

Fire rated walls systems

MB-78EI MB-118EI MB-SR50 EI MB-SR50N EI

▪ *fire resistance to EI 120*

Aluprof fire rated systems provide an extensive range of solutions to encompass all requirements in protecting "fire zones" in the building, and help to secure evacuation routes. Our Fire Rated product range includes a door & external window wall and internal partition wall system as well as high-rise curtain walling system, complemented by slope glazing & roof light options. Depending on requirements, these applications can achieve different level of performance in terms of fire rating, starting from EI30 to EI120 for vertical screens, and REI30/RE30 for roof glazing. On the top of that fire rated doors can be fitted with an additional elements to provide smoke proof performance.



FEATURES AND BENEFITS



MB-78EI

- rebated single and double doors up to 2,5 m height or automatic sliding doors
MB-78EI DPA up to 2,45 m height
- wall partitions and door and wall sets of height up to 4,0 m
- angular door mid-rail option
- large selection of specialized hardware



MB-118EI

- internal and external wall partitions of height up to 4,0 m
- ability to combine large number of units in the width offering flexibility and variety of use
- fabrication and installation specs alike MB-78EI guidelines



MB-SR50 EI / MB-SR50N EI

- the same appearance for fire and non-fire rated elements of curtain wall facade
- various design and aesthetics options for capping
- system flexibility allows faceted joints up to $\pm 7,5^\circ$ per side, and inclined facades up to $\pm 15^\circ$ as well as slope & roof glazing between 0 and 80°
- full compatibility with MB-78EI system allows fire rated door to be fitted into a curtain wall

TECHNICAL SPECIFICATION	MB-78EI	MB-118EI	MB-SR50 EI	MB-SR50N EI
Frame / mullions width	78 mm	118 mm	85 – 185 mm	85 – 225 mm
Leaf / transom width	78 mm	–	65 – 145 mm	69,5 – 189,5 mm
Inertia mullions (range Ix)	–	–	88,47 – 725,81 cm ⁴	81,34 – 1222,14 cm ⁴
Inertia transoms (range Iz)	–	–	42,02 – 263,48 cm ⁴	49,54 – 629,54 cm ⁴
Glazing rang	6 – 49 mm	31 – 84 mm	15 – 52 mm	
MIN VISIBLE WIDTH T PROFILE				
Door frame / mullion	51 (72) mm	83 mm	50 mm	
Door leaf / transom	72 (51) mm	110 mm	50 mm	
MAX SIZE AND WEIGHT LIMITATIONS				
Max size of door leaf / curtain wall element (H×W)	H to 2500 mm W to 1400 mm	H to 3000 mm W to 1500 mm	H to 3000 mm / 1200 mm W to 1500 mm / 1800 mm	
Max weight of door leaf / curtain wall	250 kg	410 kg	300 kg	

PERFORMANCE	MB-78EI	MB-118EI	MB-SR50 EI / MB-SR50N EI
Air Permeability	class 2 PN-EN 12207:2001	class A4 PN-EN 12152:2004	class AE 1050 Pa, PN-EN 12152
Watertightness	class 5A, PN-EN 12208:2001	class RE750 PN-EN 12154:2004	class RE1200, PN-EN 12154
Fire resistance	partition walls & rebated doors: EI15, EI30, EI45, EI60 or EI90, EN 13501-2, automatic sliding doors: EI30, EN 1634-1	EI120, EN 13501-2	EI15, EI30, EI45, EI60, EN-13501-2, roof lights: REI20 / RE30, EN 13501-2
Thermal insulation (U _f)	from 1,6 W/(m ² K)	–	from 1,9 W/(m ² K)
Acoustic insulation (R _w)	to 41 dB	–	–



LET'S BUILD A BETTER FUTURE

Fire rated walls systems

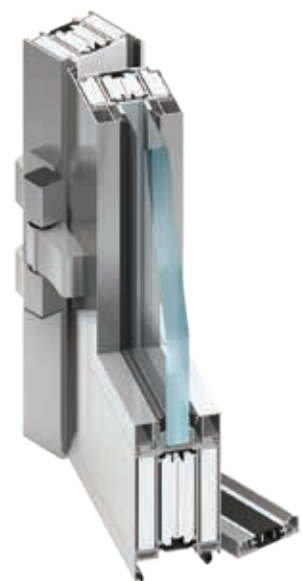
MB-60E EI

MB-78EI

MB-118EI

MB-SR50N EI

Aluprof fire rated systems provide an extensive range of solutions to encompass all requirements in protecting "fire zones" in the building, and help to secure evacuation routes. Our Fire Rated product range includes a door & external window wall and internal partition wall system as well as high-rise curtain walling system, complemented by slope glazing & roof light options. Depending on requirements, these applications can achieve different level of performance in terms of fire rating, starting from EI30 to EI120 for vertical screens, and REI30/RE30 for roof glazing. On the top of that fire rated doors can be fitted with an additional elements to provide smoke proof performance.



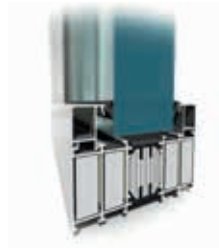
fire resistance to EI 120

MB-60E EI



- a fire-rated system based on the MB-60E. Common elements can be used
- product range: single and double doors with transom light and partitions
- the system can be used with all typical, fire-rated glass of various classifications, with a thickness of 5 to 41 mm
- simple and quick to prefabricate

MB-118EI



- pinternal and external wall partitions of height up to 4.0 mm
- ability to combine large number of units in the width offering flexibility and variety of use
- fabrication and installation specs alike MB-78EI guidelines

MB-78EI



- rebated single and double doors up to 2.5 m height or automatic sliding doors MB-78EI DPA up to 2.45 m height
- wall partitions and door and wall sets of height up to 4.0 m
- angular door mid-rail option
- large selection of specialized hardware

MB-SR50N EI



- the same appearance for fire and non-fire rated elements of curtain wall facade
- various design and aesthetics options for capping
- system flexibility allows faceted joints up to $\pm 7.5^\circ$ per side, and inclined facades up to $\pm 15^\circ$ as well as slope & roof glazing between 0 and 80°
- full compatibility with MB-78EI system allows fire rated door to be fitted into a curtain wall

TECHNICAL SPECIFICATION	MB-60E EI	MB-78EI	MB-118EI	MB-SR50N EI
Frame / mullions width	60 mm	78 mm	118 mm	85 – 225 mm
Leaf / transom width	60 mm	78 mm	—	69.5 – 189.5 mm
Inertia mullions (range Ix)	—	—	—	81.34 – 1222.14 cm ⁴
Inertia transoms (range Iz)	—	—	—	49.54 – 629.54 cm ⁴
Glazing thickness	5 – 41 mm	6 – 49 mm	31 – 84 mm	15 – 52 mm
MIN VISIBLE WIDTH T PROFILE				
Door frame / mullion	62.5 / 55 mm	51 (72) mm	83 mm	50 mm
Door leaf / transom	67 / 76 mm	72 (51) mm	110 mm	50 mm
SIZE AND WEIGHT LIMITATIONS				
Max. size of door leaf / curtain wall element (H×L)	H to 2475 mm L to 1400 mm	H to 3000 mm L to 1400 mm	H to 3000 mm L to 1500 mm	H to 3000 mm / 1200 mm L to 1500 mm / 1800 mm
Max. weight of door leaf / curtain wall	120 kg	250 kg	410 kg	300 kg

PERFORMANCE	MB-60E EI	MB-78EI	MB-118EI	MB-SR50N EI
Air permeability	class 2, EN 12207	class 2, EN 12207	class A4, EN 12152	class AE 1050 Pa, EN 12152
Water tightness	class 3A, EN 12208	class 5A, EN 12208	class RE750, EN 12154	class RE1200, EN 12154
Fire resistance	EI15 – EI30, EN 13501-2	partition walls & rebated doors: EI15, EI30, EI45, EI60 or EI90, EN 13501-2, sliding doors: EI30, EN 1634-1	EI120, EN 13501-2	EI15, EI30, EI45, EI60, EN-13501-2, roof lights: REI30 / RE30, EN 13501-2
Thermal insulation	—	U_f from 1.6 W/(m ² K)	—	U_f from 1.9 W/(m ² K)
Acoustic insulation	—	R_w to 41 dB	—	—