

OTTOSTUMM | **mogs**

FerroFinestra®
W20



FerroFinestra®
W20

Content

Sommario

Índice

System

System description
Performances
Type overview and
dimensional limits

Sistema

Descrizione del sistema
Performance
Tipologie e limiti dimensionali

Sistema

Descripción del sistema
Características de prestación
Resumen de modelos y
dimensiones

1.0

1.1
1.2
1.3

Profile Range

Profiles
Glazing beads and complementary
Glazing table

Gamma profili

Profili
Profili fermavetro e complementari
Tabella vetrazioni

Gama de perfiles

Perfiles
Junquillos y complementarios
Tabla de acristalamiento

2.0

2.1
2.2
2.3

Accessories

Opening scheme
Surface finishes
Gaskets
System accessories
Hinges
Sliding door
Flush bolts
General fittings
Locks
Screws
Assembling tools

Accessori

Schema di apertura
Finiture
Guarnizioni
Accessori di sistema
Cerniere
Porta scorrevole
Catenacci
Ferramenta generale
Serrature
Viti
Utensili di assemblaggio

Accesorios

Diagrama de apertura
Acabados de superficie
Juntas de sellado
Accesorios del sistema
Bisagras
Puerta corrediza
Pasador de canto
Herrajes generales
Cerraduras
Tornillos
Herramientas de montaje

3.0

3.1
3.2
3.3
3.4
3.5
3.6
3.7
3.8
3.9

Examples

Window and door details:
W20 Basic
W20 Classic
W20 Slim

Details, structural connections
Wall connections

Esempi

Sezioni finestre e porte:
W20 Basic
W20 Classic
W20 Slim

Dettagli di costruzione
Attacchi a muro

Ejemplos

Detalles de ventanas y puertas:
W20 Basic
W20 Classic
W20 Slim

Detalles de construcción
Cierres constructivos

4.0

4.1
4.2
4.3
4.4
4.5

Processing

Health and safety

Cutting
Welding

Lavorazioni

Prevenzione e sicurezza

Taglio
Saldatura

Procesamiento

Prevención y seguridad

Corte
Soldadura

5.0

5.1
5.2
5.3

Accessories installation:
Gaskets
System accessories
Hinges
Sliding door installation
Flush bolts
General fittings
Handles
Locks

Montaggio accessori:
Guarnizioni
Accessori di sistema
Cerniere
Montaggio porta scorrevole
Catenacci
Ferramenta generale
Maniglie
Serrature

Montaje accesorios:
Juntas de sellado
Accesorios del sistema
Bisagras
Montaje puerta corrediza
Pasador de canto
Herrajes generales
Manillas
Cerraduras

5.4
5.5
5.6
5.7
5.8
5.9
5.10
5.11

Glazing

Vetrazione

Acristalamiento

5.12

General technical instructions

Ventilation glazing rebate
Bending radius
Coating

Indicazioni tecniche generali

Ventilazione vetrocamera
Raggi di curvatura
Verniciatura

Instrucciones técnicas generales

Ventilación del acristalamiento
Radios de curvatura
Pintura

6.0

6.1

6.2

6.3

General information

Foreword
Materials
European standards
Orders
Transport and storage
Processing:
- general
- sawing
- drilling
- thread cutting
- milling
- welding
- welding station
- straightening work
- cleaning
Surface treatment:
- general notes, coating
- procedure
- weld seam area
- cleaning the surfaces
- mechanical roughening of the surface
- chemical surface treatment
- types of coating
Installation on site:
- glazing
- joint sealing
- damage prevention on site
- cleaning
- use and maintenance

Technical services
Disclaimer

Informazioni generali

Premessa
Materiali
Norme Europee
Ordini
Trasporto e stoccaggio
Lavorazioni:
- aspetti generali
- taglio a sega
- foratura
- filettatura
- fresatura
- saldatura
- postazione di saldatura
- interventi di rettifica
- pulitura
Trattamento superficiale:
- aspetti generali, la verniciatura
- procedura
- area del cordone di saldatura
- pulizia delle superfici
- preparazione meccanica della superficie
- trattamento chimico della superficie
- tipi di verniciatura
Posa in opera:
- vetratura
- sigillatura giunti
- prevenzione dei danni in cantiere
- pulizia
- uso e manutenzione

Consulenza tecnica
Avvertenze

Información general

Prólogo
Materiales
Normas europeas
Pedido
Transporte y almacenamiento
Procesamiento:
- generalidades
- corte con sierra
- taladrado
- corte roscado
- fresado
- soldadura
- puesto de soldadura
- enderezamiento
- limpieza
Tratamiento de superficie:
- generalidades, la pintura
- procedimiento
- zona de cordón de soldadura
- limpieza de las superficies
- raspado mecánico de la superficie
- tratamiento químico de la superficie
- tipos de pintura
Montaje:
- acristalamientos
- sellado de juntas
- prevención de daños en el sitio
- limpieza
- uso y mantenimiento

Apoyo técnico
Descargo

7.0

7.1

7.2

7.3

7.4

7.5

7.6

7.6.1

7.6.2

7.6.3

7.6.4

7.6.5

7.6.6

7.6.7

7.6.8

7.6.9

7.7

7.7.1

7.7.2

7.7.3

7.7.4

7.7.5

7.7.6

7.7.7

7.8

7.8.1

7.8.2

7.8.3

7.8.4

7.8.5

7.9

7.10

System

Sistema

Sistema

1.0

System description
Performances
Type overview and
dimensional limits

Descrizione del sistema
Performance
Tipologie e limiti dimensionali

Descripción del sistema
Características de prestación
Resumen de modelos y
dimensiones

1.1
1.2
1.3

System description	Descrizione del sistema	Descripción del sistema	1.1
--------------------	-------------------------	-------------------------	-----

System description

The W20 hot rolled steel window and door system was developed to provide architects and planners with optimal solutions for projects involving the renovation or restoration of industrial heritage buildings. In addition, this profile series provides interesting stimulation for design-oriented contemporary architecture.

The characteristic profile contour – 5.5 mm recess in the sightline – emphasises both the delicate appearance and the link to historical hot-rolled steel profiles. Furthermore, these unique profile contours ensure that the glazing is always flush, in the same line between the fixed sash and the window sash.

The wide range of profiles – with installation depths of 32 mm and 37 mm and sightline widths of 22 mm for the frame profile and 55 mm “Classic”, 43 mm “Slim” e 50 mm “Basic” for the frame/sash combination – makes it possible to create large-format windows, doors and window fronts with any type of opening. The opening and design variants are typical of Bauhaus architecture but are also in line with contemporary style and aesthetics. In addition to the accessories that have been specially developed and selected by OTTOSTUMM | Mogs, the W20 system is also compatible with a wide range of other fittings. This makes it possible to replace steel windows from many different historical periods and styles while staying true to the originals.

Descrizione del sistema

Il sistema per finestre e porte in acciaio laminato W20 è stato sviluppato per offrire ad architetti e progettisti soluzioni ottimali per la ristrutturazione o il restauro di edifici industriali e storici. Inoltre, questa serie di profili offre spunti interessanti per un'architettura contemporanea incentrata sul design moderno. Il design caratteristico del profilo, con giochi di sormonto delle superfici visibili, ne sottolinea la profondità ridotta e esprime lo stile degli storici profili d'acciaio laminati a caldo. I profili sono studiati per ottenere sempre la complanarità tra vetrate fisse e vetrate dei battenti.

Grazie alla vasta gamma di profili con profondità comprese tra 32 mm e 37 mm e larghezze visibili tra i 22 mm del profilo del telaio ai 55 mm “Classic”, 43 mm “Slim” e 50 mm “Basic” della combinazione telaio-battente, è possibile realizzare finestre di grande dimensione, porte e facciate finestrate con tutti i tipi di apertura desiderati. Varianti di apertura e tipologie tipiche spaziano dall'architettura Bauhaus allo stile ed estetico moderni.

Il sistema W20 è compatibile, oltre che con gli accessori appositamente sviluppati e selezionati da OTTOSTUMM | Mogs, con una vasta gamma di ferramenta reperibile in commercio. Ciò consente di sostituire in modo fedele all'originale finestre d'acciaio delle epoche e degli stili più diversi.

Descripción del sistema

El sistema de ventanas y puertas de acero laminado en caliente W20 se ha desarrollado para ofrecer a arquitectos y proyectistas soluciones óptimas para aquellos proyectos de renovación o restauración de edificios históricos del legado industrial. Además, esta serie de perfiles ofrece un interesante impulso para arquitectos contemporáneos interesados en el diseño. El contorno característico del perfil - retranqueo de 5.5 mm en la línea visible - realza la ornamentación y el vínculo con los perfiles de acero laminados en caliente con carácter histórico. Además, estos contornos únicos de perfiles siempre ofrecen una línea recta contigua entre los acristalamientos de la hoja fija y la hoja de la ventana.

Gracias a la amplia gama de perfiles con profundidades de 32 mm y 37 mm, con anchos de 22 mm para el perfil del marco y 55 mm “Classic”, 43 mm “Slim” y 50 mm “Basic” para la combinación marco/hojas, es posible elaborar ventanas, puertas y ventanales de gran tamaño con todos los tipos de aperturas deseadas. Las variantes de aperturas y acabados son típicas de la arquitectura Bauhaus, pero también armonizan perfectamente con el estilo y la estética contemporánea.

El sistema W20 es compatible tanto con los accesorios seleccionados y desarrollados especialmente por OTTOSTUMM | Mogs como con una gran variedad de herrajes independientes. Esto permite sustituir ventanas de acero de diferentes épocas históricas y corrientes estéticas conservando la fidelidad al original.

System description

Fixed glazing, single- and double-leaf windows, side hung and bottom-hung windows opening inwards and outwards, top-hung projecting windows, opening inwards and outwards;

Wet and dry glazing;

Glass thickness from 4 to 20 mm;

$U_w = 2.58 \text{ [W/m}^2\text{K]}$
calculated on sample standardized window frame dimension 1230x1480 mm according to the UNI-EN 14351-1
with $U_g = 1.3 \text{ [W/m}^2\text{K]}$
and $PSI = 0.036 \text{ [W/mK]}$;

System fittings with screw-on and weld-on hinges.

Descrizione del sistema

Vetratura fissa, finestre a una, due o più battenti, a vasistas e a sporgere, con apertura interna o esterna, porte-finestre a una, due o più battenti con apertura interna o esterna.

Vetrocamera sigillato con silicone o con guarnizioni a secco;

Spessore del vetrocamera da 4 a 20 mm;

$U_w = 2.58 \text{ [W/m}^2\text{K]}$ calcolato su un campione standard di dimensioni 1230x1480 mm secondo UNI-EN 14351-1
con $U_g = 1.3 \text{ [W/m}^2\text{K]}$
e $PSI = 0.036 \text{ [W/mK]}$;

Ferramenta con cerniere ad avvitare o a saldare.

Descripción del sistema

Acristalamiento fijo, ventanas oscilobatientes de una o dos hojas que se abren hacia dentro o hacia fuera, puertas/ventanas proyectantes que se abren hacia dentro o hacia fuera;

Acristalamiento en seco y húmedo;

Grosor del cristal de 4 a 20 mm;

$U_w = 2.58 \text{ [W/m}^2\text{K]}$ calculado sobre una muestra de marco de ventana normalizado de dimensiones 1230x1480 mm según UNI-EN 14351-1
con $U_g = 1.3 \text{ [W/m}^2\text{K]}$
y $PSI = 0.036 \text{ [W/mK]}$;

Herrajes del sistema con bisagras de soldadura o atornillables.

Performances

Performance

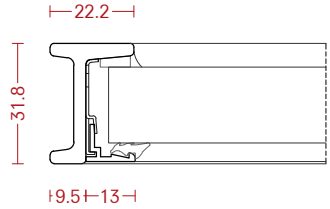
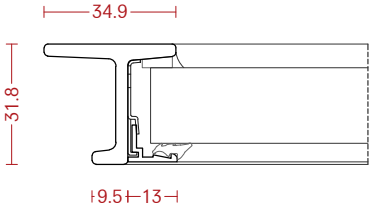
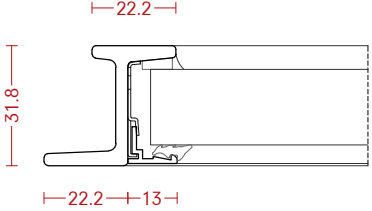
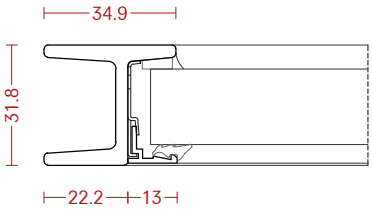
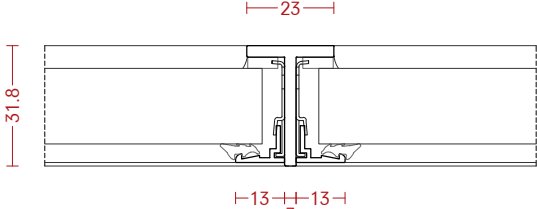
Características de prestación

1.2

U_f value
Performances

Valore U_f
Prestazioni

Valor U_f
Características de prestación

		T = 20 mm	
FF 3203LF-01	Basic	7.0	
FF 3203TF-01	Basic	7.0	
FF 3203ZF-01	Basic	7.0	
FF 3203HF-01	Basic	6.5	
FF 3203TR-14	Basic	10.0	

T = Glazing thickness
U_f = U_f value in [W/m²K]
T = 20 mm, λ=0.035 [W/(mK)]

T = Spessore vetro
U_f = valore U_f in [W/m²K]
T = 20 mm, λ=0.035 [W/(mK)]

T = Espesores de vidrio
U_f = valor U_f en [W/m²K]
T = 20 mm, λ=0.035 [W/(mK)]

U_f value
Performances

Valore U_f
Prestazioni

Valor U_f
Características de prestación

		T = 20 mm	
FF 3203TN-01	Basic	8.6	
FF 2503TR-14	Basic	8.5 (T = 10 mm)	
FF 3205LC-01 / FF 3203LF-01	Basic	5.9	
FF 3205LC-01 / FF 3203HF-01	Basic	7.6	
FF 3203LF-01 / FF 3203LF-01	Basic	7.1	

T = Glazing thickness
U_f = U_f value in [W/m²K]
T = 20 mm, λ=0.035 [W/(mK)]

T = Spessore vetro
U_f = valore U_f in [W/m²K]
T = 20 mm, λ=0.035 [W/(mK)]

T = Espesores de vidrio
U_f = valor U_f en [W/m²K]
T = 20 mm, λ=0.035 [W/(mK)]

U_f value
Performances

Valore U_f
Prestazioni

Valor U_f
Características de prestación

		T = 20 mm	
FF 3203LF-01 / FF 5505SV-01 / FF 3203LF-01	Basic	8.4	
FF 3203LF-01 / FF 6605SO-01 / FF 3203LF-01	Basic	8.7	
FF 3203LF-01 / FF 3203H-01 / FF 3203ZF-01	Basic	7.2	
FF 3203LF-01 / FF 3703L-01 / FF 3705ZA-01	Classic	6.7	

T = Glazing thickness
U_f = U_f value in [W/m²K]
T = 20 mm, λ=0.035 [W/(mK)]

T = Spessore vetro
U_f = valore U_f in [W/m²K]
T = 20 mm, λ=0.035 [W/(mK)]

T = Espesores de vidrio
U_f = valor U_f en [W/m²K]
T = 20 mm, λ=0.035 [W/(mK)]

U_f value
Performances

Valore U_f
Prestazioni

Valor U_f
Características de prestación

T = 20 mm			
FF 3203LF-01 / FF 3703LS-01 / FF 3705ZS-01	Slim	7.4	
FF 3203LF-01 / FF 3203H-01 / FF 3203TF-01	Basic	7.1	
FF 3203LF-01 / FF 3703L-01 / FF 3705TA-01	Classic	7.0	
FF 3203LF-01 / FF 3703LS-01 / FF 3705TS-01	Slim	7.8	
FF 3203H-01 / FF 3203ZF-01	Basic	7.2	

T = Glazing thickness
U_f = U_f value in [W/m²K]
T = 20 mm, λ=0.035 [W/(mK)]

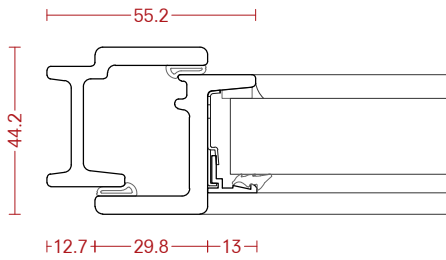
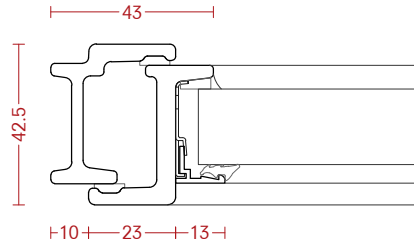
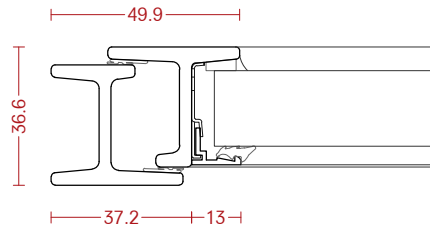
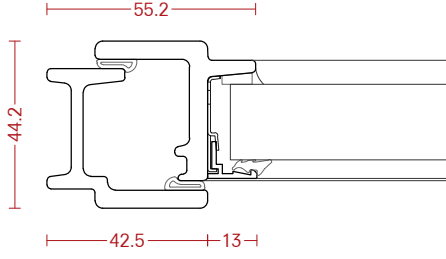
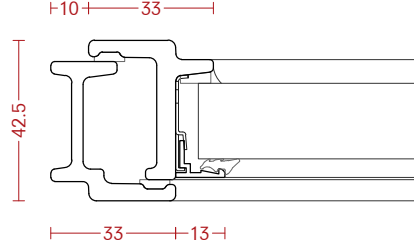
T = Spessore vetro
U_f = valore U_f in [W/m²K]
T = 20 mm, λ=0.035 [W/(mK)]

T = Espesores de vidrio
U_f = valor U_f en [W/m²K]
T = 20 mm, λ=0.035 [W/(mK)]

U_f value
Performances

Valore U_f
Prestazioni

Valor U_f
Características de prestación

T = 20 mm			
FF 3703L-01 / FF 3705ZA-01	Classic	6.4	
FF 3703LS-01 / FF 3705ZS-01	Slim	7.3	
FF 3203H-01 / FF 3203TF-01	Basic	7.1	
FF 3703L-01 / FF 3705TA-01	Classic	6.9	
FF 3703LS-01 / FF 3705TS-01	Slim	7.9	

T = Glazing thickness
U_f = U_f value in [W/m²K]
T = 20 mm, λ=0.035 [W/(mK)]

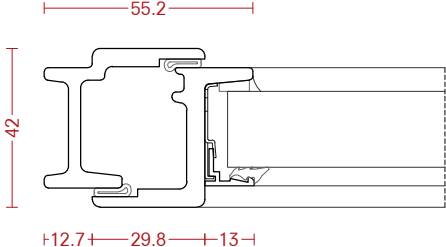
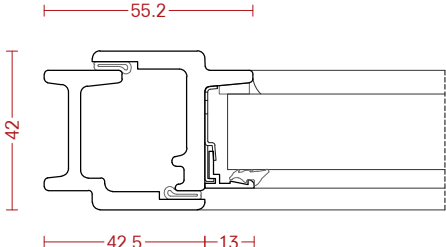
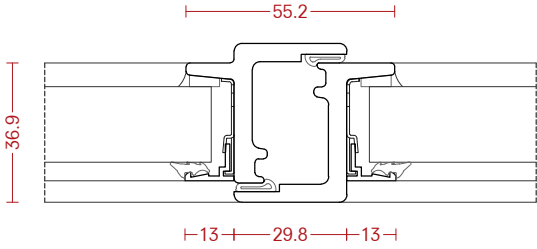
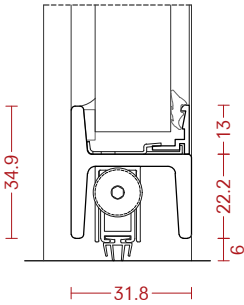
T = Spessore vetro
U_f = valore U_f in [W/m²K]
T = 20 mm, λ=0.035 [W/(mK)]

T = Espesores de vidrio
U_f = valor U_f en [W/m²K]
T = 20 mm, λ=0.035 [W/(mK)]

U_f value
Performances

Valore U_f
Prestazioni

Valor U_f
Características de prestación

		T = 20 mm	
FF 3703LP-01 / FF 3705ZAP-01	Classic	6.9	
FF 3703LP-01 / FF 3705TAP-01	Classic	7.1	
FF 3705TAP-01 / FF 3705ZAP-01	Classic	7.8	
FF 3203HF-01	Basic	8.2	

T = Glazing thickness
U_f = U_f value in [W/m²K]
T = 20 mm, λ=0.035 [W/(mK)]

T = Spessore vetro
U_f = valore U_f in [W/m²K]
T = 20 mm, λ=0.035 [W/(mK)]

T = Espesores de vidrio
U_f = valor U_f en [W/m²K]
T = 20 mm, λ=0.035 [W/(mK)]

Type overview and
dimensional limits

Tipologie e limiti
dimensionali

Resumen de modelos
y dimensiones

1.3

Legend

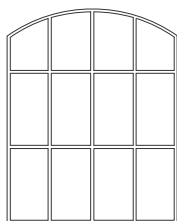
+ = Fixed
— = Open in
- - - = Open out
Dimensions in: mm

Legenda

+ = Anta fissa
— = Apertura interna
- - - = Apertura esterna
Misure in: mm

Leyenda

+ = Fijo
— = Apertura interna
- - - = Apertura externa
Medidas en: mm



Fixed glazing

Vetrature fisse

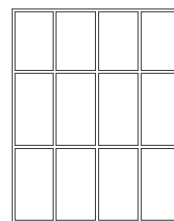
Acristalamientos fijos



Fixed glazing

Vetrature fisse

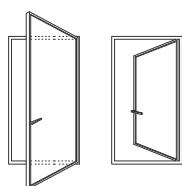
Acristalamientos fijos



Fixed glazing

Vetrature fisse

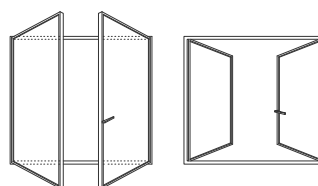
Acristalamientos fijos



Single leaf open in or open out
side hung window

Finestra a un battente
apertura interna o esterna

Ventana batiente de una hoja
que se abre hacia dentro o fuera



Double leaf open in or open out
side hung window

Finestra a due battenti
apertura interna o esterna

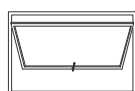
Ventana batiente de dos hojas
que se abre hacia dentro o fuera



Open in bottom hung window

Finestra vasistas apertura interna

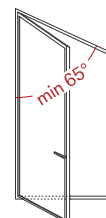
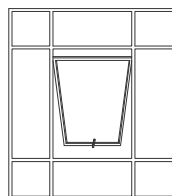
Ventana oscilante que se abre hacia dentro



Open out top hung
projecting window

Finestra a sporgere
apertura esterna

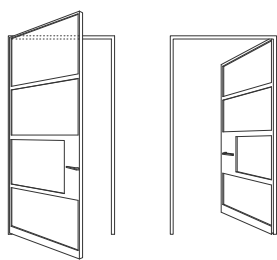
Ventana proyectante que
se abre hacia fuera



For trapezoidal windows, the minimum
angle on the hinges side is 65°

Per finestre trapezoidali, l'angolo minimo
lato cerniere è di 65°

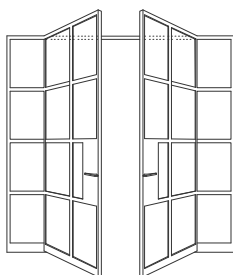
Para ventanas trapezoidales, el ángulo
mínimo en el lado de la bisagras es de 65°



Single leaf door
open in or open out

Porta a un battente
apertura interna o esterna

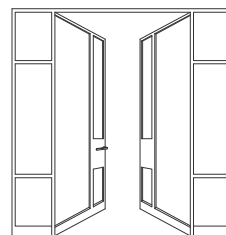
Puerta batiente de una hoja
que se abre hacia dentro o fuera



Double leaf door open in
with side lights

Porta a due battenti apertura interna
con fissi laterali

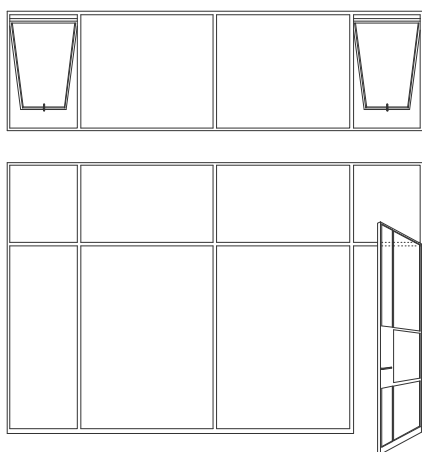
Puerta doble batiente que se abre hacia
dentro con fijos laterales



Double leaf door open out
with side lights

Porta a due battenti apertura esterna
con fissi laterali

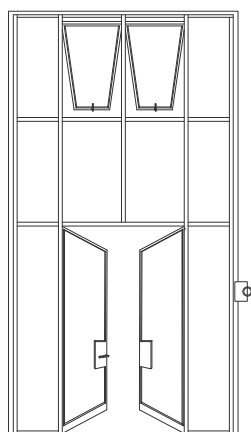
Puerta doble batiente que se abre hacia
fuera con fijos laterales



Fixed glazing with single leaf door open in
and top hung windows

Vetratura fissa con porta battente apertura
interna e finestre a sporgere

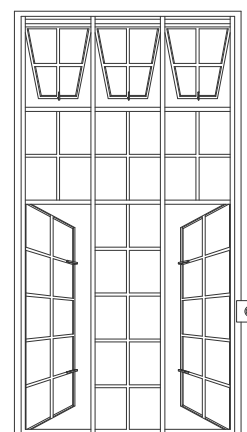
Acristalamiento con puerta batiente que se
abre hacia dentro y ventana proyectante



Curtain wall with double leaf door
and top hung windows

Facciata con porta a due battenti
e finestre a sporgere

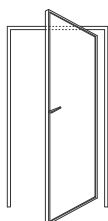
Fachadas con puerta batiente
y ventana proyectante



Industrial sidewall windows
and historical curtain walls

Facciate e vetrate fisse
stile industrial

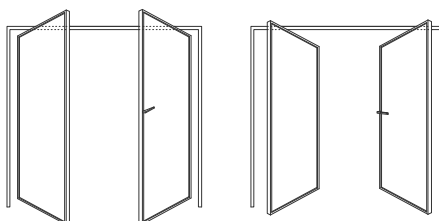
Fachadas y acristalamientos
de diseño industrial



Single leaf pivot door
open in and open out

Porta pivot a un battente
apertura interna ed esterna

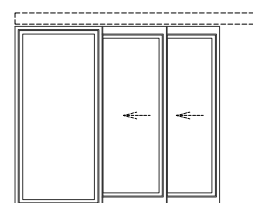
Puerta pivote de una hoja
que se abre hacia dentro y fuera



Double leaf pivot door
open in and open out

Porta pivot a due battenti
apertura interna ed esterna

Puerta pivote de dos hojas
que se abre hacia dentro y fuera



Sliding doors

Porte scorrevoli

Puertas corredizas

Dimensions

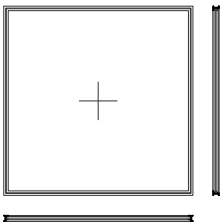
The dimensional limits must be checked on the basis of the total weight (frame and glass), the accessories used, the environmental conditions (exposure, wind pressure, ...). In case of internal partitions the dimensional limits can be extended. Contact our technical office for any clarification.

Dimensioni

I limiti dimensionali vanno comunque verificati in base al peso totale (telaio e vetro), agli accessori utilizzati, alle condizioni ambientali (esposizione, spinta del vento, ...). In caso di partizioni interne i limiti dimensionali possono essere ampliati. Contattare il nostro ufficio tecnico per ogni chiarimento.

Dimensiones

Sin embargo, los límites dimensionales deben verificarse en función del peso total (marco y vidrio), los accesorios utilizados, las condiciones ambientales (exposición, presión del viento, ...). En caso de particiones internas, los límites dimensionales pueden extenderse. Póngase en contacto con nuestra oficina técnica para cualquier aclaración.

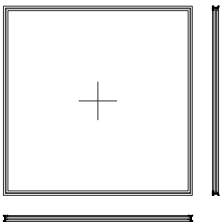


Fixed window

Finestra fissa

Ventana fija

Internal application Partizioni interne Particiones interiores	min. dimensions 400 x 400 max. dimensions 3000 x 3000
---	--

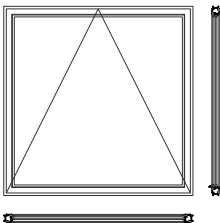


Fixed window

Finestra fissa

Ventana fija

External application Partizioni esterne Particiones exteriores	min. dimensions 400 x 400 max. dimensions 2500 x 2500
---	--

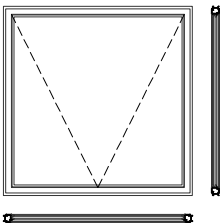


Bottom hung window open in

Finestra vasistas apertura interna

Ventana oscilante que se abre hacia dentro

min. dimensions	400 x 400
max. dimensions	1700 x 1700
max. leaf weight: 120 kg	

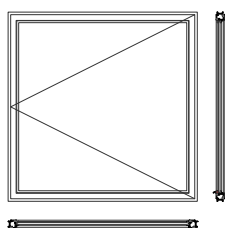


Top hung projecting window open out

Finestra a sporgere apertura esterna

Ventana proyectante que se abre hacia fuera

min. dimensions	400 x 400
max. dimensions	1700 x 1700
max. leaf weight: 120 kg	

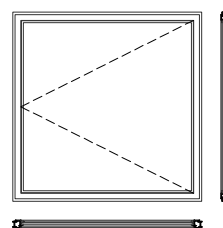


Single leaf window open in

Finestra a un battente apertura interna

Ventana de una hoja que se abre hacia dentro

min. dimensions 500 x 500
max. dimensions 1050 x 2300
max. leaf weight: 120 kg

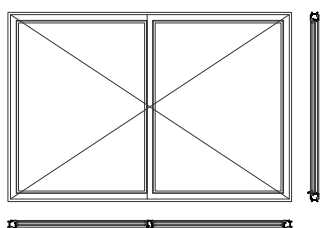


Single leaf window open out

Finestra a un battente apertura esterna

Ventana de una hoja que se abre hacia fuera

min. dimensions 500 x 500
max. dimensions 1050 x 2300
max. leaf weight: 120 kg

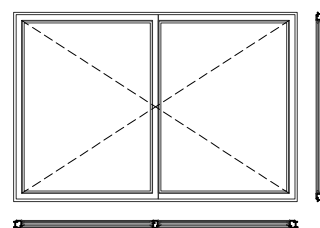


Double leaf window open in

Finestra a due battenti apertura interna

Ventana de dos hojas que se abre hacia dentro

min. dimensions 1000 x 500
max. dimensions 2100 x 2300
max. leaf weight: 120 kg

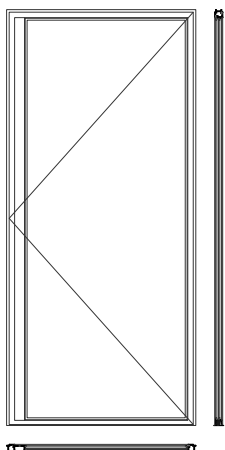


Double leaf window open out

Finestra a due battenti apertura esterna

Ventana de dos hojas que se abre hacia fuera

min. dimensions 1000 x 500
max. dimensions 2100 x 2300
max. leaf weight: 120 kg



Single leaf door open in with full height additional profile

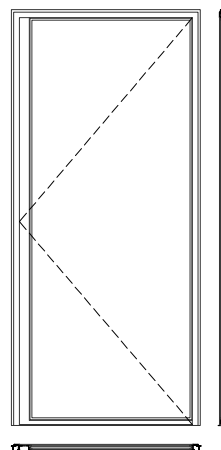
Porta a un battente apertura interna
con riporto serratura a tutt'altezza

Puerta abatible de una hoja que se abre hacia dentro
con perfil adicional de altura completa

Internal application Partizioni interne Particiones interiores	min. dimensions	700 x 1800
	max. dimensions	1050 x 3000

Windows and doors Serramenti esterni Ventanas y puertas	min. dimensions	700 x 1800
	max. dimensions	1050 x 2300

max. leaf weight: 120 kg



Single leaf door open out with full height additional profile

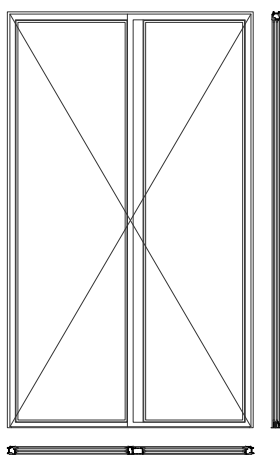
Porta a un battente apertura esterna
con riporto serratura a tutt'altezza

Puerta abatible de una hoja que se abre hacia fuera
con perfil adicional de altura completa

Internal application Partizioni interne Particiones interiores	min. dimensions	700 x 1800
	max. dimensions	1050 x 3000

Windows and doors Serramenti esterni Ventanas y puertas	min. dimensions	700 x 1800
	max. dimensions	1050 x 2300

max. leaf weight: 120 kg



Double leaf door open in with full height additional profile

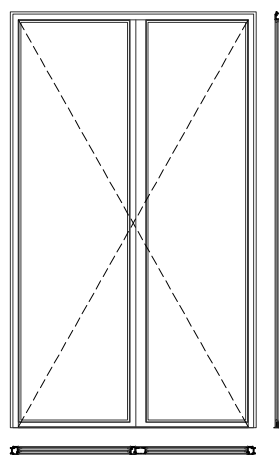
Porta a due battenti apertura interna
con riporto serratura a tutt'altezza

Puerta abatible de dos hojas que se abre hacia dentro
con perfil adicional de altura completa

Internal application Partizioni interne Particiones interiores	min. dimensions	1400 x 1800
	max. dimensions	2100 x 3000

Windows and doors Serramenti esterni Ventanas y puertas	min. dimensions	1400 x 1800
	max. dimensions	2100 x 2300

max. leaf weight: 120 kg



Double leaf door open out with full height additional profile

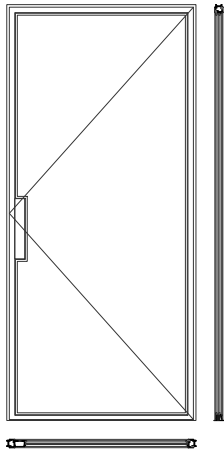
Porta a due battenti apertura esterna
con riporto serratura a tutt'altezza

Puerta abatible de dos hojas que se abre hacia fuera
con perfil adicional de altura completa

Internal application Partizioni interne Particiones interiores	min. dimensions	1400 x 1800
	max. dimensions	2100 x 3000

Windows and doors Serramenti esterni Ventanas y puertas	min. dimensions	1400 x 1800
	max. dimensions	2100 x 2300

max. leaf weight: 120 kg



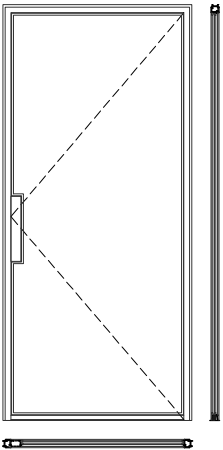
Single leaf door open in with locking box

Porta a un battente apertura interna con scatola serratura

Puerta abatible de una hoja que se abre hacia dentro con caja de cerradura

Internal application Partizioni interne Particiones interiores	min. dimensions	700 x 1800
	max. dimensions	1050 x 3000
Windows and doors Serramenti esterni Ventanas y puertas	min. dimensions	700 x 1800
	max. dimensions	1050 x 2300

max. leaf weight: 120 kg



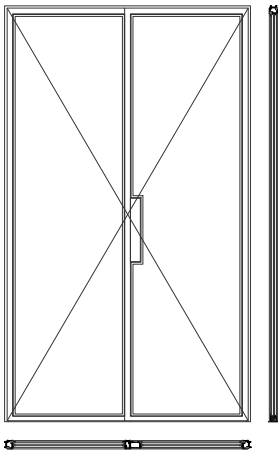
Single leaf door open out with locking box

Porta a un battente apertura esterna con scatola serratura

Puerta abatible de una hoja que se abre hacia fuera con caja de cerradura

Internal application Partizioni interne Particiones interiores	min. dimensions	700 x 1800
	max. dimensions	1050 x 3000
Windows and doors Serramenti esterni Ventanas y puertas	min. dimensions	700 x 1800
	max. dimensions	1050 x 2300

max. leaf weight: 120 kg



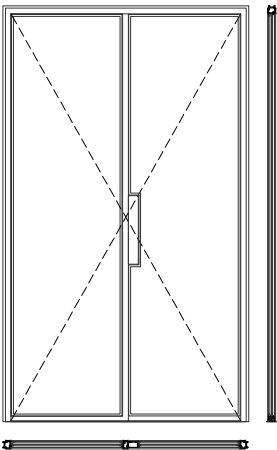
Double leaf door open in with locking box

Porta a due battenti apertura interna con scatola serratura

Puerta abatible de dos hojas que se abre hacia dentro
con caja de cerradura

Internal application Partizioni interne Particiones interiores	min. dimensions	1400 x 1800
	max. dimensions	2100 x 3000
Windows and doors Serramenti esterni Ventanas y puertas	min. dimensions	1400 x 1800
	max. dimensions	2100 x 2300

max. leaf weight: 120 kg



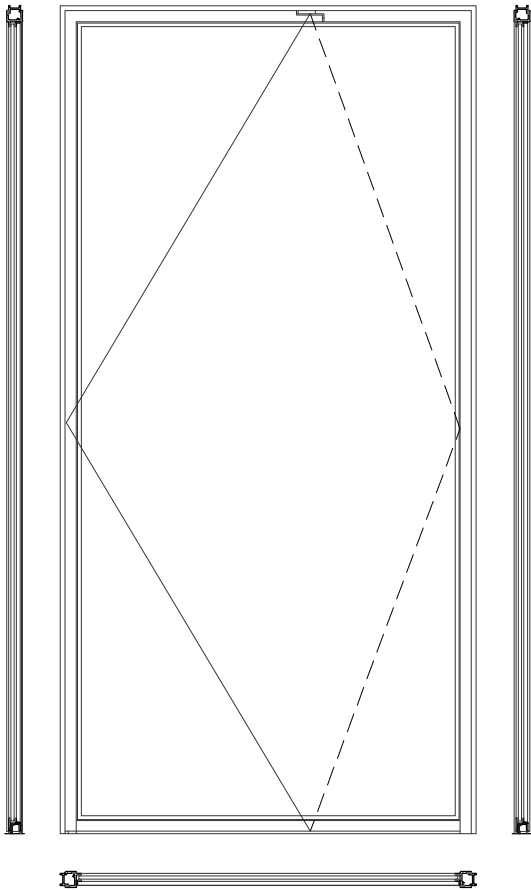
Double leaf door open out with locking box

Porta a due battenti apertura esterna con scatola serratura

Puerta abatible de dos hojas que se abre hacia fuera
con caja de cerradura

Internal application Partizioni interne Particiones interiores	min. dimensions	1400 x 1800
	max. dimensions	2100 x 3000
Windows and doors Serramenti esterni Ventanas y puertas	min. dimensions	1400 x 1800
	max. dimensions	2100 x 2300

max. leaf weight: 120 kg



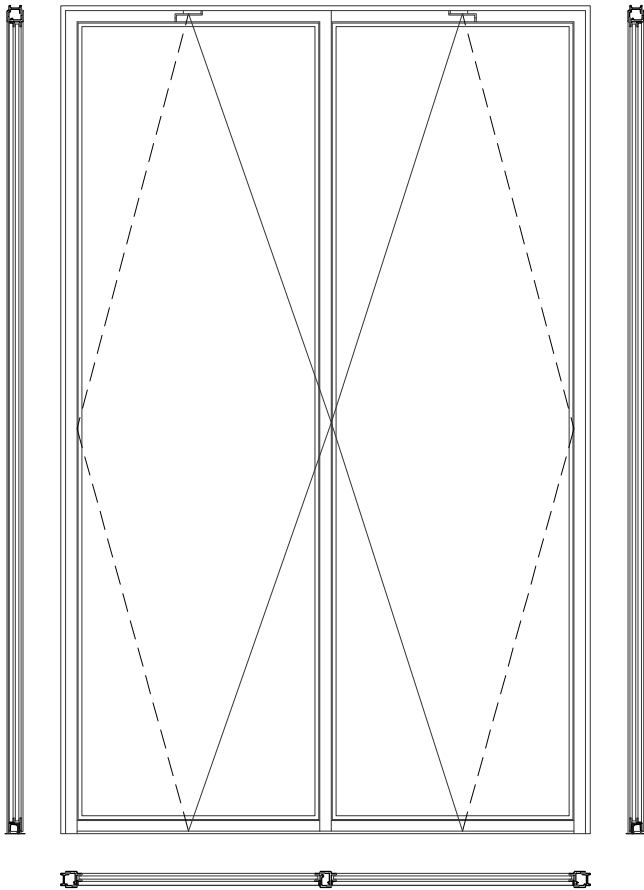
Single leaf pivot door

Porta pivot a un battente

Puerta pivote de una hoja

Internal application	min. dimensions	700 x 1800
Partizioni interne	max. dimensions	1400 x 3000
Particiones interiores		

max. leaf weight: 200 kg



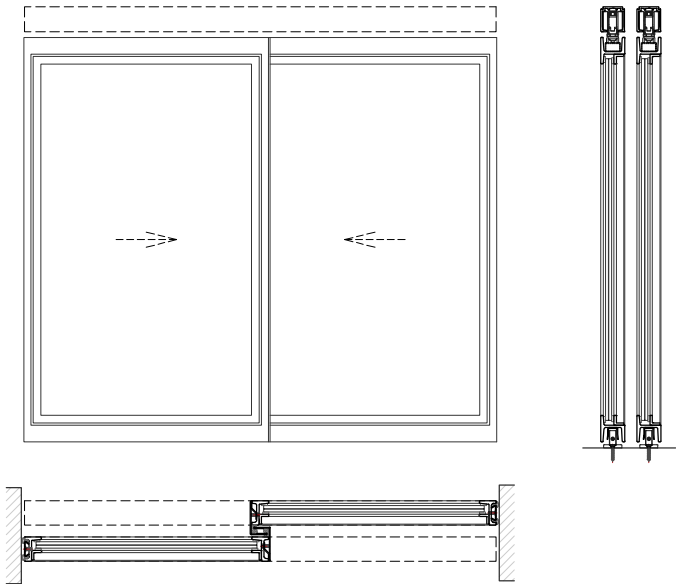
Double leaf pivot door

Porta pivot a due battenti

Puerta pivote de dos hojas

Internal application	min. dimensions	1400 x 1800
Partizioni interne	max. dimensions	2800 x 3000
Particiones interiores		

max. leaf weight: 200 kg



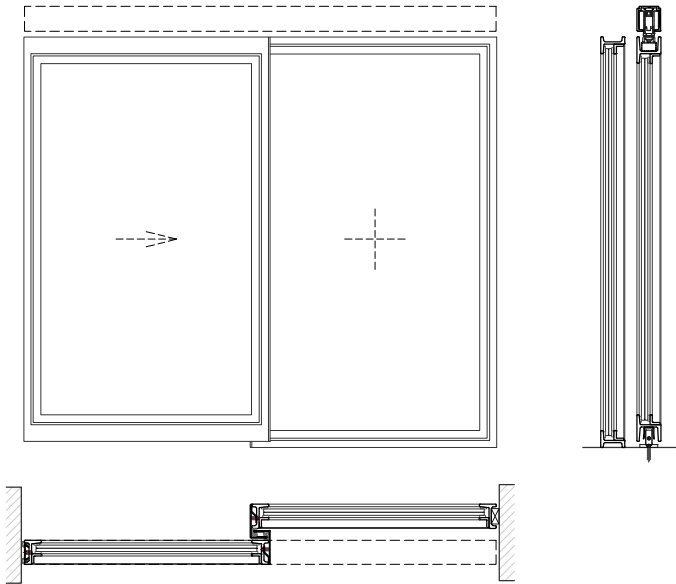
D

Double sliding leaves

Doppia anta scorrevole

Doble hojas corredizas

Internal application
Partizioni interne
Particiones interiores
min. dimensions leaf: 710 mm (*)
max. leaf weight: 160 kg ()**



A - DIN sx

Sliding leaf and fixed

Anta scorrevole e fisso

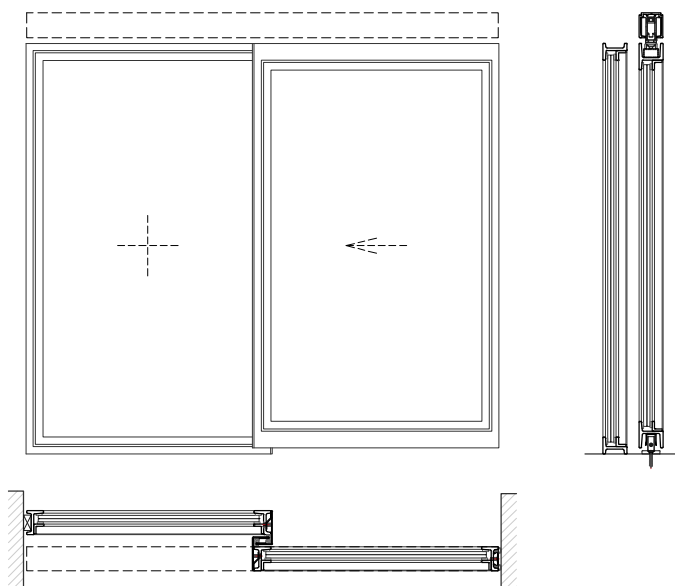
Hoja corrediza y fijo

Internal application
Partizioni interne
Particiones interiores
min. dimensions leaf: 710 mm (*)
max. leaf weight: 160 kg ()**

DIN sx = Left leaf opening
(*) Minimum dimensions depending on the trolley chosen.
(**) Maximum capacity of the trolley.

DIN sx = Anta di sinistra apribile
(*) Dimensioni minime a seconda del carrello scelto.
(**) Portata massima del carrello.

DIN sx = Apertura hoja izquierda
(*) Dimensiones mínimas en función del carro elegido.
(**) Capacidad máxima del carro.



A - DIN dx

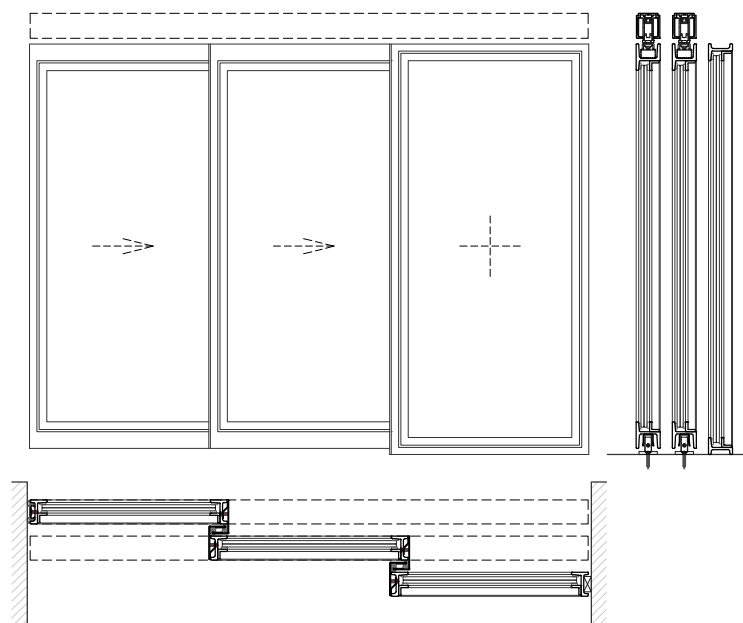
Sliding leaf and fixed

Anta scorrevole e fisso

Hoja corrediza y fijo

Internal application
Partizioni interne
Particiones interiores

min. dimensions leaf: 710 mm (*)
max. leaf weight: 160 kg (**)



B - DIN sx

Fixed and double sliding leaves

Fisso e doppia anta scorrevole

Fijo y doble hojas corredizas

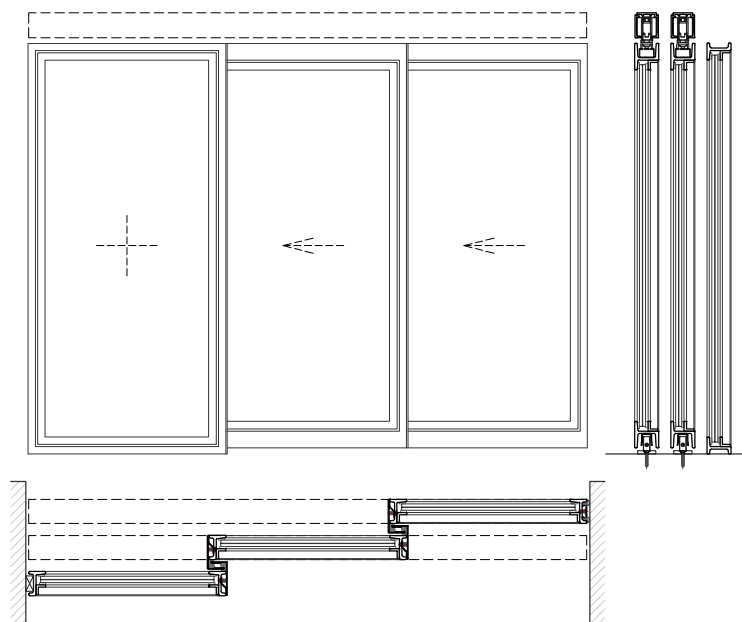
Internal application
Partizioni interne
Particiones interiores

min. dimensions leaf: 710 mm (*)
max. leaf weight: 160 kg (**)

DIN sx = Left leaf opening
DIN dx = Right leaf opening
(*) Minimum dimensions depending on the trolley chosen.
(**) Maximum capacity of the trolley.

DIN sx = Anta di sinistra apribile
DIN dx = Anta di destra apribile
(*) Dimensioni minime a seconda del carrello scelto.
(**) Portata massima del carrello.

DIN sx = Apertura hoja izquierda
DIN dx = Apertura hoja derecha
(*) Dimensiones mínimas en función del carro elegido.
(**) Capacidad máxima del carro.



B - DIN dx

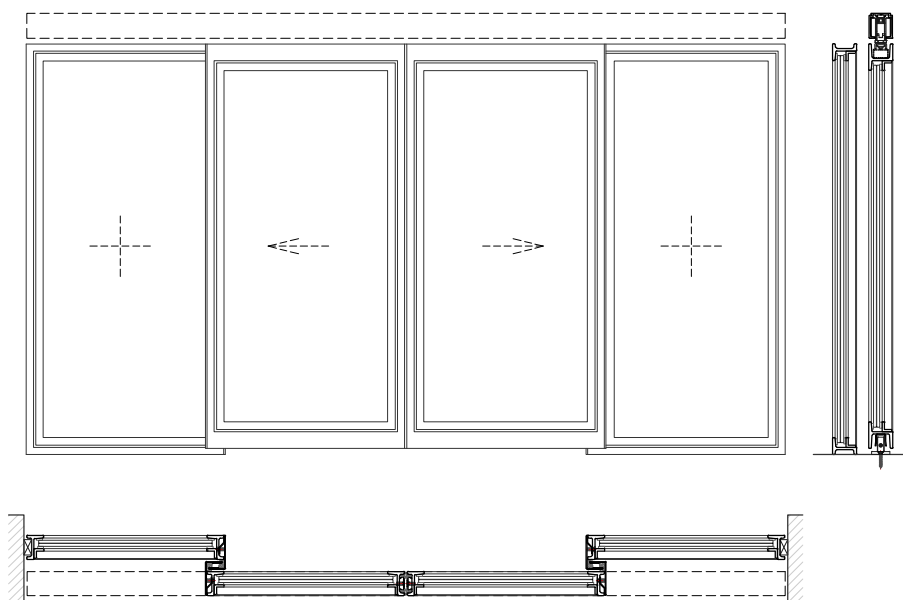
Fixed and double sliding leaves

Fisso e doppia anta scorrevole

Fijo y doble hojas corredizas

Internal application
Partizioni interne
Particiones interiores

min. dimensions leaf: 710 mm (*)
max. leaf weight: 160 kg (**)



C

Fixed and double sliding leaf

Fisso e doppia anta scorrevole

Fijo y doble hojas corredizas

Internal application
Partizioni interne
Particiones interiores

min. dimensions leaf: 710 mm (*)
max. leaf weight: 160 kg (**)

DIN dx = Right leaf opening

(*) Minimum dimensions depending on the trolley chosen.

(**) Maximum capacity of the trolley.

DIN dx = Anta di destra apribile

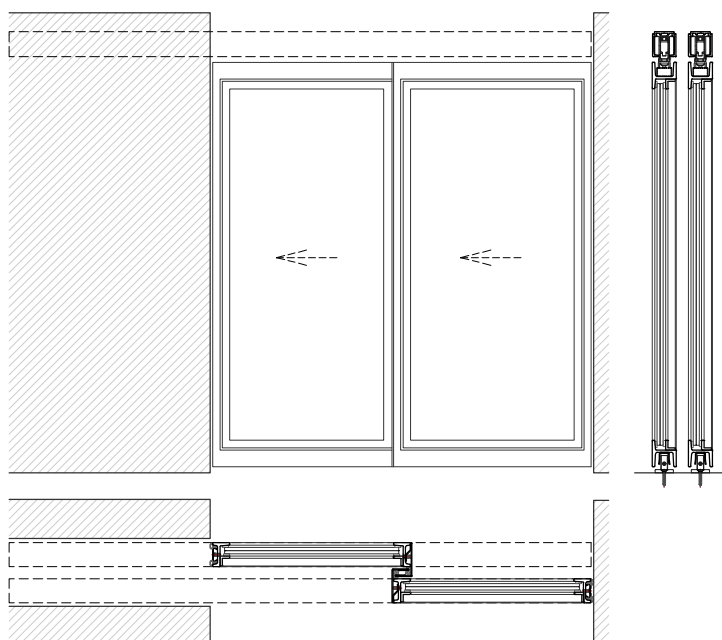
(*) Dimensioni minime a seconda del carrello scelto.

(**) Portata massima del carrello.

DIN dx = Apertura hoja derecha

(*) Dimensiones mínimas en función del carro elegido.

(**) Capacidad máxima del carro.



E - DIN sx

Double sliding leaves, concealed on one side

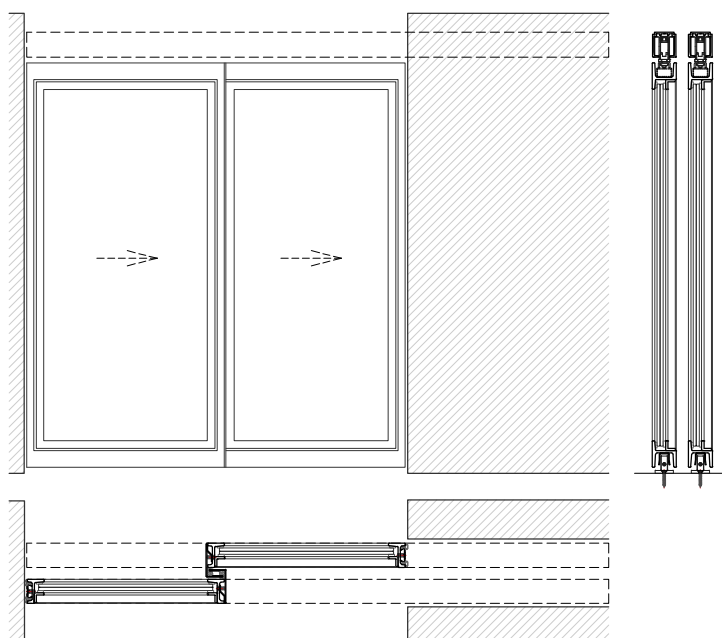
Doppia anta scorrevole, a scomparsa su un lato

Doble hojas corredizas, retráctil en un lado

Internal application
Partizioni interne
Particiones interiores

min. dimensions leaf: 710 mm (*)

max. leaf weight: 160 kg ()**



E - DIN dx

Double sliding leaves, concealed on one side

Doppia anta scorrevole, a scomparsa su un lato

Doble hojas corredizas, retráctil en un lado

Internal application
Partizioni interne
Particiones interiores

min. dimensions leaf: 710 mm (*)

max. leaf weight: 160 kg ()**

DIN sx = Left leaf opening

DIN dx = Right leaf opening

(*) Minimum dimensions depending on the trolley chosen.

(**) Maximum capacity of the trolley.

DIN sx = Anta di sinistra apribile

DIN dx = Anta di destra apribile

(*) Dimensioni minime a seconda del carrello scelto.

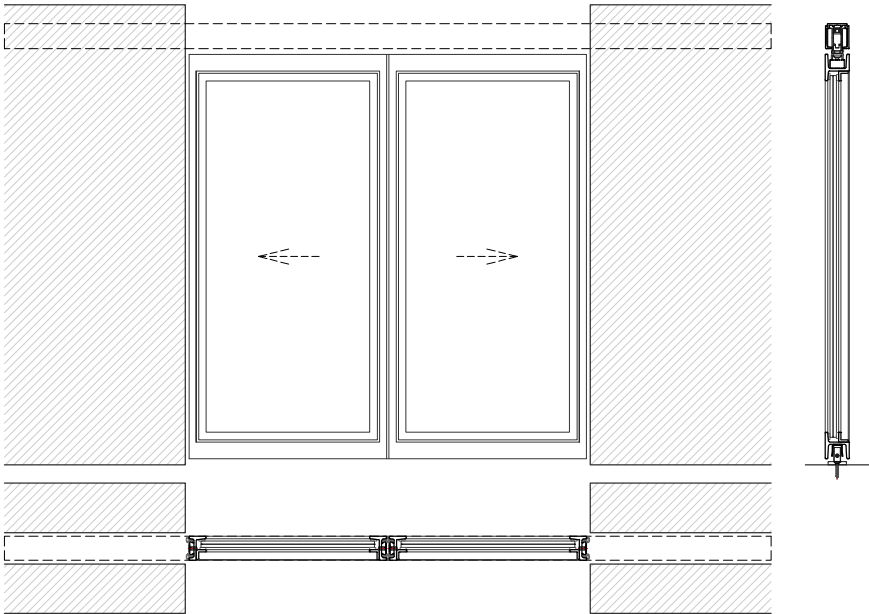
(**) Portata massima del carrello.

DIN sx = Apertura hoja izquierda

DIN dx = Apertura hoja derecha

(*) Dimensiones mínimas en función del carro elegido.

(**) Capacidad máxima del carro.



F

Double sliding leaves, concealed on one side

Doppia anta scorrevole, a scomparsa su un lato

Doble hojas corredizas, retráctil en un lado

Internal application
Partizioni interne
Particiones interiores

min. dimensions leaf: 710 mm (*)
max. leaf weight: 160 kg (**)

(*) Minimum dimensions depending on the trolley chosen.
(**) Maximum capacity of the trolley.

(*) Dimensioni minime a seconda del carrello scelto.
(**) Portata massima del carrello.

(*) Dimensiones mínimas en función del carro elegido.
(**) Capacidad máxima del carro.

Profile range	Gamma profili	Gama de perfiles	2.0
Profiles Glazing beads and complementary Glazing table	Profili Profili fermavetro e complementari Tabella vetrazioni	Perfiles Junquillos y complementarios Tabla de acristalamiento	2.1 2.2 2.3

Profiles

Profili

Perfiles

2.1

Legend

+ = Fixed
— = Open in
- - - = Open out
Dimensions in: mm
Scale 1:1
G = Weight
U = Coated surface

Legenda

+ = Anta fissa
— = Apertura interna
- - - = Apertura esterna
Misure in: mm
Scala 1:1
G = Peso
U = Superficie in vista

Leyenda

+ = Fijo
— = Apertura interna
- - - = Apertura externa
Medidas en: mm
Escala 1:1
G = Peso
U = Superficie recubierta

W20 Basic

Profiles

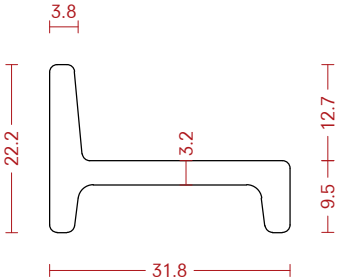
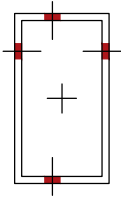
BAR LENGTH: 5800 mm
MATERIAL:
01 - Hot Rolled Steel

Profili

LUNGHEZZA BARRA: 5800 mm
MATERIALE:
01 - Acciaio laminato a caldo

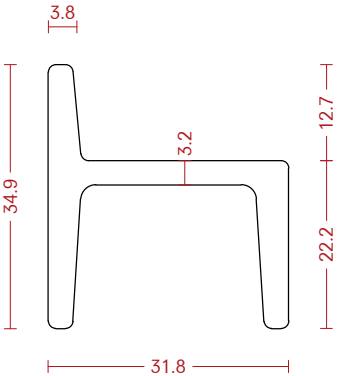
Perfiles

LONGITUD DE LA BARRA: 5800 mm
MATERIAL:
01 - Acero laminado en caliente



FF 3203LF-01

G = 1.53 U = 0.114
kg/m m²/m



FF 3203HF-01

G = 2.31 U = 0.163
kg/m m²/m

W20 Basic

Profiles

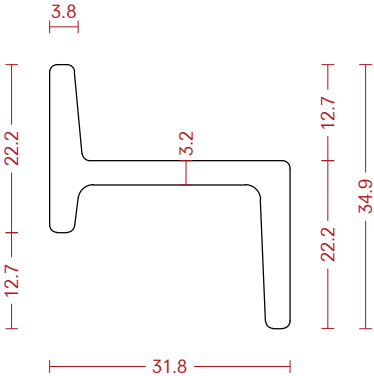
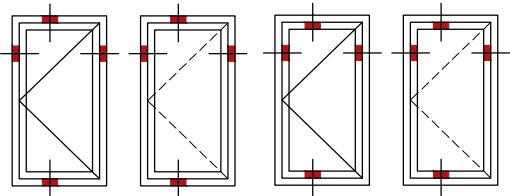
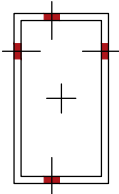
BAR LENGTH: 5800 mm
MATERIAL:
01 - Hot Rolled Steel

Profili

LUNGHEZZA BARRA: 5800 mm
MATERIALE:
01 - Acciaio laminato a caldo

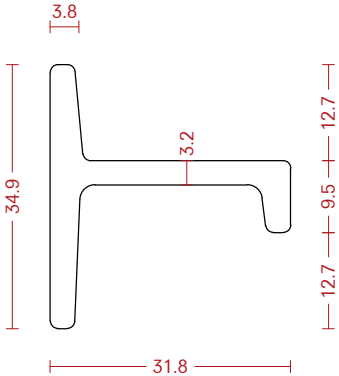
Perfiles

LONGITUD DE LA BARRA: 5800 mm
MATERIAL:
01 - Acero laminado en caliente



FF 3203ZF-01

G = 1.89 U = 0.139
kg/m m²/m



FF 3203TF-01

G = 1.89 U = 0.139
kg/m m²/m

W20 Basic

Profiles

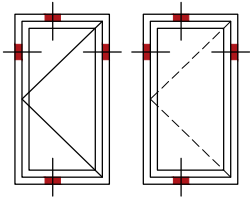
BAR LENGTH: 5800 mm
MATERIAL:
01 - Hot Rolled Steel

Profili

LUNGHEZZA BARRA: 5800 mm
MATERIALE:
01 - Acciaio laminato a caldo

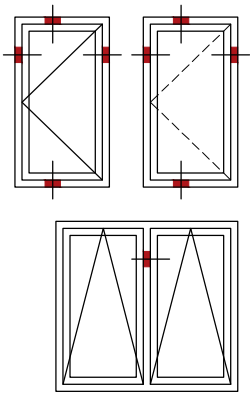
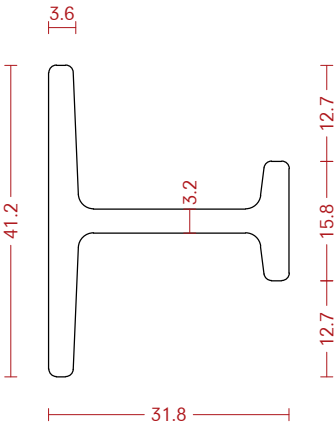
Perfiles

LONGITUD DE LA BARRA: 5800 mm
MATERIAL:
01 - Acero laminado en caliente



FF 3203H-01

G = 2.28 U = 0.162
kg/m m²/m



FF 3203TD-01

G = 2.24 U = 0.162
kg/m m²/m

W20 Basic

Profiles

BAR LENGTH: 5800 mm

MATERIAL:

01 - Hot Rolled Steel

14 - Laser welded steel,
bead blasted

Profili

LUNGHEZZA BARRA: 5800 mm

MATERIALE:

01 - Acciaio laminato a caldo

14 - Acciaio saldato laser,
micropallinato

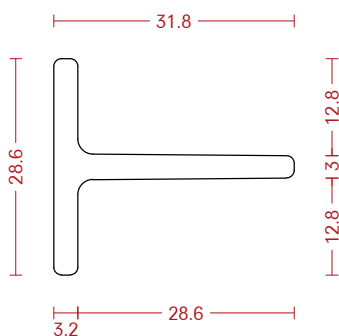
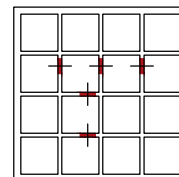
Perfiles

LONGITUD DE LA BARRA: 5800 mm

MATERIAL:

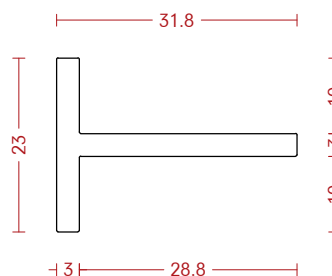
01 - Acero laminado en caliente

14 - Acero soldado con láser,
micro-arenado



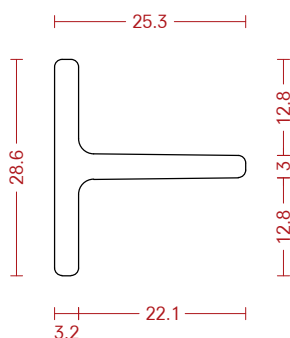
FF 3203TN-01

G = 1.43 U = 0.116
kg/m m²/m



FF 3203TR-14

G = 1.22 U = 0.109
kg/m m²/m



FF 2503TR-01

G = 1.27 U = 0.103
kg/m m²/m

W20 Basic

Profiles

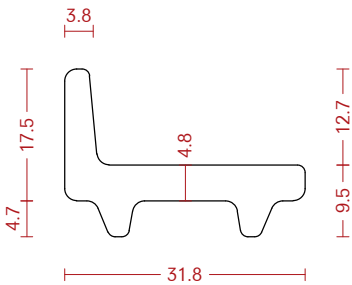
BAR LENGTH: 5800 mm
MATERIAL:
01 - Hot Rolled Steel

Profili

LUNGHEZZA BARRA: 5800 mm
MATERIALE:
01 - Acciaio laminato a caldo

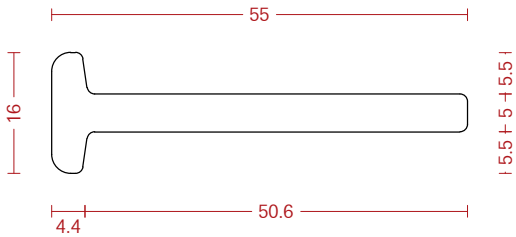
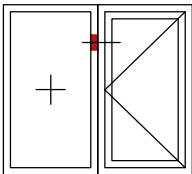
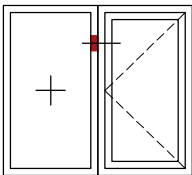
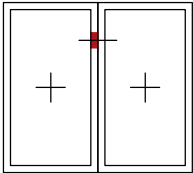
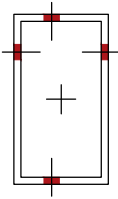
Perfiles

LONGITUD DE LA BARRA: 5800 mm
MATERIAL:
01 - Acero laminado en caliente



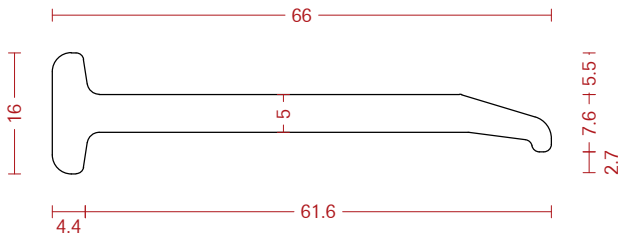
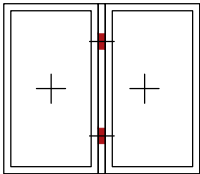
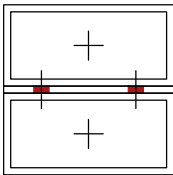
FF 3205LC-01

G = 1.84 U = 0.106
kg/m m²/m



FF 5505SV-01

G = 2.51 U = 0.135
kg/m m²/m



FF 6605SO-01

G = 2.86 U = 0.158
kg/m m²/m

W20 Classic

Profiles

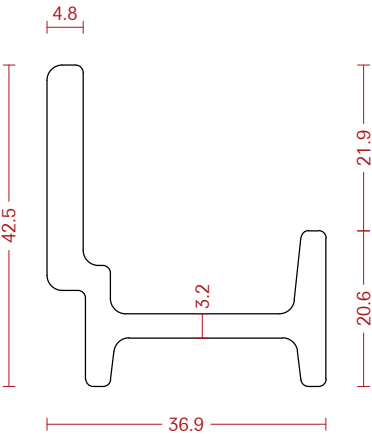
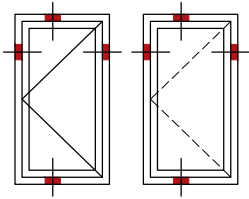
BAR LENGTH: 5800 mm
MATERIAL:
01 - Hot Rolled Steel

Profili

LUNGHEZZA BARRA: 5800 mm
MATERIALE:
01 - Acciaio laminato a caldo

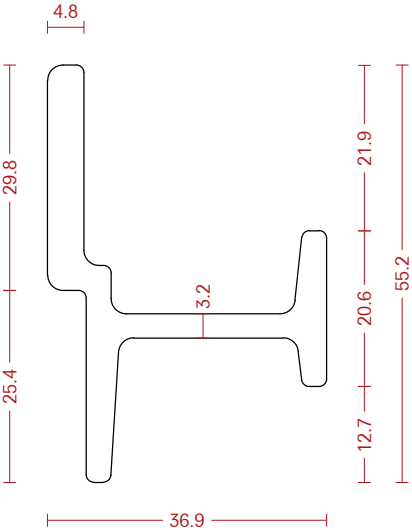
Perfiles

LONGITUD DE LA BARRA: 5800 mm
MATERIAL:
01 - Acero laminado en caliente



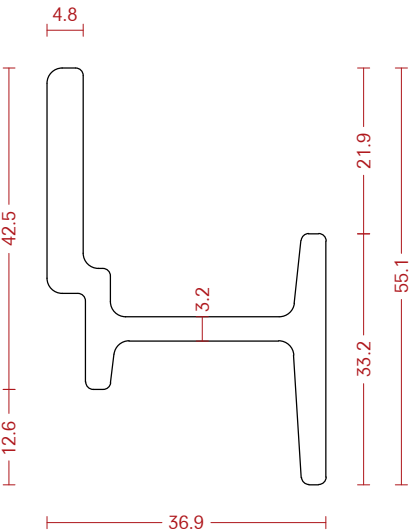
FF 3703L-01

G = 2.79 U = 0.182
kg/m m²/m



FF 3703T-01

G = 3.18 U = 0.207
kg/m m²/m



FF 3703Z-01

G = 3.18 U = 0.207
kg/m m²/m

W20 Classic

Profiles

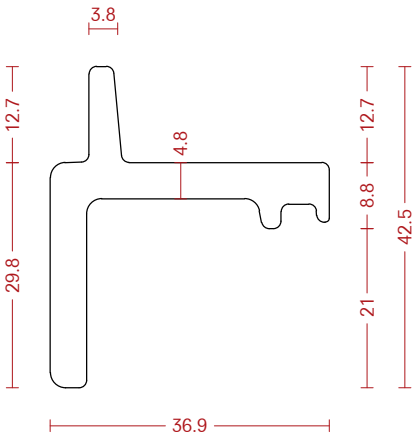
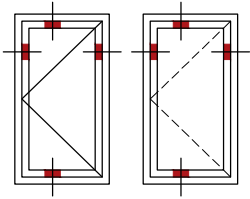
BAR LENGTH: 5800 mm
MATERIAL:
01 - Hot Rolled Steel

Profili

LUNGHEZZA BARRA: 5800 mm
MATERIALE:
01 - Acciaio laminato a caldo

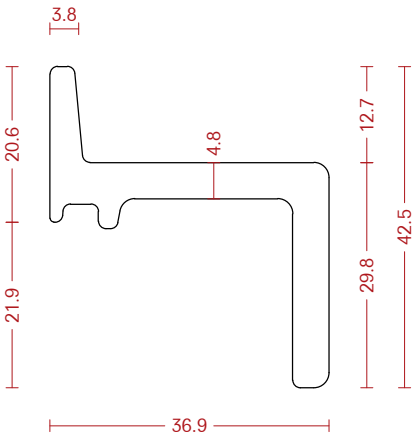
Perfiles

LONGITUD DE LA BARRA: 5800 mm
MATERIAL:
01 - Acero laminado en caliente



FF 3705TA-01

G = 2.86 U = 0.162
kg/m m²/m



FF 3705ZA-01

G = 2.86 U = 0.163
kg/m m²/m

W20 Classic

Profiles

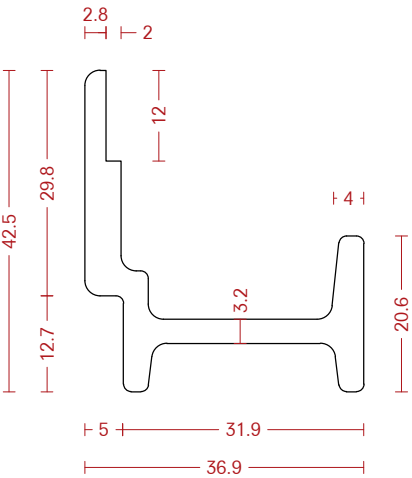
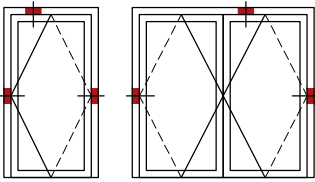
BAR LENGTH: 5800 mm
MATERIAL:
01 - Hot Rolled Steel

Profili

LUNGHEZZA BARRA: 5800 mm
MATERIALE:
01 - Acciaio laminato a caldo

Perfiles

LONGITUD DE LA BARRA: 5800 mm
MATERIAL:
01 - Acero laminado en caliente



FF 3703LP-01

G = 2.60 U = 0.182
kg/m m²/m

W20 Classic

Profiles

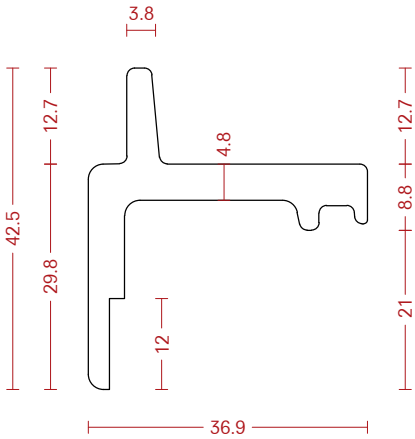
BAR LENGTH: 5800 mm
MATERIAL:
01 - Hot Rolled Steel

Profili

LUNGHEZZA BARRA: 5800 mm
MATERIALE:
01 - Acciaio laminato a caldo

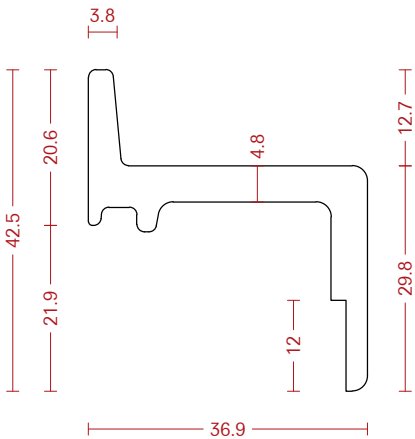
Perfiles

LONGITUD DE LA BARRA: 5800 mm
MATERIAL:
01 - Acero laminado en caliente



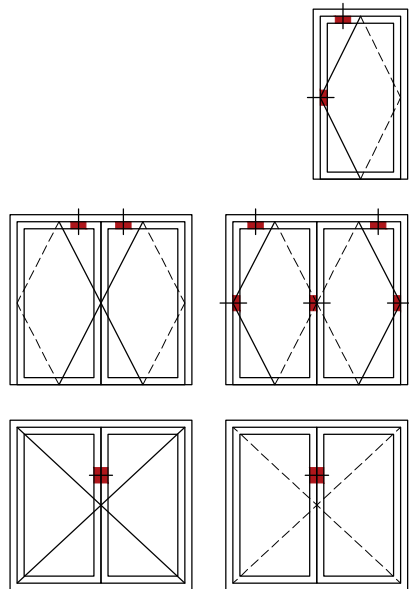
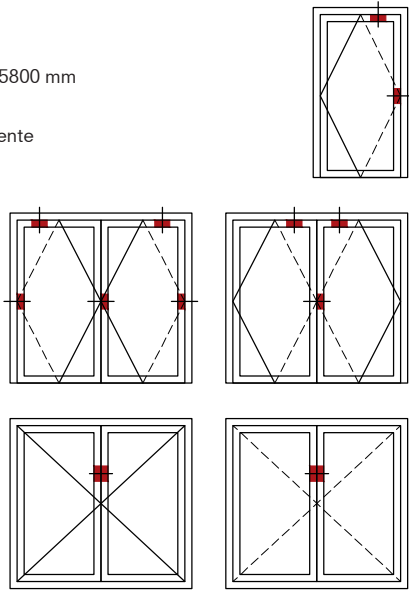
FF 3705TAP-01

G = 2.86 U = 0.162
kg/m m²/m



FF 3705ZAP-01

G = 2.86 U = 0.163
kg/m m²/m



W20 Slim

Profiles

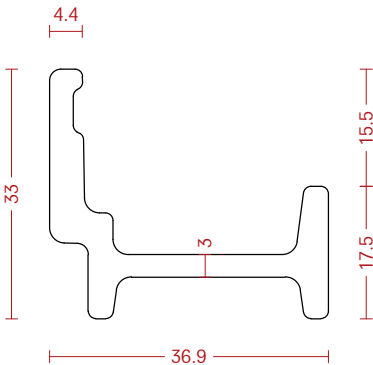
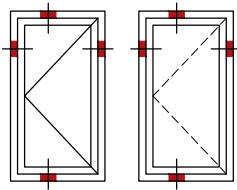
BAR LENGTH: 5800 mm
MATERIAL:
01 - Hot Rolled Steel

Profili

LUNGHEZZA BARRA: 5800 mm
MATERIALE:
01 - Acciaio laminato a caldo

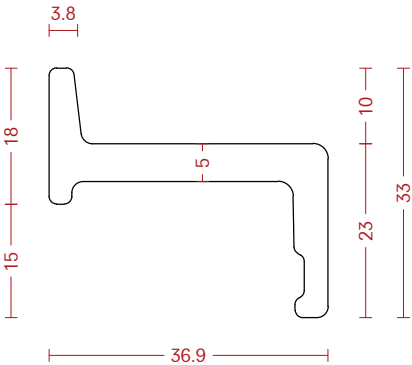
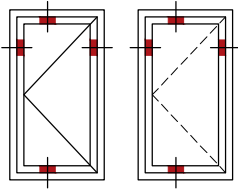
Perfiles

LONGITUD DE LA BARRA: 5800 mm
MATERIAL:
01 - Acero laminado en caliente



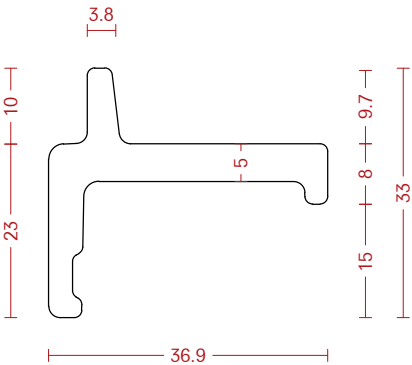
FF 3703LS-01

G = 1.92 U = 0.148
kg/m m²/m



FF 3705ZS-01

G = 1.78 U = 0.136
kg/m m²/m



FF 3705TS-01

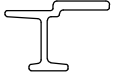
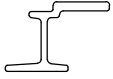
G = 3.78 U = 0.251
kg/m m²/m

Inertia values

Valori di inerzia

Valores de inercia

			G (kg/m)	U (m ² /m)	I _x (cm ⁴)	W _x (cm ³)	I _y (cm ⁴)	W _y (cm ³)
W20 Basic	FF 3203LF-01		1.534	0.114	2.470	1.273	0.440	0.326
	FF 3203TF-01		1.894	0.139	2.900	1.355	1.290	0.690
	FF 3203ZF-01		1.894	0.139	3.620	2.263	1.290	0.690
	FF 3203HF-01		2.313	0.163	4.480	2.462	1.910	1.049
	FF 3203H-01		2.281	0.163	4.480	2.462	1.910	1.049
	FF 3203TD-01		2.239	0.162	3.920	1.922	2.070	1.005
	FF 3203TN-01		1.434	0.116	1.700	0.756	0.610	0.427
	FF 3203TR-14		1.272	0.103	0.880	0.478	0.610	0.427
	FF 2503TR-01		1.272	0.103	0.880	0.478	0.610	0.270
	FF 3205LC-01		1.841	0.106	2.290	1.218	0.470	0.333
	FF 5505SV-01		2.514	0.136	9.390	3.019	0.180	0.225
	FF 6605SO-01		2.863	0.158	14.570	3.854	0.201	0.245

			G (kg/m)	U (m ² /m)	I _x (cm ⁴)	W _x (cm ³)	I _y (cm ⁴)	W _y (cm ³)
W20 Classic	FF 3703L-01		2.790	0.182	6.400	2.832	4.400	1.679
	FF 3703T-01		3.179	0.207	6.640	2.826	6.520	2.256
	FF 3703Z-01		3.176	0.207	8.250	4.104	6.490	2.253
	FF 3705TA-01		2.858	0.163	4.740	1.935	3.110	1.329
	FF 3705ZA-01		2.858	0.163	6.560	3.154	3.110	1.329
	FF 3703LP-01		2.603	0.182	6.400	2.832	4.400	1.679
	FF 3705TAP-01		2.671	0.163	4.740	1.935	3.110	1.329
	FF 3705ZAP-01		2.671	0.163	6.560	3.154	3.110	1.329
W20 Slim	FF 3703LS-01		2.253	0.158	5.190	2.403	1.770	0.843
	FF 3705TS-01		2.392	0.139	4.080	1.751	1.250	0.672
	FF 3705ZS-01		2.390	0.139	5.280	2.667	1.250	0.672

Legend

G = Weight
U = Coated surface
W_x / W_y = Flexural strength module
about one axis
I_x / I_y = Moment of inertia
about one axis

For any additional information
please contact our technical office.

Legenda

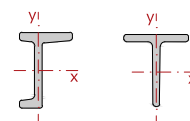
G = Peso
U = Superficie in vista
W_x / W_y = Modulo di resistenza alla
flessione lungo un asse
I_x / I_y = Momento d'inerzia
lungo un asse

Per ulteriori informazioni contattare
l'ufficio tecnico.

Legenda

G = Peso
U = Superficie recubierta
W_x / W_y = Módulo de resistencia
a la flexión sobre un eje
I_x / I_y = Momento de inercia
sobre un eje

Para más información contactar la
nuestra oficina técnica.



Glazing beads
and complementary

Profili fermavetro
e complementari

Junquillos
y complementarios

2.2

Legend

+ = Fixed
— = Open in
- - - = Open out
Dimensions in: mm
Scale 1:1
G = Weight
U = Coated surface

Legenda

+ = Anta fissa
— = Apertura interna
- - - = Apertura esterna
Misure in: mm
Scala 1:1
G = Peso
U = Superficie in vista

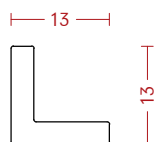
Leyenda

+ = Fijo
— = Apertura interna
- - - = Apertura externa
Medidas en: mm
Escala 1:1
G = Peso
U = Superficie recubierta

Glazing beads

BAR LENGTH: 5800 mm
MATERIAL:
01 - Hot Rolled Steel

Corner radius max 1 mm



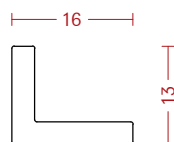
FV 1313A-01

G = 0.55 U = 0.052
kg/m m²/m

Profili

LUNGHEZZA BARRA: 5800 mm
MATERIALE:
01 - Acciaio laminato a caldo

Raggio spigoli massimo 1 mm



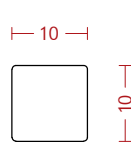
FV 1316A-01

G = 0.68 U = 0.064
kg/m m²/m

Junquillos

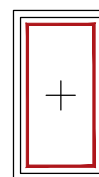
LONGITUD DE LA BARRA: 5800 mm
MATERIAL:
01 - Acero laminado en caliente

Radio máximo de esquina 1 mm



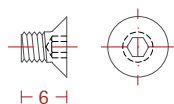
FV 1010R-01
L 6000 mm

G = 0.68 U = 0.064
kg/m m²/m



Fixing screw

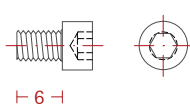
PU: 100 pc
MATERIAL:
Stainless steel A2



D99867-03
M4 x 6 mm

Vite di fissaggio

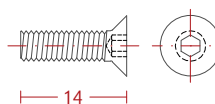
UV: 100 pezzi
MATERIALE:
Acciaio inox A2



D99866-03
M4 x 6 mm

Tornillo de fijación

CANTIDAD: 100 uds.
MATERIAL:
Acero inoxidable A2



D99876-03
M4 x 14 mm

Glazing beads

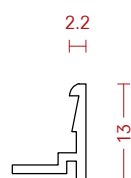
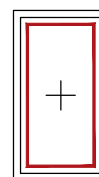
BAR LENGTH: 5800 mm
MATERIAL:
00 - Aluminium

Fermavetri

LUNGHEZZA BARRA: 5800 mm
MATERIALE:
00 - Alluminio

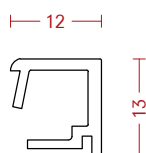
Junquillos

LONGITUD DE LA BARRA: 5800 mm
MATERIAL:
00 - Aluminio



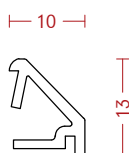
FV 1302R-00

G = 0.08 U = 0.051
kg/m m²/m



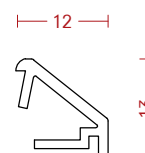
FV 1312R-00

G = 0.15 U = 0.078
kg/m m²/m



FV 1310S-00

G = 0.11 U = 0.064
kg/m m²/m



FV 1312S-00

G = 0.12 U = 0.069
kg/m m²/m

Glazing bead - clips

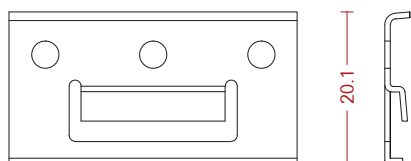
PU: 100 pc
MATERIAL:
Stainless steel AISI 304 2B

Fermavetri - clips

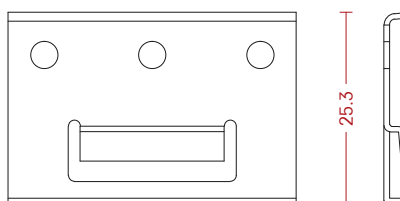
UV: 100 pezzi
MATERIALE:
Acciaio inox AISI 304 2B

Clips para junquillos

CANTIDAD: 100 uds.
MATERIAL:
Acero inoxidable AISI 304 2B



F99001-03



F99002-03

Fixture - clips

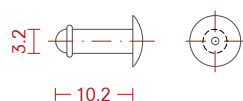
PU: 100 pc
MATERIAL:
Stainless steel A2

Fissaggio clips

UV: 100 pezzi
MATERIALE:
Acciaio inox A2

Fijacion - clips

CANTIDAD: 100 uds.
MATERIAL:
Acero inoxidable A2



D99950-03
Ø3.2 x 8 mm

False muntins

BAR LENGTH: 5800 mm

MATERIALS:

01 - Hot Rolled Steel

14 - Laser welded steel,
bead blasted

Corner radius max 1 mm

Inglesine

LUNGHEZZA BARRA: 5800 mm

MATERIALI:

01 - Acciaio laminato a caldo

14 - Acciaio saldato laser,
micropallinato

Raggio spigoli massimo 1 mm

Listones adheridos

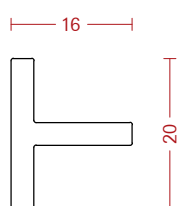
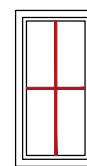
LONGITUD DE LA BARRA: 5800 mm

MATERIALES:

01 - Acero laminado en caliente

14 - Acero soldado con láser,
micro-arenado

Radio máximo de esquina 1 mm



FF 2016IT-14 *

G = 0.78 U = 0.073
kg/m m²/m



FF 2003IP-01

G = 0.47 U = 0.046
kg/m m²/m

*On request
*Su richiesta
*Por encargo

Double-side adhesive tape Nastro biadesivo

Black.

Apply with primer I99005-75.

PU: 33 m

Nero.

Applicare con primer I99005-75.

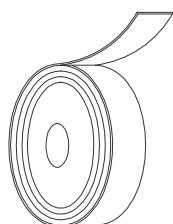
UV: 33 m

Cinta adhesiva de doble cara

Negro.

Aplicar con imprimación I99005-75.

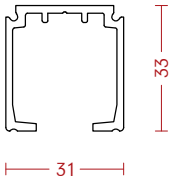
Cantidad: 33 m



G99301-74
8 x 1.55 mm

Sliding door profiles

BAR LENGTH: 3000 mm
MATERIALS:
02 = Galvanized steel
12 = Bright steel
53 = Black electrocolored aluminum

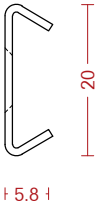


code	L
E99157-53	2000 mm
E99158-53	3000 mm
E99159-53	4000 mm
E99160-53	6000 mm

G = 0.59 U = 0.128
kg/m m²/m

Profili porta scorrevole

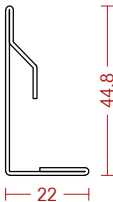
LUNGHEZZA BARRA: 3000 mm
MATERIALI:
02 = Acciaio zincato
12 = Acciaio decapato
53 = Alluminio elettrocolore nero



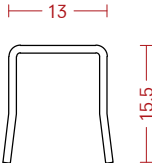
E99253-12	
G = 0.24	U = 0.052
kg/m	m ² /m

Perfiles puerta corrediza

LONGITUD DE LA BARRA: 3000 mm
MATERIALES:
02 = Acero galvanizado
12 = Acero bruto
53 = Aluminio electrocolor negro



E99254-12	
G = 0.82	U = 0.120
kg/m	m ² /m



E99257-02	
G = 0.32	U = 0.057
kg/m	m ² /m

Glazing table

Tabella vetrazioni

Tabla de acristalamiento

2.3

Important notes:

This system requires the use of glasses with edge covered.

The glazing tables and sealing guidelines are based on the nominal sizes of the profiles and glazing. Due to the production tolerances (profiles, glazing beads, panes) we advise double checking your selection.

When using insulating glass in exterior applications, use a UV resistant edge seal with the minimum width.

Note importanti:

Per questo sistema è necessario l'utilizzo di vetri con canaline ribassate.

Le tabelle vetrazioni si riferiscono alle misure nominali dei profili e delle vetrate. A causa delle tolleranze di produzione (profili, profili fermavetro, spessori) è preferibile effettuare una seconda verifica della selezione.

Quando si utilizza vetro isolante in applicazioni esterne, utilizzare un sigillante per superfici resistente ai raggi UV con la larghezza minima.

Notas importantes:

Este sistema requiere el uso de gafas con canales rebajados.

Las tablas de acristalamiento hacen referencia a las medidas nominales de los perfiles y los acristalamientos. Debido a las tolerancias de fabricación (perfiles, junquillos y espesores de vidrio), debe comprobarse la gama en caso necesario.

Cuando use vidrio aislante en aplicaciones exteriores, use un sellador de superficie resistente a los rayos UV con el ancho mínimo.

Legend

+ = Fixed
— = Open in
- - - = Open out
Dimensions in: mm
Scale 1:1
A = External gaskets
B = Internal gaskets
C = Glazing bead
D = Screw connection
E = Offset

Legenda

+ = Anta fissa
— = Apertura interna
- - - = Apertura esterna
Misure in: mm
Scala 1:1
A = Guarnizioni esterne
B = Guarnizioni interne
C = Fermavetro
D = Vite di fissaggio
E = Scarto

Leyenda

+ = Fijo
— = Apertura interna
- - - = Apertura externa
Medidas en: mm
Escala 1:1
A = Juntas exteriores
B = Juntas interiores
C = Junquillo
D = Tornillo de fijación
E = Residuos

Glazing table

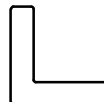
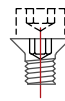
01 - Hot Rolled Steel

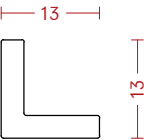
Tabella vetrazioni

01 - Acciaio laminato a caldo

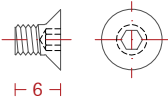
Tabla de acristalamientos

01 - Acero laminado en caliente

							
F	A		B		C	D	E
mm	code	mm	code	mm	mm	mm	mm
5	G99203-61	5	G99204-61	5.5	13	6 / 11	1 / 6
6	G99203-61	5	G99203-61	4.5	13	6 / 11	1 / 6
7	G99201-61	3	G99204-61	5.5	13	6 / 11	1 / 6
8	G99201-61	3	G99203-61	4.5	13	6 / 11	1 / 6
9	G99201-61	3	G99202-61	3.5	13	6 / 11	1 / 6
10	G99201-61	3	G99201-61	2.5	13	6 / 11	1 / 6



FV 1313A-01



D99867-03
M4 x 6 mm



D99866-03
M4 x 6 mm

Note:

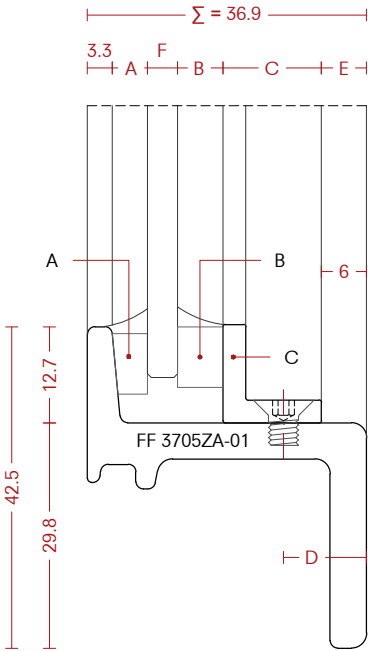
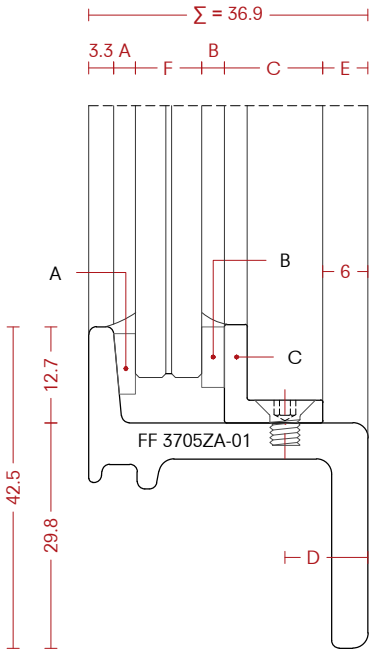
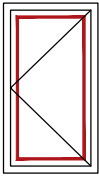
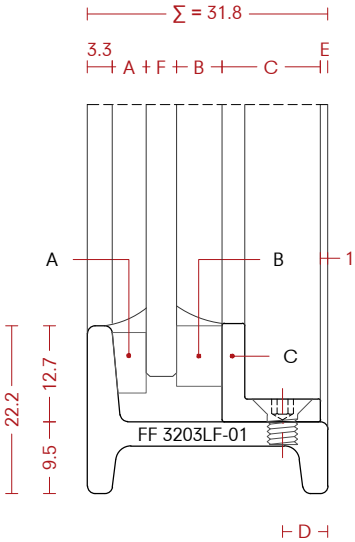
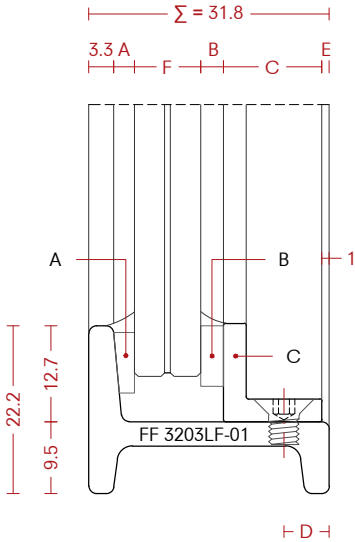
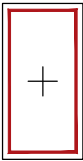
We recommend to reduce the height of the spacer of the Insulated Glass Unit (IGU).

Nota:

Si consiglia di adottare canaline vetrocamera con altezza ridotta.

Nota:

Recomendamos reducir la altura del espaciador de la unidad de vidrio aislante.



Glazing table

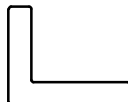
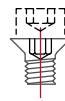
01 - Hot Rolled Steel

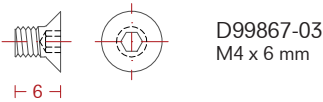
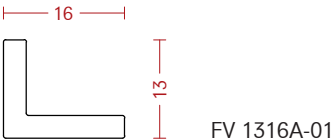
Tabella vetrazioni

01 - Acciaio laminato a caldo

Tabla de acristalamientos

01 - Acero laminado en caliente

 F	A		B		 C	 D	E
	code	mm	code	mm			
3	G99203-61	5	G99203-61	4.5	16	7.5 / 12.5	1 / 6
4	G99201-61	3	G99204-61	5.5	16	7.5 / 12.5	1 / 6
5	G99201-61	3	G99203-61	4.5	16	7.5 / 12.5	1 / 6
6	G99201-61	3	G99202-61	3.5	16	7.5 / 12.5	1 / 6
7	G99201-61	3	G99201-61	2.5	16	7.5 / 12.5	1 / 6



Note:

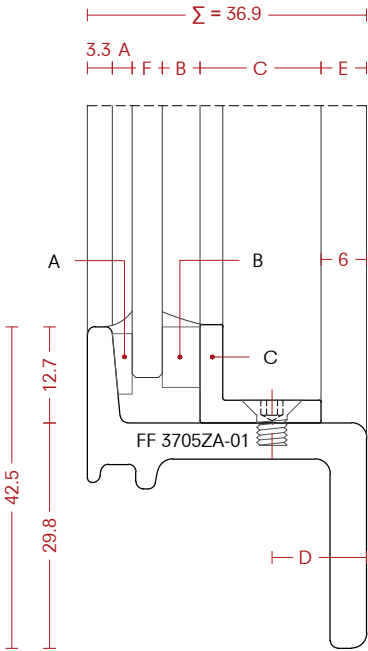
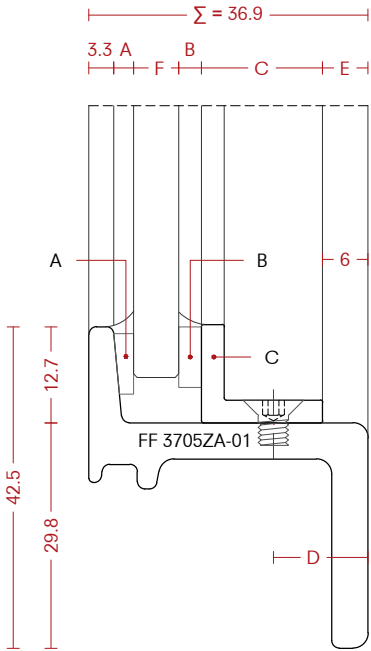
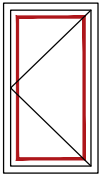
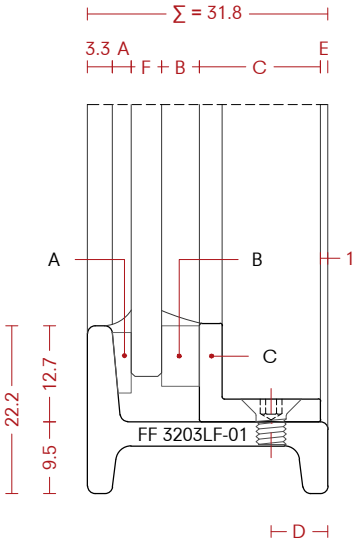
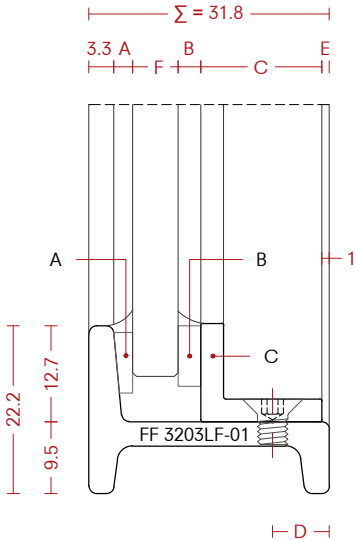
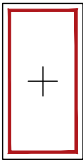
We recommend to reduce the height of the spacer of the Insulated Glass Unit (IGU).

Nota:

Si consiglia di adottare canaline vetrocamera con altezza ridotta.

Nota:

Recomendamos reducir la altura del espaciador de la unidad de vidrio aislante.



Glazing table

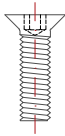
01 - Hot Rolled Steel

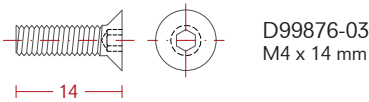
Tabella vetrazioni

01 - Acciaio laminato a caldo

Tabla de acristalamientos

01 - Acero laminado en caliente

							
F	A		B		C	D	E
mm	code	mm	code	mm	mm	mm	mm
7	G99203-61	5	G99204-61	5.5	10	6 / 11	1 / 6
8	G99203-61	5	G99203-61	4.5	10	6 / 11	1 / 6
9	G99201-61	3	G99204-61	5.5	10	6 / 11	1 / 6
10	G99201-61	3	G99203-61	4.5	10	6 / 11	1 / 6
11	G99201-61	3	G99202-61	3.5	10	6 / 11	1 / 6
12	G99201-61	3	G99201-61	2.5	10	6 / 11	1 / 6



Note:

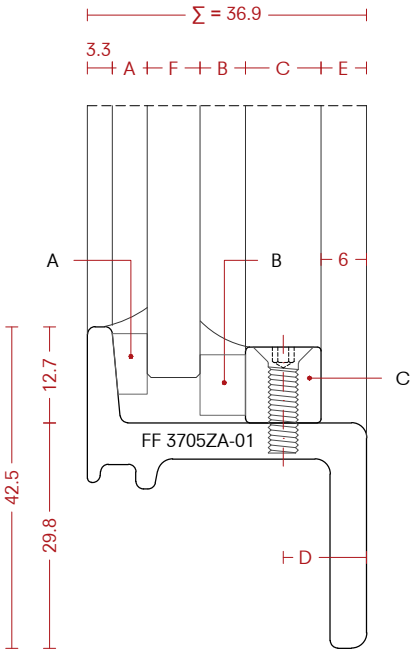
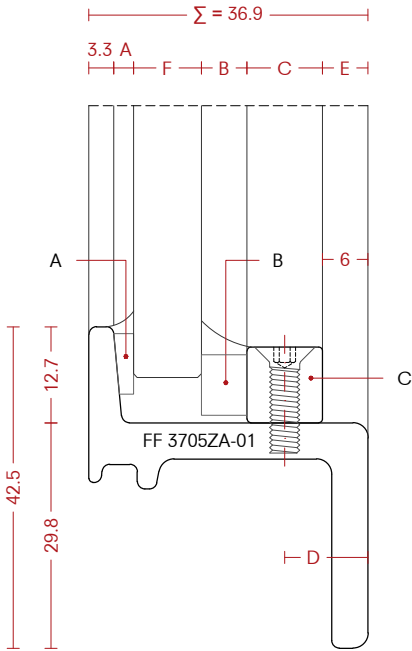
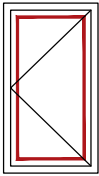
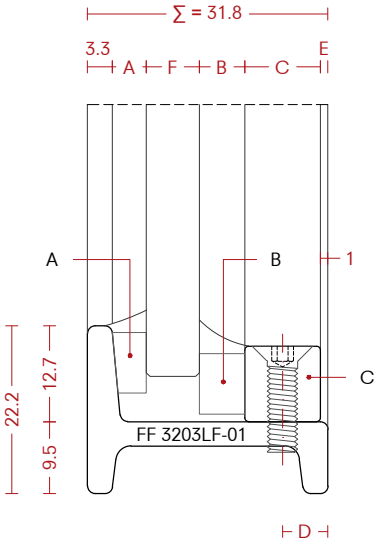
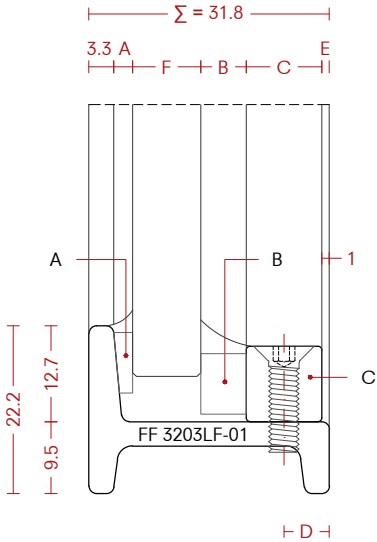
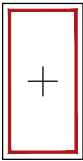
We recommend to reduce the height of the spacer of the Insulated Glass Unit (IGU).

Nota:

Si consiglia di adottare canaline vetrocamera con altezza ridotta.

Nota:

Recomendamos reducir la altura del espaciador de la unidad de vidrio aislante.



Glazing table

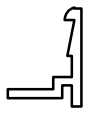
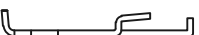
00 - Aluminium

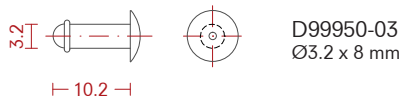
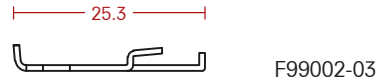
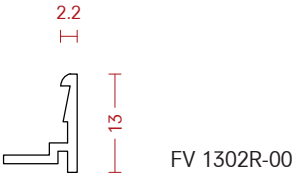
Tabella vetrazioni

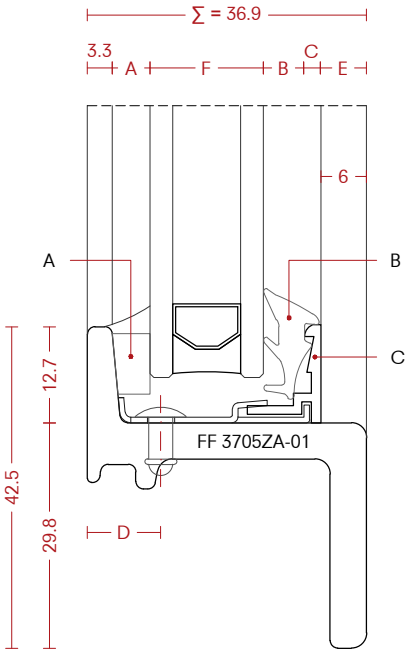
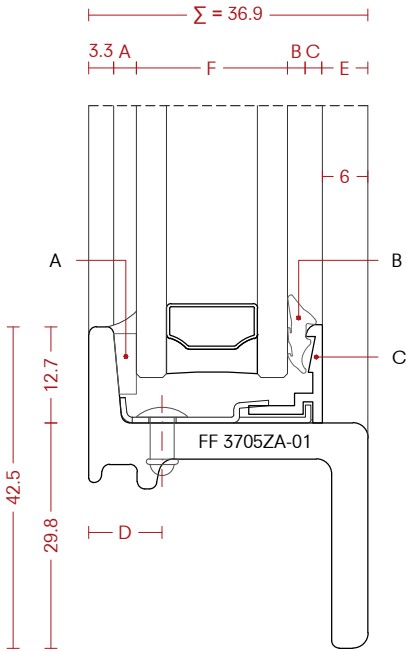
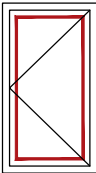
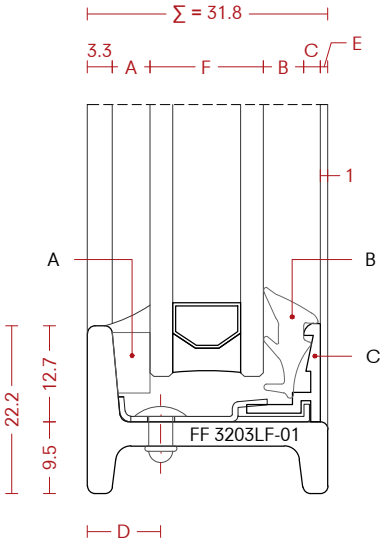
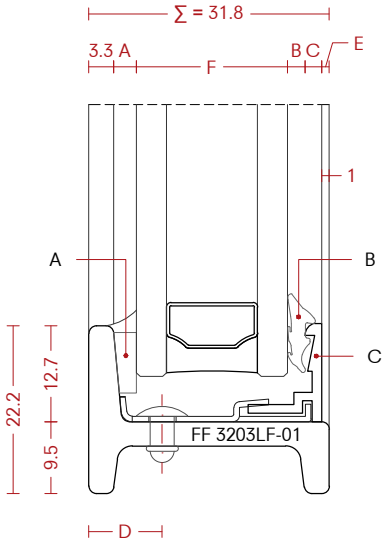
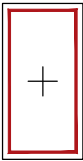
00 - Alluminio

Tabla de acristalamientos

00 - Aluminio

								
F	A		B		C	D		E
mm	code	mm	code	mm	mm	code	mm	mm
15	G99203-61	5	G99208-60	6	2.2	F99002-03	9.7	1 / 6
16	G99203-61	5	G99207-60	5	2.2	F99002-03	9.7	1 / 6
17	G99201-61	3	G99208-60	6	2.2	F99002-03	9.7	1 / 6
18	G99201-61	3	G99207-60	5	2.2	F99002-03	9.7	1 / 6
19	G99201-61	3	G99206-60	4	2.2	F99002-03	9.7	1 / 6
20	G99201-61	3	G99205-60	3	2.2	F99002-03	9.7	1 / 6





Glazing table

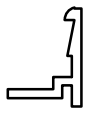
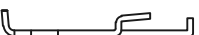
00 - Aluminium

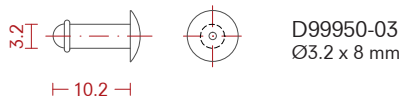
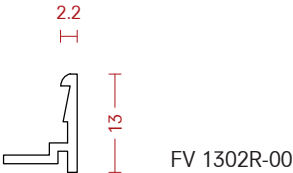
Tabella vetrazioni

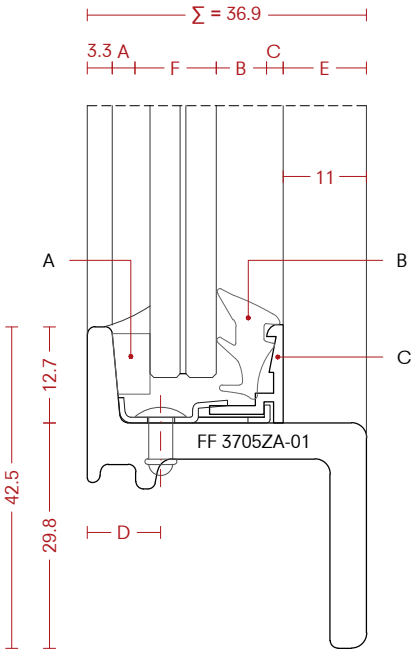
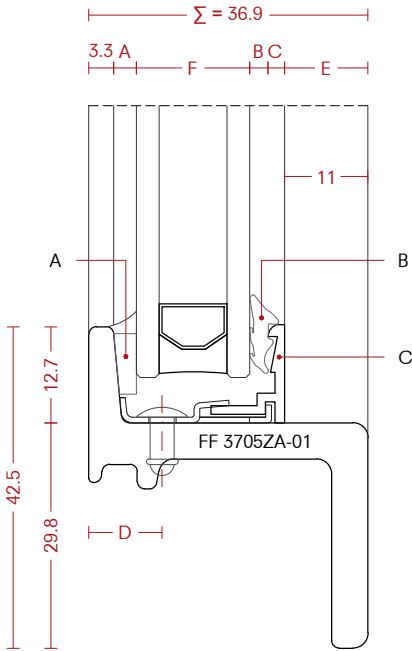
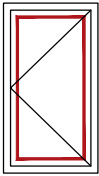
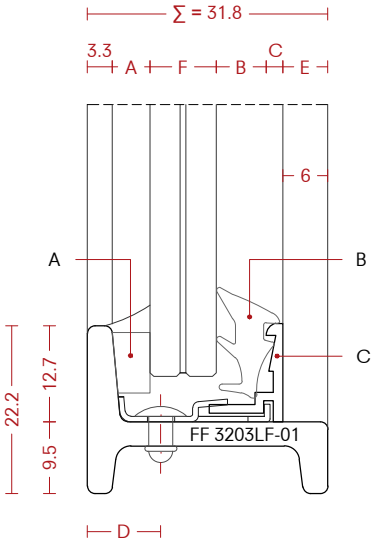
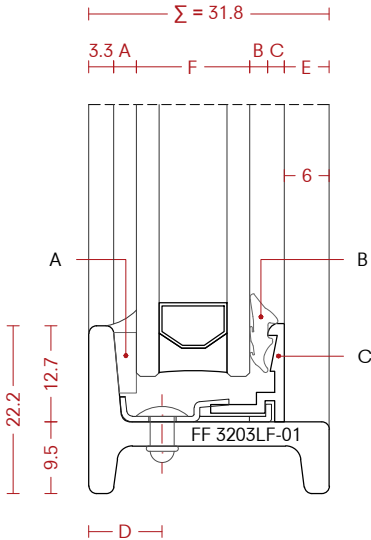
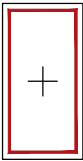
00 - Alluminio

Tabla de acristalamientos

00 - Aluminio

								
F	A		B		C	D		E
mm	code	mm	code	mm	mm	code	mm	mm
10	G99203-61	5	G99208-60	6	2.2	F99001-03	9.7	6 / 11
11	G99203-61	5	G99207-60	5	2.2	F99001-03	9.7	6 / 11
12	G99201-61	3	G99208-60	6	2.2	F99001-03	9.7	6 / 11
13	G99201-61	3	G99207-60	5	2.2	F99001-03	9.7	6 / 11
14	G99201-61	3	G99206-60	4	2.2	F99001-03	9.7	6 / 11
15	G99201-61	3	G99205-60	3	2.2	F99001-03	9.7	6 / 11





Glazing table

00 - Aluminium

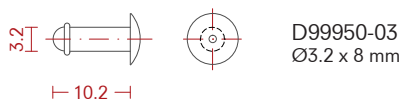
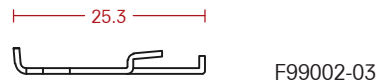
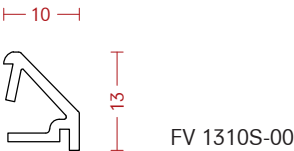
Tabella vetrazioni

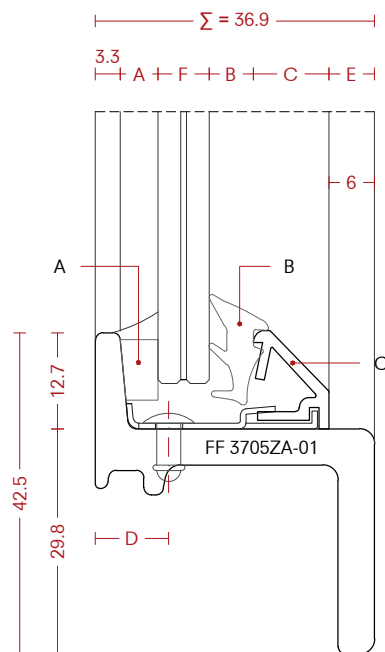
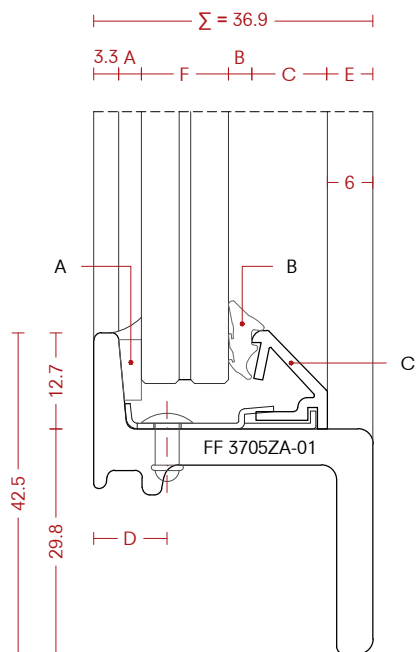
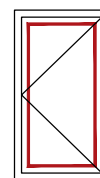
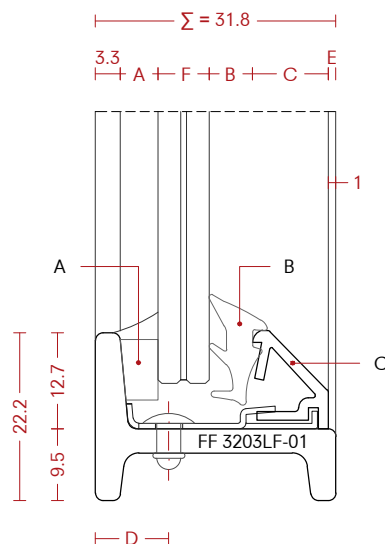
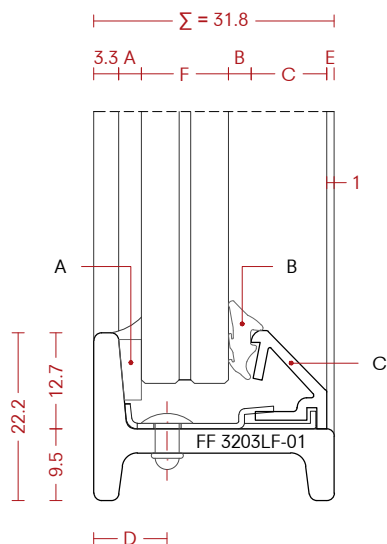
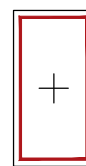
00 - Alluminio

Tabla de acristalamientos

00 - Aluminio

								
F	A		B		C	D		E
mm	code	mm	code	mm	mm	code	mm	mm
7	G99203-61	5	G99208-60	6	10	F99002-03	9.7	1 / 6
8	G99203-61	5	G99207-60	5	10	F99002-03	9.7	1 / 6
9	G99201-61	3	G99208-60	6	10	F99002-03	9.7	1 / 6
10	G99201-61	3	G99207-60	5	10	F99002-03	9.7	1 / 6
11	G99201-61	3	G99206-60	4	10	F99002-03	9.7	1 / 6
12	G99201-61	3	G99205-60	3	10	F99002-03	9.7	1 / 6





Glazing table

00 - Aluminium

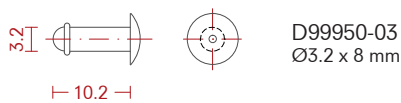
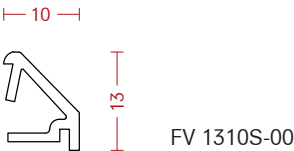
Tabella vetrazioni

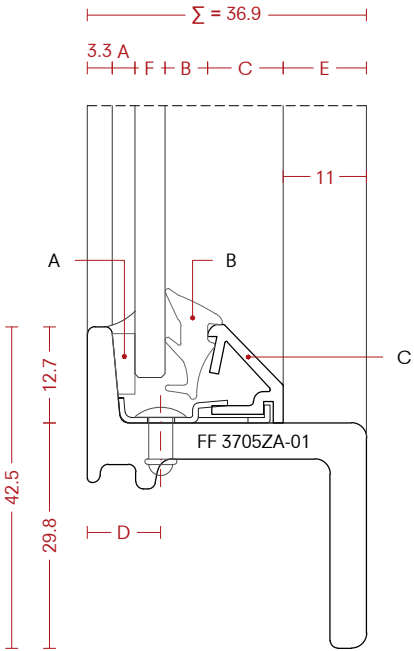
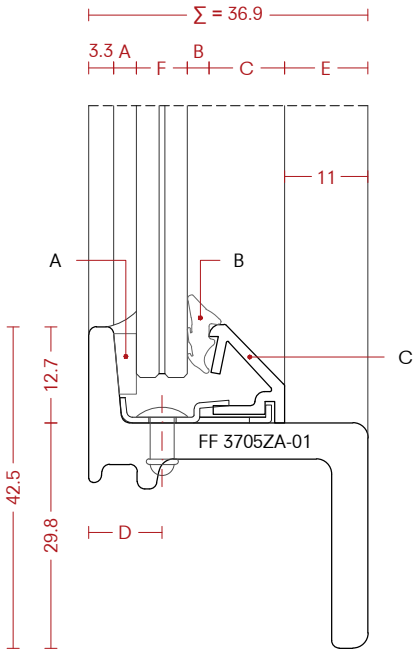
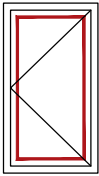
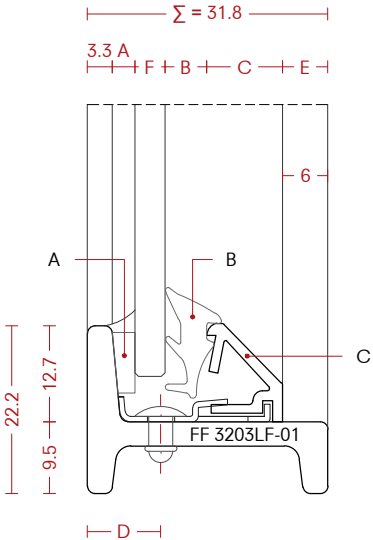
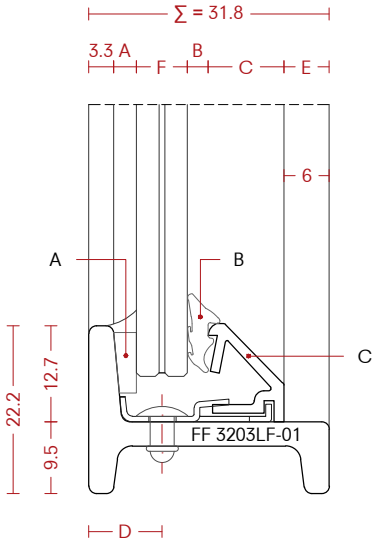
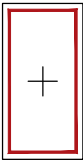
00 - Alluminio

Tabla de acristalamientos

00 - Aluminio

								
F	A		B		C	D		E
mm	code	mm	code	mm	mm	code	mm	mm
3	G99203-61	5	G99207-60	5	10	F99001-03	9.7	6 / 11
4	G99201-61	3	G99208-60	6	10	F99001-03	9.7	6 / 11
5	G99201-61	3	G99207-60	5	10	F99001-03	9.7	6 / 11
6	G99201-61	3	G99206-60	4	10	F99001-03	9.7	6 / 11
7	G99201-61	3	G99205-60	3	10	F99001-03	9.7	6 / 11





Glazing table

00 - Aluminium

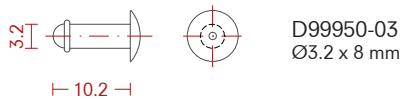
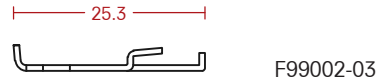
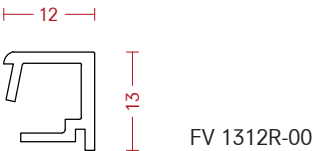
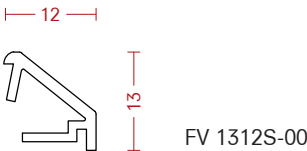
Tabella vetrazioni

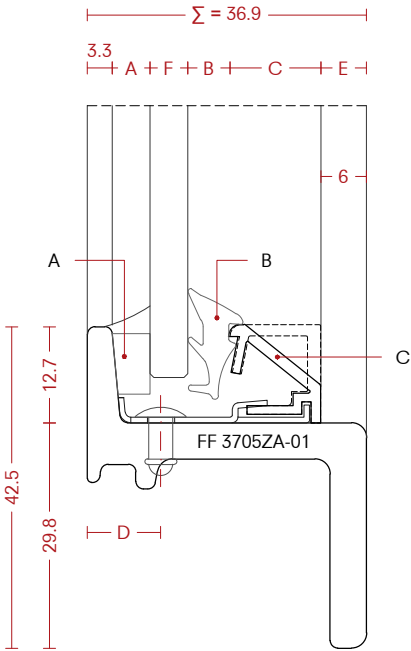
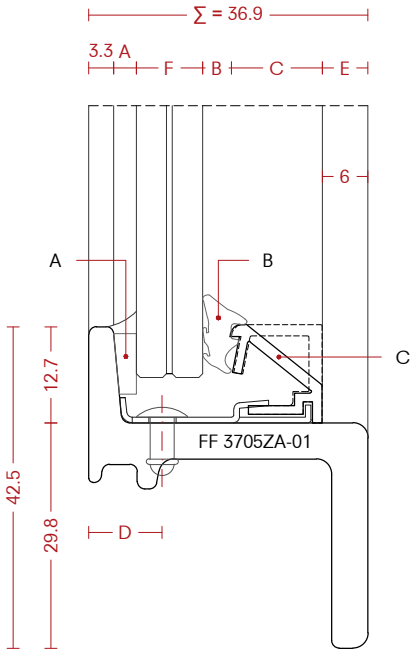
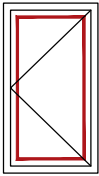
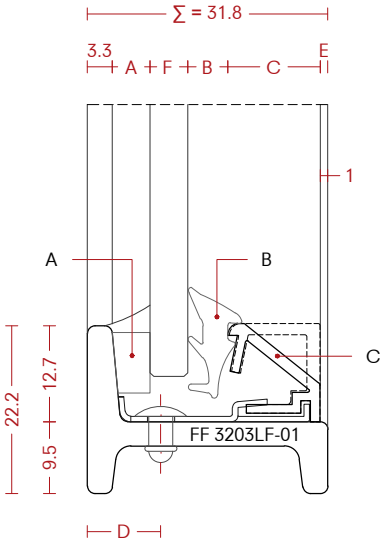
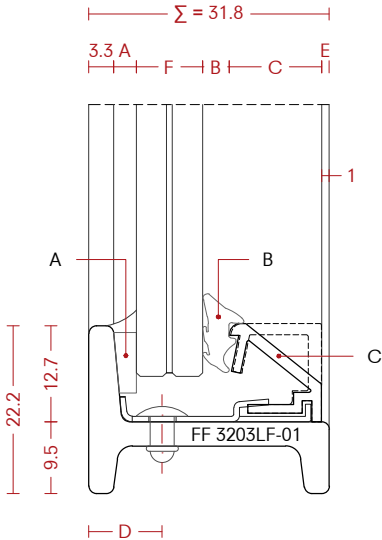
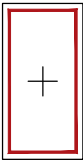
00 - Alluminio

Tabla de acristamientos

00 - Aluminio

					
F	A	B	C	D	E
mm	code	mm	code	mm	mm
5	G99203-61	5	G99208-60	6	12
6	G99203-61	5	G99207-60	5	12
7	G99201-61	3	G99208-60	6	12
8	G99201-61	3	G99207-60	5	12
9	G99201-61	3	G99206-60	4	12
10	G99201-61	3	G99205-60	3	12





Glazing table

00 - Aluminium

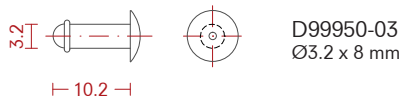
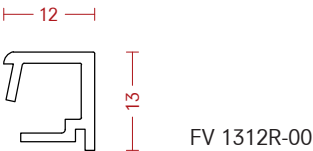
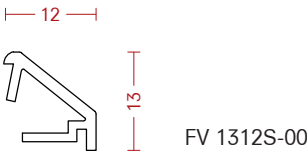
Tabella vetrazioni

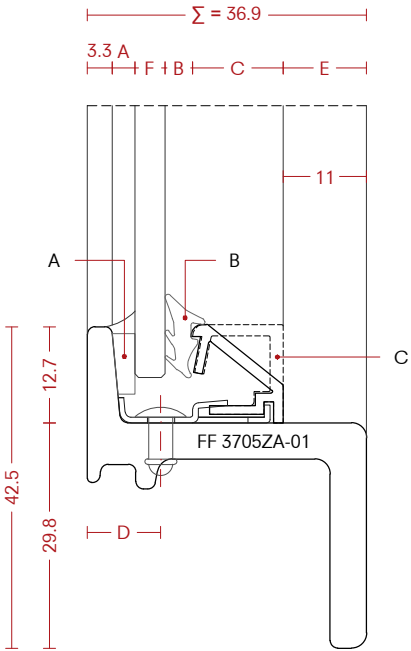
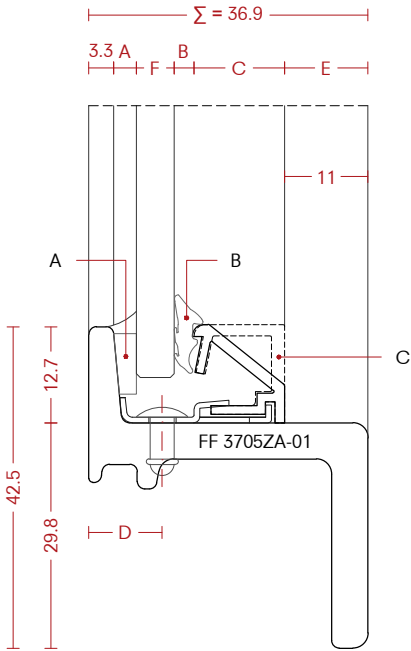
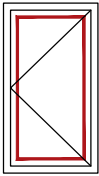
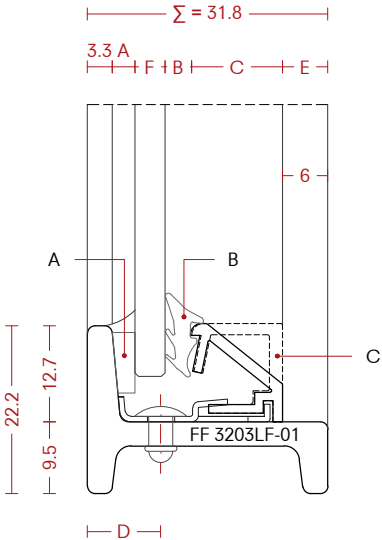
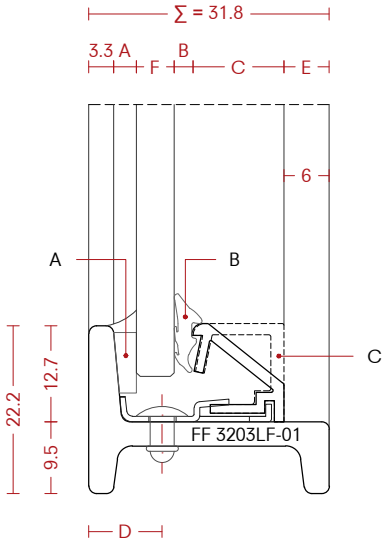
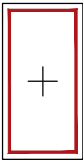
00 - Alluminio

Tabla de acristalamientos

00 - Aluminio

								
F	A		B		C	D		E
mm	code	mm	code	mm	mm	code	mm	mm
3	G99201-61	3	G99207-60	5	12	F99001-03	9.7	6 / 11
4	G99201-61	3	G99206-60	4	12	F99001-03	9.7	6 / 11
5	G99201-61	3	G99205-60	3	12	F99001-03	9.7	6 / 11





Accessories	Accessori	Accesorios	3.0
Opening scheme	Schema di apertura	Diagrama de apertura	
Surface finishes	Finiture	Acabados de superficie	
Gaskets	Guarnizioni	Juntas de sellado	3.1
System accessories	Accessori di sistema	Accesorios del sistema	3.2
Hinges	Cerniere	Bisagras	3.3
Sliding door	Porta scorrevole	Puerta corrediza	3.4
Flush bolts	Catenacci	Pasador de canto	3.5
General fittings	Ferramenta generale	Herrajes generales	3.6
Locks	Serrature	Cerraduras	3.7
Screws	Viti	Tornillos	3.8
Assembling tools	Utensili di assemblaggio	Herramientas de montaje	3.9

Opening scheme

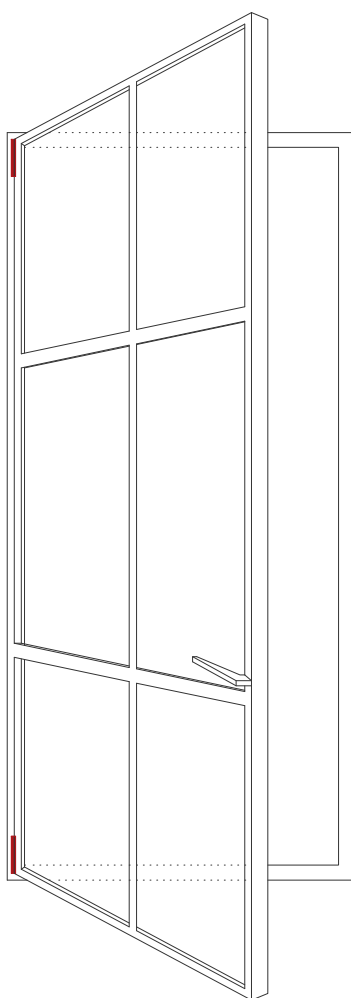
A window or a door is defined as "left opening" or "right opening" when, viewed from the opening side, the hinges are respectively on the left or on the right.

Schema di apertura

Una finestra o una porta si definiscono "apertura sinistra" o "apertura destra" quando, vista dalla parte del verso di apertura, le cerniere si trovano rispettivamente a sinistra o a destra.

Diagrama de apertura

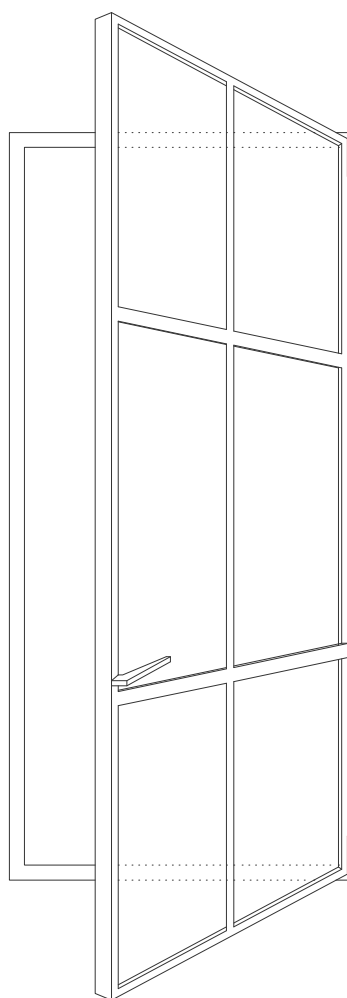
Una ventana o puerta se llama "apertura izquierda" o "apertura derecha" cuando, en la dirección de apertura, las bisagras están respectivamente a la izquierda o a la derecha.



Left opening

Apertura sinistra

Apertura izquierda



Right opening

Apertura destra

Apertura derecha

Surface finishes

Finiture superfici

Acabados de superficie

Satin chrome

Cromo satinato

Cromo mate cepillado

SC

15



Dark bronze

Bronzo anticato

Bronce oscuro

DB

17



Oil-rubbed bronze

Bronzo brunito cerato

Bronce engrasado

OB

18



Gun metal

Grigio canna di fucile

Gris oscuro

GM

42



Matt black

Nero opaco

Negro mate

MB

43



Gaskets

Guarnizioni

Juntas de sellado

3.1

Rebate gasket

EPDM black, self-adhesive.
With removable positioning lip.

PU = 50 m

Guarnizione di battuta

EPDM nero, autoadesivo.
Con labbro di posizionamento
rimovibile.

UV = 50 m

Junta de tope

EPDM negro, autoadhesiva.
Cierre de posición extraíble.

CANTIDAD = 50 m



G99019-60
W20 Classic

Rebate gasket

EPDM black.

PU = 50 m

Guarnizione di battuta

EPDM nero.

UV = 50 m

Junta de tope

EPDM negro.

CANTIDAD = 50 m



G99001-60
W20 Basic

Rebate gasket

PVC sealing tape, black,
self-adhesive, 3 mm

PU = 25 m

Guarnizione di battuta

Nastro di guarnizione in PVC, nero,
autoadesivo, 3 mm

UV = 25 m

Junta de tope

Cinta aislante de PVC, color negro,
autoadhesiva, 3 mm

CANTIDAD = 25 m



G99002-62
W20 Slim

Rebate gasket

Gasket for sliding door,
EPDM black.

PU = 50 m

Guarnizione di battuta

Guarnizione per porta scorrevole,
EPDM nero.

UV = 50 m

Junta de tope

Junta para puerta corrediza,
EPDM negro.

CANTIDAD = 50 m



G12015-60

Gasket for chicane

Neoprene, black,
self-adhesive, 15x8 mm

PU = 10 m

Guarnizione per labirinto

Neoprene, nero,
autoadesivo, 15x8 mm

UV = 10 m

Cinta para laberinto

Neopreno, color negro,
autoadhesiva, 15x8 mm

CANTIDAD = 10 m



G99014-61

External tape seals

Neoprene, black,
self-adhesive, 3 mm

PU = 20 m

Nastro autoadesivo
esterno

Neoprene, nero,
autoadesivo, 3 mm

UV = 20 m

Cinta exterior

Neopreno, color negro,
autoadhesiva, 3 mm

CANTIDAD = 20 m



G99201-61

External tape seals

Neoprene, black,
self-adhesive, 4 mm

PU = 20 m

Nastro autoadesivo
esterno

Neoprene, nero,
autoadesivo, 4 mm

UV = 20 m

Cinta exterior

Neopreno, color negro,
autoadhesiva, 4 mm

CANTIDAD = 20 m



G99202-61

External tape seals

Neoprene, black,
self-adhesive, 5 mm

PU = 20 m

Nastro autoadesivo
esterno

Neoprene, nero,
autoadesivo, 5 mm

UV = 20 m

Cinta exterior

Neopreno, color negro,
autoadhesiva, 5 mm

CANTIDAD = 20 m



G99203-61

Internal tape seals

Neoprene, black,
self-adhesive, 3 mm

PU = 20 m

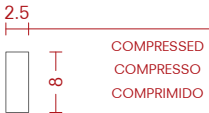
Nastro autoadesivo interno Cinta interior

Neoprene, nero,
autoadesivo, 3 mm

UV = 20 m

Neopreno, color negro,
autoadhesiva, 3 mm

CANTIDAD = 20 m



G99201-61

Internal tape seals

Neoprene, black,
self-adhesive, 4 mm

PU = 20 m

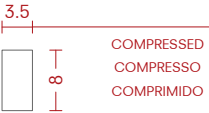
Nastro autoadesivo interno Cinta interior

Neoprene, nero,
autoadesivo, 4 mm

UV = 20 m

Neopreno, color negro,
autoadhesiva, 4 mm

CANTIDAD = 20 m



G99202-61

Internal tape seals

Neoprene, black,
self-adhesive, 5 mm

PU = 20 m

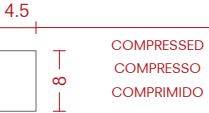
Nastro autoadesivo interno Cinta interior

Neoprene, nero,
autoadesivo, 5 mm

UV = 20 m

Neopreno, color negro,
autoadhesiva, 5 mm

CANTIDAD = 20 m



G99203-61

Internal tape seals

Neoprene, black,
self-adhesive, 6 mm

PU = 20 m

Nastro autoadesivo interno Cinta interior

Neoprene, nero,
autoadesivo, 6 mm

UV = 20 m

Neopreno, color negro,
autoadhesiva, 6 mm

CANTIDAD = 20 m



G99204-61

Internal glazing gasket

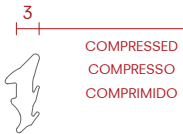
EPDM, black, 3 mm
PU = 150 m

Guarnizione vetro interna

EPDM, nero, 3 mm
UV = 150 m

Junta de acristalamiento interior

EPDM, color negro, 3 mm
CANTIDAD = 150 m



G99205-60

Internal glazing gasket

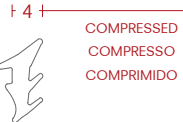
EPDM, black, 4 mm
PU = 150 m

Guarnizione vetro interna

EPDM, nero, 4 mm
UV = 150 m

Junta de acristalamiento interior

EPDM, color negro, 4 mm
CANTIDAD = 150 m



G99206-60

Internal glazing gasket

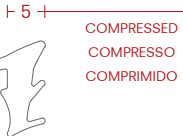
EPDM, black, 5 mm
PU = 150 m

Guarnizione vetro interna

EPDM, nero, 5 mm
UV = 150 m

Junta de acristalamiento interior

EPDM, color negro, 5 mm
CANTIDAD = 150 m



G99207-60

Internal glazing gasket

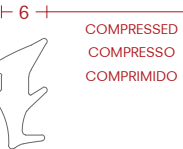
EPDM, black, 6 mm
PU = 150 m

Guarnizione vetro interna

EPDM, nero, 6 mm
UV = 150 m

Junta de acristalamiento interior

EPDM, color negro, 6 mm
CANTIDAD = 150 m



G99208-60

System accessories

Accessori di sistema

Accesorios del sistema

3.2

Weather bar

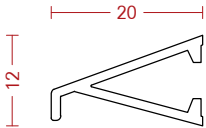
-00 = Aluminium
L = 5800 mm

Gocciolatoio

-00 = Alluminio
L = 5800 mm

Vierteaguas

-00 = Aluminio
L = 5800 mm



A99001-00

Fixing screw

Fixing screw weather bar
A99001-00, M4x9 mm DIN84

-02 = Galvanized steel
PU = 50 pieces

Vite di fissaggio

Vite di fissaggio gocciolatoio
A99001-00, M4x9 mm DIN84

-02 = Acciaio zincato
UV = 50 pezzi

Cabezal de fijación

Tornillo de fijación vierteaguas
A99001-00, M4x9 mm DIN84

-02 = Acero galvanizado
CANTIDAD = 50 unidades



D99901-02

Weather bar

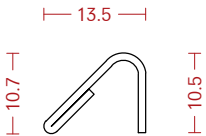
-02 = Galvanized steel
L = 3000 mm

Gocciolatoio

-02 = Acciaio zincato
L = 3000 mm

Vierteaguas

-02 = Acero galvanizado
L = 3000 mm



A99006-02

Hinges

Cerniere

Bisagras

3.3

Important notes:

All weld-on and/or screw-on hinges are compatible for both open-in and open-out.

Note importanti:

Tutte le cerniere a saldare e/o avvitare sono compatibili sia per apertura interna che per apertura esterna.

Notas importantes:

Todas las bisagras de soldadura y/o atornillable son compatibles tanto para abrir hacia adentro como para abrir hacia afuera.

Weld-on hinge

Bright steel, Ø10 mm, length 60 mm, with fixed pin and brass intermediate washer.

Capacity: 38 kg (pair=2 pc)

PU = 1 piece

Cerniera a saldare

Acciaio decapato, Ø10 mm, lunghezza 60 mm, con perno fisso e rondella intermedia in ottone.

Portata: 38 kg (coppia=2 pezzi)

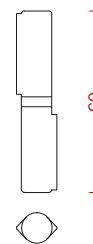
UV = 1 pezzo

Bisagra de soldadura

Acero bruto, diámetro de Ø10 mm, longitud de 60 mm, con perno fijo y anillo intermedio de latón.

Capacidad de carga: 38 kg (par=2 unidades)

CANTIDAD = 1 unidad



C99000-12

Weld-on hinge

Bright steel, Ø12 mm, length 80 mm, with fixed pin and brass intermediate washer.

Capacity: 50 kg (pair=2 pc)

PU = 1 piece

Cerniera a saldare

Acciaio decapato, Ø12 mm, lunghezza 80 mm, con perno fisso e rondella intermedia in ottone.

Portata: 50 kg (coppia=2 pezzi)

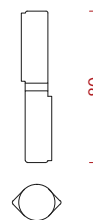
UV = 1 pezzo

Bisagra de soldadura

Acero bruto, diámetro de Ø12 mm, longitud de 80 mm, con perno fijo y anillo intermedio de latón.

Capacidad de carga: 50 kg (par=2 unidades)

CANTIDAD = 1 unidad



C99001-12

Weld-on hinge

Bright steel, Ø14 mm, length 100 mm, with fixed pin and brass intermediate washer.

Capacity: 80 kg (pair=2 pc)

PU = 1 piece

Cerniera a saldare

Acciaio decapato, Ø14 mm, lunghezza 100 mm, con perno fisso e rondella intermedia in ottone.

Portata: 80 kg (coppia=2 pezzi)

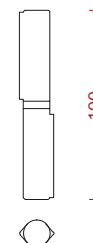
UV = 1 pezzo

Bisagra de soldadura

Acero bruto, diámetro de Ø14 mm, longitud de 100 mm, con perno fijo y anillo intermedio de latón.

Capacidad de carga: 80 kg (par=2 unidades)

CANTIDAD = 1 unidad



C99002-12

Weld-on hinge

Bright steel, Ø16 mm, length 120 mm, with fixed pin and brass intermediate washer.

Capacity: 100 kg (pair=2 pc)

PU = 1 piece

Cerniera a saldare

Acciaio decapato, Ø16 mm, lunghezza 120 mm, con perno fisso e rondella intermedia in ottone.

Portata: 100 kg (coppia=2 pezzi)

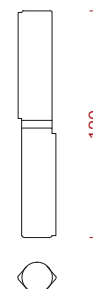
UV = 1 pezzo

Bisagra de soldadura

Acero bruto, diámetro de Ø16 mm, longitud de 120 mm, con perno fijo y anillo intermedio de latón.

Capacidad de carga: 100 kg (par=2 unidades)

CANTIDAD = 1 unidad



C99003-12

Weld-on hinge

Bright steel, Ø16 mm, length 140 mm, with fixed pin and brass intermediate washer.

Capacity: 140 kg (pair=2 pc)

PU = 1 piece

Cerniera a saldare

Acciaio decapato, Ø16 mm, lunghezza 140 mm, con perno fisso e rondella intermedia in ottone.

Portata: 140 kg (coppia=2 pezzi)

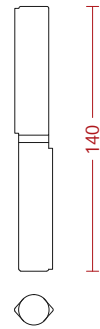
UV = 1 pezzo

Bisagra de soldadura

Acero bruto, diámetro de Ø16 mm, longitud de 140 mm, con perno fijo y anillo intermedio de latón.

Capacidad de carga: 140 kg (par=2 unidades)

CANTIDAD = 1 unidad



C99004-12

Weld-on hinge

Galvanized steel, Ø12 mm, length 80 mm, with galvanized pin and intermediate washer with "loose" pin.

Capacity: 100 kg (pair=2 pc)

-02 = Galvanized steel

PU = 1 piece

Cerniera a saldare

Acciaio zincato, Ø12 mm, lunghezza 80 mm, con perno zincato sfilabile e rondella intermedia.

Portata: 100 kg (coppia=2 pezzi)

-02 = Acciaio zincato

UV = 1 pezzo

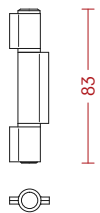
Bisagra de soldadura

Acero galvanizado, diámetro de Ø12 mm, longitud de 80 mm, con perno galvanizado y anillo intermedio con pasador "suelto".

Capacidad de carga: 100 kg (par=2 unidades)

-02 = Acero galvanizado

CANTIDAD = 1 unidad



C99006-02

3D Weld-on hinge

3-dimensional adjustable hinge for windows and doors. Length 122 mm, Ø16 mm, with low-maintenance bushes made of brass, eccentric spindle and screw plug made from stainless steel AISI 304

Adjustability:
Height ±2 mm;
Lateral contact pressure ±1 mm

Capacity: 160 kg (pair=2 pc)

-12 = Bright steel

PU = 1 piece

Cerniera a saldare regolabile 3D

Cerniera regolabile su tre dimensioni, per finestre o porte. Lunghezza 122 mm, Ø16 mm, con boccole in ottone, perno eccentrico e vite di chiusura in acciaio inox AISI 304

Regolazione:
Altezza ±2 mm;
Laterale ±1 mm

Portata: 160 kg (coppia=2 pezzi)

-12 = Acciaio decapato

UV = 1 pezzo

Bisagra de soldadura en 3D

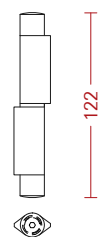
Bisagra ajustable en 3 dimensiones para ventanas y puertas. Longitud de 122 mm, diámetro de Ø16 mm, con cojinete de deslizamiento de escaso mantenimiento de bronce arquitectónico, perno excéntrico y tornillo de cierre de acero inoxidable AISI 304

Ajustabilidad:
Altura ±2 mm;
Laterales ±1 mm

Capacidad de carga: 160 kg (par=2 unidades)

-12 = Acero bruto

CANTIDAD = 1 unidad



C99008-12

End caps for hinges

For Ø16 mm 3D weld-on hinge.

-12 = Bright steel

PU = 1 piece

Tappi di chiusura per cerniere

Per cerniera a saldare regolabile 3D Ø16 mm

-12 = Acciaio decapato

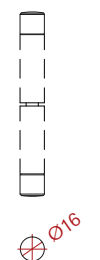
UV = 1 pezzo

Tapas para bisagras

Para bisagra de soldadura en 3 dimensiones Ø16 mm

-12 = Acero bruto

CANTIDAD = 1 unidad



Q99966-12

Screw-on hinge

Two-part screw-on hinge brass
Ø22 mm, length 80 mm

R = Right opening
L = Left opening

Capacity: 80 kg (pair=2 pc)

PU = 1 piece

Cerniera ad avvitare

Cerniera ad avvitare in ottone Ø22
mm, lunghezza: 80 mm

R = Apertura destra
L = Apertura sinistra

Portata: 80 kg (coppia=2 pezzi)

UV = 1 pezzo

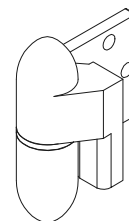
Bisagra atornillable

Bisagra atornillable de 2 piezas latón
Ø22 mm, longitud de 80 mm

R = Apertura derecha
L = Apertura izquierda

Capacidad de carga: 80 kg
(par=2 unidades)

CANTIDAD = 1 unidad



C99106-25 R
C99105-25 L

Screw-on hinge

Two-part screw-on hinge brass
Ø12.5 mm, length 85 mm

Capacity: 80 kg (pair=2 pc)

PU = 1 piece

Cerniera ad avvitare

Cerniera ad avvitare in ottone
Ø12.5 mm, lunghezza: 85 mm

Portata: 80 kg (coppia=2 pezzi)

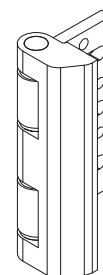
UV = 1 pezzo

Bisagra atornillable

Bisagra atornillable de 2 piezas latón
Ø12.5 mm, longitud de 85 mm

Capacidad de carga: 80 kg
(par=2 unidades)

CANTIDAD = 1 unidad



C99107-25

Screw-on hinge

Two-part screw-on hinge brass
Ø12.5 mm, length 50 mm

Capacity: 50 kg (pair=2 pc)

PU = 1 piece

Cerniera ad avvitare

Cerniera ad avvitare in ottone
Ø12.5 mm, lunghezza: 50 mm

Portata: 50 kg (coppia=2 pezzi)

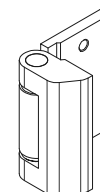
UV = 1 pezzo

Bisagra atornillable

Bisagra atornillable de 2 piezas latón
Ø12.5 mm, longitud de 50 mm

Capacidad de carga: 50 kg
(par=2 unidades)

CANTIDAD = 1 unidad



C99108-25

Screw-on hinge

Two-part screw-on hinge brass
Ø22 mm, length 70 mm

R = Right opening
L = Left opening

Capacity: 50 kg (pair=2 pc)

PU = 1 piece

Cerniera ad avvitare

Cerniera ad avvitare in ottone Ø22
mm, lunghezza: 70 mm

R = Apertura destra
L = Apertura sinistra

Portata: 50 kg (coppia=2 pezzi)

UV = 1 pezzo

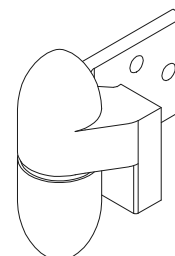
Bisagra atornillable

Bisagra atornillable de 2 piezas latón
Ø22 mm, longitud de 70 mm

R = Apertura derecha
L = Apertura izquierda

Capacidad de carga: 50 kg
(par=2 unidades)

CANTIDAD = 1 unidad



C99111-25 R
C99110-25 L

Friction stay (projecting)

Stainless steel AISI 316L 2B, for open out top hung projecting windows with adjustable opening angles.

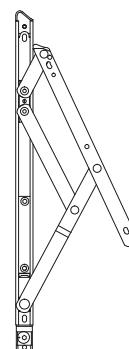
Bracci portanti a sporgere

Acciaio inox AISI 316L 2B, per finestra a sporgere apertura esterna con angolo di apertura regolabile.

Bisagra proyectante

Acero inoxidable AISI 316L 2B, para ventana proyectante que se abre hacia fuera con ángulo de apertura ajustable.

Code Codice Code	Capacity Portata Capacidad [kg]	H size H dimensione H tamaño [mm]	Opening angle Angolo di apertura Ángulo de apertura [°]
C99201-05	40	270-640	50
C99202-05	50	640-800	50
C99203-05	65	800-1100	50
C99204-05	100	600-1100	30
C99205-05	100	1100-1500	45
C99206-05	100	1500-2000	20
C99207-05	180	2000-2500	20



C9920X-05

PU = 1 pair

UV = 1 coppia

CANTIDAD = 1 par

Friction stay (turn)

Stainless steel AISI 316L, for open in or open out side hung windows.

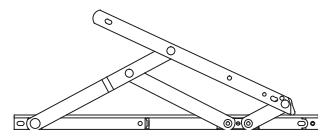
Bracci portanti anta battente

Acciaio inox AISI 316L, per finestra battente ad apertura verso l'interno o l'esterno.

Bisagra abatible

Acero inoxidable AISI 316L, para ventana abatible que se abre hacia dentro o hacia fuera.

Code Codice Code	Capacity Portata Capacidad [kg]	H size H dimensione H tamaño [mm]	Opening angle Angolo di apertura Ángulo de apertura [°]
C99210-05	22	300-600	80
C99211-05	24	400-700	90
C99212-05	38	300-660	85
C99213-05	55	450-840	60



C9921X-05

PU = 1 pair

UV = 1 coppia

CANTIDAD = 1 par

Pivot hinge Cerniera bilico Bisagra pivote C99328-04

Upper frame hinge

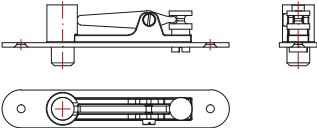
Capacity: 200 kg
PU = 1 piece

Cardine superiore telaio

Portata: 200 kg
UV = 1 pezzo

Bisagra del marco superior

Capacidad de carga: 200 kg
CANTIDAD = 1 unidad



Upper leaf hinge

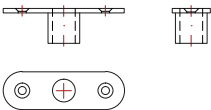
Capacity: 200 kg
PU = 1 piece

Cardine superiore anta

Portata: 200 kg
UV = 1 pezzo

Bisagra de hoja superior

Capacidad de carga: 200 kg
CANTIDAD = 1 unidad



Lower frame hinge

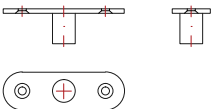
Capacity: 200 kg
PU = 1 piece

Cardine inferiore telaio

Portata: 200 kg
UV = 1 pezzo

Bisagra del marco inferior

Capacidad de carga: 200 kg
CANTIDAD = 1 unidad



Lower floor hinge

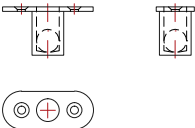
Capacity: 200 kg
PU = 1 piece

Cardine inferiore pavimento

Portata: 200 kg
UV = 1 pezzo

Bisagra de piso inferior

Capacidad de carga: 200 kg
CANTIDAD = 1 unidad



Set for pivot hinge

Kit per cerniera bilico

Kit para bisagra pivote

K02104

Lower support

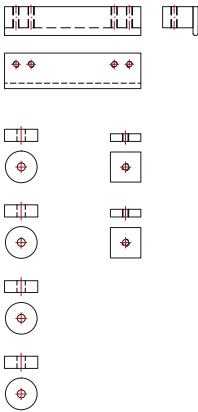
Capacity: 200 kg
PU = 1 piece

Supporto inferiore

Portata: 200 kg
UV = 1 pezzo

Apoyo inferior

Capacidad de carga: 200 kg
CANTIDAD = 1 unidad



Sliding door

Porta scorrevole

Puerta corrediza

3.4

Slide rail

Slide rail for sliding door,
33x31 mm

-53 = Black electrocolored aluminum

Capacity: 160 kg

PU = 1 piece

Binario

Binario per porta scorrevole,
33x31 mm

-53 = Alluminio elettrocolore nero

Portata: 160 kg

UV = 1 pezzo

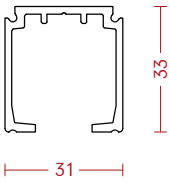
Riel

Riel para puerta corrediza,
33x31 mm

-53 = Aluminio electrocolor negro

Capacidad de carga: 160 kg

CANTIDAD = 1 unidad



code	L
E99157-53	2000 mm
E99158-53	3000 mm
E99159-53	4000 mm
E99160-53	6000 mm

Cover profile

Vertical cover profile for sliding
door, 20x5.8 mm, L 3000 mm

-12 = Bright steel

PU = 1 piece

Profilo di finitura

Profilo di finitura verticale per porta
scorrevole, 20x5.8 mm, L 3000 mm

-12 = Acciaio decapato

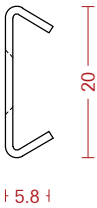
UV = 1 pezzo

Perfil de acabado

Perfil de acabado vertical para
puerta corrediza, 20x5.8 mm,
L 3000 mm

-12 = Acero bruto

CANTIDAD = 1 unidad



E99253-12

Cover profile

Chicane cover profile for sliding
door, 44.8x22 mm, L 3000 mm

-12 = Bright steel

PU = 1 piece

Profilo di finitura

Profilo di finitura labirinto per porta
scorrevole, 44.8x22 mm,
L 3000 mm

-12 = Acciaio decapato

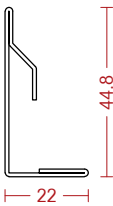
UV = 1 pezzo

Perfil de acabado

Perfil de acabado Chicane para
puerta corrediza, 44.8x22 mm,
L 3000 mm

-12 = Acero bruto

CANTIDAD = 1 unidad



E99254-12

Guide rail

Guide rail for sliding door,
13x15.5 mm, L 3000 mm

-02 = Galvanized steel

PU = 1 piece

Profilo guida

Profilo guida per porta scorrevole,
13x15.5 mm, L 3000 mm

-02 = Acciaio zincato

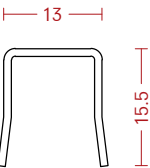
UV = 1 pezzo

Perfil de guía

Perfil de guía para puerta corrediza,
13x15.5 mm, L 3000 mm

-02 = Acero galvanizado

CANTIDAD = 1 unidad



E99257-02

Trolley

Trolley for sliding door,
2 dampers.

Leaf weight: 30-80kg
Minimum leaf width: 710 mm

PU = 1 pair

Carrello

Carrello per porta scorrevole,
2 ammortizzatori.

Peso anta: 30-80 kg
Larghezza minima anta: 710 mm

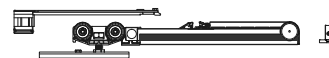
UV = 1 coppia

Carro

Carro para puerta corrediza,
2 amortiguadores.

Peso de la hoja: 30-80 kg
Longitud mínimo de hoja: 710 mm

CANTIDAD = 1 par



E99178-99

Trolley

Trolley for sliding door,
2 dampers.

Leaf weight: 120 kg
Minimum leaf width: 810 mm

PU = 1 pair

Carrello

Carrello per porta scorrevole,
2 ammortizzatori.

Peso anta: 120 kg
Larghezza minima anta: 810 mm

UV = 1 coppia

Carro

Carro para puerta corrediza,
2 amortiguadores.

Peso de la hoja: 120 kg
Longitud mínimo de hoja: 810 mm

CANTIDAD = 1 par



E99179-99

Trolley

Trolley for sliding door,
2 dampers.

Leaf weight: 160 kg
Minimum leaf width: 930 mm

PU = 1 pair

Carrello

Carrello per porta scorrevole,
2 ammortizzatori.

Peso anta: 160 kg
Larghezza minima anta: 930 mm

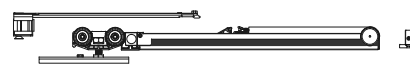
UV = 1 coppia

Carro

Carro para puerta corrediza,
2 amortiguadores.

Peso de la hoja: 160 kg
Longitud mínimo de hoja: 930 mm

CANTIDAD = 1 par



E99180-99

Flush bolts

Catenacci

Pasador de canto

3.5

Flush bolt
for windows

Concealed.

Finishings:

15 17 18 42 43

PU = 1 piece

Catenaccio
per finestre

Interno.

Finiture:

15 17 18 42 43

UV = 1 pezzo

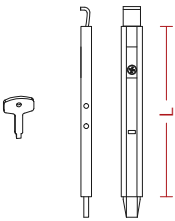
Pasador de canto
para ventanas

Oculto.

Acabados:

15 17 18 42 43

CANTIDAD = 1 unidad



code L
E99001-nn 150 mm
E99002-nn 300 mm
E99003-nn 450 mm

Extension

Extension for flush bolt E99001-nn,
E99002-nn, E99003-nn

Finishings:

15 17 18 42 43

PU = 1 piece

Prolunga

Prolunga per catenacci E99001-nn,
E99002-nn, E99003-nn

Finiture:

15 17 18 42 43

UV = 1 pezzo

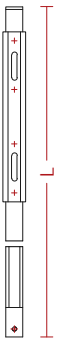
Extensión

Extensión para pasador de canto
E99001-nn, E99002-nn, E99003-nn

Acabados:

15 17 18 42 43

CANTIDAD = 1 unidad



code L
E99004-nn 424 mm

Flush bolt
for windows

Visible.

Finishings:

15 17 18 42 43

PU = 1 piece

Catenaccio
per finestre

A vista.

Finiture:

15 17 18 42 43

UV = 1 pezzo

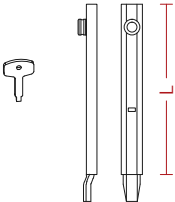
Pasador de canto
para ventanas

Visible.

Acabados:

15 17 18 42 43

CANTIDAD = 1 unidad



code L
E99005-nn 150 mm
E99006-nn 300 mm
E99007-nn 450 mm

Flush bolt with lever
for doors

Concealed, Black.

PU = 1 piece

Catenaccio con leva
per porte

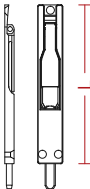
Interno, nero.

UV = 1 pezzo

Pasador de canto
para puertas

Oculto, negro.

CANTIDAD = 1 unidad



code L
E99010-35 140 mm
E99011-35 225 mm

Strike plate

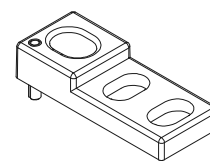
PU = 1 piece

Riscontro

UV = 1 pezzo

Chapa de cierre

CANTIDAD = 1 unidad



E99012-11

Floor recess plate

-05 = Stainless steel AISI 316L 2B

PU = 1 piece

Pozzetto

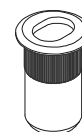
-05 = Acciaio inox AISI 316L 2B

UV = 1 pezzo

Cavidad en el suelo

-05 = Acero inoxidable AISI 316L 2B

CANTIDAD = 1 unidad



E99013-05

General fittings

Ferramenta generale

Herrajes generales

3.6

Automatic drop seal

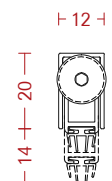
Automatic drop seal with 14 mm lift height, floor compensation.

Guarnizione a ghigliottina

Guarnizione a ghigliottina (14 mm compensazione), automatica a pavimento.

Junta de suelo automática

Junta de suelo descendente con un desplazamiento de 14 mm, descenso paralelo con compensación de suelo automática.



G995XX-62

Code Codice Code	Length Lunghezza Tamaño	Can be shortened Accorciabile Reducible
G99501-62	330 mm	50 mm
G99502-62	430 mm	135 mm
G99503-62	530 mm	200 mm
G99504-62	630 mm	200 mm
G99505-62	730 mm	200 mm
G99506-62	830 mm	200 mm
G99507-62	930 mm	200 mm
G99508-62	1030 mm	200 mm
G99509-62	1130 mm	200 mm
G99510-62	1230 mm	200 mm

PU = 1 piece

UV = 1 pezzo

CANTIDAD = 1 unidad

Lateral cover cap for automatic drop seal

-35 = black
-41 = RAL 7035 grey

PU = 1 pair

Tappo laterale per guarnizione a ghigliottina

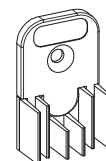
-35 = nero
-41 = grigio RAL 7035

UV = 1 coppia

Tapa lateral para junta de suelo automática

-35 = negro
-41 = gris RAL 7035

CANTIDAD = 1 par



G99511-nn

Handle spindle

-02 = Galvanized Steel
8 mm L=140 mm

PU = 1 piece

Quadro maniglia

-02 = Acciaio zincato
8 mm L=140 mm

UV = 1 pezzo

Pasador de la manilla

-02 = Acero galvanizado
8 mm L=140 mm

CANTIDAD = 1 unidad



E99551-02

Opening restrictor

Concealed opening restrictor, top-hung windows, open out.

-05 = Stainless steel AISI 316L 2B

Capacity: 110 kg (pair)

PU = 1 pair

Limitatore di apertura

Limitatore di apertura a scomparsa, finestra a sporgere, apertura esterna.

-05 = Acciaio inox AISI 316L 2B

Portata: 110 kg (coppia)

UV = 1 coppia

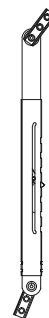
Limitador de apertura

Limitador de apertura oculto, ventana proyectante, apertura hacia fuera.

-05 = Acero inoxidable AISI 316L 2B

Capacidad de carga: 110 kg (par)

CANTIDAD = 1 par



E99203-05

Opening restrictor

Concealed opening restrictor, bottom hung windows, open in.

-05 = Stainless steel AISI 316L 2B

Capacity: 110 kg (pair)

PU = 1 pair

Limitatore di apertura

Limitatore di apertura a scomparsa, vasistas, apertura interna.

-05 = Acciaio inox AISI 316L 2B

Portata: 110 kg (coppia)

UV = 1 coppia

Limitador de apertura

Limitador de apertura oculto, ventana batiente, apertura hacia dentro.

-05 = Acero inoxidable AISI 316L 2B

Capacidad de carga: 110 kg (par)

CANTIDAD = 1 par



E99205-05

Opening restrictor

Concealed opening restrictor, side and bottom hung windows, open in and open out.

-03 = Stainless steel AISI 304 2B

Capacity: 90 kg (pair)

PU = 1 pair

Limitatore di apertura

Limitatore di apertura a scomparsa, anta battente e vasistas, apertura interna ed esterna.

-03 = Acciaio inox AISI 304 2B

Portata: 90 kg (coppia)

UV = 1 coppia

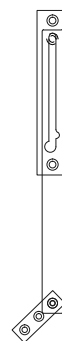
Limitador de apertura

Limitador de apertura oculto, ventana batiente y oscilante, apertura hacia dentro y hacia fuera.

-03 = Acero inoxidable AISI 304 2B

Capacidad de carga: 90 kg (par)

CANTIDAD = 1 par



E99206-03

Locks

Serrature

Cerraduras

3.7

Mortise lock

Single latch and deadbolt,
faceplate 24x6 mm, backset 35
mm, handle/lock distance 92 mm

-02 = Galvanized steel

PU = 1 piece

Serratura con scrocco e mandata

Serratura con scrocco e mandata,
frontale 24x6 mm, entrata 35 mm,
interasse maniglia/cilindro 92 mm

-02 = Acciaio zincato

UV = 1 pezzo

Cerradura de pestillo y cerrojo

Cerradura empotrable 24x6 mm,
medida de aguja de 35 mm,
distancia manilla/cilindro 92 mm

-02 = Acero galvanizado

CANTIDAD = 1 unidad



B99015-02

Mortise lock

Single latch and deadbolt,
faceplate 24x3 mm, backset 35
mm, handle/lock distance 92 mm

-02 = Galvanized steel

PU = 1 piece

Serratura con scrocco e mandata

Serratura con scrocco e mandata,
frontale 24x3 mm, entrata 35 mm,
interasse maniglia/cilindro 92 mm

-02 = Acciaio zincato

UV = 1 pezzo

Cerradura de pestillo y cerrojo

Cerradura empotrable 24x3 mm,
medida de aguja de 35 mm, distancia
manilla/cilindro 92 mm

-02 = Acero galvanizado

CANTIDAD = 1 unidad



B99016-02

Hook lock for sliding door

Hook lock for sliding door, cross
key cylinder, faceplate 160x16 mm,
backset 15 mm

-02 = Galvanized steel

PU = 1 piece

Serratura gancio per ante scorrevoli

Serratura gancio per ante
scorrevoli, chiave spillo, frontale
160x16 mm, entrata 15 mm

-02 = Acciaio zincato

UV = 1 pezzo

Cerradura de gancho para puertas corredizas

Cerradura de gancho para
puertas corredizas, clave de alfiler,
frente 160x16 mm, medida de aguja
de 15 mm

-02 = Acero galvanizado

CANTIDAD = 1 unidad



B99017-02

Central strike plate

Central strike plate for hook lock
B99017-02, 160x20x3 mm

-04 = Satin stainless steel AISI 304

PU = 1 piece

Riscontro centrale

Riscontro centrale per serratura
gancio B99017-02, 160x20x3 mm

-04 = Acciaio inox AISI 304 satinato

UV = 1 pezzo

Chapa de cierre central

Chapa de cierre central para
cerradura de gancho B99017-02,
160x20x3 mm

-04 = Acero inoxidable AISI 304 satinado

CANTIDAD = 1 unidad



B99200-04

Central strike plate

Central strike plate for mortise lock
device B99015-02 and B99016-02,
24x6x245 mm

-04 = Satin stainless steel AISI 304

PU = 1 piece

Riscontro centrale

Riscontro centrale per serratura
B99015-02 e B99016-02,
24x6x245 mm

-04 = Acciaio inox AISI 304 satinato

UV = 1 pezzo

Chapa de cierre central

Chapa de cierre central para
cerradura B99015-02 y B99016-02,
24x6x245 mm

-04 = Acero inoxidable AISI 304 satinado

CANTIDAD = 1 unidad



B99207-04

Screws

Viti

Tornillos

3.8

Screw

Hexagon recessed cap head screw,
stainless steel A2 M4x6 mm
DIN912 / ISO4762

PU = 100 pieces

Vite

Vite testa cilindrica esagono
incassato,
acciaio inox A2 M4x6 mm
DIN912 / ISO4762

UV = 100 pezzi

Tornillo

Tornillo cilindrico con hexágono
interior,
acero inoxidable A2 M4x6 mm
DIN912 / ISO4762

CANTIDAD = 100 unidades



D99866-03

Screw

Hexagon recessed countersunk
screw,
stainless steel A2 M4x6 mm
DIN7991 / ISO10642

PU = 100 pieces

Vite

Vite testa svasata piana esagono
incassato,
acciaio inox A2 M4x6 mm
DIN7991 / ISO10642

UV = 100 pezzi

Tornillo

Tornillo cabeza plana avellanada con
hexágono interior,
acero inoxidable A2 M4x6 mm
DIN7991 / ISO10642

CANTIDAD = 100 unidades



D99867-03

Rivet

Button-head rivet,
stainless steel A2 Ø3.2x8 mm
DIN7337 / ISO15973

PU = 100 pieces

Rivetto

Rivetto testa tonda
acciaio inox A2 Ø3.2x8 mm
DIN7337 / ISO15973

UV = 100 pezzi

Remache

Remache semiesférico,
acero inoxidable A2 Ø3.2x8 mm
DIN 337 / ISO15973

CANTIDAD = 100 unidades



D99950-03

Note:

All uncoded screws are the responsibility of the customer.

Nota:

Tutte le viti non codificate sono a carico del cliente.

Nota:

Todos los tornillos no codificados son responsabilidad del cliente.

Bonding

Adhesive for rebate gaskets.

PU = 1 piece

Adesivo

Adesivo per guarnizione di battuta.

UV = 1 pezzo

Pegamento

Pegamento para juntas de encaje.

CANTIDAD = 1 unidad



OS 364991

**Double-side
adhesive tape**

Black. 8x1.5 mm
Apply with primer I99005-75.

PU: 33 m

Nastro biadesivo

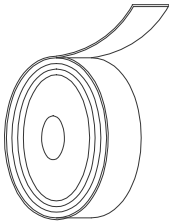
Nero. 8x1.5 mm
Applicare con primer I99005-75.

UV: 33 m

**Cinta adhesiva
de doble cara**

Negro. 8x1.5 mm
Aplicar con imprimación I99005-75.

CANTIDAD: 33 m



G99301-74

Primer

Primer for self-adhesive tape.

PU = 1 piece

Primer

Primer per nastro autoadesivo.

UV = 1 pezzo

Primer

Primer para cinta autoadhesiva.

CANTIDAD = 1 unidad



I99005-75

Assembling tools

Utensili di assemblaggio

Herramientas de montaje

3.9

Scissors

Seal-cutting scissor,
15°, 30°, 45°, 90° cutting angle.

PU = 1 piece

Forbici

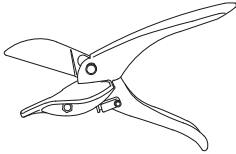
Forbici per guarnizioni,
taglio 15°, 30°, 45°, 90°.

UV = 1 pezzo

Cizallas

Cizalla para juntas,
corte de 15°, 30°, 45°, 90°.

CANTIDAD = 1 unidad



D99540-02

Scissors
Spare parts

Blades for scissor D99540-02

PU = 1 pair

Forbici
Pezzi di ricambio

Lame per forbici D99540-02

UV = 1 coppia

Cizallas
Piezas de repuesto

Cuchillas por cizalla D99540-02

CANTIDAD = 1 par



Q99540C-99

Scissors

Seal-cutting scissor,
45° cutting angle.
For G99019-60

PU = 1 piece

Forbici

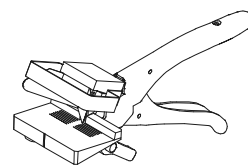
Forbici per guarnizioni,
taglio 45°.
Per G99019-60

UV = 1 pezzo

Cizallas

Cizalla para juntas,
corte de 45°.
Para G99019-60

CANTIDAD = 1 unidad



D99543-02

Scissors Spare parts

Base for scissor D99543-02

PU = 1 piece

Forbici Pezzi di ricambio

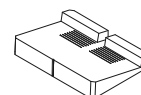
Base per forbici D99543-02

UV = 1 pezzo

Cizallas Piezas de repuesto

Soporte por cizalla D99543-02

CANTIDAD = 1 unidad



Q99543A-99

Scissors Spare parts

Blades retainer with blades and
safety bracket for scissor
D99543-02

PU = 1 piece

Forbici Pezzi di ricambio

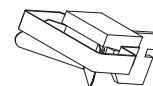
Porta lame con lame e protezione
per forbici D99543-02

UV = 1 pezzo

Cizallas Piezas de repuesto

Portacuchillas completo con cuchillas
por cizalla D99543-02

CANTIDAD = 1 unidad



Q99543B-99

Scissors Spare parts

Blades for scissor D99543-02

PU = 4 pieces

Forbici Pezzi di ricambio

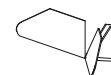
Lame per forbici D99543-02

UV = 4 pezzi

Cizallas Piezas de repuesto

Cuchillas por cizalla D99543-02

CANTIDAD = 1 unidades



Q99543C-99

Scissors Spare parts

Locking lever for scissor
D99543-02

PU = 1 pair

Forbici Pezzi di ricambio

Leva di bloccaggio per forbici
D99543-02

UV = 1 coppia

Cizallas Piezas de repuesto

Palanca de bloqueo por cizalla
D99543-02

CANTIDAD = 1 par



Q99543D-99

Alignment pin

For welding of hinge
C99008-12

-03 = Stainless steel AISI 304 2B

PU = 1 piece

Spina di allineamento

Per saldatura cerniera
C99008-12

-03 = Acciaio inox AISI 304 2B

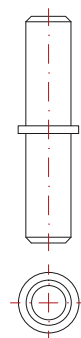
UV = 1 pezzo

Pasador de posicionamiento

Pasador de posicionamiento para
soldadura de bisagra C99008-12

-03 = Acero inoxidable AISI 304 2B

CANTIDAD = 1 unidad



D99401-03

Adjusting tool

Adjusting tool for 3D hinge
C99008-12

-03 = Stainless steel AISI 304 2B

PU = 1 piece

Chiave di regolazione

Chiave di regolazione per cerniera
3D C99008-12

-03 = Acciaio inox AISI 304 2B

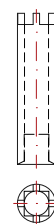
UV = 1 pezzo

Llave

Llave de ajuste para calibrar
bisagras 3D C99008-12

-03 = Acero inoxidable AISI 304 2B

CANTIDAD = 1 unidad



D99501-03

Examples

Esempi

Ejemplos

4.0

Window and door details:
W20 Basic
W20 Classic
W20 Slim

Sezioni finestre e porte:
W20 Basic
W20 Classic
W20 Slim

Detalles de ventanas y puertas:
W20 Basic
W20 Classic
W20 Slim

4.1
4.2
4.3

Details, structural connections
Wall connections

Dettagli di costruzione
Attacchi a muro

Detalles de construcción
Cierres constructivos

4.4
4.5

Window and door details
W20 Basic

Sezioni finestre e porte
W20 Basic

Detalles de ventanas y puertas
W20 Basic

4.1

Legend

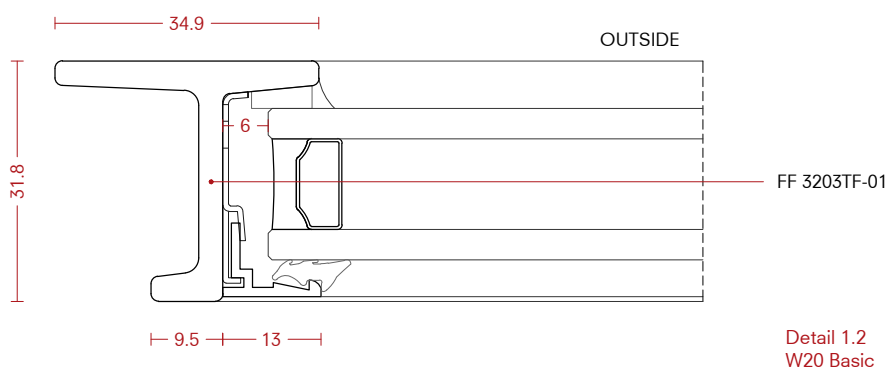
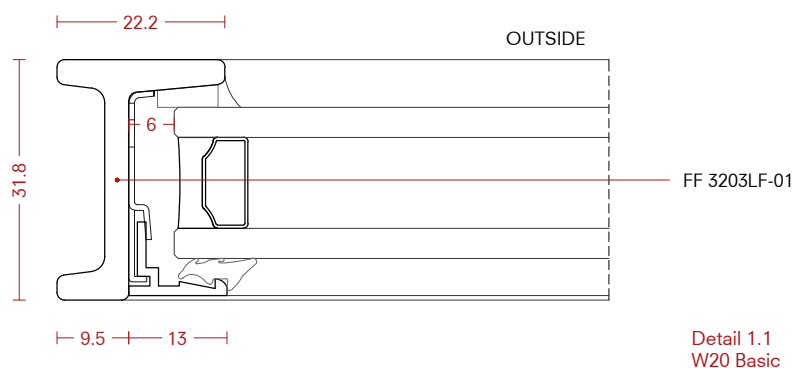
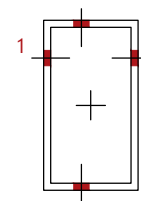
+ = Fixed
— = Open in
- - - = Open out
Dimensions in: mm
Scale 1:1 - 1:2

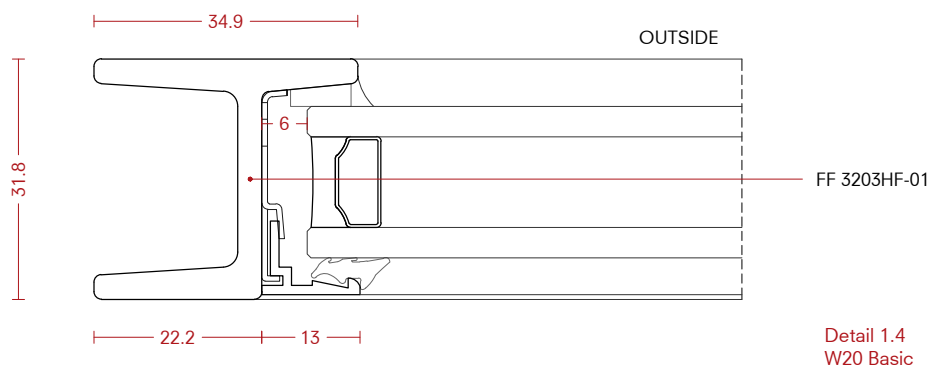
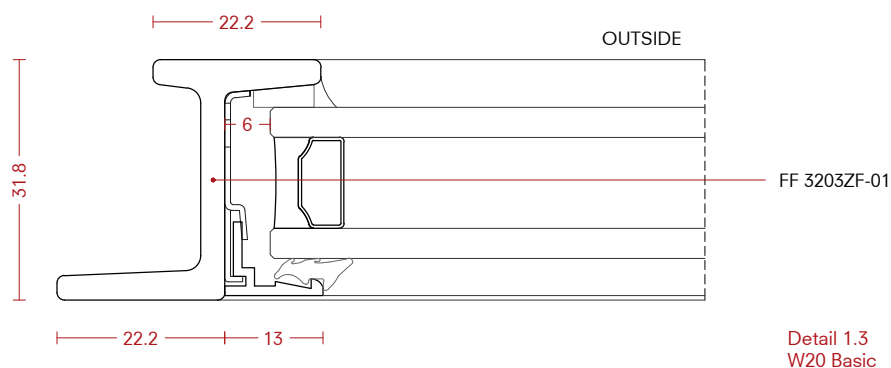
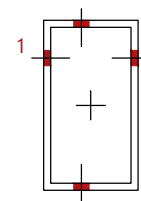
Legenda

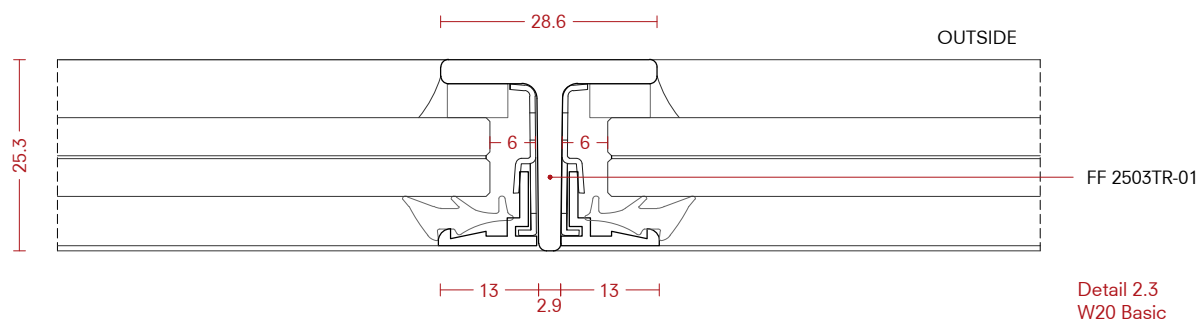
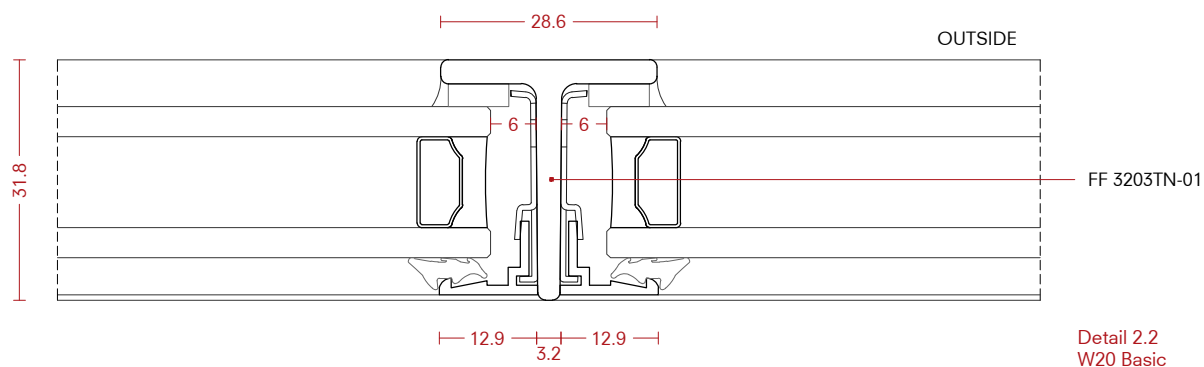
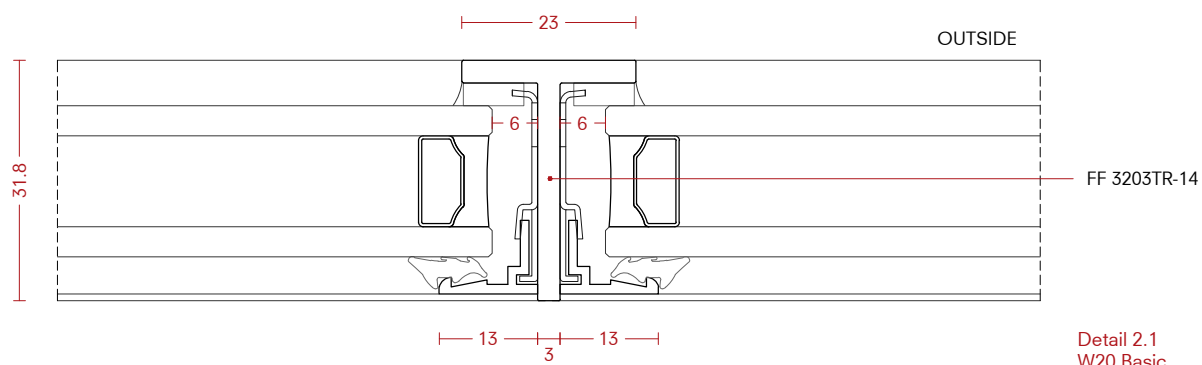
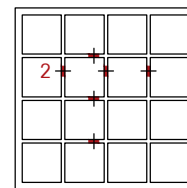
+ = Anta fissa
— = Apertura interna
- - - = Apertura esterna
Misure in: mm
Scala 1:1 - 1:2

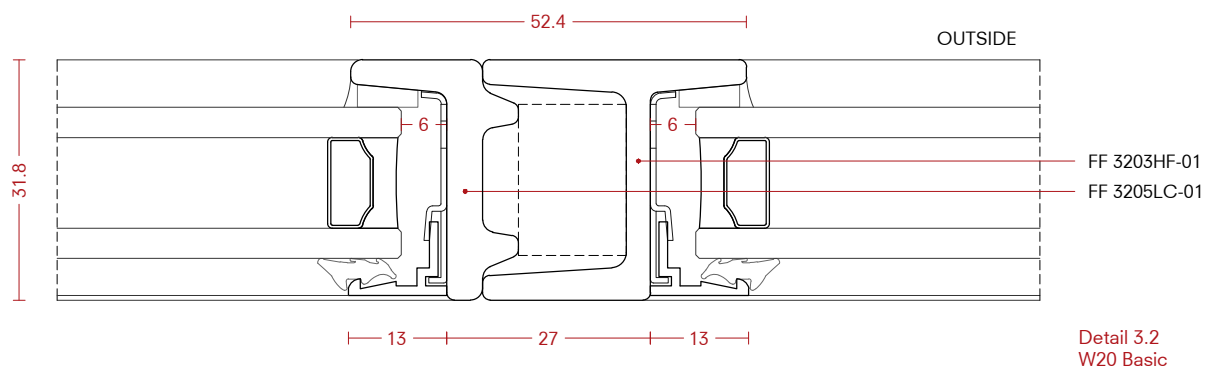
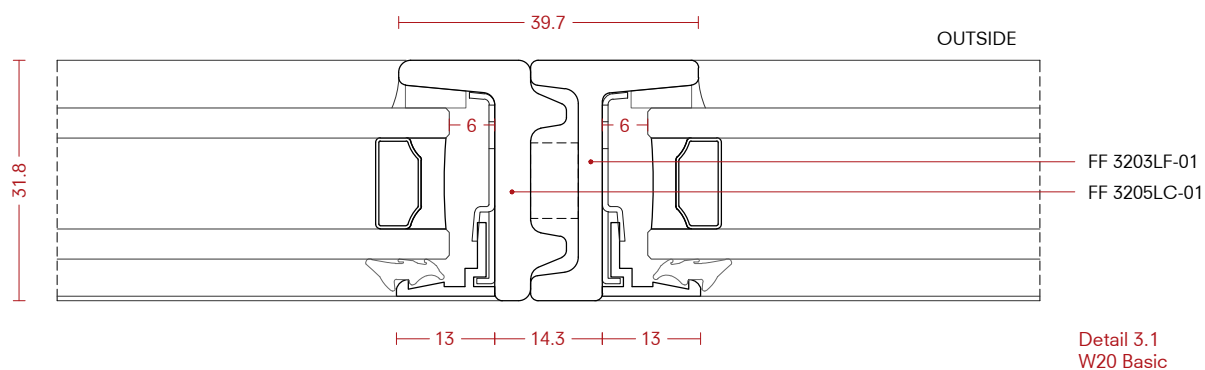
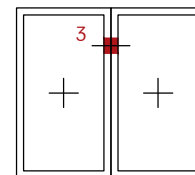
Leyenda

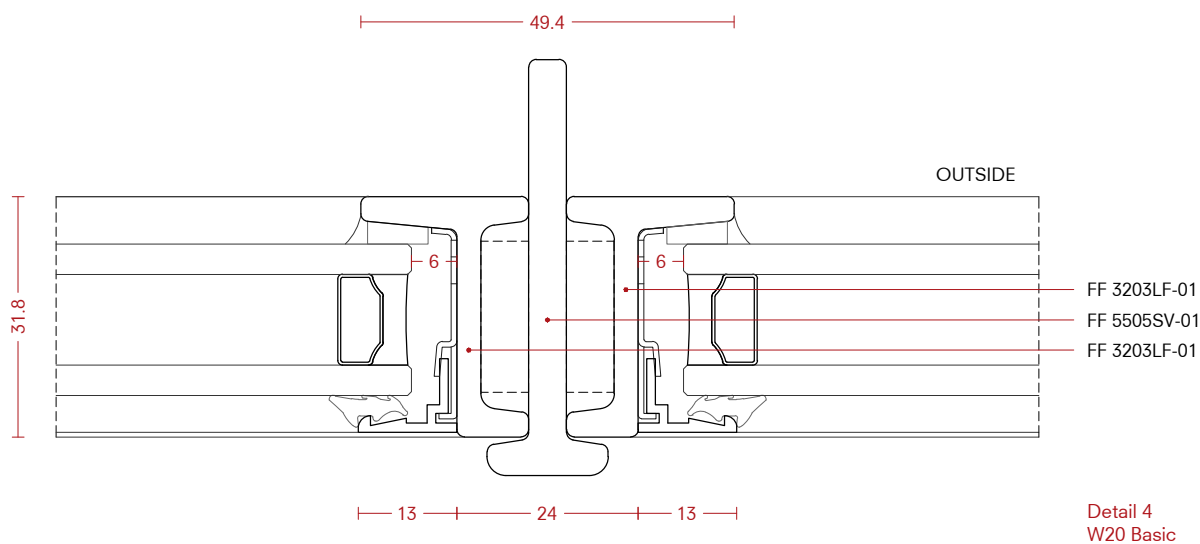
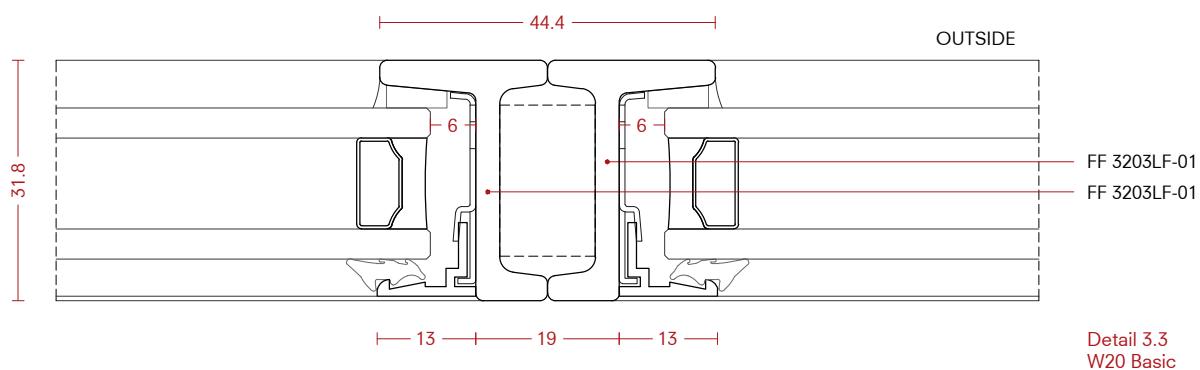
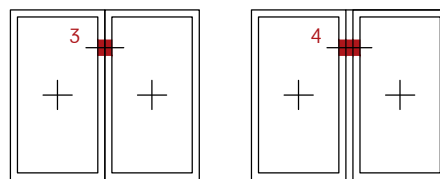
+ = Fijo
— = Apertura interna
- - - = Apertura externa
Medidas en: mm
Escala 1:1 - 1:2

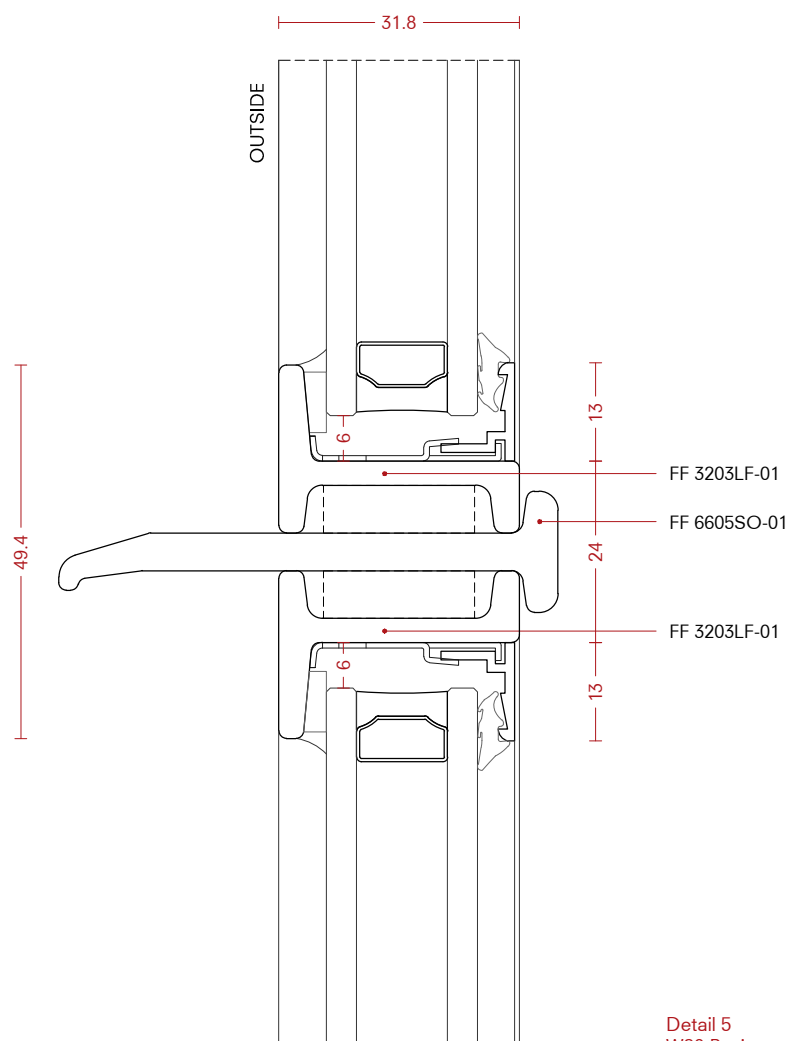
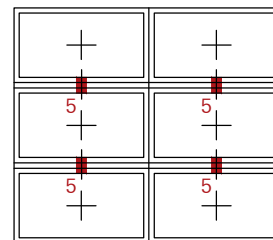


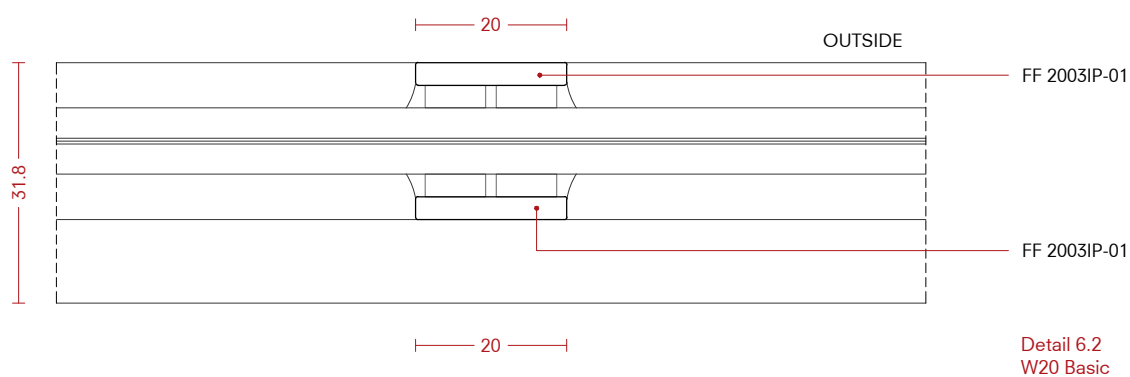
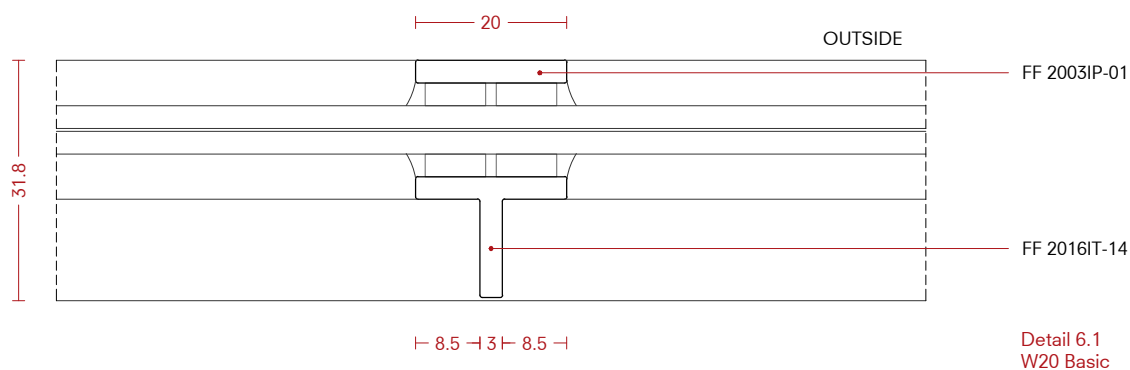
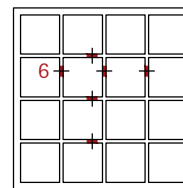


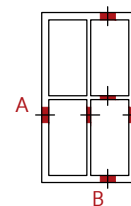




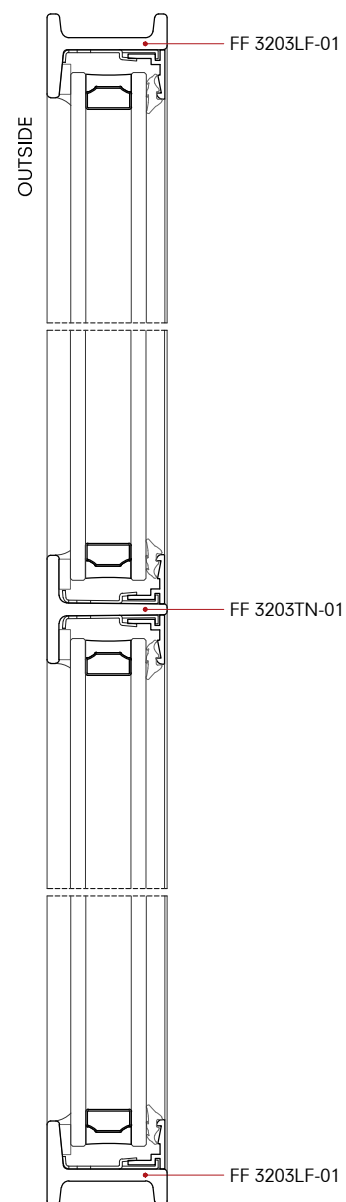
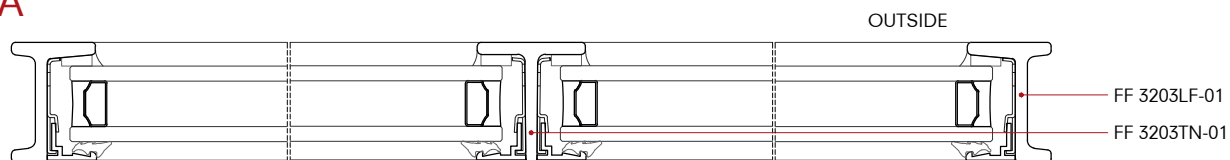




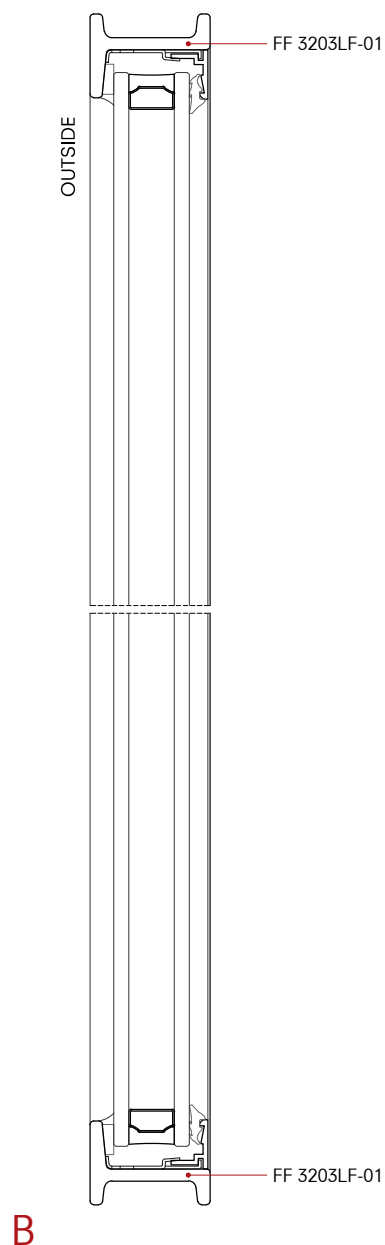
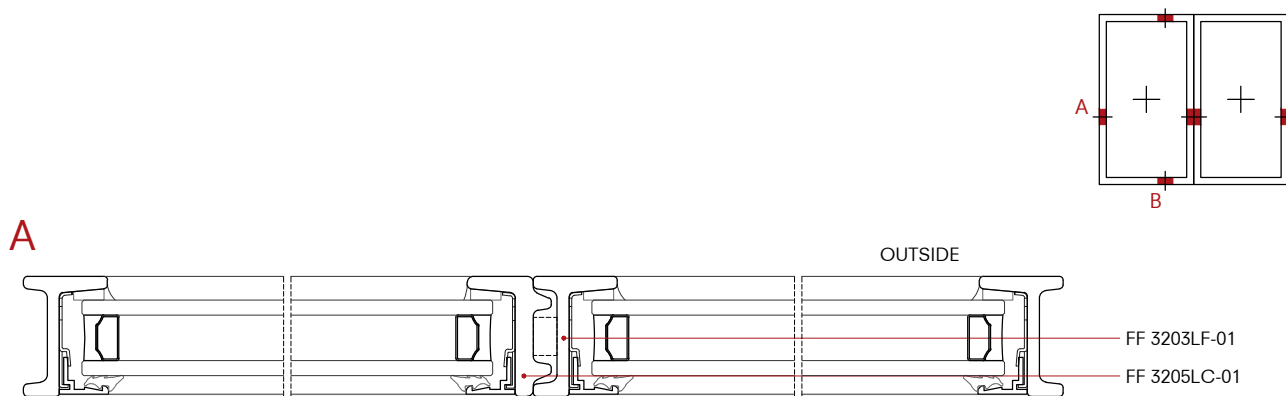


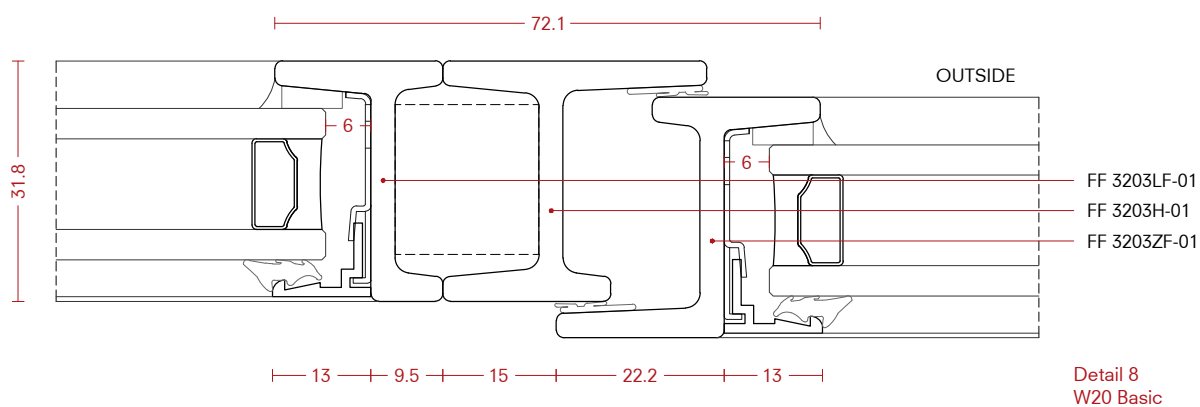
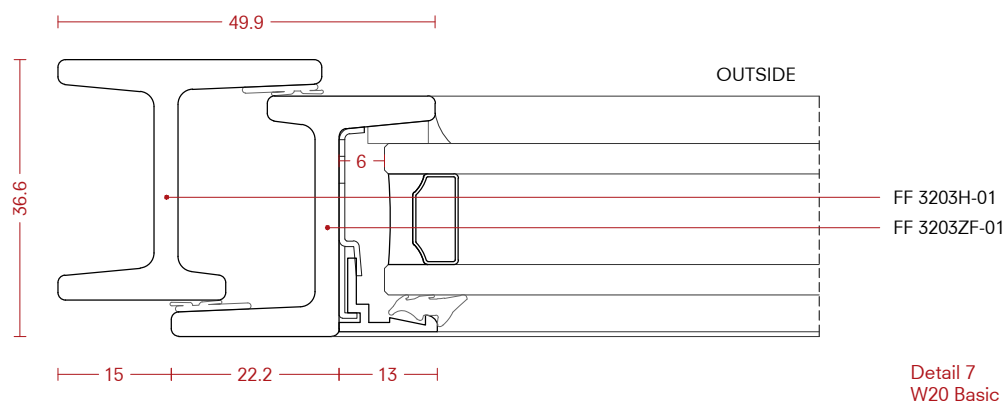
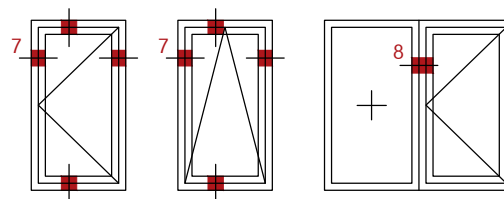


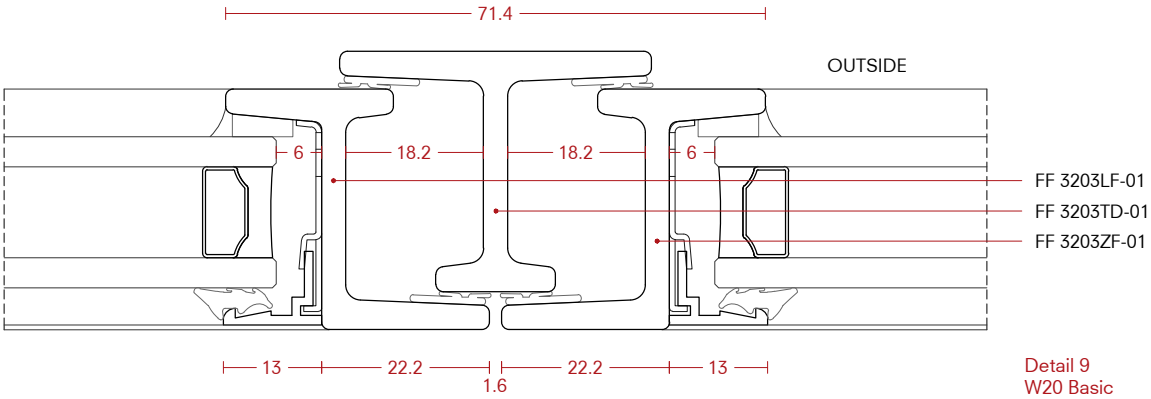
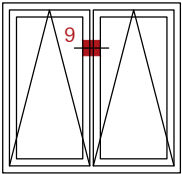
A

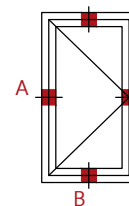


B

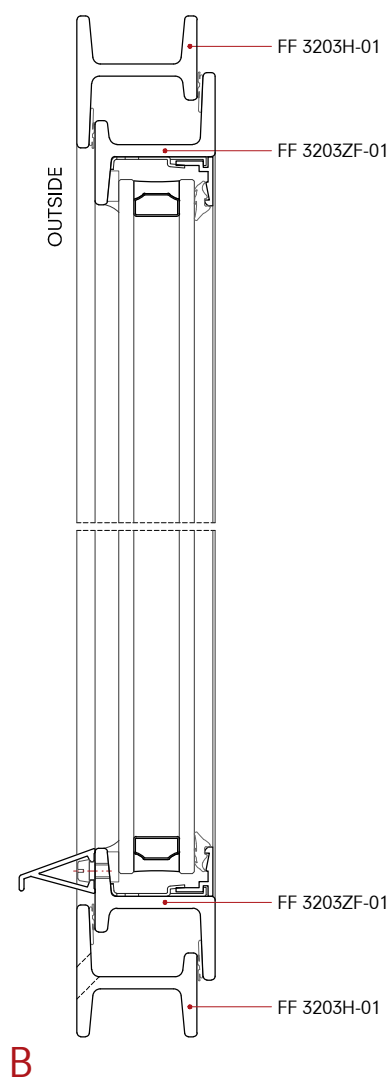
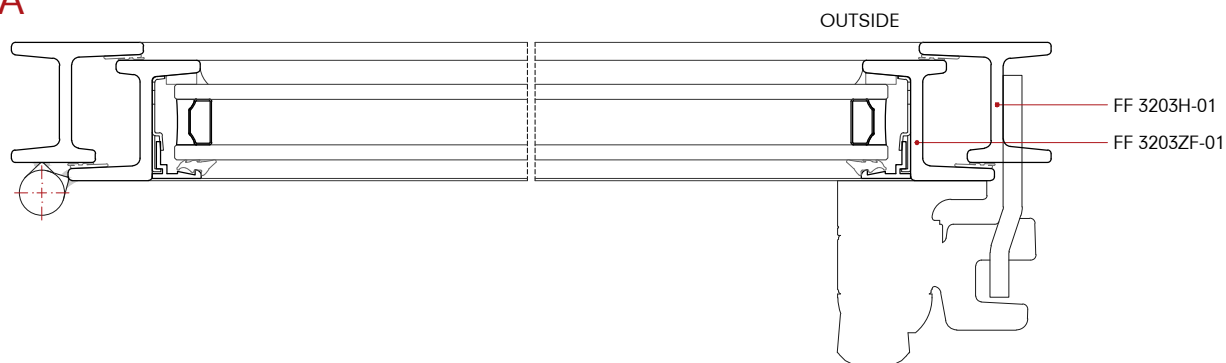




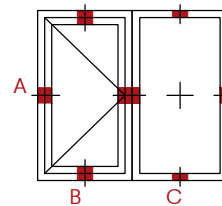




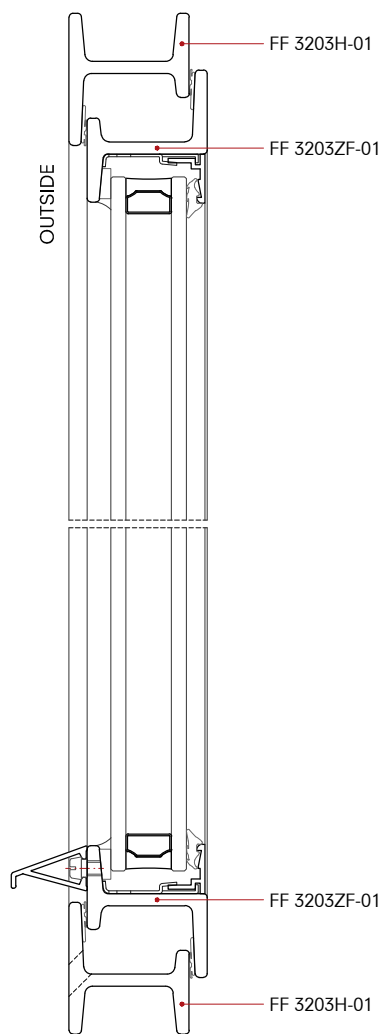
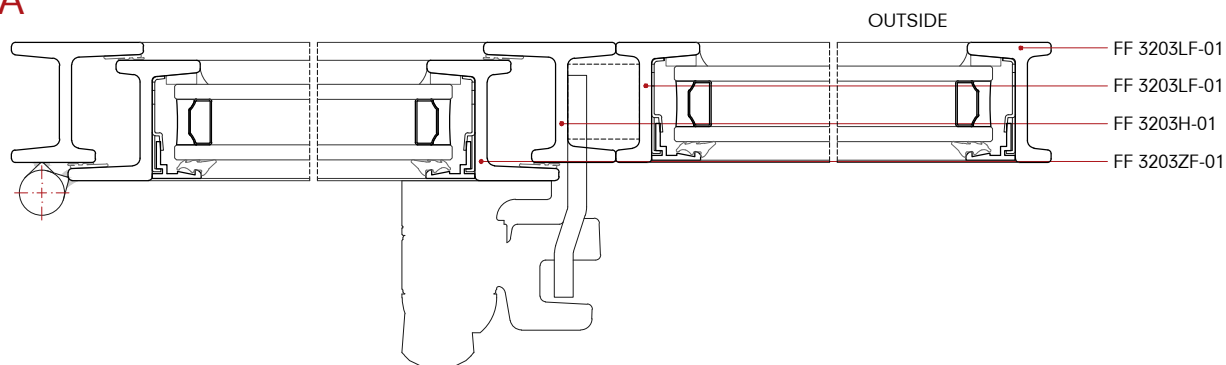
A



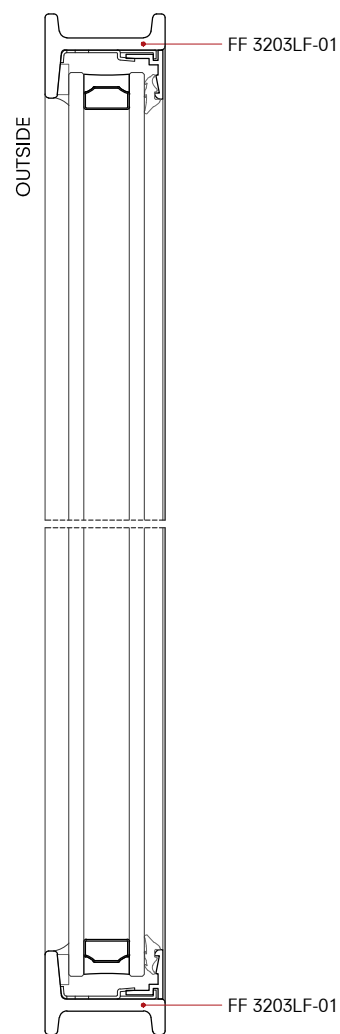
B



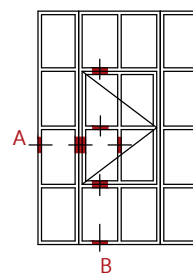
A



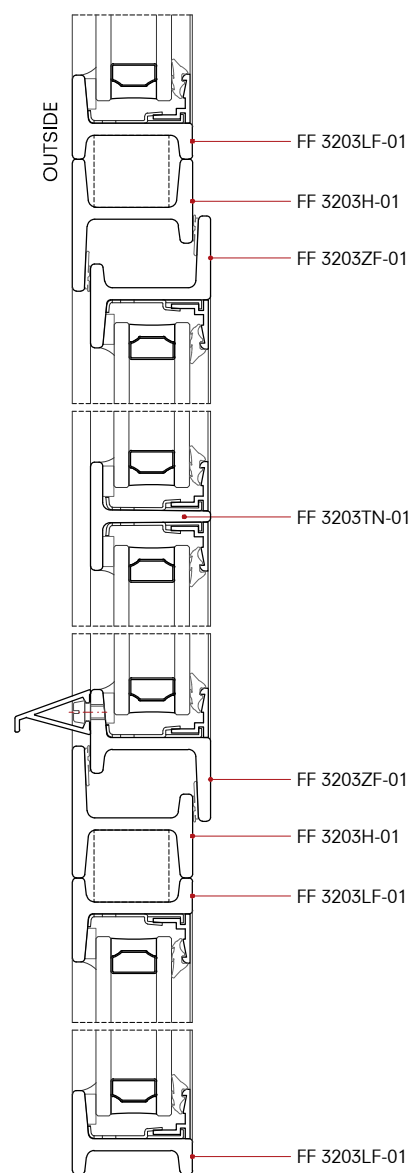
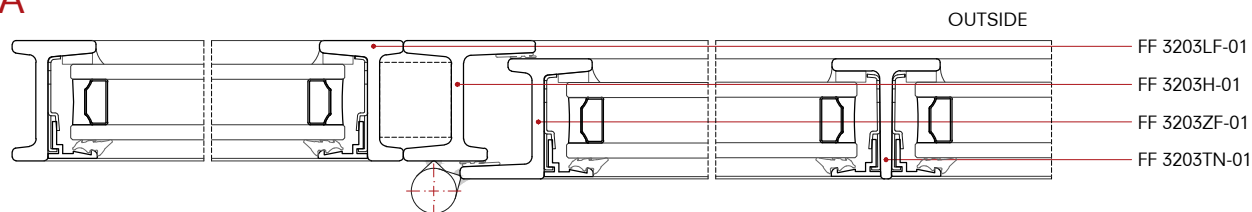
B



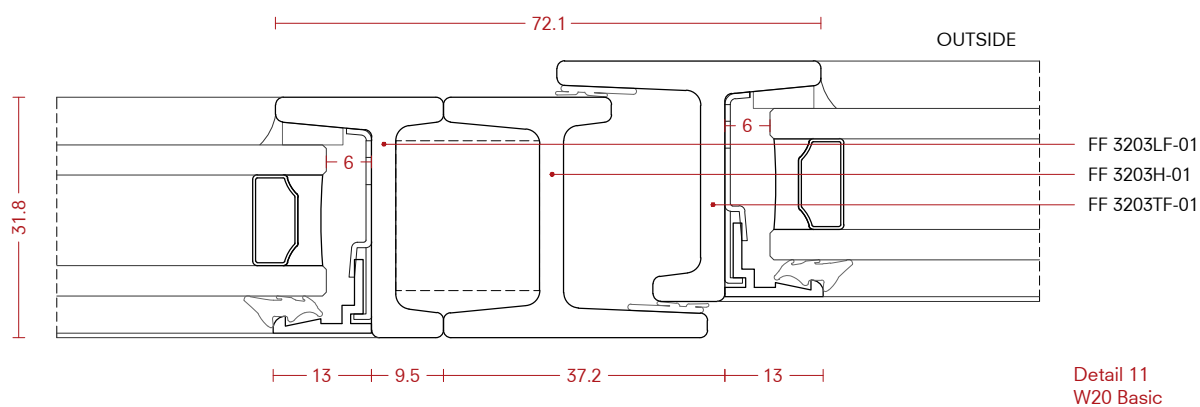
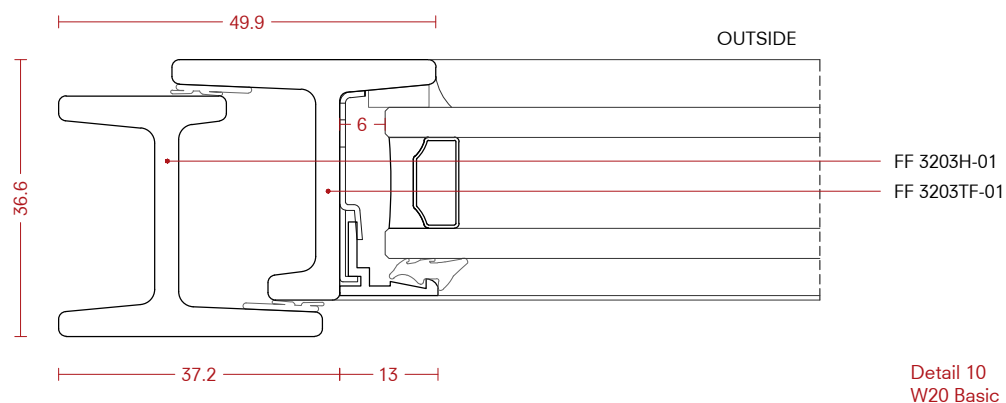
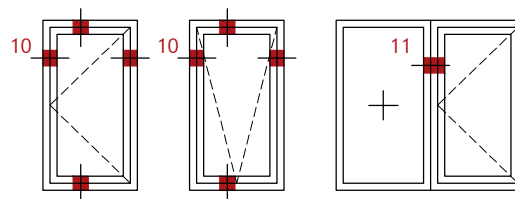
C

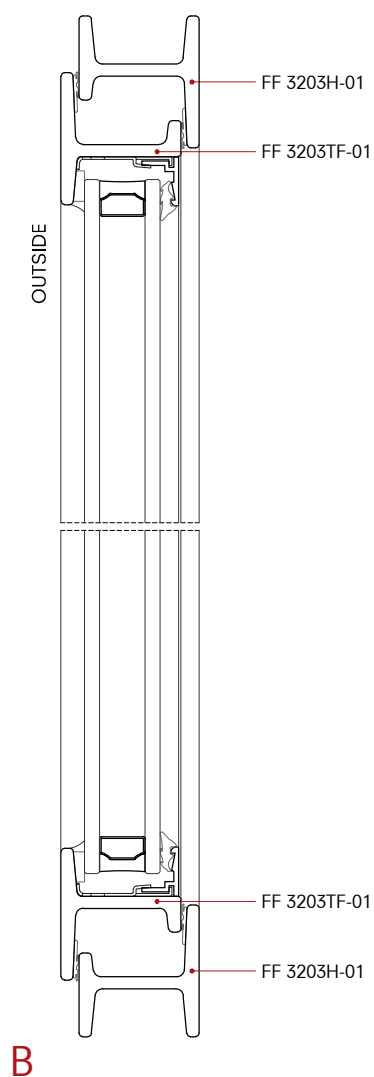
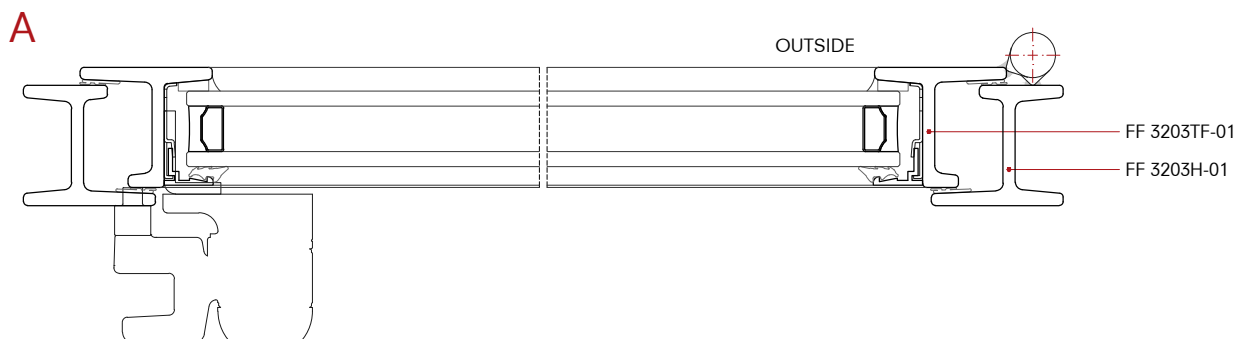
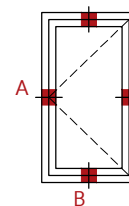


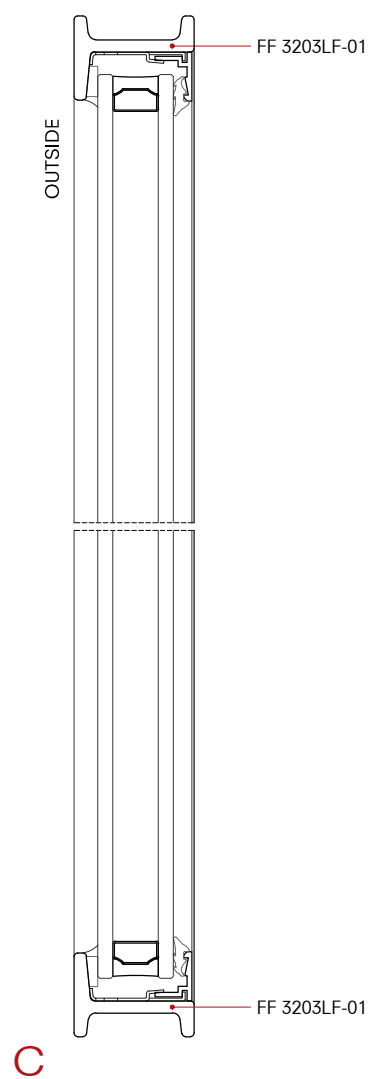
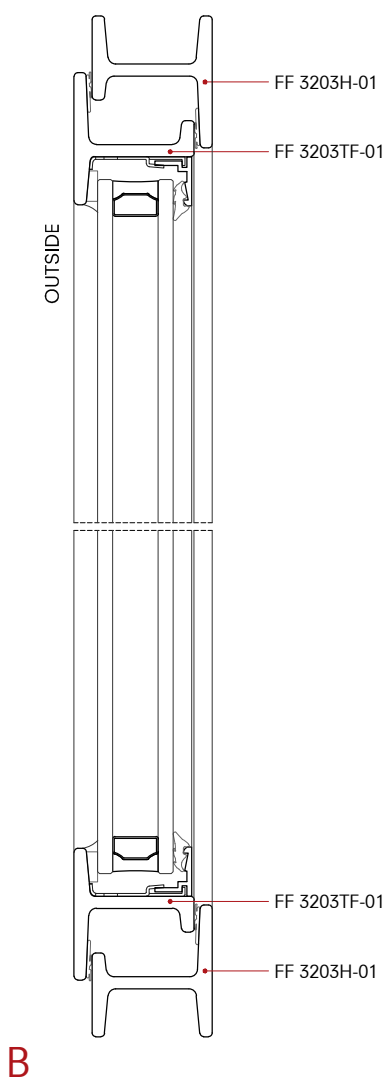
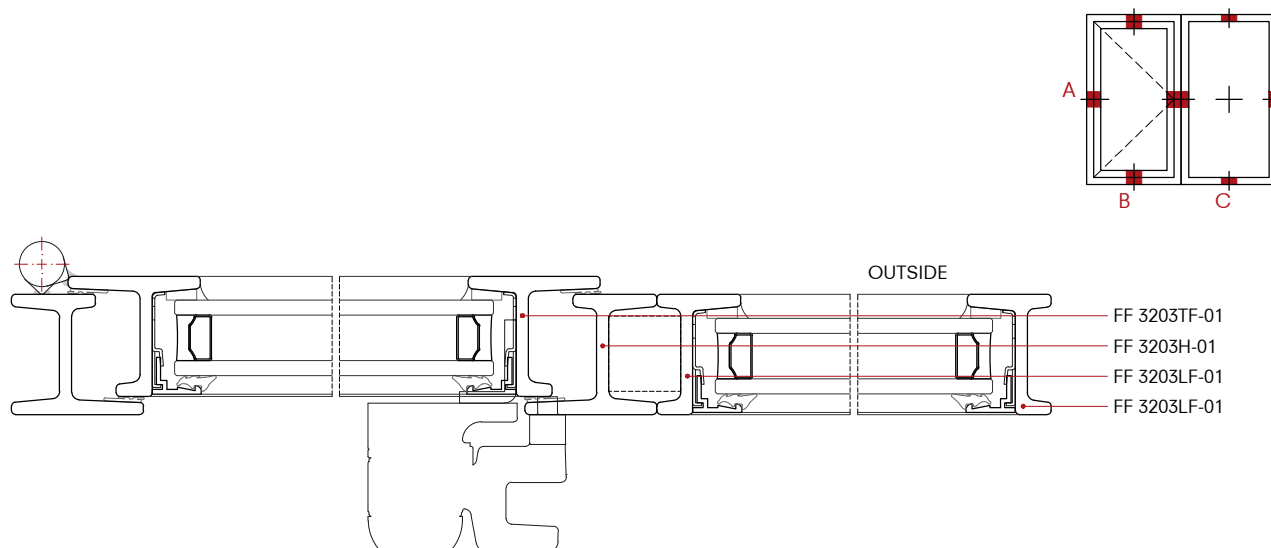
A



B



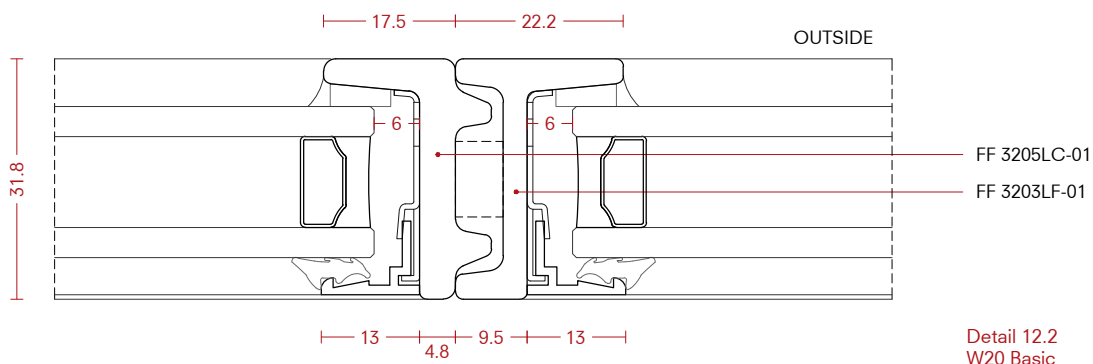
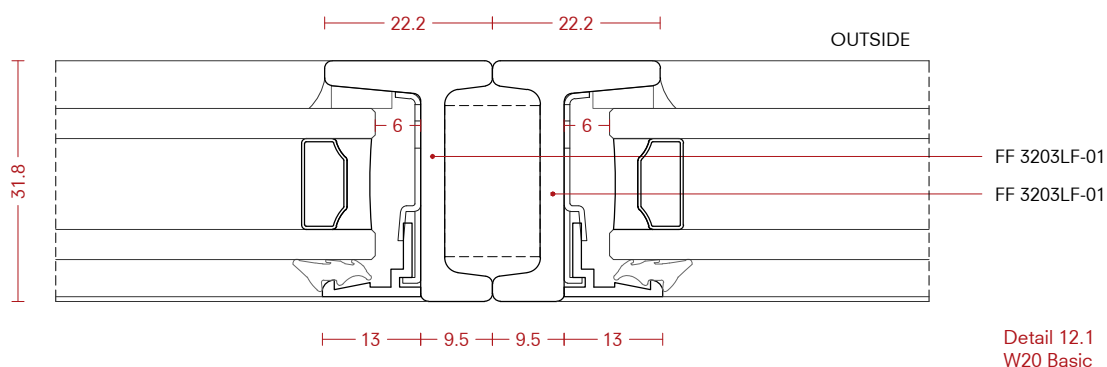
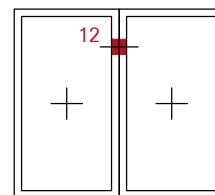




Profile matching

Accostamento telai

Combinación de marcos



Note:

For the cutting list, consider the appropriate machining and welding tolerances in relation to the laying areas and the sealing chosen.

Nota:

Per la distinta di taglio considerare le opportune tolleranze di lavorazione e saldatura in relazione alle arie di posa e alle sigillature scelte.

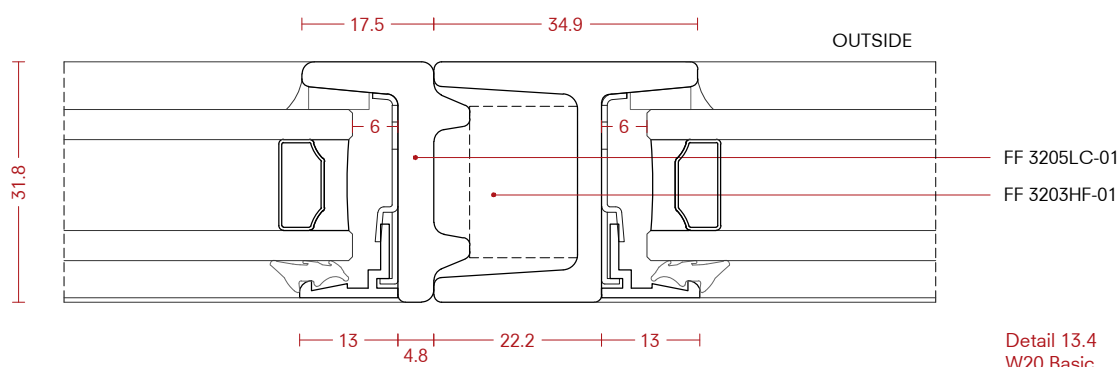
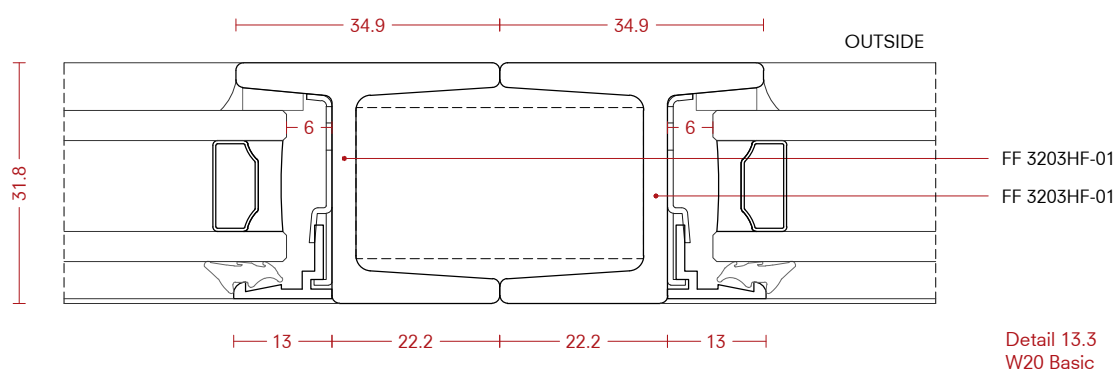
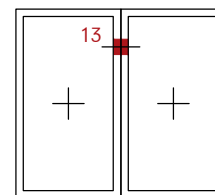
Nota:

Para la lista de cortes, considere las tolerancias apropiadas de mecanizado y soldadura en relación con las áreas de colocación y los sellos elegidos.

Profile matching

Accostamento telai

Combinación de marcos



Note:

For the cutting list, consider the appropriate machining and welding tolerances in relation to the laying areas and the sealing chosen.

Nota:

Per la distinta di taglio considerare le opportune tolleranze di lavorazione e saldatura in relazione alle arie di posa e alle sigillature scelte.

Nota:

Para la lista de cortes, considere las tolerancias apropiadas de mecanizado y soldadura en relación con las áreas de colocación y los sellos elegidos.

Window and door details
W20 Classic

Sezioni finestre e porte
W20 Classic

Detalles de ventanas y puertas
W20 Classic

4.2

Legend

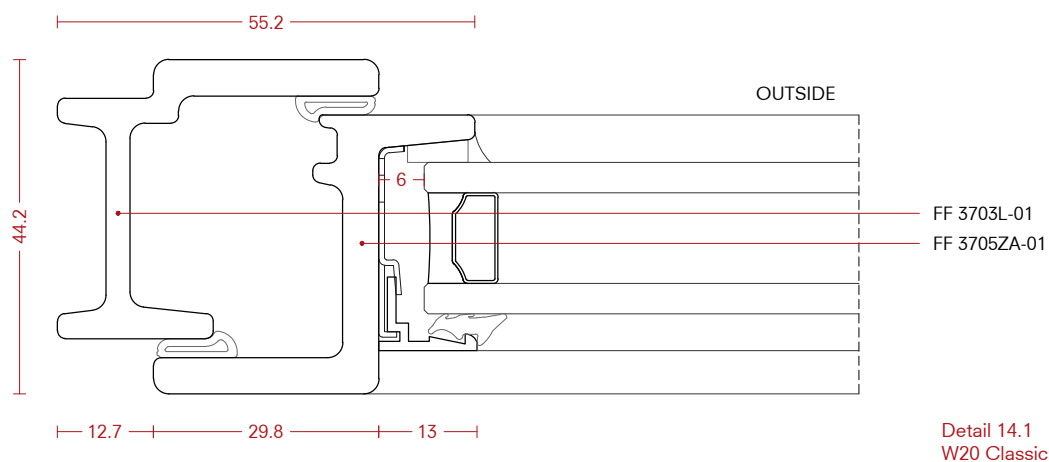
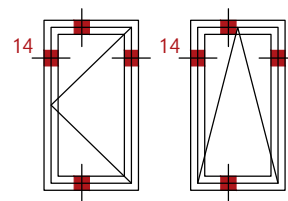
+ = Fixed
— = Open in
- - - = Open out
Dimensions in: mm
Scale 1:1 - 1:2

Legenda

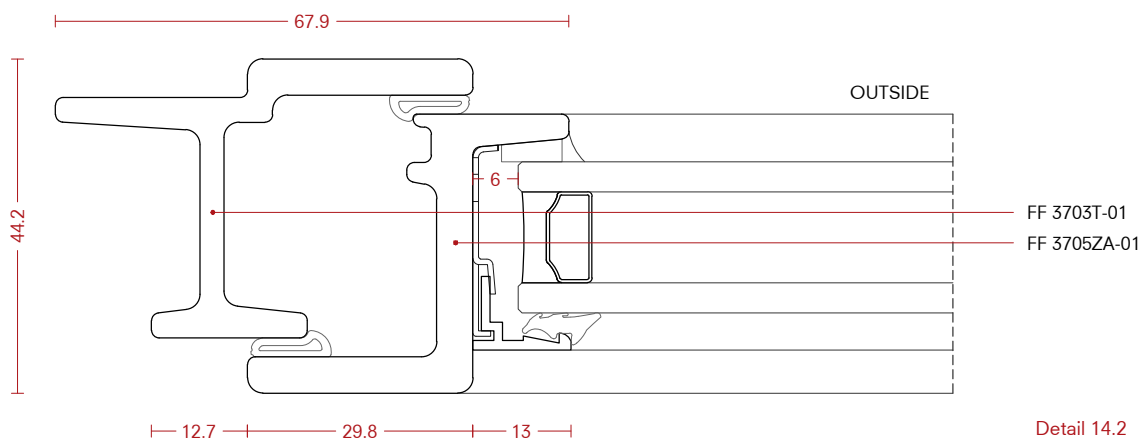
+ = Anta fissa
— = Apertura interna
- - - = Apertura esterna
Misure in: mm
Scala 1:1 - 1:2

Leyenda

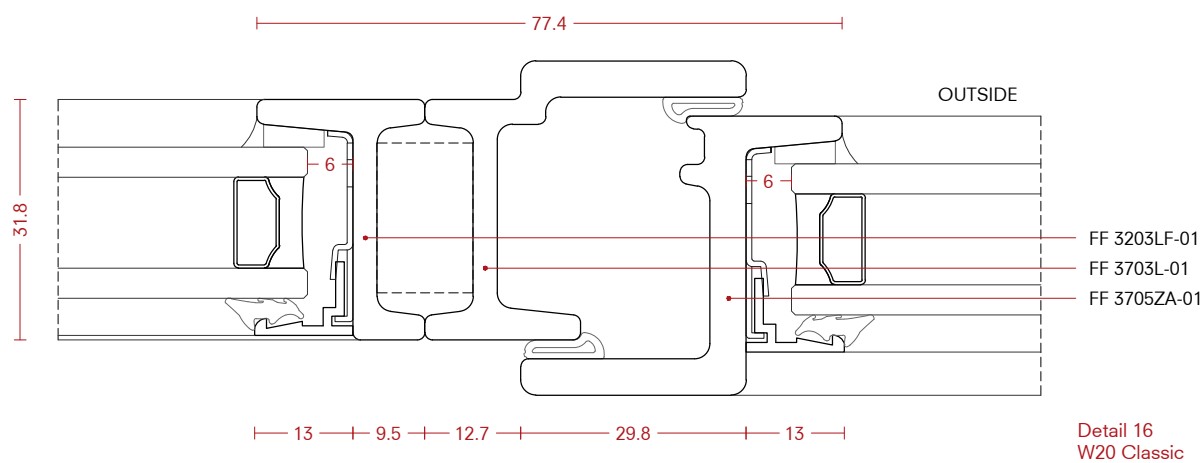
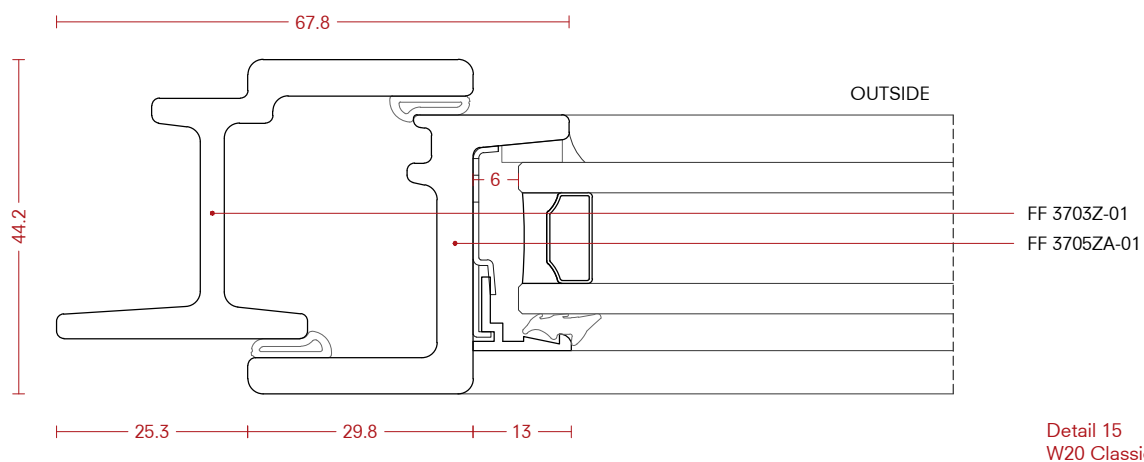
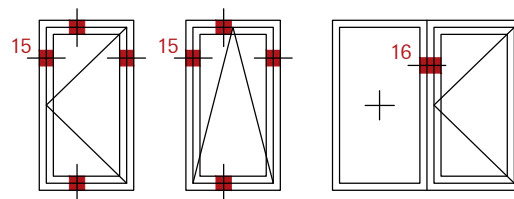
+ = Fijo
— = Apertura interna
- - - = Apertura externa
Medidas en: mm
Escala 1:1 - 1:2

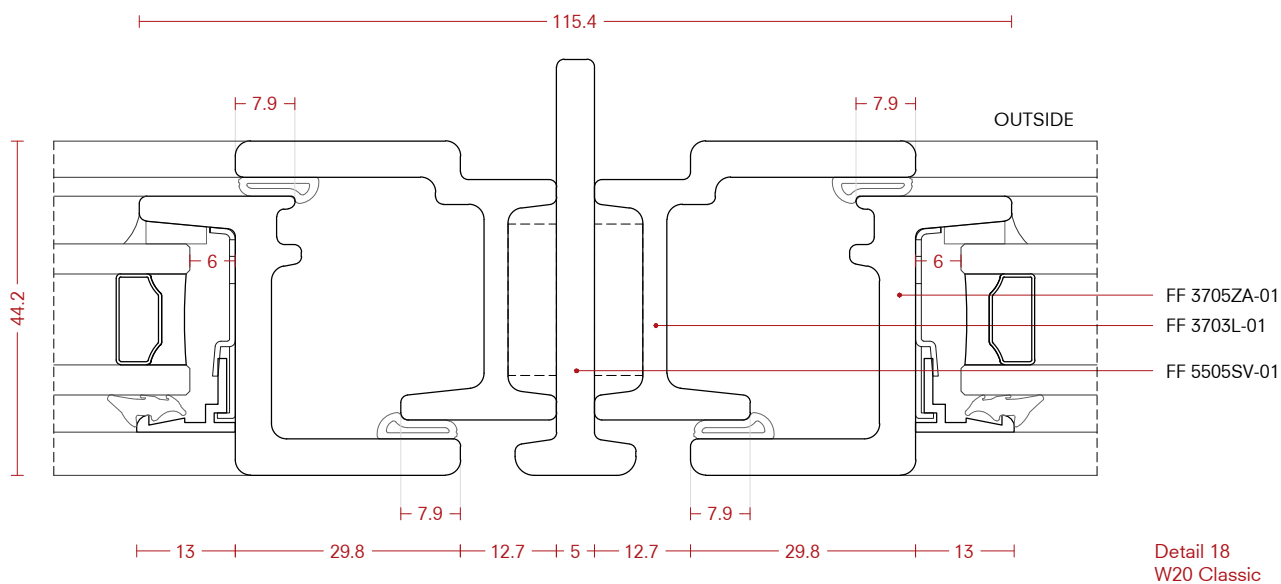
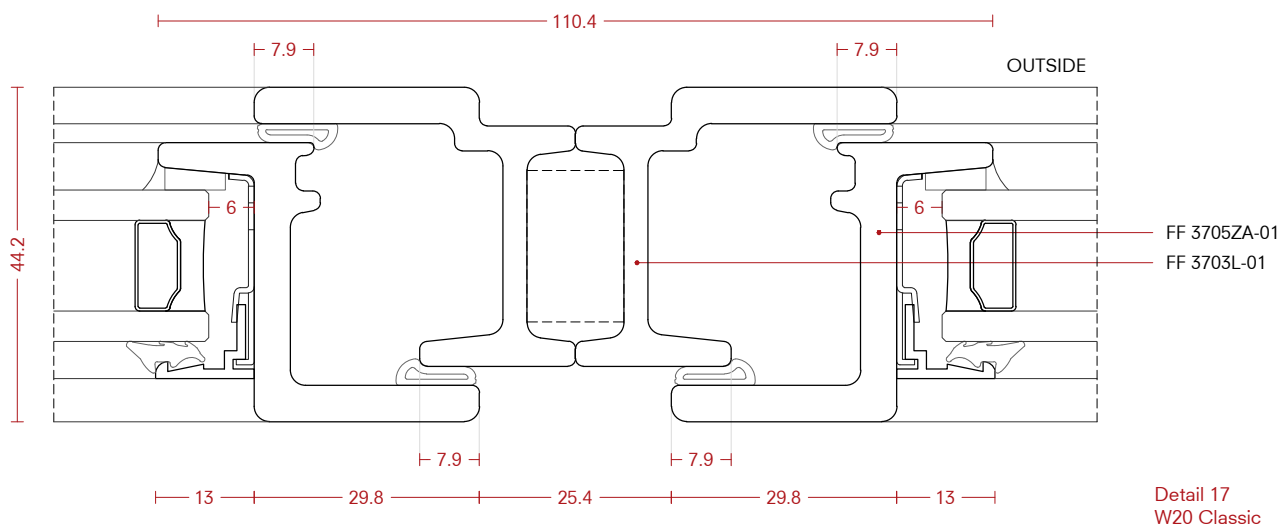
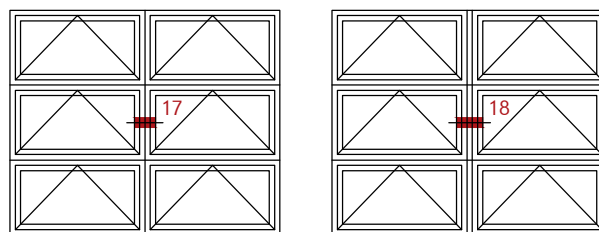


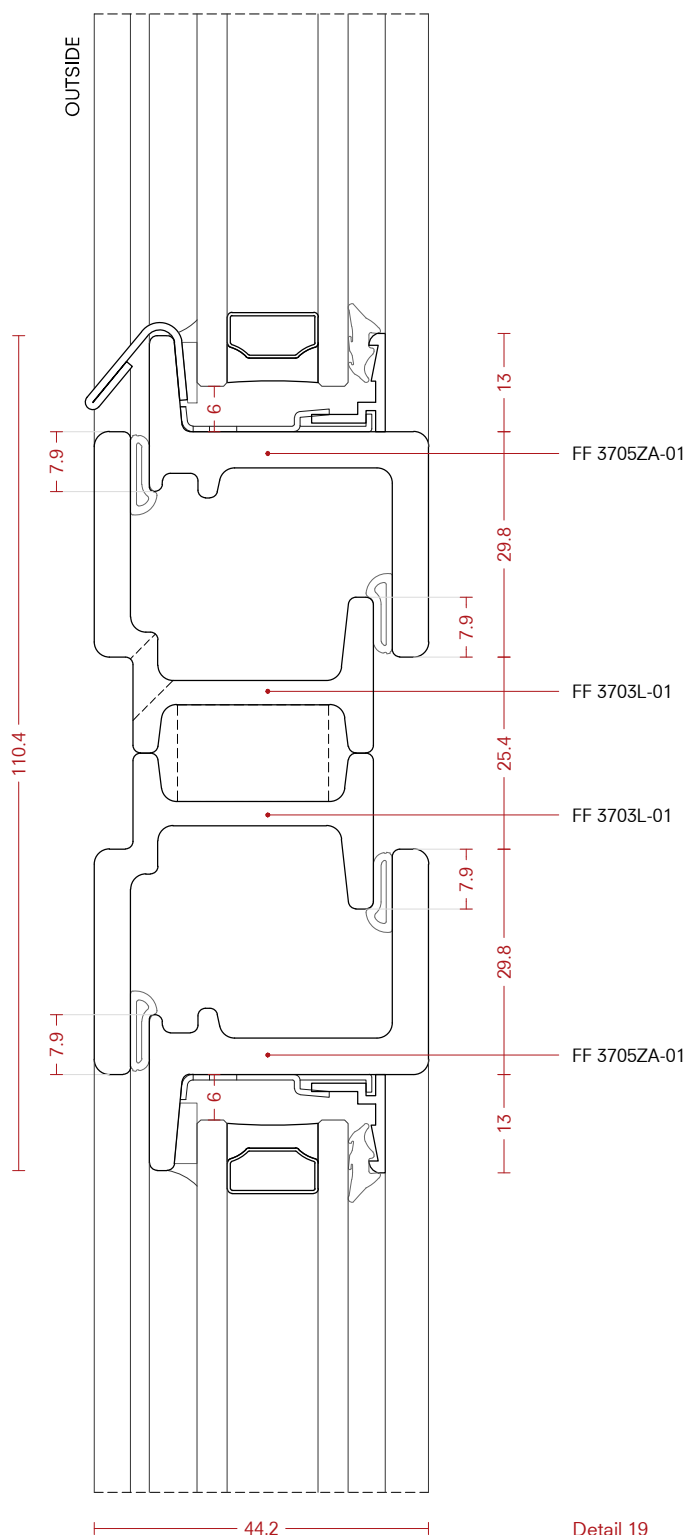
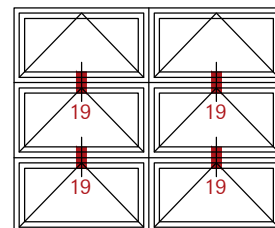
Detail 14.1
W20 Classic



Detail 14.2
W20 Classic

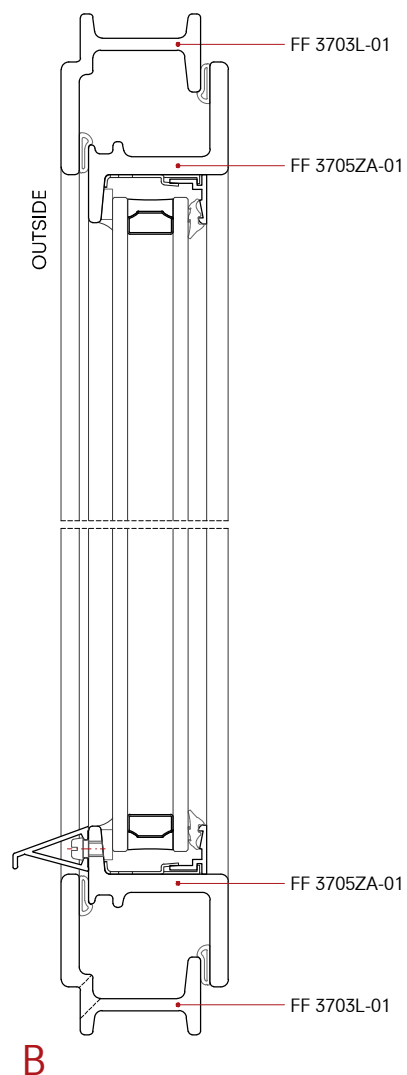
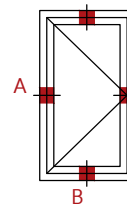
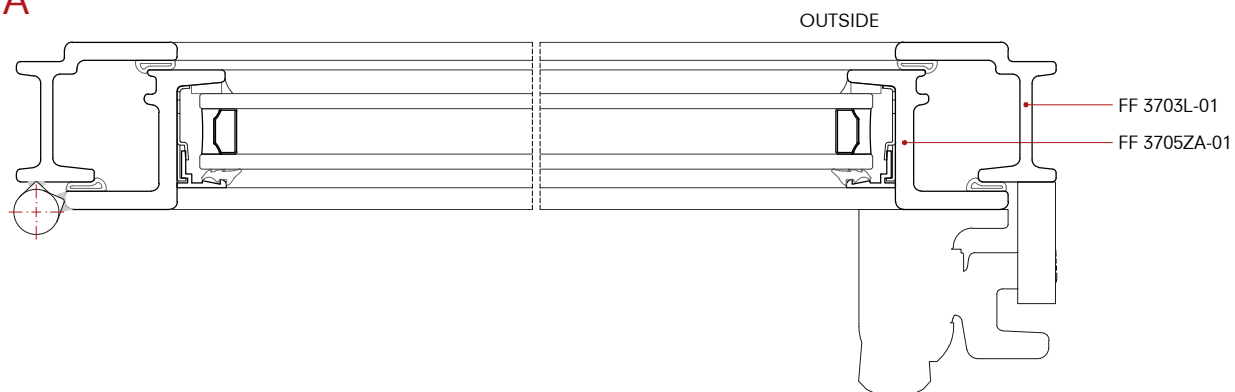






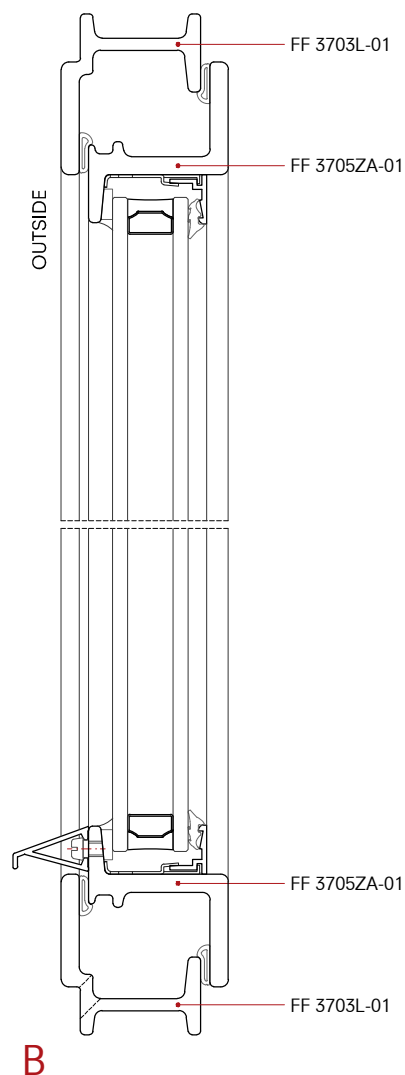
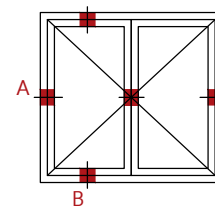
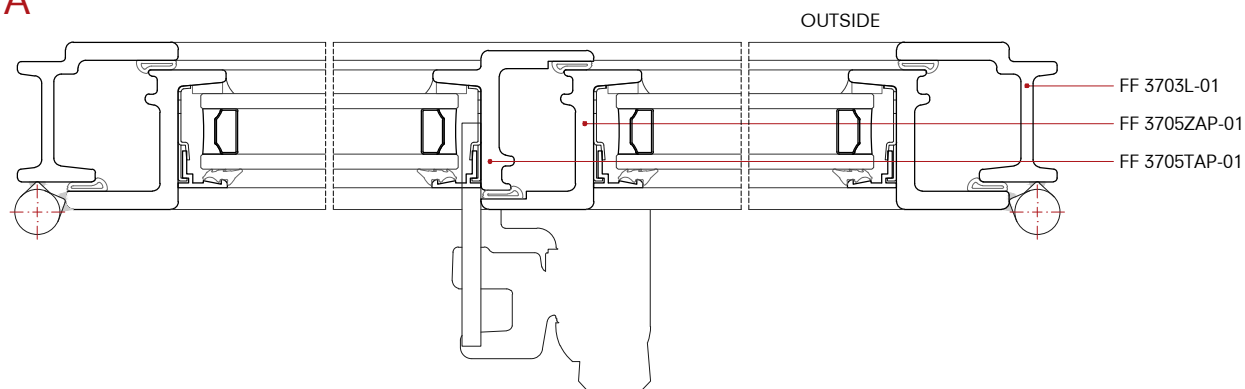
Detail 19
W20 Classic

A

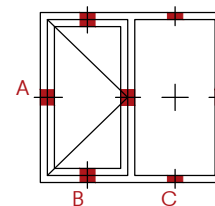


B

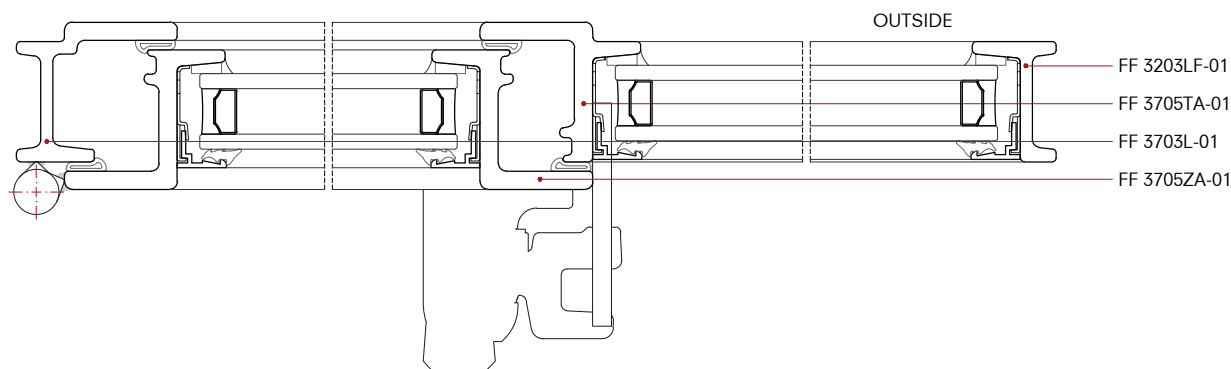
A



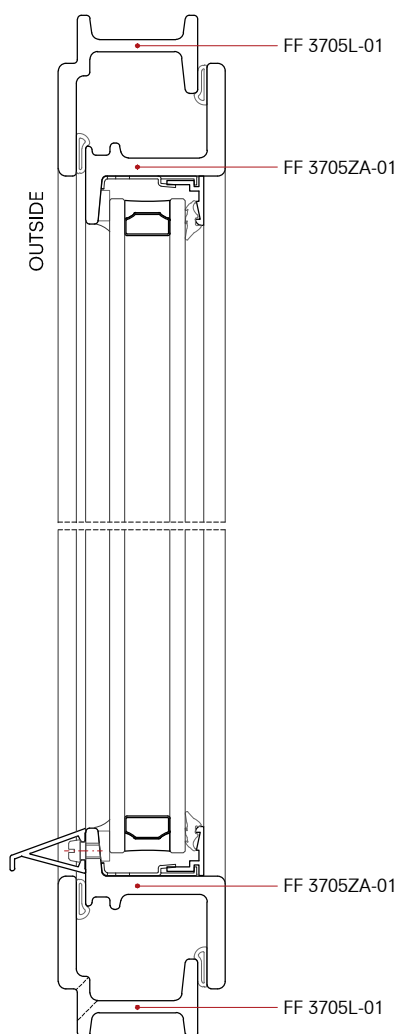
B



A

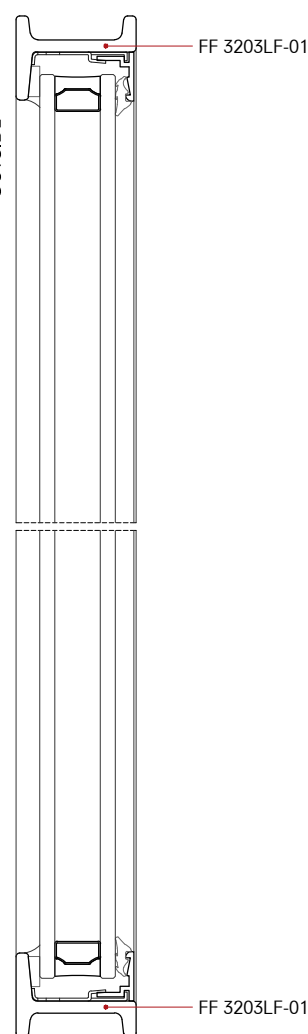


OUTSIDE



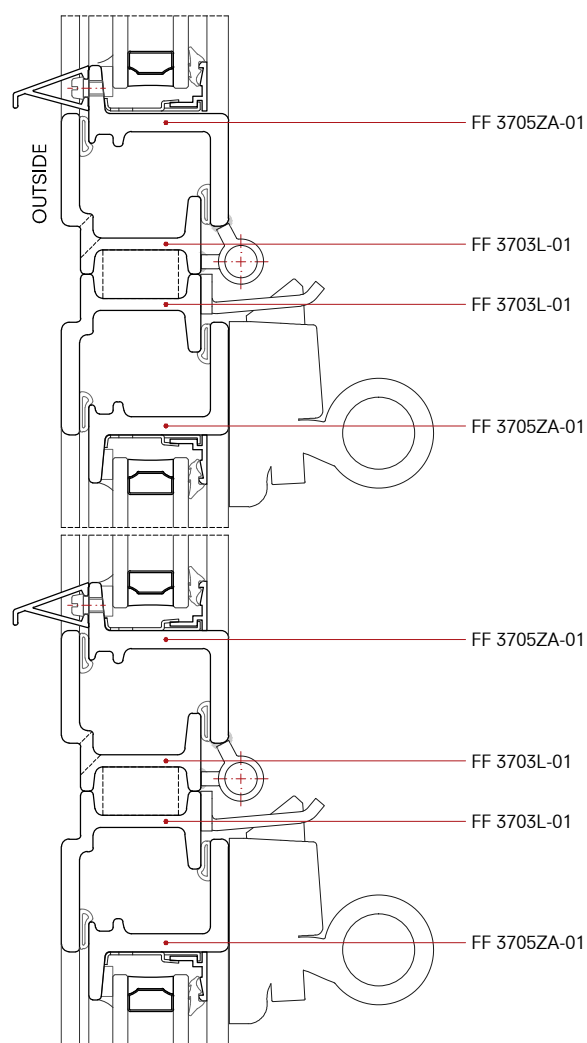
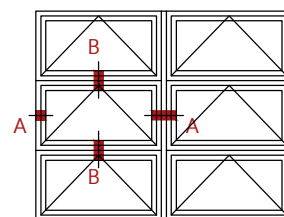
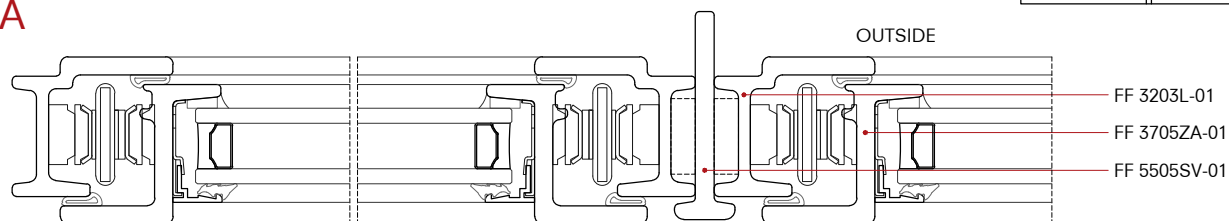
B

OUTSIDE

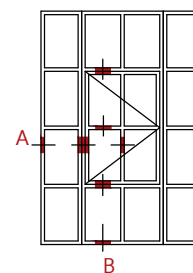


C

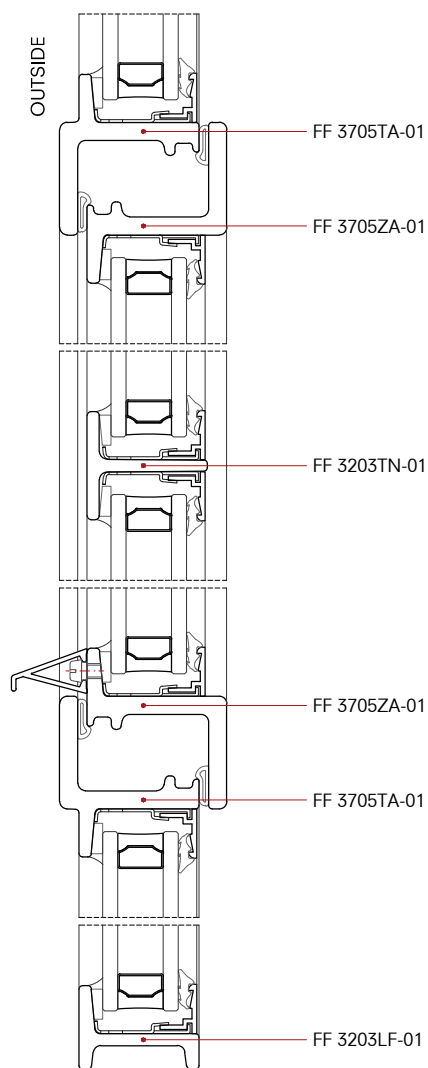
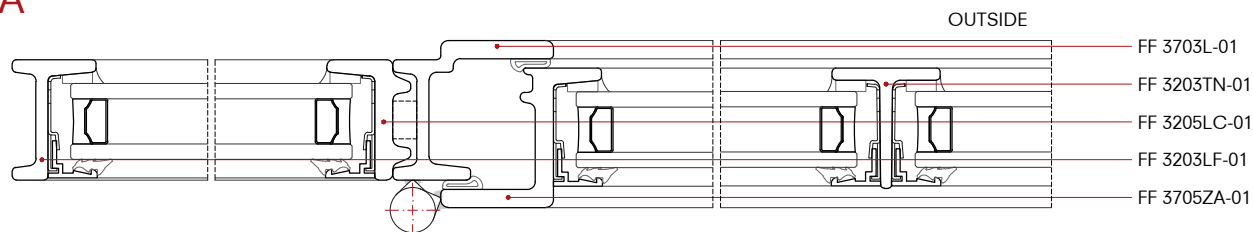
A



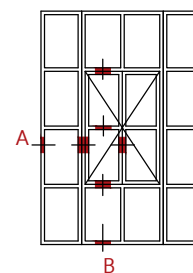
B



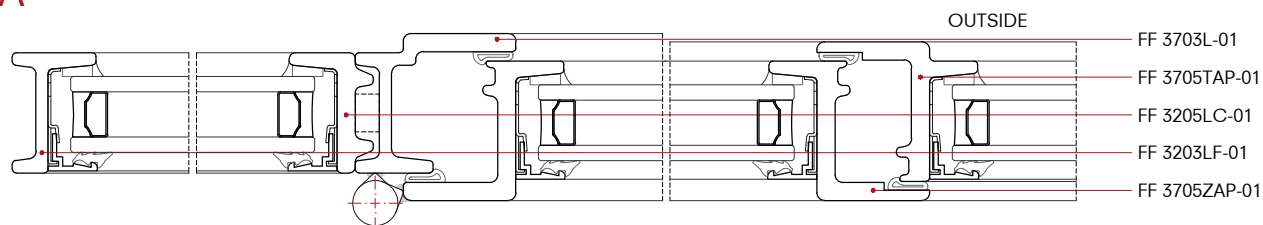
A



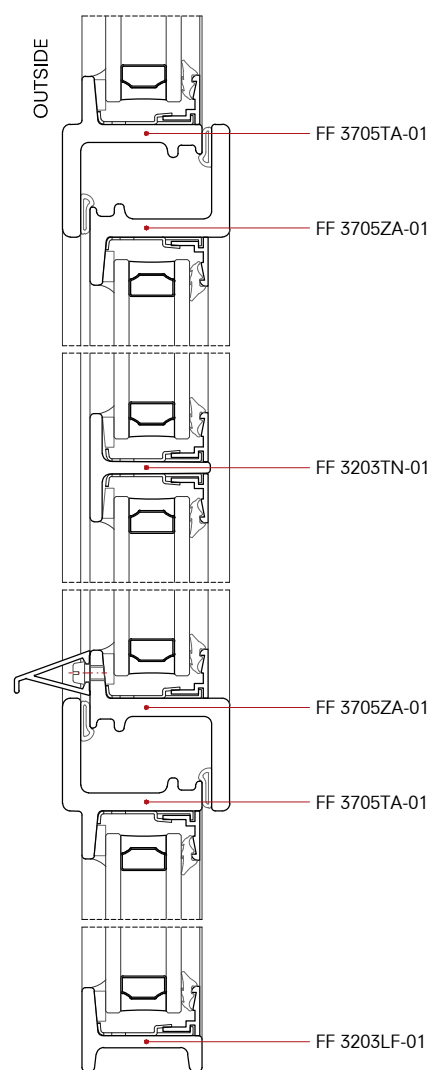
B



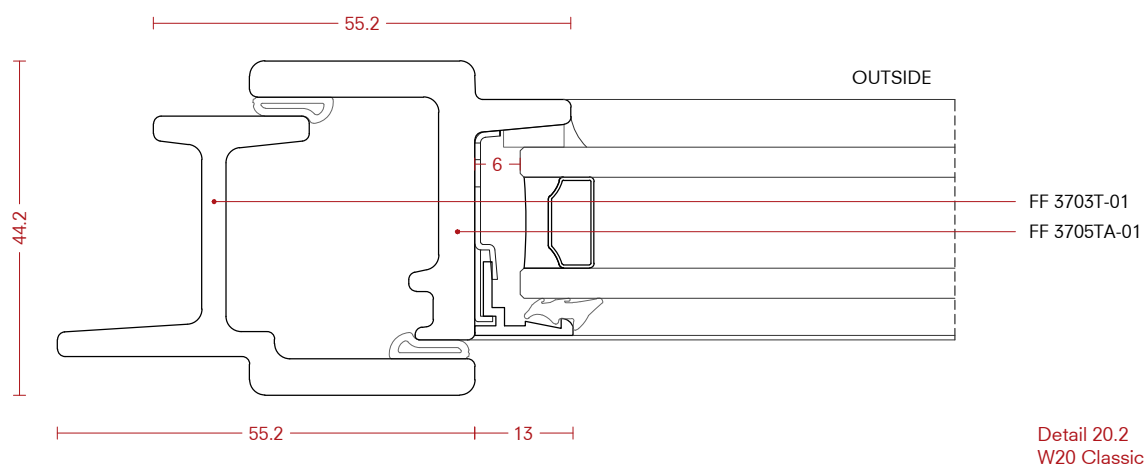
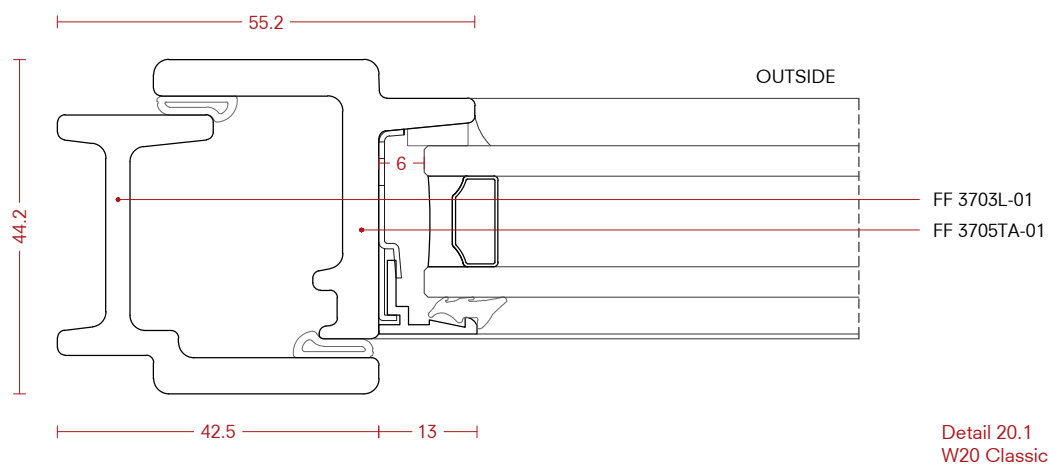
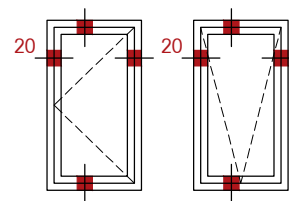
A

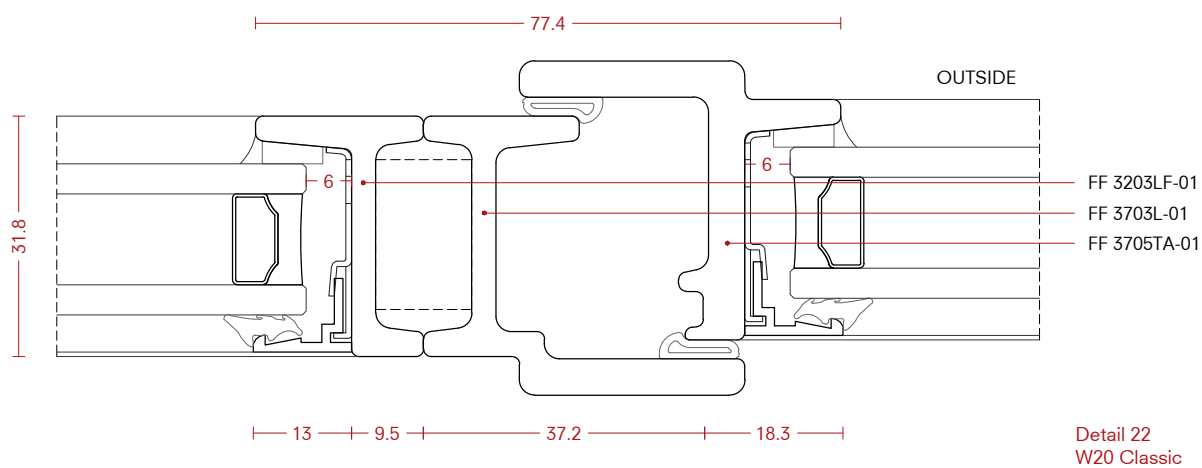
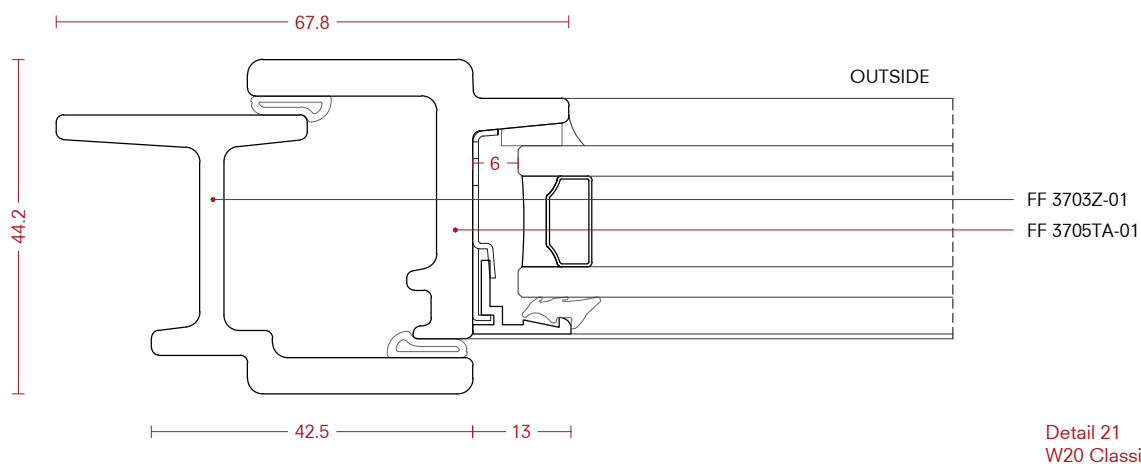
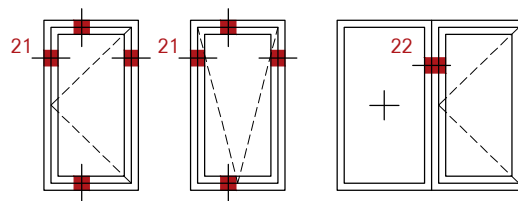


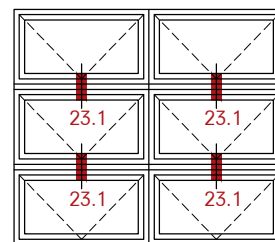
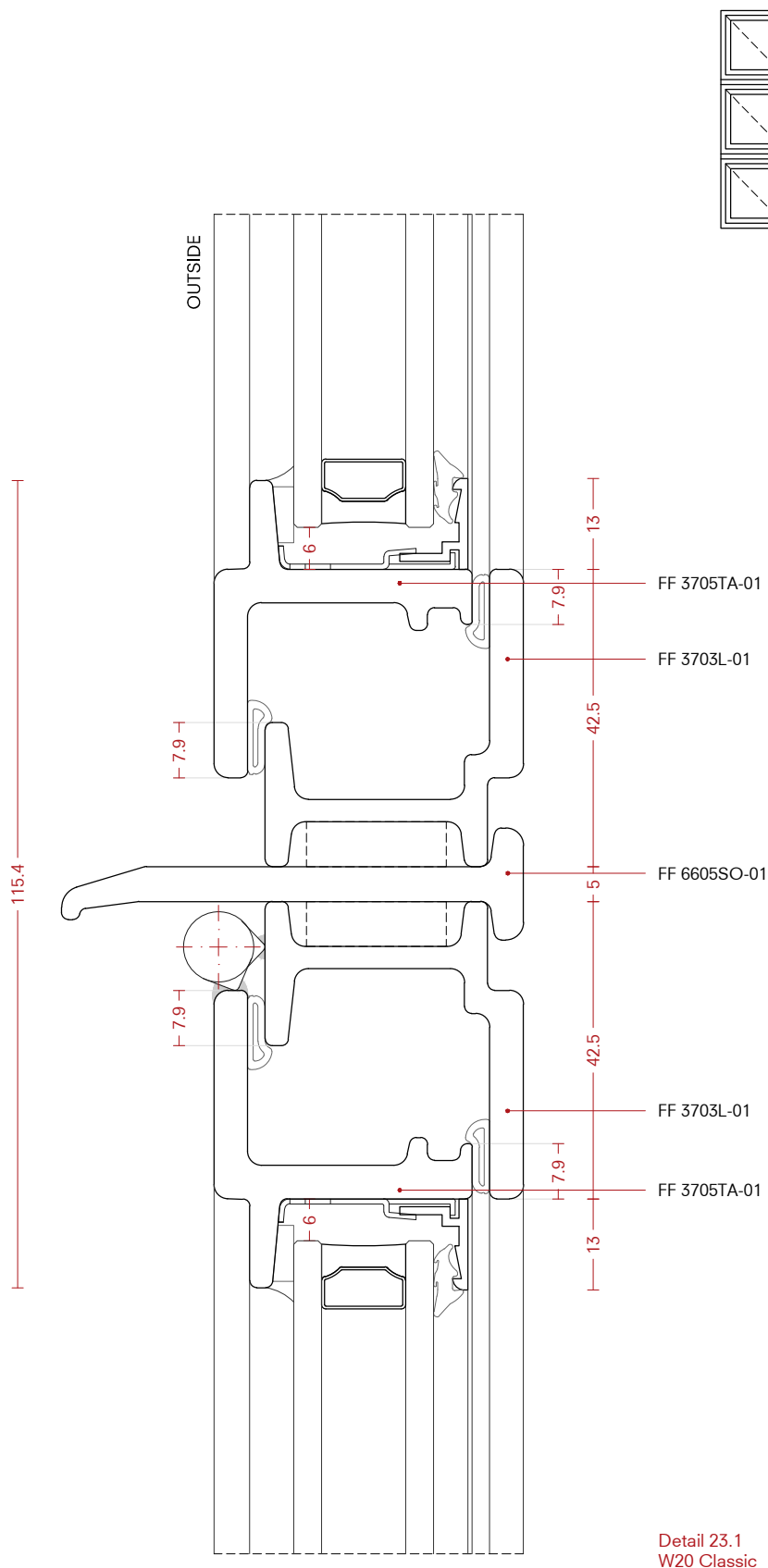
OUTSIDE



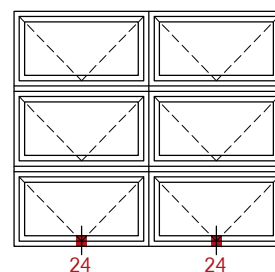
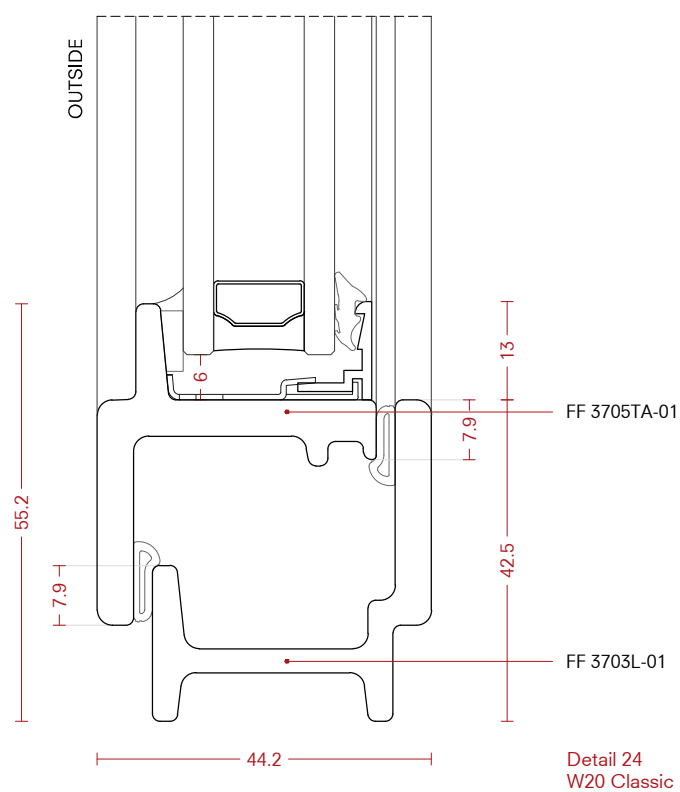
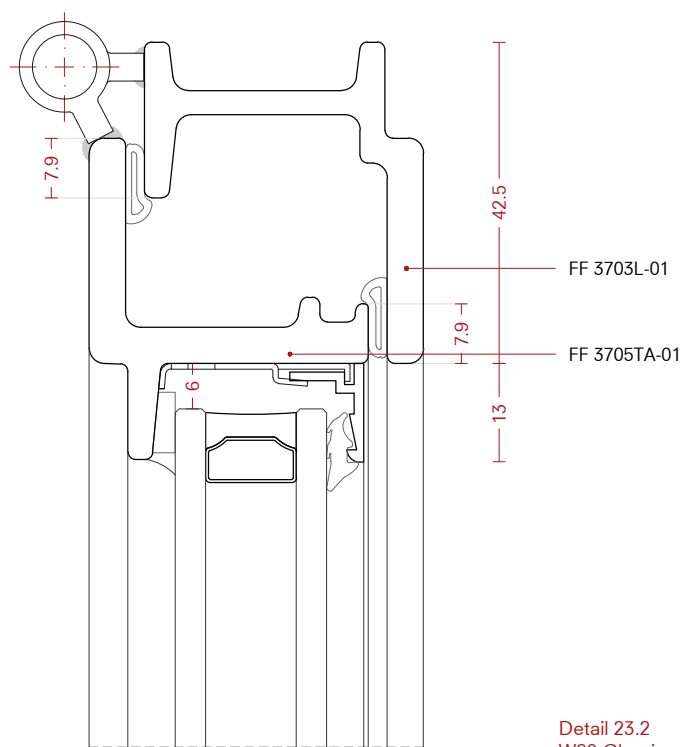
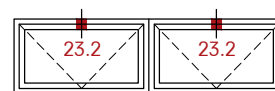
B



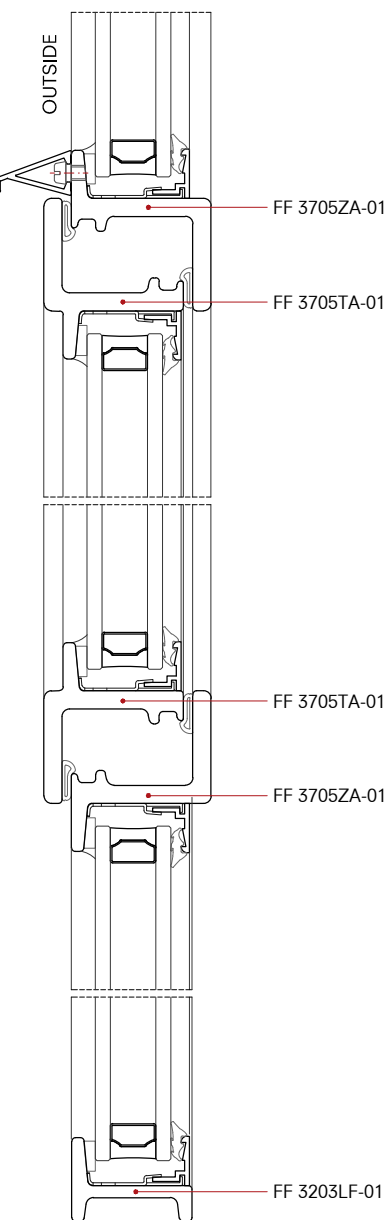
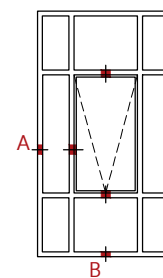
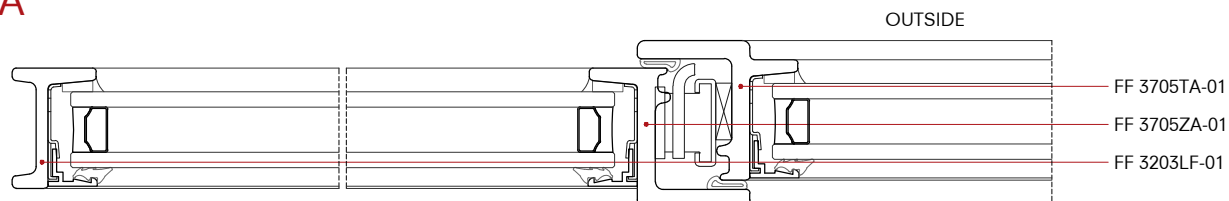




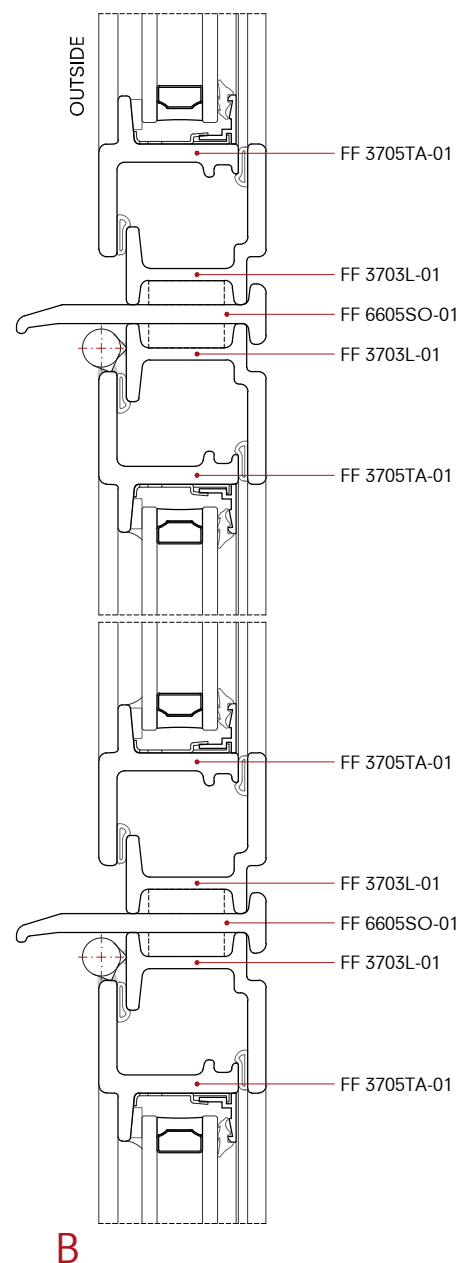
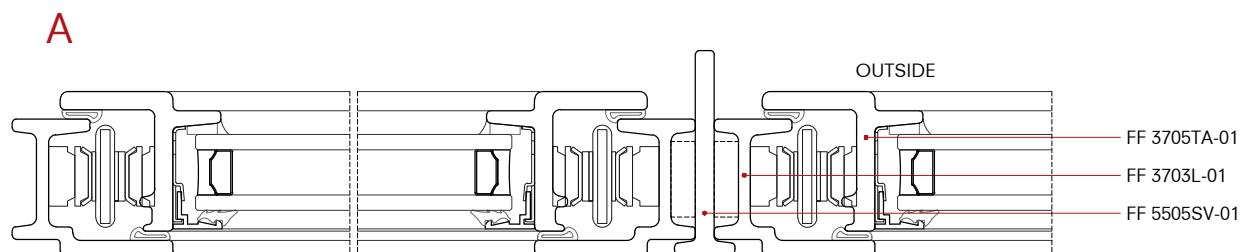
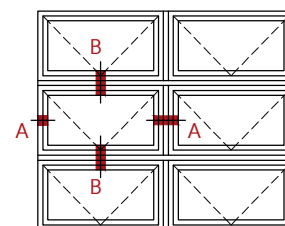
Detail 23.1
W20 Classic

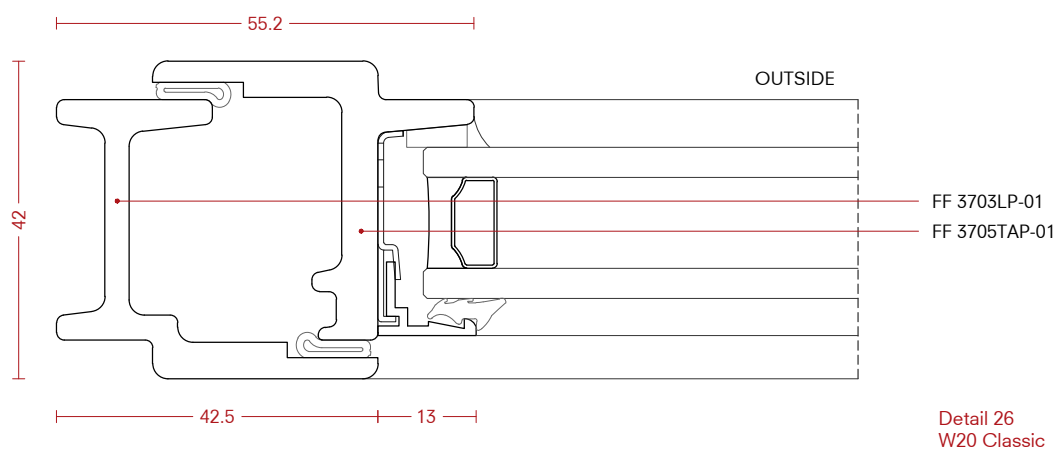
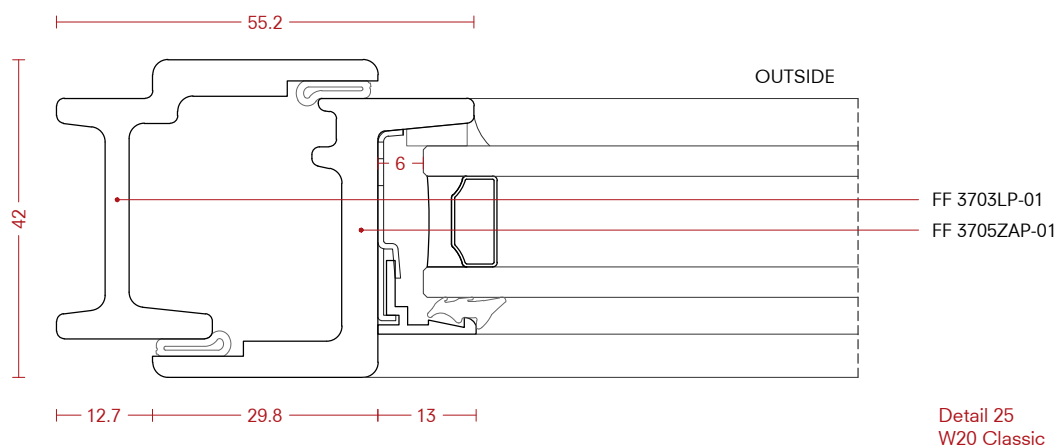
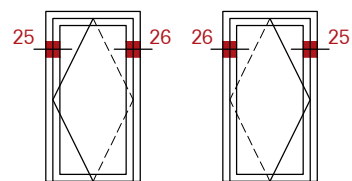


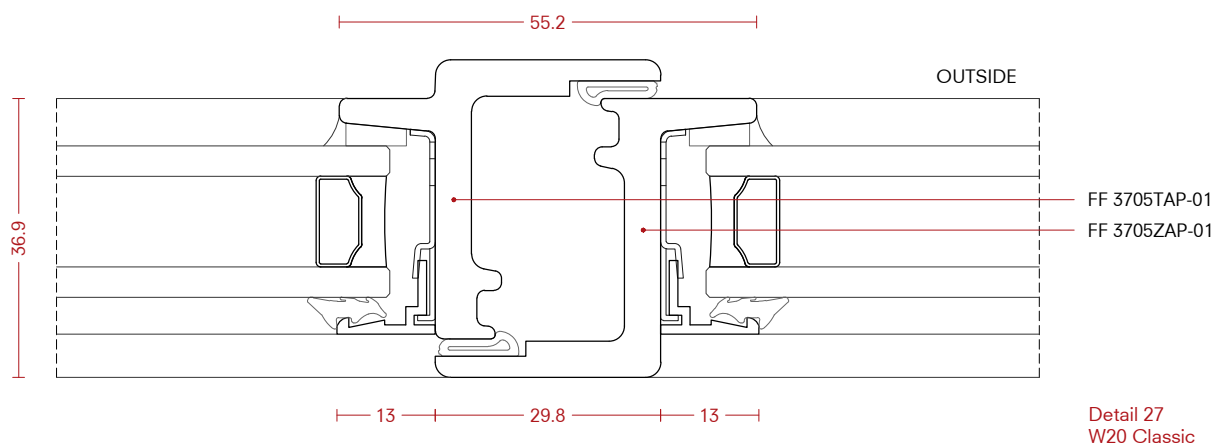
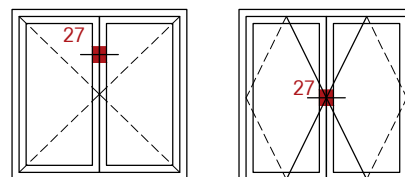
A

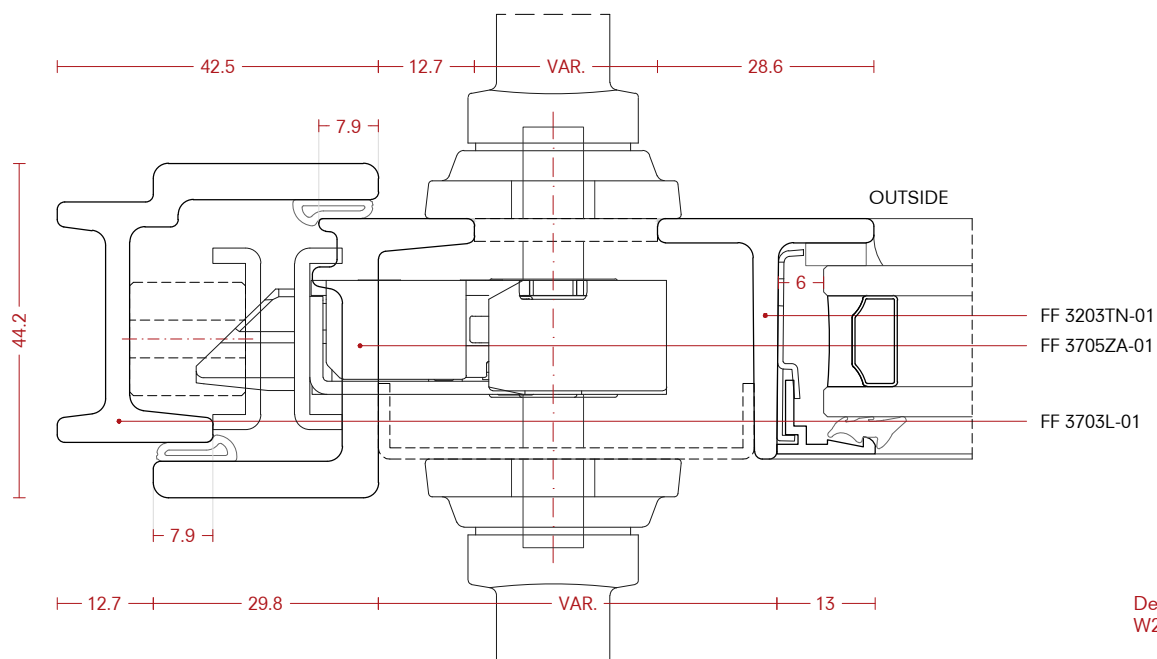
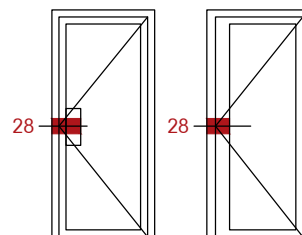


B

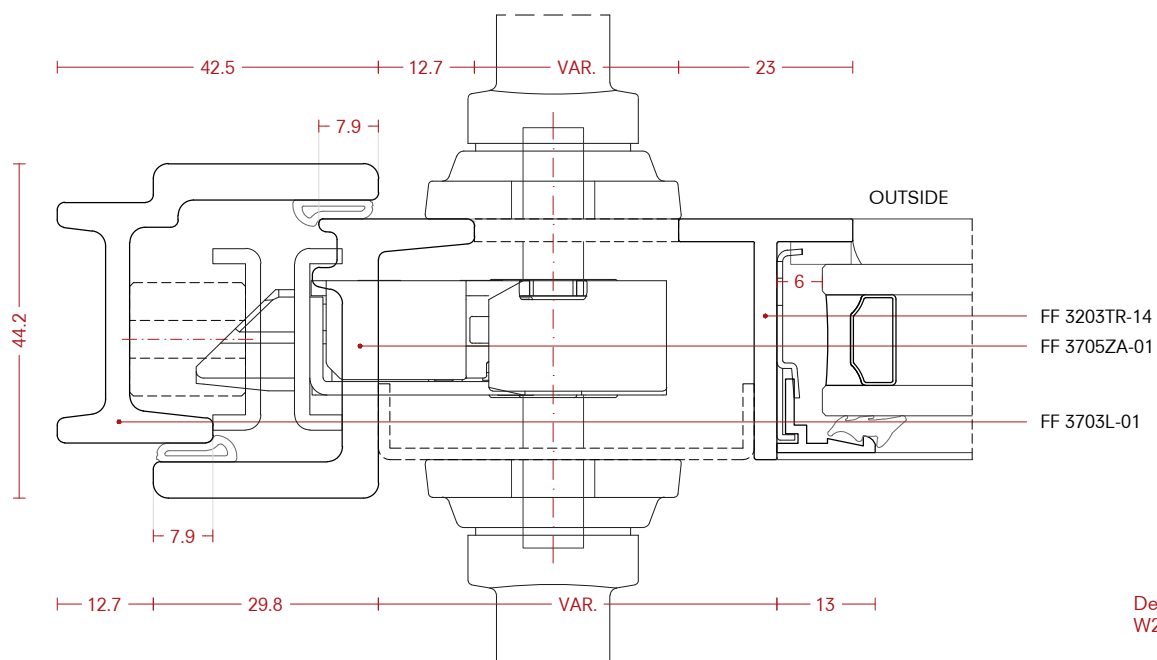




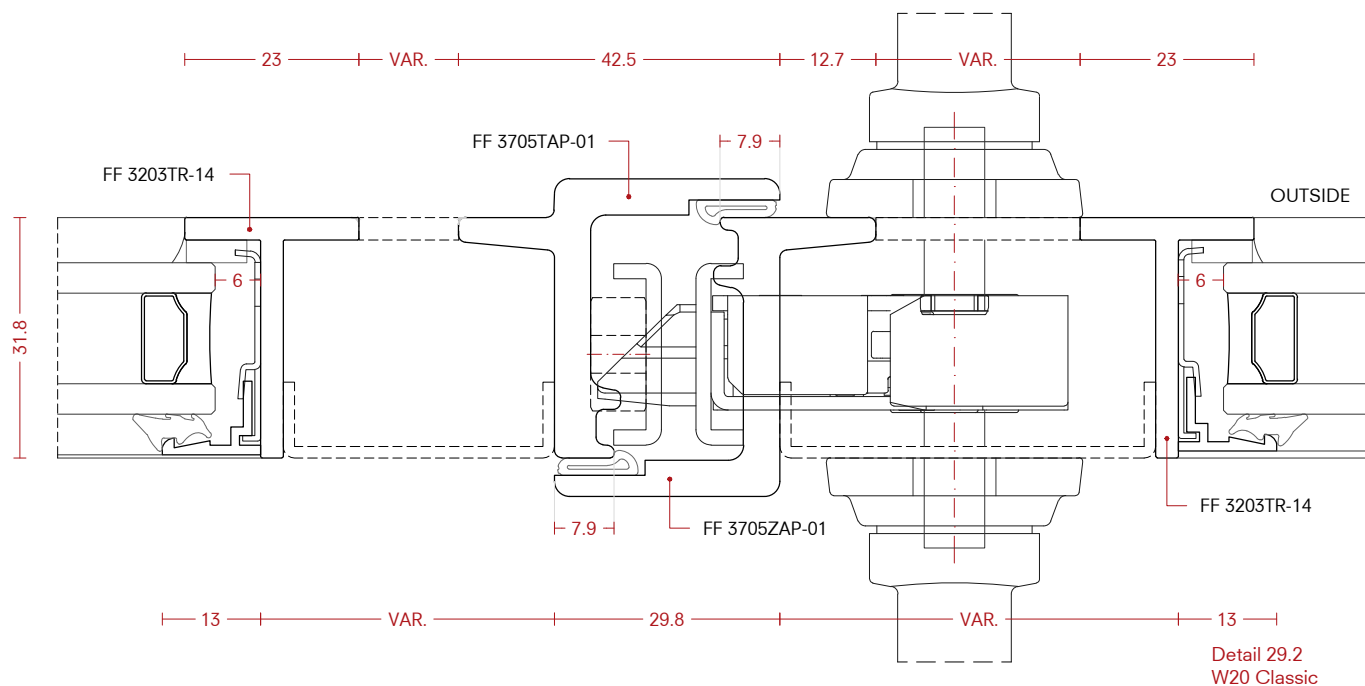
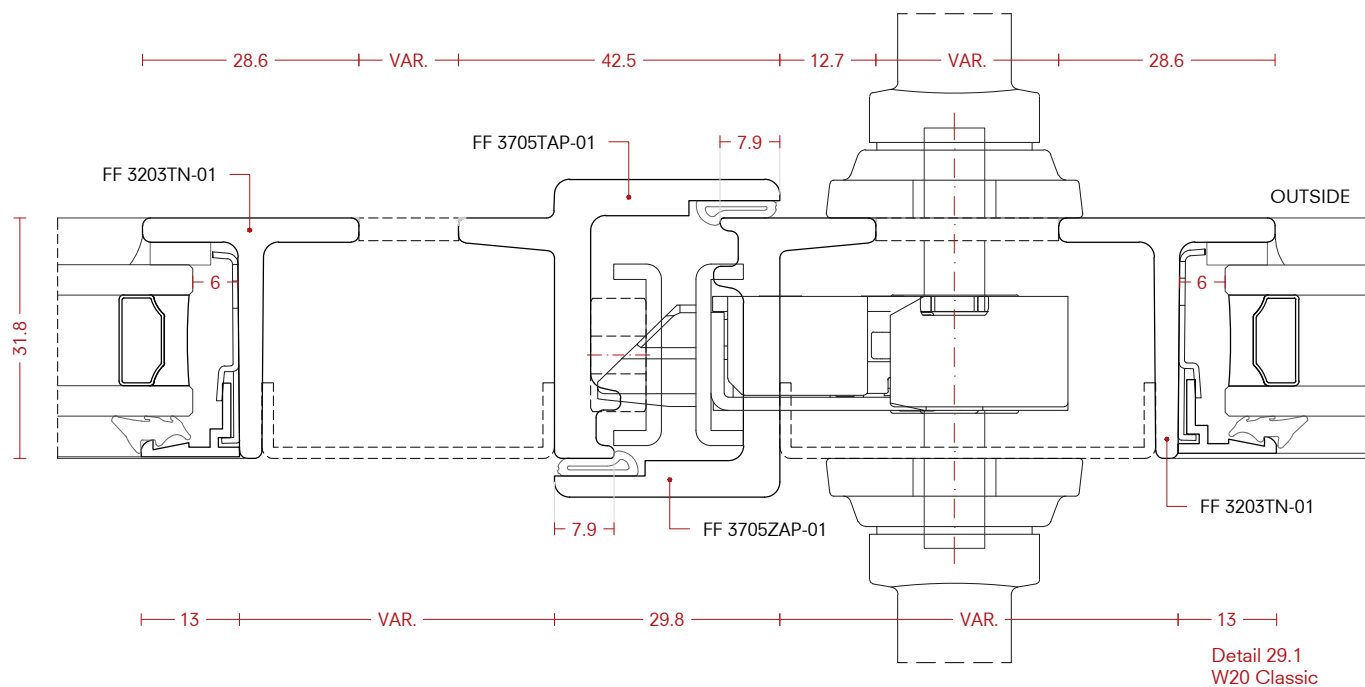
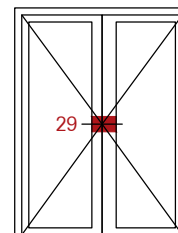


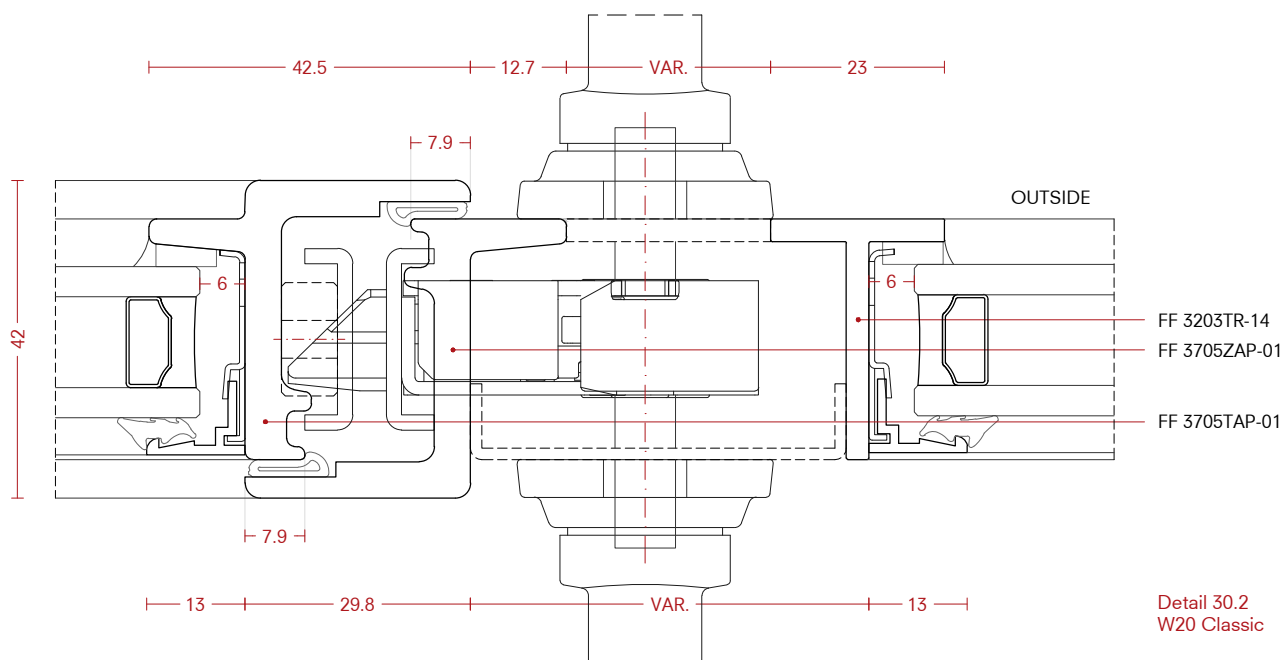
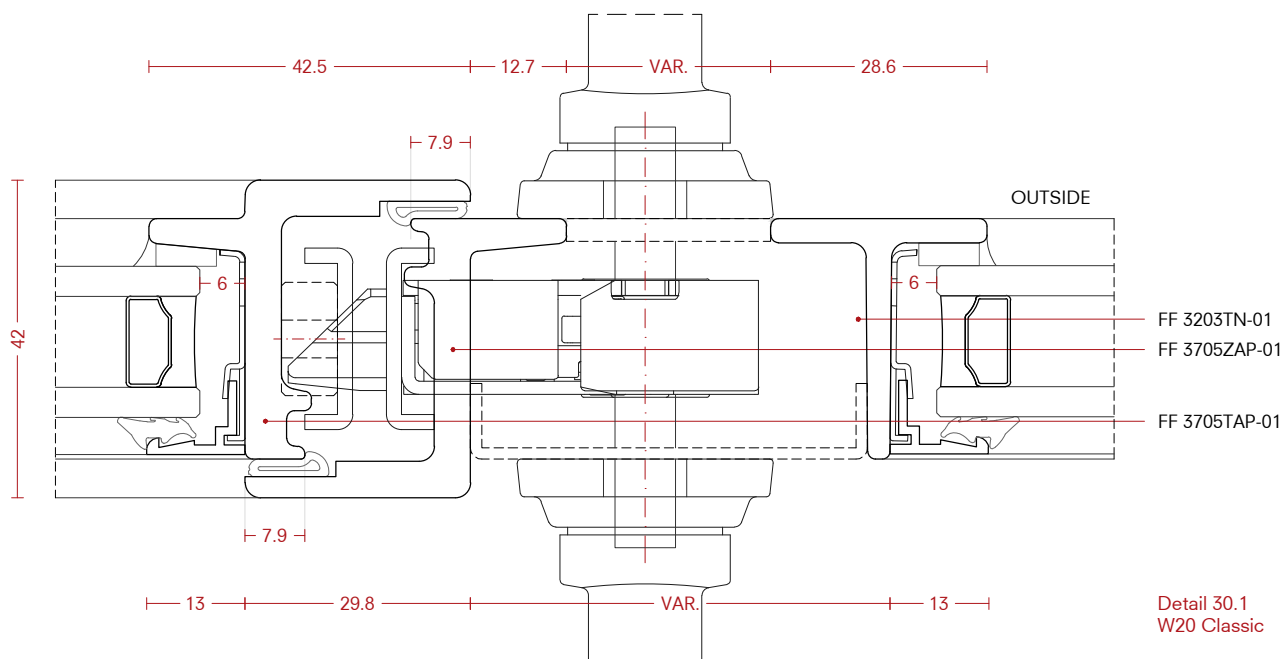
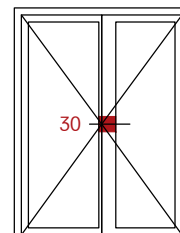


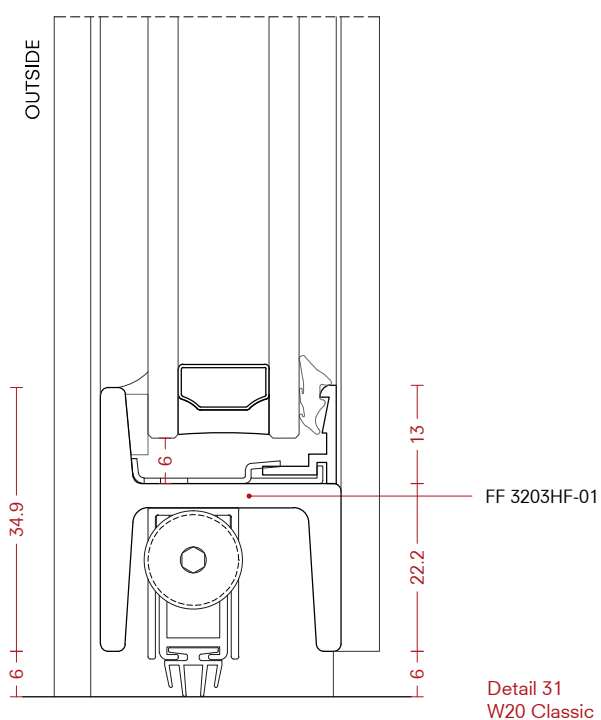
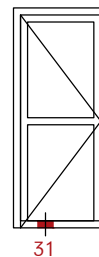
Detail 28.1
W20 Classic

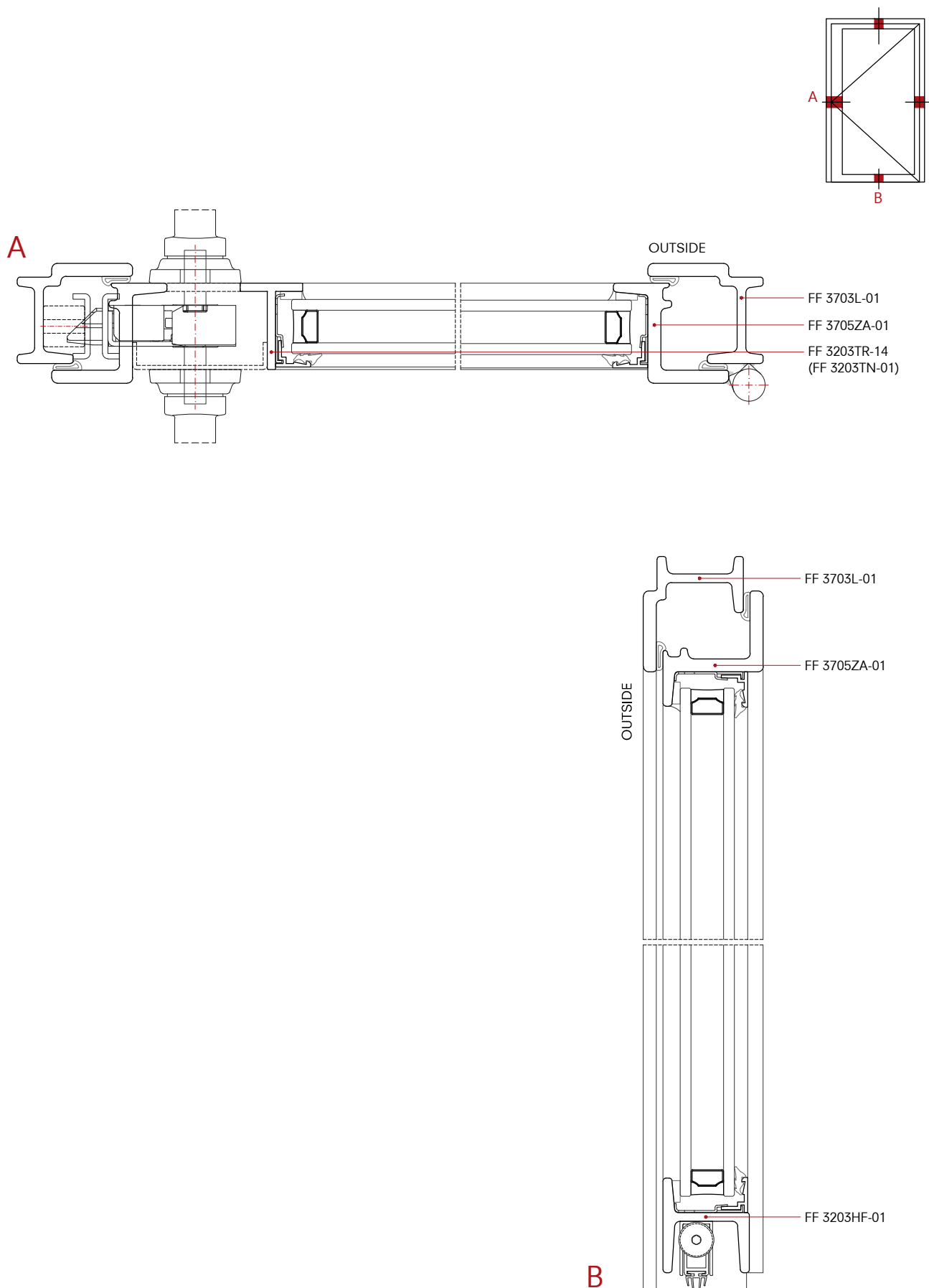


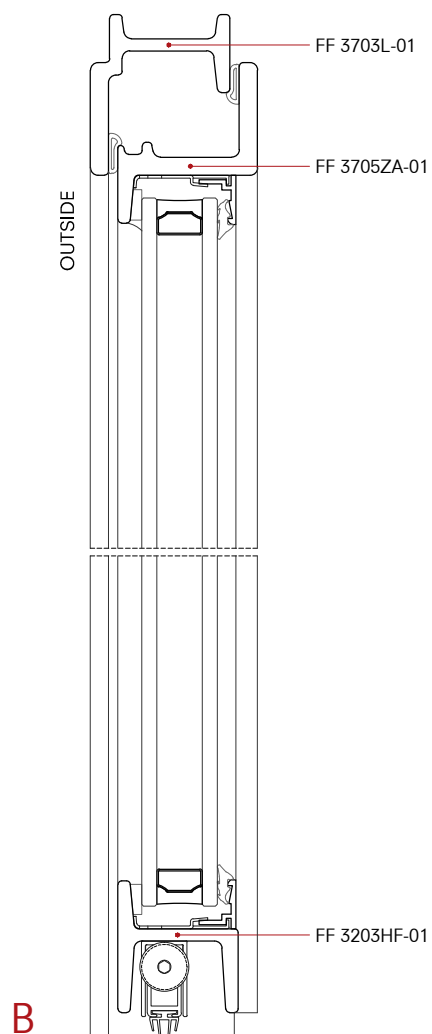
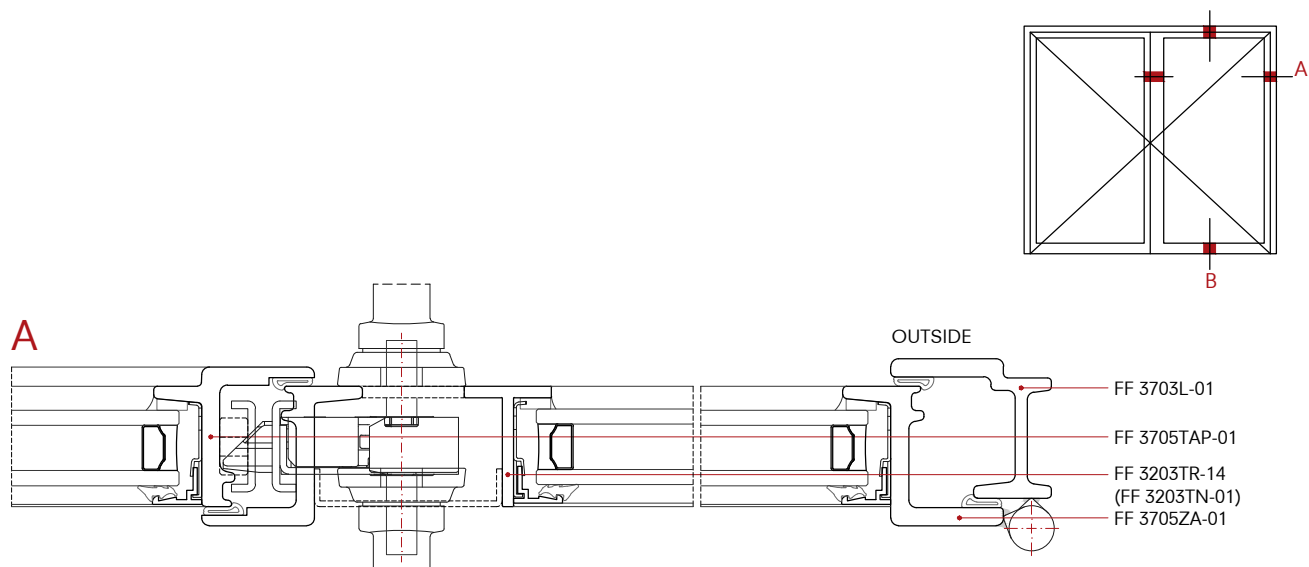
Detail 28.2
W20 Classic

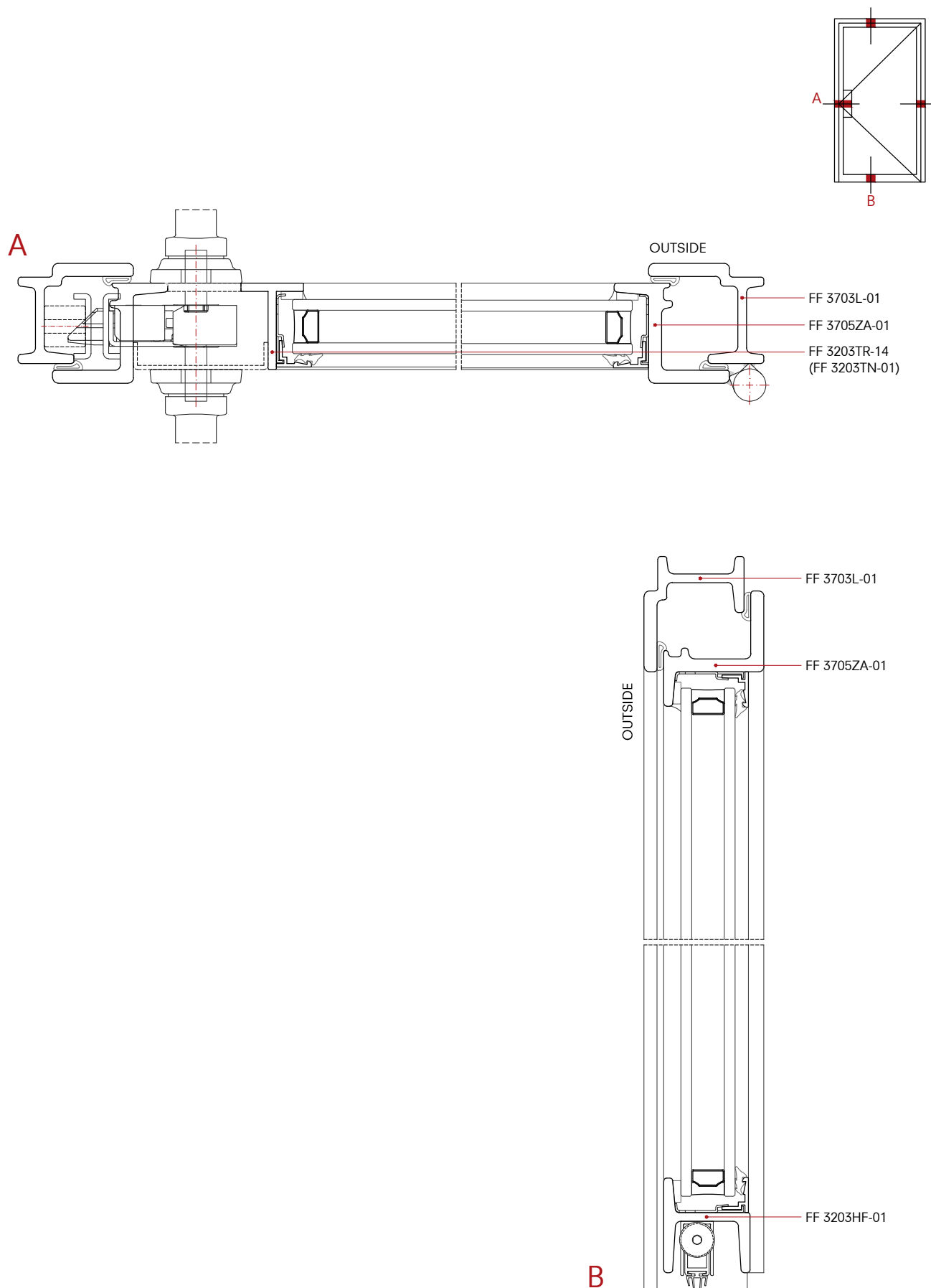


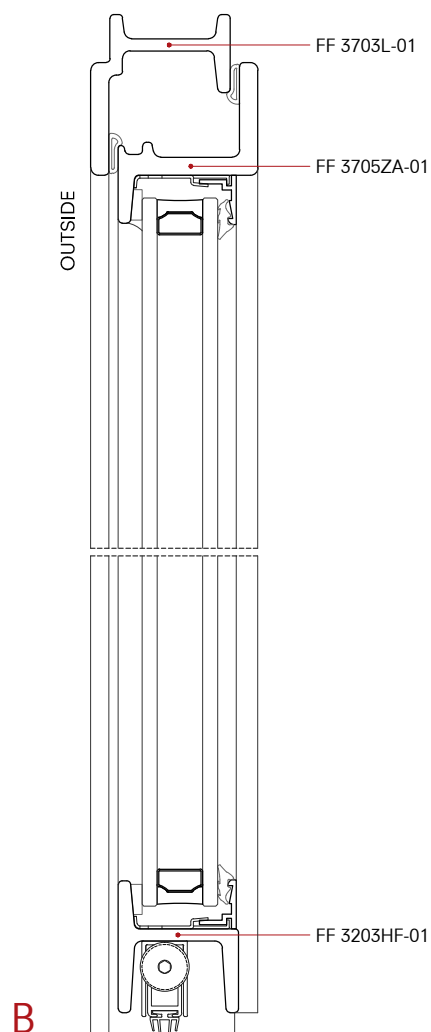
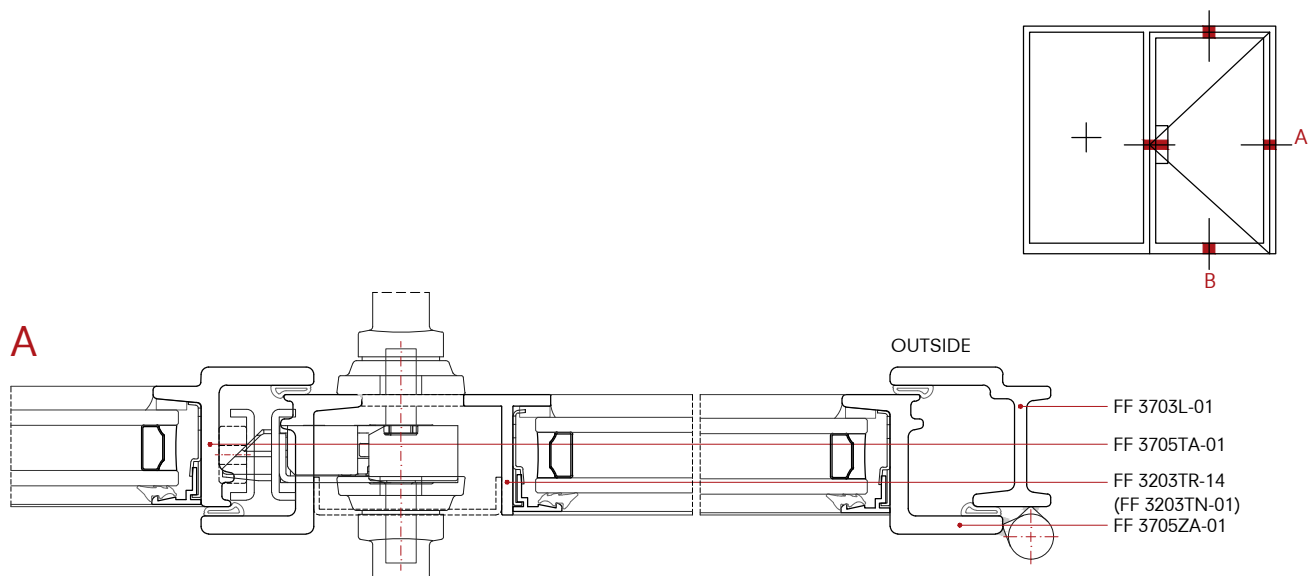


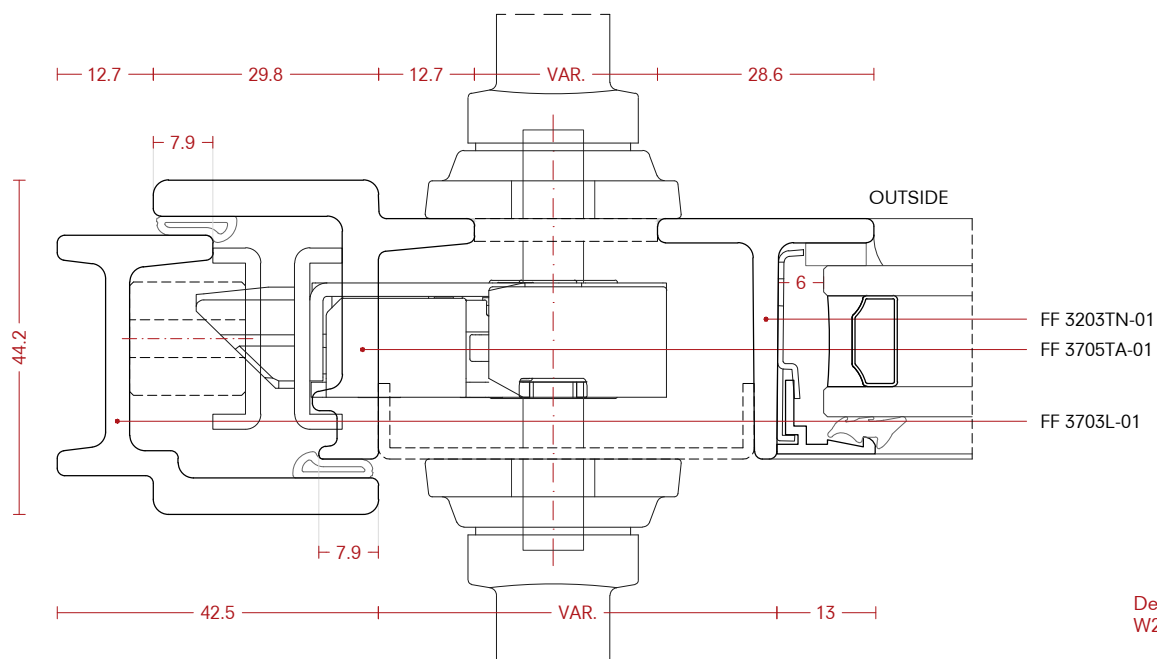
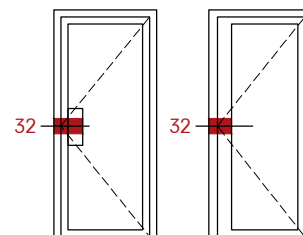




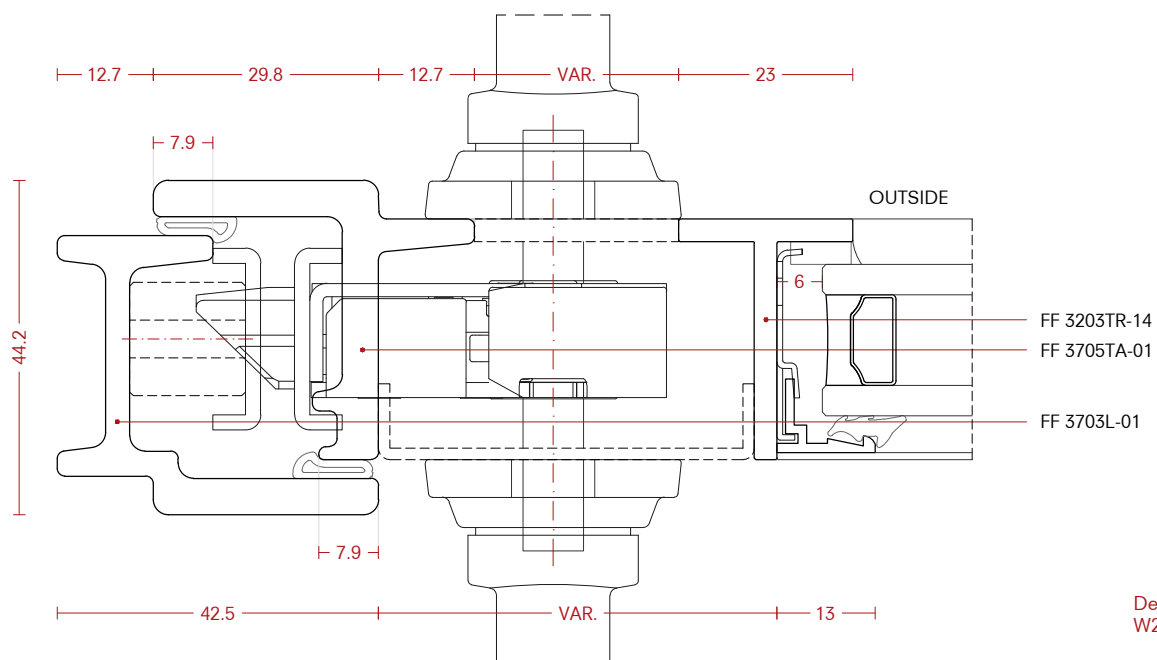




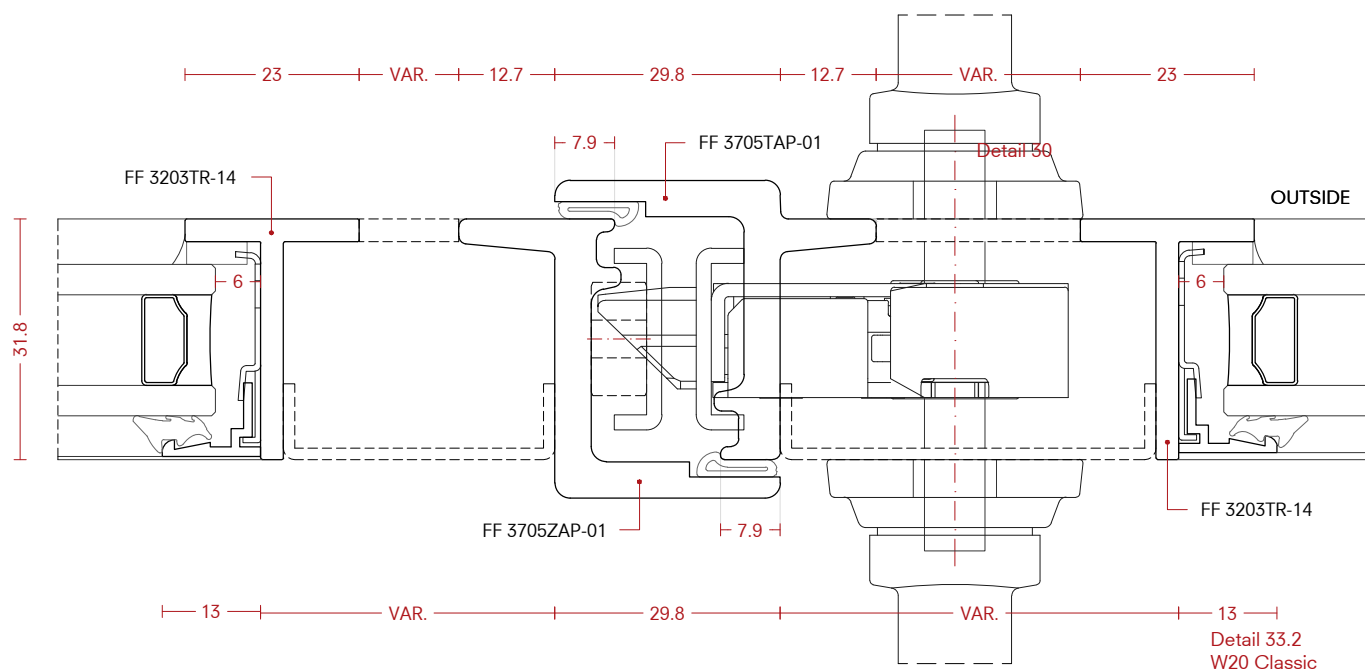
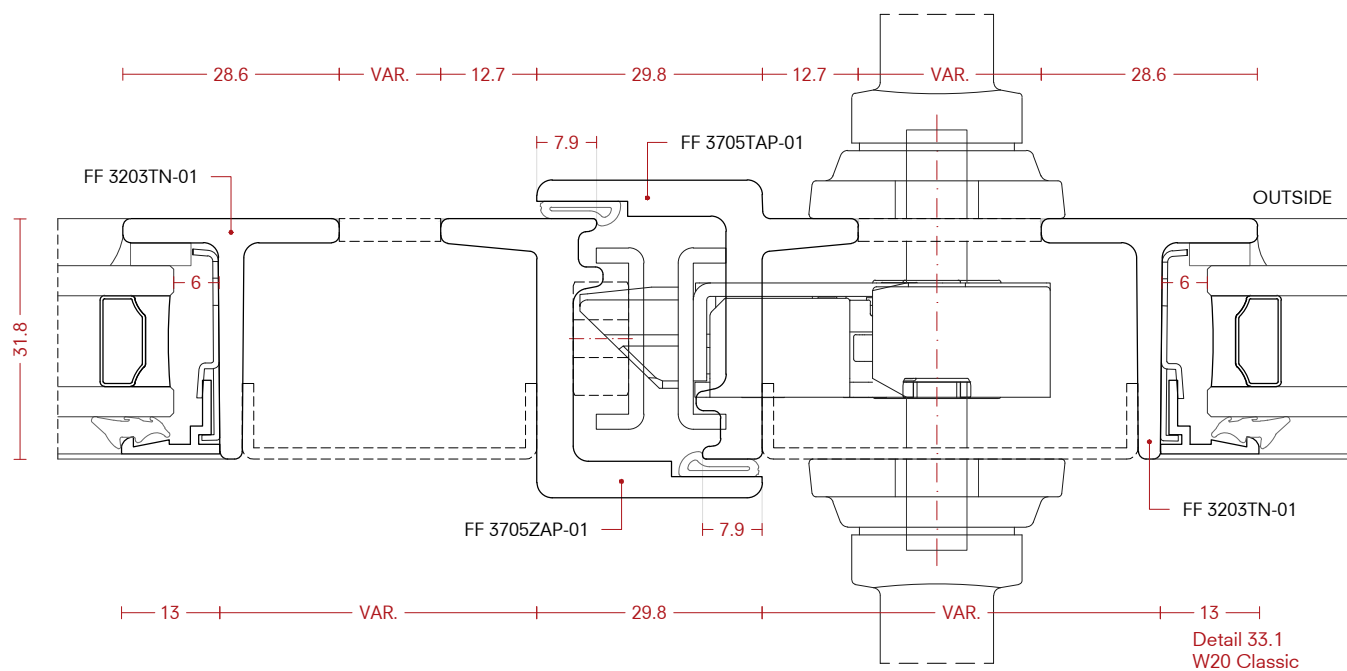
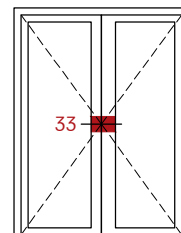


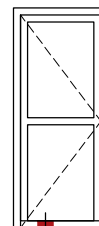


Detail 32.1
W20 Classic

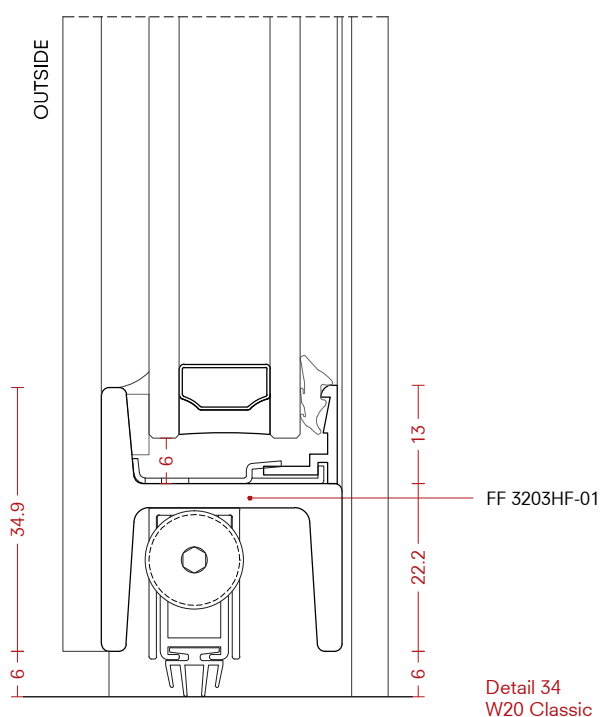


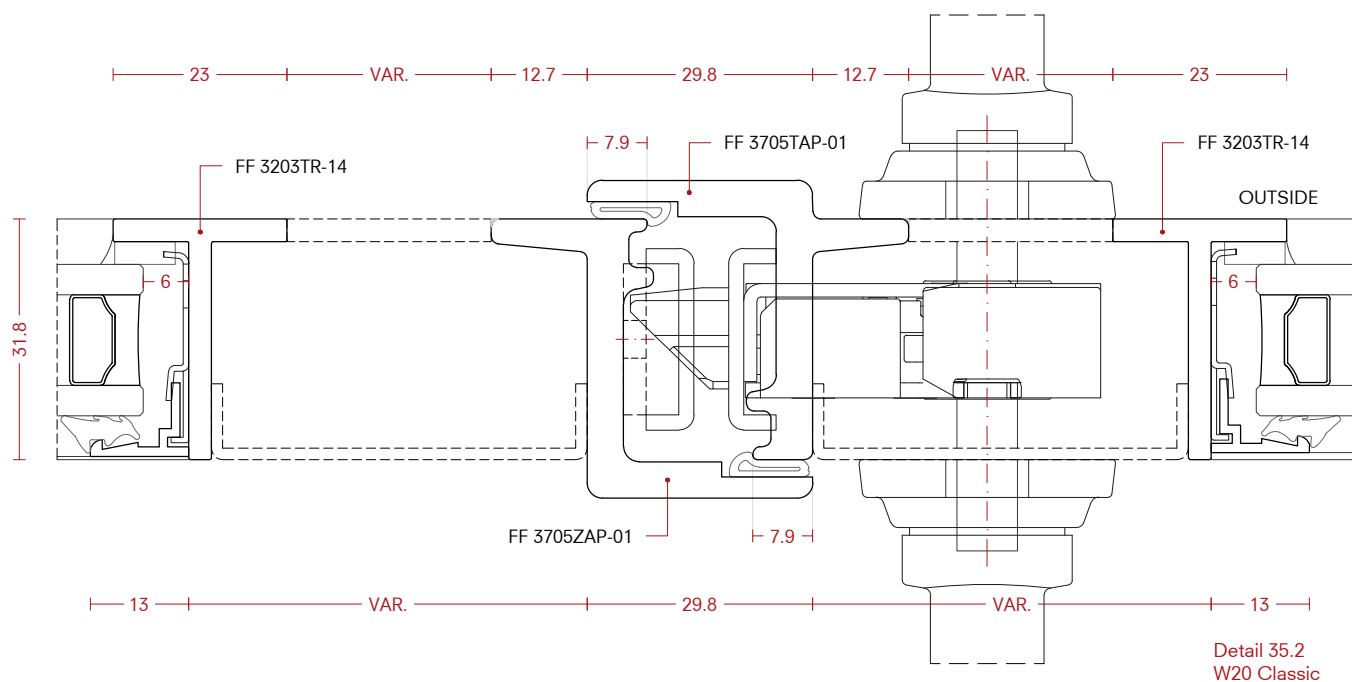
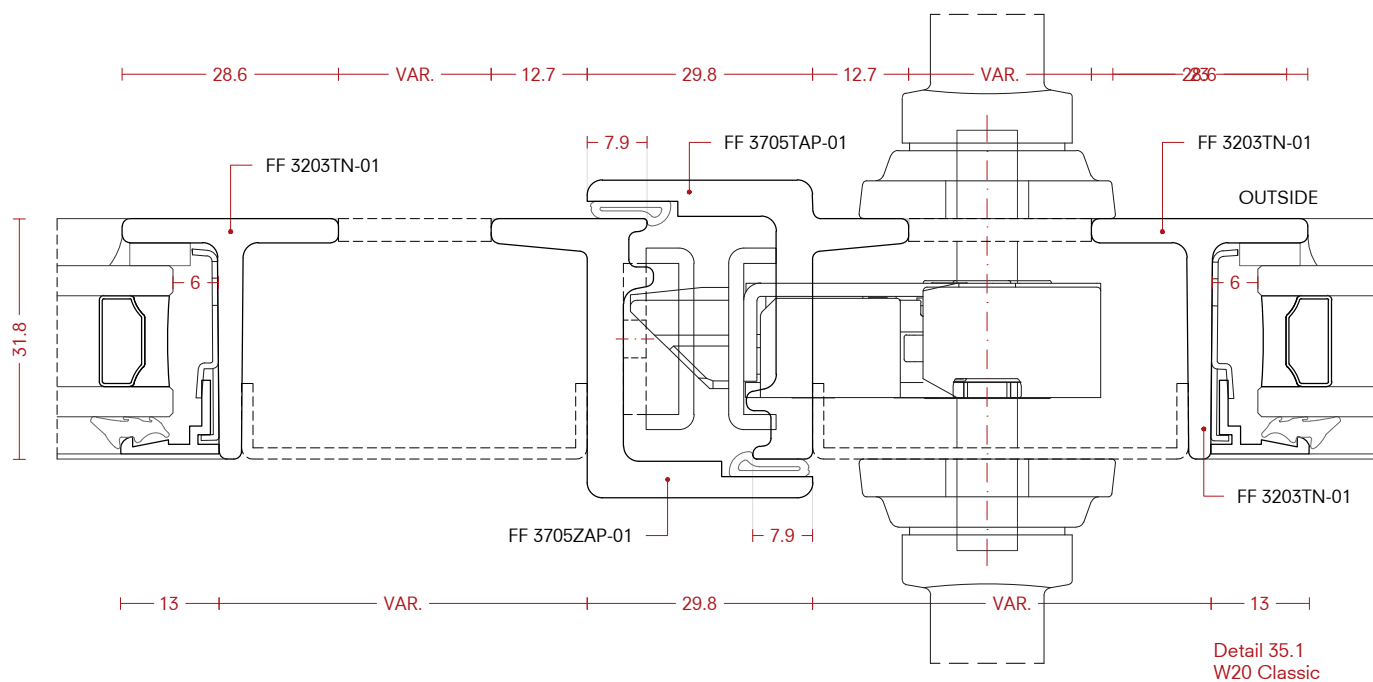
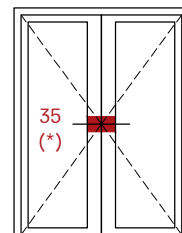
Detail 32.2
W20 Classic





34





Note:

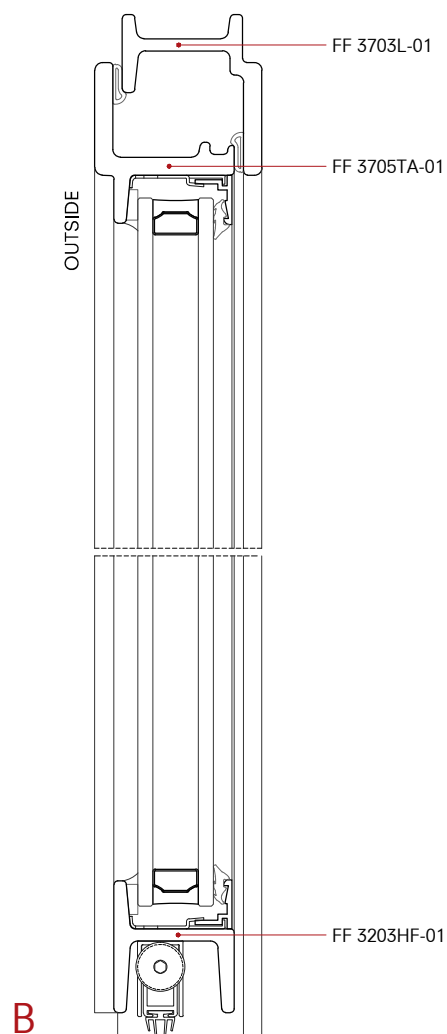
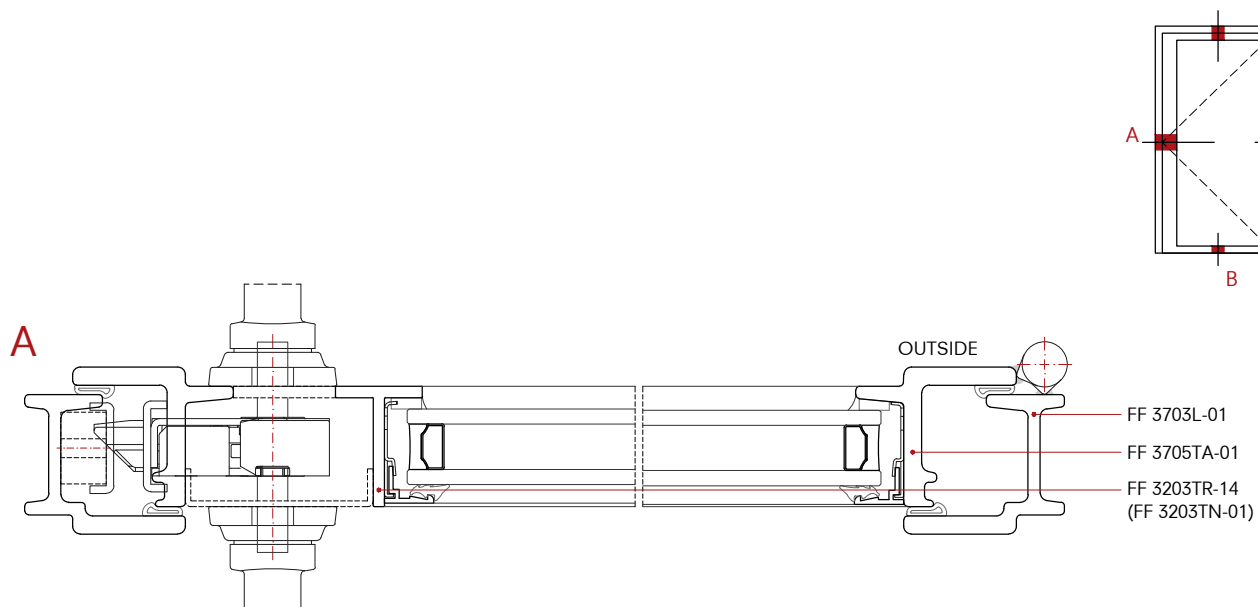
(*) W20 Classic - B99015-02 lock can be used only for single or for double leaves with specular locking box.

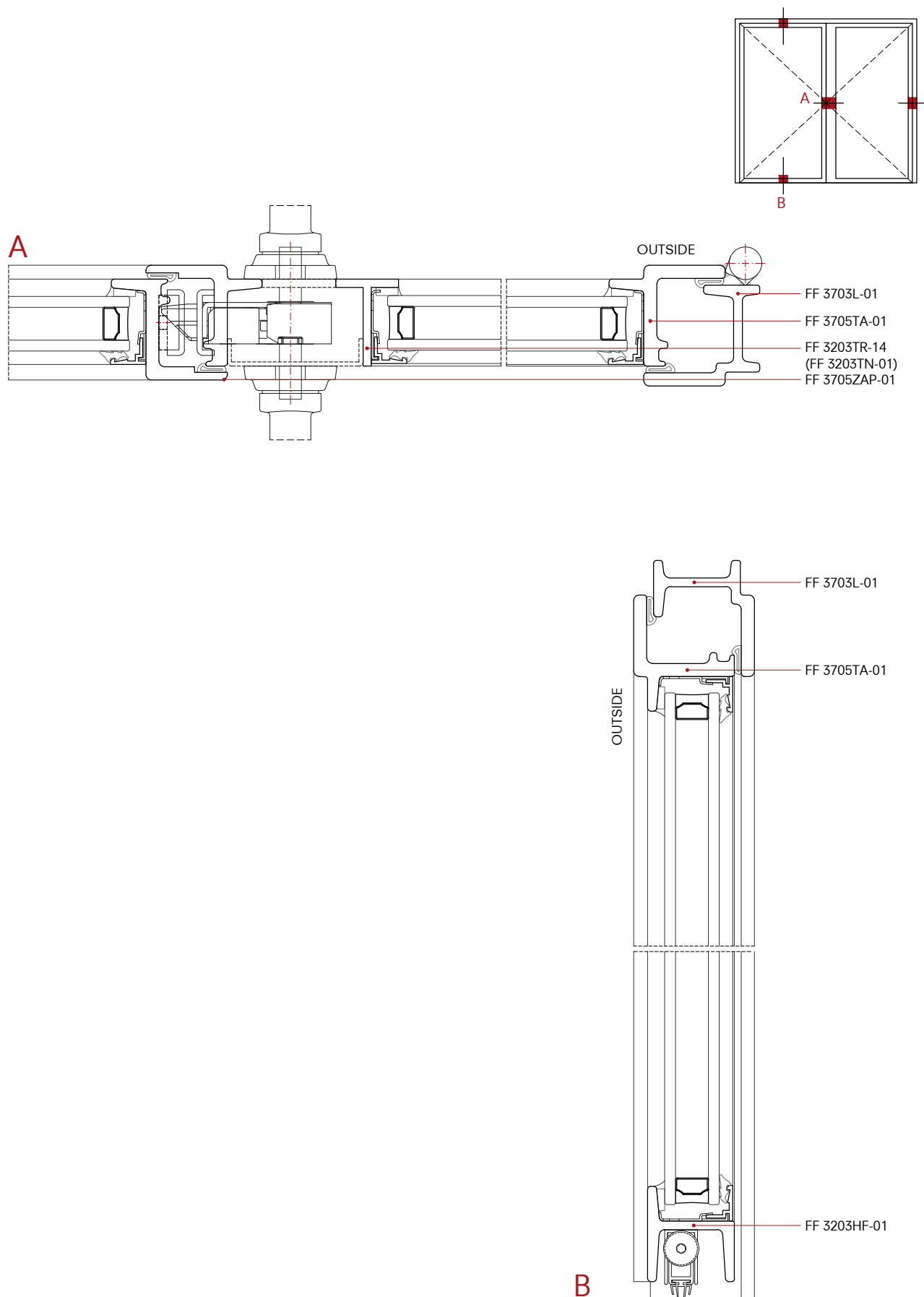
Nota:

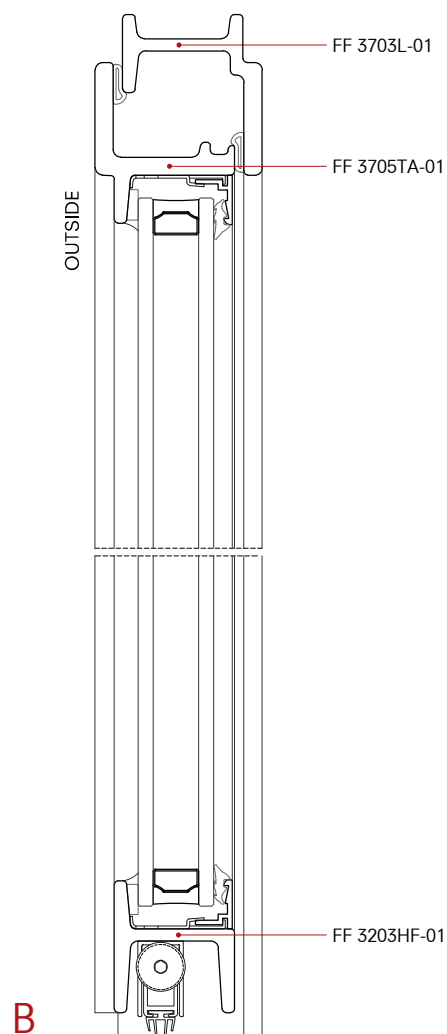
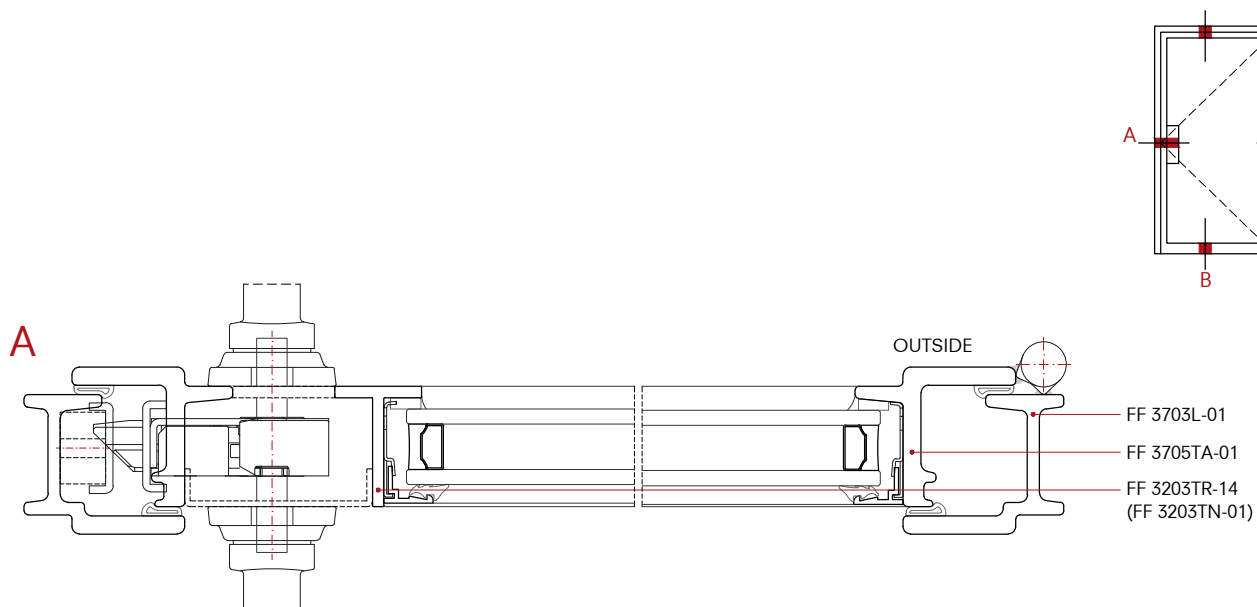
(*) W20 Classic - La serratura B99015-02 è utilizzabile solo per anta singola o doppia con scatola serratura speculare.

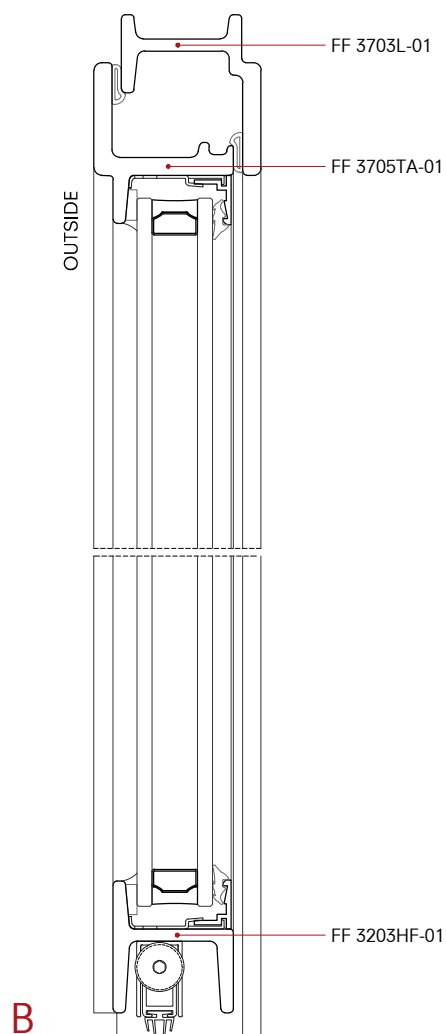
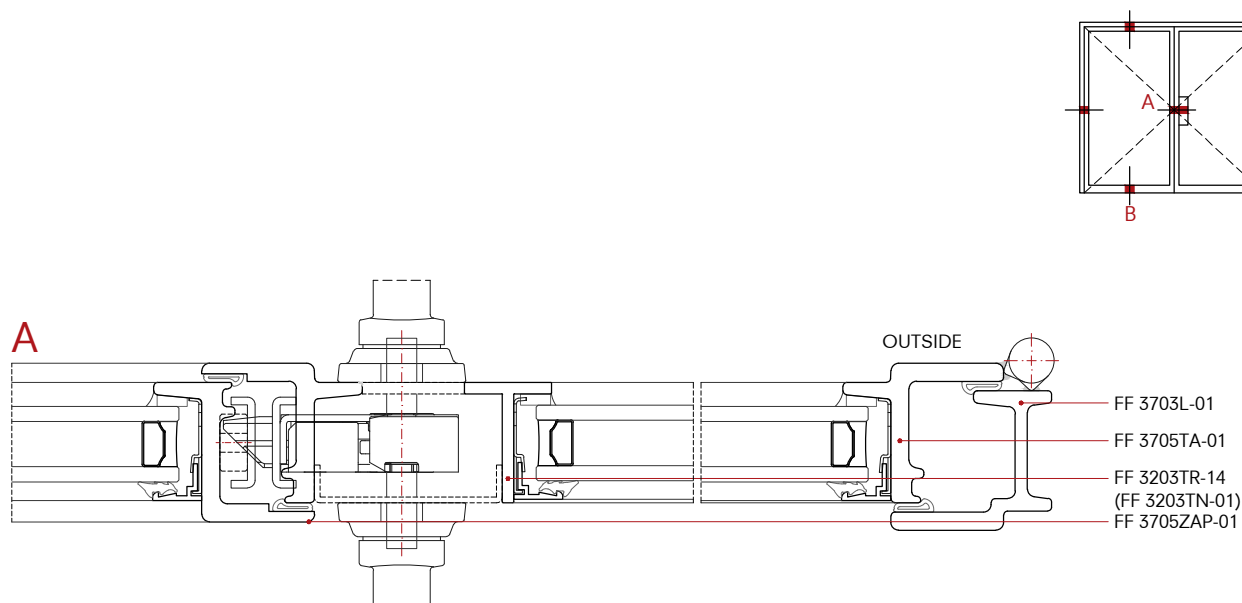
Nota:

(*) W20 Classic - La cerradura B99015-02 solo se puede utilizar para una o dos hojas con caja de cerradura de espejo.





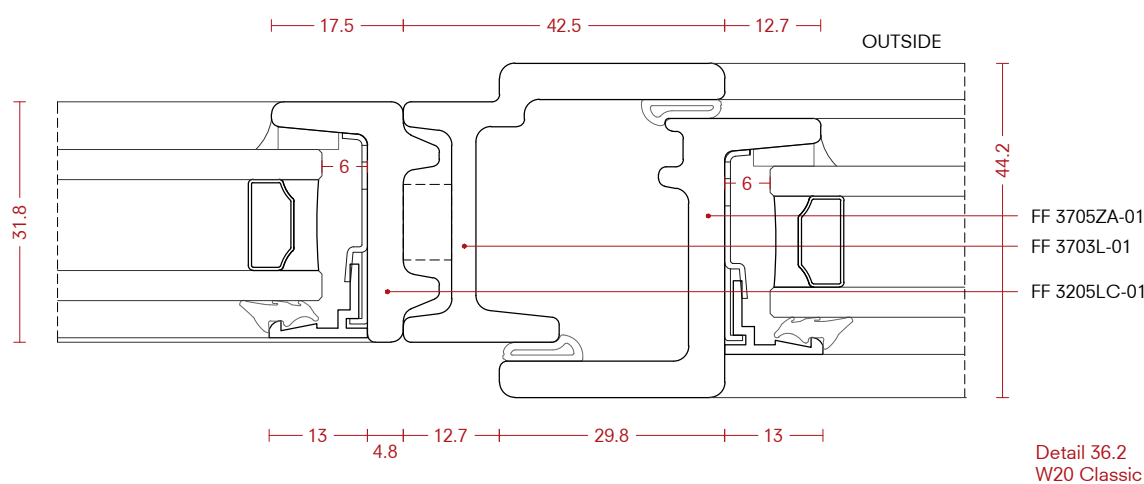
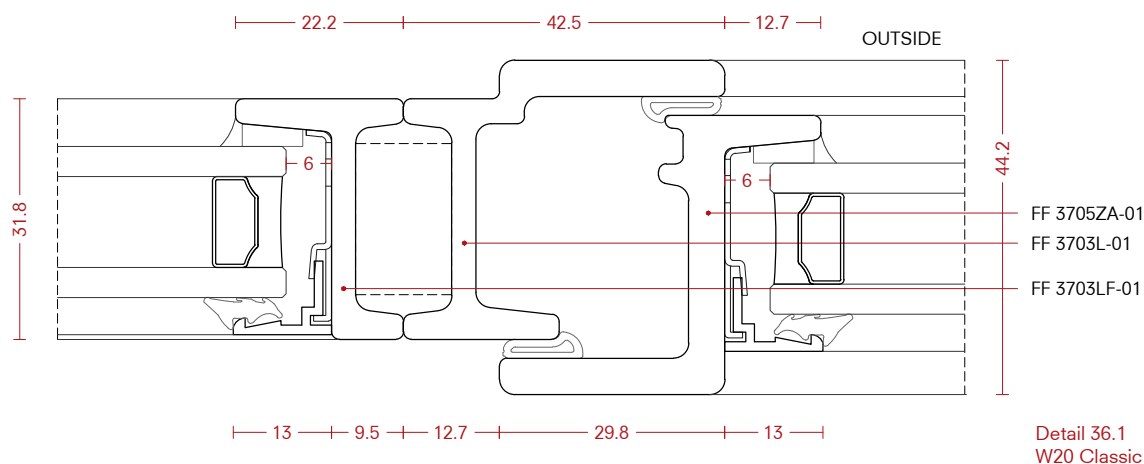
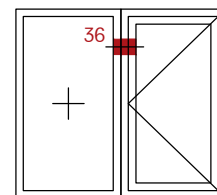




Profile matching

Accostamento telai

Combinación de marcos



Note:

For the cutting list, consider the appropriate machining and welding tolerances in relation to the laying areas and the sealing chosen.

Nota:

Per la distinta di taglio considerare le opportune tolleranze di lavorazione e saldatura in relazione alle arie di posa e alle sigillature scelte.

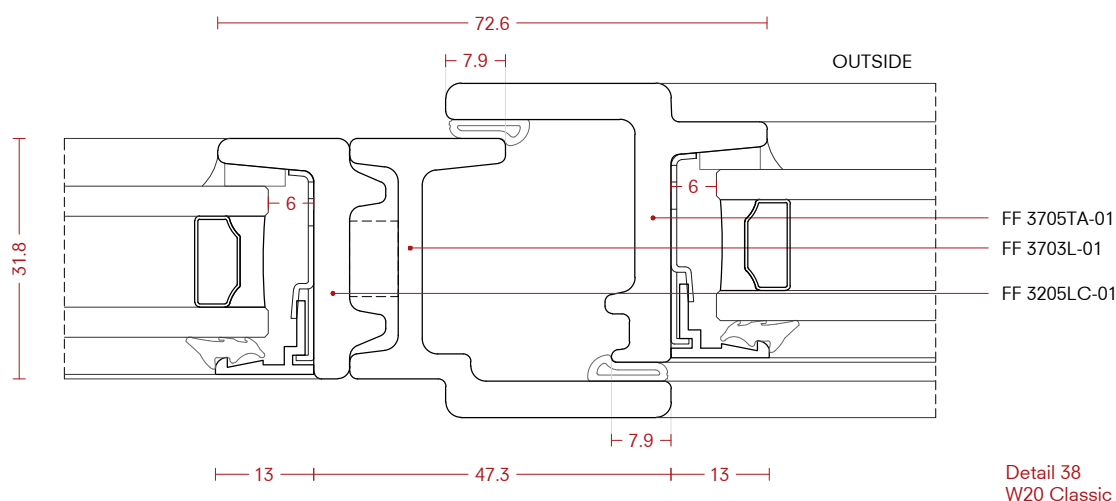
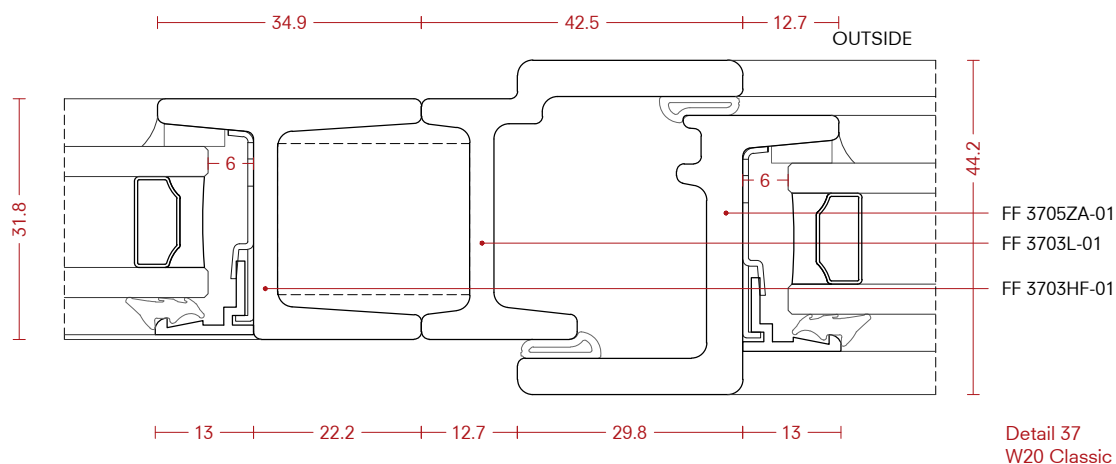
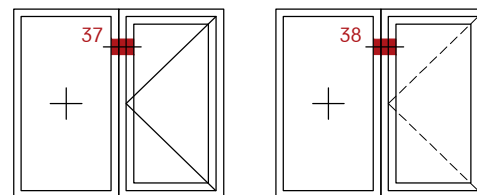
Nota:

Para la lista de cortes, considere las tolerancias apropiadas de mecanizado y soldadura en relación con las áreas de colocación y los sellos elegidos.

Profile matching

Accostamento telai

Combinación de marcos



Note:

For the cutting list, consider the appropriate machining and welding tolerances in relation to the laying areas and the sealing chosen.

Nota:

Per la distinta di taglio considerare le opportune tolleranze di lavorazione e saldatura in relazione alle arie di posa e alle sigillature scelte.

Nota:

Para la lista de cortes, considere las tolerancias apropiadas de mecanizado y soldadura en relación con las áreas de colocación y los sellos elegidos.

Profile matching

Accostamento telai

Combinación de marcos

Note:

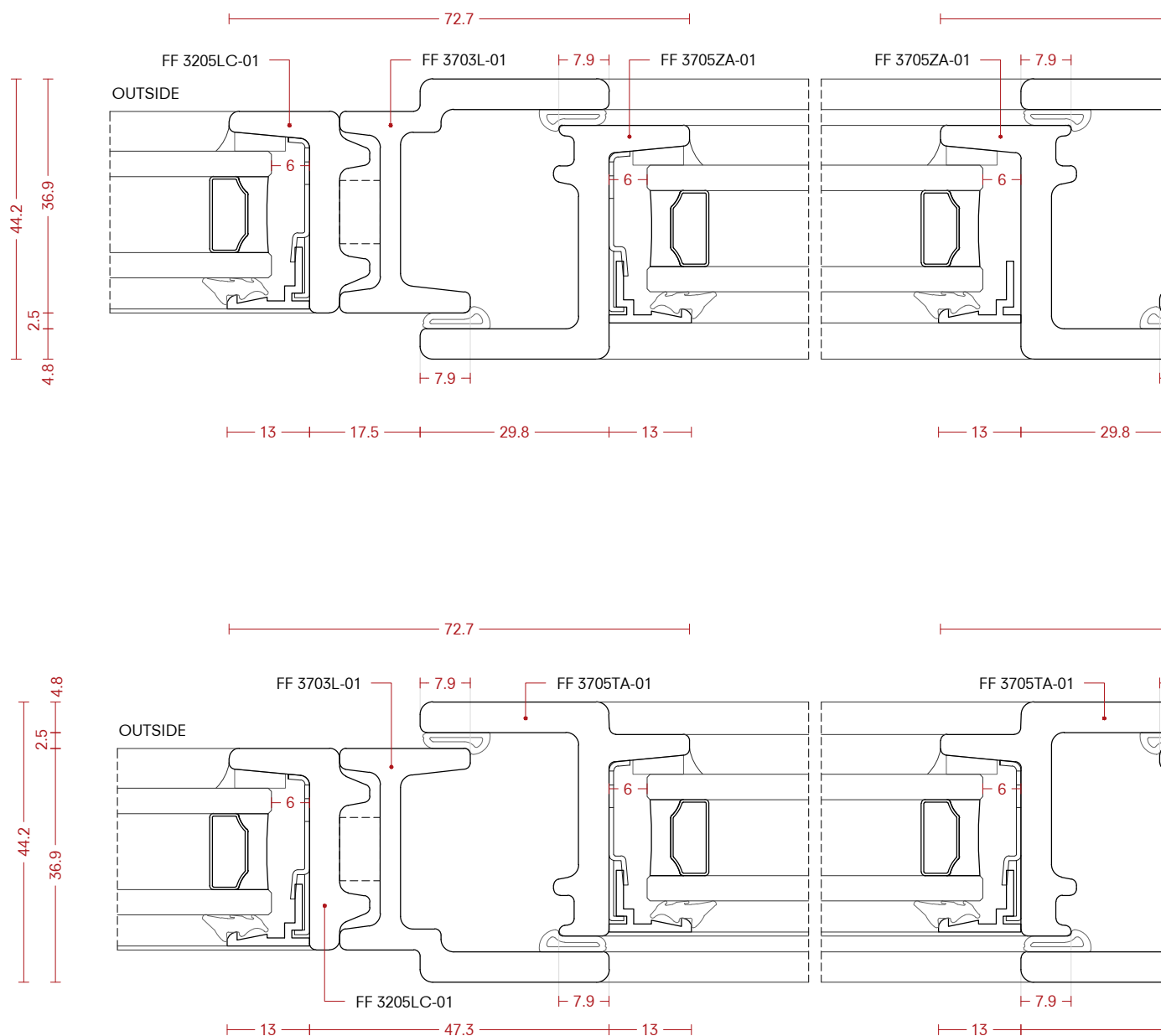
For the cutting list, consider the relevant machining and welding tolerances taking into account the necessary gaps in the installation of frames and the chosen gasket.

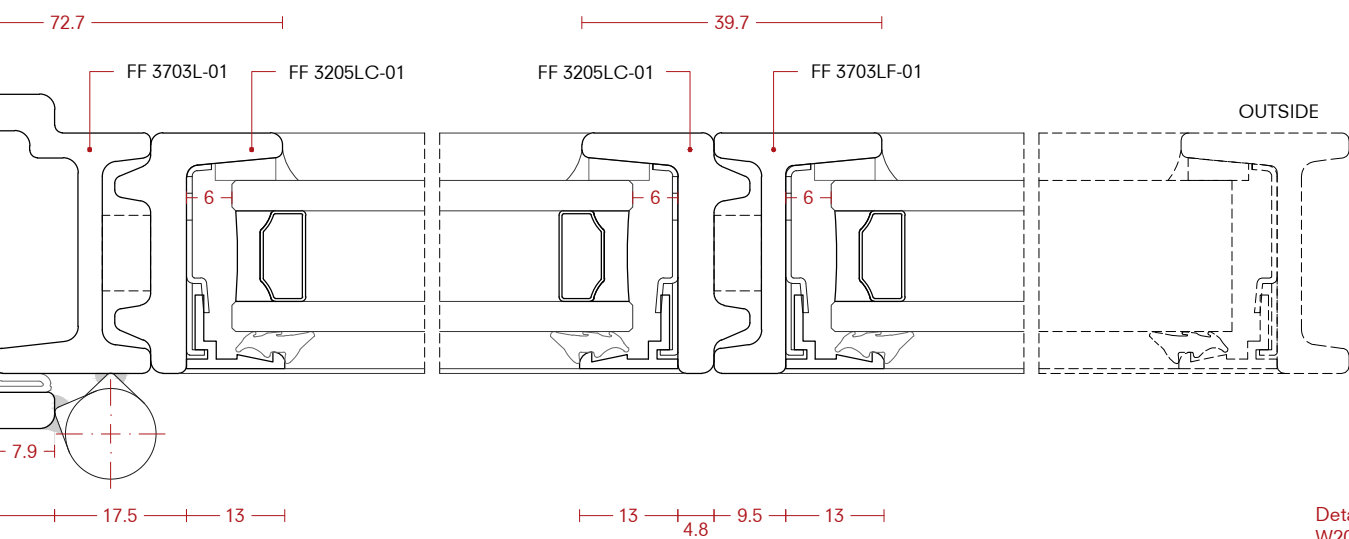
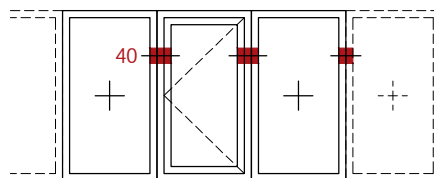
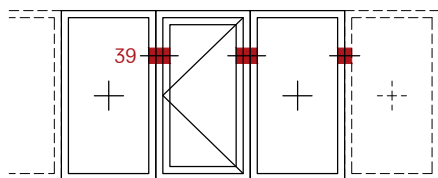
Nota:

Per la distinta di taglio, considerare le corrette tolleranze di lavorazione e saldatura, in relazione all'aria necessaria nell'installazione e alla sigillatura scelta.

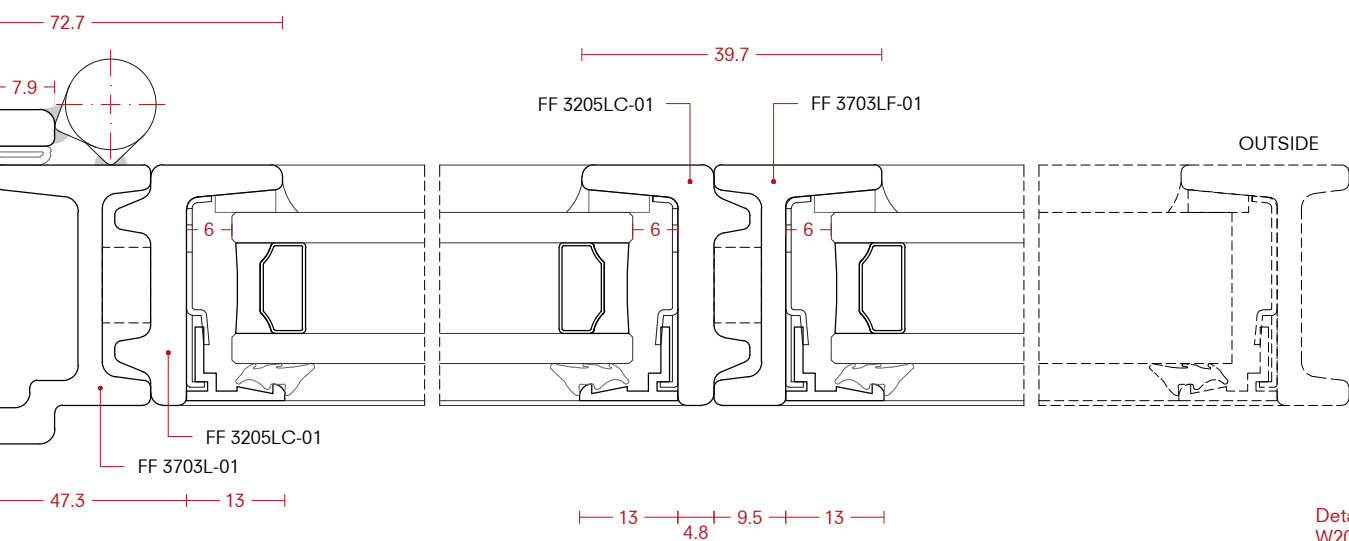
Nota:

Para la lista de cortes, considere las correctas tolerancias de mecanizado y soldadura, en relación al aire requerido en la instalación y el sello elegido.





Detail 39
W20 Classic



Detail 40
W20 Classic

Window and door details
W20 Slim

Sezioni finestre e porte
W20 Slim

Detalles de ventanas y puertas
W20 Slim

4.3

Legend

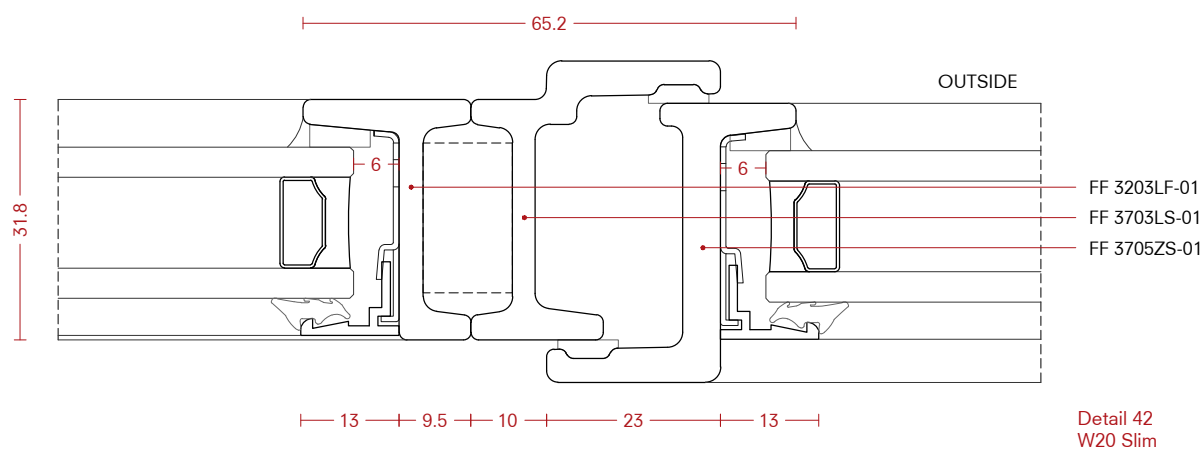
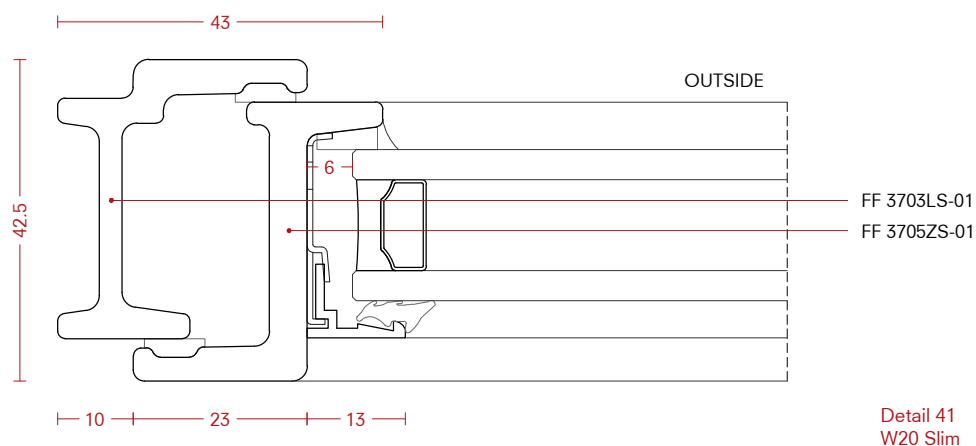
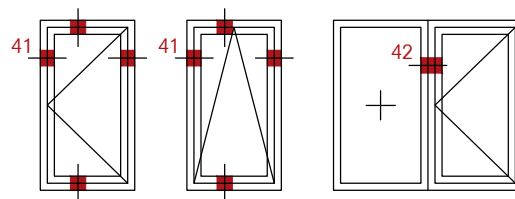
+ = Fixed
— = Open in
- - - = Open out
Dimensions in: mm
Scale 1:1 - 1:2

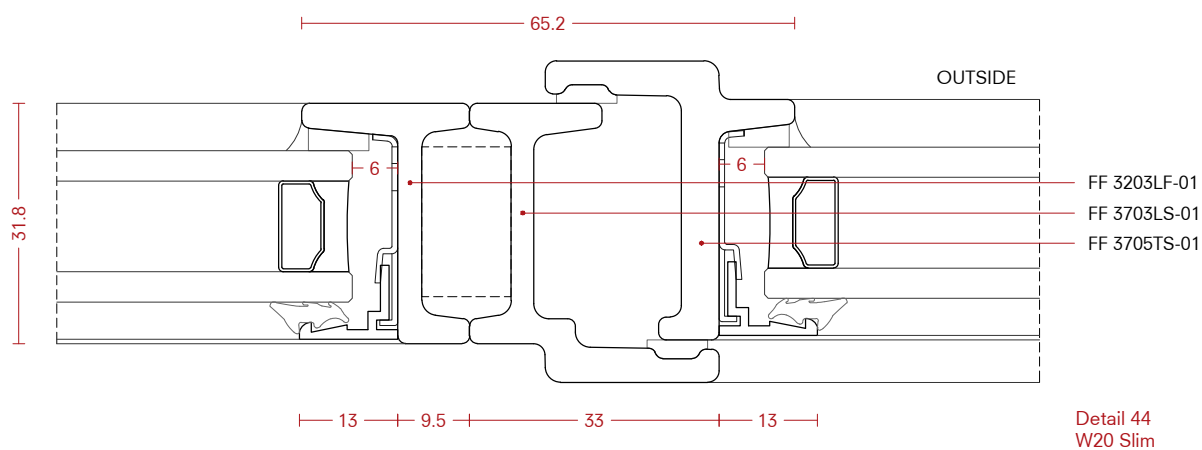
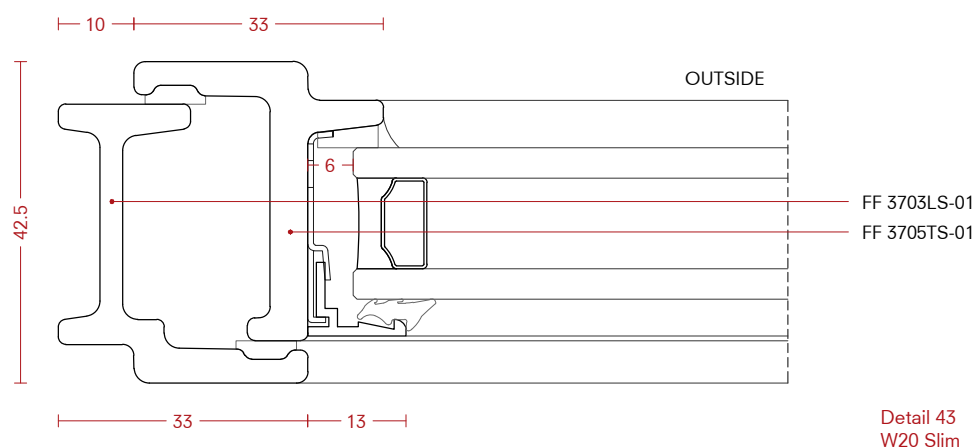
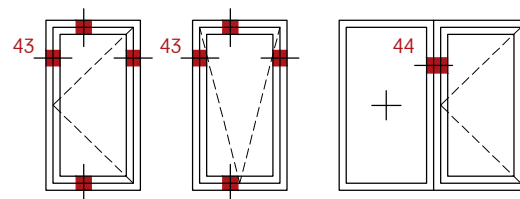
Legenda

+ = Anta fissa
— = Apertura interna
- - - = Apertura esterna
Misure in: mm
Scala 1:1 - 1:2

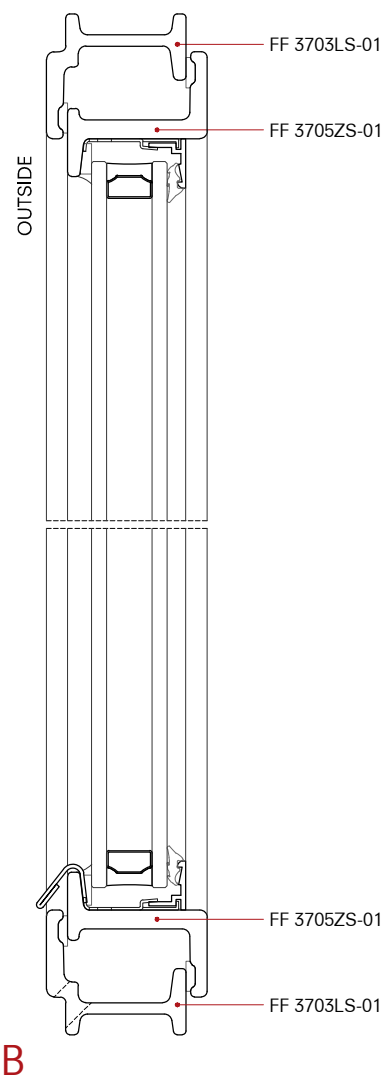
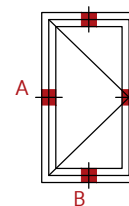
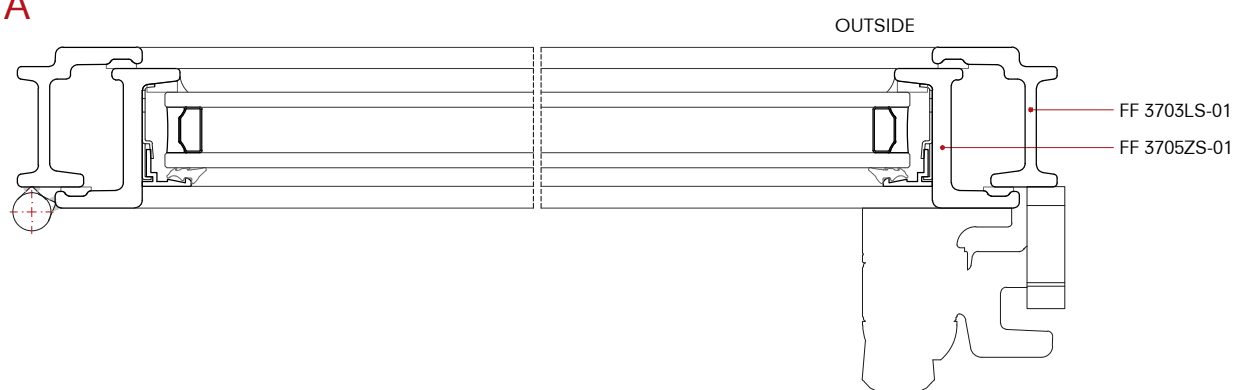
Leyenda

+ = Fijo
— = Apertura interna
- - - = Apertura externa
Medidas en: mm
Escala 1:1 - 1:2

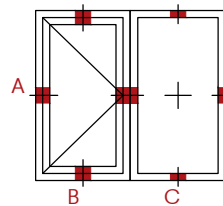




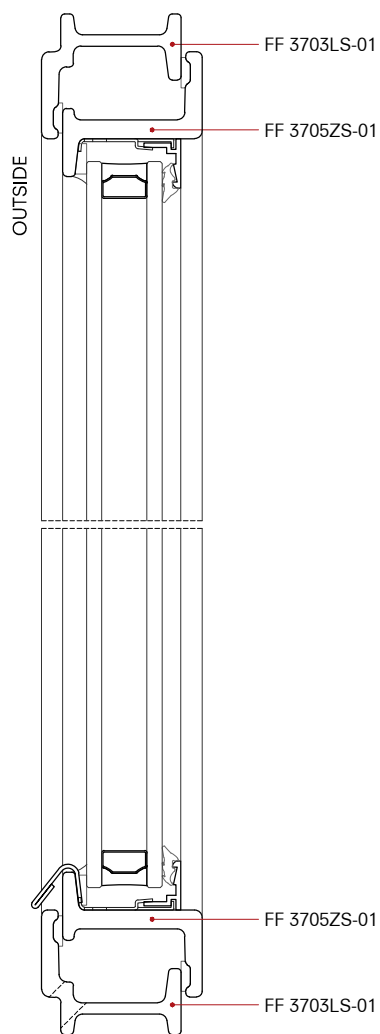
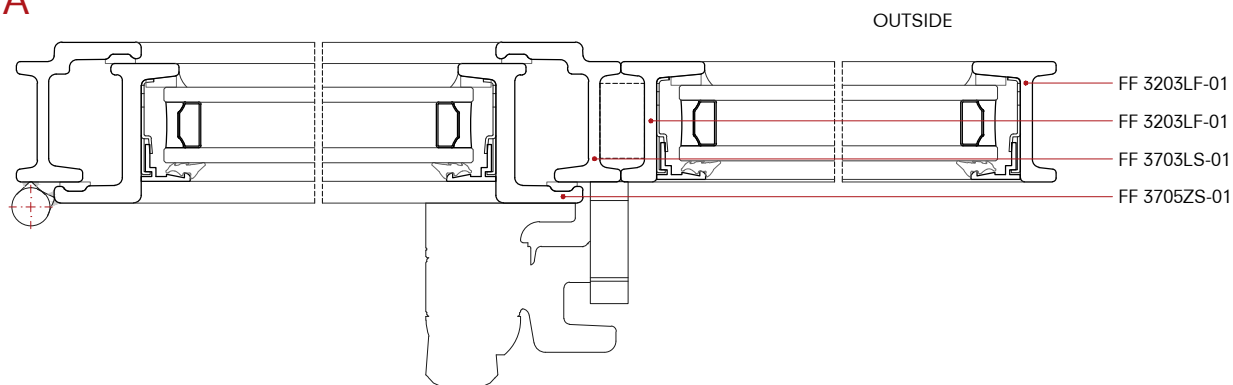
A



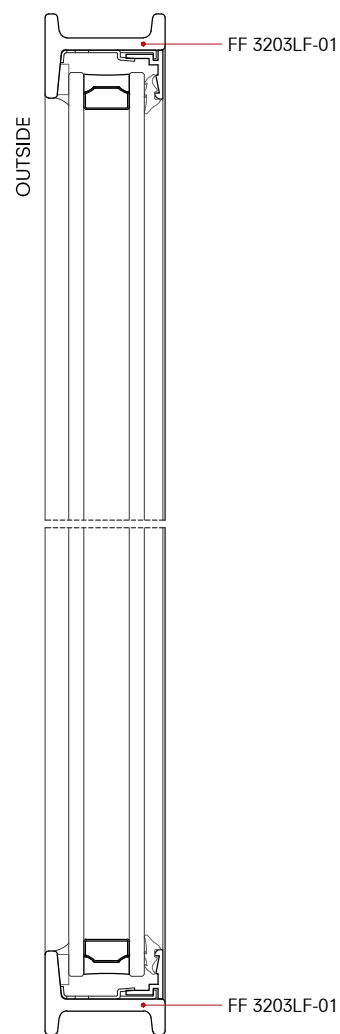
B



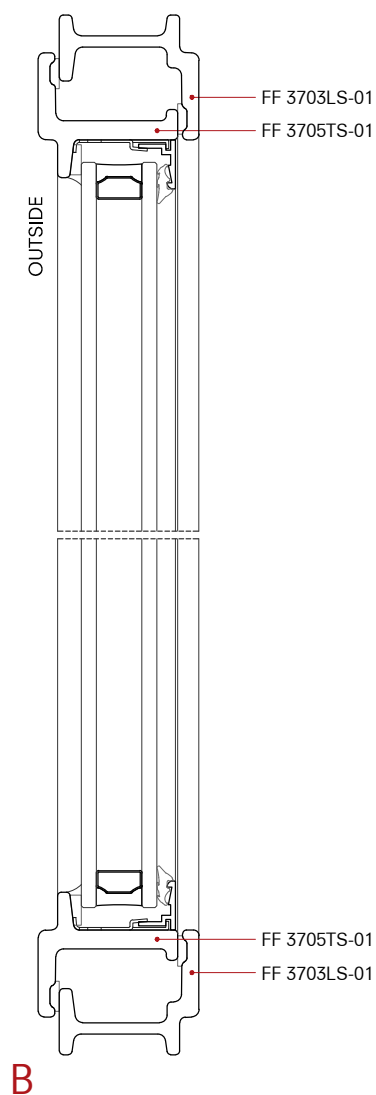
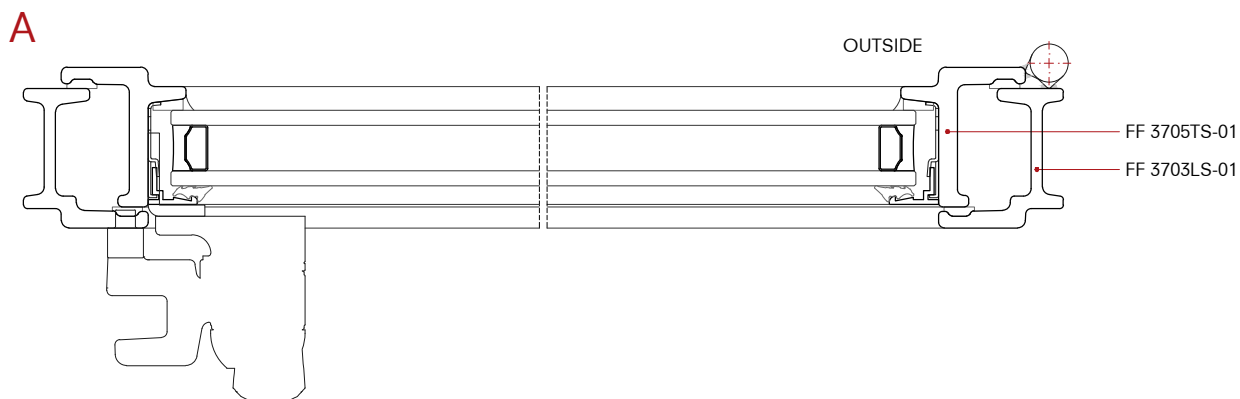
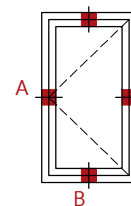
A

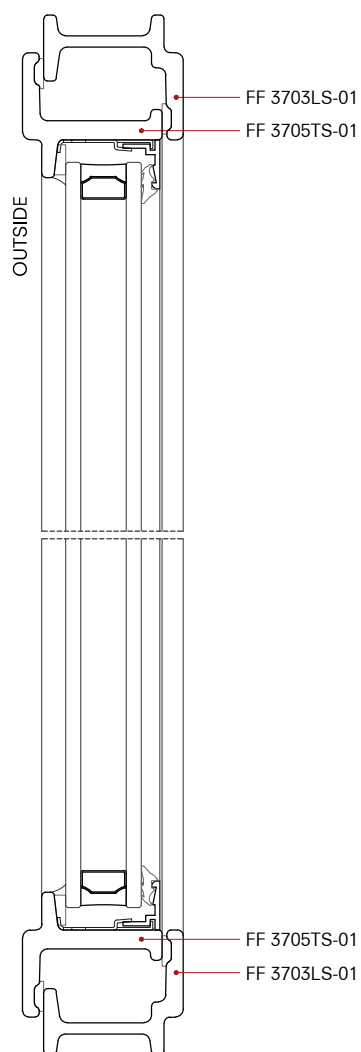
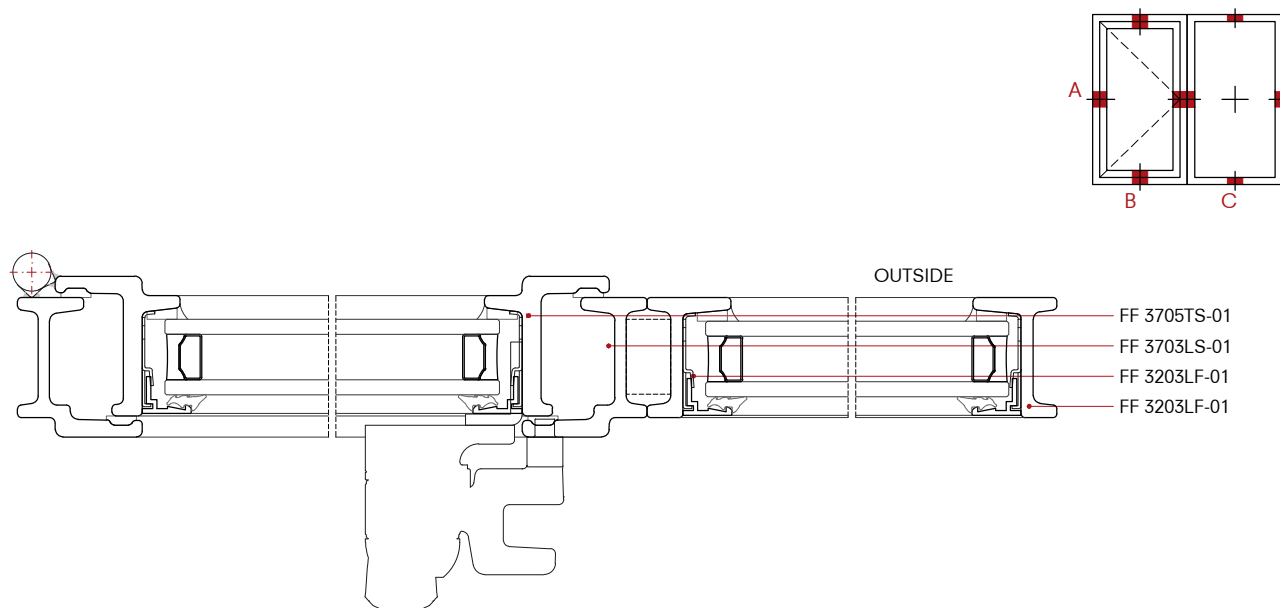


B

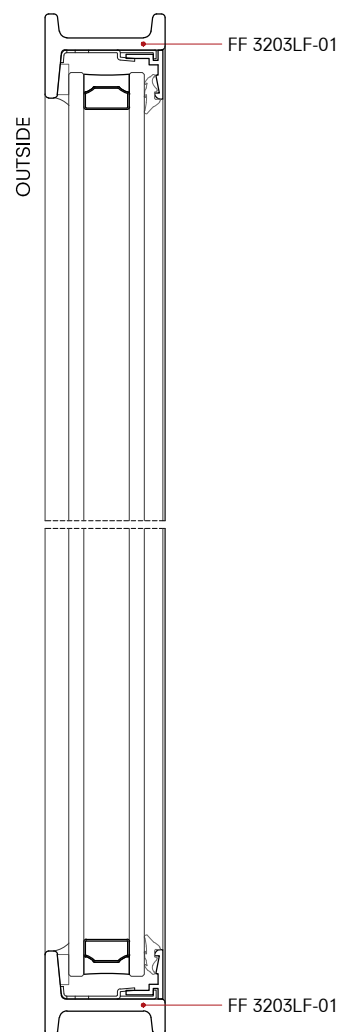


C

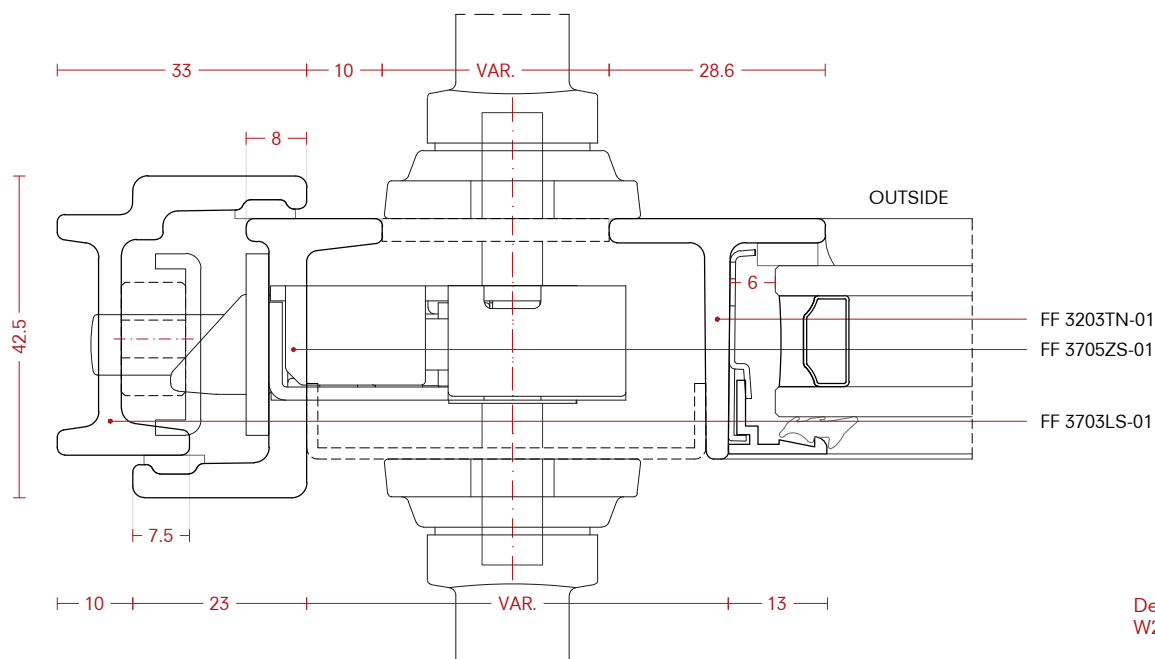
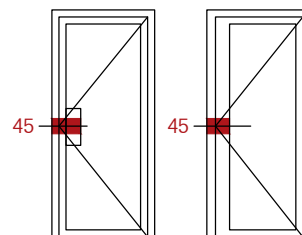




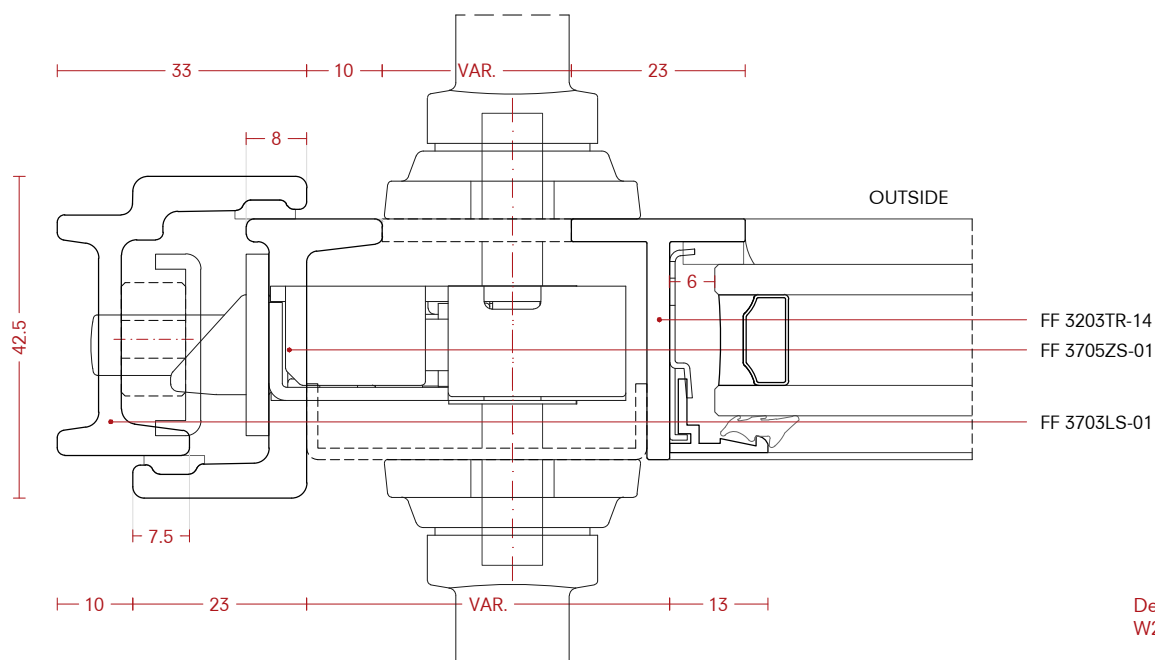
B



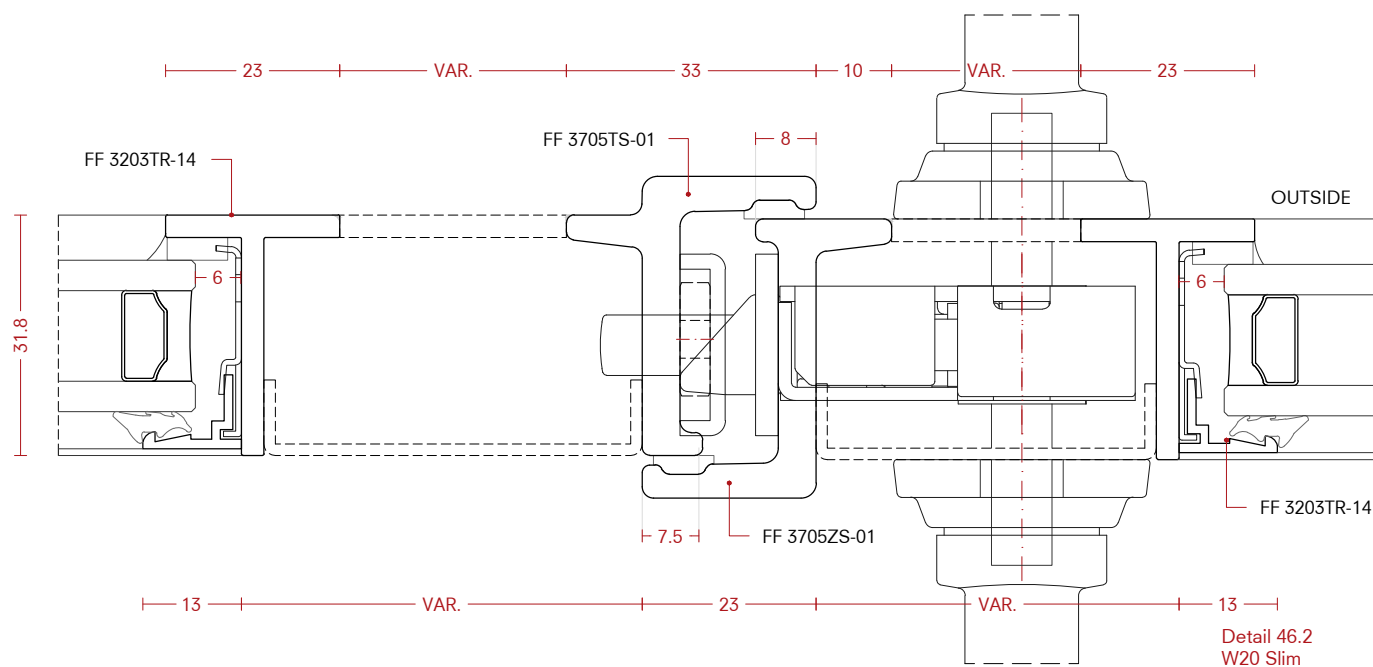
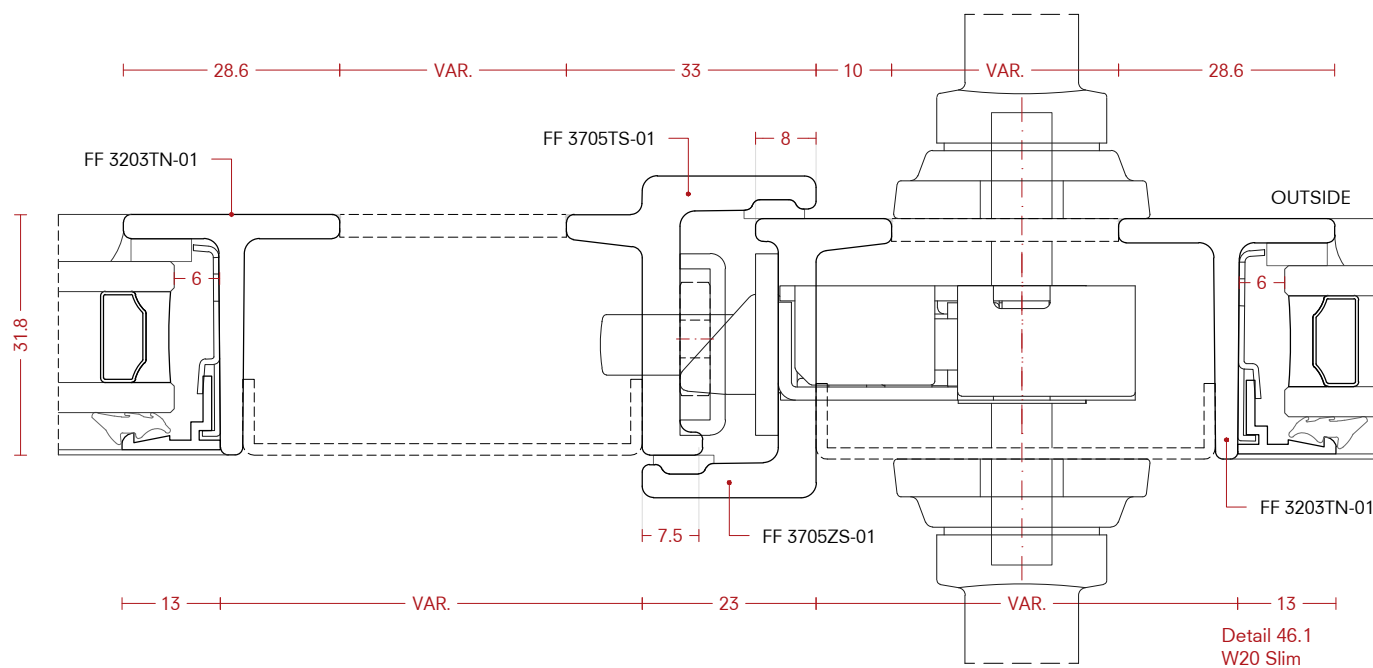
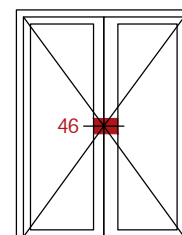
C

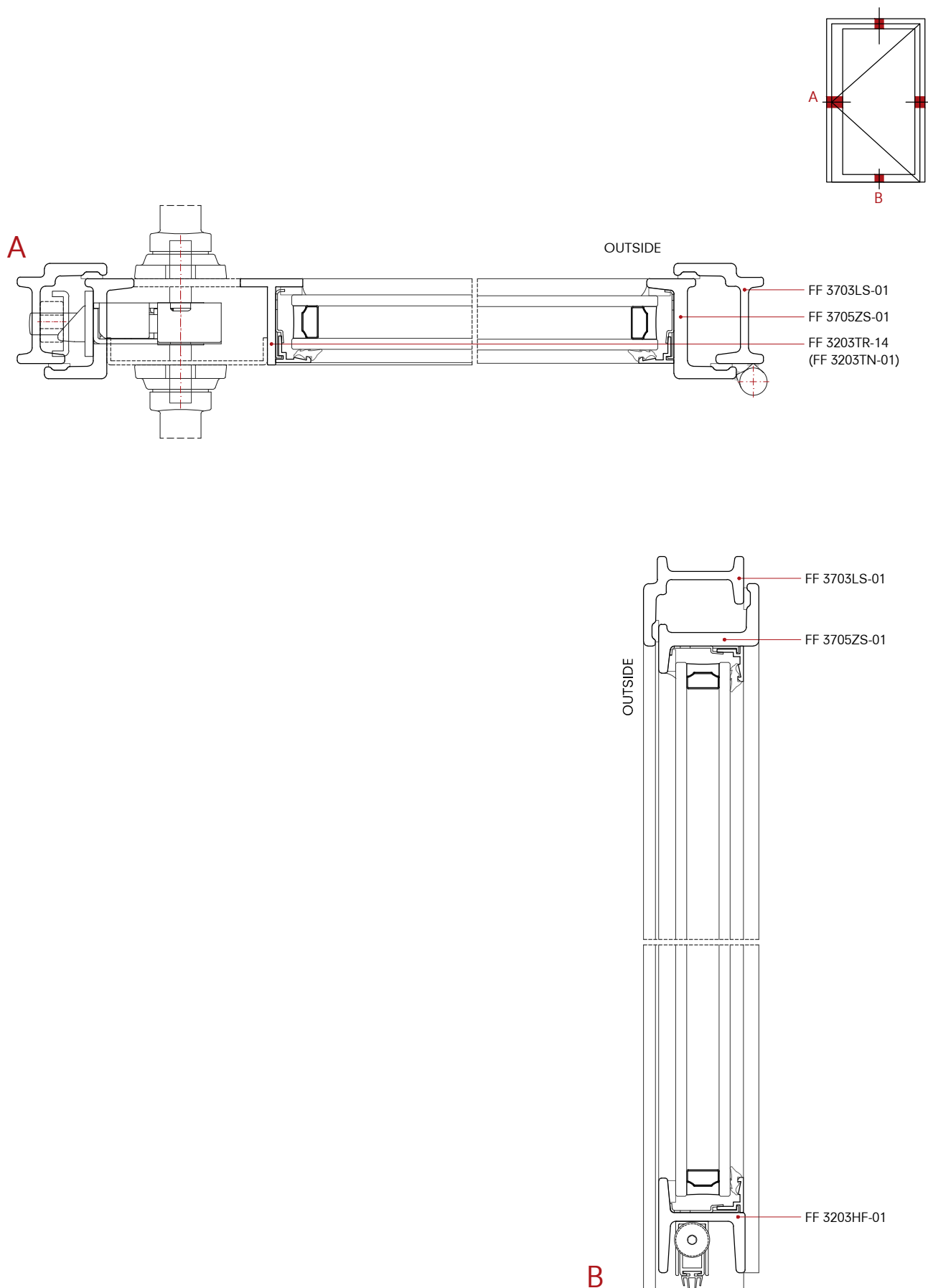


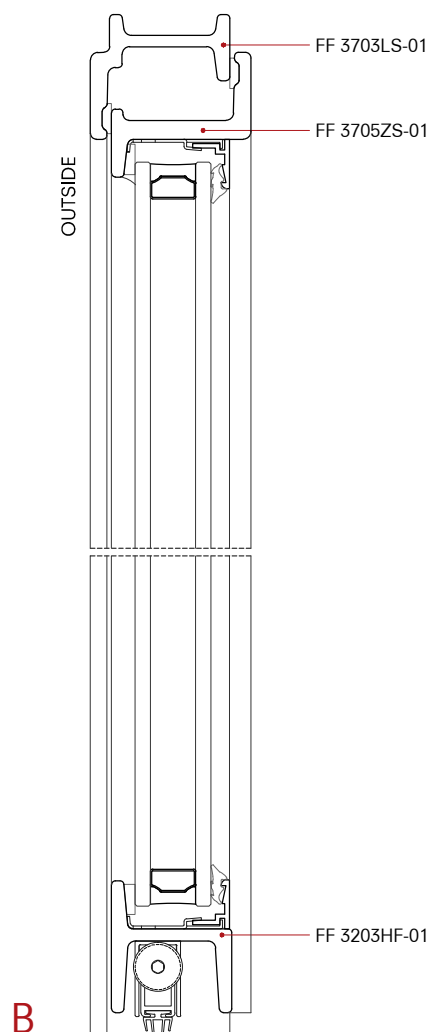
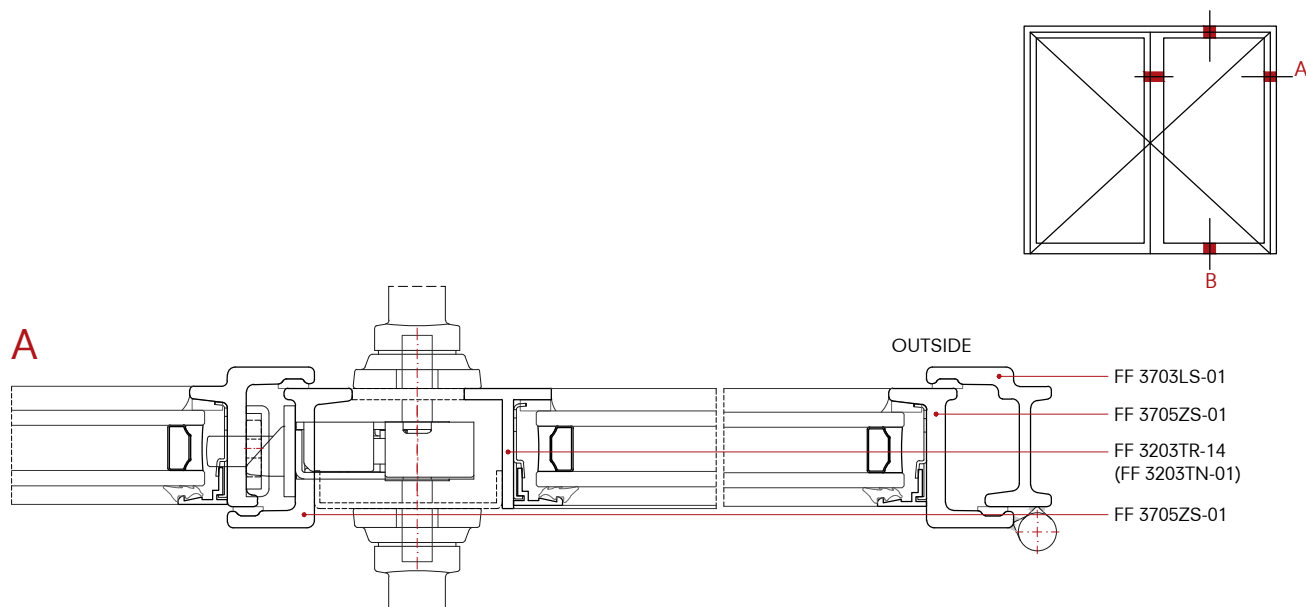
Detail 45.1
W20 Slim

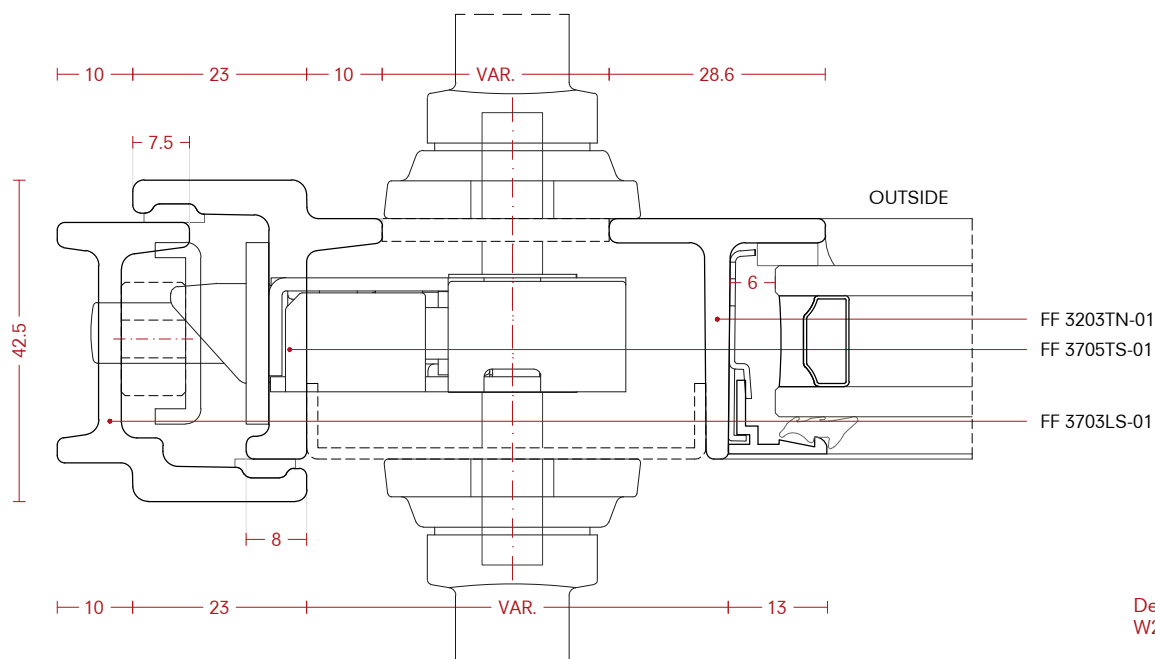
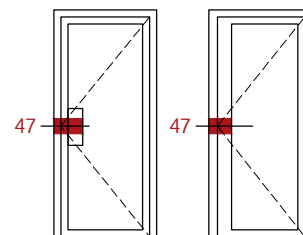


Detail 45.2
W20 Slim

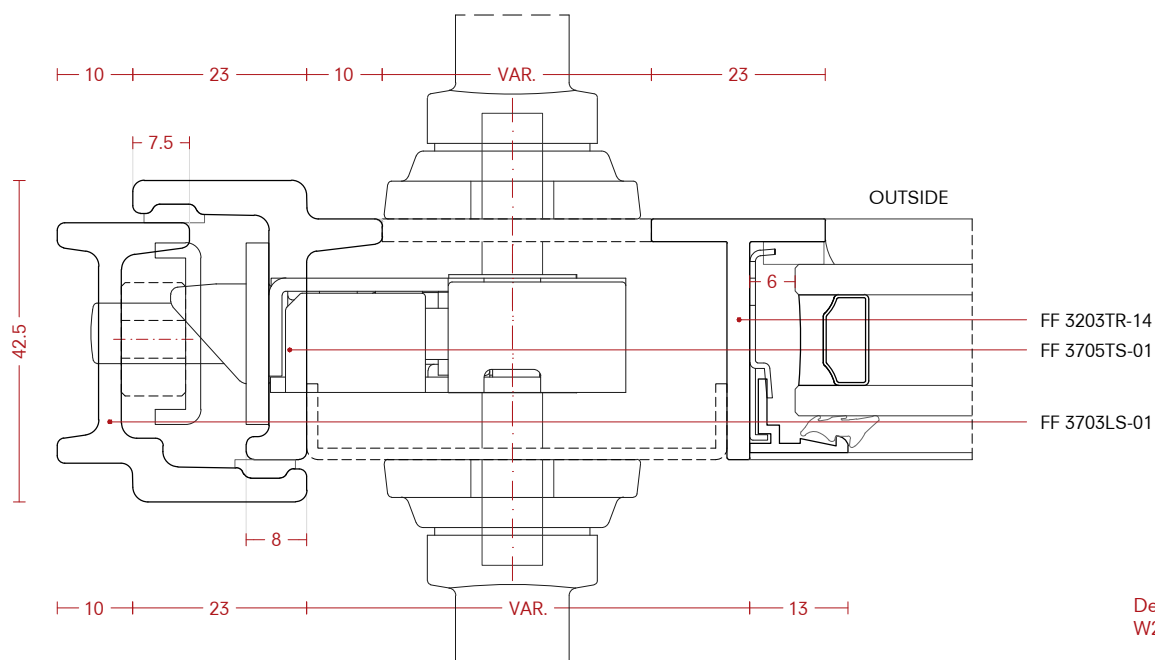




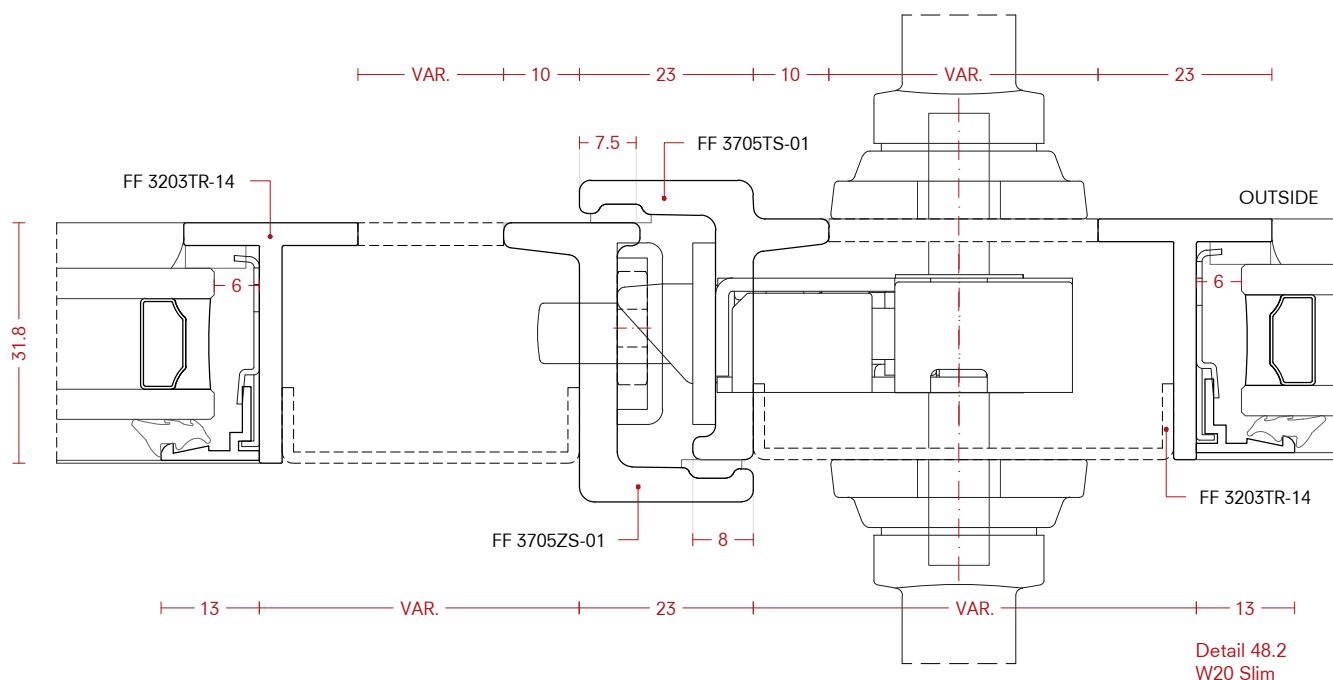
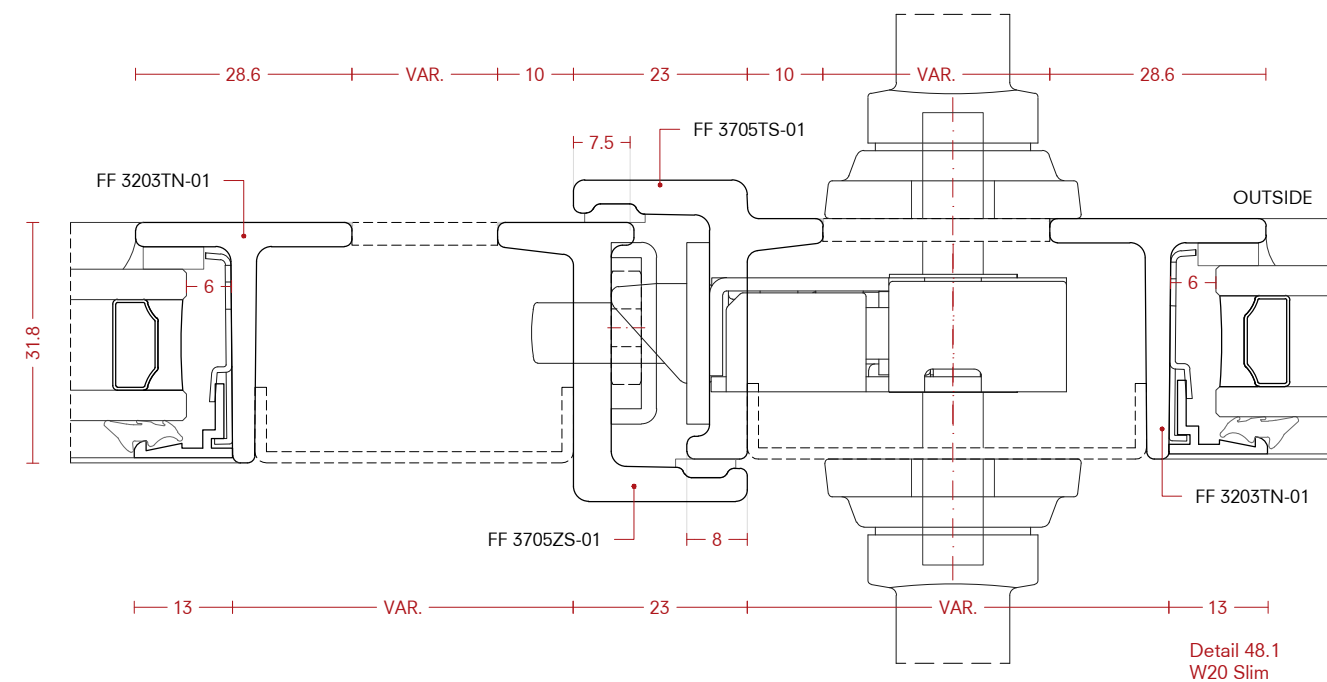
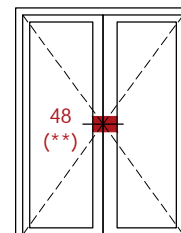




Detail 47.1
W20 Slim



Detail 47.2
W20 Slim



Note:

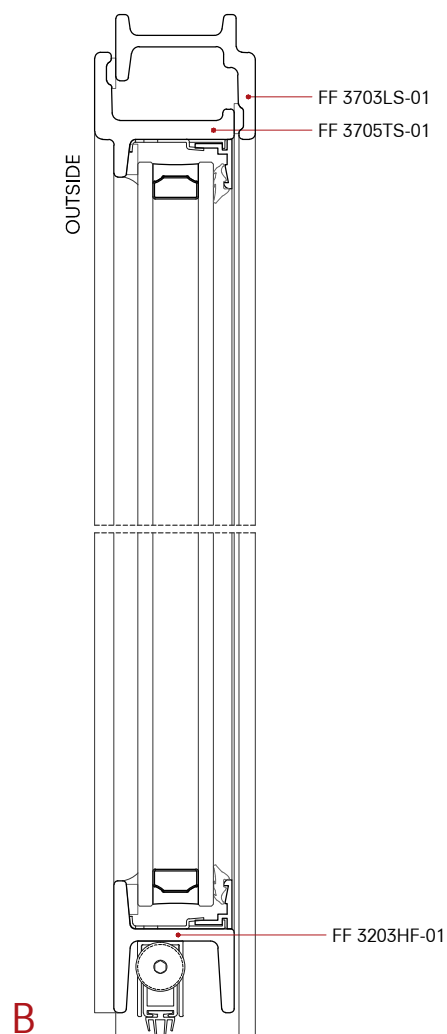
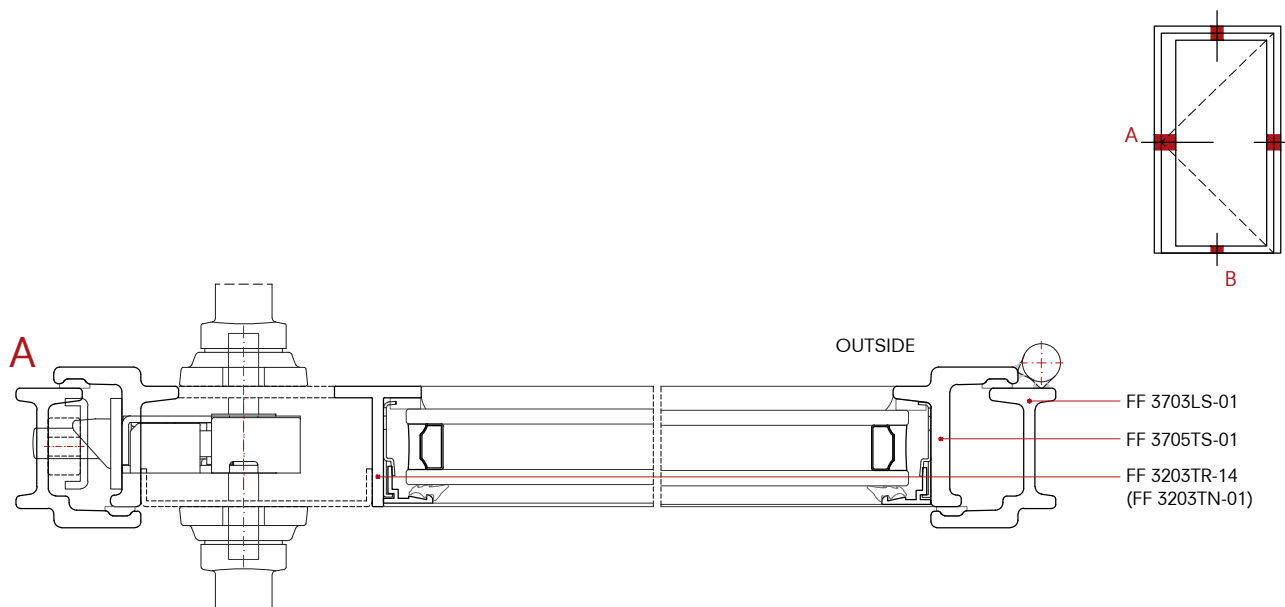
(**) W20 Slim - B99016-02 lock can be used only for single or for double leaves with specular locking box.

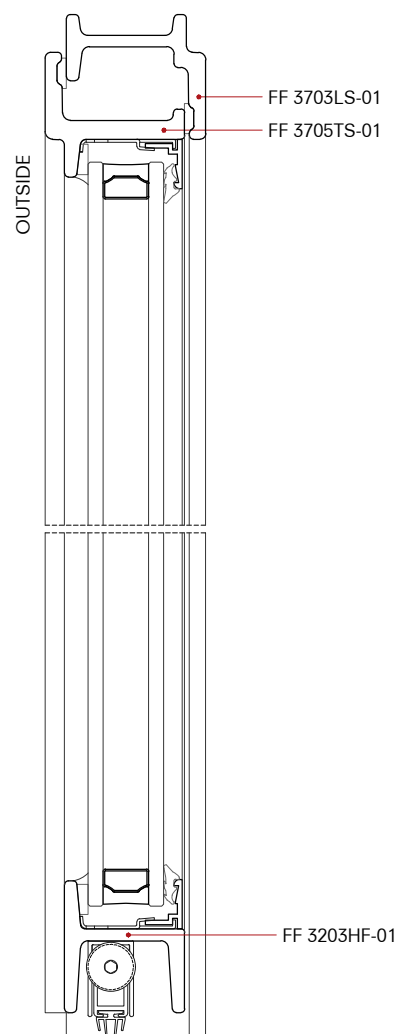
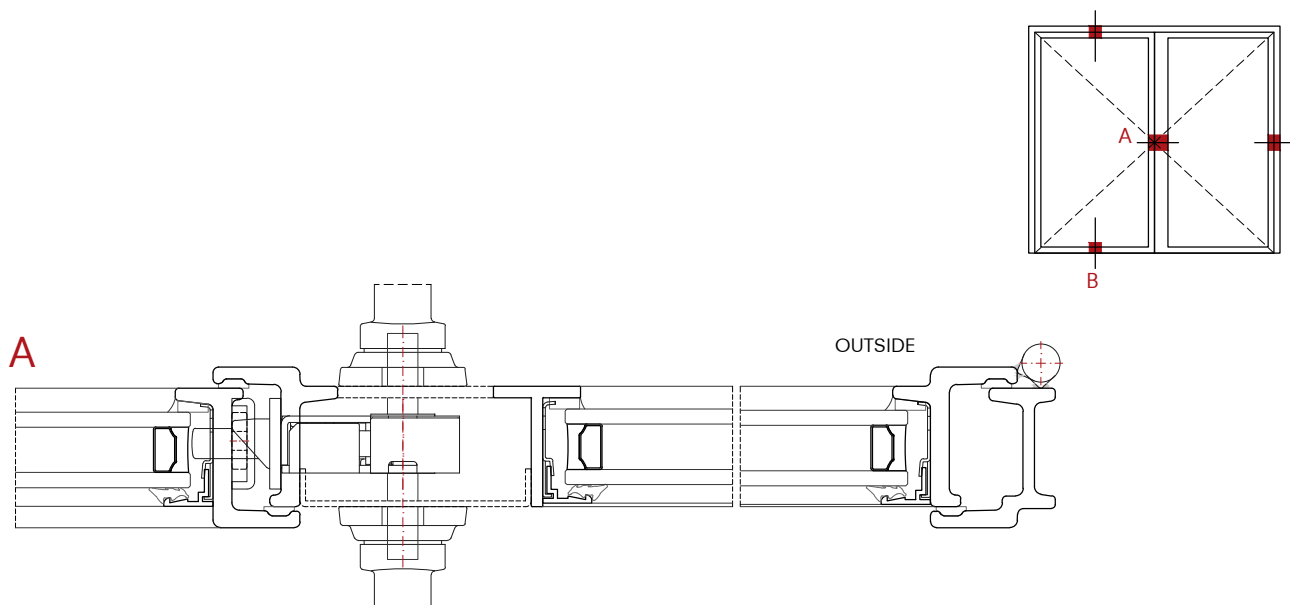
Nota:

(**) W20 Slim - La serratura B99016-02 è utilizzabile solo per anta singola o doppia con scatola serratura speculare.

Nota:

(**) W20 Slim - La cerradura B99016-02 solo se puede utilizar para una o dos hojas con caja de cerradura de espejo.





Details, structural
connections

Dettagli di costruzione
giunti d'angolo

Detalles de construcción

4.4

Legend

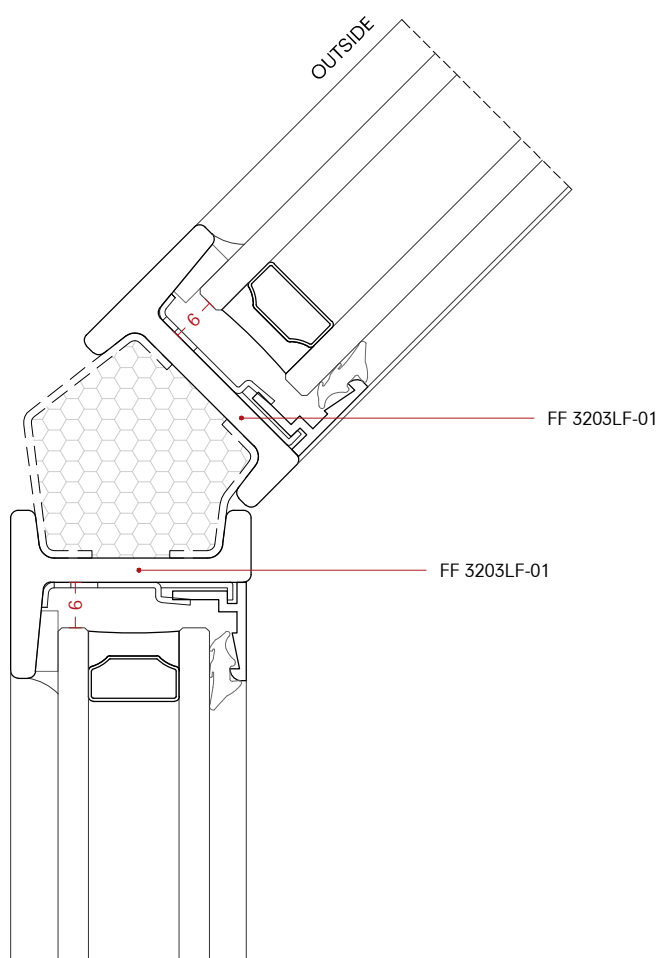
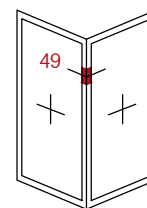
+ = Fixed
— = Open in
- - - = Open out
Dimensions in: mm
Scale 1:1

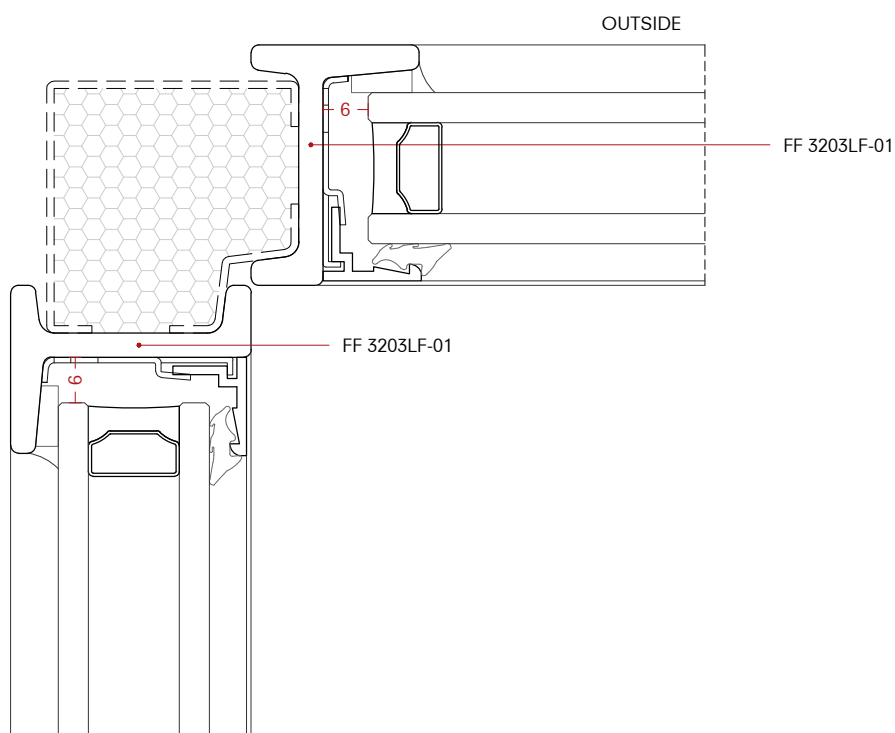
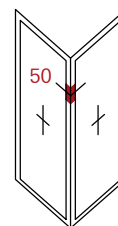
Legenda

+ = Anta fissa
— = Apertura interna
- - - = Apertura esterna
Misure in: mm
Scala 1:1

Leyenda

+ = Fijo
— = Apertura interna
- - - = Apertura externa
Medidas en: mm
Escala 1:1





Wall connections

Attacchi a muro

Cierres constructivos

4.5

Legend

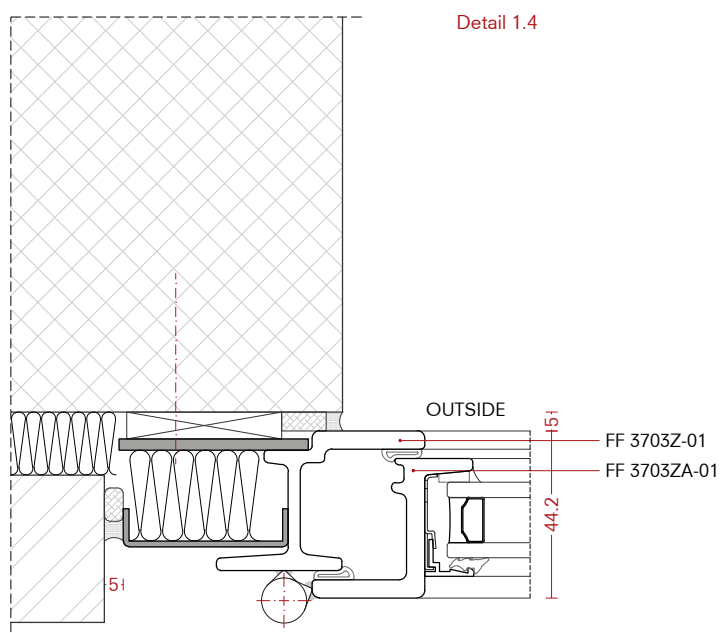
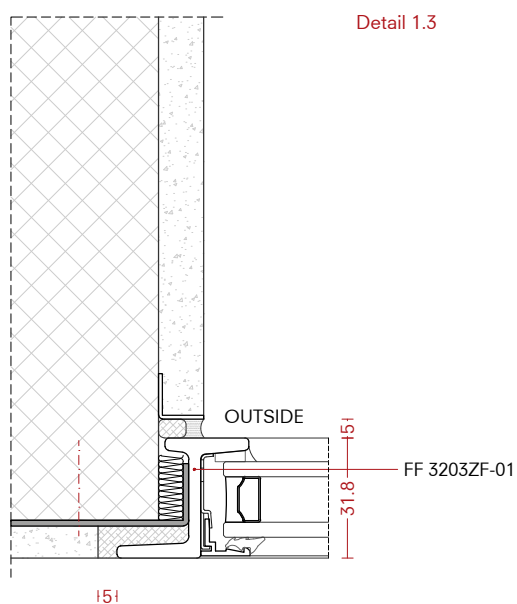
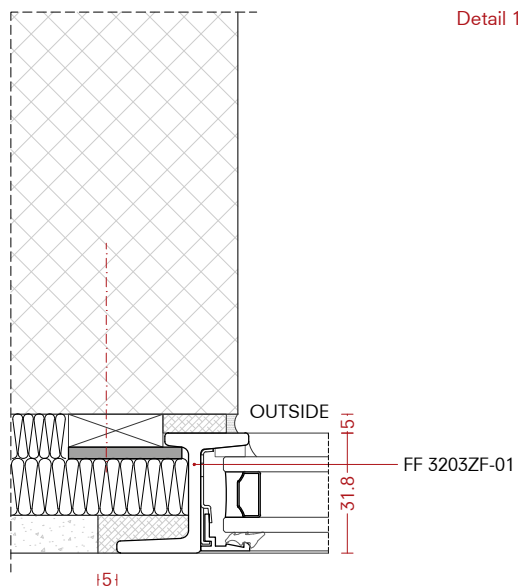
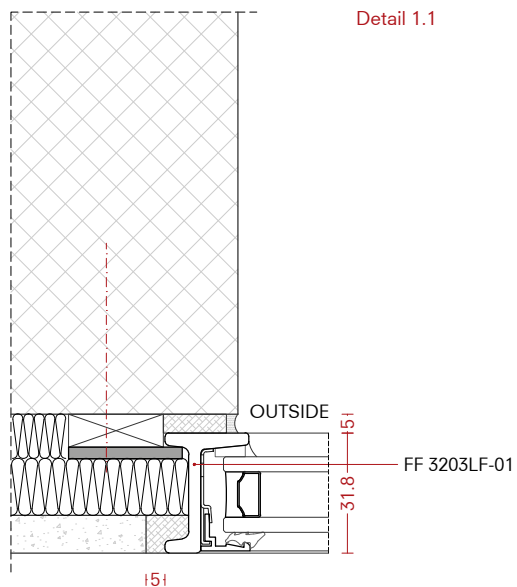
+ = Fixed
— = Open in
- - - = Open out
Dimensions in: mm
Scale 1:2

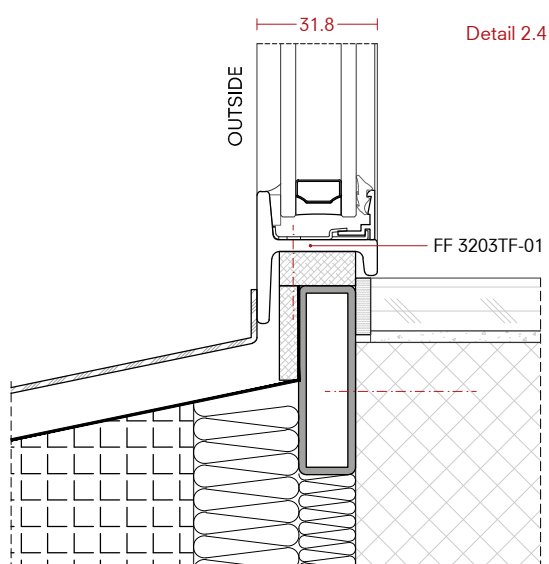
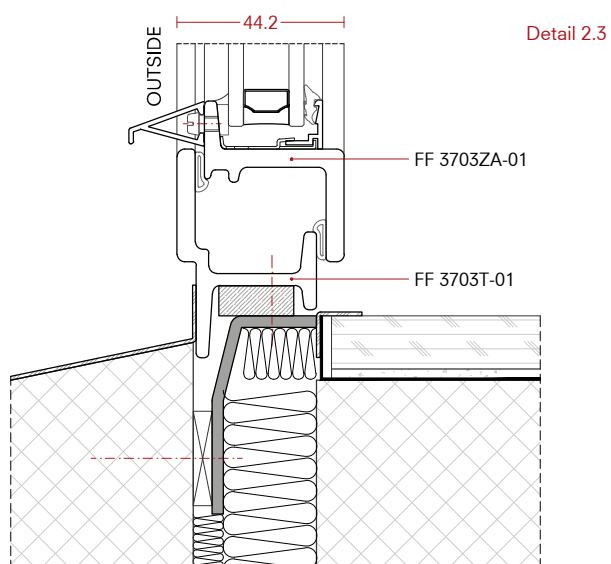
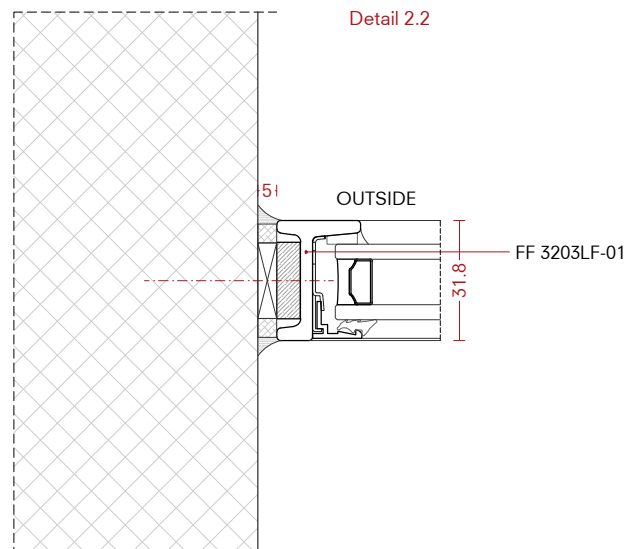
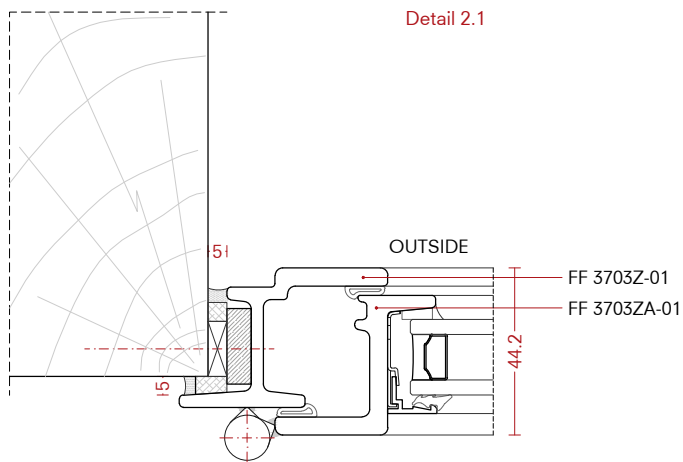
Legenda

+ = Anta fissa
— = Apertura interna
- - - = Apertura esterna
Misure in: mm
Scala 1:2

Leyenda

+ = Fijo
— = Apertura interna
- - - = Apertura externa
Medidas en: mm
Escala 1:2





Processing

Lavorazioni

Procesamiento

5.0

Health and safety

Prevenzione e sicurezza

Prevención y seguridad

5.1

Cutting
Welding

Taglio
Saldatura

Corte
Soldadura

5.2
5.3

Accessories installation:
Gaskets
System accessories
Hinges
Sliding door installation
Flush bolts
General fittings
Handles
Locks

Montaggio accessori:
Guarnizioni
Accessori di sistema
Cerniere
Montaggio porta scorrevole
Catenacci
Ferramenta generale
Maniglie
Serrature

Montaje accesorios:
Juntas de sellado
Accesorios del sistema
Bisagras
Montaje puerta corrediza
Pasador de canto
Herrajes generales
Manillas
Cerraduras

5.4
5.5
5.6
5.7
5.8
5.9
5.10
5.11

Glazing

Vetrazione

Acristalamiento

5.12

Important notes:

All processes are considered glazed-in except where specified.

Note importanti:

Tutte le lavorazioni si intendono glazed-in tranne dove specificato.

Notas importantes:

Todos los procesos se consideran acristalados, excepto donde se especifique.

Health and safety

Prevenzione e sicurezza

Prevención y seguridad

5.1

Health and safety

W20 hot rolled steel profiles can generally be processed in the same way as other steel window profile systems.

No special machines or process for fabrication are required. The standard fabrication processes, such as welding and grinding, can be carried out easily.

During welding and machining we recommend to protect eyes and airways according to country specific health and safety regulations.

Prevenzione e sicurezza

I profili W20 in acciaio laminato a caldo possono generalmente essere lavorati analogamente ad altri sistemi di profili per finestre in acciaio.

Non sono necessarie macchine speciali o processi particolari per la fabbricazione. I processi di fabbricazione standard, come saldatura e rettifica, possono essere eseguiti facilmente.

Durante le lavorazioni e la saldatura raccomandiamo di proteggere gli occhi e le vie respiratorie secondo le norme specifiche di salute e sicurezza del Paese.

Salud y seguridad

Los Perfiles W20 en acero laminado en caliente generalmente se pueden procesar de la misma manera que otros sistemas de perfiles de ventana de acero.

No se requieren máquinas especiales o medidas para la fabricación. Los procesos de fabricación estándar, como la soldadura y el pulido, se pueden llevar a cabo fácilmente.

Durante el procesamiento y la soldadura, recomendamos proteger los ojos y las vías respiratorias de acuerdo con las normas de salud y seguridad específicas del país.

Cutting

Taglio

Corte

5.2

Cutting

W20 profiles can be cut with conventional steel saws. The feed rate on saws have to be reduced compared to conventional tubular steel profiles. We recommend a proper lubrication during cutting operations.

For further information, see also the chapter "General Information".

Taglio

I profili W20 possono essere tagliati con seghe per acciaio convenzionali. La velocità di avanzamento delle seghe deve essere ridotta rispetto a quella comunemente usata per i convenzionali profili tubolari in acciaio. Raccomandiamo una lubrificazione adeguata durante le operazioni di taglio.

Per ulteriori indicazioni, vedere anche il Capitolo "informazioni generali".

Cutting

Los perfiles W20 se pueden cortar con sierras para metales convencionales. Dado que los perfiles presentan muchas filigranas, la velocidad de avance al serrar debe reducirse en comparación con los perfiles tubulares de acero convencionales. Recomendamos utilizar una lubricación de micropulverización para cortar los perfiles.

Para más información, véase también el capítulo "Información general".

Legend

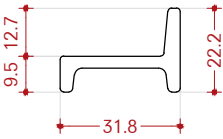
+ = Fixed
— = Open in
- - - = Open out
Dimensions in: mm
Scale 1:1 - 1:2
V = View
R = Reference cut length peak/peak
CL = Cutting Length
HF = Height Frame
HG = Height Glass
HL = Height Leaf
WF = Width Frame
WG = Width Glass
WL = Width Leaf

Legenda

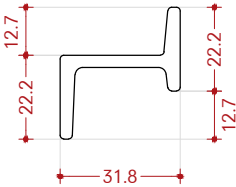
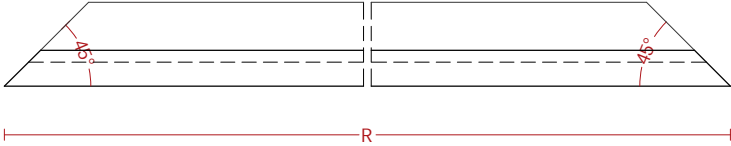
+ = Anta fissa
— = Apertura interna
- - - = Apertura esterna
Misure in: mm
Scala 1:1 - 1:2
V = Vista
R = Riferimento lunghezza di taglio
CL = Lunghezza di taglio
HF = Altezza telaio
HG = Altezza vetro
HL = Altezza anta
WF = Larghezza telaio
WG = Larghezza vetro
WL = Larghezza anta

Leyenda

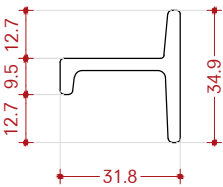
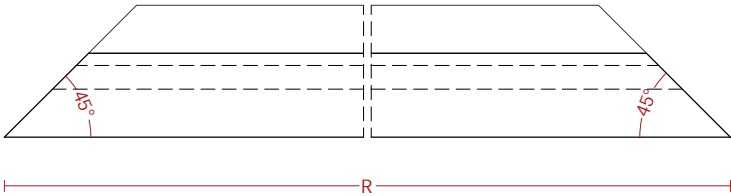
+ = Fijo
— = Apertura interna
- - - = Apertura externa
Medidas en: mm
Escala 1:1 - 1:2
V = Vista
R = Referencia de la longitud de corte de los extremos
CL = Longitud de corte
HF = Altura marco
HG = Altura vidrio
HL = Altura hoja
WF = Longitud marco
WG = Longitud vidrio
WL = Longitud hoja



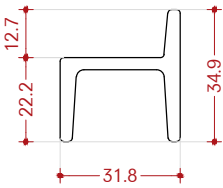
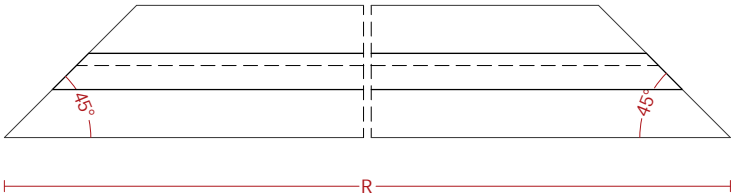
FF 3203LF-01



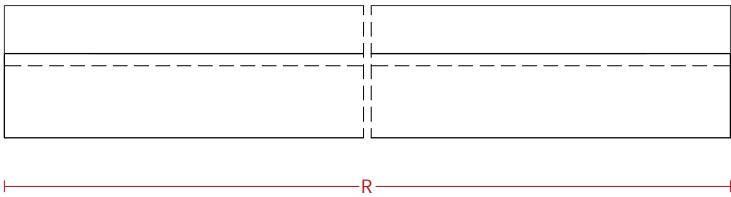
FF 3203ZF-01

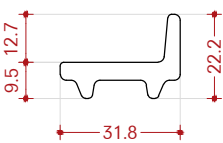


FF 3203TF-01

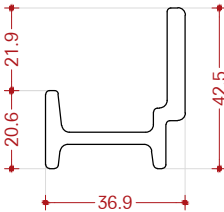
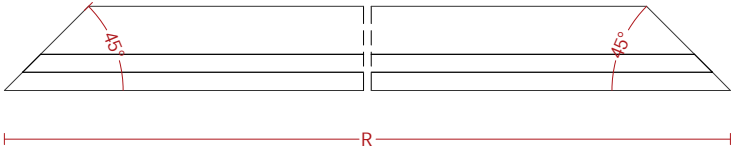


FF 3203HF-01

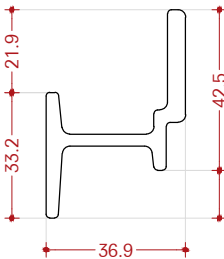
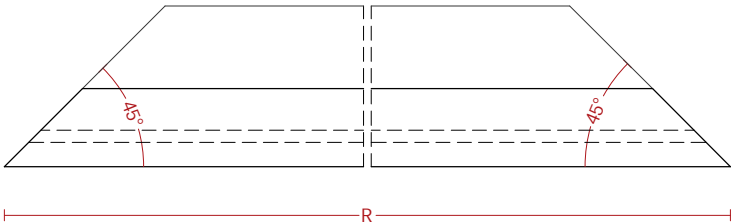




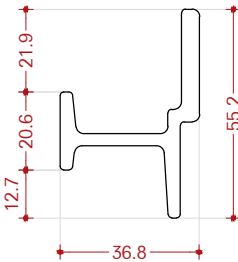
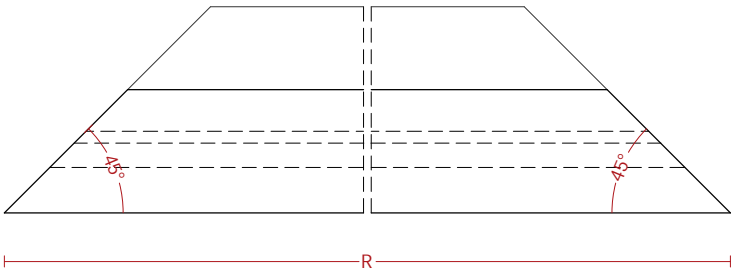
FF 3203LC-01



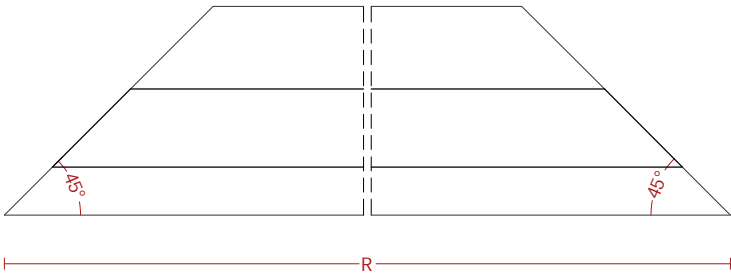
FF 3703L-01

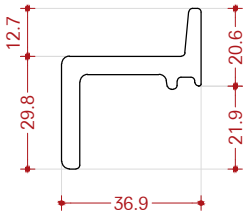


FF 3703Z-01

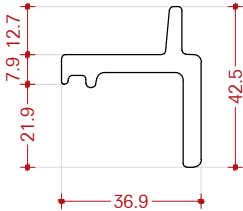
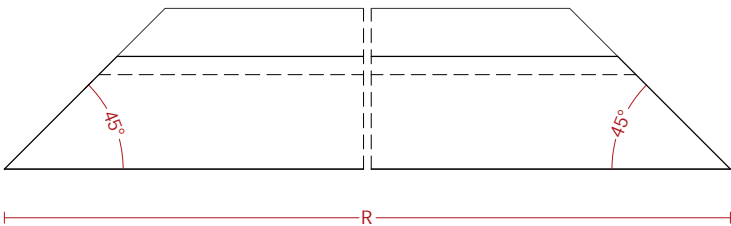


FF 3703T-01

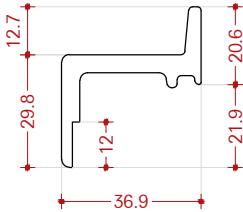
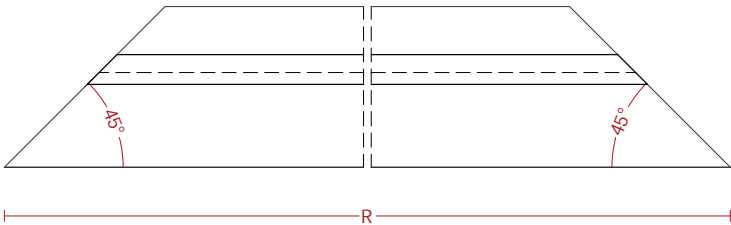




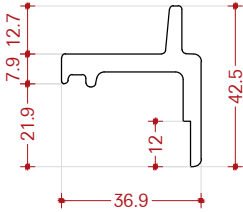
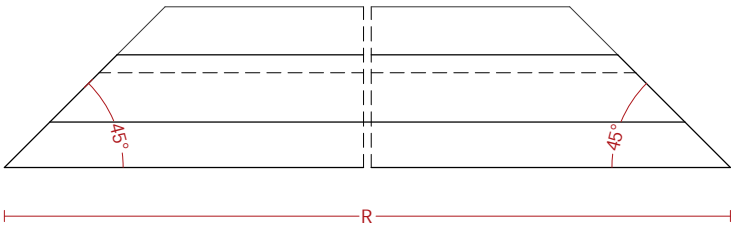
FF 3705ZA-01



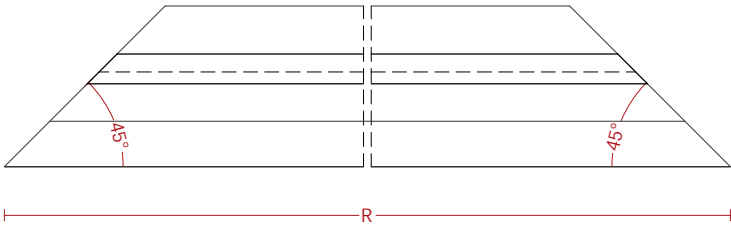
FF 4703TA-01

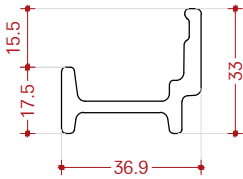


FF 3705ZAP-01

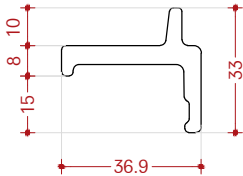
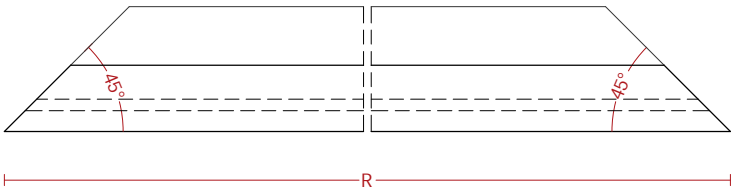


FF 4703TAP-01

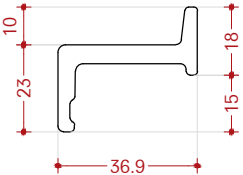
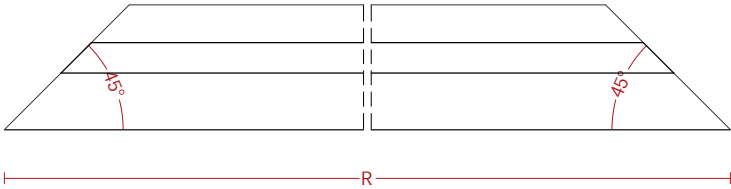




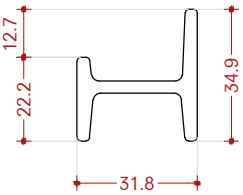
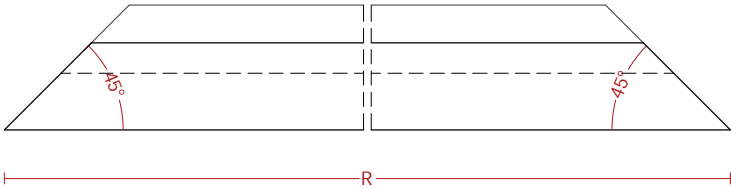
FF 3703LS-01



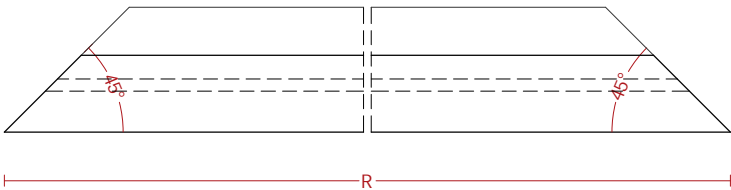
FF 4703TS-01

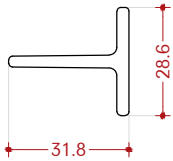


FF 5303TZ-01

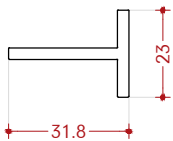
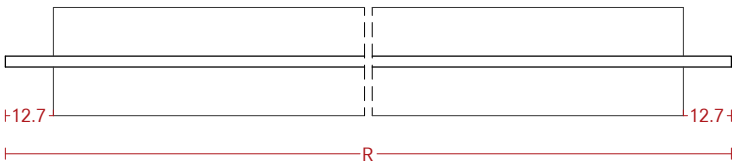


FF 5303TZ-01

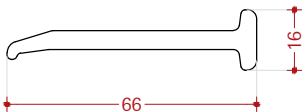
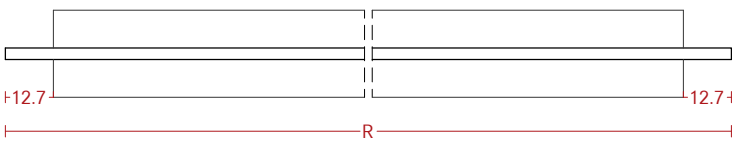




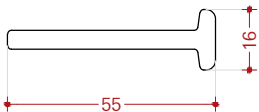
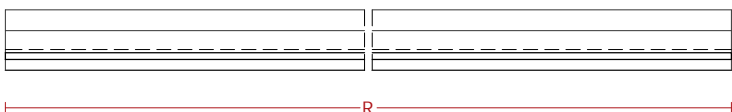
FF 4203TN-01



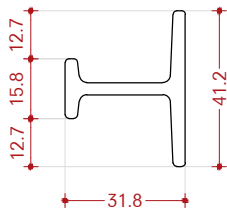
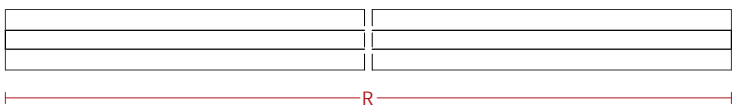
FF 4203TR-14



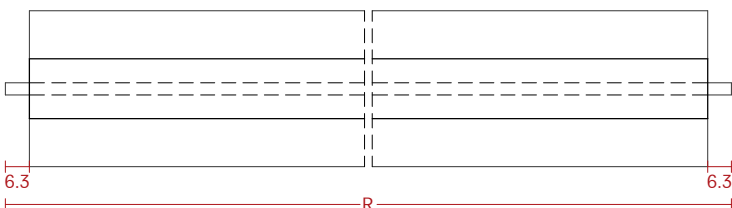
FF 6605SO-01



FF 5505SV-01



FF 4703TD-14



Cutting length

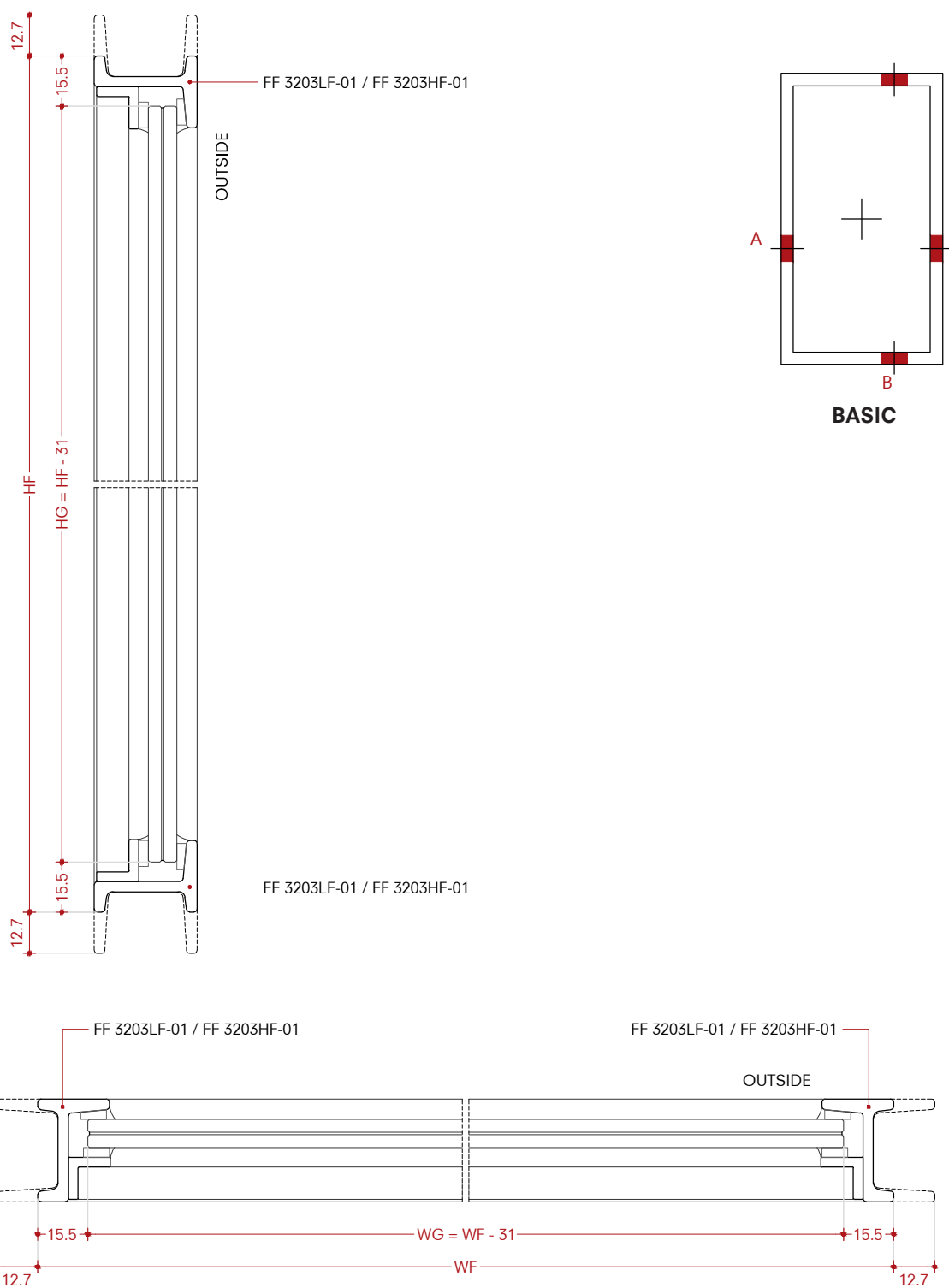
FF 3203LF-01 / FF 3203HF-01
Fixed frame

Liste di taglio

FF 3203LF-01 / FF 3203HF-01
Anta fissa

Longitud de corte

FF 3203LF-01 / FF 3203HF-01
Ventana fija



Cutting length

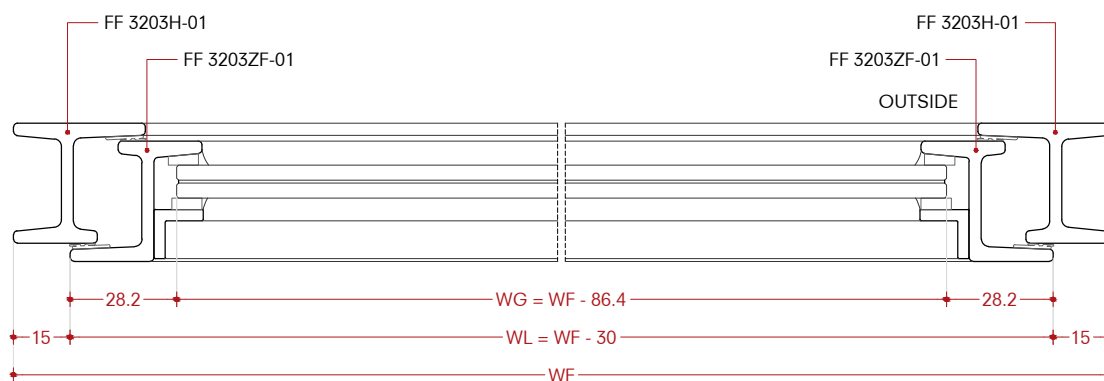
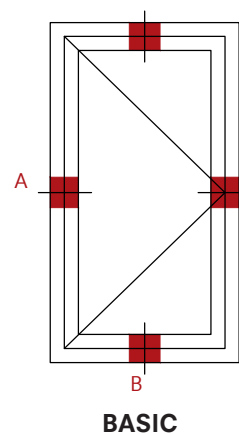
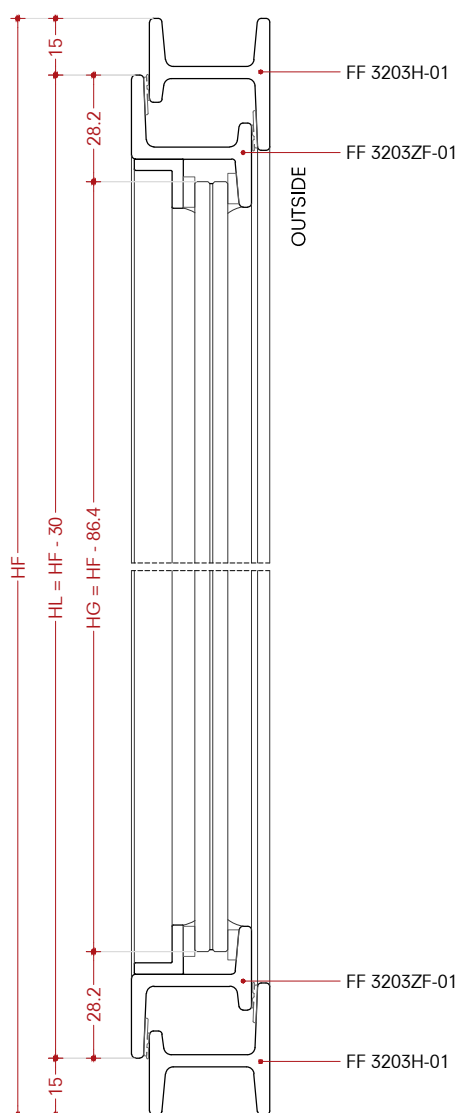
Single leaf window
Open in

Liste di taglio

Finestra a un battente
Apertura interna

Longitud de corte

Ventana de una hoja
Que se abre hacia dentro



Cutting length

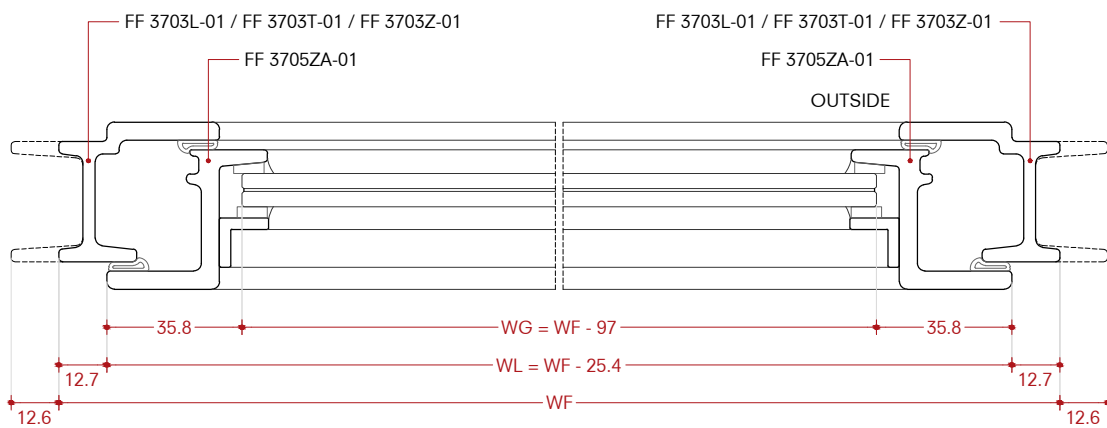
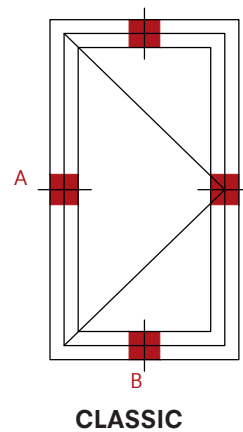
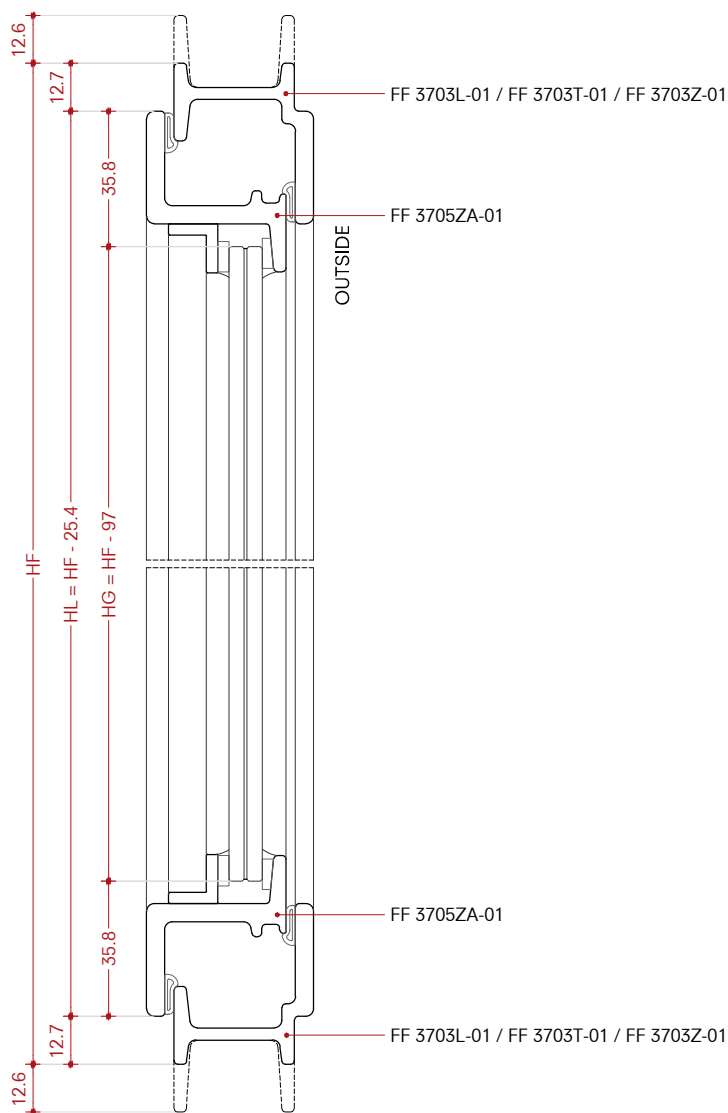
Single leaf window
Open in

Liste di taglio

Finestra a un battente
Apertura interna

Longitud de corte

Ventana de una hoja
Que se abre hacia dentro



Cutting length

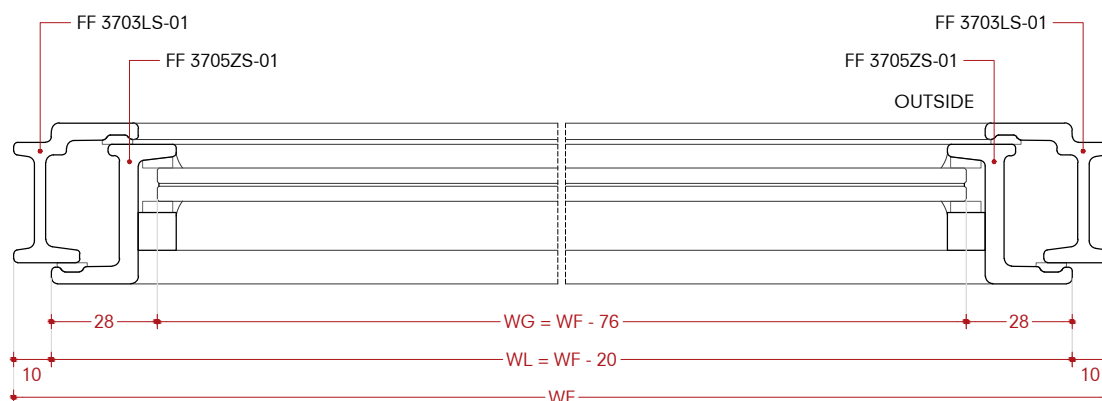
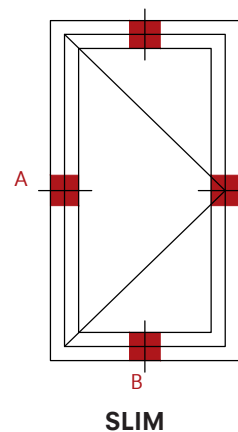
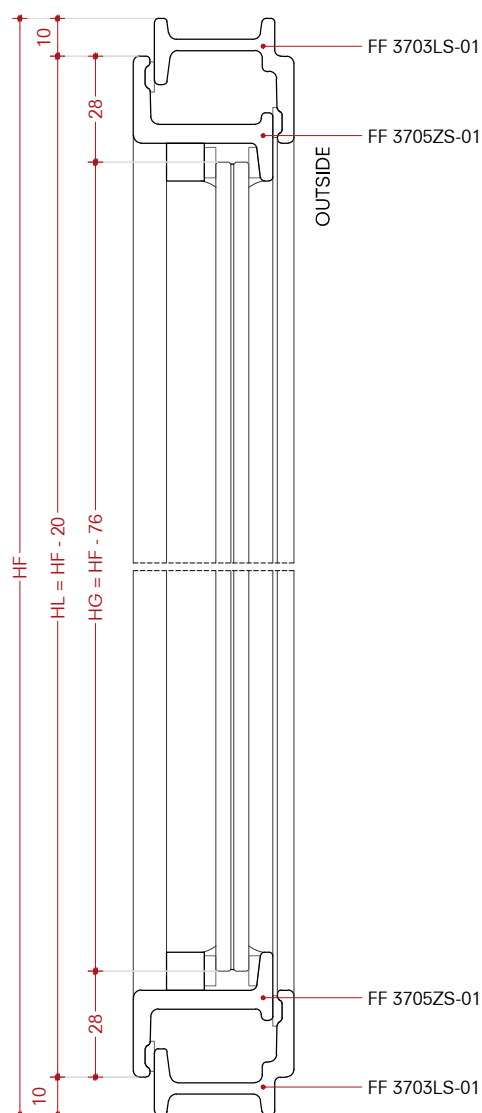
Single leaf window
Open in

Liste di taglio

Finestra a un battente
Apertura interna

Longitud de corte

Ventana de una hoja
Que se abre hacia dentro



Cutting length

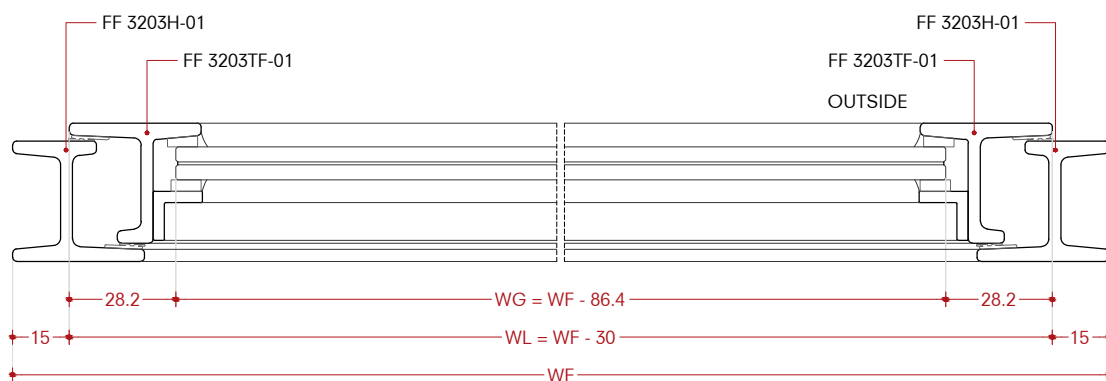
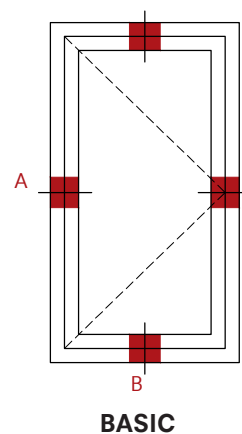
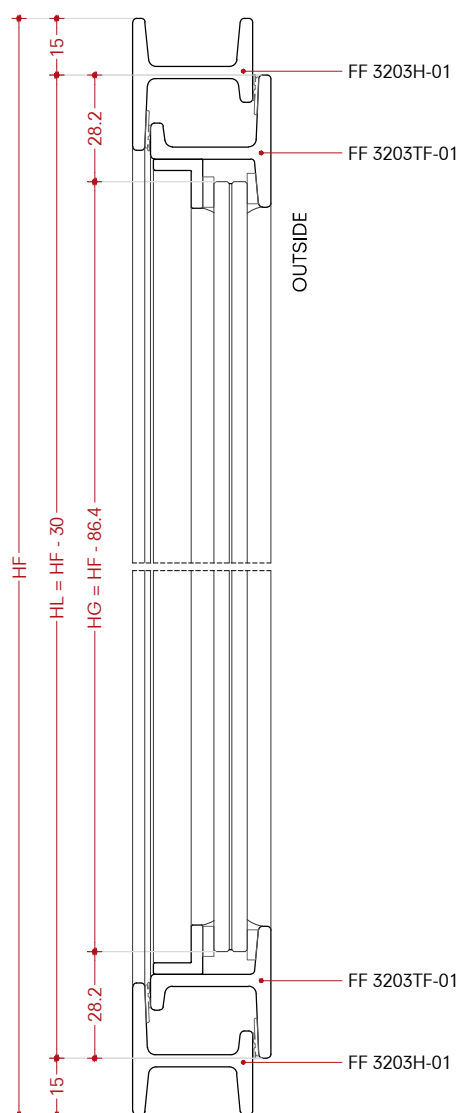
Single leaf window
Open out

Liste di taglio

Finestra a un battente
Apertura esterna

Longitud de corte

Ventana de una hoja
Que se abre hacia fuera



Cutting length

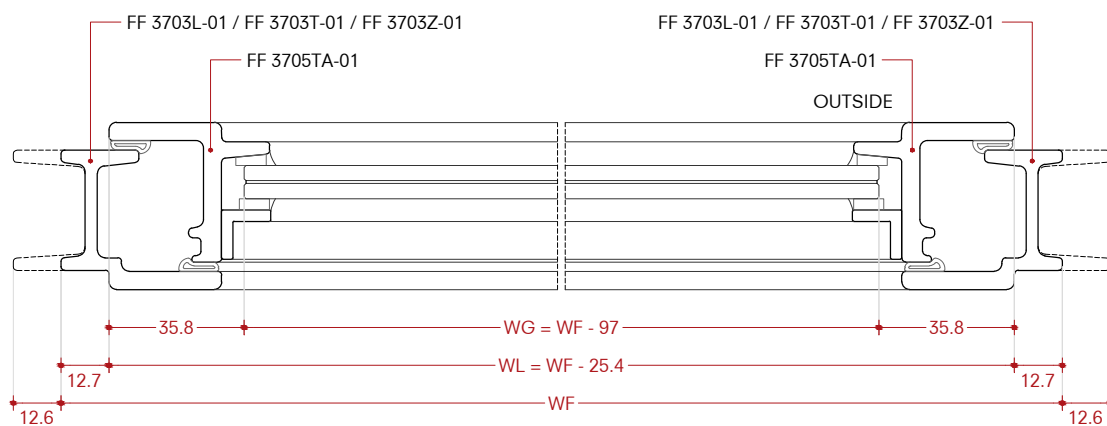
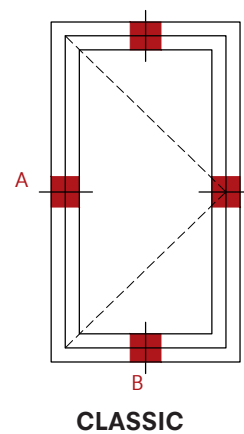
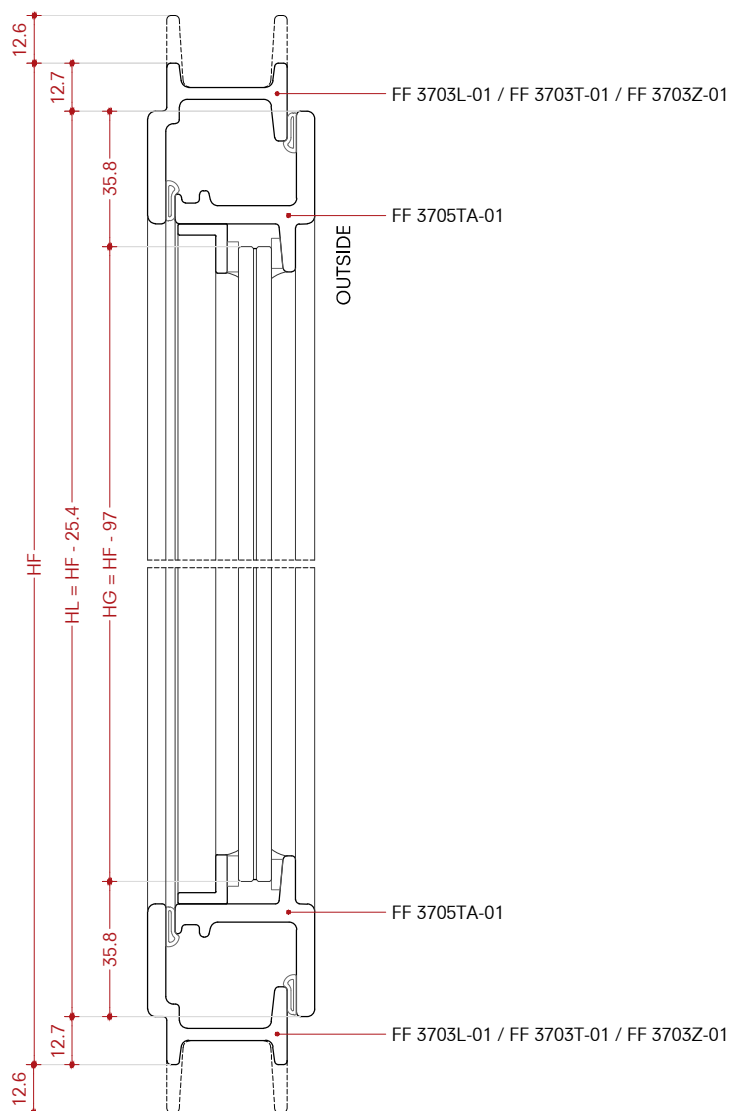
Single leaf window
Open out

Liste di taglio

Finestra a un battente
Apertura esterna

Longitud de corte

Ventana de una hoja
Que se abre hacia fuera



Cutting length

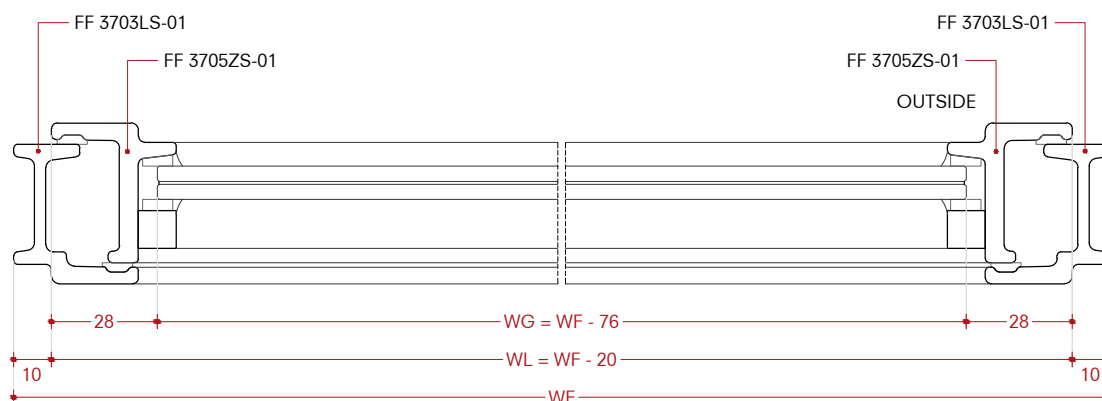
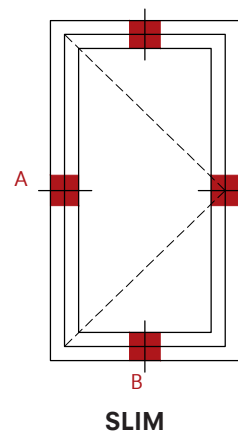
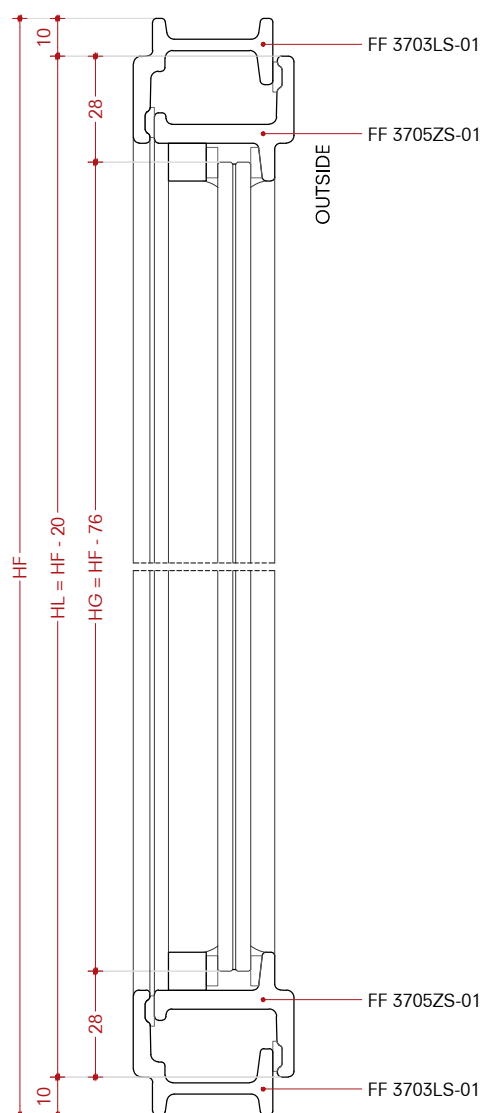
Single leaf window
Open out

Liste di taglio

Finestra a un battente
Apertura esterna

Longitud de corte

Ventana de una hoja
Que se abre hacia fuera



Cutting length

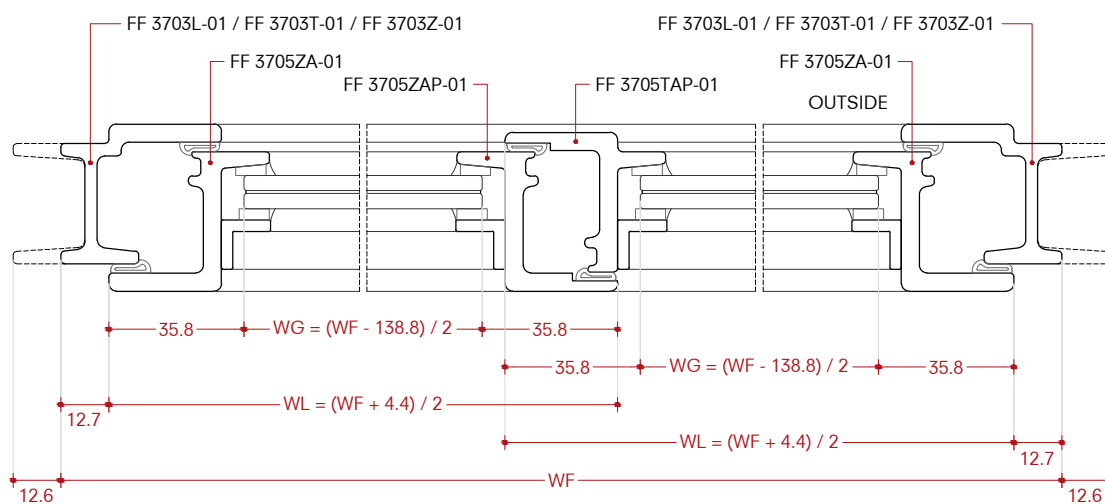
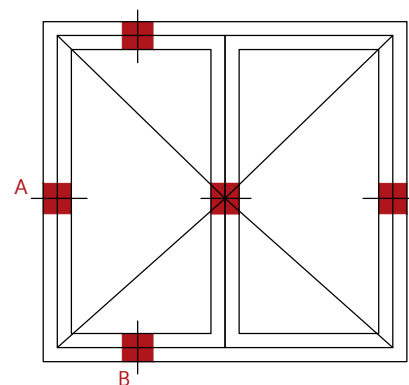
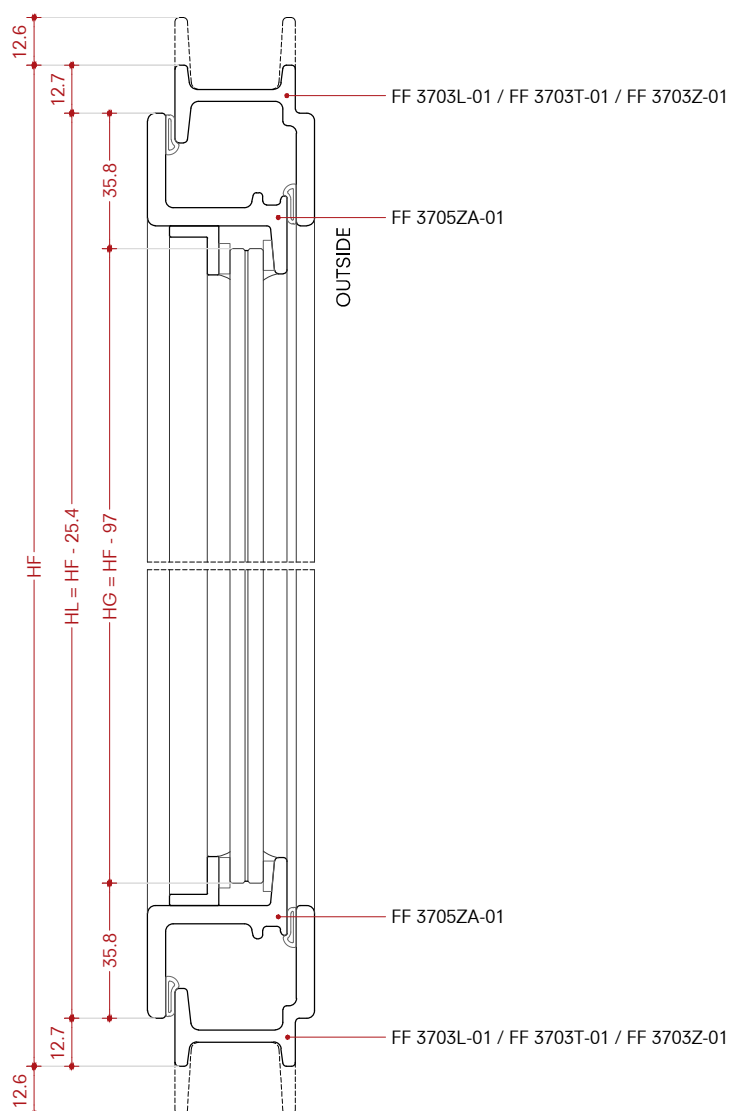
Double leaf window
Open in

Liste di taglio

Finestra a due battenti
Apertura interna

Longitud de corte

Ventana de dos hojas
Que se abre hacia dentro



Cutting length

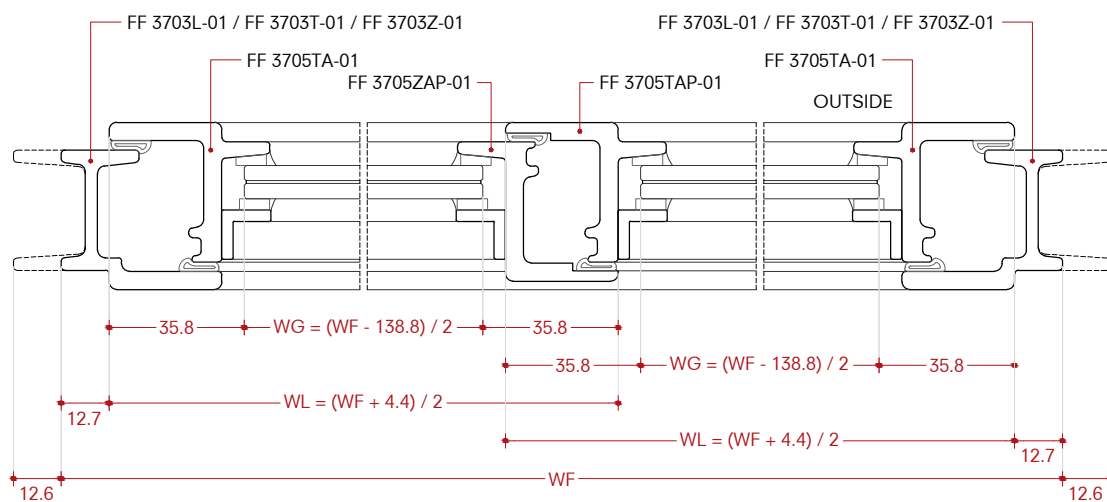
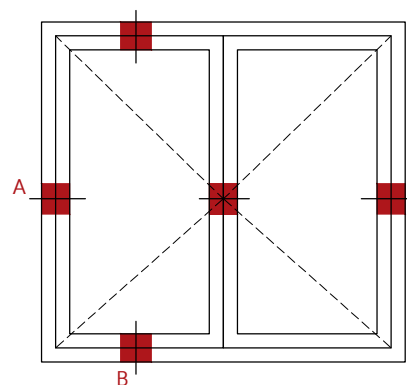
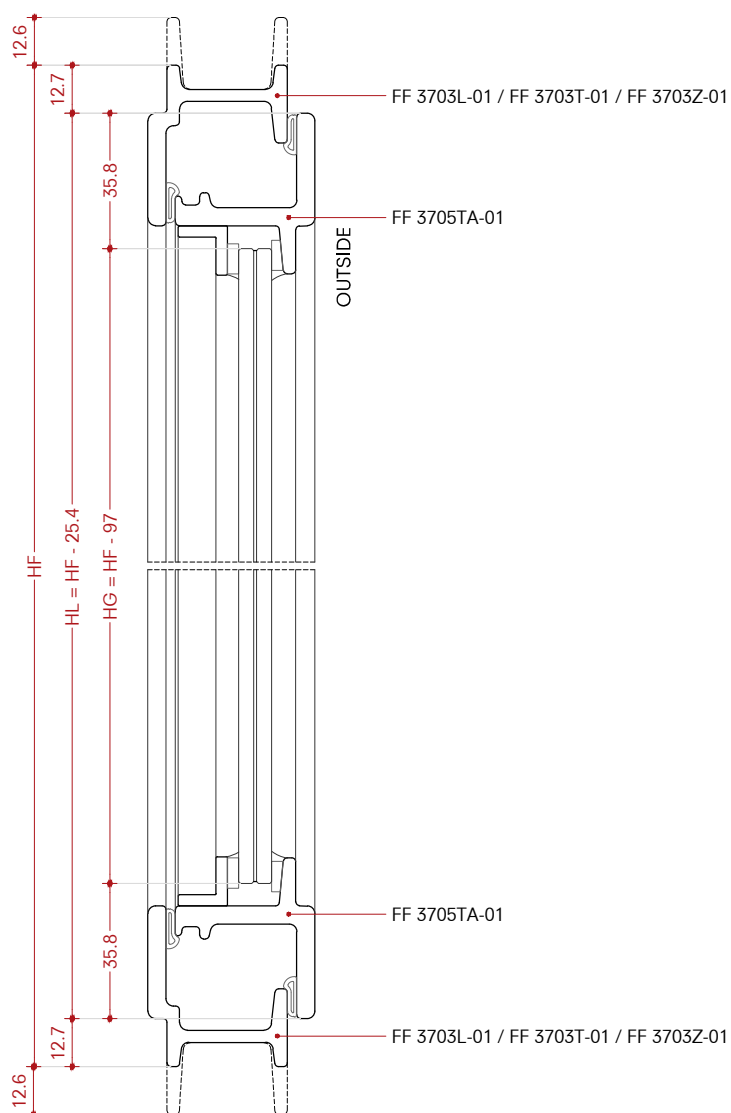
Double leaf window
Open out

Liste di taglio

Finestra a due battenti
Apertura esterna

Longitud de corte

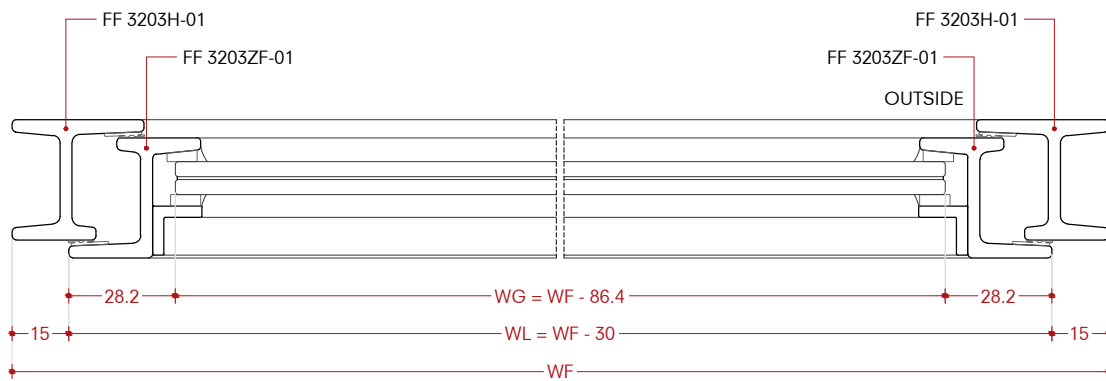
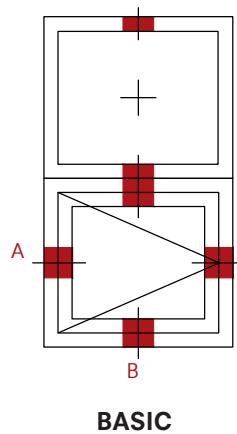
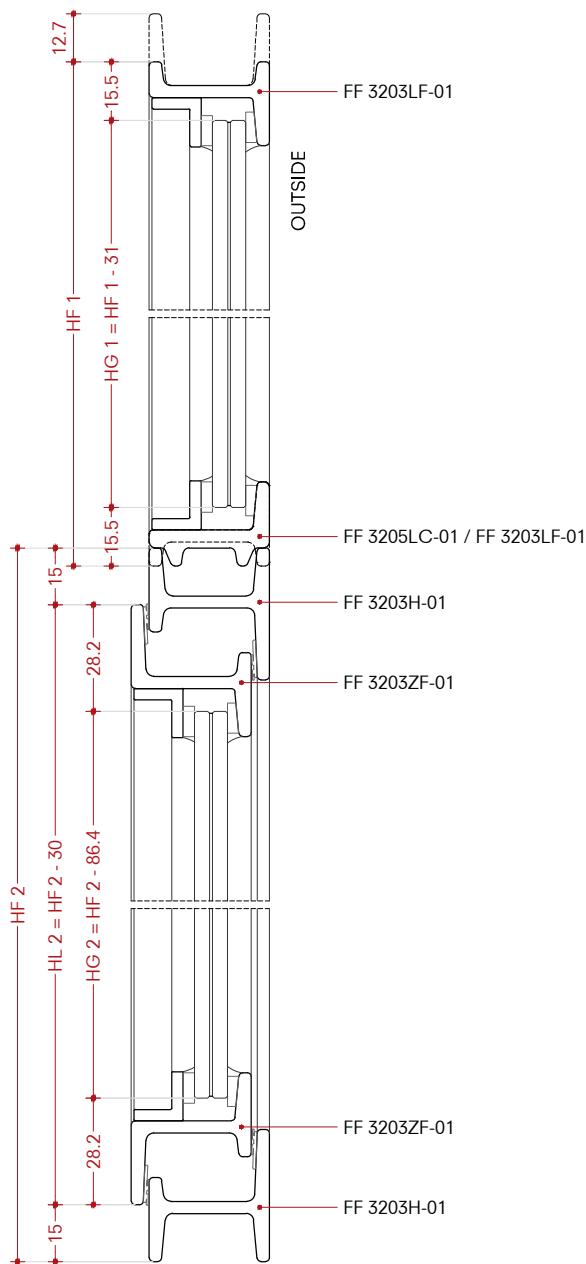
Ventana de dos hojas
Que se abre hacia fuera



Cutting length
Open in

Liste di taglio
Apertura interna

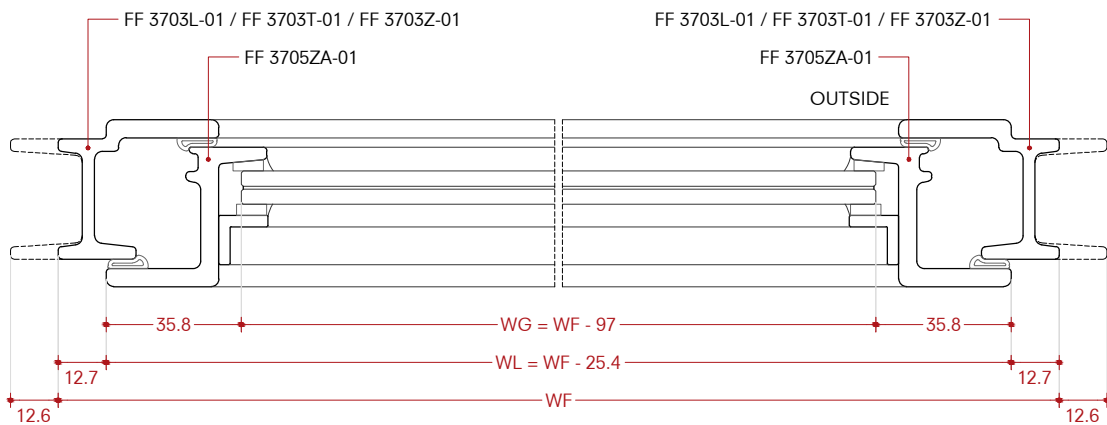
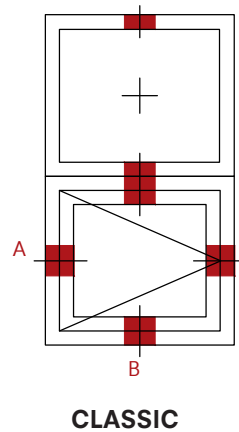
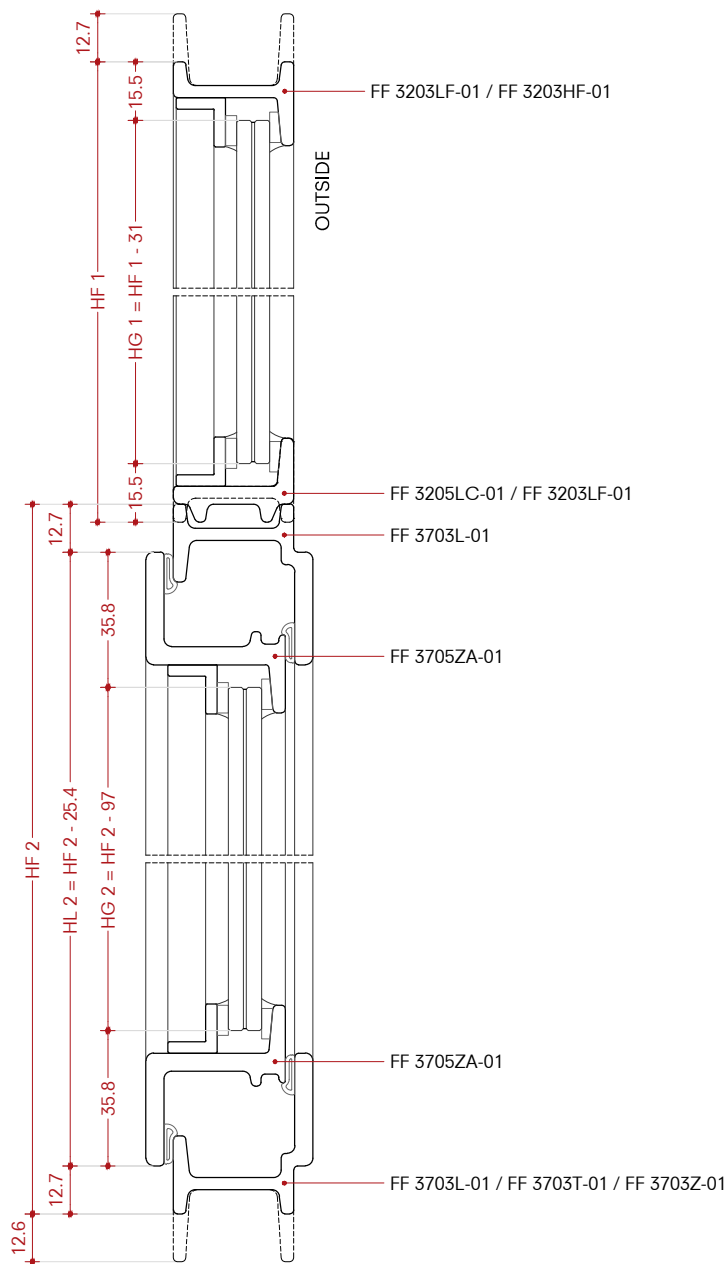
Longitud de corte
Apertura hacia dentro



Cutting length
Open in

Liste di taglio
Apertura interna

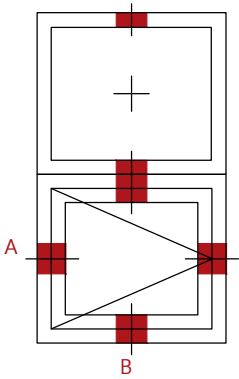
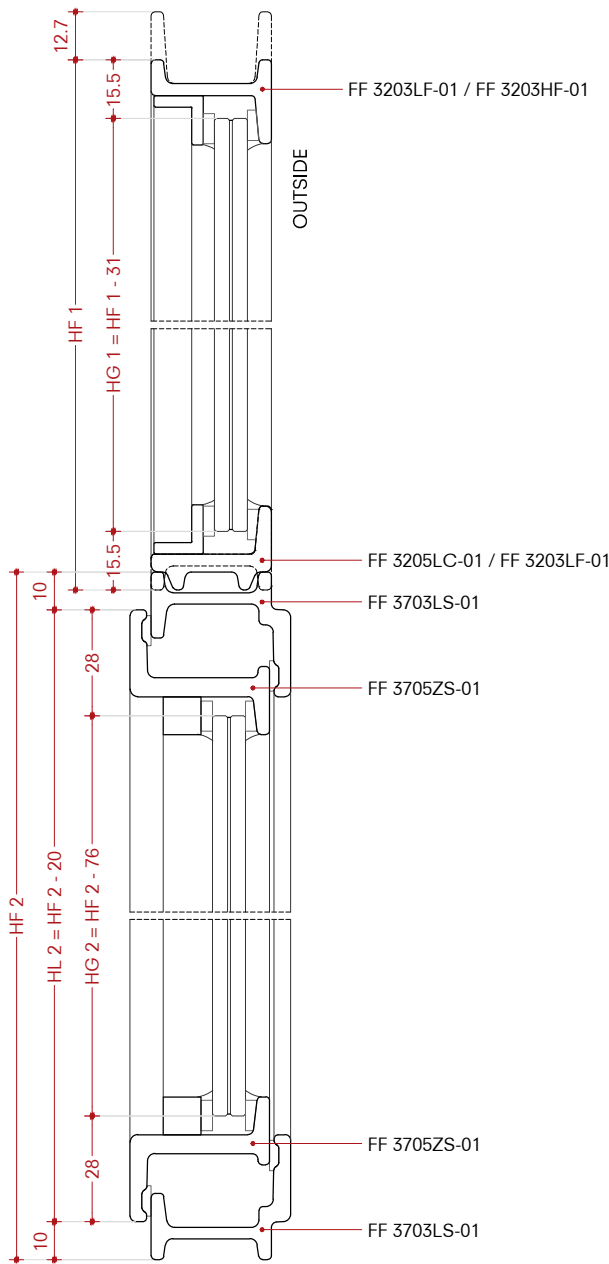
Longitud de corte
Apertura hacia dentro



Cutting length
Open in

Liste di taglio
Apertura interna

Longitud de corte
Apertura hacia dentro

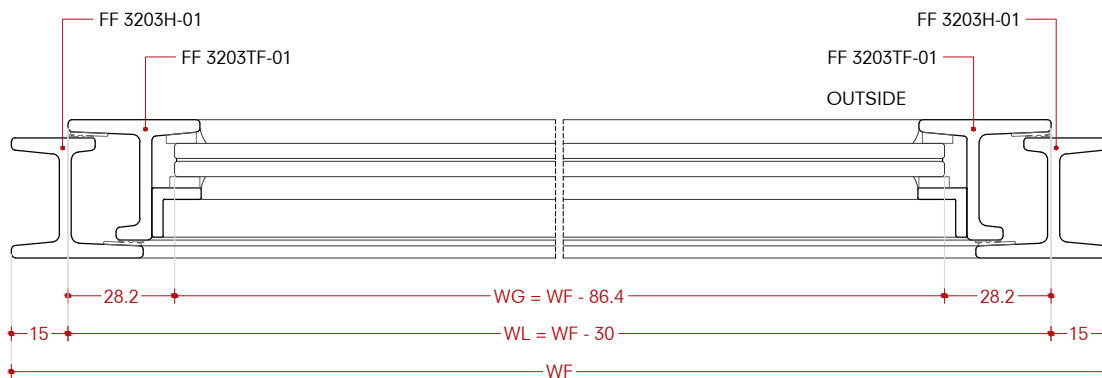
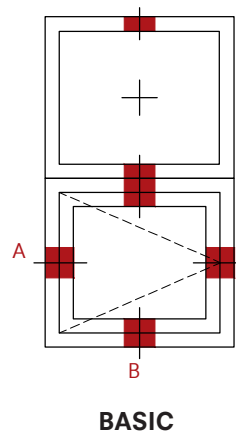
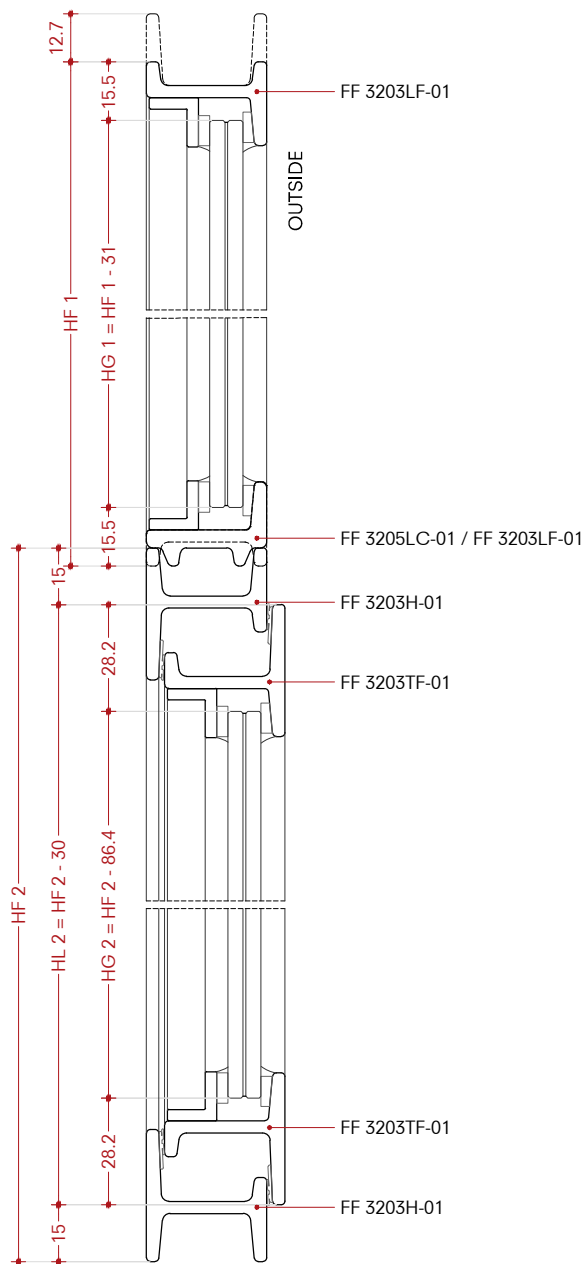


Cutting length
Open out

Liste di taglio

Apertura esterna

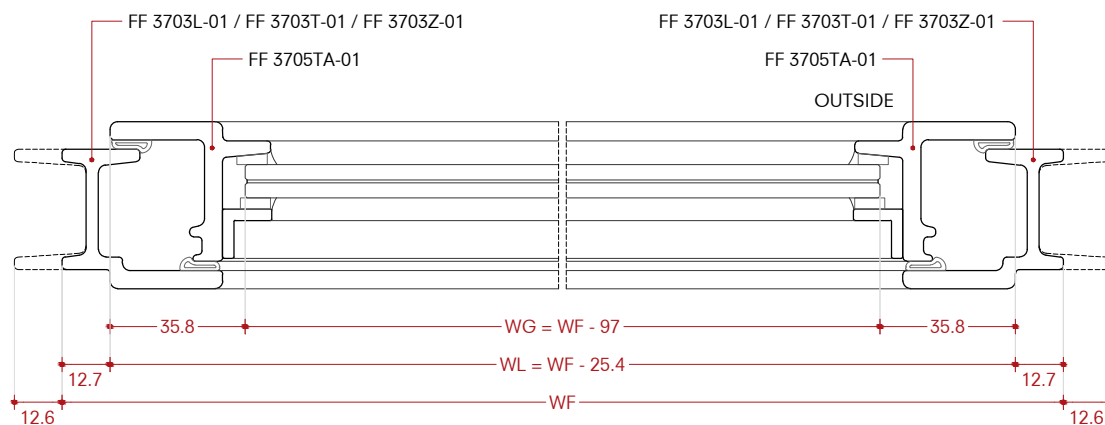
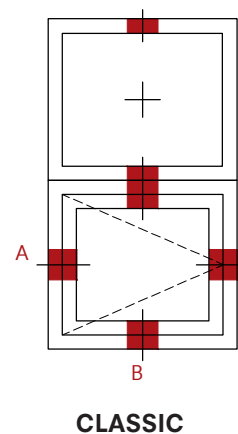
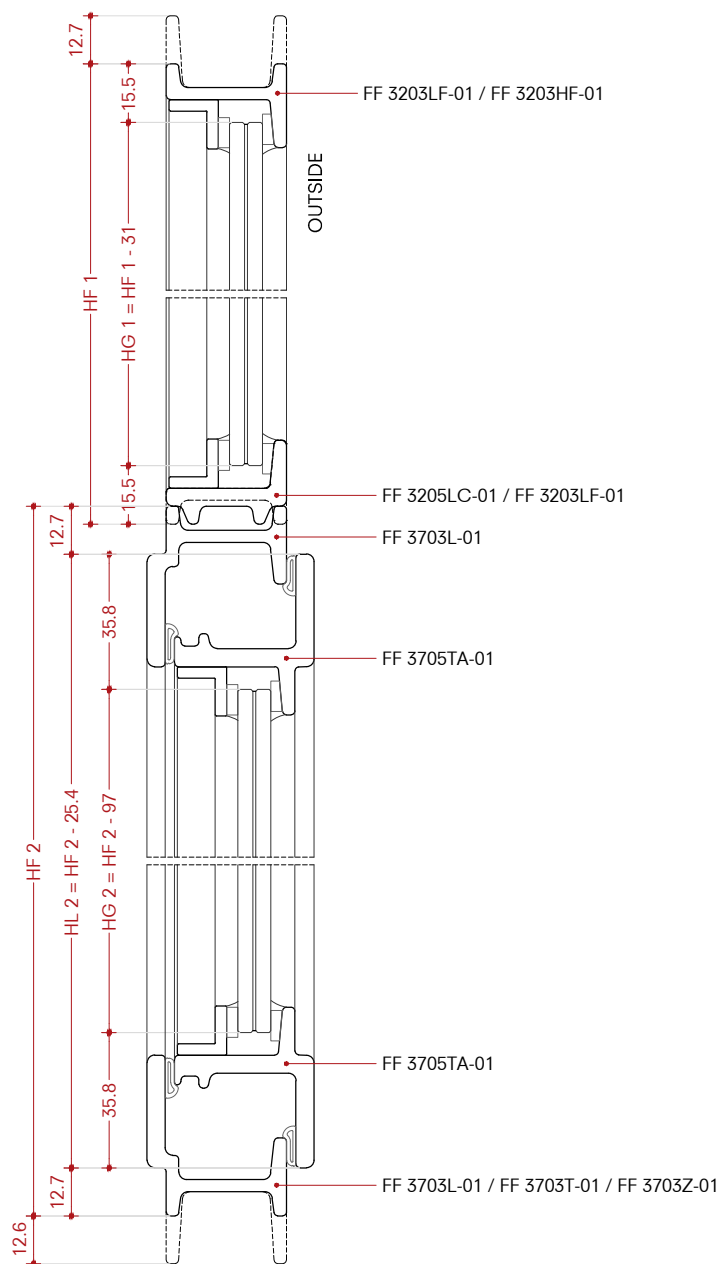
Longitud de corte
Que se abre hacia fuera



Cutting length
Open out

Liste di taglio
Apertura esterna

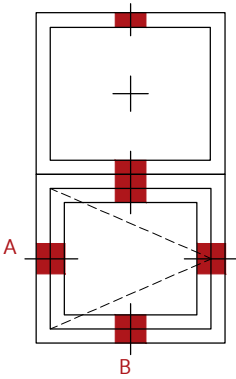
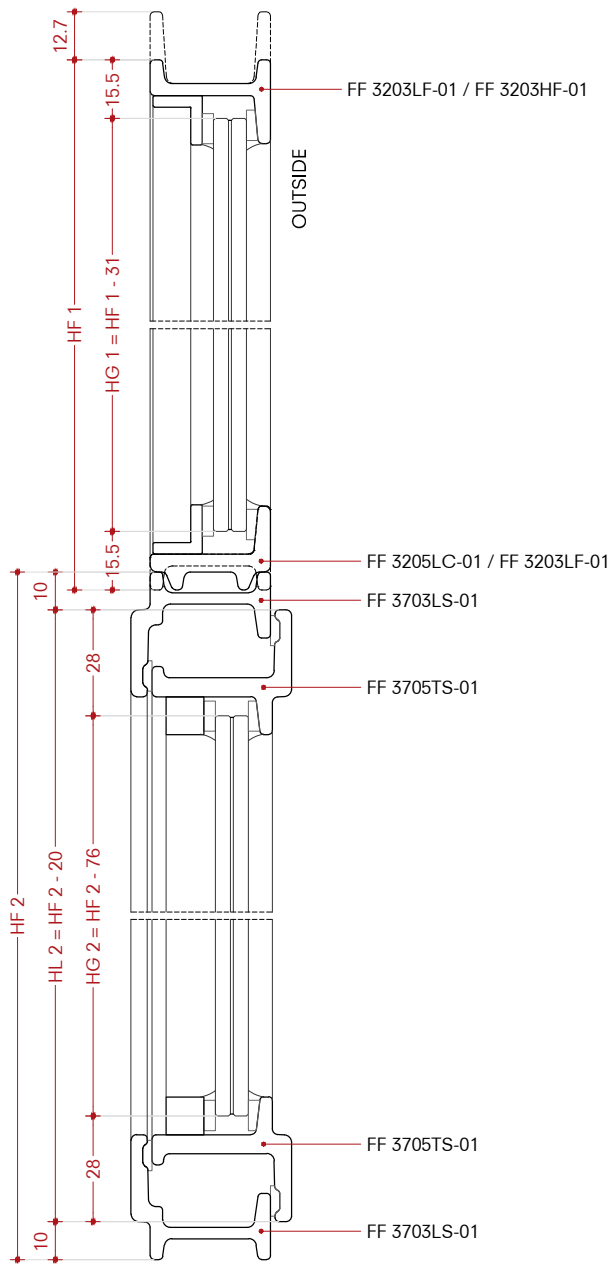
Longitud de corte
Que se abre hacia fuera



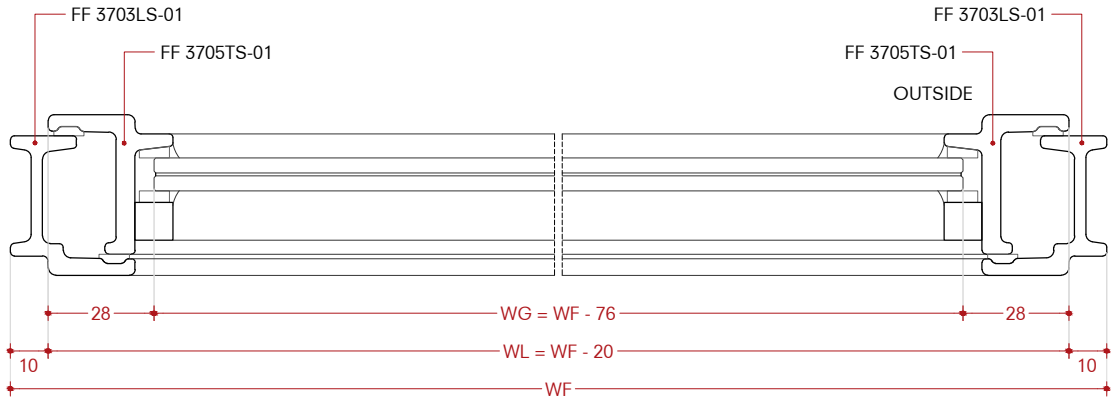
Cutting length
Open out

Liste di taglio
Apertura esterna

Longitud de corte
Que se abre hacia fuera



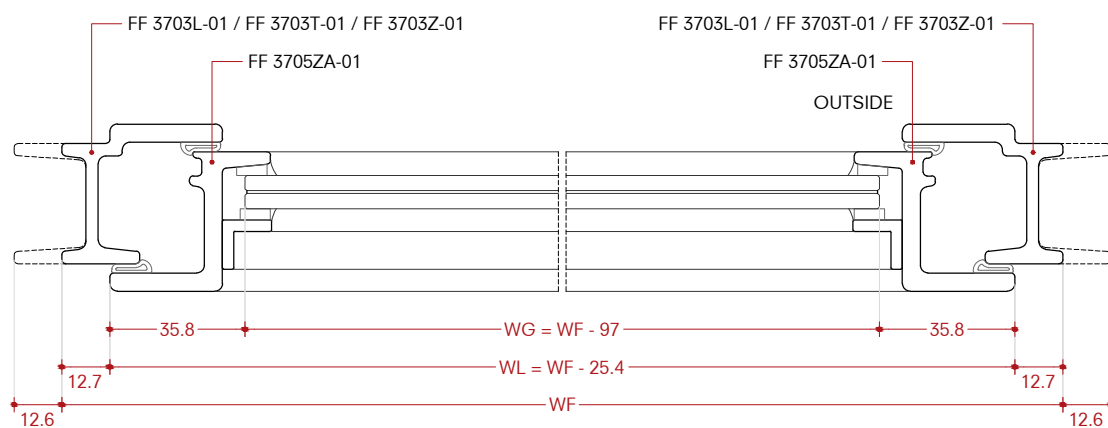
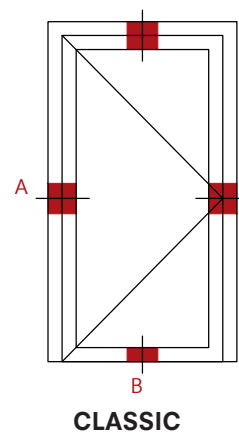
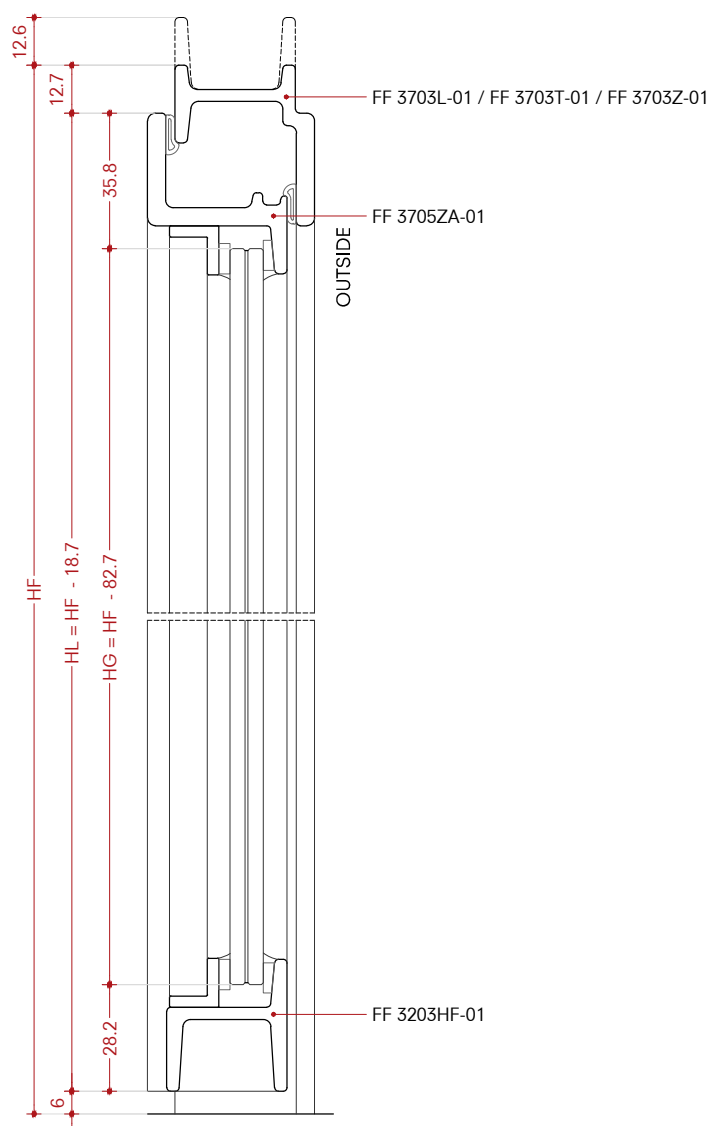
SLIM



Cutting length
Single leaf door
Open in

Liste di taglio
Porta a un battente
Apertura interna

Longitud de corte
Puerta abatible de una hoja
Que se abre hacia dentro



Cutting length

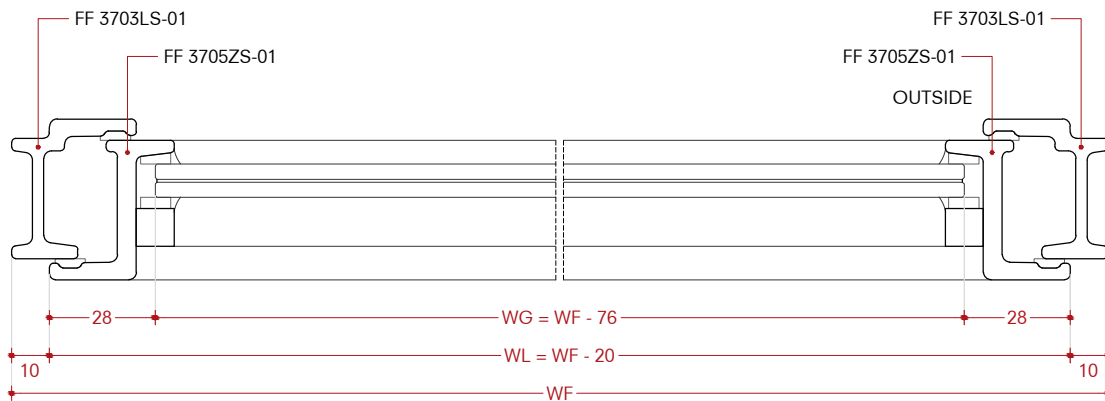
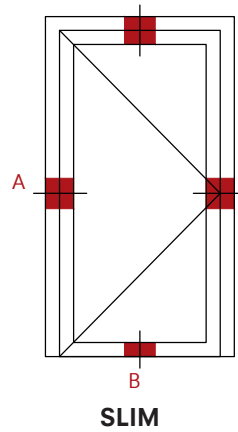
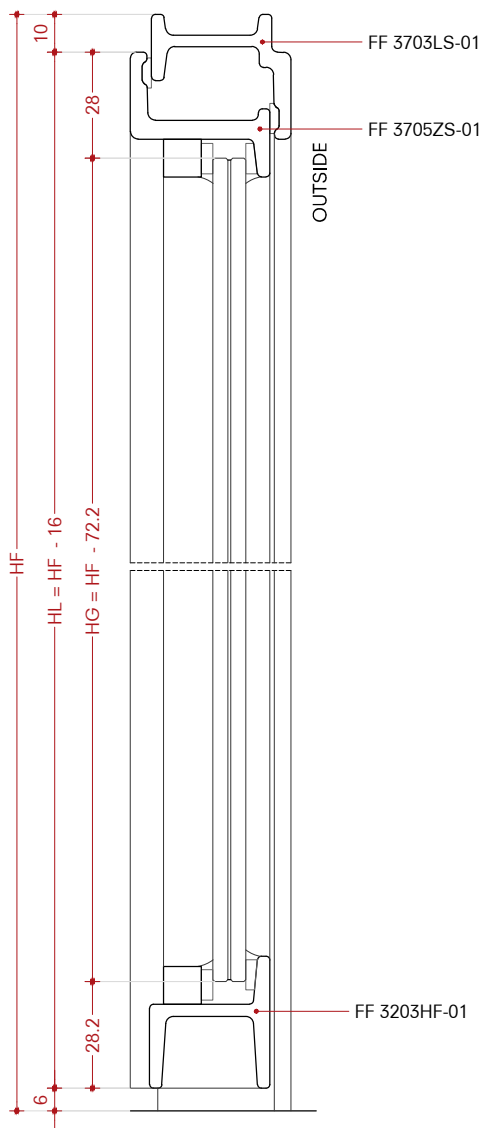
Single leaf door
Open in

Liste di taglio

Porta a un battente
Apertura interna

Longitud de corte

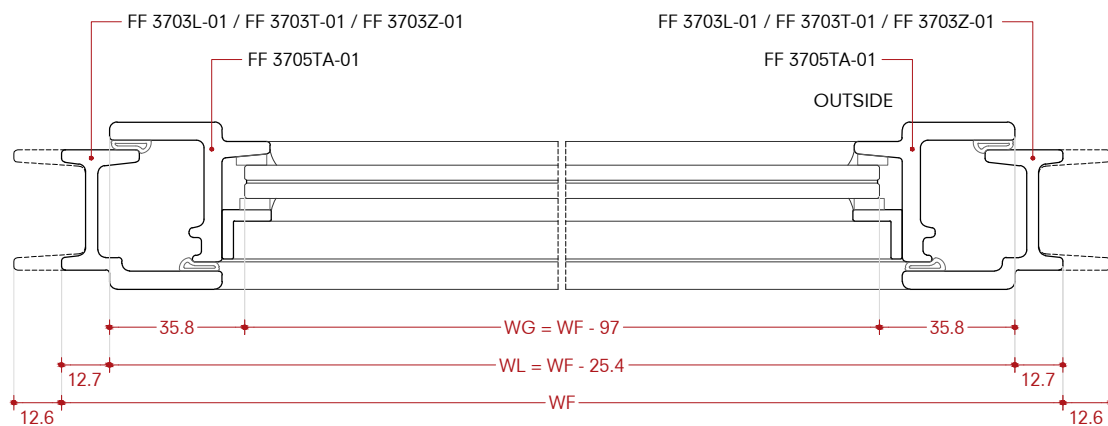
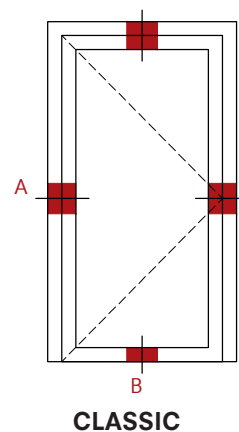
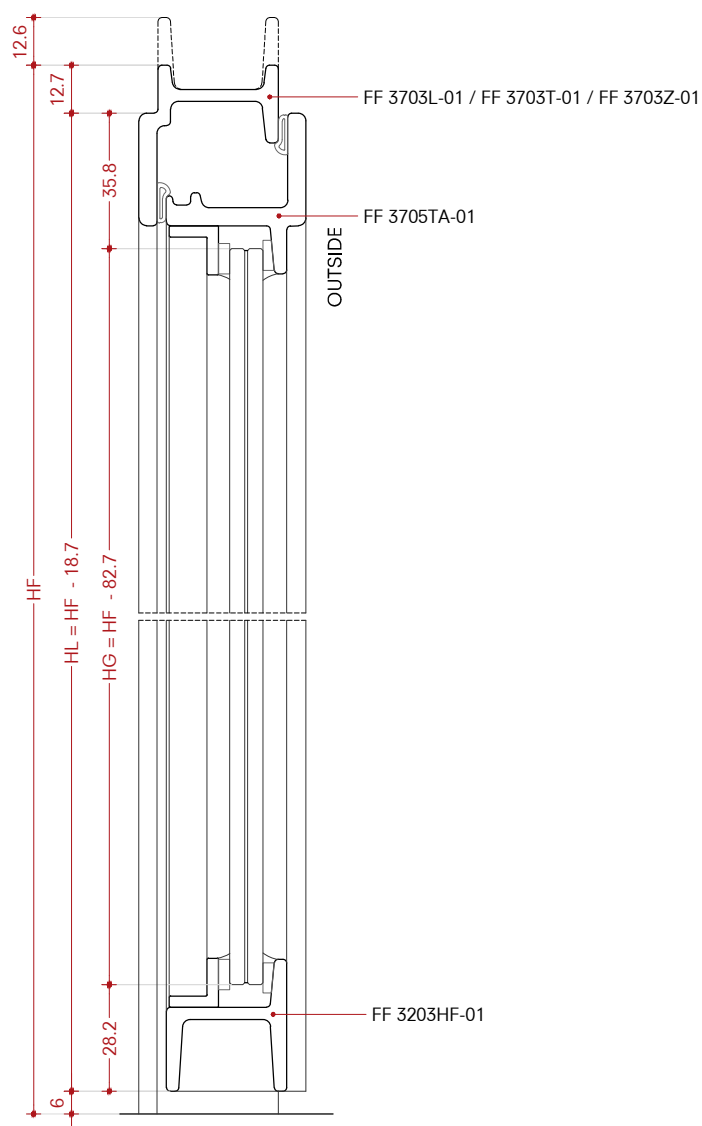
Puerta abatible de una hoja
Que se abre hacia dentro



Cutting length
Single leaf door
Open out

Liste di taglio
Porta a un battente
Apertura esterna

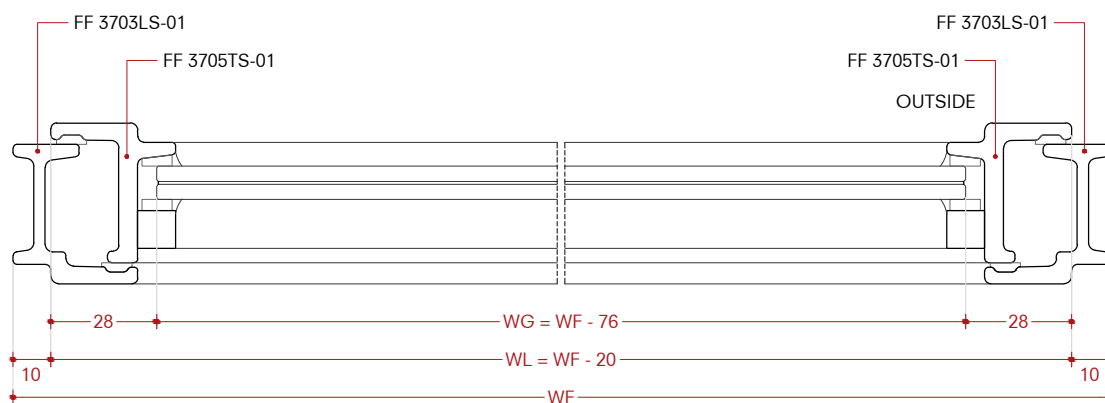
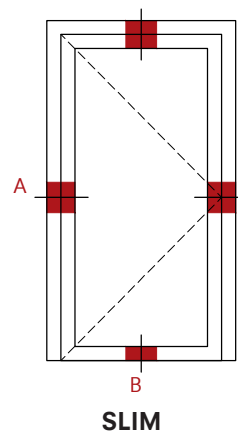
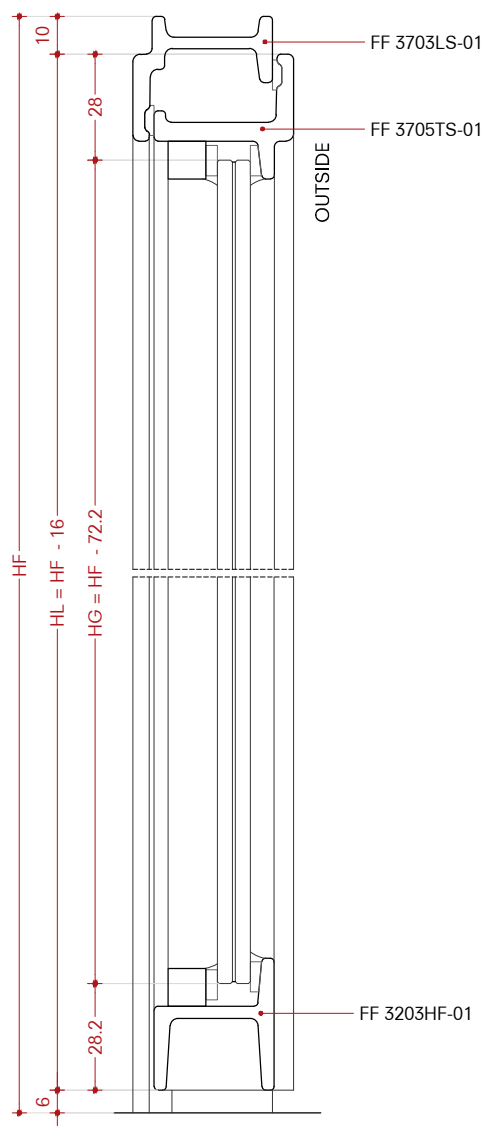
Longitud de corte
Puerta abatible de una hoja
Que se abre hacia fuera



Cutting length
Single leaf door
Open out

Liste di taglio
Porta a un battente
Apertura esterna

Longitud de corte
Puerta abatible de una hoja
Que se abre hacia fuera



Cutting length

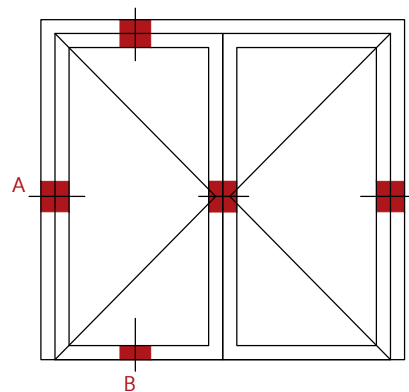
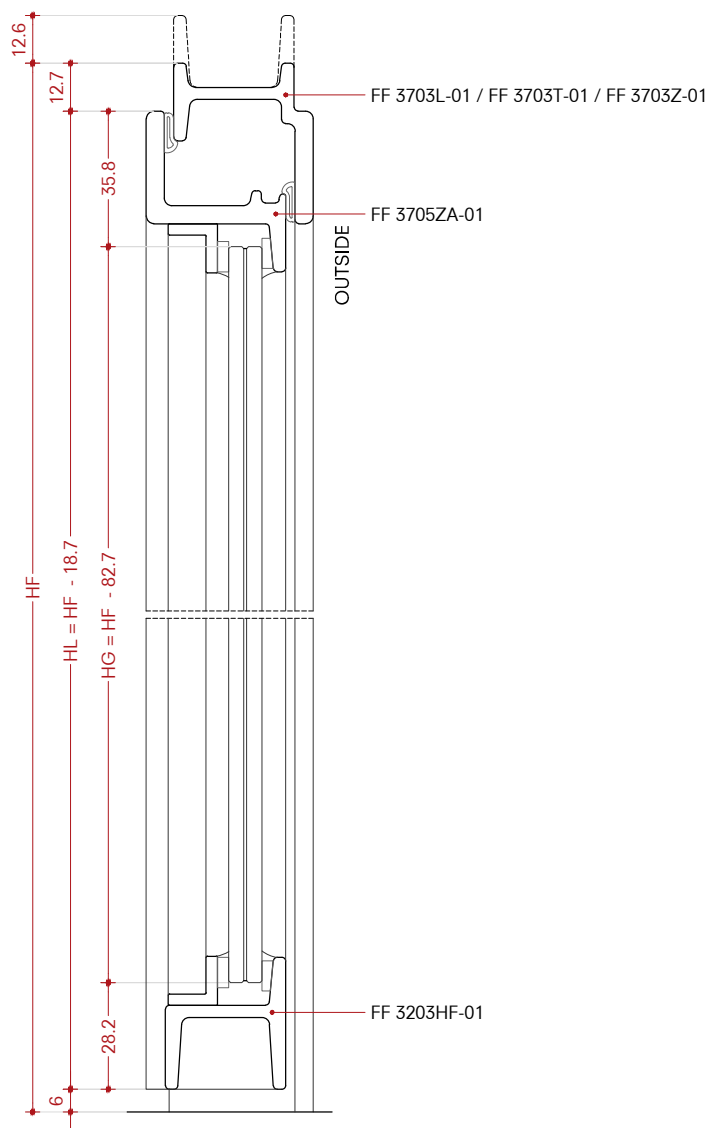
Double leaf door
Open in

Liste di taglio

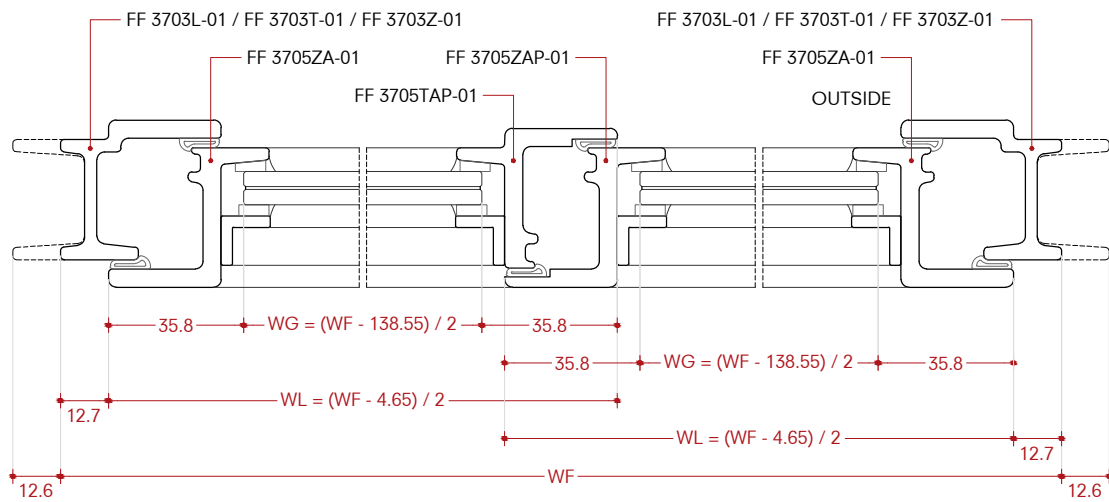
Porta a due battenti
Apertura interna

Longitud de corte

Puerta abatible de dos hojas
Que se abre hacia dentro



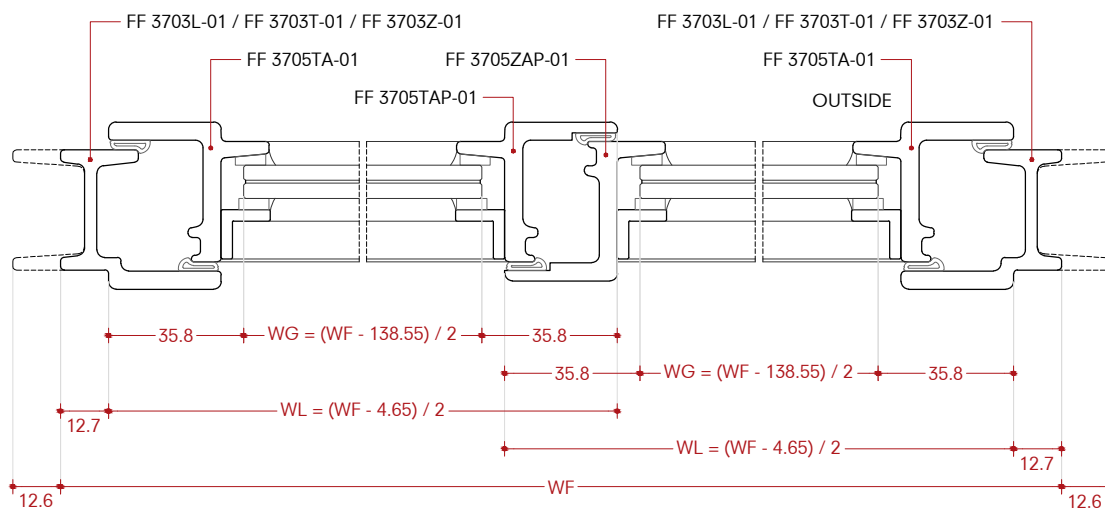
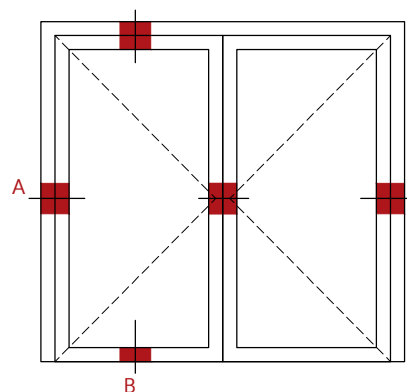
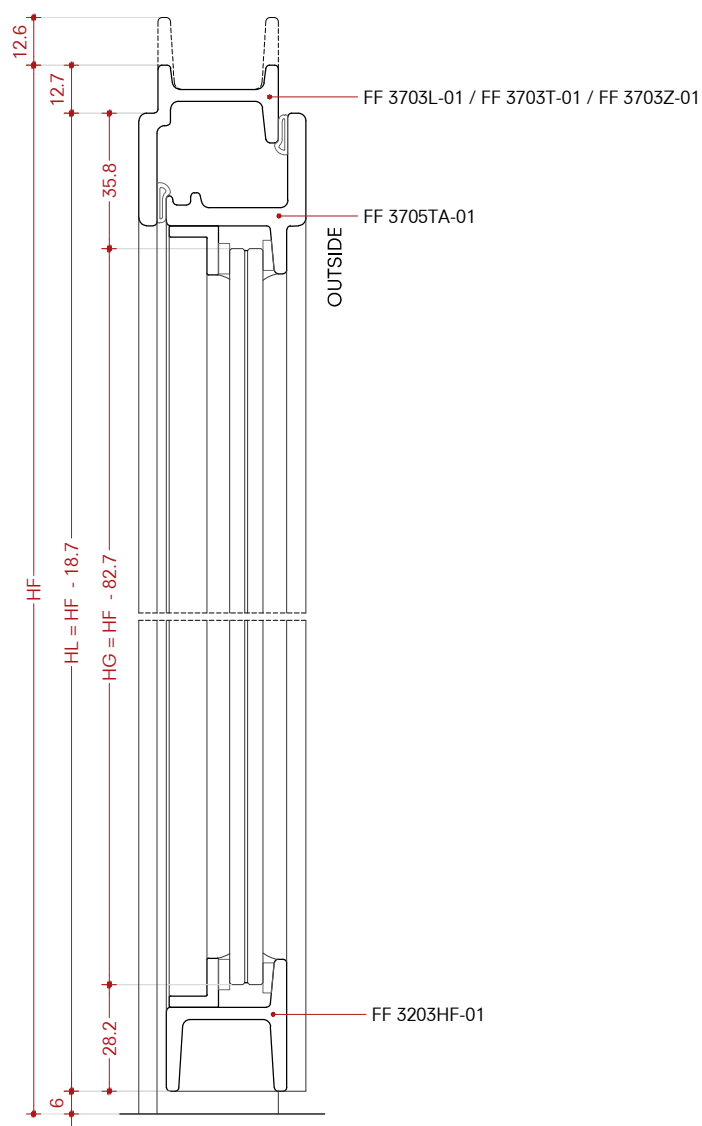
CLASSIC



Cutting length
Double leaf door
Open out

Liste di taglio
Porta a due battenti
Apertura esterna

Longitud de corte
Puerta abatible de dos hojas
Que se abre hacia fuera

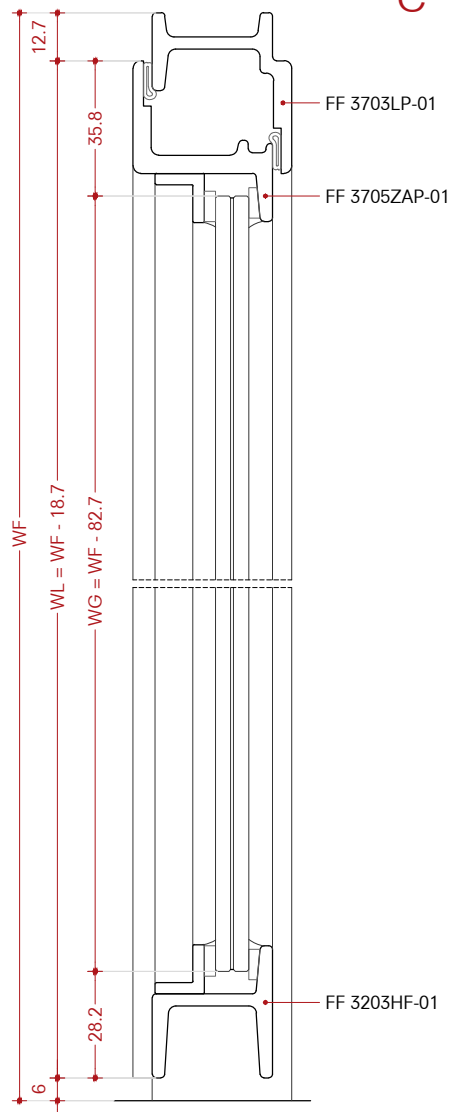


Cutting length
Single leaf pivot door

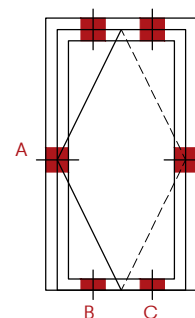
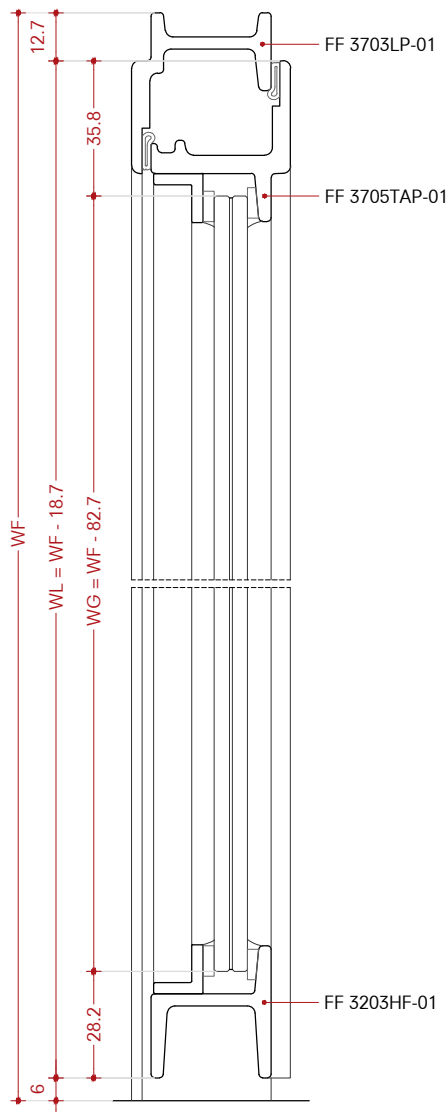
Liste di taglio
Porta pivot a un battente

Longitud de corte
Puerta pivote de una hoja

B

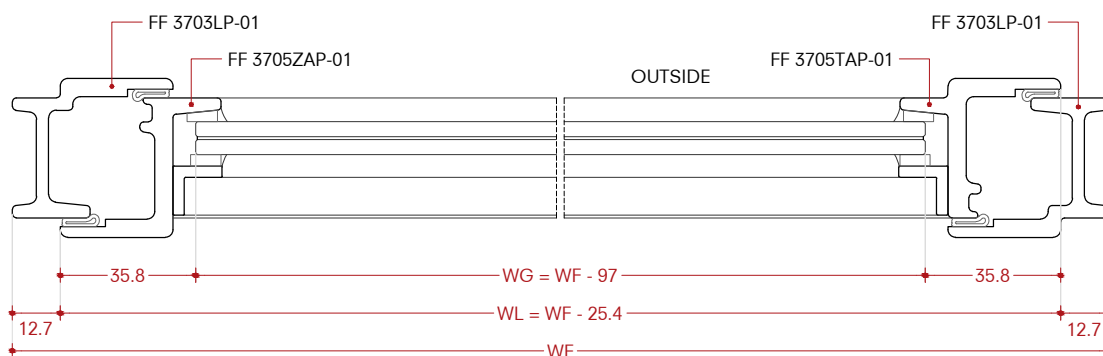


C



CLASSIC

A



Note:

Evaluate the rotation point position.

Nota:

Valutare la posizione del punto di rotazione.

Nota:

Evalúe la posición del punto de rotación.

Cutting length

Porta pivot a due battenti

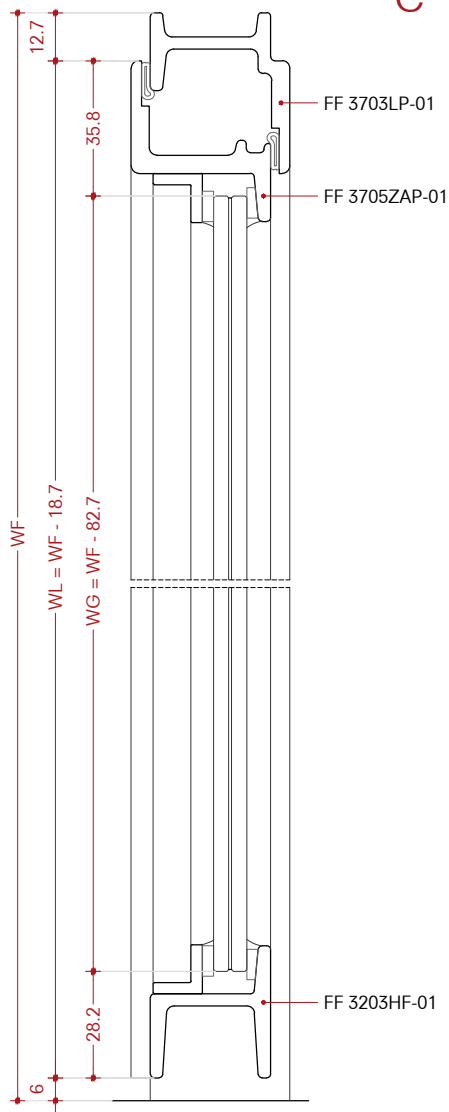
Liste di taglio

Porta pivot a due battenti

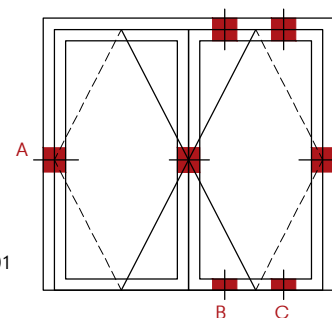
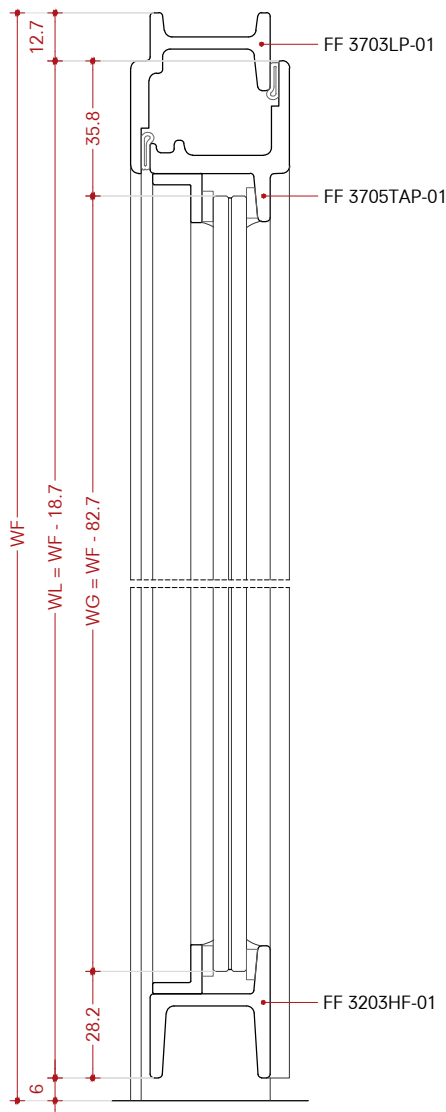
Longitud de corte

Puerta pivote de dos hojas

B

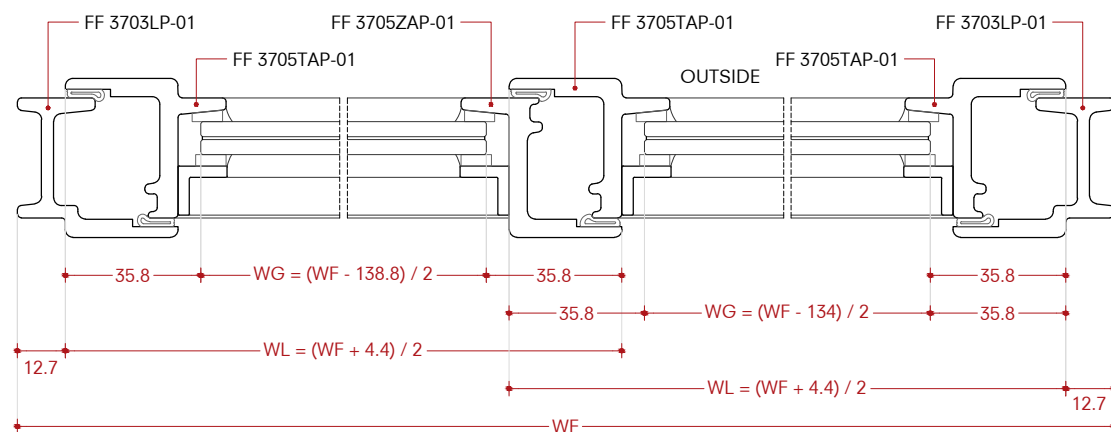


C



CLASSIC

A



Note:

Evaluate the rotation point position.

Nota:

Valutare la posizione del punto di rotazione.

Nota:

Evalúe la posición del punto de rotación.

Cutting length

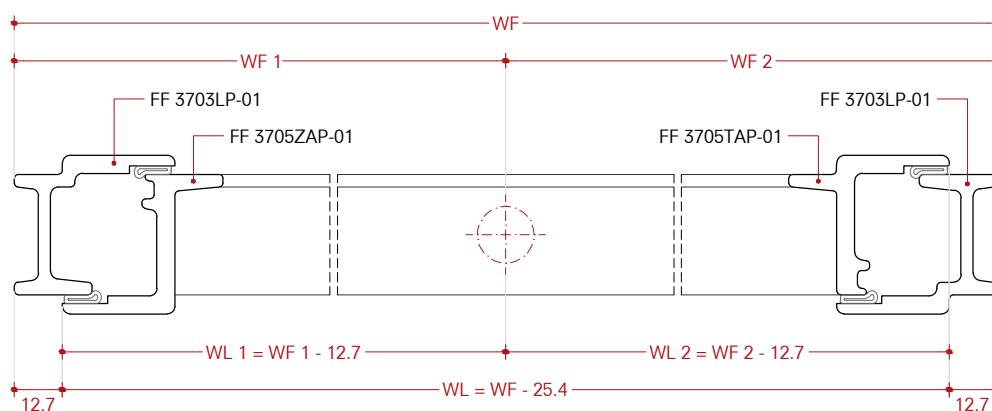
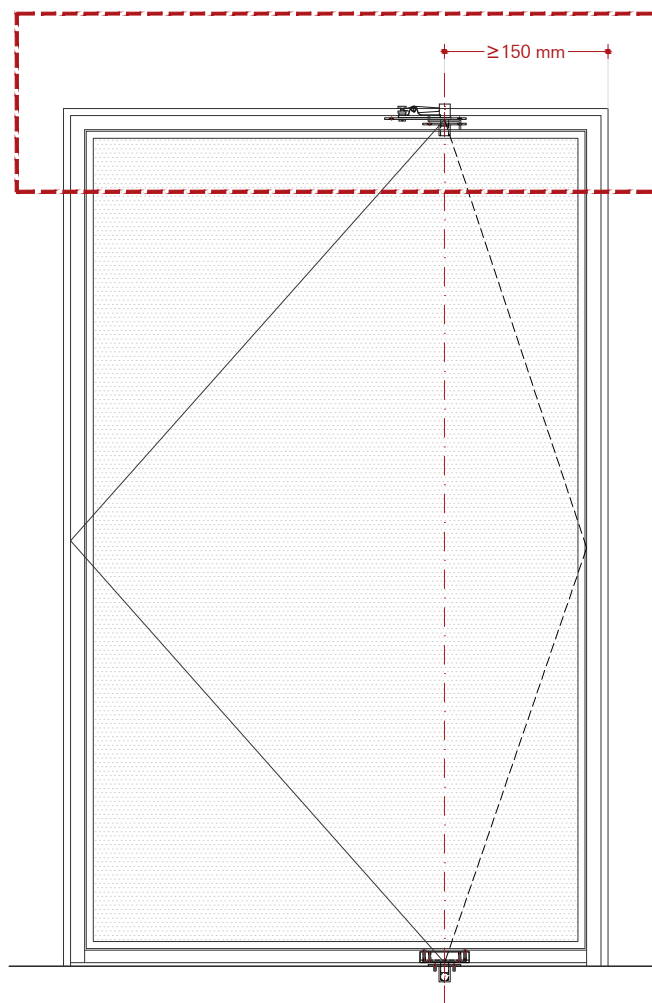
Upper frame and leaf profile
Single leaf pivot door

Liste di taglio

Traverso superiore telaio e anta
Porta pivot a un battente

Longitud de corte

Travesaño superior de marco y hoja
Puerta pivote de una hoja



Note:

Evaluate the rotation point position.

Nota:

Valutare la posizione del punto di rotazione.

Nota:

Evalúe la posición del punto de rotación.

Welding**Saldatura****Soldadura****5.3****Legend**

+ = Fixed
— = Open in
- - - = Open out
Dimensions in: mm
Scale 1:1 - 1:2
☀ = Spot weld
 = Welding
CL = Cutting Length
HF = Height Frame
HG = Height Glass
HL = Height Leaf
WF = Width Frame
WG = Width Glass
WL = Width Leaf

Legenda

+ = Anta fissa
— = Apertura interna
- - - = Apertura esterna
Misure in: mm
Scala 1:1 - 1:2
☀ = Punto saldatura
 = Saldatura
CL = Lunghezza di taglio
HF = Altezza telaio
HG = Altezza vetro
HL = Altezza anta
WF = Larghezza telaio
WG = Larghezza vetro
WL = Larghezza anta

Leyenda

+ = Fijo
— = Apertura interna
- - - = Apertura externa
Medidas en: mm
Escala 1:1 - 1:2
☀ = Punto soldadura
 = Soldadura
CL = Longitud de corte
HF = Altura marco
HG = Altura vidrio
HL = Altura hoja
WF = Longitud marco
WG = Longitud vidrio
WL = Longitud hoja

Welding

W20 profiles can be welded without taking any particular precautions, using the standard CMT or MIG/MAG welding procedure. We recommend using a smoke extraction system and ensuring sufficient ventilation of the room. Ensure the welding is thorough and clean.

Saldatura

I profili W20 possono essere saldati senza particolari precauzioni, utilizzando la procedura di saldatura standard CMT o MIG/MAG. Raccomandiamo di utilizzare un sistema di aspirazione fumi e di garantire una ventilazione sufficiente della stanza. Assicurarsi che la saldatura sia accurata e pulita.

Soldadura

Los perfiles W20 pueden procesarse con los procedimientos de soldadura habituales, como MIG/MAG o CMT, sin ningún tipo de medida especial. Durante la soldadura, recomendamos utilizar un extractor de humos y garantizar la ventilación adecuada de la sala. Garantizar una soldadura concienzuda y limpia.

Frame welding

1. Deburr and bevel bar ends.
2. Assemble the frame on the welding table.
3. Check frame dimensions.
4. Check angularity.
5. Check diagonal dimensions.
6. Fix position with small welding spots.
7. Recheck diagonal dimensions.
8. Carry out the welding alternating from the inside to the outside.
9. Recheck diagonal dimensions.
10. Grind the corners, creating a flat and smooth surface.

Saldatura del telaio

1. Sbavare e smussare l'estremità della barra.
2. Saldare il telaio su di un tavolo di saldatura.
3. Controllare le dimensioni del telaio.
4. Controllare gli angoli.
5. Controllare le dimensioni delle diagonali.
6. Fissare la posizione con piccoli punti di saldatura.
7. Ricontrollare le dimensioni delle diagonali.
8. Eseguire la saldatura procedendo dall'interno verso l'esterno dell'angolo.
9. Ricontrollare le dimensioni delle diagonali.
10. Rettificare dei cordoni di saldatura, creando una superficie piana e liscia.

Soldadura del marco

1. Desbarbar y biselar los extremos de las barras.
2. Montar el marco sobre la mesa de soldadura.
3. Comprobar las dimensiones del marco.
4. Comprobar los ángulos.
5. Comprobar las diagonales.
6. Fijar la posición del marco con pequeños puntos de soldadura.
7. Volver a comprobar las diagonales.
8. Ejecutar la soldadura desde el lado interior al lado exterior, alternándolos.
9. Volver a comprobar las diagonales.
10. Rectificar en plano las costuras de soldadura en las esquinas.

Welding profiles made

The best results were achieved using the following two welding procedures:

MAG (metal-arc active gas)

Inert gas: CAR 18 (18% CO₂ and 82% Argon sec. EN 439 M21)
Welding rod: DT-Ziro, Ø0.8 mm (Dratec)

Preparation of profile cut:
Bevel bar ends (ca. 2 mm x 45°).
Do not bevel the last 5 mm of the outermost point in order to avoid burning away the sharp edge. Spot-weld the inner and outer corners, then draw a weld seam from the inside outward.

CMT (cold metal transfer)

Type of gas: 100% Argon
Welding rod:
A) CuSi₃, Ø0.8 mm (Dratec/Bedra)
B) DT-Ziro, Ø0.8 mm (Dratec)

Preparation of profile cut:
Bevel bar ends (ca. 2 mm x 45°).
Do not bevel the last 5 mm of the outermost point in order to avoid burning away the sharp edge. Spot-weld the inner and outer corners, then draw a weld seam from the inside outward. The CMT welding procedure is well suited to welding steel profiles. One advantage of the CuSi₃ welding rod is that weld seams can be ground flat in a significantly shorter amount of time. This kind of rod also proves especially advantageous when dealing with stepped flanges. The mechanical resistance of CuSi₃ filling material is lower than that of DT-Ziro, which means that it should not be used with very large casement windows or doors. Smaller and medium size window leaves can be welded with CuSi₃. However, steel hinges should be welded only with DT-Ziro filling material.

Saldatura di profili in acciaio

I migliori risultati di saldatura si raggiungono con i seguenti due metodi:

MAG (metal-arc active gas)

Tipo di gas: miscela CAR 18 (18% CO₂ e 82% Argon sec. EN 439 M21)
Materiale di riempimento: DT-Ziro, Ø0.8 mm (es. Dratec)

Preparazione dell'angolo: creare uno smusso di ca. 2 mm x 45° su entrambe le facce esterne del profilo. Non smussare gli ultimi 5 mm della punta esterna per mantenere inalterata la forma dello spigolo. Fissare l'angolo con un punto di saldatura sui due lati del bordo, quindi eseguire la saldatura.

CMT (cold metal transfer)

Tipo di gas: 100% Argon
Materiale di riempimento:
A) CuSi₃, Ø0.8 mm (Dratec/Bedra)
B) DT-Ziro, Ø0.8 mm (Dratec)

Preparazione dell'angolo: creare uno smusso di ca. 2 mm x 45° su entrambe le facce esterne del profilo. Non smussare gli ultimi 5 mm della punta esterna per mantenere inalterata la forma dello spigolo. Fissare l'angolo con un punto di saldatura sui due lati del bordo, quindi eseguire la saldatura. La saldatura CMT è particolarmente adatta per la saldatura di profili in acciaio. Il filo CuSi₃ ha il vantaggio di poter rettificare le saldature in pochissimo tempo. La resistenza meccanica del riempitivo CuSi₃ è inferiore a quella del filler DT-Ziro, quindi non dovrebbe essere utilizzato su ante molto grandi. Per tale motivo, questo tipo di saldatura può tranquillamente essere utilizzato su porte e finestre di dimensioni piccole e medie. Inoltre, le cerniere devono essere sempre saldate solo con riempimento DT-Ziro.

Soldadura de perfiles en acero

Con los dos siguientes procedimientos de soldadura se consiguen los mejores resultados:

MAG (metal-arc active gas)

Gas de protección: CAR 18 (18% de CO₂ y 82% de argón, de acuerdo con EN 439 M21)
Cordón de soldadura: DT-ZiRo, diámetro de 0.8 mm (Dratec)

Preparación de los cortes del perfil:
Biselar los extremos de las barras (aprox. 2 mm x 45°). No biselar los últimos 5 mm del extremo exterior para evitar la abrasión del borde afilado. Puntear las esquinas interiores y exteriores; luego, tirar de la costura de soldadura desde dentro hacia fuera.

CMT (cold metal transfer)

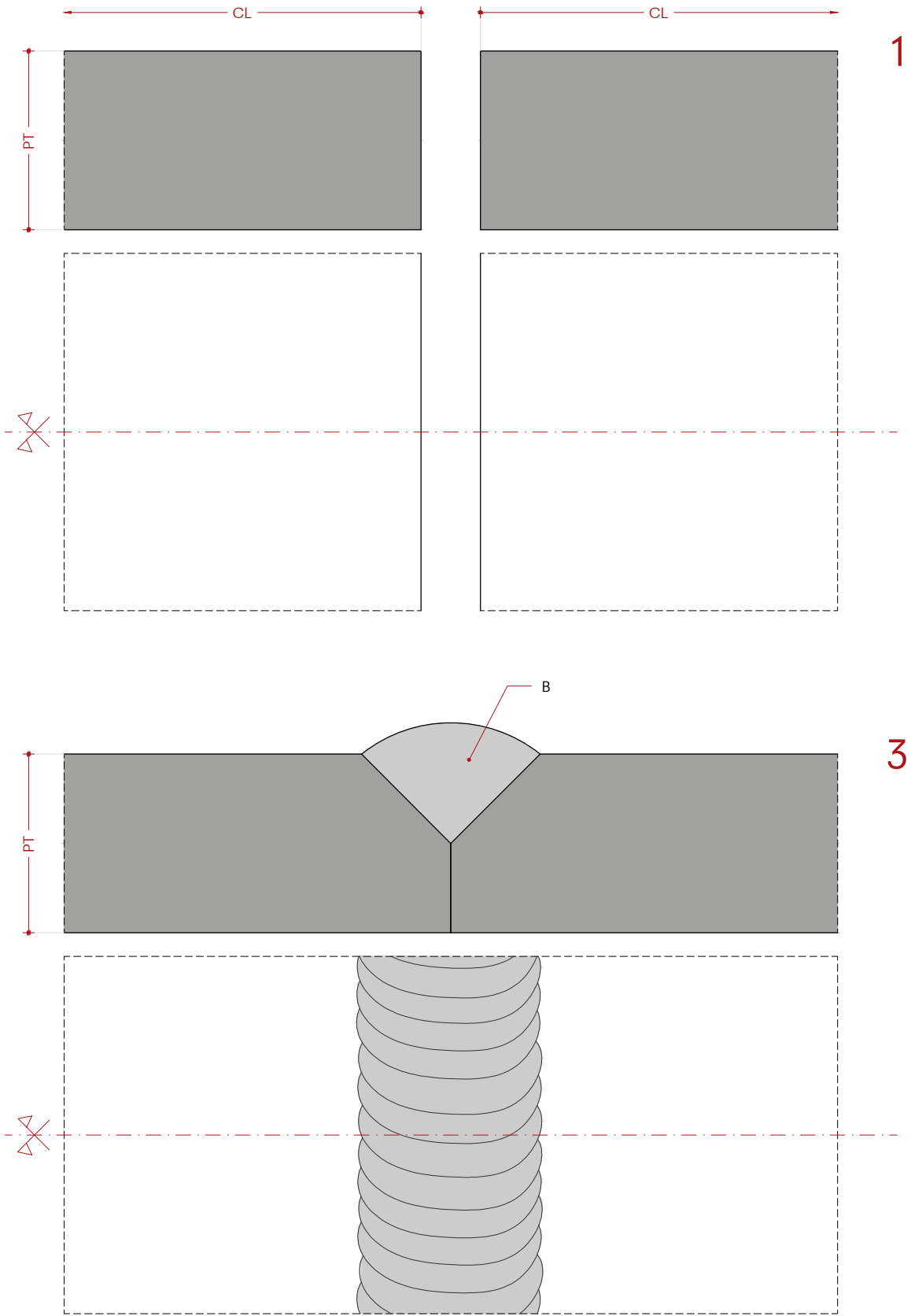
Gas de protección: 100% argón
Cordón de soldadura:
A) CuSi₃, diámetro 0.8 mm (Dratec/Bedra)
B) DT-ZiRo, diámetro de 0.8 mm (Dratec)

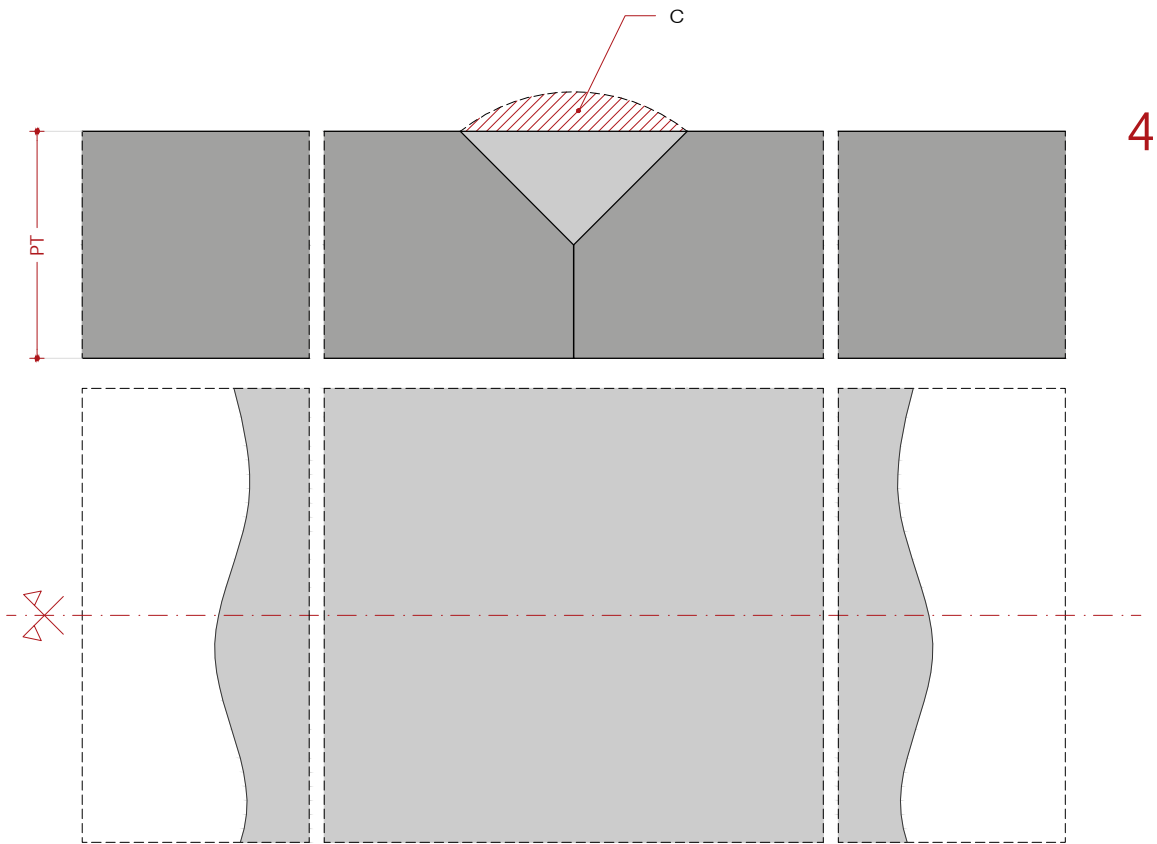
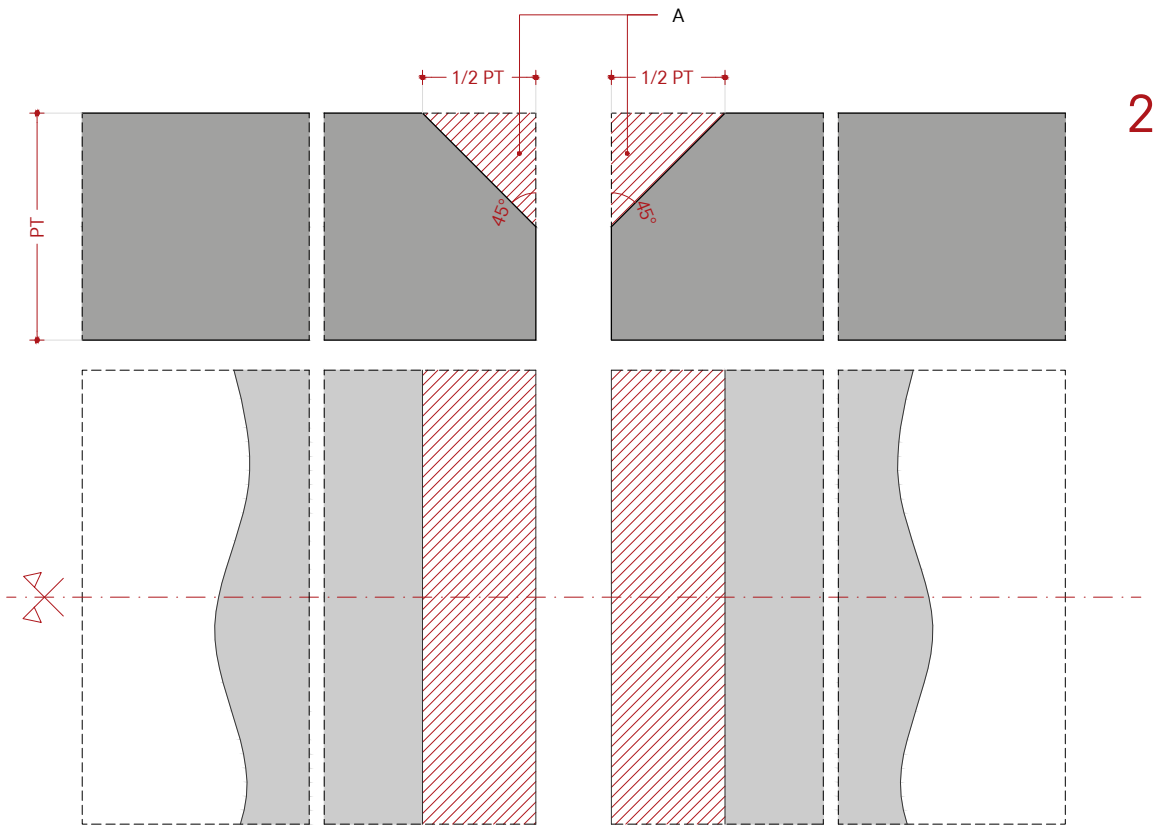
Preparación de los cortes del perfil:
Biselar los extremos de las barras (aprox. 2 mm x 45°). No biselar los últimos 5 mm del extremo exterior para evitar la abrasión del borde afilado. Puntear las esquinas interiores y exteriores; luego, tirar de la costura de soldadura desde dentro hacia fuera. El procedimiento de soldadura CMT es muy apropiado para soldar perfiles de acero. Una ventaja del cordón de soldadura CuSi₃ es que permite realizar el rectificado plano de las costuras de soldadura en un periodo de tiempo considerablemente reducido. Este cordón más blando resulta particularmente útil y beneficioso para las bridas escalonadas. En comparación con el material de relleno DT-Ziro, el agarre mecánico del material de relleno CuSi₃ es menor, por lo que no debe utilizarse para ventanas o puertas abatibles particularmente grandes. Las hojas de ventana más pequeñas y medianas se pueden soldar de forma segura con el cordón CuSi₃.

Welding instructions

Istruzioni saldatura

Instrucciones de soldadura





PT = Profile thickness

- A) Chamfer
- B) Welding
- C) Grind excess part

PT = Spessore profilo

- A) Smussare
- B) Saldatura
- C) Smerigliare parte in eccesso

PT = Espesor de perfil

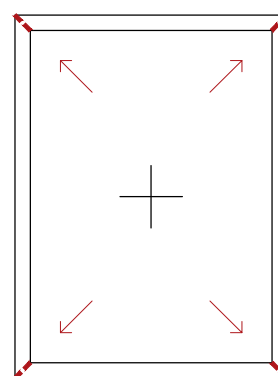
- A) Chaflán
- B) Soldadura
- C) Esmerilar la parte sobrante

FF 3203TF-01 / FF 3203TF-01

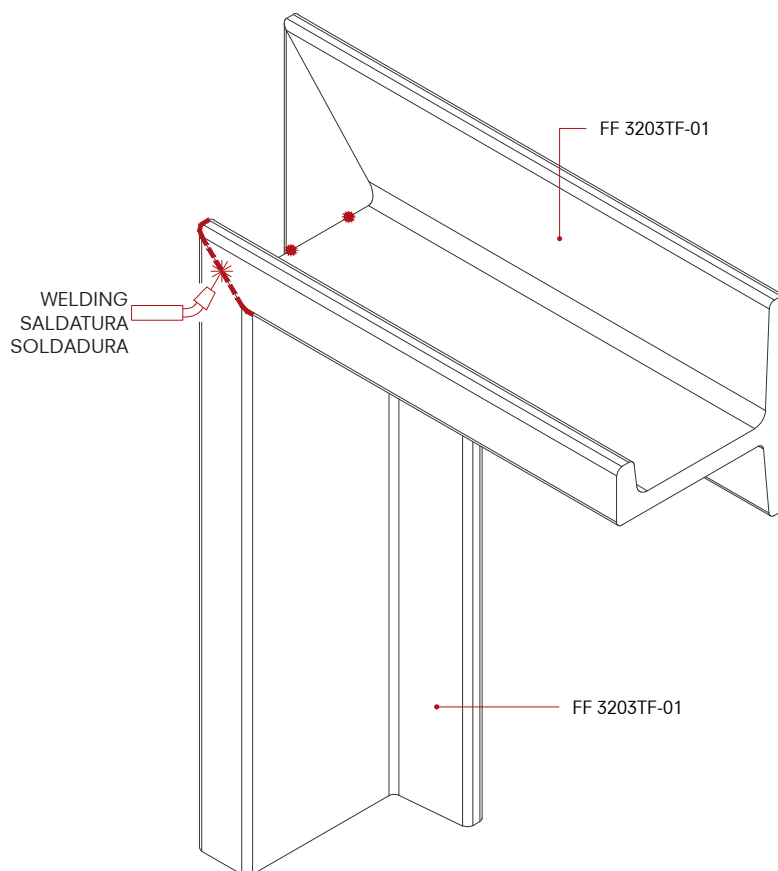
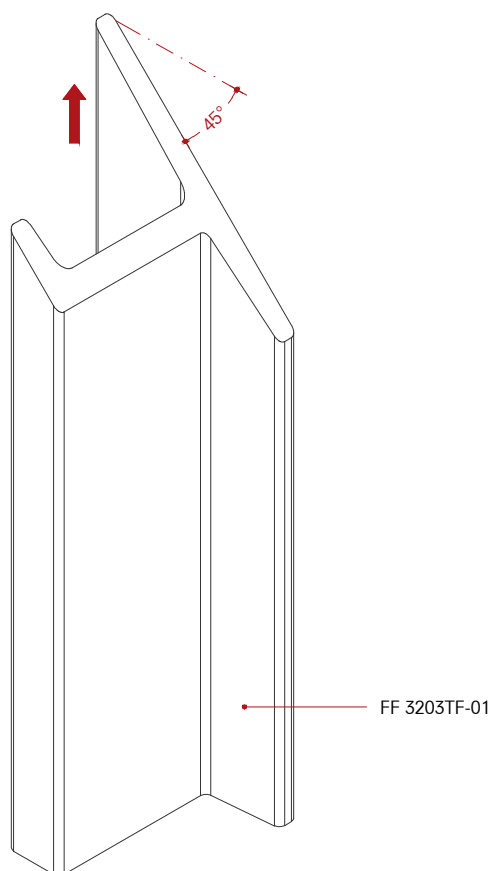
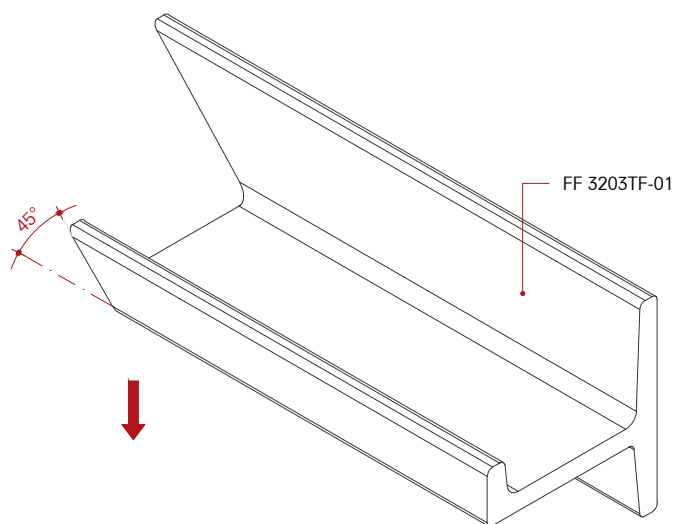
Fixed partition

Finestra telaio fisso

Ventana fija



Internal view
Vista interna
Vista interna

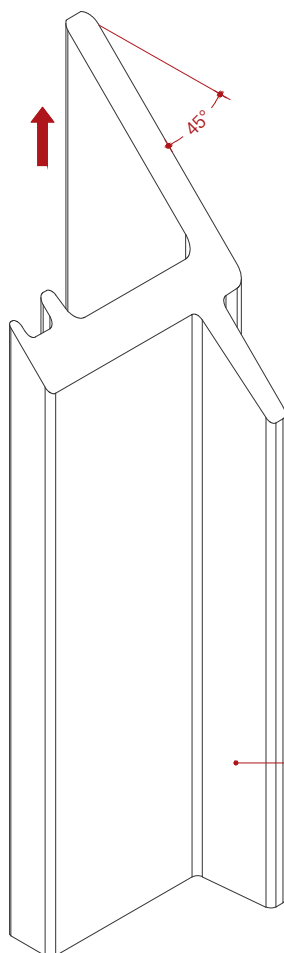
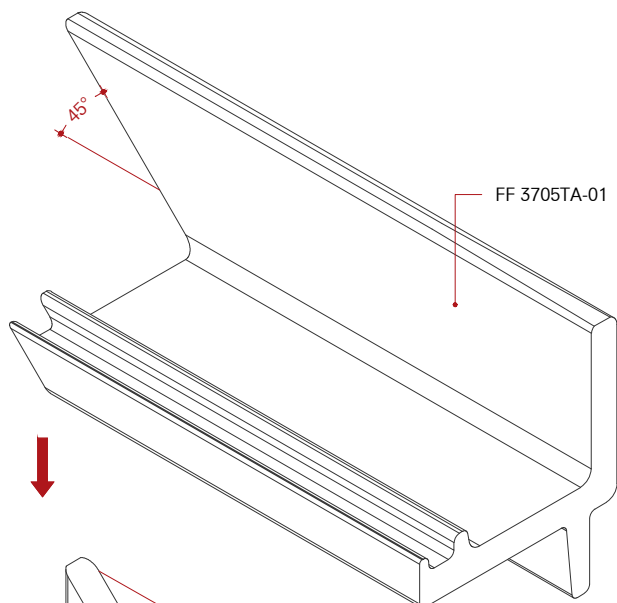


FF 3705TA-01 / FF 3705TA-01

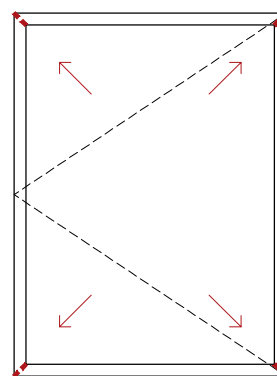
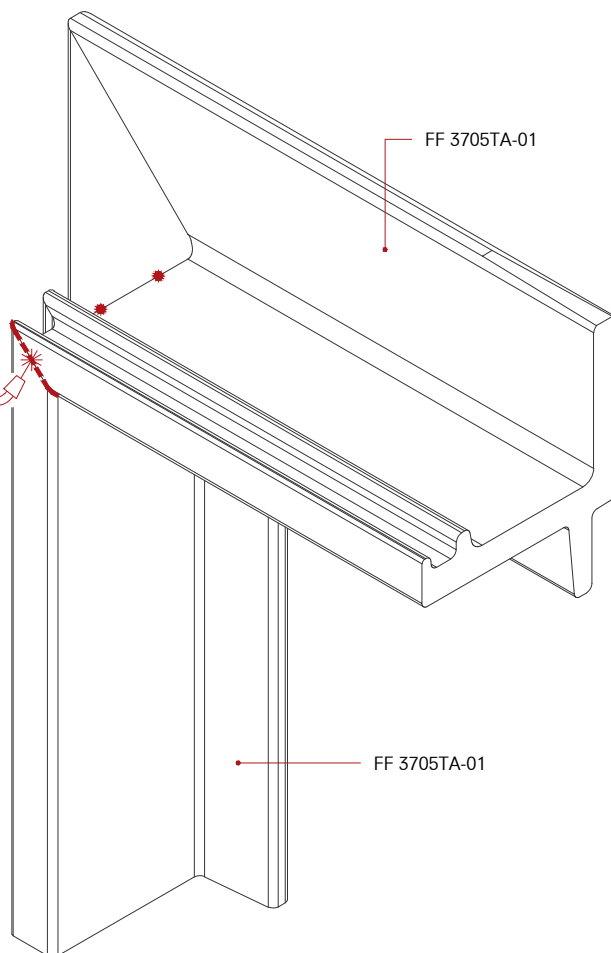
Single leaf window open out

Finestra a un battente apertura esterna

Ventana de una hoja que se abre hacia fuera



WELDING
SALDATURA
SOLDADURA



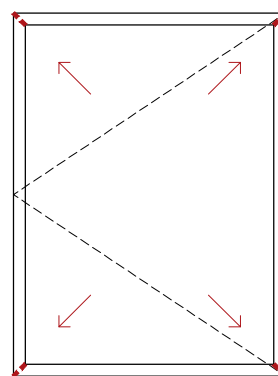
Internal view
Vista interna
Vista interna

FF 3705TS-01 / FF 3705TS-01

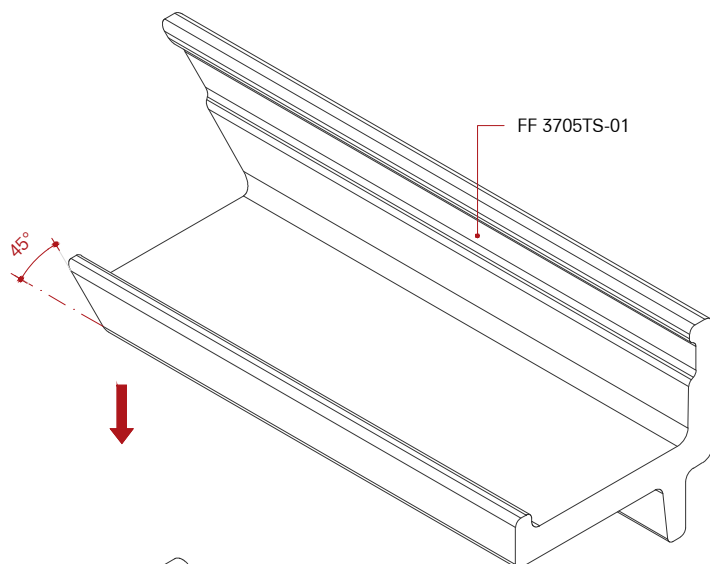
Single leaf window open out

Finestra a un battente apertura esterna

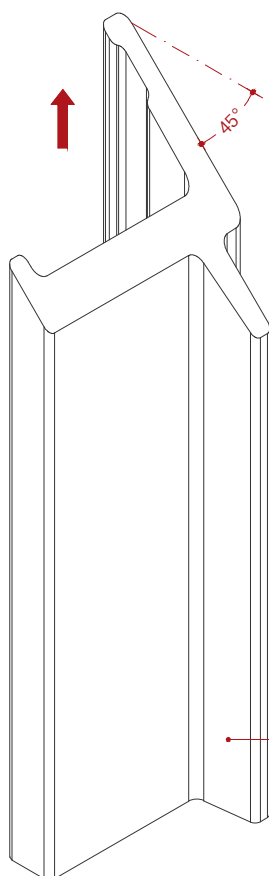
Ventana de una hoja que se abre hacia fuera



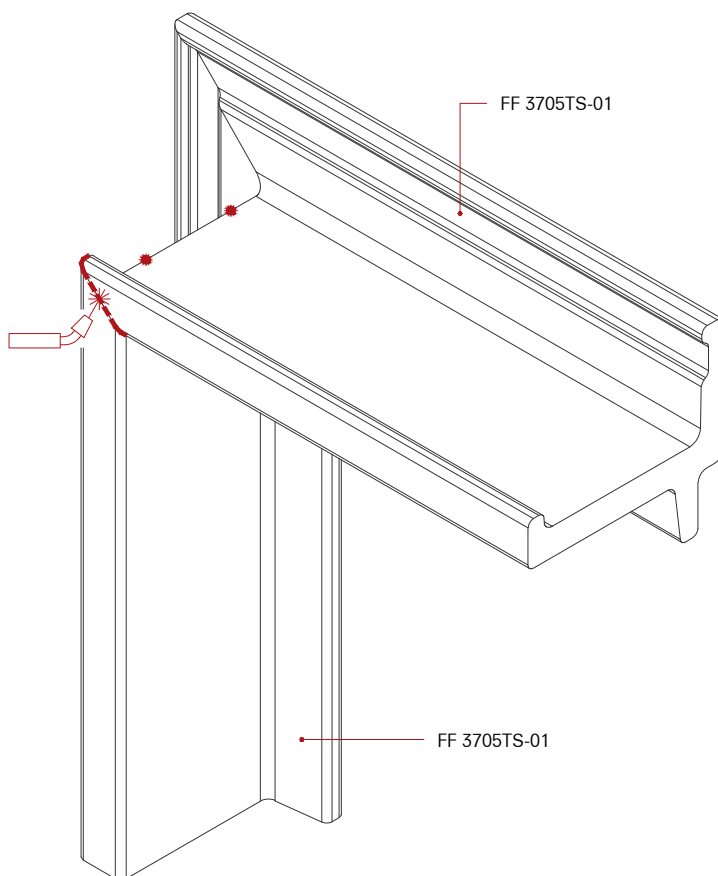
Internal view
Vista interna
Vista interna



FF 3705TS-01



FF 3705TS-01



FF 3705TS-01

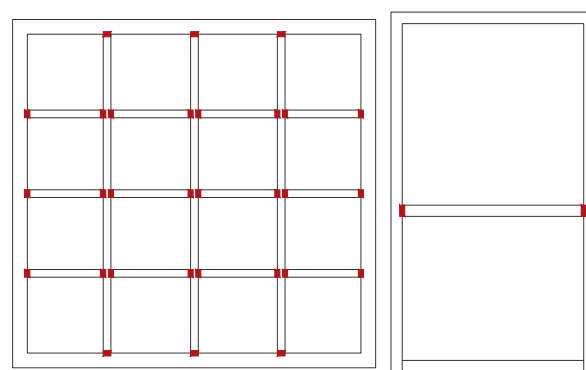
FF 3705TS-01

FF 4203LF-01 / FF 4203TR-14

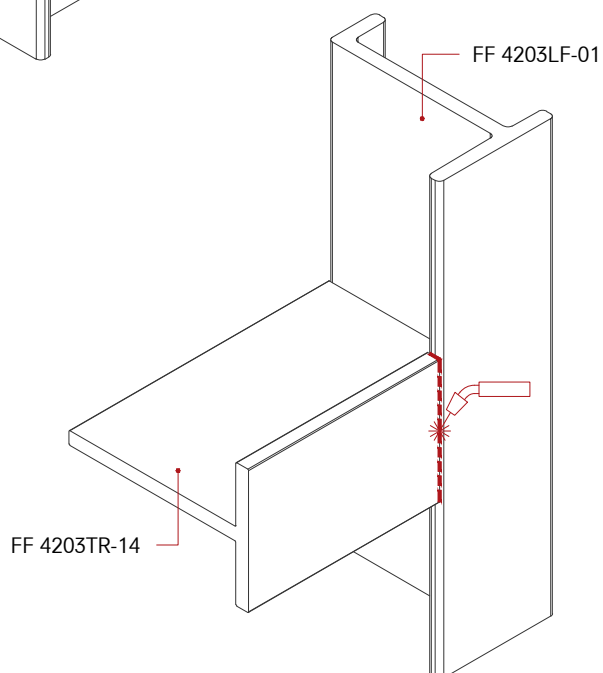
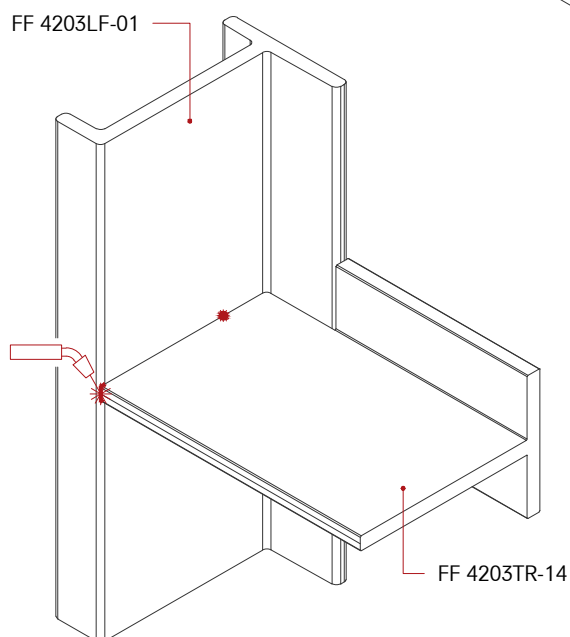
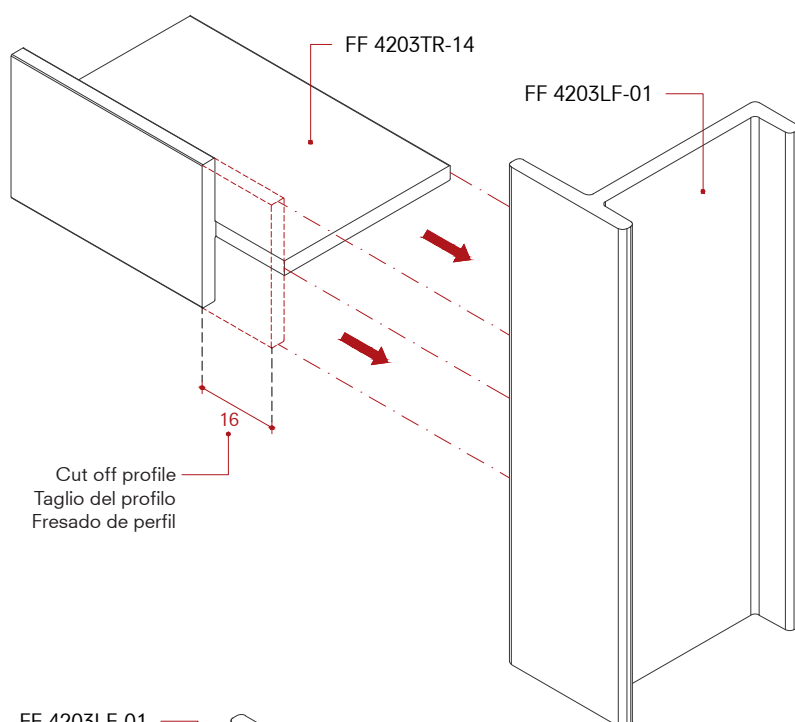
Fixed partitions

Partizioni fisse

Particiones - secciones fijas



Internal view
Vista interna
Vista interna



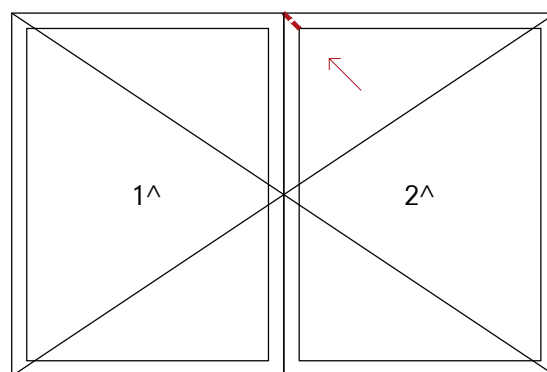
External view
Vista esterna
Vista externa

FF 3705TS-01 / FF 3705ZS-01
W20 Slim

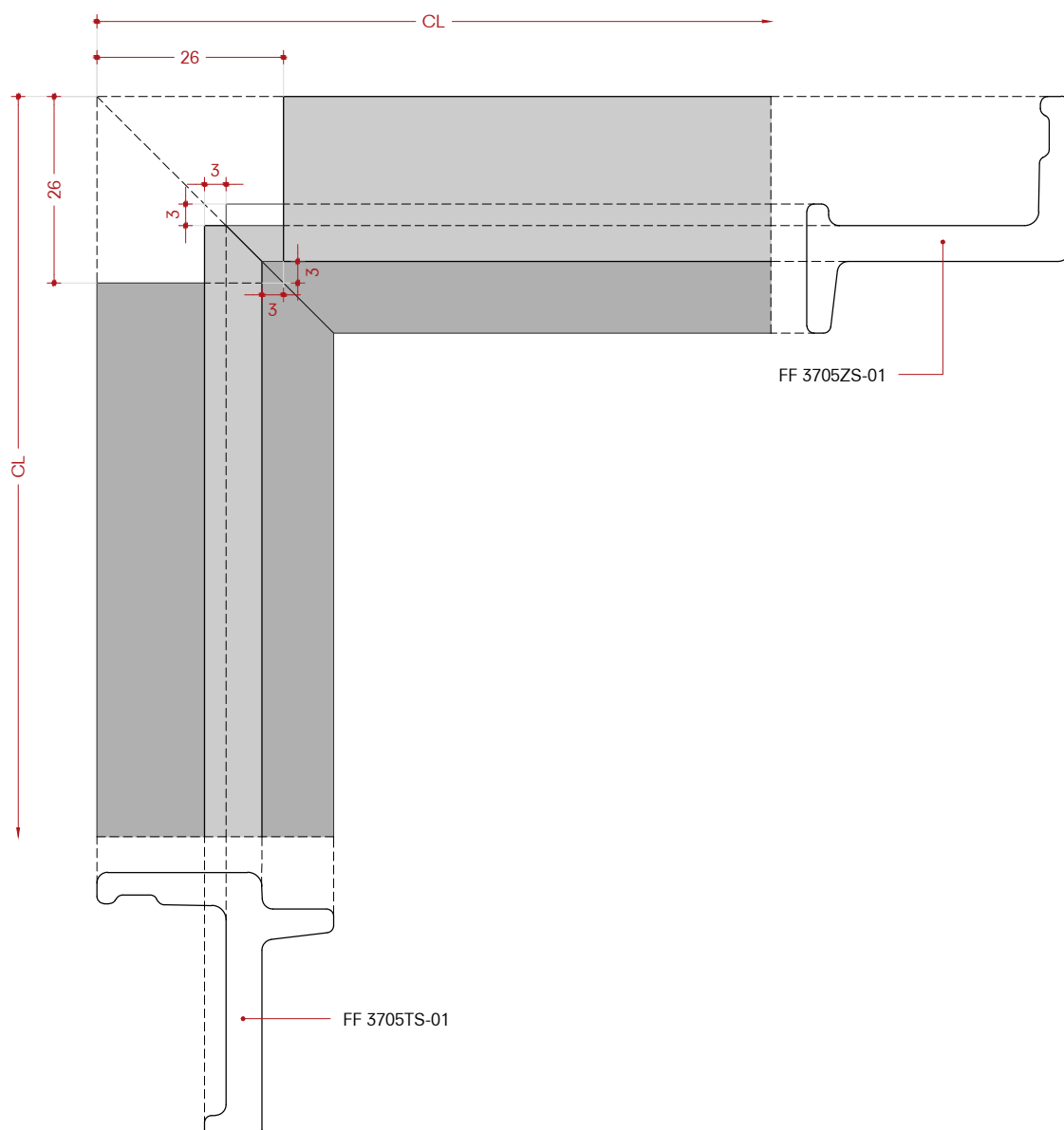
Double leaf window open in

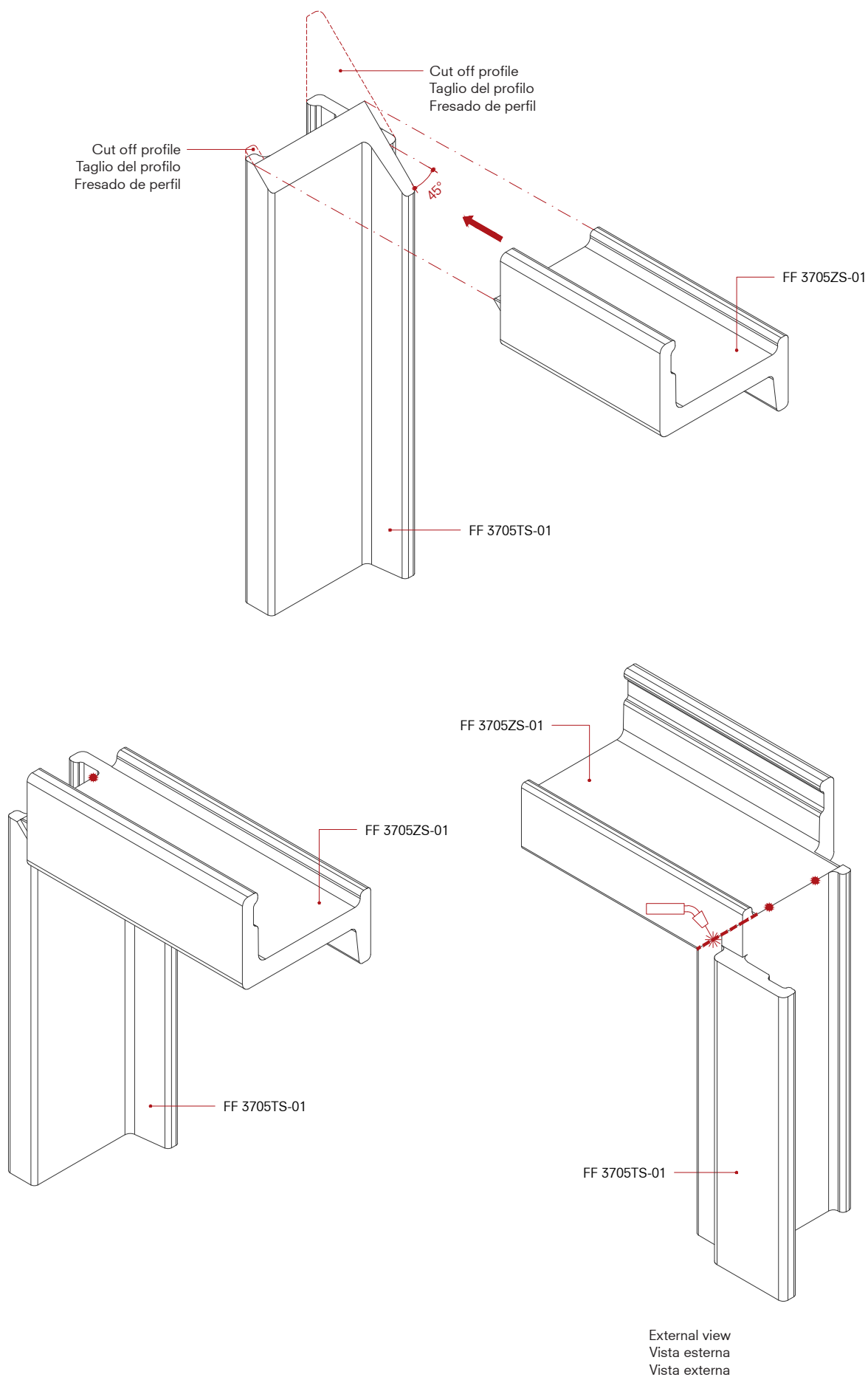
Finestra doppia anta apertura interna

Doble ventana que se abre hacia dentro



Internal view
Vista interna
Vista interna



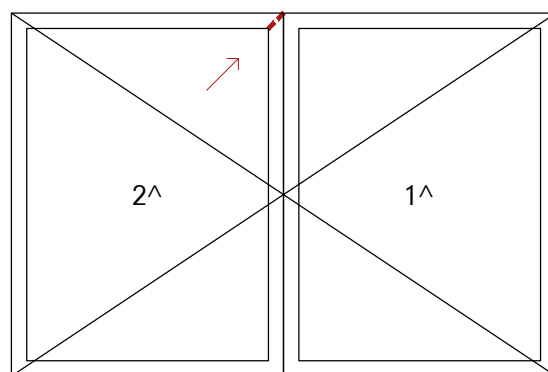


FF 3705TAP-01 / FF 3705ZA-01
W20 Classic

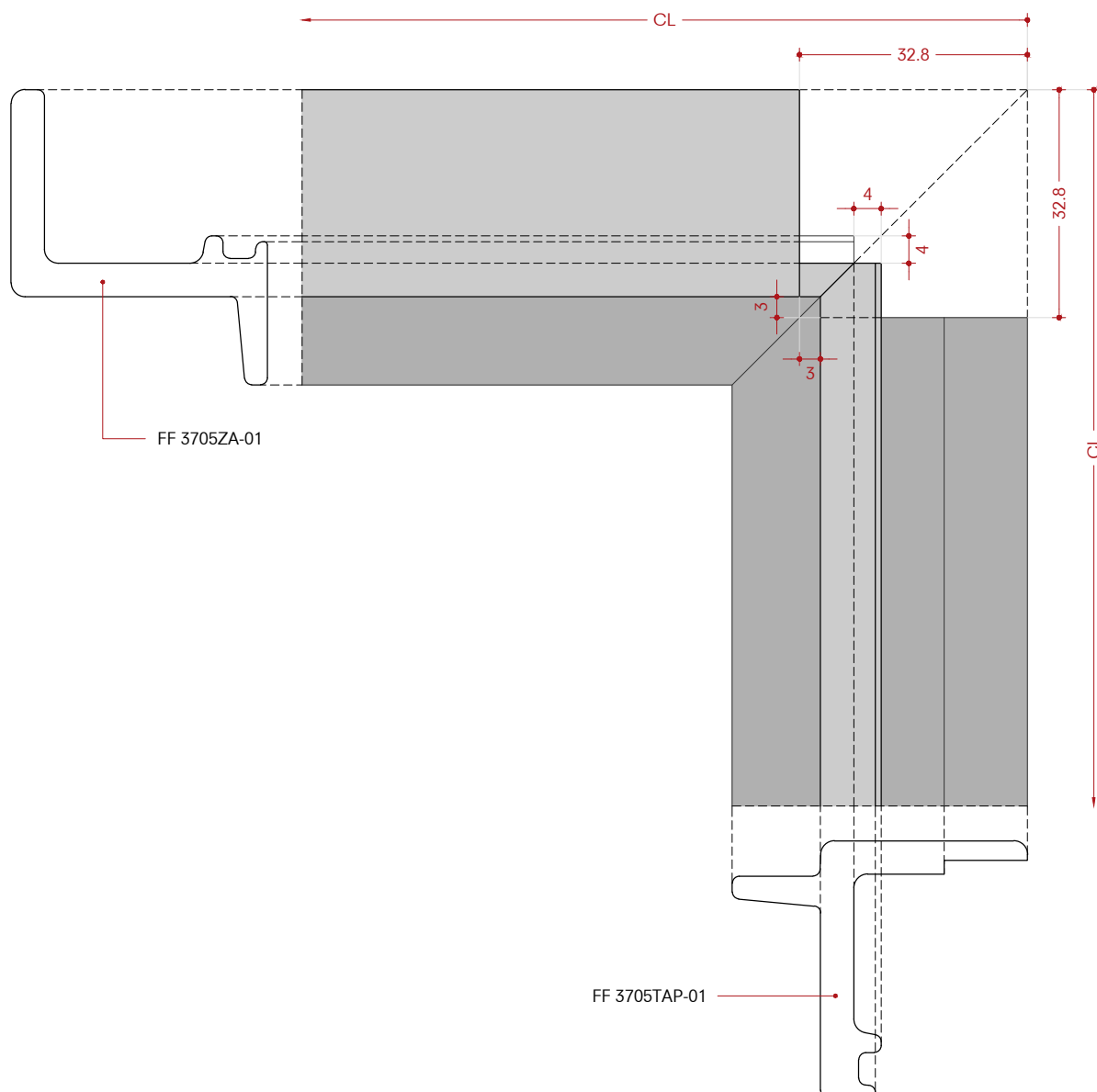
Double leaf window open in

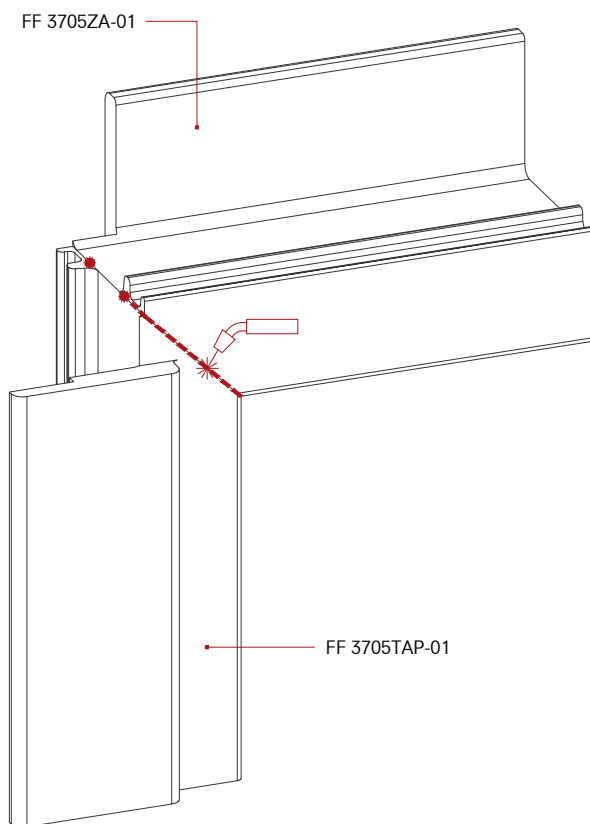
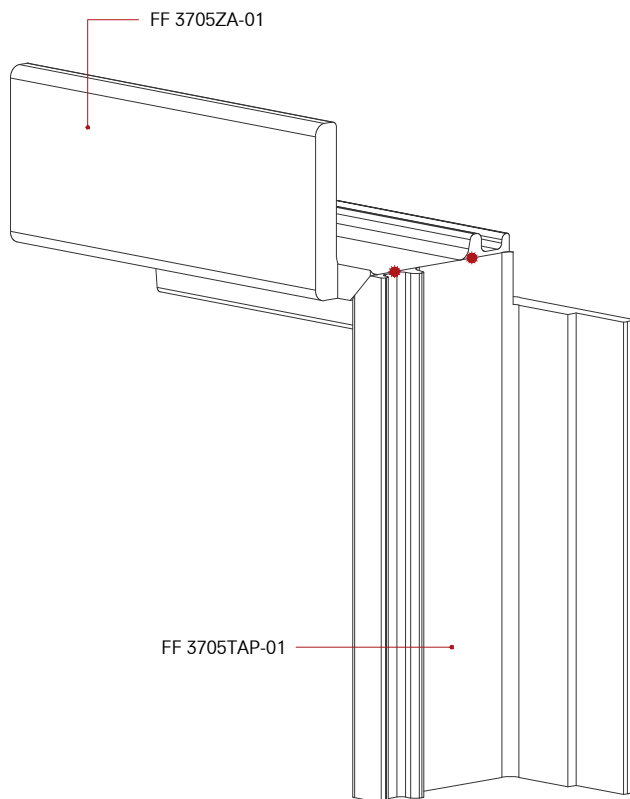
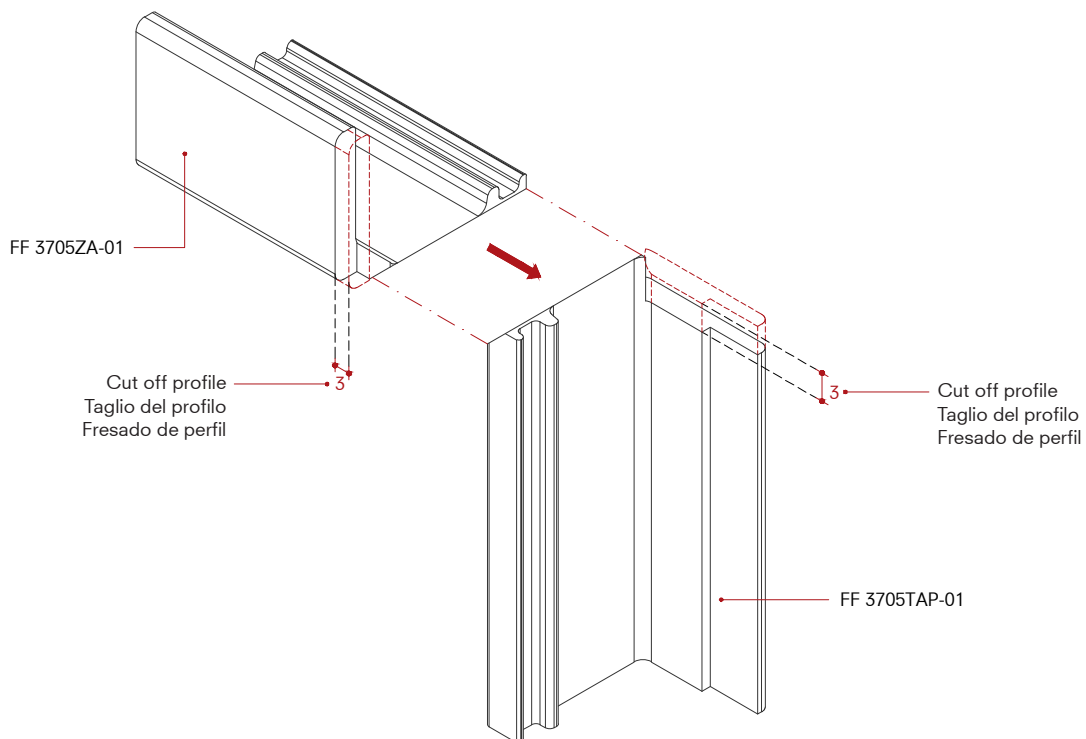
Finestra doppia anta apertura interna

Doble ventana que se abre hacia dentro



Internal view
Vista interna
Vista interna





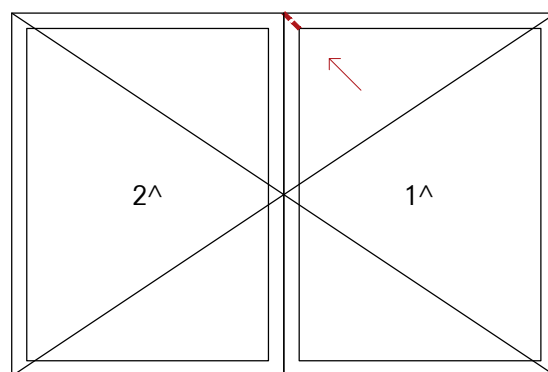
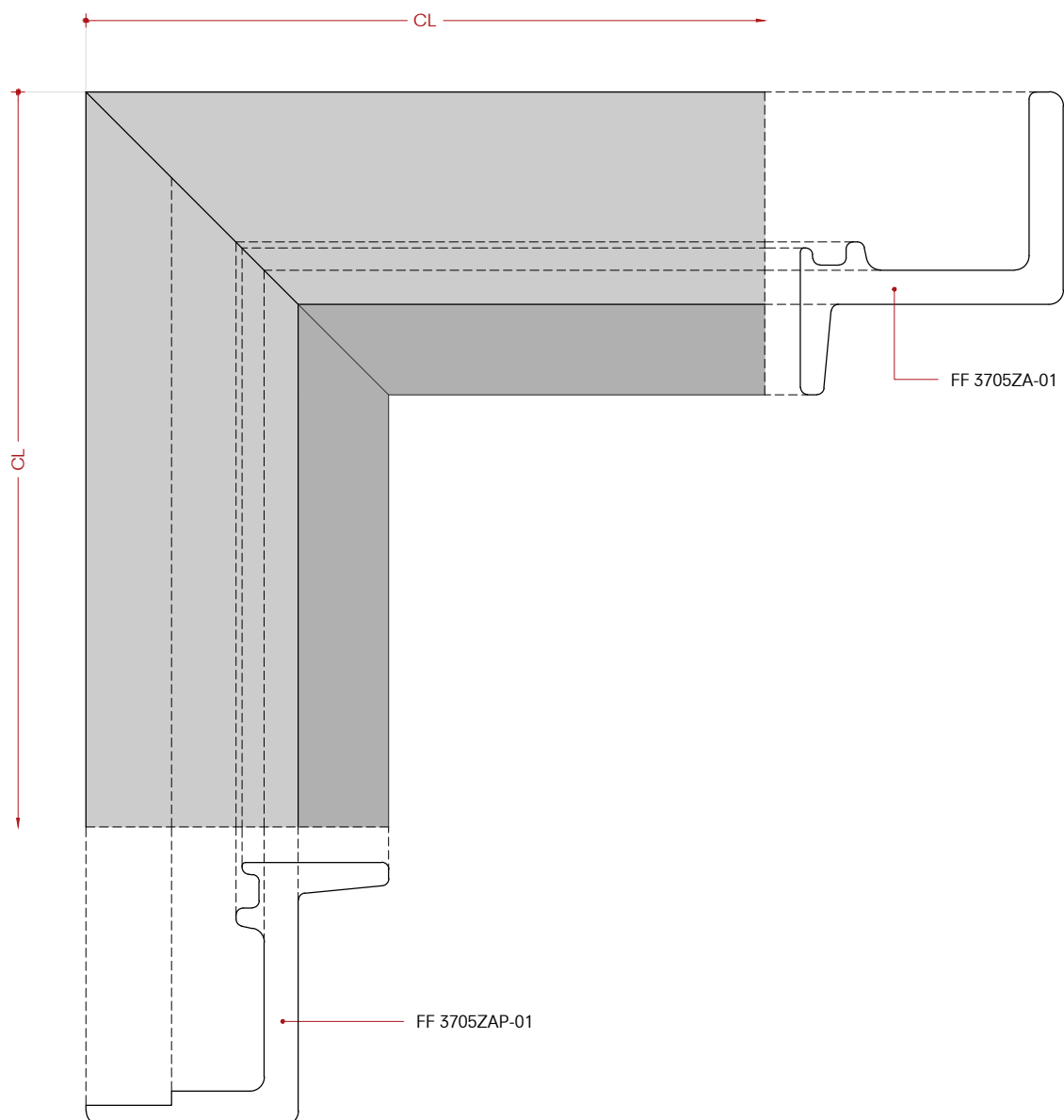
External view
Vista esterna
Vista externa

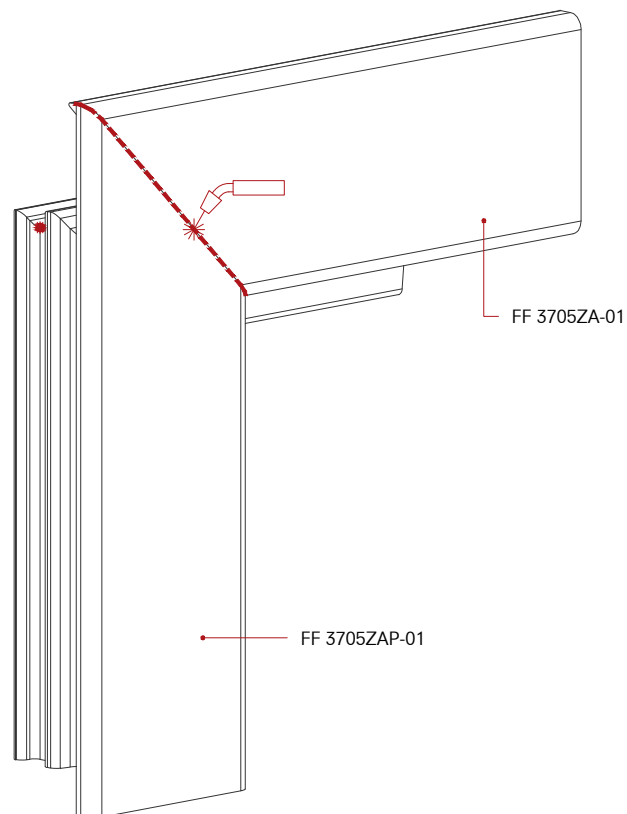
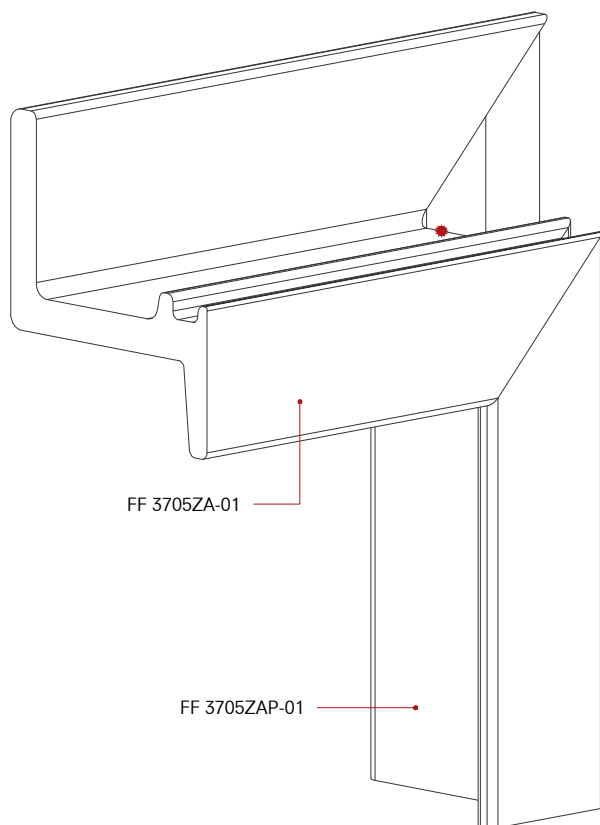
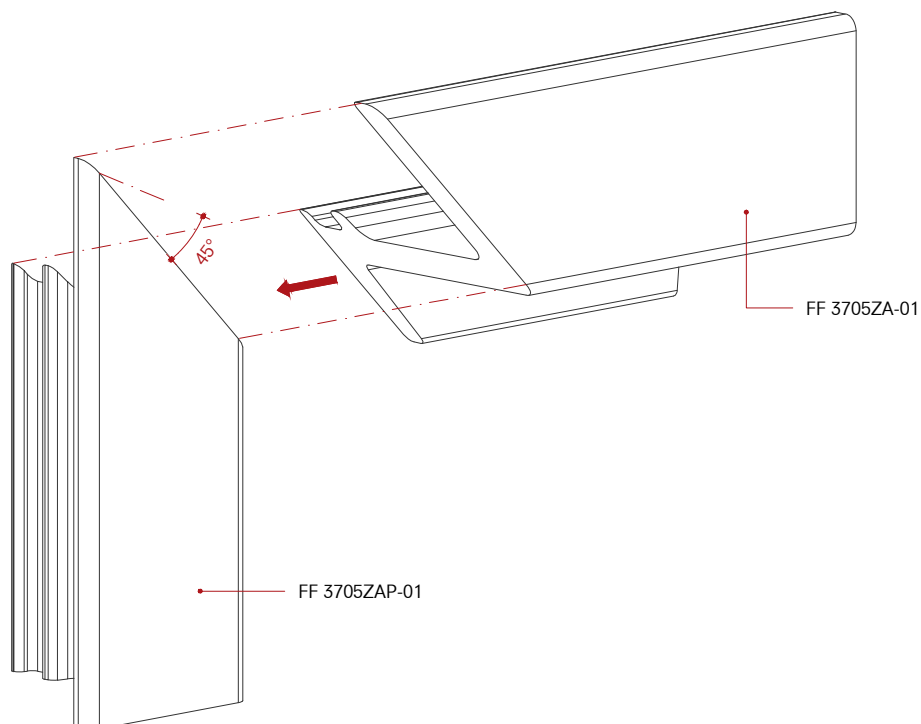
FF 3705ZAP-01 / FF 3705ZA-01
W20 Classic

Double leaf window open in

Finestra doppia anta apertura interna

Doble ventana que se abre hacia dentro

Internal view
Vista interna
Vista interna



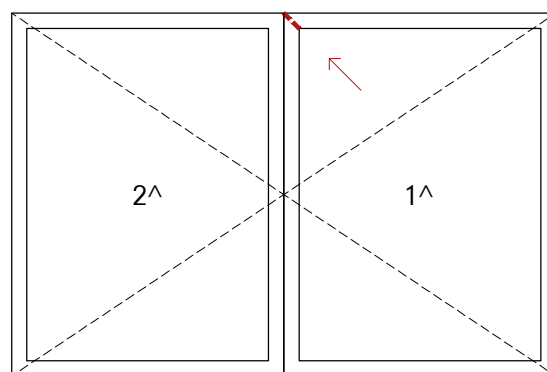
External view
Vista esterna
Vista externa

FF 3705TAP-01 / FF 3705TA-01
W20 Classic

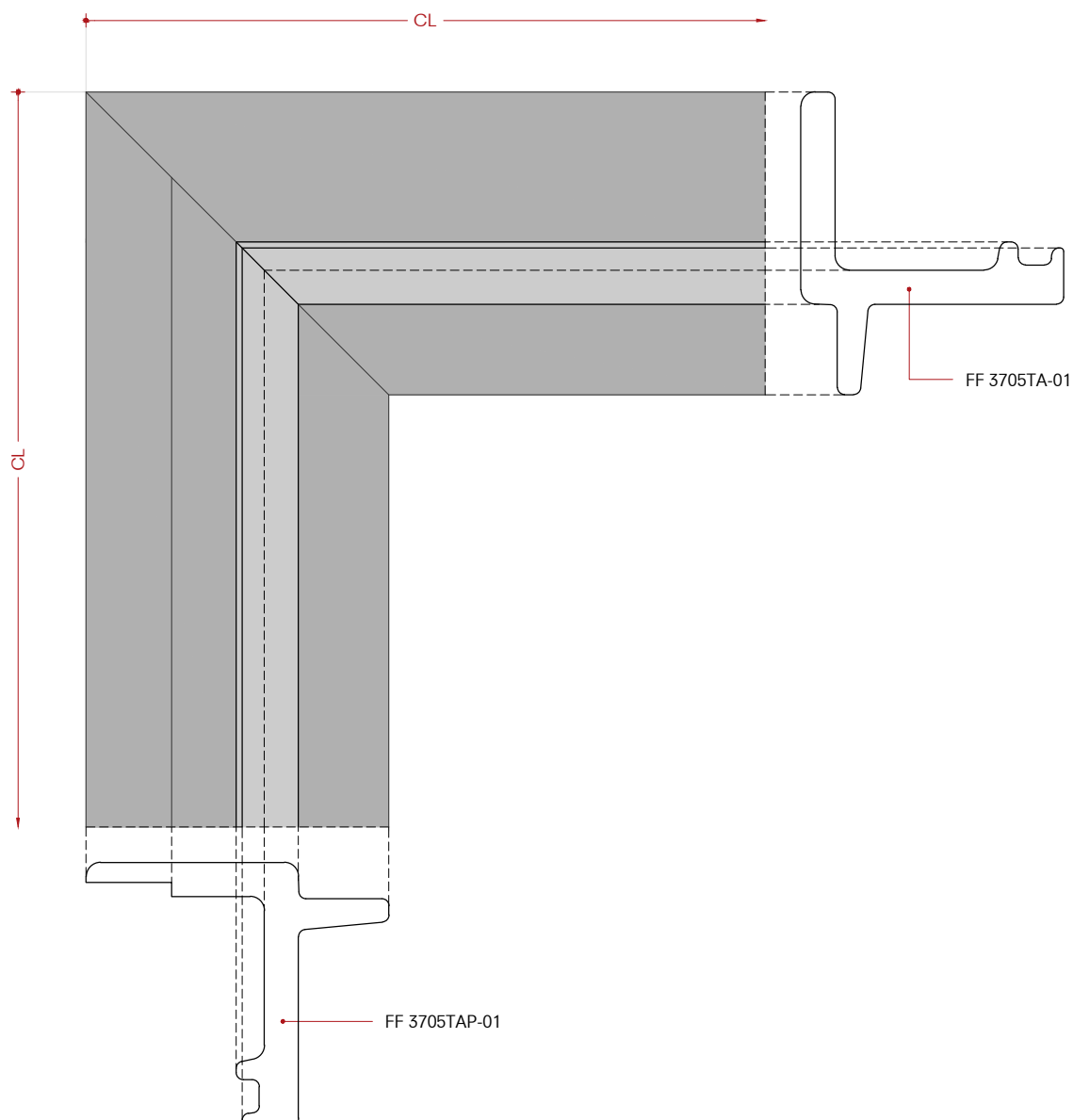
Double leaf window open out

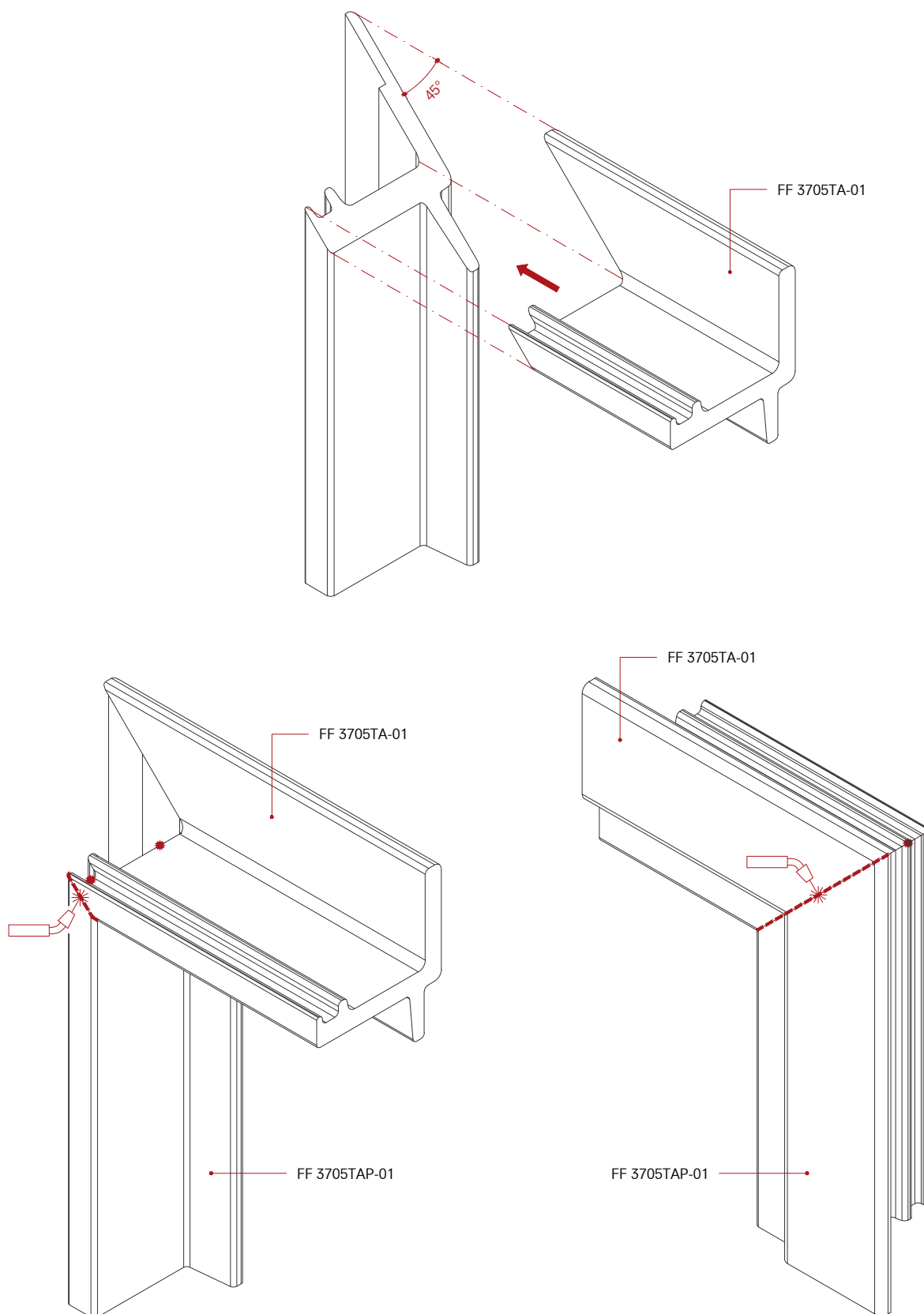
Finestra doppia anta apertura esterna

Doble ventana que se abre hacia fuera



Internal view
Vista interna
Vista interna





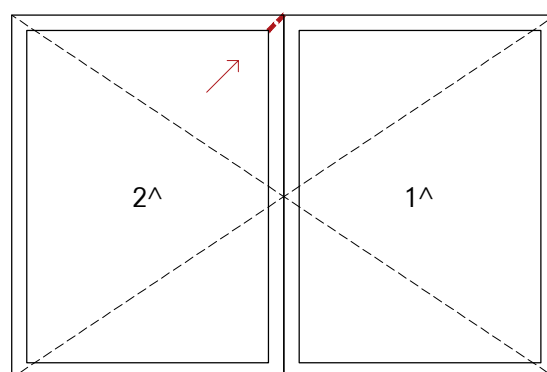
External view
Vista esterna
Vista externa

FF 3705ZAP-01 / FF 3705TA-01
W20 Classic

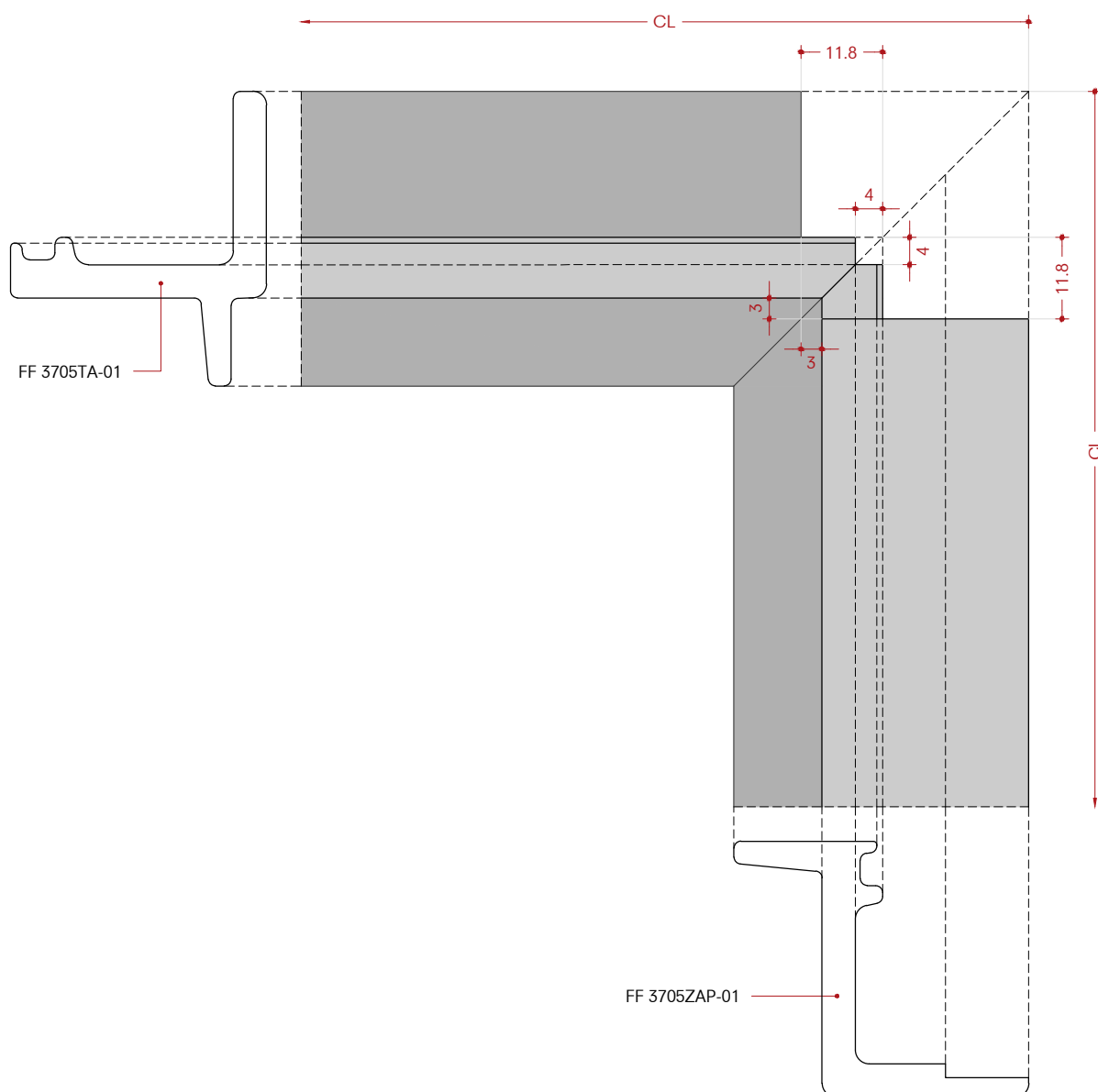
Double leaf window open out

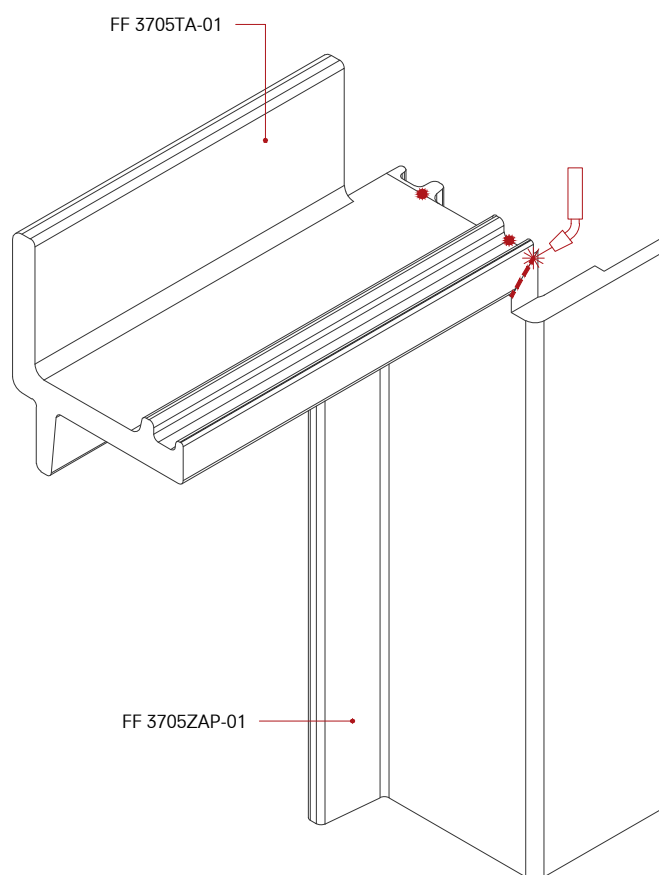
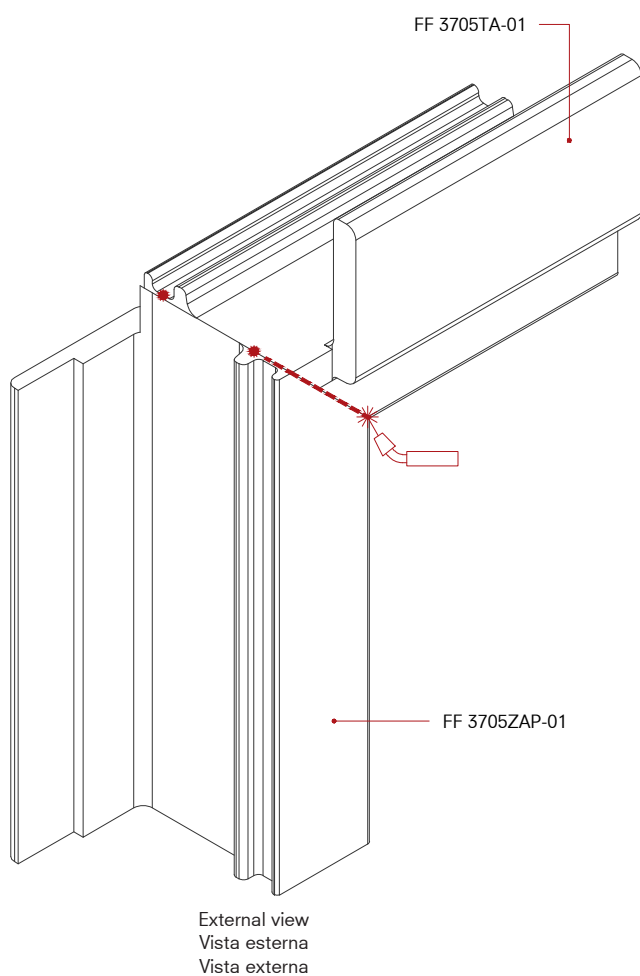
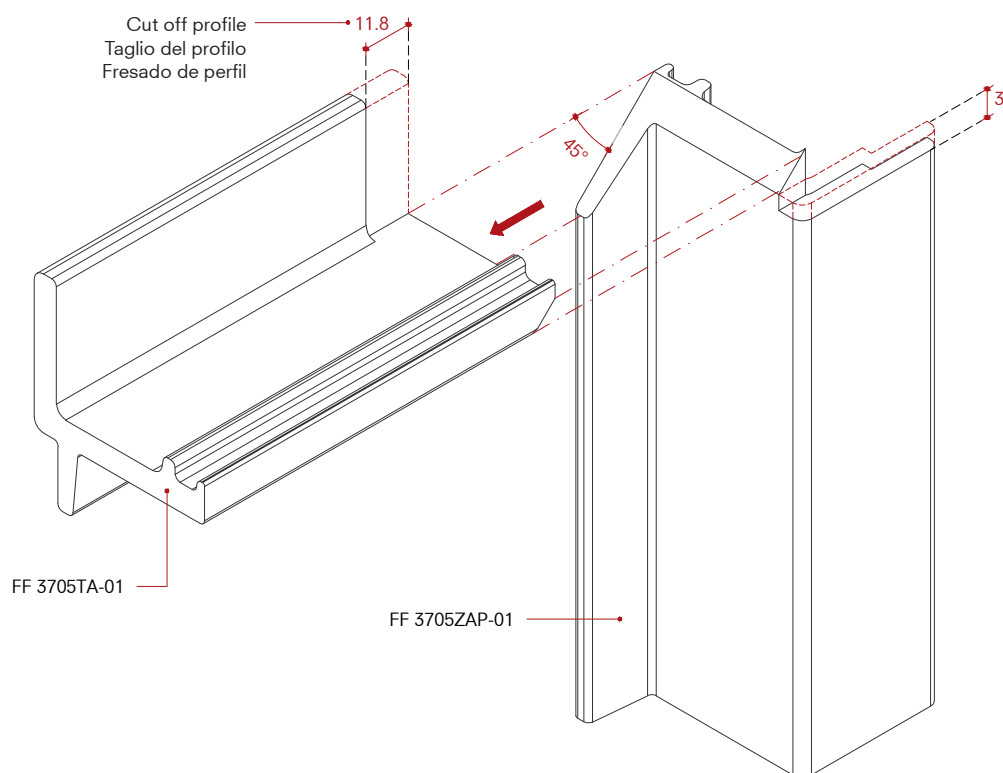
Finestra doppia anta apertura esterna

Doble ventana que se abre hacia fuera



Internal view
Vista interna
Vista interna





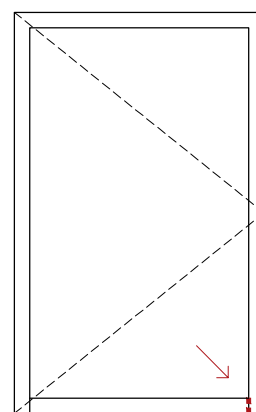
FF 3203HF-01 / FF 3203TF-01

W20 Basic

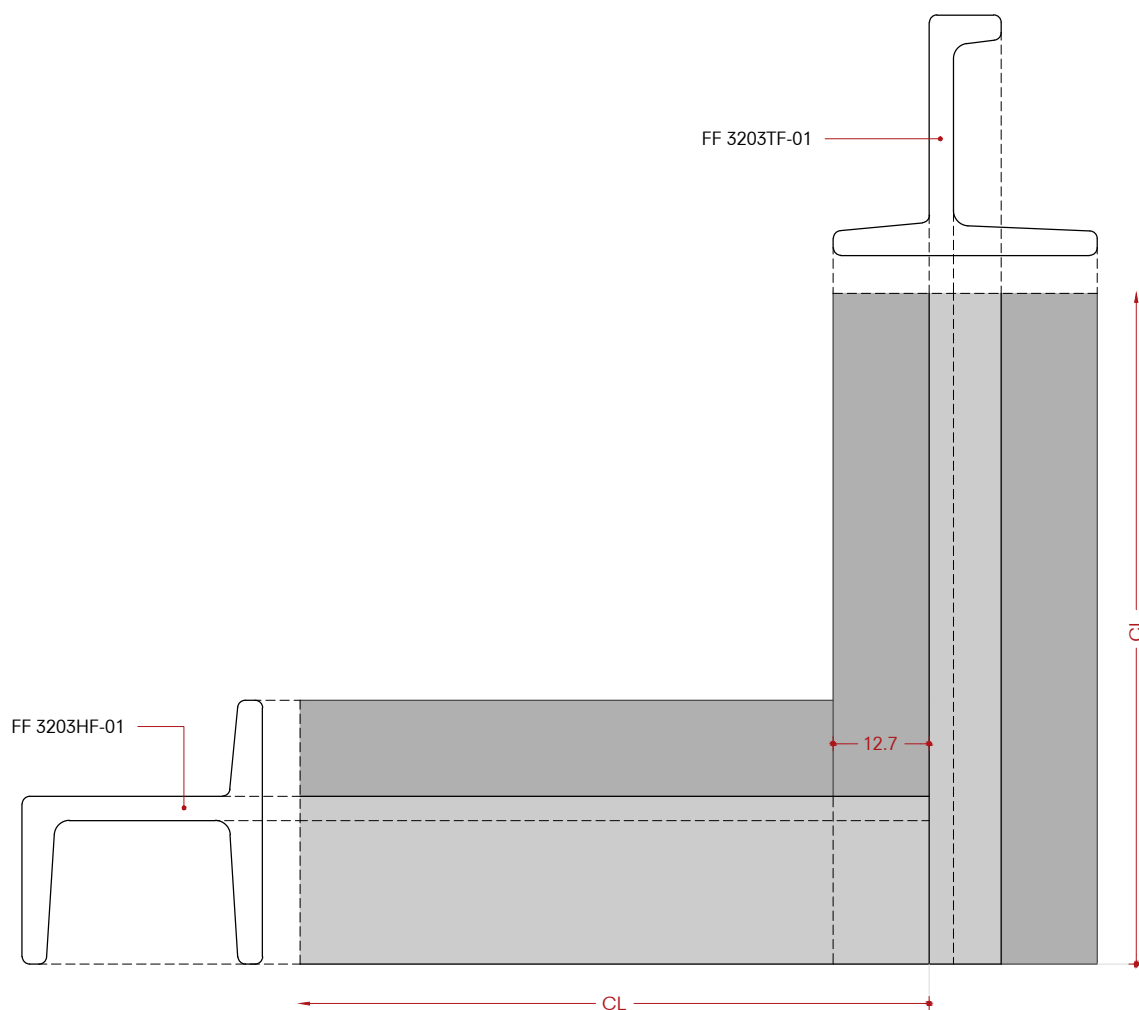
Single leaf door open out

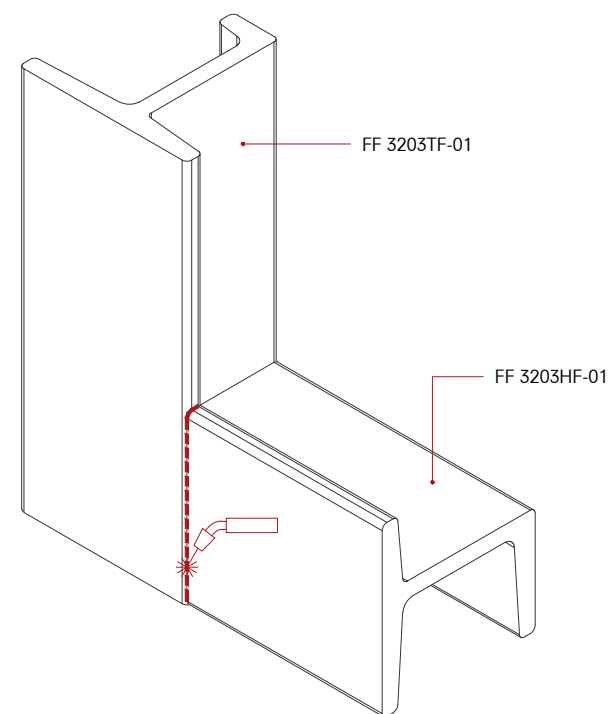
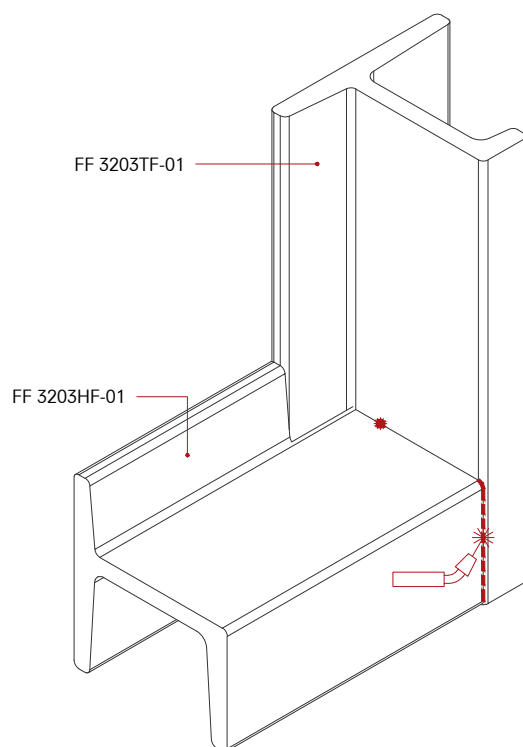
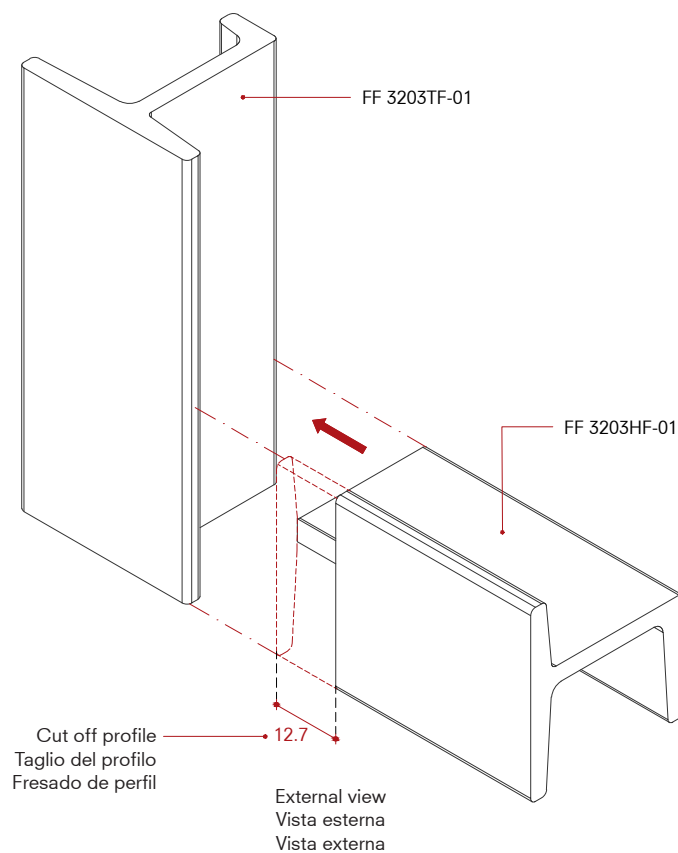
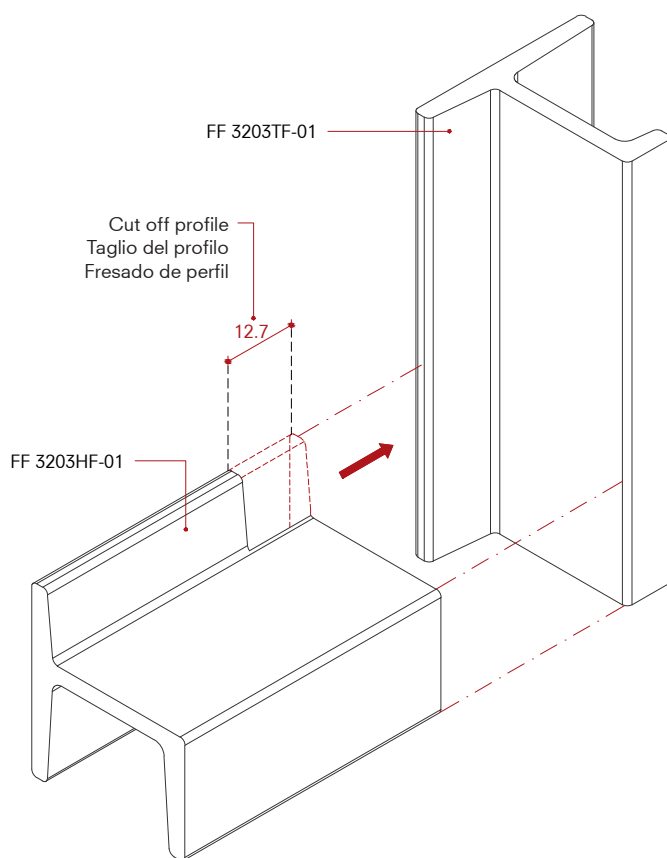
Porta a un battente apertura esterna

Puerta de una hoja apertura hacia fuera



Internal view
Vista interna
Vista interna





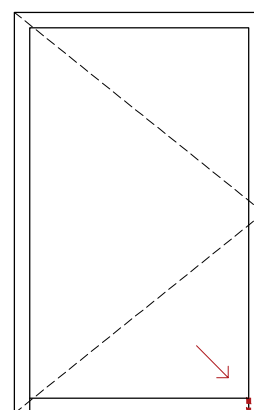
External view
Vista esterna
Vista externa

FF 3203HF-01 / FF 3705TS-01
W20 Slim

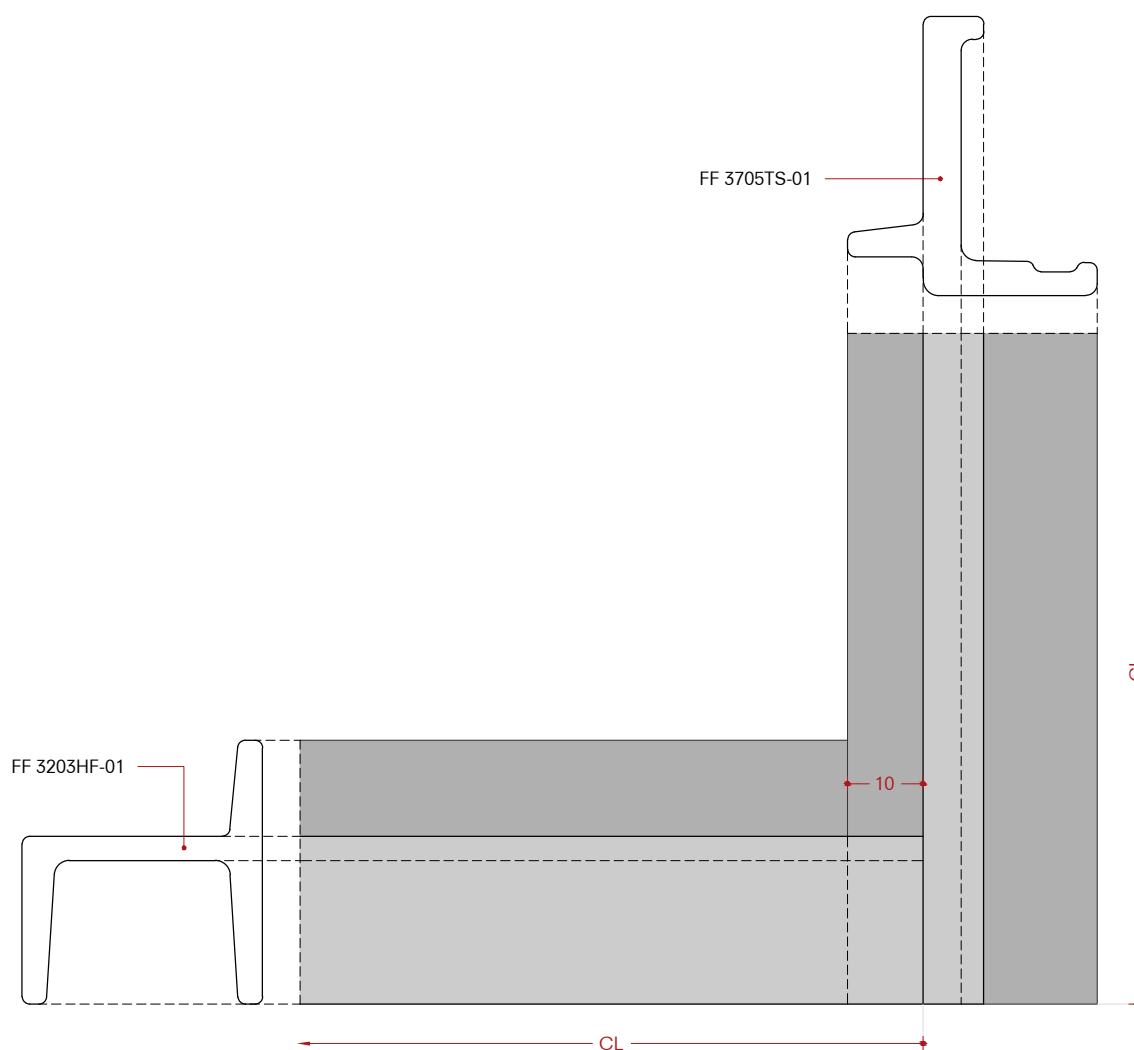
Single leaf door open out

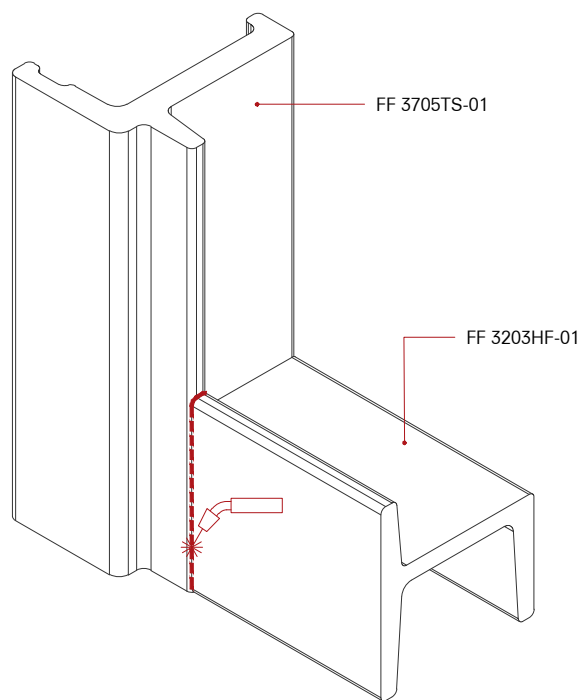
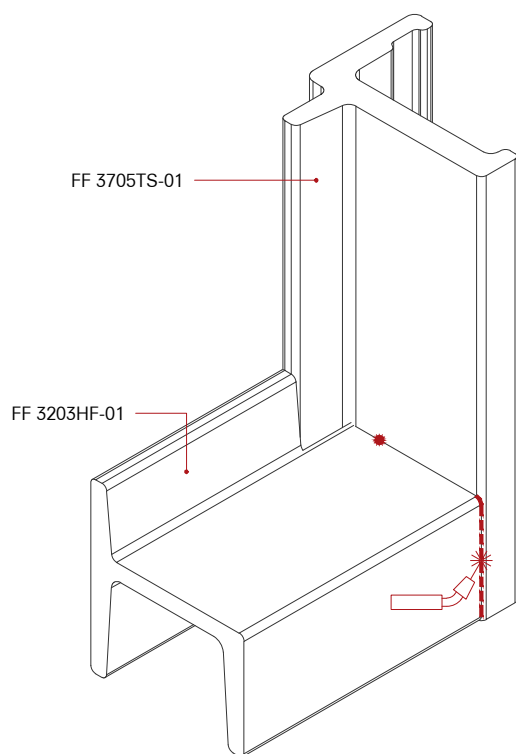
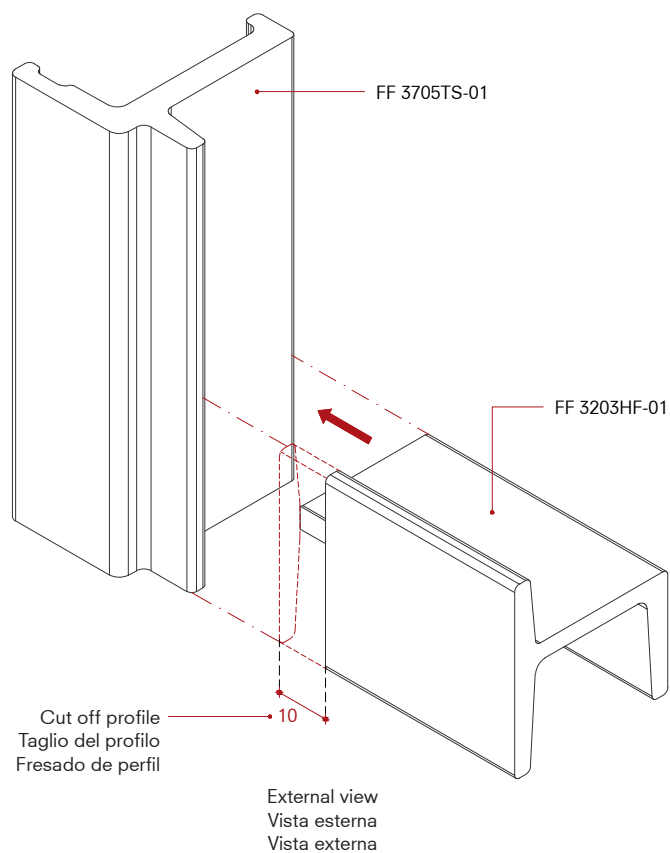
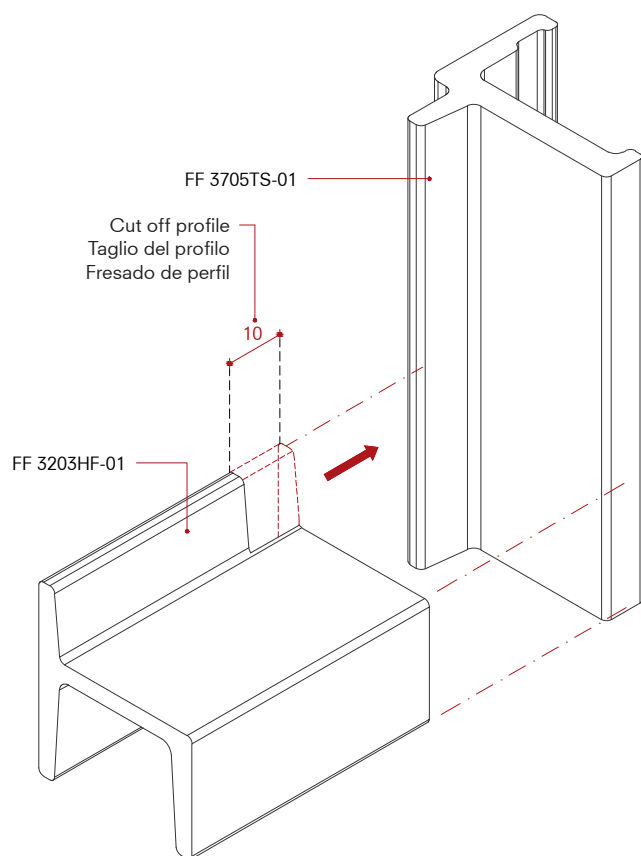
Porta a un battente apertura esterna

Puerta de una hoja apertura hacia fuera



Internal view
Vista interna
Vista interna





External view
Vista esterna
Vista externa

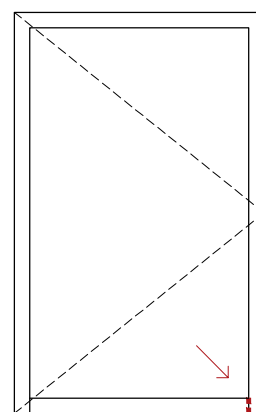
FF 3203HF-01 / FF 3705TA-01

W20 Classic

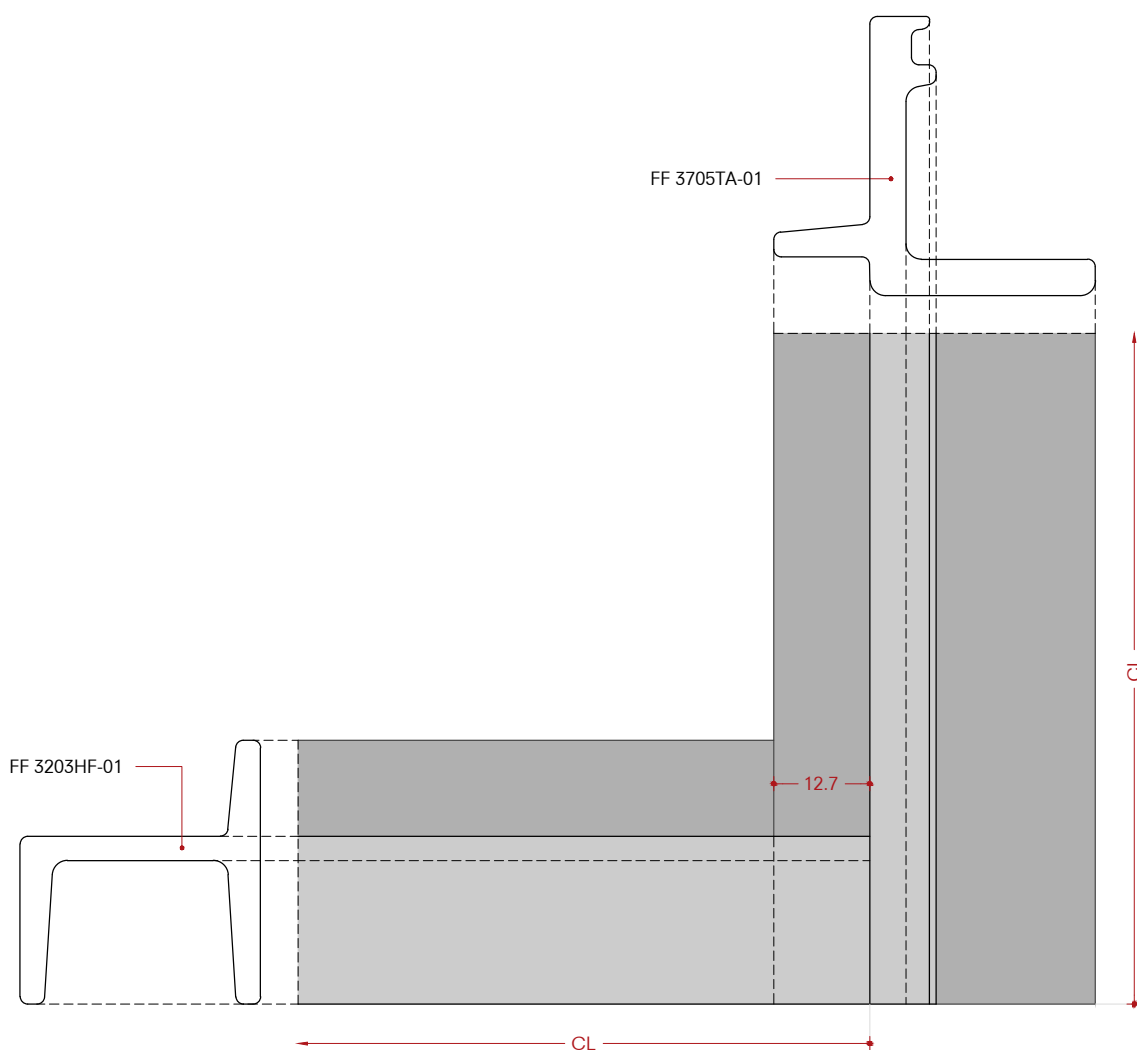
Single leaf door open out

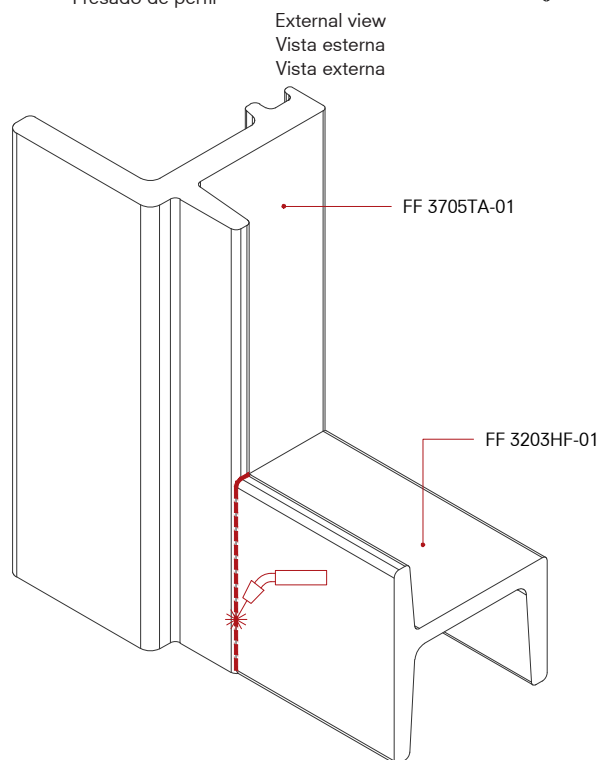
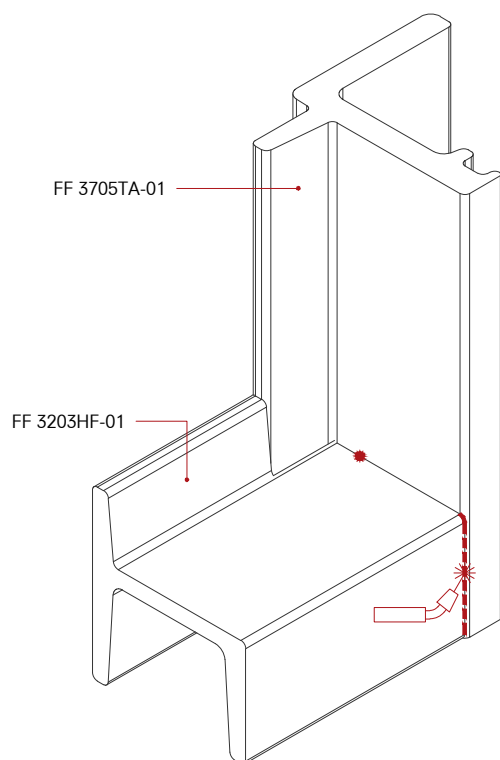
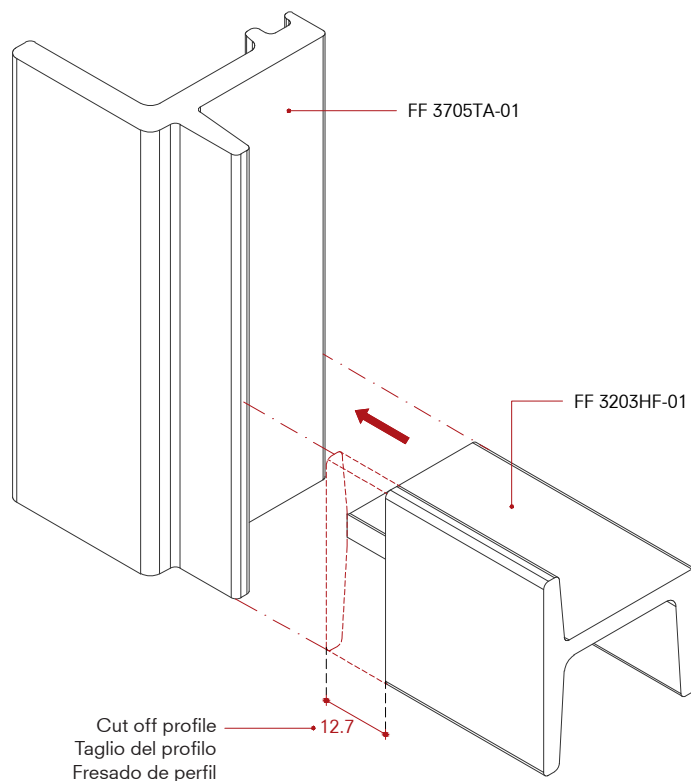
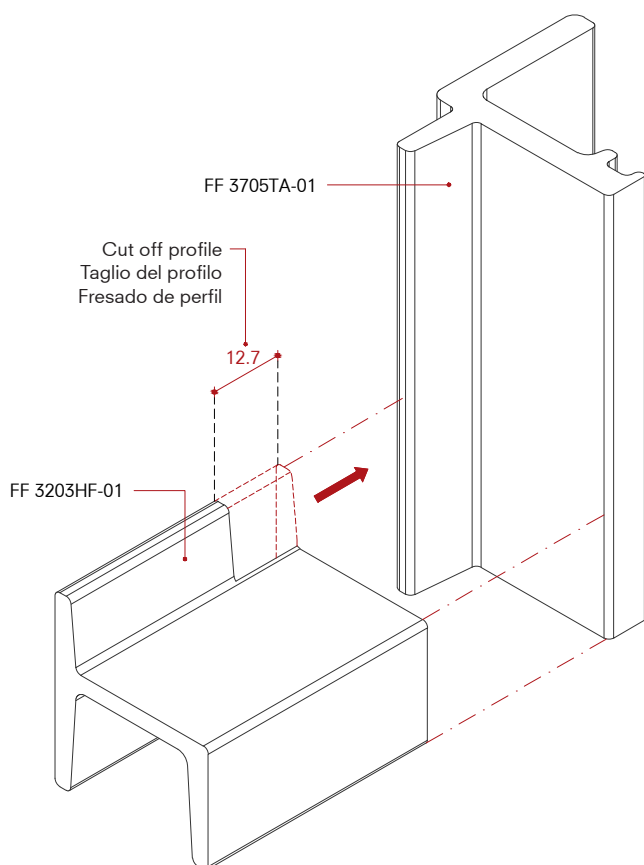
Porta a un battente apertura esterna

Puerta de una hoja apertura hacia fuera



Internal view
Vista interna
Vista interna





External view
Vista esterna
Vista externa

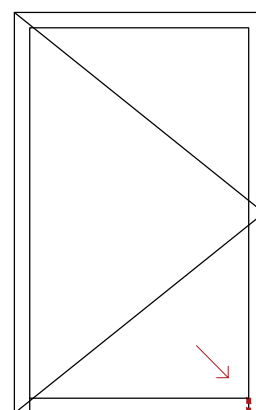
FF 3203HF-01 / FF 3203ZF-01

W20 Basic

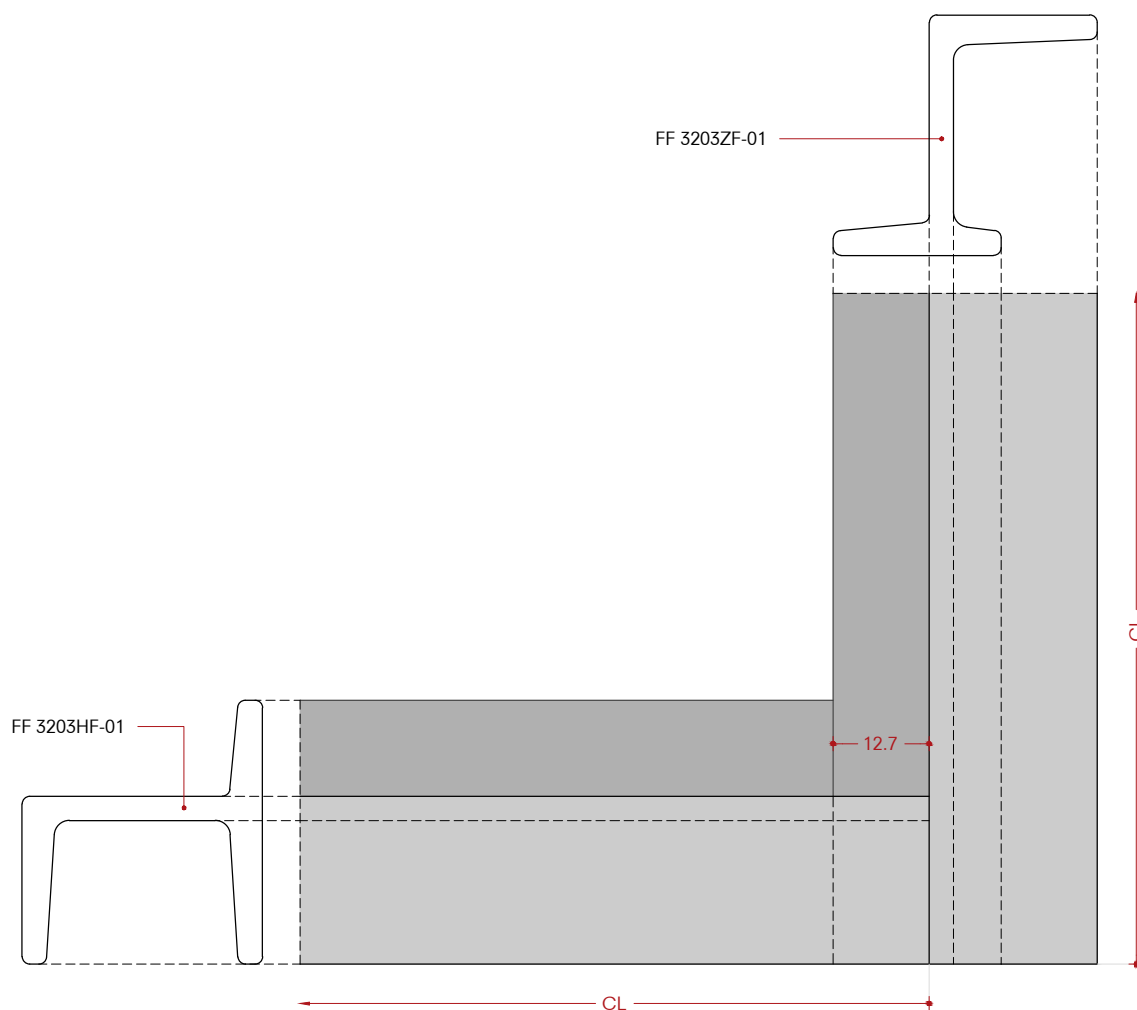
Single leaf door open in

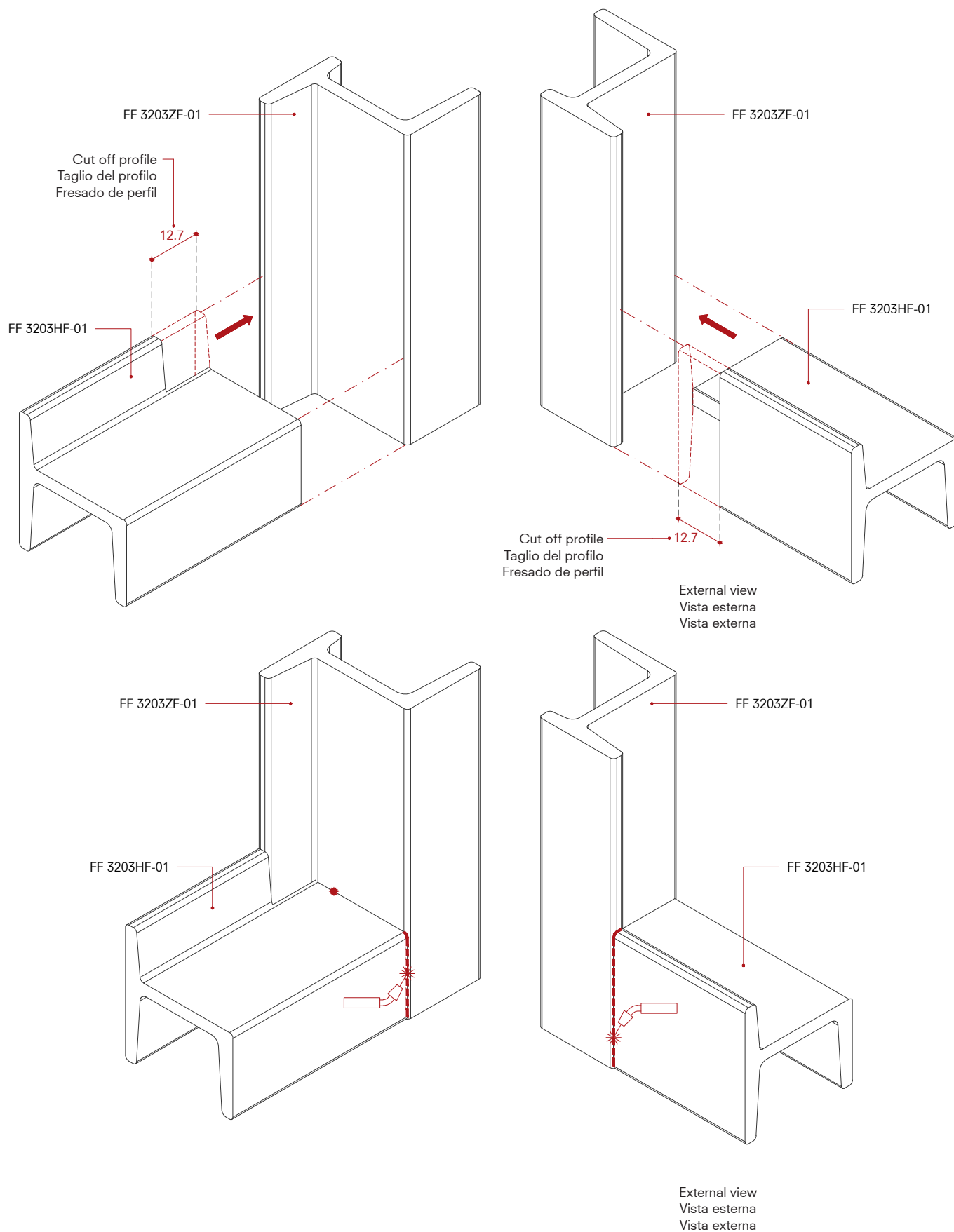
Porta a un battente apertura interna

Puerta de una hoja apertura hacia dentro



Internal view
Vista interna
Vista interna



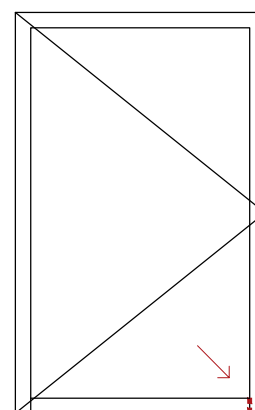


FF 3203HF-01 / FF 3705ZS-01
W20 Slim

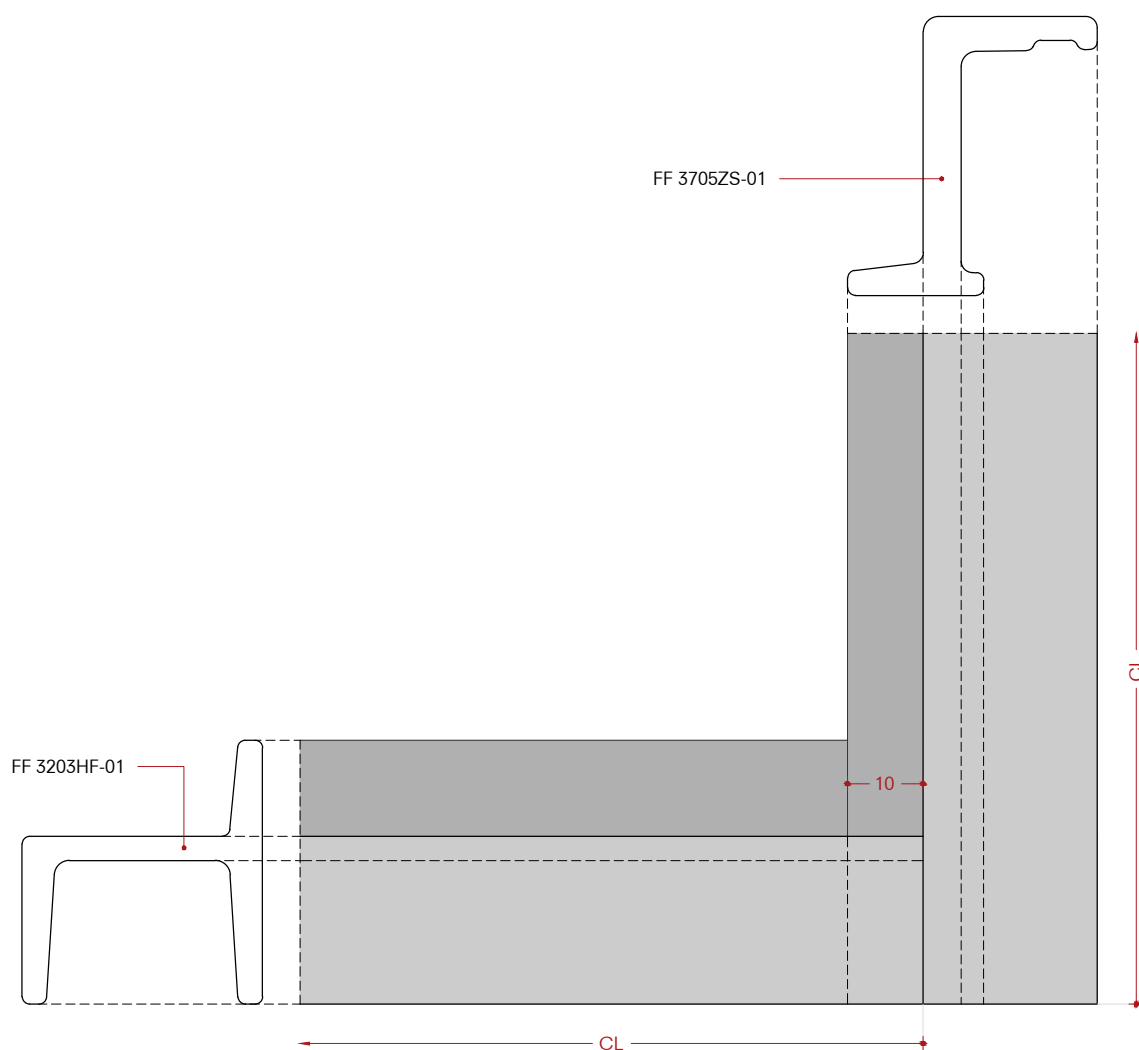
Single leaf door open in

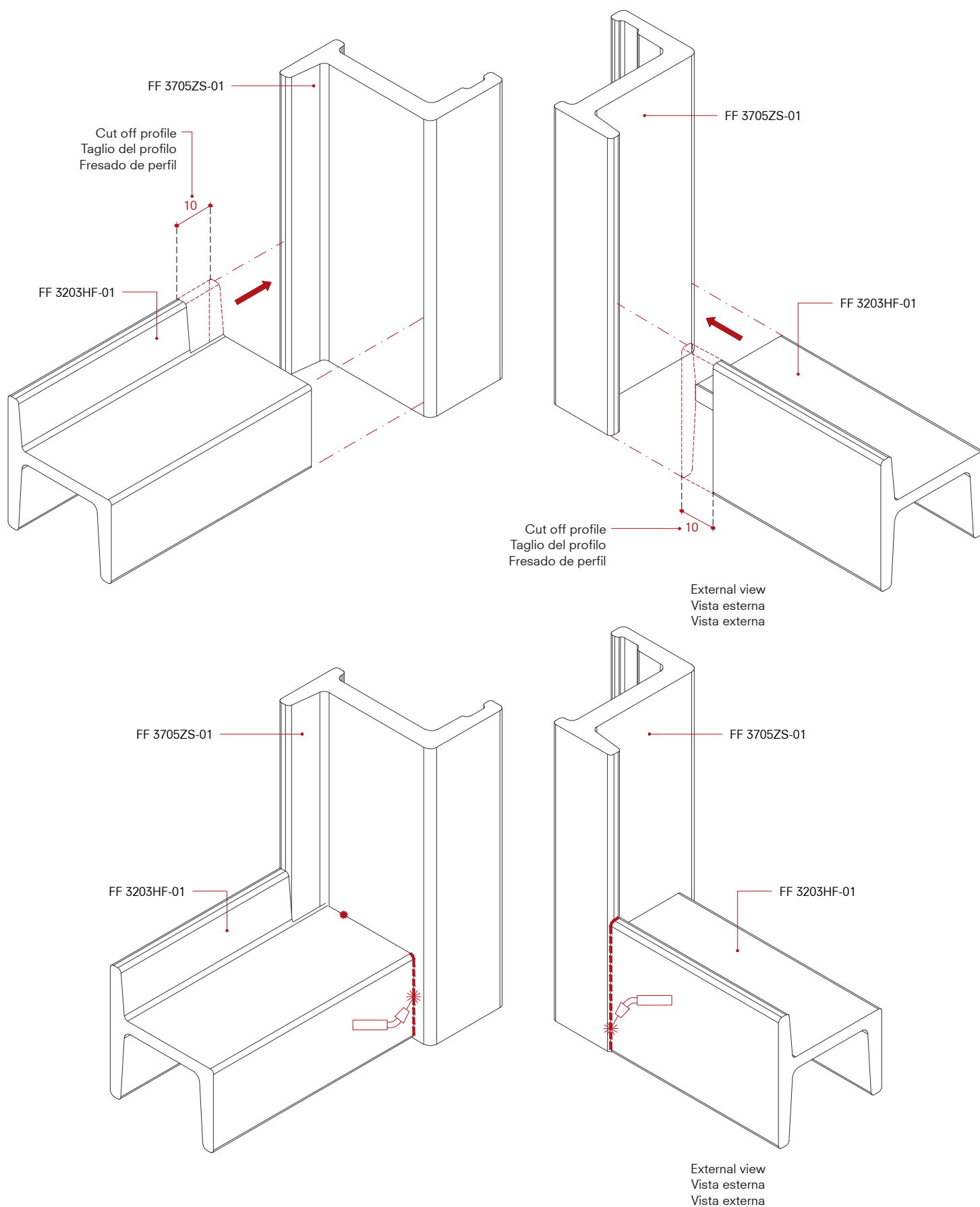
Porta a un battente apertura interna

Puerta de una hoja apertura hacia dentro



Internal view
Vista interna
Vista interna





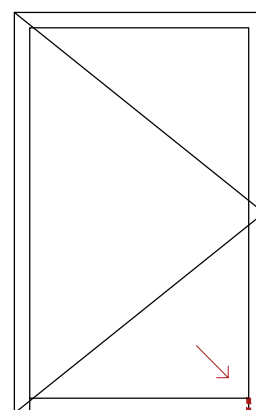
FF 3203HF-01 / FF 3705ZA-01

W20 Classic

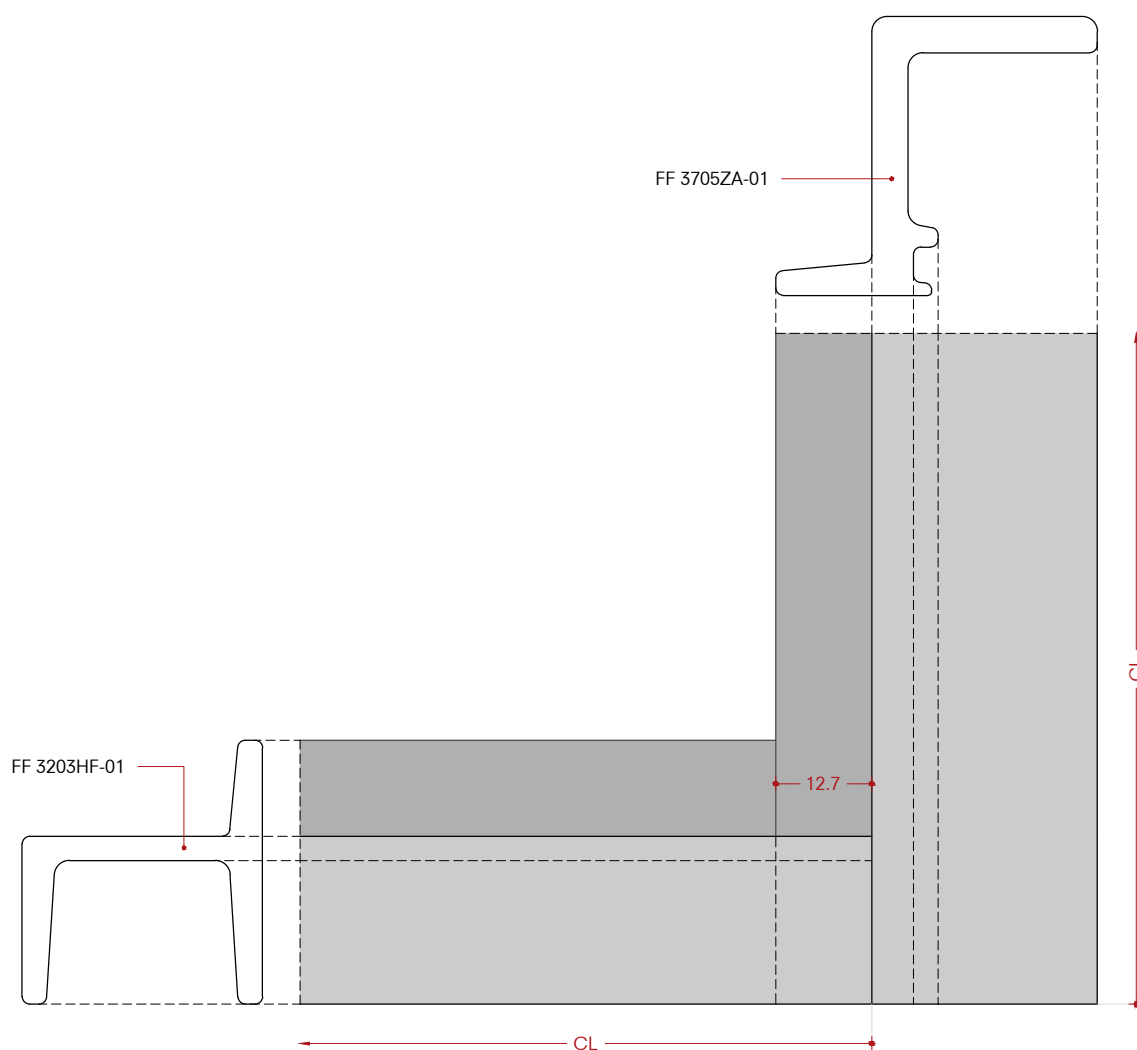
Single leaf door open in

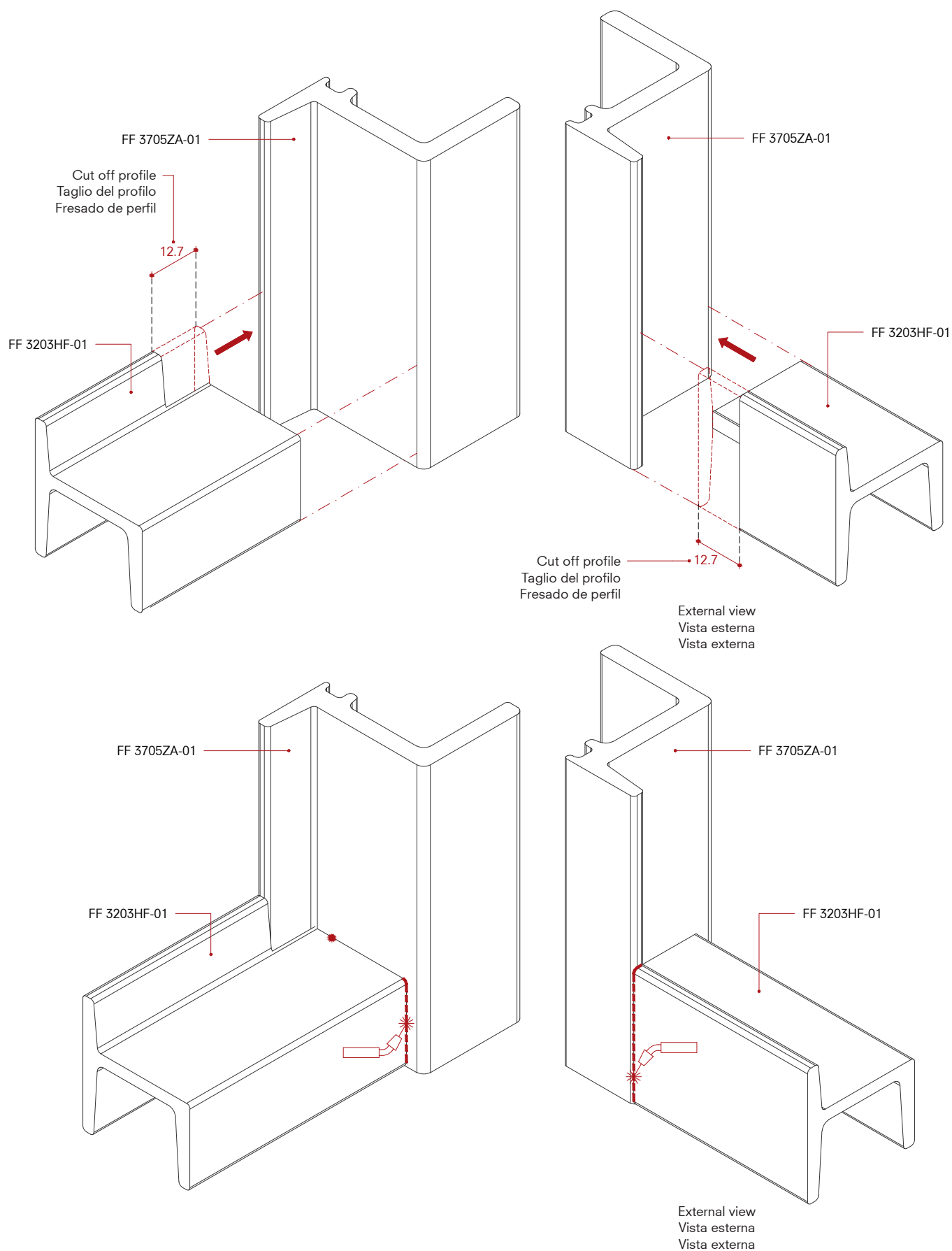
Porta a un battente apertura interna

Puerta de una hoja apertura hacia dentro



Internal view
Vista interna
Vista interna



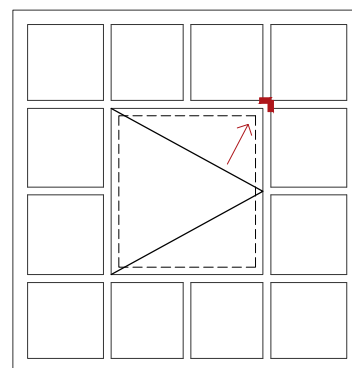


FF 3705TA-01 / FF 3203TN-01
W20 Classic

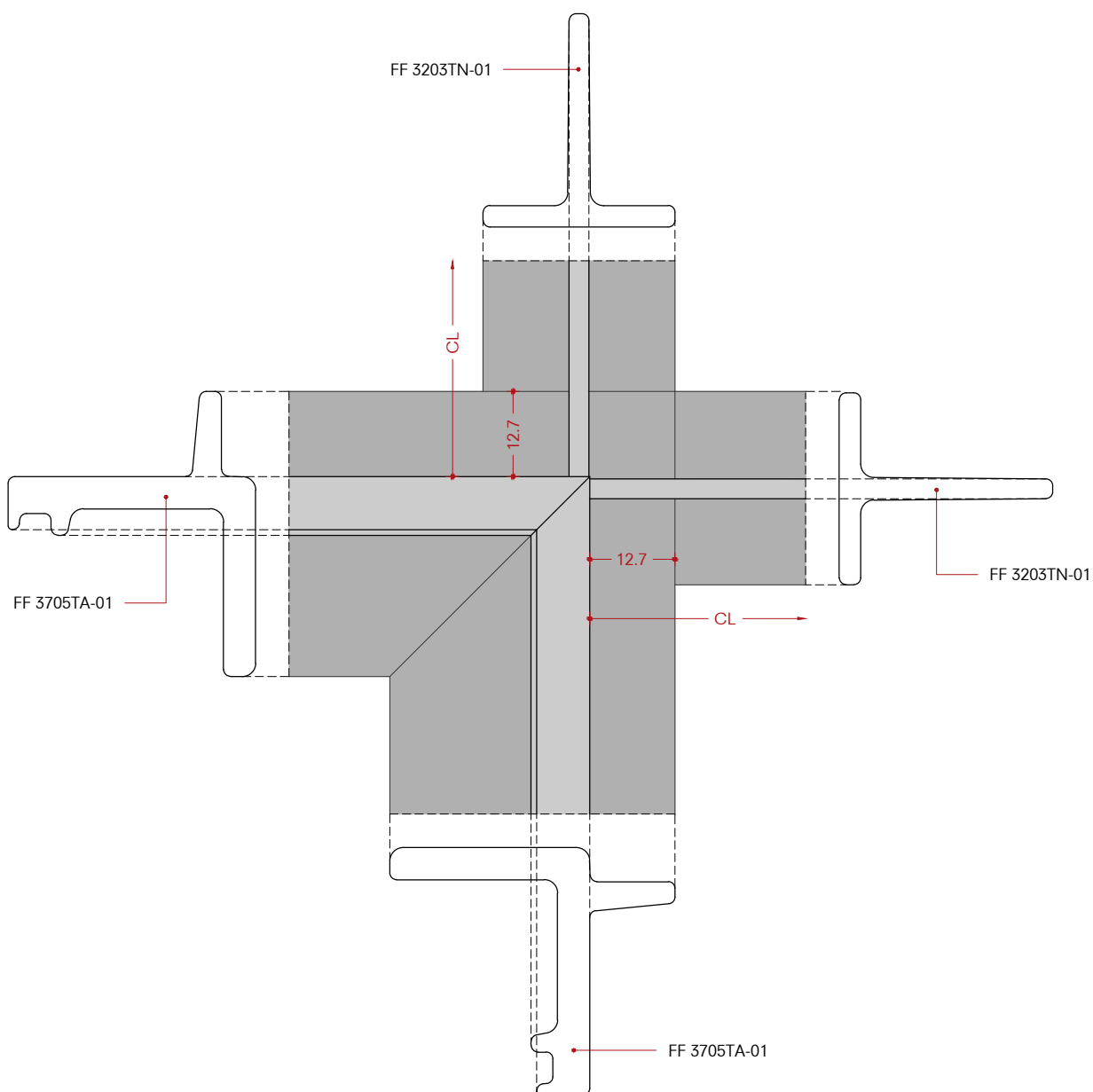
Window open in fixed partitions

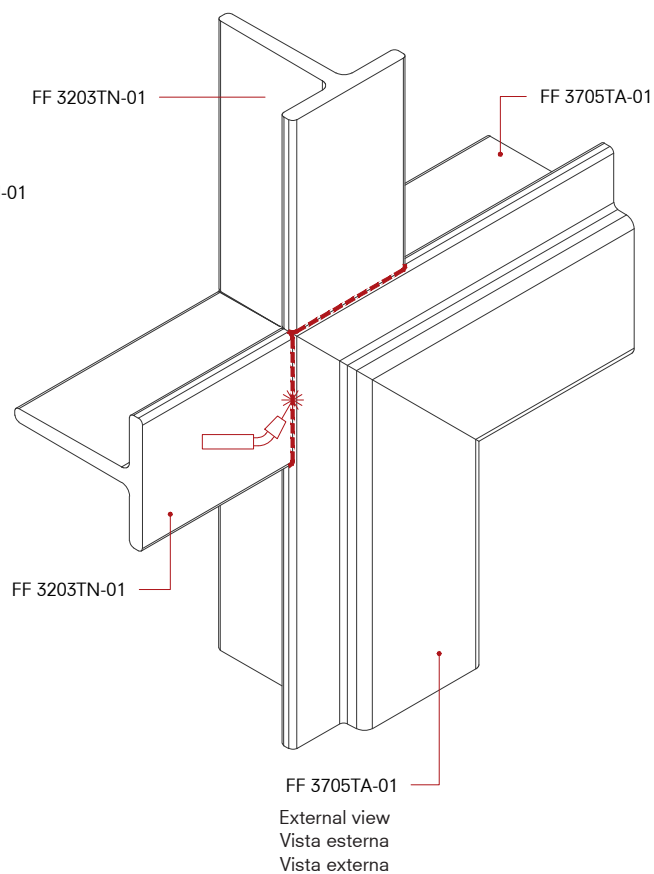
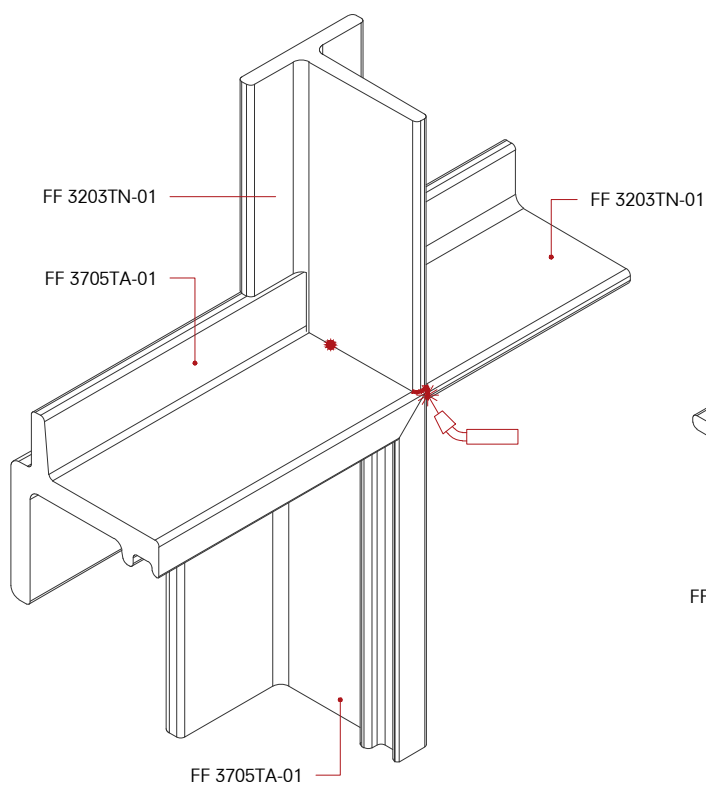
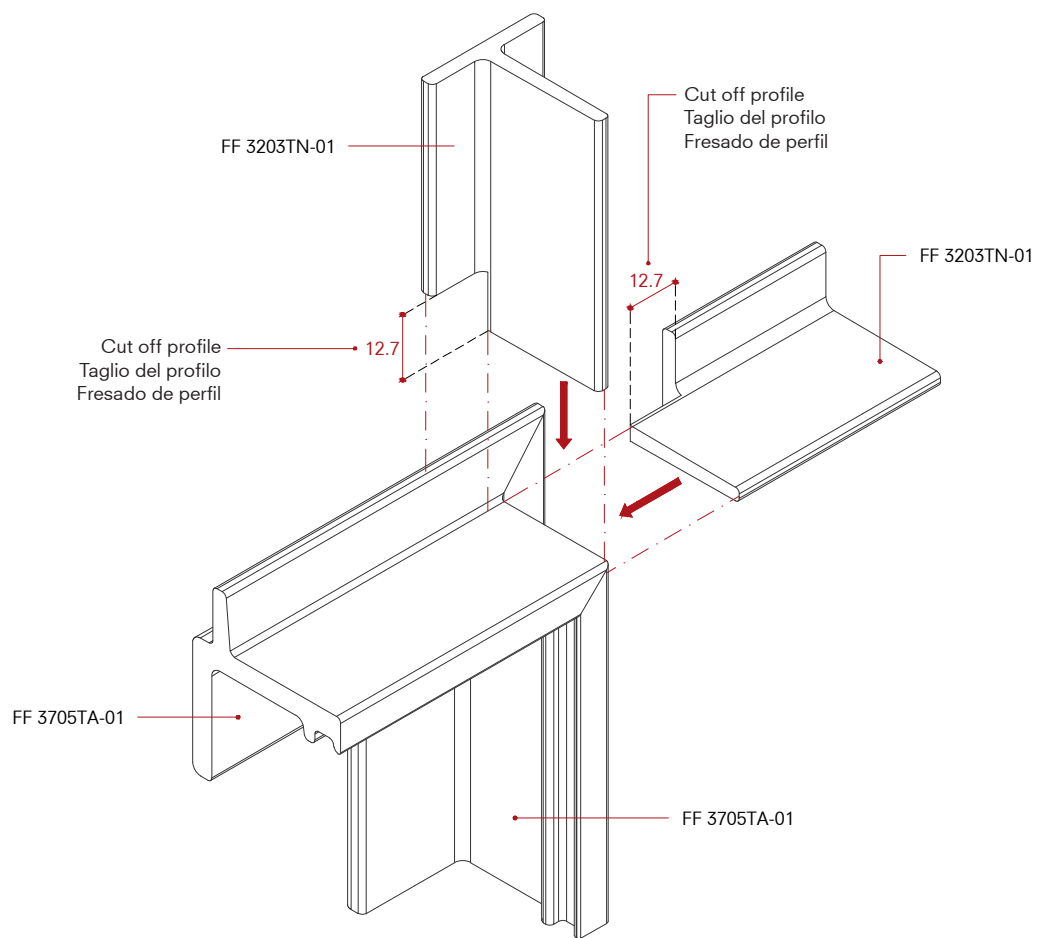
Finestra su partizioni fisse apertura interna

Ventana su particiones apertura hacia dentro



Internal view
Vista interna
Vista interna





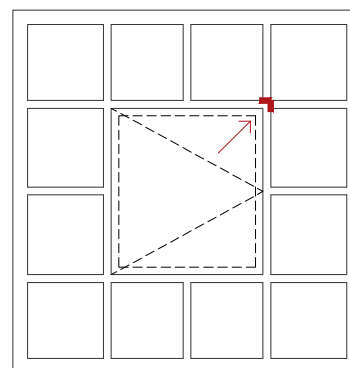
FF 3705ZA-01 / FF 3203TN-01

W20 Classic

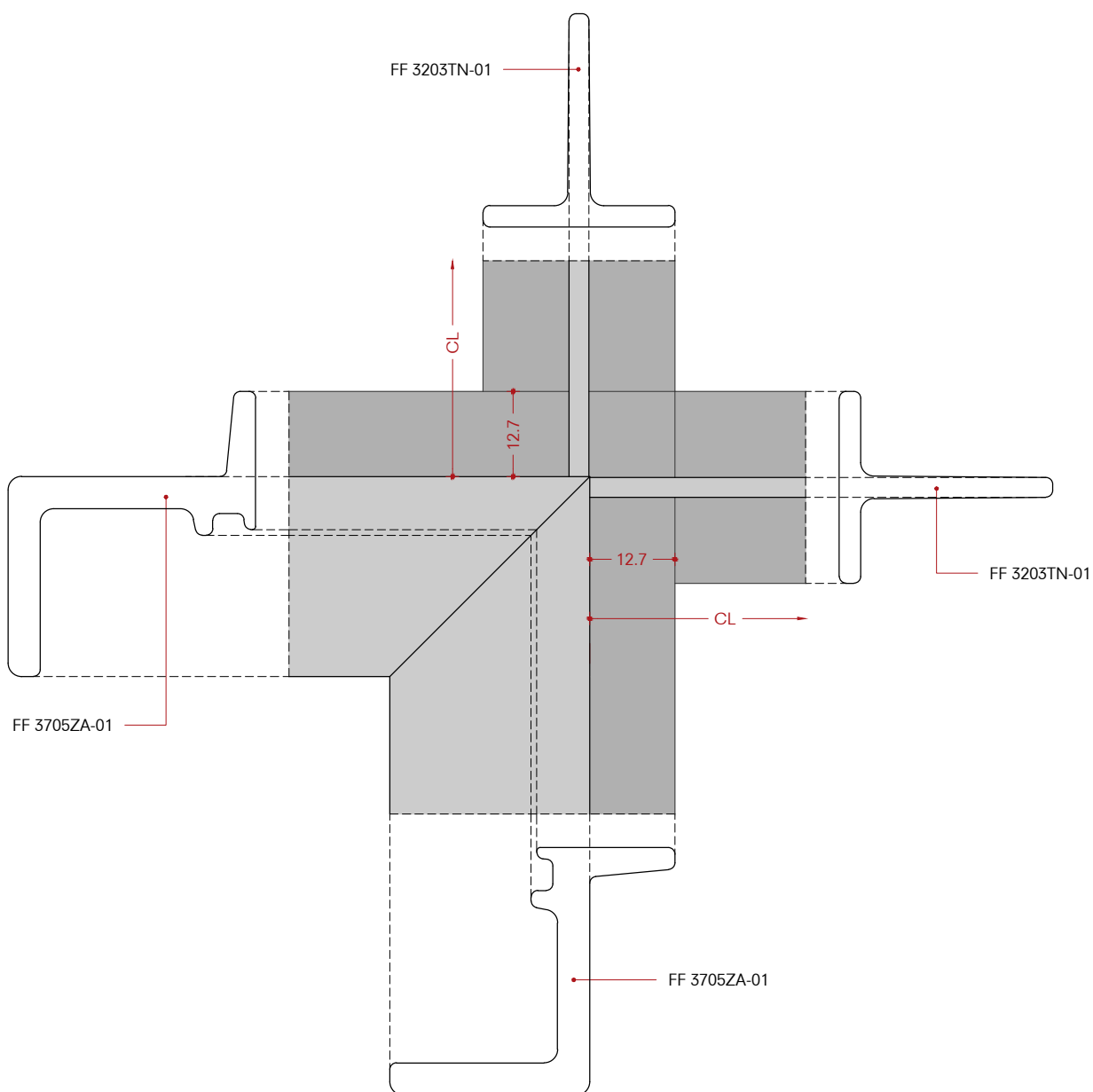
Window open out fixed partitions

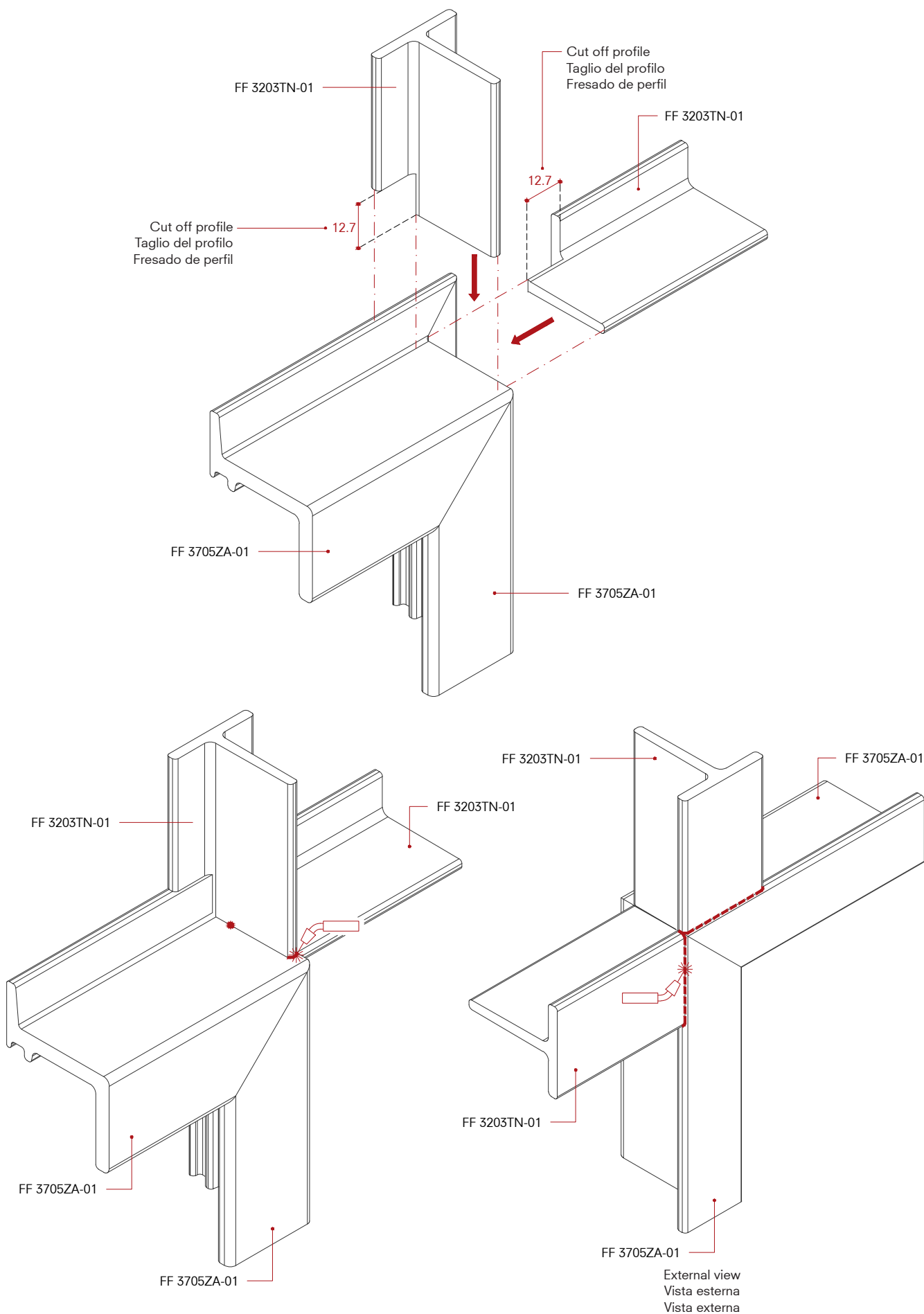
Finestra su partizioni fisse apertura esterna

Ventana su particiones apertura hacia fuera



Internal view
Vista interna
Vista interna



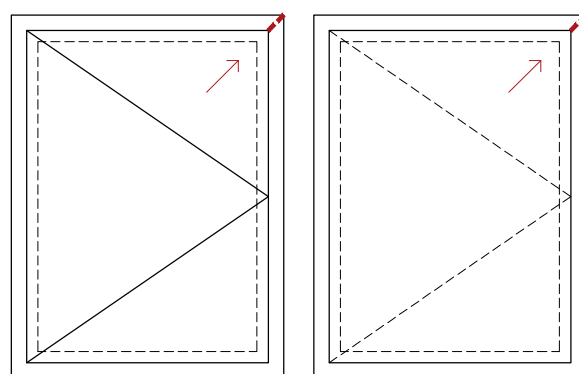


FF 3703L-01 / FF 3703T-01
W20 Classic

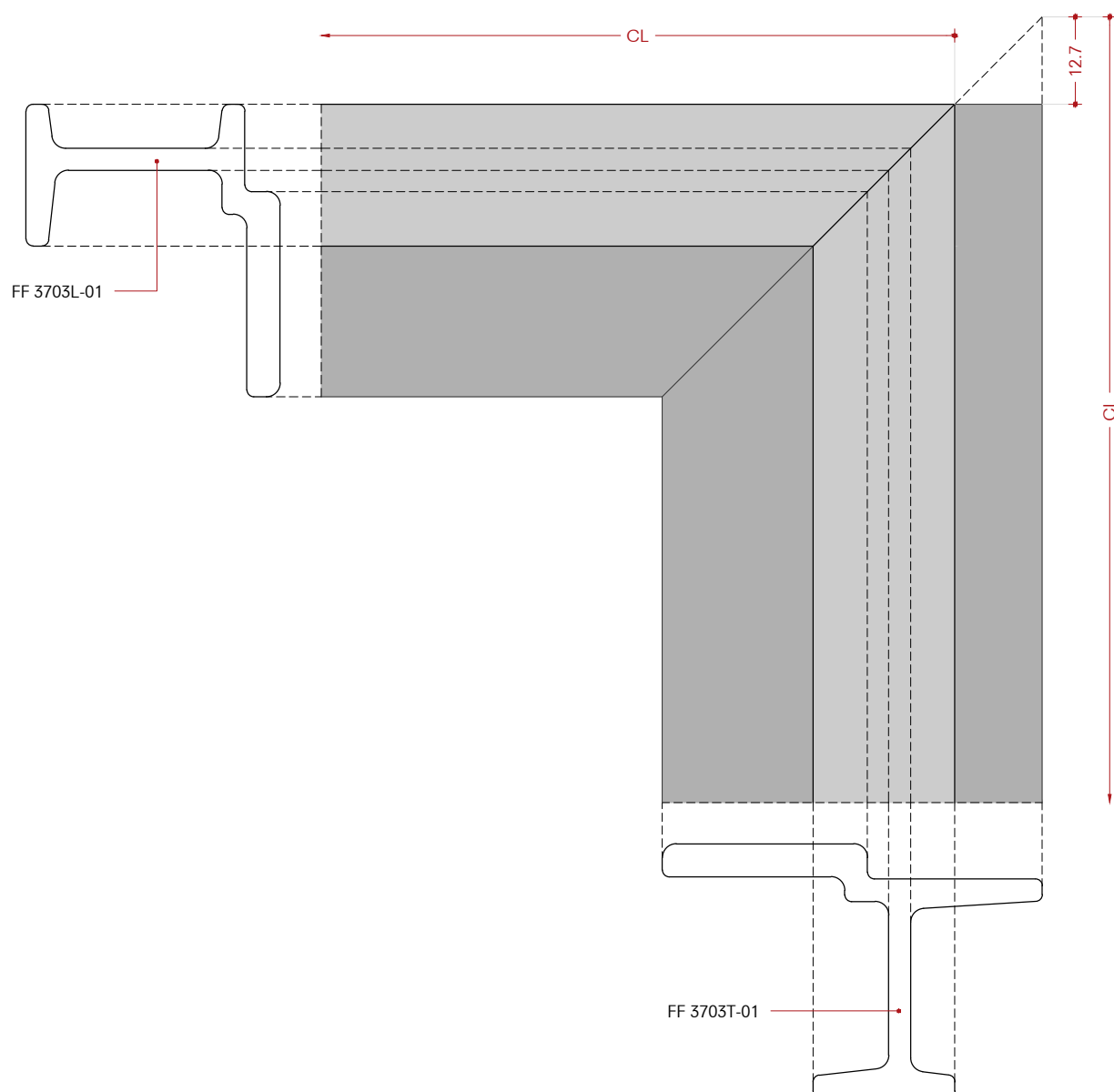
Window open in or open out

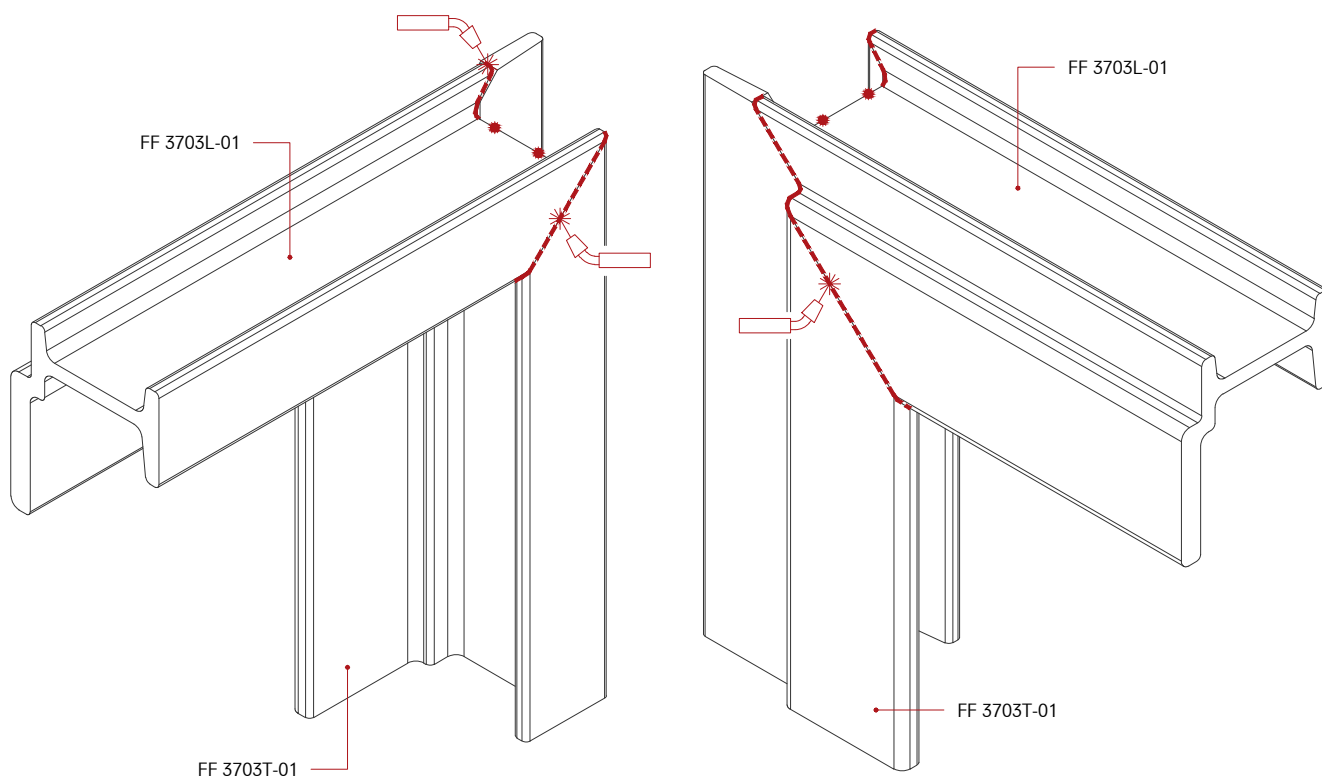
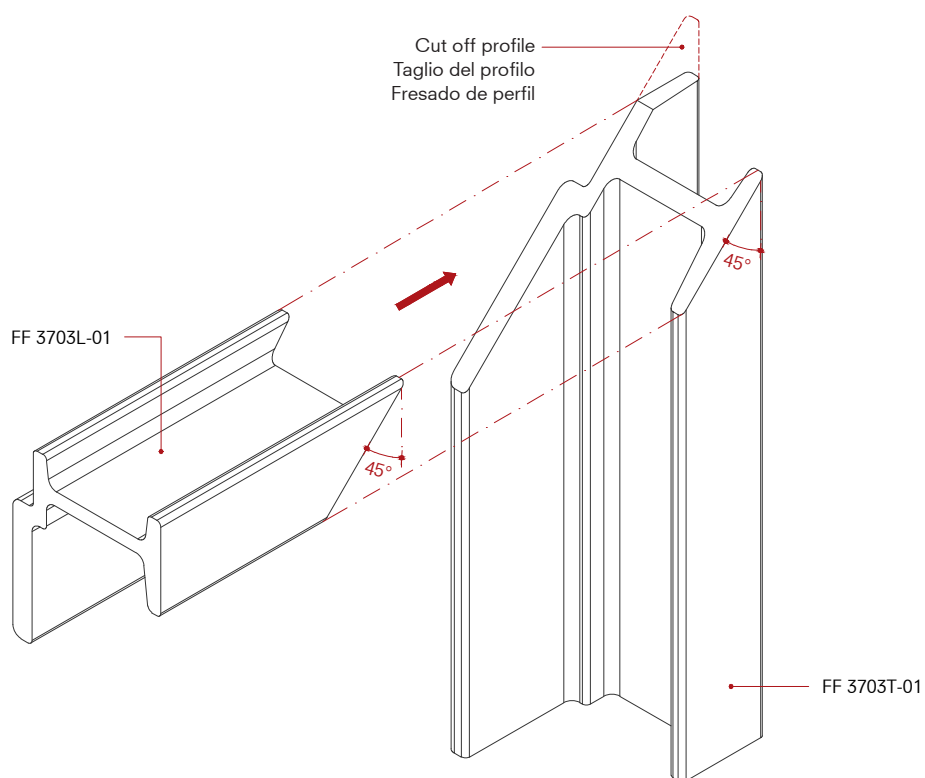
Finestra apertura interna o esterna

Ventana apertura hacia dentro o fuera



Internal view
Vista interna
Vista interna





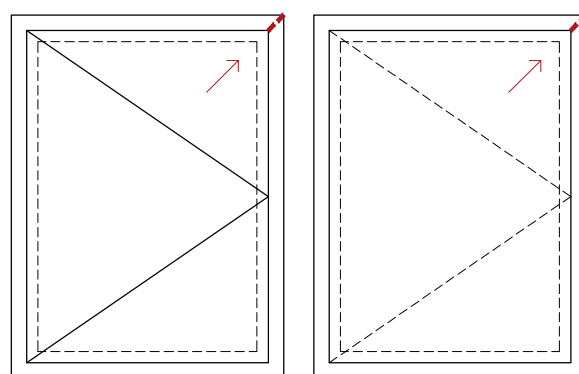
External view
Vista esterna
Vista externa

FF 3703L-01 / FF 3703Z-01
W20 Classic

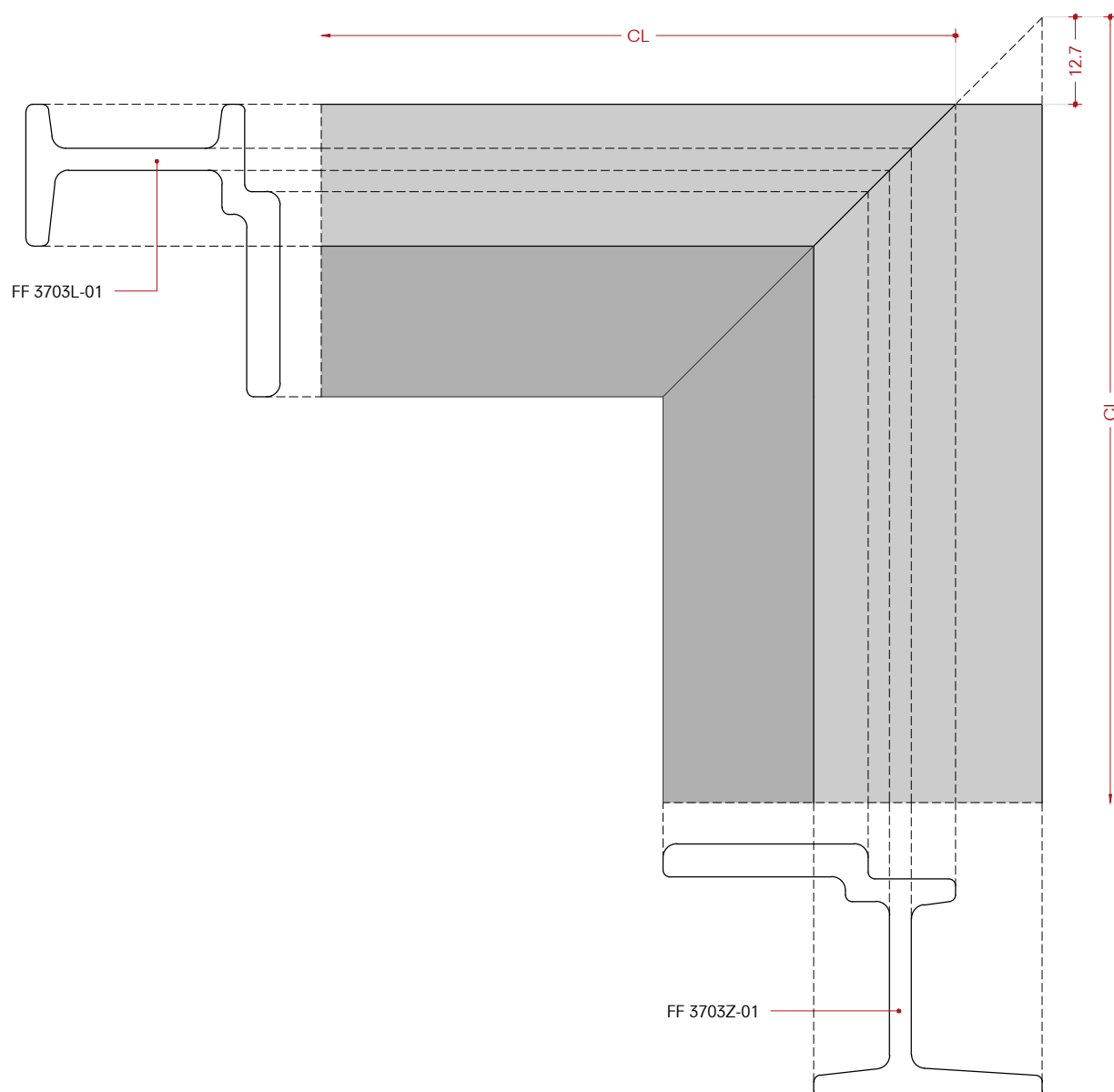
Window open in or open out

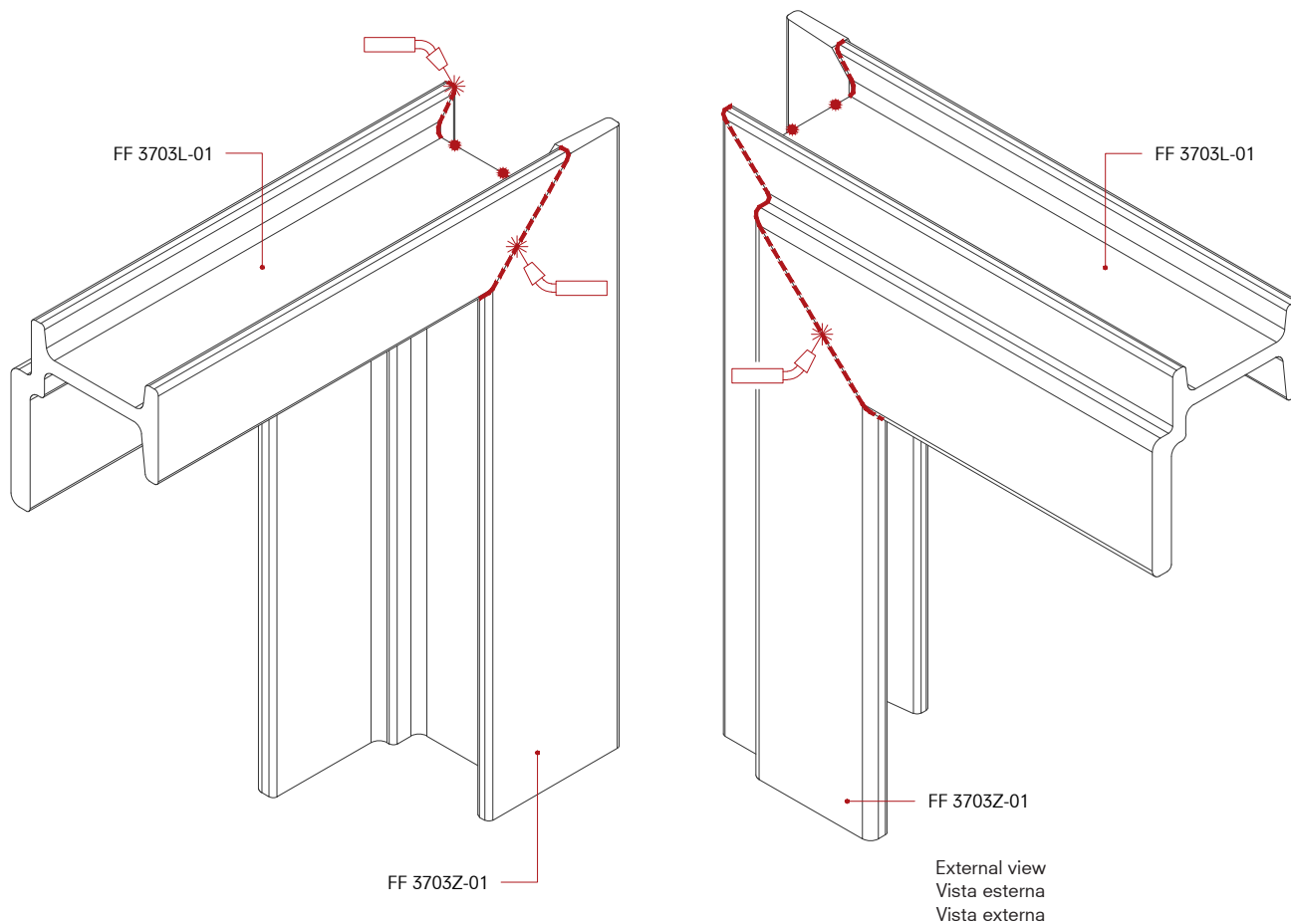
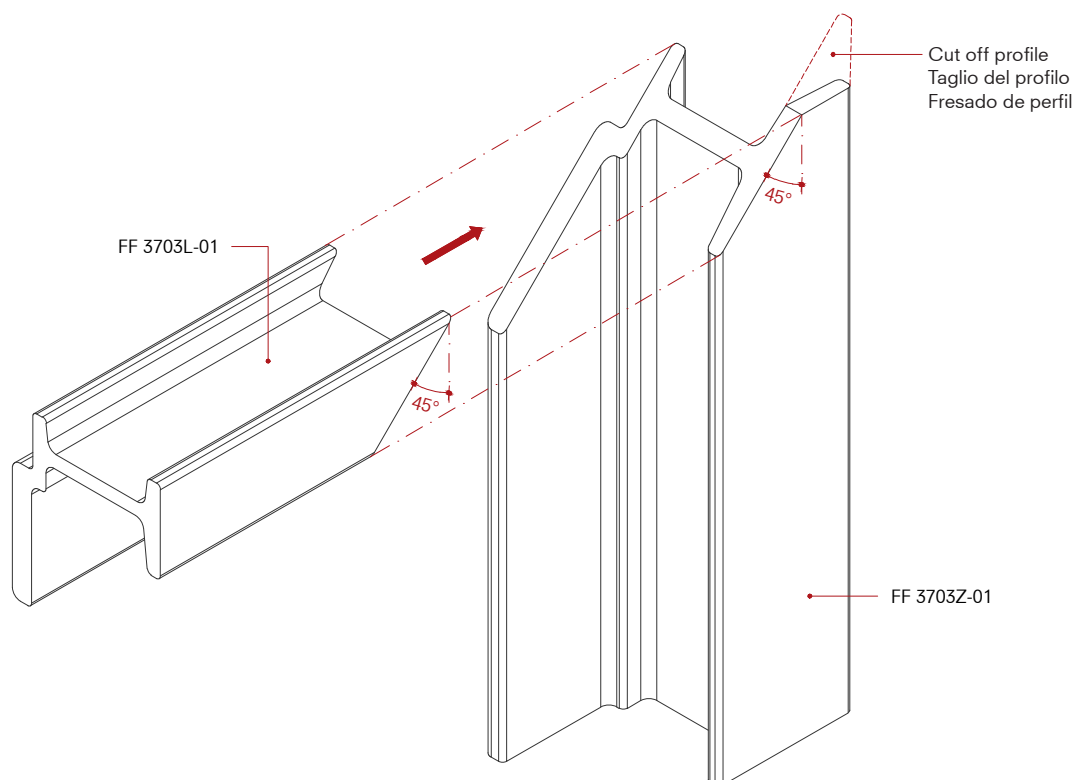
Finestra apertura interna o esterna

Ventana apertura hacia dentro o fuera



Internal view
Vista interna
Vista interna





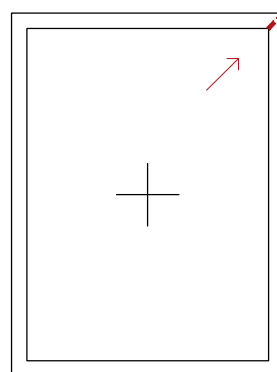
FF 3203LF-01 / FF 3205LC-01

W20 Classic

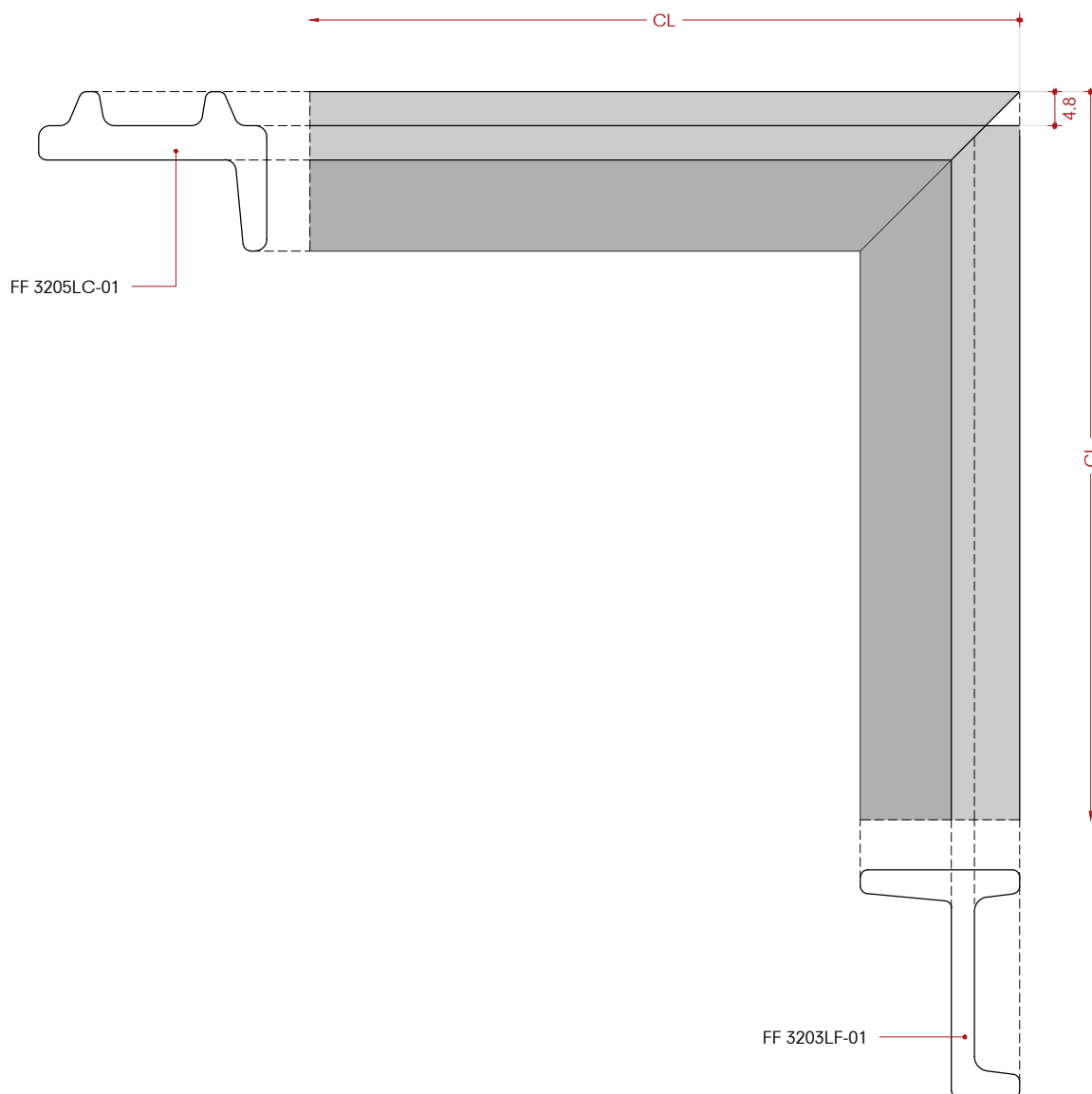
Fixed partition

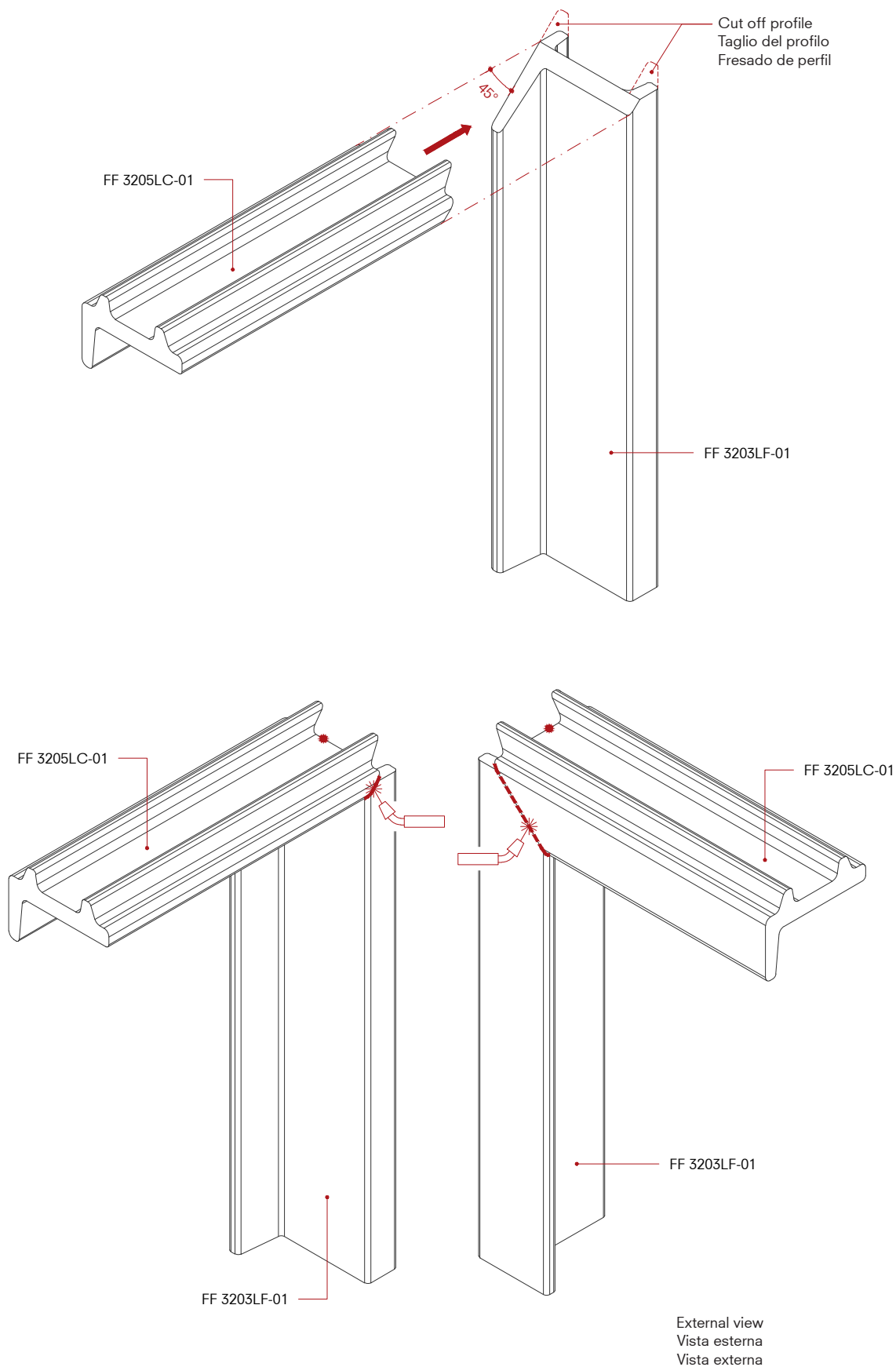
Finestra telaio fisso

Ventana fija



Internal view
Vista interna
Vista interna



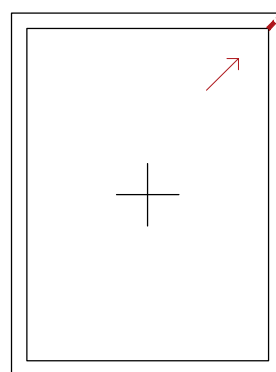


FF 3203ZF-01 / FF 3205LC-01

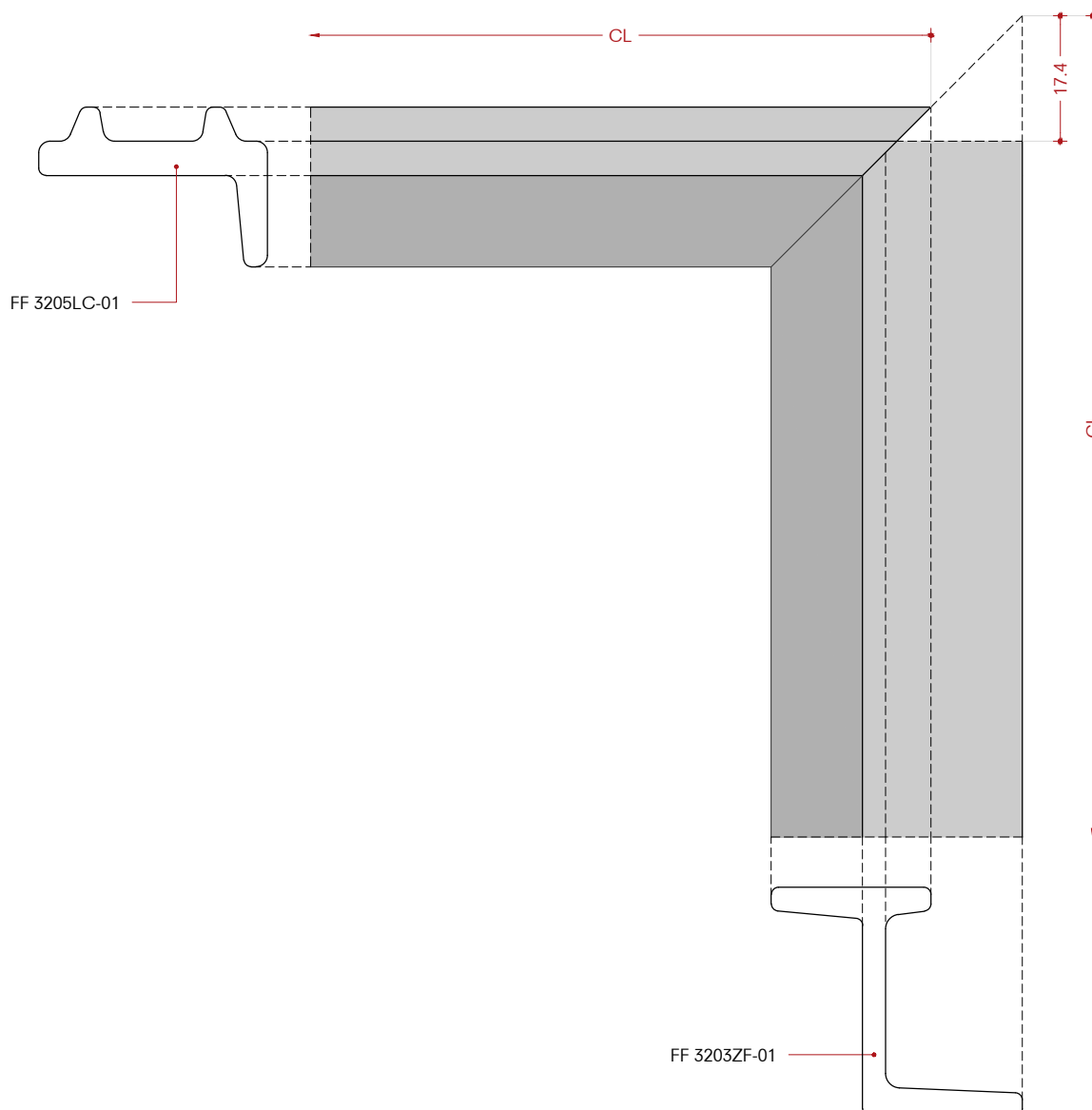
Fixed partition

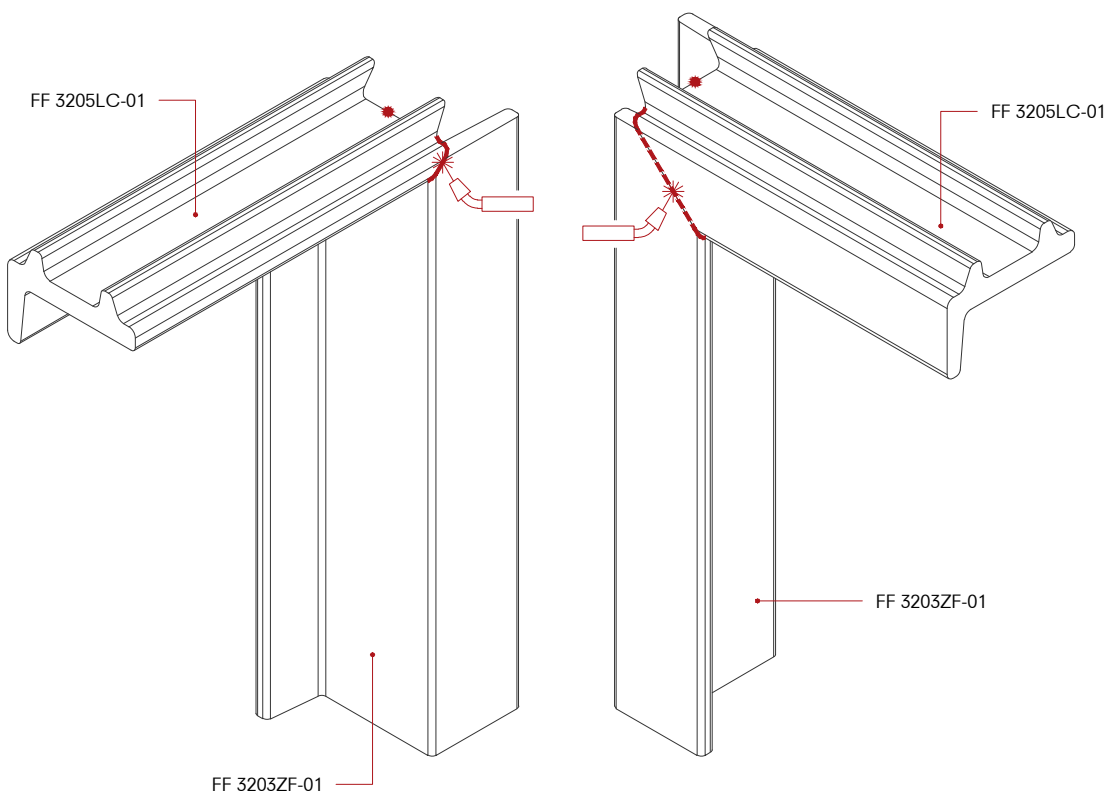
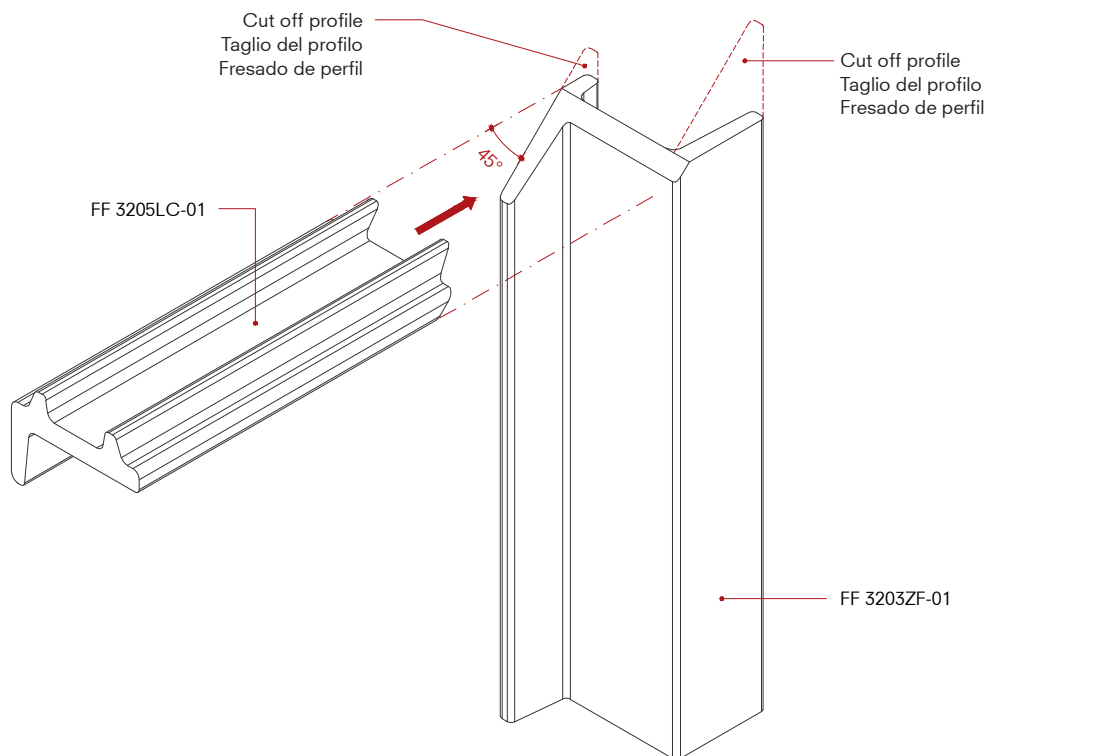
Finestra telaio fisso

Ventana fija



Internal view
Vista interna
Vista interna



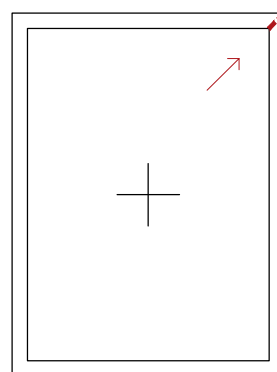


FF 3203ZF-01 / FF 3203LF-01

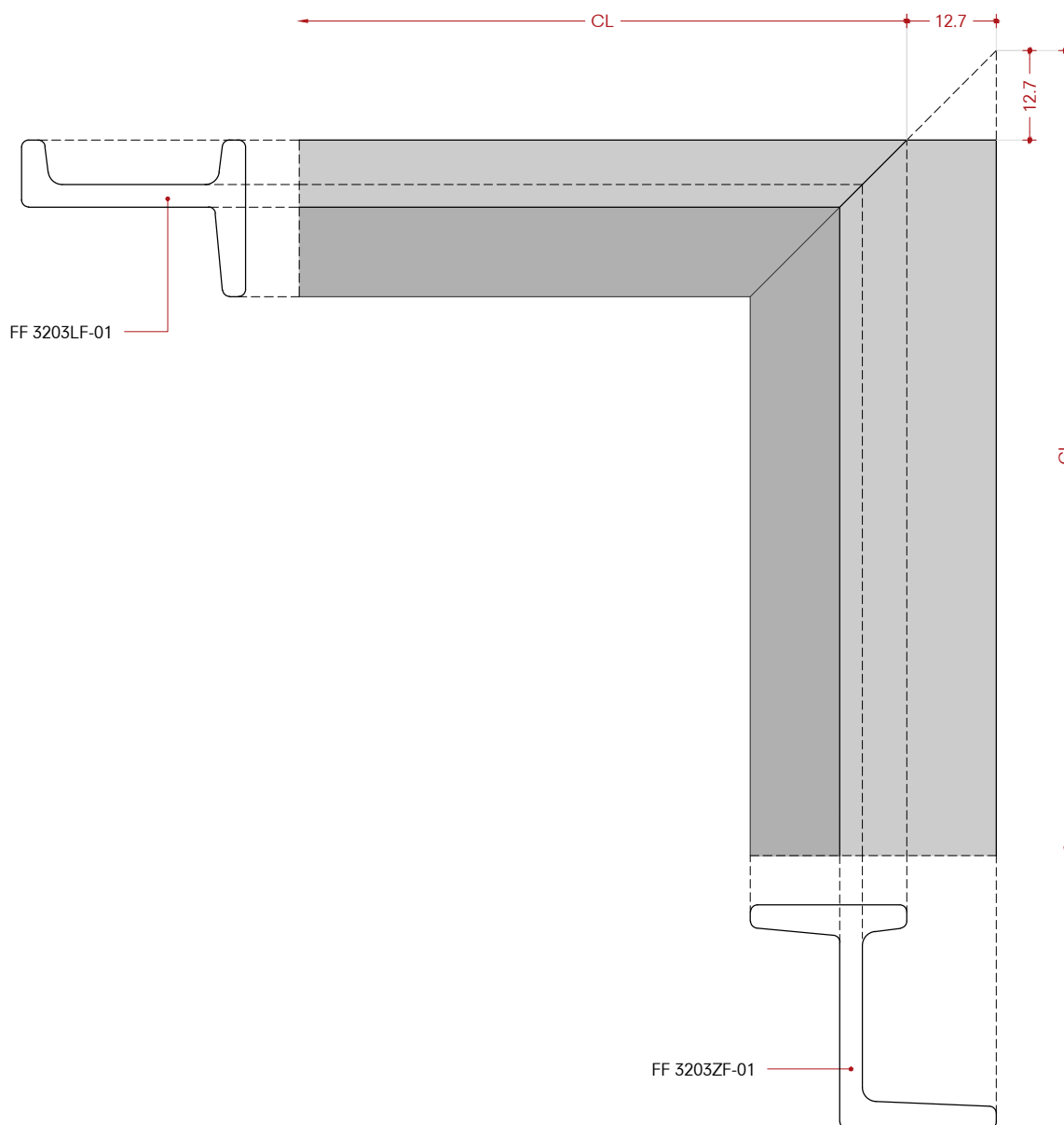
Fixed partition

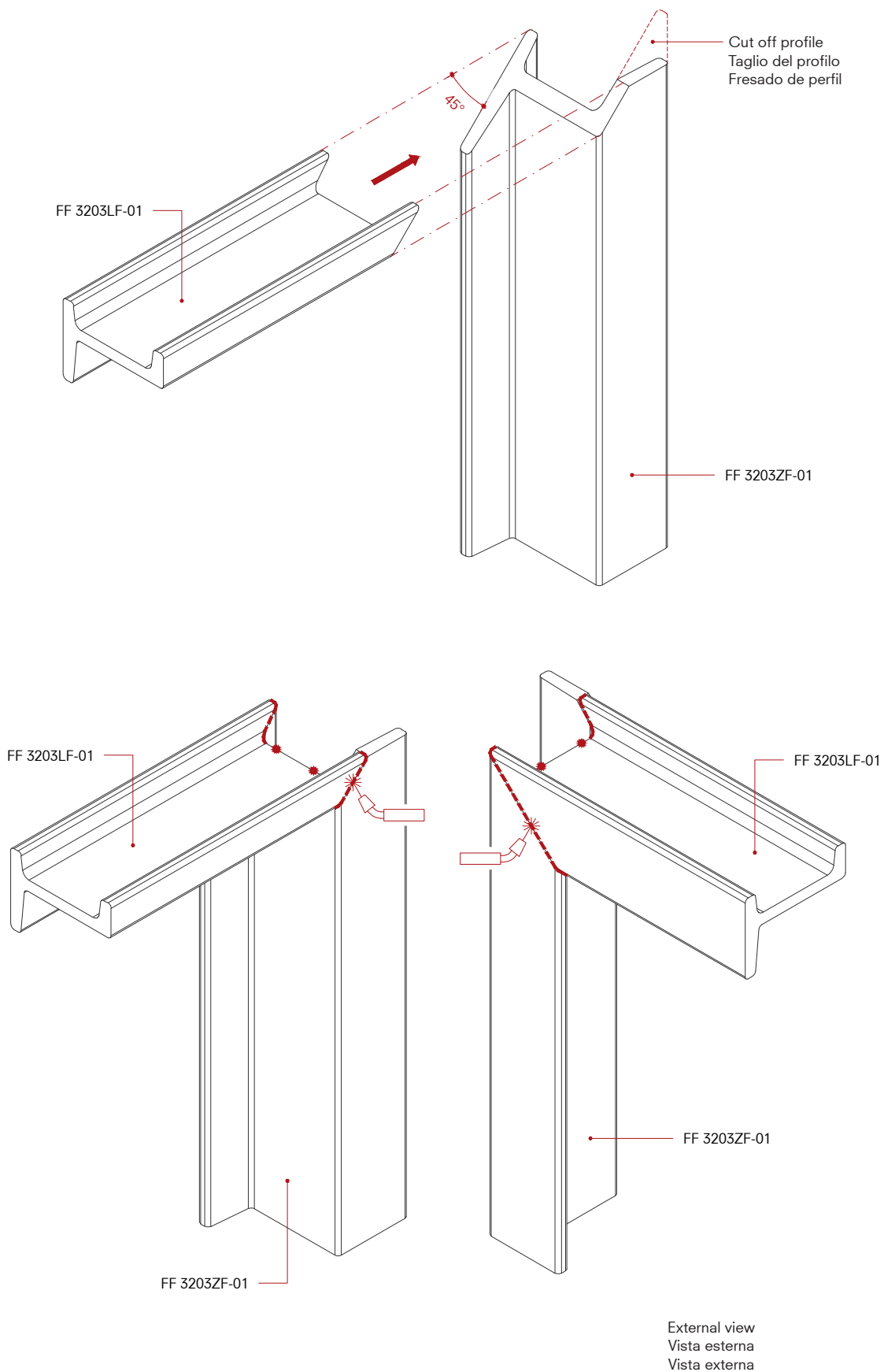
Finestra telaio fisso

Ventana fija



Internal view
Vista interna
Vista interna



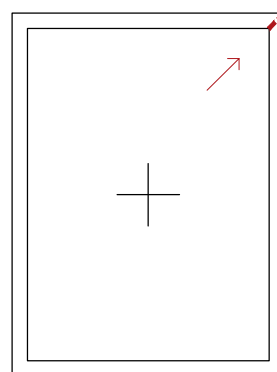


FF 3203TF-01 / FF 3203LF-01

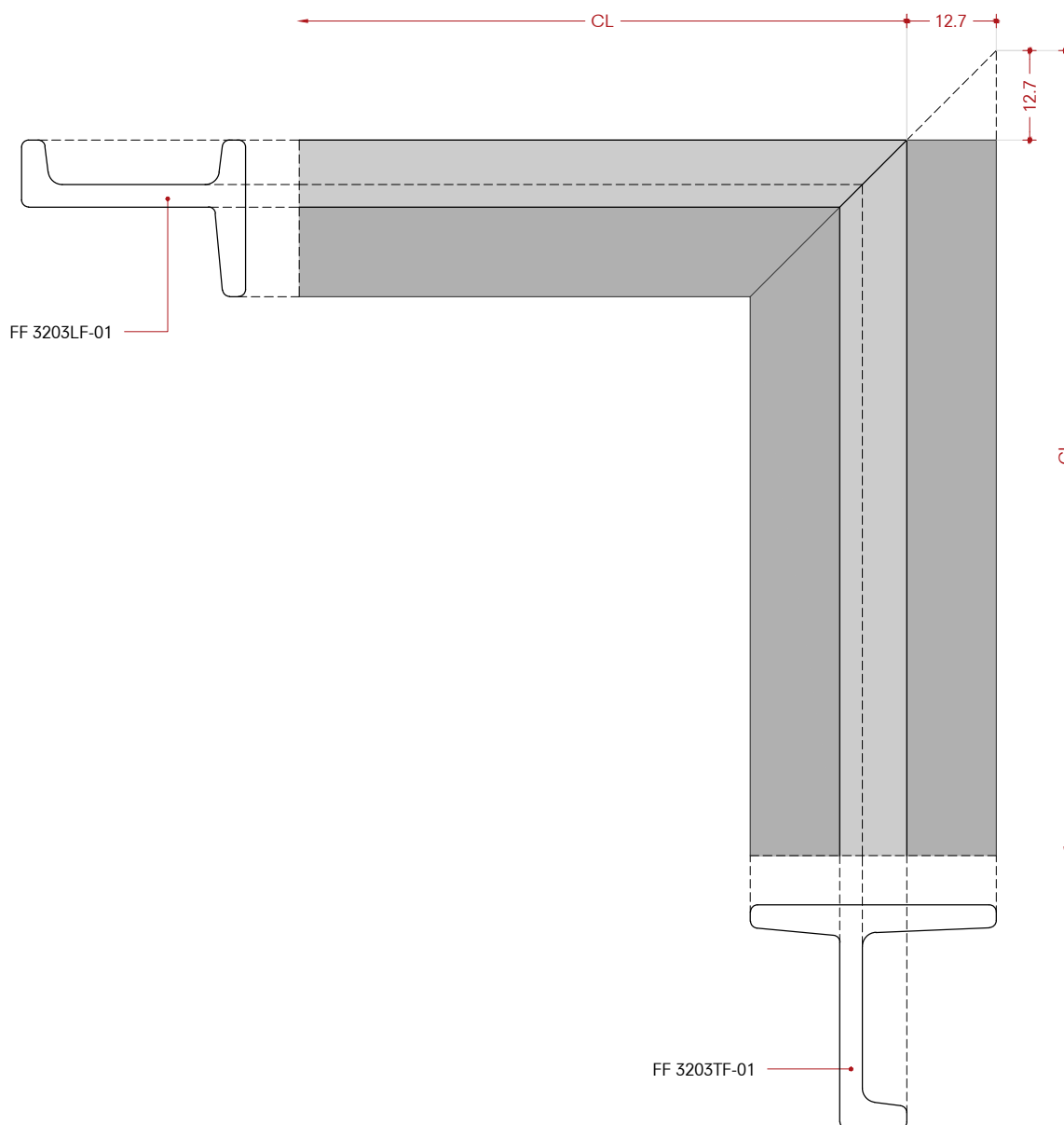
Fixed partition

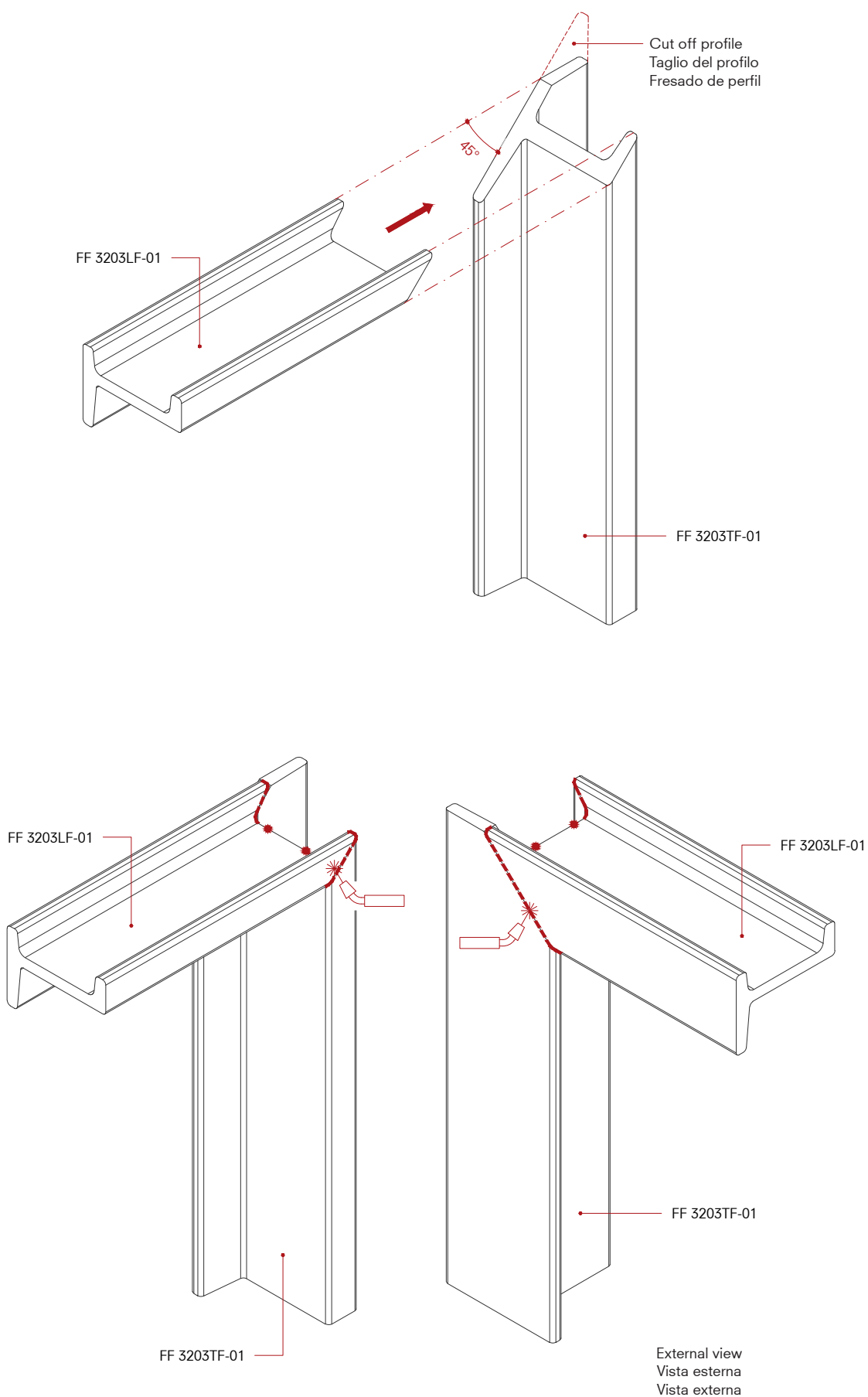
Finestra telaio fisso

Ventana fija



Internal view
Vista interna
Vista interna





Accessories installation:	Montaggio accessori:	Montaje accesorios:	
Gaskets	Guarnizioni	Juntas de sellado	5.4

Cutting

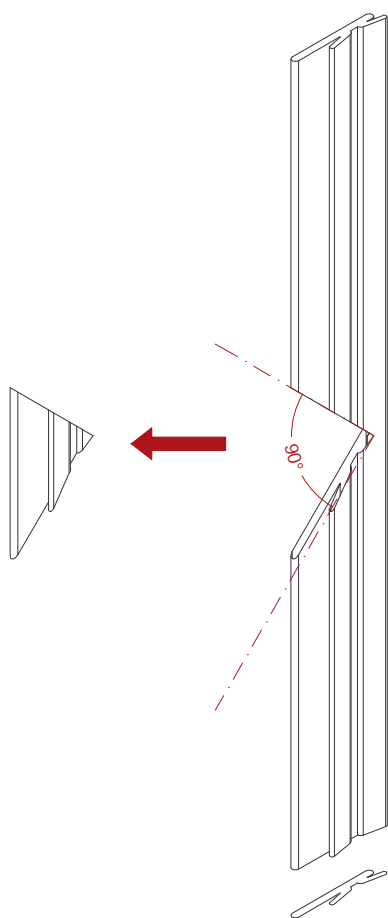
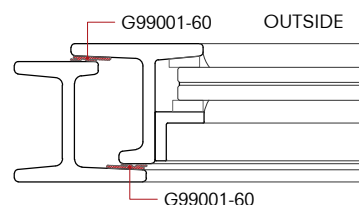
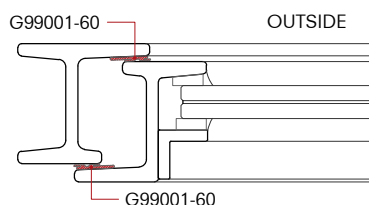
Rebate gasket G99001-60 at 45°
Open in and open out

Taglio

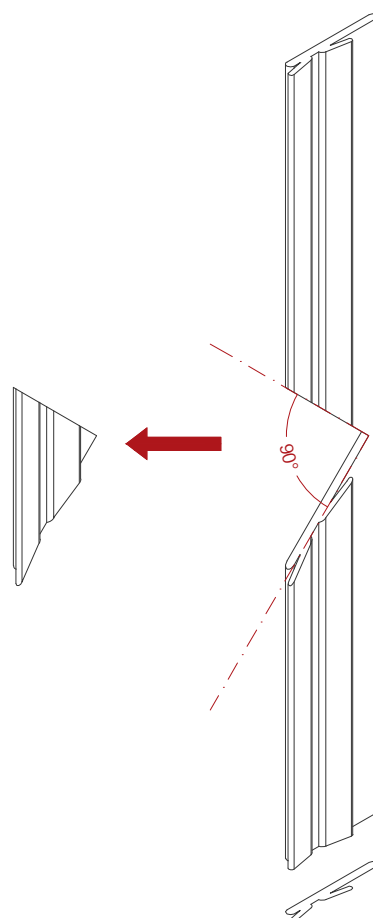
Guarnizione di battuta G99001-60 a 45°
Apertura interna ed esterna

Corte

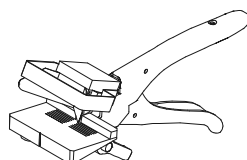
Junta de tope G99001-60 en 45°
Apertura interna ed externa



2



2



- 1) Use seal scissor D99543-02
- 2) Glue with sealant OS 364991

- 1) Utilizzare la forbice per guarnizioni D99543-02
- 2) Incollare con sigillante OS 364991

- 1) Use las tijeras para juntas D99543-02
- 2) Pegar con adherente OS 364991

Cutting

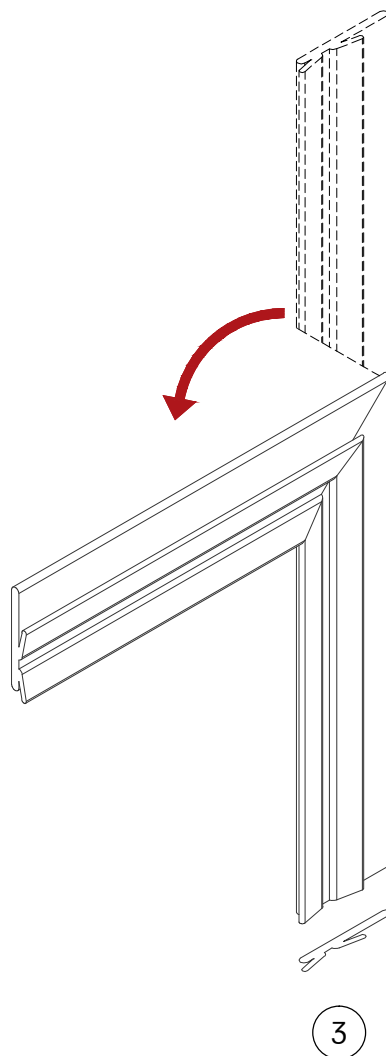
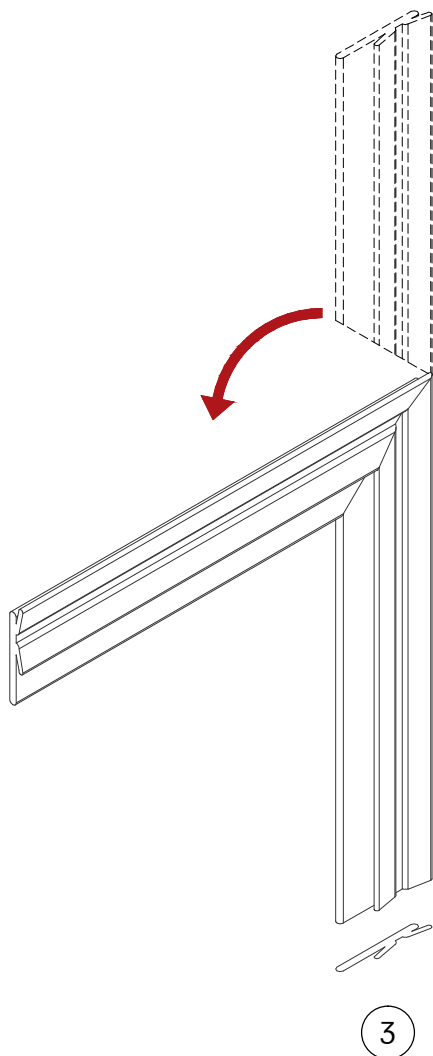
Rebate gasket G99001-60 at 45°
Open in and open out

Taglio

Guarnizione di battuta G99001-60 a 45°
Apertura interna ed esterna

Corte

Junta de tope G99001-60 en 45°
Apertura interna ed externa



- 1) Use seal scissor D99543-02
- 2) Glue with sealant OS 364991

- 1) Utilizzare la forbice per guarnizioni D99543-02
- 2) Incollare con sigillante OS 364991

- 1) Use las tijeras para juntas D99543-02
- 2) Pegar con adherente OS 364991

Cutting

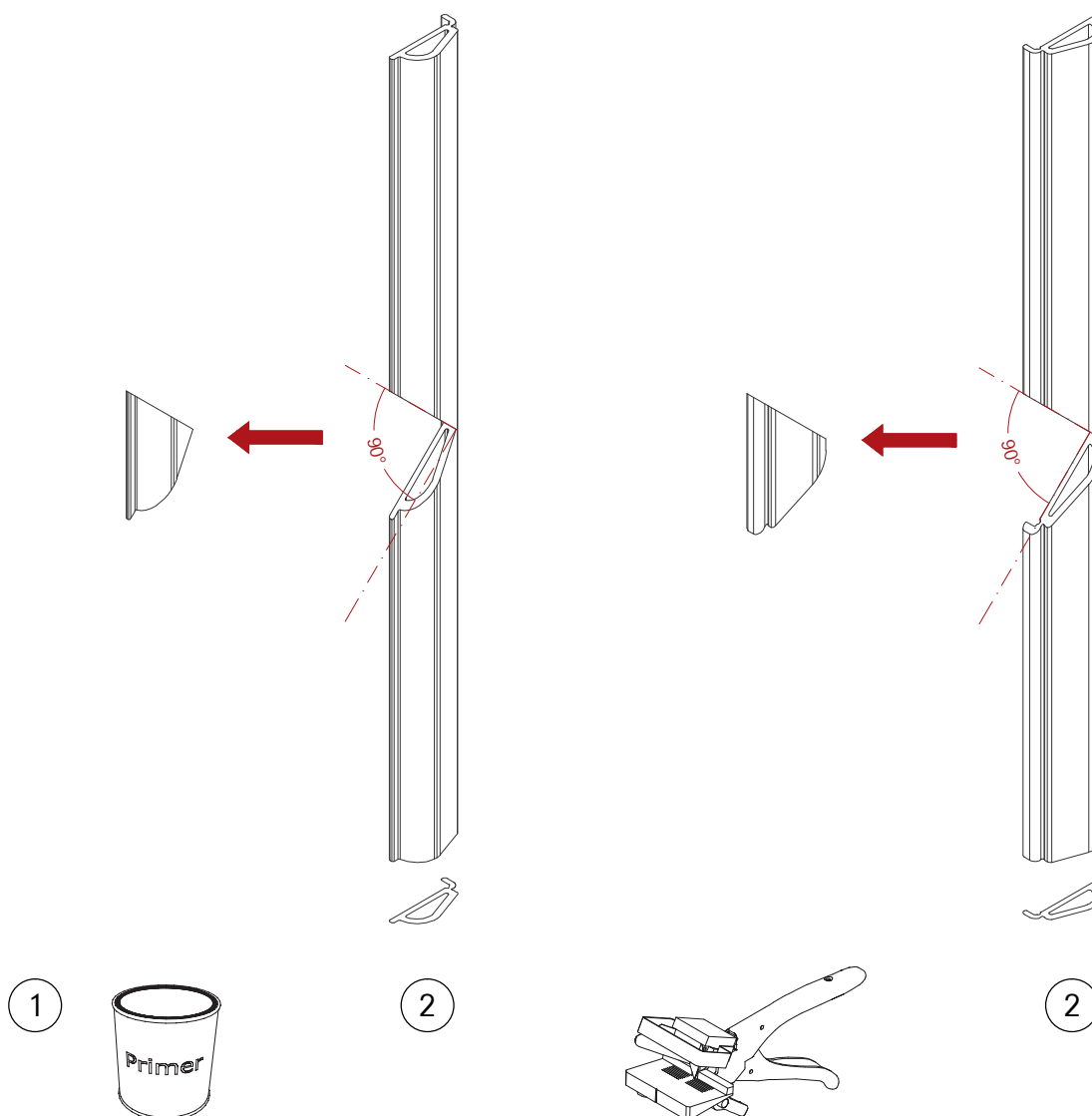
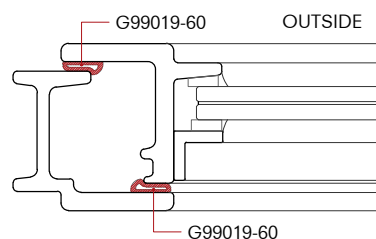
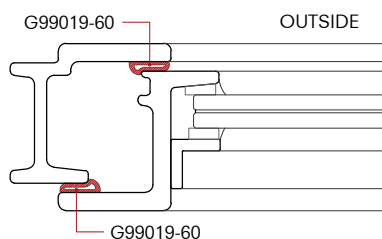
Rebate gasket G99019-60 at 45°
Open in and open out

Taglio

Guarnizione di battuta G99019-60 a 45°
Apertura interna ed esterna

Corte

Junta de tope G99019-60 en 45°
Apertura interna ed externa



- 1) Clean surface and apply primer I99005-75
- 2) Use seal scissor D99543-02
- 3) Glue with sealant OS 364991
- 4) Removable positioning lip

- 1) Pulire superficie e stendere primer I99005-75
- 2) Utilizzare la forbice per guarnizioni D99543-02
- 3) Incollare angoli con sigillante OS 364991
- 4) Rimuovere labbro di posizionamento

- 1) Limpiar la superficie y aplicar el Primer I99005-75
- 2) Use las tijeras para juntas D99543-02
- 3) Pegar esquinas con sellador OS 364991
- 4) Retire el labio de posicionamiento

Cutting

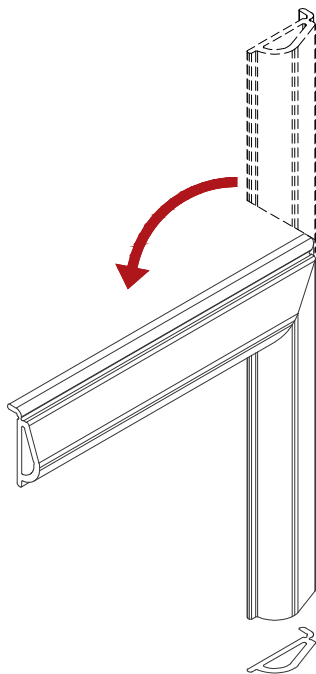
Rebate gasket G99019-60 at 45°
Open in and open out

Taglio

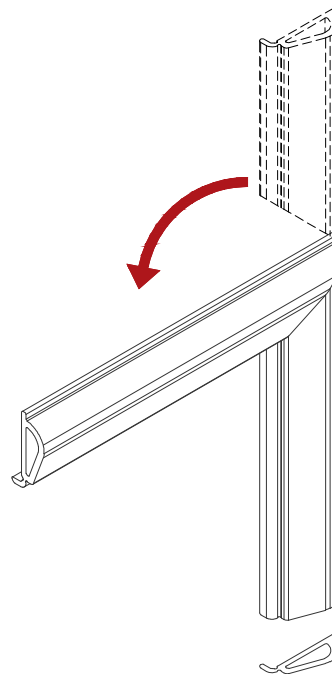
Guarnizione di battuta G99019-60 a 45°
Apertura interna ed esterna

Corte

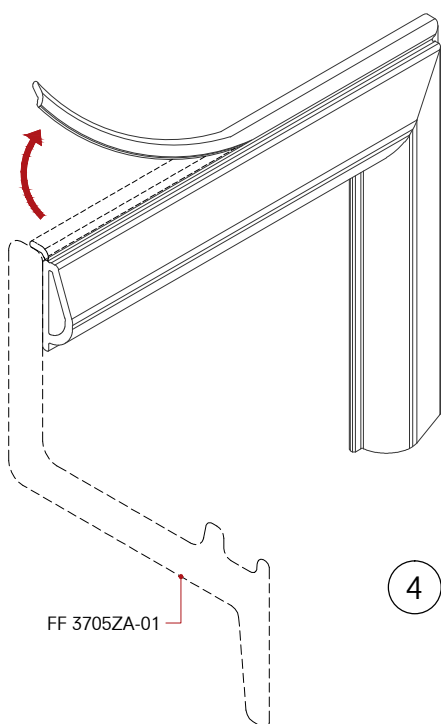
Junta de tope G99019-60 en 45°
Apertura interna ed externa



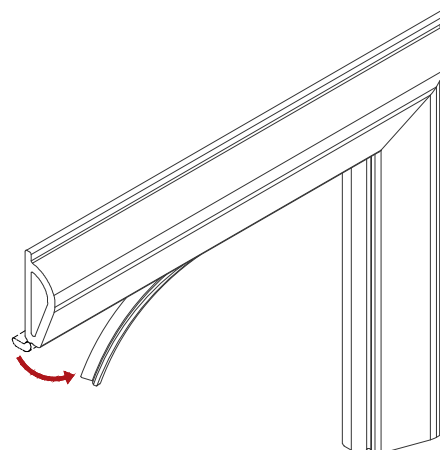
3



3



4



4

- 1) Clean surface and apply primer I99005-75
- 2) Use seal scissor D99543-02
- 3) Glue with sealant OS 364991
- 4) Removable positioning lip

- 1) Pulire superficie e stendere primer I99005-75
- 2) Utilizzare la forbice per guarnizioni D99543-02
- 3) Incollare angoli con sigillante OS 364991
- 4) Rimuovere labbro di posizionamento

- 1) Limpiar la superficie y aplicar el Primer I99005-75
- 2) Use las tijeras para juntas D99543-02
- 3) Pegar esquinas con sellador OS 364991
- 4) Retire el labio de posicionamiento

Accessories installation:	Montaggio accessori:	Montaje accesorios:	
System accessories	Accessori di sistema	Accesorios del sistema	5.5

Profile processing

FF 3705ZA-01 + FF 3705TAP-01
W20 Classic - Double leaf window
Open in

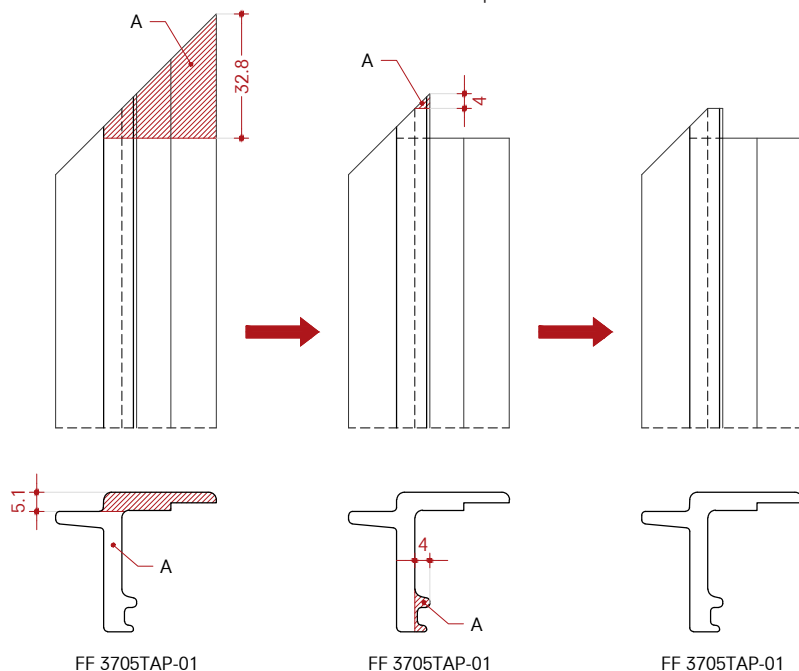
Lavorazione del profilo

FF 3705ZA-01 + FF 3705TAP-01
W20 Classic - Finestra a due battenti
Apertura interna

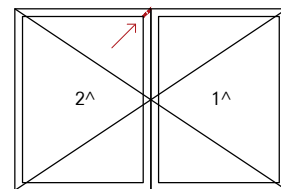
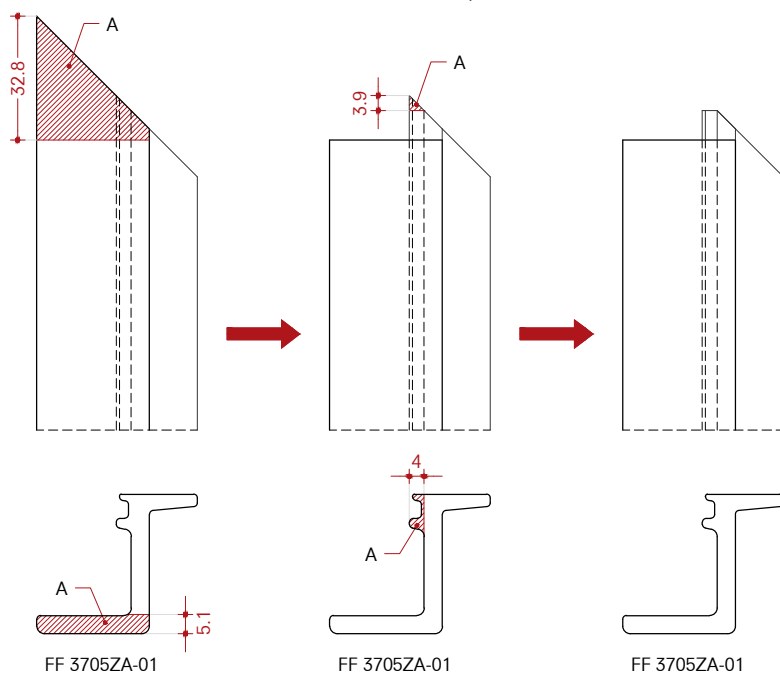
Mecanizado de perfil

FF 3705ZA-01 + FF 3705TAP-01
W20 Classic - Ventana de dos hojas
Que se abre hacia dentro

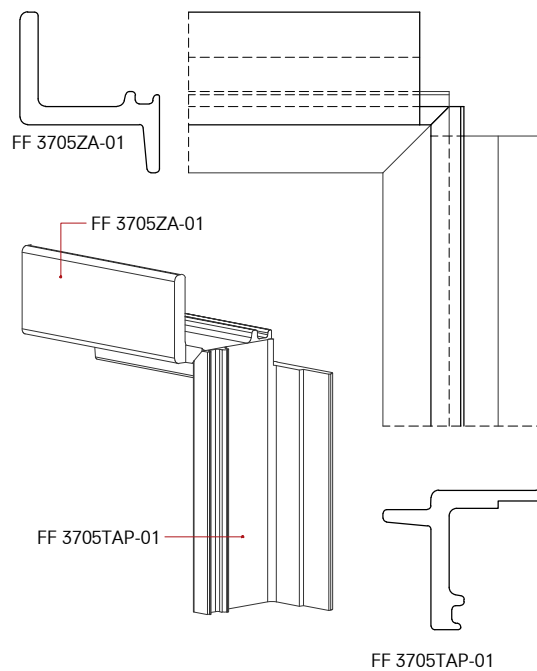
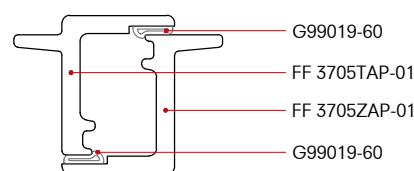
FF 3705TAP-01 profile milling
Parti da rimuovere profilo FF 3705TAP-01
Acortamientos de perfil FF 3705TAP-01



FF 3705ZA-01 profile milling
Parti da rimuovere profilo FF 3705ZA-01
Acortamientos de perfil FF 3705ZA-01



Internal view
Vista interna
Vista interna



Assembling profile
Assemblaggio dei profili
Perfil de montaje

A) Cut outs

A) Fresate

A) Fresado

Profile processing

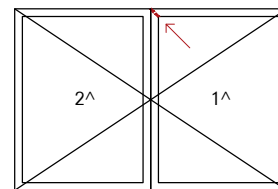
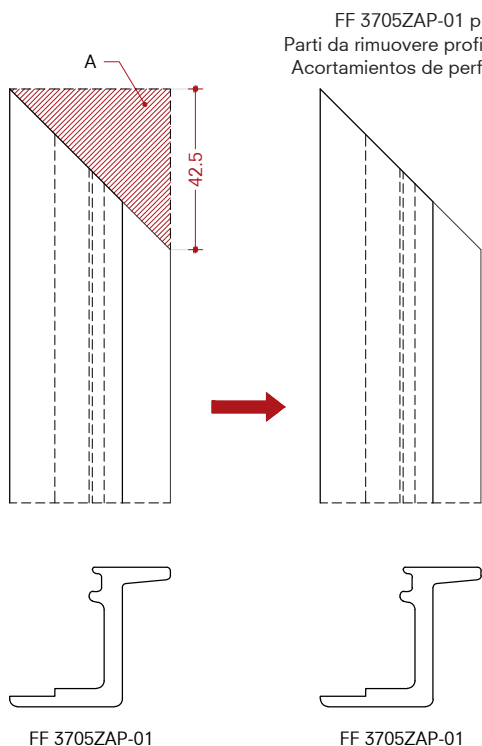
FF 3705ZA-01 + FF 3705ZAP-01
W20 Classic - Double leaf window
Open in

Lavorazione del profilo

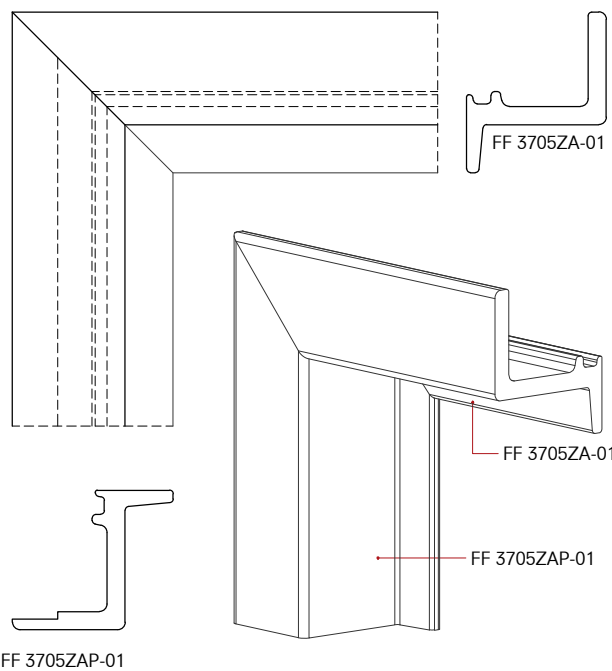
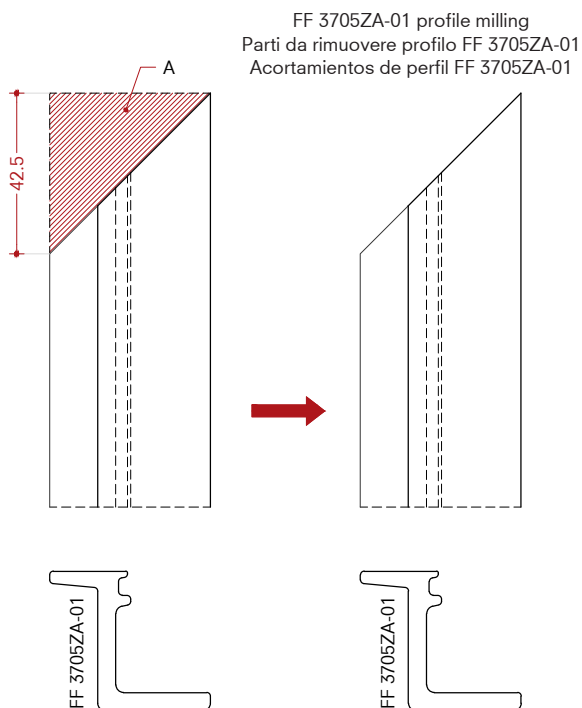
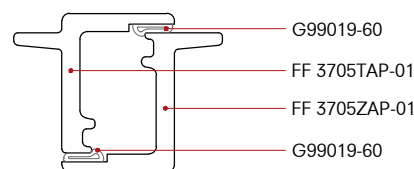
FF 3705ZA-01 + FF 3705ZAP-01
W20 Classic - Finestra a due battenti
Apertura interna

Mecanizado de perfil

FF 3705ZA-01 + FF 3705ZAP-01
W20 Classic - Ventana de dos hojas
Que se abre hacia dentro



Internal view
Vista interna
Vista interna



Assembling profile
Assemblaggio dei profili
Perfil de montaje

A) Cut outs

A) Fresate

A) Fresado

Profile processing

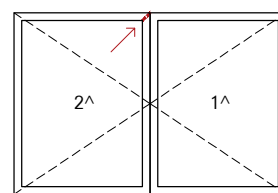
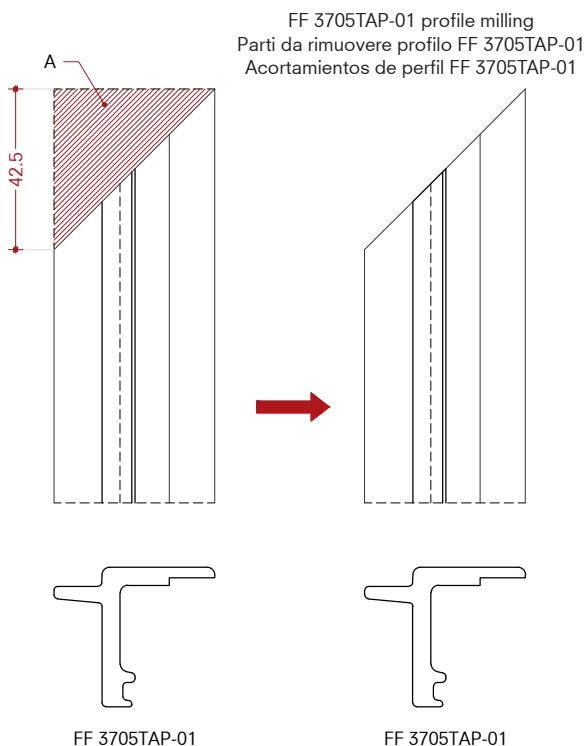
FF 3705TA-01 + FF 3705TAP-01
W20 Classic - Double leaf window
Open out

Lavorazione del profilo

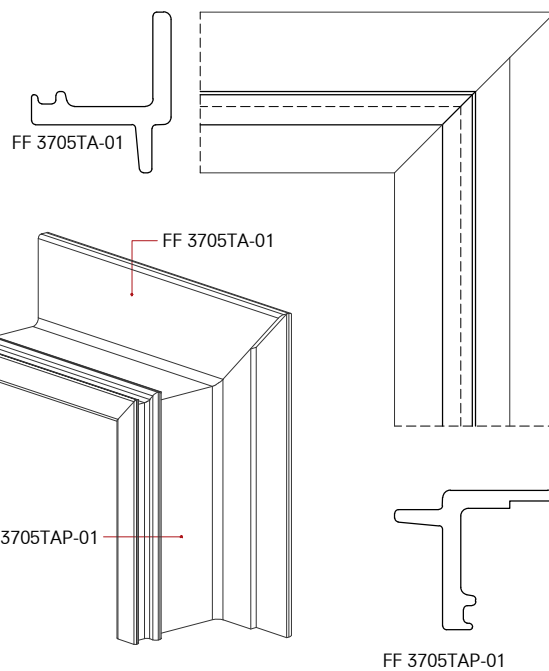
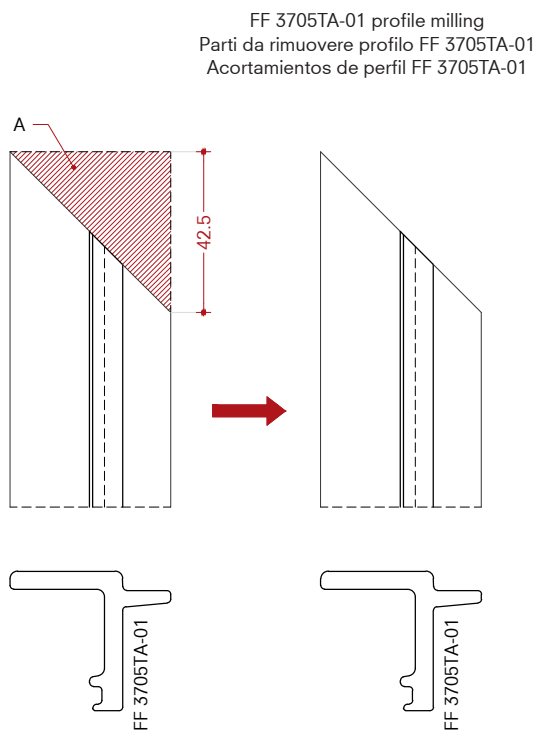
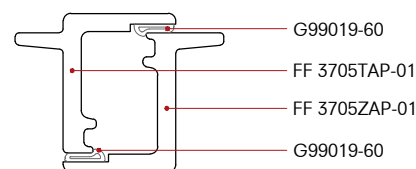
FF 3705TA-01 + FF 3705TAP-01
W20 Classic - Finestra a due battenti
Apertura esterna

Mecanizado de perfil

FF 3705TA-01 + FF 3705TAP-01
W20 Classic - Ventana de dos hojas
Que se abre hacia fuera



Internal view
Vista interna
Vista interna



Assembling profile
Assemblaggio dei profili
Perfil de montaje

A) Cut outs

A) Fresate

A) Fresado

Profile processing

FF 3705TA-01 + FF 3705ZAP-01
W20 Classic - Double leaf window
Open out

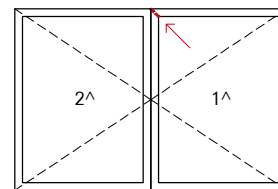
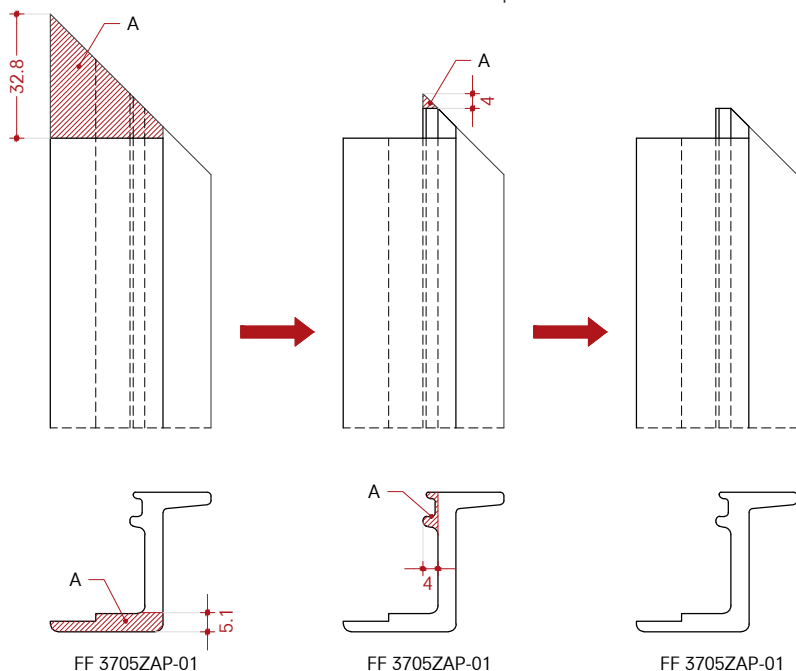
Lavorazione del profilo

FF 3705TA-01 + FF 3705ZAP-01
W20 Classic - Finestra a due battenti
Apertura esterna

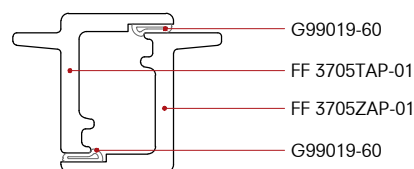
Mecanizado de perfil

FF 3705TA-01 + FF 3705ZAP-01
W20 Classic - Ventana de dos hojas
Que se abre hacia fuera

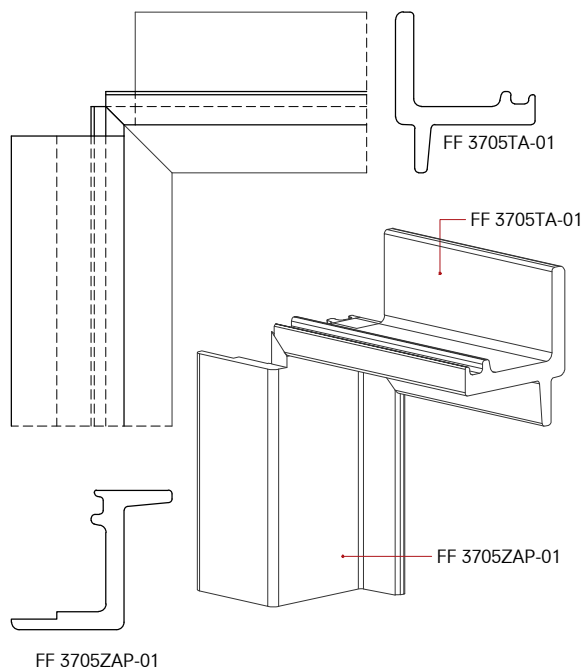
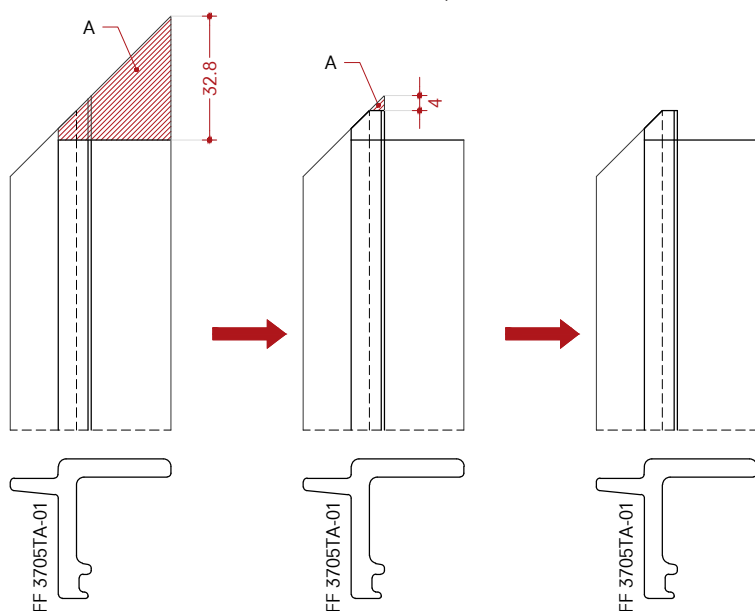
FF 3705ZAP-01 profile milling
Parti da rimuovere profilo FF 3705ZAP-01
Acortamientos de perfil FF 3705ZAP-01



Internal view
Vista interna
Vista interna



FF 3705TA-01 profile milling
Parti da rimuovere profilo FF 3705TA-01
Acortamientos de perfil FF 3705TA-01



Assembling profile
Assemblaggio dei profili
Perfil de montaje

A) Cut outs

A) Fresate

A) Fresado

Profile processing

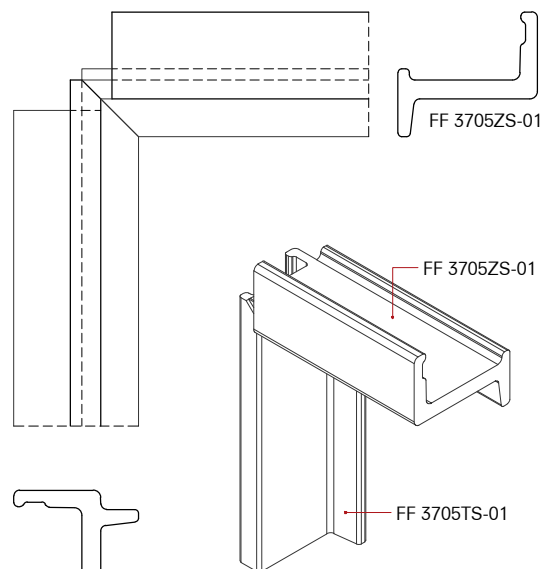
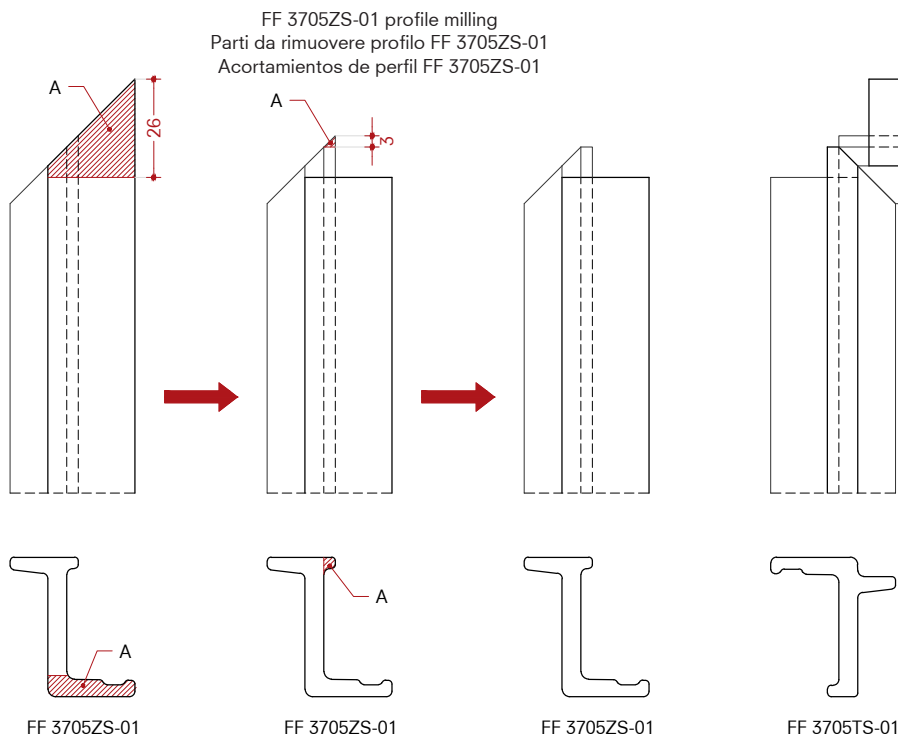
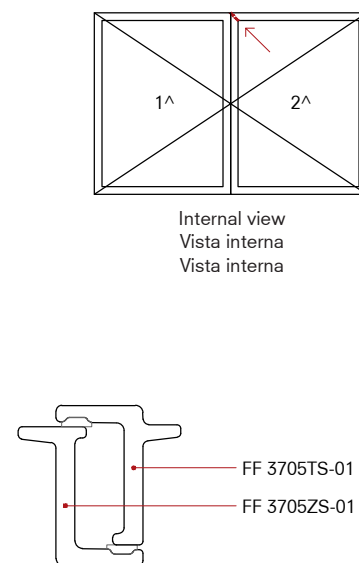
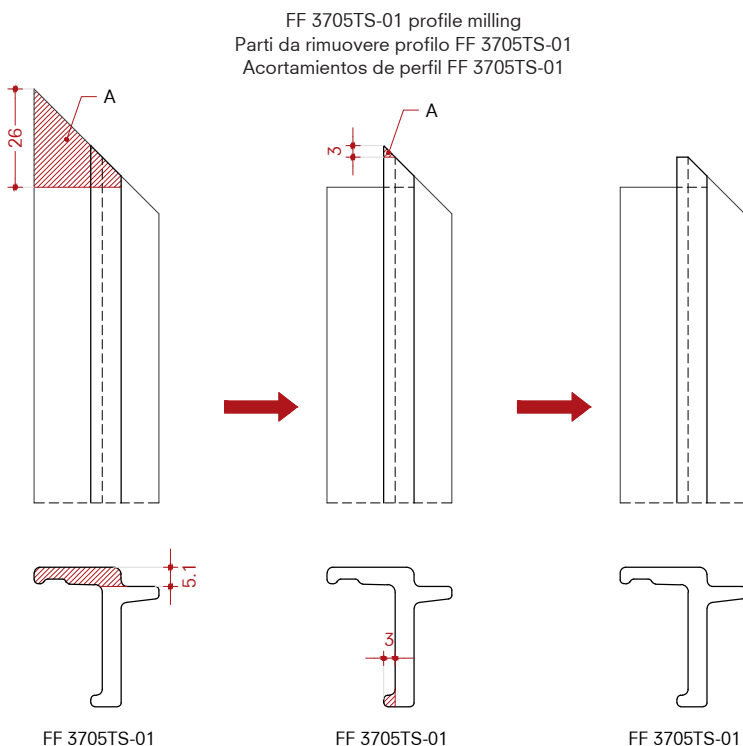
FF 3705TS-01 + FF 3705ZS-01
W20 Slim - Double leaf window
Open in

Lavorazione del profilo

FF 3705TS-01 + FF 3705ZS-01
W20 Slim - Finestra a due battenti
Apertura interna

Mecanizado de perfil

FF 3705TS-01 + FF 3705ZS-01
W20 Slim - Ventana de dos hojas
Que se abre hacia dentro



Assembling profile
Assemblaggio dei profili
Perfil de montaje

A) Cut outs

A) Fresate

A) Fresado

Processing

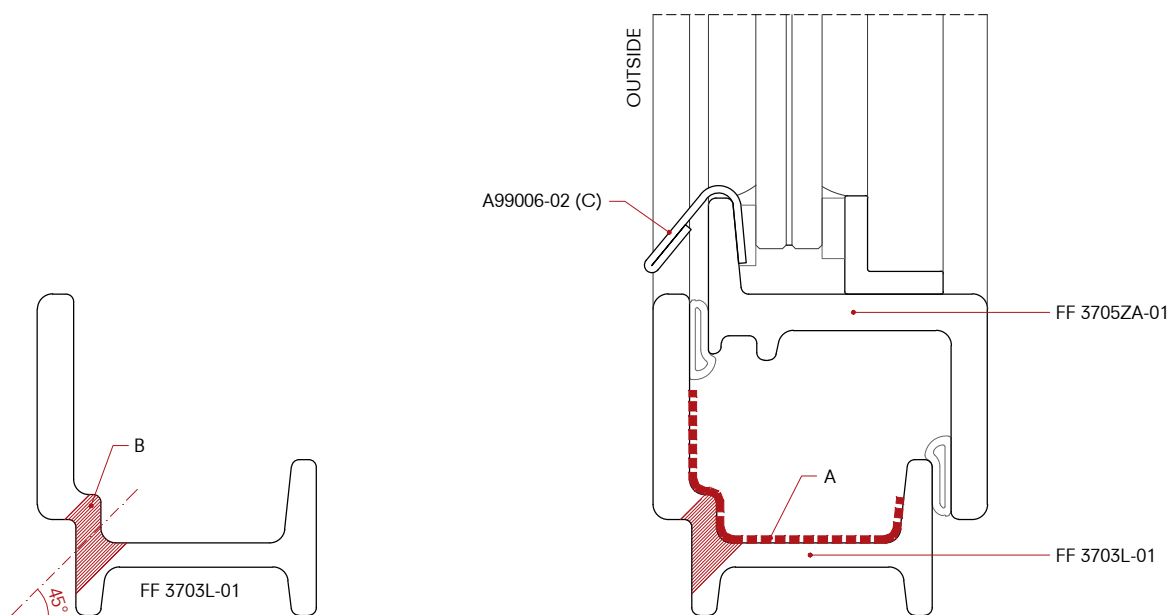
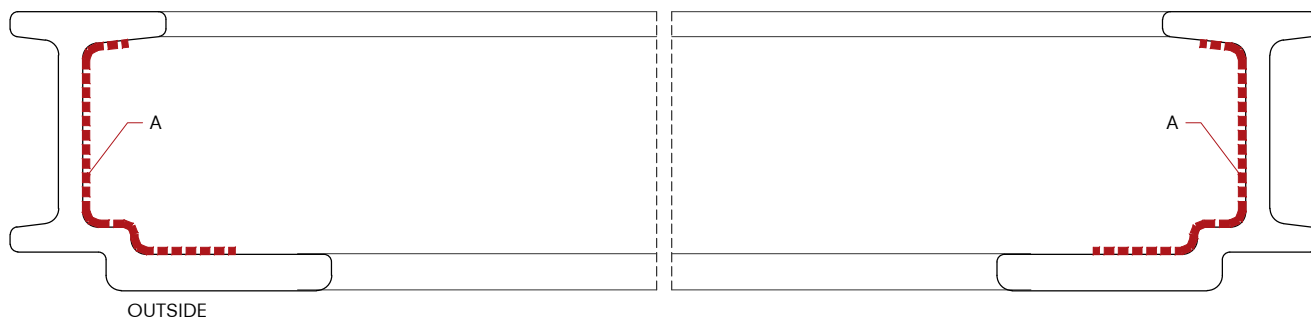
W20 Classic - Drainage
Open in

Lavorazione

W20 Classic - Drenaggio
Apertura interna

Mecanizado

W20 Classic - Drenaje
Que se abre hacia dentro



Note:

To be sealed after coating.

- A) Sealant at corners
- B) n°02 Ø8 holes on frame profile
- C) Weather bar A99006-02

Nota:

Da sigillare dopo verniciatura.

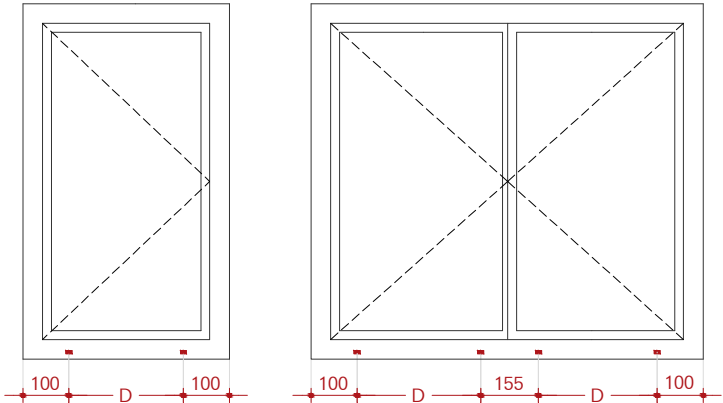
- A) Sigillante negli angoli
- B) n°02 fori Ø8 sul profilo del telaio
- C) Gocciolatoio A99006-02

Nota:

Para ser sellado después de pintar

- A) Agente sellante en las esquinas
- B) n°02 orificios Ø8 en marco de perfil
- C) Vierendeaguas A99006-02

Outside view / Vista dall'esterno / Vista desde el exterior



Min. n°02 drain holes
For single leaf window

Minimo n°02 fori
Per finestra anta singola

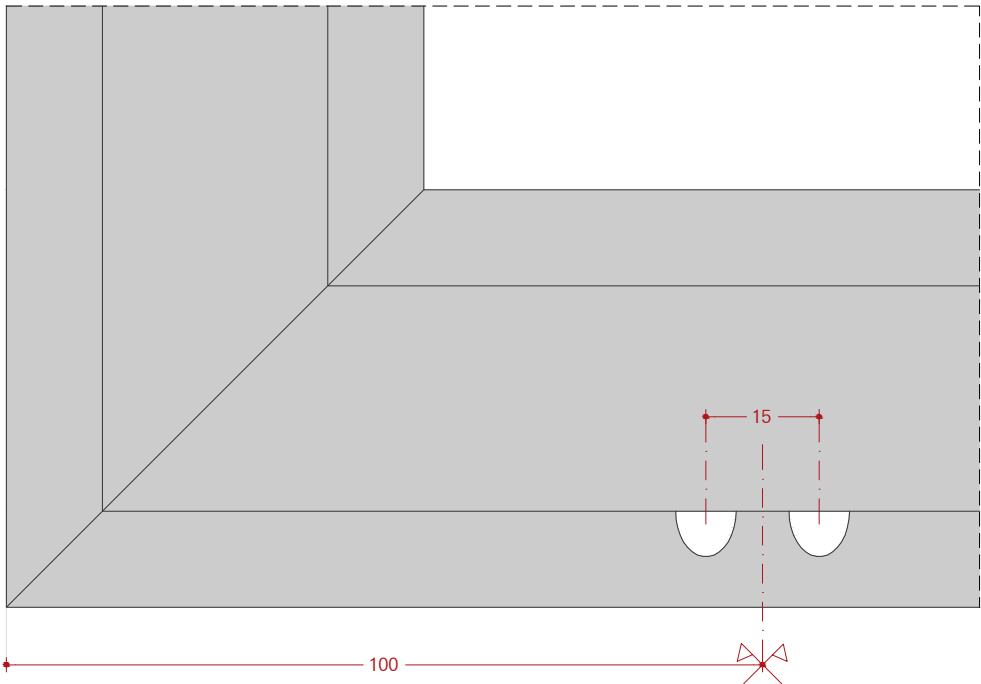
Minimo n°02 orificios
Para ventana de una hoja

Min. n°04 drain holes
For double leaf window

Minimo n°04 fori
Per finestra anta doppia

Minimo n°04 orificios
Para ventana de doble hoja

Position of drainage holes
Posizione dei fori di drenaggio
Posición de orificios de desagüe



D) Max. distance between drainage holes
1000 mm

D) Massima distanza tra i fori di drenaggio
1000 mm

D) Distancia máxima entre orificios de desagüe
1000 mm

Processing

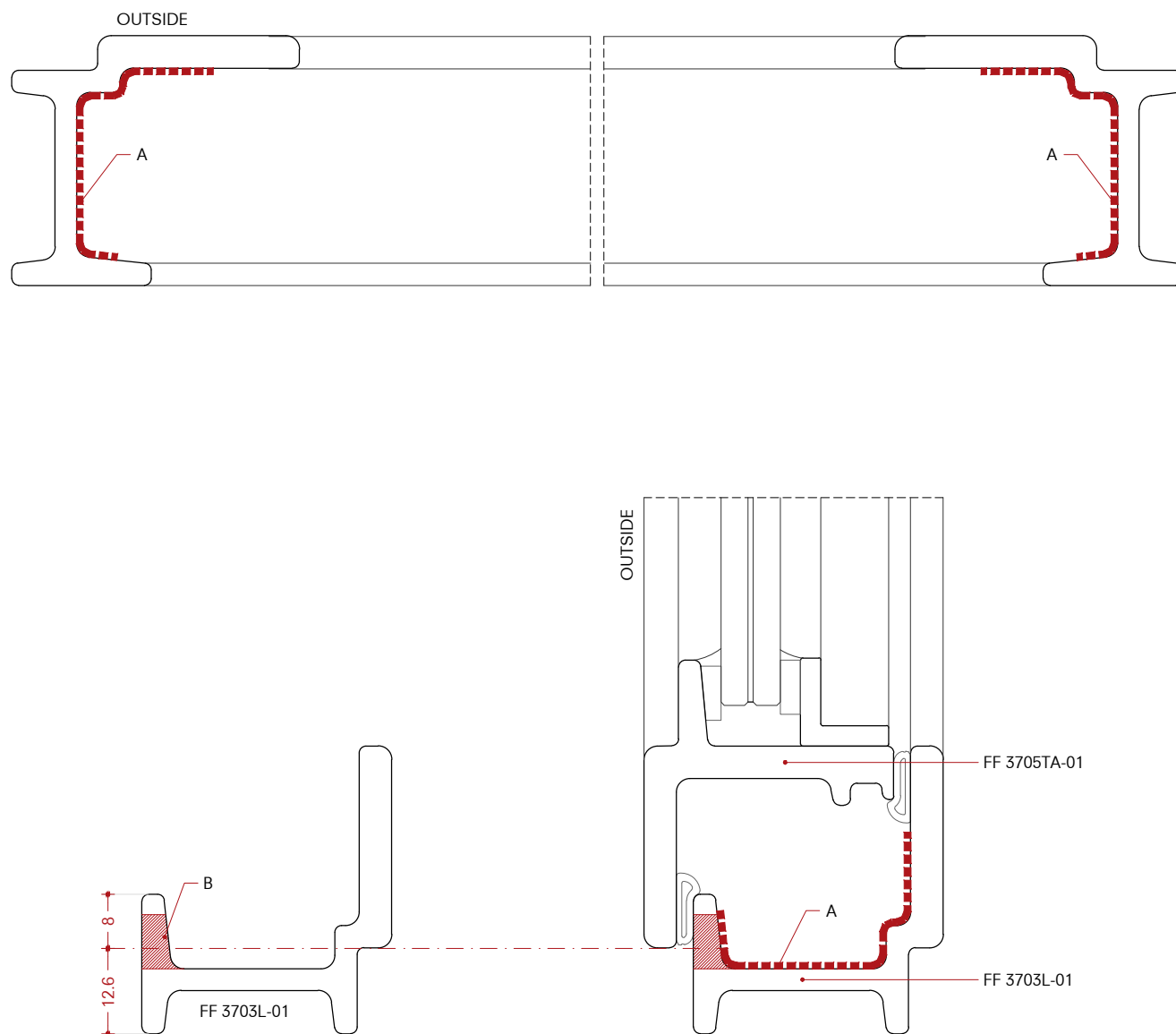
W20 Classic - Drainage
Open out

Lavorazione

W20 Classic - Drenaggio
Apertura esterna

Mecanizado

W20 Classic - Drenaje
Que se abre hacia fuera



Note:

To be sealed after coating.

- A) Sealant at corners
B) n°02 Ø8 holes on frame profile

Nota:

Da sigillare dopo verniciatura.

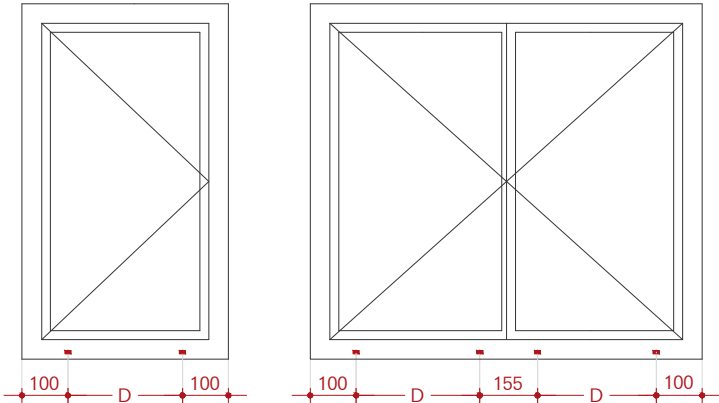
- A) Sigillante negli angoli
B) n°02 fori Ø8 sul profilo del telaio

Nota:

Para ser sellado después de pintar

- A) Agente sellante en las esquinas
B) n°02 orificios Ø8 en marco de perfil

Outside view / Vista dall'esterno / Vista desde el exterior



Min. n°02 drain holes
For single leaf window

Minimo n°02 fori
Per finestra anta singola

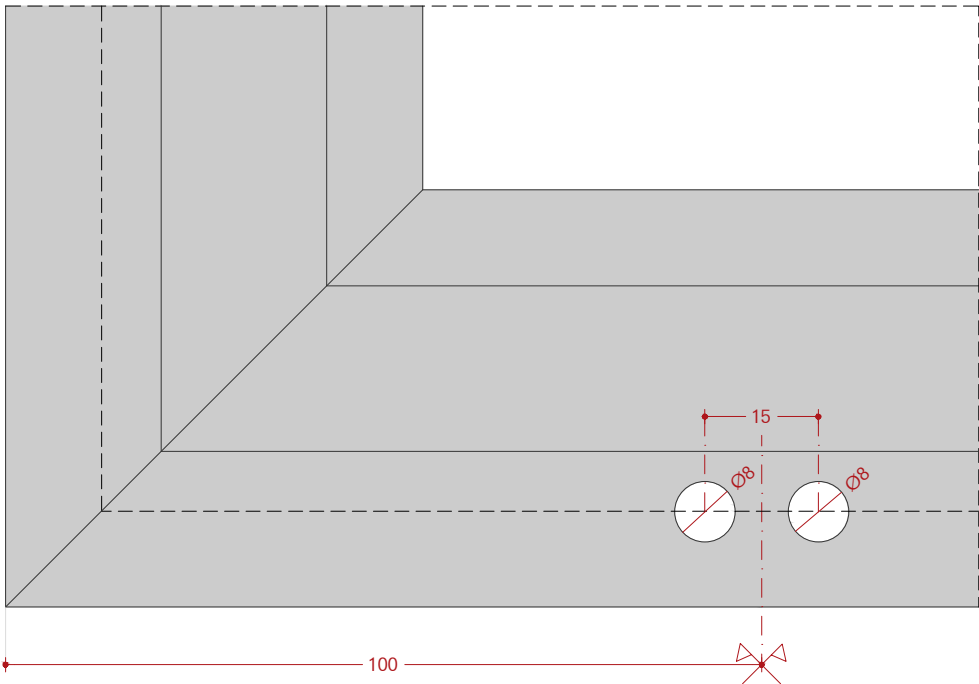
Minimo n°02 orificios
Para ventana de una hoja

Min. n°04 drain holes
For double leaf window

Minimo n°04 fori
Per finestra anta doppia

Minimo n°04 orificios
Para ventana de doble hoja

Position of drainage holes
Posizione dei fori di drenaggio
Posición de orificios de desagüe



D) Max. distance between drainage holes
1000 mm

D) Massima distanza tra i fori di drenaggio
1000 mm

D) Distancia máxima entre orificios de desagüe
1000 mm

Processing

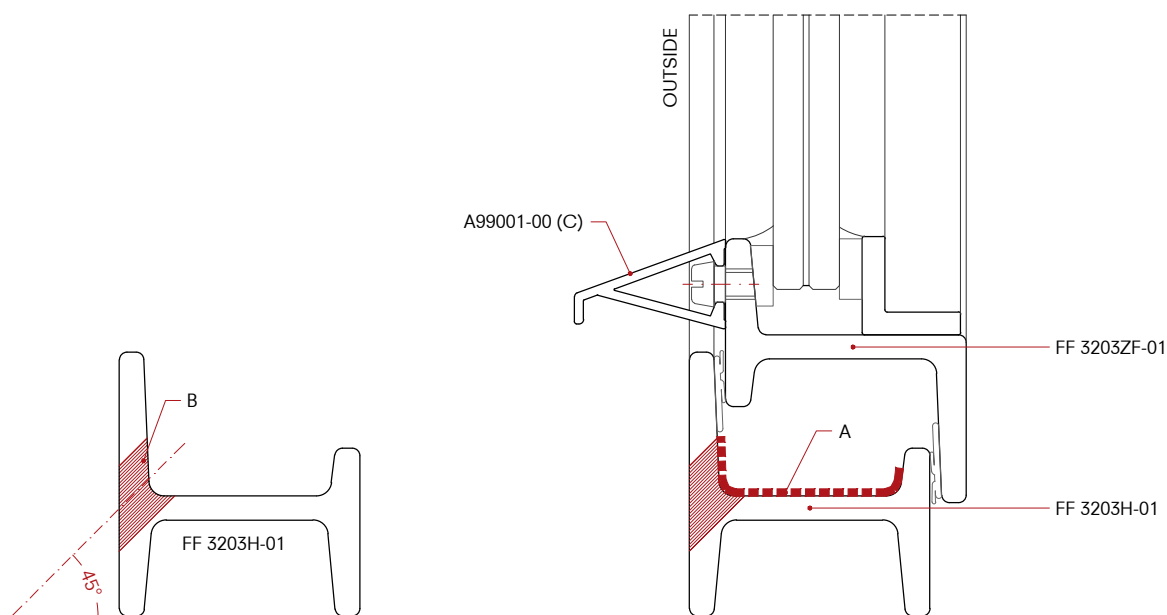
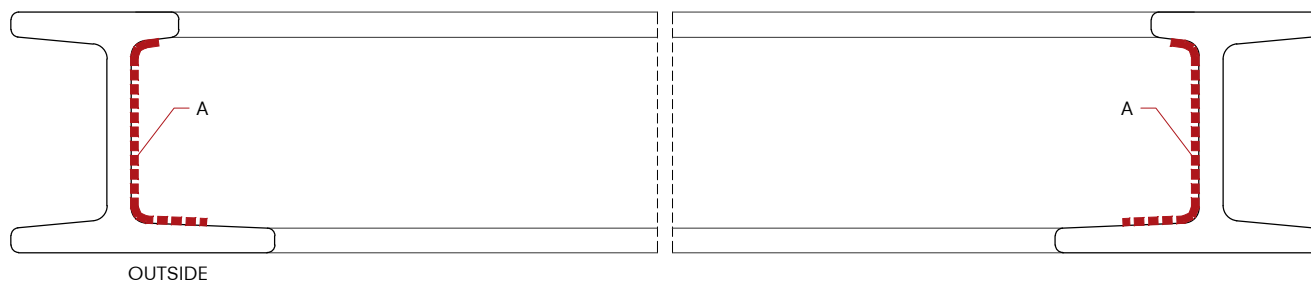
W20 Basic - Drainage
Open in

Lavorazione

W20 Basic - Drenaggio
Apertura interna

Mecanizado

W20 Basic - Drenaje
Que se abre hacia dentro



Note:

To be sealed after coating.

- A) Sealant at corners
- B) n°02 Ø8 holes on frame profile
- C) Weather bar A99001-00

Nota:

Da sigillare dopo verniciatura.

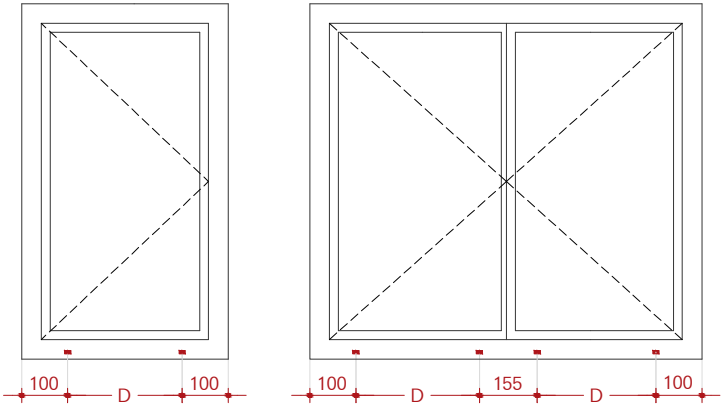
- A) Sigillante negli angoli
- B) n°02 fori Ø8 sul profilo del telaio
- C) Gocciolatoio A99001-00

Nota:

Para ser sellado después de pintar

- A) Agente sellante en las esquinas
- B) n°02 orificios Ø8 en marco de perfil
- C) Vierendeaguas A99001-00

Outside view / Vista dall'esterno / Vista desde el exterior



Min. n°02 drain holes
For single leaf window

Minimo n°02 fori
Per finestra anta singola

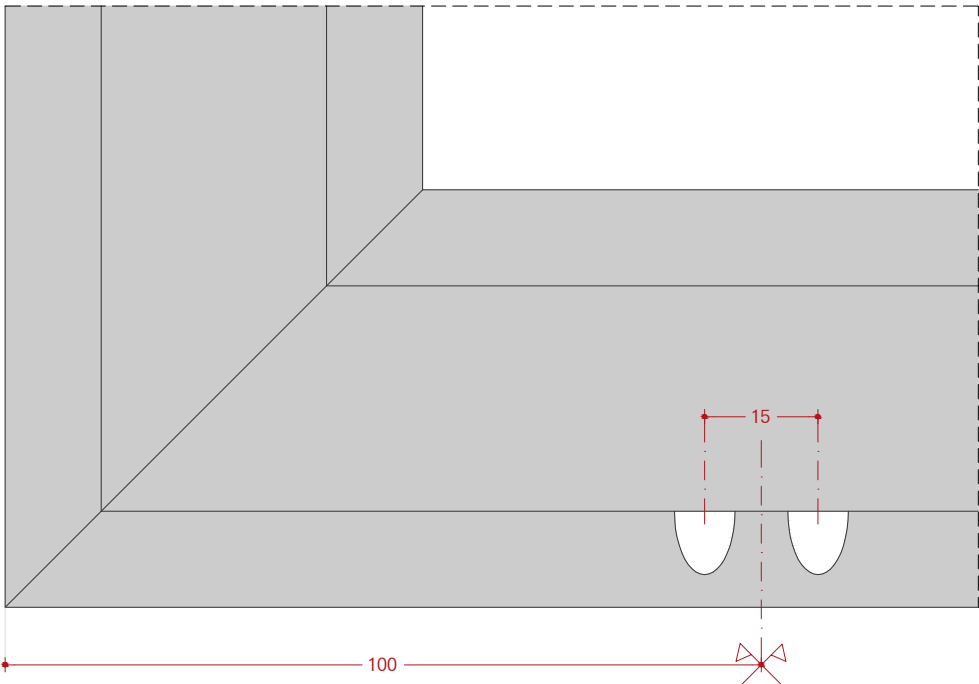
Minimo n°02 orificios
Para ventana de una hoja

Min. n°04 drain holes
For double leaf window

Minimo n°04 fori
Per finestra anta doppia

Minimo n°04 orificios
Para ventana de doble hoja

Position of drainage holes
Posizione dei fori di drenaggio
Posición de orificios de desagüe



D) Max. distance between drainage holes
1000 mm

D) Massima distanza tra i fori di drenaggio
1000 mm

D) Distancia máxima entre orificios de desagüe
1000 mm

Processing

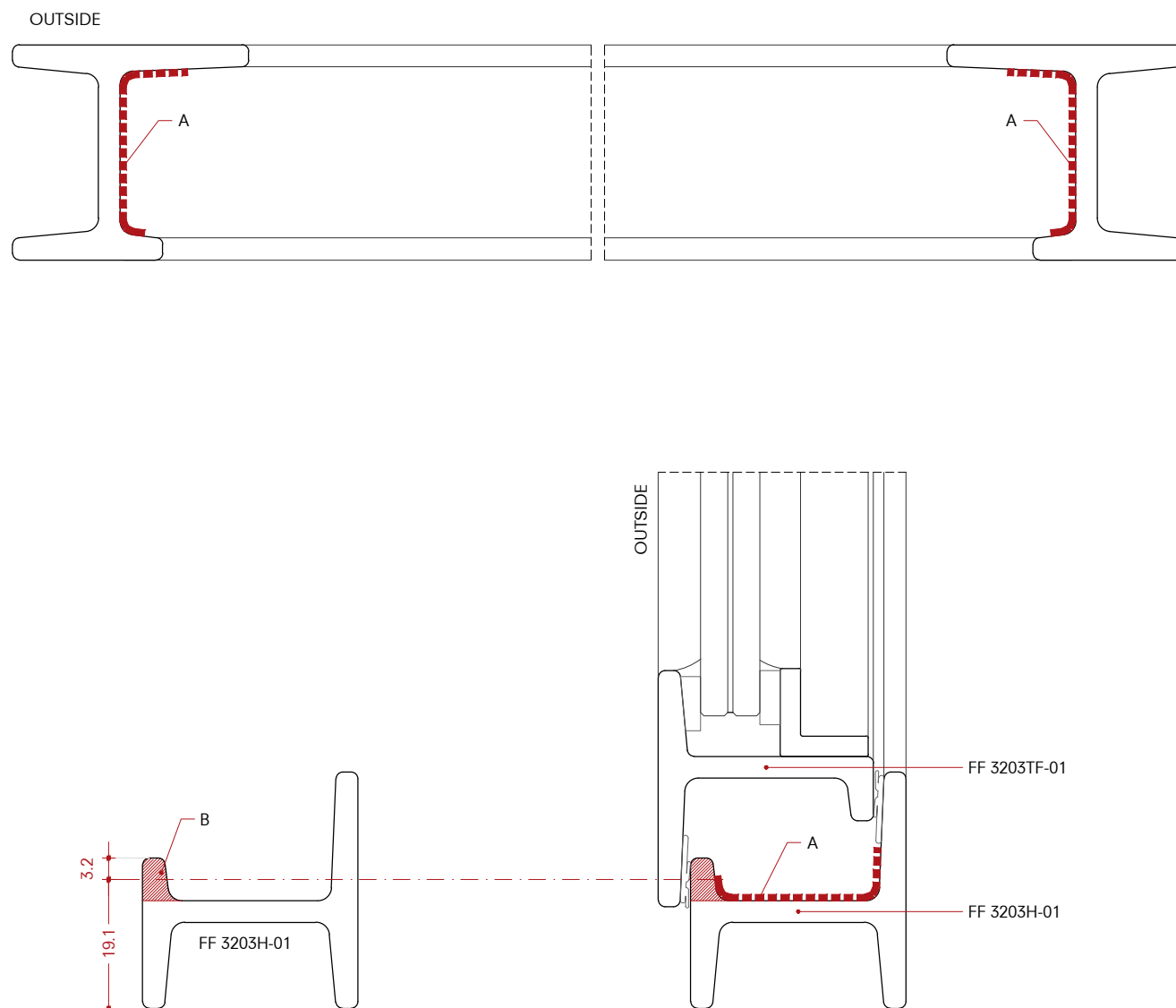
W20 Basic - Drainage
Open out

Lavorazione

W20 Basic - Drenaggio
Apertura esterna

Mecanizado

W20 Basic - Drenaje
Que se abre hacia fuera



Note:

To be sealed after coating.

- A) Sealant at corners
B) n°02 Ø6 holes on frame profile

Nota:

Da sigillare dopo verniciatura.

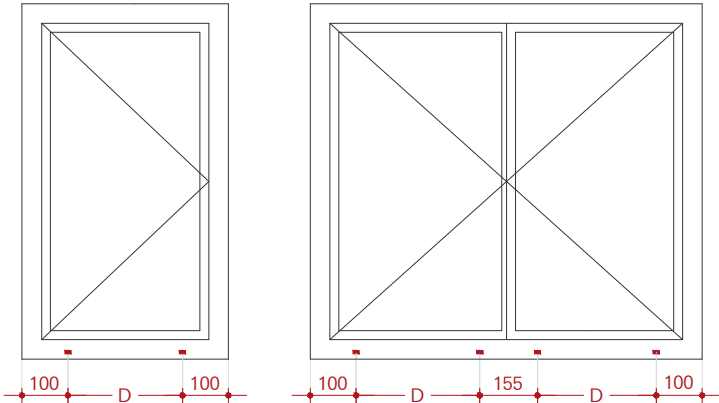
- A) Sigillante negli angoli
B) n°02 fori Ø6 sul profilo del telaio

Nota:

Para ser sellado después de pintar

- A) Agente sellante en las esquinas
B) n°02 orificios Ø6 en marco de perfil

Outside view / Vista dall'esterno / Vista desde el exterior



Min. n°02 drain holes
For single leaf window

Minimo n°02 fori
Per finestra anta singola

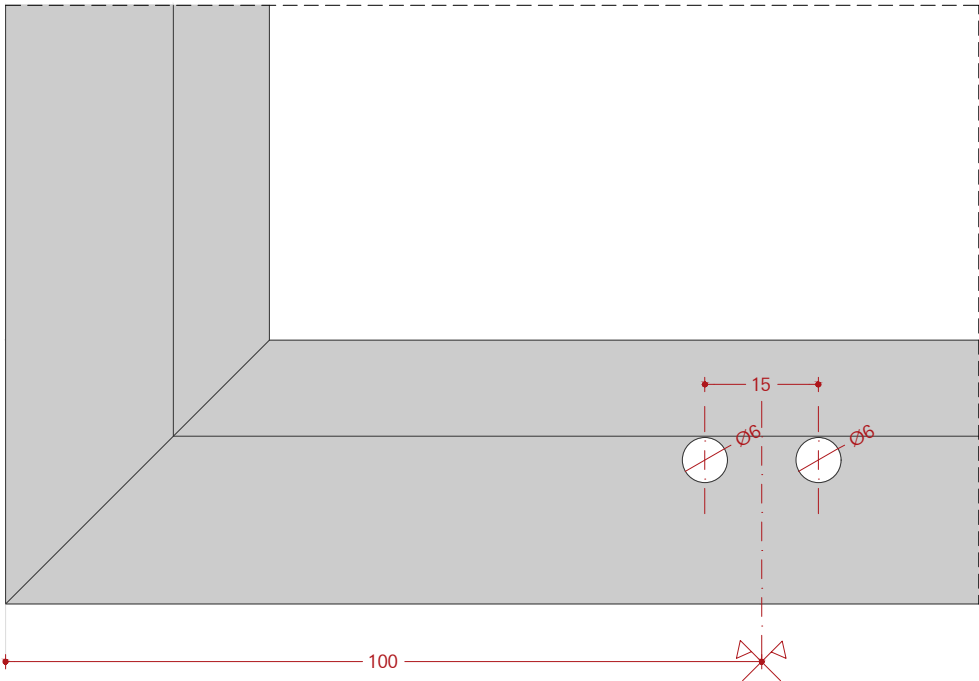
Minimo n°02 orificios
Para ventana de una hoja

Min. n°04 drain holes
For double leaf window

Minimo n°04 fori
Per finestra anta doppia

Minimo n°04 orificios
Para ventana de doble hoja

Position of drainage holes
Posizione dei fori di drenaggio
Posición de orificios de desagüe



D) Max. distance between drainage holes
1000 mm

D) Massima distanza tra i fori di drenaggio
1000 mm

D) Distancia máxima entre orificios de desagüe
1000 mm

Processing

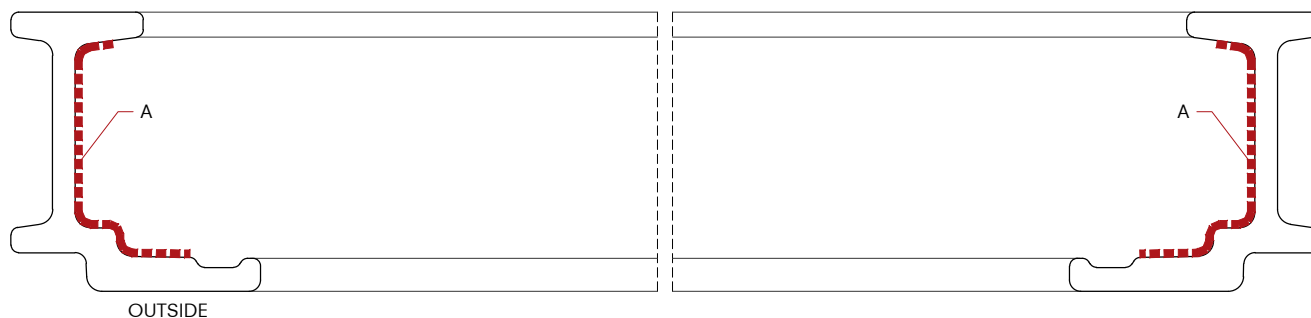
W20 Slim - Drainage
Open in

Lavorazione

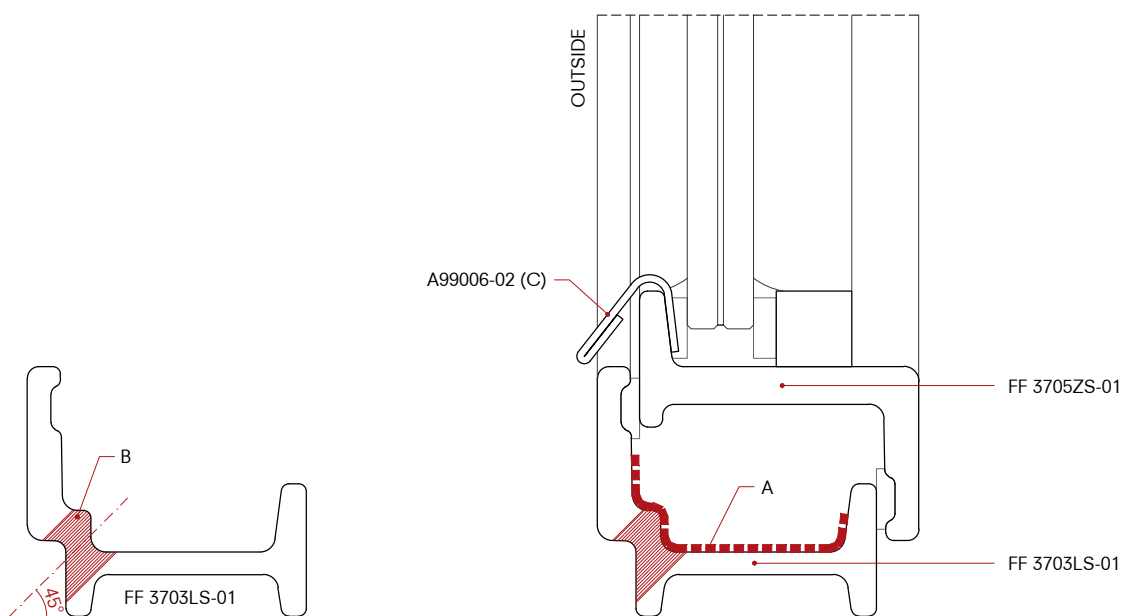
W20 Slim - Drenaggio
Apertura interna

Mecanizado

W20 Slim - Drenaje
Que se abre hacia dentro



OUTSIDE



Note:

To be sealed after coating.

- A) Sealant at corners
- B) n°02 Ø8 holes on frame profile
- C) Weather bar A99006-02

Nota:

Da sigillare dopo verniciatura.

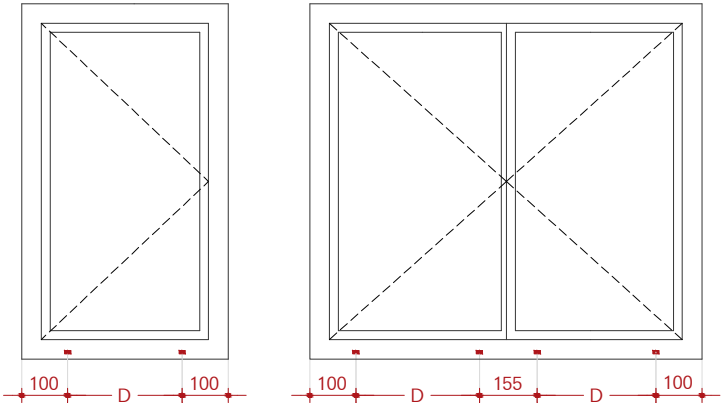
- A) Sigillante negli angoli
- B) n°02 fori Ø8 sul profilo del telaio
- C) Gocciolatoio A99006-02

Nota:

Para ser sellado después de pintar

- A) Agente sellante en las esquinas
- B) n°02 orificios Ø8 en marco de perfil
- C) Vierendeaguas A99006-02

Outside view / Vista dall'esterno / Vista desde el exterior



Min. n°02 drain holes
For single leaf window

Minimo n°02 fori
Per finestra anta singola

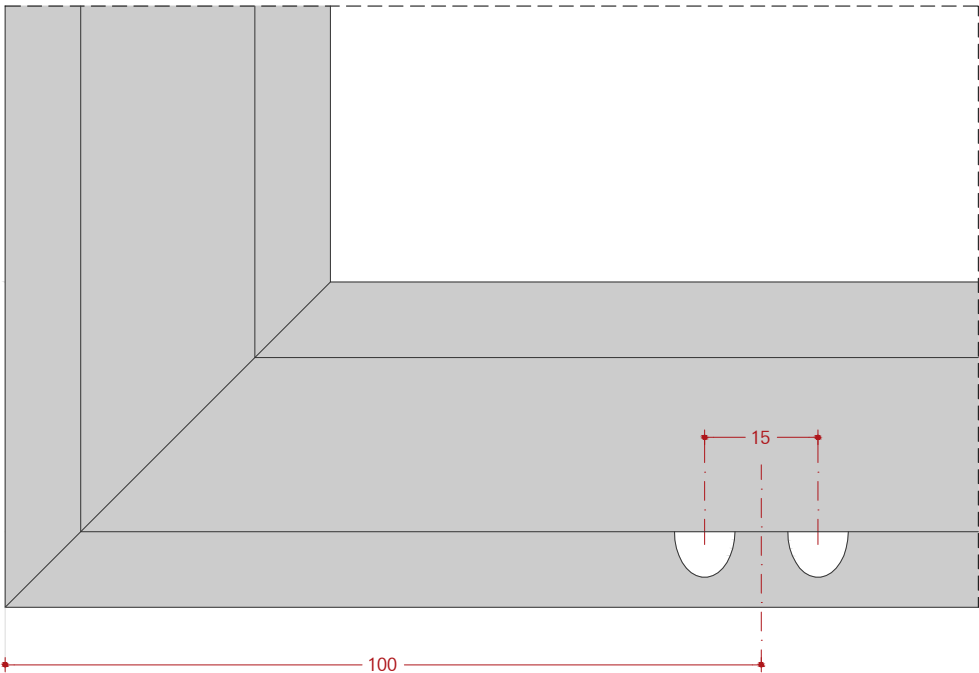
Minimo n°02 orificios
Para ventana de una hoja

Min. n°04 drain holes
For double leaf window

Minimo n°04 fori
Per finestra anta doppia

Minimo n°04 orificios
Para ventana de doble hoja

Position of drainage holes
Posizione dei fori di drenaggio
Posición de orificios de desagüe



D) Max. distance between drainage holes
1000 mm

D) Massima distanza tra i fori di drenaggio
1000 mm

D) Distancia máxima entre orificios de desagüe
1000 mm

Processing

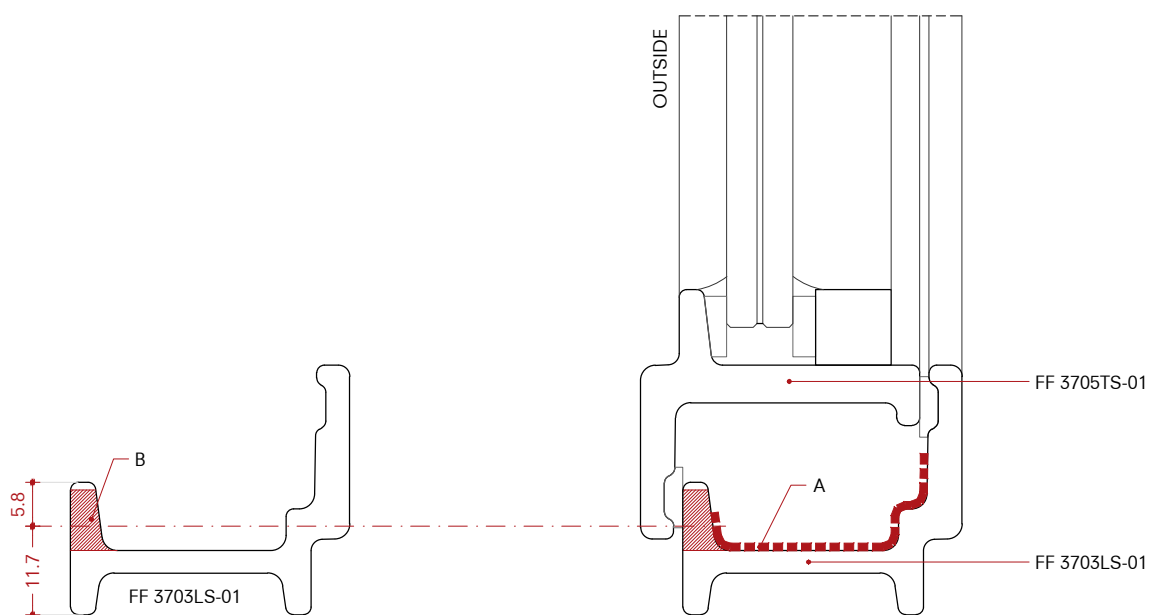
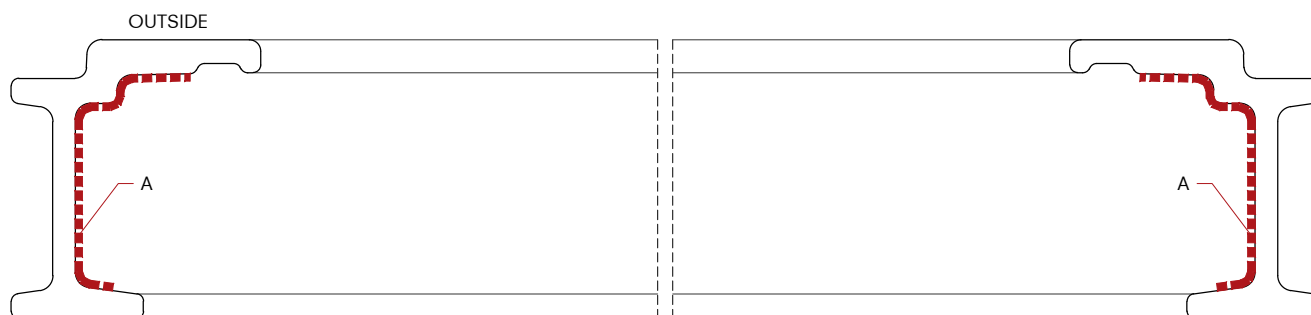
W20 Slim - Drainage
Open out

Lavorazione

W20 Slim - Drenaggio
Apertura esterna

Mecanizado

W20 Slim - Drenaje
Que se abre hacia fuera



Note:

To be sealed after coating.

- A) Sealant at corners
- B) n°02 Ø8 holes on frame profile

Nota:

Da sigillare dopo verniciatura.

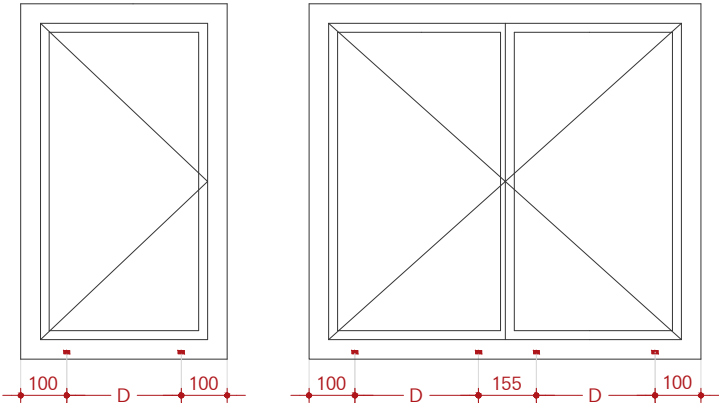
- A) Sigillante negli angoli
- B) n°02 fori Ø8 sul profilo del telaio

Nota:

Para ser sellado después de pintar

- A) Agente sellante en las esquinas
- B) n°02 orificios Ø8 en marco de perfil

Outside view / Vista dall'esterno / Vista desde el exterior



Min. n°02 drain holes
For single leaf window

Minimo n°02 fori
Per finestra anta singola

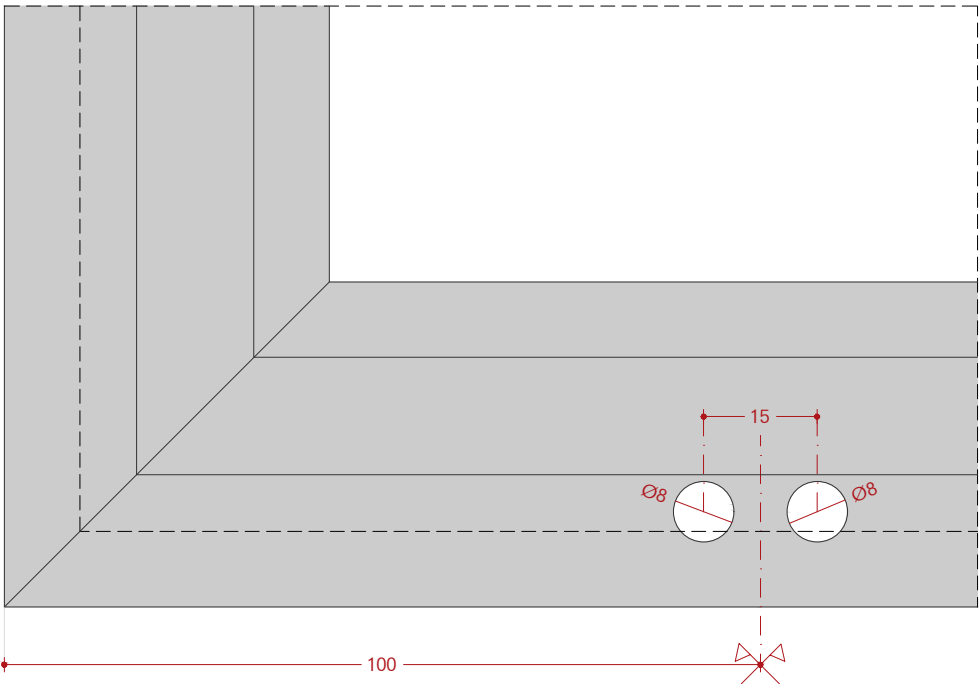
Minimo n°02 orificios
Para ventana de una hoja

Min. n°04 drain holes
For double leaf window

Minimo n°04 fori
Per finestra anta doppia

Minimo n°04 orificios
Para ventana de doble hoja

Position of drainage holes
Posizione dei fori di drenaggio
Posición de orificios de desagüe



D) Max. distance between drainage holes
1000 mm

D) Massima distanza tra i fori di drenaggio
1000 mm

D) Distancia máxima entre orificios de desagüe
1000 mm

Installation

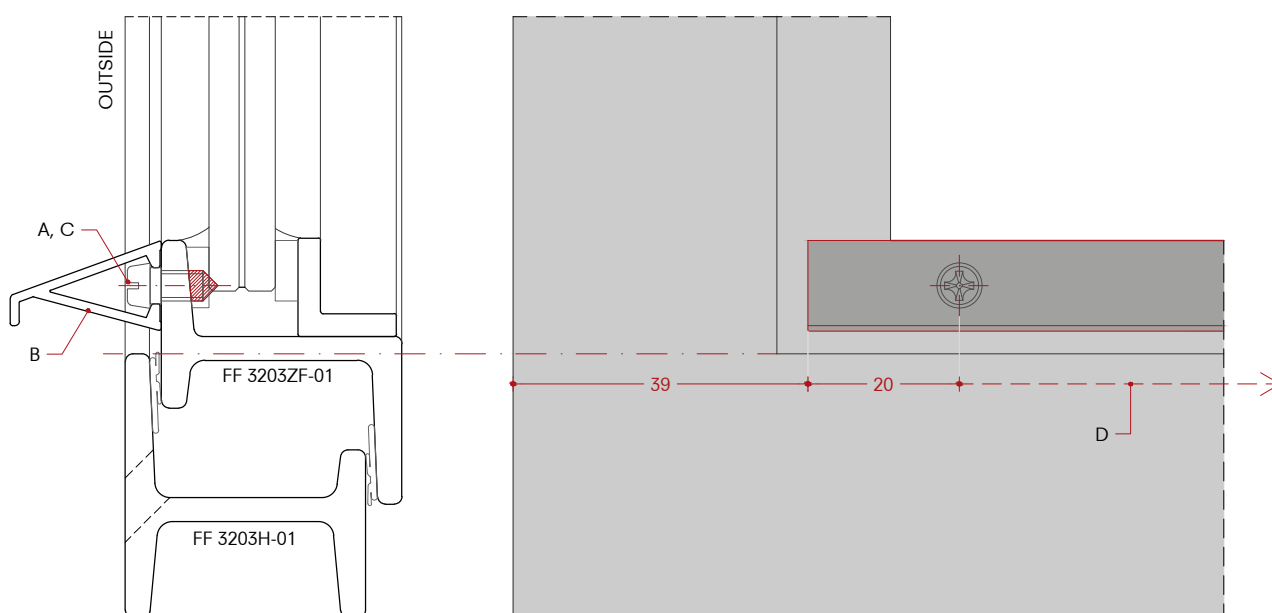
Weather bar A99001-00
W20 Basic
Single-leaf and double-leaf windows
Open in

Montaggio

Gocciolatoio A99001-00
W20 Basic
Finestre a uno e due battenti
Apertura interna

Montaje

Vierteaguas A99001-00
W20 Basic
Ventanas de 1 y 2 hojas
Apertura interna



A) Fastening with screws D99901-02
B) A99001-00 weather bar
C) Cut the screw flush and paint the frame
D) Maximum pitch 240 mm

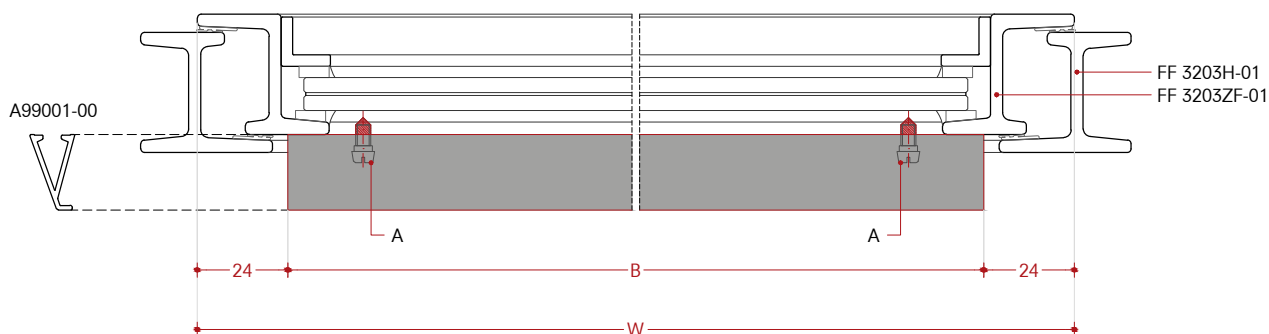
A) Fissaggio con viti D99901-02
B) Gocciolatoio A99001-00
C) Accorciare la vite in eccesso e verniciare il telaio
D) Distanza massima 240 mm

A) Fijación con tornillos D99901-02
B) Vierteaguas A99001-00
C) Recortar tornillo y pintar el marco
D) Distanza massima 240 mm

Single leaf window

Finestra anta singola

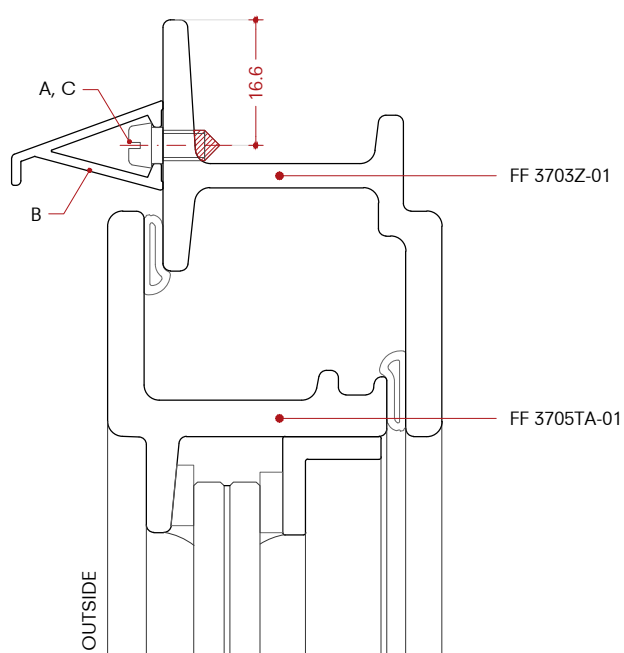
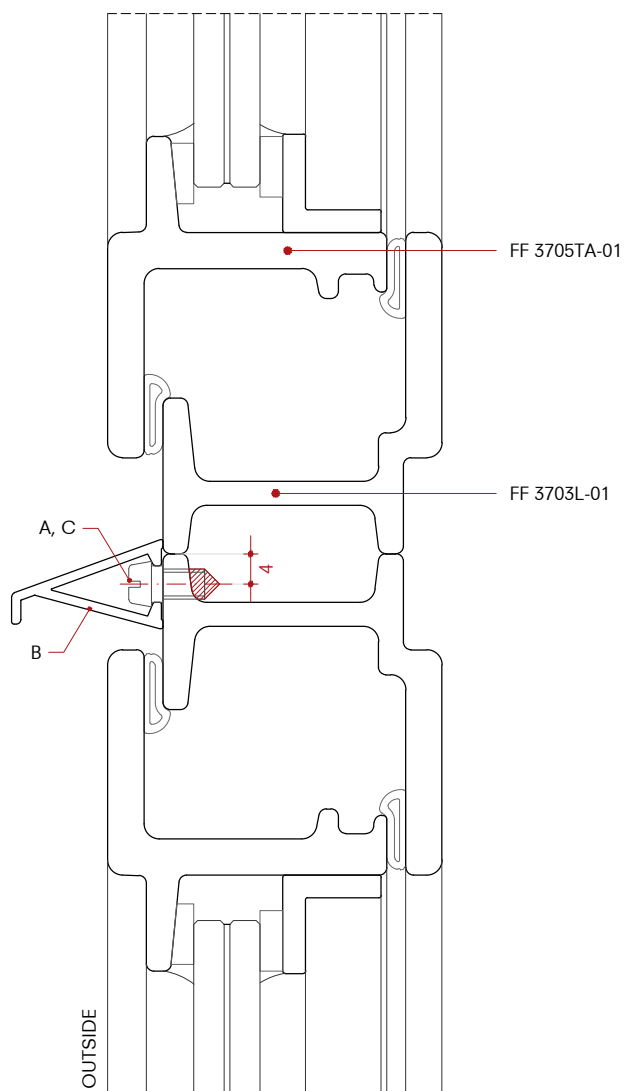
Ventana de una hoja



- A) D99901-02 positioning - maximum pitch 240 mm; first D99901-02 at 20 mm from ending of the weather bar
B) Weather bar lenght = leaf width W - 48 mm

- A) Posizione D99901-02 - distanza massima 240 mm; primo D99901-02 a 20 mm dalla parte terminale del gocciolatoio
B) Lunghezza gocciolatoio = larghezza anta W - 48 mm

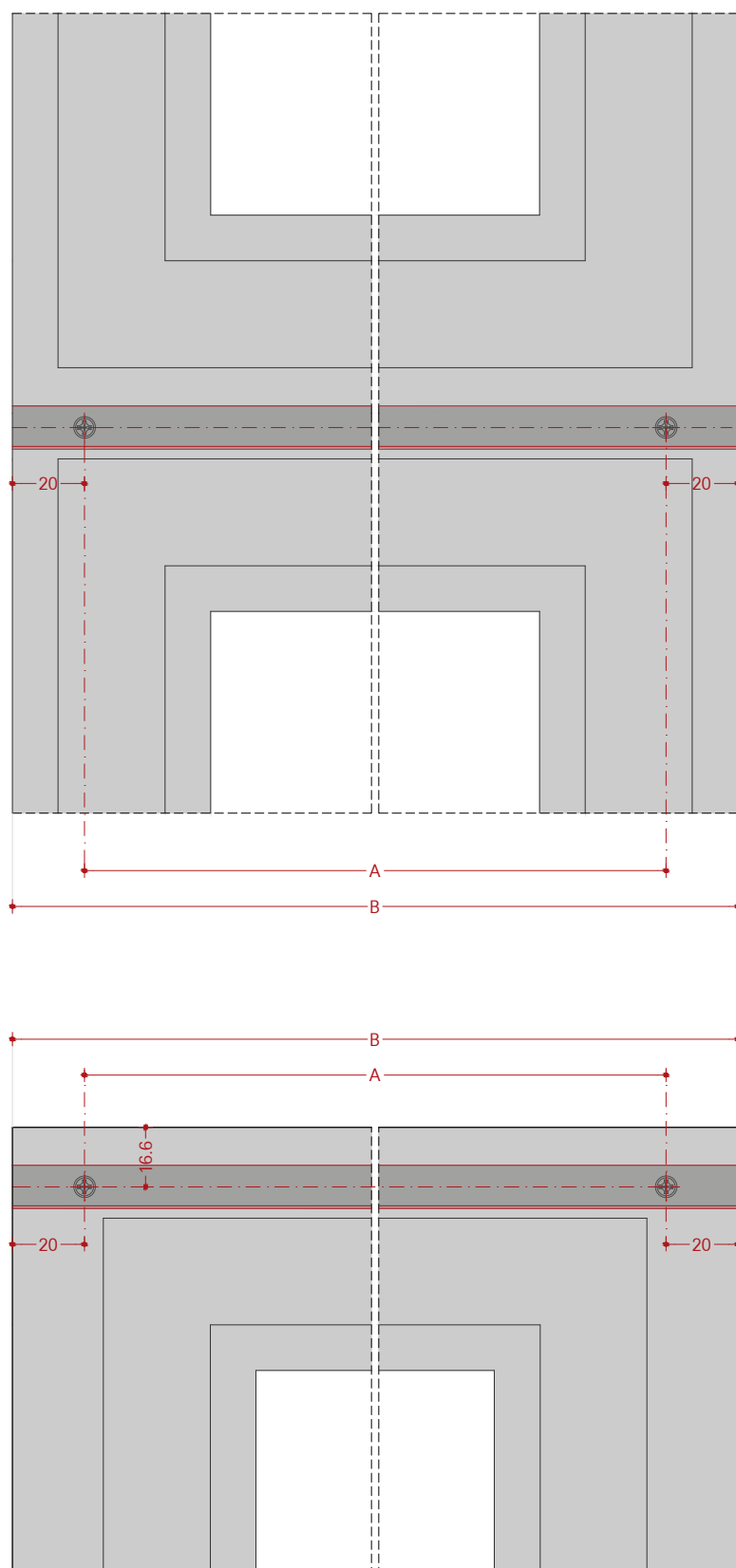
- A) Posición D99901-02 - distancia máxima 240 mm; primer D99901-02 a 20 mm del final de vierteaguas
B) Largo de vierteaguas = ancho de la hoja W - 48 mm



A) Fastening with screws D99901-02
B) A99001-00 weather bar
C) Cut the screw flush and paint the frame

A) Fissaggio con viti D99901-02
B) Gocciolatoio A99001-00
C) Accorciare la vite in eccesso e verniciare il telaio

A) Fijación con tornillos D99901-02
B) Vierendeaguas A99001-00
C) Recortar tornillo y pintar el marco



A) D99901-02 positioning - maximum pitch 240 mm; first D99901-02 at 20 mm from ending of the weather bar
B) Weather bar lenght = frame width

A) Posizione D99901-02 - distanza massima 240 mm; primo D99901-02 a 20 mm dalla parte terminale del gocciolatoio
B) Lunghezza gocciolatoio = larghezza telaio

A) Posición D99901-02 - distancia máxima 240 mm; primer D99901-02 a 20 mm del final de vierteaguas
B) Largo de vierteaguas = ancho de marco

Installation

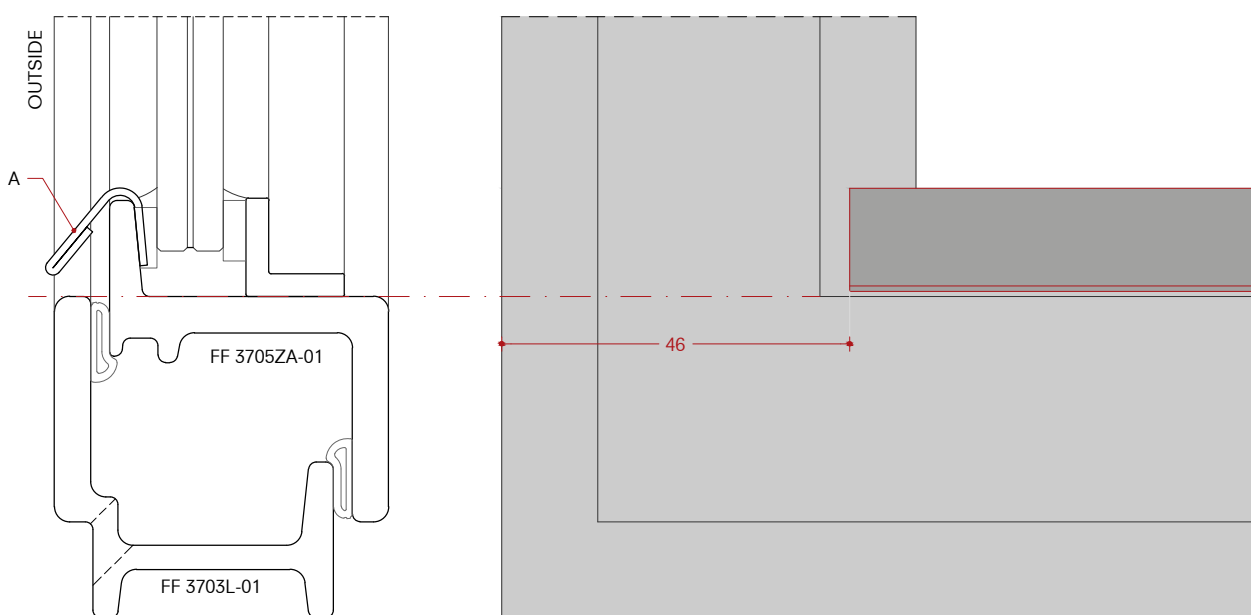
Weather bar A99006-02
W20 Classic
Single-leaf and double-leaf windows
Open in

Montaggio

Gocciolatoio A99006-02
W20 Classic
Finestre a uno e due battenti
Apertura interna

Montaje

Vierteaguas A99006-02
W20 Classic
Ventanas de 1 y 2 hojas
Apertura interna



A) A99006-02 weather bar

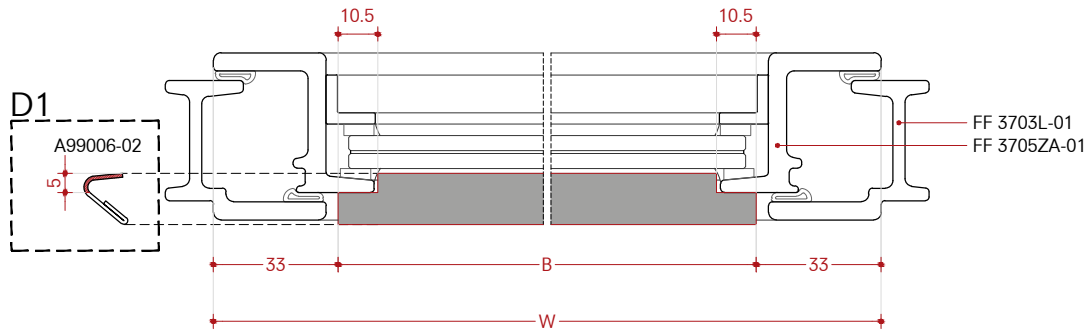
A) Gocciolatoio A99006-02

A) Vierteaguas A99006-02

Single leaf window

Finestra anta singola

Ventana de una hoja



- A) D99901-02 positioning - maximum pitch 240 mm; first D99901-02 at 20 mm from ending of the weather bar
B) Weather bar lenght = leaf width W - 66 mm

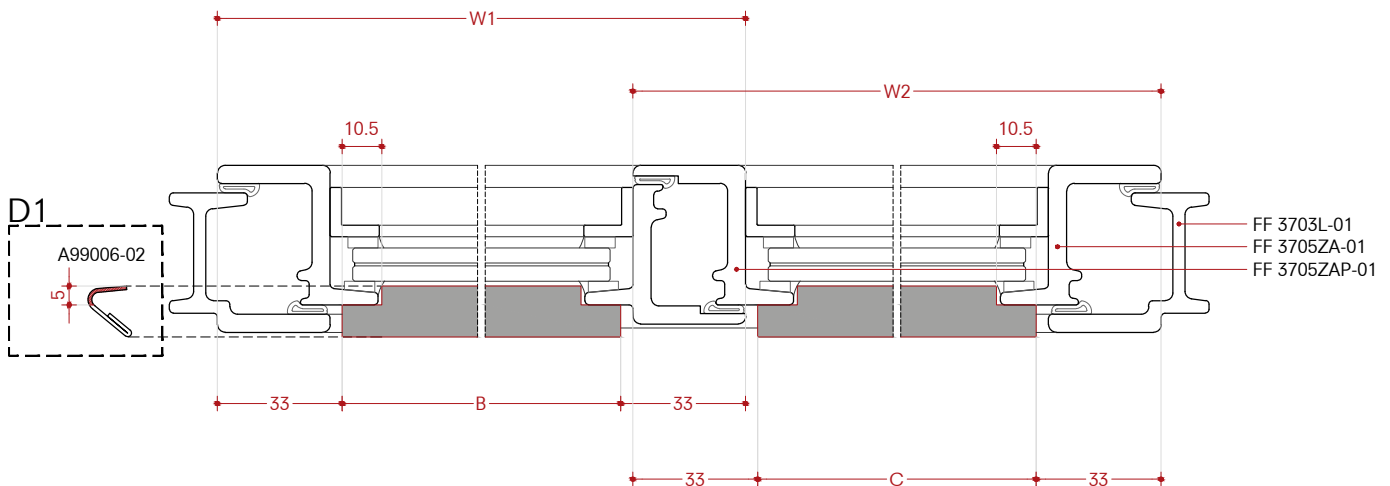
- A) Posizione D99901-02 - distanza massima 240 mm; primo D99901-02 a 20 mm dalla parte terminale del gocciolatoio
B) Lunghezza gocciolatoio = larghezza anta W - 66 mm

- A) Posición D99901-02 - distancia máxima 240 mm; primer D99901-02 a 20 mm del final de vierteaguas
B) Largo de vierteaguas = ancho de la hoja W - 66 mm

Double leaf window

Finestra doppia anta

Ventana de dos hojas

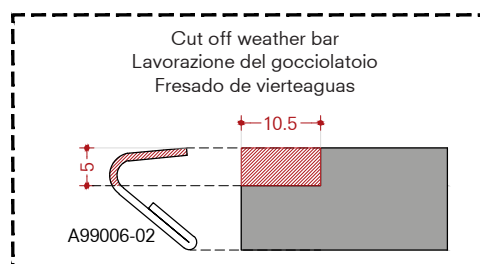


- A) D99901-02 positioning - maximum pitch 240 mm; first D99901-02 at 20 mm from ending of the weather bar
B) Weather bar lenght = leaf width W1 - 66 mm
C) Weather bar lenght = leaf width W2 - 66 mm

- A) Posizione D99901-02 - distanza massima 240 mm; primo D99901-02 a 20 mm dalla parte terminale del gocciolatoio
B) Lunghezza gocciolatoio = larghezza anta W1 - 66 mm
C) Lunghezza gocciolatoio = larghezza anta W2 - 66 mm

- A) Posición D99901-02 - distancia máxima 240 mm; primer D99901-02 a 20 mm del final de vierteaguas
B) Largo de vierteaguas = ancho de la hoja W1 - 66 mm
C) Largo de vierteaguas = ancho de la hoja W2 - 66 mm

DETAIL 1



Accessories installation:

Hinges

Montaggio accessori:

Cerniere

Montaje accesorios:

Bisagras

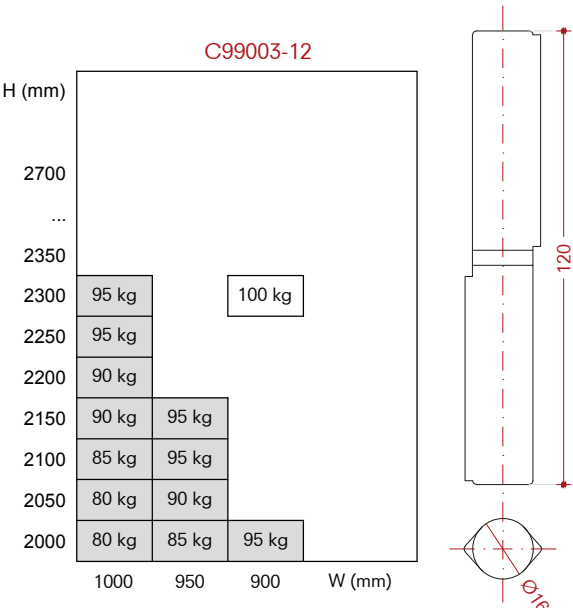
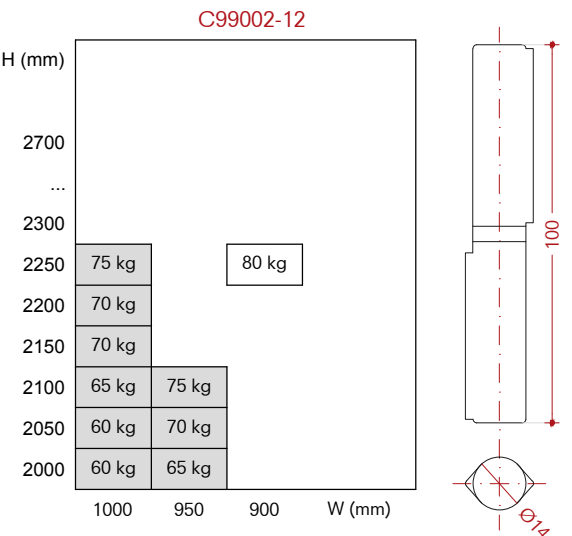
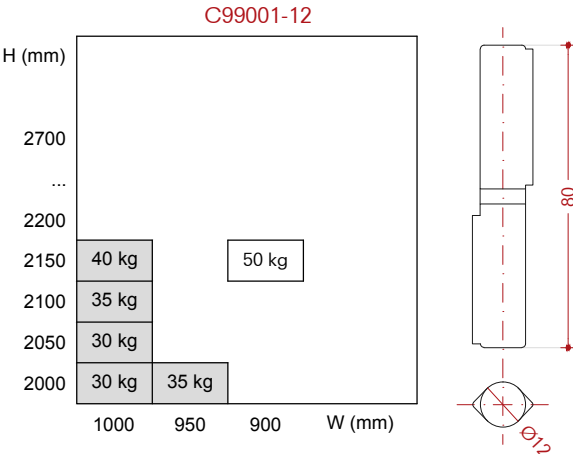
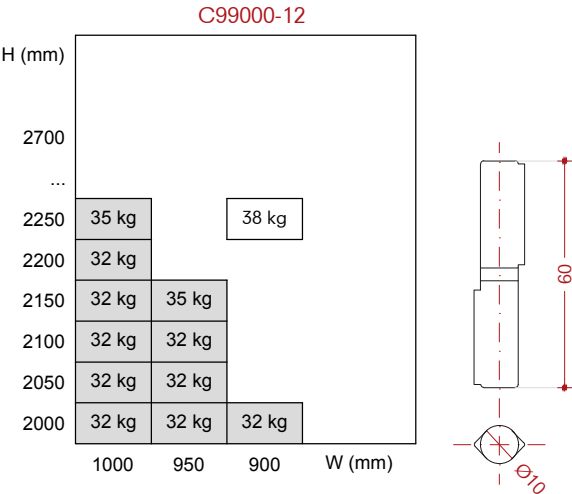
5.6

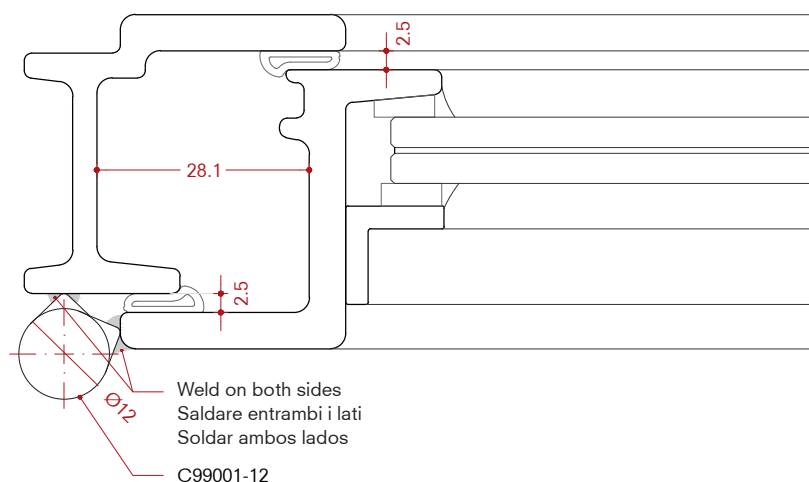
Load capacity tables
Weld-on hinges

Tabella portate
Cerniere a saldare

Tablas de peso
Bisagras de soldadura

	Material Materiale Material	Diameter Diametro Diámetro	Length Lunghezza Longitud	Capacity (pair) Portata (coppia) Capacidad (par)
C99000-12	Bright steel Acciaio decapato Acero bruto	Ø = 10 mm	60 mm	38 kg
C99001-12	Bright steel Acciaio decapato Acero bruto	Ø = 12 mm	80 mm	50 kg
C99002-12	Bright steel Acciaio decapato Acero bruto	Ø = 14 mm	100 mm	80 kg
C99003-12	Bright steel Acciaio decapato Acero bruto	Ø = 16 mm	120 mm	100 kg





Note

Please ensure that it is possible to unhinge the door leaf after installation. This should be taken into account during the planning.

To weld the hinges we recommend the use 3 mm spacers to reach the 2.5 mm distance.

Nota

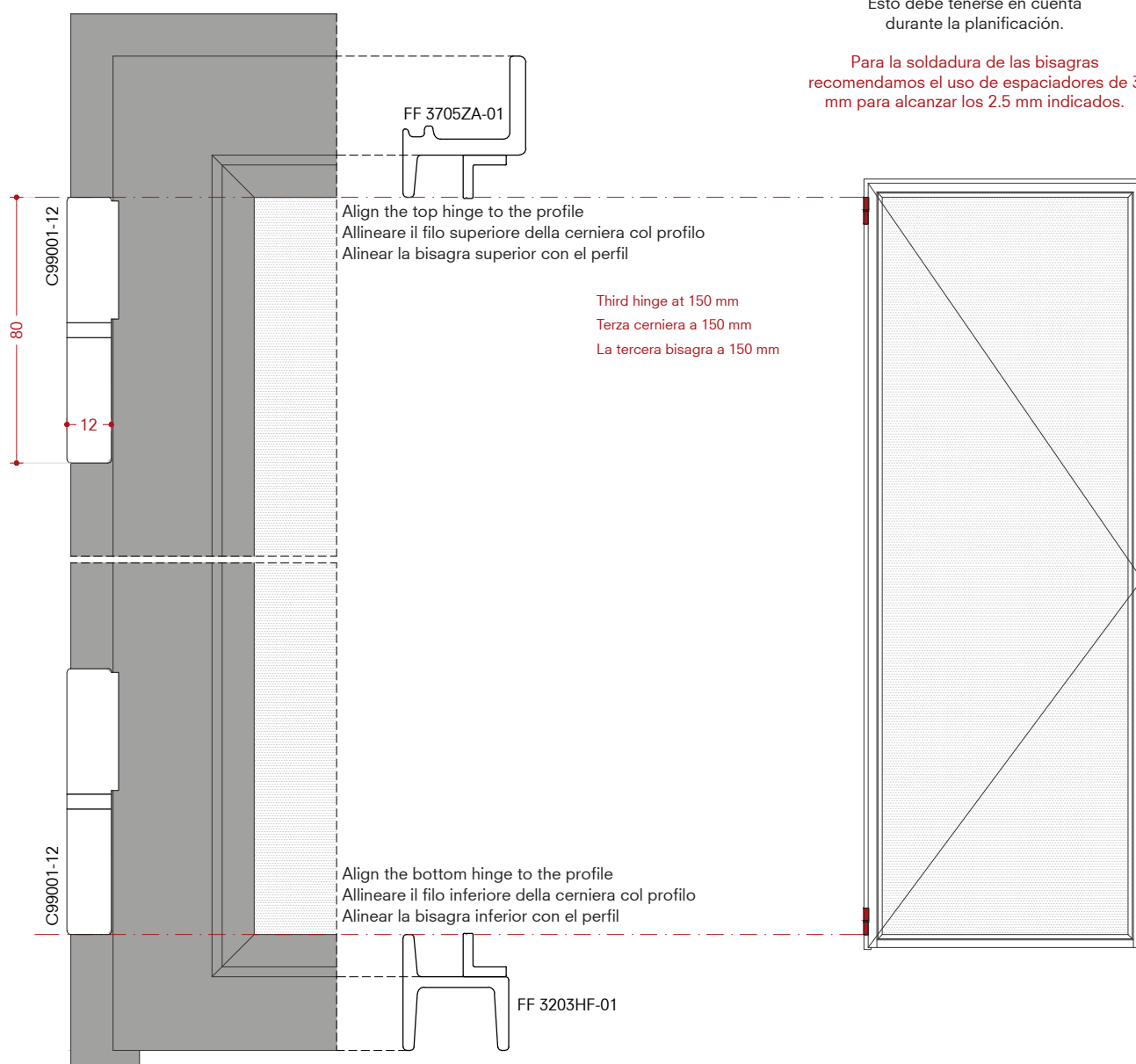
Assicurarsi che sia possibile smontare l'anta dopo l'installazione. Da considerarsi sempre in fase di progettazione.

Per la saldatura delle cerniere consigliamo l'utilizzo di distanziatori da 3 mm per il successivo raggiungimento di 2.5 mm indicato.

Nota

Asegúrese de que sea posible desenganchar la puerta después de la instalación. Esto debe tenerse en cuenta durante la planificación.

Para la soldadura de las bisagras recomendamos el uso de espaciadores de 3 mm para alcanzar los 2.5 mm indicados.

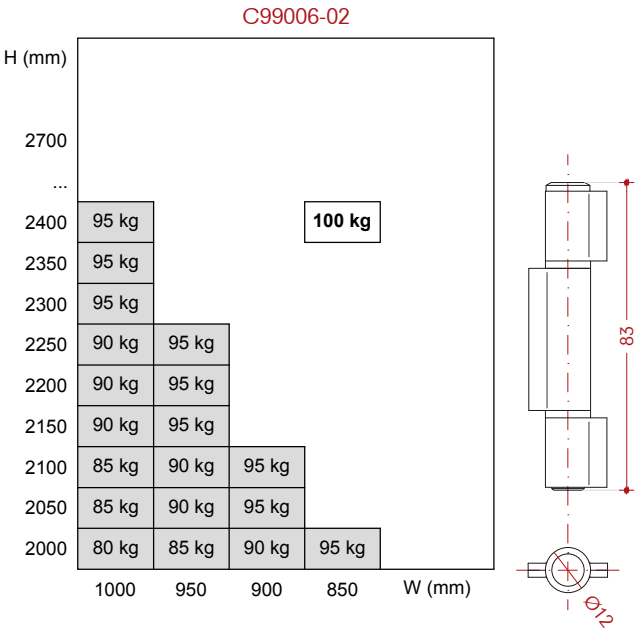
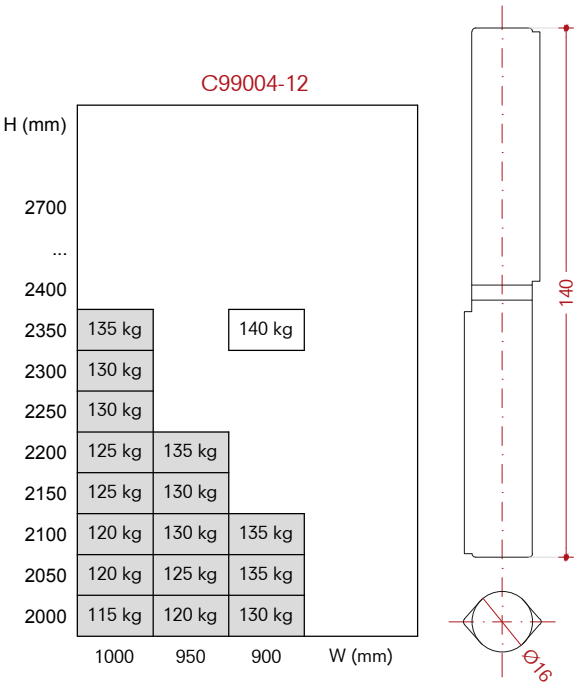


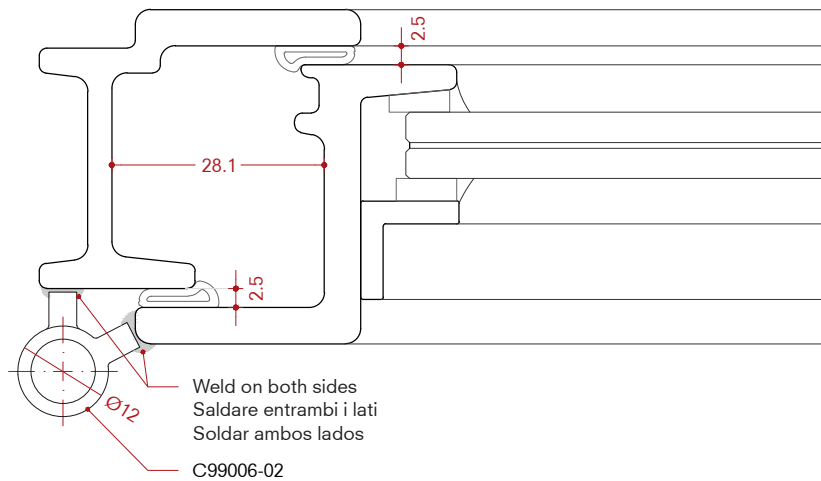
Load capacity tables
Weld-on hinges

Tabella portate
Cerniere a saldare

Tablas de peso
Bisagras de soldadura

	Material Materiale Material	Diameter Diametro Diámetro	Length Lunghezza Longitud	Capacity (pair) Portata (coppia) Capacidad (par)
C99004-12	Bright steel Acciaio decapato Acero bruto	Ø = 16 mm	140 mm	140 kg
C99006-02	Galvanized steel Acciaio zincato Acero galvanizado	Ø = 12 mm	83 mm	100 kg





Note

Please ensure that it is possible to unhinge the door leaf after installation. This should be taken into account during the planning.

To weld the hinges we recommend the use 3 mm spacers to reach the 2.5 mm distance.

Nota

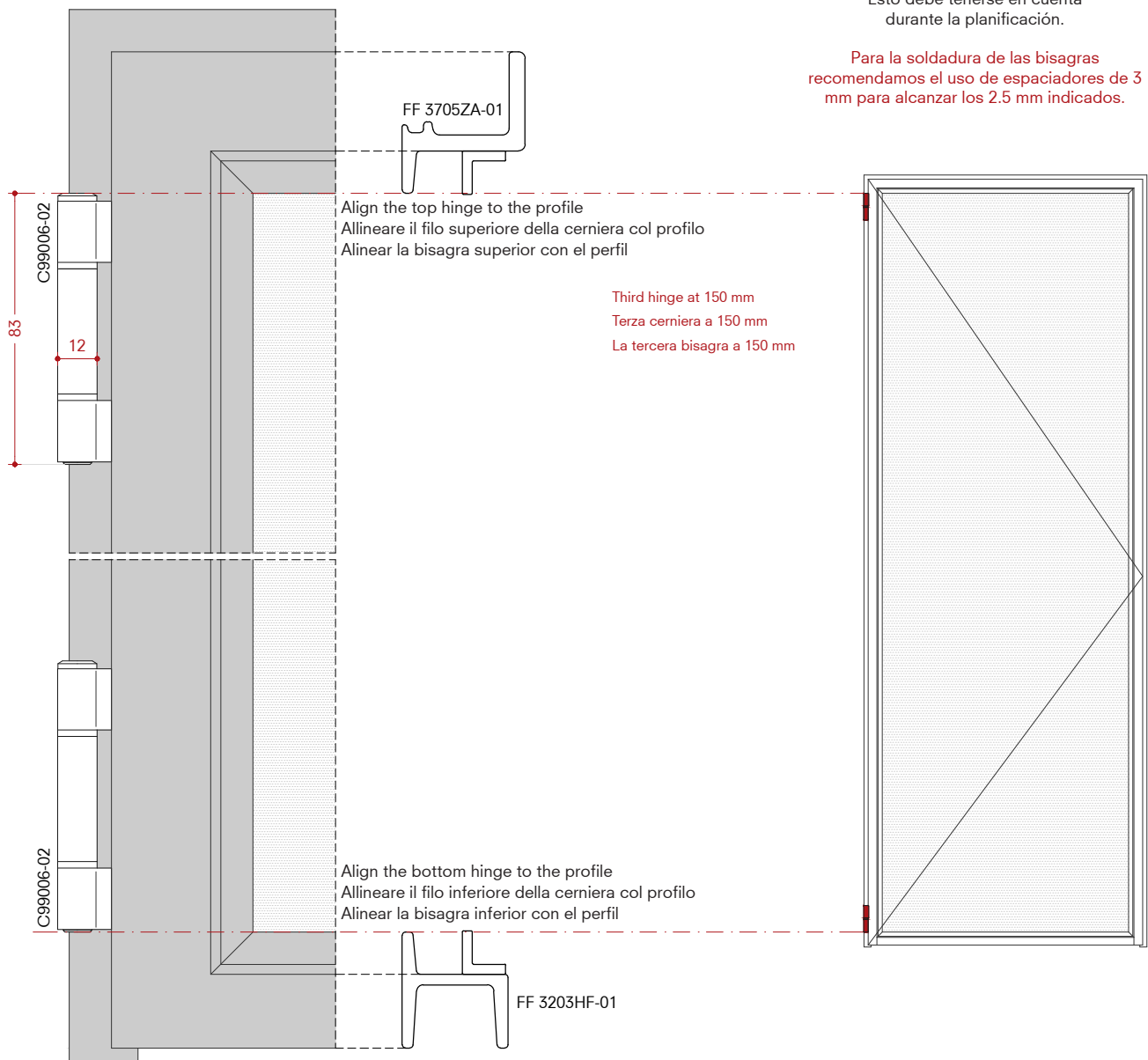
Assicurarsi che sia possibile smontare l'anta dopo l'installazione. Da considerarsi sempre in fase di progettazione.

Per la saldatura delle cerniere consigliamo l'utilizzo di distanziatori da 3 mm per il successivo raggiungimento di 2.5 mm indicato.

Nota

Asegúrese de que sea posible desenganchar la puerta después de la instalación. Esto debe tenerse en cuenta durante la planificación.

Para la soldadura de las bisagras recomendamos el uso de espaciadores de 3 mm para alcanzar los 2.5 mm indicados.

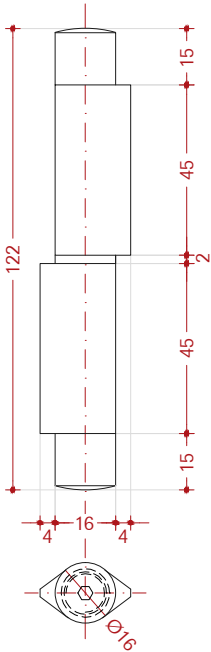
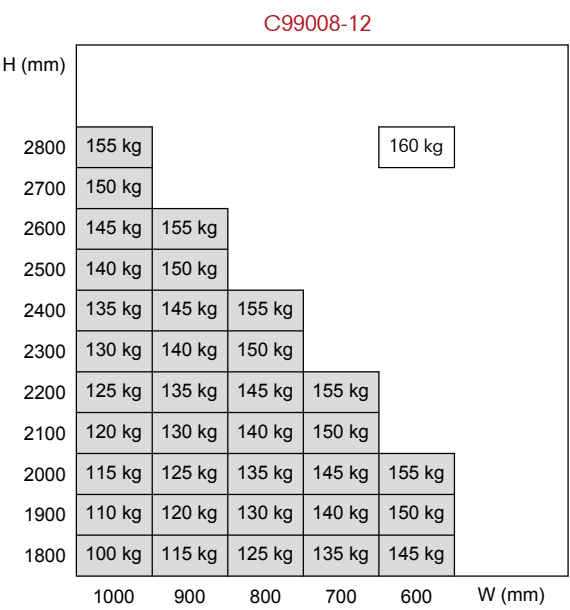


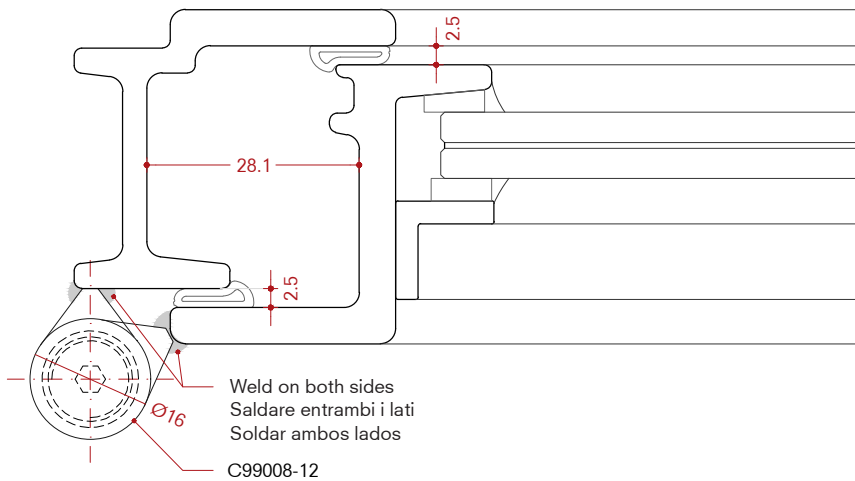
Load capacity tables
Weld-on hinges

Tabella portate
Cerniere a saldare

Tablas de peso
Bisagras de soldadura

	Material Materiale Material	Diameter Diametro Diámetro	Length Lunghezza Longitud	Capacity (pair) Portata (coppia) Capacidad (par)
C99008-12 ADJUSTABLE 3D REGOLABILE 3D 3D AJUSTABLE	Bright steel Acciaio decapato Acero bruto	Ø = 16 mm	122 mm	160 kg





Note

Please ensure that it is possible to unhinge the door leaf after installation. This should be taken into account during the planning.

To weld the hinges we recommend the use 3 mm spacers to reach the 2.5 mm distance.

Nota

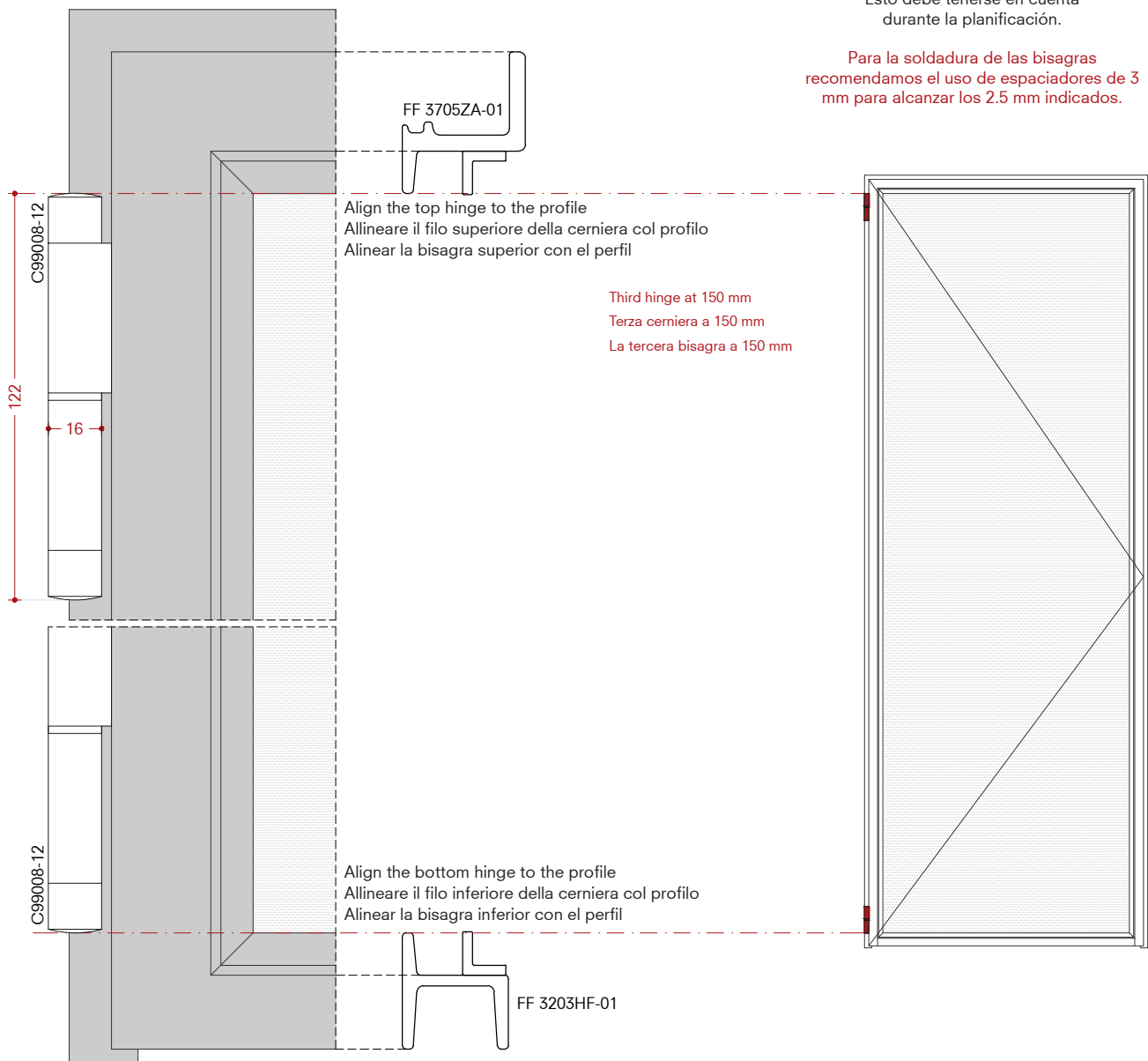
Assicurarsi che sia possibile smontare l'anta dopo l'installazione. Da considerarsi sempre in fase di progettazione.

Per la saldatura delle cerniere consigliamo l'utilizzo di distanziatori da 3 mm per il successivo raggiungimento di 2.5 mm indicato.

Nota

Asegúrese de que sea posible desenganchar la puerta después de la instalación. Esto debe tenerse en cuenta durante la planificación.

Para la soldadura de las bisagras recomendamos el uso de espaciadores de 3 mm para alcanzar los 2.5 mm indicados.



Installation

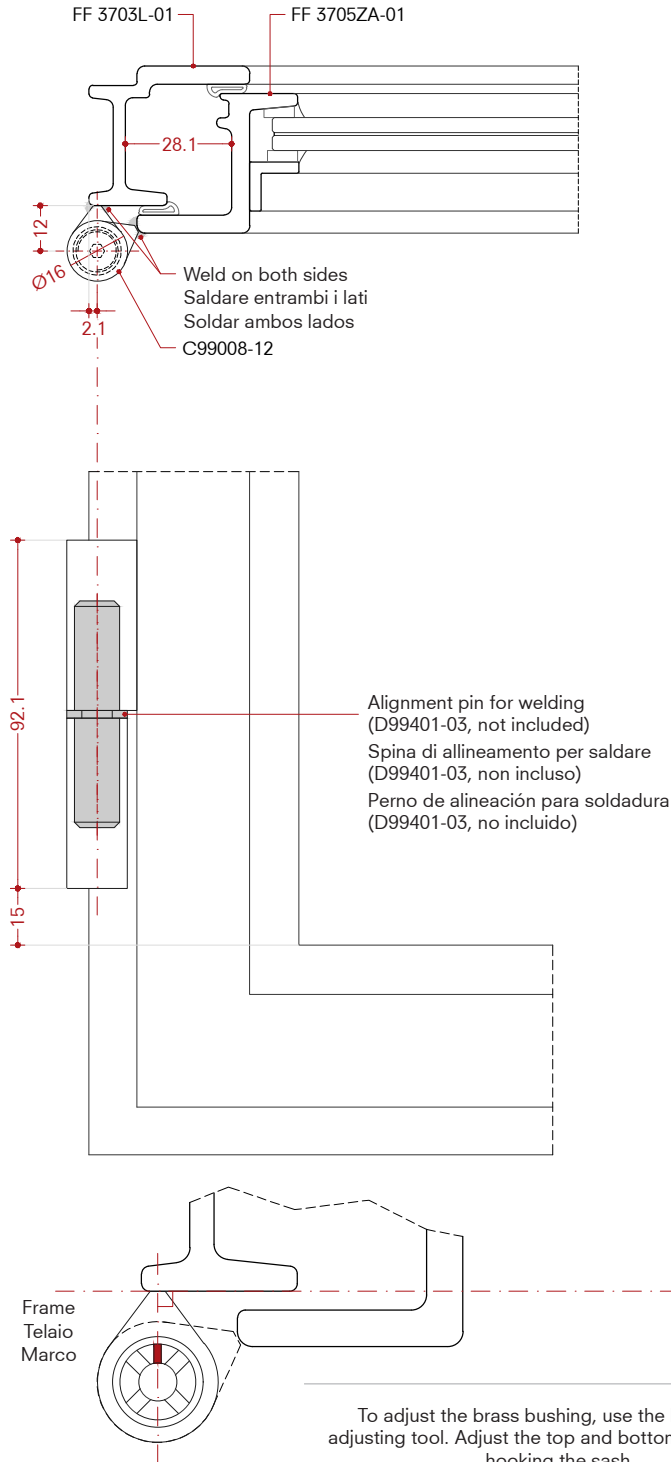
Adjustable 3D weld-on hinge
C99008-12

Montaggio

Cerniera 3D regolabile a saldare
C99008-12

Montaje

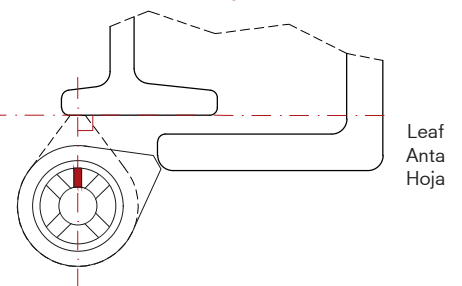
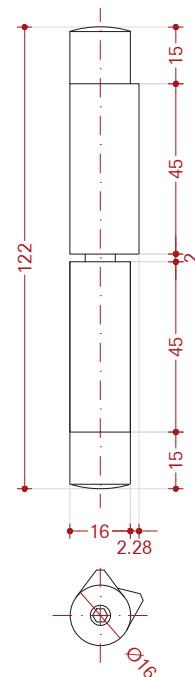
Bisagra ajustable 3D para soldar
C99008-12



The hinge may only be welded on
without brass bushings.

La cerniera deve essere saldata
senza boccole in ottone.

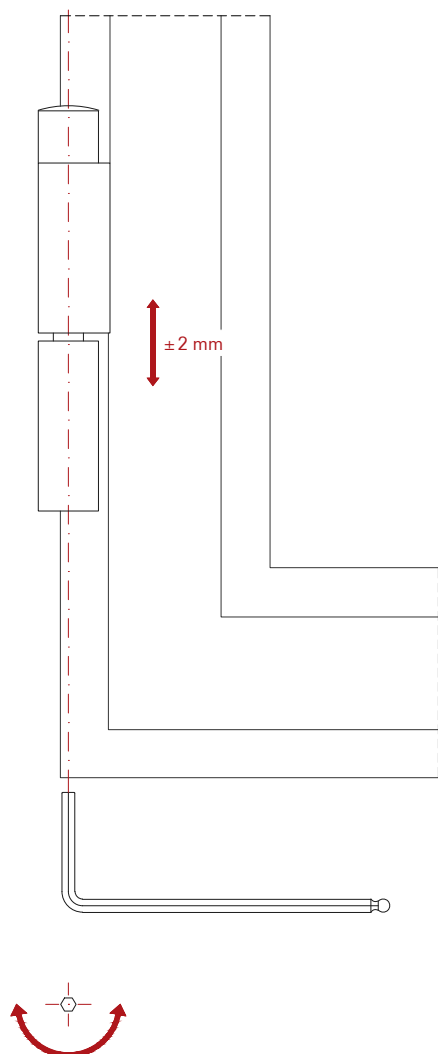
la bisagra solo se puede soldar
sin casquillos.



To adjust the brass bushing, use the D99501-03
adjusting tool. Adjust the top and bottom hinge before
hooking the sash.

Per regolare la bussola in ottone utilizzare la chiave di
regolazione D99501-03. Regolare la cerniera superiore e
inferiore prima di agganciare il battente.

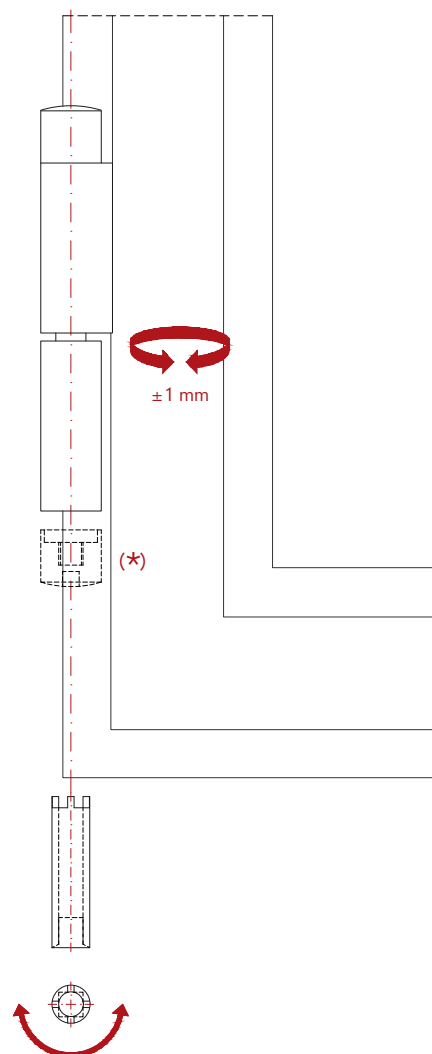
Para ajustar el casquillo de bronce, usar la llave de
ajuste D99501-03. Ajustar bisagra superior e inferior
antes de enganchar la hoja.



Use an allen key (4 mm, not included)
for the upward and downward setting

Utilizzare una chiave a brugola
(4 mm, non inclusa) per la regolazione
verso l'alto e verso il basso

Use la llave allen (4 mm, no incluida)
para el ajuste hacia arriba y hacia abajo



Use 1/4" allen key adjusting tool D99501-03
(Not included) for left and right setting

Per la regolazione destra e sinistra utilizzare
una chiave da 1/4" su D99501-03 (non inclusa)

Para el ajuste a izquierda y a derecha
use una llave allen 1/4" en D99501-03 (no incluido)

Note:

(*) After the installation mount all of the parts
of the hinges to stop the adjustments and
fix the caps.

Nota:

(*) Dopo l'installazione montare tutte le parti
delle cerniere, bloccare le regolazioni e
fissare i tappi.

Nota:

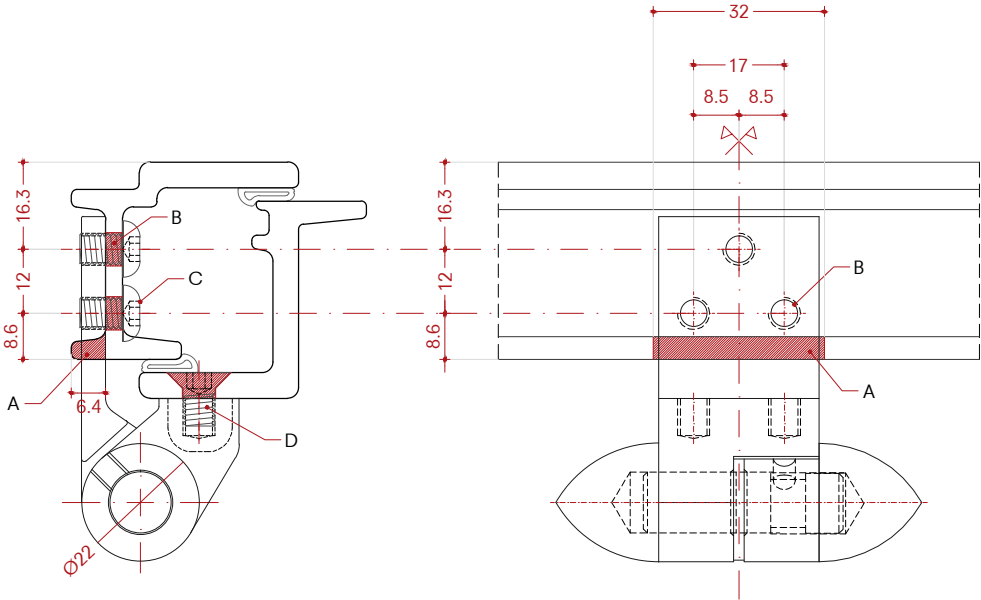
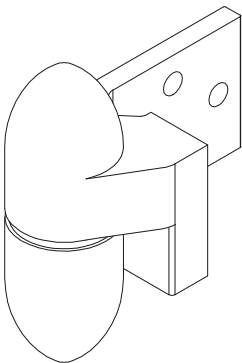
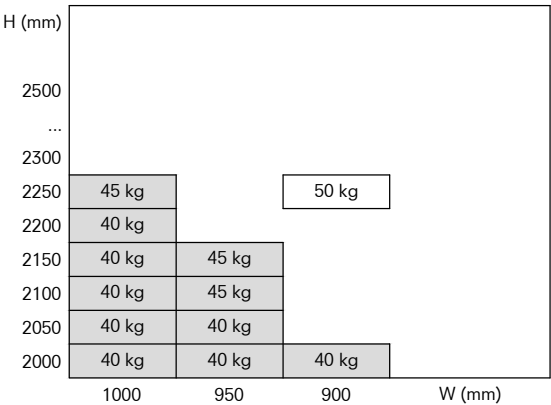
(*) Después de la instalación, monte todas
las partes de las bisagras para detener los
ajustes y arregla las tapas.

Load capacity tables
Screw-on hinges

Tabella portate
Cerniere ad avvitare

Tablas de peso
Bisagras atornillable

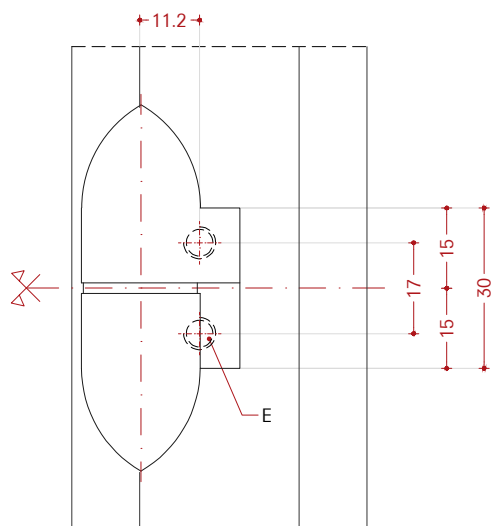
		Material Materiale Material	Diameter Diametro Diámetro	Length Lunghezza Longitud	Capacity (pair) Portata (coppia) Capacidad (par)
C99111-25 R	Right opening Apertura destra Apertura derecha	Natural brass Ottone naturale Latón natural	Ø = 22 mm	70 mm	50 kg
C99110-25 L	Left opening Apertura sinistra Apertura izquierda	Natural brass Ottone naturale Latón natural	Ø = 22 mm	70 mm	50 kg



- A) 5x32 mm cut off profile
B) Ø6.25 mm holes on profile
C) Fastening hinge to frame with M6x8 ISO7380 screws
D) Fastening hinge to leaf with M6x10 ISO10642 screws
E) Ø6.25 mm holes on profile

- A) 5x32 mm taglio del profilo
B) Fori Ø6.25 mm sul profilo
C) Fissaggio cerniera al telaio con viti M6x8 ISO7380
D) Fissaggio cerniera all'anta con viti M6x10 ISO10642
E) Fori Ø6.25 mm sul profilo

- A) 5x32 mm fresado de perfil
B) Orificios Ø6.25 mm en perfil
C) Fijación bisagra en perfil con tornillos M6x8 ISO7380
D) Fijación bisagra en hoja con tornillos M6x10 ISO10642
E) Orificios Ø6.25 mm en perfil



Note

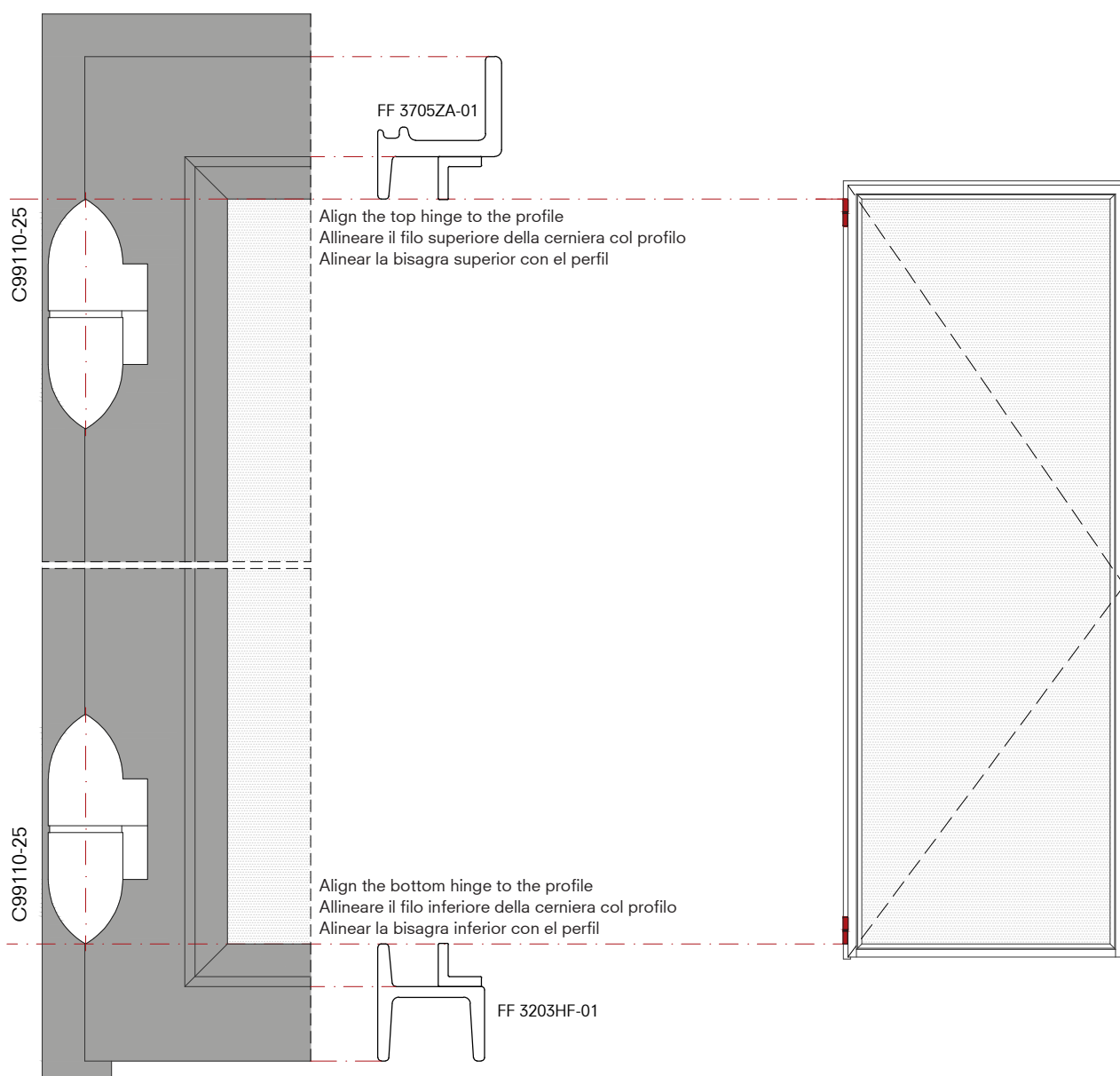
Please ensure that it is possible to unhinge the door leaf after installation. This should be taken into account during the planning.

Nota

Assicurarsi che sia possibile smontare l'anta dopo l'installazione. Da considerarsi sempre in fase di progettazione.

Nota

Asegúrese de que sea posible desenganchar la puerta después de la instalación. Esto debe tenerse en cuenta durante la planificación.

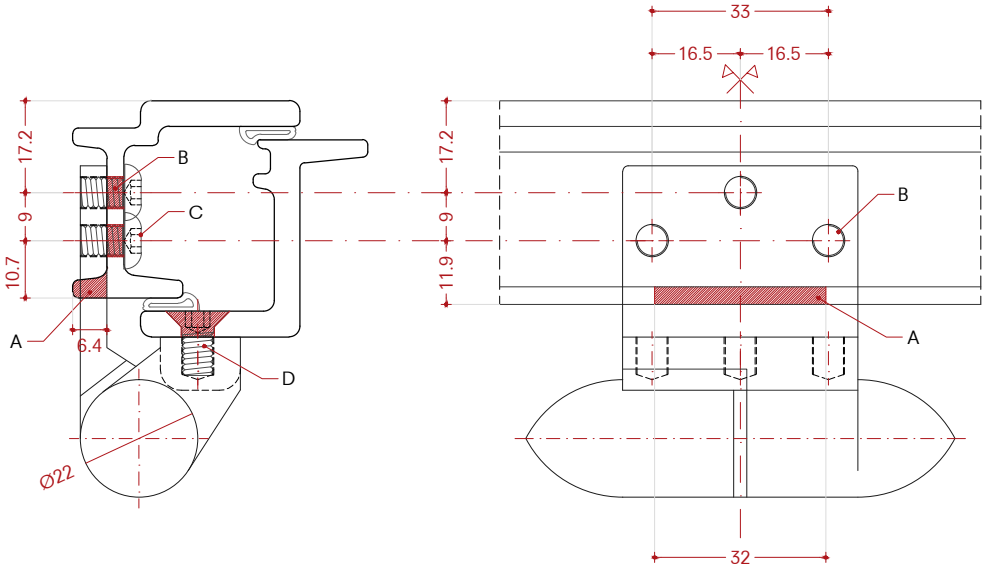
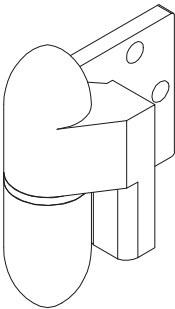
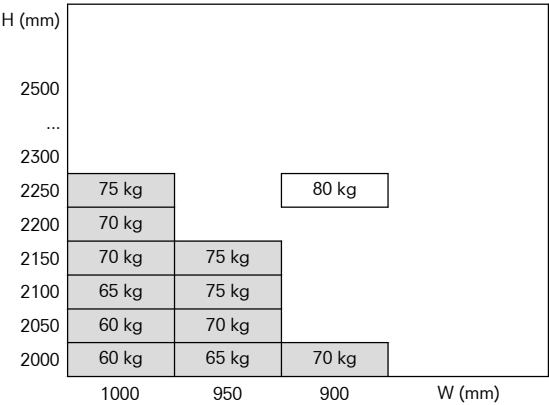


Load capacity tables
Screw-on hinges

Tabella portate
Cerniere ad avvitare

Tablas de peso
Bisagras atornillable

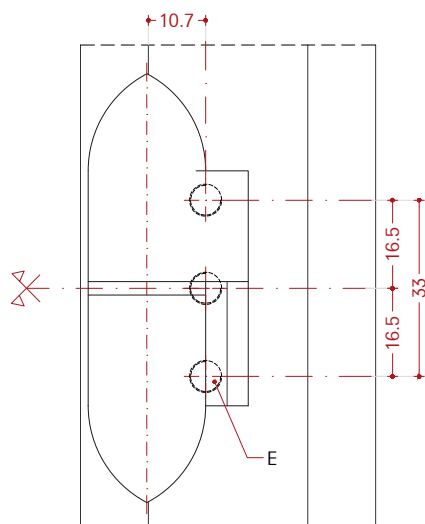
		Material Materiale Material	Diameter Diametro Diámetro	Length Lunghezza Longitud	Capacity (pair) Portata (coppia) Capacidad (par)
C99106-25 R	Right opening Apertura destra Apertura derecha	Natural brass Ottone naturale Latón natural	Ø = 22 mm	80 mm	80 kg
C99105-25 L	Left opening Apertura sinistra Apertura izquierda	Natural brass Ottone naturale Latón natural	Ø = 22 mm	80 mm	80 kg



- A) 5x32 mm cut off profile
- B) Ø6.25 mm holes on profile
- C) Fastening hinge to frame with M6x8 ISO7380 screws
- D) Fastening hinge to leaf with M6x12 ISO10642 screws
- E) Ø6.25 mm holes on profile

- A) 5x32 mm taglio del profilo
- B) Fori Ø6.25 mm sul profilo
- C) Fissaggio cerniera al telaio con viti M6x8 ISO7380
- D) Fissaggio cerniera all'anta con viti M6x12 ISO10642
- E) Fori Ø6.25 mm sul profilo

- A) 5x32 mm fresado de perfil
- B) Orificios Ø6.25 mm en perfil
- C) Fijación bisagra en perfil con tornillos M6x8 ISO7380
- D) Fijación bisagra en hoja con tornillos M6x12 ISO10642
- E) Orificios Ø6.25 mm en perfil



Note

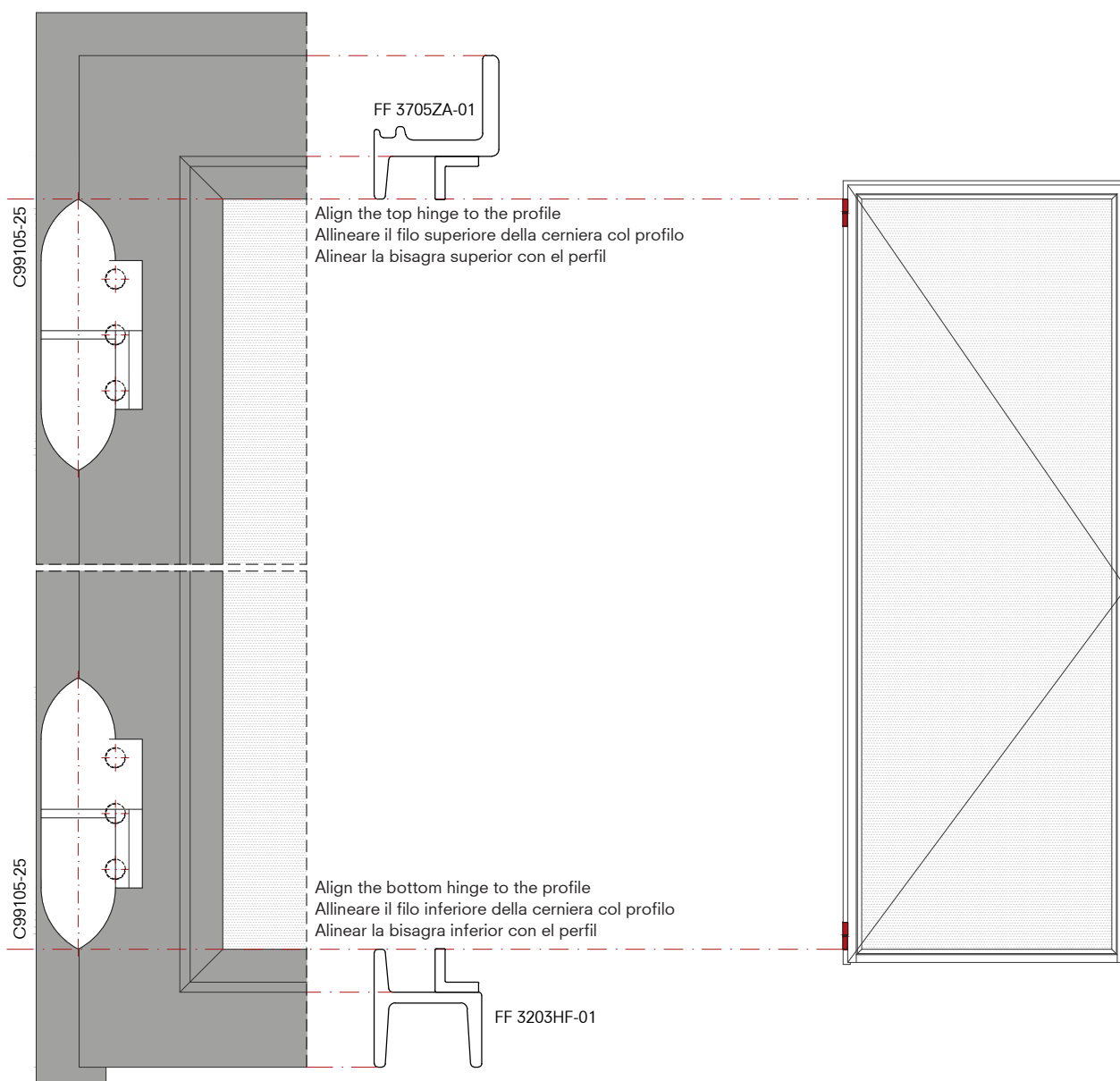
Please ensure that it is possible to unhinge the door leaf after installation. This should be taken into account during the planning.

Nota

Assicurarsi che sia possibile smontare l'anta dopo l'installazione. Da considerarsi sempre in fase di progettazione.

Nota

Asegúrese de que sea posible desengancher la puerta después de la instalación. Esto debe tenerse en cuenta durante la planificación.

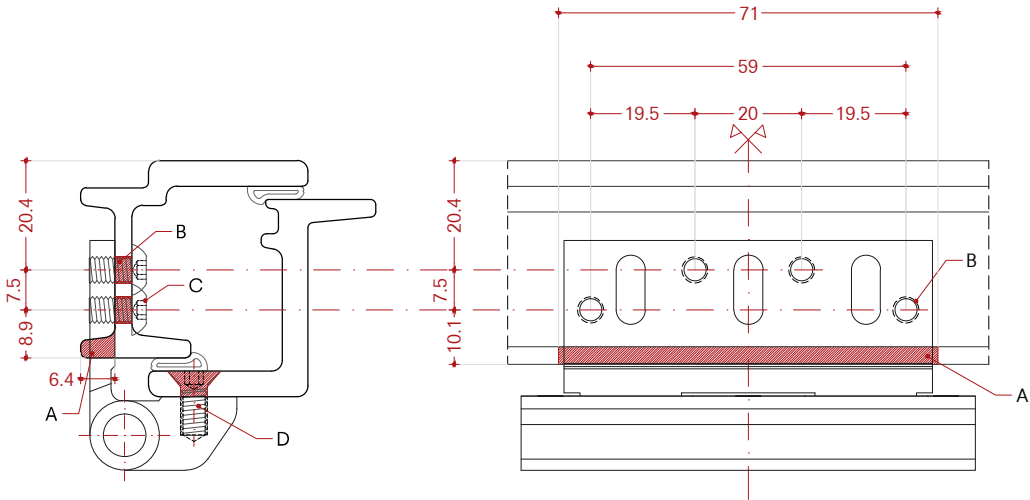
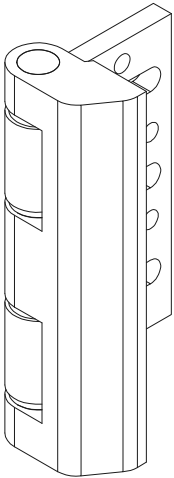
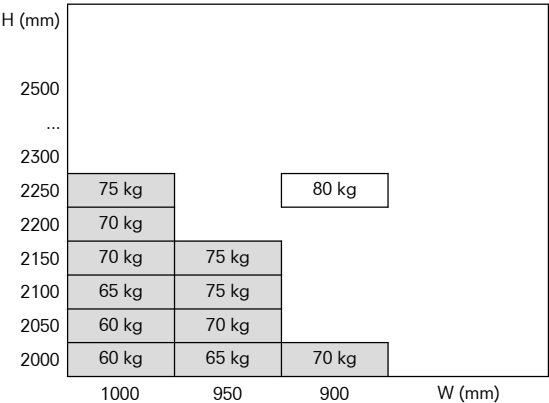


Load capacity tables
Screw-on hinges

Tabella portate
Cerniere ad avvitare

Tablas de peso
Bisagras atornillable

		Material Materiale Material	Diameter Diametro Diámetro	Length Lunghezza Longitud	Capacity (pair) Portata (coppia) Capacidad (par)
C99107-25 R	Right opening Apertura destra Apertura derecha	Natural brass Ottone naturale Latón natural	Ø = 12.5 mm	85 mm	80 kg
C99107-25 L	Left opening Apertura sinistra Apertura izquierda	Natural brass Ottone naturale Latón natural	Ø = 12.5 mm	85 mm	80 kg

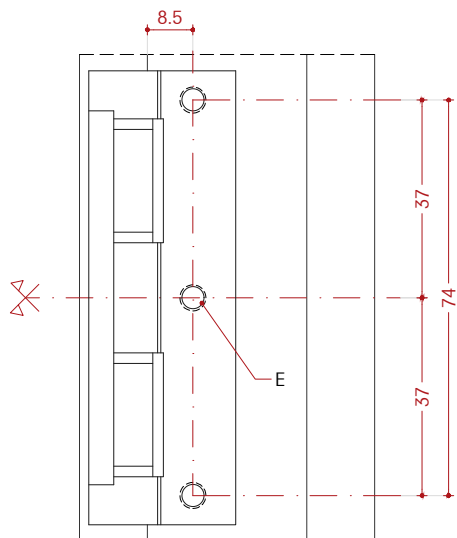


- A) 6x71 mm cut off profile
B) Ø5.2 mm holes on profile
C) Fastening hinge to frame with M5x8 ISO7380 screws
D) Fastening hinge to leaf with M5x12 ISO10642 screws
E) Ø5.2 mm holes on profile

- A) 6x71 mm taglio del profilo
B) Fori Ø5.2 mm sul profilo
C) Fissaggio cerniera al telaio con viti M5x8 ISO7380
D) Fissaggio cerniera all'anta con viti M5x12 ISO10642
E) Fori Ø5.2 mm sul profilo

- A) 6x71 mm fresado de perfil
B) Orificios Ø5.2 mm en perfil
C) Fijación bisagra en perfil con tornillos M5x8 ISO7380
D) Fijación bisagra en hoja con tornillos M5x12 ISO10642
E) Orificios Ø5.2 mm en perfil

View from rear
Vista dal retro
Vista desde atrás



Note

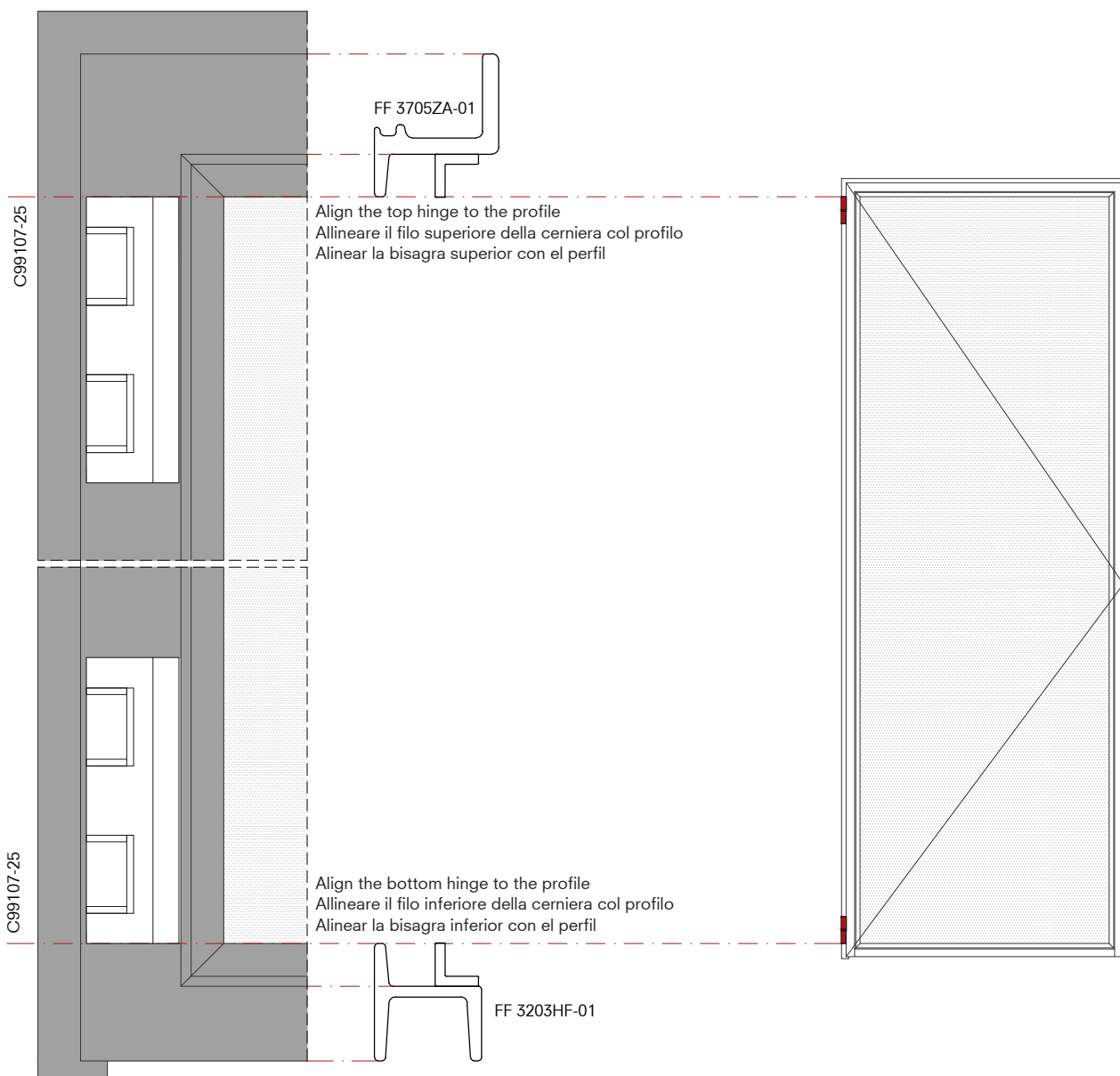
Please ensure that it is possible to unhinge the door leaf after installation. This should be taken into account during the planning.

Nota

Assicurarsi che sia possibile smontare l'anta dopo l'installazione. Da considerarsi sempre in fase di progettazione.

Nota

Asegúrese de que sea posible desengancher la puerta después de la instalación. Esto debe tenerse en cuenta durante la planificación.



Rules for third hinge

Regole per la terza cerniera

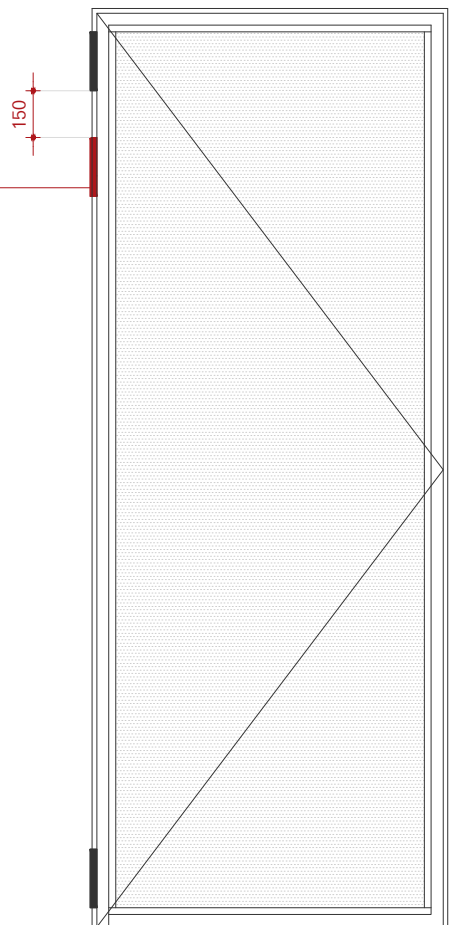
Normas para tercera bisagra

Third hinge at 150 mm
Terza cerniera a 150 mm
La tercera bisagra a 150 mm

The third hinge increases the load-bearing capacity by 15%

La terza cerniera aumenta la capacità di carico del 15%

La 3ª bisagra aumenta la capacidad de carga hasta un 15%



Use the third hinge if:
Terza cerniera consigliata in caso di:
Usar 3ª bisagra en los siguientes casos:

A

Doors equipped with upper door closer
Porte dotate di chiudiporta superiore
Puertas equipadas con cierre en parte superior

B

Doors with panic bar (EN1125)
Porte con maniglione antipanico (EN1125)
Puertas con barra anti pánico (EN1125)

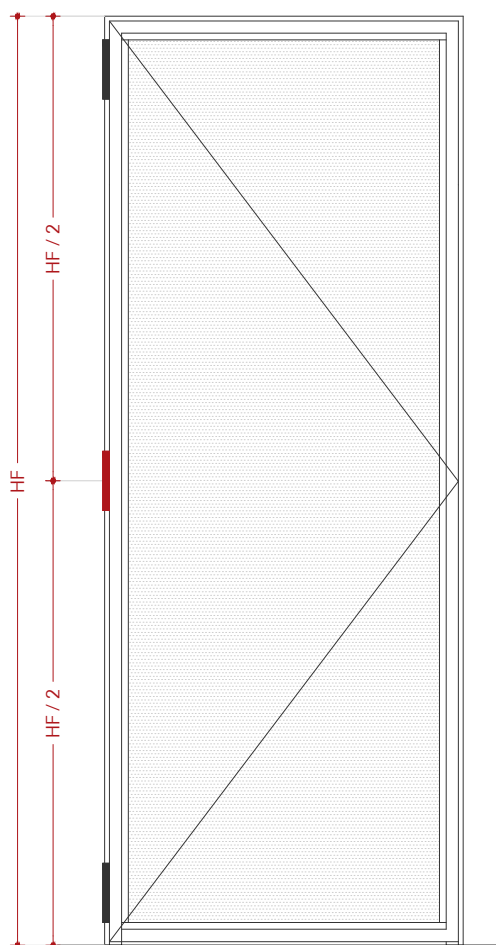
C

Doors for intensive uses (schools, hospitals, ...)
Porte ad uso intensivo (scuole, ospedali, ecc.)
Puertas de uso intensivo (colegios, hospitales, etc.)

Rules for middle hinge

Regole per la cerniera centrale

Normas para la bisagra central



Middle hinge needed if:
Cerniera centrale necessaria se:
Bisagra media necesaria si:

Doors height is more than 2100 mm

Porte di altezza superiore a 2100 mm

La altura de la puerta es superior a 2100 mm

Note for all hinges:

Please ensure that it is possible to unhinge the door leaf after installation. This should be taken into account during the planning.

HF = Height Frame

Nota per tutte le cerniere:

Assicurarsi che sia possibile togliere l'anta dopo l'installazione. Questo dovrebbe essere preso in considerazione durante la progettazione.

HF = Altezza telaio

Nota para todas las bisagras:

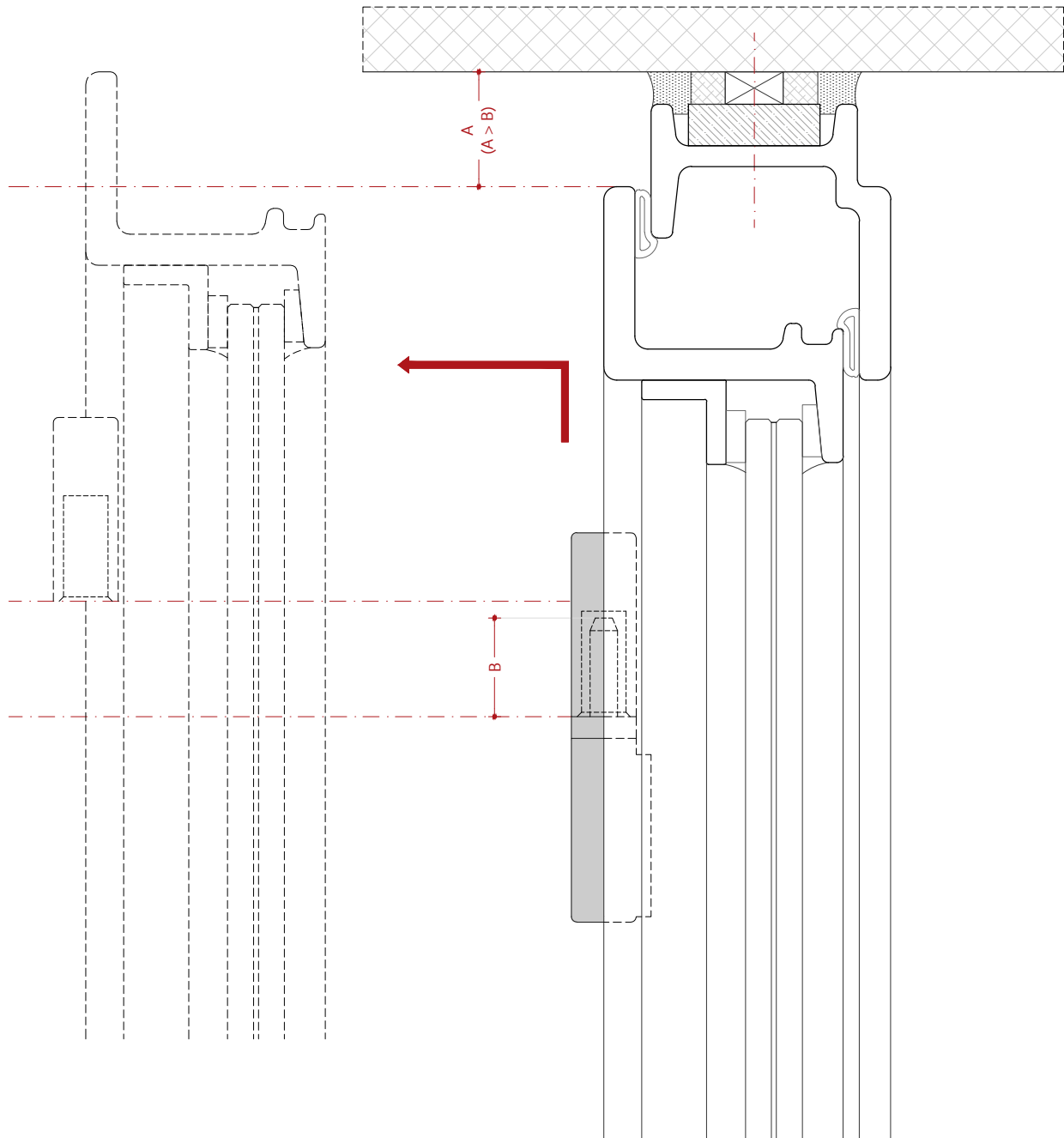
Asegúrese de que sea posible desenganchar la puerta después de la instalación. Esto debe tenerse en cuenta durante la planificación.

HF = Altura marco

**Recommendations
for installation**

**Raccomandazioni per
l'installazione in luce**

**Recomendaciones
para la instalación**



Note for all hinges:

In case of installation of the door "in the soffit" make sure that the necessary space is guaranteed to be able to remove the door from the hinges. Also evaluating a possible insertion, in the upper part, of a spacer element between the frame and the wall.

Nota per tutte le cerniere:

In caso di installazione della porta "in luce" assicurarsi che sia garantito lo spazio necessario per poter sfilare l'anta dalle cerniere. Valutando anche un eventuale inserimento, nella parte superiore, di un elemento distanziatore tra telaio e muratura.

Nota para todas las bisagras:

En caso de instalación de la puerta "en la abertura" asegúrese de que se garantiza el espacio necesario para poder retirar la puerta de las bisagras. También se evalúa una posible inserción, en la parte superior, de un elemento distanciador entre el marco y la pared.

Installation

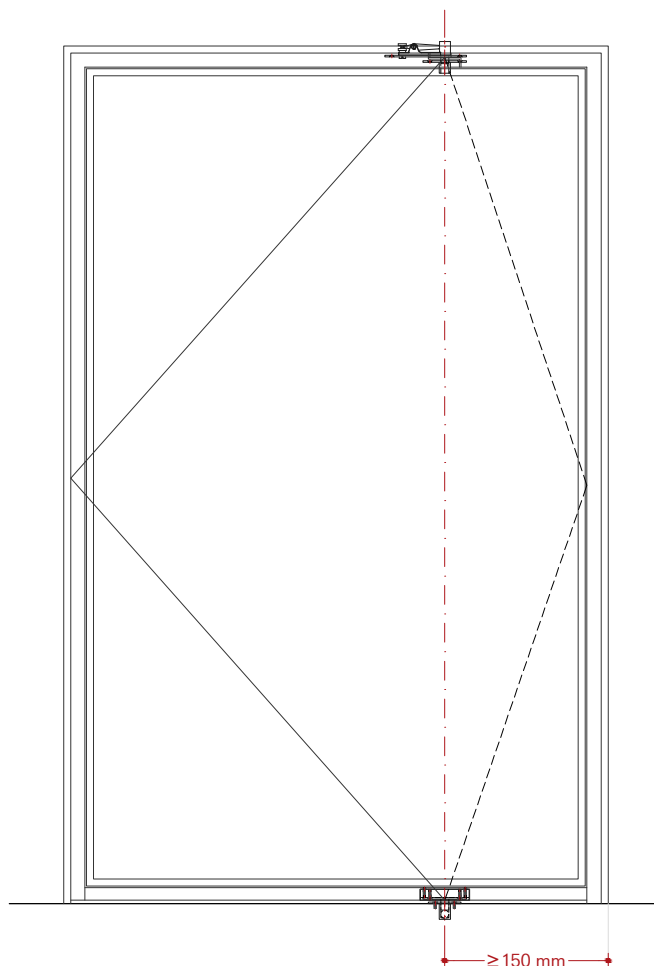
Single leaf pivot door

Montaggio

Porta pivot a un battente

Montaje

Puerta pivote de una hoja



Vertical pivot - max. leaf weight: 200 kg

Note:

Evaluate the rotation point position.

Nota:

Valutare la posizione del punto di rotazione.

Nota:

Evalúe la posición del punto de rotación.

Profile processing

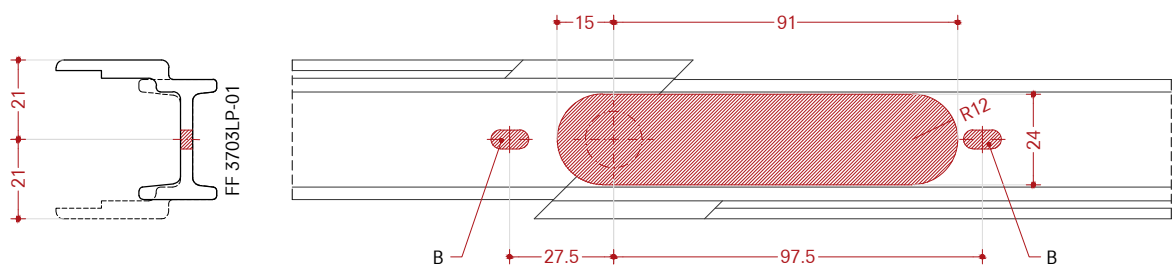
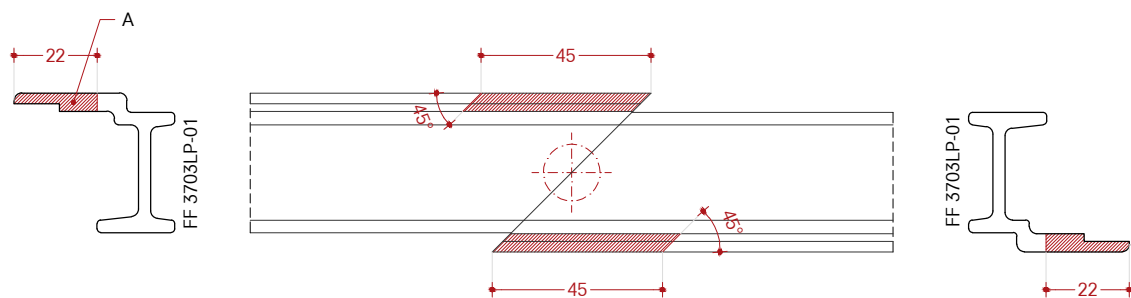
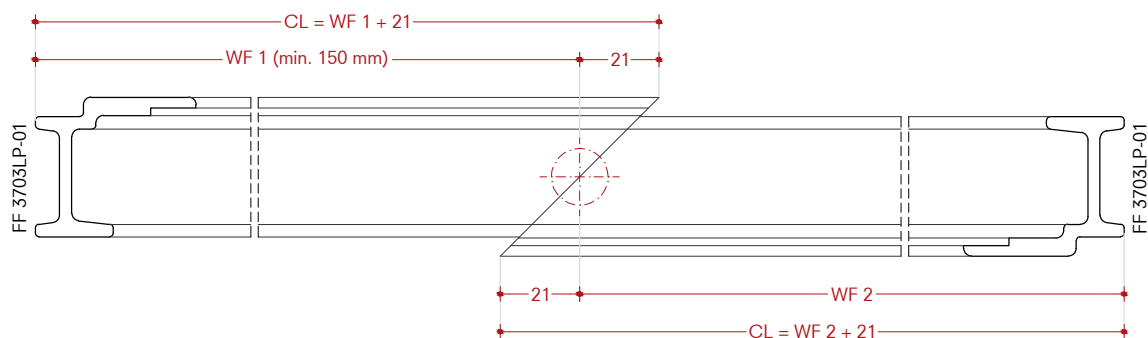
Upper frame FF 3703LP-01 profile
Single leaf pivot door

Lavorazione del profilo

traverso superiore telaio FF 3703LP-01
Porta pivot a un battente

Mecanizado de perfil

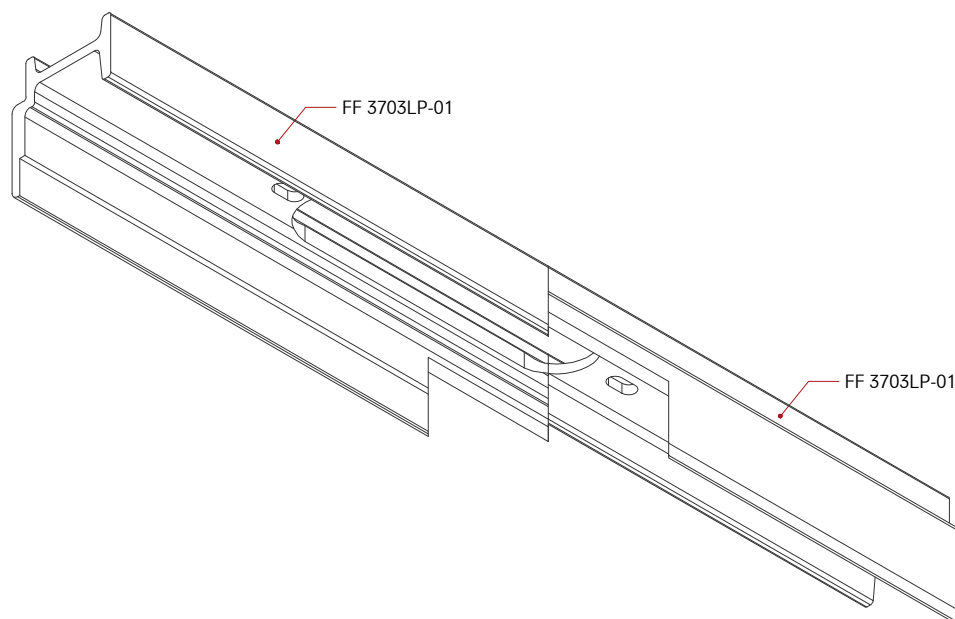
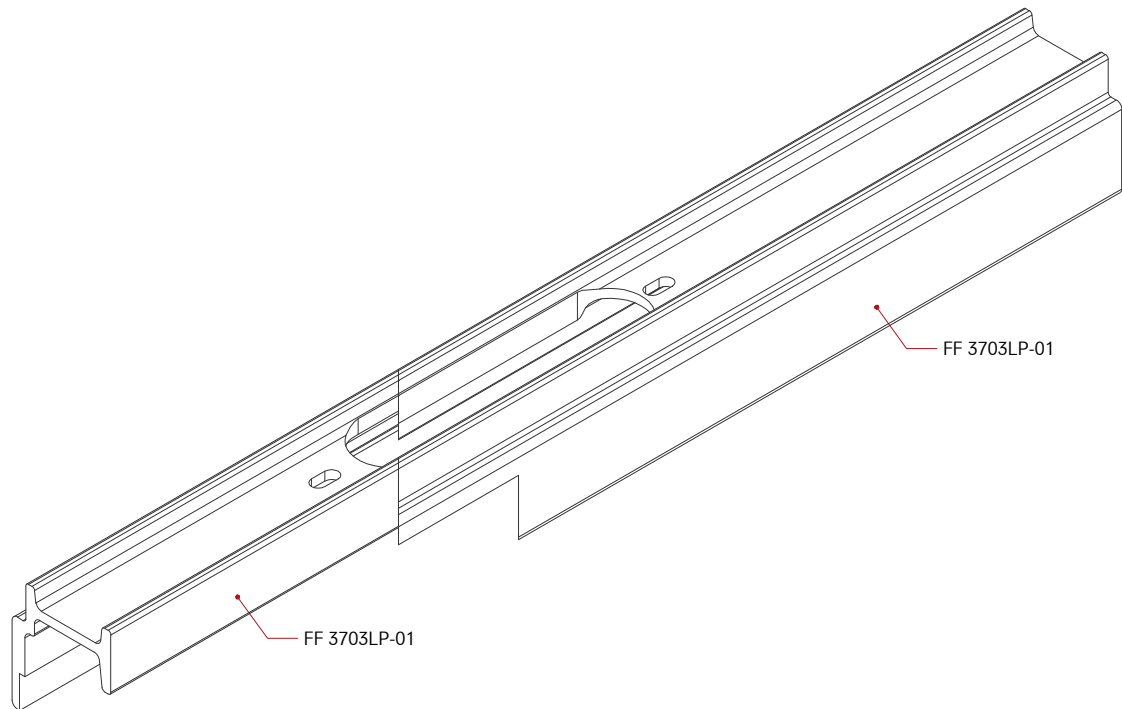
Travesaño superior
de marco FF 3703LP-01
Puerta pivote de una hoja



A) Cut-off profile
B) 10x5 mm slotted holes

A) Taglio del profilo
B) Foro asolato 10x5 mm

A) Fresado de perfil
B) Orificio hendido 10x5 mm



Profile processing

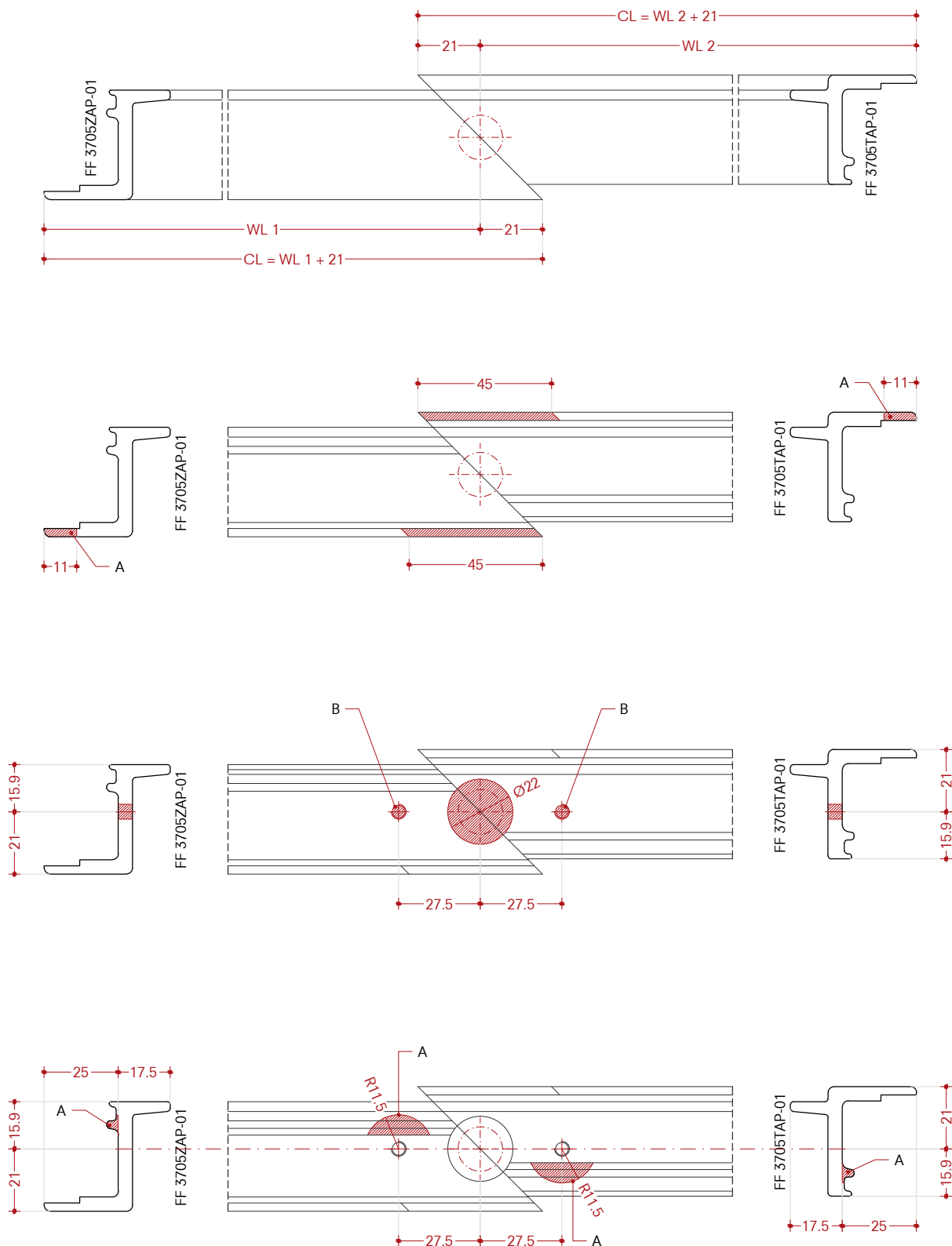
Upper leaf FF 3705TAP-01
and FF 3705ZAP-01 profile
Single leaf pivot door

Lavorazione del profilo

Traverso superiore anta
FF 3705TAP-01 e FF 3705ZAP-01
Porta pivot a un battente

Mecanizado de perfil

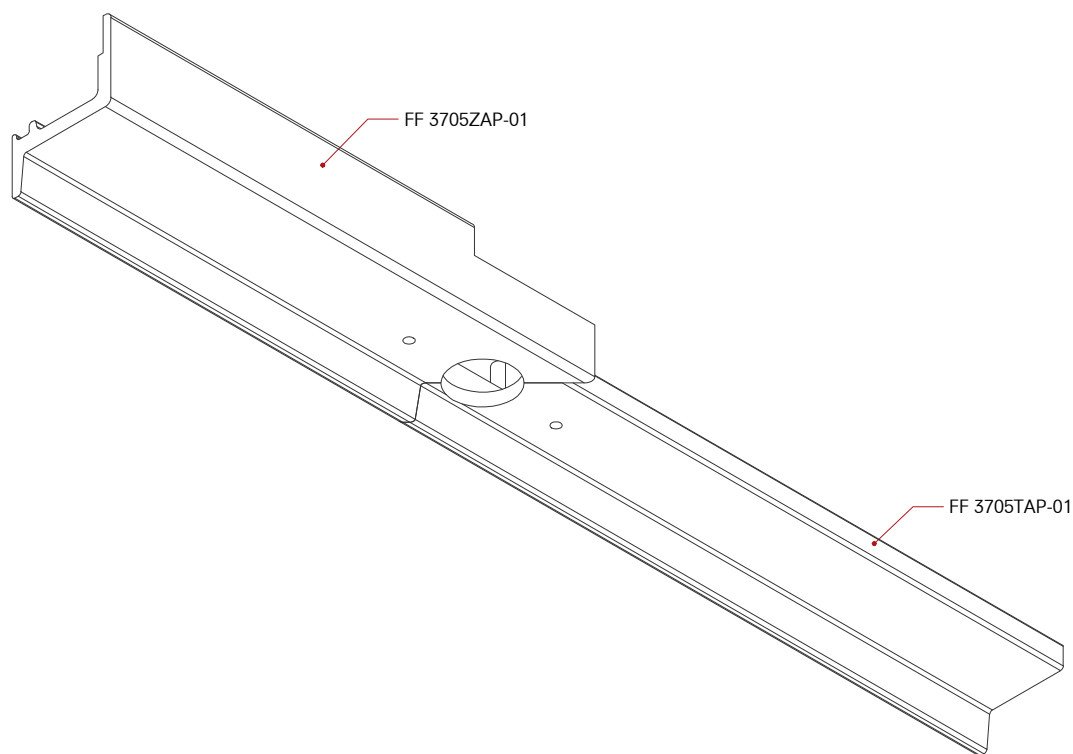
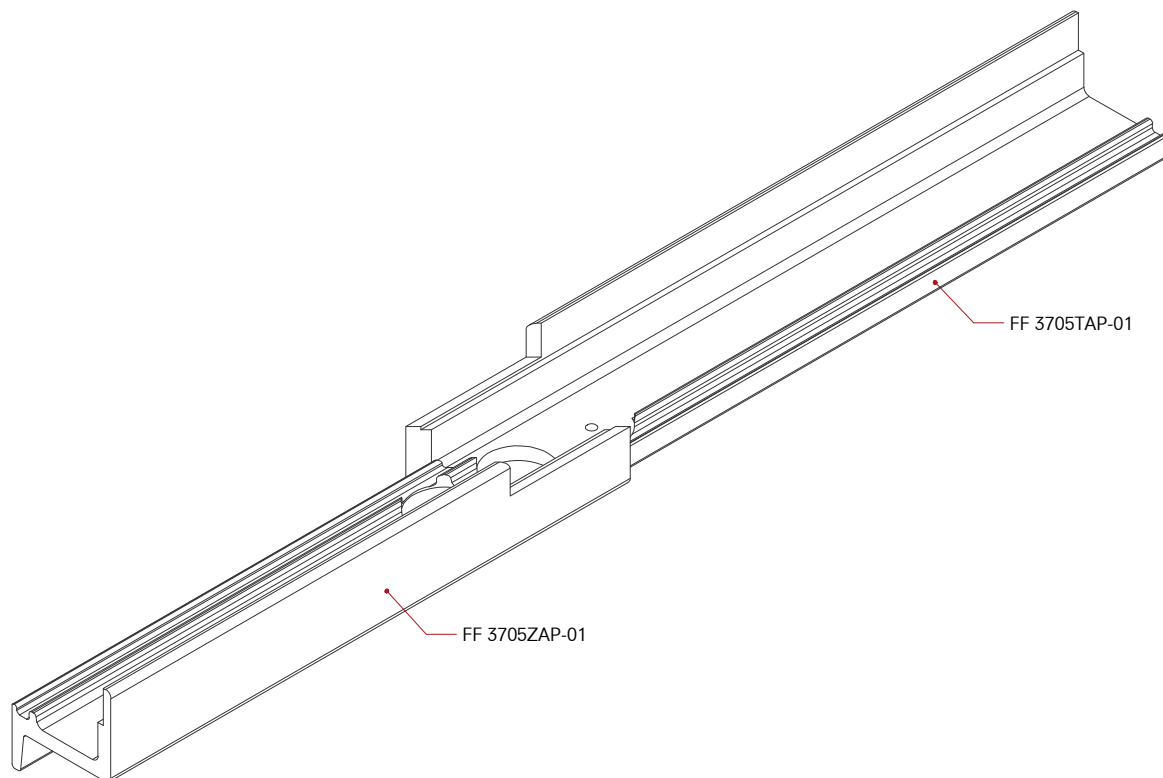
Travesaño superior de hoja
FF 3705TAP-01 y FF 3705ZAP-01
Puerta pivote de una hoja



A) Cut-off profile
B) M5 hole

A) Taglio del profilo
B) Foro M5

A) Fresado de perfil
B) Orificio M5



Profile processing

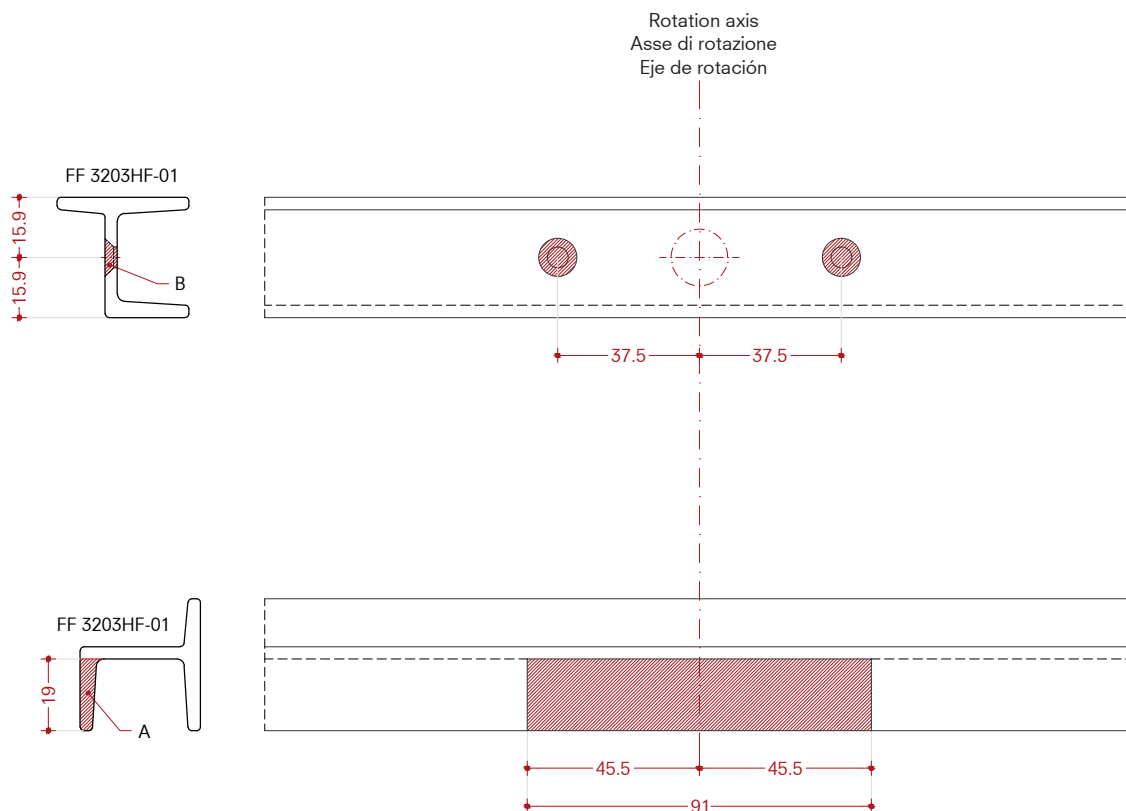
Bottom profile FF 3203HF-01
Single leaf pivot door

Lavorazione del profilo

Zoccolo inferiore anta FF 3203HF-01
Porta pivot a un battente

Mecanizado de perfil

Travesaño inferior de hoja FF 3203HF-01
Puerta pivote de una hoja



A) Cut-off profile
B) Slotted hole for M5 screw

A) Taglio del profilo
B) Foro asolato per vite M5

A) Fresado de perfil
B) Orificio hendido para tornillo M5

Installation

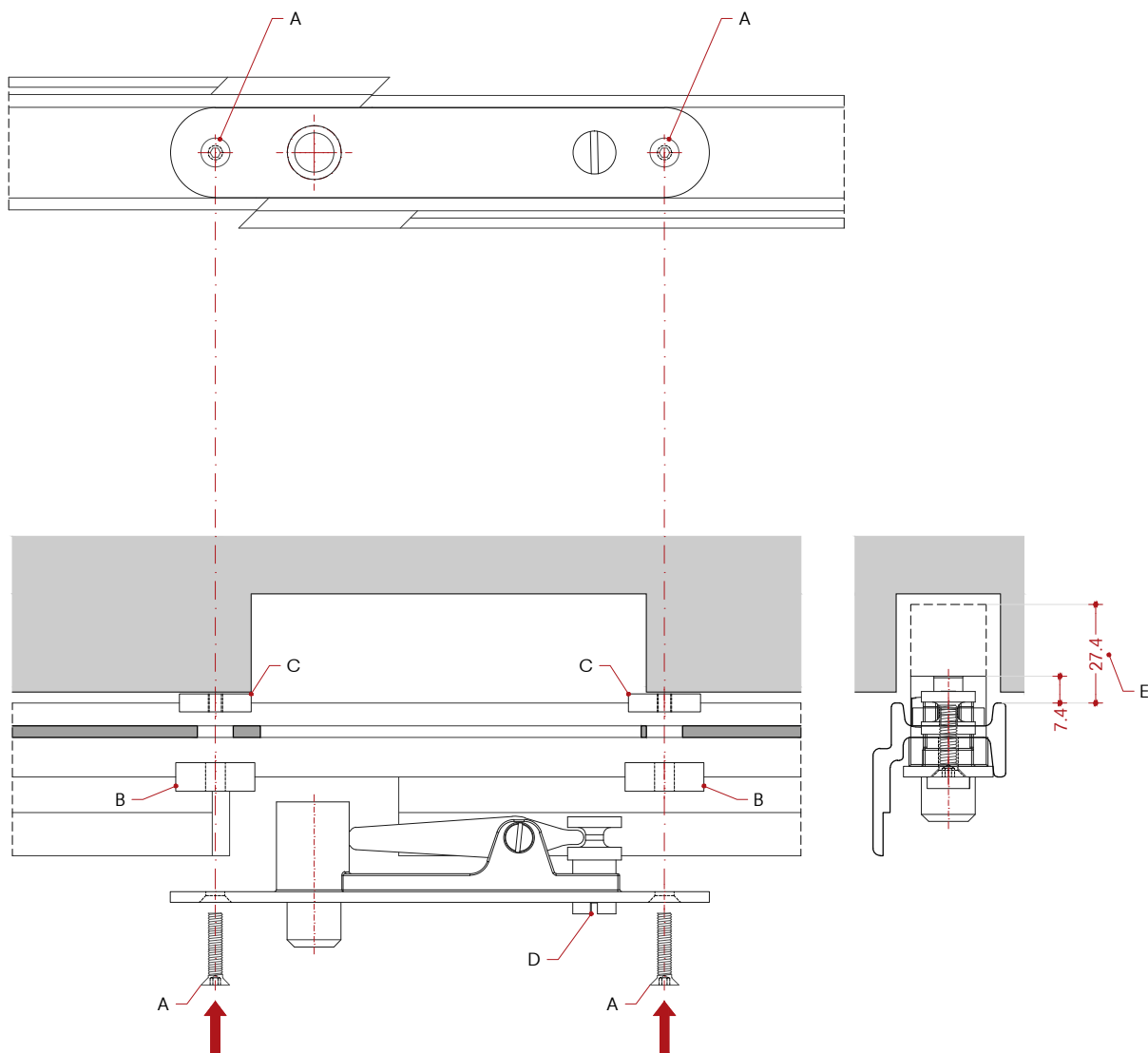
Upper frame hinge

Montaggio

Cardine superiore telaio

Montaje

Bisagra del marco superior



- A) Fastening with M4x20 ISO10642 screw
- B) 8 mm shim
- C) 5 mm shim
- D) For assembly, screw out the adjustment screw completely.
- E) Evaluate the overall hinge dimension.

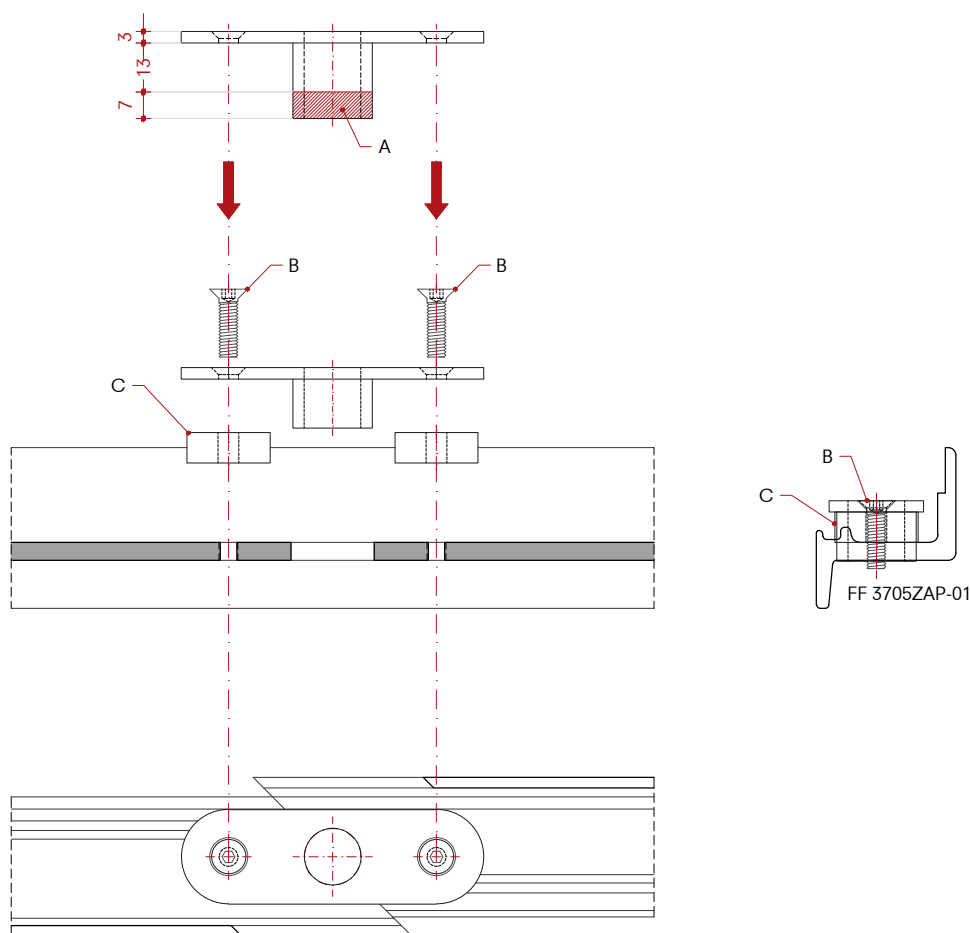
- A) Fissaggio con vite M4x20 ISO10642
- B) Spessore 8 mm
- C) Spessore 5 mm
- D) Per la fase di montaggio in opera ritrarre completamente il perno.
- E) Valutare la dimensione complessiva della cerniera.

- A) Fijación con tornillo M4x20 ISO10642
- B) Base 8 mm
- C) Base 5 mm
- D) Para la fase de montaje in situ, retraiga completamente el pasador.
- E) Evaluar la dimensión general de la bisagra.

Installation
Upper leaf hinge

Montaggio
Cardine superiore anta

Montaje
Bisagra de hoja superior



A) Cut-off
B) Fastening with M5x18 ISO10642 screw
C) 8 mm shim

A) Taglio
B) Fissaggio con vite M5x18 ISO10642
C) Spessore 8 mm

A) Fresado
B) Fijación con tornillo M5x18 ISO10642
C) Base 8 mm

Installation

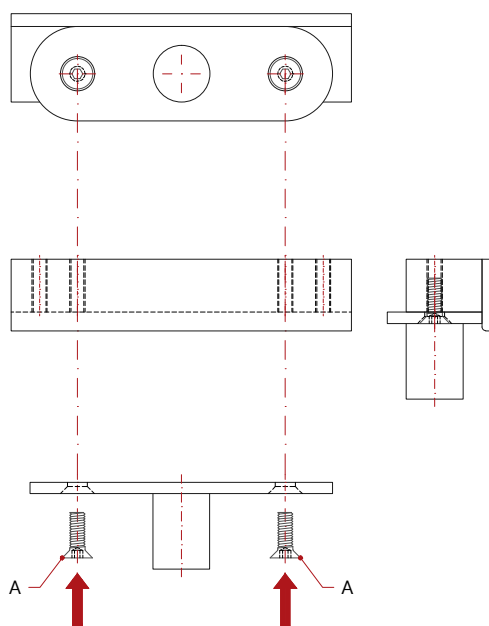
Lower frame hinge

Montaggio

Cardine inferiore telaio

Montaje

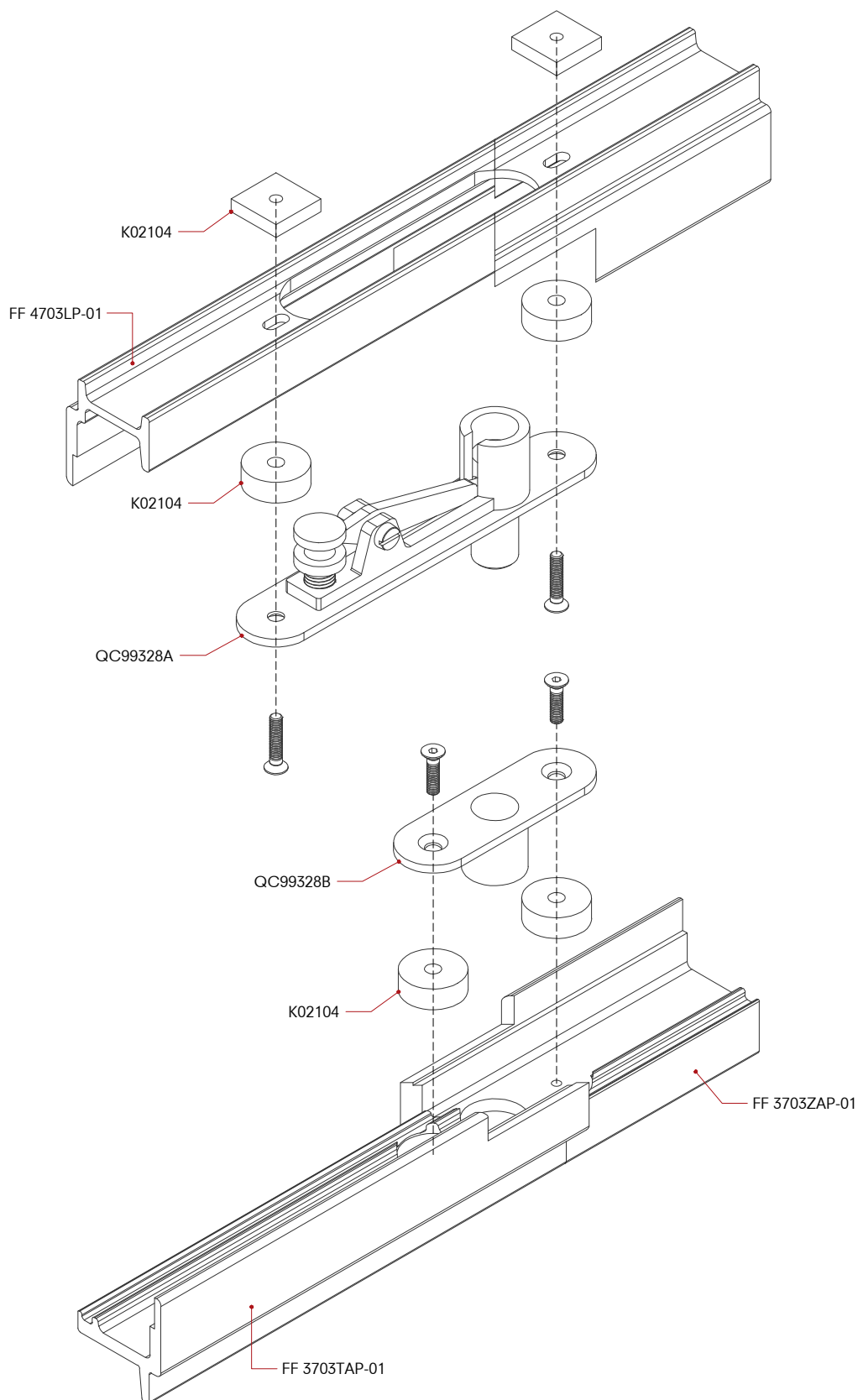
Bisagra del marco inferior

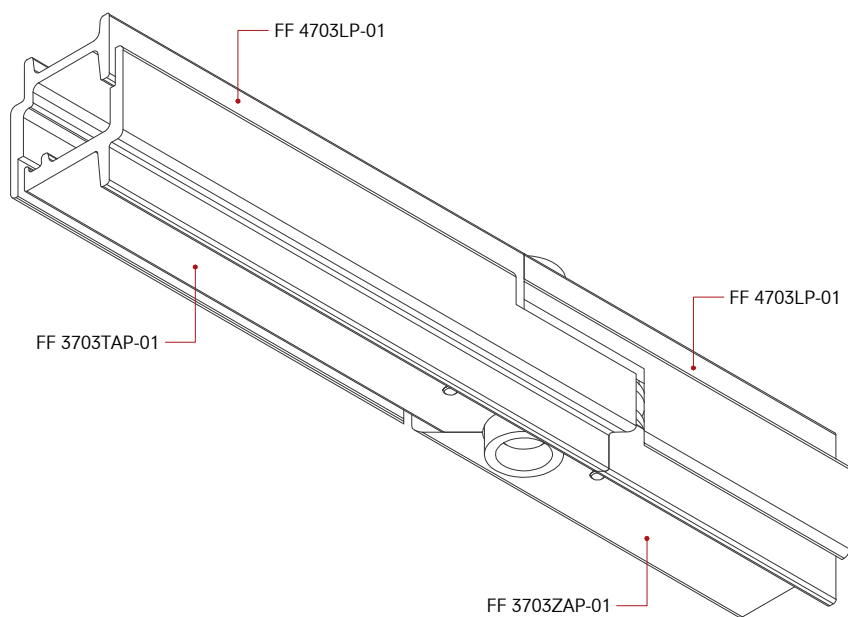
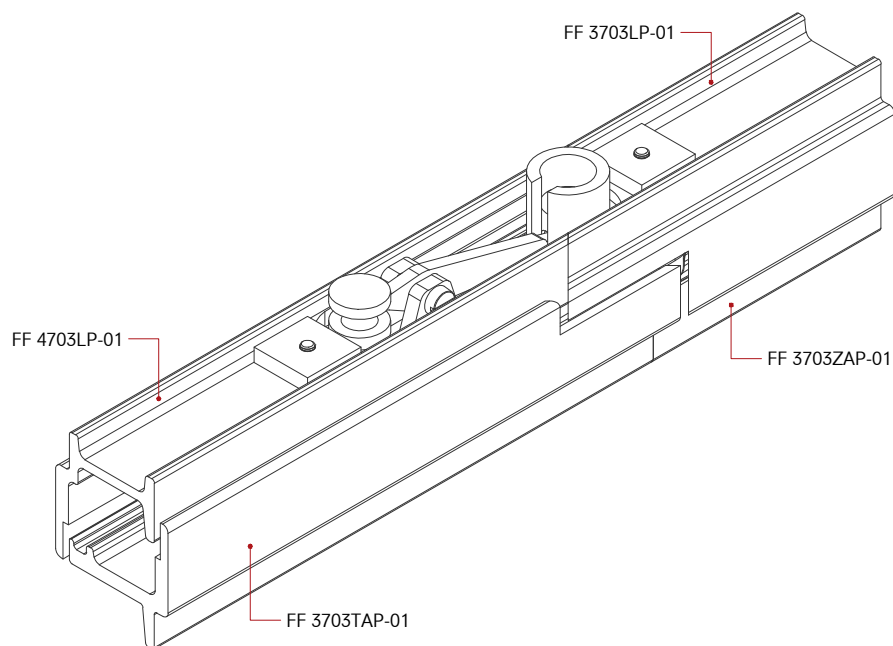


A) Fastening with M4x12 ISO10642 screw

A) Fissaggio con vite M4x12 ISO10642

A) Fijación con tornillo M4x12 ISO10642

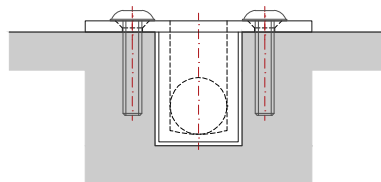
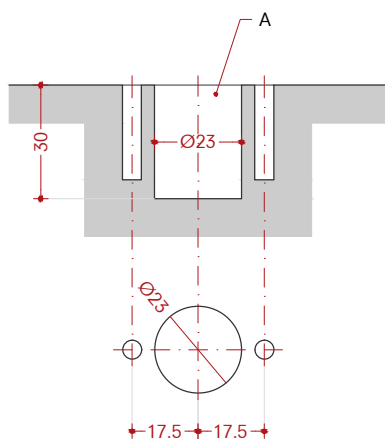




Installation on floor

Lavorazioni a pavimento

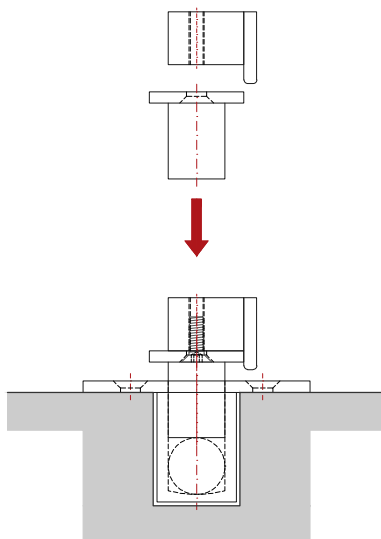
Instalación en suelo



**Insert lower
door support**

**Inserire supporto
inferiore anta**

**Insertar soporte
puerta inferior**



A) Ø23 mm depth 30 mm hole on floor

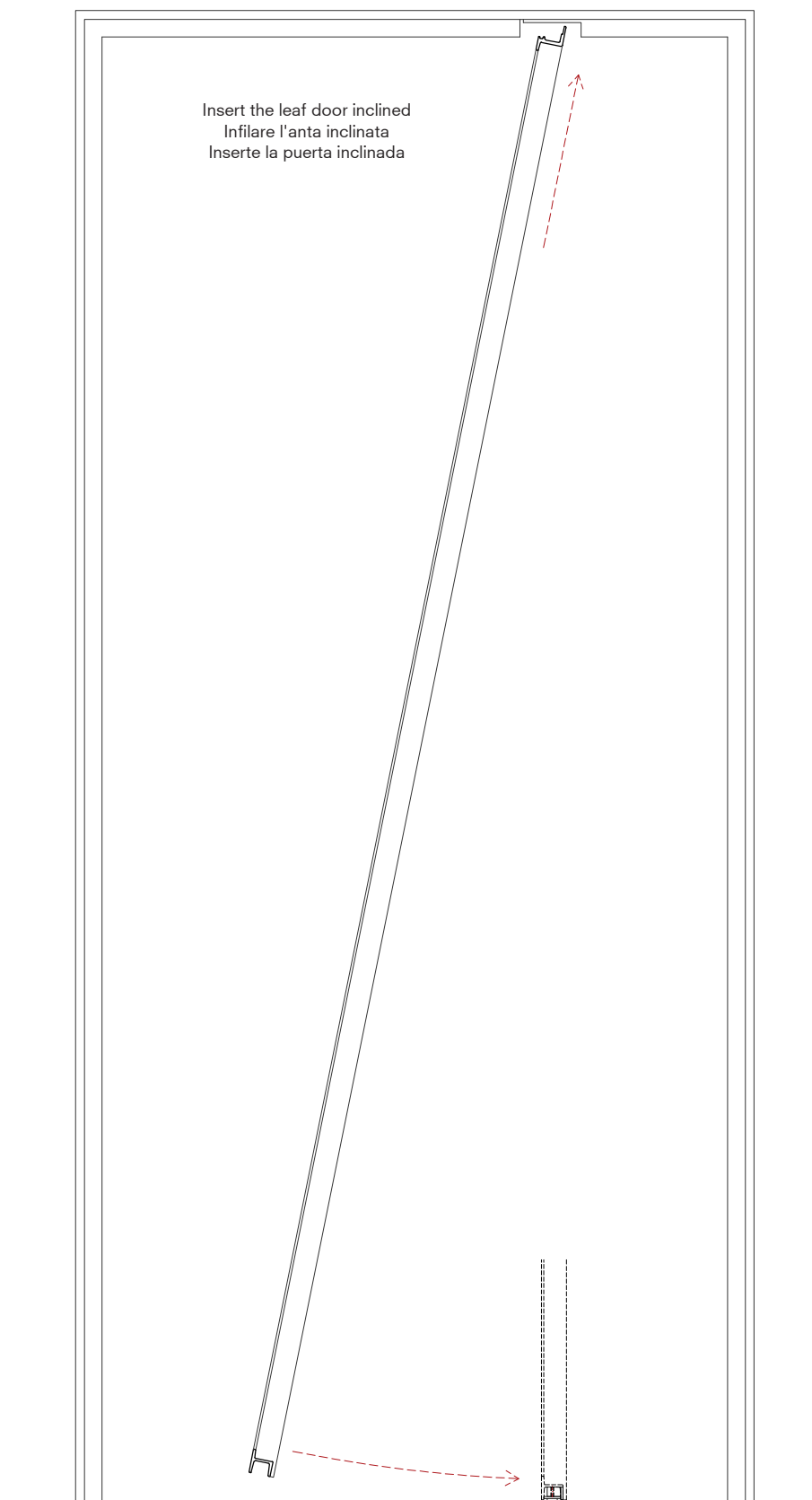
A) Foro Ø23 mm profondità 30 mm a pavimento

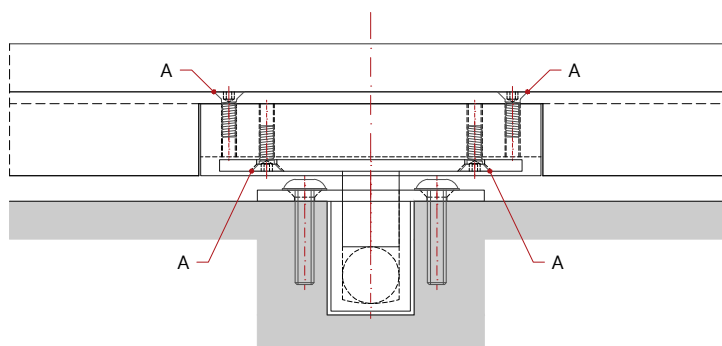
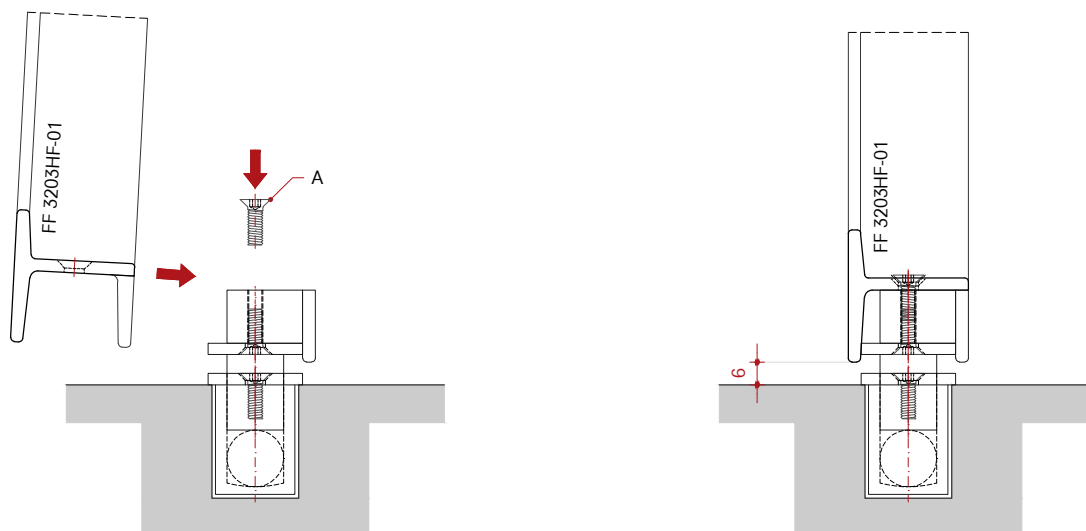
A) Orificio Ø23 mm profundidad 30 mm en suelo

Door leaf assembly

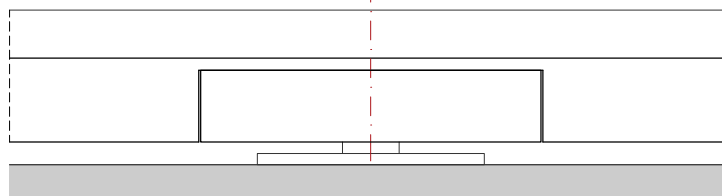
Montaggio anta porta

Montaje de la hoja de la puerta





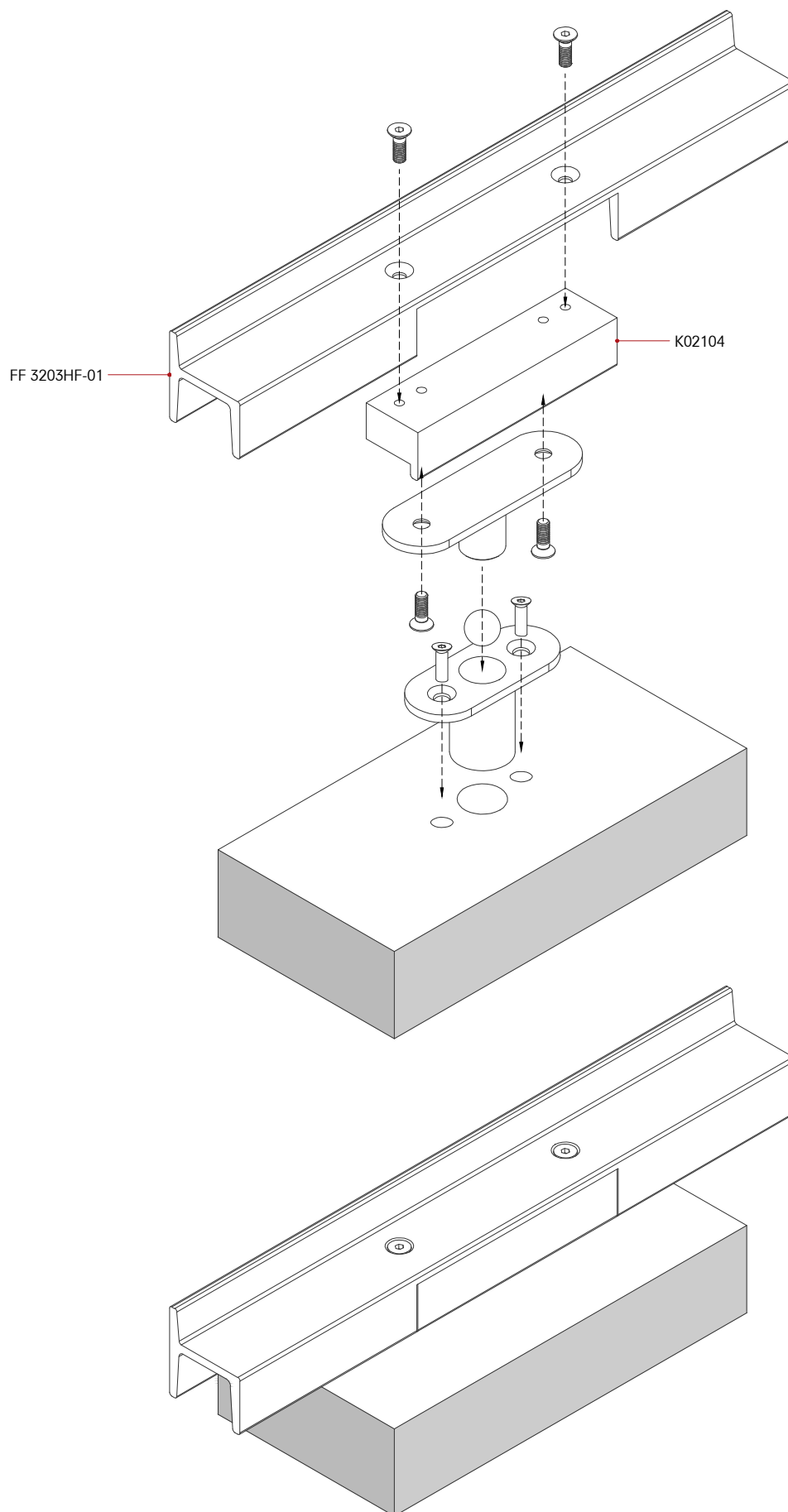
Detail lower gap, door closed
Dettaglio spacco inferiore interno ad anta chiusa
Detalle de la hendidura inferior interior con la puerta cerrada



A) Fastening with M4x12 ISO10642 screws

A) Fissaggio con viti M4x12 ISO10642

A) Fijación con tornillos M4x12 ISO10642



Installation

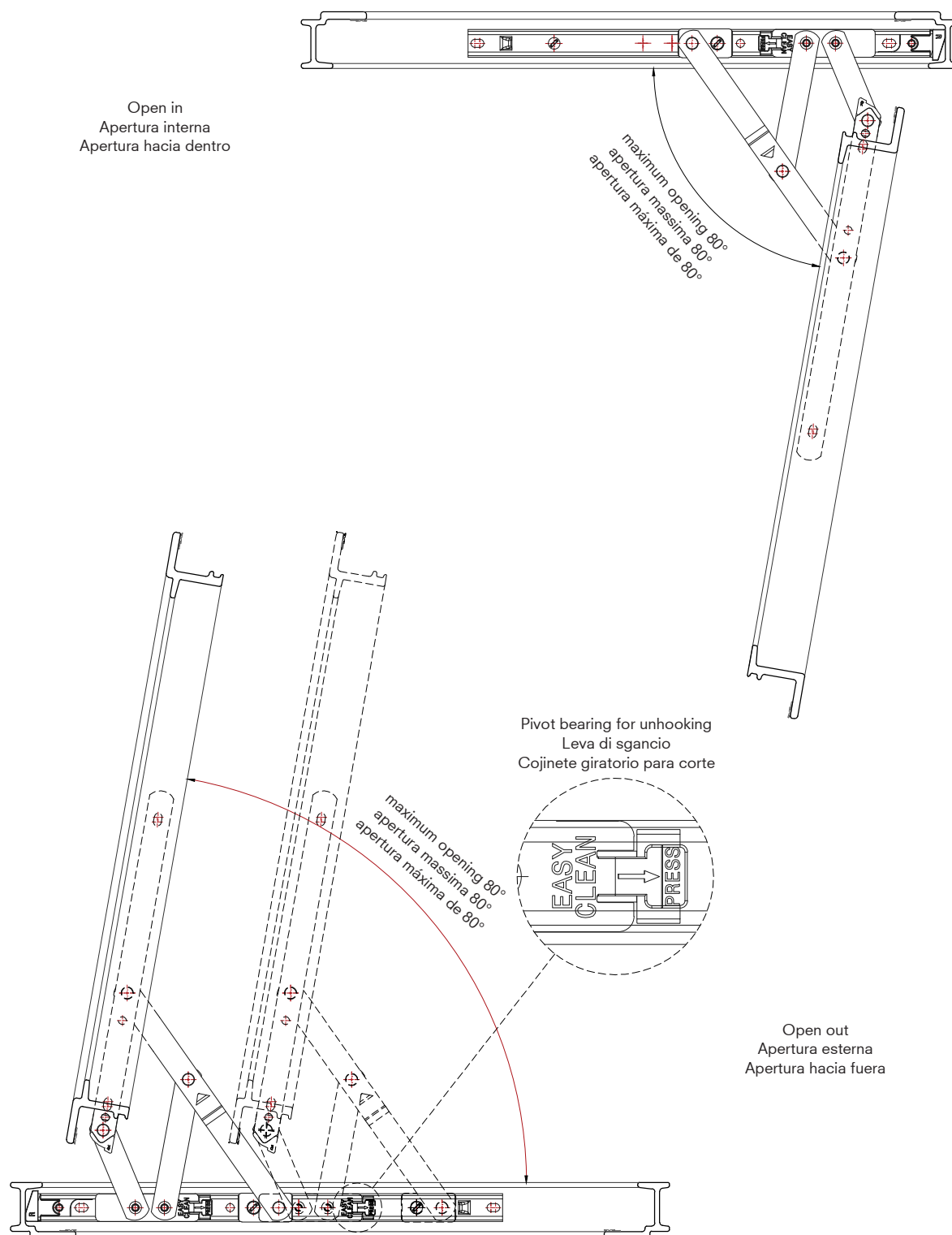
Friction stay C99210-05

Montaggio

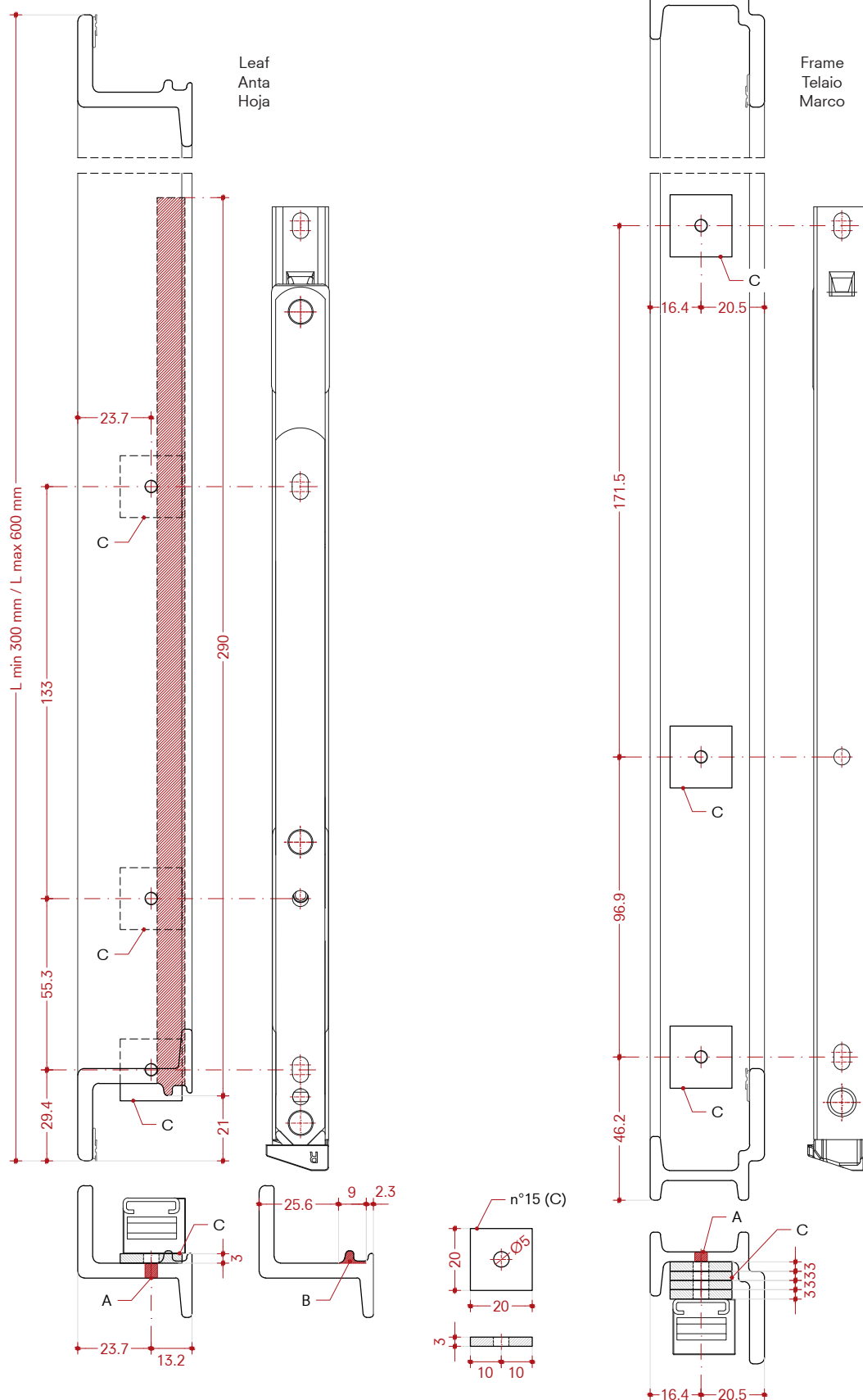
Bracci portanti C99210-05

Montaje

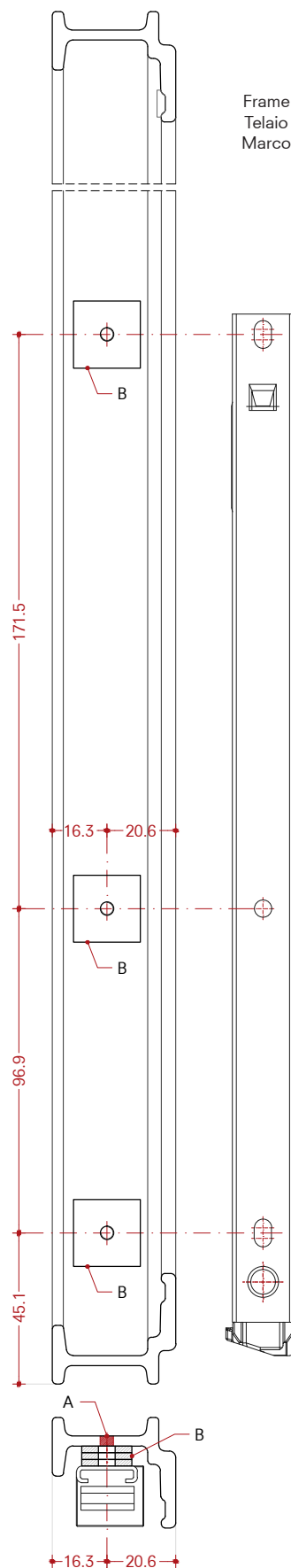
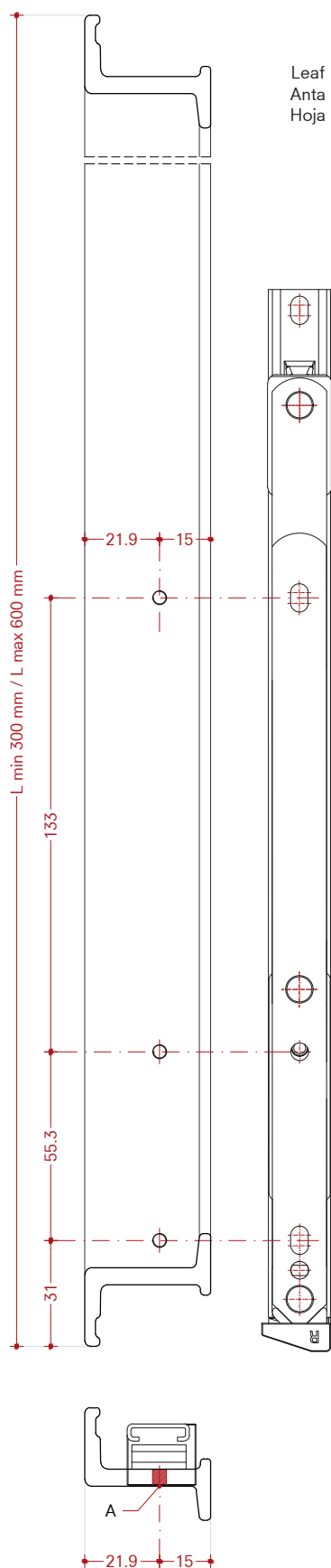
Cizalla de apertura C99210-05



CLASSIC



SLIM

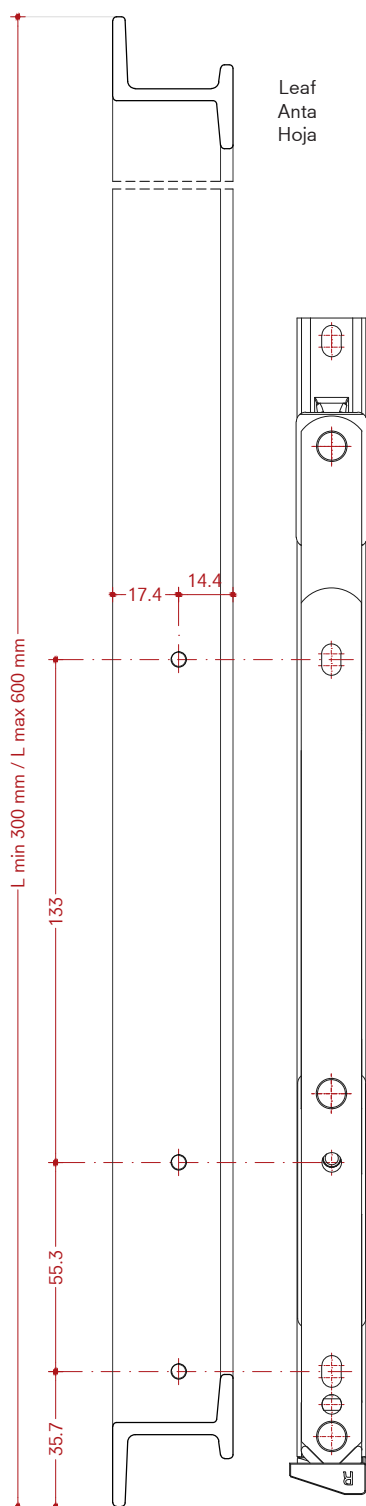


A) M4 mm holes
B) n°9 15x15x3 mm plate (not provided)

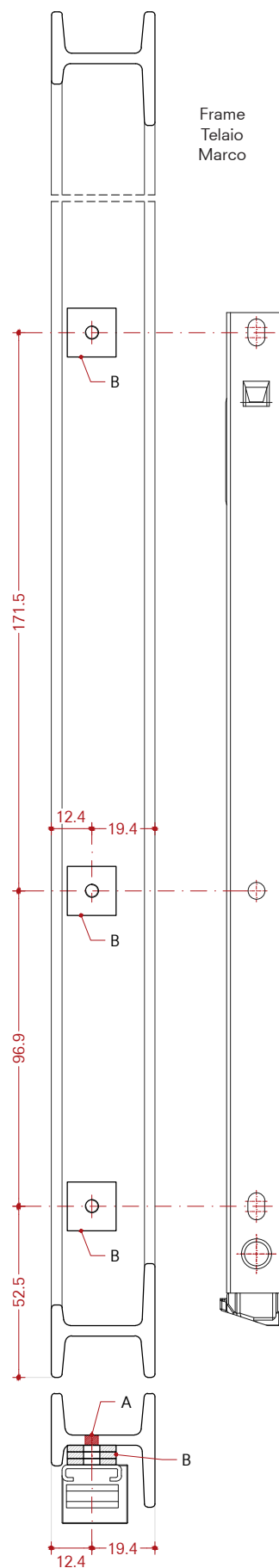
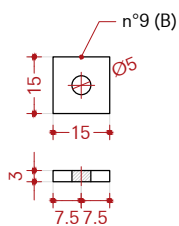
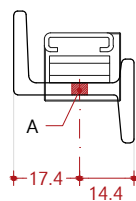
A) Fori M4 mm
B) n°9 piastre 15x15x3 mm (non fornite)

A) Oreficios M4 mm
B) n°9 Placa 15x15x3 mm (no provisto)

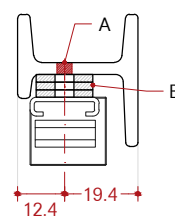
BASIC



Leaf
Anta
Hoja



Frame
Telaio
Marco



A) M4 mm holes
B) n°9 15x15x3 mm plate (not provided)

A) Fori M4 mm
B) n°9 piastre 15x15x3 mm (non fornite)

A) Oreficios M4 mm
B) n°9 Placa 15x15x3 mm (no provisto)

Installation

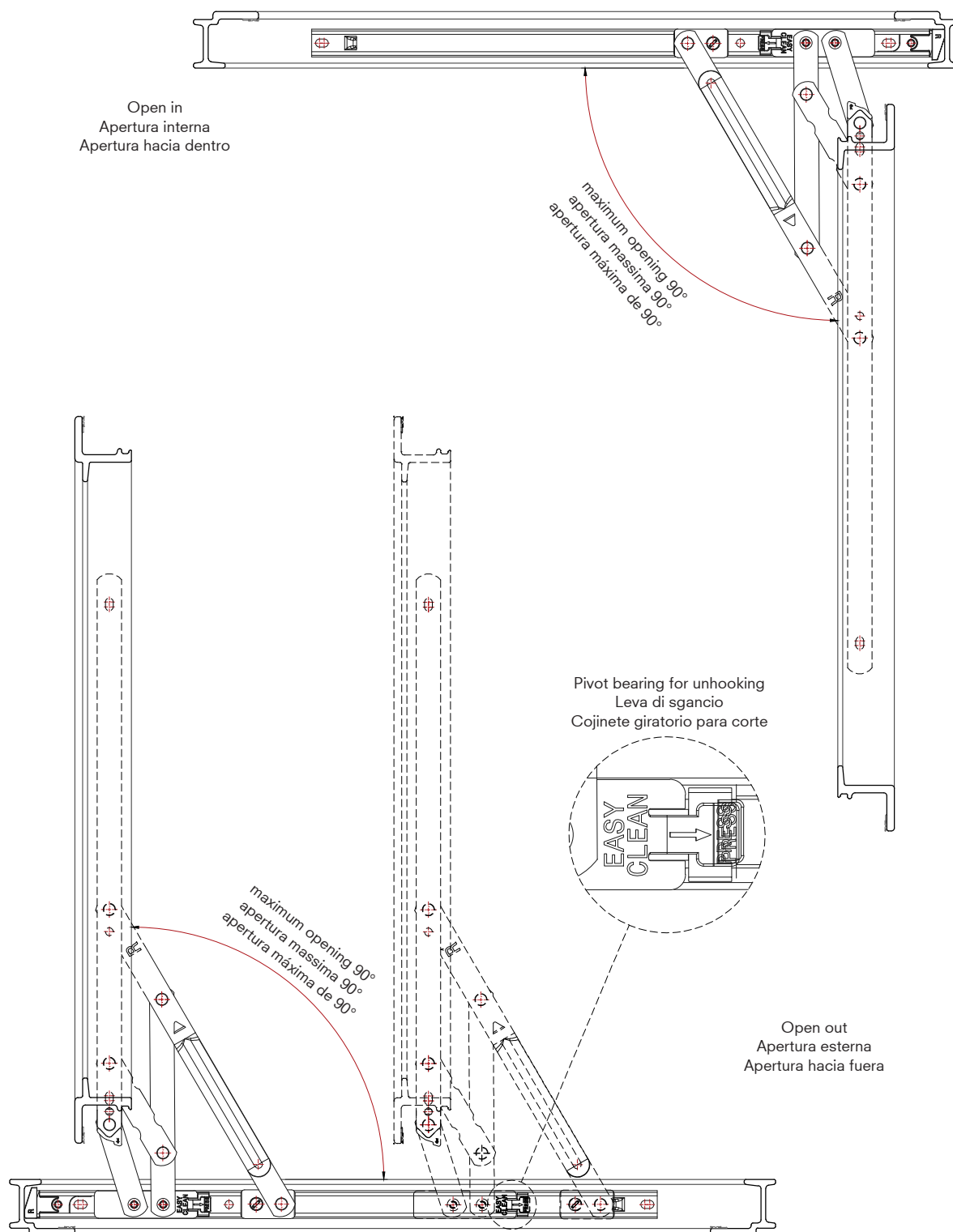
Friction stay C99211-05

Montaggio

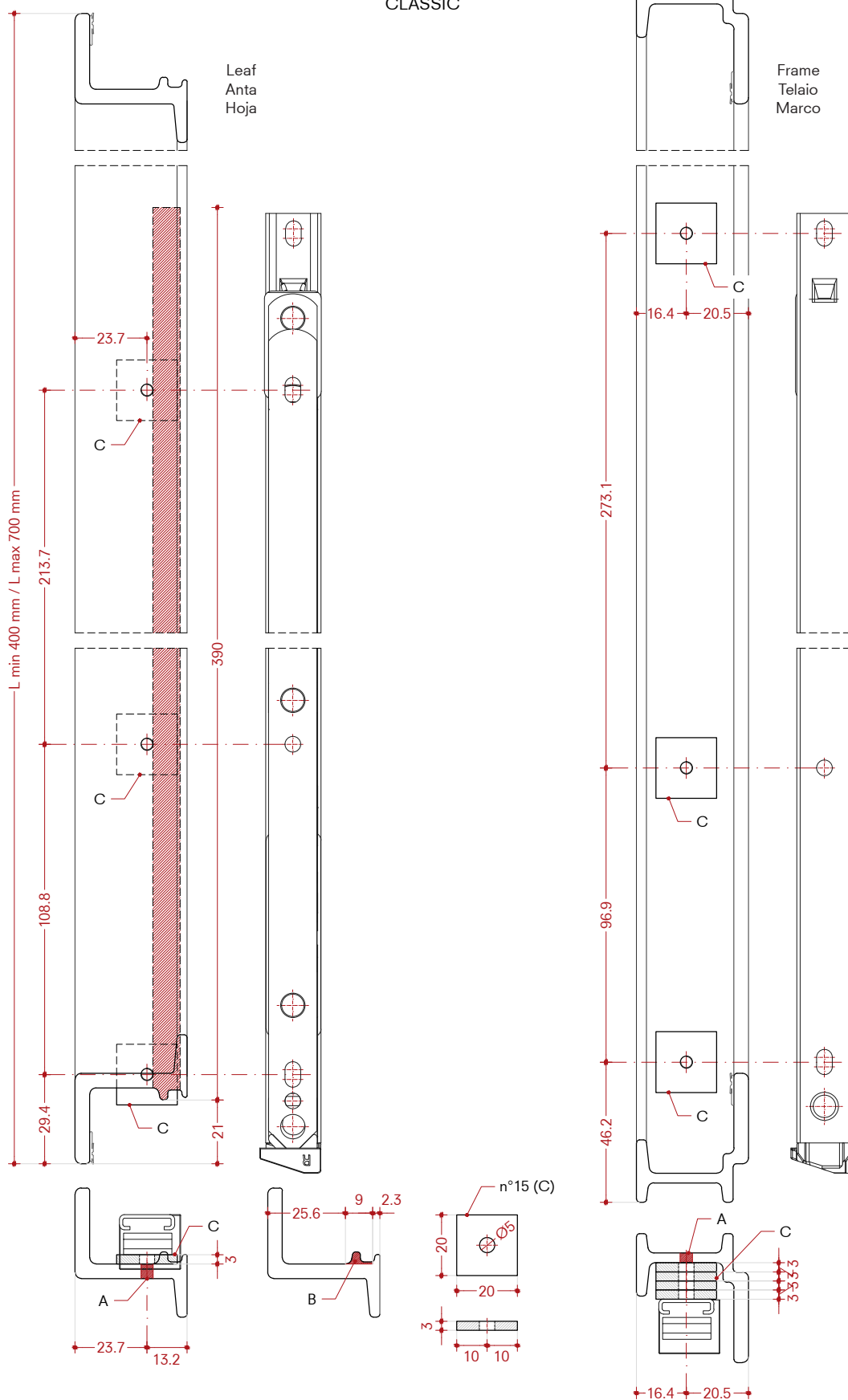
Bracci portanti C99211-05

Montaje

Cizalla de apertura C99211-05



CLASSIC

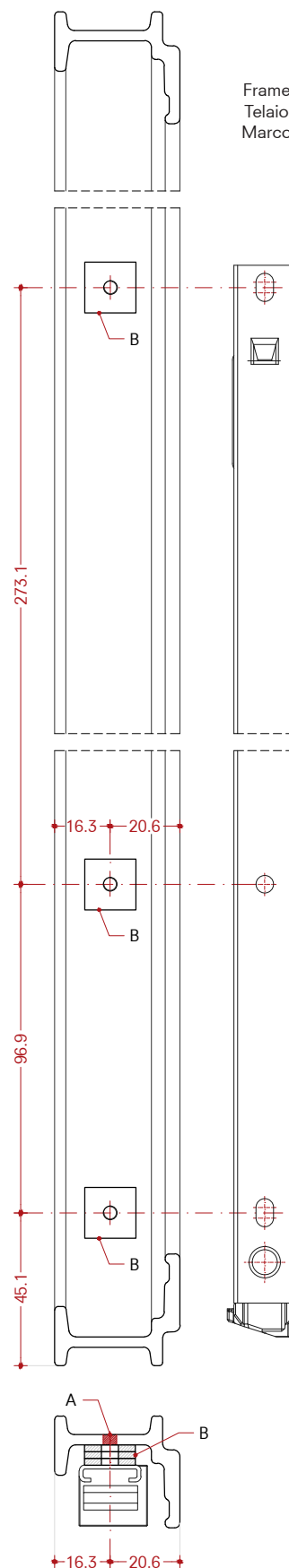
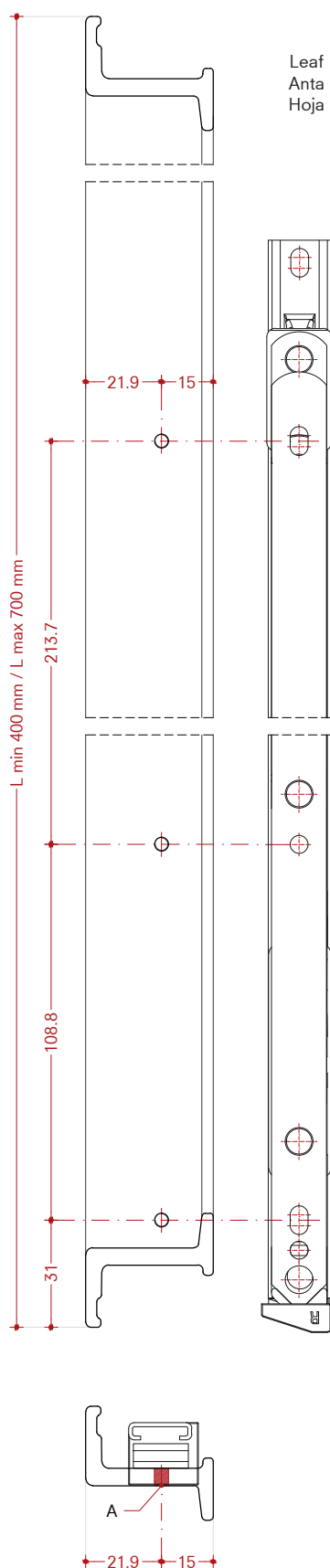


A) M4 mm holes
B) Cut off profile
C) n°15 20x20x3 mm plate (not provided)

A) Fori M4 mm
B) Taglio del profilo
C) n°15 piastre 20x20x3 mm (non fornite)

A) Oreficios M4 mm
B) Fresado de perfil
C) n°15 Placa 20x20x3 mm (no provisto)

SLIM

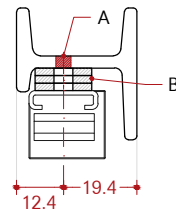
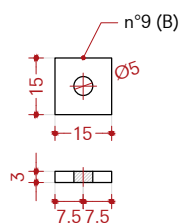
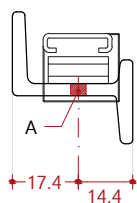
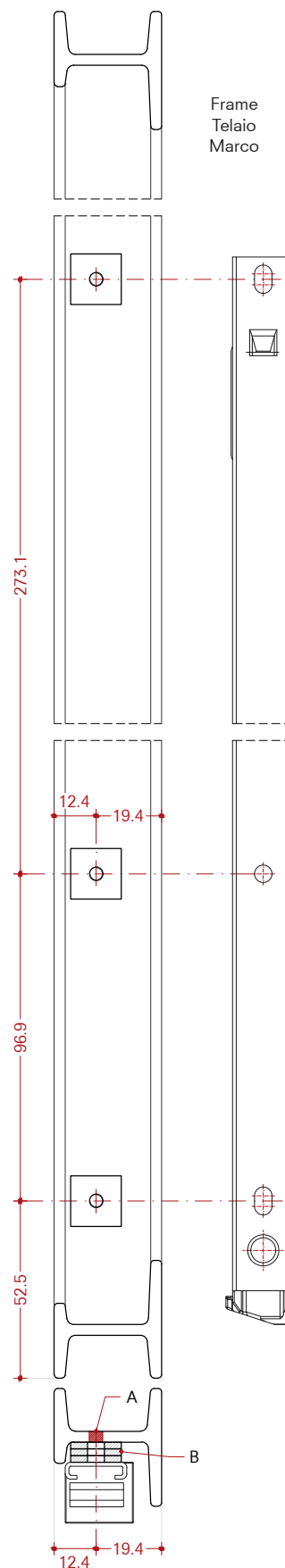
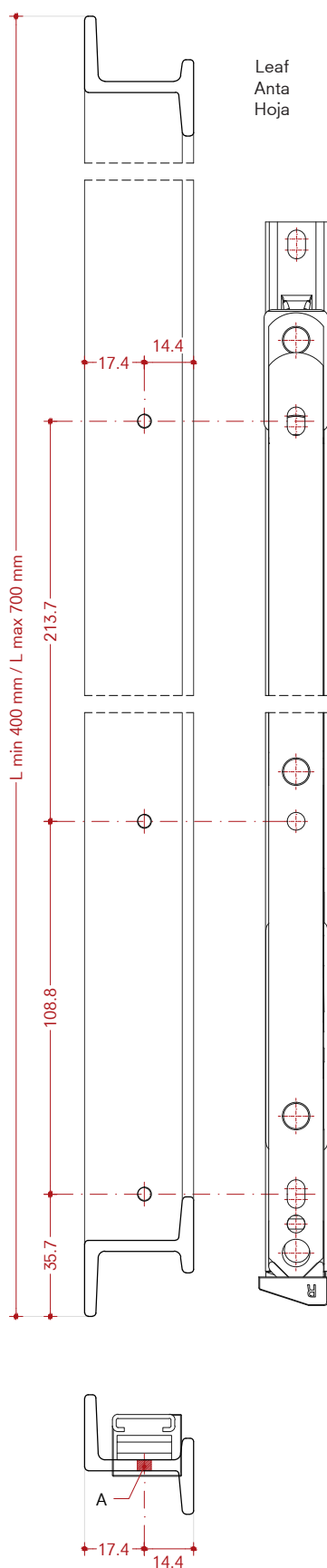


A) M4 mm holes
B) n°9 15x15x3 mm plate (not provided)

A) Fori M4 mm
B) n°9 piastre 15x15x3 mm (non fornite)

A) Oreficios M4 mm
B) n°9 Placa 15x15x3 mm (no provisto)

BASIC



A) M4 mm holes
B) n°9 15x15x3 mm plate (not provided)

A) Fori M4 mm
B) n°9 piastre 15x15x3 mm (non fornite)

A) Oreficios M4 mm
B) n°9 Placa 15x15x3 mm (no provisto)

Installation

Friction stay for top hung
Open out window

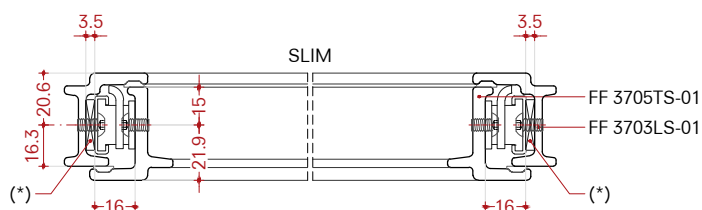
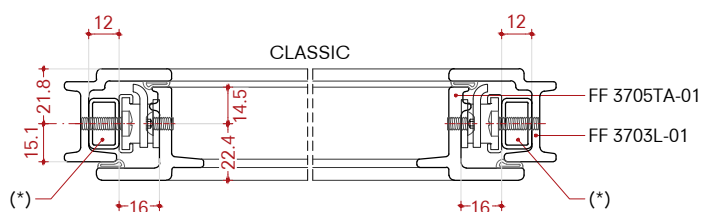
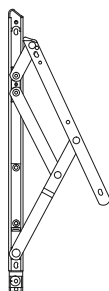
Montaggio

Braccio portante a sporgere
Finestra apertura esterna

Montaje

Cizalla de apertura descendente
Ventana que abre hacia fuera

Capacity (pair)	Portata (coppia)	Capacidad (par)	Height window	Altezza finestra	Altura ventana	Opening angle	Angolo di apertura	Ángulo de apertura
	[Kg]		[mm]					
C99201-05	40		270÷640			50°		
C99202-05	50		640÷800			50°		
C99203-05	65		800÷1100			50°		
C99204-05	100		600÷1100			30°		
C99205-05	100		1100÷1500			45°		
C99206-05	100		1500÷2000			20°		
C99207-05	180		2000÷2500			20°		



(*) Not provided
(*) Non fornita
(*) No provisto

Scale
Scala
Escala

1:3

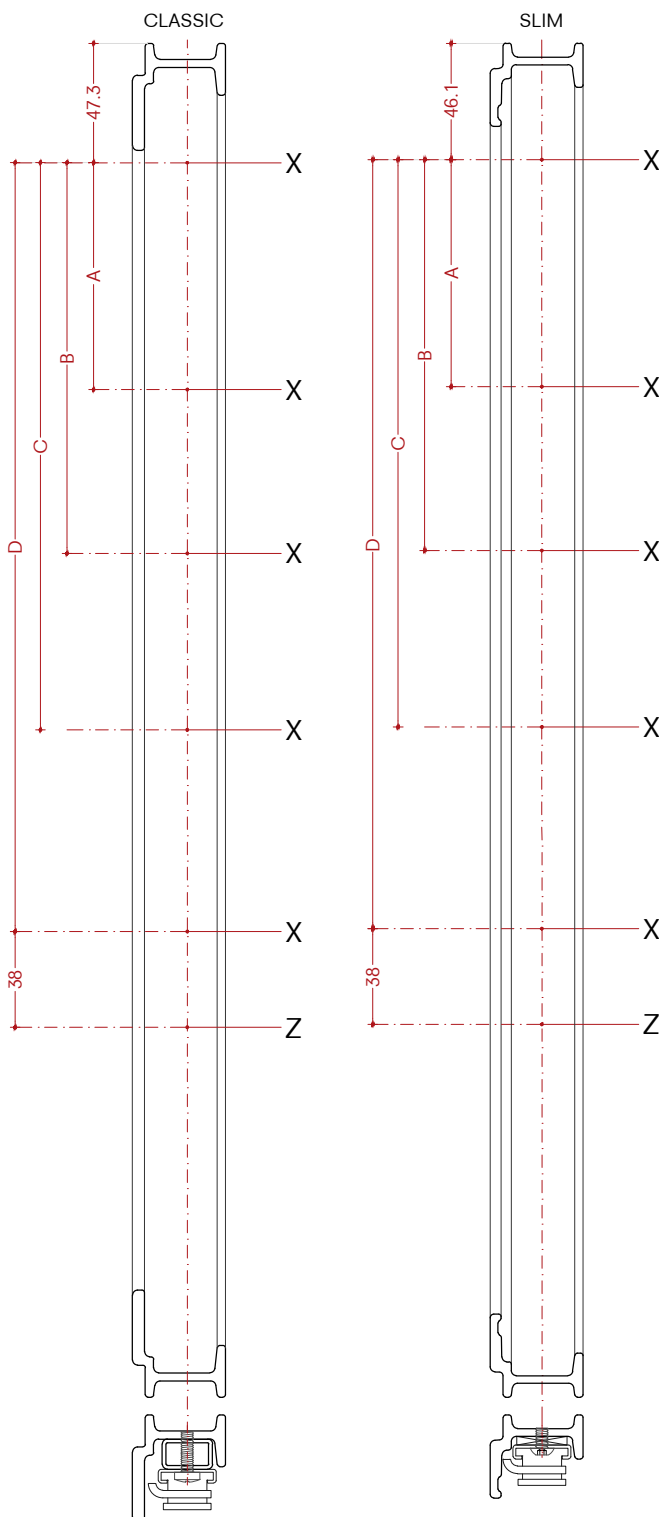
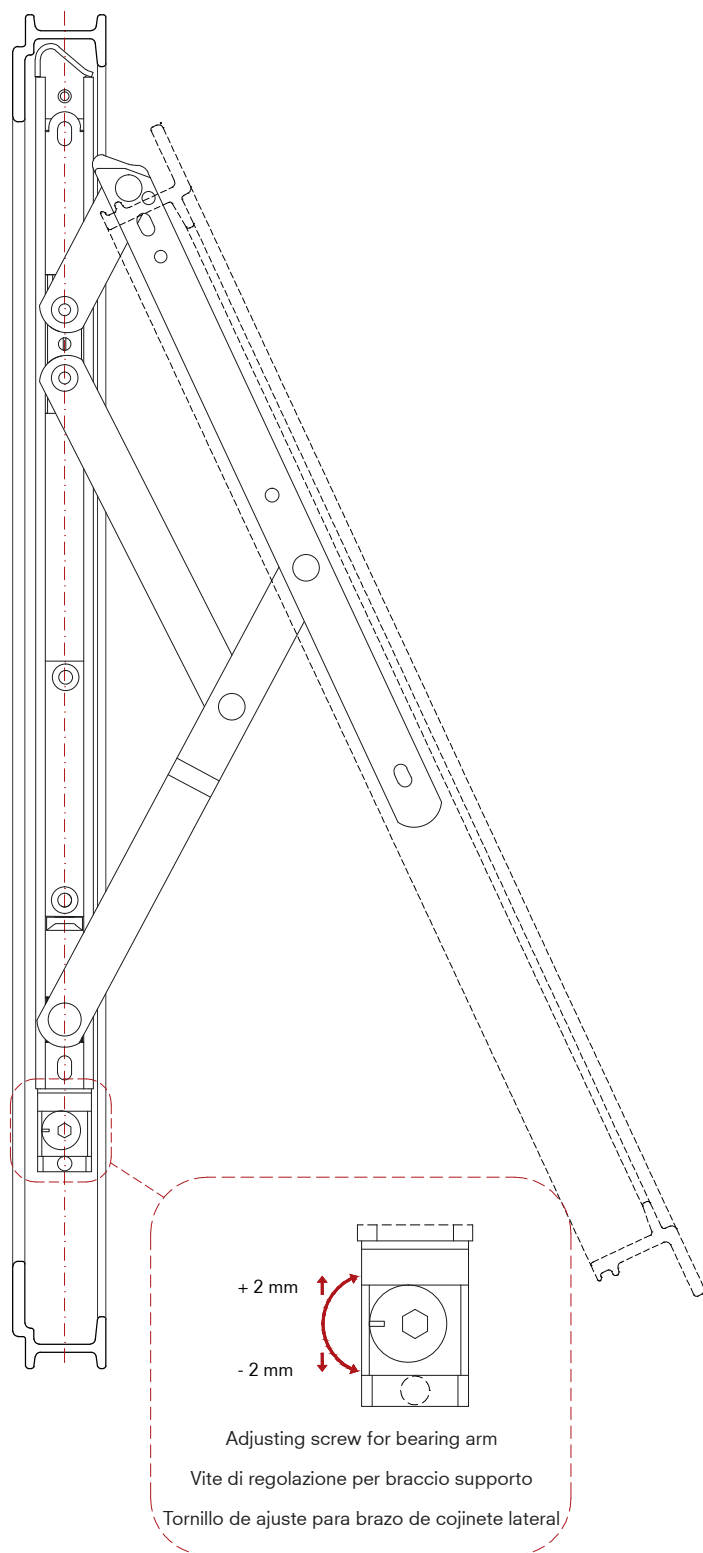
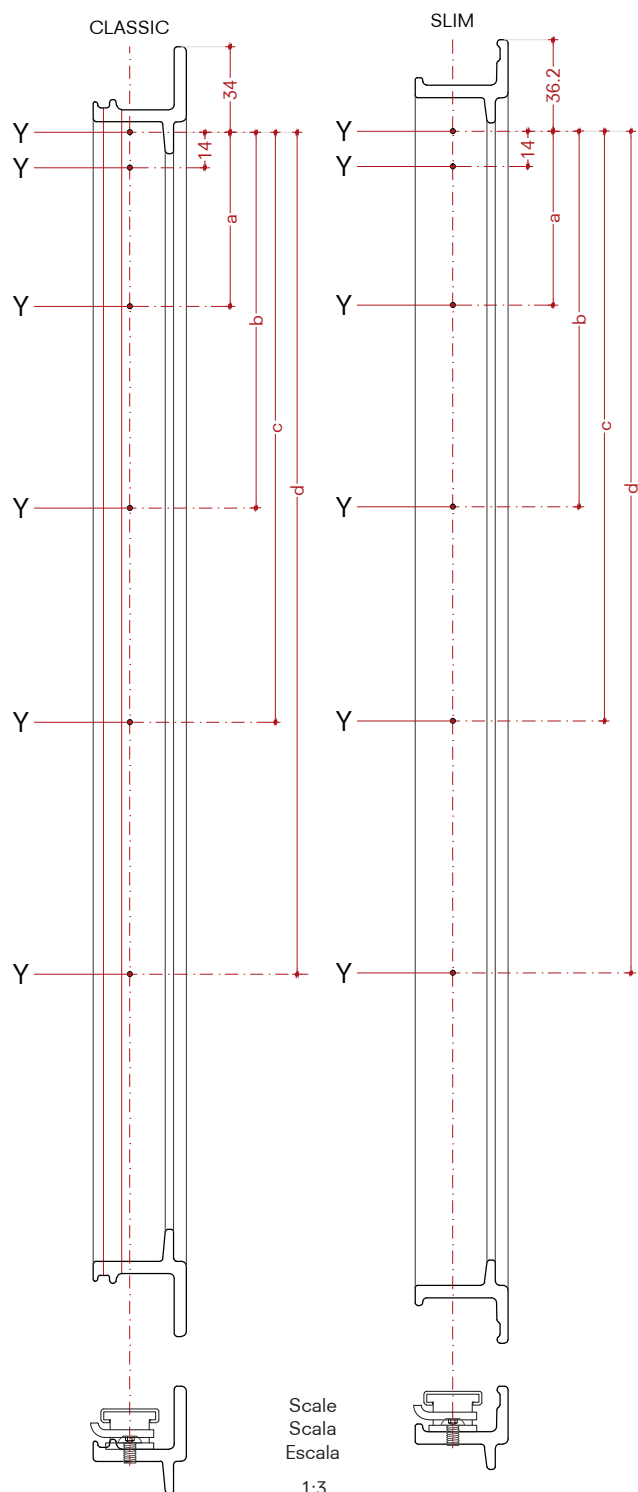


Table with distances between holes Tabella con passi di foratura Tabla con distancias de taladros								
	A (y)	B (y)	C (x)	D (x)	a (y)	b (y)	c (x)	d (y)
C99201-05	177.8	-	-	218.2	40.8	-	165.1	-
C99202-05	212.7	-	-	269.0	65.0	-	190.1	-
C99203-05	215.7	304.0	-	370.6	118.4	-	541.2	-
C99204-05	133.7	222.0	-	370.6	-	-	118.4	241.2
C99205-05	251.3	418.3	-	523.0	65.0	203.2	317.4	-
C99206-05	295.4	-	-	526.5	80.0	-	235.75	350.0
C99207-05	161.4	292.4	584.5	638.5	65.0	189.0	314.4	383.9

- X M5 HOLE ON PROFILE
M5x16 mm ISO7045 screw
FORO M5 SU PROFILO
Vite M5x16 mm ISO7045
ORIFICIO M5 EN PERFIL
Tornillo M5x16 mm ISO7045
- Y M5x8 mm ISO7380
(Screws must be cut)
M5x8 mm ISO7380
(Le viti devono essere accorciate)
M5x8 mm ISO7380
(Los tornillos deben colocarse en cruz)
- Z Hole Ø7 mm
Foro Ø7 mm
Orificio Ø7 mm



Accessories installation:

Sliding door
installation

Montaggio accessori:

Montaggio
porta scorrevole

Montaje accesorios:

Montaje
puerta corrediza

5.7

Legend

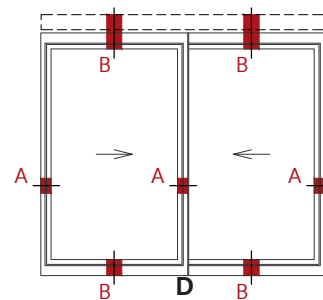
+ = Fixed
- - - = Opening
Dimensions in: mm
Scale 1:1 - 1:2 - 1:3

Legenda

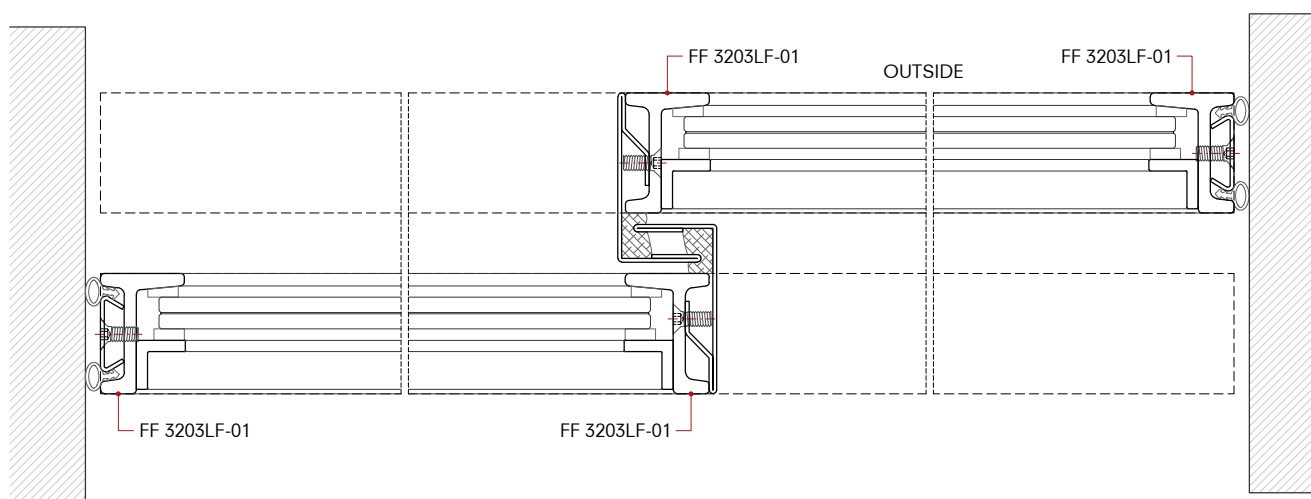
+ = Anta fissa
- - - = Apertura
Misure in: mm
Scala 1:1 - 1:2 - 1:3

Leyenda

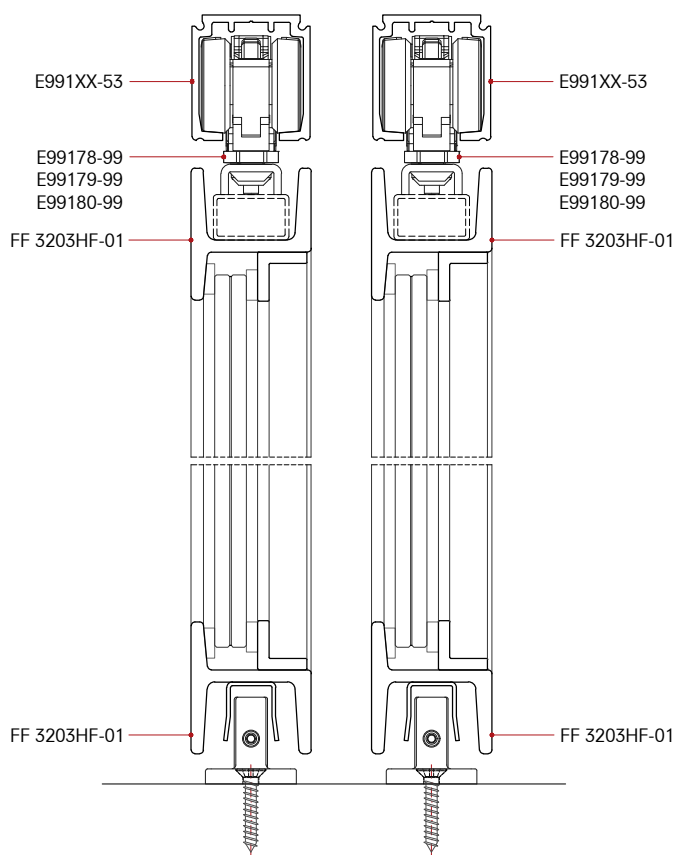
+ = Fijo
- - - = Apertura
Medidas en: mm
Escala 1:1 - 1:2 - 1:3

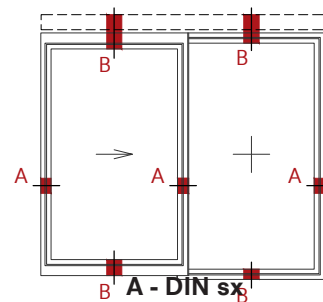


A

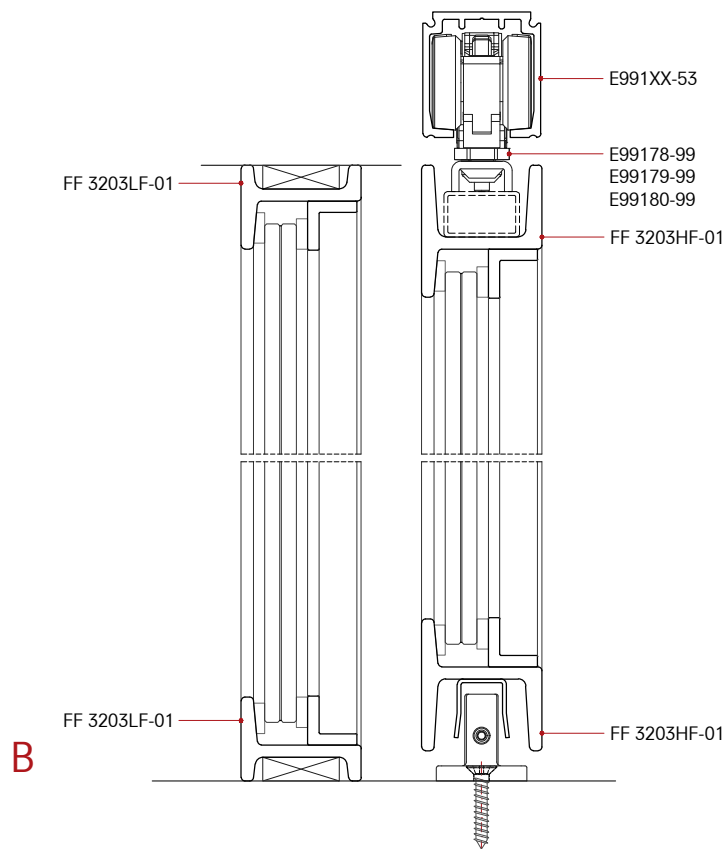
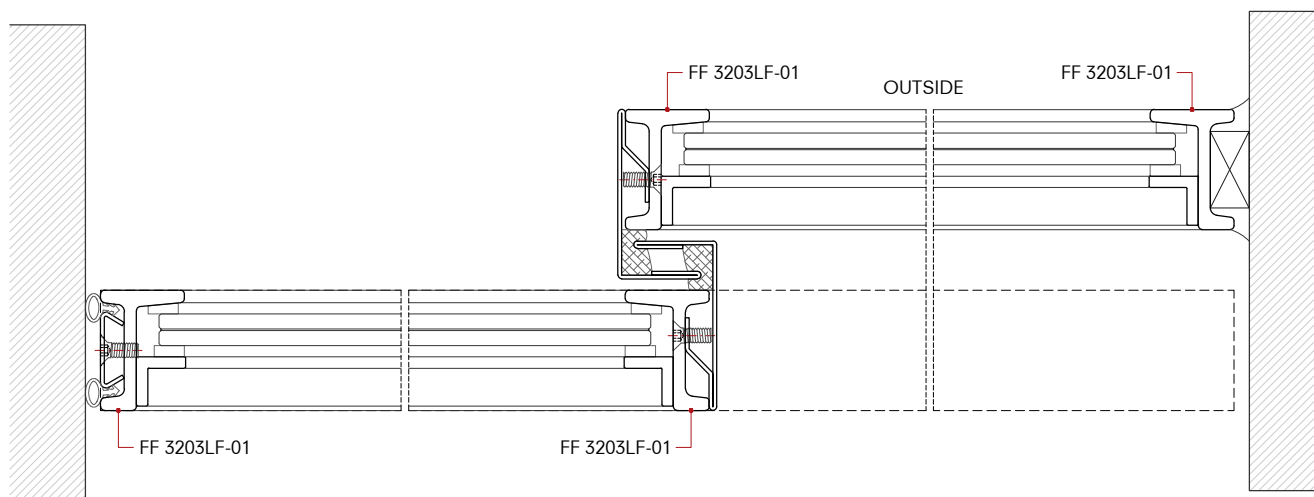


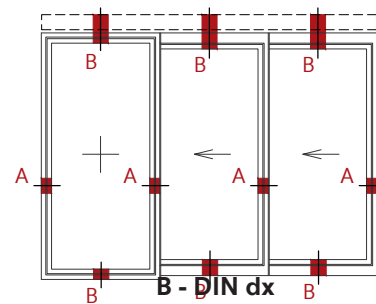
B



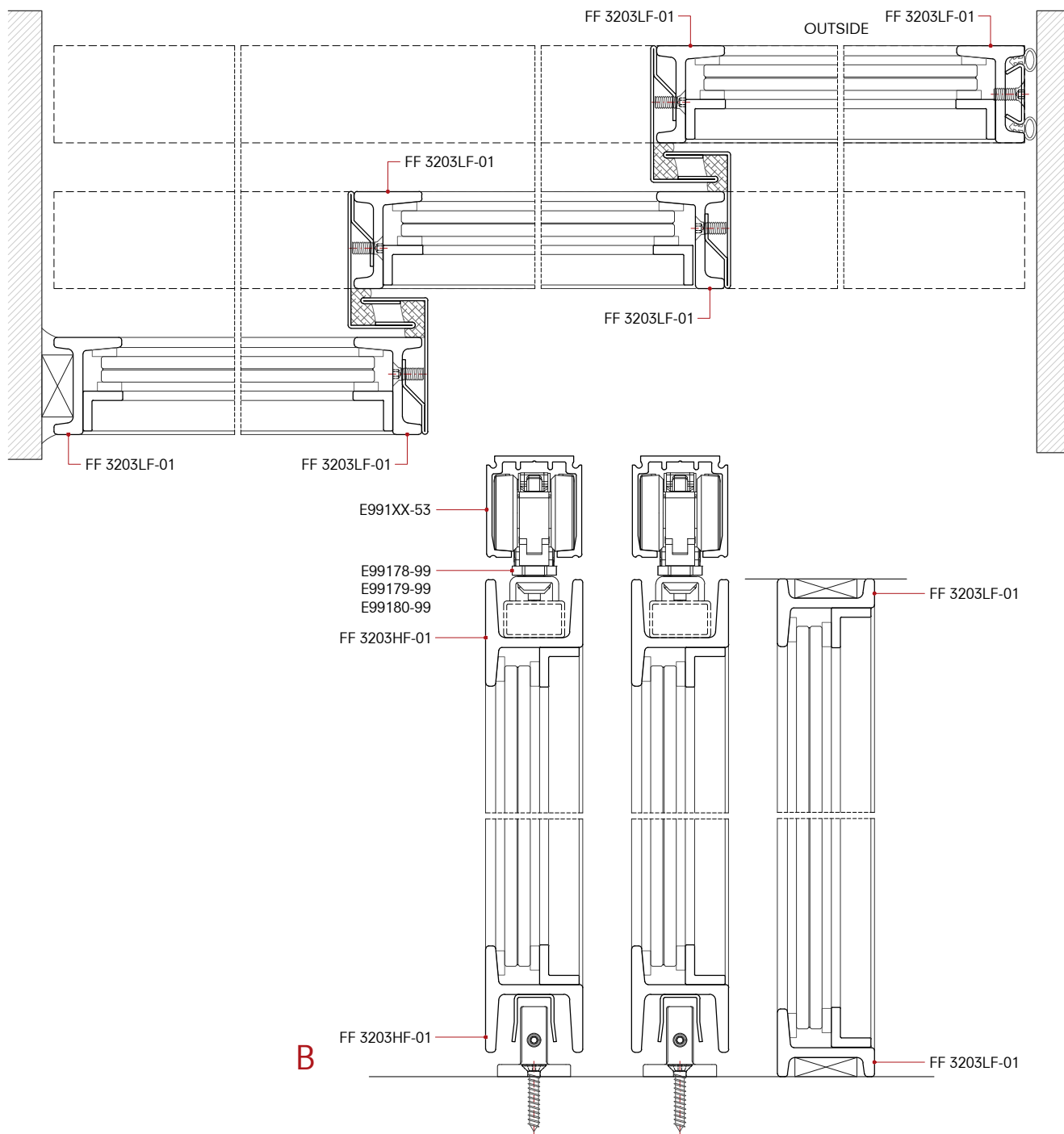


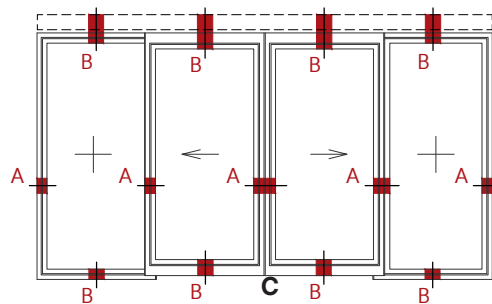
A



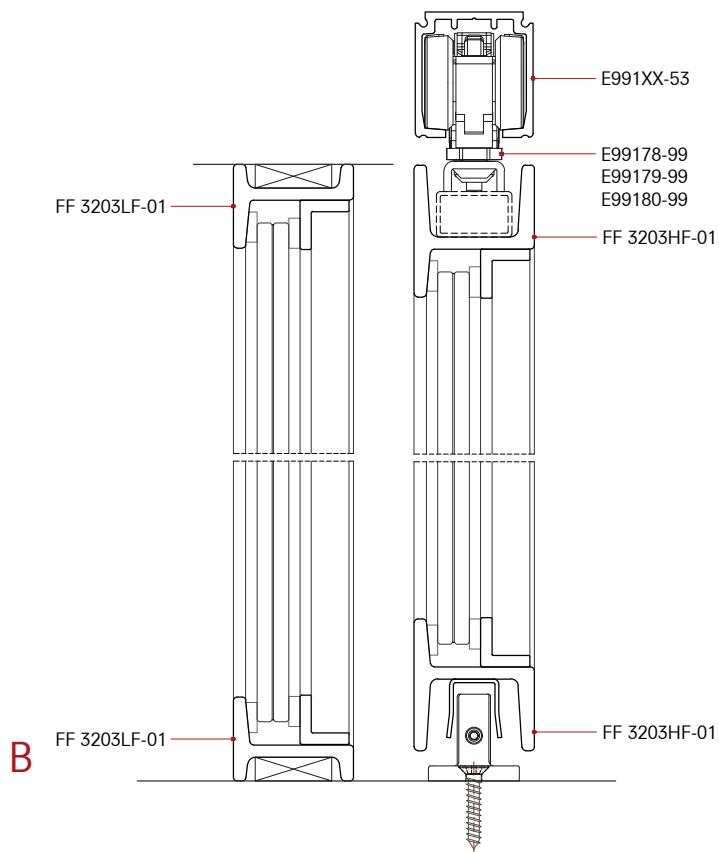
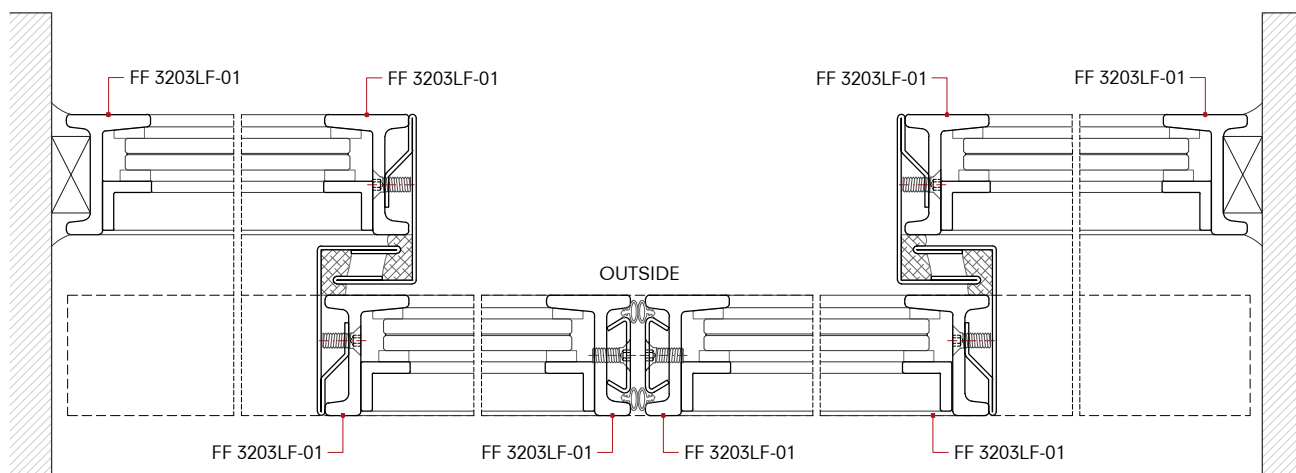


A

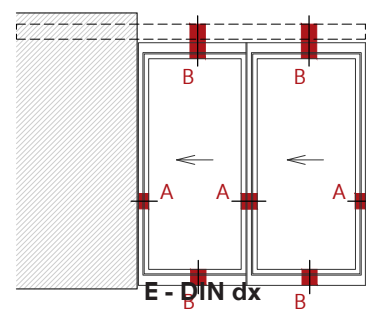




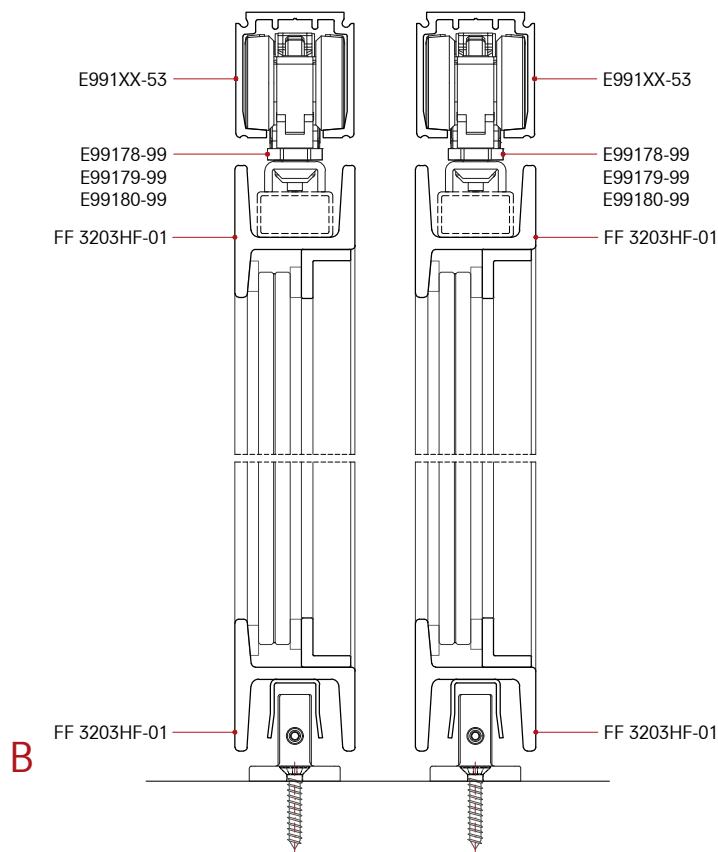
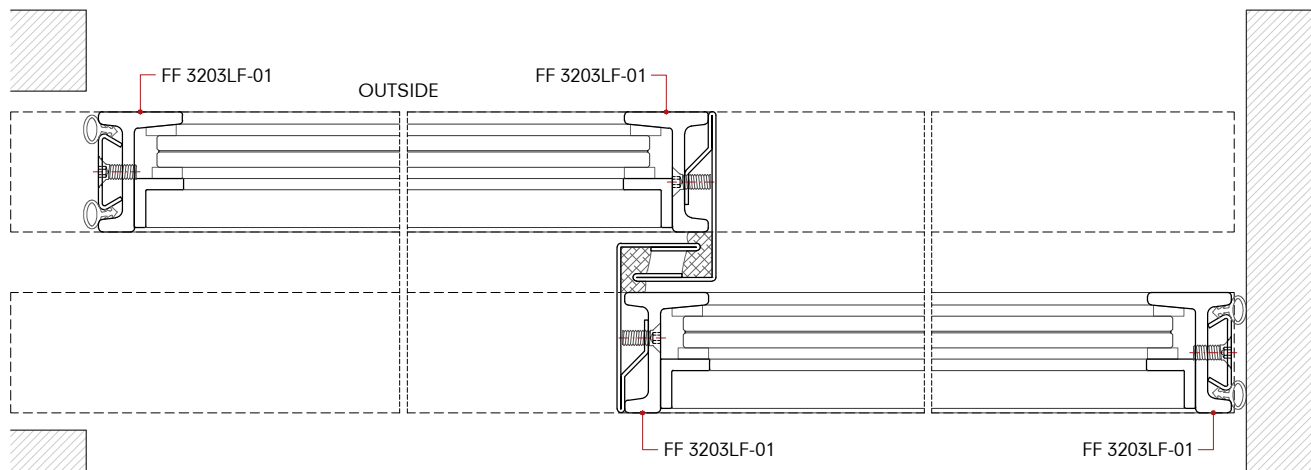
A

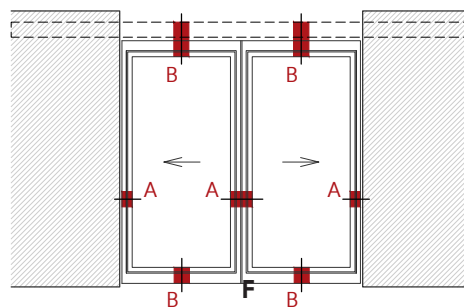


B

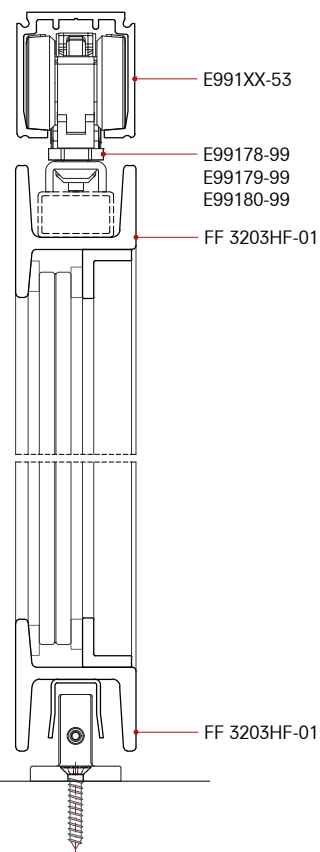
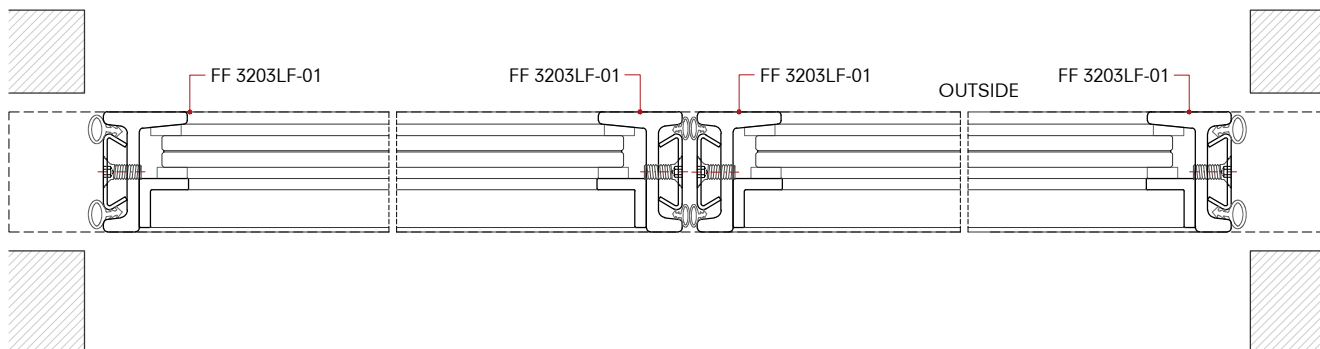


A





A



B

Installation

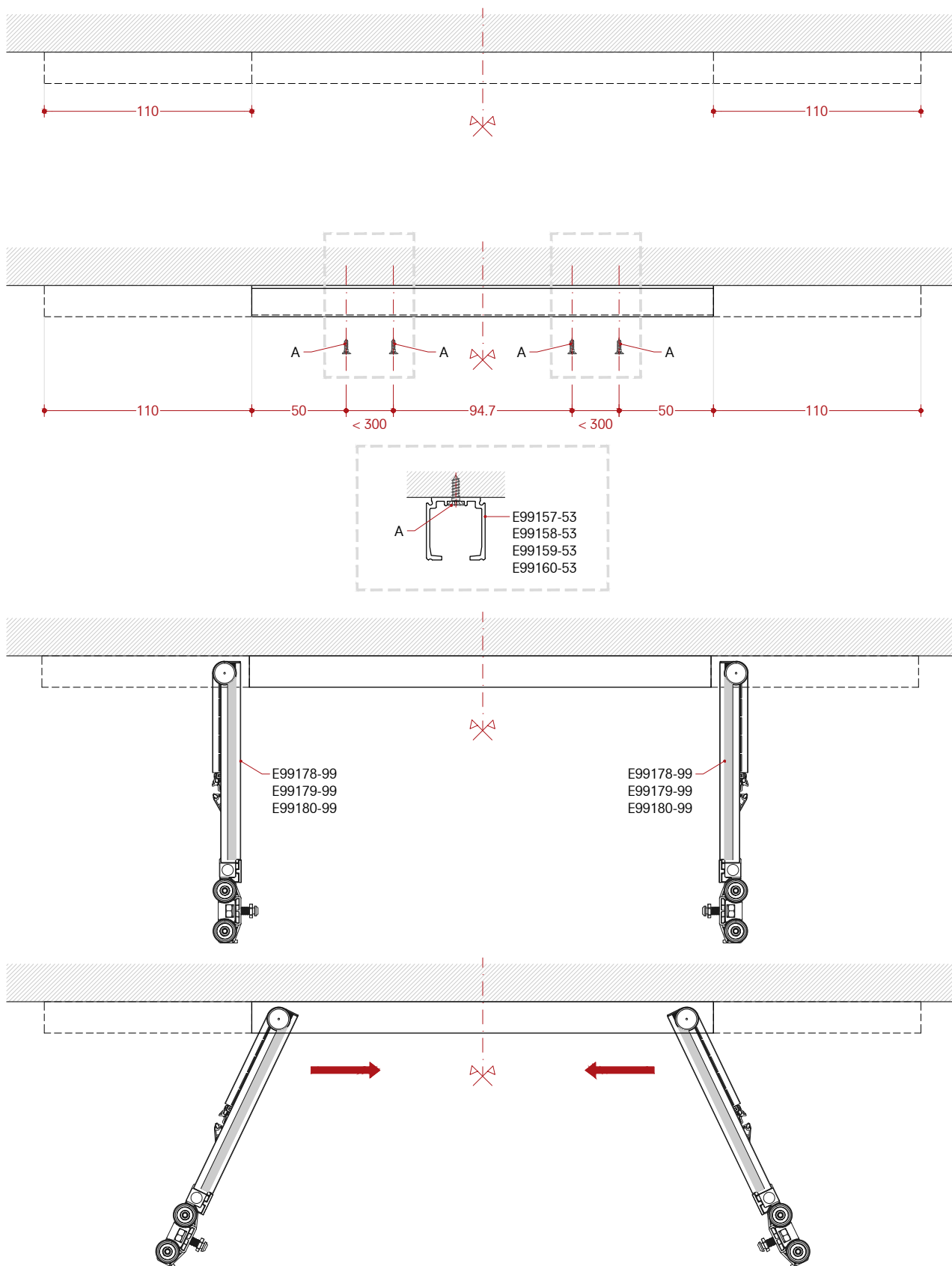
Trolleys for sliding door

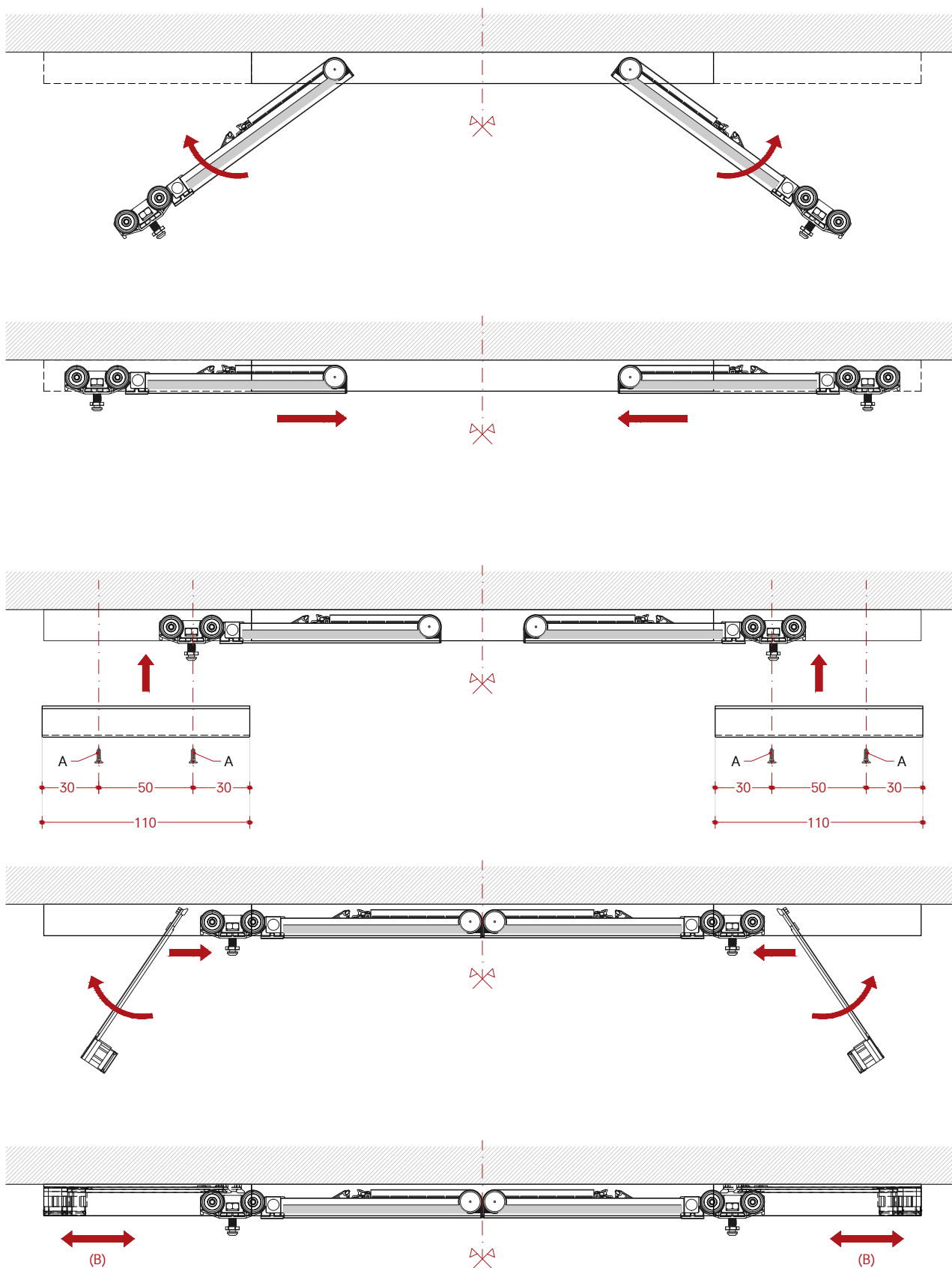
Montaggio

Carrelli per porta scorrevole

Montaje

Carros para puerta corrediza





Scale 1:3
A) Not provided
B) Setting position on site

Scala 1:3
A) Non forniti
B) Posizionamento in loco

Escala 1:3
A) No provisto
B) Configuración de la posición en el sitio

Installation

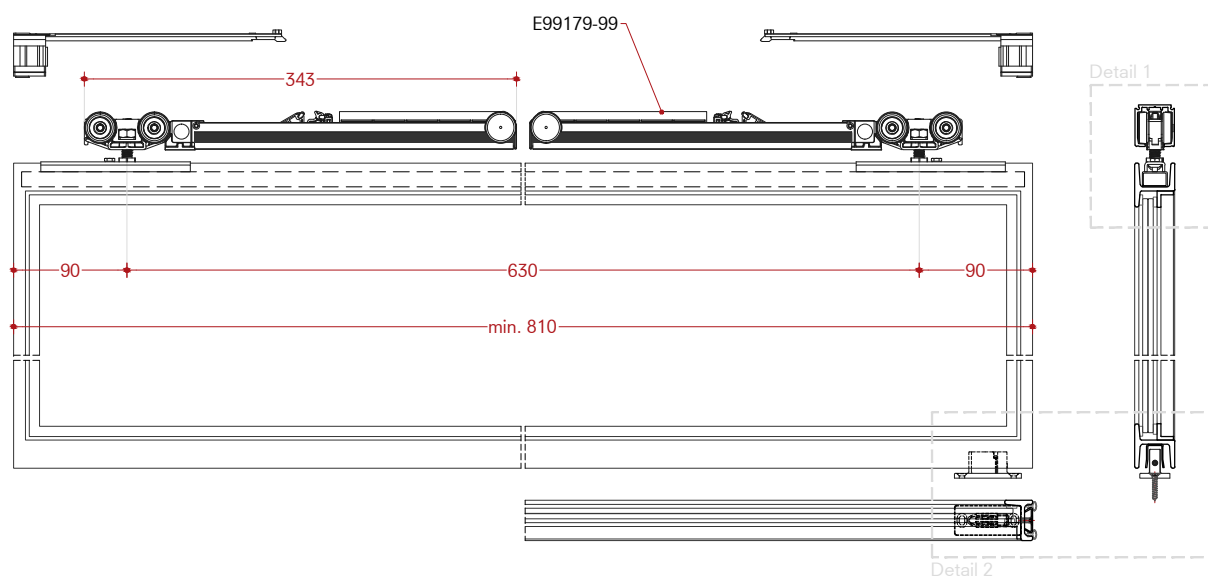
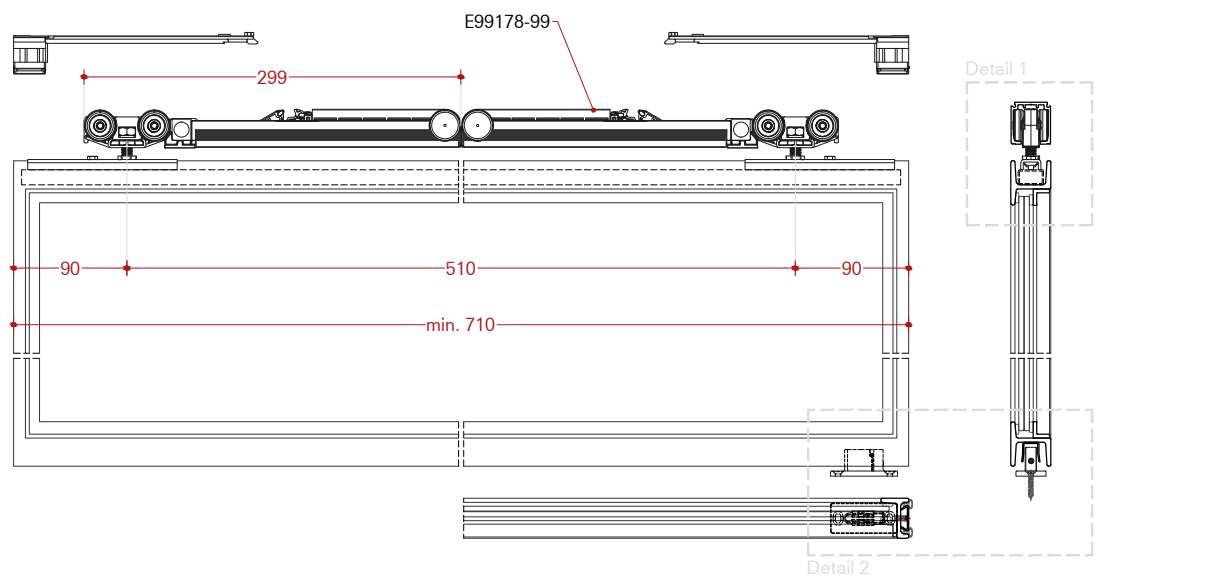
Trolleys for sliding door

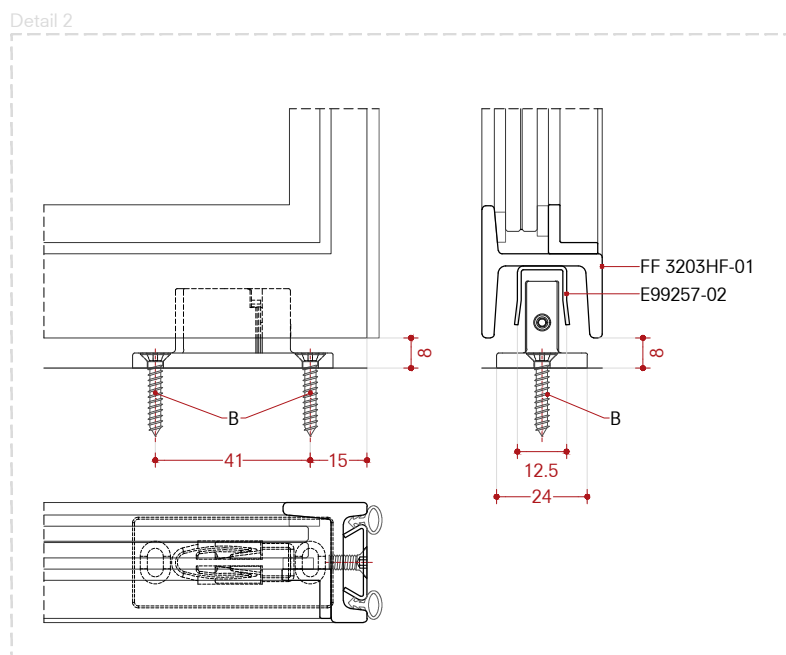
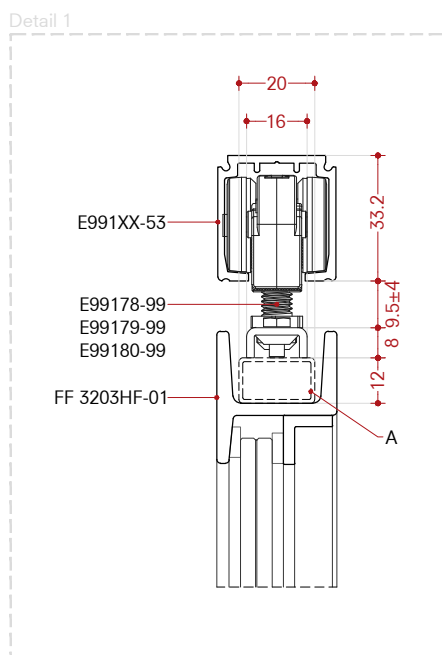
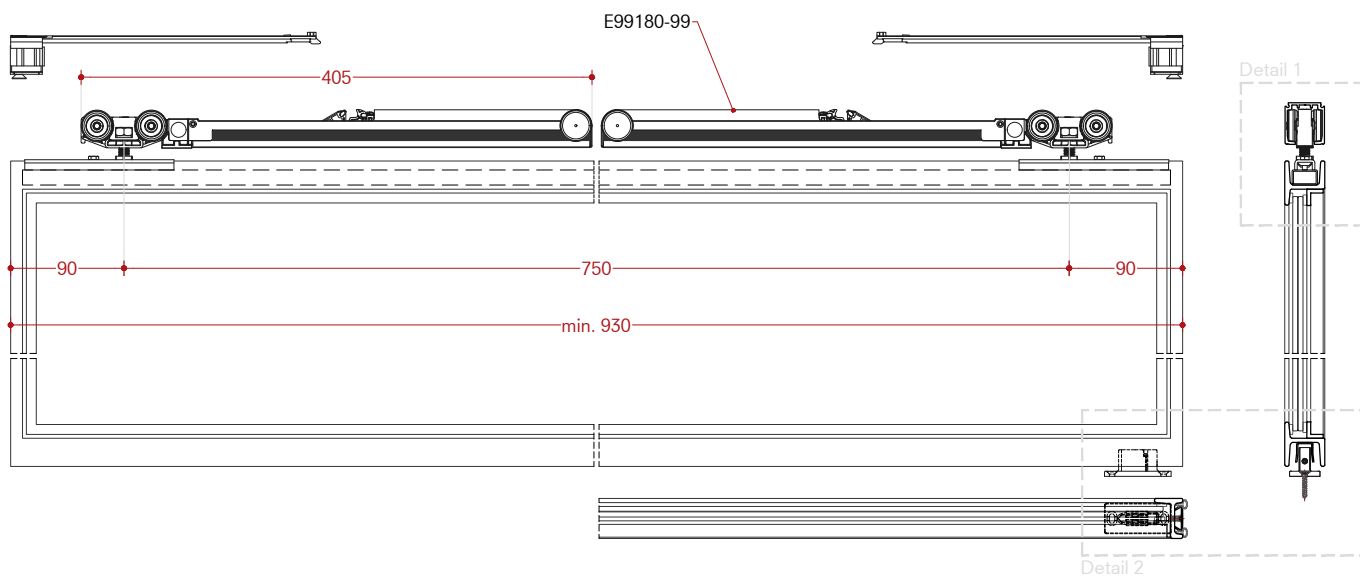
Montaggio

Carrelli per porta scorrevole

Montaje

Carros para puerta corrediza





Scale 1:6
A) B) Not provided

Scala 1:6
A) B) Non forniti

Escala 1:6
A) B) No provisto

Einbau

Upper slide rail for sliding door

E99157-53

E99158-53

E99159-53

E99160-53

Montaggio

Binario superiore per porta scorrevole

E99157-53

E99158-53

E99159-53

E99160-53

Montaje

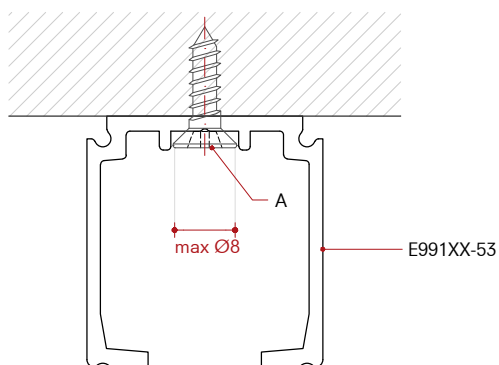
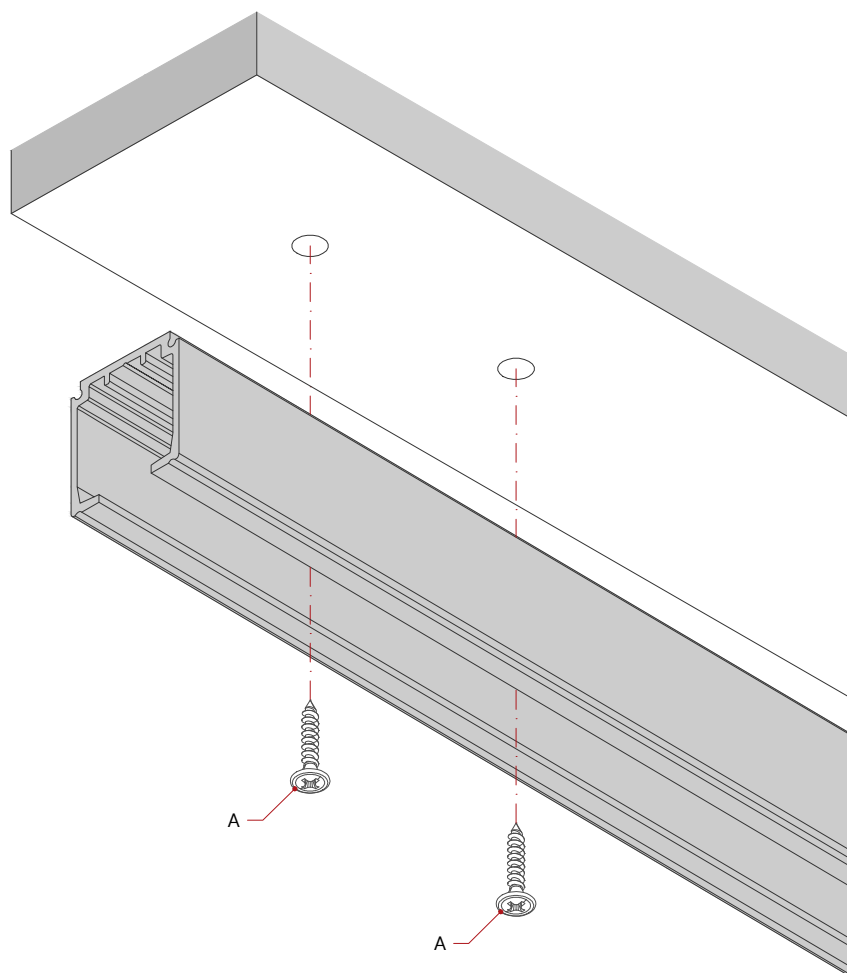
Riel superior para puerta corrediza

E99157-53

E99158-53

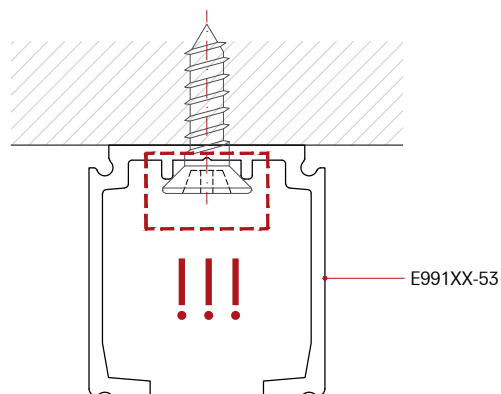
E99159-53

E99160-53



A) Not provided

A) Non forniti



A) No provisto

Einbau

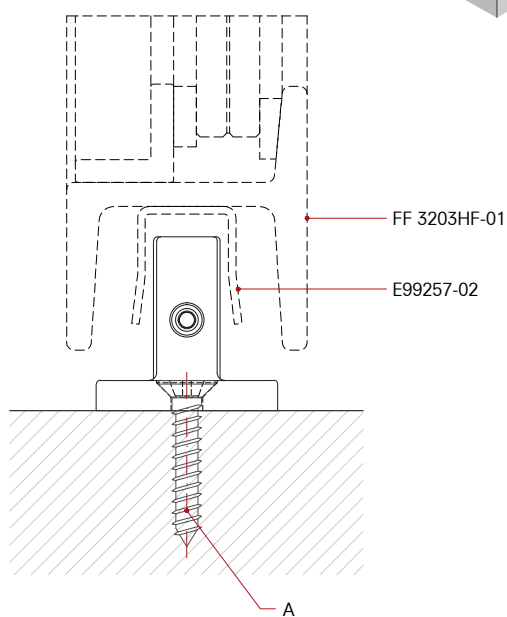
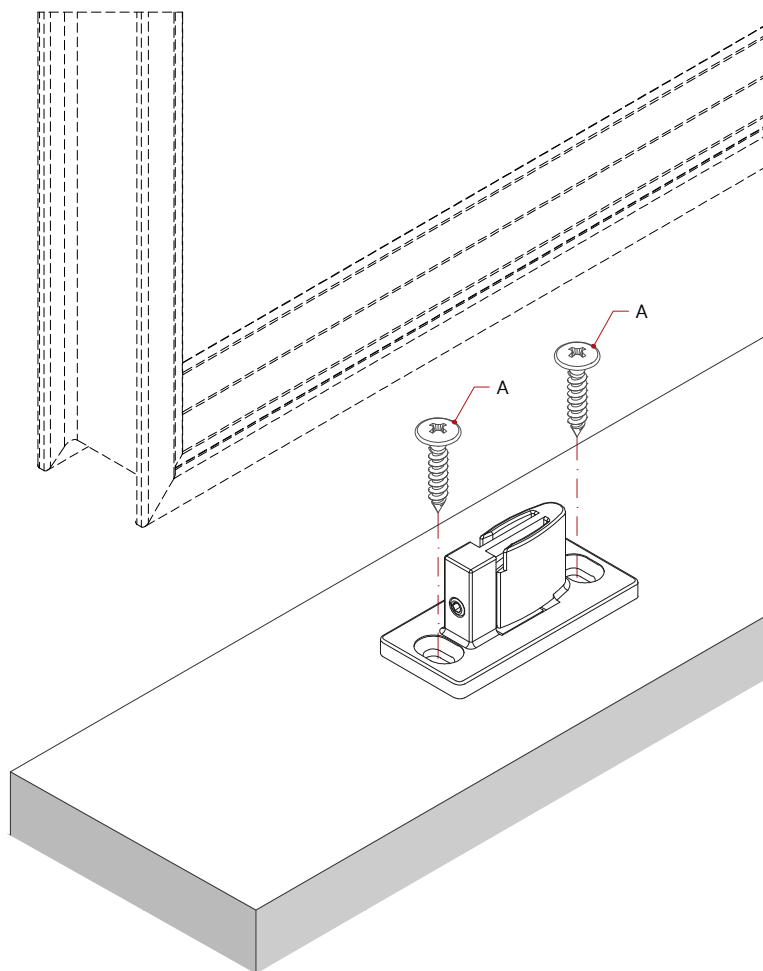
Bottom guide for sliding door

Montaggio

Guida inferiore per porta scorrevole

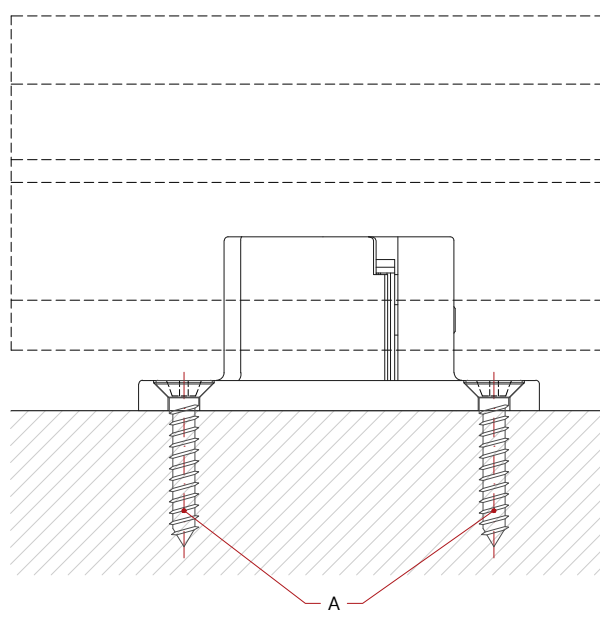
Montaje

Guía inferior para puerta corrediza



A) Not provided

A) Non forniti



A) No provisto

Einbau

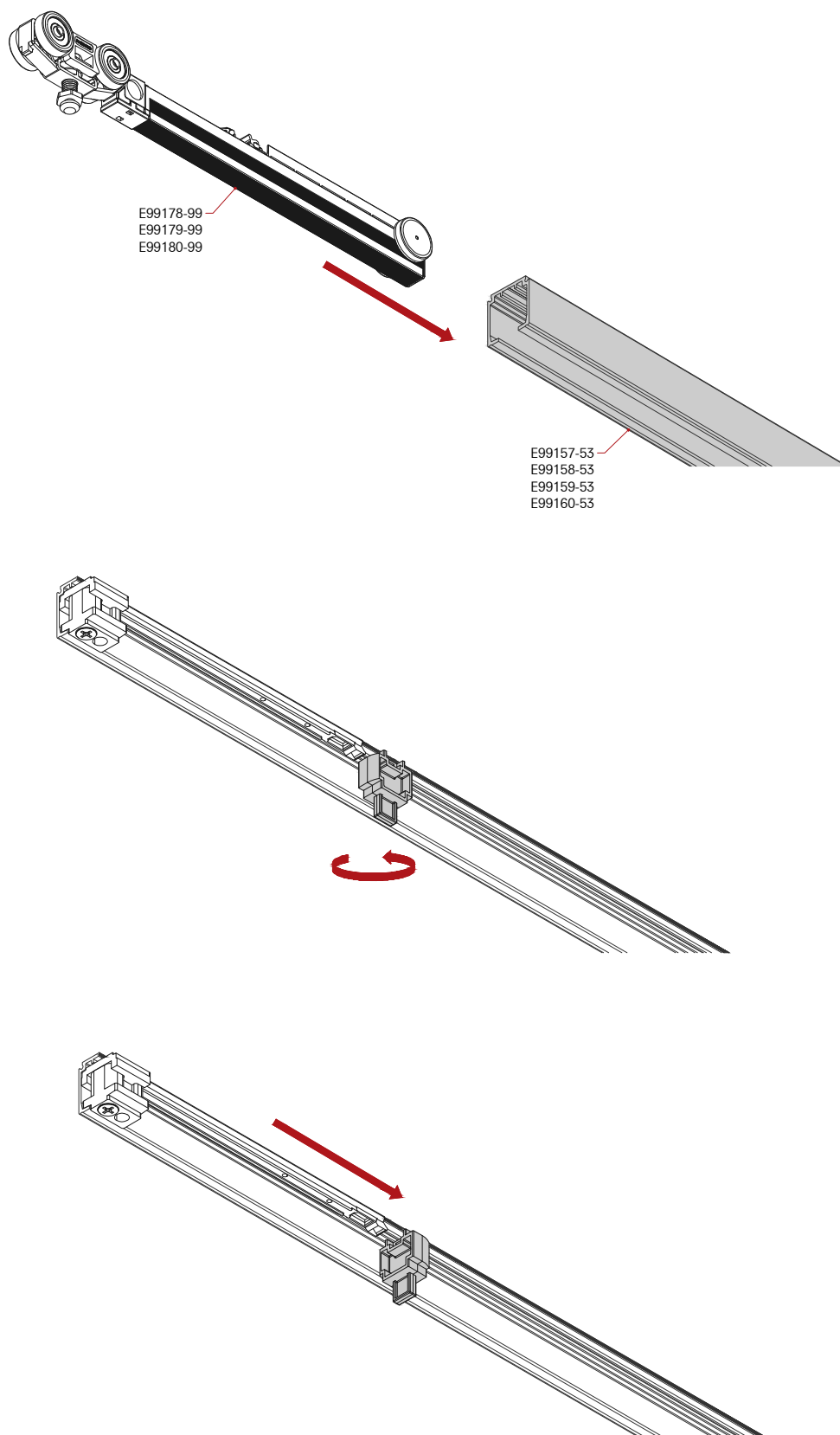
Trolleys for sliding door
E99178-99
E99179-99
E99180-99

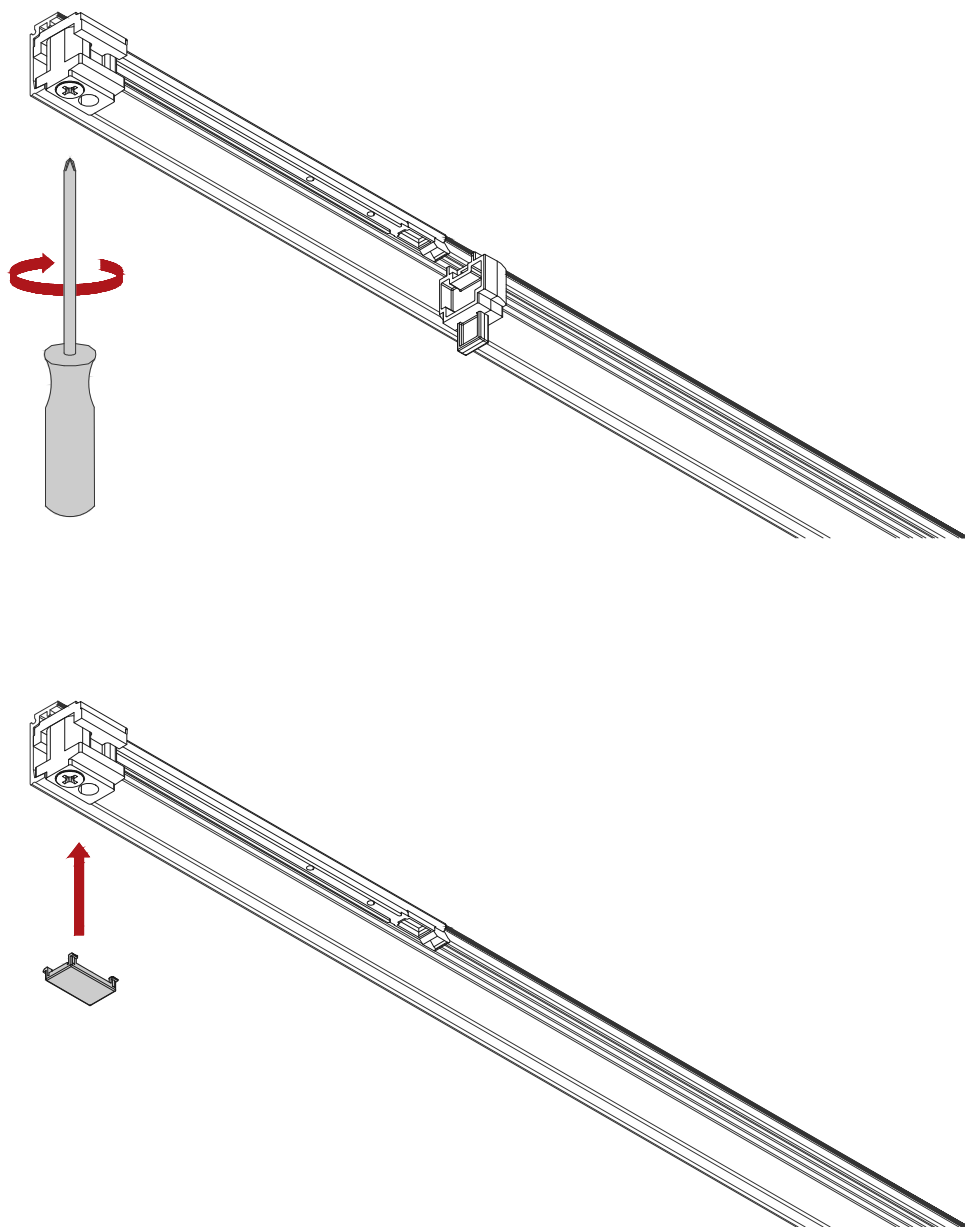
Montaggio

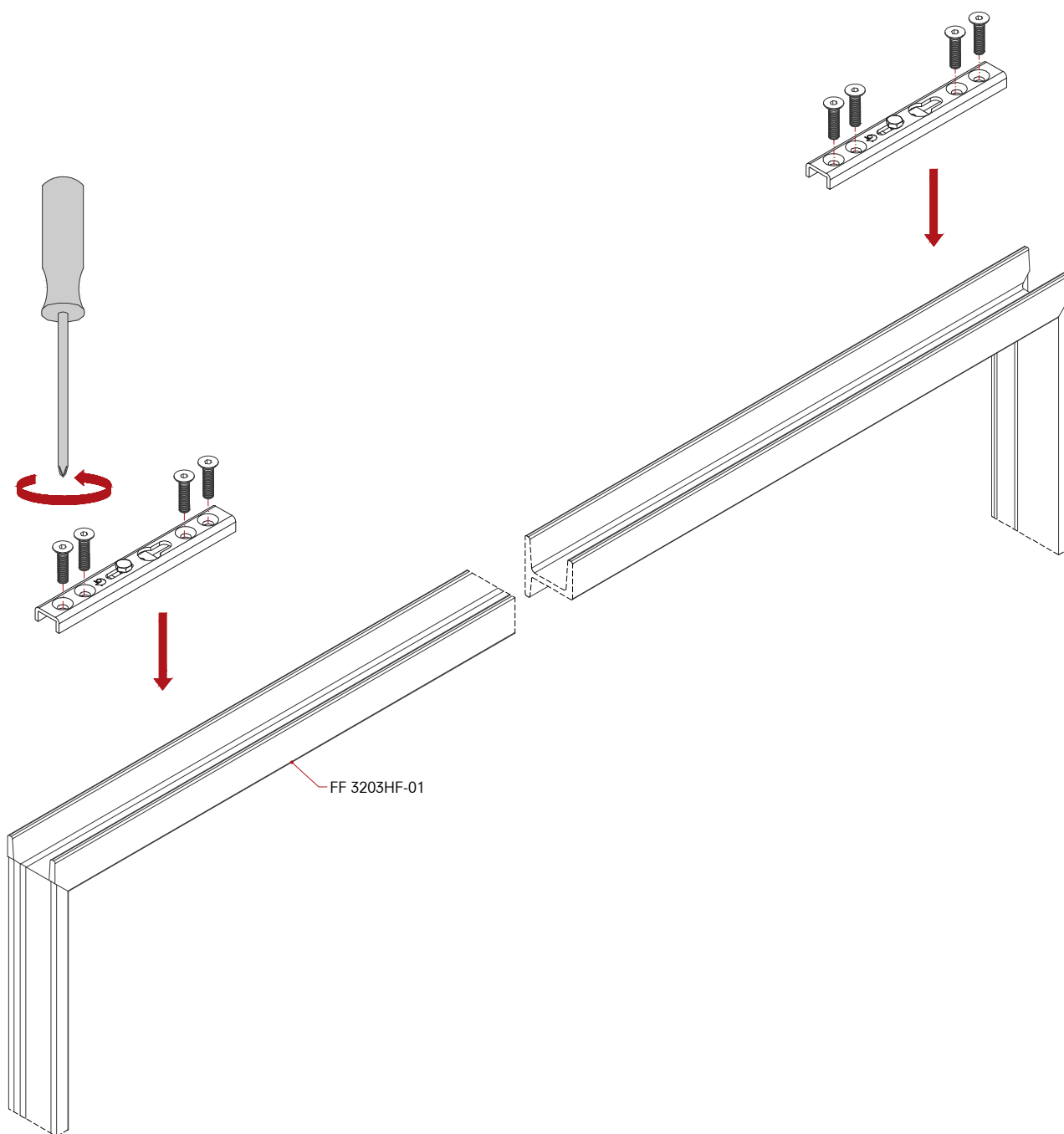
Carrelli per porta scorrevole
E99178-99
E99179-99
E99180-99

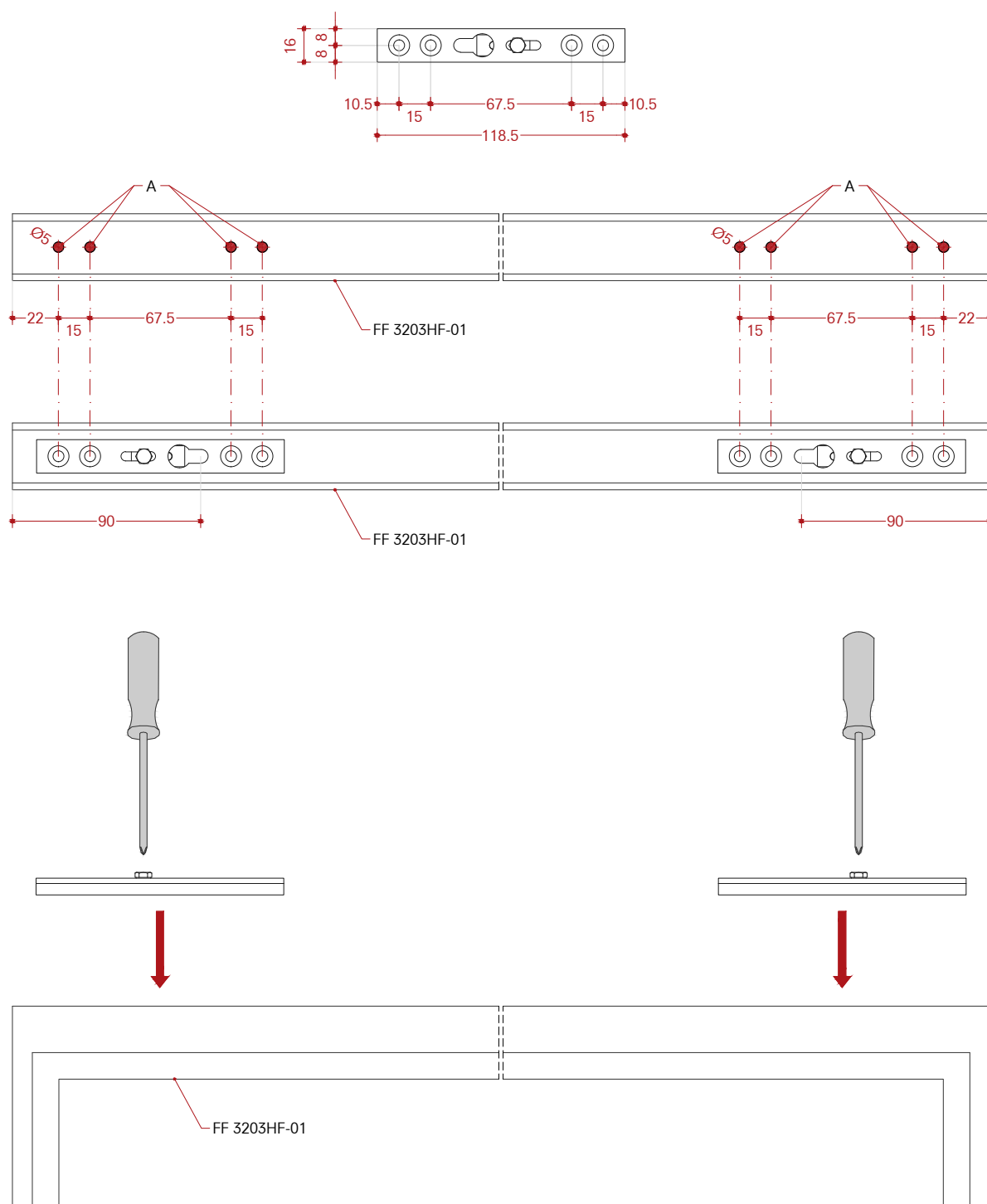
Montaje

Carros para puerta corrediza
E99178-99
E99179-99
E99180-99









Scale 1:3
A) Holes Ø5 mm in the door leaf

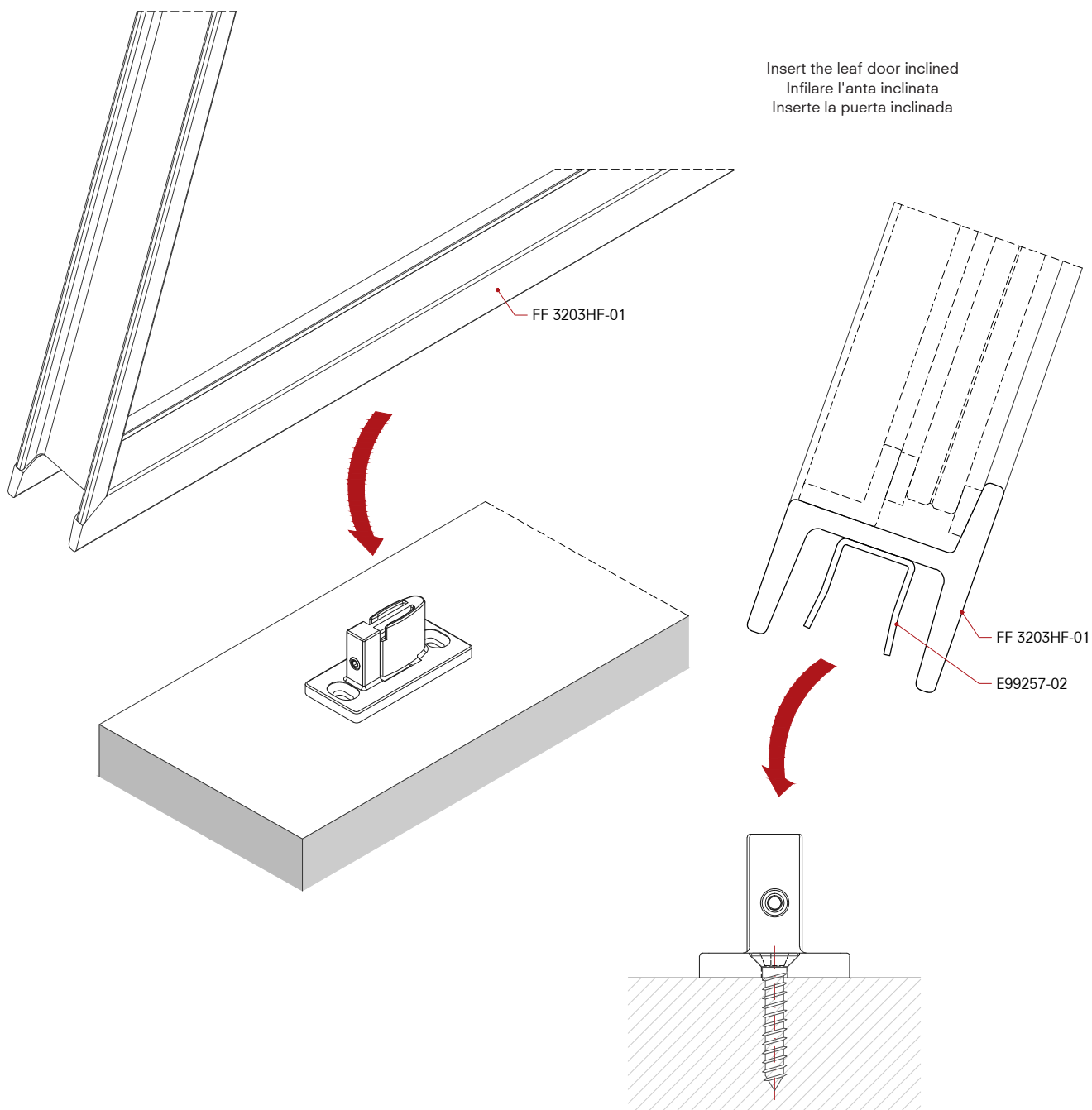
Scala 1:3
A) Fori Ø5 mm nell'anta della porta

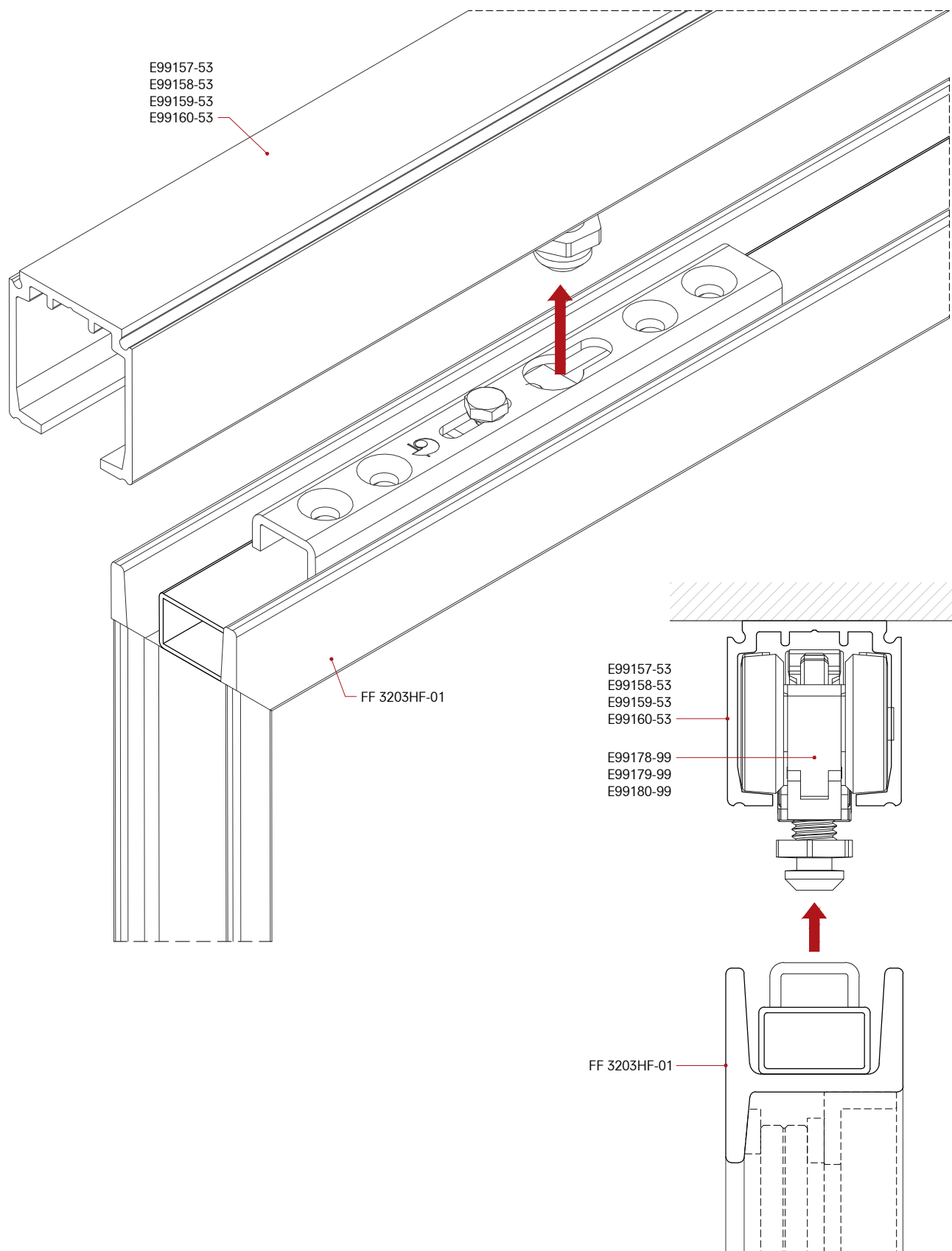
Escala 1:3
A) Orificios de Ø5 mm en hoja de la puerta

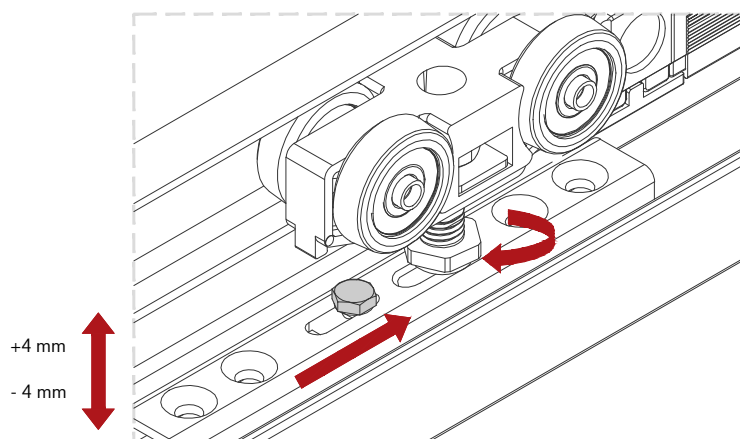
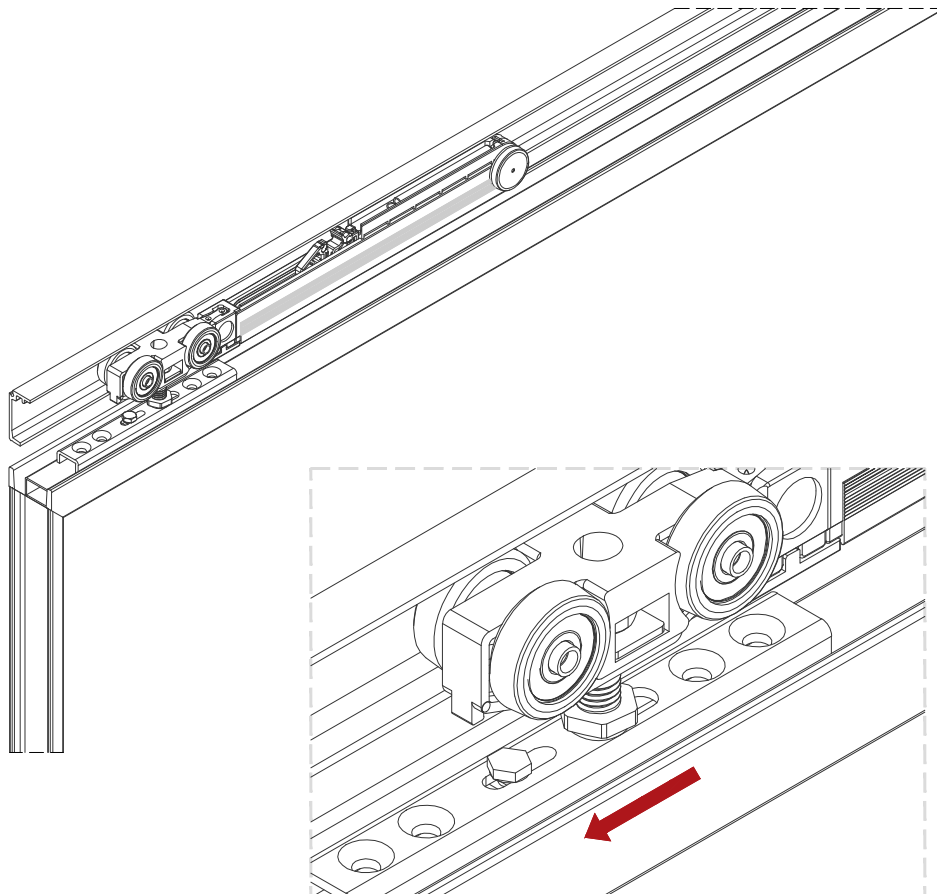
Door leaf assembly

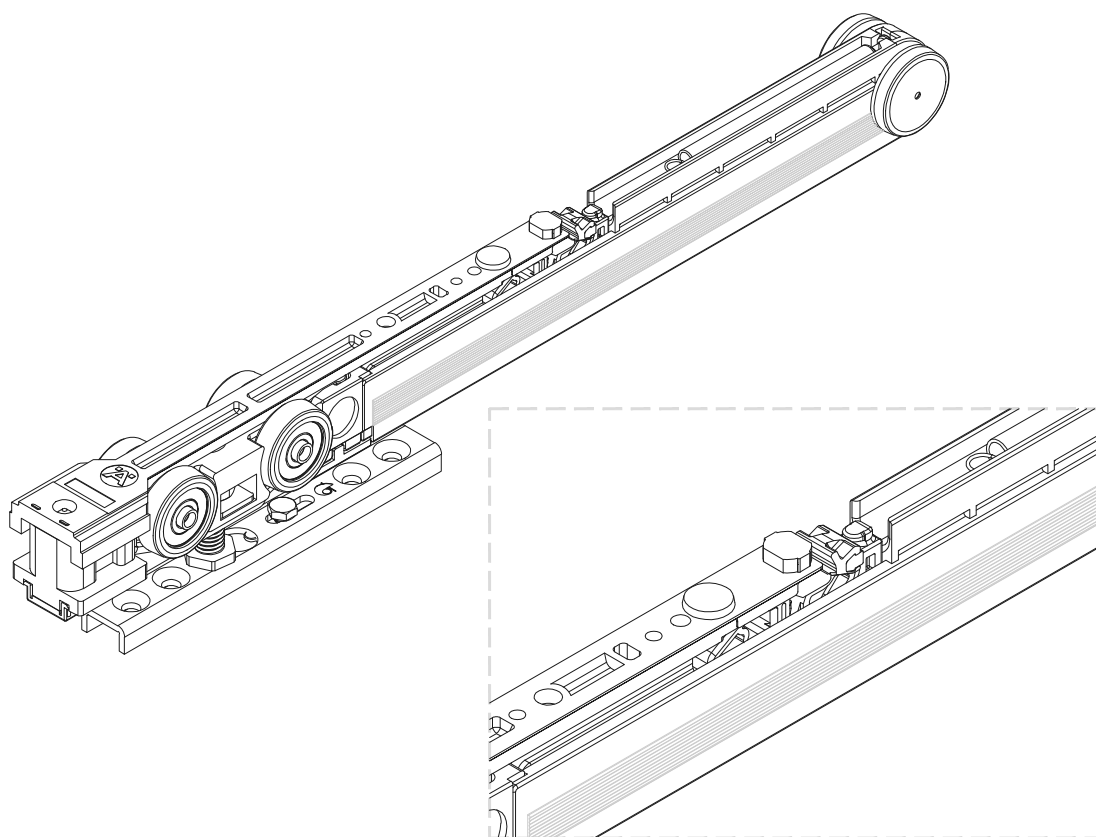
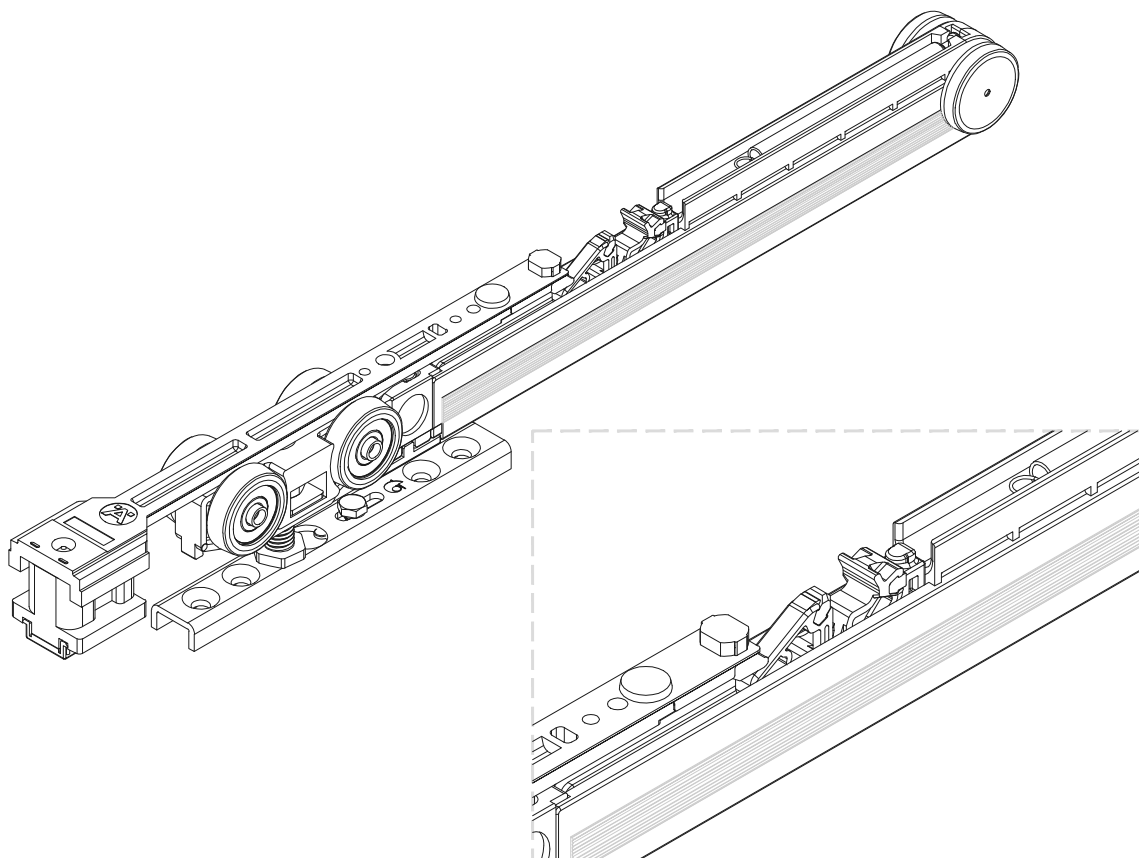
Montaggio anta porta

Montaje de la hoja de la puerta









NOTE:

Close the door slowly at first automatic load after installation.

NOTA:

Chiudere la porta lentamente al primo caricamento automatico dopo l'installazione.

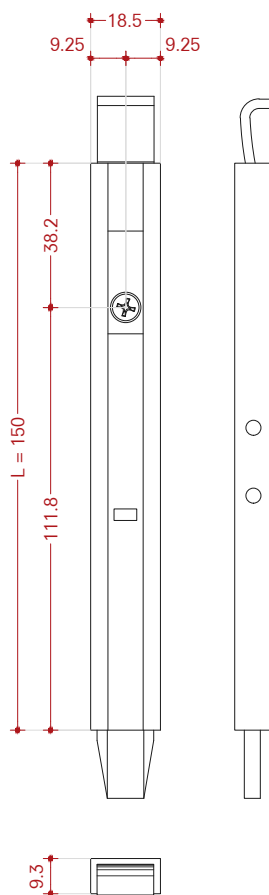
NOTA:

Cierre la puerta lentamente en la primera carga automática después de la instalación.

Accessories installation:	Montaggio accessori:	Montaje accesorios:	
Flush bolts	Catenacci	Pasador de canto	5.8

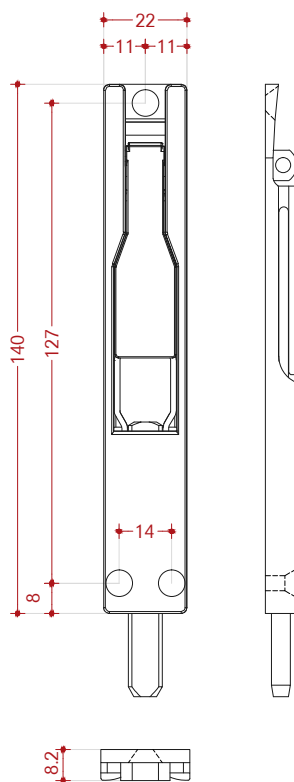
Flush bolt

E99001-nn L = 150 mm
E99002-nn L = 300 mm
E99003-nn L = 450 mm



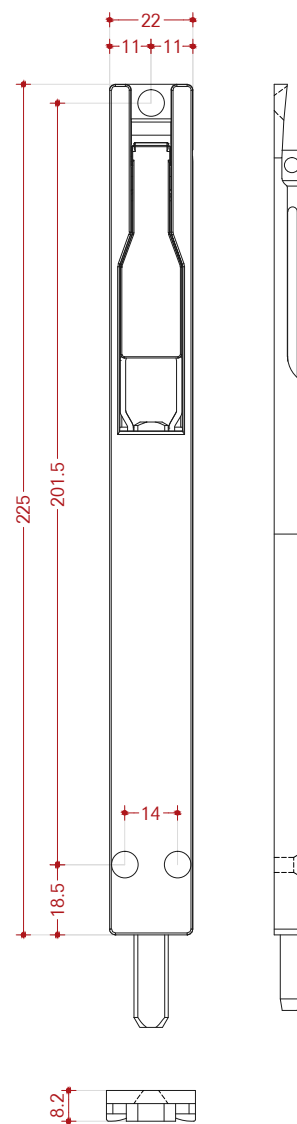
Catenaccio

E99010-35



Pasador de canto

E99011-35



Installation

Flush bolt (with or without lock)

E99001-nn - L = 150 mm

E99002-nn - L = 300 mm

E99003-nn - L = 450 mm

Montaggio

Catenaccio (con o senza blocco)

E99001-nn - L = 150 mm

E99002-nn - L = 300 mm

E99003-nn - L = 450 mm

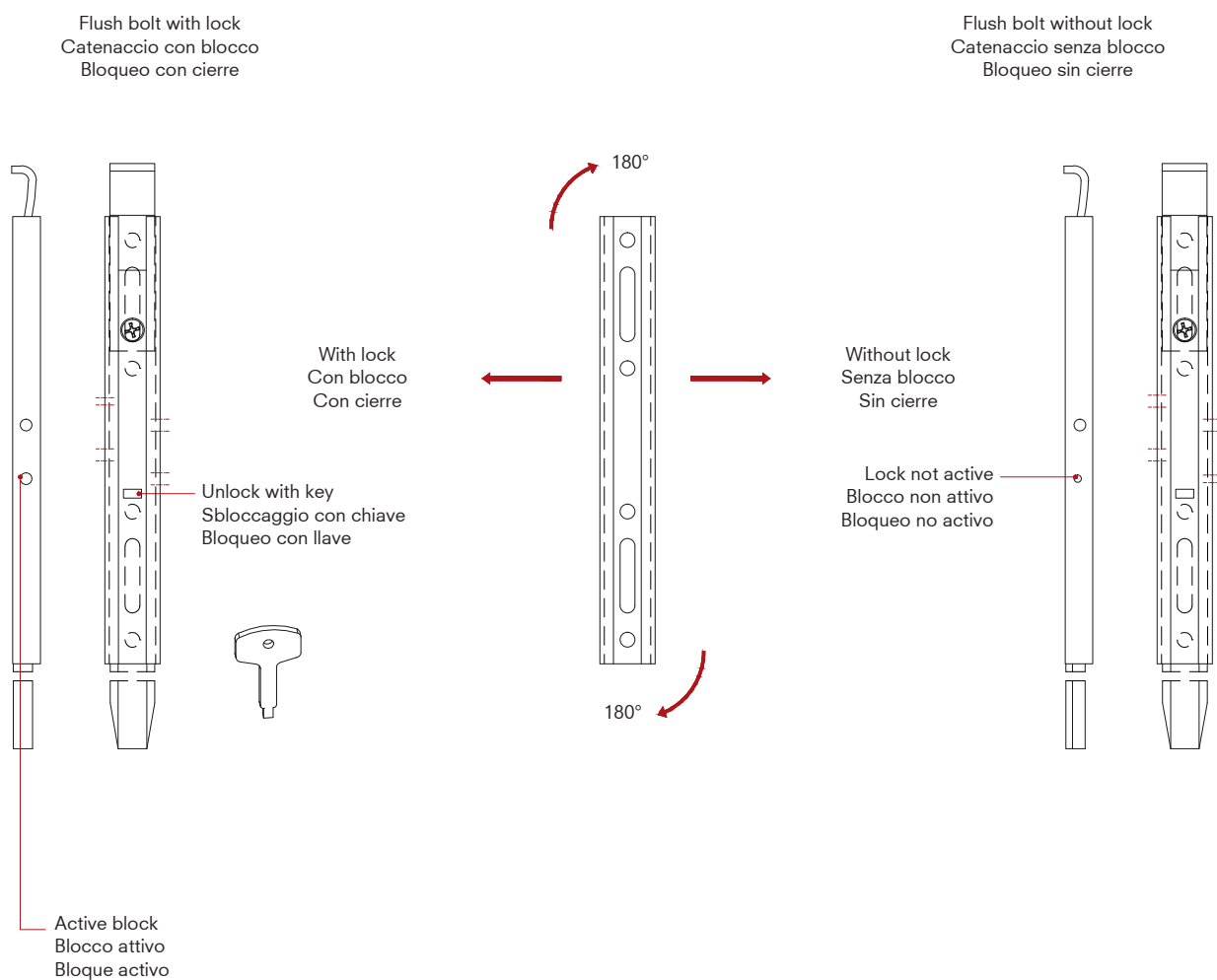
Montaje

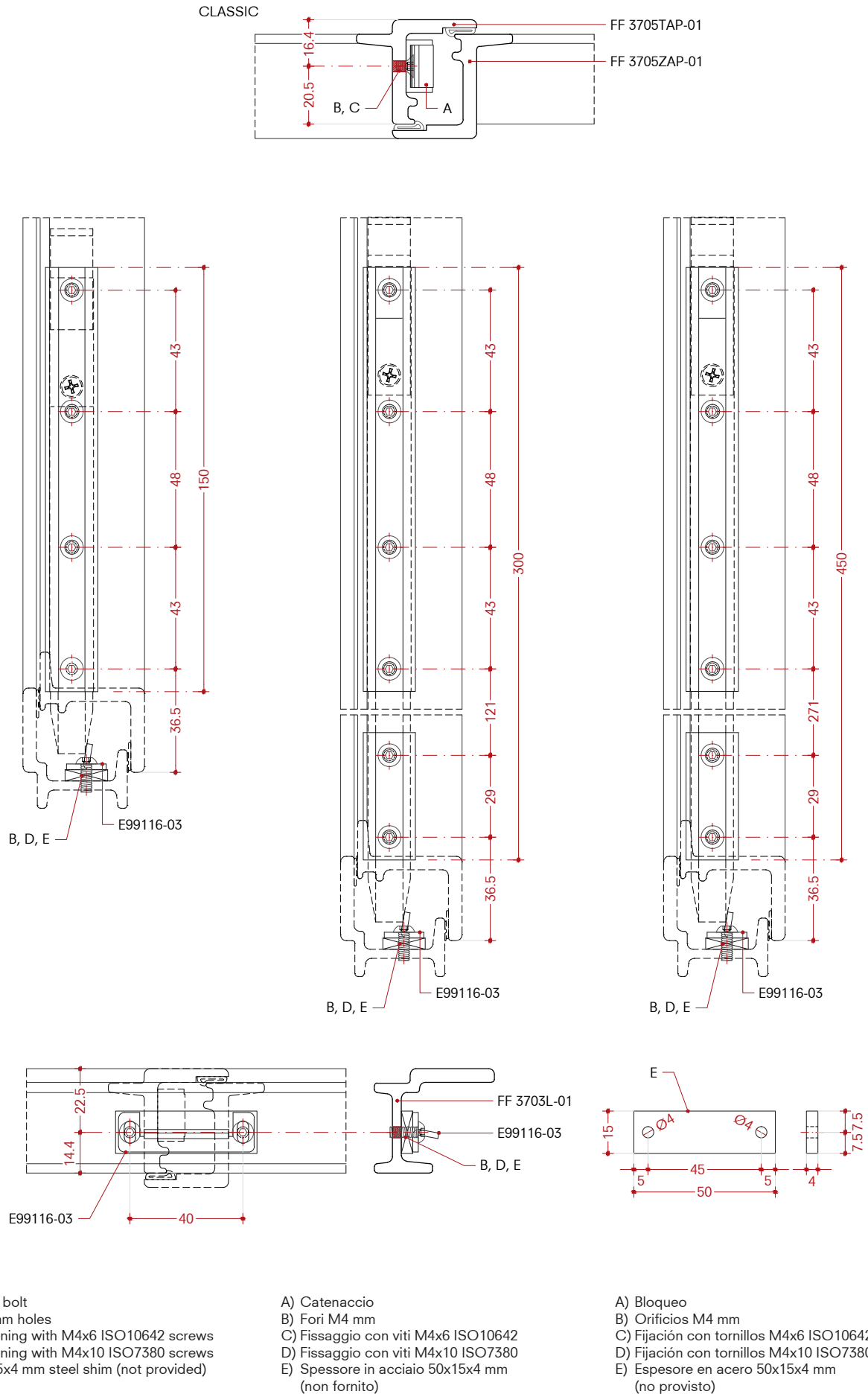
Pasador de canto (con o sin cierre)

E99001-nn - L = 150 mm

E99002-nn - L = 300 mm

E99003-nn - L = 450 mm





Installation

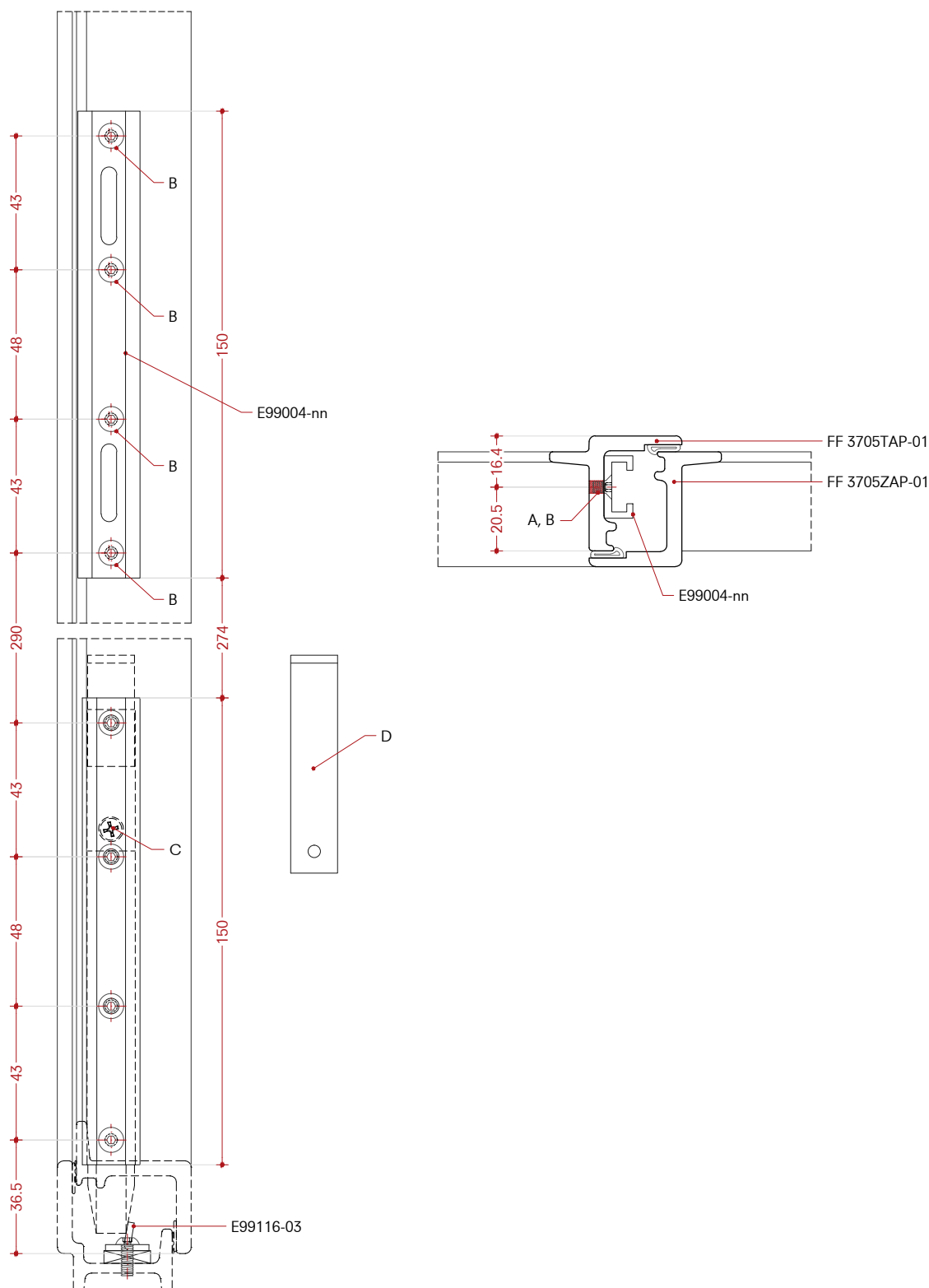
Extension E99004-nn for flush bolt
E99001-nn, E99002-nn, E99003-nn

Montaggio

Prolunga E99004-nn per catenaccio
E99001-nn, E99002-nn, E99003-nn

Montaje

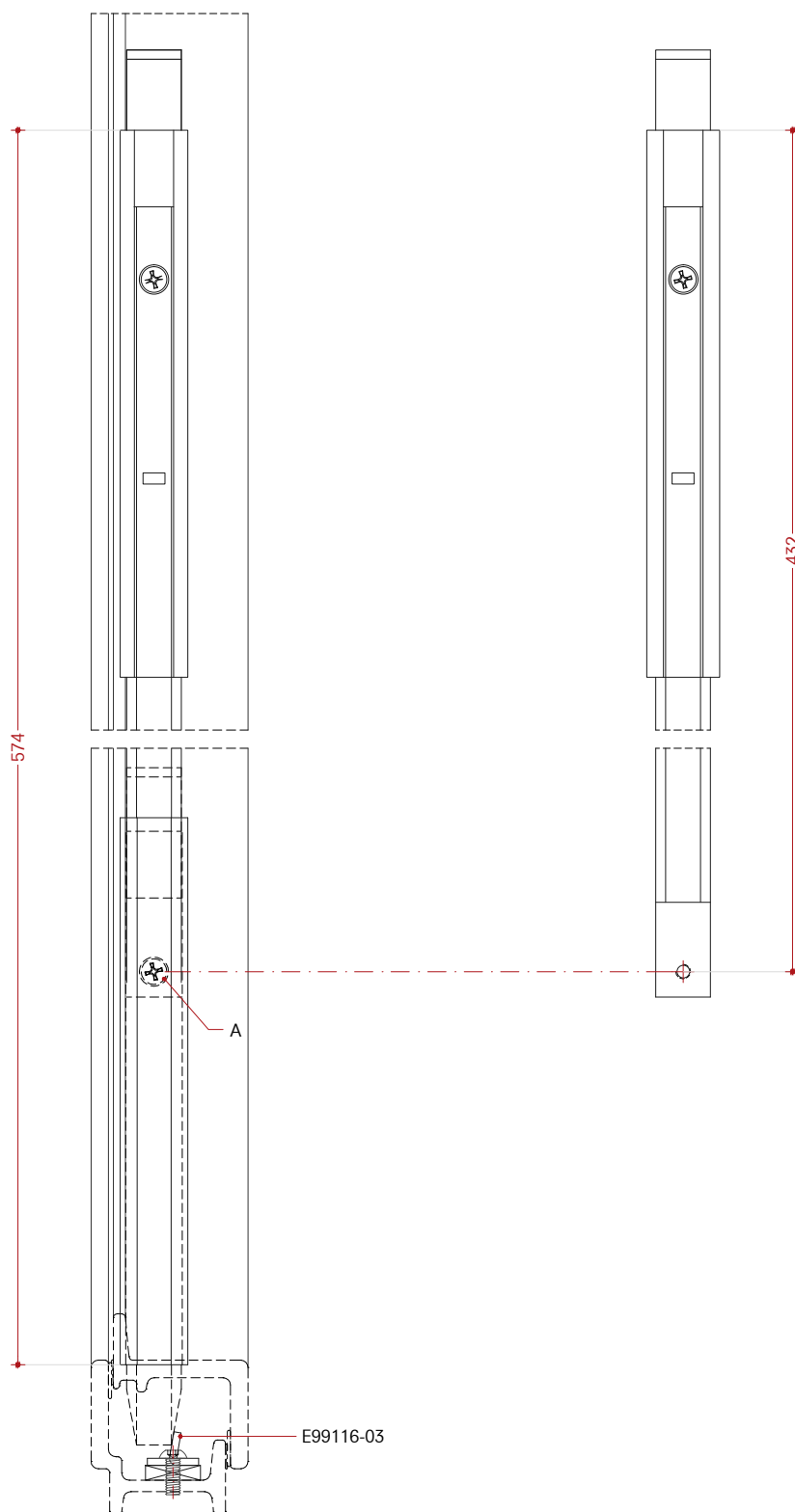
Extensión E99004-nn para pasador de
canto E99001-nn, E99002-nn, E99003-nn



- A) M4 mm holes
- B) Fastening with M4x6 ISO10642 screws
- C) Remove this screw
- D) Remove the lever part

- A) Fori M4 mm
- B) Fissaggio con viti M4x6 ISO10642
- C) Rimuovere questa vite
- D) Rimuovere la parte della leva

- A) Oreficios M4 mm
- B) Fijación con tornillos M4x6 ISO10642
- C) Quitar este tornillo
- D) Retire la parte de la palanca



A) Fix the extension part with the screw

A) Fissare la prolunga con la vite

A) Arreglar la extensión con el tornillo

Installation

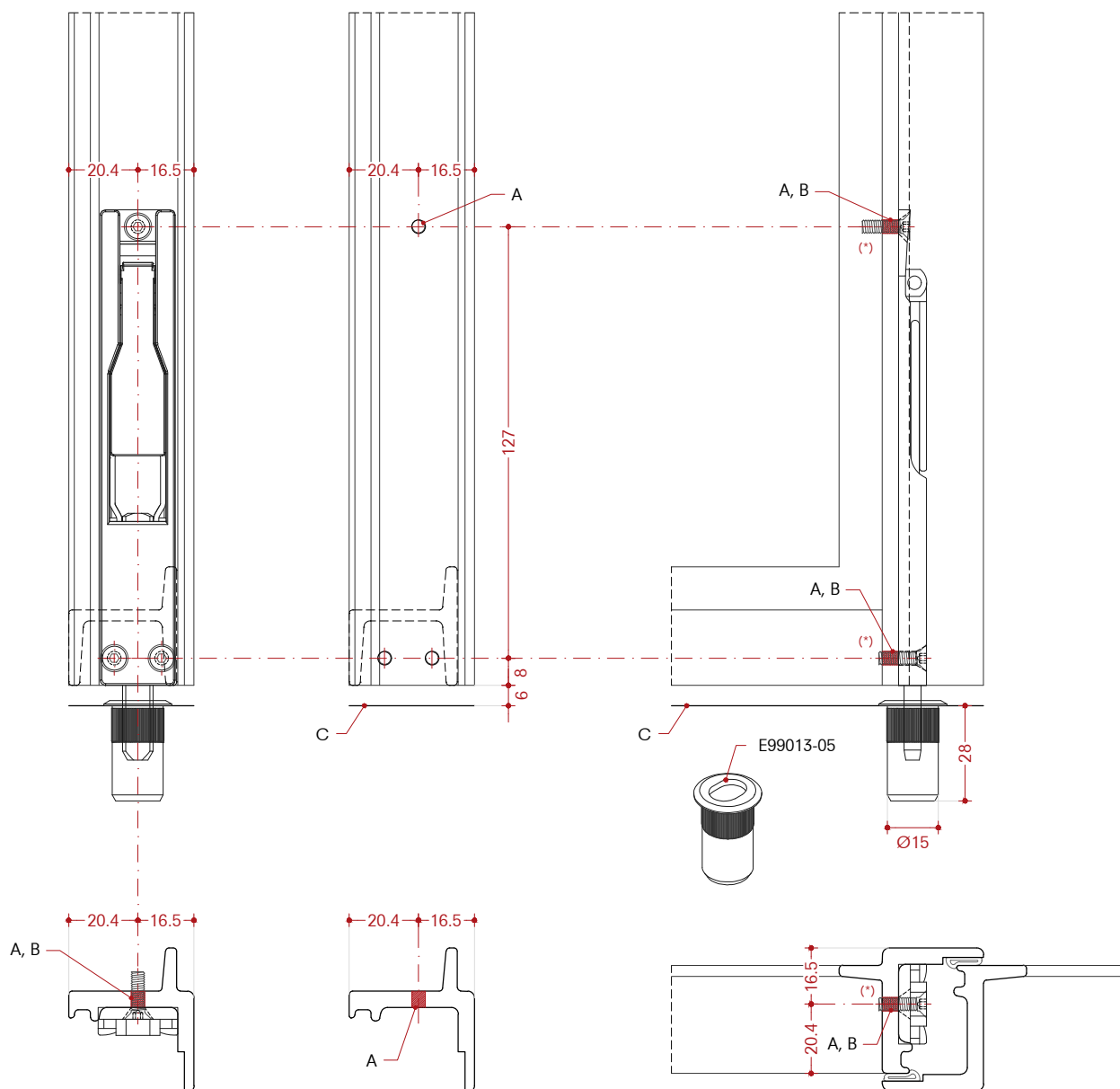
Flush bolt with lever E99010-35

Montaggio

Catenaccio con leva E99010-35

Montaje

Pasador de canto con palanca E99010-35



A) M4 holes on profile
B) Fastening with M4x14 ISO10642 screws
C) Finished floor

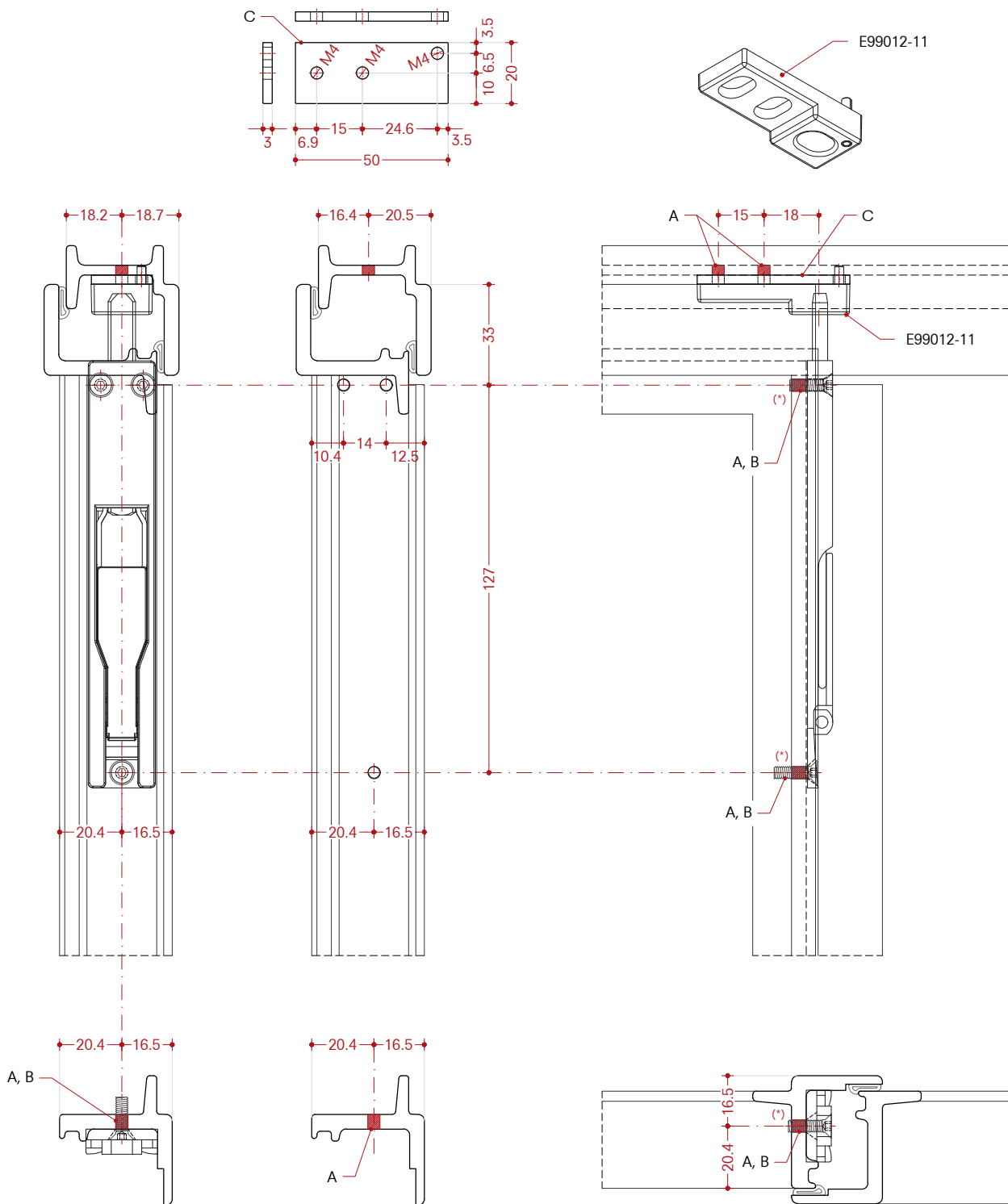
(*) Cut the screws

A) Fori M4 sul profilo
B) Fissaggio con viti M4x14 ISO10642
C) Pavimento finito

(*) Accorciare le viti

A) Orificios M4 en perfil
B) Fijación con tornillos M4x14 ISO10642
C) Piso acabado

(*) Recortar tornillos



- A) M4 holes on profile
B) Fastening with M4x14 ISO10642 screws
C) 50x20x3 mm steel shim (not provided)

- (*) Cut the screws

- A) Fori M4 sul profilo
B) Fissaggio con viti M4x14 ISO10642
C) Spessore in acciaio 50x20x3 mm
(non fornito)

- (*) Accorciare le viti

- A) Orificios M4 en perfil
B) Fijación con tornillos M4x14 ISO10642
C) Espesore en acero 50x20x3 mm
(no provisto)

- (*) Recortar tornillos

Accessories installation:	Montaggio accessori:	Montaje accesorios:	
General fittings	Ferramenta generale	Herrajes generales	5.9

Installation

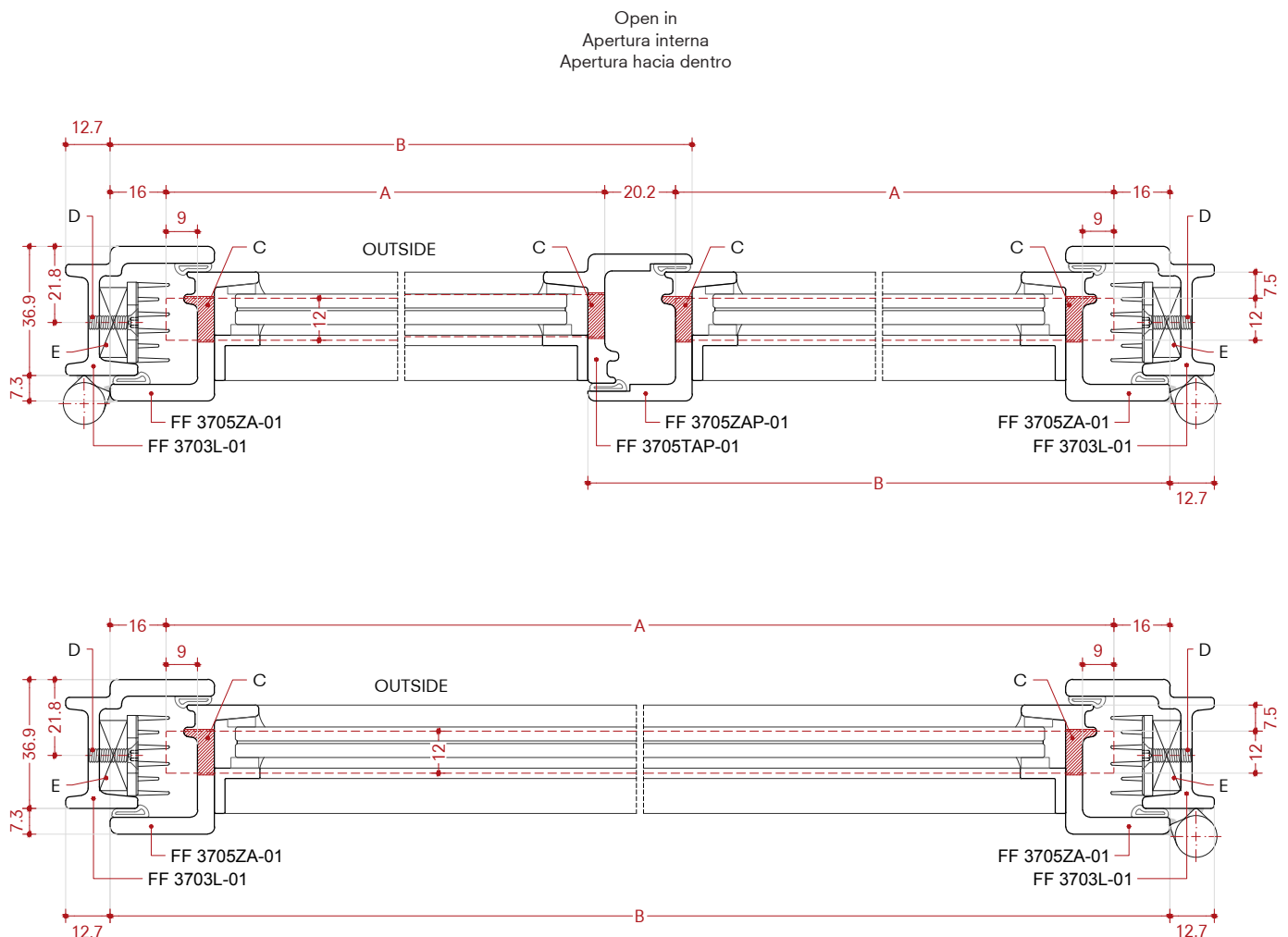
Automatic door seal
Single and double leaf door
Open in and open out

Montaggio

Guarnizione a ghigliottina
Porta a uno e due battenti
Apertura interna ed esterna

Montaje

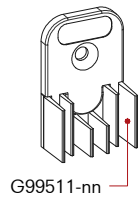
Junta guillotina
Puerta de una e dos hojas
Que se abre hacia dentro y fuera



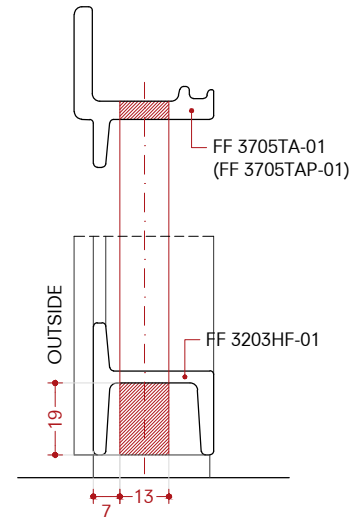
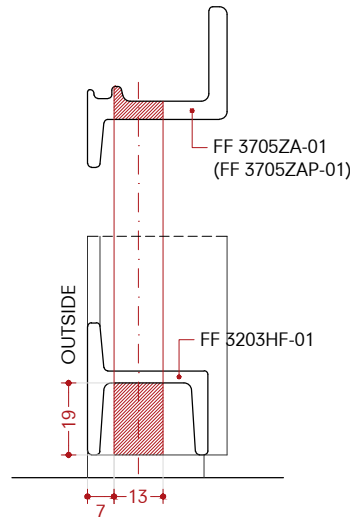
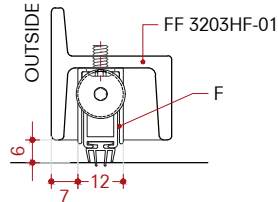
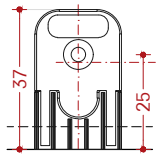
- A) Automatic drop seal (aluminium profile)
- B) Door leaf
- C) 13x20 mm cutout
- D) Fastening of G99511-nn with M4x14 ISO10642 screws
- E) 23x5 L=37 mm PVC plate (not provided)

- A) Guarnizione a ghigliottina automatica (profilo in alluminio)
- B) Porta
- C) Taglio 13x20 mm
- D) Fissaggio G99511-nn con viti M4x14 ISO10642
- E) Piastra in PVC 23x5 L=37 mm (non fornita)

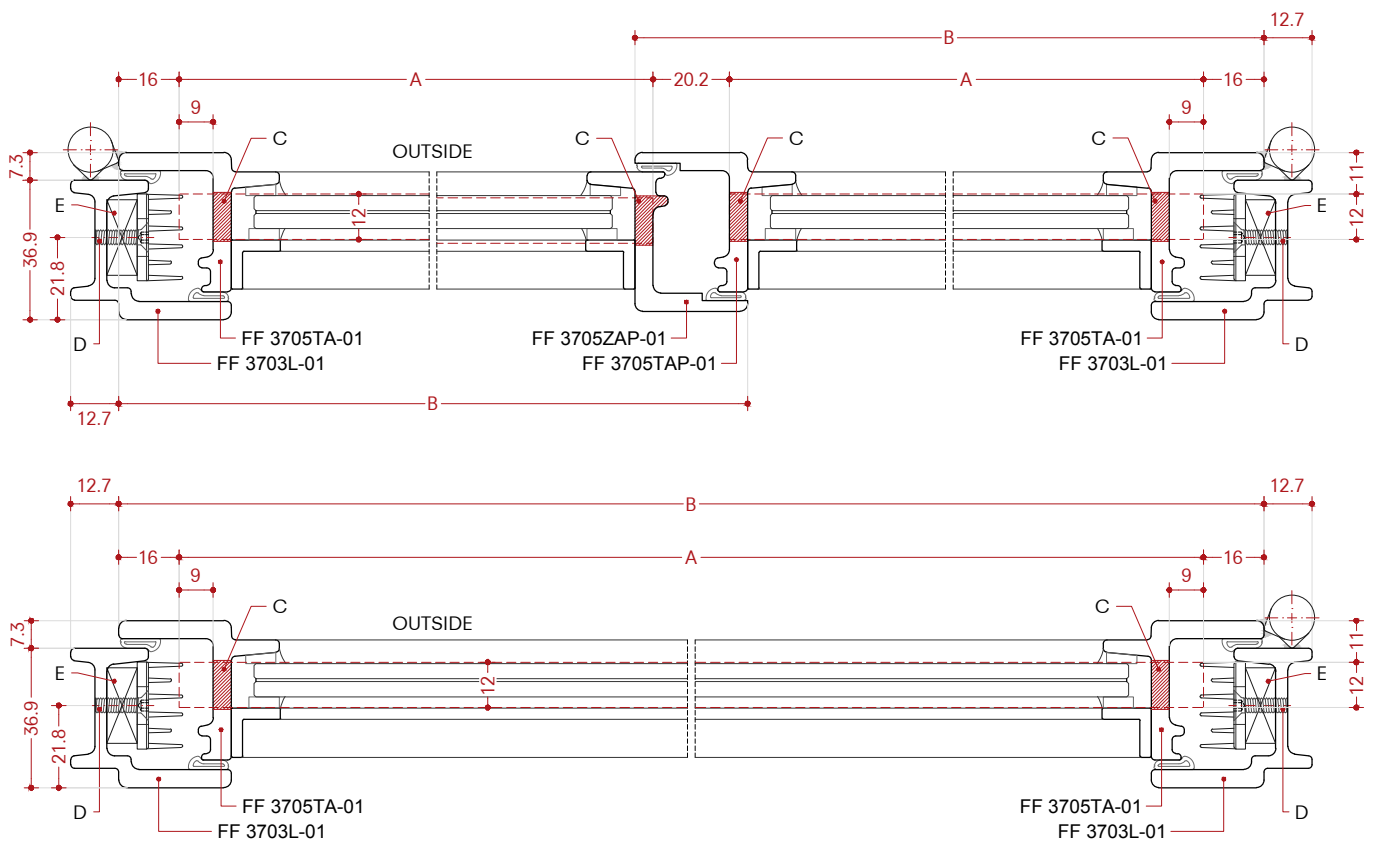
- A) Junta guillotina automática (perfil de aluminio)
- B) Puerta
- C) Corte 13x20 mm
- D) Fijación G99511-nn con tornillos M4x14 ISO10642
- E) Placa en PVC 23x5 L=37 mm (no provisto)



G99511-nn



Open out
Apertura esterna
Que se abre hacia fuera



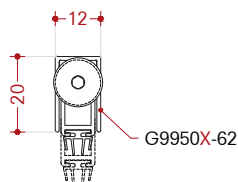
- A) Automatic drop seal (aluminium profile)
- B) Door leaf
- C) 13x20 mm cutout
- D) Fastening of G99511-nn with M4x14 ISO10642 screws
- E) 23x5 L=37 mm PVC plate (not provided)
- F) G995XX-62 bottom profile fastening with M4x6 ISO7380 screws. Automatic drop seal G995XX-62 length of 330 mm to 1230 mm

- A) Guarnizione a ghigliottina automatica (profilo in alluminio)
- B) Porta
- C) Taglio 13x20 mm
- D) Fissaggio G99511-nn con viti M4x14 ISO10642
- E) Piastra in PVC 23x5 L=37 mm (non fornita)
- F) Fissaggio G995XX-62 con viti M4x6 ISO7380. Guarnizione a ghigliottina G995XX-62 lunghezza da 330 mm fino a 1230 mm

- A) Junta guillotina automática (perfil de aluminio)
- B) Puerta
- C) Corte 13x20 mm
- D) Fijación G99511-nn con tornillos M4x14 ISO10642
- E) Placa en PVC 23x5 L=37 mm (no provisto)
- F) Fijación G995XX-62 con tornillos M4x6 ISO7380. Junta guillotina G995XX-62 longitud de 330 mm a 1230 mm

Installation

Automatic door seal
G995XX-62 cut off profile



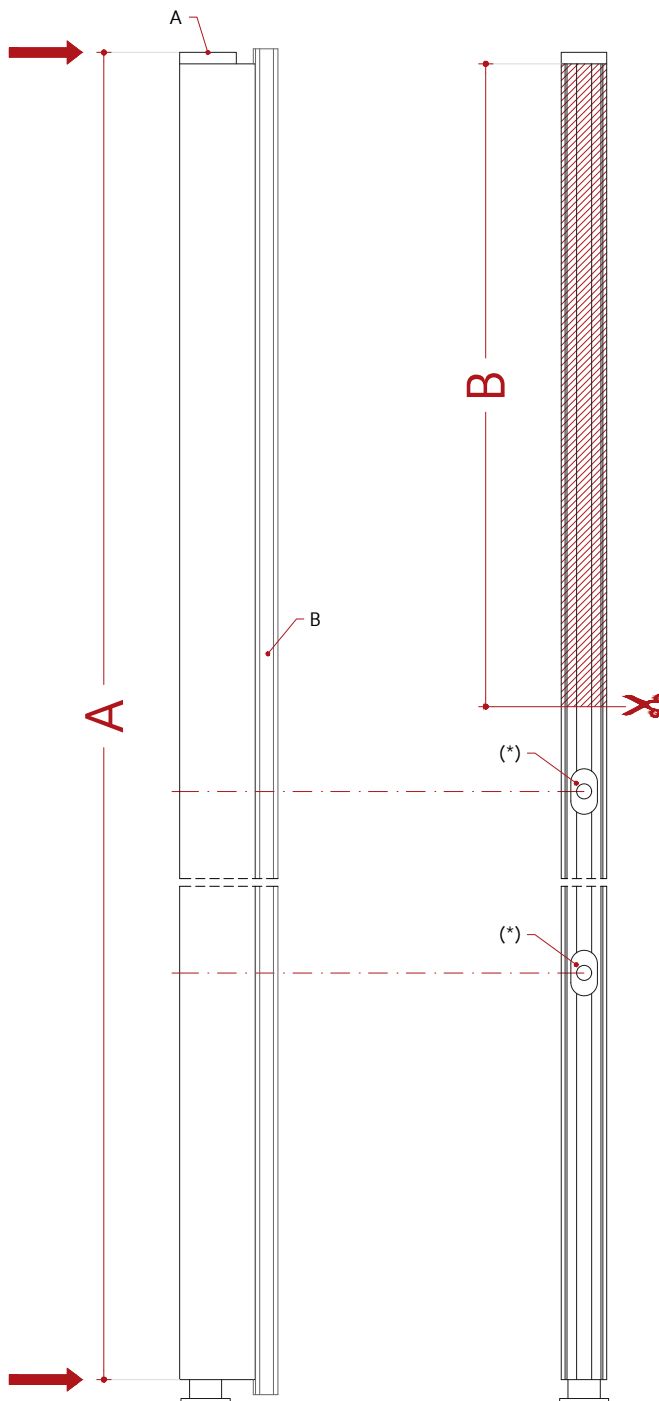
	A	B
G99501-62	330	50
G99502-62	430	135
G99503-62	530	200
G99504-62	630	200
G99505-62	730	200
G99506-62	830	200
G99507-62	930	200
G99508-62	1030	200
G99509-62	1130	200
G99510-62	1230	200

Montaggio

Guarnizione a ghigliottina
Taglio del profilo G9950X-62

Lock side
Lato serratura
Lado de la cerradura

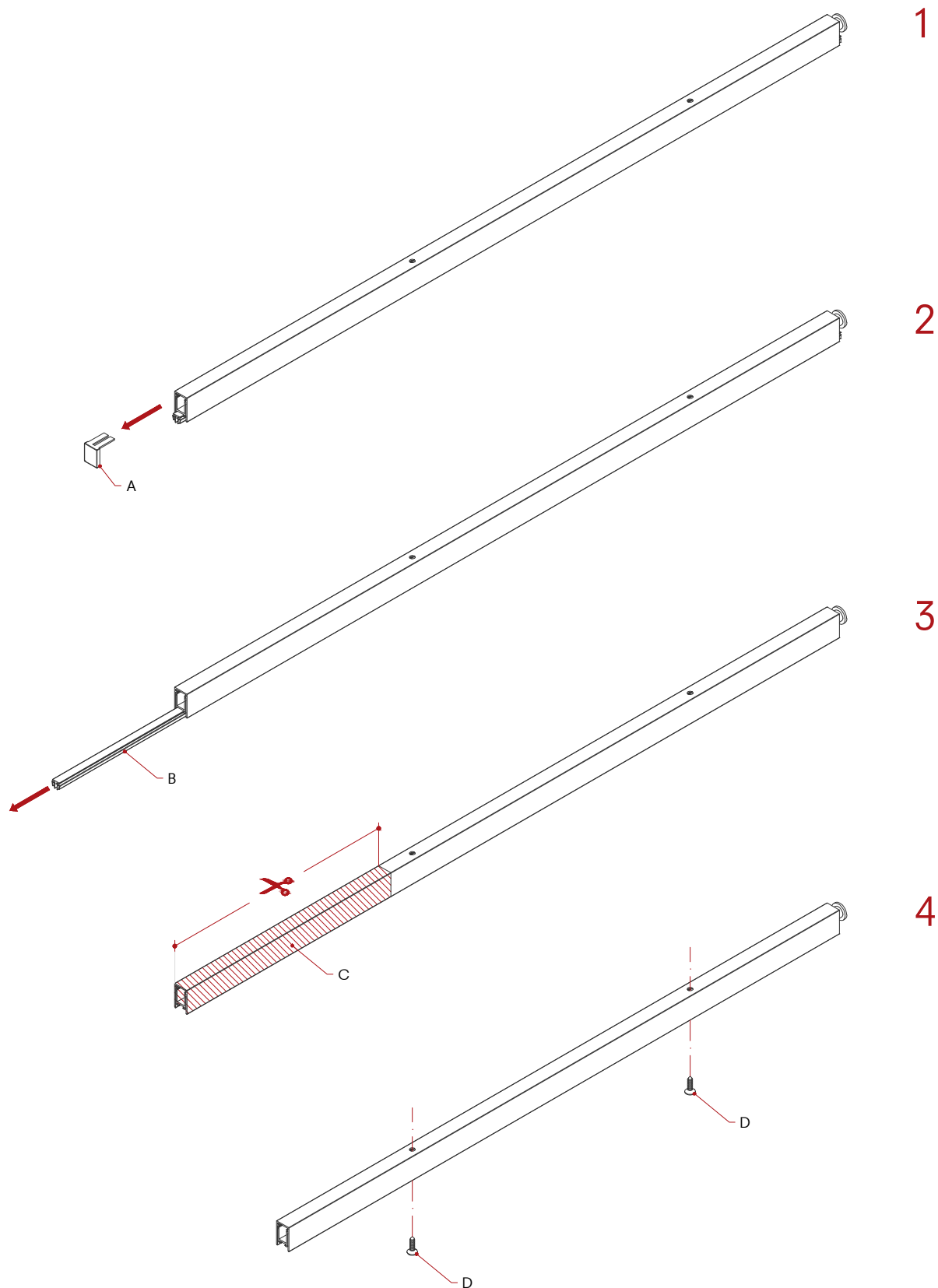
Hinge side
Lato cerniera
Lado de la bisagra



A) Remove the cap
B) Remove the gasket
(*) Existing hole

A) Rimuovere il tappo di chiusura
B) Rimuovere la guarnizione
(*) Foro esistente

A) Quitar la tapa
B) Quitar la junta
(*) Orificio existente



A) Remove the cap
B) Remove the gasket
C) Cut off profile
D) Fastening with selftapping Ø3.2 mm ISO14585 screws

A) Rimuovere il tappo di chiusura
B) Rimuovere la guarnizione
C) Taglio del profilo
D) Fissaggio con viti autofilettanti Ø3.2 mm ISO14585

A) Quitar la tapa
B) Quitar la junta
C) Fresado de perfil
D) Fijación con tornillos autorroscantes Ø3.2 mm ISO14585

Installation

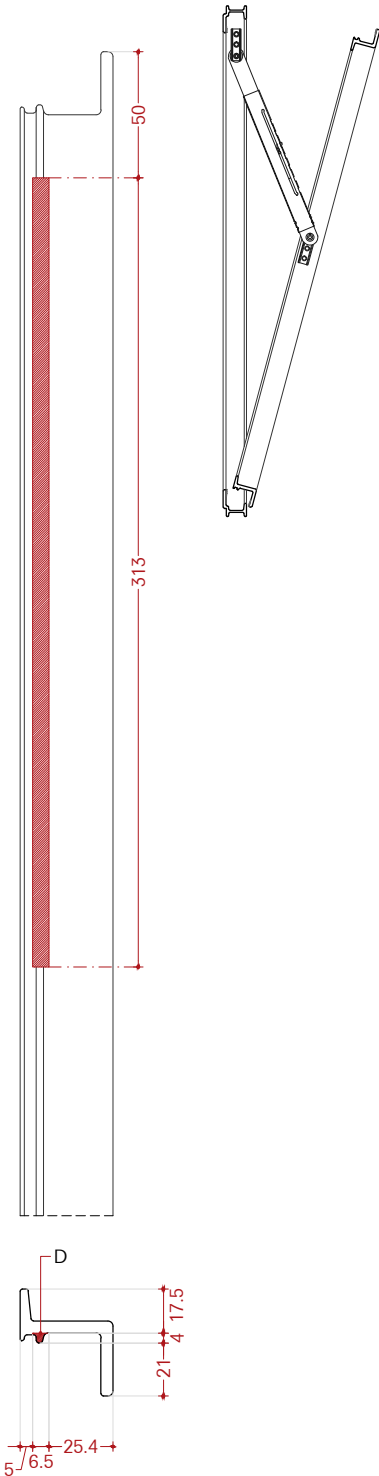
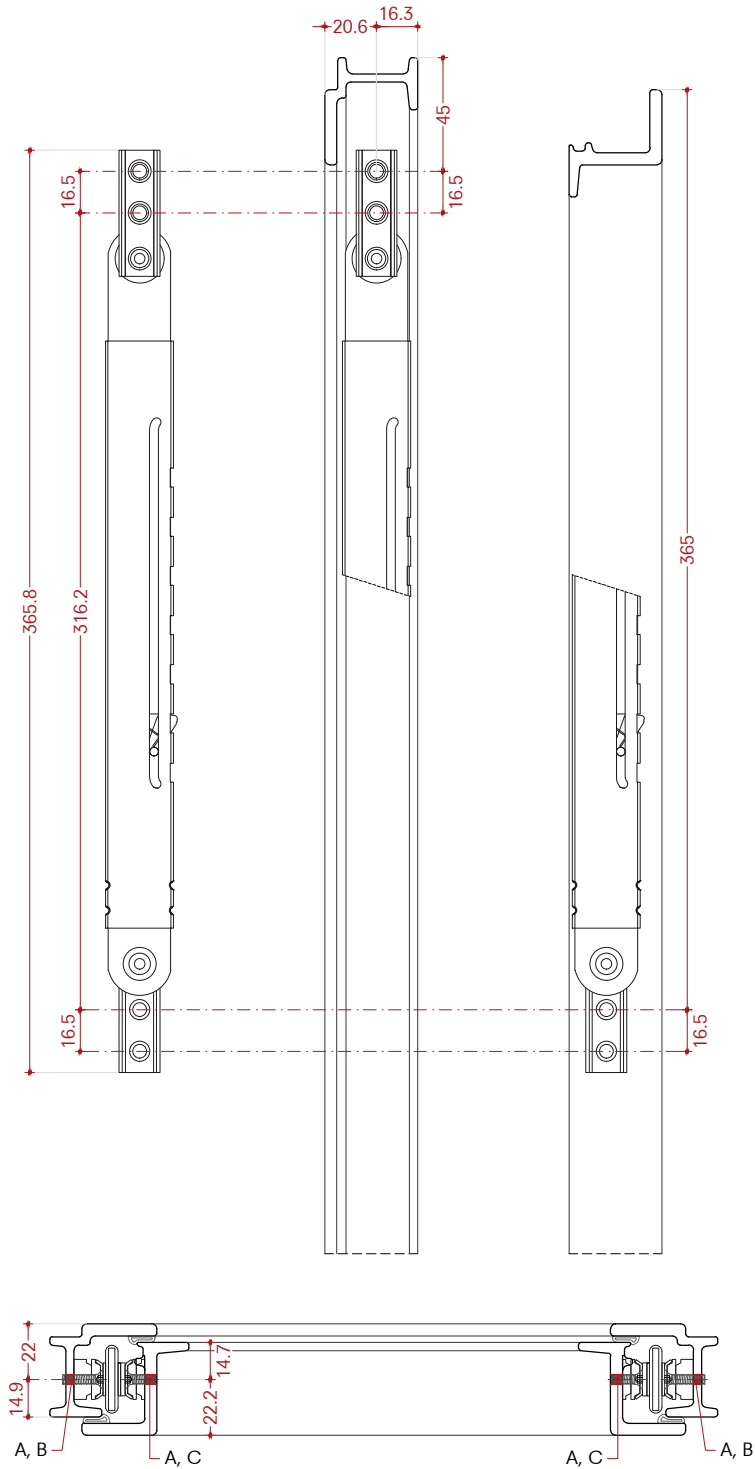
Opening restrictor E99205-05
Bottom hung open in window

Montaggio

Limitatore di apertura E99205-05
Finestra vasistas apertura interna

Montaje

Limitador de apertura E99205-05
Ventana proyectante que se abre hacia dentro



Scale 1:3

- A) M4 mm holes
- B) Fastening with M4x16 ISO10642 screws
- C) Fastening with M4x12 ISO10642 screws and cut the screws
- D) Cut off profile

Scala 1:3

- A) Fori M4 mm
- B) Fissaggio con viti M4x16 ISO10642
- C) Fissaggio con viti M4x12 ISO10642 e accorciare la vite
- D) Taglio del profilo

Escala 1:3

- A) Oreficios M4 mm
- B) Fijación con tornillos M4x16 ISO10642
- C) Fijación con tornillos M4x12 ISO10642 y recortar tornillo
- D) Fresado de perfil

Installation

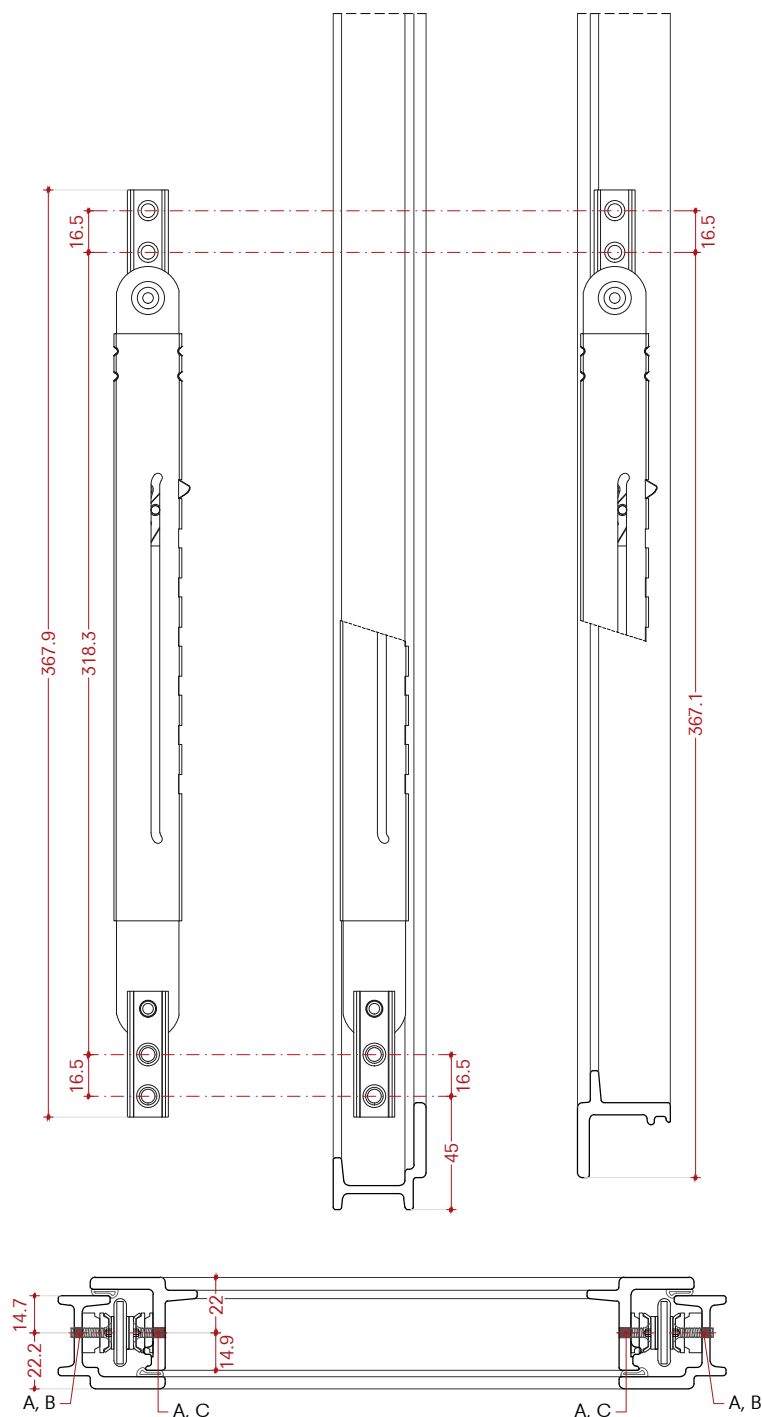
Opening restrictor E99203-05
Top hung open out window

Montaggio

Limitatore di apertura E99203-05
Finestra a sporgere apertura esterna

Montaje

Limitador de apertura E99203-05
Ventana proyectante que se abre hacia fuera

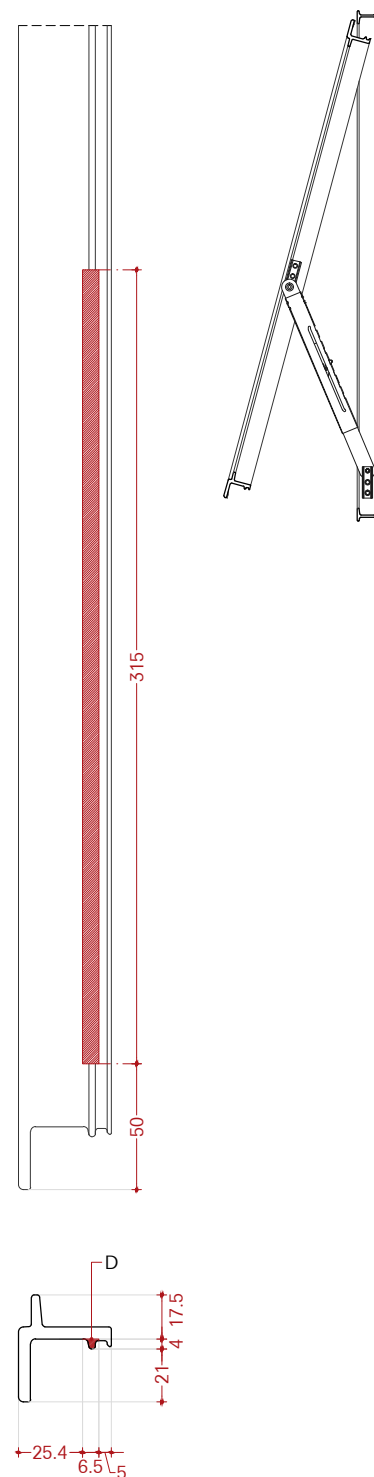


Scale 1:3

- A) M4 mm holes
- B) Fastening with M4x16 ISO10642 screws
- C) Fastening with M4x12 ISO10642 screws and cut the screws
- D) Cut off profile

Scala 1:3

- A) Fori M4 mm
- B) Fissaggio con viti M4x16 ISO10642
- C) Fissaggio con viti M4x12 ISO10642 e accorciare la vite
- D) Taglio del profilo



Escala 1:3

- A) Oreficios M4 mm
- B) Fijación con tornillos M4x16 ISO10642
- C) Fijación con tornillos M4x12 ISO10642 y recortar tornillo
- D) Fresado de perfil

Installation

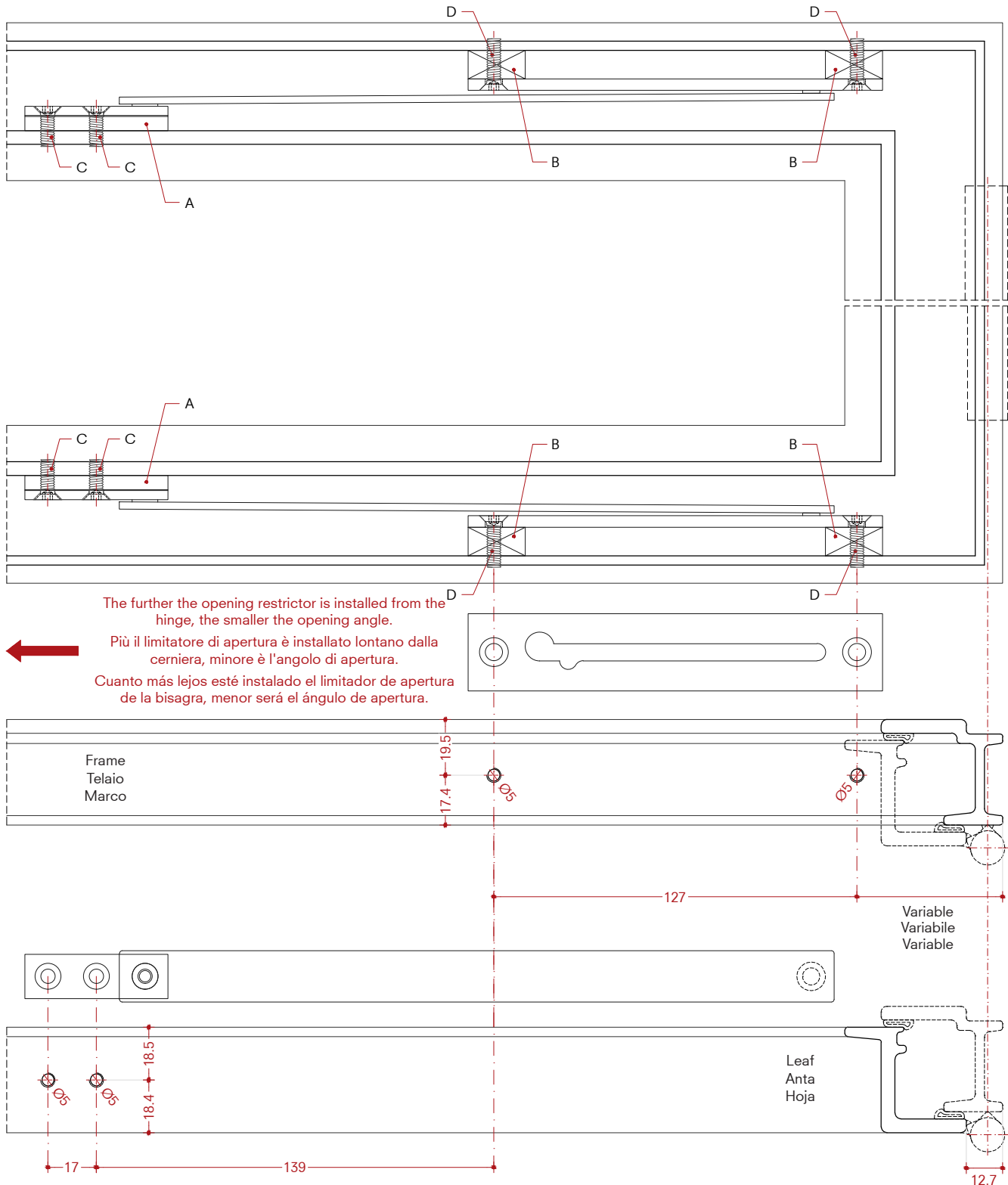
Opening restrictor E99206-03
Open in and open out window

Montaggio

Limitatore di apertura E99206-03
Finestra apertura interna ed esterna

Montaje

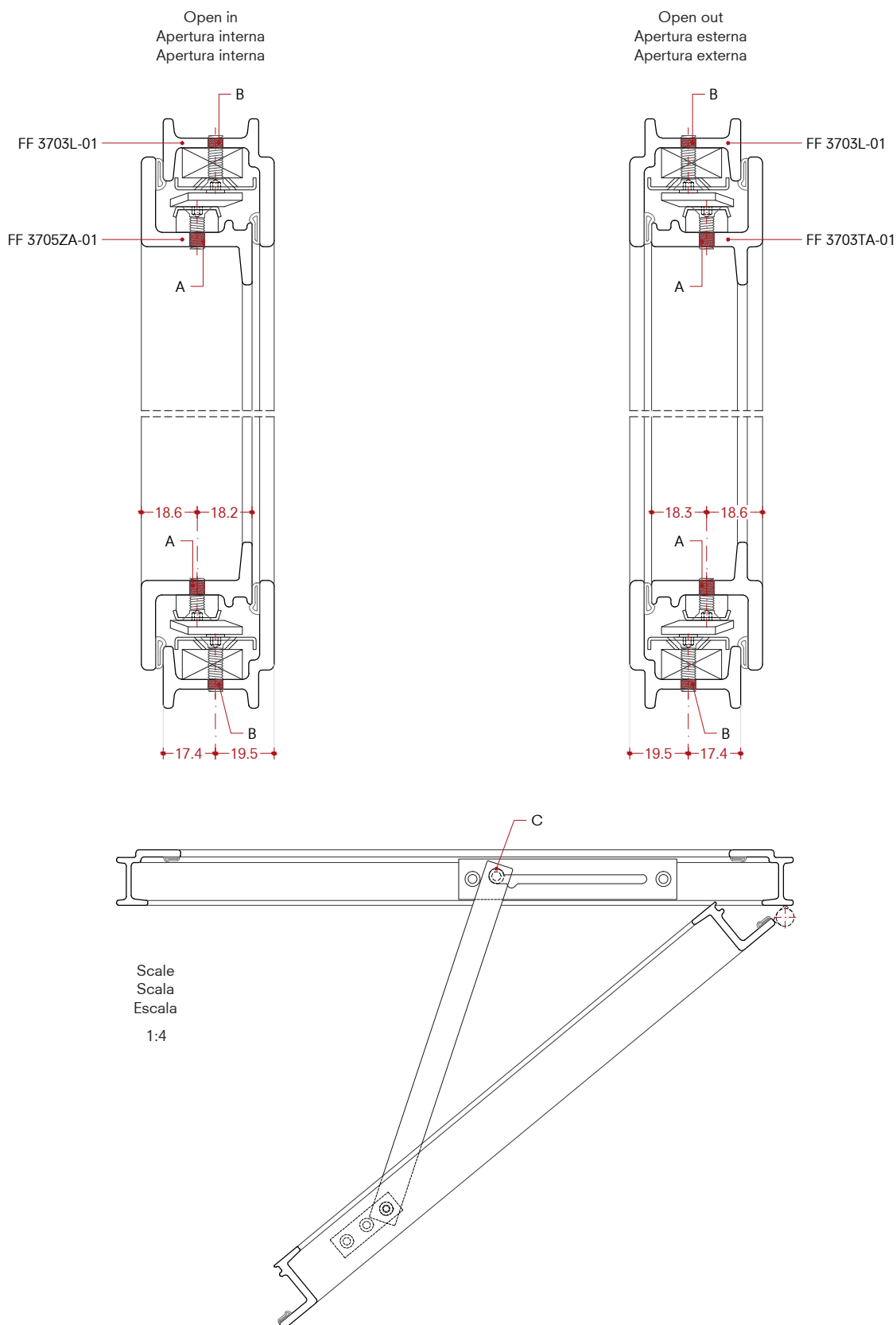
Limitador de apertura E99206-03
Ventana que se abre hacia dentro y fuera



- A) Plate 7.5 mm
- B) Plate 10 mm (not provided)
- C) M5 mm holes and fastening with M5x14 ISO10642 screws
- D) M5 mm holes and fastening with M5x18 ISO10642 screws and cut the screws

- A) Piastra 7.5 mm
- B) Piastra 10 mm (non fornita)
- C) Fori M5 mm e fissaggio con viti M5x14 ISO10642
- D) Fori M5 mm e fissaggio con viti M5x18 ISO10642 e accorciare la vite

- A) Placa 7.5 mm
- B) Placa 10 mm (no provisto)
- C) Oreficios M5 mm y fijación con tornillos M5x14 ISO10642
- D) Oreficios M5 mm y fijación con tornillos M5x18 ISO10642 y recortar tornillo



A) M5 mm holes and fastening with M5x14 ISO10642 screws
B) M5 mm holes and fastening with M5x18 ISO10642 screws and cut the screws
C) Position to unlock the restrictors.

A) Fori M5 mm e fissaggio con viti M5x14 ISO10642
B) Fori M5 mm e fissaggio con viti M5x18 ISO10642 e accorciare la vite
C) Posizione di sbloccaggio del limitatore

A) Oreficios M5 mm y fijación con tornillos M5x14 ISO10642
B) Oreficios M5 mm y fijación con tornillos M5x18 ISO10642 y recortar tornillo
C) Posición de liberación del limitador

Accessories installation:	Montaggio accessori:	Montaje accesorios:	
Handles	Maniglie	Manillas	5.10

Installation

Heritage window handle
Open in, single leaf window

Montaggio

Maniglia Heritage per finestra
Finestra a un battente apertura interna

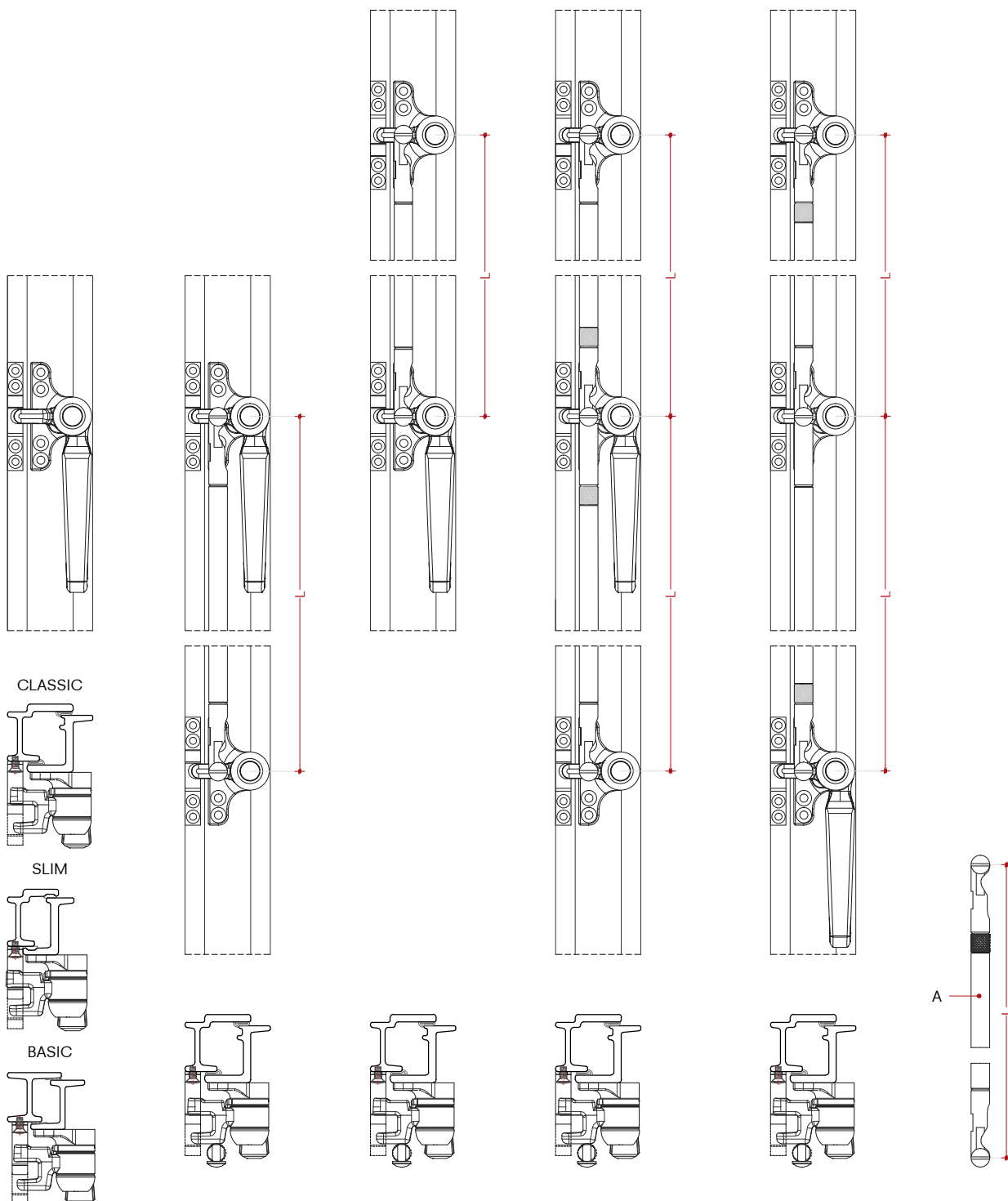
Montaje

Manilla de ventana Heritage
Apertura hacia dentro, ventana de 1 hoja

MONO

DUPLEX

TRIPLEX



Scale 1:4

A) Connection rod

Code	L
701220 nn	600 mm
701221 nn	750 mm
701222 nn	900 mm
701223 nn	1050 mm
701224 nn	1200 mm

Scala 1:4

A) Barra di collegamento

Code	L
701220 nn	600 mm
701221 nn	750 mm
701222 nn	900 mm
701223 nn	1050 mm
701224 nn	1200 mm

Escala 1:4

A) Barra de enlace

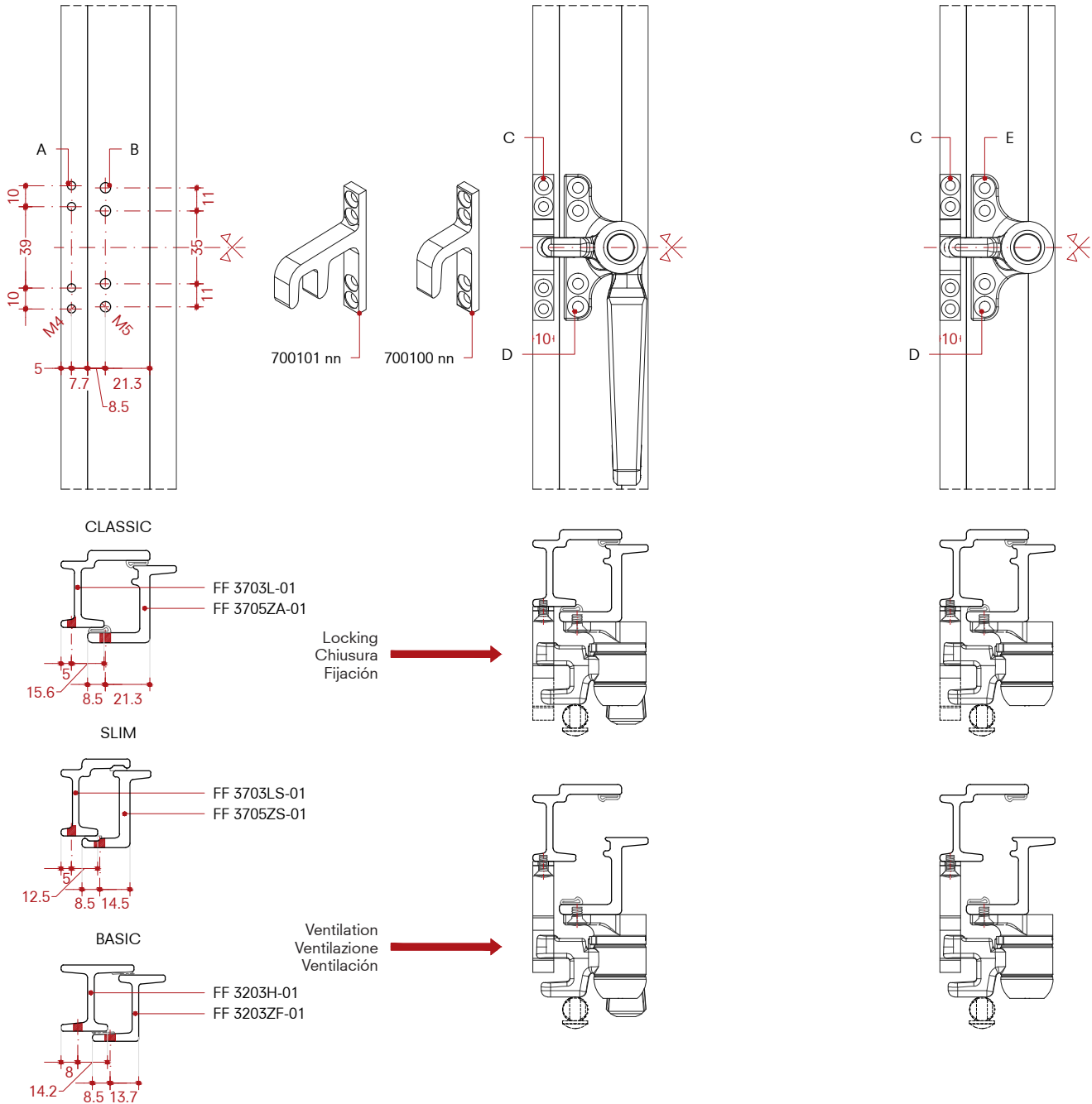
Code	L
701220 nn	600 mm
701221 nn	750 mm
701222 nn	900 mm
701223 nn	1050 mm
701224 nn	1200 mm

Assembly / Montaggio / Montaje

Profiles drilling
Foratura profili
Orificios en perfiles

Handle and locking hook
Maniglia e gancio di chiusura
Manilla y gancho de cierre

Additional locking nose and hook
Punto di chiusura e gancio aggiuntivi
Cierre adicional y gancho de cierre



- A) M4 holes on frame profile
- B) M5 holes on leaf profile
- C) Fastening of locking hook with M4x10 ISO2010 screws
- D) Fastening of handle and of additional locking nose with M5x8 ISO2010/ISO7047 screws
- E) A 70122X nn connection rod required to connect the handle to additional locking nose

For any additional information please contact our technical office.

- A) Fori M4 sul profilo del telaio
- B) Fori M5 su profilo anta
- C) Fissaggio punto di chiusura e gancio aggiuntivo con viti M4x8 ISO2010
- D) Fissaggio della maniglia con viti M5x8 ISO2010/ISO7047
- E) 70122X nn asta di collegamento necessaria per collegare la maniglia al punto di chiusura aggiuntivo

Per ulteriori informazioni contattare l'ufficio tecnico.

- A) Oreficios M4 en el perfil del marco
- B) Oreficios M5 en el perfil de la hoja
- C) Fijación del punto de bloqueo y gancho adicional con tornillos M4x10 ISO2010
- D) Fijación del tirador con tornillos M5x8 ISO2010/ISO7047
- E) 70122X nn varilla de conexión necesaria para conectar la manija al punto de bloqueo adicional

Para más información contactar la nuestra oficina técnica.

Installation

Heritage window handle
Open in, single leaf window
Right opening

Montaggio

Maniglia Heritage per finestra
Finestra a un battente apertura interna
Apertura destra

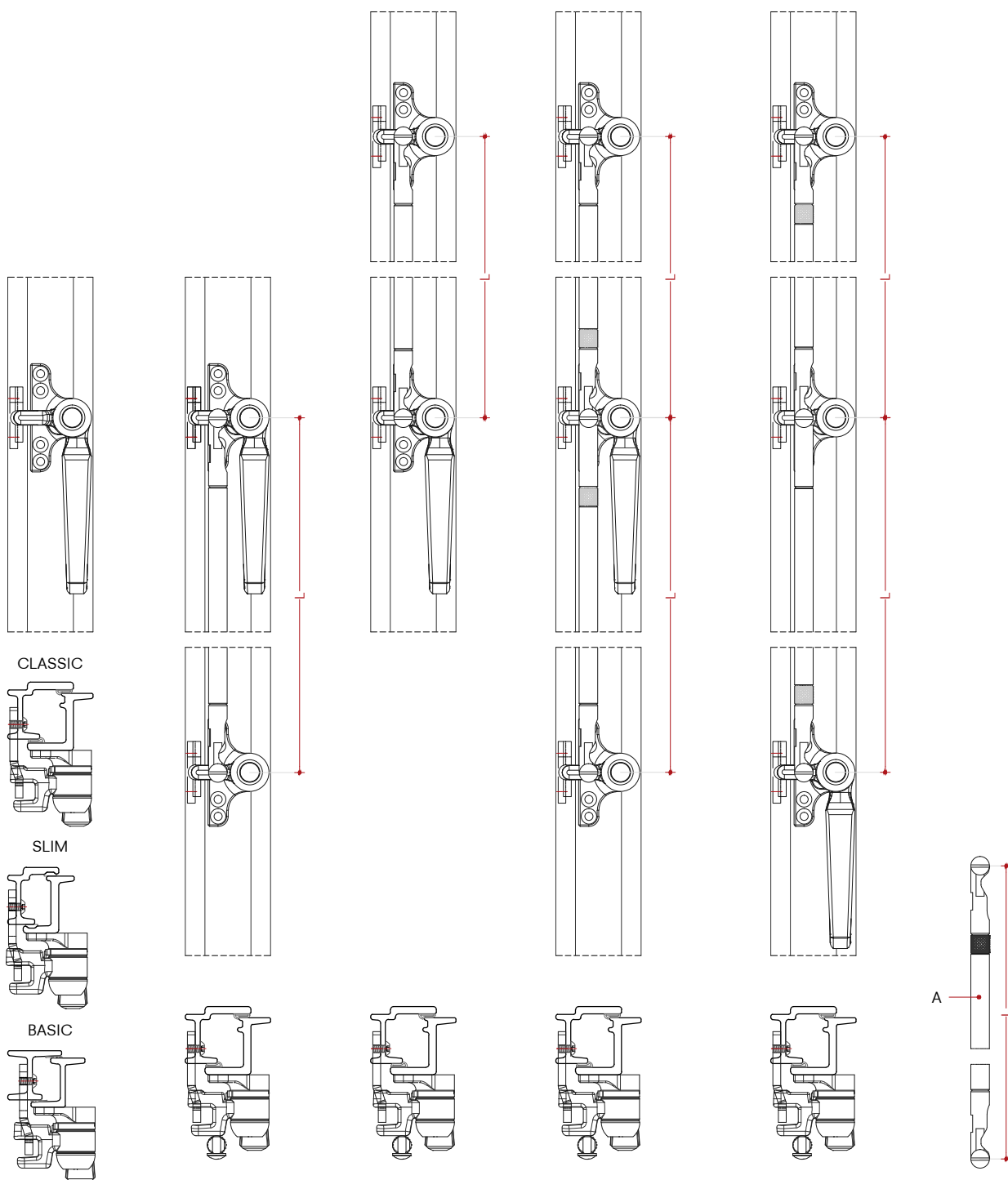
Montaje

Manilla de ventana Heritage
Apertura hacia dentro, ventana de 1 hoja
Apertura derecha

MONO

DUPLEX

TRIPLEX



Scale 1:4

A) Connection rod

Code L	
701220 nn	600 mm
701221 nn	750 mm
701222 nn	900 mm
701223 nn	1050 mm
701224 nn	1200 mm

Scala 1:4

A) Barra di collegamento

Code L	
701220 nn	600 mm
701221 nn	750 mm
701222 nn	900 mm
701223 nn	1050 mm
701224 nn	1200 mm

Escala 1:4

A) Barra de enlace

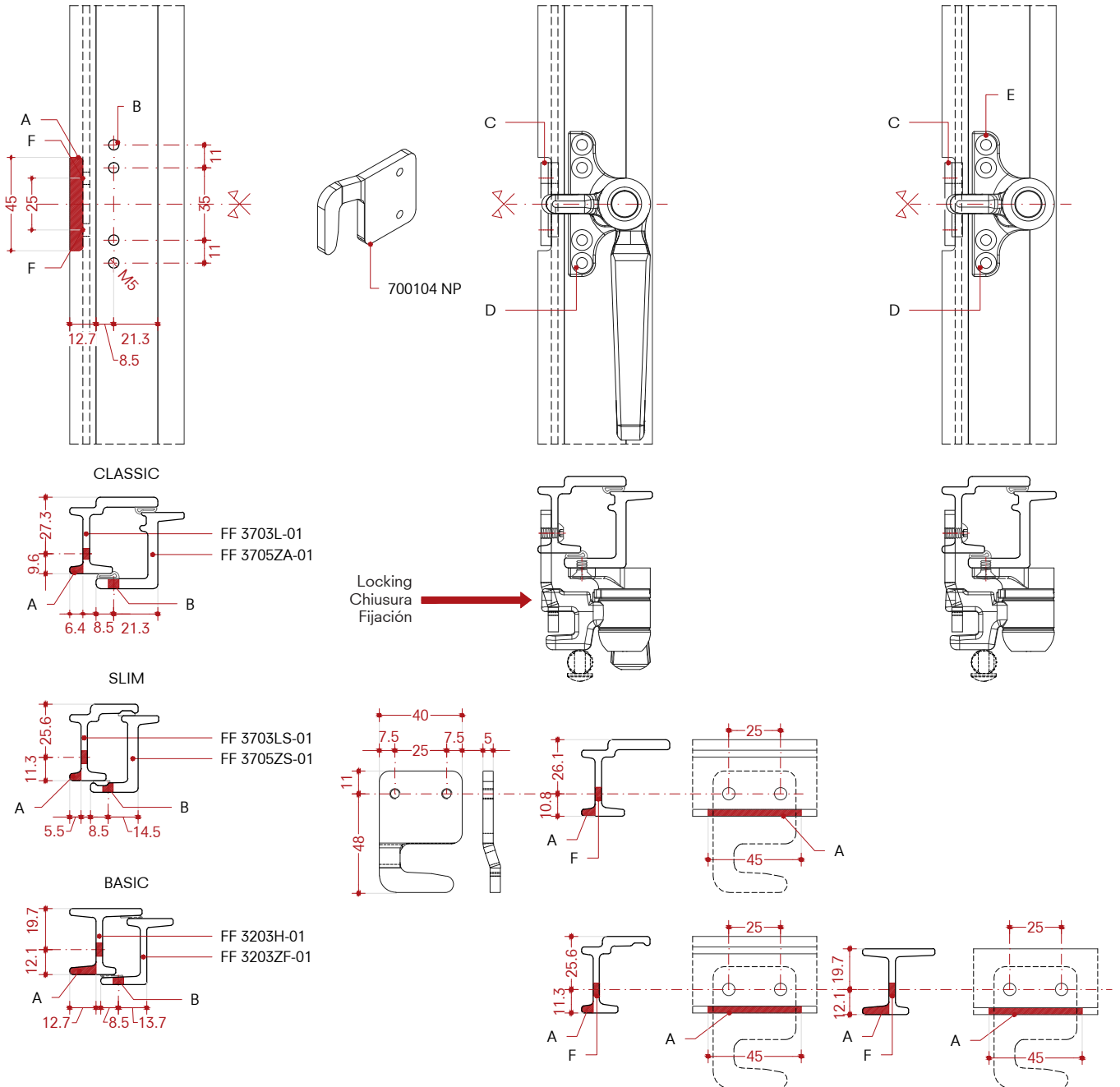
Code L	
701220 nn	600 mm
701221 nn	750 mm
701222 nn	900 mm
701223 nn	1050 mm
701224 nn	1200 mm

Assembly / Montaggio / Montaje

Profiles drilling
Foratura profili
Orificios en perfiles

Handle and locking hook
Maniglia e gancio di chiusura
Manilla y gancho de cierre

Additional locking nose and hook
Punto di chiusura e gancio additionali
Cierre adicional y gancho de cierre



- A) Cut off profile
- B) M5 holes
- C) Fastening of locking hook with M5x8 ISO7380 screws
- D) Fastening of handle and of additional locking nose with M5x8 ISO2010/ISO7047 screws
- E) A 70122X nn connection rod required to connect the handle to additional locking nose
- F) Ø5.2 mm holes

For any additional information please contact our technical office.

- A) Taglio del profilo
- B) Fori M5
- C) Fissaggio punto di chiusura e gancio additional con viti M5x8 ISO7380
- D) Fissaggio della maniglia con viti M5x8 ISO2010/ISO7047
- E) 70122X nn asta di collegamento necessaria per collegare la maniglia al punto di chiusura additional
- F) Fori Ø5.2 mm

Per ulteriori informazioni contattare l'ufficio tecnico.

- A) Fresado de perfil
- B) Oreficios M5
- C) Fijación del punto de bloqueo y gancho adicional con tornillos M5x8 ISO7380
- D) Fijación del tirador con tornillos M5x8 ISO2010/ISO7047
- E) 70122X nn varilla de conexión necesaria para conectar la manija al punto de bloqueo adicional
- F) Oreficios Ø5.2 mm

Para más información contactar la nuestra oficina técnica.

Installation

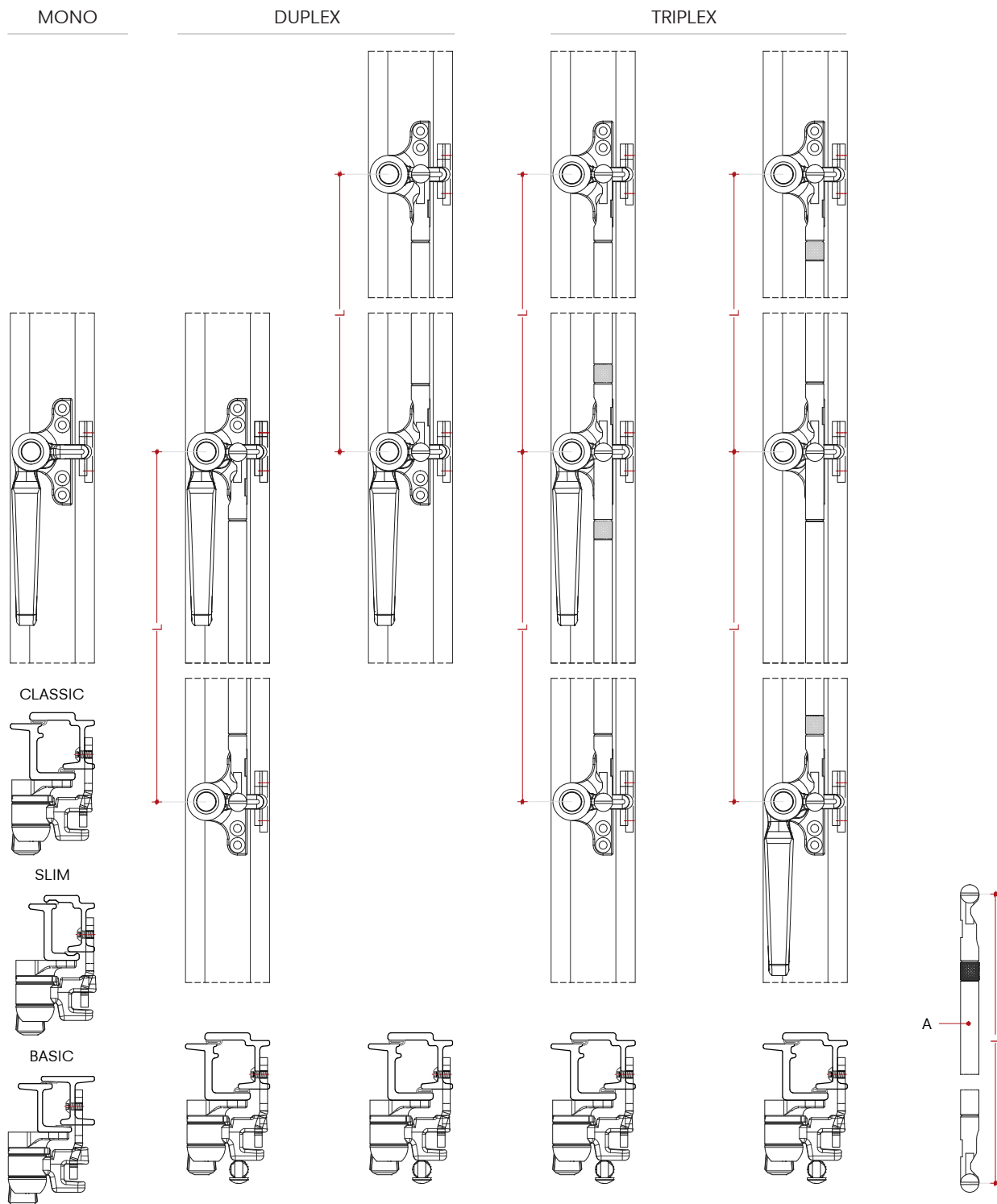
Heritage window handle
Open in, single leaf window
Left opening

Montaggio

Maniglia Heritage per finestra
Finestra a un battente apertura interna
Apertura sinistra

Montaje

Manilla de ventana Heritage
Apertura hacia dentro, ventana de 1 hoja
Apertura izquierda



Scale 1:4

A) Connection rod

Code	L
701220 nn	600 mm
701221 nn	750 mm
701222 nn	900 mm
701223 nn	1050 mm
701224 nn	1200 mm

Scala 1:4

A) Barra di collegamento

Code	L
701220 nn	600 mm
701221 nn	750 mm
701222 nn	900 mm
701223 nn	1050 mm
701224 nn	1200 mm

Escala 1:4

A) Barra de enlace

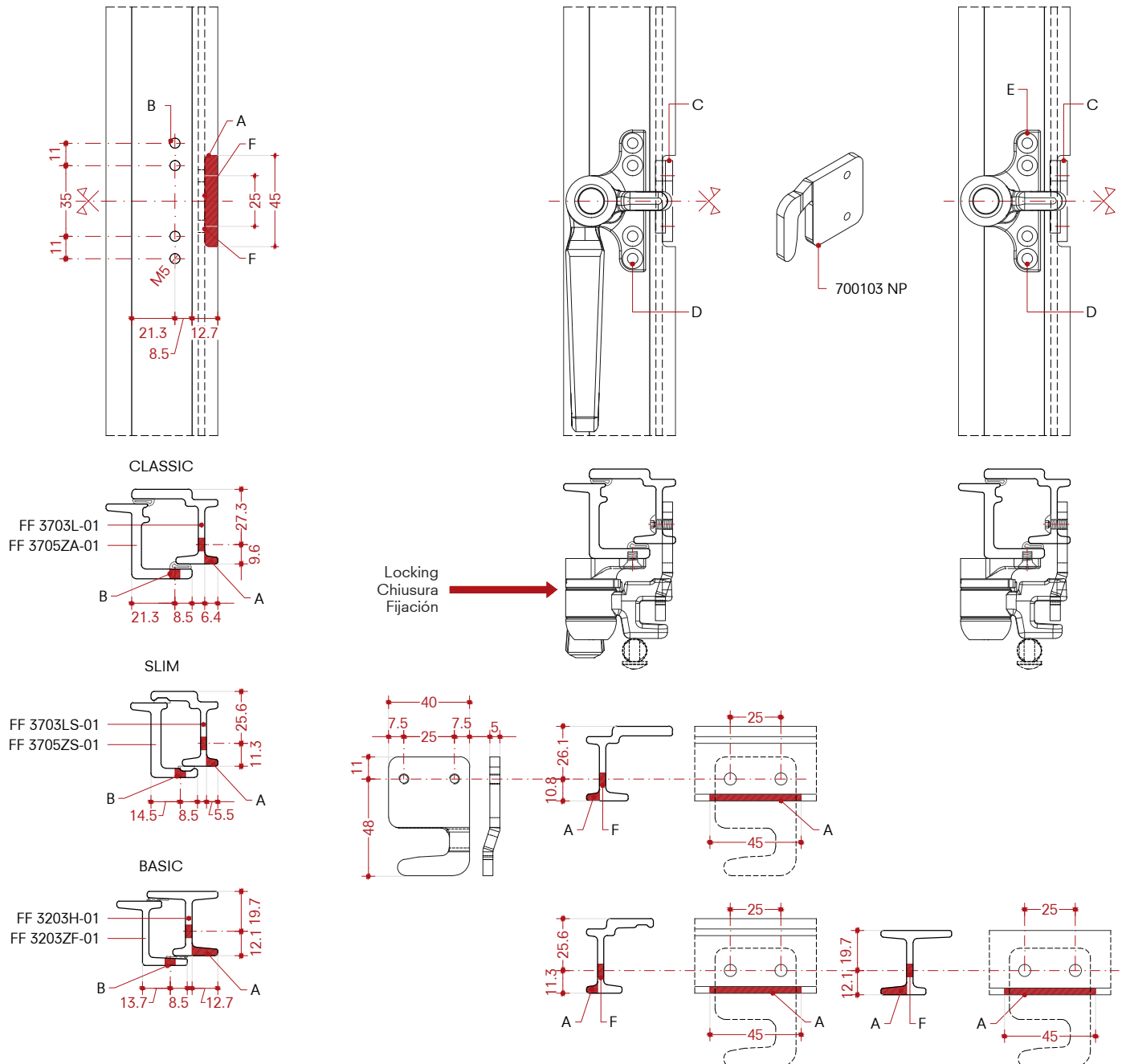
Code	L
701220 nn	600 mm
701221 nn	750 mm
701222 nn	900 mm
701223 nn	1050 mm
701224 nn	1200 mm

Assembly / Montaggio / Montaje

Profiles drilling
Foratura profili
Orificios en perfiles

Handle and locking hook
Maniglia e gancio di chiusura
Manilla y gancho de cierre

Additional locking nose and hook
Punto di chiusura e gancio aggiuntivi
Cierre adicional y gancho de cierre



- A) Cut off
- B) M5 holes
- C) Fastening of locking hook with M5x8 ISO7380 screws
- D) Fastening of handle and of additional locking nose with M5x8 ISO2010/ISO7047 screws
- E) A 70122X nn connection rod required to connect the handle to additional locking nose
- F) Ø5.2 mm holes

For any additional information please contact our technical office.

- A) Taglio del profilo
- B) Fori M5
- C) Fissaggio punto di chiusura e gancio
addizionale con viti M5x8 ISO7380
- D) Fissaggio della maniglia con viti M5x8
ISO2010/ISO7047
- E) 70122X nn asta di collegamento necessaria
per collegare la maniglia al punto di chiusura
addizionale
- F) Fori Ø5.2 mm

Per ulteriori informazioni contattare l'ufficio tecnico.

- A) Fresado de perfil
- B) Oreficios M5
- C) Fijación del punto de bloqueo y gancho adicional con tornillos M5x8 ISO7380
- D) Fijación del tirador con tornillos M5x8 ISO2010/ISO7047
- E) 70122X sin varilla de conexión necesaria para conectar la manija al punto de bloqueo adicional
- F) Oreficios Ø5.2 mm

Para más información contactar la nuestra oficina técnica.

Installation

Heritage window handle
Open in, double leaf window

Montaggio

Maniglia Heritage per finestra
Finestra a due battenti apertura interna

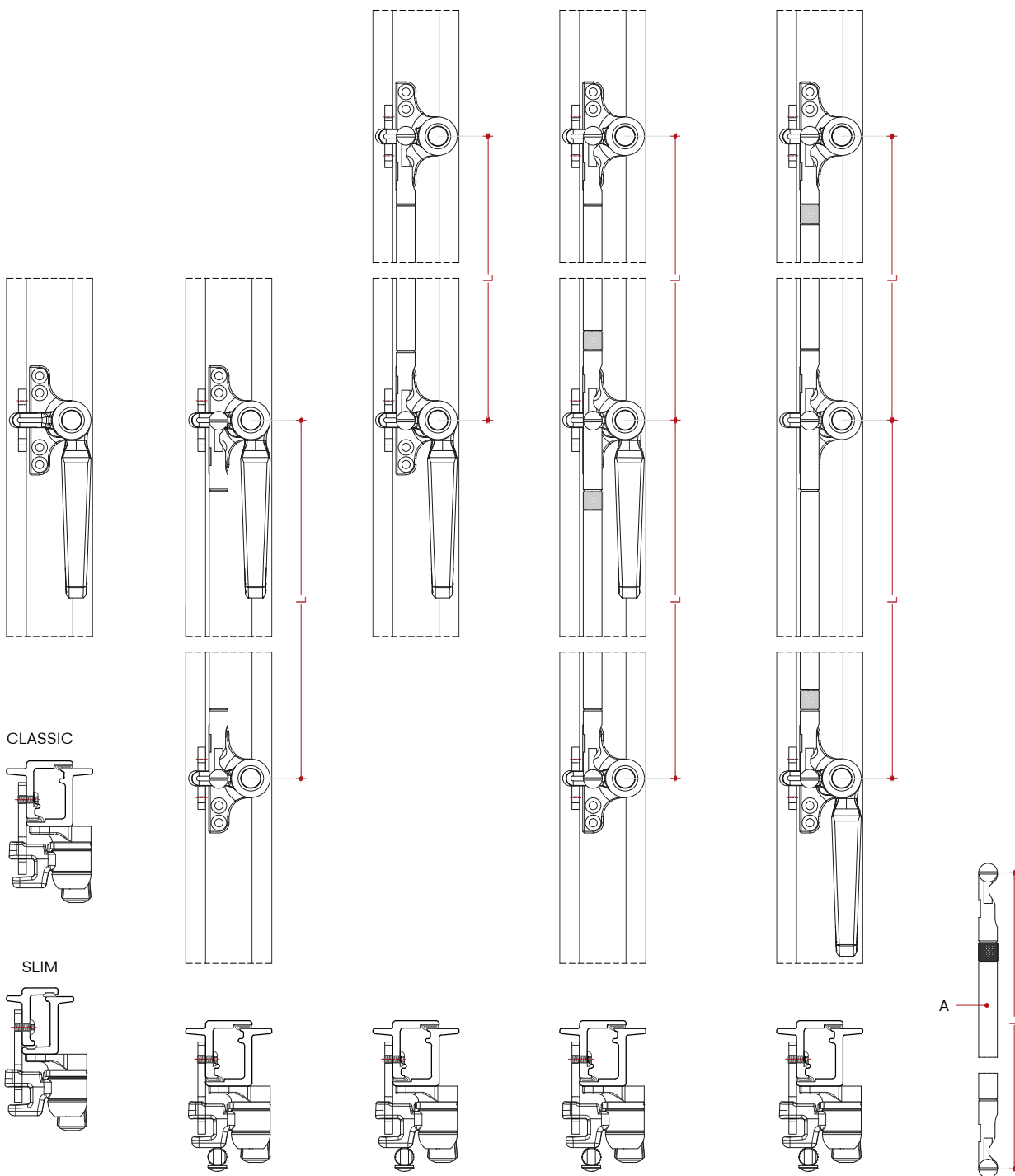
Montaje

Manilla de ventana Heritage
Apertura hacia dentro, ventana de 1 hoja

MONO

DUPLEX

TRIPLEX



Scale 1:4

A) Connection rod

Code	L
701220 nn	600 mm
701221 nn	750 mm
701222 nn	900 mm
701223 nn	1050 mm
701224 nn	1200 mm

Scala 1:4

A) Barra di collegamento

Code	L
701220 nn	600 mm
701221 nn	750 mm
701222 nn	900 mm
701223 nn	1050 mm
701224 nn	1200 mm

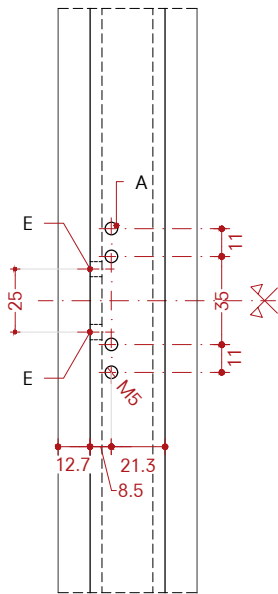
Escala 1:4

A) Barra de enlace

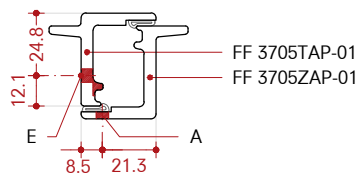
Code	L
701220 nn	600 mm
701221 nn	750 mm
701222 nn	900 mm
701223 nn	1050 mm
701224 nn	1200 mm

Assembly / Montaggio / Montaje

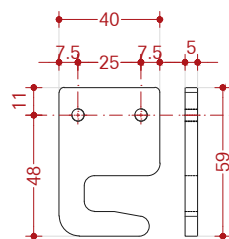
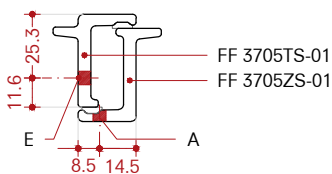
Profiles drilling
Foratura profili
Orificios en perfiles



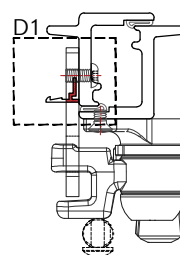
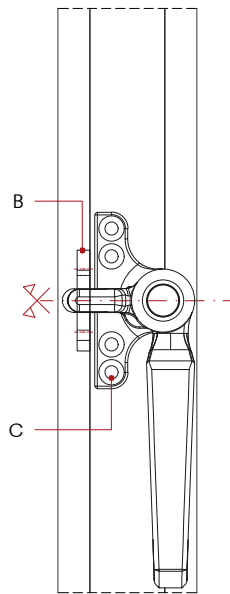
CLASSIC



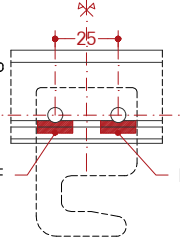
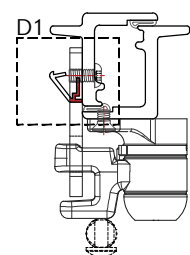
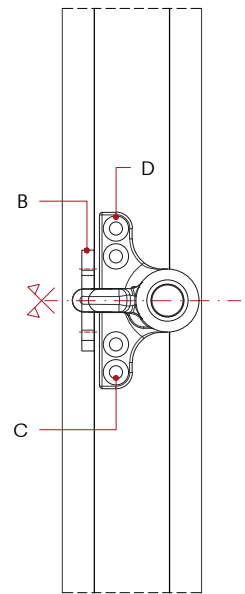
SLIM



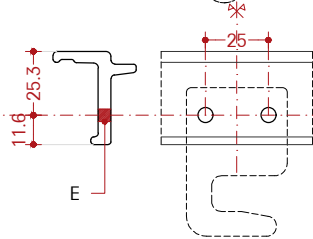
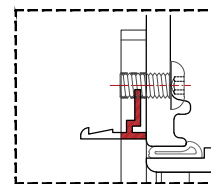
Handle and locking hook
Maniglia e gancio di chiusura
Manilla y gancho de cierre



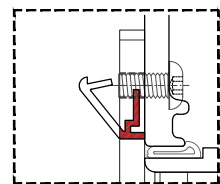
Additional locking nose and hook
Punto di chiusura e gancio aggiuntivi
Cierre adicional y gancho de cierre



DETAIL 1



DETAIL 2



- A) M5 holes
- B) Fastening of locking hook with M5x10 ISO7380 screws
- C) Fastening of handle and of additional locking nose with M5x8 ISO2010/ISO7047 screws
- D) A 70122X nn connection rod required to connect the handle to additional locking nose
- E) Ø5.2 mm holes
- F) Cut off

Detail 1-2) Glazing beads - fastening examples: cut out glazing bead accordingly (42x5.5 mm)

For any additional information please contact our technical office.

- A) Fori M5
- B) Fissaggio punto di chiusura e gancio aggiuntivo con viti M5x10 ISO7380
- C) Fissaggio della maniglia con viti M5x8 ISO2010/ISO7047
- D) 70122X nn asta di collegamento necessaria per collegare la maniglia al punto di chiusura aggiuntivo
- E) Fori Ø5.2 mm
- F) Taglio del profilo

Detail 1-2) Fermavetro - esempi di fissaggio: lavorare il profilo fermavetro in base alla tipologia (42x5.5 mm)

Per ulteriori informazioni contattare l'ufficio tecnico.

- A) Oreficios M5
- B) Fijación del punto de bloqueo y gancho adicional con tornillos M5x10 ISO7380
- C) Fijación del tirador con tornillos M5x8 ISO2010/ISO7047
- D) 70122X nn varilla de conexión necesaria para conectar la manija al punto de bloqueo adicional
- E) Oreficios Ø5.2 mm
- F) Fresado de perfil

Detail 1-2) Barras de soporte de cristal - ejemplos de desenganche sujeción barra soporte cristal (42x5.5 mm)

Para más información contactar la nuestra oficina técnica.

Installation

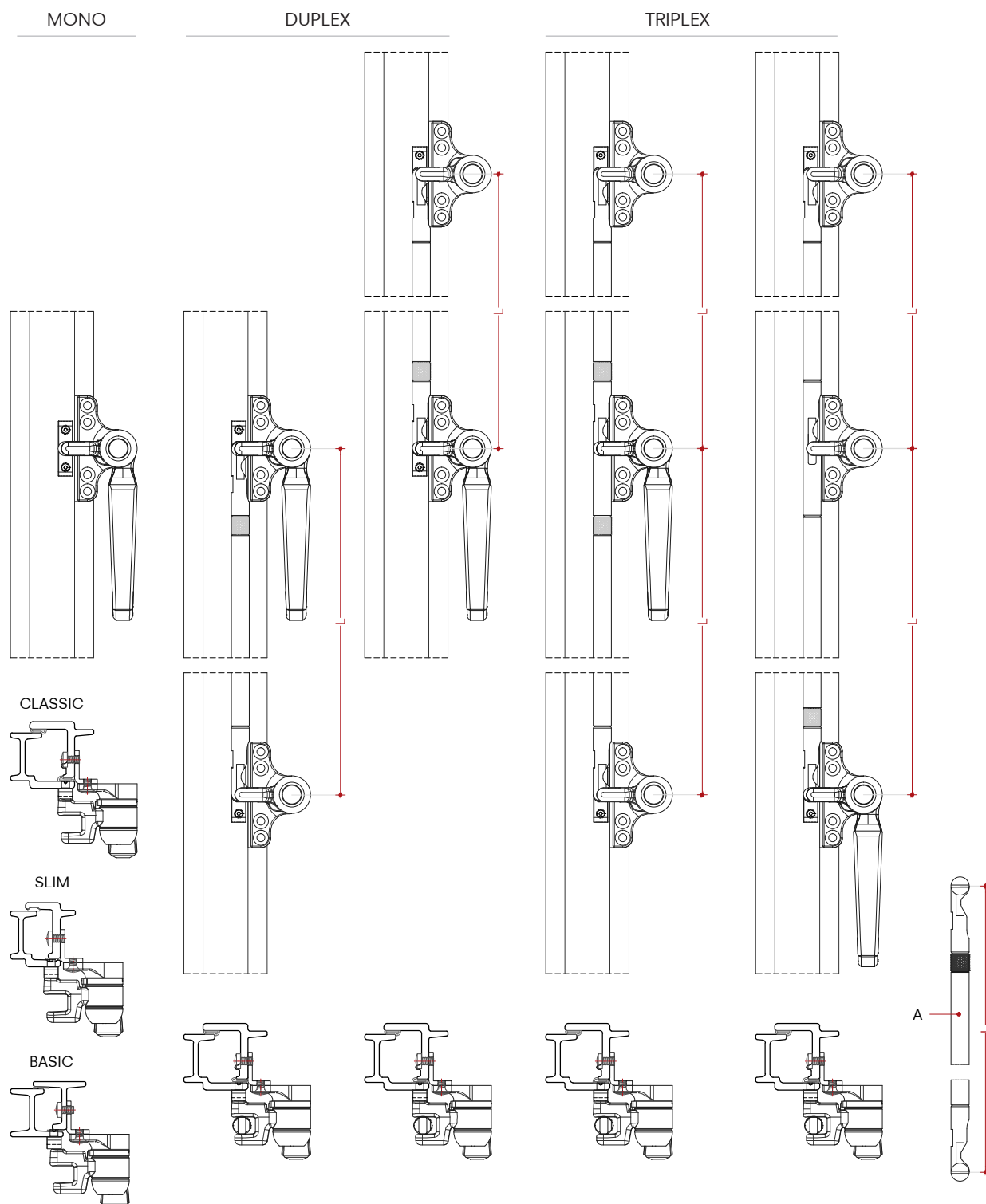
Heritage window handle
Open out, single leaf window

Montaggio

Maniglia Heritage per finestra
Finestra a un battente apertura esterna

Montaje

Manilla de ventana Heritage
Apertura hacia fuera, ventana de 1 hoja



Scale 1:4

A) Connection rod

Code	L
701220 nn	600 mm
701221 nn	750 mm
701222 nn	900 mm
701223 nn	1050 mm
701224 nn	1200 mm

Scala 1:4

A) Barra di collegamento

Code	L
701220 nn	600 mm
701221 nn	750 mm
701222 nn	900 mm
701223 nn	1050 mm
701224 nn	1200 mm

Escala 1:4

A) Barra de enlace

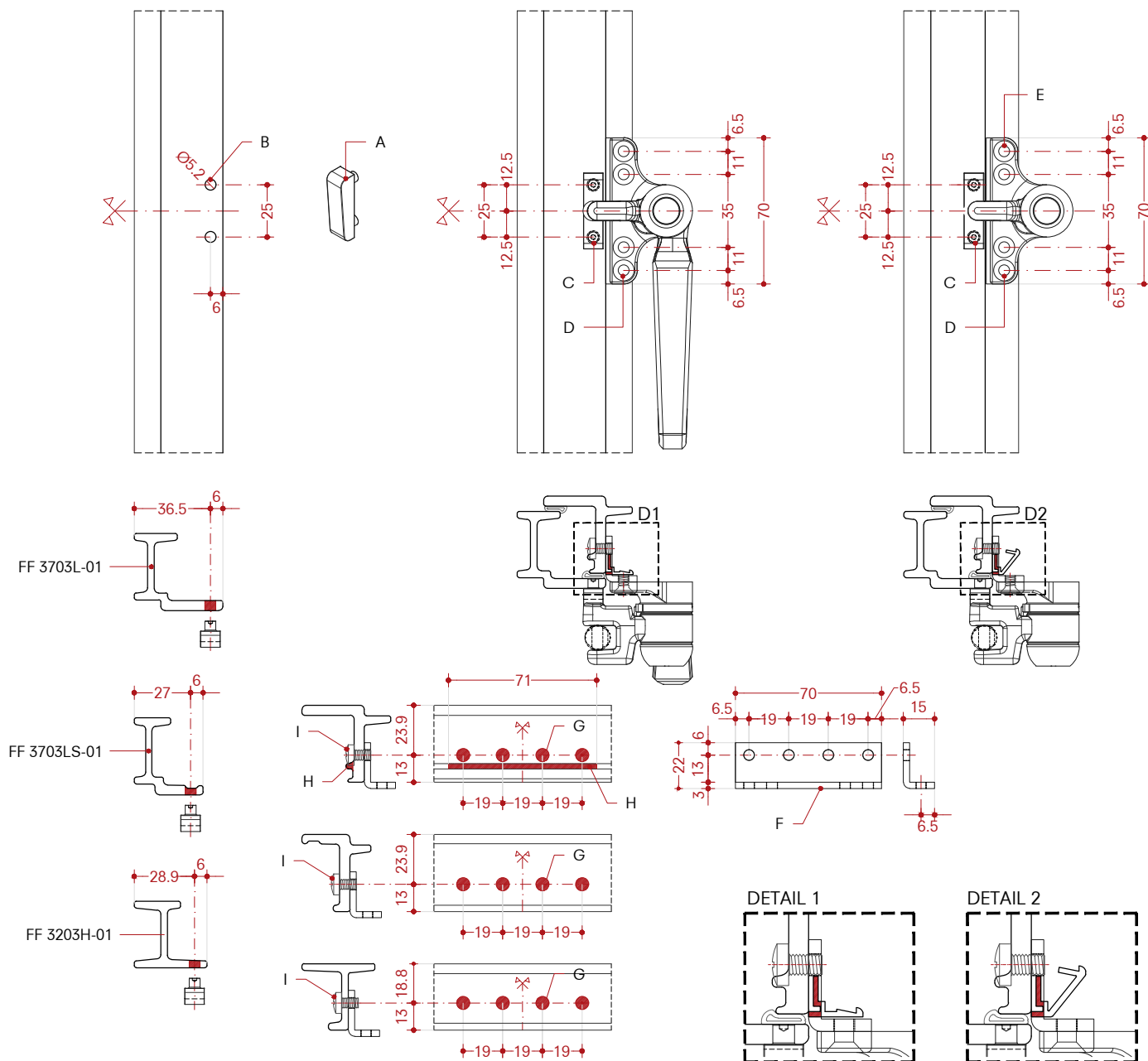
Code	L
701220 nn	600 mm
701221 nn	750 mm
701222 nn	900 mm
701223 nn	1050 mm
701224 nn	1200 mm

Assembly / Montaggio / Montaje

Profiles drilling
Foratura profili
Orificios en perfiles

Handle and locking wedge
Maniglia e gancio di chiusura
Manilla y gancho de cierre

Additional locking nose and hook
Punto di chiusura e gancio additionali
Cierre adicional y gancho de cierre



- A) Wedge 700109 NB
- B) Ø5.2 mm holes on frame profile
- C) Fastening of 700109 NB on frame profile
- D) Fastening of handle and of additional locking nose with M5x8 ISO2010/ISO7047 screws
- E) A 70122X nn connection rod required to connect the handle to additional locking nose
- F) Bracket D04121-03
- G) Ø5.2 mm holes
- H) Cut off
- I) Fastening with M5x8 ISO7045 screws

Detail 1-2) Glazing beads - fastening examples: cut out glazing bead accordingly (71x3.2 mm)

For any additional information please contact our technical office.

- A) Cuneo 700109 NB
- B) Fori Ø5.2 mm su profilo telaio
- C) Fissaggio 700109 NB su profilo telaio
- D) Fissaggio della maniglia con viti M5x8 ISO2010/ISO7047
- E) 70122X nn asta di collegamento necessaria per collegare la maniglia al punto di chiusura additional
- F) Staffa D04121-03
- G) Fori Ø5.2 mm
- H) Taglio del profilo
- I) Fissaggio con viti M5x8 ISO7045

Detail 1-2) Fermavetro - esempi di fissaggio: lavorare il profilo fermavetro in base alla tipologia (71x3.2 mm)

Per ulteriori informazioni contattare l'ufficio tecnico.

- A) Cuña de bloqueo 700109 NB
- B) Oreficios Ø5.2 mm en el perfil del marco
- C) Fijación 700109 NB en el perfil del marco
- D) Fijación del tirador con tornillos M5x8 ISO2010/ISO7047
- E) 70122X nn varilla de conexión necesaria para conectar la manija al punto de bloqueo adicional
- F) Ángulo D04121-03
- G) Oreficios Ø5.2 mm
- H) Fresado de perfil
- I) Fijación con tornillos M5x8 ISO7045

Detail 1-2) Barras de soporte de cristal - ejemplos de desenganche sujeción barra soporte cristal (71x3.2 mm)

Para más información contactar la nuestra oficina técnica.

Installation

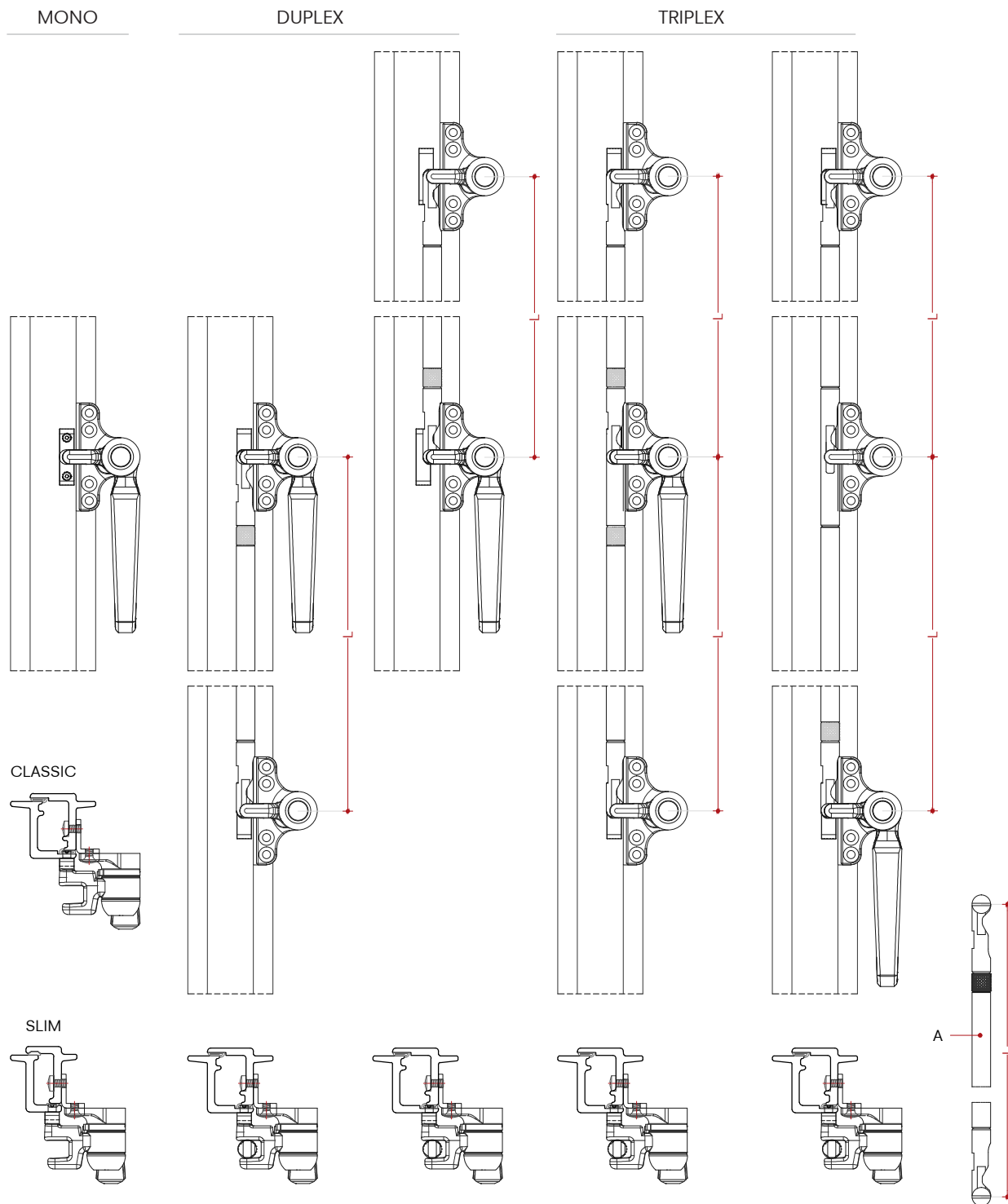
Heritage window handle
Open out, double leaf window

Montaggio

Maniglia Heritage per finestra
Finestra a due battenti apertura esterna

Montaje

Manilla de ventana Heritage
Apertura hacia fuera, ventana de 1 hoja



Scale 1:4

A) Connection rod

Code	L
701220 nn	600 mm
701221 nn	750 mm
701222 nn	900 mm
701223 nn	1050 mm
701224 nn	1200 mm

Scala 1:4

A) Barra di collegamento

Code	L
701220 nn	600 mm
701221 nn	750 mm
701222 nn	900 mm
701223 nn	1050 mm
701224 nn	1200 mm

Escala 1:4

A) Barra de enlace

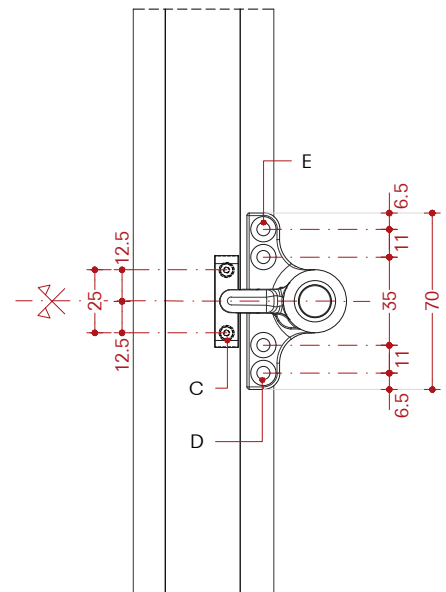
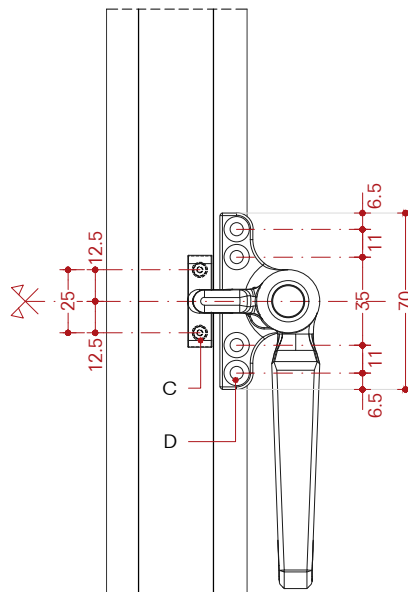
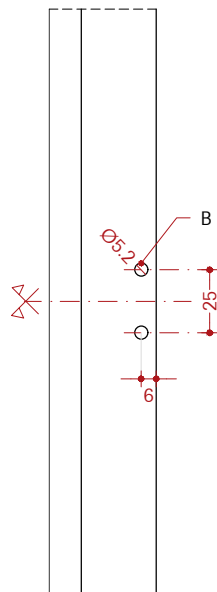
Code	L
701220 nn	600 mm
701221 nn	750 mm
701222 nn	900 mm
701223 nn	1050 mm
701224 nn	1200 mm

Assembly / Montaggio / Montaje

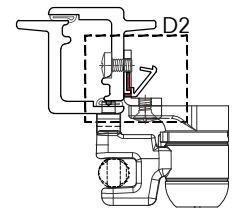
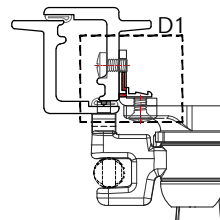
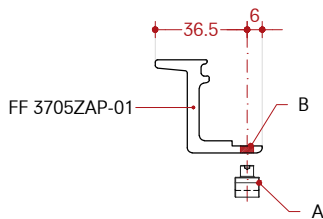
Profiles drilling
Foratura profili
Orificios en perfiles

Handle and locking wedge
Maniglia e gancio di chiusura
Manilla y gancho de cierre

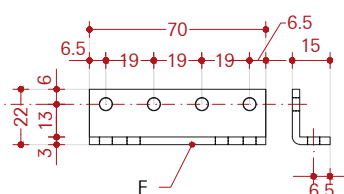
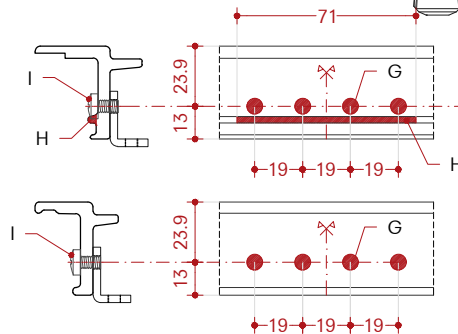
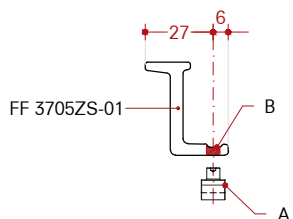
Additional locking nose and hook
Punto di chiusura e gancio additionali
Cierre adicional y gancho de cierre



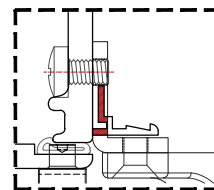
CLASSIC



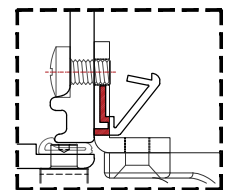
SLIM



DETAIL 1



DETAIL 2



- A) Wedge 700109 NB
- B) Ø5.2 mm holes
- C) Fastening of 700109 NB
- D) Fastening of handle and of additional locking nose with M5x8 ISO2010/ISO7047 screws
- E) A 70122X nn connection rod required to connect the handle to additional locking nose
- F) Bracket D04121-03
- G) Ø5.2 mm holes
- H) Cut off
- I) Fastening with M5x8 ISO7045 screws

Detail 1-2) Glazing beads - fastening examples:
cut out glazing bead accordingly
(71x3.2 mm)

For any additional information please contact
our technical office.

- A) Cuneo 700109 NB
- B) Fori Ø5.2 mm
- C) Fissaggio 700109 NB
- D) Fissaggio della maniglia con viti M5x8 ISO2010/ISO7047
- E) 70122X nn asta di collegamento necessaria per collegare la maniglia al punto di chiusura
- F) Staffa D04121-03
- G) Fori Ø5.2 mm
- H) Taglio del profilo
- I) Fissaggio con viti M5x8 ISO7045

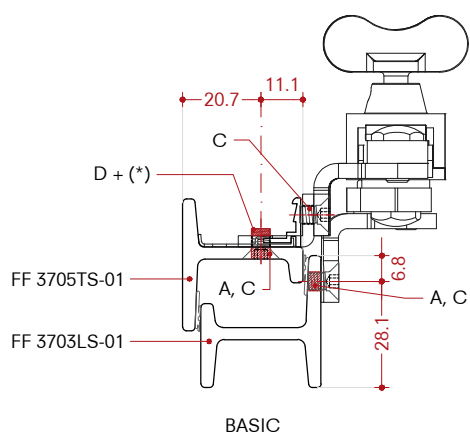
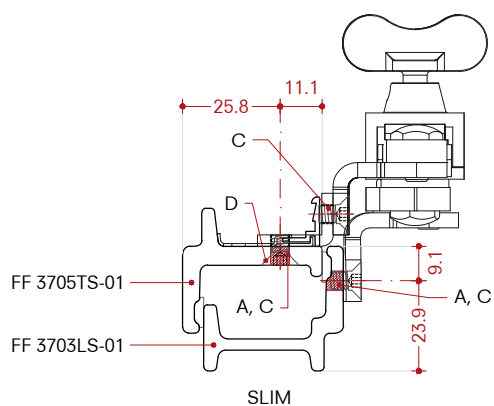
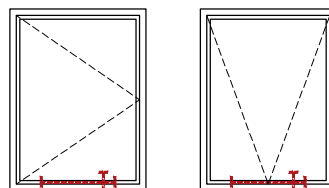
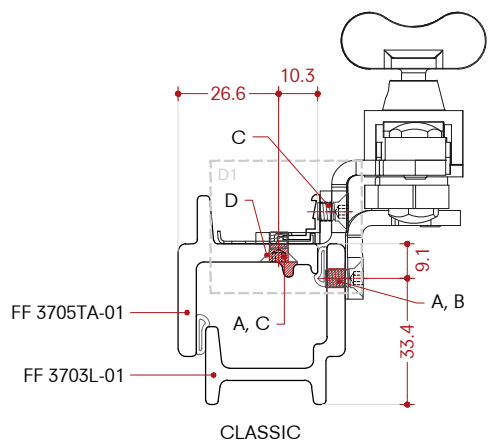
Detail 1-2) Fermavetro - esempi di fissaggio:
lavorare il profilo fermavetro in base
alla tipologia (71x3.2 mm)

Per ulteriori informazioni contattare l'ufficio
tecnico.

- A) Cuña de bloqueo 700109 NB
- B) Oreficios Ø5.2 mm
- C) Fijación 700109 NB
- D) Fijación del tirador con tornillos M5x8 ISO2010/ISO7047
- E) 70122X nn varilla de conexión necesaria para conectar la manija al punto de bloqueo
- F) Ángulo D04121-03
- G) Oreficios Ø5.2 mm
- H) Fresado de perfil
- I) Fijación con tornillos M5x8 ISO7045

Detail 1-2) Barras de soporte de cristal -
ejemplos de desenganche sujeción
barra soporte cristal (71x3.2 mm)

Para más información contactar la nuestra
oficina técnica.

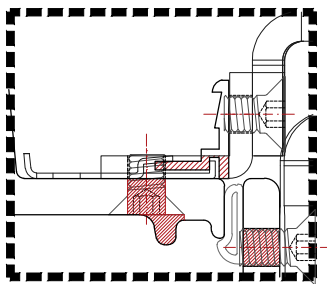
InstallationSlide stay 70011X nn
Open out**Montaggio**Braccio di bloccaggio scorrevole
70011X nn
Apertura esterna**Montaje**Soporte deslizante 70011X nn
Apertura hacia fuera

A) M5 holes
B) Fastening with M5x10 mm ISO10642 screws
C) Fastening with M5x8 mm ISO10642 screws
D) Peg stay brackets D99128-03
(*) Cut the screw

A) fori M5
B) Fissaggio con viti M5x10 mm ISO10642
C) Fissaggio con viti M5x8 mm ISO10642
D) Staffa D99128-03 per supporto braccio di bloccaggio
(*) Accorciare la vite

A) Orificios M5
B) Fijación con tornillos M5x10 mm ISO10642
C) Fijación con tornillos M5x8 mm ISO10642
D) Soportes angulares de acero inoxidable D99128-03
(*) Recortar tornillo

DETAIL 1

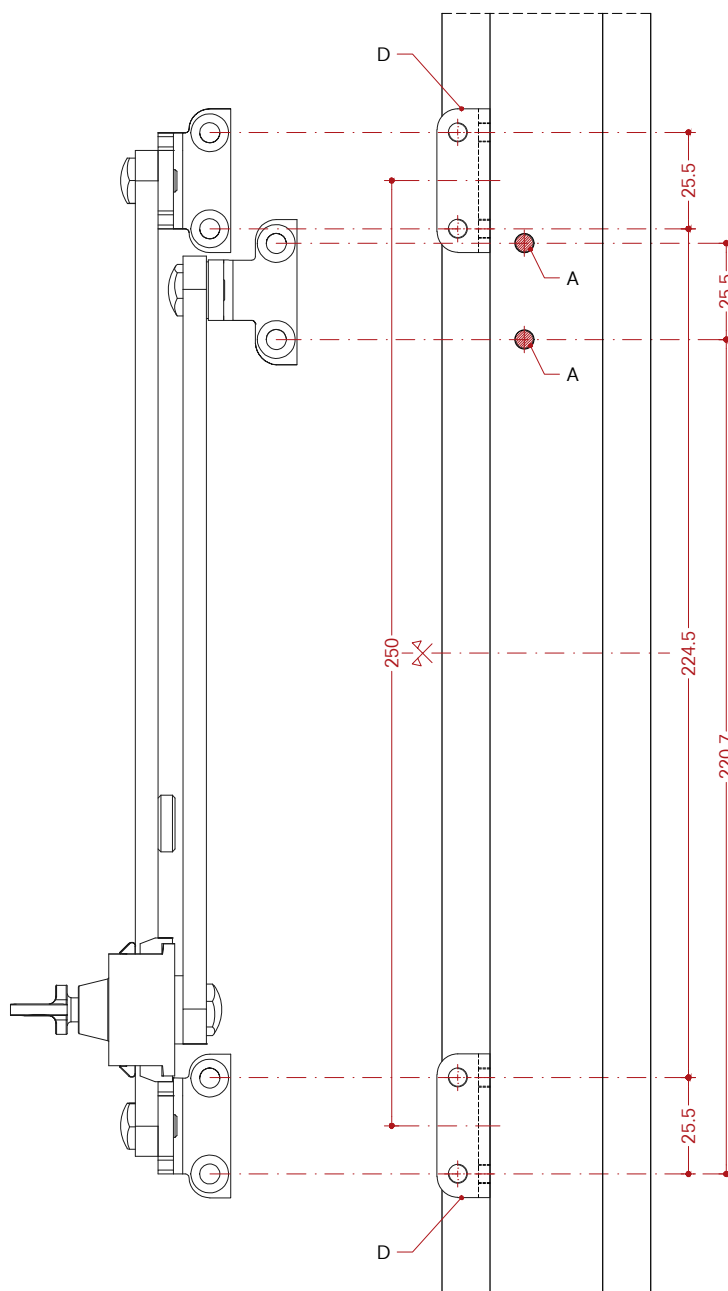


Glazing beads - fastening examples - glazing bead cut out (40x3.2 mm)

Profili fermavetro - esempi di fissaggio - lavorazione profili fermavetro (40x3.2 mm)

Perlas de esmalte - ejemplos de fijación - ajuste de la cuenta de esmalte (cuenta de esmalte de esmalte 40x3.2 mm)

CLASSIC



Installation

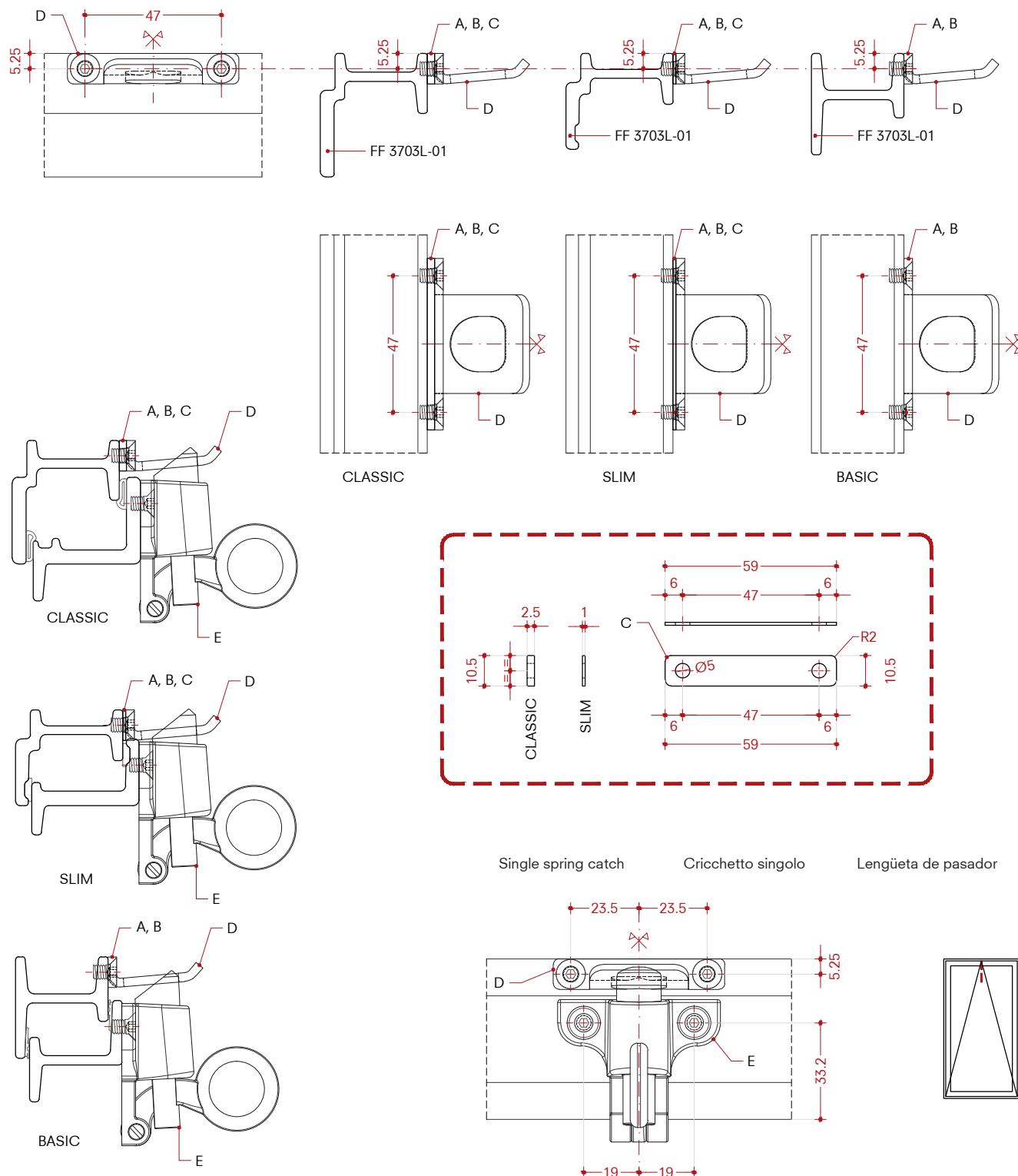
Spring catch 703000 nn
and spring catch plate 703001 nn

Montaggio

Cricchetto 703000 nn
e riscontro 703001 nn

Montaje

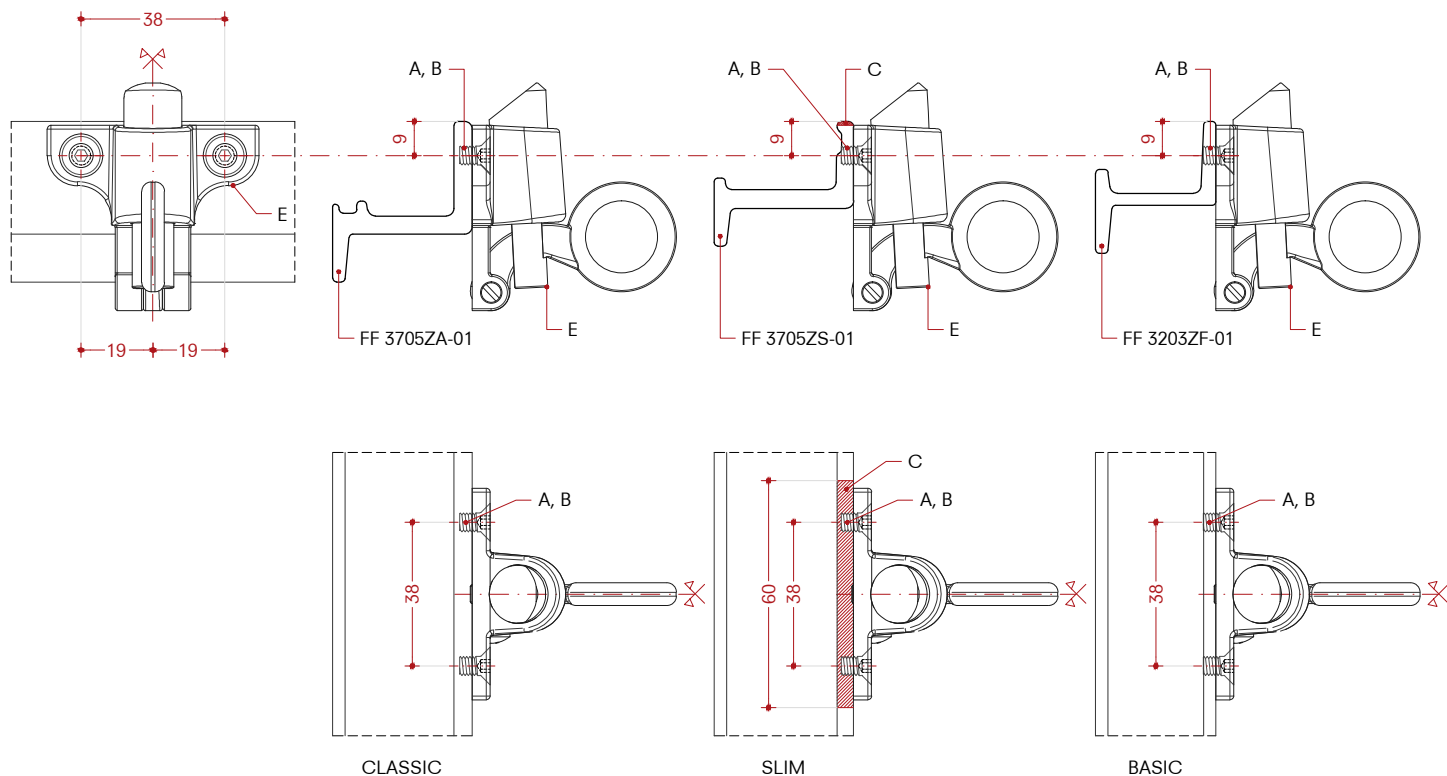
Pasador 703000 nn
y placa de fijador 703001 nn



- A) M5 holes
- B) Fastening with M5x8 ISO10642 screws
- C) Shim stainless steel AISI 304 in-house production
- D) 703001 nn spring catch plate
- E) 703000 nn spring catch

- A) Fori M5
- B) Fissaggio con viti M5x8 ISO10642
- C) Piatto in acciaio inox AISI 304 (non fornito)
- D) 703001 nn piastra per cricchetto
- E) 703000 nn cricchetto

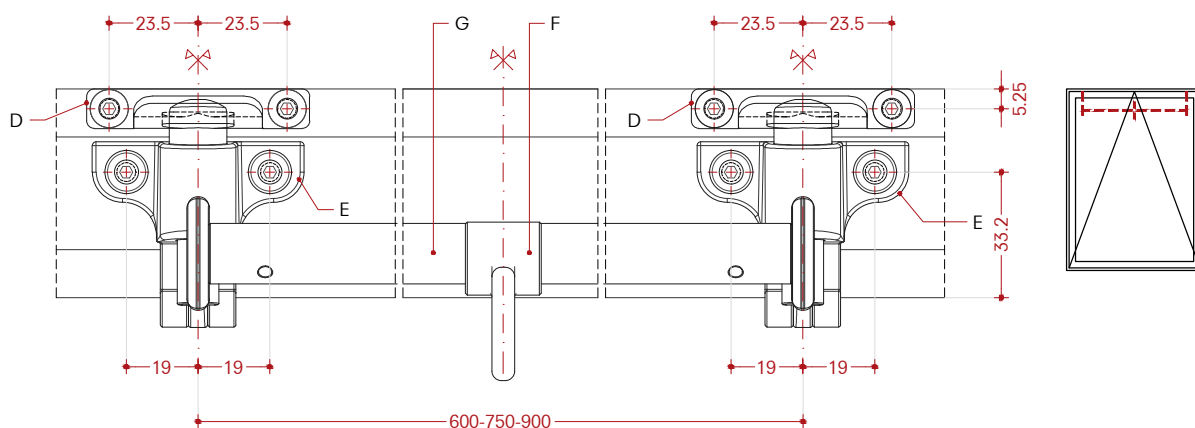
- A) Oreficios M5
- B) Fijación con tornillos M5x8 ISO10642
- C) Placa de acero inoxidable AISI 304 (no provisto)
- D) 703001 nn placa para lengüeta
- E) 703000 nn lengüeta de pasador



Double spring catch

Cricchetto doppio

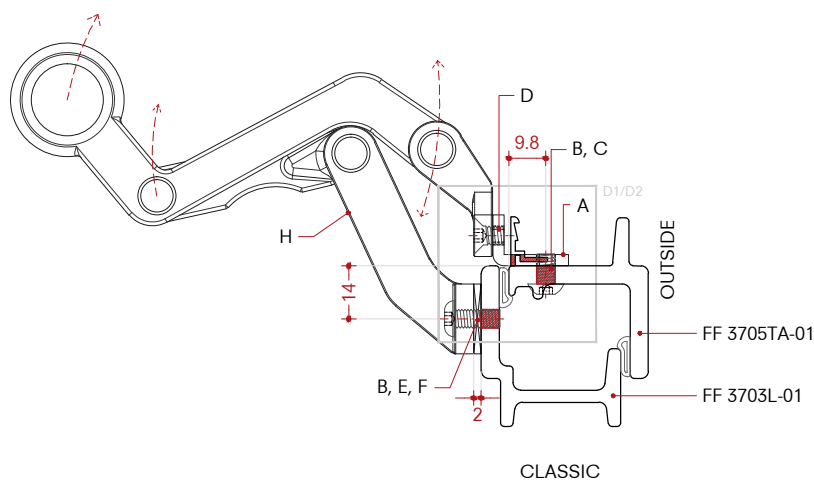
Lengüeta de pasador doble



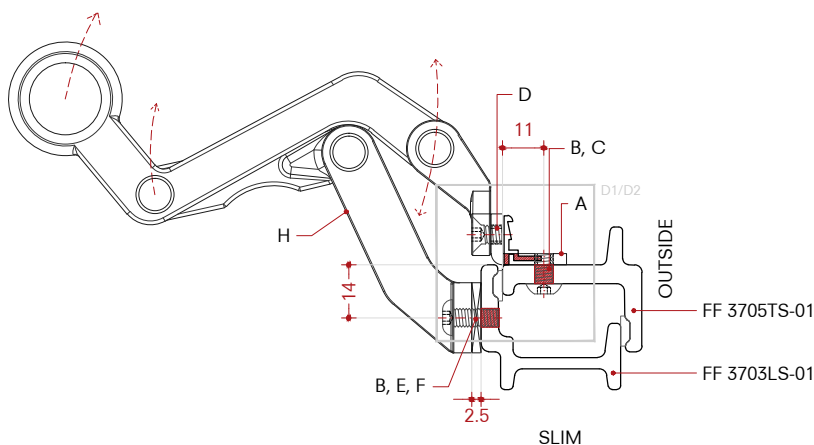
- A) M5 holes
 B) Fastening with M5x8 ISO10642 screws
 C) Cut off
 D) 703001 nn spring catch plate
 E) 703000 nn spring catch
 F) 700520 nn connecting tube ring
 G) Connecting tube
 700510 nn L = 600
 700511 nn L = 750
 700512 nn L = 900

- A) Fori M5
 B) Fissaggio con viti M5x8 ISO10642
 C) Taglio del profilo
 D) 703001 nn piastra per cricchetto
 E) 703000 nn cricchetto
 F) 700520 nn anello tubo collegamento
 G) Tubo di collegamento
 700510 nn L = 600
 700511 nn L = 750
 700512 nn L = 900

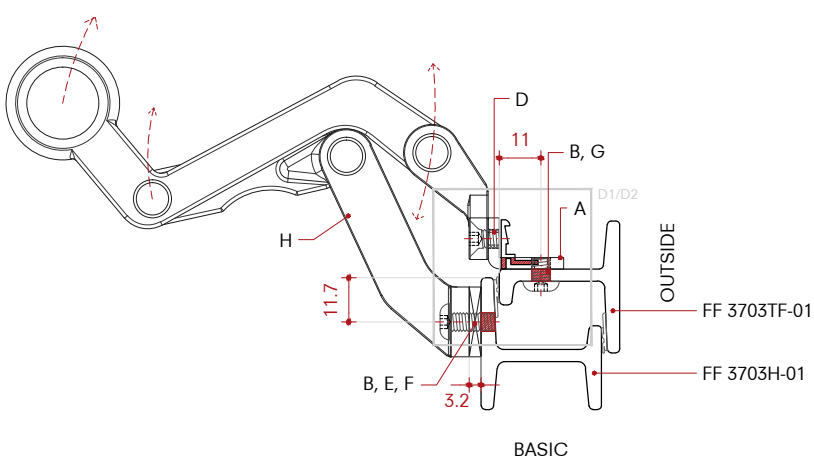
- A) Oreficios M5
 B) Fijación con tornillos M5x8 ISO10642
 C) Fresado de perfil
 D) 703001 nn placa para lengüeta
 E) 703000 nn lengüeta de pasador
 F) 700520 nn anillo tubo de conexión
 G) Tubo de conexión
 700510 nn L = 600
 700511 nn L = 750
 700512 nn L = 900

InstallationFolding opener
700500 nn and 700501 nn**Montaggio**Braccio a compasso
700500 nn e 700501 nn**Montaje**Brazo articulado
700500 nn y 700501 nn

CLASSIC



SLIM



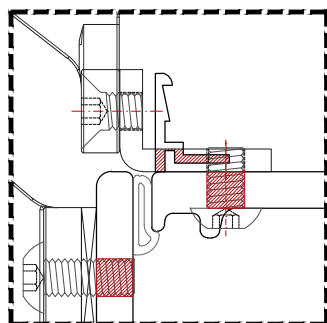
BASIC

A) D04124-03 bracket folding opener
B) Holes Ø5 mm
C) Fastening with M5x8 ISO7380 screws
D) Fastening with M5x8 ISO10642 screws
E) Steel shim (not provided)
F) Fastening with M5x12 ISO7380 screws
G) Fastening with M5x6 ISO7380 screws
H) 700500 nn folding opener

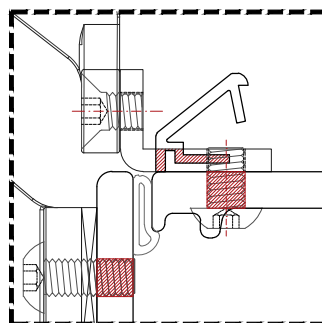
A) D04124-03 staffa per braccio a compasso
B) Fori Ø5 mm
C) Fissaggio con viti M5x8 ISO7380
D) Fissaggio con viti M5x8 ISO10642
E) Piatto in acciaio (no provisto)
F) Fissaggio con viti M5x12 ISO7380
G) Fissaggio con viti M5x6 ISO7380
H) 700500 nn braccio a compasso

A) D04124-03 soporte de brazo articulado
B) Oreficios Ø5 mm
C) Fijación con tornillos M5x8 ISO7380
D) Fijación con tornillos M5x8 ISO10642
E) Placa de acero (no provisto)
F) Fijación con tornillos M5x12 ISO7380
G) Fijación con tornillos M5x6 ISO7380
H) 700500 nn brazo articulado

DETAIL 1



DETAIL 2



Glazing beads - fastening examples - glazing bead cut out (50x3.2 mm)

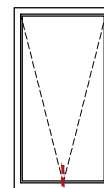
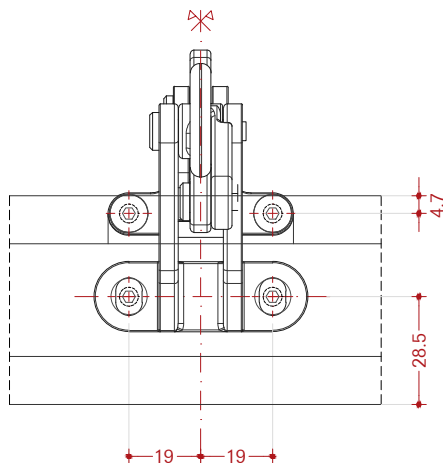
Profili fermavetro - esempi di fissaggio - lavorazione profili fermavetro (50x3.2 mm)

Perlas de esmalte - ejemplos de fijación - ajuste de la cuenta de esmalte (cuenta de esmalte de esmalte 50x3.2 mm)

Single folding opener

Braccio a compasso singolo

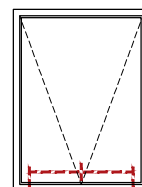
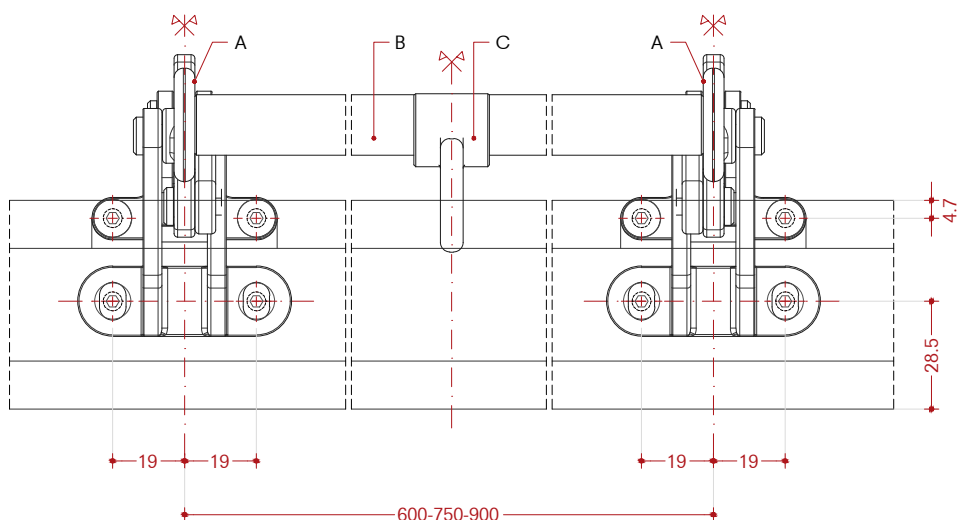
brazo articulado



Double folding opener

Braccio a compasso doppio

Brazo articulado doble



A) 700501 nn double folding opener
 B) 700520 nn connecting tube ring
 C) Connecting tube
 700510 nn L = 600
 700511 nn L = 750
 700512 nn L = 900

A) 700501 nn doppio braccio a compasso
 B) 700520 nn anello tubo collegamento
 C) Tubo di collegamento
 700510 nn L = 600
 700511 nn L = 750
 700512 nn L = 900

A) 700501 nn doble brazo articulado
 B) 700520 nn anillo tubo de conexión
 C) Tubo de conexión
 700510 nn L = 600
 700511 nn L = 750
 700512 nn L = 900

Installation

Peg stay 700110 / 700111 / 700114 /
700115 / 700116

Glazed in
Open out

Montaggio

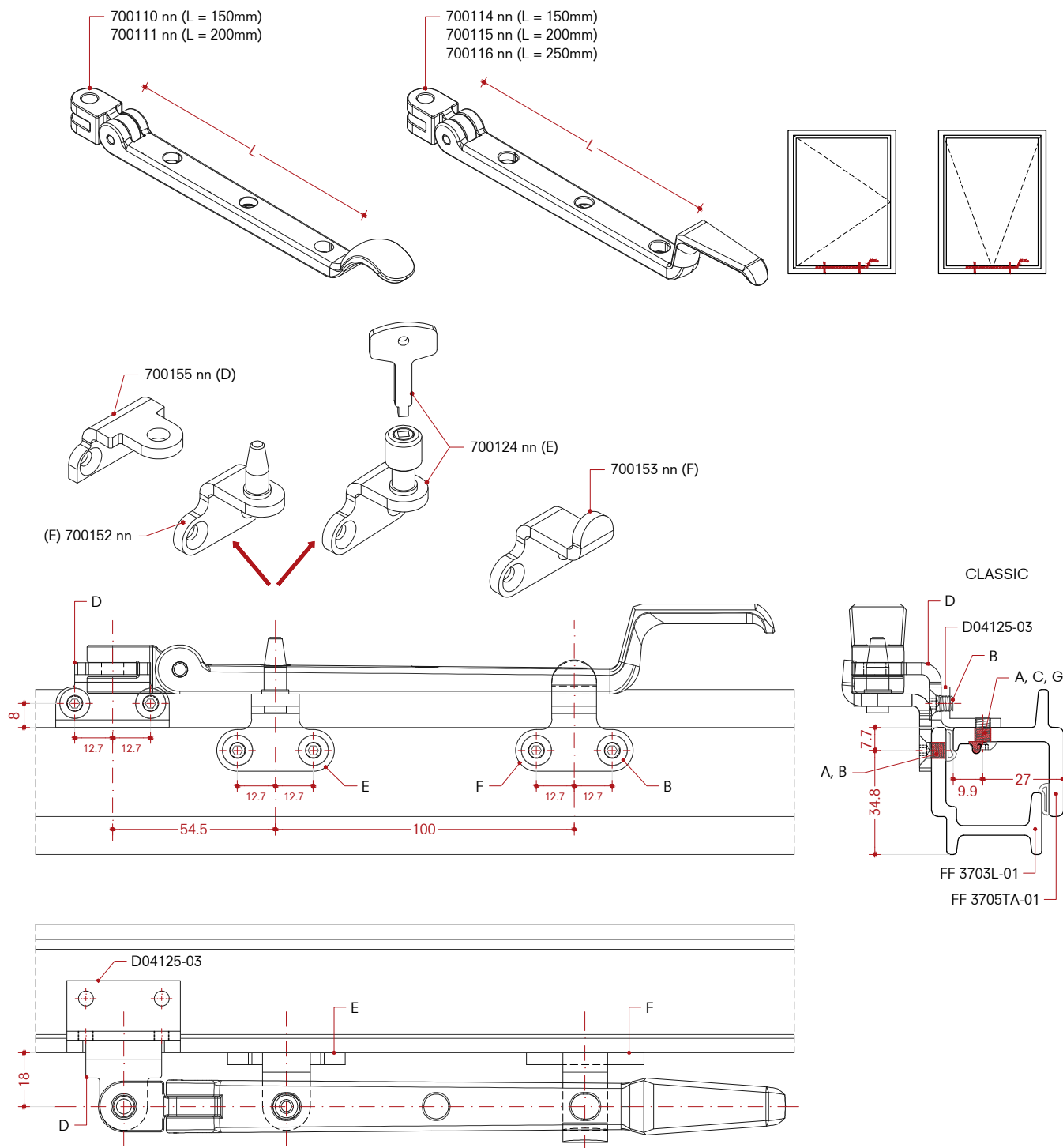
Braccio di bloccaggio 700110 /
700111 / 700114 / 700115 / 700116

Fermavetro interno
Apertura esterna

Montaje

Brazo fijo 700110 / 700111 / 700114 /
700115 / 700116

Junquillos interno
Apertura hacia fuera



- A) M5 holes
- B) Fastening with M5x8 ISO10642 screws
- C) Fastening with M5x8 ISO7380 screws
- D) Peg stay bracket 700155 nn
- E) Peg stay pin 700152 nn option with key 700124 nn
- F) Peg stay rest 700153 nn
- G) Cut off profile

- A) Fori M5
- B) Fissaggio con viti M5x8 ISO10642
- C) Fissaggio con viti M5x8 ISO7380
- D) Staffa per braccio di bloccaggio 700155 nn
- E) Perno fermo per braccio di bloccaggio 700152 nn opzione con chiave 700124 nn
- F) Supporto per braccio di bloccaggio 700153 nn
- G) Taglio del profilo

- A) Oreficios M5
- B) Fijación con tornillos M5x8 ISO10642
- C) Fijación con tornillos M5x8 ISO7380
- D) Soporte para brazo de bloqueo 700155 nn
- E) Pasador de tope para brazo de bloqueo 700152 nn opción con llave 700124 nn
- F) Soporte para brazo de bloqueo 700153 nn
- G) Fresado de perfil

InstallationPeg stay 700110 / 700111 / 700114 /
700115 / 700116

Glazed out

Open out

MontaggioBraccio di bloccaggio 700110 /
700111 / 700114 / 700115 / 700116

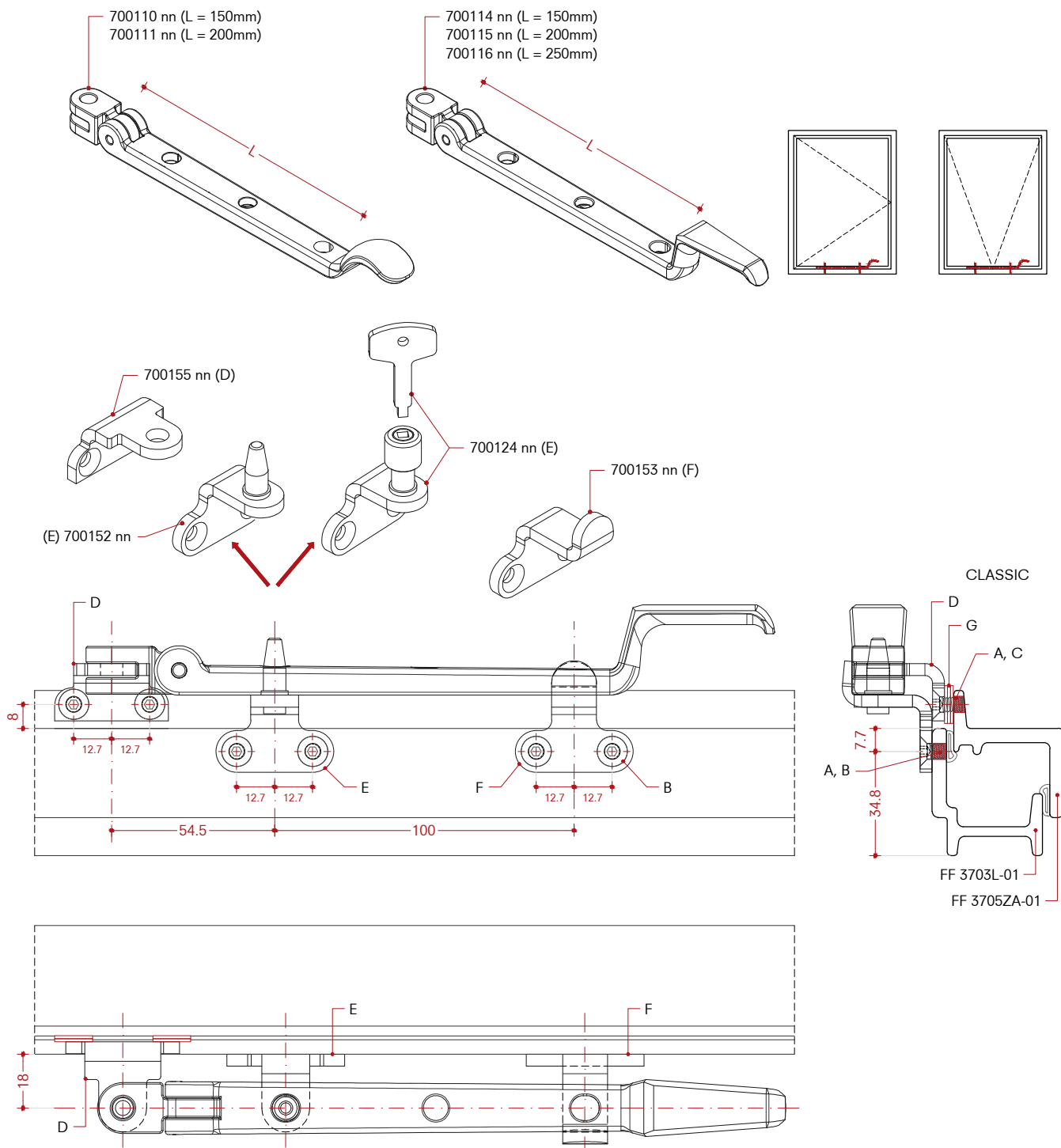
Fermavetro esterno

Apertura esterna

MontajeBrazo fijo 700110 / 700111 / 700114 /
700115 / 700116

Junquillos externo

Apertura hacia fuera



- A) M5 holes
B) Fastening with M5x8 ISO10642 screws
C) Fastening with M5x10 ISO10642 screws
D) Peg stay bracket 700155 nn
E) Peg stay pin 700152 nn option with key 700124 nn
F) Peg stay rest 700153 nn
G) n°02 shims 12.7x12.7x1 mm (not provided)

- A) Fori M5
B) Fissaggio con viti M5x8 ISO10642
C) Fissaggio con viti M5x10 ISO10642
D) Staffa per braccio di bloccaggio 700155 nn
E) Perno fermo per braccio di bloccaggio 700152 nn opzione con chiave 700124 nn
F) Supporto per braccio di bloccaggio 700153 nn
G) n°02 spessori 12.7x12.7x1 mm (non fornita)

- A) Oreficios M5
B) Fijación con tornillos M5x8 ISO10642
C) Fijación con tornillos M5x10 ISO10642
D) Soporte para brazo de bloqueo 700155 nn
E) Pasador de tope para brazo de bloqueo 700152 nn opción con llave 700124 nn
F) Soporte para brazo de bloqueo 700153 nn
G) n°02 Espesores 12.7x12.7x1 mm (no provisto)

InstallationPeg stay 700110 / 700111 / 700114 /
700115 / 700116

Glazed in

Open out

MontaggioBraccio di bloccaggio 700110 /
700111 / 700114 / 700115 / 700116

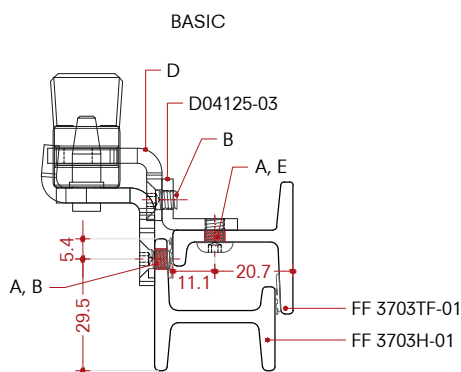
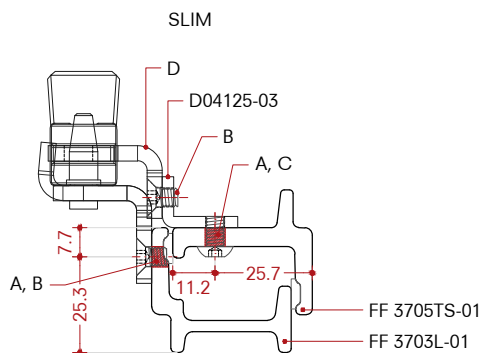
Fermavetro interno

Apertura esterna

MontajeBrazo fijo 700110 / 700111 / 700114 /
700115 / 700116

Junquillos interno

Apertura hacia fuera



- A) M5 holes
- B) Fastening with M5x8 ISO10642 screws
- C) Fastening with M5x8 ISO7380 screws
- D) Peg stay bracket 700155 nn
- E) Fastening with M5x6 ISO7380 screws

- A) Fori M5
- B) Fissaggio con viti M5x8 ISO10642
- C) Fissaggio con viti M5x8 ISO7380
- D) Staffa per braccio di bloccaggio 700155 nn
- E) Fissaggio con viti M5x6 ISO7380

- A) Oreficios M5
- B) Fijación con tornillos M5x8 ISO10642
- C) Fijación con tornillos M5x8 ISO7380
- D) Soporte para brazo de bloqueo 700155 nn
- E) Fijación con tornillos M5x6 ISO7380

InstallationPeg stay 700110 / 700111 / 700114 /
700115 / 700116

Glazed out

Open out

MontaggioBraccio di bloccaggio 700110 /
700111 / 700114 / 700115 / 700116

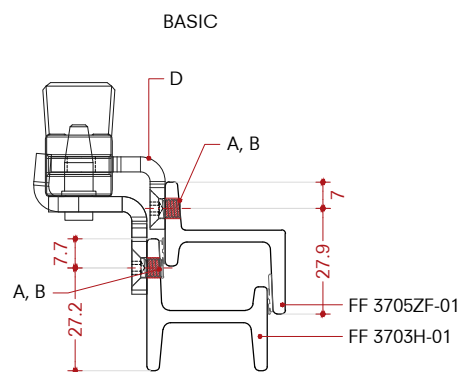
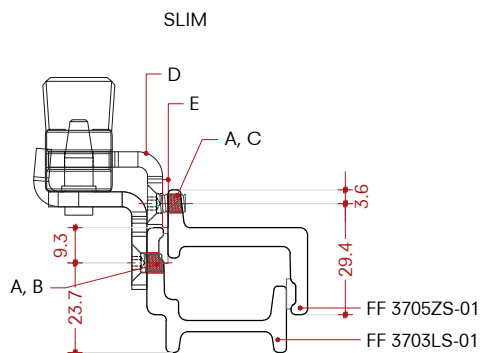
Fermavetro esterno

Apertura esterna

MontajeBrazo fijo 700110 / 700111 / 700114 /
700115 / 700116

Junquillos externo

Apertura hacia fuera



A) M5 holes
B) Fastening with M5x8 ISO10642 screws
C) Fastening with M5x10 ISO10642 screws
D) Peg stay bracket 700155 nn
E) Shim 12.7x12.7x1 mm (not provided)

A) Fori M5
B) Fissaggio con viti M5x8 ISO10642
C) Fissaggio con viti M5x10 ISO10642
D) Staffa per braccio di bloccaggio 700155 nn
E) Spessore 12.7x12.7x1 mm (non fornita)

A) Oreficios M5
B) Fijación con tornillos M5x8 ISO10642
C) Fijación con tornillos M5x10 ISO10642
D) Soporte para brazo de bloqueo 700155 nn
E) Pasador de tope para brazo de bloqueo 700152 nn opción con llave 700124 nn
F) Soporte para brazo de bloqueo 700153 nn
G) Espesor 12.7x12.7x1 mm (no provisto)

Accessories installation:	Montaggio accessori:	Montaje accesorios:	
Locks	Serrature	Cerraduras	5.11

Installation

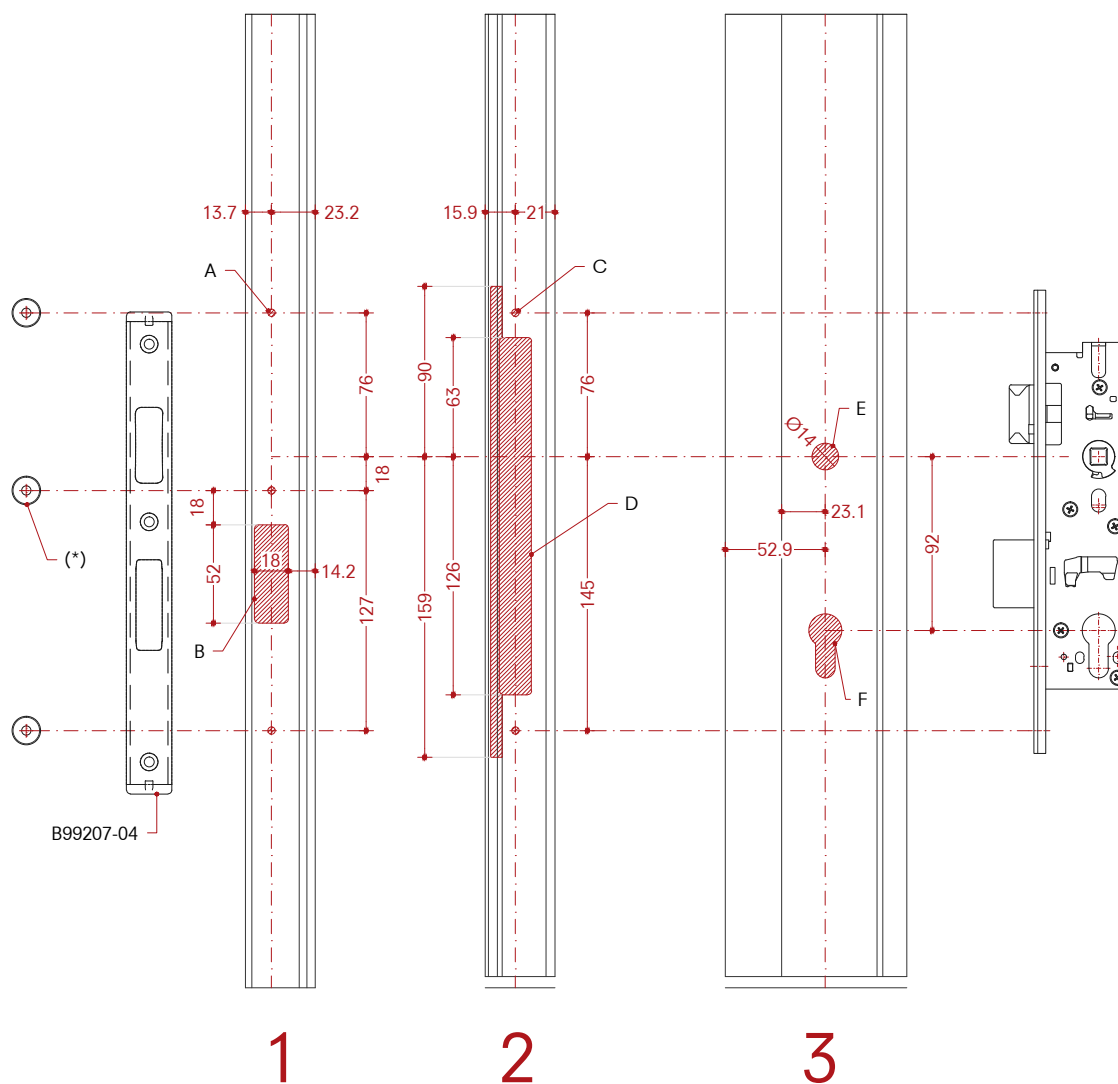
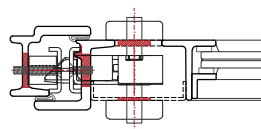
Lock B99015-02 - W20 Classic
with full height additional profile
FF 3203TN-01
Open in door

Montaggio

Serratura B99015-02 - W20 Classic
con riporto serratura a tutt'altezza
FF 3203TN-01
Porta apertura interna

Montaje

Cerradura B99015-02 - W20 Classic
con perfil adicional de altura
completa FF 3203TN-01
Puerta apertura hacia dentro



Scale 1:4

- A) Holes M4 in door frame
- B) Cut-out in door frame
- C) Holes M4 in the door leaf
- D) Milling in the door leaf
- E) Lever handle bore Ø14 mm
- F) Profile cylinder milling

(*) Not provided

Scala 1:4

- A) Foro M4 nel telaio della porta
- B) Foratura del telaio della porta
- C) Foro M4 nell'anta della porta
- D) Fresatura nell'anta della porta
- E) Foro leva maniglia Ø14 mm
- F) Fresatura profili per i cilindri

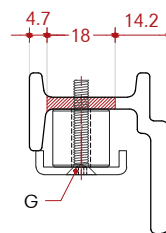
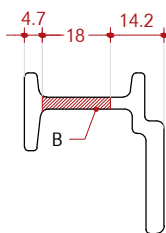
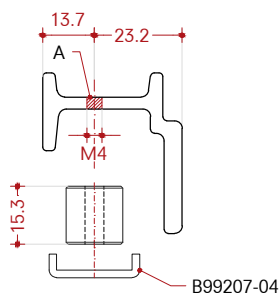
(*) Non fornita

Escala 1:4

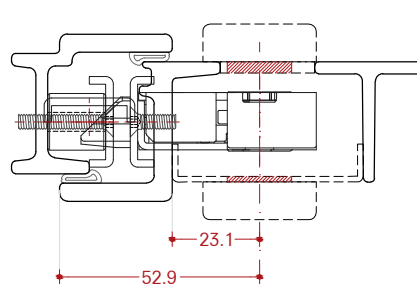
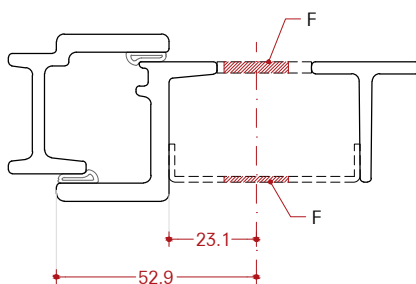
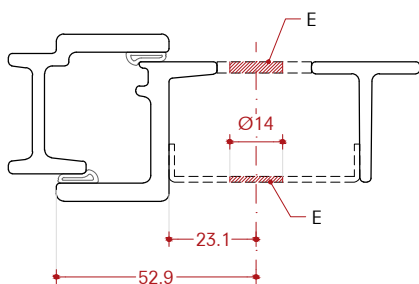
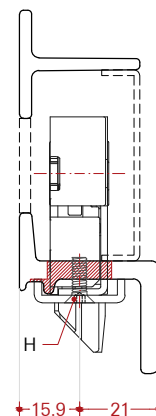
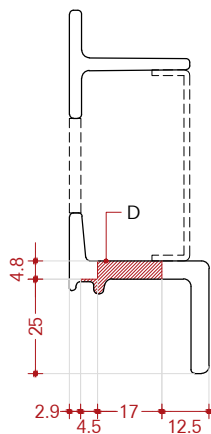
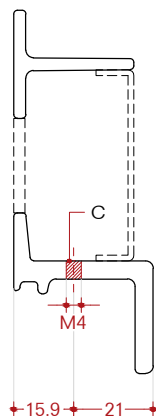
- A) Oreficio de M4 en marco de la puerta
- B) Oreficio en marco de la puerta
- C) Oreficio de M4 en hoja de la puerta
- D) Fresado en hoja de la puerta
- E) Palanca de perfil de Ø14 mm
- F) Fresado en perfil para cilindros

(*) No provisto

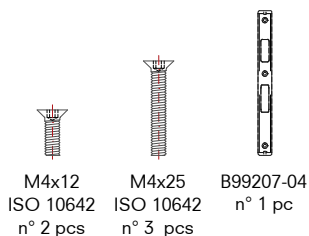
1



2



3



- A) Holes M4 in door frame
- B) Cut-out in door frame
- C) Holes M4 in the door leaf
- D) Milling in the door leaf
- E) Lever handle bore Ø14 mm
- F) Profile cylinder milling
- G) Fastening with M4x25 ISO10642 screws and cut the screws
- H) Fastening with M4x12 ISO10642 screws and cut the screws

- A) Fori M4 nel telaio della porta
- B) Foratura del telaio della porta
- C) Fori M4 nell'anta della porta
- D) Fresatura nell'anta della porta
- E) Foro leva maniglia Ø14 mm
- F) Fresatura profili per i cilindri
- G) Montaggio con viti M4x25 ISO10642 e accorciare le viti
- H) Montaggio con viti M4x12 ISO10642 e accorciare le viti

- A) Orificios de M4 en marco de la puerta
- B) Oreficio en marco de la puerta
- C) Orificios de M4 en hoja de la puerta
- D) Fresado en hoja de la puerta
- E) Palanca de perfil de Ø14 mm
- F) Fresado en perfil para cilindros
- G) Montaje con tornillos M4x25 ISO10642 y recortar tornillos
- H) Montaje con tornillos M4x12 ISO10642 y recortar tornillos

Installation

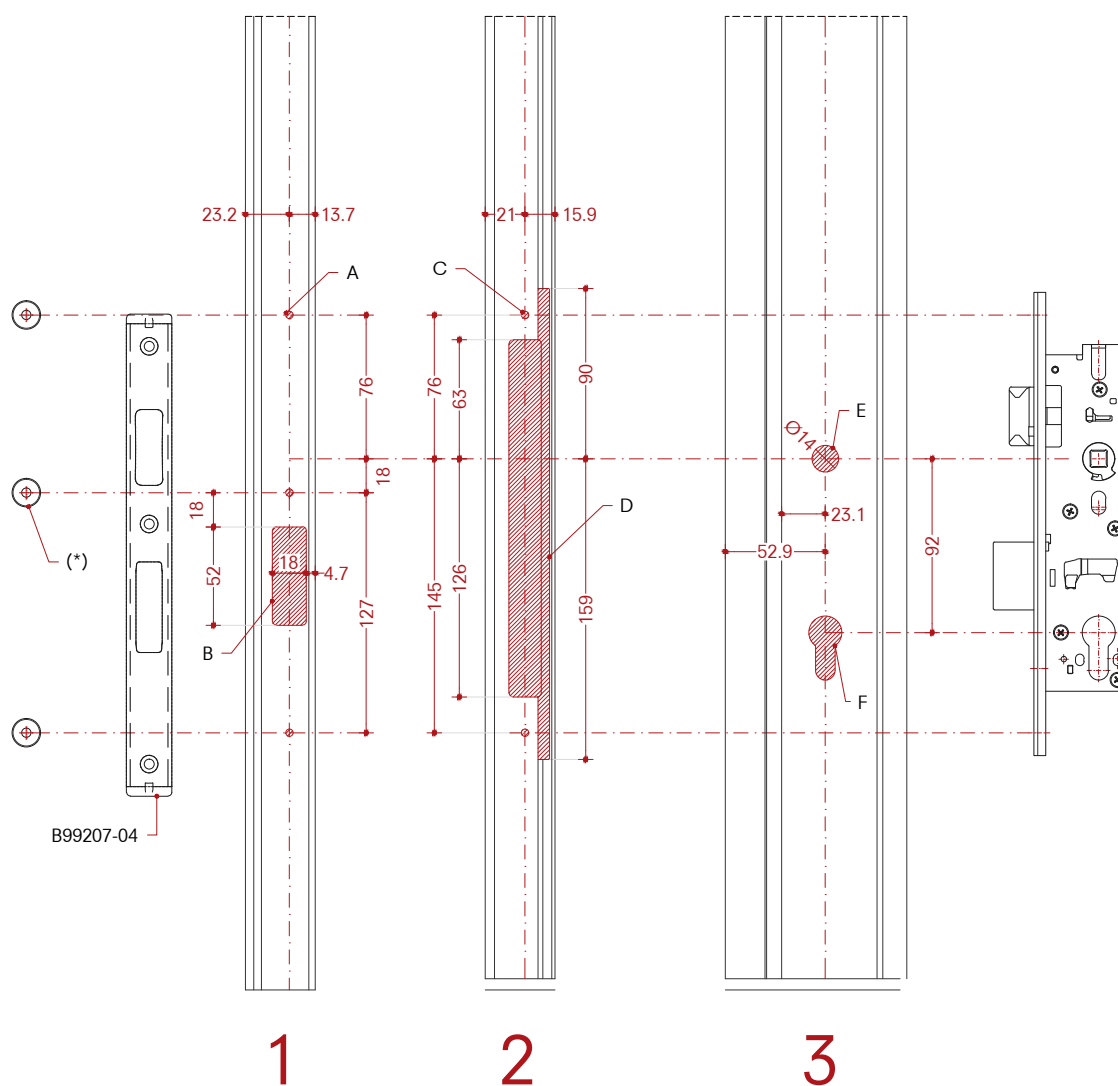
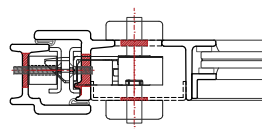
Lock B99015-02 - W20 Classic
with full height additional profile
FF 3203TN-01
Open out door

Montaggio

Serratura B99015-02 - W20 Classic
con riporto serratura a tutt'altezza
FF 3203TN-01
Porta apertura esterna

Montaje

Cerradura B99015-02 - W20 Classic
con perfil adicional de altura
completa FF 3203TN-01
Puerta apertura hacia fuera



Scale 1:4

- A) Holes M4 in door frame
- B) Cut-out in door frame
- C) Holes M4 in the door leaf
- D) Milling in the door leaf
- E) Lever handle bore Ø14 mm
- F) Profile cylinder milling

(*) Not provided

Scala 1:4

- A) Foro M4 nel telaio della porta
- B) Foratura del telaio della porta
- C) Foro M4 nell'anta della porta
- D) Fresatura nell'anta della porta
- E) Foro leva maniglia Ø14 mm
- F) Fresatura profili per i cilindri

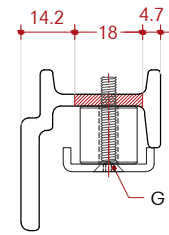
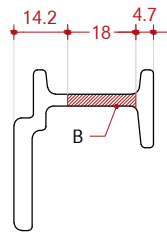
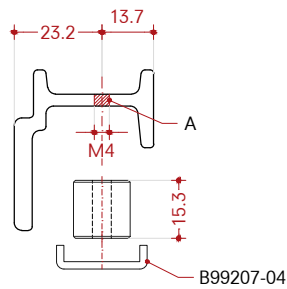
(*) Non fornita

Escala 1:4

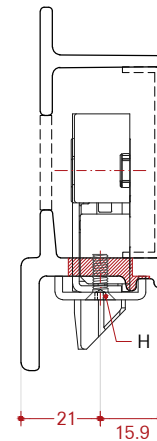
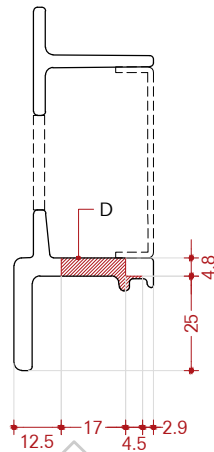
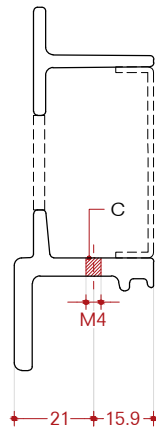
- A) Oreficio de M4 en marco de la puerta
- B) Oreficio en marco de la puerta
- C) Oreficio de M4 en hoja de la puerta
- D) Fresado en hoja de la puerta
- E) Palanca de perfil de Ø14 mm
- F) Fresado en perfil para cilindros

(*) No provisto

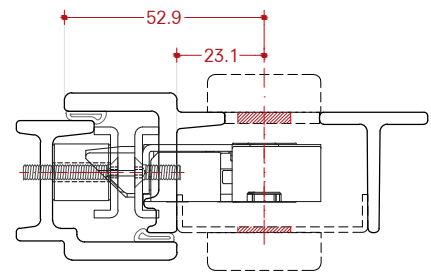
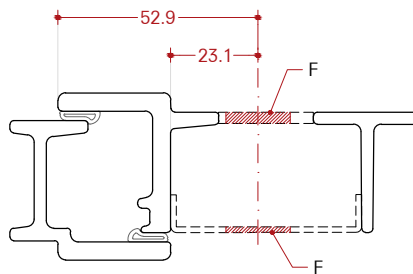
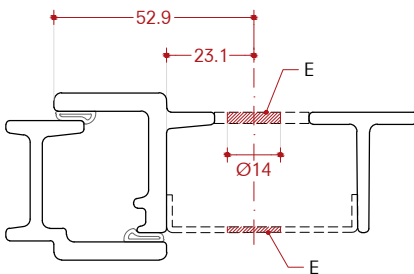
1



2



3



4

M4x12
ISO 10642
n° 2 pcs

M4x25
ISO 10642
n° 3 pcs

B99207-04
n° 1 pc

- A) Holes M4 in door frame
B) Cut-out in door frame
C) Holes M4 in the door leaf
D) Milling in the door leaf
E) Lever handle bore Ø14 mm
F) Profile cylinder milling
G) Fastening with M4x25 ISO10642 screws and cut the screws
H) Fastening with M4x12 ISO10642 screws and cut the screws

- A) Fori M4 nel telaio della porta
B) Foratura del telaio della porta
C) Fori M4 nell'anta della porta
D) Fresatura nell'anta della porta
E) Foro leva maniglia Ø14 mm
F) Fresatura profili per i cilindri
G) Montaggio con viti M4x25 ISO10642 e accorciare le viti
H) Montaggio con viti M4x12 ISO10642 e accorciare le viti

- A) Orificios de M4 en marco de la puerta
B) Oreficio en marco de la puerta
C) Orificios de M4 en hoja de la puerta
D) Fresado en hoja de la puerta
E) Palanca de perfil de Ø14 mm
F) Fresado en perfil para cilindros
G) Montaje con tornillos M4x25 ISO10642 y recortar tornillos
H) Montaje con tornillos M4x12 ISO10642 y recortar tornillos

Installation

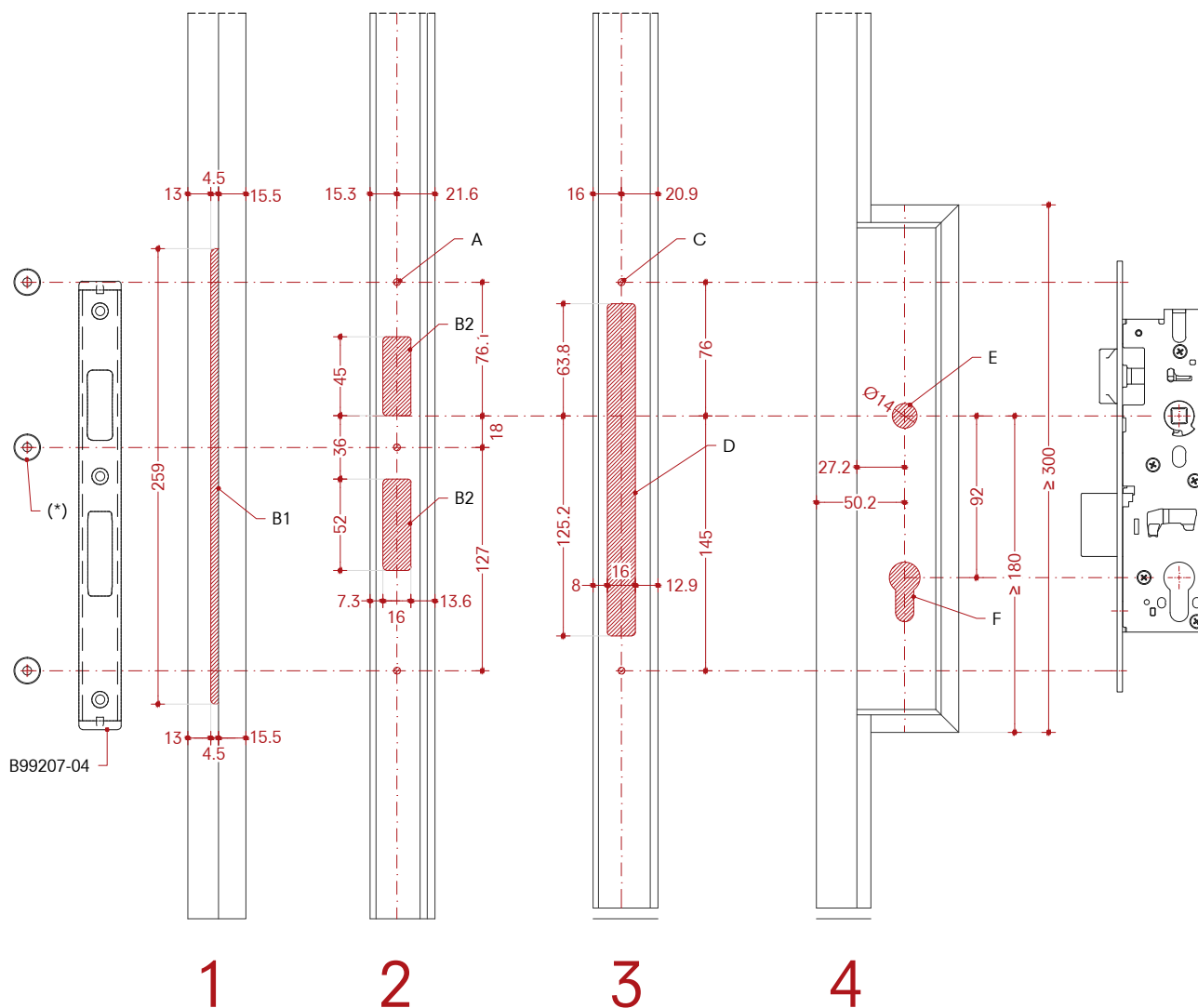
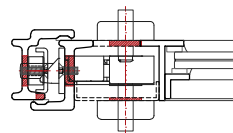
Lock B99016-02 - W20 Slim
with locking box FF 3203TR-14
Open in door

Montaggio

Serratura B99016-02 - W20 Slim
con scatola FF 3203TR-14
Porta apertura interna

Montaje

Cerradura B99016-02 - W20 Slim
con cerradura FF 3203TR-14
Puerta apertura hacia dentro



Scale 1:4

- A) Holes M4 in door frame
- B) Cut-out in door frame
- C) Holes M4 in the door leaf
- D) Milling in the door leaf
- E) Lever handle bore Ø14 mm
- F) Profile cylinder milling

(*) Not provided

Scala 1:4

- A) Foro M4 nel telaio della porta
- B) Foratura del telaio della porta
- C) Foro M4 nell'anta della porta
- D) Fresatura nell'anta della porta
- E) Foro leva maniglia Ø14 mm
- F) Fresatura profili per i cilindri

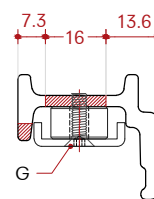
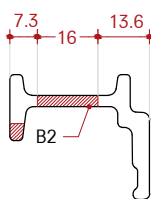
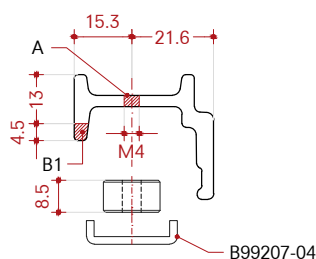
(*) Non fornita

Escala 1:4

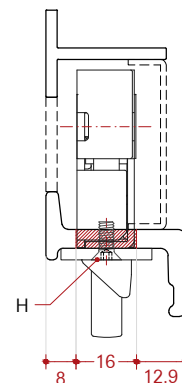
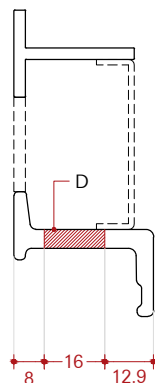
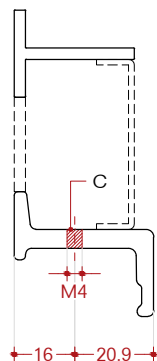
- A) Oreficio de M4 en marco de la puerta
- B) Oreficio en marco de la puerta
- C) Oreficio de M4 en hoja de la puerta
- D) Fresado en hoja de la puerta
- E) Palanca de perfil de Ø14 mm
- F) Fresado en perfil para cilindros

(*) No provisto

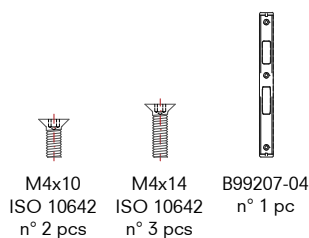
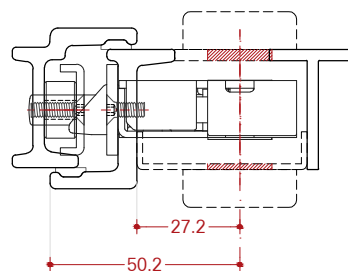
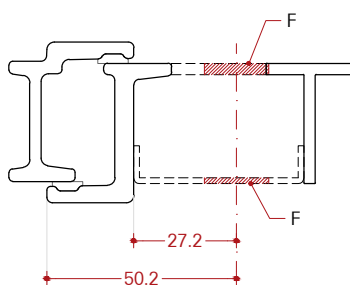
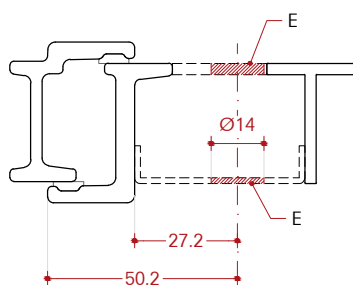
1-2



3



4



- A) Holes M4 in door frame
- B) Cut-out in door frame
- C) Holes M4 in the door leaf
- D) Milling in the door leaf
- E) Lever handle bore Ø14 mm
- F) Profile cylinder milling
- G) Fastening with M4x14 ISO10642 screws and cut the screws
- H) Fastening with M4x10 ISO10642 screws and cut the screws

- A) Fori M4 nel telaio della porta
- B) Foratura del telaio della porta
- C) Fori M4 nell'anta della porta
- D) Fresatura nell'anta della porta
- E) Foro leva maniglia Ø14 mm
- F) Fresatura profili per i cilindri
- G) Montaggio con viti M4x14 ISO10642 e accorciare le viti
- H) Montaggio con viti M4x10 ISO10642 e accorciare le viti

- A) Orificios de M4 en marco de la puerta
- B) Oreficio en marco de la puerta
- C) Orificios de M4 en hoja de la puerta
- D) Fresado en hoja de la puerta
- E) Palanca de perfil de Ø14 mm
- F) Fresado en perfil para cilindros
- G) Montaje con tornillos M4x14 ISO10642 y recortar tornillos
- H) Montaje con tornillos M4x10 ISO10642 y recortar tornillos

Installation

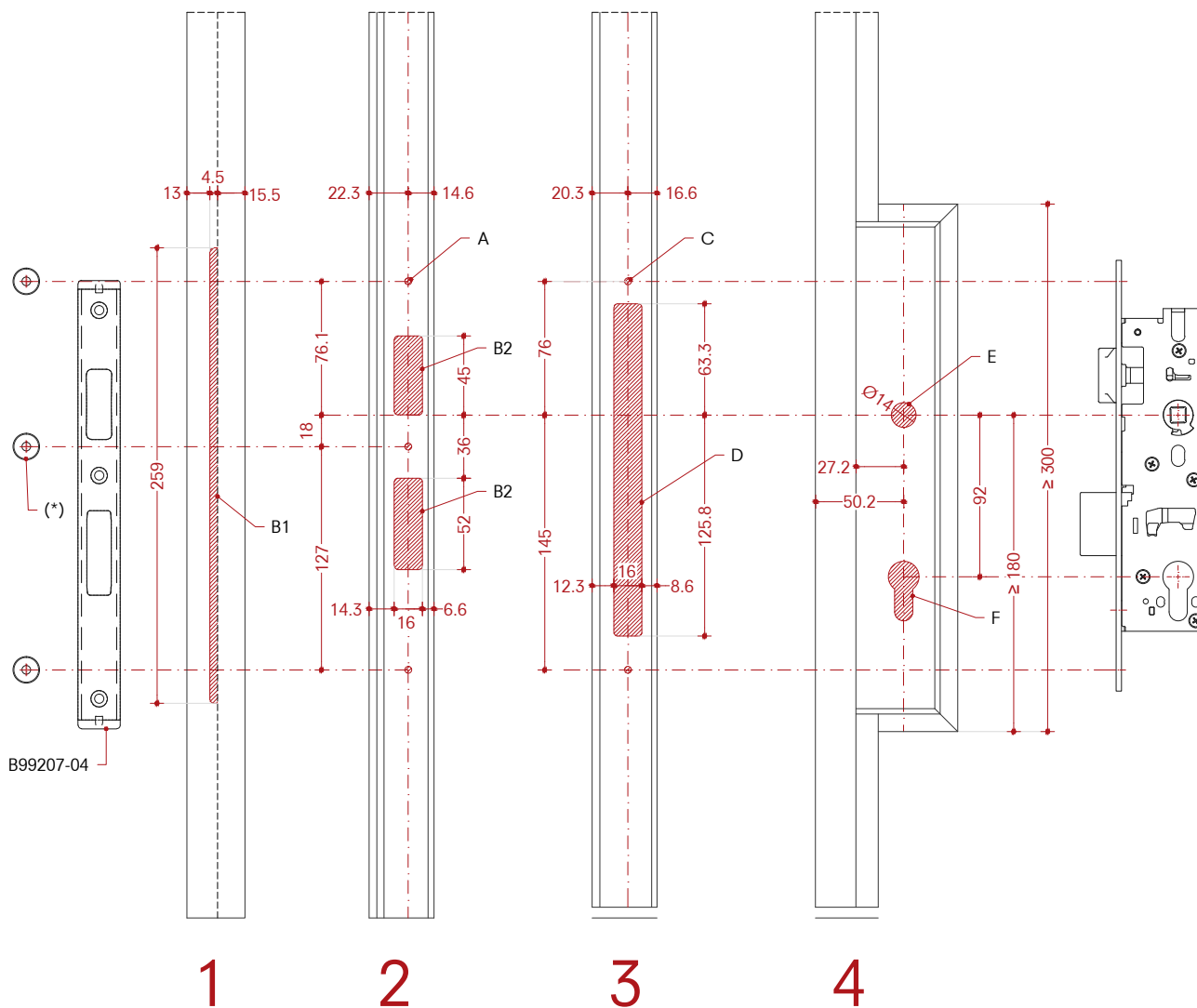
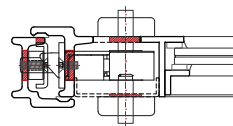
Lock B99016-02 - W20 Slim
with locking box FF 3203TR-14
Open out door

Montaggio

Serratura B99016-02 - W20 Slim
con scatola FF 3203TR-14
Porta apertura esterna

Montaje

Cerradura B99016-02 - W20 Slim
con cerradura FF 3203TR-14
Puerta apertura hacia fuera



Scale 1:4

- A) Holes M4 in door frame
- B) Cut-out in door frame
- C) Holes M4 in the door leaf
- D) Milling in the door leaf
- E) Lever handle bore Ø14 mm
- F) Profile cylinder milling

(*) Not provided

Scala 1:4

- A) Foro M4 nel telaio della porta
- B) Foratura del telaio della porta
- C) Foro M4 nell'anta della porta
- D) Fresatura nell'anta della porta
- E) Foro leva maniglia Ø14 mm
- F) Fresatura profili per i cilindri

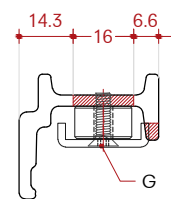
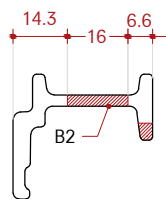
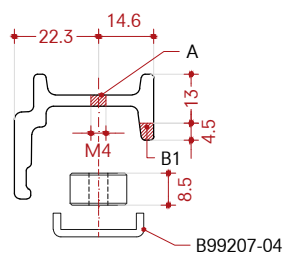
(*) Non fornita

Escala 1:4

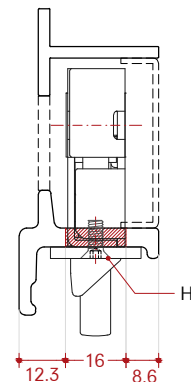
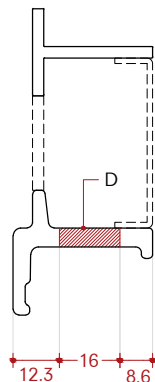
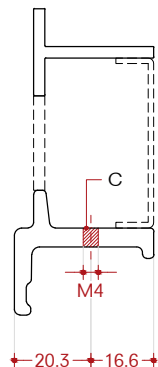
- A) Oreficio de M4 en marco de la puerta
- B) Oreficio en marco de la puerta
- C) Oreficio de M4 en hoja de la puerta
- D) Fresado en hoja de la puerta
- E) Palanca de perfil de Ø14 mm
- F) Fresado en perfil para cilindros

(*) No provisto

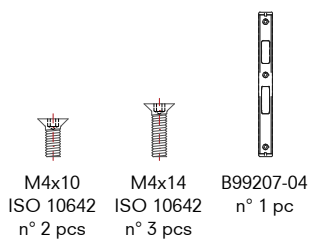
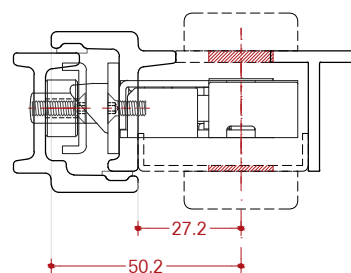
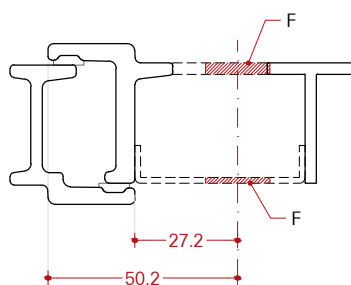
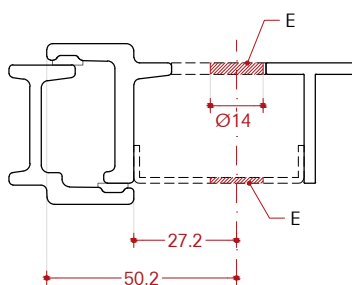
1-2



3



4



- A) Holes M4 in door frame
- B) Cut-out in door frame
- C) Holes M4 in the door leaf
- D) Milling in the door leaf
- E) Lever handle bore Ø14 mm
- F) Profile cylinder milling
- G) Fastening with M4x14 ISO10642 screws and cut the screws
- H) Fastening with M4x10 ISO10642 screws and cut the screws

- A) Fori M4 nel telaio della porta
- B) Foratura del telaio della porta
- C) Fori M4 nell'anta della porta
- D) Fresatura nell'anta della porta
- E) Foro leva maniglia Ø14 mm
- F) Fresatura profili per i cilindri
- G) Montaggio con viti M4x14 ISO10642 e accorciare le viti
- H) Montaggio con viti M4x10 ISO10642 e accorciare le viti

- A) Orificios de M4 en marco de la puerta
- B) Oreficio en marco de la puerta
- C) Orificios de M4 en hoja de la puerta
- D) Fresado en hoja de la puerta
- E) Palanca de perfil de Ø14 mm
- F) Fresado en perfil para cilindros
- G) Montaje con tornillos M4x14 ISO10642 y recortar tornillos
- H) Montaje con tornillos M4x10 ISO10642 y recortar tornillos

Einbau

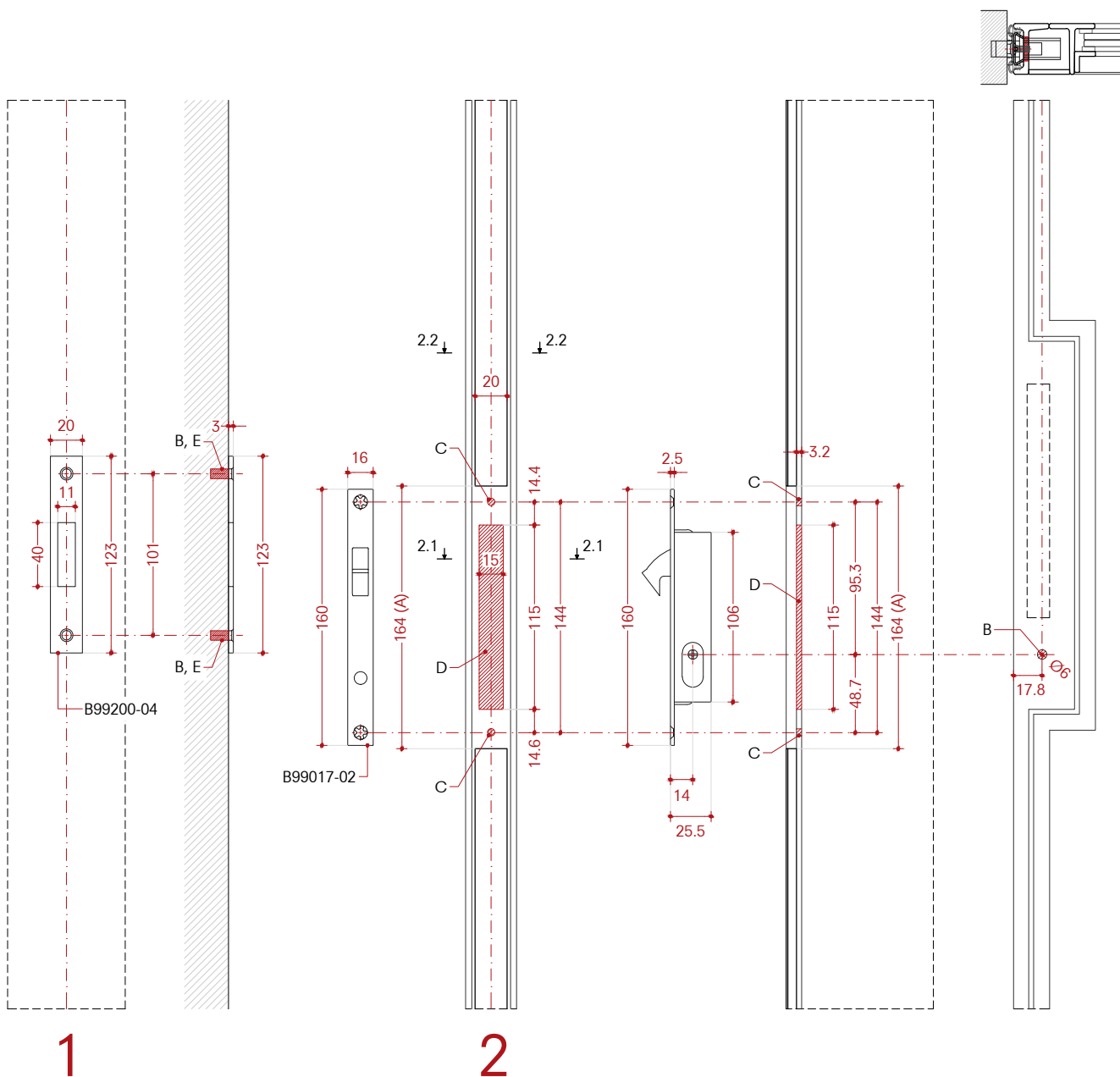
Hook lock for sliding door
B99017-02

Montaggio

Serratura gancio per ante scorrevoli
B99017-02

Montaje

Cerradura de gancho para
puertas corredizas B99017-02



Scale 1:4

A) Space between vertical covering profiles
E99253-12

B) Holes Ø6 mm in the wall
C) Holes Ø4.5 mm in the door leaf
D) Cut-out in the door leaf
E) Fastening screws not provided

Scala 1:4

A) Spazio tra i profili di finitura verticale
E99253-12

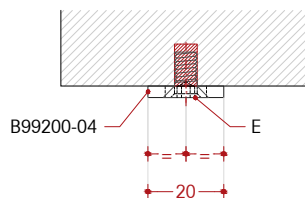
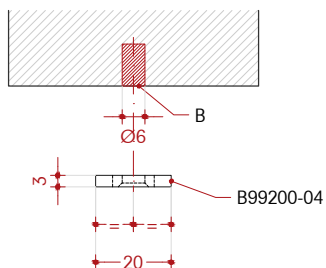
B) Fori Ø6 mm nella parete
C) Fori Ø4.5 mm nell'anta della porta
D) Fresatura nell'anta della porta
E) Fissaggio con viti non fornito

Escala 1:4

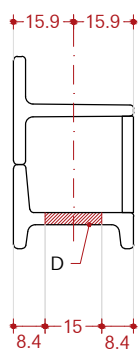
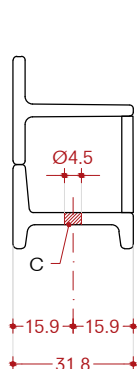
A) Espacio entre perfiles de acabado verticales
E99253-12

B) Orificios de Ø6 mm en la pared
C) Orificios de Ø4.5 mm en hoja de la puerta
D) Fresado en hoja de la puerta
E) Fijación con tornillos no provisto

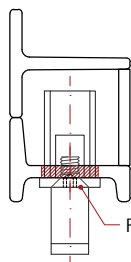
1



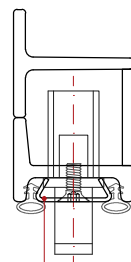
2



2.1-2.1



2.2-2.2

E99253-12
G12015-60
M4x10 mm ISO10642M5x8
ISO 10642
n° 2 pcsB99200-04
n° 1 pcM4x10
ISO 10642G12015-60
n° 2 pcsE99253-12
n° 1 pc

Scale 1:2

- A) Space between vertical covering profiles
E99253-12
B) Holes Ø6 mm in the wall
C) Holes Ø4.5 mm in the door leaf
D) Cut-out in the door leaf
E) Fastening screws not provided
F) Fastening with M5x8 ISO10642 screws

Scala 1:2

- A) Spazio tra i profili di finitura verticale
E99253-12
B) Fori Ø6 mm nella parete
C) Fori Ø4.5 mm nell'anta della porta
D) Fresatura nell'anta della porta
E) Fissaggio con viti non fornito
F) Fissaggio con viti M5x8 ISO10642

Escala 1:2

- A) Espacio entre perfiles de acabado verticales
E99253-12
B) Orificios de Ø6 mm en la pared
C) Orificios de Ø4.5 mm en hoja de la puerta
D) Fresado en hoja de la puerta
E) Fijación con tornillos no provisto
F) Fijación con tornillos M5x8 ISO10642

Processing

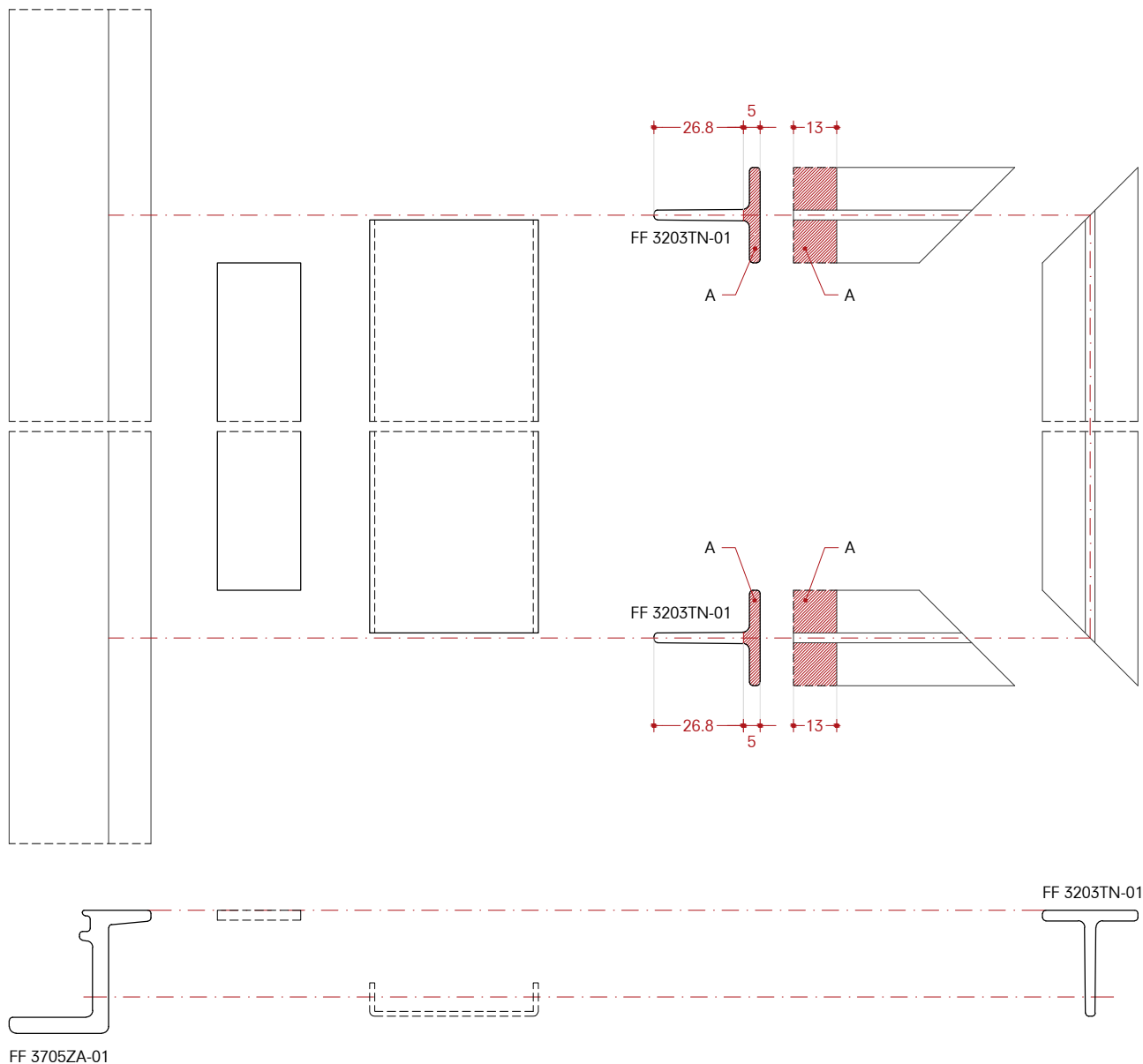
Locking box with FF 3203TN-01
Open in

Lavorazione

Scatola serratura con FF 3203TN-01
Apertura interna

Mecanizado

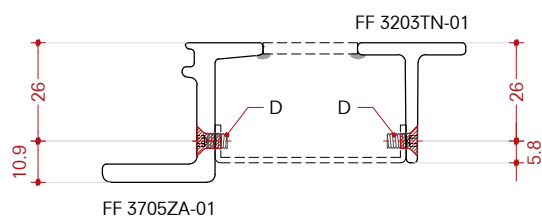
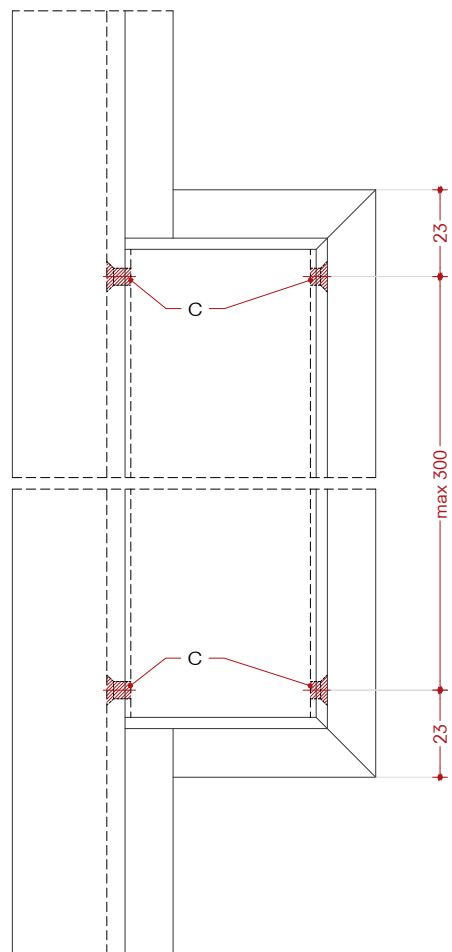
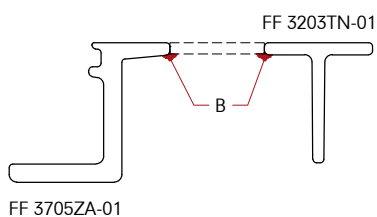
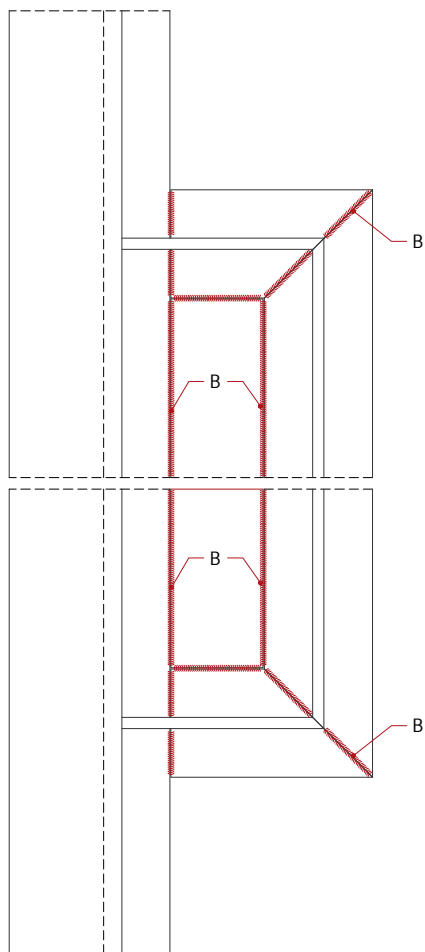
Cerradura con FF 3203TN-01
Apertura hacia dentro



A) Cut outs
B) Welding
C) M4 holes
D) Fastening with M4x8 mm ISO10642

A) Fresate
B) Saldatura
C) Fori M4
D) Montaggio con viti M4x8 mm ISO10642

A) Fresado
B) Soldadura
C) Orificios M4
D) Montaje con tornillos M4x8 mm ISO10642



A) Cut outs
B) Welding
C) M4 holes
D) Fastening with M4x8 mm ISO10642

A) Fresate
B) Saldatura
C) Fori M4
D) Montaggio con viti M4x8 mm ISO10642

A) Fresado
B) Soldadura
C) Orificios M4
D) Montaje con tornillos M4x8 mm ISO10642

Processing

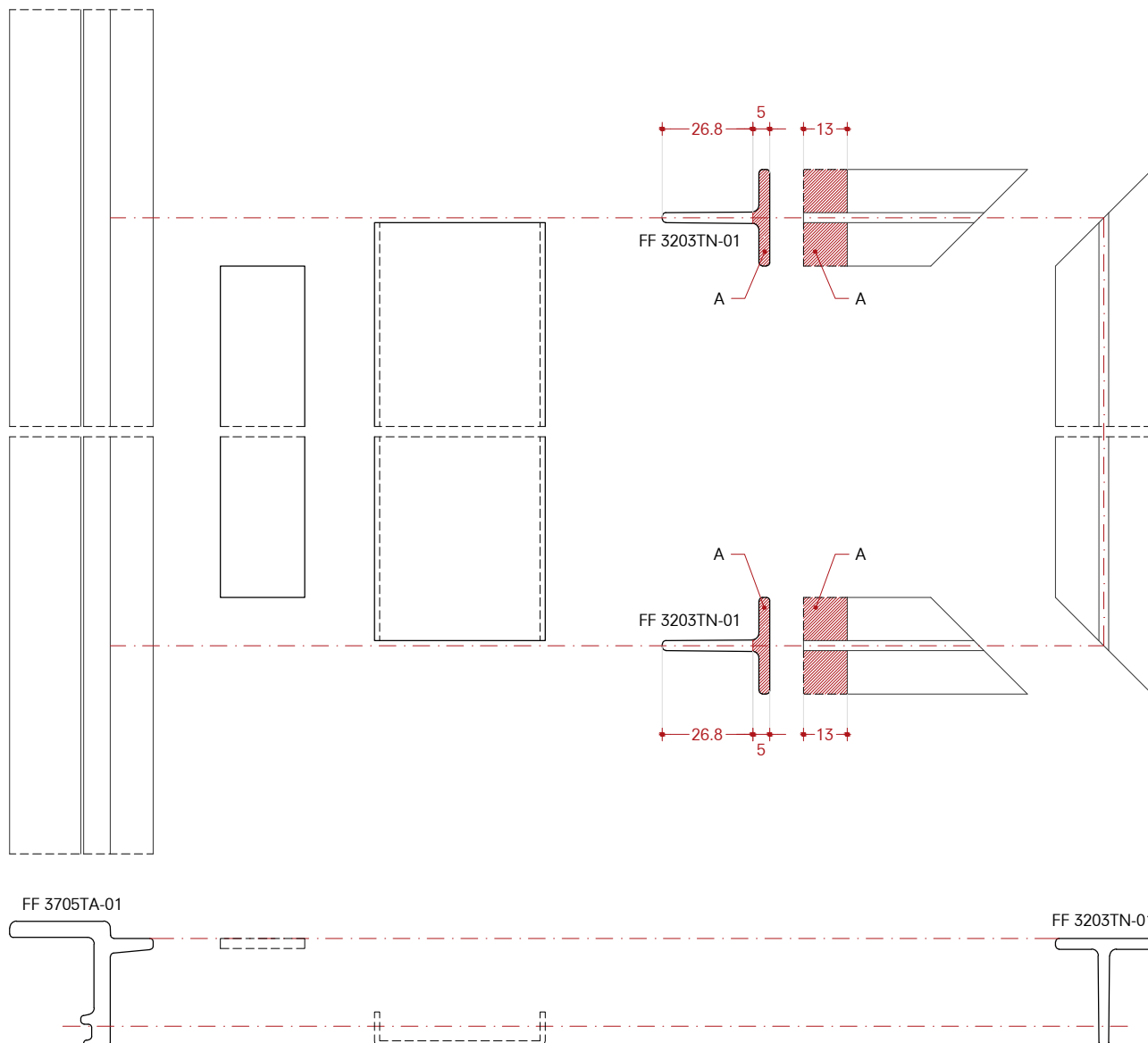
Locking box with FF 3203TN-01
Open out

Lavorazione

Scatola serratura con FF 3203TN-01
Apertura esterna

Mecanizado

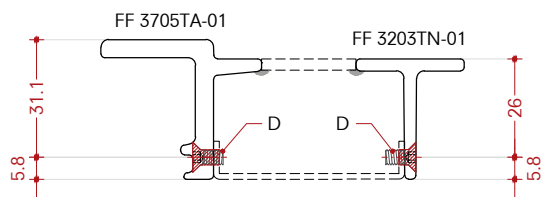
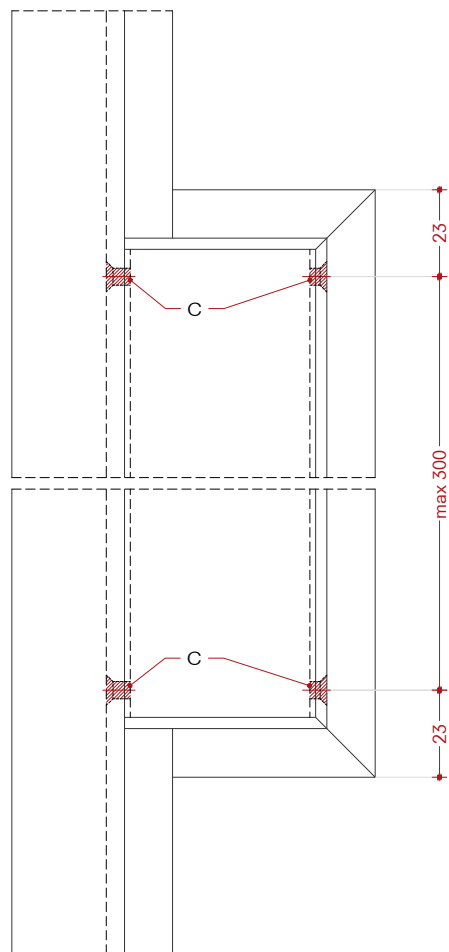
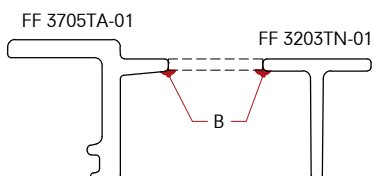
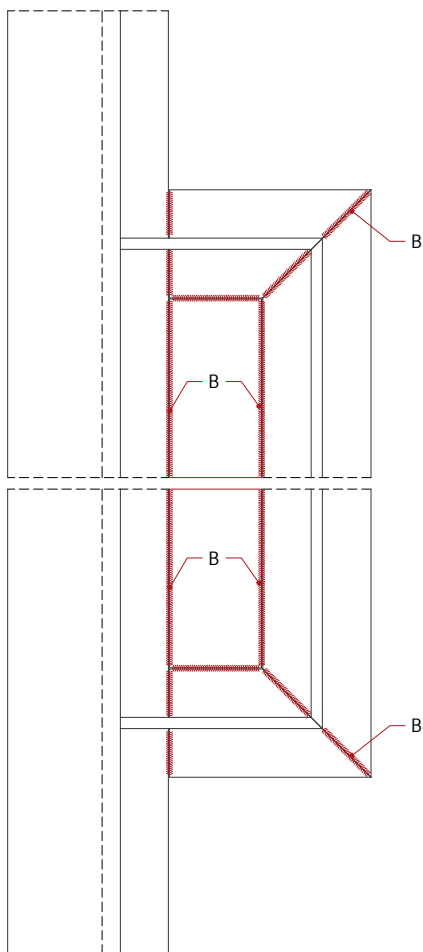
Cerradura con FF 3203TN-01
Apertura hacia fuera



A) Cut outs
B) Welding
C) M4 holes
D) Fastening with M4x8 mm ISO10642

A) Fresate
B) Saldatura
C) Fori M4
D) Montaggio con viti M4x8 mm ISO10642

A) Fresado
B) Soldadura
C) Orificios M4
D) Montaje con tornillos M4x8 mm ISO10642



A) Cut outs
B) Welding
C) M4 holes
D) Fastening with M4x8 mm ISO10642

A) Fresate
B) Saldatura
C) Fori M4
D) Montaggio con viti M4x8 mm ISO10642

A) Fresado
B) Soldadura
C) Orificios M4
D) Montaje con tornillos M4x8 mm ISO10642

Processing

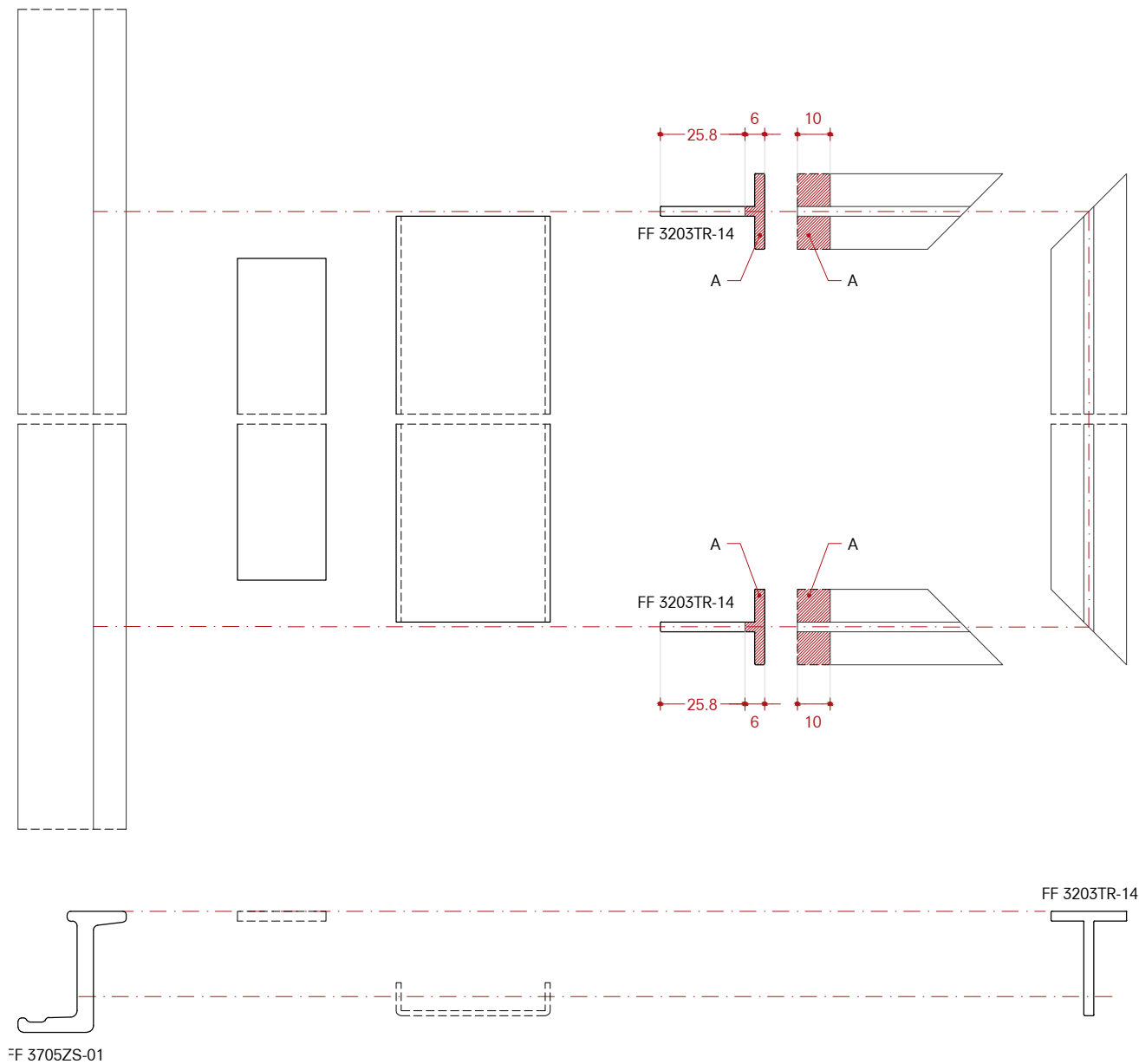
Locking box with FF 3203TR-14
Open in

Lavorazione

Scatola serratura con FF 3203TR-14
Apertura interna

Mecanizado

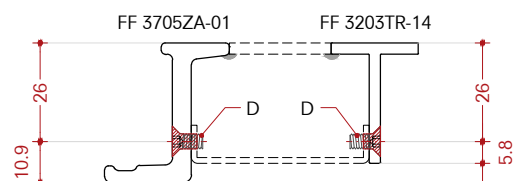
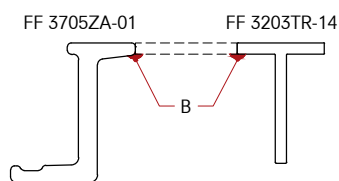
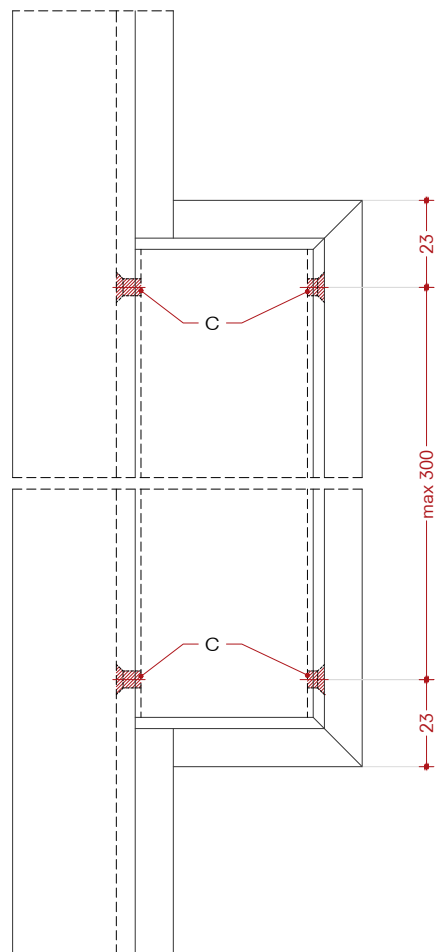
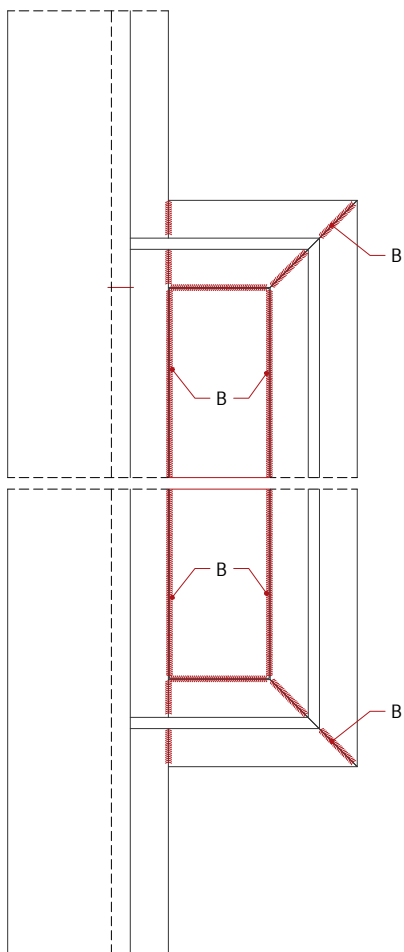
Cerradura con FF 3203TR-14
Apertura hacia dentro



- A) Cut outs
- B) Welding
- C) M4 holes
- D) Fastening with M4x8 mm ISO10642

- A) Fresate
- B) Saldatura
- C) Fori M4
- D) Montaggio con viti M4x8 mm ISO10642

- A) Fresado
- B) Soldadura
- C) Orificios M4
- D) Montaje con tornillos M4x8 mm ISO10642



A) Cut outs
B) Welding
C) M4 holes
D) Fastening with M4x8 mm ISO10642

A) Fresate
B) Saldatura
C) Fori M4
D) Montaggio con viti M4x8 mm ISO10642

A) Fresado
B) Soldadura
C) Orificios M4
D) Montaje con tornillos M4x8 mm ISO10642

Processing

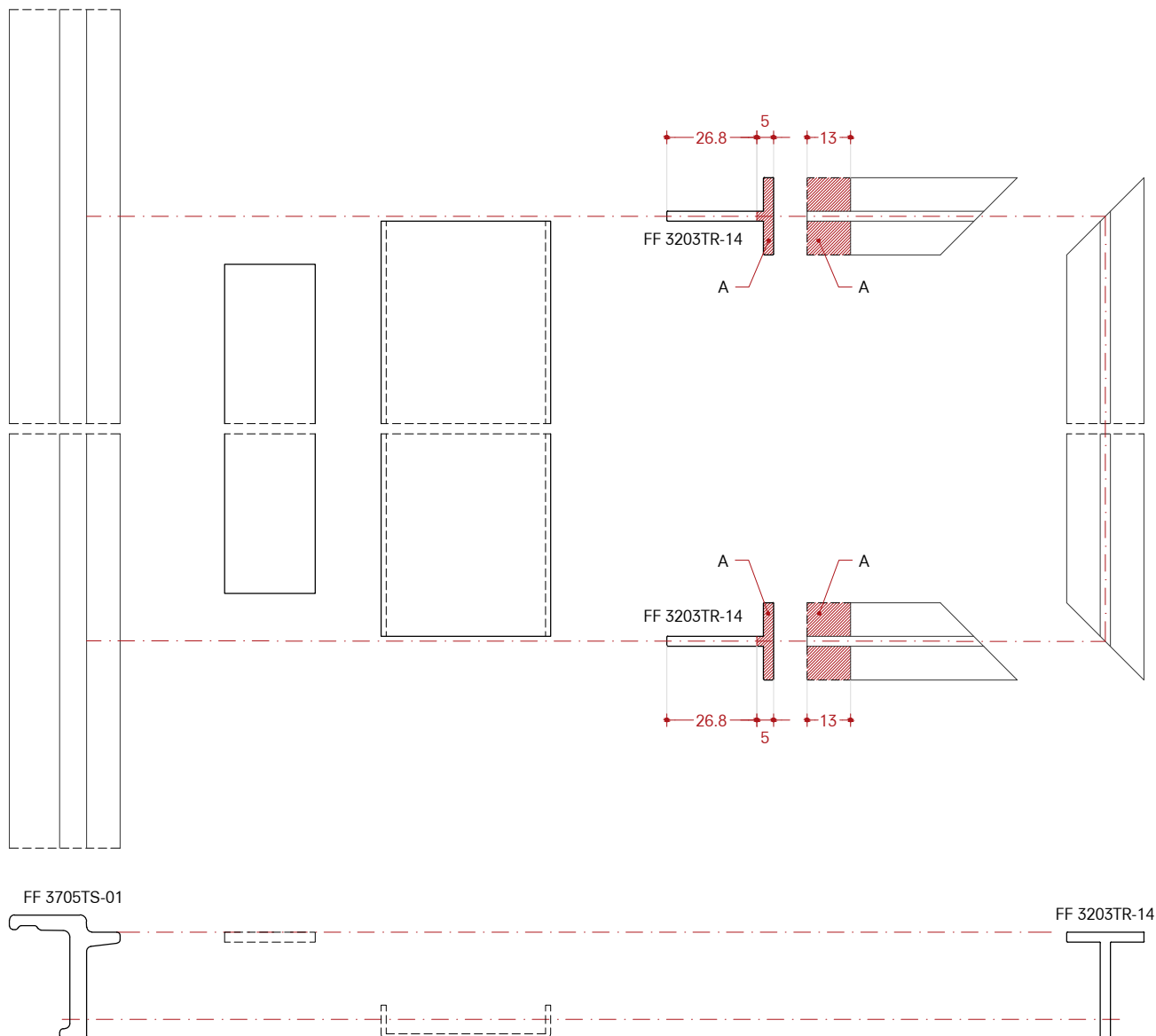
Locking box with FF 3203TR-14
Open out

Lavorazione

Scatola serratura con FF 3203TR-14
Apertura esterna

Mecanizado

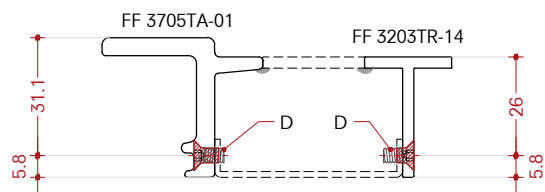
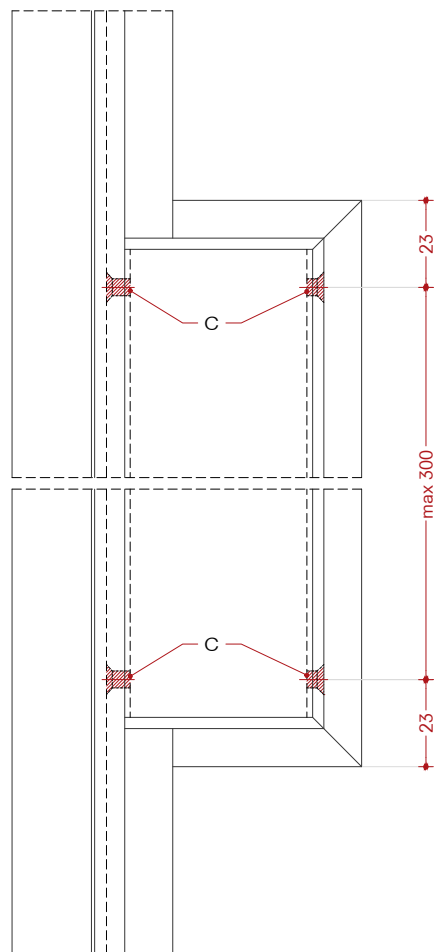
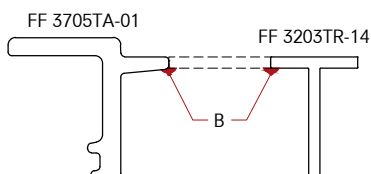
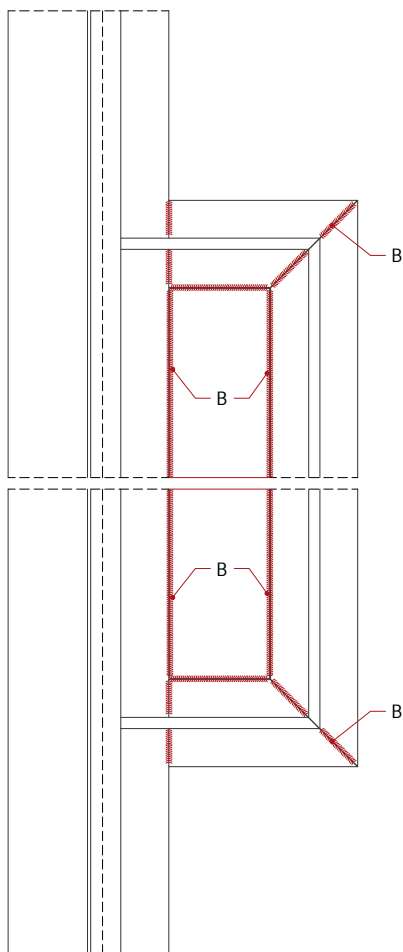
Cerradura con FF 3203TR-14
Apertura hacia fuera



A) Cut outs
B) Welding
C) M4 holes
D) Fastening with M4x8 mm ISO10642

A) Fresate
B) Saldatura
C) Fori M4
D) Montaggio con viti M4x8 mm ISO10642

A) Fresado
B) Soldadura
C) Orificios M4
D) Montaje con tornillos M4x8 mm ISO10642



A) Cut outs
B) Welding
C) M4 holes
D) Fastening with M4x8 mm ISO10642

A) Fresate
B) Saldatura
C) Fori M4
D) Montaggio con viti M4x8 mm ISO10642

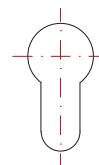
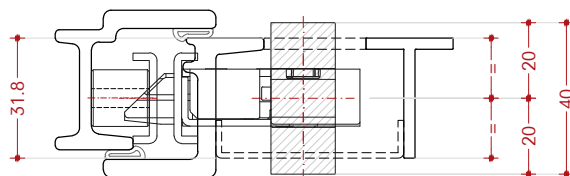
A) Fresado
B) Soldadura
C) Orificios M4
D) Montaje con tornillos M4x8 mm ISO10642

Cylinder combinations

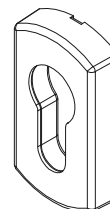
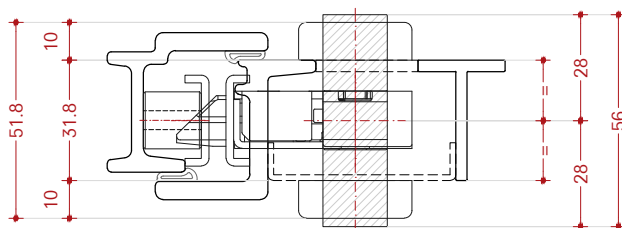
Combinazioni cilindro

Combinaciones cilindro

B99015-02 inward opening

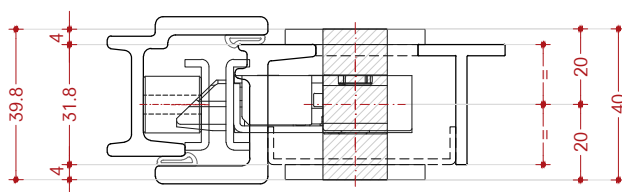
Cylinder without escutcheon
Cilindro senza bocchetta
Cilindro sin roseta

B99015-02 inward opening



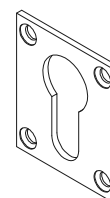
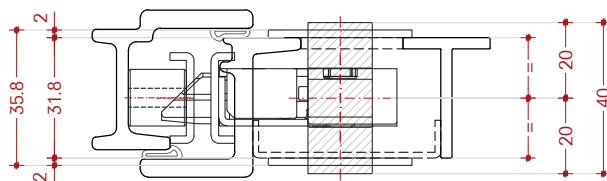
700910 nn

B99015-02 inward opening



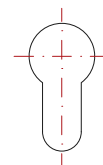
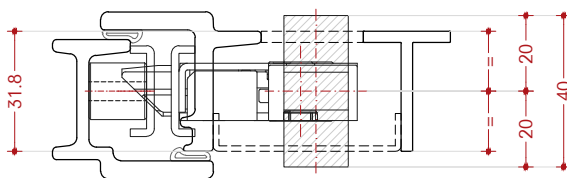
750060 nn

B99015-02 inward opening

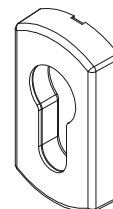
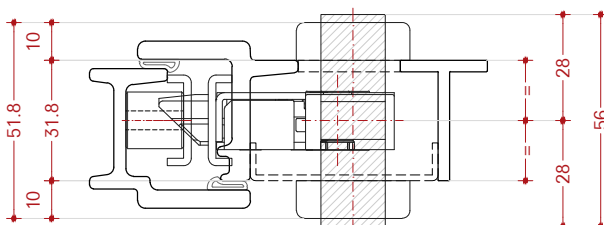


750070 nn

B99015-02 outward opening

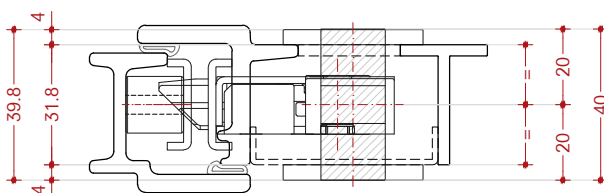
Cylinder without escutcheon
Cilindro senza bocchetta
Cilindro sin roseta

B99015-02 outward opening



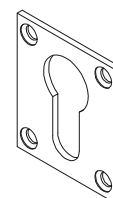
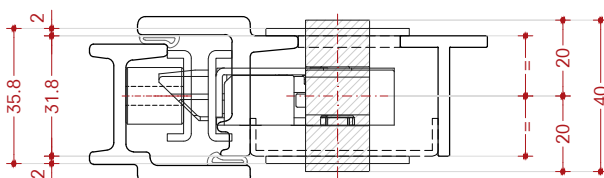
700910 nn

B99015-02 outward opening



750060 nn

B99015-02 outward opening



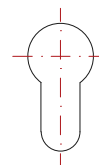
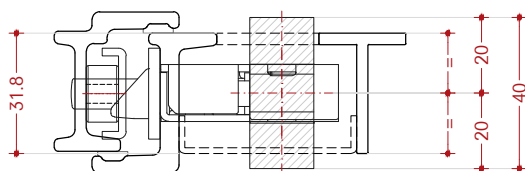
750070 nn

Cylinder combinations

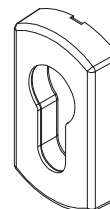
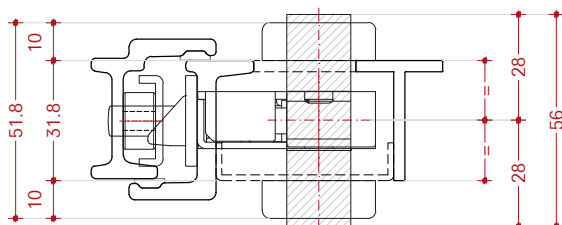
Combinazioni cilindro

Combinaciones cilindro

B99016-02 inward opening

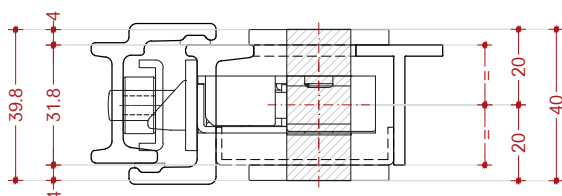
Cylinder without escutcheon
Cilindro senza bocchetta
Cilindro sin roseta

B99016-02 inward opening



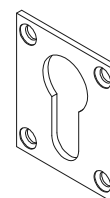
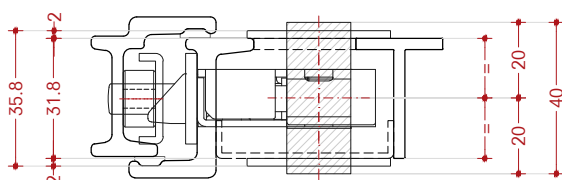
700910 nn

B99016-02 inward opening



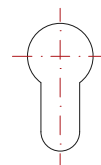
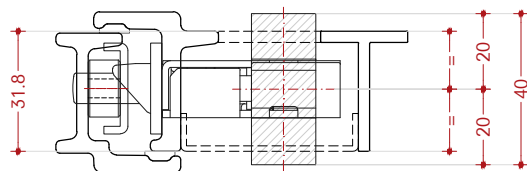
750060 nn

B99016-02 inward opening

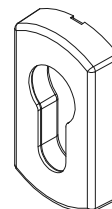
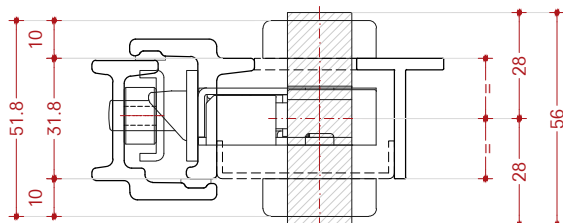


750070 nn

B99016-02 outward opening

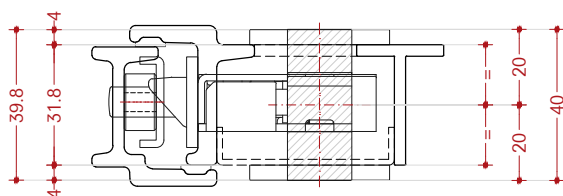
Cylinder without escutcheon
Cilindro senza bocchetta
Cilindro sin roseta

B99016-02 outward opening



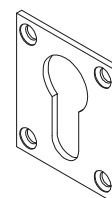
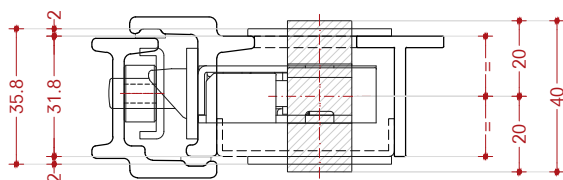
700910 nn

B99016-02 outward opening



750060 nn

B99016-02 outward opening



750070 nn

Glazing

Vetrazione

Acristalamiento

5.12

Legend

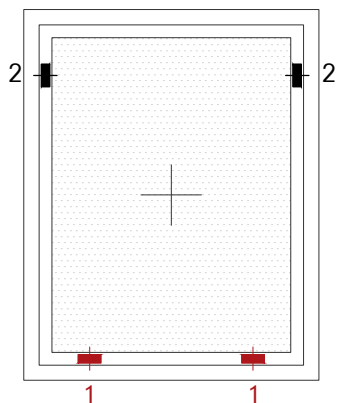
+ = Fixed
— = Open in
- - - = Open out
Dimensions in: mm
Scale 1:1 - 1:2

Legenda

+ = Anta fissa
— = Apertura interna
- - - = Apertura esterna
Misure in: mm
Scala 1:1 - 1:2

Leyenda

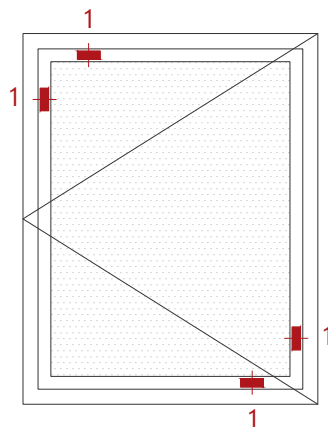
+ = Fijo
— = Apertura interna
- - - = Apertura externa
Medidas en: mm
Escala 1:1 - 1:2

Installation
Glazing**Montaggio**
Vetrazioni**Montaje**
Acristalamiento

Fixed window

Finestra fissa

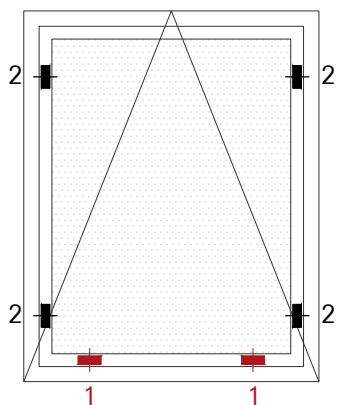
Ventana fija



Single leaf window open in and open out

Finestra a un battente apertura interna e esterna

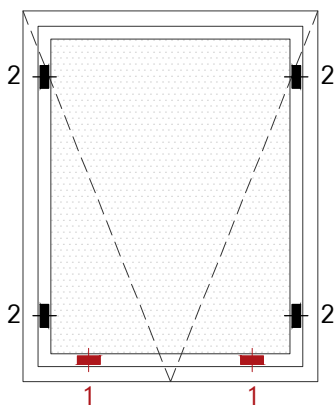
Ventana de una hoja que se abre hacia dentro y fuera



Bottom hung window open in

Finestra vasistas apertura interna

Ventana oscilante que se abre hacia dentro

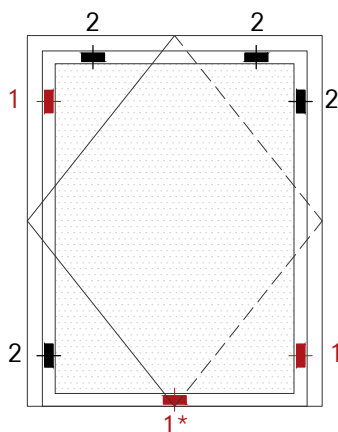


Top hung projecting window open out

Finestra a sporgere apertura esterna

Ventana proyectante que se abre hacia fuera

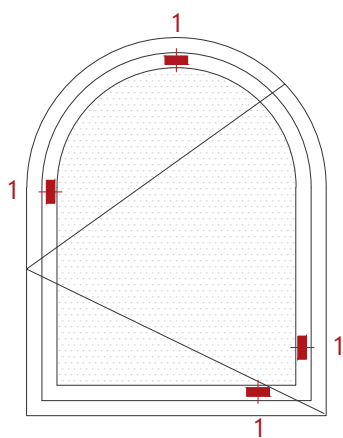
1) Support shims
2) Distance shims1) Spessori di supporto
2) Spessori di distanza1) Espesores de soporte
2) Calzas de distancia



Single leaf pivot door open in and open out

Porta pivot a un battente apertura interna ed esterna

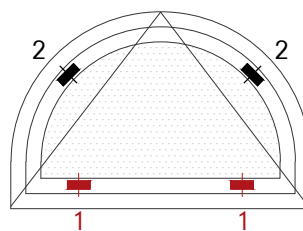
Puerta pivote de una hoja que se abre hacia dentro y fuera



Single leaf window open in and open out

Finestra a un battente apertura interna e esterna

Ventana de una hoja que se abre hacia dentro y fuera



Open in bottom hung window

Finestra vasistas apertura interna

Ventana oscilante que se abre hacia dentro

1) Support shims

2) Distance shims

1*) For glazing units over one meter wide, the shims must be above the swivel bearing

2*) In case of swing door, they become support shims

A) In the case of horizontal pivot openings, it is advisable to ask the Ottostumm technical office

1) Spessori di supporto

2) Spessori di distanza

1*) Per unità di vetratura larghe oltre il metro, gli spessori devono trovarsi sopra il cuscinetto girevole

2*) In caso di anta oscillante diventano spessori di supporto

A) Nel caso di aperture a bilico orizzontale si consiglia di chiedere all'ufficio tecnico di Ottostumm

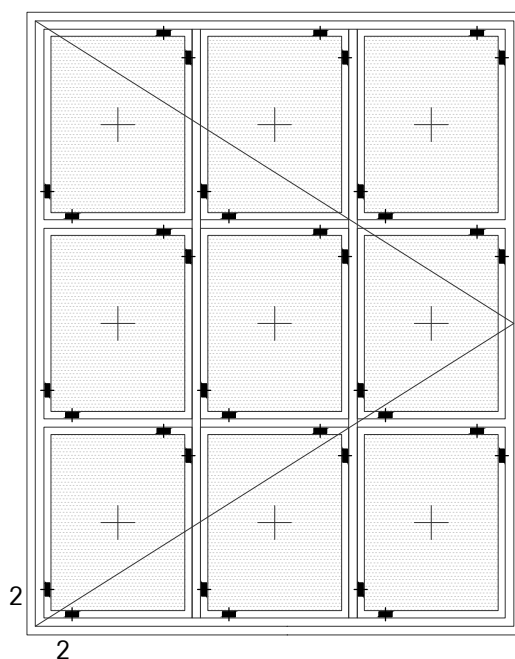
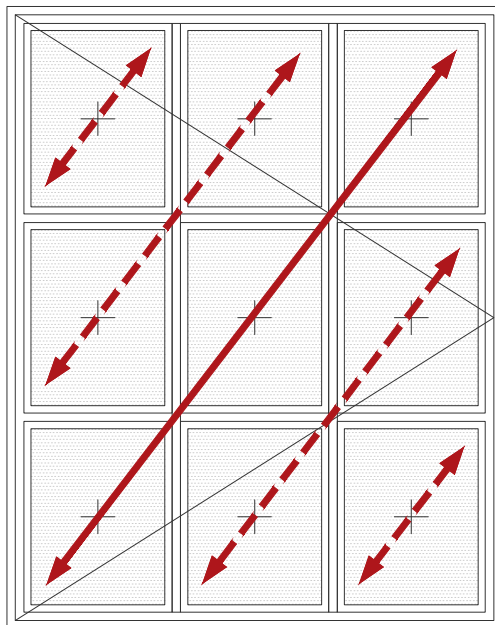
1) Espesores de soporte

2) Calzas de distancia

1*) Para acristalamientos de más de un metro de ancho, las calzas deben estar por encima del cojinete giratorio

2*) En caso de puerta batiente, se convierten en espesores de soporte

A) En el caso de aberturas pivotantes horizontales, es recomendable consultar a la oficina técnica de Ottostumm.



Single leaf window open in and open out

Finestra a un battente apertura interna ed esterna

Ventana de una hoja que se abre hacia dentro y fuera

2) Distance shims

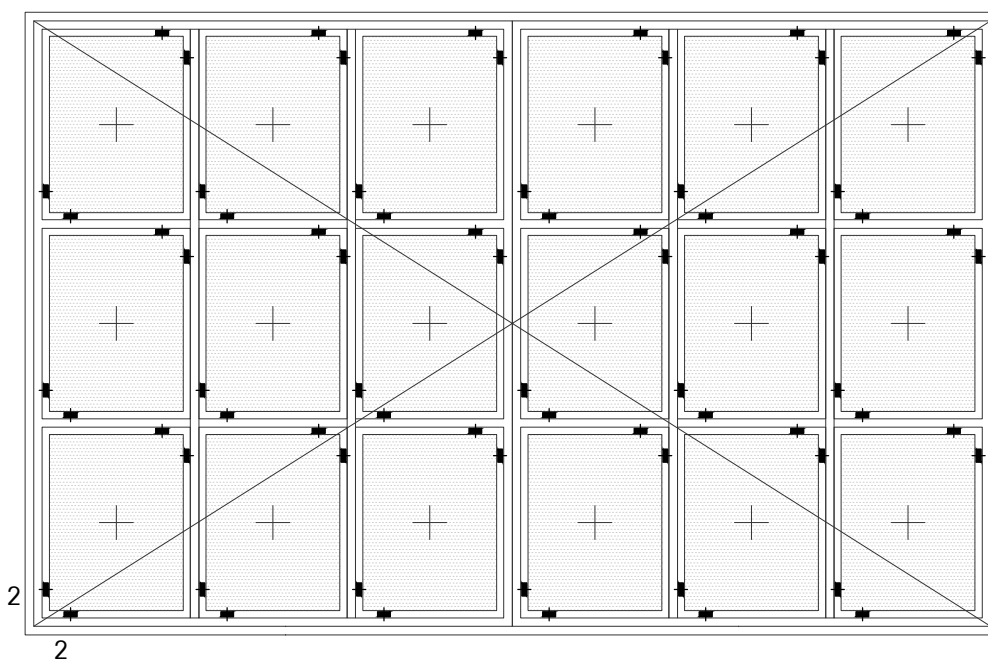
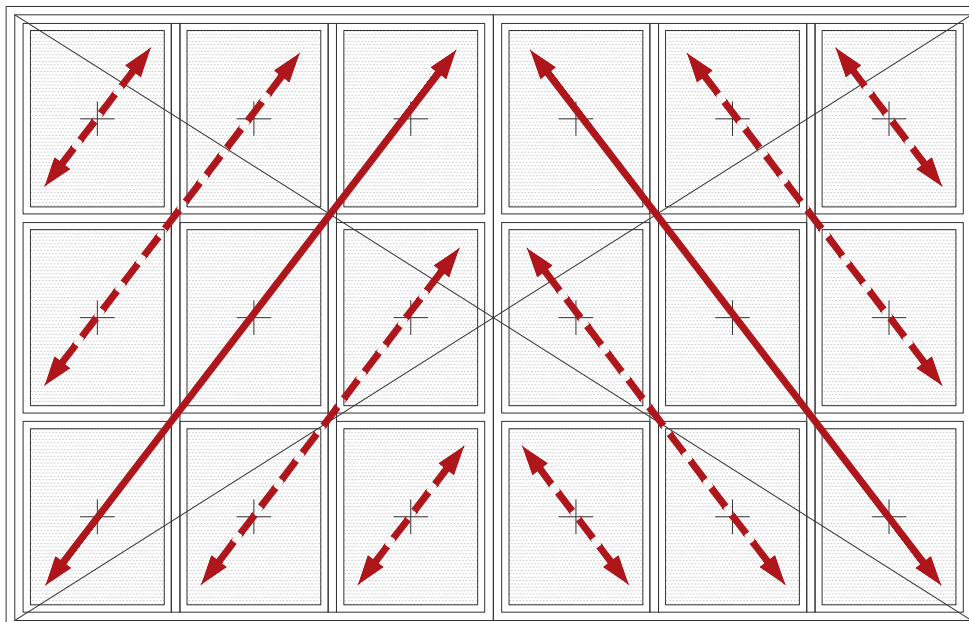
2) Spessori di distanza

2) Calzas de distancia

disclaimer see 7.0.14

rel. 06 - 09/2023

ottostumm-mogs.com



Double leaf window open in and open out

Finestra a due battenti apertura interna ed esterna

Ventana de dos hojas que se abre hacia dentro y fuera

2) Distance shims

2) Spessori di distanza

2) Calzas de distancia

Installation
Glazing beads

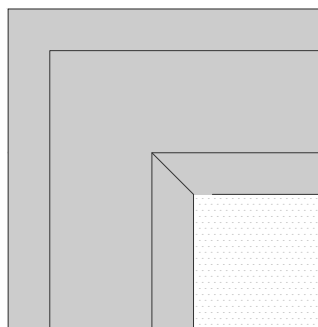
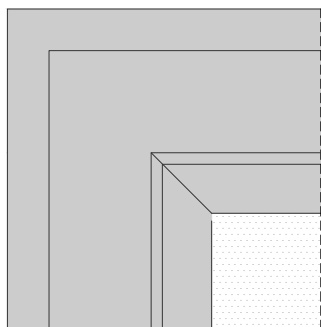
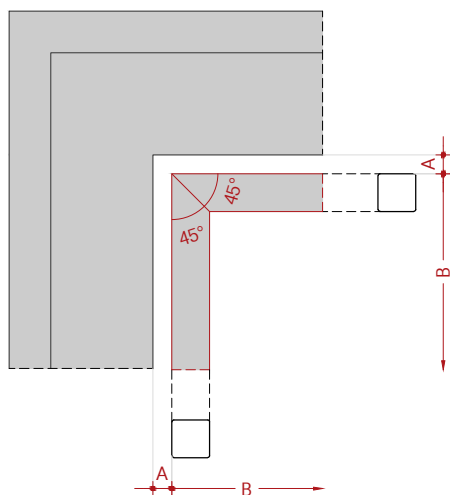
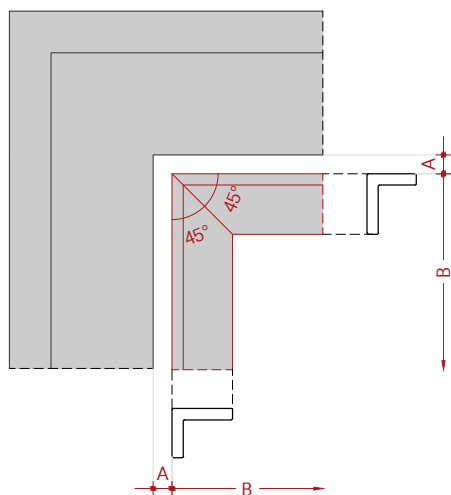
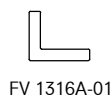
Montaggio
Fermavetri

Montaje
Junquillos

45° cutting of angled glazing beads and welding of the corners on the inside.

Taglio a 45° dei fermavetri angolari e saldatura degli angoli sul lato interno.

Corte de junquillos a 45° y soldado desde el interior.



-01 Corner radius max 1 mm

A) Shim between frame and glazing bead 0.5 mm (distance)
B) Cutting length

-01 Raggio spigoli massimo 1 mm

A) Aria di 0.5 mm
B) Lunghezza di taglio

-01 Radio máximo de esquina 1 mm

A) Inserto de 0.5 mm como distancia
B) Longitud de corte

90° cutting of aluminium glazing beads.

Taglio a 90° dei fermavetri in alluminio.

Corte de junquillos de aluminio a 90°.



FV 1302R-00



FV 1312R-00

Shaped cutting of aluminium glazing beads.

Taglio sagomato dei fermavetri in alluminio.

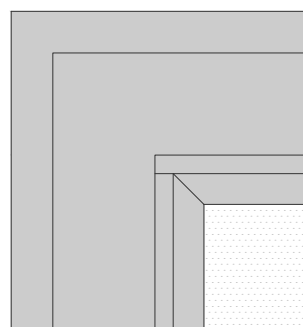
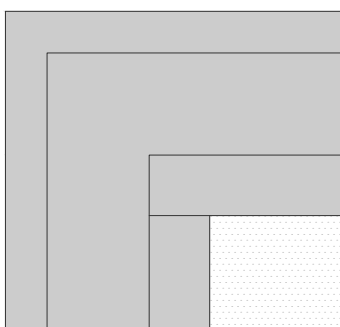
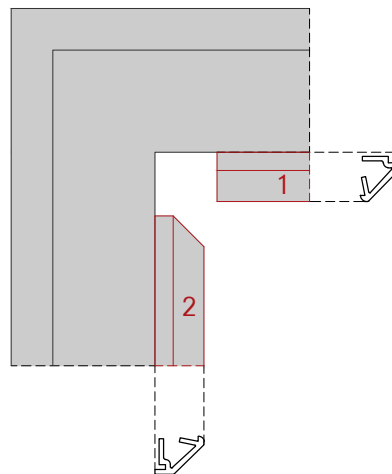
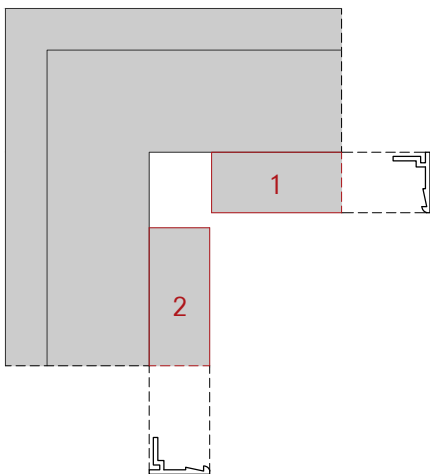
Corte con forma de junquillos de aluminio.



FV 1310S-00



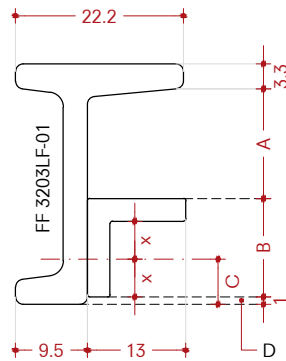
FV 1312S-00



Installation

Glazing beads

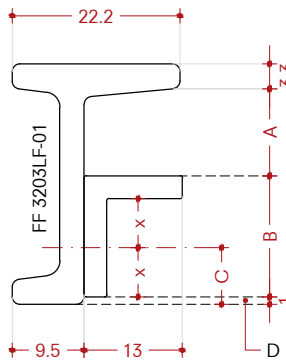
Positioning of glazing bead



Montaggio

Fermavetri

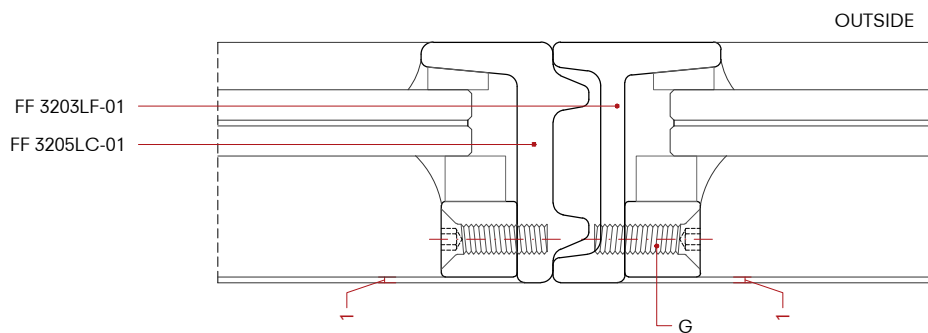
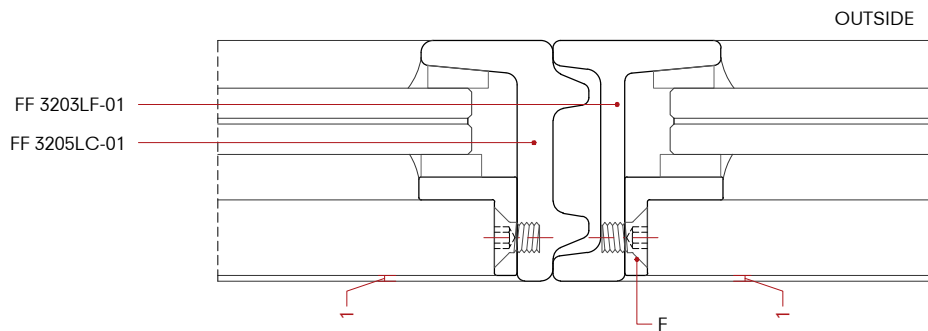
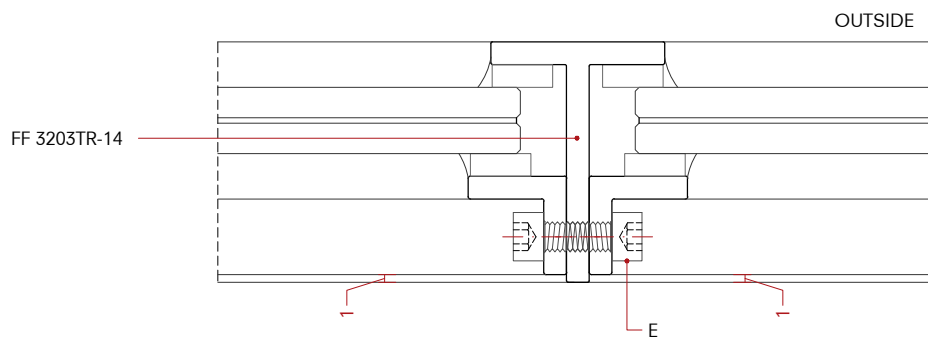
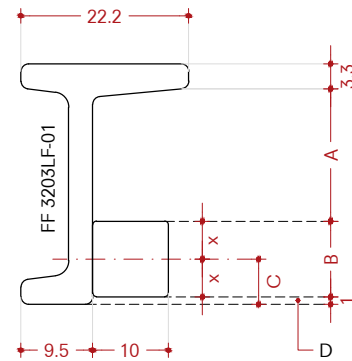
Posizionamento fermavetro



Montaje

Junquillos

Colocación de junquillo



Dimensions see chapter 2.3
"Glazing table"

- A) Glazing including internal gasket and external gasket
- B) Depth of glazing bead
- C) Position of the screw connection
- D) Positioning of the glazing bead: recommendation offset 1 mm
- E) Screw D99866-03 (be careful to the vertical interferences)
- F) D99867-03 screws
- G) D99876-03 screws

Dimensioni vedi capitolo 2.3
"Tabella vetrazioni"

- A) Vetri comprensivi di guarnizione interna e guarnizione esterna
- B) Profondità del fermavetro
- C) Posizione della vite di fissaggio
- D) Posizionamento del fermavetro: offset consigliato 1 mm
- E) Vite D99866-03 (attenzione alle interferenze verticali)
- F) Viti D99867-03
- G) Viti D99876-03

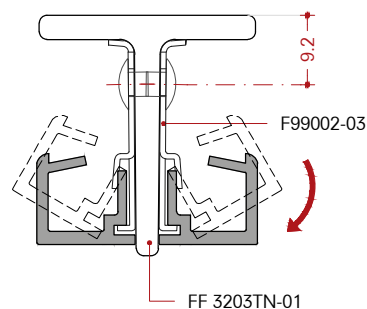
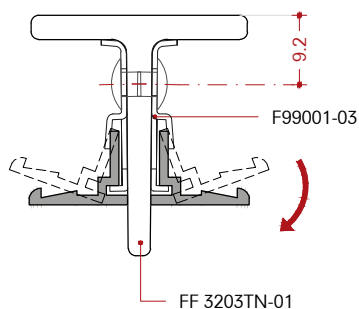
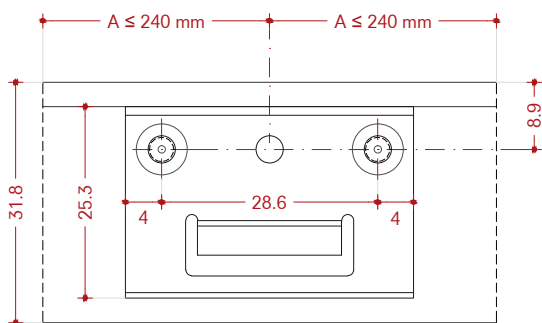
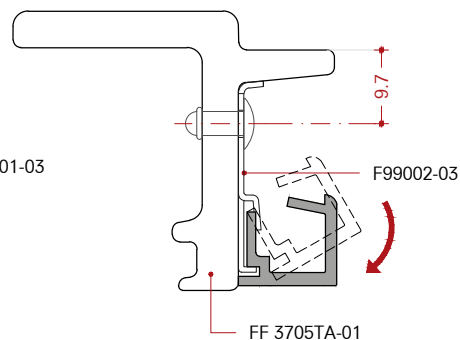
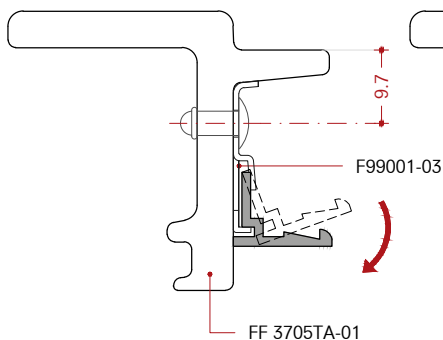
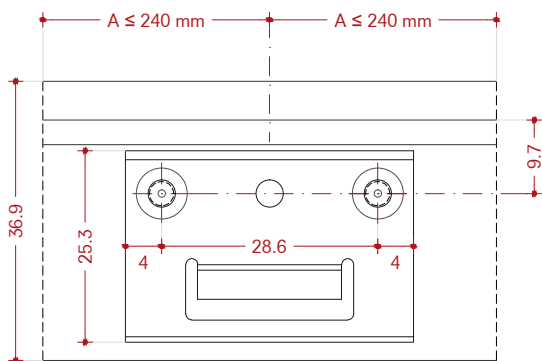
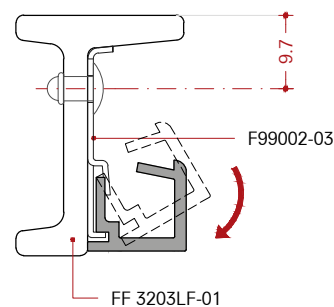
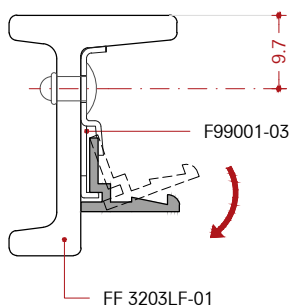
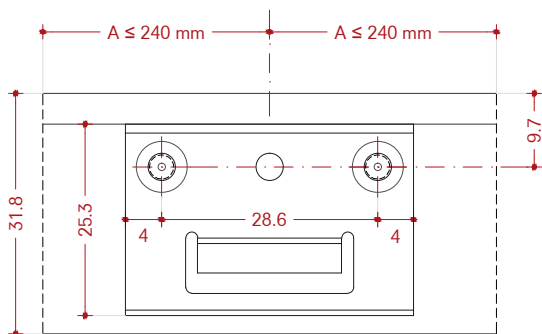
Dimensiones ver capítulo 2.3
"Tabla de acristalamiento"

- A) Acristalamiento que incluye junta interna y junta externa
- B) Profundidad del cordón de acristalamiento
- C) Posición de tornillo
- D) Posicionamiento del cordón de acristalamiento: recomendación de compensación 1 mm
- E) Tornillo D99866-03 (cuidado con las interferencias verticales)
- F) Tornillos D99867-03
- G) Tornillos D99876-03

Installation Glazing beads

Montaggio Fermavetri

Montaje Junquillos



Fastening of clips with rivet D99950-03 (see chapter 2.3 "Glazing table")

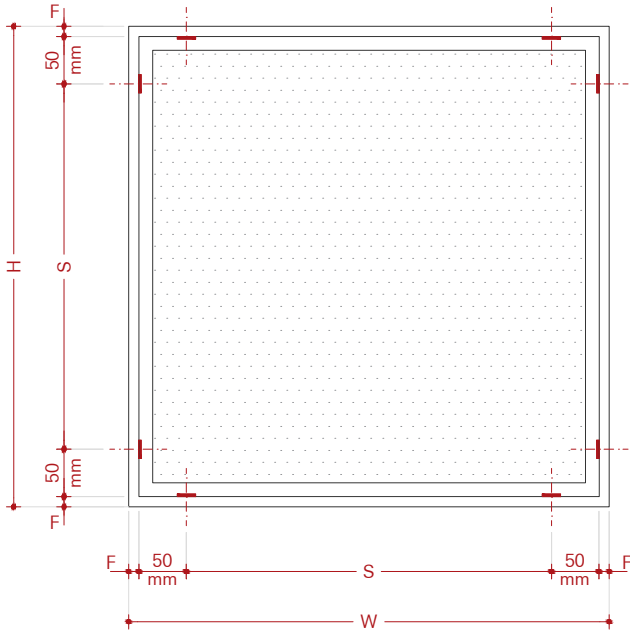
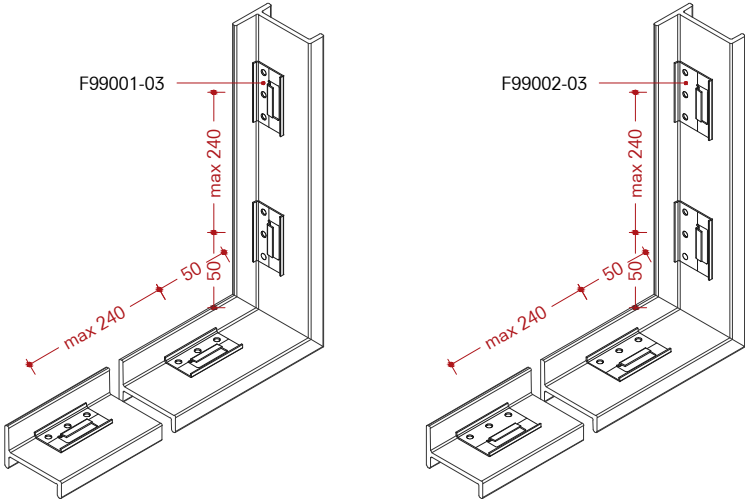
A) Maximum fixing distance

Fissaggio clips con rivetto D99950-03 (vedi capitolo 2.3 "Tabella vetrazioni")

A) Distanza massima di fissaggio

Fijación de clips con remache D99950-03 (ver capítulo 2.3 "Tabla de acristalamiento")

A) Distancia máxima de fijación



F) Internal profile width
H) Overall height
S) On-centre distance between the outer clips
W) Overall width

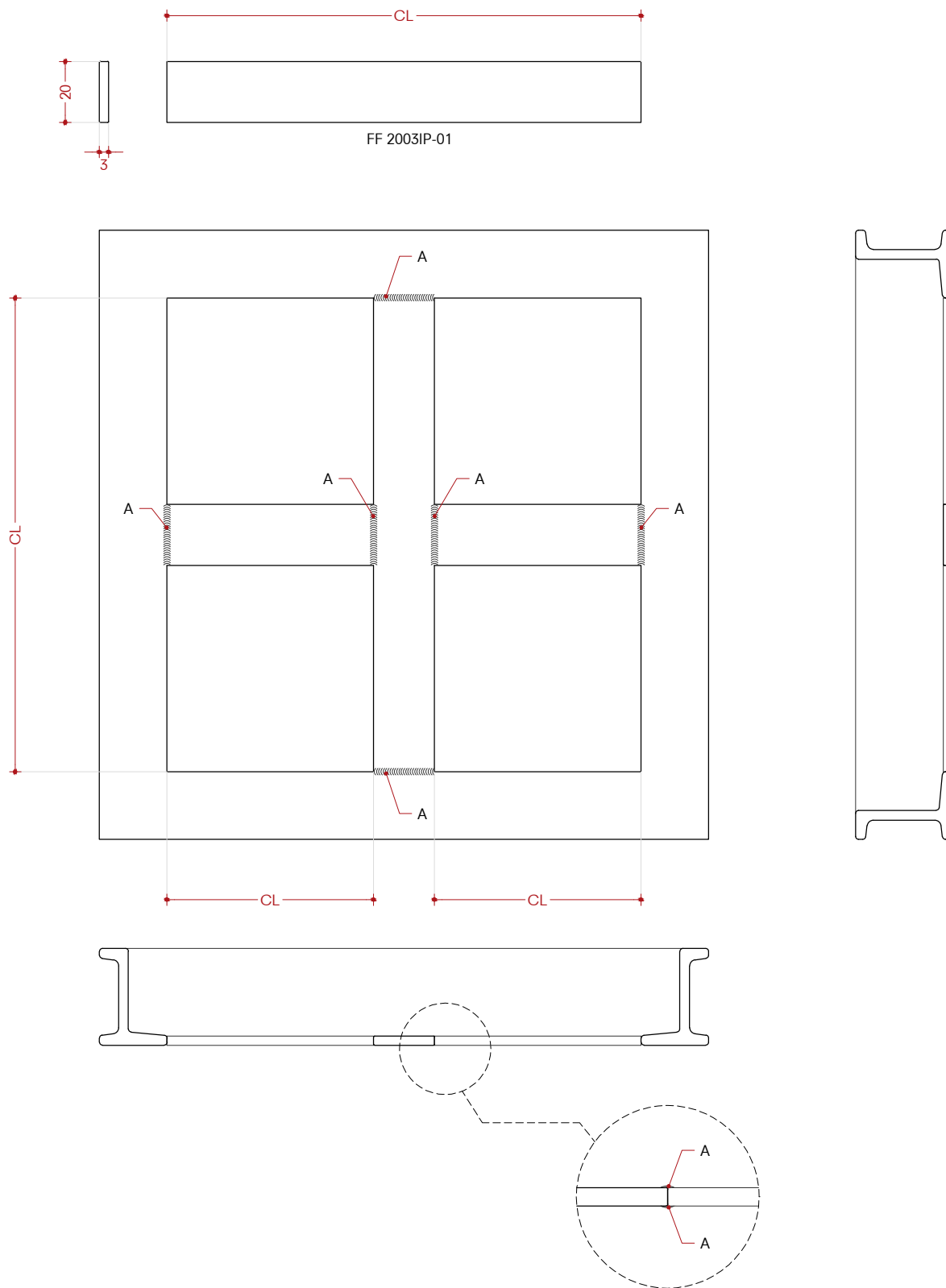
F) Larghezza profilo interno
H) Altezza totale
S) Distanza tra le clips esterne
W) Larghezza totale

F) Ancho del perfil interno
H) Altura total
S) Distancia entre clips externos
W) Ancho total

Installation
False muntins

Montaggio
Inglesine

Montaje
Listones



CL = Cutting length

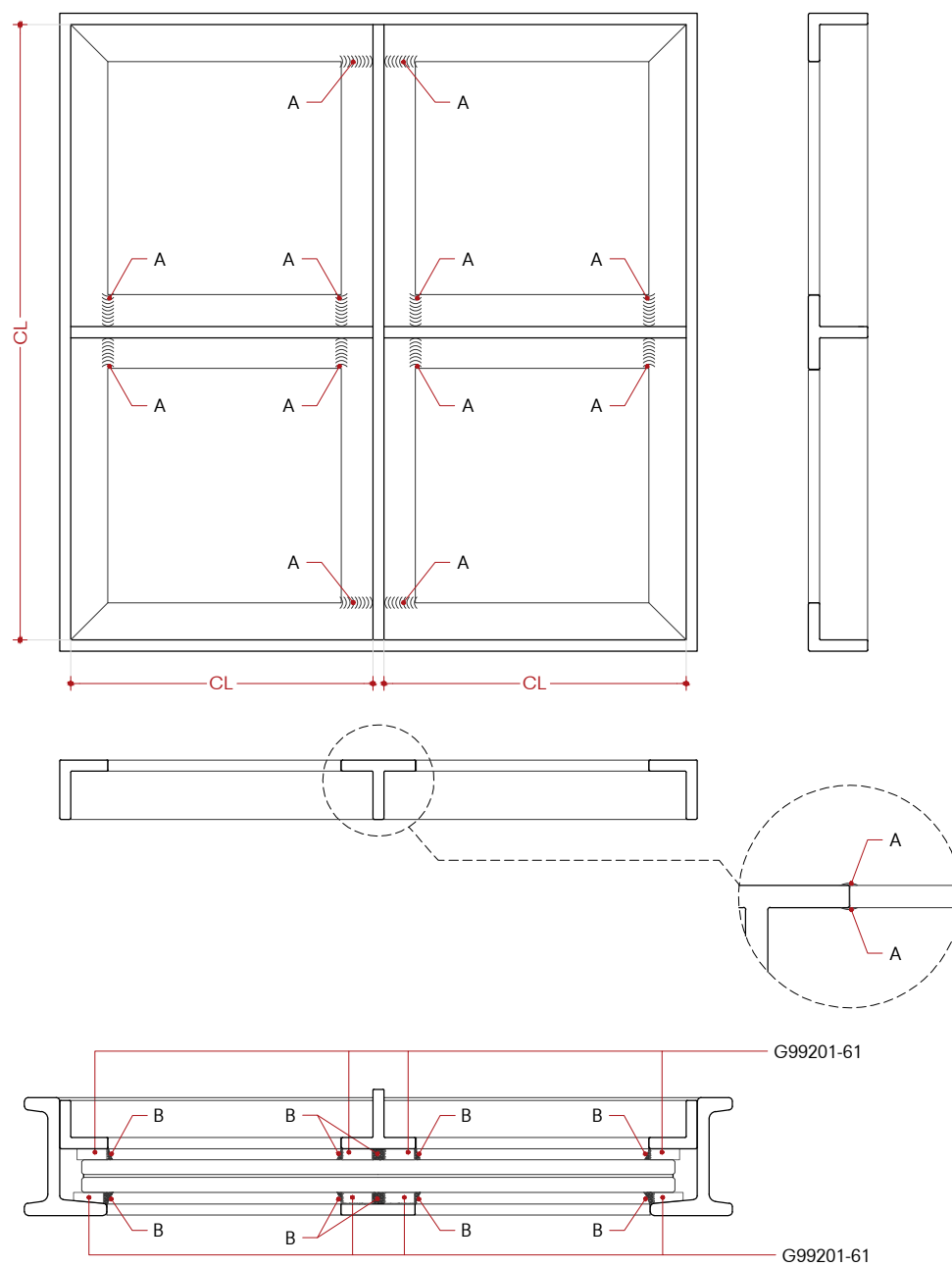
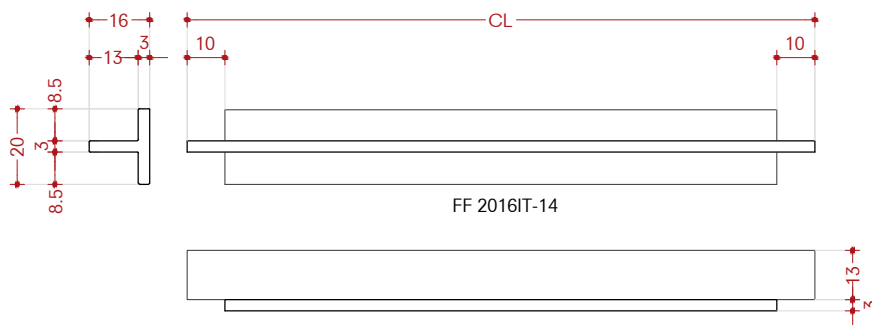
A) Welding on both sides
B) Silicon after painting

CL = Misura di taglio

A) Saldatura su entrambi i lati
B) Silicone dopo la verniciatura

CL = Longitud de corte

A) Soldadura en ambos lados
B) Silicona después de pintar



CL = Cutting length

A) Welding on both sides
B) Silicon after painting

CL = Misura di taglio

A) Saldatura su entrambi i lati
B) Silicone dopo la verniciatura

CL = Longitud de corte

A) Soldadura en ambos lados
B) Silicona después de pintar

General technical
instructions

Indicazioni tecniche
generali

Instrucciones técnicas
generales

6.0

Ventilation glazing rebate
Bending radius
Coating

Ventilazione vetrocamera
Raggi di curvatura
Verniciatura

Ventilación del acristalamiento
Radios de curvatura
Pintura

6.1
6.2
6.3

Ventilation glazing rebate

Ventilazione
vetrocamera

Ventilación del
acristalamiento

6.1

Ventilation glazing rebate

If there is a high chance of moisture forming in the glazing rebate, appropriate ventilation must be provided.

In such cases, drainage holes and outlets must be provided to enhance air circulation and to keep moisture away from the insulated glazing.

Ventilazione vetrocamera

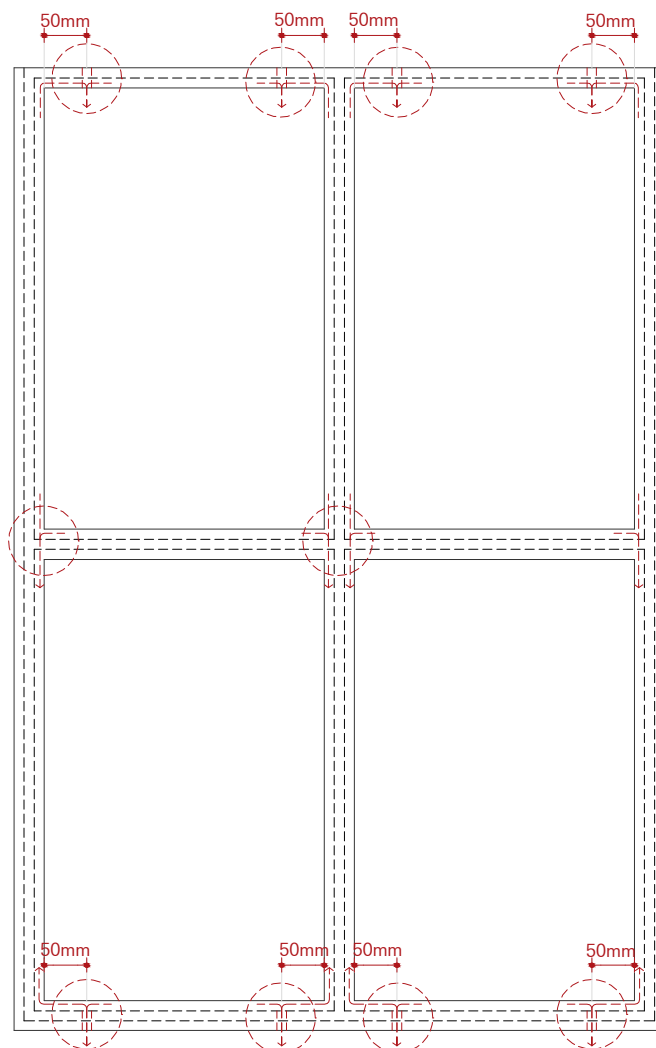
Se esiste un'alta possibilità di formazione di umidità nella battuta del vetro, deve essere fornita un'adeguata ventilazione.

In tal caso, devono essere previsti fori di drenaggio e aerazione per migliorare la circolazione dell'aria ed evitare formazione di umidità sui vetri isolanti.

Ventilación del acristalamiento

Si existe una alta probabilidad de que se forme humedad el galce del acristalamiento, se debe proporcionar una ventilación adecuada.

En tales casos, se deben proporcionar orificios de drenaje y salidas para mejorar la circulación del aire y mantener la humedad alejada del acristalamiento aislado.



Bending radius

Raggi di curvatura

Radios de curvatura

6.2

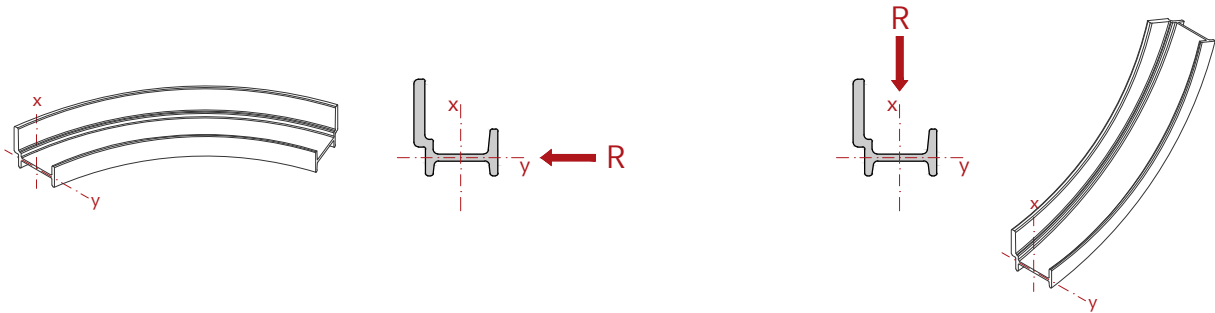
Bending radius**Raggi di curvatura****Radios de curvatura**

Fixed frames Telai fissi Marcos fijos		
Profile Profilo Perfil	Description Descrizione Descripción	Minimum radius Raggio minimo Radio mínimo
FT 3203LF-01	L profile Profilo a L L perfil	300 mm
FT 3203ZF-01	Z profile Profilo a Z Z perfil	350 mm
FT 3203TF-01	T profile Profilo a T T perfil	350 mm
FT 3203HF-01	H profile Profilo a H H perfil	400 mm

Window + Door Finestra + Porta Ventana + Puerta		
Profile Profilo Perfil	Description Descrizione Descripción	Minimum radius Raggio minimo Radio mínimo
FT 3703L-01	L profile Profilo a L L perfil	350 mm
FT 3703Z-01	Z profile Profilo a Z Z perfil	350 mm
FT 3703T-01	T profile Profilo a T T perfil	350 mm
FF 3705ZA-01	Z profile Profilo a Z Z perfil	350 mm
FF 3705TA-01	T profile Profilo a T T perfil	350 mm
FF 3203TN-01	T profile Profilo a T T perfil	350 mm

Profile Profilo Perfil	Description Descrizione Descripción	Minimum radius Raggio minimo Radio mínimo
FV 1313A-01	Glazing bead Profilo fermavetro Marcos	300 mm
FV 1316A-01	Glazing bead Profilo fermavetro Marcos	300 mm
FV 1010R-01	Glazing bead Profilo fermavetro Marcos	300 mm

Profile Profilo Perfil	Description Descrizione Descripción	Minimum radius Raggio minimo Radio mínimo
FV 1302R-00	Glazing bead Profilo fermavetro Marcos	NOT BENDABLE NON CURVABILE NO CURVABLE
FV 1312R-00	Glazing bead Profilo fermavetro Marcos	NOT BENDABLE NON CURVABILE NO CURVABLE
FV 1310S-00	Glazing bead Profilo fermavetro Marcos	NOT BENDABLE NON CURVABILE NO CURVABLE
FV 1312S-00	Glazing bead Profilo fermavetro Marcos	NOT BENDABLE NON CURVABILE NO CURVABLE



Coating

Verniciatura

Pintura

6.3

Coating

Verniciatura a liquido

Pintura líquida

Painting procedure (ISO 12944) - based on Sherwin Williams liquid paints Procedura di verniciatura (ISO 12944) - basata sulle vernici liquide Sherwin Williams Procedimiento de pintura (ISO 12944) - basado en pinturas líquidas Sherwin Williams			
Surface cleaning / Pulizia delle superfici / Limpieza de superficie			
- Sand blast frames until metal gets almost white with grit Sa 2.5 for cycle C3-H/C4-M or sand blast frames until metal gets totally white with grit Sa 3 for cycle C5M-H. - Clean up any debris of sand blasting with compressed air in order to obtain a perfectly cleaned surface. - Apply the first primer layer within 2 hours from sand blasting or, in any case, before the oxidation process starts.			
- Sabbiare i telai fino a quando il metallo diventa quasi bianco con graniglia Sa 2.5 per il ciclo C3-H/C4-M o sabbia i telai fino a quando il metallo non diventa completamente bianco con graniglia Sa 3 per il ciclo C5M-H. - Pulire dai residui della sabbatura con aria compressa per ottenere una superficie perfettamente pulita. - Applicare il primo strato di primer entro 2 ore dalla sabbatura o, comunque, prima dell'inizio del processo di ossidazione.			
- Lije los marcos con chorro de arena hasta que el metal se vuelva casi blanco con el grano Sa 2.5 para el ciclo C3-H/C4-M o lije los marcos con chorro de arena hasta que el metal se vuelva totalmente blanco con el grano Sa 3 para el ciclo C5M-H. - Limpie cualquier residuo de chorro de arena con aire comprimido para obtener una superficie perfectamente limpia. - Aplique la primera capa de imprimación dentro de las 2 horas posteriores al chorro de arena o, en cualquier caso, antes de que comience el proceso de oxidación.			
Liquid painting options / Opzioni di verniciatura a liquido / Opciones de pintura líquida			
C3-H	- Apply first layer of the epoxy primer with zinc phosphate Macropoxy C400V3, grey or white 70 µm - Apply a second layer of the epoxy primer with zinc phosphate Macropoxy C400V3, grey or white 70 µm - Apply a third layer of poly-acrylic enamel Inverplast/B pastel: 60 µm Colours and shades as per customer choice (*). - Total coating thickness: 200 µm	- Applicare il primo strato di primer epossidico con fosfato di zinco Macropoxy C400V3, grigio o bianco 70 µm - Applicare un secondo strato di primer epossidico con fosfato di zinco Macropoxy C400V3, grigio o bianco 70 µm - Applicare un terzo strato di smalto poliaccrilico Inverplast/B pastello: 60 µm Colori e tonalità a scelta del cliente (*). - Spessore totale del rivestimento: 200 µm	- Aplique la primera capa de la imprimación epoxi con fosfato de zinc Macropoxy C400V3, gris o blanco 70 µm - Aplique una segunda capa de imprimación epoxi con fosfato de zinc Macropoxy C400V3, gris o blanco 70 µm - Aplique una tercera capa de esmalte poliaccrilico Inverplast/B pastel: 60 µm Colores y tonos según la elección del cliente (*). - Espesor total del recubrimiento: 200 µm.
C4-M	- Apply first layer of the epoxy primer with zinc phosphate Macropoxy C400V3, grey or white 90 µm - Apply a second layer of the epoxy primer with zinc phosphate Macropoxy C400V3, grey or white 90 µm - Apply a third layer of poly-acrylic enamel Inverplast/B pastel: 60 µm Colours and shades as per customer choice (*). - Total coating thickness: 240 µm	- Applicare il primo strato di primer epossidico con fosfato di zinco Macropoxy C400V3, grigio o bianco 90 µm - Applicare un secondo strato di primer epossidico con fosfato di zinco Macropoxy C400V3, grigio o bianco 90 µm - Applicare un terzo strato di smalto poliaccrilico Inverplast/B pastello: 60 µm Colori e tonalità a scelta del cliente (*). - Spessore totale del rivestimento: 240 µm	- Aplique la primera capa de la imprimación epoxi con fosfato de zinc Macropoxy C400V3, gris o blanco 90 µm - Aplique una segunda capa de imprimación epoxi con fosfato de zinc Macropoxy C400V3, gris o blanco 90 µm - Aplique una tercera capa de esmalte poliaccrilico Inverplast/B pastel: 60 µm Colores y tonos según la elección del cliente (*). - Espesor total del recubrimiento: 240 µm.
C5M-H	- Apply first layer of the epoxy primer with zinc phosphate Macropoxy C400V3, grey or white 80 µm - Apply a second layer of the epoxy primer with zinc phosphate Macropoxy C400V3, grey or white 90 µm - Apply a third layer of the epoxy primer with zinc phosphate Macropoxy C400V3, grey or white 90 µm - Apply final layer of poly-acrylic enamel Inverplast/B pastel: 60 µm Colours and shades as per customer choice (*). - Total coating thickness: 320 µm	- Applicare il primo strato di primer epossidico con fosfato di zinco Macropoxy C400V3, grigio o bianco 80 µm - Applicare un secondo strato di primer epossidico con fosfato di zinco Macropoxy C400V3, grigio o bianco 90 µm - Applicare un terzo strato di primer epossidico con fosfato di zinco Macropoxy C400V3, grigio o bianco 90 µm - Applicare lo strato finale di smalto poliaccrilico Inverplast/B pastello: 60 µm Colori e tonalità a scelta del cliente (*). - Spessore totale del rivestimento: 320 µm	- Aplique la primera capa de la imprimación epoxi con fosfato de zinc Macropoxy C400V3, gris o blanco 80 µm - Aplique una segunda capa de imprimación epoxi con fosfato de zinc Macropoxy C400V3, gris o blanco 90 µm - Aplique una tercera capa de imprimación epoxi con fosfato de zinc Macropoxy C400V3, gris o blanco 90 µm - Aplique la capa final de esmalte poliaccrilico Inverplast/B pastel: 60 µm Colores y tonos según la elección del cliente (*). - Espesor total del recubrimiento: 320 µm
Drying-curing process / Processo di essiccazione-indurimento / Proceso de secado-curado			
- Dry frames for at least 5 hours at a room temperature of 15°C (60°F) between the different applications of epoxy primers. - Wait for at least 8 hours at a room temperature of 15°C (60°F) before applying the final enamel paint on the last epoxy primer application. - Max. humidity level: 85%			
- Asciugare i telai per almeno 5 ore a una temperatura ambiente di 15°C (60°F) un'applicazione e l'altra di primer epossidico. - Attendere almeno 8 ore a temperatura ambiente di 15°C (60°F) prima di applicare la vernice a smalto finale sull'ultima applicazione di primer epossidico. - Massimo livello di umidità: 85%			
- Seque los marcos durante al menos 5 horas a una temperatura ambiente de 15°C (60°F) entre las diferentes aplicaciones de imprimaciones epoxi. - Espere al menos 8 horas a una temperatura ambiente de 15°C (60°F) antes de aplicar la pintura de esmalte final en la última aplicación de imprimación epoxi. - Max. nivel de humedad: 85%			
(*) For colour selection and/or special touch up finishes, please contact directly Sherwin Williams. (*) Per la selezione del colore e/o finiture speciali di ritocco, contattare direttamente Sherwin Williams. (*) Para la selección de colores y/o acabados especiales de retoque, comuníquese directamente con Sherwin Williams.			

Powder Coating

W20 profiles can be powder coated or wet painted.

Powder coating for outdoor use

Contact must be established in such a way to prevent any deformation of the profiles and frames. Additional support may be required for flexible profiles. All the holes and must be foreseen before the painting operations.

Process sequence**Preparation**

- Grind welding points, blast them if necessary (remove waviness).
- Degreasing and cleaning of all component surfaces.
- Roughening (in general sweeping) of all component surfaces / alternative: chemical surface treatment.

Painting cycle - sequence A

- Degreasing
- Flushing
- Zinc phosphating
- Flushing
- Spotting of welding and filing areas with epoxy powder primer, nominal coat thickness of 70 µm
- 1x polyester powder paint, nominal coat thickness of 60-90 µm

Painting cycle - sequence B

- Degreasing
- Flushing
- Zinc phosphating
- Flushing
- 1x full-surface epoxy powder primer, nominal coat thickness of 50-70 µm or 1x full-surface zinc powder primer, nominal coat thickness of 70 µm
- 1x polyester powder top coat, nominal coat thickness of 60-90 µm

The safety regulations and procedural instructions of the manufacturers must be observed.

Verniciatura a polvere

I profili W20 possono essere verniciati a liquido o a polvere.

Vernice in polvere per utilizzo esterno

Il supporto dei telai deve avvenire in modo tale da escludere ogni possibile deformazione. In caso di profili flessibili potrebbe essere necessario un supporto aggiuntivo. Tutti i fori e le lavorazioni devono essere previste prima delle operazioni di verniciatura.

Fasi del processo**Preparazione**

- Smerigliatura dei punti di saldatura, se necessario sabbiatura (eliminare le ondulazioni).
- Rimozione del grasso e pulizia di tutte le superfici del componente.
- Preparazione meccanica (in genere sabbiatura leggera, sweep) di tutte le superfici del componente / In alternativa: trattamento chimico della superficie

Ciclo verniciatura - svolgimento A

- Sgrassaggio
- Risciacquo
- Fosfatazione allo zinco
- Risciacquo
- Protezione dei punti saldati e limati con primer epossidico in polvere, spessore dello strato nominale 70 µm
- 1x vernice in polvere PE, spessore dello strato nominale 60-90 µm

Ciclo verniciatura - svolgimento B

- Sgrassaggio
- Risciacquo
- Fosfatazione allo zinco
- Risciacquo
- 1x primer epossidico in polvere su tutta la superficie, spessore dello strato nominale 50 - 70 µm oppure 1x primer in polvere di zinco su tutta la superficie, spessore dello strato nominale 70 µm
- 1x vernice coprente in polvere PE, spessore dello strato nominale 60 - 90 µm

Osservare le precauzioni di sicurezza e le indicazioni sui metodi del produttore.

Recubrimiento en polvo

Los perfiles W20 se pueden pintar en húmedo y recubrirse con pintura en polvo.

Laca en polvo para uso en exteriores

El contacto debe realizarse de manera que los perfiles y marcos no puedan deformarse. Todos los orificios y los procesos de poliuretano deben preverse antes de las operaciones de pintura.

Secuencia**Preparación**

- Lijar los puntos de soldadura o aplicar chorro si es necesario (eliminar ondulaciones).
- Desengrasar y limpiar todas las superficies de componentes.
- Raspado (p. ej. Sweeping) de todas las superficies de componentes/alternativa: tratamiento químico de la superficie.

Ciclo de pintura - secuencia A

- Desengrasado
- Enrojecimiento
- Realizar fosfatado de cinc
- Enrojecimiento
- Corrección de zonas de soldadura o lijado con imprimación de polvo de epóxidos, grosor nominal de capa 70 µm
- 1x capa de laca de polvo de poliéster, grosor nominal de capa 60-90 µm

Ciclo de pintura - secuencia B

- Desengrasado
- Enrojecimiento
- Realizar fosfatado de cinc
- Enrojecimiento
- 1x imprimación de polvo de epóxidos por toda la superficie, grosor nominal de capa 50-70 µm o 1x imprimación de polvo de cinc por toda la superficie, grosor nominal de capa 70 µm
- 1x capa de laca de polvo de poliéster de cobertura, grosor nominal de capa 60-90 µm

Deben tenerse en cuenta las normas de seguridad y las instrucciones del procedimiento de los fabricantes.

Powder coating for indoor use

Contact must be established in such a way to prevent any deformation of the profiles and frames. Additional support may be required for flexible profiles.

Process sequence

- Grind welding points, blast them if necessary (remove waviness).
- De-greasing and cleaning.
- Roughening of the surface (in general sweeping) or chemical pre-treatment.

Sequence A

- Zinc phosphating.
- 1x polyester powder top coat, nominal thickness layers of 80-120 µm

The safety regulations and procedural instructions of the manufacturers must be observed.

Sequence B

- Chromating (the adhesion of the intended powder coating to steel surfaces without a metal coating must be clarified).
- 1x polyester powder paint, nominal coat thickness of 80-120 µm

The safety regulations and procedural instructions of the manufacturers must be observed.

Powder coating

- see also DIN 55634

Process sequence

- Grind welding points, blast them if necessary (remove waviness).
- Degreasing and cleaning of all component surfaces.
- Roughening of all component surfaces / alternative: chemical surface treatment.
- Primer coating: EP primer - nominal coat thickness of 60 µm
- Top coat: PUR or polyester nominal coat thickness of 60 µm

or

- 2x PUR - nominal coat thickness: 2 x 60 µm = 120 µm

Vernice in polvere per utilizzo interno

Il supporto dei telai deve avvenire in modo tale da escludere ogni possibile deformazione. In caso di profili flessibili potrebbe essere necessario un supporto aggiuntivo. I supporti devono essere previsti nelle zone metalliche dei profili.

Fasi del processo

- Smerigliatura dei punti di saldatura, se necessario sabbiatura (eliminare le ondulations).
- Rimozione del grasso e pulizia.
- Preparazione meccanica della superficie (in genere sabbiatura leggera, sweep) o pretrattamento chimico.

Modalità di svolgimento A

- Fosfatazione allo zinco.
- 1x topcoat con vernice PE in polvere, spessore dello strato nominale 80-120 µm

Osservare le precauzioni di sicurezza e le indicazioni sui metodi del produttore.

Modalità di svolgimento B

- Cromatazione (verificare l'adesione della vernice in polvere utilizzata sulle superfici in acciaio senza rivestimento metallico).
- 1x vernice PE in polvere, spessore dello strato nominale 80-120 µm

Osservare le precauzioni di sicurezza e le indicazioni sui metodi del produttore.

Rivestimento di polvere

- vedere anche DIN 55634

Fasi del processo

- Smerigliatura dei punti di saldatura, se necessario sabbiatura (eliminare le ondulations).
- Rimozione del grasso e pulizia di tutte le superfici del componente.
- Preparazione meccanica di tutte le superfici del componente / In alternativa: trattamento chimico della superficie.
- Rivestimento di base: Primer EP - spessore dello strato nominale 60 µm
- Top coat: PUR o poliestere - spessore dello strato nominale 60 µm

oppure

- 2x PUR - spessore dello strato nominale: 2 x 60 µm = 120 µm

Laca en polvo para uso en interiores

El contacto debe realizarse de manera que los perfiles y marcos no puedan deformarse.

Secuencia

- Lijar los puntos de soldadura o aplicar chorro si es necesario (eliminar ondulations).
- Desengrasar y limpiar.
- Embastar la superficie (p. ej. Sweeping) o tratamiento químico previo.

Secuencia A

- Realizar fosfatado de cinc
- 1x capa de laca de polvo de poliéster de cobertura, grosor nominal de capa 80-120 µm

Deben tenerse en cuenta las normas de seguridad y las instrucciones del procedimiento de los fabricantes.

Secuencia B

- Cromatar (la adherencia de la laca en polvo sobre las superficies de acero sin recubrimiento metálico debe comprobarse).
- 1x capa de laca de polvo de poliéster, grosor nominal de capa 80-120 µm

Deben tenerse en cuenta las normas de seguridad y las instrucciones del procedimiento de los fabricantes.

Revestimiento de polvo

- véase también DIN 55634

Secuencia

- Lijar los puntos de soldadura o aplicar chorro si es necesario (eliminar ondulations).
- Desengrasar y limpiar todas las superficies de componentes.
- Raspado de todas las superficies de componentes/alternativa: tratamiento químico de la superficie.
- Revestimiento básico: Imprimación de epóxidos, grosor nominal de capa 60 µm
- Revestimiento de cobertura: PUR o poliéster, grosor nominal de capa 60 µm

o

- 2x capas PUR, grosor nominal de capa: 2 x 60 µm = 120 µm

VFF leaflet St. 01: 2015-10

Scheda descrittiva VFF St. 01: 2015-10 Hoja de datos St. 01 VFF: 2015-10

Correlation of corrosivity categories, protection period and corrosion protection classes.

Corrispondenze tra categorie di corrosività, durata della protezione e classi di protezione contro la corrosione.

Relación de categorías de corrosividad, duración de protección, accesibilidad y clases de protección contra corrosión.

Corrosivity category Categoria corrosività Categoría corrosividad	Protection period Periodo di protezione Periodo de protección	(1) Corrosion protection class Classe di protezione Clase de protección		Environment example outdoors Esempio di ambiente esterno Ejemplo de ambiente externo	Environment example indoors Esempio di ambiente interno Ejemplo de ambiente interno
C1 Insignificant Insignificante	Low Basso Bajo	I	I		Heated building with neutral atmosphere. Edificio riscaldato con atmosfera neutra. Edificio climatizado con ambiente neutral.
	Médium Medio Medio	I	I		
	High Alto Alto	I	I		
C2 Low Basso Bajo	Low Basso Bajo	I	II	Rural areas with a low level of pollution. Zone rurali con basso livello di inquinamento. Zonas rurales con bajo nivel de contaminación.	Buildings where condensation may occasionally occur, e.g. gymnasiums. Edifici in cui può verificarsi occasionalmente condensa, ad es. palestre. Edificios donde puede producirse condensación ocasionalmente, p. Ej. gimnasios.
	Medium Medio Medio	I	II		
	High Alto Alto	I	III		
C3 Moderate Moderato Moderar	Low Basso Bajo	II	III	Urban and industrial atmosphere, moderate sulphur dioxide pollution, coastal area with low salt content. Ambiente urbano e industriale, moderato inquinamento da anidride solforosa, area costiera a basso contenuto di sale. Atmósfera urbana e industrial, contaminación moderada de dióxido de azufre, área costera con bajo contenido de sal.	Production rooms with high humidity and some air pollution, e.g. laundries, dairies, canteen kitchens, winter gardens. Ambiente urbano e industriale, moderato inquinamento da anidride solforosa, area costiera a basso contenuto di sale. Atmósfera urbana e industrial, contaminación moderada de dióxido de azufre, área costera con bajo contenido de sal.
	Medium Medio Medio	II	III		
	High Alto Alto	II	III		
C4 High Alto Alto	Low Basso Bajo	III	III	Industrial areas, tunnels, traffic junctions, moderate salt load. Aree industriali, gallerie, incroci stradali, carico di sale moderato. Zonas industriales, túneles, cruces de tráfico, carga salina moderada.	Chemical plants, swimming pools, slaughterhouses. Impianti chimici, piscine, macelli. Plantas químicas, piscinas, mataderos.
	Medium Medio Medio	III	III		
	High Alto Alto	III	> III (2)		
C5-I Very high Molto alto Muy alto	Low Basso Bajo	III	> III (2)	Industrial sectors with high moisture and aggressive atmosphere. Settori industriali con elevata umidità e atmosfera aggressiva. Sectores industriales con alta humedad y ambiente agresivo.	Buildings or areas with almost constant condensation and heavy pollution. Edifici o aree con condensa quasi costante e forte inquinamento. Edificios o áreas con condensación casi constante y fuerte contaminación.
	Medium Medio Medio	III	> III (2)		
	High Alto Alto	> III (2)	> III (2)		
C5-M Very high Molto alto Muy alto	Low Basso Bajo	III	> III (2)	Coastal and offshore areas with high salt concentration. Zone costiere e offshore con alta concentrazione di sale. Zonas costeras y mar adentro con alta concentración de sal.	Buildings or areas with almost constant condensation and heavy pollution. Edifici o aree con condensa quasi costante e forte inquinamento. Edificios o áreas con condensación casi constante y fuerte contaminación.
	Medium Medio Medio	III	> III (2)		
	High Alto Alto	> III (2)	> III (2)		

(1) The indication of the corrosion protection class serves only the assignment of the previous building authority requirements to the new European classification system consisting of corrosivity category and protection period.

(2) The corrosion protection classes are not applicable in the event of very high corrosion loads and long protection periods as well as special loads. In the case of these loads and conditions, the necessary measures must be determined on a case-by-case basis.

Source: DIN 55634 table 1.

(1) L'indicazione della classe di protezione contro la corrosione serve solo per l'allineamento dei requisiti inerenti alla sorveglianza sulle costruzioni al nuovo sistema di classificazione europeo in base a categoria di corrosività e durata della protezione.

(2) In presenza di esposizione a corrosione intensa, durata della protezione prolungata e sollecitazioni particolari le classi di protezione contro la corrosione non sono applicabili. In simili circostanze e condizioni occorre definire le misure da adottare caso per caso.

Fonte: DIN 55634 Tabella 1.

(1) La indicación de la clase de protección contra corrosión solo sirve para asignar los requisitos antiguos de la obra al nuevo sistema de clasificación europeo compuesto por categoría de corrosividad y duración de protección.

(2) En caso de gran carga por corrosión y duración de protección, así como en caso de cargas especiales, las clases de protección contra corrosión no son aplicables. En este caso de cargas y condiciones deben determinarse las medidas individualmente para cada caso.

Fuente: DIN 55634 Tabla 1.

General information

Foreword
Materials
European standards
Orders
Transport and storage
Processing:
- general
- sawing
- drilling
- thread cutting
- milling
- welding
- welding station
- straightening work
- cleaning
Surface treatment:
- general notes, coating
- procedure
- weld seam area
- cleaning the surfaces
- mechanical roughening of the surface
- chemical surface treatment
- types of coating
Installation on site:
- glazing
- joint sealing
- damage prevention on site
- cleaning
- use and maintenance
Technical services
Disclaimer

Informazioni generali

Premessa
Materiali
Norme Europee
Ordini
Trasporto e stoccaggio
Lavorazioni:
- aspetti generali
- taglio a sega
- foratura
- filettatura
- fresatura
- saldatura
- postazione di saldatura
- interventi di rettifica
- pulitura
Trattamento superficiale:
- aspetti generali, la verniciatura
- procedura
- area del cordone di saldatura
- pulizia delle superfici
- preparazione meccanica della superficie
- trattamento chimico della superficie
- tipi di verniciatura
Posa in opera:
- vetratura
- sigillatura giunti
- prevenzione dei danni in cantiere
- pulizia
- uso e manutenzione
Consulenza tecnica
Avvertenze

Información general

Prólogo
Materiales
Normas europeas
Pedido
Transporte y almacenamiento
Procesamiento:
- generalidades
- corte con sierra
- taladrado
- corte roscado
- fresado
- soldadura
- puesto de soldadura
- enderezamiento
- limpieza
Tratamiento de superficie:
- generalidades, la pintura
- procedimiento
- zona de cordón de soldadura
- limpieza de las superficies
- raspado mecánico de la superficie
- tratamiento químico de la superficie
- tipos de pintura
Montaje:
- acristalamientos
- sellado de juntas
- prevención de daños en el sitio
- limpieza
- uso y mantenimiento
Apoyo técnico
Descargo

7.0

7.1
7.2
7.3
7.4
7.5
7.6
7.6.1
7.6.2
7.6.3
7.6.4
7.6.5
7.6.6
7.6.7
7.6.8
7.6.9
7.7
7.7.1
7.7.2
7.7.3
7.7.4
7.7.5
7.7.6
7.7.7
7.8
7.8.1
7.8.2
7.8.3
7.8.4
7.8.5
7.9
7.10

7.1 Foreword

The profile systems from OTTOSTUMM I Mogs are designed for use in door, window and façade construction. The high dimensional accuracy and straightness of the profiles makes them easy to be processed.

These documents are intended for specialist companies that are familiar with the relevant standards, directives and regulations.

Notes on construction suggestions and application examples:

- The illustrations shown are non-binding suggestions.
- The examples cannot cover every possible application.
- All relevant regulations are to be observed.
- The processing guidelines for the OTTOSTUMM I Mogs product ranges also apply.
- The static dimensioning of the profiles, anchors, dowels, screws and glazing must be determined independently by the executing company in accordance with the applicable standards, directives and regulations.
- In individual cases they must be checked for their usefulness and, if necessary, modified in consultation with the responsible architect, structural engineer and/or building physicist.
- The professional execution is the responsibility of the executing company.
- OTTOSTUMM I Mogs assumes no liability for this.

For all items contained in this documentation, as well as for all activities related to them (order, transport, etc.), our General Conditions and Terms, which can be downloaded at www.ottostumm-mogs.com, apply.

7.1 Premessa

I sistemi per profili di OTTOSTUMM I Mogs sono progettati per l'utilizzo nella costruzione di porte, portoni, finestre e facciate. L'elevata precisione dimensionale e la perfetta linearità dei profili semplificano la lavorazione. La presente documentazione è riservata ad aziende che hanno già dimestichezza con le norme, le direttive e le disposizioni in materia.

Note relative alle proposte di costruzione e agli esempi di applicazione:

- Le raffigurazioni fornite sono proposte non vincolanti.
- Gli esempi non possono coprire ogni singolo caso applicativo.
- Tenere conto di tutte le disposizioni vigenti in materia.
- Osservare anche le direttive di lavorazione dei diversi sistemi OTTOSTUMM I Mogs.
- Il dimensionamento statico dei profili, degli ancoraggi, dei tasselli, delle viti e delle vetrate deve essere definito dalla ditta esecutrice sotto la propria responsabilità e in conformità alle norme, direttive e disposizioni vigenti in materia.
- In circostanze particolari deve essere verificata la fruibilità e, se necessario, devono essere apportate le dovute modifiche in accordo con i professionisti competenti.
- Della corretta esecuzione è responsabile la ditta esecutrice.
- OTTOSTUMM I Mogs è sollevata da qualsiasi responsabilità a riguardo.

Per ulteriori avvertenze, fare riferimento a quanto specificato nel Disclaimer.

Per tutti gli articoli contenuti nella presente documentazione, così come per ogni attività ad essi collegata (ordine, trasporto ecc) fanno fede le nostre Condizioni generali di vendita, scaricabili al sito www.ottostumm-mogs.com

7.1 Prólogo

Los sistemas de perfiles de OTTOSTUMM I Mogs han sido concebidos para su uso en la construcción de puertas, portales, ventanas y fachadas. La gran precisión y el carácter especialmente recto de los perfiles permite un procesamiento sencillo.

La presente documentación van dirigidas a empresas especializadas que están familiarizadas con las directivas y normativas aplicables.

Notas relativas a sugerencias de construcción y ejemplos de aplicación:

- Las representaciones indicadas son sugerencias no vinculantes.

- Los ejemplos no pueden representar todos los casos posibles de aplicación.
- Deben tenerse en cuenta todas las normas aplicables.
- Además, deben respetarse las directivas de procesamiento de los programas OTTOSTUMM I Mogs.
- El dimensionamiento estático de los perfiles, los anclajes, los tacos, tornillos y acristalamientos debe determinarlos la empresa responsable por su cuenta de conformidad con las normas, directivas y disposiciones vigentes.
- En casos individuales habrá que comprobar la viabilidad y puede ser necesario realizar cambios tras consulta con el arquitecto, ingeniero o calculistas.
- La responsabilidad de la realización correcta de estas tareas recae sobre la empresa encargada.
- OTTOSTUMM I Mogs no puede dar garantía alguna al respecto.

Para mayor información, dirijase a las cláusulas especificadas en la nota de descargo de responsabilidad.

Para todos los artículos contenidos en esta documentación, así como para todas las actividades ligadas (pedidos, transporte, etc) se aplican las condiciones generales de venta, que se pueden descargar desde www.ottostumm-mogs.com.

7.2 Materials

OTTOSTUMM | Mogs profiles are produced in the following material variants:

- A) Steel, material S235JR, 1.0038, hot rolled.
- B) Steel, material S235JR, 1.0038, laser welded, beadblasted.
- C) Steel, material S235JR, 1.0038, laser welded.
- D) Aluminium alloy EN AW 6060 according to EN 573-3, T 66 condition according to EN 755-2 for supplementary profiles and glazing beads.

7.2 Materiali

I profili OTTOSTUMM | Mogs sono realizzati nelle seguenti varianti di materiale:

- A) Acciaio, materiale S235JR, 1.0038, laminato a caldo.
- B) Acciaio, materiale S235JR, 1.0038, saldato laser, micropallinato.
- C) Acciaio, materiale S235JR, 1.0038, saldato laser.
- D) Lega di alluminio EN AW 6060 secondo EN 573-3, stato T 66 secondo EN 755-2 per profili complementari e listelli fermavetro.

7.2 Materiales

Los perfiles OTTOSTUMM | Mogs se fabrican en las siguientes variantes de material:

- A) Acero, material S235JR, 1.0038, laminado en caliente.
- B) Acero, material S235JR, 1.0038, soldado con láser, micro-arenado.
- C) Acero, material S235JR, 1.0038, soldado con láser.
- D) Aleación de aluminio EN AW 6060 - de conformidad con EN 573-3, estado T 66 de conformidad con EN 755-2 para perfiles adicionales y junquillos.

7.3 European standards

EN 1993-1-1: Design of steel structures - Part 1-1: General rules and rules for buildings
EN 1993-1 -1/NA: National Annex - Nationally determined parameters -: Design of steel structures - Part 1-1: General rules and rules for buildings
EN 1993-1-2: Design of steel structures - Part 1-2: General rules - Structural fire design
EN 1993-1 -2/NA: National Annex - Nationally determined parameters -: Design of steel structures - Part 1-2: General rules - Structural fire design
EN 1993-1-5: Design of steel structures - Part 1-5: Plated structural elements
EN 1993-1 -5/NA: National Annex - Nationally determined parameters -: Design of steel structures - Part 1-5: Plated structural elements
EN 12944: Corrosion protection of steel structures by protective paint systems
EN 12944-1: General introduction
EN 12944-2: Classification of environments
EN 12944-3: Design considerations
EN 12944-4: Types of surface and surface preparation
EN 12944-5: Protective paint systems
EN 12944-6: Laboratory performance test methods
EN 12944-7: Execution and supervision of paint work
EN 12944-8: Development of specifications for new work and maintenance

7.3 Norme europee

EN 1993-1-1: Misurazione e progettazione di strutture in acciaio - Parte 1-1: Regole generali e regole per gli edifici
EN 1993-1 -1/NA: Allegato nazionale - Parametri definiti a livello nazionale -: Misurazione e progettazione di strutture in acciaio - Parte 1-1: Regole generali e regole per gli edifici
EN 1993-1-2: Misurazione e progettazione di strutture in acciaio - Parte 1-2: Regole generali - Progettazione di strutture portanti in caso di incendio
EN 1993-1 -2/NA: Allegato nazionale - Parametri definiti a livello nazionale -: Misurazione e progettazione di strutture in acciaio - Parte 1-2: Regole generali - Progettazione di strutture portanti in caso di incendio
EN 1993-1-5: Misurazione e progettazione di strutture in acciaio - Parte 1-5: Elementi strutturali a lastra
EN 1993-1 -5/NA: Allegato nazionale - Parametri definiti a livello nazionale -: Misurazione e progettazione di strutture in acciaio - Parte 1-5: Elementi strutturali a lastra
EN 12944: Protezione dalla corrosione di strutture in acciaio mediante verniciatura
EN 12944-1: Informazioni generali, termini, corrosione
EN 12944-2: Suddivisione delle condizioni ambientali
EN 12944-3: Regole di base per la progettazione
EN 12944-4: Tipi di superficie e preparazione della superficie
EN 12944-5: Sistemi di verniciatura
EN 12944-6: Prove in laboratorio per la valutazione dei sistemi di verniciatura
EN 12944-7: Esecuzione e supervisione dei lavori di verniciatura
EN 12944-8: Stesura di specifiche per lavori nuovi e di manutenzione

7.3 Normas europeas

EN 1993-1-1: Proyecto de estructuras de acero. Parte 1-1: Reglas generales y reglas para edificios.
EN 1993-1 -1: Anejo Nacional: Parámetros de determinación nacional: Proyecto de estructuras de acero. Parte 1-1: Reglas generales y reglas para edificios.
EN 1993-1-2: Proyecto de estructuras de acero. Parte 1-2: Reglas generales. Proyecto de estructuras sometidas al fuego.
EN 1993-1 -2: Anejo Nacional: Parámetros de determinación nacional: Proyecto de estructuras de acero. Parte 1-2: Reglas generales. Proyecto de estructuras sometidas al fuego.
EN 1993-1-5: Proyecto de estructuras de acero. Parte 1-5: Placas planas cargadas en su plano.
EN 1993-1 -5: Anejo Nacional: Parámetros de determinación nacional: Proyecto de estructuras de acero. Parte 1-5: Placas planas cargadas en su plano.
EN 12944: Protección de estructuras de acero frente a la corrosión mediante sistemas de pintura protectores
EN 12944-1: Introducción general.
EN 12944-2: Clasificación de ambientes.
EN 12944-3: Consideraciones sobre el diseño.
EN 12944-4: Tipos y preparación de superficies.
EN 12944-5: Sistemas de pintura protectores.
EN 12944-6: Ensayos de comportamiento en laboratorio.
EN 12944-7: Ejecución y supervisión de trabajos de pintado.
EN 12944-8: Desarrollo de especificaciones para trabajos nuevos y mantenimiento.

7.4 Order

Delivery lengths of profiles and packaging units of accessories and fittings are included in the program list. In the case of insulate profiles, the outside unfolding specified for profiles contains the entire visible unfolding. The specified weights per metre apply to the corresponding material and the weights of the composite webs are included in the insulated profiles.

7.4 Ordine

Le lunghezze di fornitura dei profili e le confezioni di accessori e ferramenta sono indicate nel catalogo. In caso di profili taglio termico lo sviluppo esterno si riferisce all'intero sviluppo visibile. I pesi al metro indicati si riferiscono al rispettivo materiale e in caso di profili taglio termico sono inclusi anche i pesi delle anime isolanti di collegamento.

7.4 Pedido

Las longitudes de suministro y las unidades de embalaje de accesorios y herrajes se pueden consultar en los listados. En el caso de los perfiles de unión, la estructura exterior indicada incluye toda la estructura visible. Los pesos por metro se refieren al material correspondiente y en el caso de los perfiles de unión se incluye el peso de las barras de unión.

7.5 Transport and storage

OTTOSTUMM I Mogs profiles are treated and pack extremely carefully at the factory to rule out any corrosion and mechanical damage at the distribution warehouses and during transport to the processor.

The risk is transferred to the purchaser when the goods are handed over to a freight forwarder or carrier, at the latest, however, when they leave the warehouse or the supplying plant.

Unloading operations can be carried out with an overhead crane or forklift truck.

Only forklift trucks with wide forks set at a large distance may be used for unloading and transport.

For the timely notification of transport damage and other material defects, the corresponding information in our terms of sale shall apply.

OTTOSTUMM I Mogs profiles must be stored separately according to the material in order to exclude a risk of corrosion due to extraneous rust particles on stainless steel and aluminium. Dry storage in suitable rooms must be ensured to avoid corrosion. Short-term strong temperature fluctuations in the storage room should be avoided in view of possible condensation water formation in the profile stack.

The profiles must rest on wood or plastic, materials which must not contain any aggressive substances that could trigger chemical reactions at the contact surfaces with the profiles.

Scratches, indentations or other deformation or damage to the surface must be avoided during storage and transport. This applies in particular to the interim storage of profiles that have already been subjected to surface treatment. They may be removed from storage racks only by lifting them out.

For businesses that process aluminium as well as steel, it is a matter of course that strict spatial separation of these materials is ensured both during storage and processing. The formation of white rust in continuously hot-dip materials does not constitute a reason for complaint.

7.5 Trasporto e stoccaggio

I profili OTTOSTUMM I Mogs vengono trattati e imballati in magazzino con estrema accortezza per proteggerli dalla corrosione e da possibili danni meccanici che possono subire nei magazzini di distribuzione e durante il trasporto verso il produttore di serramenti.

Con l'affidamento della merce a un vettore o trasportatore, e comunque al più tardi all'uscita dal magazzino o dallo stabilimento di produzione, il rischio viene trasferito al cliente. Le operazioni di scarico possono avvenire con carroponte o con carrello elevatore.

Se si utilizza un carrello elevatore per scaricare e trasportare la merce, le forche dell'elevatore devono essere larghe e regolate alla massima distanza.

Per la segnalazione tempestiva di eventuali danni dovuti al trasporto o altri difetti strutturali valgono le indicazioni relative contenute nelle nostre condizioni di vendita.

I profili OTTOSTUMM I Mogs devono essere obbligatoriamente stoccati in base al materiale per evitare il pericolo di corrosione dovuto a particelle di ruggine volatile che vengono a contatto con l'acciaio inossidabile e l'alluminio. Per evitare la corrosione deve essere garantito uno stoccaggio in locali adeguatamente protetti dall'umidità. Variazioni brusche della temperatura all'interno del luogo di stoccaggio devono essere evitate per impedire la formazione di acqua di condensa tra i profili. I profili devono poggiare su legno o plastica, materiali che non devono contenere sostanze aggressive che potrebbero innescare reazioni chimiche nei punti di contatto tra i profili. Evitare graffi, impronte, deformazioni o danni superficiali di qualunque natura durante l'immagazzinaggio e il trasporto. Ciò vale in particolare in caso di stoccaggi intermedi di profili già sottoposti a trattamento della superficie. Il prelievo dai luoghi di stoccaggio può avvenire soltanto per sollevamento.

In aziende che prevedono la lavorazione di alluminio oltre a quella dell'acciaio è ovviamente necessario predisporre una rigida separazione degli spazi adibiti alla lavorazione, ma anche allo stoccaggio di questi due materiali. La formazione di ossidazione bianca sui materiali sottoposti ad affinazione continua mediante immersione a caldo non costituisce motivo di reclamo.

7.5 Transporte y almacenamiento

Los perfiles de OTTOSTUMM I Mogs se tratan con la máxima diligencia en fábrica para evitar corrosión y daños mecánicos en los almacenes de distribución y en el transporte a la empresa procesadora.

La responsabilidad sobre la mercancía se transfiere al comprador en el momento de la entrega a la empresa de transporte o el encargado de transporte y, como muy tarde, en el momento en el que la mercancía abandona el almacén o la fábrica proveedora.

Las operaciones de descarga se pueden realizar con un puente grúa o carro elevador. Si se realizan descargas y transportes con carretilla elevadora, solo se deben emplear horquillas anchas y ajustadas a distancias amplias. En cuanto a los plazos de comunicación de daños de transporte u otros imperfectos materiales se aplican las indicaciones correspondientes en nuestras condiciones de venta.

Los perfiles de OTTOSTUMM I Mogs deben almacenarse obligatoriamente separados por material para evitar cualquier posibilidad de corrosión por partículas de óxido ajeno en el acero y el aluminio inoxidables. Para evitar la corrosión hay que garantizar un almacenamiento en seco en espacios adecuados. Deben evitarse las oscilaciones térmicas repentinas en el espacio de almacenamiento para evitar la posible formación de agua de condensación en las pilas de los perfiles. Los perfiles deben apilarse sobre madera o plástico, materiales que no tienen que contener sustancias agresivas que puedan provocar reacciones químicas en las superficies de contacto con los perfiles. Durante el transporte y el almacenamiento deben evitarse arañazos, abolladuras o cualquier otra deformación o forma de daño en las superficies. Hay que tener especial cuidado en los almacenamientos temporales de los perfiles cuyas superficies ya han sido tratadas. Para retirar los perfiles de sus estructuras de almacenamiento siempre se deben elevar, nunca arrastrar.

En el caso de empresas que aparte de acero también procesan aluminio, debe preverse una separación física estricta de ambos materiales tanto durante el almacenamiento como el procesamiento. La formación de óxido blanco en los materiales continuo en caliente no representa un motivo de reclamación.

7.6 Processing

7.6.1 General

Special attention must be paid to the strictly separate processing of the materials steel and stainless steel or aluminium. No tools of any kind must be mutually shared.

Width and height tolerances of ± 1 mm beyond the outer dimensions apply to the production of the frames unless expressly stated otherwise in the product chapters.

For the sealing of joint zones not closed by welding in joined frame connections, we strongly recommend using a narrow joint sealant.

OTTOSTUMM | Mogs door fittings are supplied with initial factory lubrication and do not need to be greased during installation. Information on further maintenance can be found in the processing guidelines. Window fittings must be greased slightly during installation in accordance with the instructions in the fitting packaging.

The profiles made of hot-dip carbon steel correspond in terms of their processability to commercially available carbon steel of comparable strength. Observe the wall thickness of 1.5 mm and - in particular when welding - the zinc-magnesium coating.

Commercially available products for machining carbon steel are to be used as coolants and lubricants.

7.6 Lavorazione

7.6.1 Aspetti generali

Prestare particolare attenzione alla lavorazione separata di acciaio, acciaio inox e alluminio.

Gli utensili di qualsiasi tipo non devono essere utilizzati in modo alternato per le diverse lavorazioni.

Salvo diversamente indicato nei capitoli dedicati, la tolleranza di larghezza e altezza ammessa per la fabbricazione dei telai è di ± 1 mm rispetto alla misura esterna.

Per l'isolamento delle fughe in corrispondenza delle giunzioni del telaio che non vengono saldate si consiglia vivamente l'utilizzo di un apposito sigillante per fughe sottili. Le ferramenta per porte OTTOSTUMM | Mogs sono fornite con una prima lubrificazione in fabbrica e non deve essere aggiunto grasso durante il montaggio. Per informazioni sulla manutenzione successiva fare riferimento alle direttive di lavorazione. Le ferramenta per finestre devono essere leggermente lubrificate durante il montaggio secondo quanto riportato sulle confezioni.

I profili in acciaio al carbonio zincati mediante immersione a caldo presentano una lavorabilità analoga a quella degli altri acciai al carbonio comunemente reperibili sul mercato. Da tenere in particolare considerazione è lo spessore della lamiera pari a 1.5 mm e la presenza del rivestimento in zinco-magnesio, specialmente durante la saldatura.

Durante la lavorazione degli acciai al carbonio, impiegare prodotti di raffreddamento e lubrificazione comunemente disponibili in commercio.

7.6 Procesamiento

7.6.1 Generalidades

Hay que prestar especial atención a la separación de los materiales de acero o acero inoxidable y el aluminio. Las herramientas no se pueden emplear de forma conjunta para ambos materiales.

Si no se establece expresamente lo contrario en los capítulos concretos del producto, la tolerancia aplicable de anchura y altura para la fabricación de marcos es de ± 1 mm.

Para sellar zonas de fuga cerradas mediante procesos distintos a la soldadura en el caso de las uniones de marcos (unión a tope o con inglete) recomendamos encarecidamente el uso del agente sellante para fugas.

Los herrajes de puertas OTTOSTUMM | Mogs se suministran con una lubricación inicial de fábrica y no necesitan engrasarse durante el montaje. Las indicaciones sobre el mantenimiento posterior deben consultarse en las directivas de procesamiento. Los herrajes de ventana deben engrasarse ligeramente en el montaje tal y como se indica en las instrucciones de los embalajes de los herrajes.

Los perfiles de acero al carbono galvanizado en caliente cuentan con la misma procesabilidad que los aceros al carbono habituales del mercado con una resistencia comparable. Debe tenerse en cuenta su grosor de pared de 1.5 mm y, especialmente a la hora de soldar, el recubrimiento de zinc-magnesio.

Como agentes refrigerantes y lubricantes deben emplearse los productos habituales del sector para la mecanización de aceros al carbono.

7.6.2 Sawing

Particular attention must be paid to the clamping of sectional steel profiles. Special cutting supports corresponding to the profile shapes must be inserted for this purpose.

Cuts are usually made with metal cold circular saws, which can make angle cuts within a range of $\pm 90^\circ$. However, high-performance band saws or hand saws can be used also for simple, straight cuts.

Only HSS saw blades are to be used.

Fine toothing is required for OTTOSTUMM I Mogs profiles.

Cutting speed: 20-40 m/min.

Tooth pitch: 4-6 mm

Saw blade thickness: 2.4 to 4 mm

The specifications depend on the type of machine used.

Universal cold circular saws are recommended as sawing machines.

7.6.2 Taglio a sega

Prestare particolare attenzione al bloccaggio dei profili in acciaio. A tal riguardo, utilizzare le dime di taglio specifiche.

I tagli vengono eseguiti in genere con seghe circolari per metallo a freddo; i tagli ad angolo possono essere eseguiti in un range tra $\pm 90^\circ$. Per tagli diritti più semplici possono essere utilizzate anche seghe a nastro ad alte prestazioni o seghe manuali.

Utilizzare unicamente lame per seghe HSS.

Per i profili OTTOSTUMM I Mogs è richiesta una dentatura fine.

Velocità di taglio: 20-40 m/min.

Passo dei denti: 4-6 mm

Spessore della lama: da 2.4 a 4 mm

I dati indicati dipendono dal tipo di macchinario utilizzato.

Si consiglia l'utilizzo di seghe circolari a freddo universali.

7.6.2 Corte con sierra

Hay que prestar atención especial a la sujeción de tubos perfilados de acero. En este contexto, hay que usar hojas de sierra adecuadas a las formas de perfil.

Por norma general, los cortes a medida se realizan con sierras circulares para corte de metales en frío con capacidad para realizar cortes angulares de $\pm 90^\circ$. No obstante, para realizar otros cortes más sencillos y rectos se pueden emplear sierras de alto rendimiento o sierras manuales.

Solo se deben emplear hojas de sierra HSS.

Los perfiles de OTTOSTUMM I Mogs requieren un dentado fino.

Velocidad de corte: 20-40 m/min.

División de dientes: 4-6 mm

Grosor de hoja de sierra: 2.4 a 4 mm

Las indicaciones propuestas dependen del tipo de máquina empleado.

Se recomiendan sierras circulares universales de corte en frío.

7.6.3 Drilling

Drilling jigs or templates should always be used.

The drills - standard range (HSS) - must be ground exactly and always kept sharp (reground). Angles, cutting edges and relief cuts to the core must be symmetrical. Point angle of 116° - 118° .

7.6.3 Foratura

Utilizzare sempre schemi o dime di foratura. Le punte - gamma comune (HSS) - devono essere affilati con precisione e l'affilatura deve essere costantemente mantenuta (affilatura periodica).

Gli angoli, i profili del tagliente e gli angoli di spoglia rispetto al nucleo della punta devono essere simmetrici. Angolo di punta 116° - 118° .

7.6.3 Taladrado

Siempre debe emplear calibres o plantillas de taladro.

Los taladros, gama habitual (HSS), deben mantenerse siempre bien lijados y afilados (reafilar). Cualquier ángulo, borde de corte o lijado posterior con respecto al alma debe ser simétrico. Ángulo punta 116° - 118° .

Drilling Ø [mm]	Speed [rpm]	Feed rate [mm/rev.]
3	1000	0.11
4.8	780	0.12
5.2	730	0.125
6	625	0.13
7	560	0.14
8	500	0.145
9.2	410	0.165

Foro Ø [mm]	Velocità [rpm]	Avanzamento [mm/giro]
3	1000	0.11
4.8	780	0.12
5.2	730	0.125
6	625	0.13
7	560	0.14
8	500	0.145
9.2	410	0.165

Taladro Ø [mm]	Velocidad [rpm]	Avance [mm/vuelta]
3	1000	0.11
4.8	780	0.12
5.2	730	0.125
6	625	0.13
7	560	0.14
8	500	0.145
9.2	410	0.165

Spray cooling for large cross-sections increases the tool life.

In caso di sezioni di grandi dimensioni il raffreddamento a spruzzo prolunga la vita utile dell'utensile.

La refrigeración por pulverización en las secciones más amplias aumenta la vida útil de las herramientas.

7.6.4 Tapping and thread cutting

Use HSS tools. The cutting speed is approx. 10% higher than with alloyed steels.

7.6.4 Filettatura

Utilizzare utensili HSS. È richiesta una velocità di taglio del 10% superiore a quella impiegata con gli acciai legati.

7.6.4 Taladrado y corte roscado

Emplear herramientas HSS. La velocidad de corte es aprox. un 10% superior que la de los aceros de aleación.

7.6.5 Milling

The milling cutters - standard range (HSS) - must be ground exactly and always kept sharp (reground). Angles, cutting edges and relief cuts must be symmetrical. The required milling work must be carried out with tools for thin-walled profiles (with profile miller or machining centre for steel and stainless steel).

7.6.5 Fresatura

Le frese - gamma comune (HSS) - devono essere affilate con precisione e l'affilatura deve essere costantemente mantenuta (affilatura periodica). Gli angoli, i profili del tagliente e le spoglie devono essere simmetrici. Le operazioni di fresatura richieste devono essere eseguite con utensili per profili in lamiera sottile (con frese a pantografo o centri di lavorazione per acciaio e acciaio inox).

7.6.5 Fresado

La fresas, gama habitual (HSS), deben mantenerse siempre bien lijadas y afiladas (reafilear). Cualquier ángulo, borde de corte o lijado posterior ser simétrico. Los trabajos de fresado requeridos deben llevarse a cabo con perfiles de paredes finas (con fresa de copia o centro de mecanizado para acero y acero inoxidable).

7.6.6 Welding

The carbon steel can be melt-welded and resistance-welded with all the processes commonly used in practice. As for alloyed steel, gas fusion welding is not recommended (distortion due to large-area heating of the profiles). Particularly suitable are:

- Metal active gas welding (MAG)
- Metal inert gas welding (MIG)

7.6.6 Saldatura

L'acciaio al carbonio può essere saldato con tutti i comuni metodi di saldatura per fusione o a resistenza. Come con gli acciai legati si sconsiglia l'uso della saldatura ossiacetilenica (deformazione a causa del riscaldamento di un'ampia superficie del profilo). I metodi particolarmente adatti sono i seguenti:

- Saldatura ad arco con metallo sotto protezione di gas attivo (MAG)
- Saldatura ad arco con metallo sotto protezione di gas inerte (MIG)

7.6.6 Soldadura

El acero al carbono se puede soldar a resistencia o a fusión con todos los procedimientos habituales en la práctica. Al igual que en el caso del acero de aleación, debe evitarse la soldadura de fusión de gas (deformación por calentamiento de grandes superficies de los perfiles). Los siguientes tipos son especialmente adecuados:

- Soldadura de metal por gas activo (MAG)
- Soldadura de metal por gas inerte (MIG)

7.6.7 Welding station

When welding elements, make sure the working surface is absolutely flat! A suitable welding table with fasteners is recommended for this purpose. The welding station should always be well ventilated. Smoke extraction systems are recommended here! The relevant regulations must be observed.

7.6.7 Postazione di saldatura

Per la saldatura degli elementi è richiesta una superficie di lavoro assolutamente in piano. Si consiglia pertanto l'utilizzo di un apposito banco di saldatura con mezzi di fissaggio. La postazione di saldatura deve essere sempre ben ventilata. Si consiglia l'utilizzo di un impianto di aspirazione dei fumi. Osservare le disposizioni vigenti in materia.

7.6.7 Puesto de soldadura

Al soldar los elementos debe garantizarse que la superficie de trabajo está totalmente nivelada. En este caso, recomendamos una mesa de soldadura adecuada con medios de fijación. El puesto de soldadura siempre debe estar bien ventilado. En este contexto, recomendamos el uso de dispositivos de extracción de humo. Deben tenerse en cuenta todas las normas aplicables.

7.6.8 Straightening work

If, despite all precautions, slight distortions occur in the frame and sash, they should be straightened using suitable spindle presses or other straightening machines.

7.6.8 Lavori di rettifica

Se, nonostante tutte le precauzioni del caso, i telai o i battenti subiscono lievi deformazioni, è possibile rettificarli con l'impiego di apposite presse a bilanciere o altri macchinari di rettifica.

7.6.8 Enderezamiento

Si a pesar de tomar todas las precauciones surgen pequeñas deformaciones en el marco y las hojas, deben corregirse mediante prensas de husillo u otros dispositivos de ajuste.

7.6.9 Plastering

The weld seams are usually plastered with an angle grinder (for further information, refer to the processing guidelines). In order to achieve a clean visible surface of the element and ensure the exact function of the glazing bead, the corners must be treated with a file.

7.6.9 Ripulitura

I cordoni di saldatura vengono rifiniti solitamente con la smerigliatrice angolare (per ulteriori indicazioni vedere le direttive di lavorazione). Per ottenere una superficie visibile dell'oggetto pulita e per garantire il corretto funzionamento dei profili fermavetro, è necessario ripassare gli angoli con una lima.

7.6.9 Acabado

Normalmente los cordones de soldadura se repasan con la lijadora angular (más información en las directivas de procesamiento). Para obtener una superficie visible limpia del elemento y para garantizar el funcionamiento preciso de la barra de soporte de cristal, hay que repasar las esquinas con una lima.

7.7 Surface treatment

7.7.1 General notes, coating

The surface treatment serves corrosion protection and colour design. With steel profiles, it must always be carried out after machining. Exception: aluminium profiles. Coating accumulation should be avoided, in particular in the area of the sealing and glazing bead mounting zones.

Decisive are:

- EN ISO 12944 Corrosion protection of steel structures by protective paint systems
- DIN 55634 - Paints, varnishes and coatings
 - Corrosion protection of supporting thin-walled building components made of steel
- Guideline from GSB or Qualicoat for piece coating of steel parts
- Also refer to VFF leaflet ST.01

In the case of high corrosion loads and a long protection period (e.g. windows near the coast) and special loads, the suitable corrosion protection system must be determined in each individual case.

The manufacturer of the coating material must prove the suitability of their product for the coating of the profiles and the corrosion protection of the overall system (primer and top coat, weld seam area, cutting edge).

7.7.2 Procedure

In order to achieve perfect adhesion of the coating system, an appropriate surface must be created by cleaning and roughening or chemical pre-treatment.

7.7.3 Weld seam area

Welding beads and scale must be carefully removed with the grinding machine and, if necessary, reworked with a blasting gun and corundum sand.

7.7 Trattamento della superficie

7.7.1 Aspetti generali, la verniciatura

Il trattamento della superficie è necessario per la protezione contro la corrosione e per la finitura cromatica dell'oggetto. In linea di massima va eseguito dopo la lavorazione dei profili in acciaio. Eccezione: profili in alluminio. Evitare gli accumuli di rivestimento in particolare nelle zone delle guarnizioni e delle sedi dei profili fermavetro.

Riferimenti normativi:

- EN ISO 12944 Protezione dalla corrosione di strutture di acciaio mediante verniciatura e rivestimento
- DIN 55634 - Verniciature e rivestimenti - Protezione anticorrosione di componenti portanti in lamina d'acciaio sottile
- Direttiva GSB o Qualicoat per la zincatura di singoli pezzi per articoli in acciaio
- Fare riferimento anche alla scheda descrittiva VFF ST.01

In presenza di esposizione a corrosione intensa, durata della protezione prolungata (ad esempio serramenti in zona costiera) o sollecitazioni particolari, occorre definire un sistema di protezione contro la corrosione specifico per il singolo caso.

Il produttore del materiale usato per la verniciatura deve provare l'idoneità del suo prodotto per il rivestimento dei profili e la protezione contro la corrosione dell'intero sistema (rivestimento di base e topcoat, zona del cordone di saldatura, bordo tagliato).

7.7.2 Procedura

Per ottenere un'adesione perfetta del sistema di rivestimento, anche la superficie di acciaio deve essere adeguatamente pulita, irruvidita o sottoposta ad apposito pretrattamento chimico.

7.7.3 Area del cordone di saldatura

Eliminare accuratamente perle di saldatura e scaglie di laminazione con la smerigliatrice; se necessario perfezionare con una pistola per sabbiatura e sabbia di corindone.

7.7 Tratamiento de superficie

7.7.1 Generalidades, la pintura

El tratamiento de la superficie sirve como protección contra la corrosión y para dar color. Por norma general, debe realizarse tras la mecanización de perfiles de acero. Excepción: Perfiles de aluminio. Debe evitarse la acumulación del revestimiento, sobre todo en las zonas de alojamiento de las juntas y la barra de soporte de cristal.

Se aplican las siguientes normas:

- EN ISO 12944 Protección de estructuras de acero frente a la corrosión mediante sistemas de pintura protectores.
- DIN 55634 - Sustancias de revestimiento y recubrimientos: protección contra corrosión de componentes portantes de paredes finas de acero
- Directiva de GSB o Qualicoat para el revestimiento individual de componentes de acero
- Debe hacerse referencia a la hoja de datos ST.01 de VFF

Si la carga corrosiva es muy elevada y se requiere una protección prolongada (p. ej. Ventanas en zona de costa) y en caso de exigencias especiales, hay que determinar el sistema de protección contra corrosión adecuado en cada caso individual. El fabricante debe acreditar el carácter adecuado de su producto para el revestimiento de los perfiles (sin tratamiento o galvanizado continuo en caliente) y para la protección contra corrosión del sistema completo (revestimiento básico y de cobertura, zona de cordón de soldadura, borde de corte).

7.7.2 Procedimiento

Debe conseguirse una superficie adecuada mediante la limpieza, el raspado o el tratamiento previo químico para garantizar la adherencia impecable del sistema de revestimiento.

7.7.3 Zona de cordón de soldadura

Las perlas de soldadura y las marcas por óxido deben eliminarse cuidadosamente con la lijadora y, en caso necesario, repasarse después con una pistola a presión y corindón.

7.7.4 Cleaning the surfaces

Due to the forming process and the subsequent machining, the profile surfaces are soiled with cooling lubricant, grease, cutting oil etc. To ensure perfect adhesion of the coating, the profiles must be completely cleaned. The choice of the cleaning process is incumbent on the coating company carrying out the work. Possible cleaning processes:

- A) Washing off with solvent mixtures
- B) Steam jet cleaning with or without chemical additives
- C) High-pressure hot-water cleaning with or without chemical additives
- D) Alkaline or acidic decoction degreasing in immersion or spraying process.

7.7.4 Pulizia delle superfici

A seguito del processo di profilatura e della successiva lavorazione, le superfici dei profili si sporcano con residui di refrigerante, grasso, olio di taglio, ecc. Per ottenere un'adesione perfetta del rivestimento, è necessario pulire accuratamente i profili. La scelta del metodo di pulizia spetta alla ditta che esegue i trattamenti. Metodi di pulizia possibili:

- A) Risciacquo con miscela di solventi
- B) Pulizia con getto di vapore con o senza additivi chimici
- C) Pulizia con idropulitrice ad alta pressione con o senza additivi chimici
- D) Sgrassaggio in ambiente alcalino o acido per immersione o a spruzzo.

7.7.4 Limpieza de las superficies

Debido al proceso de cambio de forma y la mecanización posterior, las superficies del perfil están contaminadas con lubricantes de refrigeración, grasas, aceites de corte, etc. Los perfiles deben limpiarse para garantizar un nivel de adherencia óptimo del revestimiento. La empresa encargada del revestimiento debe elegir el procedimiento de limpieza adecuado. Procedimientos de limpieza admisibles:

- A) Aclarado con mezcla de disolventes
- B) Limpieza con chorro de vapor con o sin adición de sustancias químicas
- C) Limpieza con chorro de agua caliente a presión con o sin adición de sustancias químicas
- D) Desengrasado por cocción alcalina o ácida mediante inmersión o pulverización.

7.7.5 Mechanical roughening of the surface

Mechanical roughening significantly improves the adhesion between the coating and the substrate. In the simplest case, the profiles and frames are ground with abrasive paper or corundum plastic fleece (e.g. Scotch Brite). Disadvantage: very high input for profiled surfaces - no reliable process. In particular with larger quantities, overblowing (= sweep jets) with corundum at reduced pressure and a jet impact angle of < 30° is more economic and safer. Any abrasion and blasting abrasive residue must be removed completely.

Warning: In the case of continuously hot-dip galvanized profiles, the metal coating must not be removed.

7.7.5 Preparazione meccanica della superficie

La preparazione meccanica migliora decisamente l'adesione tra rivestimento e fondo. Nel caso più semplice i profili e i telai vengono smerigliati con carta abrasiva o tela sintetica al corindone (ad es. Scotch Brite). Svantaggi: molto faticoso in caso di superfici profilate - metodo proceduralmente non affidabile. Soprattutto in presenza di grandi quantità di pezzi, una sabbiatura leggera con corindone ad una pressione inferiore e un angolo di impatto entro i 30° è più proficua e sicura. Eliminare completamente il materiale abraso e i residui di materiale per sabbiatura.

Avvertenza: in caso di profili zincati per immersione a caldo il rivestimento metallico non può essere rimosso.

7.7.5 Raspado mecánico de la superficie

El Raspado mecánico mejora notablemente la adherencia entre el revestimiento y la base. En los casos más simples, los perfiles y marcos se tratan con papel de lija o fieltro de corindón y plástico (p. ej. Scotch Brite). Desventaja: Se requiere un gran esfuerzo en las superficies perfiladas; no es un proceso seguro. Sobre todo para cantidades mayores es preferible la técnica del sobresoplado (= chorro Sweep) con corindón a presión reducida y un ángulo de impacto del chorro 30° porque es más segura y rentable. Debe eliminarse cualquier resto de material desprendido la fricción o resto del material del chorro.

Advertencia: En el caso de los perfiles con galvanizado continuo en caliente no se debe eliminar el recubrimiento metálico.

7.7.6 Chemical surface treatment

Chemical surface treatment is an alternative to mechanical roughening. The procedural instructions and safety regulations must be observed. For profiles of the W20 series from OTTOSTUMM | Mogs only zinc phosphating is possible.

7.7.6 Trattamento chimico della superficie

Il trattamento chimico della superficie rappresenta un'alternativa al trattamento meccanico. Osservare le linee guida sul metodo e le precauzioni di sicurezza. Per profili della serie W20 di OTTOSTUMM | Mog è possibile solo la fosfatazione allo zinco.

7.7.6 Tratamiento químico de la superficie

El tratamiento químico de la superficie representa una alternativa al raspado mecánico. Deben tenerse en cuenta las normas de seguridad y las instrucciones del procedimiento. Para los perfiles de la serie W20 de OTTOSTUMM | Mogs solo es posible el fosfatado de zinc.

7.7.7 Types of coating

W20 profiles can be powder coated or wet painted.

You'll find the different painting techniques in a specific chapter of this documentation (6.3.0).

7.7.7 Tipi di verniciatura

I profili W20 possono essere verniciati a liquido o a polvere.

Trovate le diverse metodologie di verniciatura nell'apposito capitolo di questa documentazione (6.3.0).

7.7.7 Tipos de pintura

Los perfiles W20 se pueden pintar en húmedo y recubrirse con pintura en polvo.

Encontrará las diferentes técnicas de pintura en un capítulo específico de esta documentación (6.3.0).

7.8 Installation on site

7.8.1 Glazing

The glazing systems of all OTTOSTUMM I Mogs series comply with the relevant standards, the cushioning regulations of the glazing trade and the guidelines of insulating glass manufacturers. Particular attention must be paid to the regulations regarding pressure compensation and drainage from free rebate spaces. All glazing systems are usually designed for glazing between elastomer profiles (EPDM or neoprene).

If necessary, a silicone-free lubricant is applied to the seals to facilitate installation.

The glass mass is determined and the glazing beads and sealing profiles are selected on the basis of the filling thickness according to the specifications in the program list and processing documents.

Wet glazing is possible and must be carried out in accordance with the generally applicable regulations.

In the case of acrylic glass (PMMA) and polycarbonate (PC) fillings, the risk of stress cracks in these sheets in contact with our EPDM seals cannot be excluded. The risk of incompatibility is beyond our control and must be clarified by the processor with the manufacturers of such fillings.

7.8.2 Joint sealing

For the sealing of structural attachment and construction joints, use specific and certified products, referring to the manufacturer's instructions.

7.8.3 Prevention of surface damage during installation

For a correct conservation of OTTOSTUMM I Mogs frames it is advisable to use counter frames, in order to carry out the installation only at the conclusion of the masonry and plastering works.

In case of installation at an early stage of the construction site, with the use of self-adhesive plastic films, the user is solely responsible for ensuring that the products used are fully compatible with the components.

For large objects, we recommend the interim acceptance of construction phases immediately after their completion.

7.8 Posa in opera

7.8.1 Vetrazione

I sistemi di vetratura di tutte le serie OTTOSTUMM I Mogs rispettano le norme in materia, le disposizioni valide per la lavorazione artigianale del vetro e le linee guida dei produttori di vetro isolante. Da tenere in particolare considerazione sono le disposizioni relative alla compensazione della pressione e al drenaggio dagli spazi sotto il vetro.

In linea generale tutti i sistemi di vetratura sono predisposti per la sigillatura con guarnizioni (EPDM o Neoprene).

Se necessario, le guarnizioni sono progettate per essere montate semplicemente con un lubrificante privo di silicone.

Il calcolo delle dimensioni del vetro e la scelta dei profili fermavetro e dei profili di tenuta devono avvenire in base allo spessore della vetrata isolante e secondo le indicazioni contenute nel catalogo e nella documentazione per la lavorazione.

La vetratura sigillata con silicone è ammessa e deve essere realizzata secondo le normative genericamente valide.

In caso di installazione di lastre di acrilico (PMMA) e policarbonato (PC) non è escluso il rischio di crepe da tensione nelle zone dovute al contatto con le nostre guarnizioni in EPDM. Il pericolo di incompatibilità è fuori dal nostro controllo, pertanto il produttore di serramenti è tenuto a chiarire tali eventualità con i produttori di questo tipo di lastre.

7.8.2 Sigillatura giunti

Per l'isolamento delle fughe della costruzione e dei punti di giunzione con il vano murario, utilizzare prodotti specifici e certificati, rifacendosi alle indicazioni del produttore.

7.8.3 Prevenzione dei danni ai telai durante la posa

Per una corretta conservazione dei telai OTTOSTUMM I Mogs si consiglia di utilizzare sempre dei controtelai, in modo da eseguire la posa in opera solo a conclusione dei lavori di muratura e intonacatura.

In caso di posa in fase iniziale del cantiere, con utilizzo di pellicole di plastica autoadesive rimovibili, l'utilizzatore sarà il solo responsabile della completa compatibilità dei prodotti utilizzati con i componenti da montare.

In caso di grandi dimensioni consigliamo di procedere al collaudo del lotto appena posato.

7.8 Montaje

7.8.1 Acristalamiento

Los sistemas de acristalamiento de todas las series OTTOSTUMM I Mogs cumplen las normas generales aplicables, los reglamentos de colocación de calzos del gremio cristalero y las directrices de los fabricantes del vidrio aislante. Debe prestar especial atención a las normas relativas a la compensación de presión y el drenaje de agua en las zonas del galce.

Por norma general, todos los sistemas de acristalamiento han sido concebidos para el acristalamiento entre perfiles de elastómero (EPDM o neoprenos).

Si se requiere, las juntas están provistas de un lubricante sin silicona para facilitar su montaje. La determinación de las medidas del vidrio, así como la elección de barras de soporte de cristal y perfiles de sellado en función del grosor de llenado deben realizarse de acuerdo con las indicaciones en la lista de programas o en la documentación de procesamiento.

Se puede realizar un acristalamiento en mojado siempre y cuando se cumplan los reglamentos generales vigentes.

En el caso de rellenos de vidrio acrílico (PMMA) y policarbonato (PC) no se puede descartar el riesgo de fisuras por tensión en esas placas cuando entran en contacto con nuestras juntas de EPDM. El riesgo de esta incompatibilidad está fuera de nuestro control y debe evaluarlo la empresa procesadora junto con los fabricantes de los rellenos citados.

7.8.2 Sellado de juntas

Para sellar fugas de conexiones constructivas y fugas generales en la construcción, use productos específicos y certificados, refiriéndose a las indicaciones del fabricante.

7.8.3 Prevención de daños superficiales en marcos

Para una correcta conservación de los marcos OTTOSTUMM I Mogs es aconsejable utilizar siempre contramarcos, con el fin de realizar la instalación solo al finalizar los trabajos de albañilería y revoque.

Si se emplean otros procedimientos de protección, con láminas autoadhesivas de plástico, use productos especificados y certificados, en base a las instrucciones del fabricante.

En caso de objetos de grandes dimensiones, recomendamos la recepción intermedia de los tramos constructivos inmediatamente después de su fabricación.

7.8.4 Cleaning

In addition to the exposure to the sun and weather, exterior wall elements are exposed to aggressive air components and are therefore inevitably subject to soiling. This not only impairs the appearance of the components, but also poses an increased risk of corrosion due to the constant effect of the dirt deposits. The components must therefore be cleaned at intervals, which vary depending on the location. In the following we confine ourselves to a few essential notes:

Light soiling is removed with water and a neutral cleaning agent (no soapy water!) using a sponge and cloth. Then rise thoroughly with demineralized water.

If other cleaning agents are required, a test application on a concealed surface should first ensure that surfaces are neither mechanically nor chemically corroded. Cleaners with pH values below 5 and above 8 as well as abrasive or scouring agents such as steel wool or wire brushes must be excluded in any case. Further details can be found in the technical literature.

7.8.4 Pulizia

I serramenti sono esposti a diverse sollecitazioni quali sole, agenti atmosferici, ma anche particelle aggressive presenti nell'aria ed è quindi inevitabile che si sporchino. Oltre a pregiudicare l'aspetto delle superfici, l'imbrattamento aumenta il rischio di corrosione dovuta al contatto costante con i depositi di sporco. I serramenti devono essere puliti a intervalli regolari a seconda del luogo di installazione.

Ci limitiamo a fornire le seguenti indicazioni fondamentali:

Eliminare lo sporco leggero con acqua e un prodotto per la pulizia neutro (no soluzioni saponate!) applicati con una spugna e un panno. Dopodiché risciacquare accuratamente con acqua demineralizzata.

In caso si renda necessario l'utilizzo di altri detergenti, eseguire una prova su una superficie nascosta per verificare che non vi siano reazioni meccaniche o chimiche sulle superfici. Evitare assolutamente detersivi con pH inferiore a 5 o superiore a 8, nonché prodotti abrasivi o leviganti, lana o spazzole d'acciaio. Per ulteriori dettagli consultare la letteratura specifica.

7.8.4 Limpieza de componentes

Aparte del sol y las influencias climáticas, los elementos de paredes exteriores están expuestos a componentes agresivos del aire, por lo que la suciedad es inevitable. La suciedad no solo compromete la apariencia estética de los componentes, sino que representa un serio riesgo de corrosión debido a la actuación continua de la contaminación cuando se acumula en zonas concretas. Por ello, los componentes deben limpiarse en intervalos regulares que varían según el lugar de uso. Desde OTTOSTUMM | Mogs nos limitaremos a transmitirle las siguientes recomendaciones: La suciedad ligera debe eliminarse con agua y un producto de limpieza neutro (no se permiten las soluciones de jabón) con ayuda de una esponja o un paño. A continuación se debe realizar un aclarado exhaustivo con agua demineralizada. Si otros agentes limpiadores son requeridos, una prueba en una zona poco visible que las superficies no sufran daños mecánicos ni químicos. Deben descartarse directamente los productos de limpieza con valores de pH inferiores a 5 y superiores a 8, así como cualquier medio con efecto abrasivo o lijador, así como cepillos metálicos o lana de acero.

Puede consultar más detalles en la documentación especializada.

7.8.5 Use and maintenance

The Construction Products Ordinance must always be observed here. Any relevant product standards also apply.

If there are no malfunctions or damage caused by inappropriate handling, maintenance for private use can be limited to easily oiling or greasing accessible sliding fitting parts at large intervals. Maintenance work for large objects and public buildings should be carried out by a specialist, especially since it involves more extensive maintenance measures. By concluding a maintenance contract with the building owner, the processor can ensure that the quality of their work is maintained to the satisfaction of their customers over a long period of use. In this context, please also observe the maintenance instructions of the fitting manufacturers.

The following maintenance work is to be performed:

- A) Cleaning of elements, in particular moving parts and functional zones.
- B) Inspection of the seals between:
 - Sash and blind frame Replace damaged rebate gaskets.
 - Glass and sash frame
 - Element frame and building structure
 - If necessary, repair or replace the sealants or sealing profiles.
- C) Inspection of the corner and butt joint at the seals. If necessary, repair them with the adhesives and sealants.
- D) Subject the glazing to a visual inspection for cracks, including edge cracks, and replace it if necessary.
- E) Verification of all functions:
 - Check the fitting components for ease of movement and grease the movable parts if necessary. Bolted strips with plastic bearing bushings are maintenance-free and must not be lubricated.

The replacement of non-functional parts (fittings, accessories, glass etc.) is the responsibility of the authorised specialist company.

7.8.5 Uso e manutenzione

A riguardo è necessario attenersi essenzialmente al regolamento sui prodotti per l'edilizia. Si applicano inoltre le rispettive norme di prodotto, ove presenti.

Se non sono presenti malfunzionamenti o danni dovuti ad uso improprio, è possibile limitarsi alla manutenzione prevista in caso di utilizzo privato, che consiste nella lubrificazione con quantità moderate di olio o grasso dei componenti mobili delle ferramenta a cui è possibile accedere ad intervalli relativamente distanziati. I lavori di manutenzione su oggetti di grandi dimensioni o su edifici pubblici devono essere eseguiti da ditte qualificate, in particolare quando l'intervento è associato ad altre misure conservative del fabbricato. In questo caso il produttore di serramenti può stipulare un contratto di garanzia per assicurarsi che la qualità del suo lavoro resti invariata nel tempo, per la massima soddisfazione del cliente. A tal riguardo occorre tenere presenti anche le istruzioni di manutenzione del costruttore delle ferramenta.

I lavori di manutenzione da eseguire sono i seguenti:

- A) Pulizia degli elementi, in particolare delle parti mobili e delle aree rilevanti per il funzionamento.
- B) Controllo della tenuta tra:
 - Telaio del battente e telaio dell'anta; sostituire le guarnizioni della battuta danneggiate.
 - Vetro e telaio del battente;
 - Telaio dell'infilso e muratura;
 - Se necessario migliorare la qualità del sigillante o dei profili di tenuta, oppure sostituirli.
- C) Controllo delle giunzioni d'angolo delle guarnizioni; eventualmente, migliorare la qualità con i collanti/sigillanti.
- D) Controllo della vetratura mediante ispezioni visive in merito a fessurazioni; se necessario sostituire.
- E) Controllo di tutte le funzionalità:
 - Controllare la mobilità di tutti i componenti della ferramenta, eventualmente ingrassare le parti mobili. Le cerniere con boccole in plastica non richiedono manutenzione e non devono essere lubrificati.

La sostituzione di parti non funzionanti (ferramenta, vetro, accessorio) spetta alla ditta specializzata autorizzata.

7.8.5 Uso y mantenimiento

Por norma general, en este caso debe tenerse en cuenta la normativa de productos constructivos. Adicionalmente deben tenerse en cuenta las normas de producto aplicables, si las hay.

Si no se da un funcionamiento incorrecto y si no hay daños causados por un tratamiento incorrecto, el mantenimiento para uso privado puede limitarse a la lubricación ligera con aceite o grasa de los componentes deslizantes accesibles de los herrajes en intervalos regulares prolongados. Los trabajos de mantenimiento de objetos de mayor tamaño o de obras públicas debe realizarlos un especialista siempre y cuando estén sujetos a más medidas de conservación. En este caso, la empresa procesadora puede celebrar un contrato de mantenimiento con los propietarios de la obra para garantizar que la calidad de su trabajo se conserve durante un período de uso prolongado y cumplir los requisitos de su cliente. En este contexto debe tener en cuenta también las indicaciones de mantenimiento del fabricante de los herrajes.

Deben llevarse a cabo los siguientes trabajos de mantenimiento:

- A) Limpieza de los elementos, sobre todo piezas y zonas de funcionamiento móviles.
- B) Comprobación de las juntas entre:
 - Marcos de hojas y de molduras, sustituir las juntas de tope dañadas.
 - Cristal y marcos de hojas
 - El marco general del elemento y el cuerpo constructivo
 - Sustituir o corregir los agentes sellantes o los perfiles de junta si es necesario.
- C) Comprobación de las uniones en esquina y tope en las juntas; aplicar los agentes adhesivos y sellantes del capítulo Medios auxiliares si es necesario.
- D) Comprobación del acristalamiento en busca de fisuras zonas estalladas, sustitución en caso necesario.
- E) Comprobación de todas las funciones:
 - comprobar la facilidad de marcha de las piezas de herraje, lubricar las piezas móviles si es necesario. En caso de cintas atornilladas con cojinetes de plástico, estos están libres de mantenimiento y no deben lubricarse.

Solo empresas especializadas deben ocuparse de la sustitución de piezas que no funcionan (herraje, accesorios, cristal, etc.).

7.9 Technical services

Our planning and drawing documents, processing guidelines and fitting installation plans make it easier for you to process our systems. Even without explicit indication, the processing guidelines of the basic series apply to all object-related construction suggestions. Furthermore, the consulting services of our company and our sales partners are at your disposal. Documents and consultations correspond to our best knowledge. However, no guarantee can be given for the absence of errors, unless the errors are based on intent or gross negligence on our part. We offer our processors seminars with intensive instruction in the theory and practice of OTTOSTUMM | Mogs systems. We also support other EDP software, such as FPPRO Emmigissoft and LogiKal® from ORGADATA etc. We keep our customers up to date with the latest technical and standardization information.

7.9 Consulenza tecnica

I nostri elaborati di progetto, disegni, direttive di lavorazione e schemi di montaggio delle ferramenta semplificano la lavorazione dei nostri sistemi. Anche senza esplicita indicazione le direttive di lavorazione delle serie di base valgono per tutte le proposte costruttive riferite all'oggetto. I nostri consulenti interni e partner commerciali sono inoltre a vostra completa disposizione. La documentazione e le consulenze riflettono le migliori conoscenze di cui disponiamo. Non possiamo assumerci tuttavia la responsabilità per l'assoluta assenza di errori, salvo il caso in cui l'errore sia dovuto a dolo o grave negligenza da parte nostra. Ai nostri produttori di serramenti offriamo seminari con una ricca offerta di nozioni teoriche e pratiche sui sistemi OTTOSTUMM | Mogs. Sosteniamo inoltre software dedicati, come FPPRO Emmigissoft e LogiKal® di ORGADATA, ecc. Teniamo i nostri clienti aggiornati su questioni tecniche e normative fornendo loro continue informazioni.

7.9 Apoyo técnico

Nuestra documentación de planificación y representación gráfica, las directivas de procesamiento y los planos de montaje de herrajes le facilitan el procesamiento de nuestros sistemas. Aunque no se indique expresamente, en todas las propuestas constructivas concretas de un objetos se deben aplicar las directivas de procesamiento de las series básicas. Además, puede acudir a los servicios de asesoramiento de nuestra empresa y nuestros socios de distribución. La documentación y el asesoramiento que facilitamos se basa en nuestros conocimientos y lo ofrecemos de buena fe. No obstante no podemos garantizar la ausencia de errores a excepción de información errónea facilitada con premeditación o por negligencia grave. A nuestras empresas procesadoras le ofrecemos seminarios con formación intensiva teórica y práctica para los sistemas OTTOSTUMM | Mogs. Además trabajamos con otros programas de procesamiento electrónico de datos como, por ejemplo, FPPRO y LogiKal® de ORGADATA, etc. Mantenemos a nuestros clientes siempre al día en cuanto a la técnica y las normativas gracias a la información actualizada que manejamos.

7.10 Disclaimer

All the information contained in this documentation is given to the best of our knowledge and ability. However, we decline all responsibility for the use of any suggestions, examples of applications and/or data, or for typographical errors or scale reproductions. Details and solutions contained therein must be verified with reference to mechanical, functional and technical feasibility, as well as static compliance, on the basis of the regulations in force, releasing the companies Otto Stumm and Mogs from any liability of any kind. The Manufacturer is responsible for the technical performance characteristics of the product resulting from the manufacturing and assembly of the system, and for its suitability to be placed on the market in accordance with and in compliance with all current law. We reserve the right to make technical changes without prior warning. All items in this catalogue are subject to availability at the time of order. No part of this catalogue may be reproduced, published, distributed, reused by any means whatsoever, or copied, without our prior written permission.

Current version available at www.ottostumm-mogs.com

7.10 Avvertenze

Tutte le informazioni contenute in questa documentazione sono riportate al meglio delle nostre conoscenze e capacità. Tuttavia, decliniamo ogni responsabilità per l'uso dei dati, suggerimenti o esempi di applicazione, come pure per errori tipografici o riproduzioni in scala. Dettagli e soluzioni ivi contenute devono essere verificate con riferimento alle caratteristiche meccaniche e funzionali e alla fattibilità tecnica, nonché alla conformità statica, sulla base della normativa vigente, sollevando le società Otto Stumm e Mogs da qualsiasi responsabilità di qualsiasi tipo. Il Produttore si assume la responsabilità in relazione alla conformità tecnica del prodotto derivante dalla lavorazione e dall'assemblaggio del sistema e ne garantisce l'idoneità ad essere immesso sul mercato in conformità e nel rispetto della normativa vigente. Ci riserviamo il diritto di apportare modifiche tecniche in qualsiasi momento, senza preavviso. L'evasione dell'ordine è condizionata dall'effettiva disponibilità dei prodotti al momento dell'ordine stesso. Nessuna parte di questo catalogo può essere copiata, riprodotta, pubblicata, distribuita o riutilizzata con qualsiasi mezzo senza il nostro previo permesso scritto.

La versione attuale è disponibile all'indirizzo www.ottostumm-mogs.com

7.10 Descargo

Toda la información contenida en esta documentación se presentan según nuestro mejor conocimiento y habilidad. Sin embargo, rechazamos cada responsabilidad por el uso de los datos, sugerencias o ejemplos de aplicación, así como errores tipográficos o reproducciones a escala. Los detalles y soluciones que se contienen deben ser objeto de verificación mecánica, funcional y viabilidad técnica. Además, la conformidad estática se tiene que basar en la normativa vigente, eximiendo a las empresas Otto Stumm y Mogs de cualquier responsabilidad de cualquier tipo. El fabricante se hace responsable de la conformidad técnica del producto resultante de la producción y el ensamblado del sistema y garantiza su idoneidad para la comercialización de acuerdo con los reglamentos aplicables y en cumplimiento de los mismos. Nos reservamos el derecho de efectuar cambios técnicos en cualquier momento, sin aviso. El cumplimiento del pedido está condicionado a la disponibilidad efectiva de los productos en el momento del mismo. Ninguna parte de este catálogo puede ser reproducida, publicada, distribuida, reusada por cualquier medio o copiada, sin nuestro permiso previo por escrito.

La versión actualizada está disponible en www.ottostumm-mogs.com

Index

3D Adjusting tools - [3.9.3](#)
3D Hinge alignment pins - [3.9.3](#)
3D weld-on hinges - [3.3.2](#)
3D weld-on hinges installation - [5.6.7](#)

A

Adhesive tape for muntins - [2.2.3](#), [3.8.2](#)
Automatic drop seal - [3.6.1](#)
Automatic drop seal installation - [5.9.1](#)

B

Bending radius - [6.2.1](#)
Bonding - [3.8.2](#)

C

Coating - [6.2.4](#)
Cutting gaskets - [5.4.1](#)
Cutting pivot profiles - [5.2.28](#)
Cutting profiles - [5.2.1](#)
Cylinder combinations - [5.11.19](#)

D

Details - structural connections - [4.4.1](#)
Details - wall connections - [4.5.1](#)
Dimensions - [1.3.3](#)
Disclaimer - [7.0.14](#)
Drainage cut outs - [5.5.7](#)

F

False muntins - [2.2.3](#)
False muntins installation - [5.12.11](#)
Fixing glazing beads - [2.2.1](#)
Floor recess plate - [3.5.2](#)
Flush bolt extension - [3.5.1](#)
Flush bolt extension installation - [5.8.5](#)
Flush bolt installation - [5.8.3](#)
Flush bolts for doors - [3.5.1](#)
Flush bolts for doors installation - [5.8.2](#)
Flush bolts for windows - [3.5.1](#)
Folding opener installation - [5.10.17](#)
Friction stay installation - [5.6.33](#)
Friction stays - [3.3.4](#)

G

Gaskets - [3.1.1](#)
General information - [6.3.6](#)
Glazing beads - [2.2.1](#)
Glazing beads installation - [5.12.5](#)
Glazing installation - [5.12.1](#)
Glazing tables - [2.3.1](#)

H

Handles - Heritage - installation - [5.10.1](#)
Handle spindle - [3.6.1](#)
Health and safety informations - [5.1.2](#)
Hinges informations - [5.6.15](#)
Hinges installation - [5.6.1](#)
Hook lock for sliding door - [3.7.1](#)

L

Lateral cover cap - [3.6.1](#)
Lock for sliding door installation - [5.11.9](#)
Locking box processing - [5.11.11](#)
Locks - [3.7.1](#)
Locks installation - [5.11.1](#)

O

Opening restrictor installation - [5.9.5](#)
Opening restrictors - [3.6.2](#)
Opening scheme information - [2.3.21](#)

P

Peg stay installation - [5.10.19](#)
Performances - [1.2.1](#)
Pivot door leaf assembly - [5.6.30](#)
Pivot hinge components - [3.3.5](#)
Pivot hinge installation - [5.6.24](#)
Pivot profile processing - [5.6.19](#)
Primer for doubleadhesive tape - [3.8.2](#)
Profile inertia values - [2.1.11](#)
Profile matching - [4.1.19](#), [4.2.35](#)
Profile processing - [5.5.1](#)
Profiles range - [2.1.1](#)

R

Rivet - [3.8.1](#)

S

Scissors for gaskets - [3.9.1](#)
Screw-on hinges - [3.3.3](#)
Screw-on hinges - capacity tables - [5.6.9](#)
Screws - [3.8.1](#)
Slide stay installation - [5.10.13](#)
Spring catch installation - [5.10.15](#)
Strike plate - [3.5.2](#)
Surface finishes - [2.3.22](#)
System description - [1.1.1](#)

T

Technical services - [7.0.13](#)
Trolleys for sliding door - [3.4.2](#)
Trolleys for sliding door installation - [5.7.7](#)
Type overview - [1.3.1](#)

V

Ventilation glazing rebate - [6.1.2](#)

W

Weather bars - [3.2.2](#)
Weather bars installation - [5.5.19](#)
Welding profiles - [5.3.1](#)
Weld-on hinges - [3.3.1](#)
Weld-on hinges - capacity tables - [5.6.1](#)
Window and door details - W20 Basic - [4.1.1](#)
Window and door details - W20 Classic - [4.2.1](#)
Window and door details - W20 Slim - [4.3.1](#)