



## Fire rated doors and wall partitions Aluprof MB-78EI

Hansen

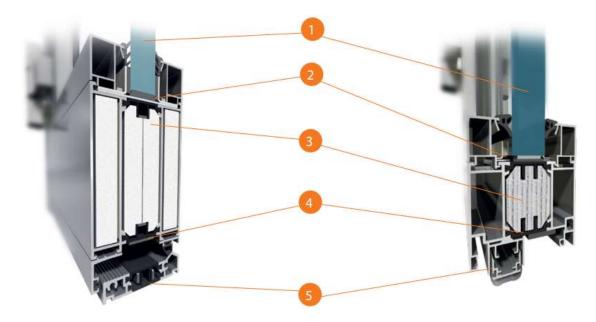
**The MB-78EI system** has been developed for the producing of internal or external fire-rated partition walls, with single- or double-leaf doors featured by a fire resistance class of EI 15, EI 30, EI 45 EI 60 or EI 90 to EN 13501-2.

MB-78EI-based products have a very good thermal and acoustic insulation. The structure of the MB-78 EI system is based on the thermally-insulated, 78 mm deep aluminium profiles. They are characterized by a low overall heat transfer coefficient "U," thanks in the main, to specialist design thermal break, 34mm in width. The resistance to high temperature is assured by special fire insulation elements – GKF or CI – introduced into the inner chambers of the profiles and into insulating spaces between profiles and steel accessories and joints.

The MB-78EI door system can exist as an individual "goal-post frame" as part of a larger composite "window wall" or in fire resistant facade MB-SR50N EI system. Structures & door sets of this type, both single & double leaf door arrangements, have been successfully tested in a notified laboratory, obtaining fire resistance classes of EI 30 & EI 60.

Depth of wall & door frame:	78 mm	
Depth of leaf:	78 mm	
Glazing range:	8-49 mm	
Thermal insulation:	from 1,6 W/(m2·K)	
Air permeability:	Class 2, PN-EN 12207:2001	
Water tightness:	Class 5A, PN-EN 12208:2001	
Fire resistance:	Classes EI 15, EI 30, EI45, EI 60, EI 90 in accordance with EN 13501-2, classes EI 15, EI 30, EI45, EI 60 in accordance with AT-15-6006/2016	
Acoustic Insulation:	Up to 41 dB	

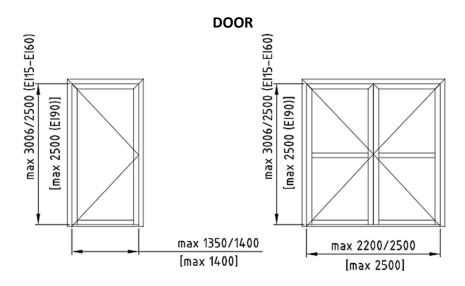
#### Fire rated doors and wall partitions MB-78 EI



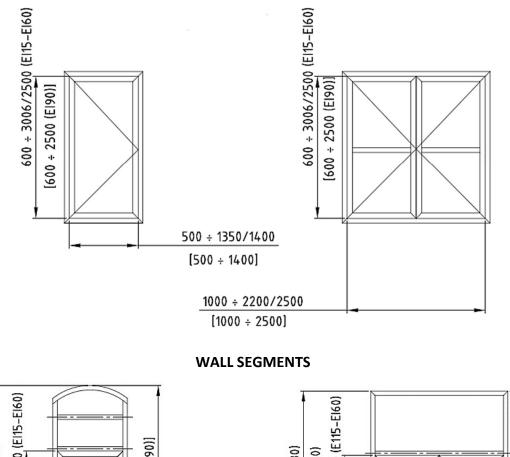
- Single or double fire-resistant glass of a thickness of up to 49 mm
- Steel accessories and expanding tapes that protect the structure from high temperatures
- GKF or CI type fire protection inserted inside the profiles, enables performance classes EI15 to EI 90
- Profiled thermal break that provides adequate protection against heat loss (Uf from 1,6)
- Different door bottom rail seal solutions: with & without threshold profile option, obtaining a smoke-proof class S200 Sa

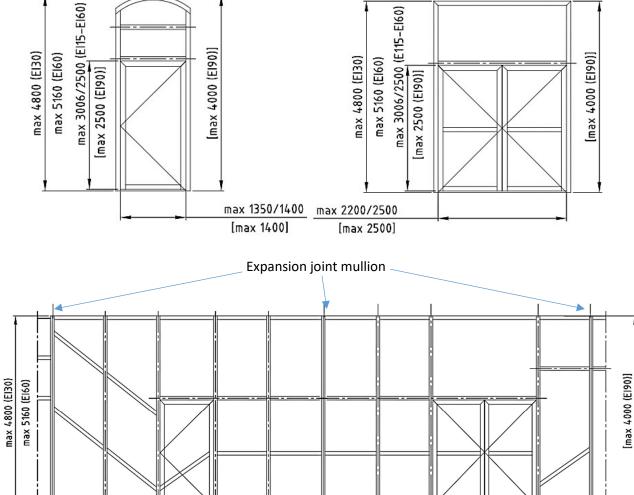
#### Maximum dimensions of the wall segments

The range of permissible dimensions of the construction includes fixed partitions up to 5,16 m high and single-swing doors with leaf dimensions: W up to 1,4 m; H up to 3,0 m; the width of double doors may achieve 2,5 m.



**TECHNICAL WINDOW** 



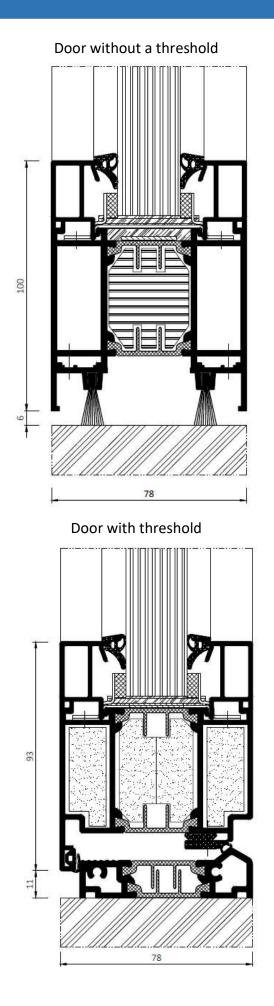


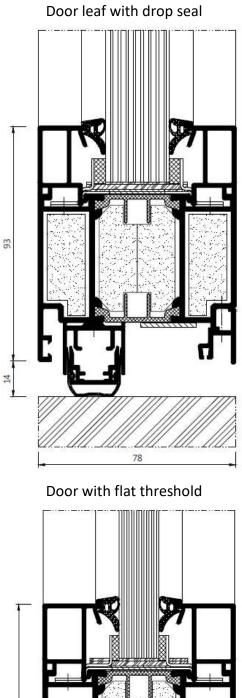
# **Cross sections** Door frame and door leaf with GKF infills 0 Ó D 143 78 78 143

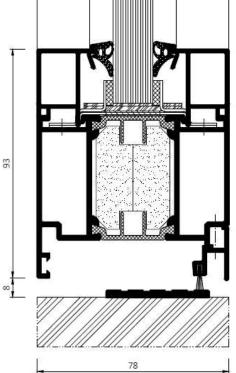
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Door frame and door leaf with Cl infills







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Fire-resistant glazing				
	Tuno of glace	Class	Thickness [mm]	
	Type of glass	Class	Thickness [mm]	
1	Polflam 20	EI30	20	
2	Polflam 25	EI60	25	
3	Contraflam 30	EI30	16	
4	Contraflam 30-20	EI30	20	
5	Contraflam 60	EI60	25	
6	Contraflam 60-30	EI60	27	
7	Pyrostop 30	EI30	16	
8	Pyrostop 60	E160	23	