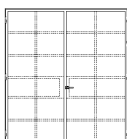


METALFORM

W40 FR E30 - E60 - E90 - E120

Design Overview Based on Assessment of the Fire Resistant Performance **WF 514554**

Model		Single leaf door without side- and transom light		Double leaf door without side- and transom light			
Subject 1	Classification	Max Leaf Dimension Width to Height	Max Leaf Dimension Height to Width	Max Area	Max Leaf Dimension Width to Height	Max Leaf Dimension Height to Width	Max Area
Leaf Dimensions LATCHED	E30	1480 to 2500 mm	3110 to 1190 mm	3,7m²	1480 to 2500 mm	3110 to 1190 mm	3,7m²
	E60	1480 to 2500 mm	3110 to 1190 mm	3,7m²	1480 to 2500 mm	3110 to 1190 mm	3,7m²
	E90	1400 to 2500 mm	2940 to 1190 mm	3,5m²	1400 to 2500 mm	2940 to 1190 mm	3,5m²
	E 120	1320 to 2500 mm	2770 to 1190 mm	3,3m²	1320 to 2500 mm	2770 to 1190 mm	3,3m²
Subject 2	Classification	Max Leaf Dimension Width to Height	Max Leaf Dimension Height to Width	Max Area	Max Leaf Dimension Width to Height	Max Leaf Dimension Height to Width	Max Area
Leaf Dimensions UNLATCHED	E30	1190 mm	2500 mm	2,98m²	1480 to 2500 mm	3110 to 1190 mm	3,7m²
	E60	1190 mm	2500 mm	2,98m²	1480 to 2500 mm	3110 to 1190 mm	3,7m²
	E90	1190 mm	2500 mm	2,98m²	1400 to 2500 mm	2940 to 1190 mm	3,5m²
	E 120	1190 mm	2500 mm	2,98m²	1320 to 2500 mm	2770 to 1190 mm	3,3m²
Subject 3	Classification	Max Glass Dimension Width* to Height	Max Glass Dimension Height* to Width	Max Area	Max Glass Dimension Width* to Height	Max Glass Dimension Height* to Width	Max Area
Glass Dimensions T-EW/13-11/15-1	E30	1280 to 2896 mm	1600 to 2295 mm	3,67 m²	1280 to 2896 mm	1600 to 2295 mm	3,67 m²
	E60	1280 to 2896 mm	1600 to 2295 mm	3,67 m²	1280 to 2896 mm	1600 to 2295 mm	3,67 m²
	E90	1050 to 3348 mm	1274 to 2794 mm	3,55m²	1050 to 3348 mm	1274 to 2794 mm	3,55m²
	E 120	1280 to 2754 mm	1536 to 2295 mm	3,53m²	1280 to 2754 mm	1536 to 2295 mm	3,53m²
Subject 4	Classification	Max Glass Dimension Width* to Height	Max Glass Dimension Height* to Width	Max Area	Max Glass Dimension Width* to Height	Max Glass Dimension Height* to Width	Max Area
Glass Dimensions T-E/6 & T-E/8 T-E/10	E30 Side	1078 to 1512 mm	1890 to 863 mm	1,63 m²	1078 to 1512 mm	1890 to 863 mm	1,63 m²
	E30 Transom**	2274 to 800 mm	1000 to 2274 mm	2,27 m²	2274 to 800 mm	1000 to 2274 mm	2,27 m²
Subject 5		Usable Hardware/Fittings			Usable Hardware/Fittings		
Hardware / Fittings	All Classification	– All surface or concealed mounted door closer classified according EN 1154 – All locks classified accroding EN 12209 – Hinges Ottostumm C99008-12 – Handles Ottostumm Collection "ONE" "TIMELESS" and "HERITAGE"			– All surface or concealed mounted door closer classified according EN 1154 – All locks classified accroding EN 12209 – Hinges Ottostumm C99008-12 – Handles Ottostumm Collection "ONE" "TIMELESS" and "HERITAGE"		

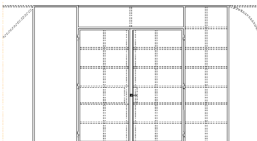
* Note If the clear door leaf dimensions under subject 1 and 2 are larger than the above glass dimensions, a number of additional horizontal and vertical transoms are permissible.

** Note Only T-E/10

METALFORM

W40 FR E30 - E60 - E90 - E120

Design Overview Based on Assessment of the Fire Resistant Performance **WF 514554**

Model		Single leaf door with side- and transom light 	Double leaf door with side- and transom light 
Subject 1	Classification	Max Leaf Dimension Width to Height Max Leaf Dimension Height to Width Max Area	Max Leaf Dimension Width to Height Max Leaf Dimension Height to Width Max Area
Leaf Dimensions LATCHED	E30	1138 to 2206 mm2743 to 923 mm2,5m²	1138 to 2206 mm2743 to 923 mm2,5m²
	E60	1138 to 2206 mm2743 to 923 mm2,5m²	1138 to 2206 mm2743 to 923 mm2,5m²
	E90	1108 to 2206 mm2647 to 923 mm2,4m²	1108 to 2206 mm2647 to 923 mm2,4m²
	E 120	1061 to 2206 mm2537 to 923 mm2,3m²	1061 to 2206 mm2537 to 923 mm2,3m²
Subject 2	Classification	Max Leaf Dimension Width to Height Max Leaf Dimension Height to Width Max Area	Max Leaf Dimension Width to Height Max Leaf Dimension Height to Width Max Area
Leaf Dimensions UNLATCHED	E30	923 mm2203 mm2,03m²	1138 to 2206 mm2743 to 923 mm2,5m²
	E60	923 mm2203 mm2,03m²	1138 to 2206 mm2743 to 923 mm2,5m²
	E90	923 mm2203 mm2,03m²	1108 to 2206 mm2647 to 923 mm2,4m²
	E 120	923 mm2203 mm2,03m²	1061 to 2206 mm2537 to 923 mm2,3m²
Subject 3	Classification	Max Glass Dimension Width* to Height Max Glass Dimension Height* to Width Max Area	Max Glass Dimension Width* to Height Max Glass Dimension Height* to Width Max Area
Glass Dimensions T-EW/13-1115-1	E30 Side	1078 to 1512 mm1890 to 863mm1,63 m²	1078 to 1512 mm1890 to 863mm1,63 m²
	E30 Transom	2274 to 800 mm1000 to 2274 mm2,27 m²	2274 to 800 mm1000 to 2274 mm2,27 m²
	E60 Side	1078 to 1512 mm1890 to 863mm1,63 m²	1078 to 1512 mm1890 to 863mm1,63 m²
	E60 Transom	2274 to 800 mm1000 to 2274 mm2,27 m²	2274 to 800 mm1000 to 2274 mm2,27 m²
	E90 Side	1078 to 1512 mm1890 to 863mm1,63 m²	1078 to 1512 mm1890 to 863mm1,63 m²
	E90 Transom	2214 to 800 mm1000 to 2214 mm2,14 m²	2214 to 800 mm1000 to 2214 mm2,14 m²
	E 120 Side	1057 to 1512 mm1852 to 863mm1,59 m²	1078 to 1512 mm1890 to 863mm1,63 m²
	E120 Transom**	2120 to 800 mm800 to 2120 mm1,69 m²	2120 to 800 mm800 to 2120 mm1,69 m²
Subject 4	Classification	Max Glass Dimension Width* to Height Max Glass Dimension Height* to Width Max Area	Max Glass Dimension Width* to Height Max Glass Dimension Height* to Width Max Area
Glass Dimensions T-E/6 & T- E/8 T-E/10	E30 Side	1078 to 1512 mm1890 to 863 mm1,63 m²	1078 to 1512 mm1890 to 863 mm1,63 m²
	E30 Transom**	2274 to 800 mm1000 to 2274 mm2,27 m²	2274 to 800 mm1000 to 2274 mm2,27 m²
Subject 5	All Classifice	Usable Hardware/Fittings	Usable Hardware/Fittings
Hardware / Fittings		All surface or concealed mounted door closer classified according EN 1154 All locks classsified accroding EN 12209 Hinges Ottostumm C99008-12 Handles Ottostumm Collection "ONE" " " "TIMELESS" and "HERITAGE	All surface or concealed mounted door closer classified according EN 1154 All locks classsified accroding EN 12209 Hinges Ottostumm C99008-12 Handles Ottostumm Collection "ONE" " " "TIMELESS" and "HERITAGE

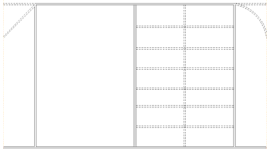
* **Note** If the clear door leaf or frame dimensions under subject 1 and 2 are larger than the above glass dimensions, a number of additional horizontal and vertical transoms are permissible.

** **Note** Only T-E/10
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METALFORM

W40 FR E30 - E60 - E90 - E120

Design Overview Based on Assessment of the Fire Resistant Performance **WF 514554** and Testreport **WF 525930**

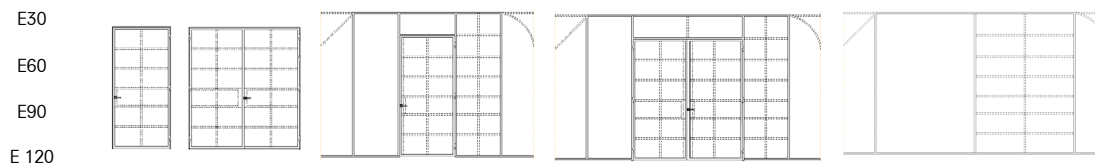
Model	Partition				
Subject 1	Classification	Max Width	Max Height	Max Area	
Dimension Partition	E30	Infinite	4000 mm	Infinite	
	E90	Infinite	4000 mm	Infinite	
	E90	Infinite	4000 mm	Infinite	
	E 120	Infinite	4000 mm	Infinite	
Subject 2	Classification	Max Glass Dimension Width* to Height	Max Glass Dimension Height* to Width	Max Area	
Glass Dimensions T-EW/15-1	E30	1562 to 2894 mm	3473 to 1302 mm	4,52m²	
	E60	1562 to 2894 mm	3473 to 1302 mm	4,52m²	
	E90	1562 to 2894 mm	3473 to 1302 mm	4,52m²	
	E 120	1432 to 2894 mm	3183 to 1302 mm	4,14 m²	
Subject 3	Classification	Max Glass Dimension Width* to Height	Max Glass Dimension Height* to Width	Max Area	
Glass Dimensions T-EW/13-1	E30 Side	923 to 1602 mm	1922 to 769 mm	1,48 m²	
	E30 Transom	1862 to 633 mm	760 to 1552mm	1,18 m²	
	E60 Side	923 to 1602 mm	1922 to 769 mm	1,48 m²	
	E60 Transom	1862 to 633 mm	760 to 1552mm	1,18 m²	
	E90 Side	923 to 1602 mm	1922 to 769 mm	1,48 m²	
	E90 Transom	1862 to 633 mm	760 to 1552mm	1,18 m²	
	E 120 Side	846 to 1602 mm	1762 to 769 mm	1,35 m²	
	E120 Translom	1707 to 633 mm	696 to 1552 mm	1,18 m²	
Subject 4	Classification	Max Glass Dimension Width* to Height	Max Glass Dimension Height* to Width	Max	Area
Glass Dimensions T-E/6 & T-E/8 T-E/10	E30 Side	1078 to 1512 mm	1890 to 863 mm	1,63	m²
	E30 Transom**	2274 to 800 mm	1000 to 2274 mm	2,27	m²

* Note: If the clear frame dimensions under subject 1 and 2 are larger than the above glass dimensions, a number of additional horizontal and vertical transoms are permissible.

** Note Only T-E/10

W40 FR E30 - E60 - E90 - E120

Design Overview Based on Assessment of the Fire Resistant Performance **WF 514554**



Hardware

Locks	Lock B99014-02 and strike plate B99207-04
Door Closers	All surface or concealed mounted door closer classified according EN 1192
Hinges	3D Ottostumm C99008-01 and C99008-02 / Quatity and location according Technical Catalog W40
Handles	OS Collection "ONE" / "TIMELESS" / "HERITAGE"

Intumescent Strips

Glass Rebate	G99952-80 only necessary for E60, E90 and E120 if the glass area is larger than 2,77 m ²
Leaf stop	G99953-81 For all classification inside and outside
Frame Rebate	G99951-81 Around the perimeter frame and leaf
Leaf Rebate	G99951-81 For single leaf doors on the lockside
Middle Stile	G99951-81 On both sides of a double leaf LATCHED door G99956-84 On both sides of a double leaf UNLATCHED door

Transom

Vertical	A number of additional transoms are permissible.
Horizontal	A number of additional transoms are permissible.

Miscellaneous

Drop Seal	With and without possible
Glazing Bead	Only screw on angle FV1616A-01
Glazing Tape	G99950-79 (3x10mm); G99954-79 (4x10mm); G99955-79 (5x10mm)

METALFORM

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