



Technical catalog of fire proof closures

Doors
Glazed
Sliding

Doors

Elite Premio EI 60-120

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Glazed Doors

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STANDARD RAL COLOURS:

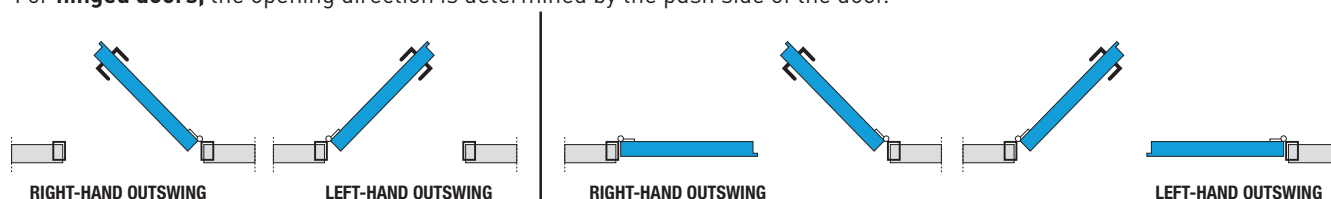
Powder coating for interiors (with textured and/or embossed finishes only): RAL 7035, 1013, 5010, 9002, 9006, 9010. For more RAL colours, please see our price list.

OPENING SYSTEMS:

For **sliding doors**, the opening direction is determined by looking at the door from the guide side (inner side).

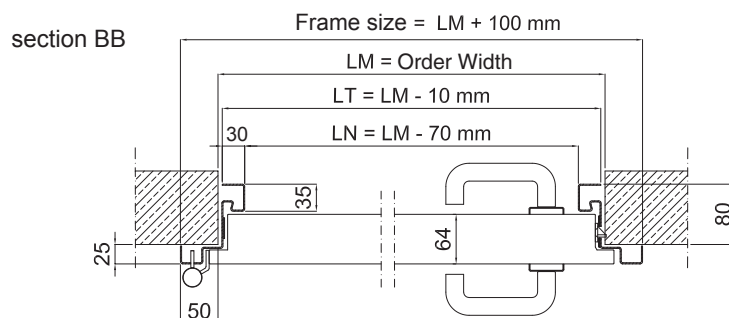
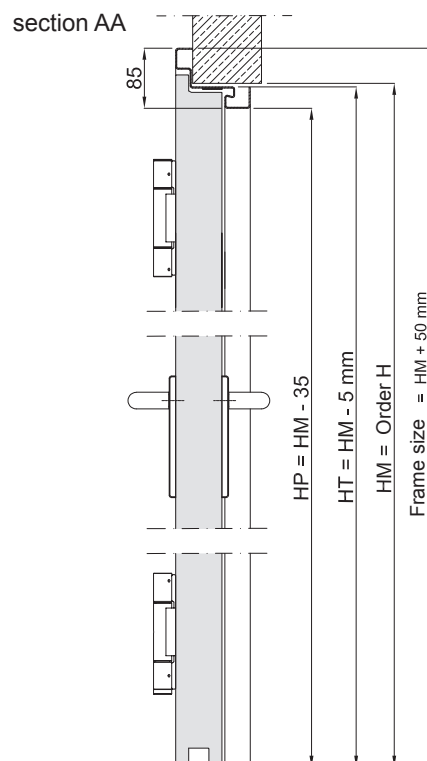
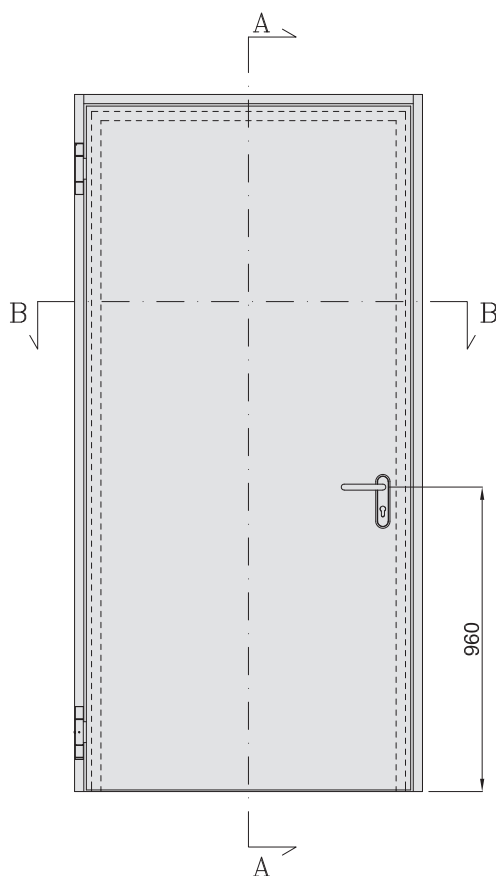


For **hinged doors**, the opening direction is determined by the push side of the door.



DOORS

ELITE PREMIO single leaf door



Elite Premio fire proof door. Certified according to European standard EN 1634 with fire resistance class EI 60, EI 120.

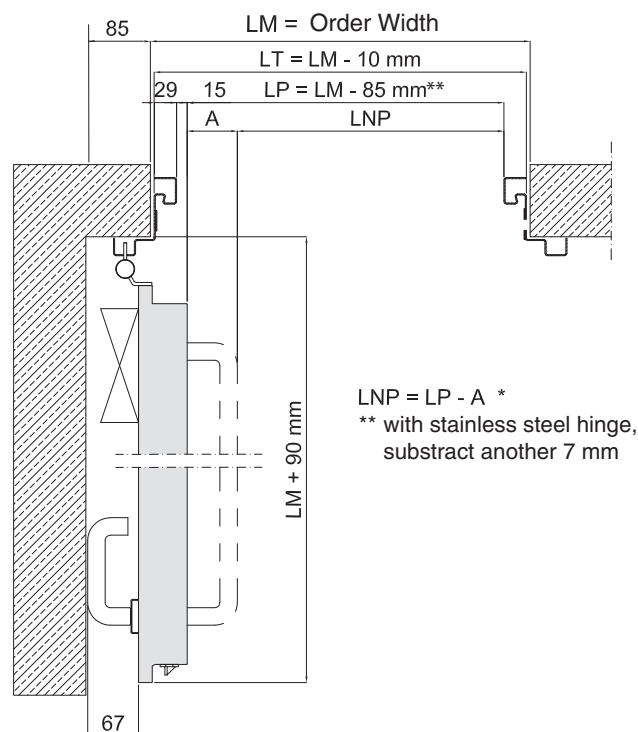
Consists of:

- 15/10 mm thick "Z-shaped galvanised steel frame, to make the door panel perfectly flush with the frame, with cold smoke seal compartment;
- the frame is mechanically joint to the corners without welding. The electrogalvanised coating remains intact at all points, without the corrosion that typically occurs in welded joints;
- the panel is flush with the double galvanised steel frame - 8/10 thick, bent, boxed, electrowelded, with high-density internal insulation. Total door thickness mm. 64
- 20 mm thick door panel, to minimise the risk of injuries in the event of impact against people;
- 2 pressed steel spring hinges per door leaf, sliding on tempered anti-friction bushings, designed for intensive use and high load conditions. As a standard, they are painted in the same colour as the door. Adjustable at any time with special screws; cannot be reached when the door is closed. Hinges are mechanically fastened to the door and therefore can be replaced in case of long, heavy use, according to Italian Ministerial Decree M.I. 64 of 10/03/98, Ministerial Decree M.I. 21/06/04 (GU 155 of 05/07/04) and T.U. 81/2008 for escape routes;
- self-closing mechanism with spring in the hinges (adjustable);
- sealing bolts between the two hinges;

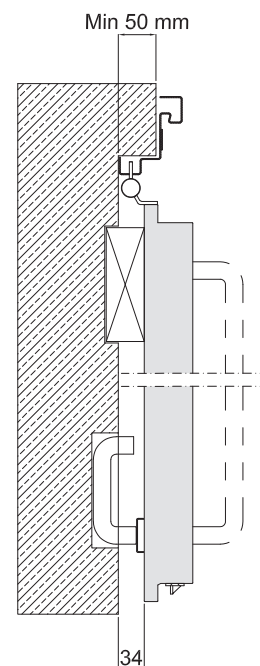
- Yale type lock with three-key cylinder;
- black PVC handle with steel core, "U" shaped for accidental grips, placed at 960 mm from the floor, according to Italian Presidential Decree 503 of 24/07/96, unless otherwise requested by the customer;
- thermal seal all around the frame;
- surfaces with category Z140 galvanised coating (minimum zinc mass 140 g/sqm per surface), finished with embossed and/or textured epoxy polyester powder for internal use, 120 microns thick (RAL colours: see list on page 1);
- arranged for the installation of a movable drop-bar seal.

Nominal situation

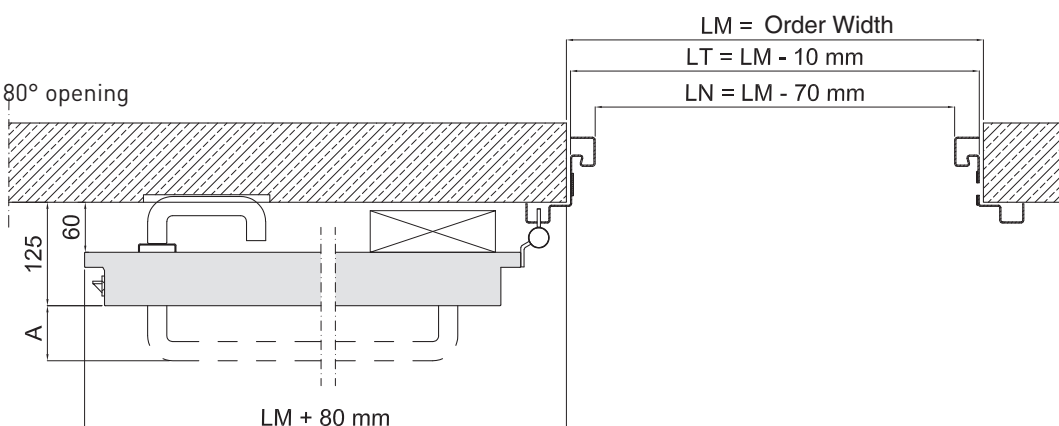
90° opening



Limit situation



180° opening



* Panic bar size

style	size	"A" **
Novoguard	79 mm	0 mm
Novopush	73 mm	0 mm
Cisa Touch	75 mm	0 mm
Cisa lever handle	105 mm	105 mm
EPN Touch	80 mm	0 mm
EPN Bar	103 mm	103 mm

** According to Italian Ministerial Decree 03.08-2015, par. G. 1.9.16

finished wall hole order size (LM x HM)	external frame (LT x HT)	clear width (LN x HN)	clear width (LP x HP)
--------------------------------------------	-----------------------------	--------------------------	--------------------------

STANDARD DOORS H = 2050

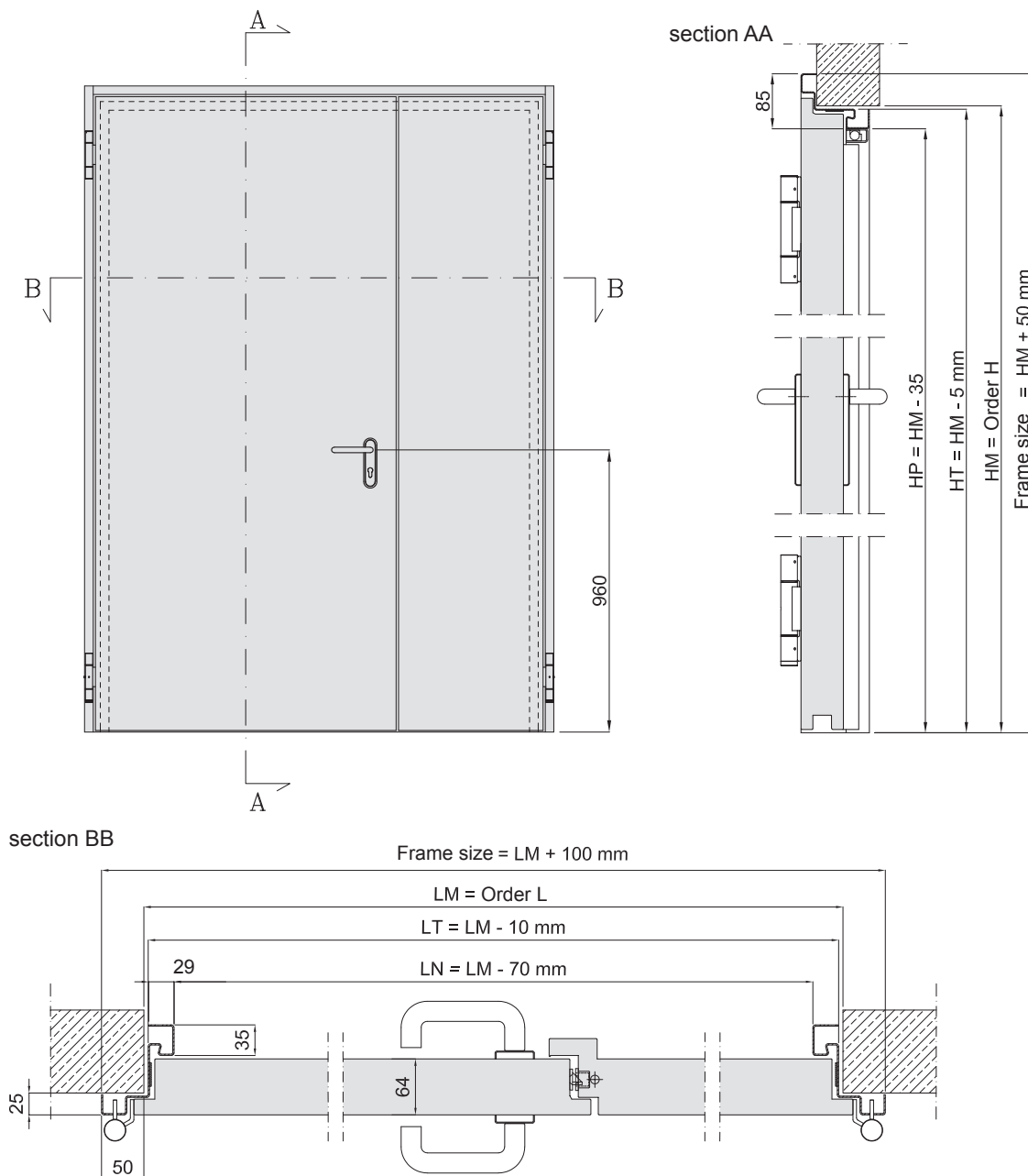
800 x 2050	790 x 2045	730 x 2015	715 x 2015
900 x 2050	890 x 2045	830 x 2015	815 x 2015
1000 x 2050	990 x 2045	930 x 2015	915 x 2015
1250 x 2050	1240 x 2045	1180 x 2015	1165 x 2015
1350 x 2050	1340 x 2045	1280 x 2015	1265 x 2015

STANDARD DOORS H = 2150

800 x 2150	790 x 2145	730 x 2115	715 x 2115
900 x 2150	890 x 2145	830 x 2115	815 x 2115
1000 x 2150	990 x 2145	930 x 2115	915 x 2115
1250 x 2150	1240 x 2145	1180 x 2115	1165 x 2115
1350 x 2150	1340 x 2145	1280 x 2115	1265 x 2115

N.B. All measurements are given in mm.

ELITE PREMIO double leaf door



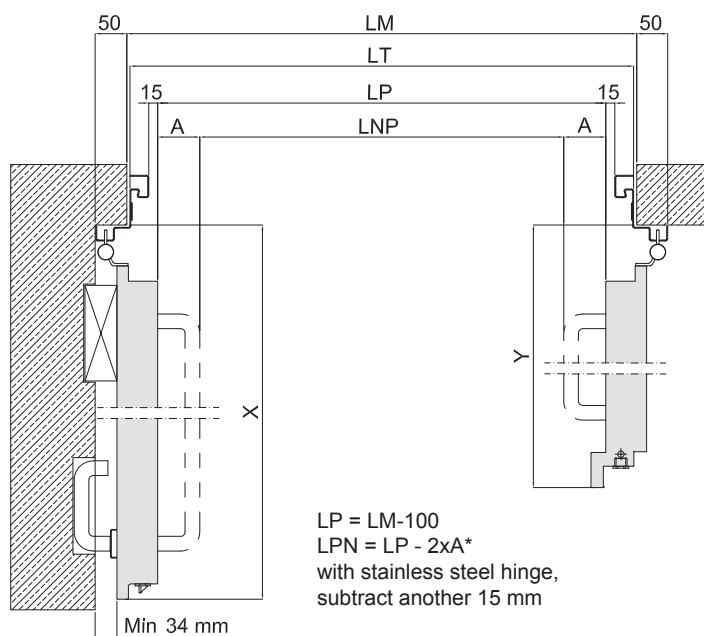
Elite Premio fire proof door. Certified according to the EN 1634 standard with fire resistance class EI 60, EI 120.

Consists of:

- 15/10 mm thick "Z-shaped galvanised steel frame, to make the door panel perfectly flush with the frame, with cold smoke seal compartment;
- frame with interlocked joints at the corners for excellent rigidity, without the corrosion that typically occurs in welded joints;
- door leaf flush with boxed and welded 8/10mm-thick galvanised double sheet steel frame with high-density insulation, protected with two layers of calcium sulphate material around the lock. Total door thickness 64 mm; Z140 zinc coating thickness (10-12 microns per side);
- 20 mm thick door leaf, to minimise the risk of injuries in the event of impact against people;
- 2 pressed steel hinges per door leaf, sliding on tempered anti-friction bushings, designed for intensive use and high load conditions. Adjustable at any time with special screws; cannot be reached when the door is closed. Hinges are designed to be easily replaced, in compliance with the maintenance plan to be established according to Italian Min. Decree M.I. 64 of 10/03/98, Ministerial Decree M.I. 21/06/04 (GU 155 of 05/07/04) and T.U. 81/2008 for escape routes;
- self-closing mechanism with spring in the hinges (adjustable);
- door closer arm (except for Metal doors);
- sealing bolt between the two hinges;

- Yale type lock with three-key cylinder on main door leaf;
- Flush-bolt self-locking system on second door leaf, with lever opening;
- black PVC handle with steel core, "U" shaped for accidental grips, placed at 960 mm from the floor, according to Italian Presidential Decree 503 of 24/07/96, unless otherwise requested by the customer;
- thermal seal all around the frame;
- surface finished with embossed and/or textured epoxy polyester powder for internal use, 120 microns thick (RAL colours: see list on page 1);
- arranged for the installation of a movable drop-bar seal.

90° opening



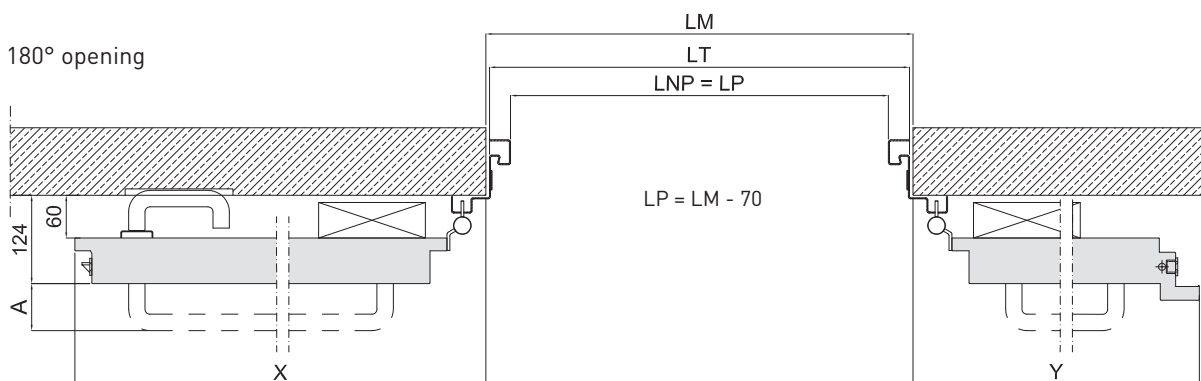
90° DOOR DIVISION

Main door leaf order size	X	Y
800	890	LM - X + 200
900	990	
1000	1090	

180° DOOR DIVISION

Main door leaf order size	X	Y
800	880	LM - X + 180
900	980	
1000	1080	

180° opening



* Panic bar size

style	size	"A" **
Novoguard	79 mm	0 mm
Novopush	73 mm	0 mm
Cisa Touch	75 mm	0 mm
Cisa lever handle	105 mm	105 mm
EPN Touch	80 mm	0 mm
EPN Bar	103 mm	103 mm

** According to Italian Ministerial Decree 03.08-2015, par. G. 1.9.16

finished wall hole order size (LM x HM)	external frame (LT x HT)	nominal width (LN x HN)	clear width (LP x HP)
-----------------------------------------	--------------------------	-------------------------	-----------------------

STANDARD DOORS H = 2050

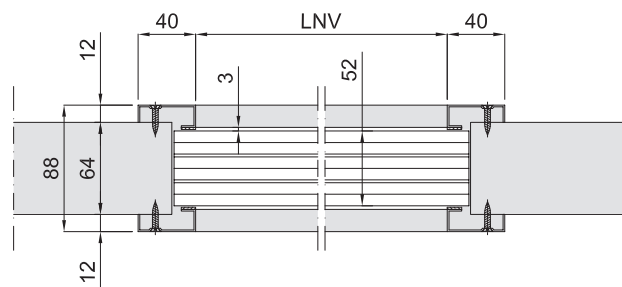
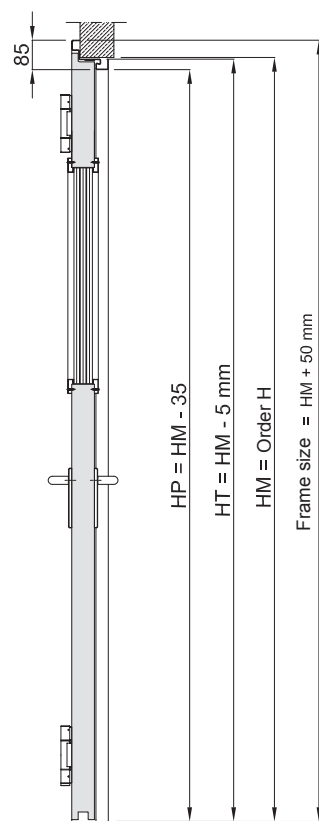
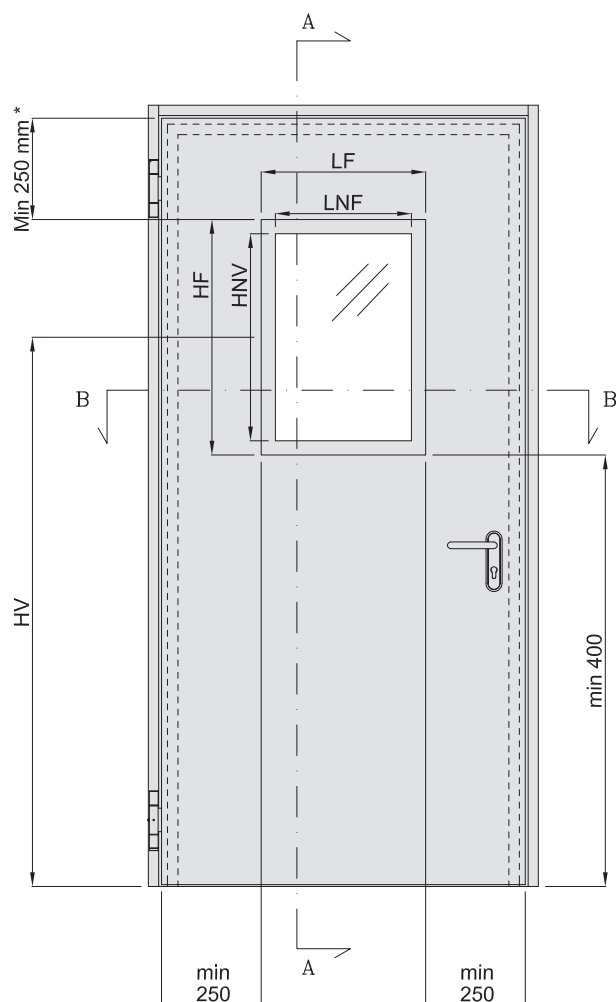
1250 x 2050 (800 + 450)	1240 x 2045	1180 x 2015	1150 x 2015
1350 x 2050 (900 + 450)	1340 x 2045	1280 x 2015	1250 x 2015
1450 x 2050 (1000 + 450)	1440 x 2045	1380 x 2015	1350 x 2015
1600 x 2050 (800 + 800)	1590 x 2045	1530 x 2015	1500 x 2015
1800 x 2050 (1000 + 800)	1790 x 2045	1730 x 2015	1700 x 2015
2000 x 2050 (1000 + 1000)	1990 x 2045	1930 x 2015	1900 x 2015

STANDARD DOORS H = 2150

1250 x 2150 (800 + 450)	1240 x 2145	1180 x 2115	1150 x 2115
1350 x 2150 (900 + 450)	1340 x 2145	1280 x 2115	1250 x 2115
1450 x 2150 (1000 + 450)	1440 x 2145	1380 x 2115	1350 x 2115
1600 x 2150 (800 + 800)	1590 x 2145	1530 x 2115	1500 x 2115
1800 x 2150 (1000 + 800)	1790 x 2145	1730 x 2115	1700 x 2115
2000 x 2150 (1000 + 1000)	1990 x 2145	1930 x 2115	1900 x 2115

N.B. All measurements are given in mm.

ELITE PREMIO door with glazing



Example with glass EI 120

* Minimum distance from the edge for fire certification. This does not apply to Metal doors.

- Rectangular or circular glass panels are supplied on request.
- We use REI fire-rated laminated glass, consisting of several glass sheets filled with a clear material that turns to an opaque foam during a fire.
- The glass is fastened with pressed steel mouldings that are screwed to the door, with special self-extinguishing seals that do not keep the material inside the glass from swelling at high temperatures.
- Supplied in standard sizes or in special sizes on request.

NOTES

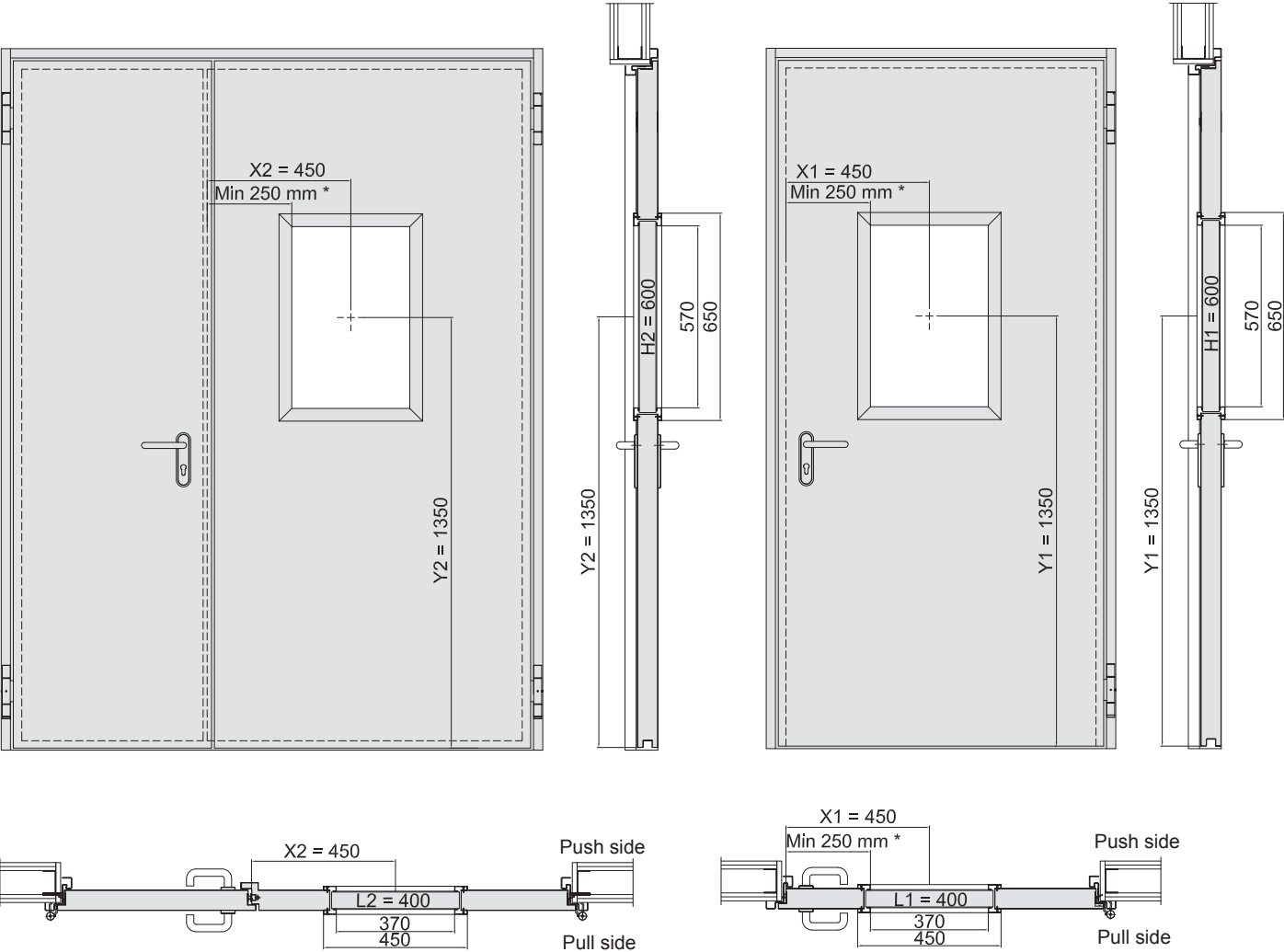
- For glass sizes greater than 300x400 and in case of frequent use, it is advisable to use a door closer.
- Glass is always pre-assembled.
- Fire-rated glass deteriorates when exposed to direct sunlight or in contact with water.
- Because of the particular construction method, the glass may include microspheres and imperfections; complaints will not be accepted if these are invisible from a distance of more than 3 metres.

height glass centreline	glass size	clear width external	glass glazing bead
(HV)	(nom. L x nom. H)	(LNV x HNV)	(LF x HF)
1550	300 x 400	270 x 370	350 x 450
1500	400 x 600	370 x 570	450 x 650
1550	Ø 400	370	Ø 450

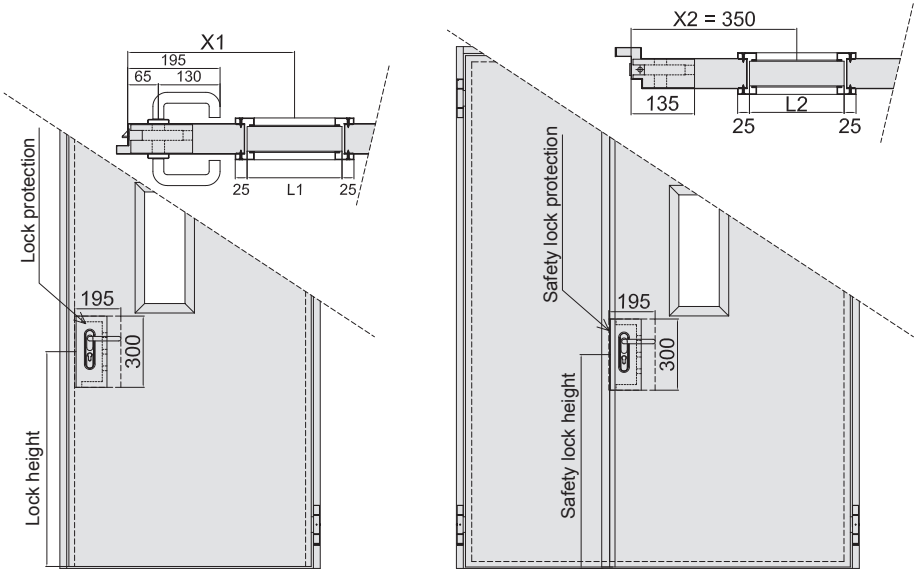
N.B. All measurements are given in mm.

ELITE PREMIO door with customized glazing

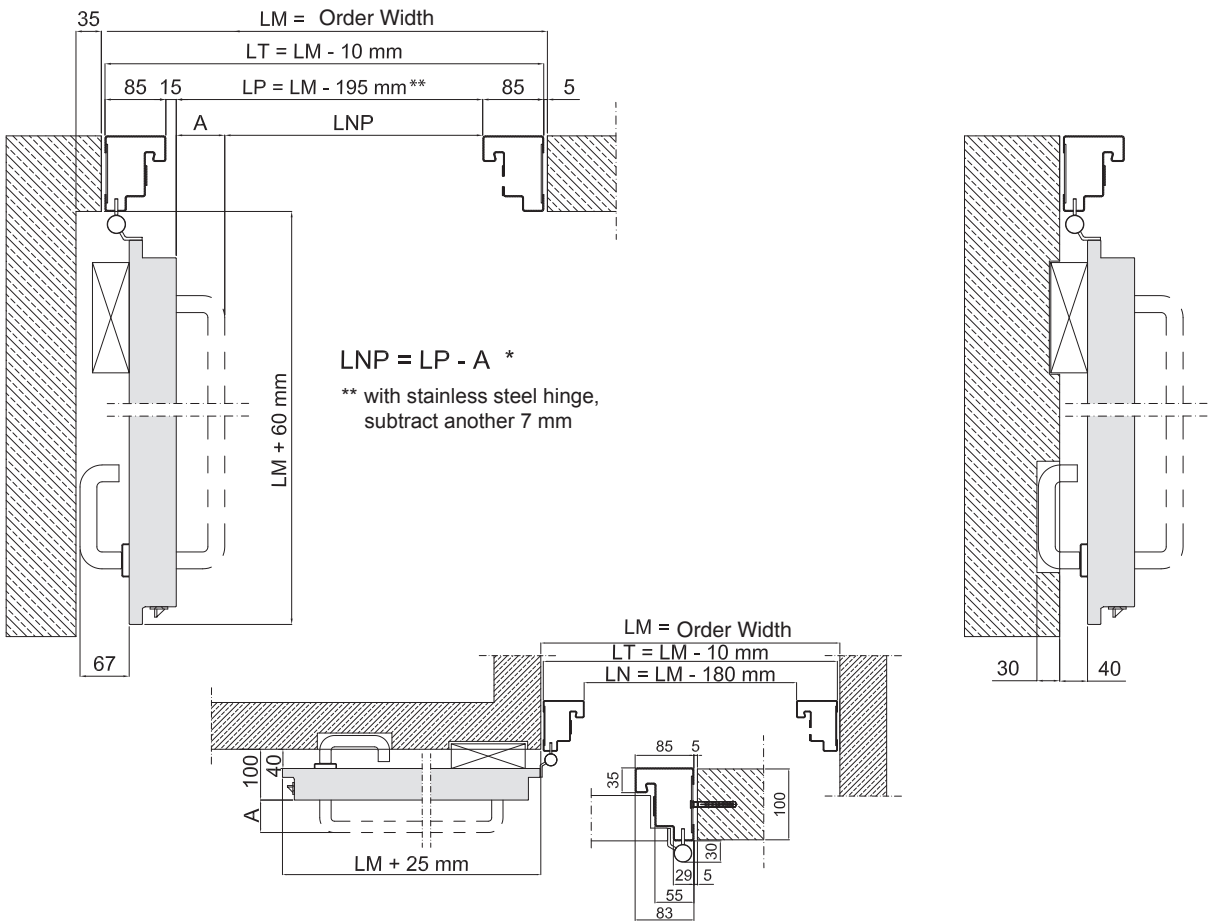
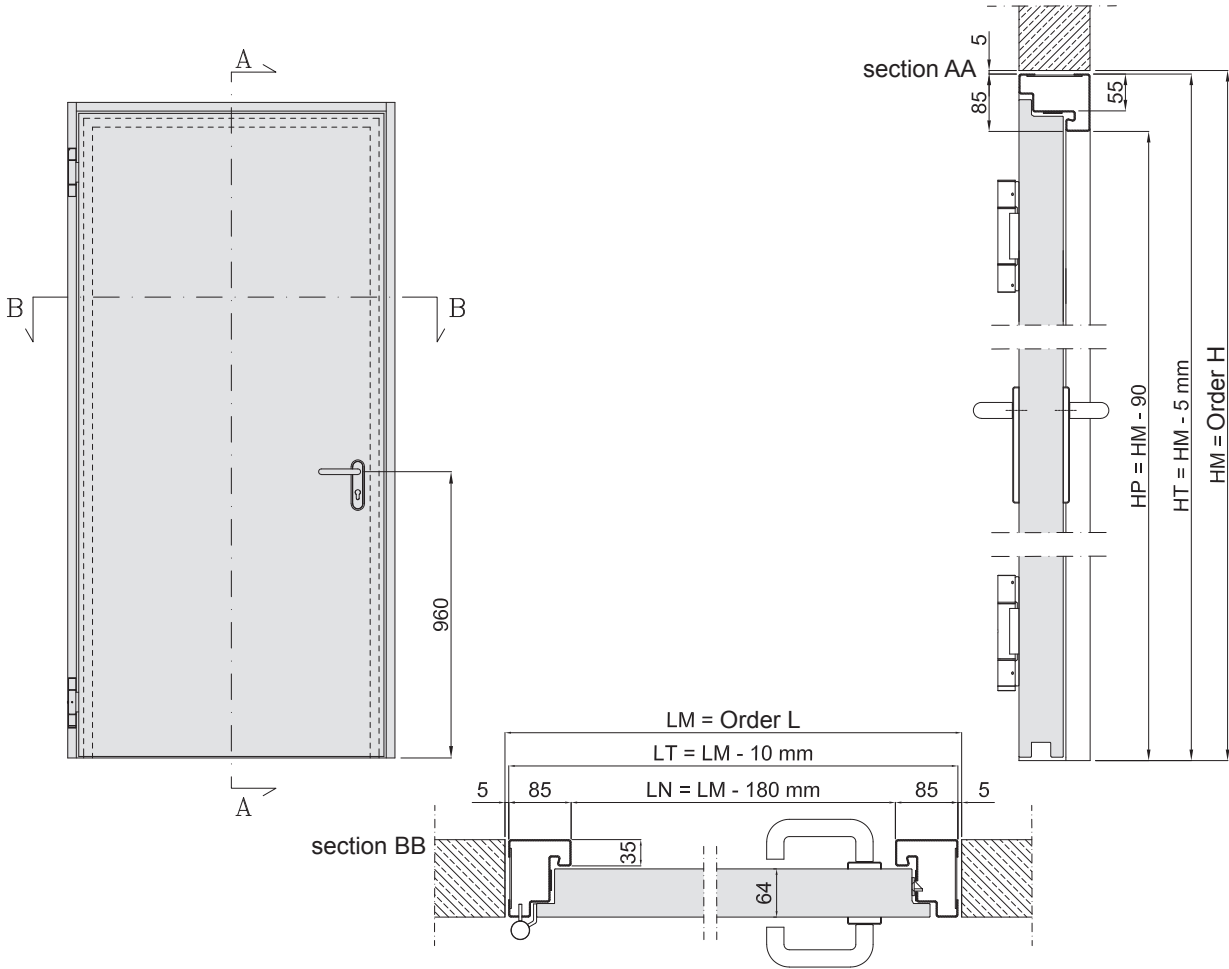
Glass size or glass positioning can be customized (within the limits of any applicable certifications).

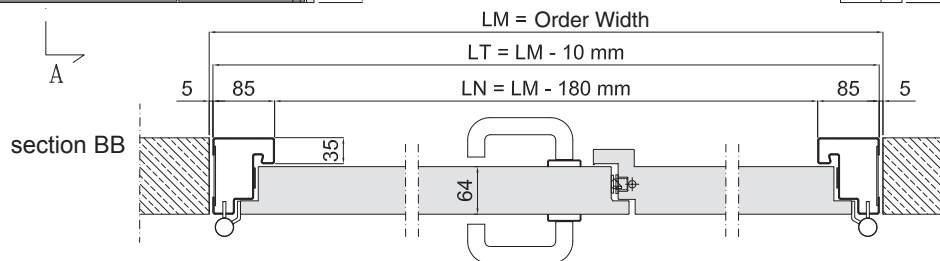
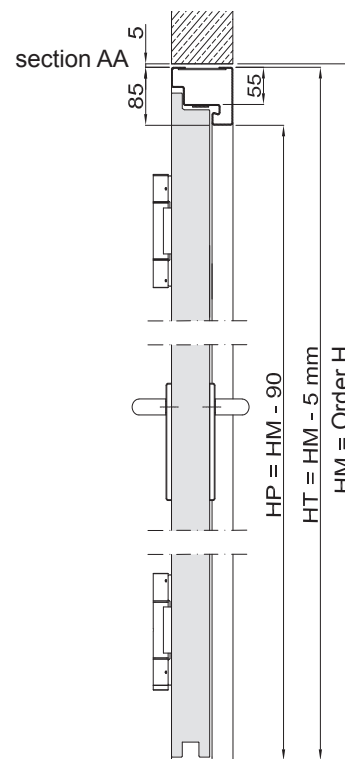
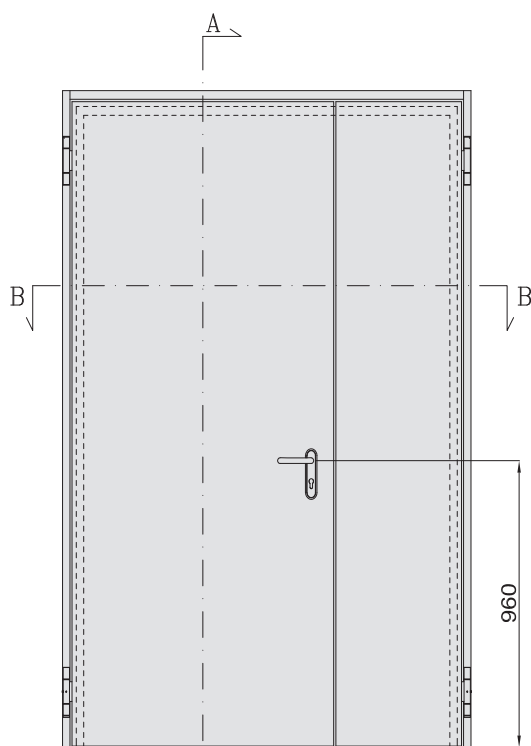


Handle and counter-lock box size

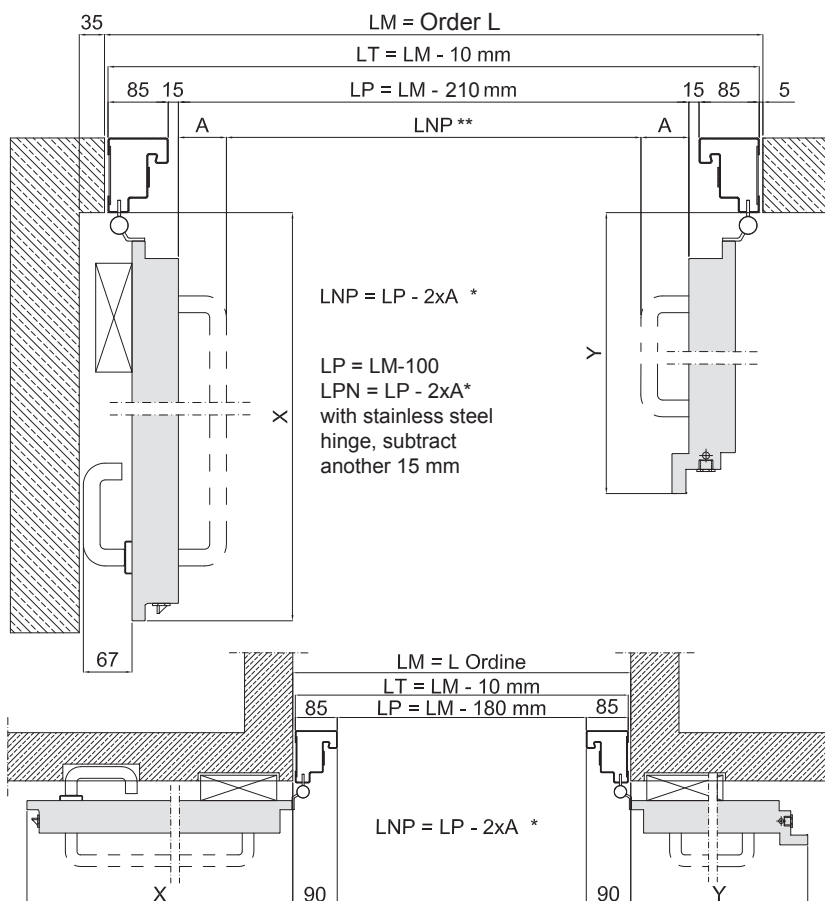


ELITE PREMIO with L2 frame, single leaf door





Nominal situation



90° DOOR DIVISION		
Main door panel order size	X	Y
800	860	LM - X + 150
900	960	
1000	1060	

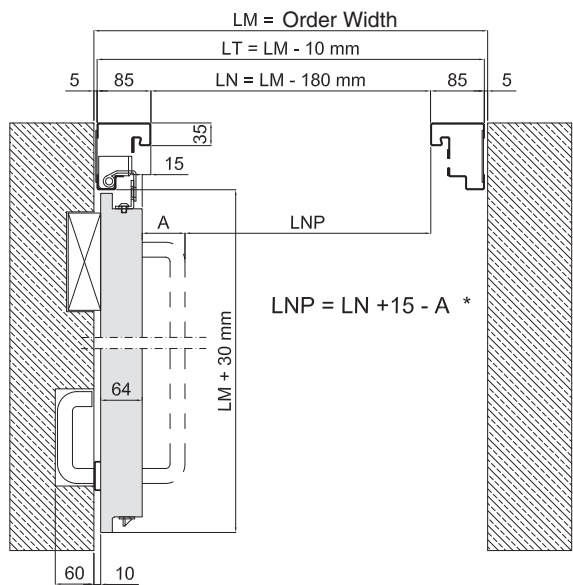
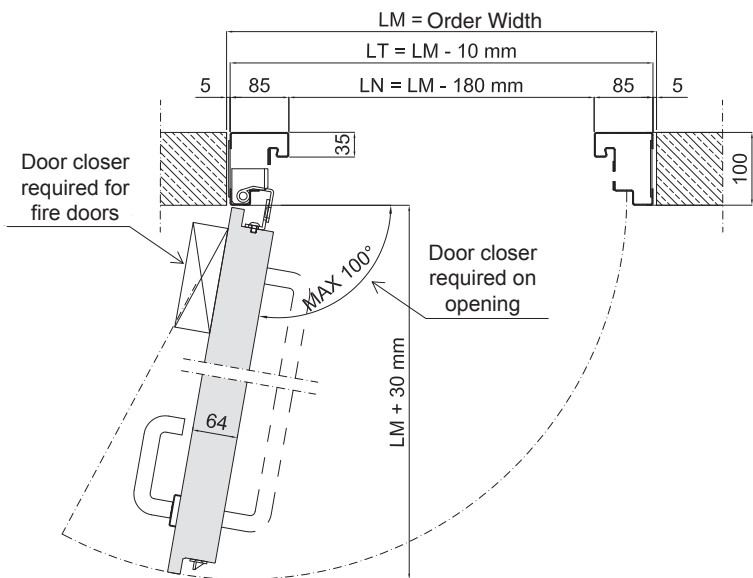
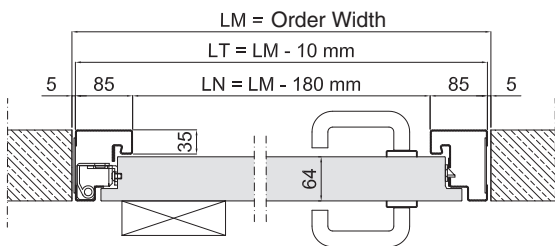
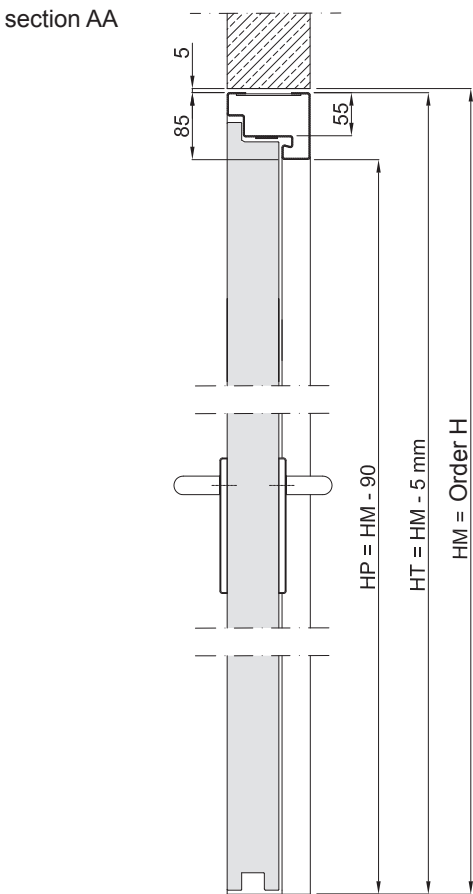
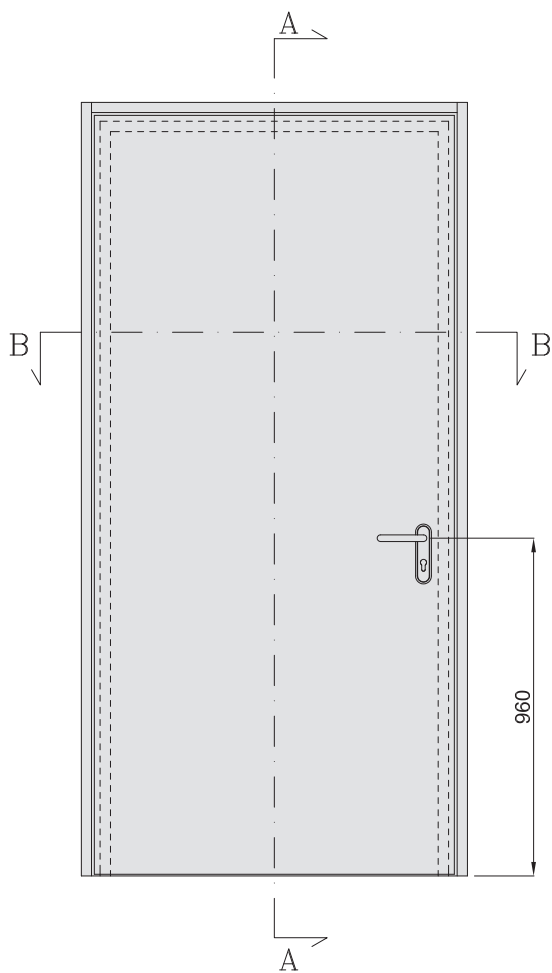
180° DOOR DIVISION		
Main door panel order size	X	Y
800	825	LM - X + 150
900	925	
1000	1025	

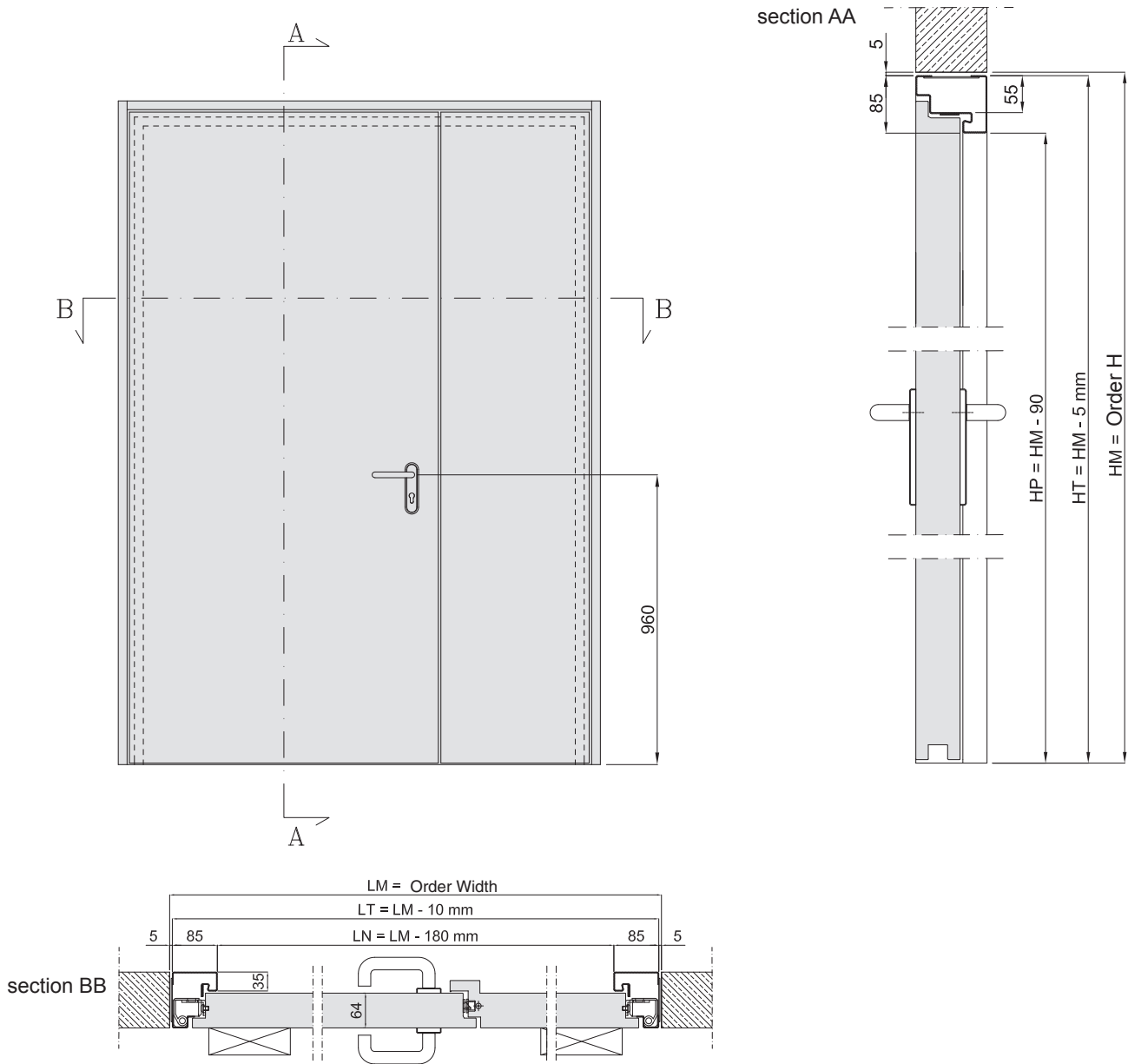
* Panic bar size

style	size	"A" **
Novoguard	79 mm	0 mm
Novopush	73 mm	0 mm
Cisa Touch	75 mm	0 mm
Cisa lever handle	105 mm	105 mm
EPN Touch	80 mm	0 mm
EPN Bar	103 mm	103 mm

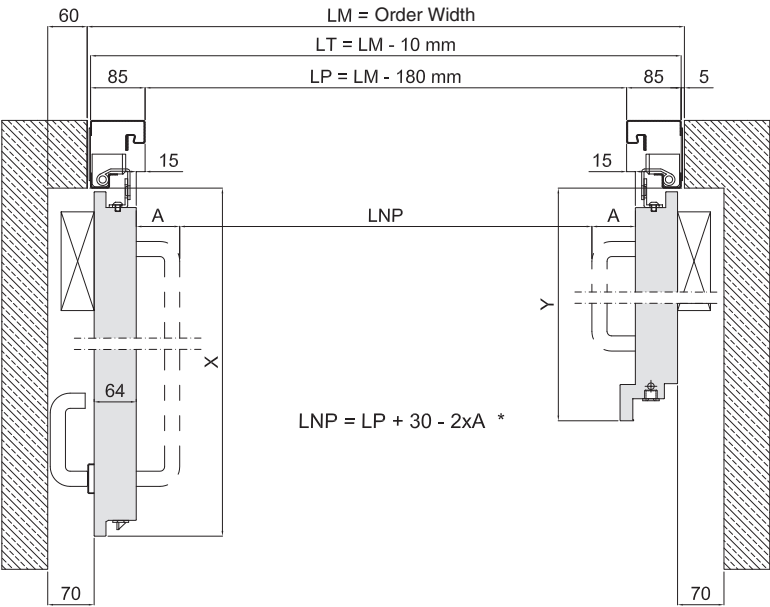
** According to Italian Ministerial Decree 03.08-2015, par. G. 1.9.16

ELITE PREMIO L2 with hidden hinge, single leaf door

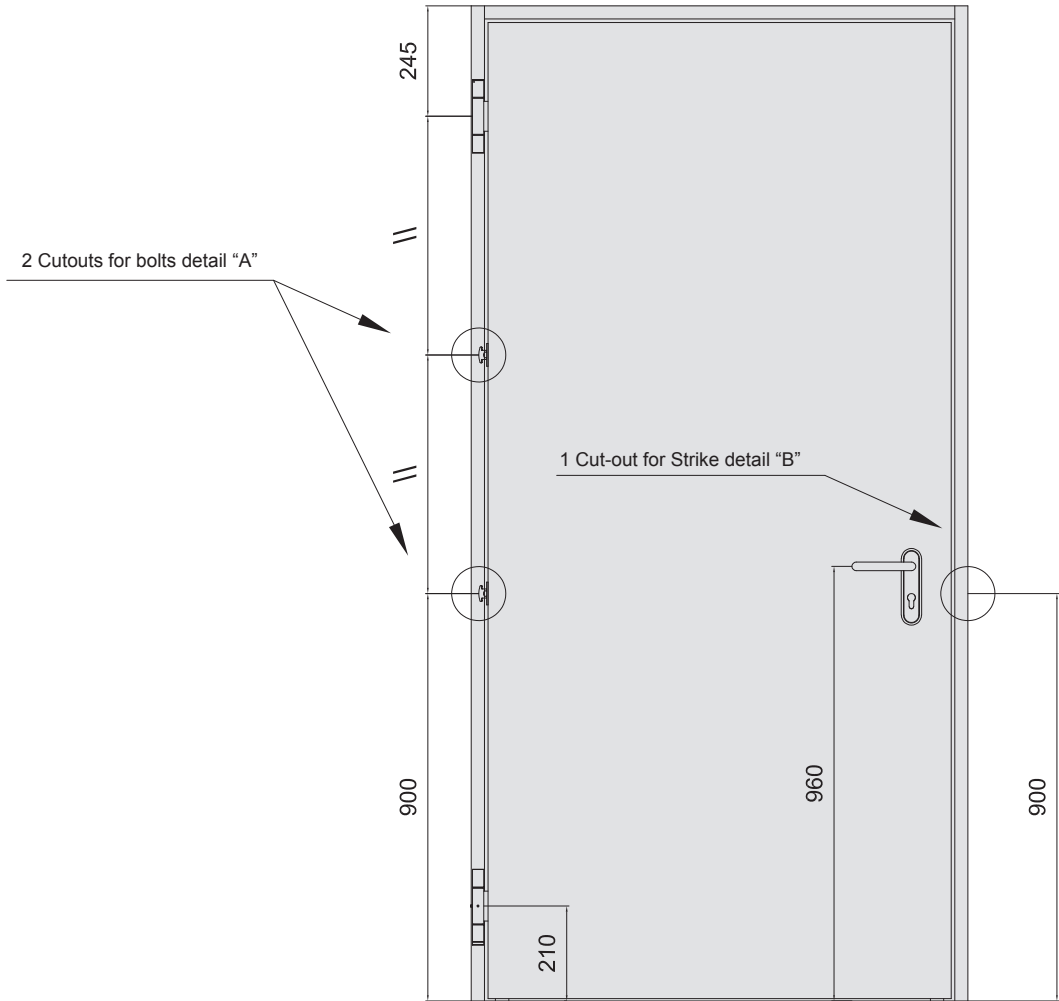




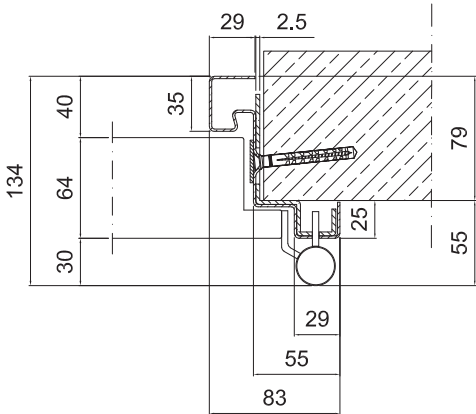
Nominal situation



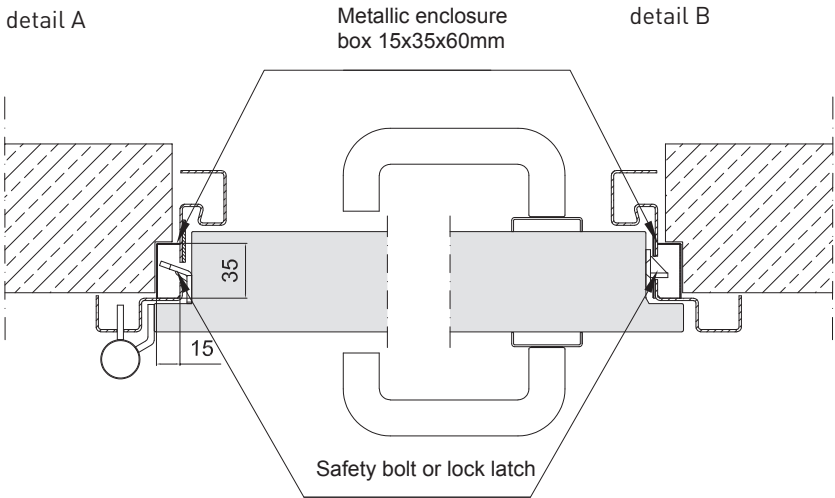
DOOR DIVISION		
Main door panel order size	X	Y
800	830	LM - X + 25
900	930	
1000	1030	

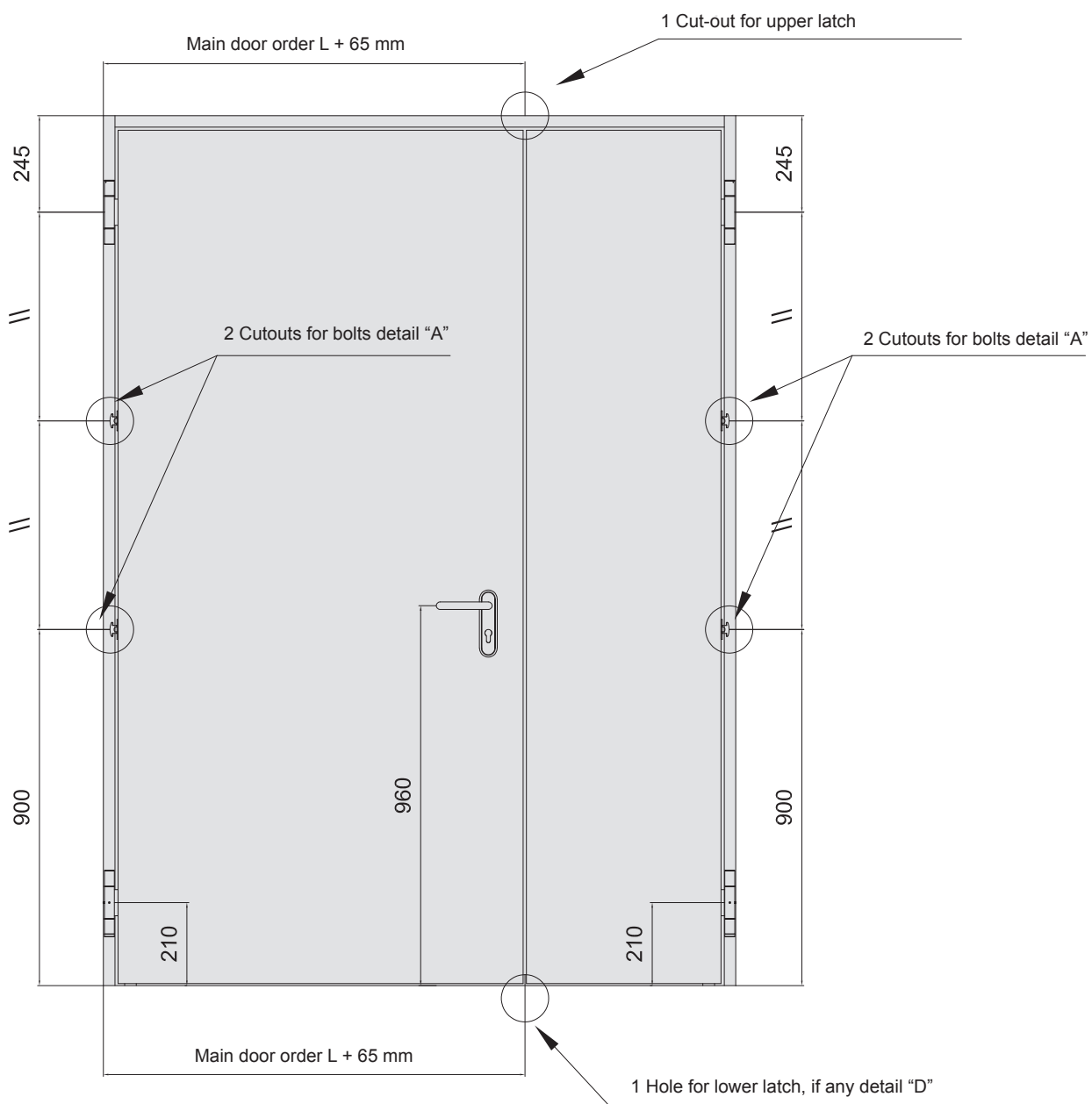
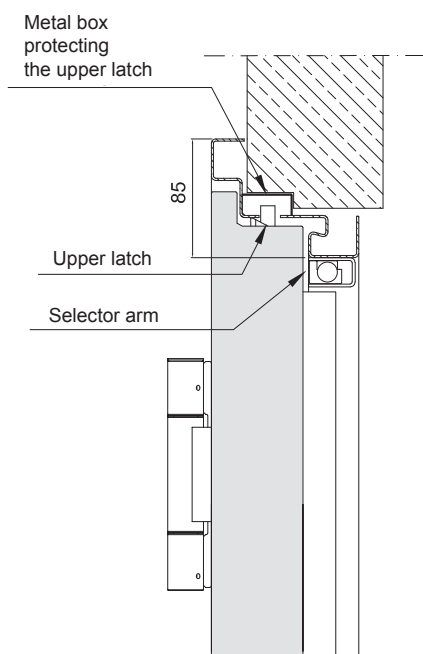
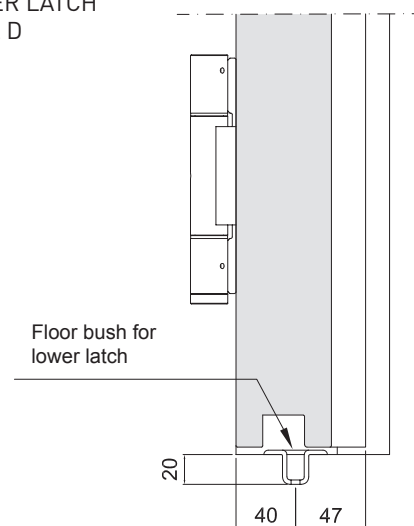


Hinge detail

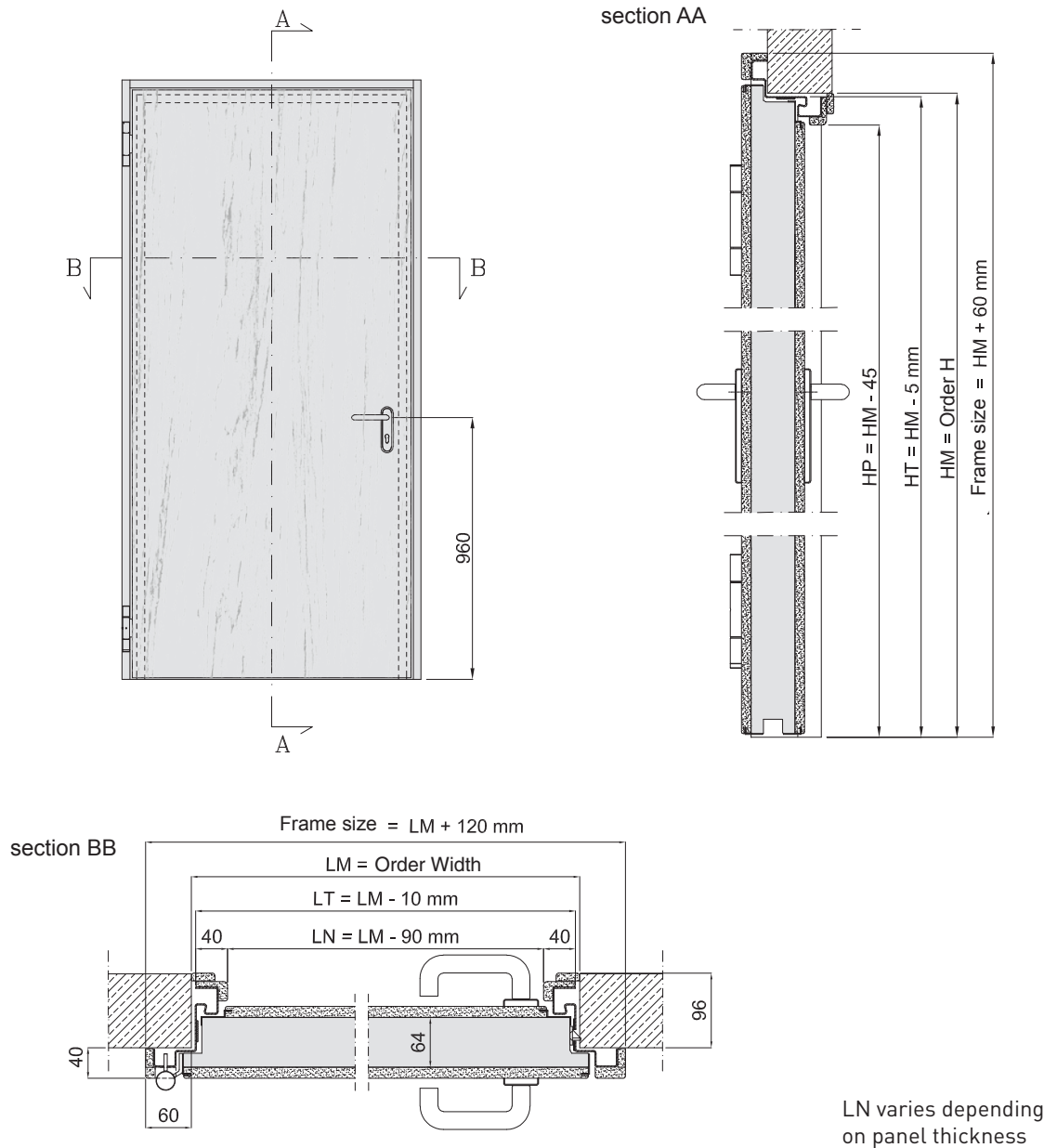


BOLT detail A



UPPER LATCH
detail CLOWER LATCH
detail D

SCUDO REI 120, single leaf door with panel

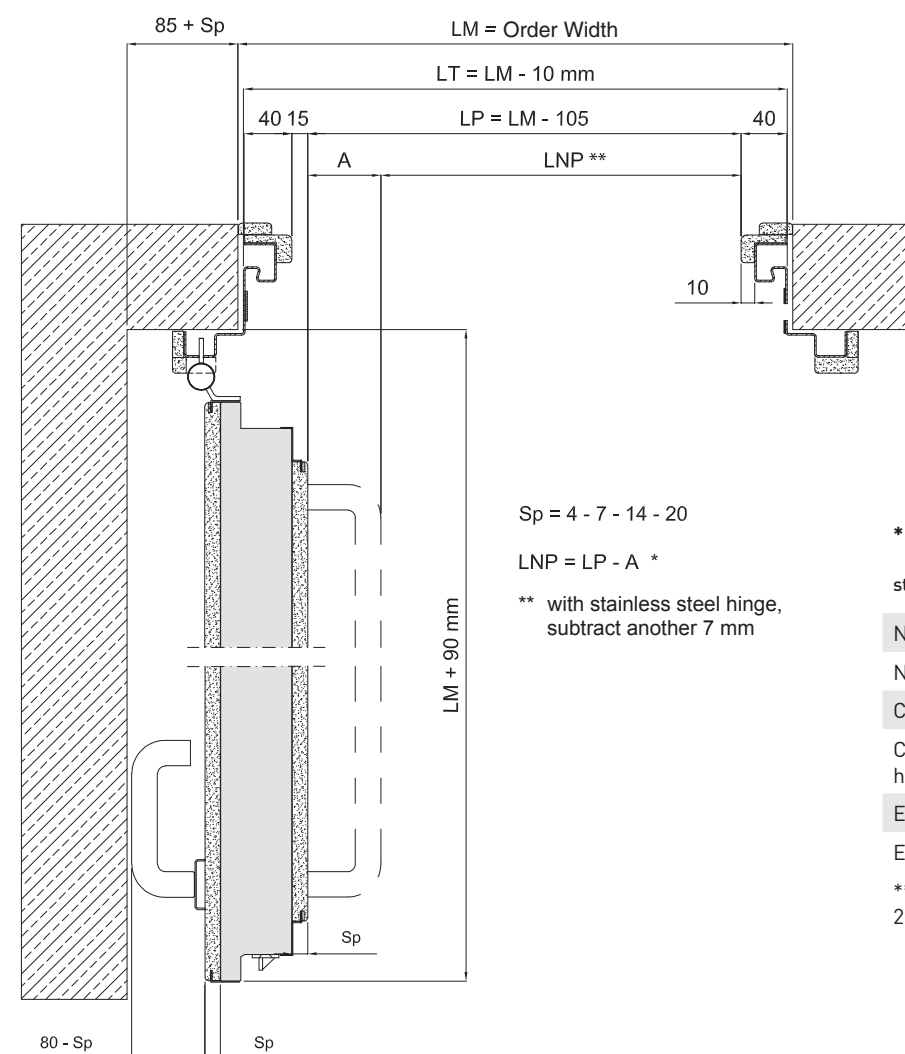


REI 120 fire proof door, certified according to EN 1634 standard with fire resistance class EI 60, EI 120.

Consists of:

- 15/10 mm thick "Z-shaped galvanised steel frame, with cold smoke seal compartment;
- frame with interlocked joints at the corners, without the corrosion that typically occurs in welded joints;
- door panel flush with boxed and welded 8/10mm-thick galvanised double sheet steel frame with high-density insulation, protected with two layers of calcium sulphate material around the lock. Total door thickness 64 mm; Z140 zinc coating thickness (10-12 microns per side);
- Panels available: solid wood, milled compound, or laminated MDF sheet. The panel is secured to the edges with specially shaped sheet steel, which is painted in the same colour as the panel;
- door leaf thickness varies according to panel thickness;
- 2 pressed steel hinges per door leaf, sliding on tempered anti-friction bushings, designed for intensive use and high load conditions. Adjustable at any time with special screws; cannot be reached when the door is closed. Hinges are designed to be easily replaced, in compliance with the maintenance plan to be established according to Italian Min. Decree M.I. 64 of 10/03/98, Ministerial Decree M.I. 21/06/04 (GU 155 of 05/07/04) and T.U. 81/2008 for escape routes;
- self-closing mechanism with spring in the hinges (adjustable);
- door closer arm;
- sealing bolt between the two hinges;
- Yale type lock with three-key cylinder on main door leaf;
- Flush-bolt type self-locking system on second door leaf, with lever opening;
- black PVC handle with steel core, "U" shaped for accidental grips, placed at 960 mm from the floor, according to Italian Presidential Decree 503 of 24/07/96, unless otherwise requested by the customer;
- thermal seal all around the frame;
- for non-coated parts, surface finish with embossed and/or textured epoxy polyester powder for interior application (RAL colour: see list on page 1);
- arranged for the installation of a movable drop-bar seal.
- fastenings or anchoring systems and any frame fills as required (mechanical dowels + plasterboard strips, brackets, self-tapping screws + plasterboard strips, screws + plasterboard strips for drywall installation kit).

90° opening



Sp = 4 - 7 - 14 - 20

LNP = LP - A *

** with stainless steel hinge, subtract another 7 mm

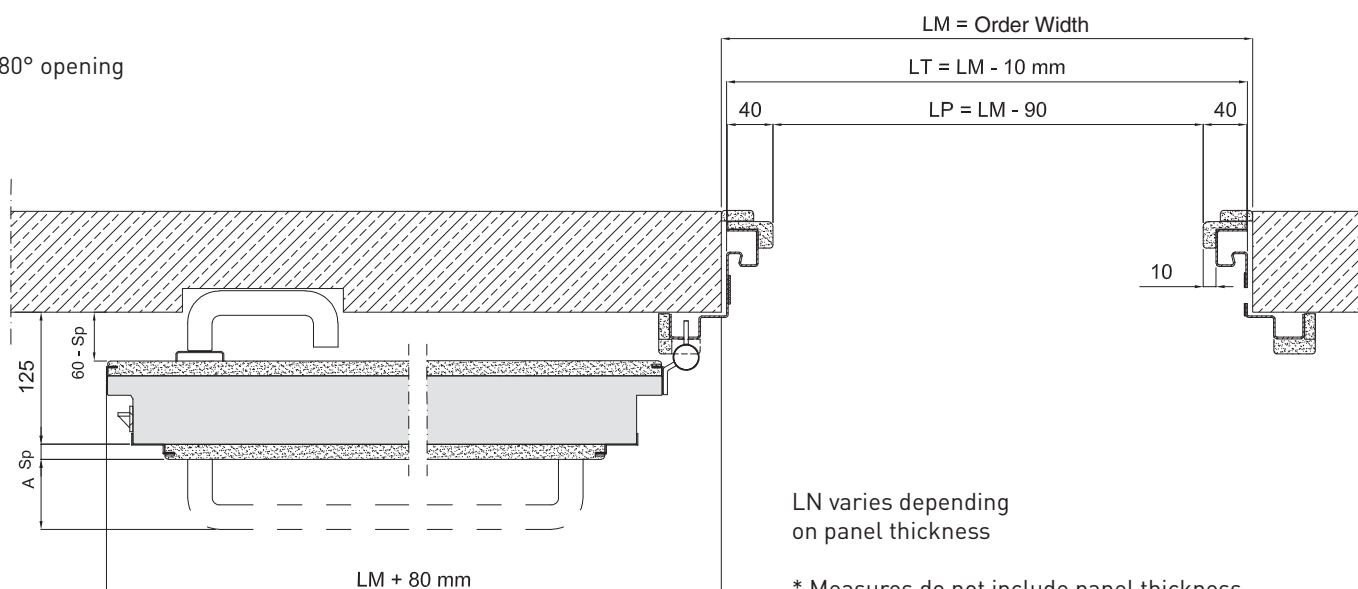
* Panic bar size

style	size	"A" **
Novoguard	79 mm	0 mm
Novopush	73 mm	0 mm
Cisa Touch	75 mm	0 mm
Cisa lever handle	105 mm	105 mm
EPN Touch	80 mm	0 mm
EPN Bar	103 mm	103 mm

** According to Italian Ministerial Decree 03.08-2015, par. G. 1.9.16

LNP varies depending on coating thickness

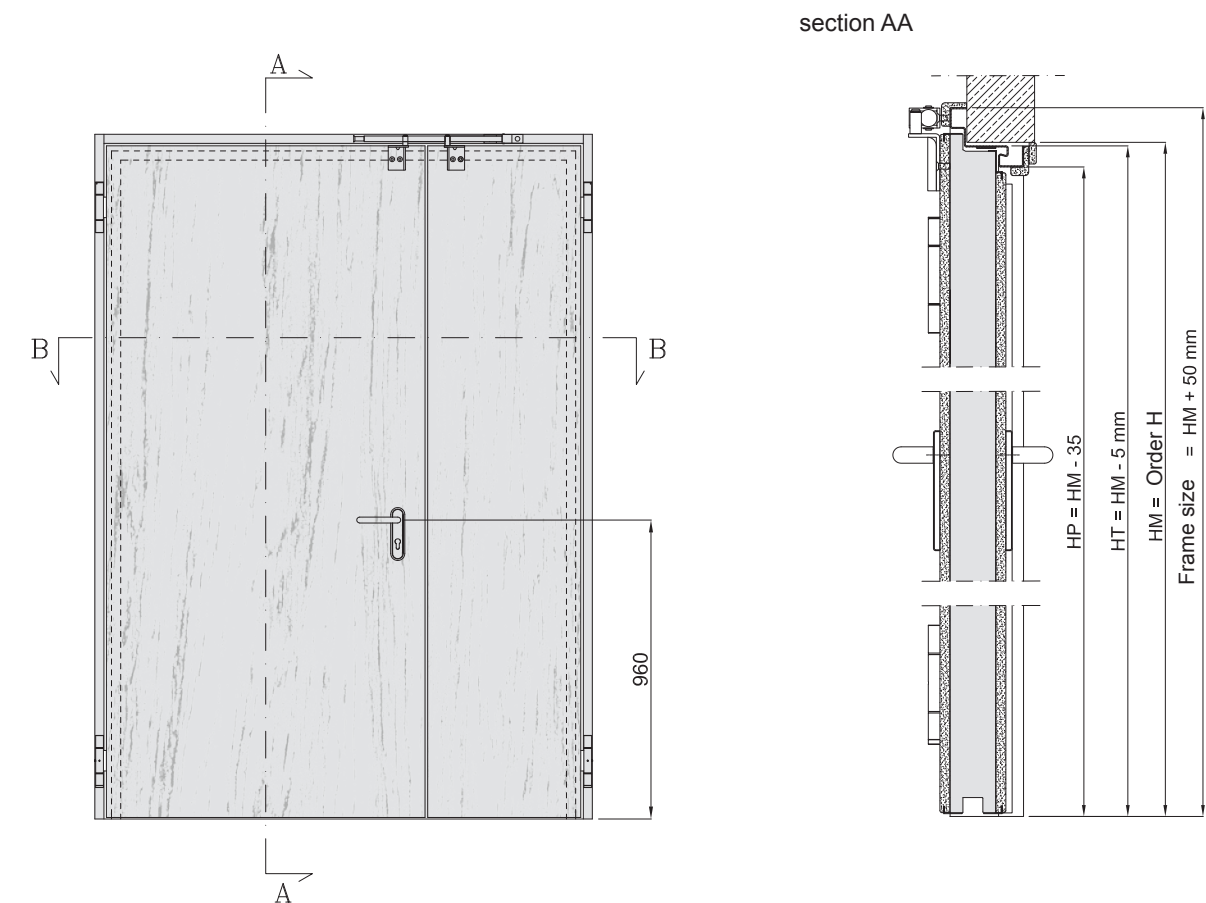
180° opening



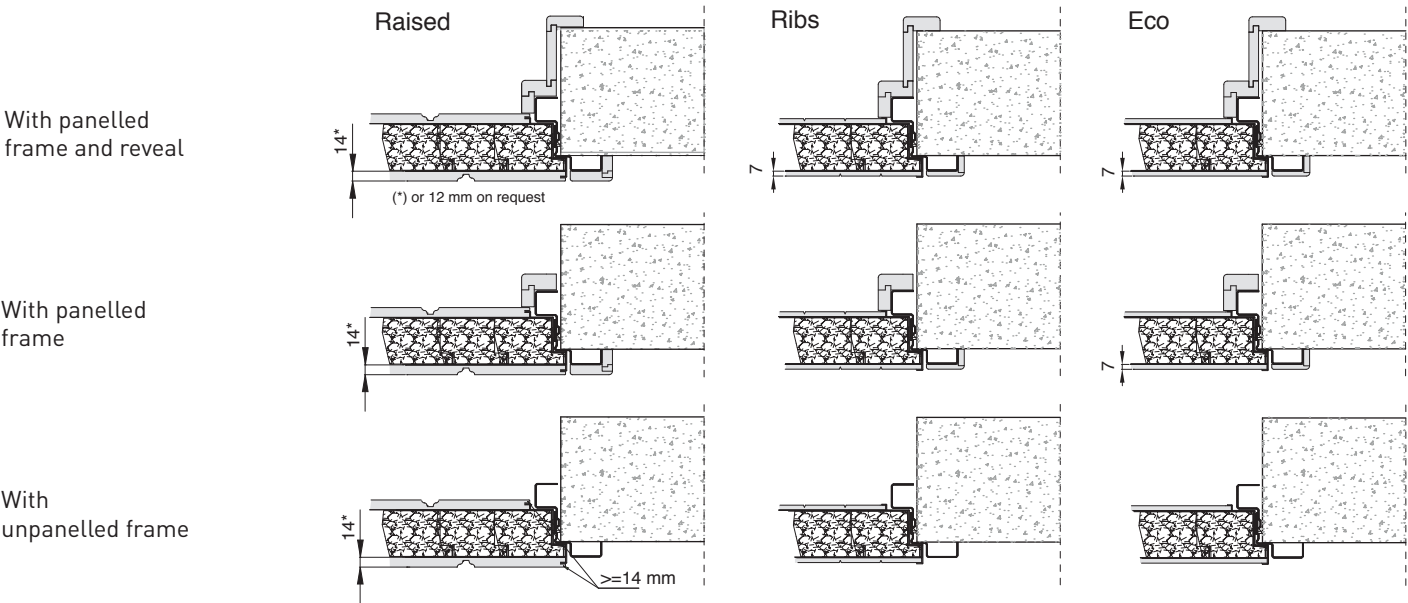
LN varies depending on panel thickness

* Measures do not include panel thickness.

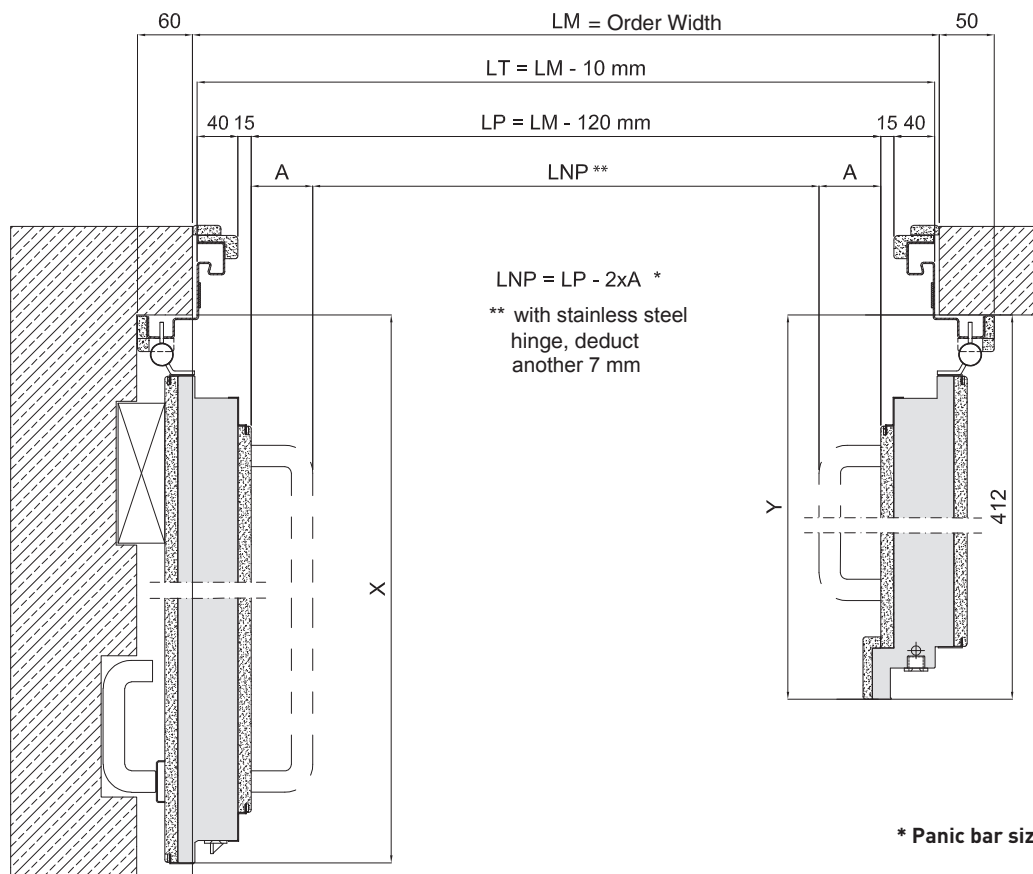
SCUDO REI 120, double leaf door with panel



LN varies depending
on panel thickness



90° opening



* Panic bar size

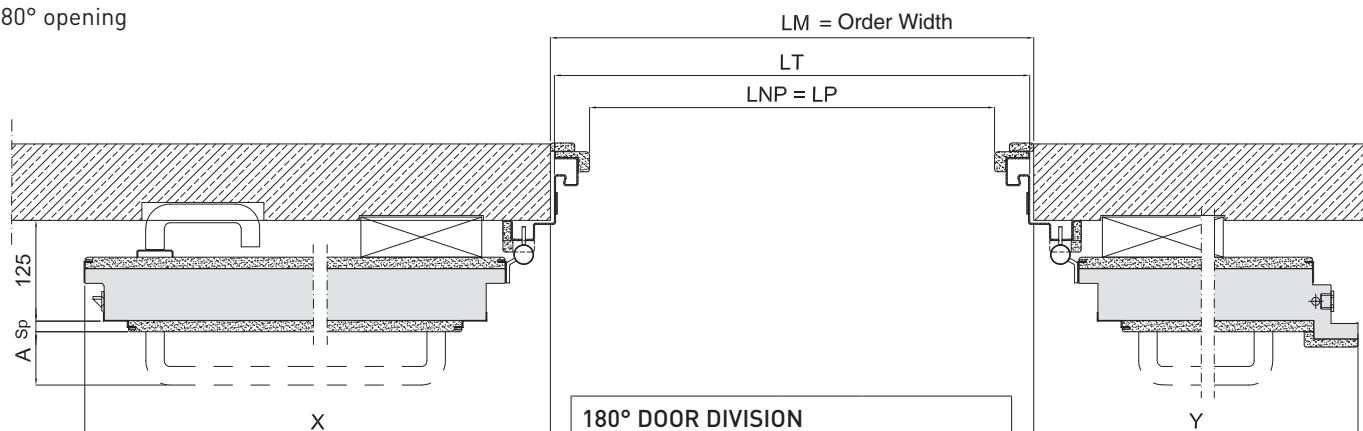
style	size	"A" **
Novoguard	79 mm	0 mm
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Cisa Touch	75 mm	0 mm
Cisa lever handle	105 mm	105 mm
EPN Touch	80 mm	0 mm
EPN Bar	103 mm	103 mm

** According to Italian Ministerial Decree 03.08-2015, par. G. 1.9.16

180° DOOR DIVISION		
Main door panel order size	X	Y
800	890	LM - X + 200
900	990	
1000	1090	

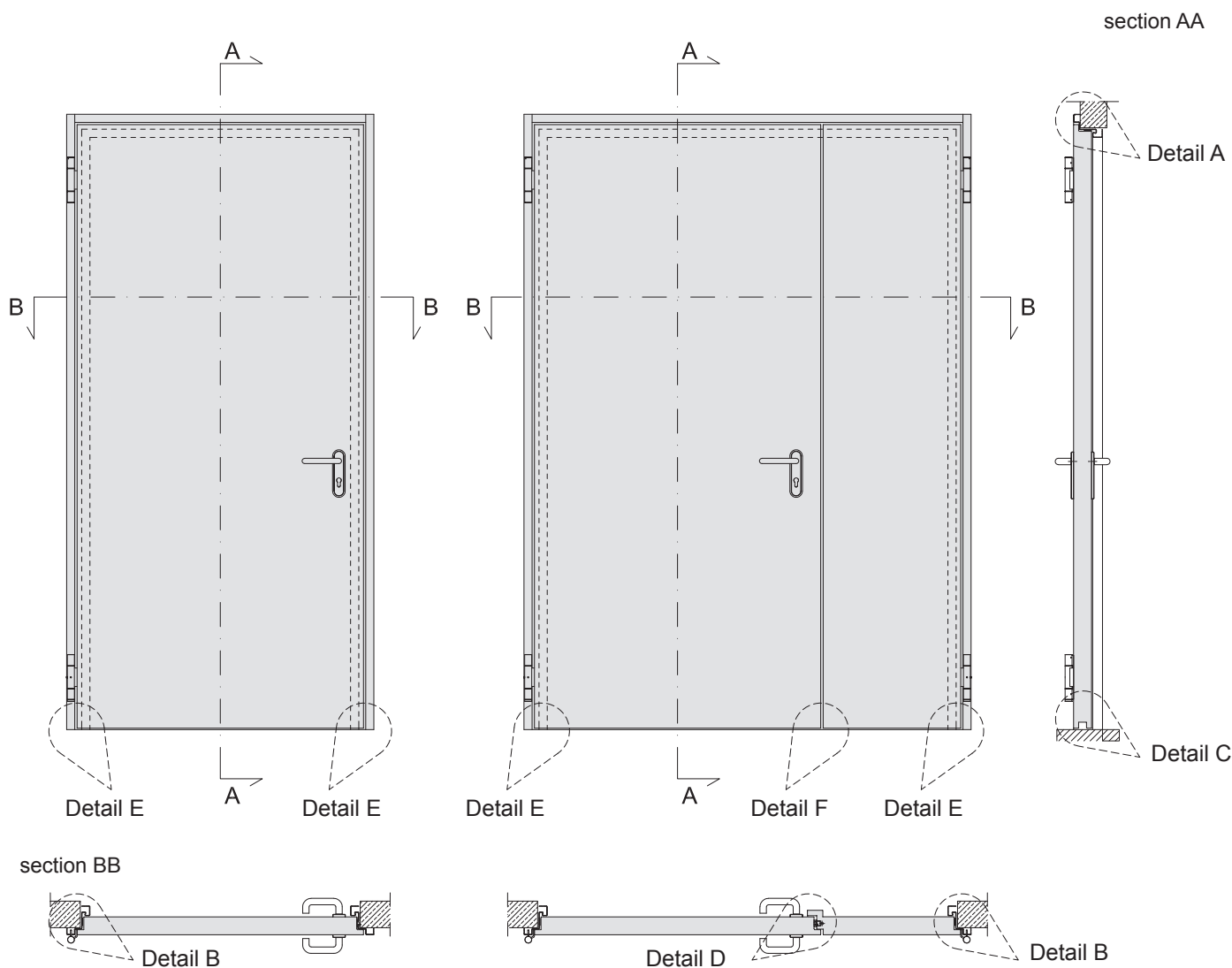
LNP varies depending on panel thickness

180° opening



180° DOOR DIVISION

Main door panel order size	X	Y
800	880	LM - X + 180
900	980	
1000	1080	



Classified Performance:

Corrosion: minimum level C3 according to (EN ISO 12944-6:1998)
Hinge load resistance: level 6 (up to 120 kg per hinge, EN 1935:2002)
Transmittance: $U_d [W / M^2 \cdot K]$ varies from 1.5 to 2 (without glass) (EN-ISO 10077-2:2012)
Watertightness: class 1B or 2B (EN 14351-1 and UNI EN 1027)
Air permeability: class 1 or class 3 (EN 14351-1 and UNI EN 1026)
Air permeability according to ASTM E283-04 (2012): approved
Resistance to wind load: class C3, C4, C5 (EN 14351-1 and UNI EN 12211)
Vertical load resistance: class 4 (EN 947)
Static torsion resistance: class 4 (EN 948)
Resistance to soft and heavy body impact: class 4 (EN 949)
Resistance to hard body impact: class 1 (EN 950)
Opening and closing cycles: maximum level for REI doors (more than 200,000 cycles), class 6 according to EN12400:2004, C5 according to EN 16034:2014
Sound insulation: from 21 up to 40 dB R_w (EN ISO 10140-2:2010 and EN ISO 717-1:2013)
Burglar resistance: RC1 (EN 1627: 2011)
Hot and cold smoke resistance: Sa and Sm rating (EN 1634-3:2005)
CE marking 0407-CPD-578 (IG-202-2012), (EN14351-1:2006+A1:2010) for exterior door (without fire rating) with/without panic bar.

Elite Premio Acoustic Door

- noise reduction level from 21 to 40 Db.
- standard equipment: see table;
- to meet the noise reduction criteria, any gaps remaining between the wall and frame must be carefully sealed.

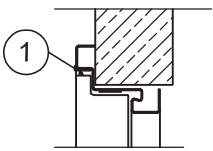
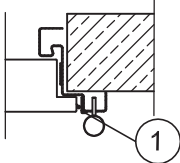
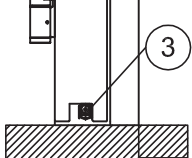
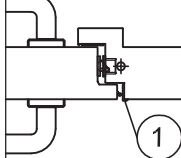
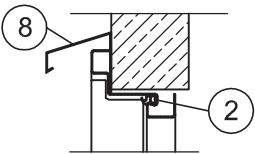
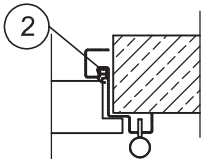
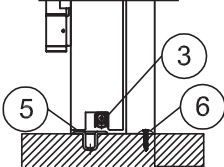
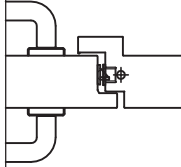
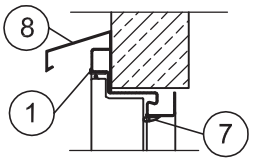
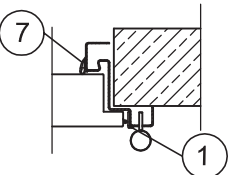
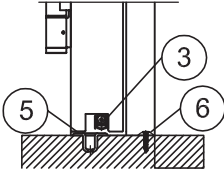
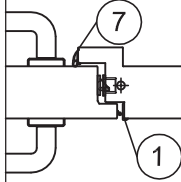
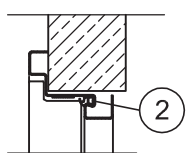
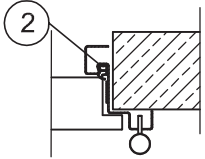
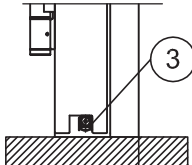
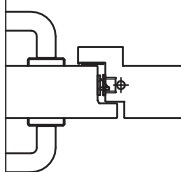
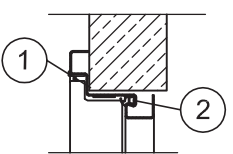
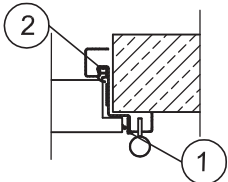
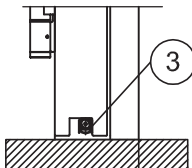
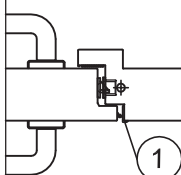
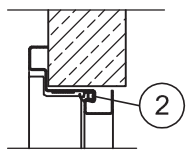
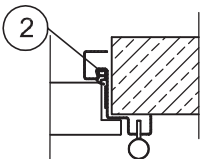
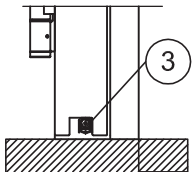
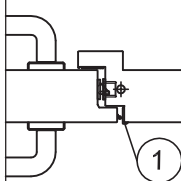
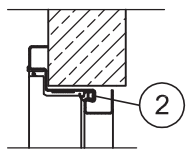
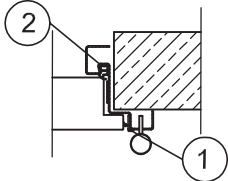
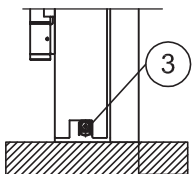
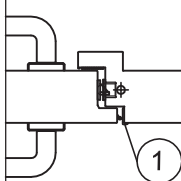
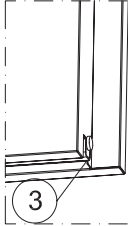
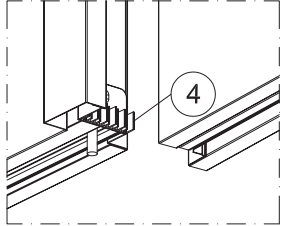
	Metal	EI 120	Scudo Class EI 120
-	23 dB*	22 dB*	22 dB*
AC1	33 dB	32 dB	34 dB
AC2	38 dB	39 dB	40 dB

* performances achievable with standard model only with no additional components

Multi-purpose Elite Premio exterior door

- standard equipment: see table;
- on request: sill pan (to avoid direct contact with water), with UV-resistant coating for direct exposure to sunlight.

	EXT 0	EXT 1	EXT 3
Type of performance	class	class	class
Air permeability	0	1	3
Water tightness	0	1B	2B
Wind resistance	C3	C3	C3

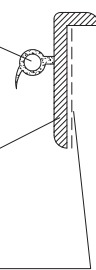
	Detail A	Detail B	Detail C	Detail D
ASTM NFRC 400				
Ext 1				
Ext 3				
AC1				
AC2				
1A Sa/Sm 2A Sa				
2A Sa/Sm				
<div> <div> <p>Detail E</p>  </div> <div> <p>Detail F</p>  </div> </div> <p>On all kits except ASTM</p>				
<p>Key</p> <ul style="list-style-type: none"> 1 T seal with bulb attachment (GUA110) 2 Integrated seal (GUA200) 3 Movable drop-bar seal (PAR - - -) 4 No Air seal (GUA203) 5 Floor bushing (POZ000) 6 Fixed drop-bar seal (SOL001) 7 Drop seal (GUA080) 8 Flashing (on request) (SC0000) 				

GUA 110
"T seal with bulb attachment"

Soft part

Hard base

Adhesive surface

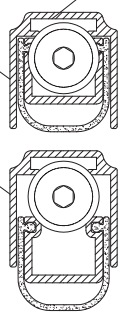


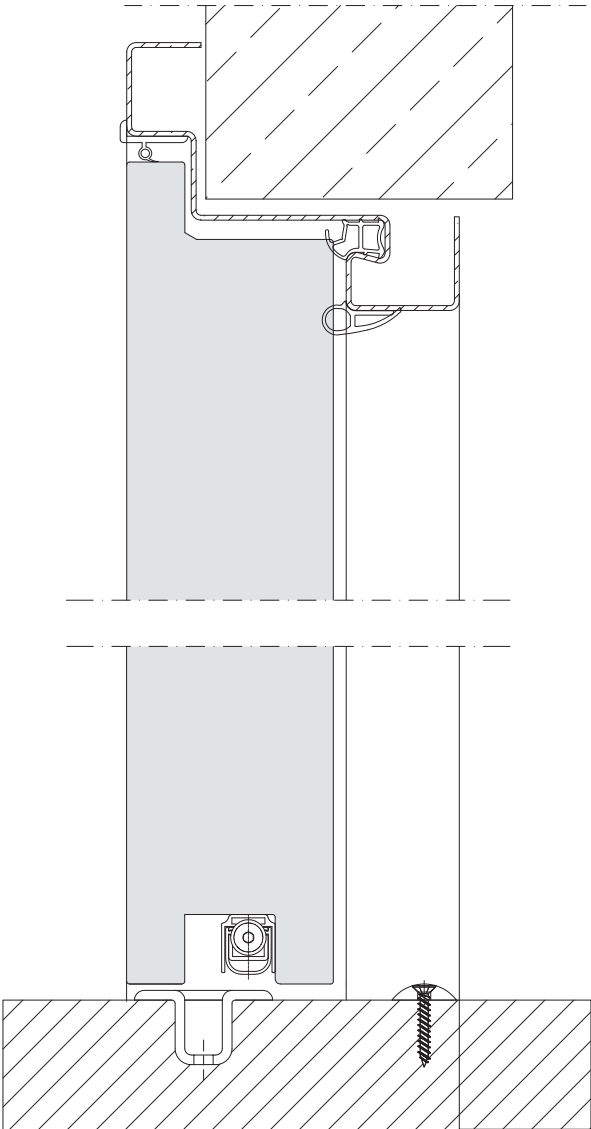
PAR - - -
"Movable drop seal"

Aluminium body

At rest

Lowered

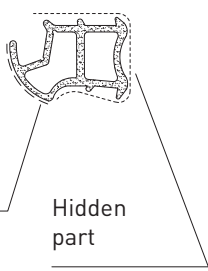




GUA 200
"Built in"

Visible lip seal

Hidden part

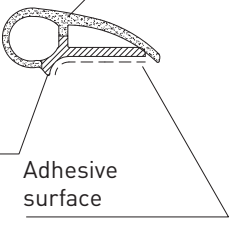


GUA 080
"Drop-shaped seal"

Soft part

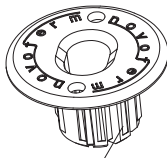
Hard base

Adhesive surface



POZ 000
"Floor cup"

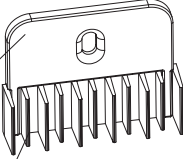
Eccentric body for adjustment



GUA 203
"No-Air Brush"

Stiff plate

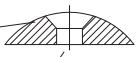
Soft part



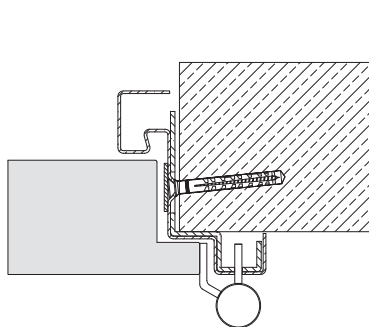
SOL 001
"Fixed drop seal"

Extruded aluminium

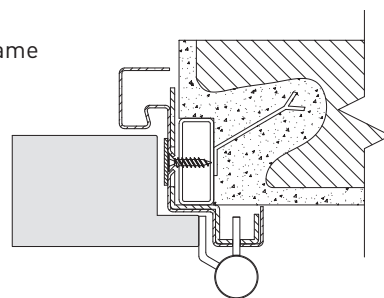
Countersink for installation



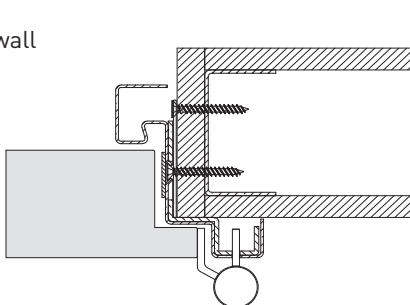
With dowels



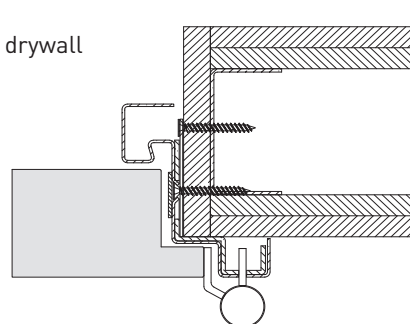
On metal counterframe



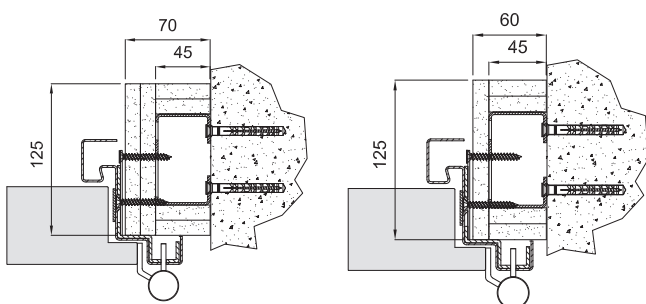
EI 60 gypsum drywall



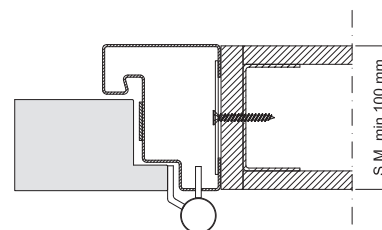
EI 120 gypsum drywall



Wall in the opening EI 60
EI 120



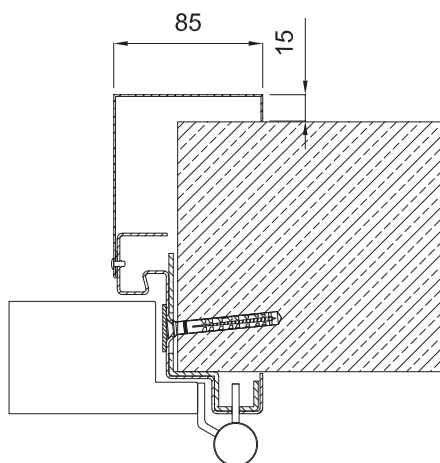
Tubular frame



Elite Premio doors are tested on a standardised flexible support, according to the EN 1363-1 standard, par 7.2.2. In accordance with point 13.5.3. of EN 1634-1, the product can be installed in any non-standard flexible supporting construction, which achieves at least the same level of fire performance as the door.

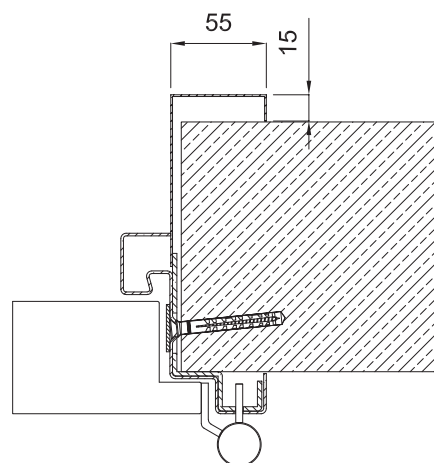
Outer jamb

On request

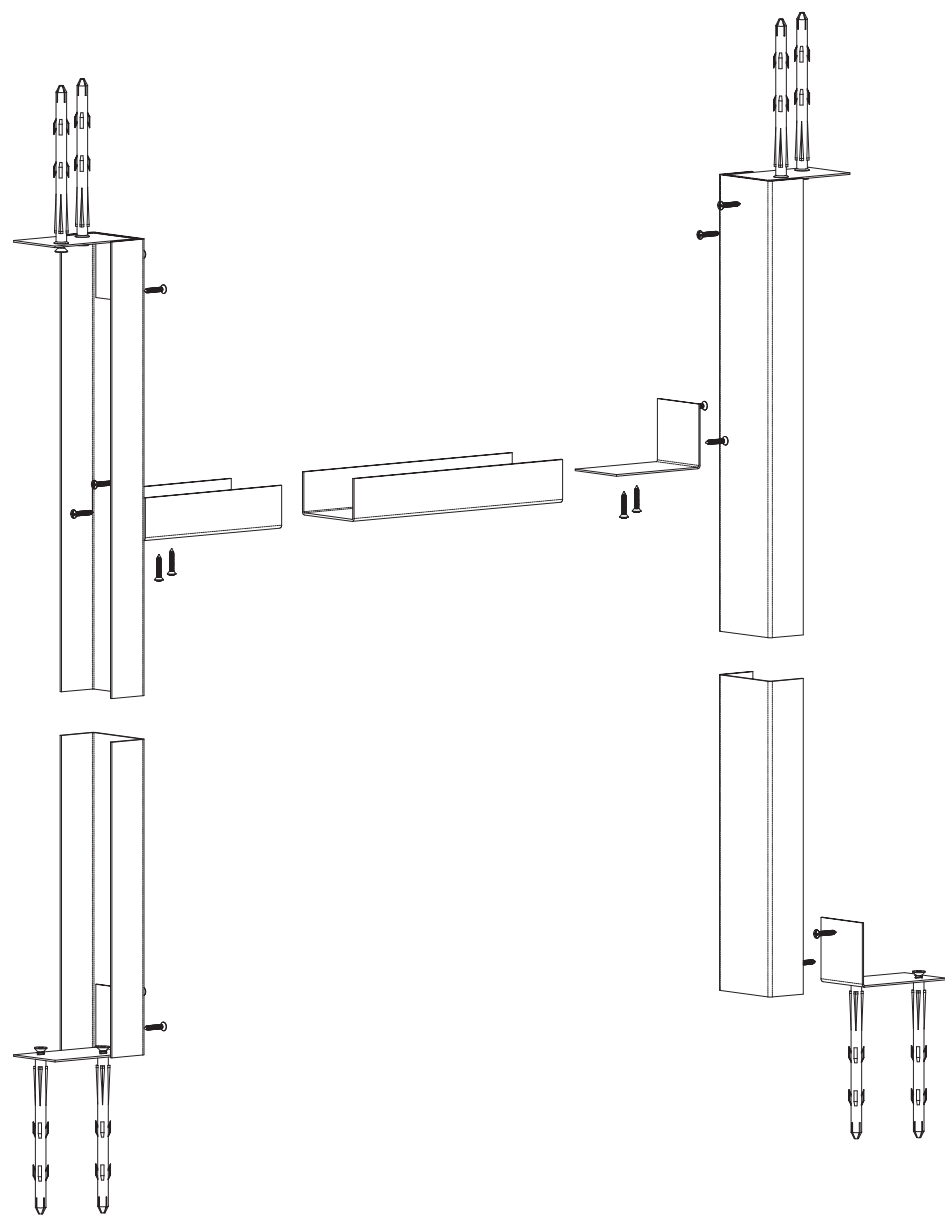


Inner jamb

On request

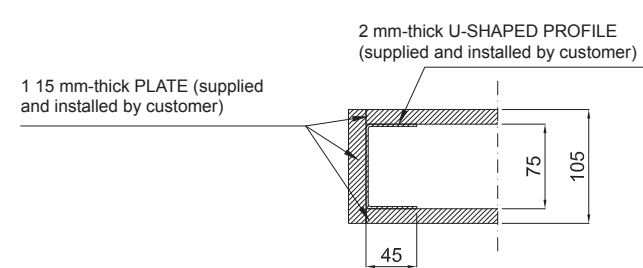


K3-type drywall-mounted door

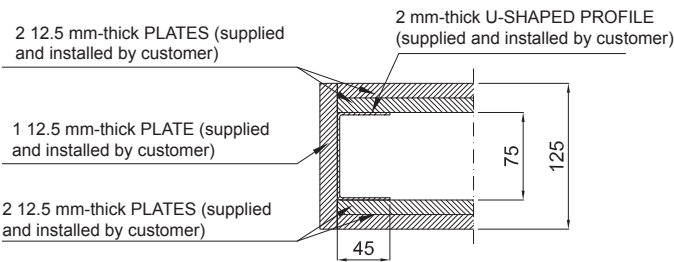


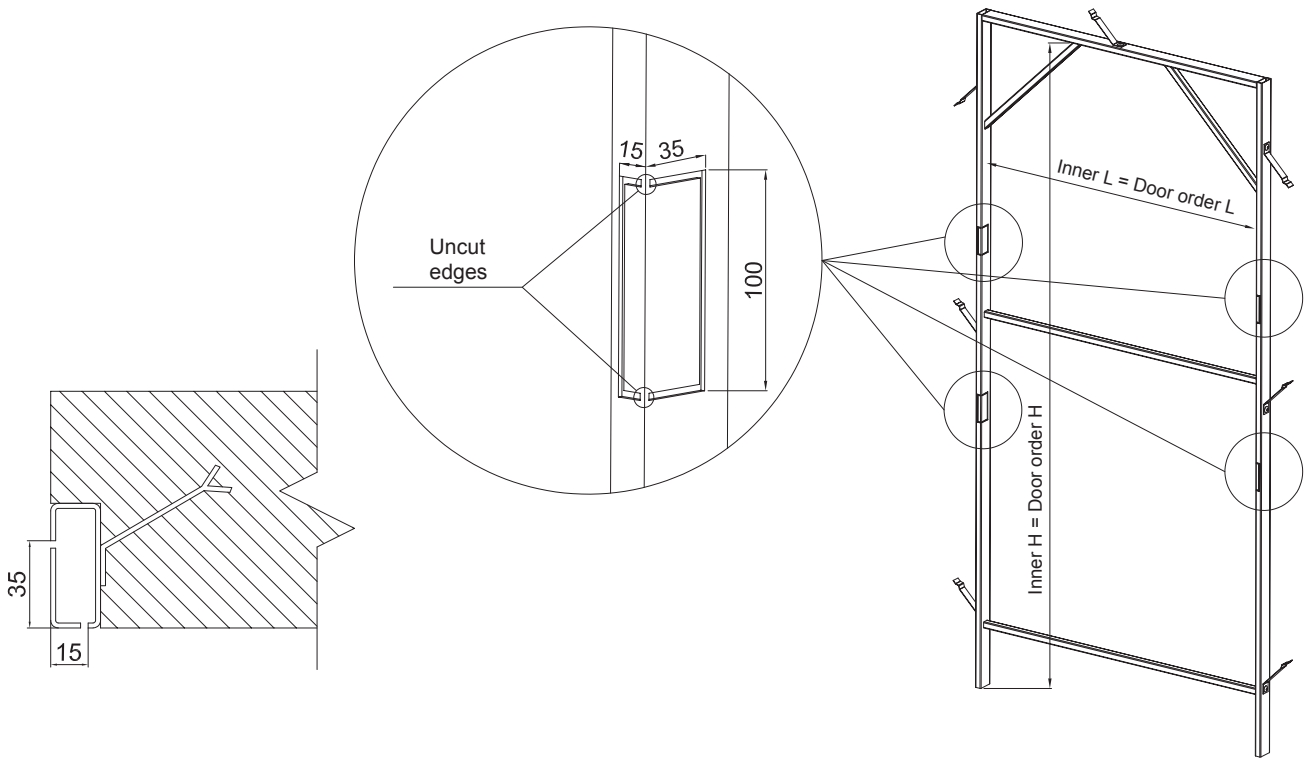
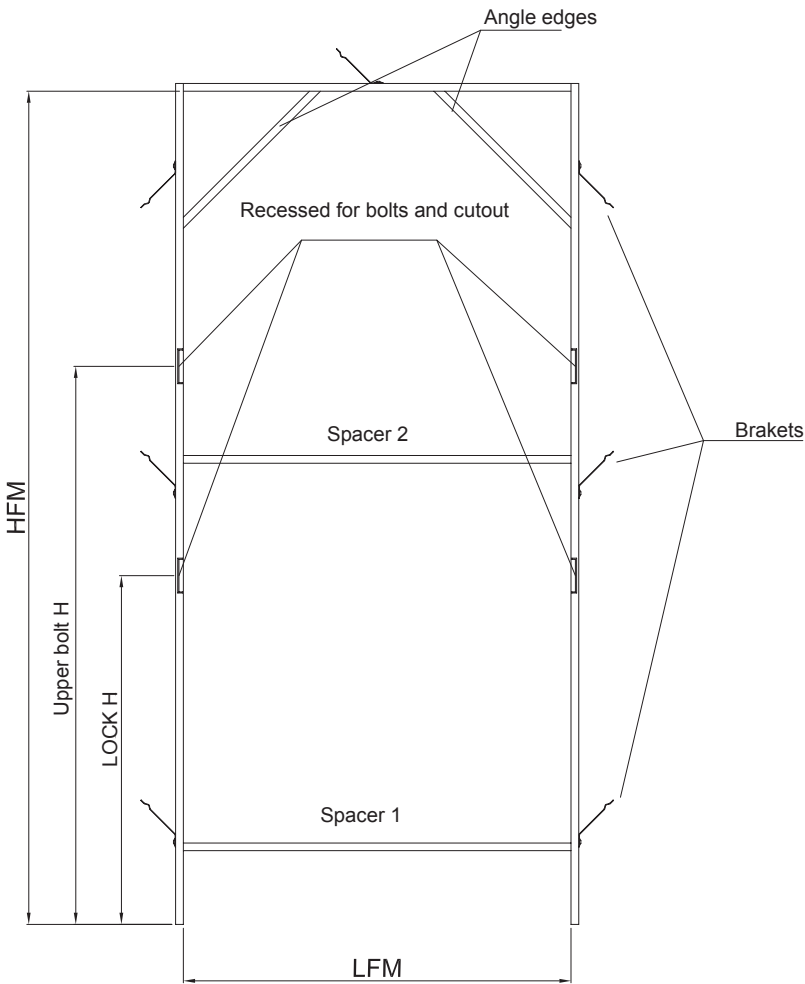
Flexible wall details

EI 60 drywall



EI 120 drywall



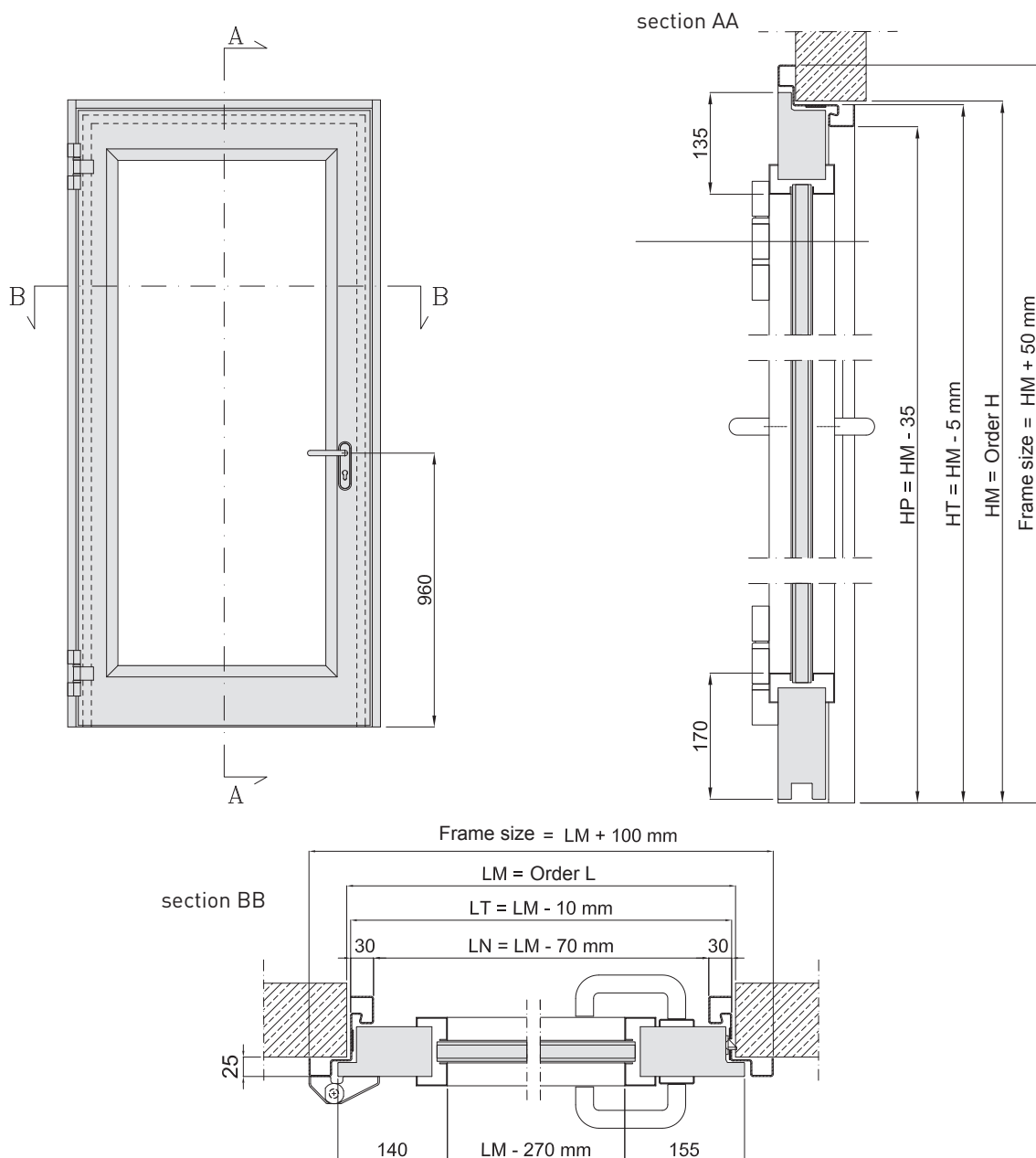


NOTES

A series of horizontal dotted lines for writing notes.

GLAZED DOORS

NOVOGLASS+ single leaf glazed door



NOVOGLASS fire proof glazed door, EI 60, EI 120 certified.

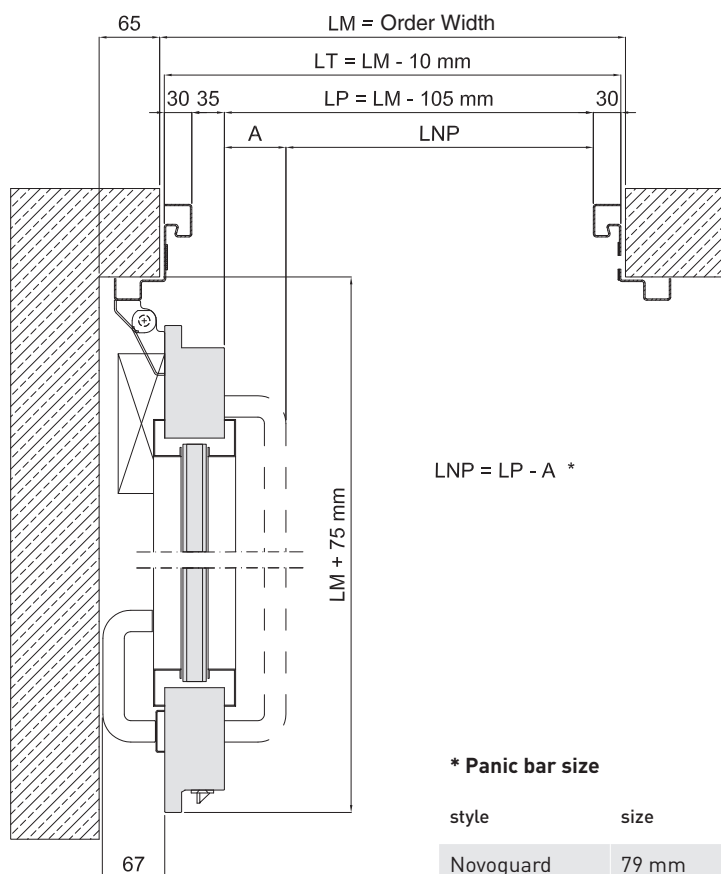
Consists of:

- 15/10 mm thick "Z-shaped galvanised steel frame, to make the door panel perfectly flush with the frame, with cold smoke seal compartment;
- the frame is mechanically joint to the corners without welding. The electrogalvanised coating remains intact at all points, without the corrosion that typically occurs in welded joints;
- Door panel consisting of a steel framework, with a supporting section, flush with a frame made of pressed, boxed and welded double galvanized sheet steel, with inorganic insulation, free of asbestos. The profile of the door leaf features a special finish on the glass side (which is therefore invisible after installation) designed to reduce thermal conductivity between the two sides of the door.
- REI fire-rated laminated glass, consisting of several glass sheets filled with a normally clear material that turns to an opaque foam and gives out water vapour during a fire. Glass panels are fastened with glazing beads, without visible screws, with special self-extinguishing seals that do not keep the material inside the glass from swelling at high temperatures.
- 2 steel spring hinges per panel, designed for intensive use and high load conditions. Adjustable at any time with special screws; cannot be reached when the door is closed. Hinges are mechanically fastened to the door

and therefore can be replaced in case of long, heavy use, according to Italian Ministerial Decree M.I. 64 of 10/03/98, Ministerial Decree M.I. 21/06/04 (GU 155 of 05/07/04) and T.U. 81/2008 for escape routes;

- Black hydraulic door closer;
- sealing bolts between the two hinges;
- Yale type lock with three-key cylinder;
- black PVC handle with steel core, "U" shaped for accidental grips, placed at 960 mm from the floor, according to Italian Presidential Decree 503 of 24/07/96, unless otherwise requested by the customer;
- thermal seal all around the frame;
- surfaces with category Z140 galvanised coating (minimum zinc mass 140 g/sqm per surface), finished with embossed and/or textured epoxy polyester powder for internal use, 120 microns thick (RAL colours: see list on page 1);
- arranged for the installation of a movable drop-bar seal.
- The lower profile width can be increased upon request up to 40 cm according to Italian Presidential Decrees no. 503 of 24 July 1996, no. 384 of 27 April 1978, Ministerial decree no. 236 of 14 June 1989 for the removal of architectural barriers.

Nominal situation

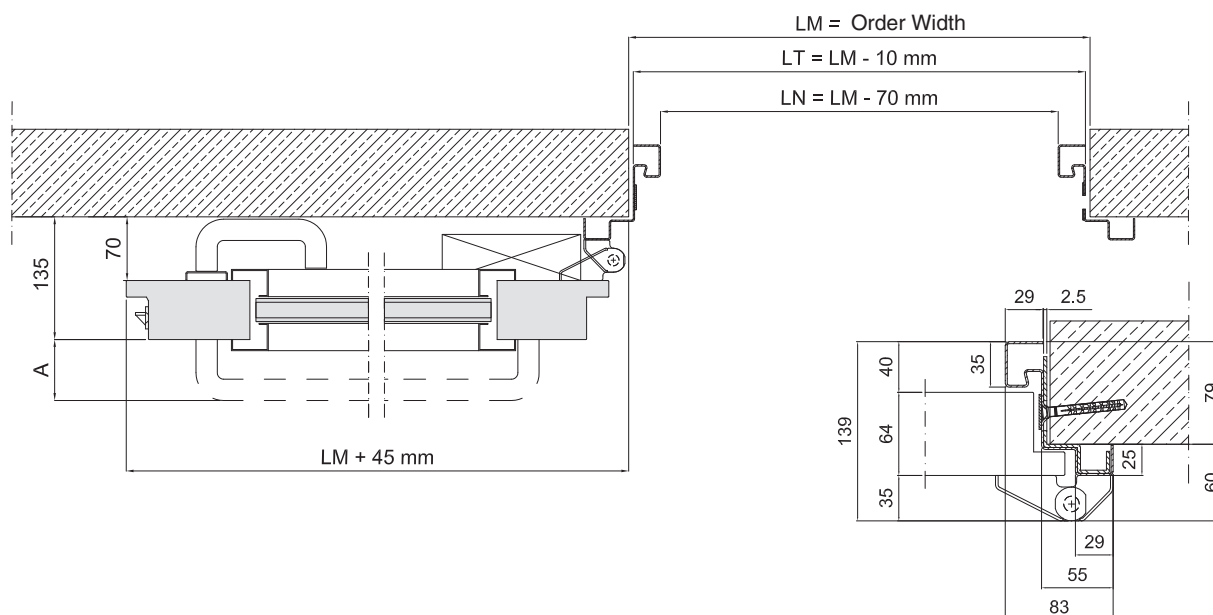
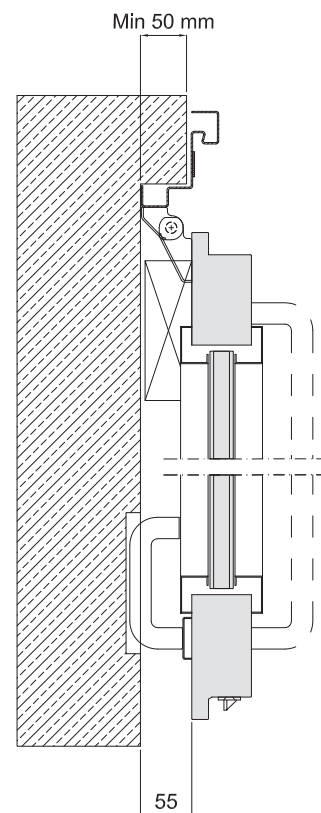


* Panic bar size

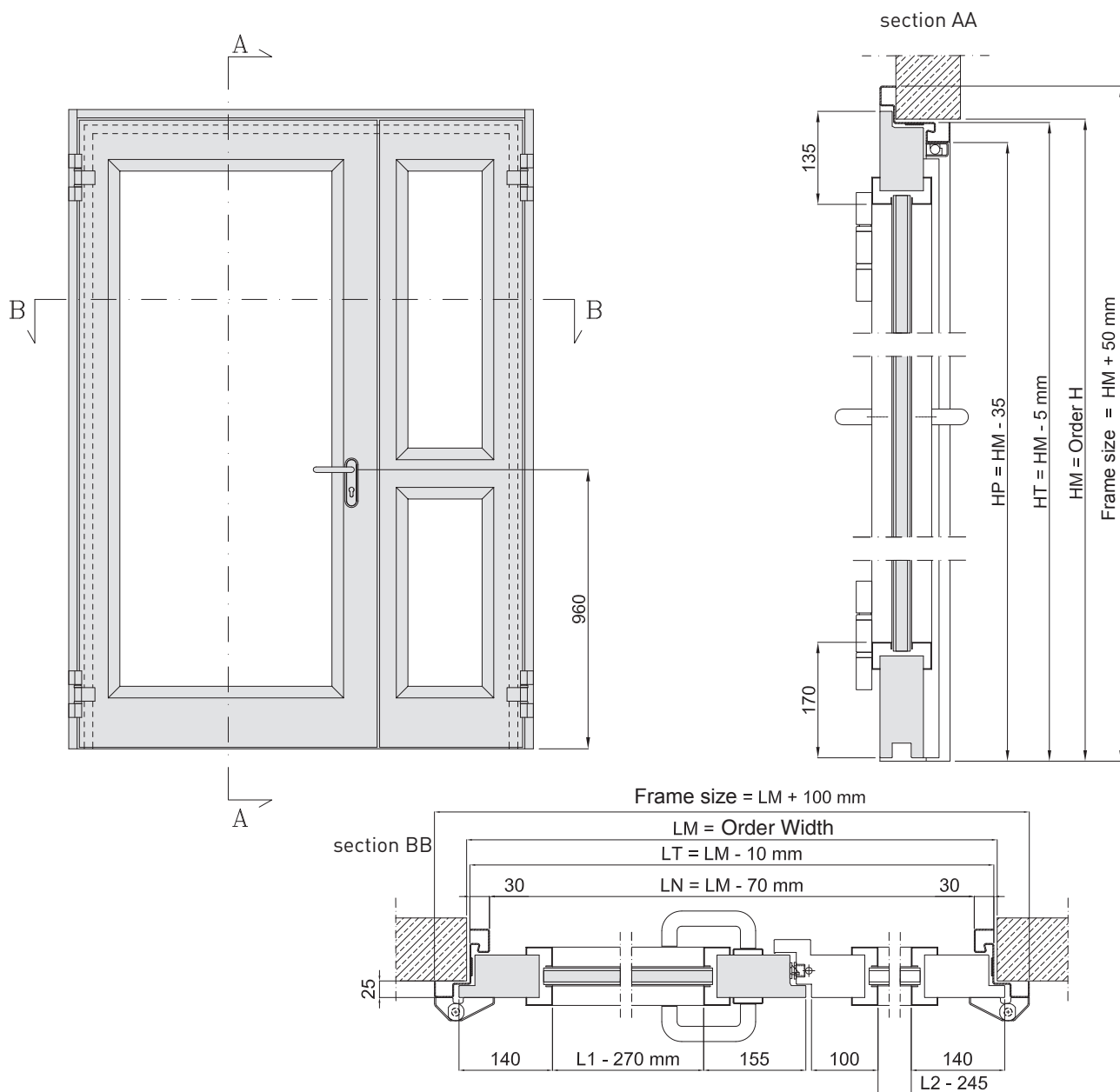
style	size	"A" **
Novoguard	79 mm	0 mm
Novopush	73 mm	0 mm
Cisa Touch	75 mm	0 mm
Cisa lever handle	105 mm	105 mm
EPN Touch	80 mm	0 mm
EPN Bar	103 mm	103 mm

** According to Italian Ministerial Decree 03.08-2015, par. G. 1.9.16

Limit situation



NOVOGLASS+ double leaf glazed door

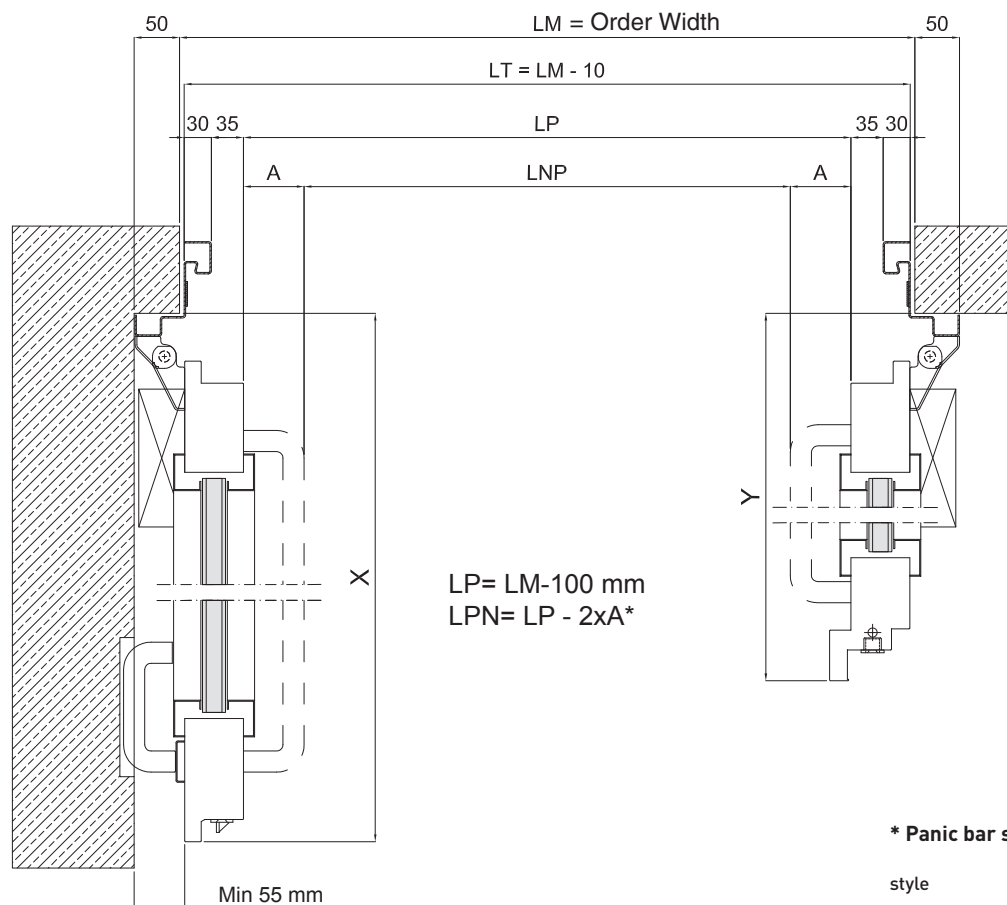


NOVOGLASS fire proof glazed door, EI 60, EI 120 certified.

Consists of:

- 15/10 mm thick "Z-shaped galvanised steel frame, to make the door panel perfectly flush with the frame, with cold smoke seal compartment;
- the frame is mechanically joint to the corners without welding. The electro-galvanised coating remains intact at all points, without the corrosion that typically occurs in welded joints;
- The door leaves consist of a steel framework, with a supporting section, flush with a frame made of pressed, boxed and welded double galvanized sheet steel, with inorganic insulation, free of asbestos. The profile of the door panel features a special finish on the glass side (which is therefore invisible after installation) designed to reduce thermal conductivity between the two sides of the door.
- REI fire-rated laminated glass, consisting of several glass sheets filled with a normally clear material that turns to an opaque foam and gives out water vapour during a fire. Glass panels are fastened with glazing beads, without visible screws, with special self-extinguishing seals that do not keep the material inside the glass from swelling at high temperatures.
- 2 steel spring hinges per panel, designed for intensive use and high load conditions. Adjustable at any time with special screws; cannot be reached when the door is closed. Hinges are mechanically fastened to the door and therefore can be replaced in case of long, heavy use, according to Italian Ministerial Decree M.I. 64 of 10/03/98, Ministerial Decree M.I. 21/06/04 (GU 155 of 05/07/04) and T.U. 81/2008 for escape routes;
- Black hydraulic door closer.
- Black door closer arm;
- sealing bolts between the two hinges;
- Yale type lock with three-key cylinder;
- Flush-bolt self-locking system on second door panel, with lever opening;
- black PVC handle with steel core, "U" shaped for accidental grips, placed at 960 mm from the floor, according to Italian Presidential Decree 503 of 24/07/96, unless otherwise requested by the customer;
- thermal seal all around the frame;
- surfaces with category Z140 galvanised coating (minimum zinc mass 140 g/sqm per surface), finished with embossed and/or textured epoxy polyester powder for internal use, 120 microns thick (RAL colours: see list on page 1);
- arranged for the installation of a movable drop-bar seal.
- The lower profile width can be increased upon request up to 40 cm according to Italian Presidential Decrees no. 503 of 24 July 1996, no. 384 of 27 April 1978, Ministerial decree no. 236 of 14 June 1989 for the removal of architectural barriers.

90° opening



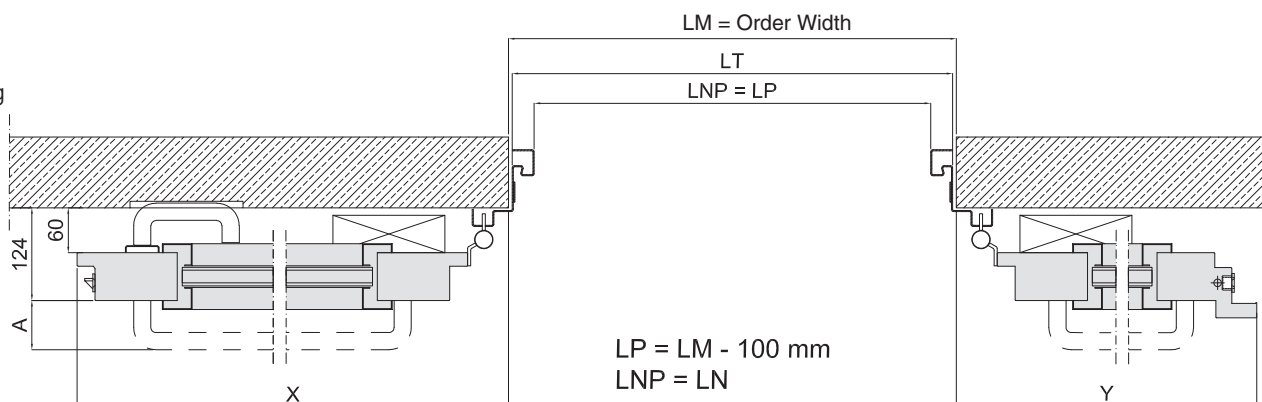
DOOR DIVISION		
Main door panel order size	X	Y
800	890	LM - X + 200
900	990	
1000	1090	

*** Panic bar size**

style	size	"A" **
Novoguard	79 mm	0 mm
Novopush	73 mm	0 mm
Cisa Touch	75 mm	0 mm
Cisa lever handle	105 mm	105 mm
EPN Touch	80 mm	0 mm
EPN Bar	103 mm	103 mm

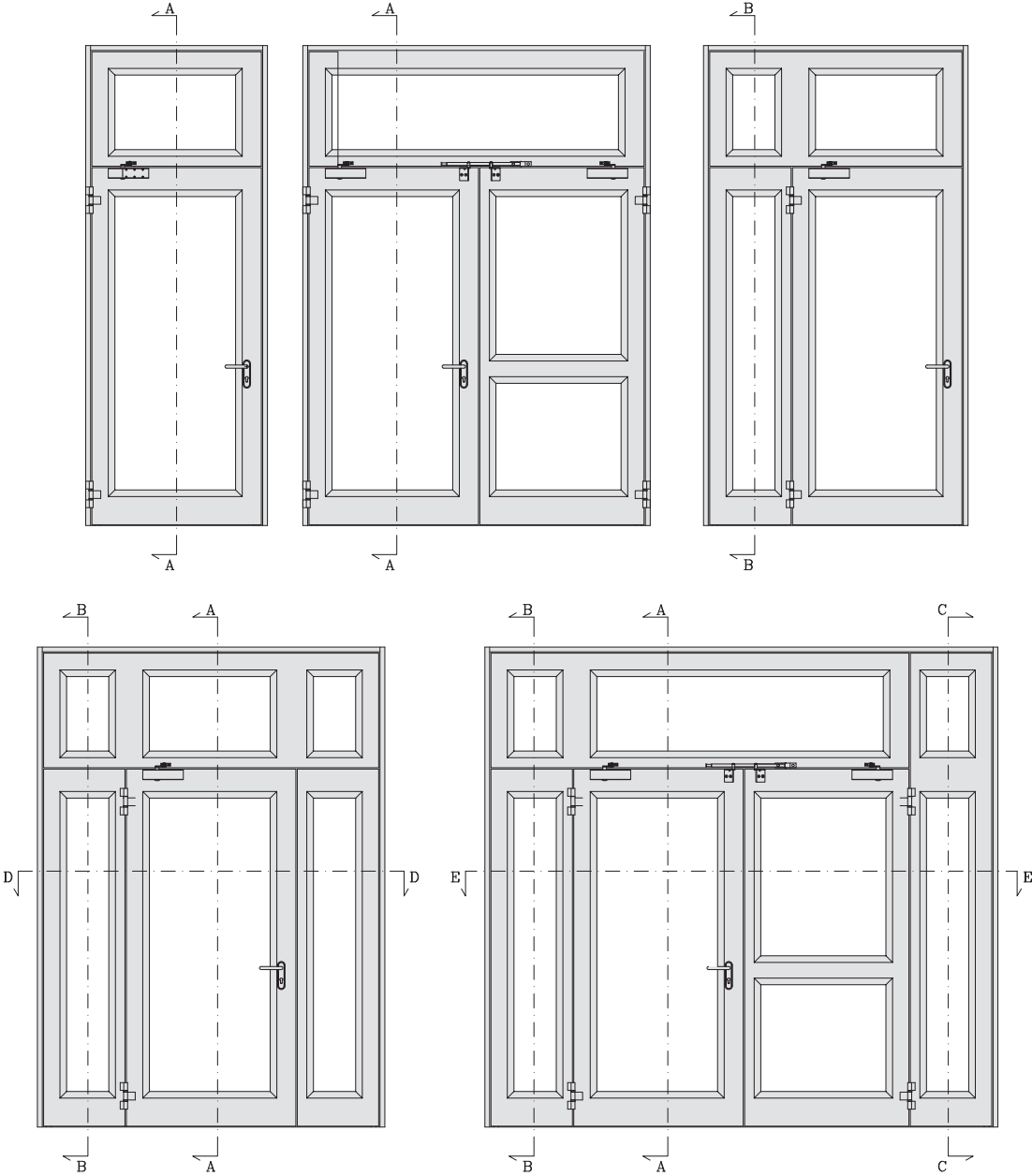
** According to Italian Ministerial Decree 03.08-2015, par. G. 1.9.16

180° opening



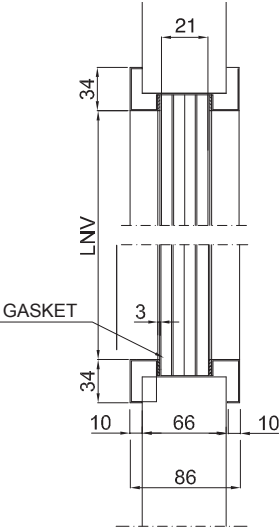
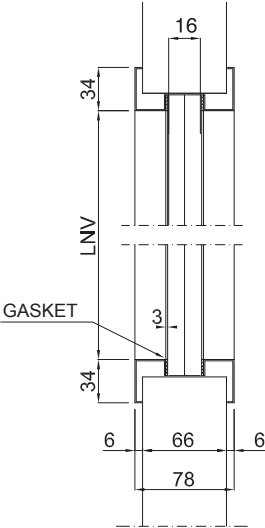
DOOR DIVISION		
Main door panel order size	X	Y
800	880	LM - X + 180
900	980	
1000	1080	

NOVOGLASS+ REI 30 - 60 complex glazed doors (also without central cross beam)

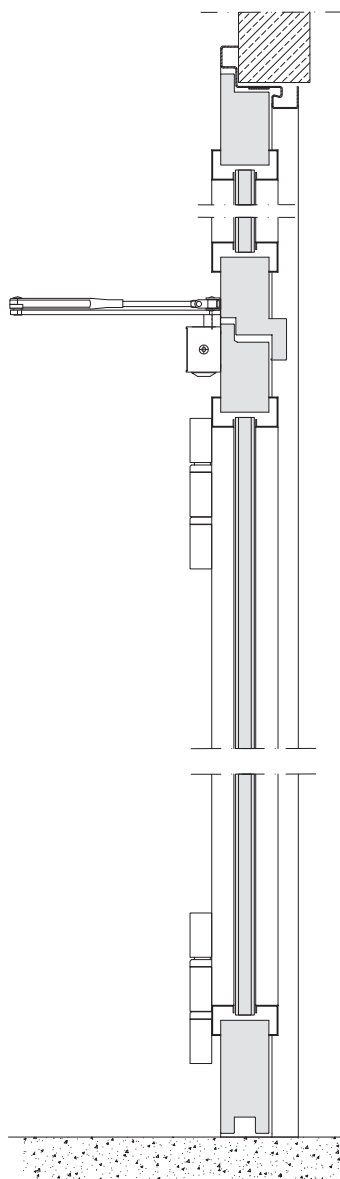


REI 30

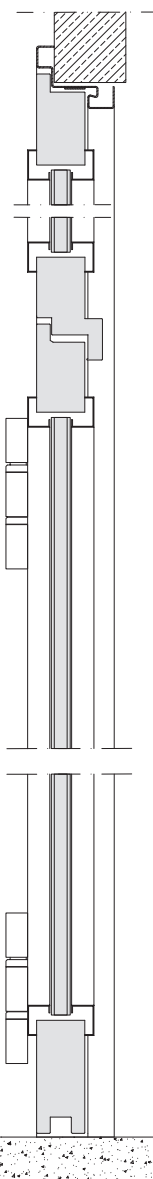
REI 60



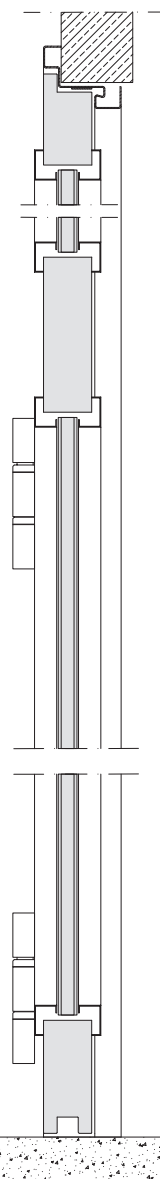
section AA



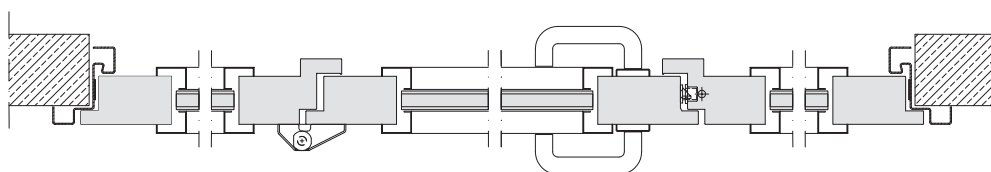
section BB



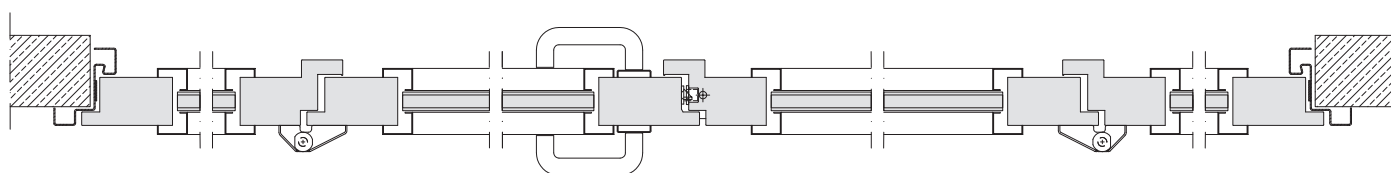
section CC



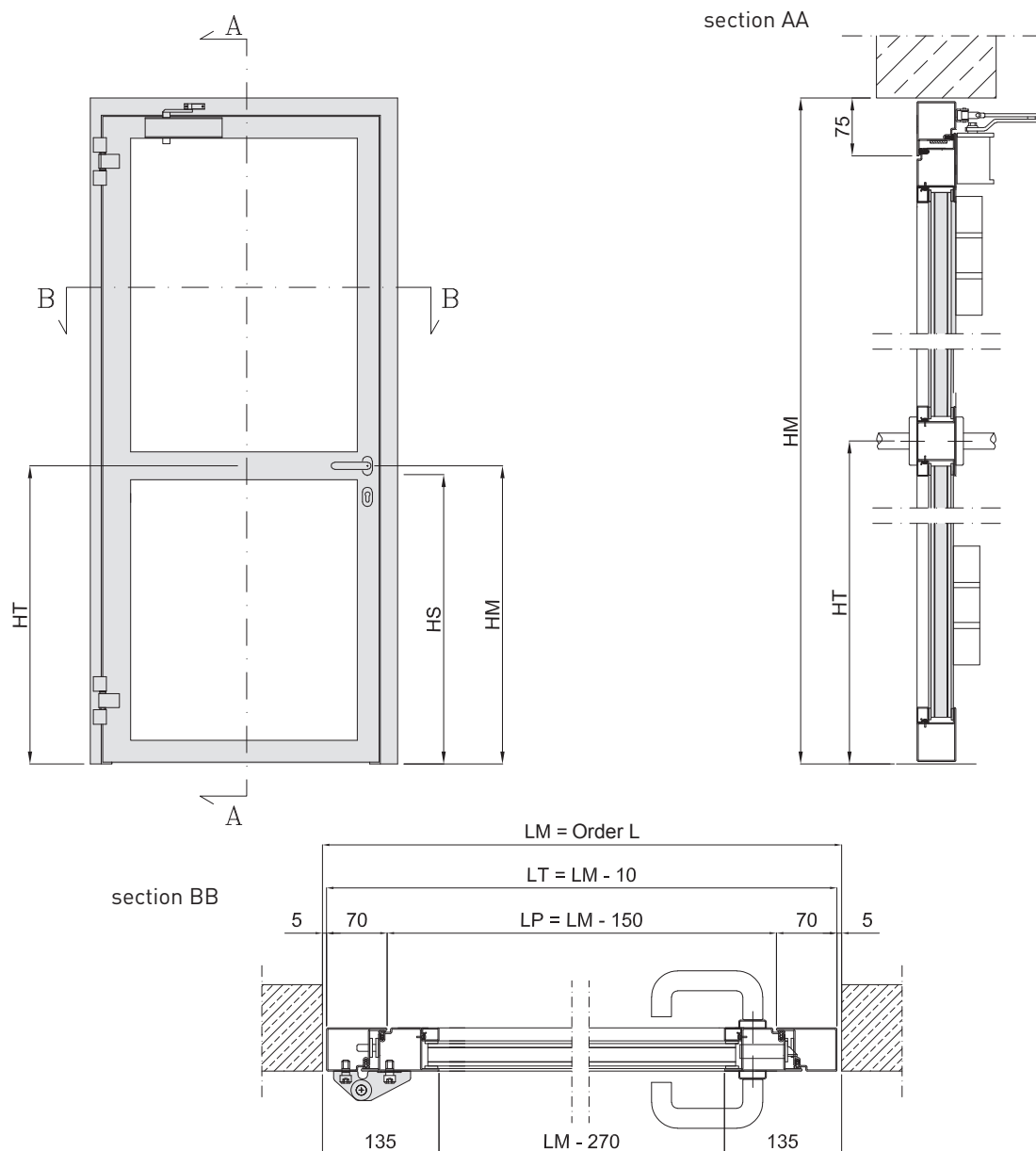
section DD



section DD

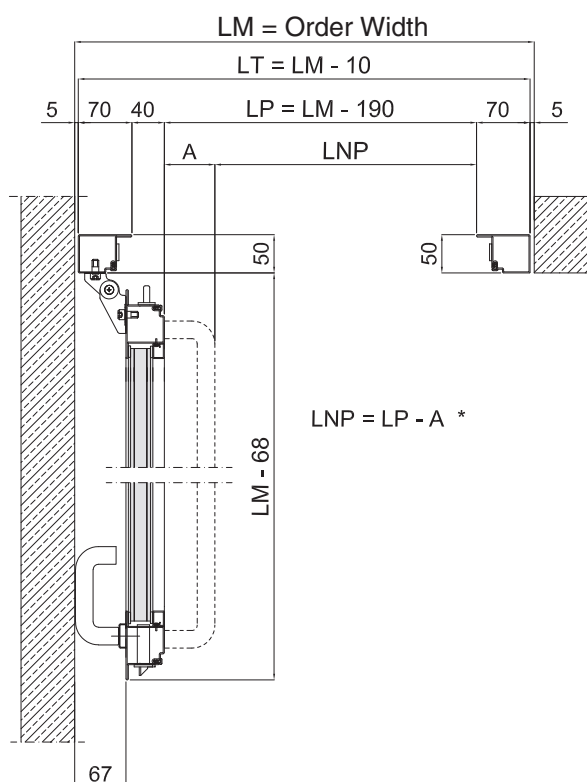


STAHLGLASS single leaf glazed door



Stahlglass fire proof glazed door, certified according to UNI 9723, fire resistance class REI 30-60, Re 120

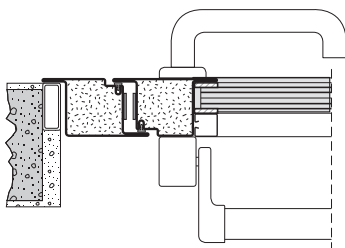
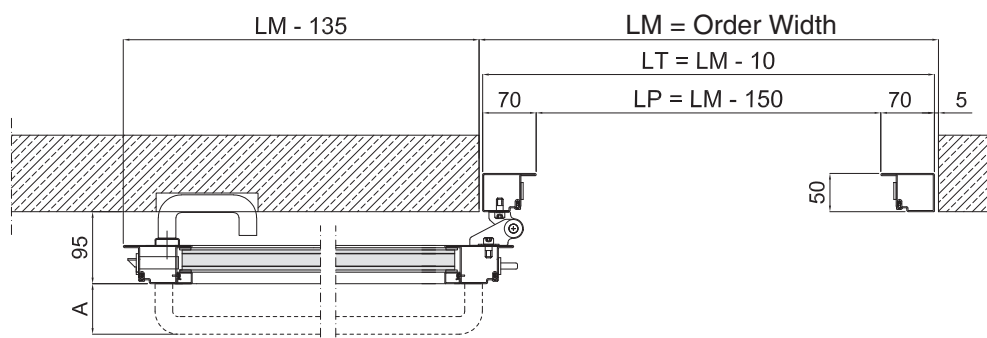
- Door panel and frame profiles in 15/10 mm thick tubular calibrated steel, welded at the corners, with double housings for neoprene compound gaskets. Their special shape, the door panel and frame are perfectly flush, for an excellent aesthetic result. The profiles feature a special finish to reduce thermal conductivity and are filled with a special sublimating material. Self-extinguishing seal all around the door.
- REI fire-rated laminated glass, consisting of several glass sheets filled with a normally clear material that turns to an opaque foam and gives out water vapour during a fire.
- Glass panels are fastened with flush glazing beads, with special self-extinguishing seals that do not keep the material inside the glass from swelling at high temperatures.
- 2 three-part hinges per door panel, pivoting on ball bearings in three directions; adjustable. Hinges are also designed to be easily replaceable as required according to the maintenance plan according to Italian Ministerial Decree M.I. 64 of 10-03-98 (fire doors) and Law Decree 626/94 and 242/96 (escape routes).
- Nylon handle with steel core.
- Black hydraulic door closer.
- Fireproof lock with three-key cylinder.
- Fire paint finish in a range of RAL colours (see list on page 1).
- Can be installed on a counterframe previously walled by the customer or with dowels.



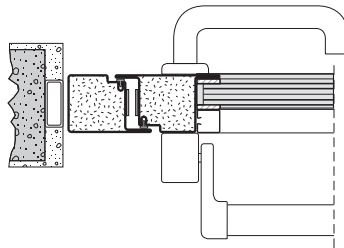
* Panic bar size

style	size	"A" **
Novoguard	79 mm	0 mm
Cisa Touch	75 mm	0 mm
Cisa lever handle	105 mm	105 mm
EPN Touch	80 mm	0 mm
EPN Bar	103 mm	103 mm

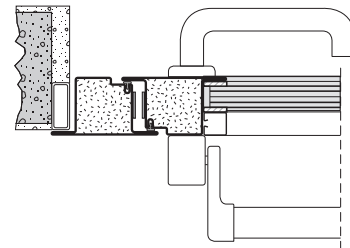
** According to Italian Ministerial Decree 03.08-2015, par. G. 1.9.16



"Z" frame installation

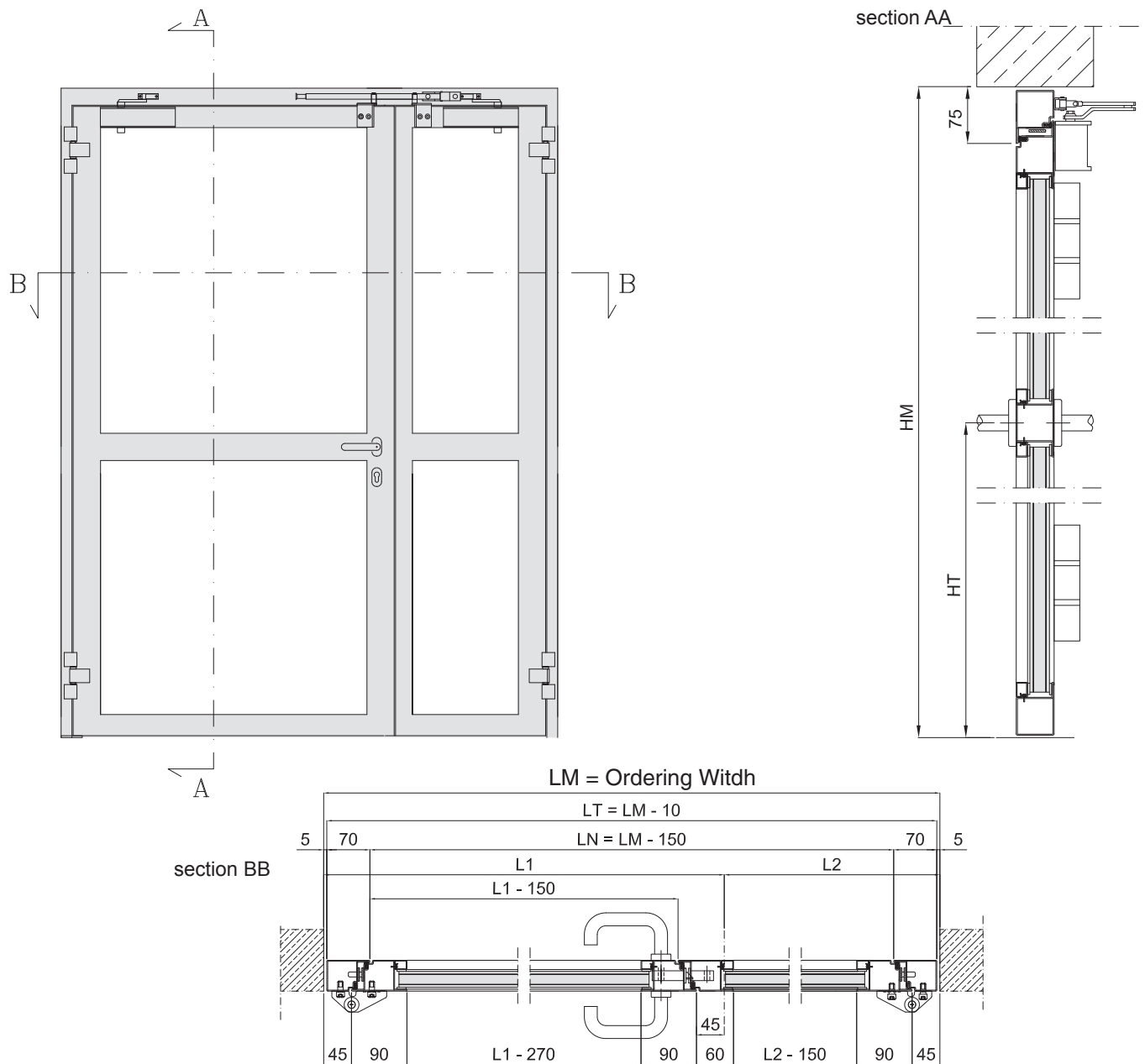


"L" frame installation



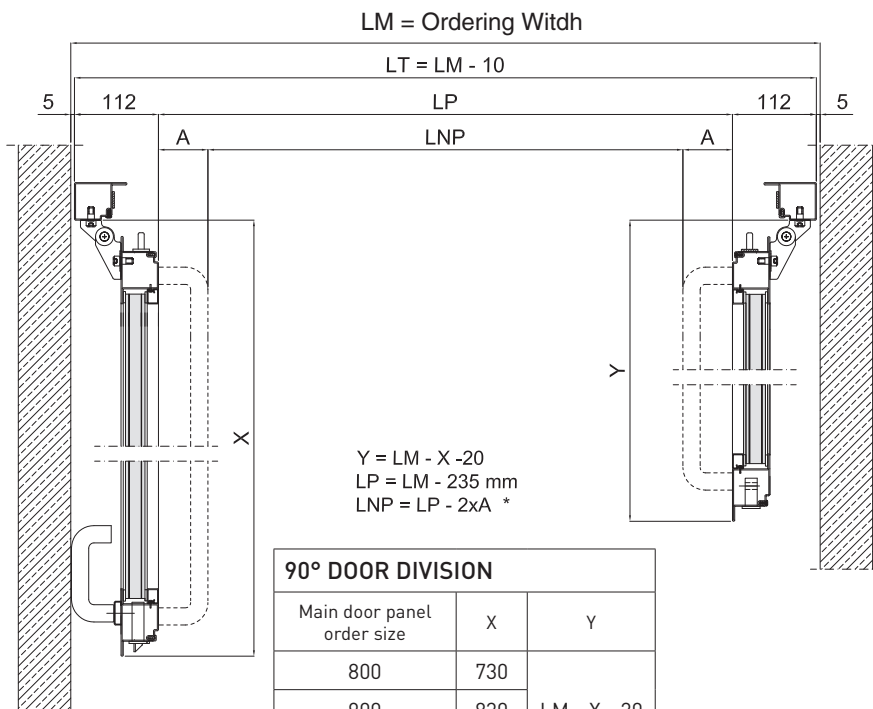
"T" frame installation

STAHLGLASS double leaf glazed door



Stahlglass fire proof glazed door, certified according to UNI 9723, fire resistance class REI 30-60, Re 120

- Door panel and frame profiles in 15/10 mm thick tubular calibrated steel, welded at the corners, with double housings for neoprene compound gaskets. Their special shape, the door panel and frame are perfectly flush, for an excellent aesthetic result. The profiles feature a special finish to reduce thermal conductivity and are filled with a special sublimating material. Self-extinguishing seal all around the door.
- REI fire-rated laminated glass, consisting of several glass sheets filled with a normally clear material that turns to an opaque foam and gives out water vapour during a fire. - Glass panels are fastened with flush glazing beads, with special self-extinguishing seals that do not keep the material inside the glass from swelling at high temperatures.
- 2 three-part hinges per door panel, pivoting on ball bearings in three directions; adjustable. Hinges are also designed to be easily replaceable as required according to the maintenance plan according to Italian Ministerial Decree M.I. 64 of 10-03-98 (fire doors) and Law Decree 626/94 and 242/96 (escape routes).
- Nylon handle with steel core.
- Black door closer arm;
- Black hydraulic door closer.
- Fire-rated lock with three-key cylinder on main door panel;
- Fire paint finish in a range of RAL colours (see list on page 1). Also available with aluminium coating on request.
- Can be installed on a counterframe previously walled by the customer or with dowels.



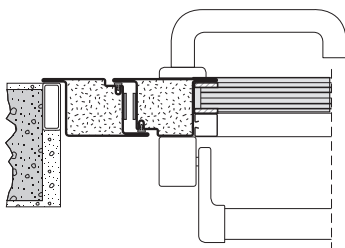
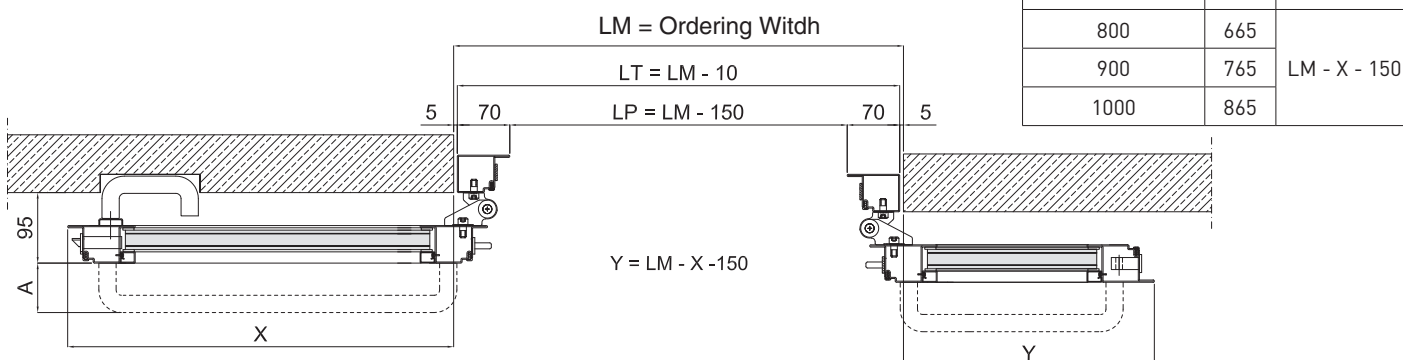
90° DOOR DIVISION

Main door panel order size	X	Y
800	730	LM - X - 20
900	830	
1000	930	

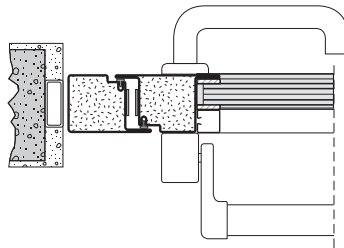
* Panic bar size

style	size	"A" **
Novoguard	79 mm	0 mm
Cisa Touch	75 mm	0 mm
Cisa lever handle	105 mm	105 mm
EPN Touch	80 mm	0 mm
EPN Bar	103 mm	103 mm

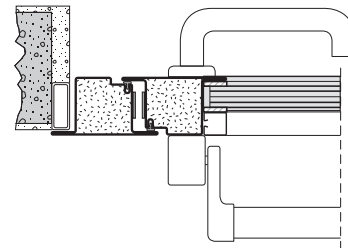
** According to Italian Ministerial Decree 03.08-2015, par. G. 1.9.16



"Z" frame installation

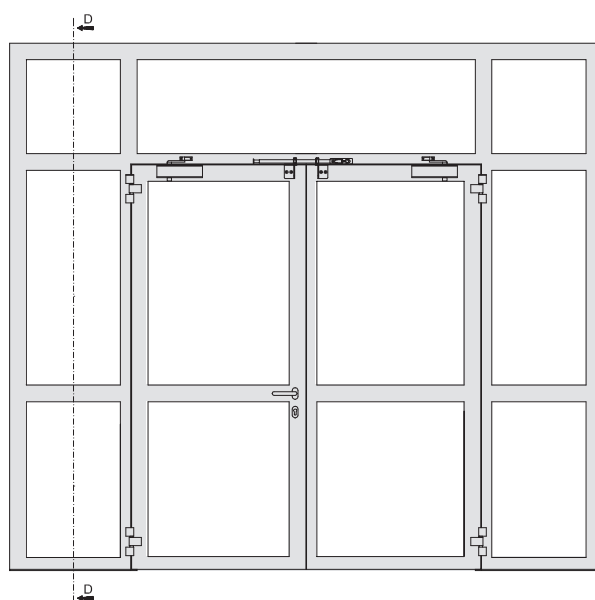
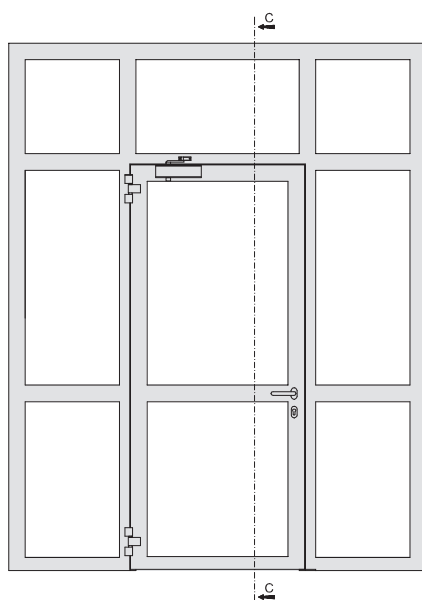
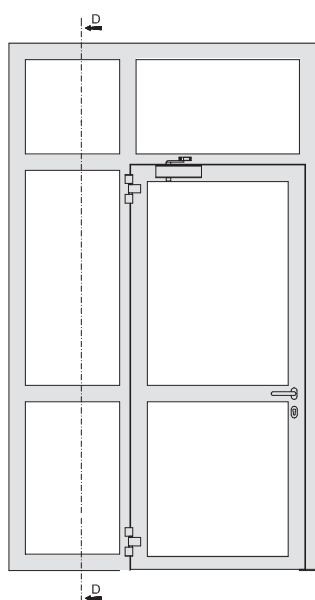
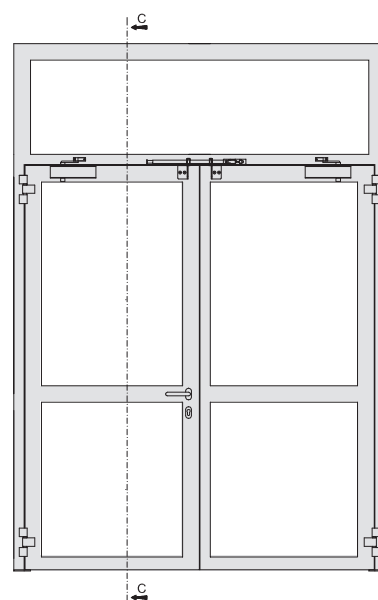
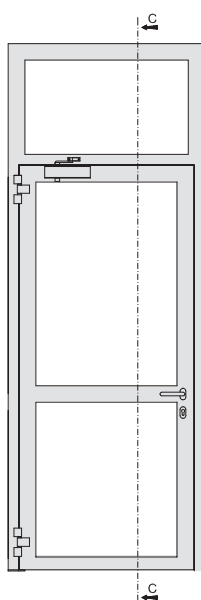
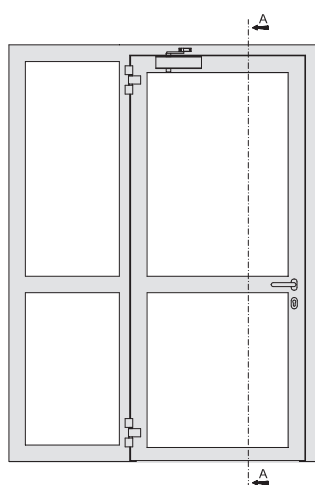
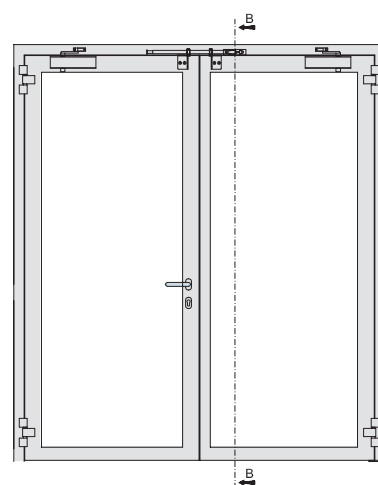
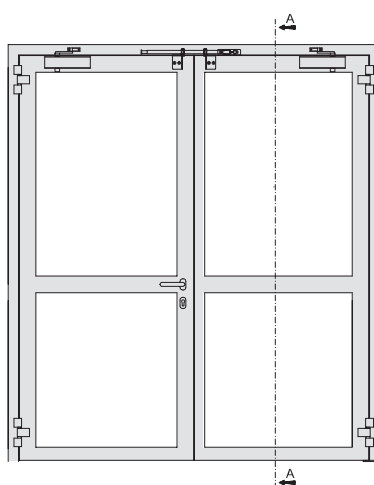
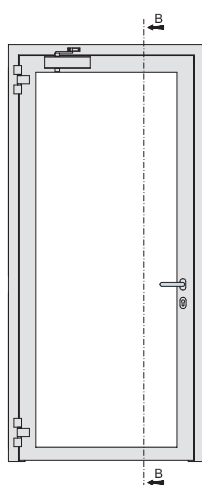
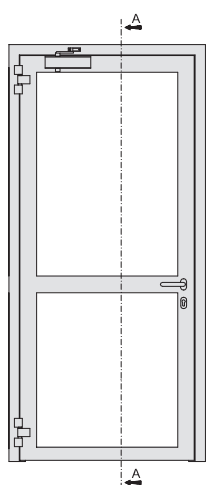


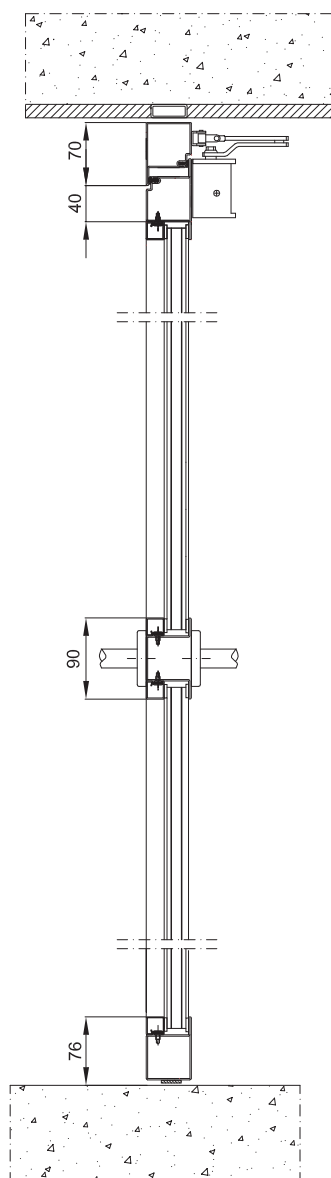
"L" frame installation



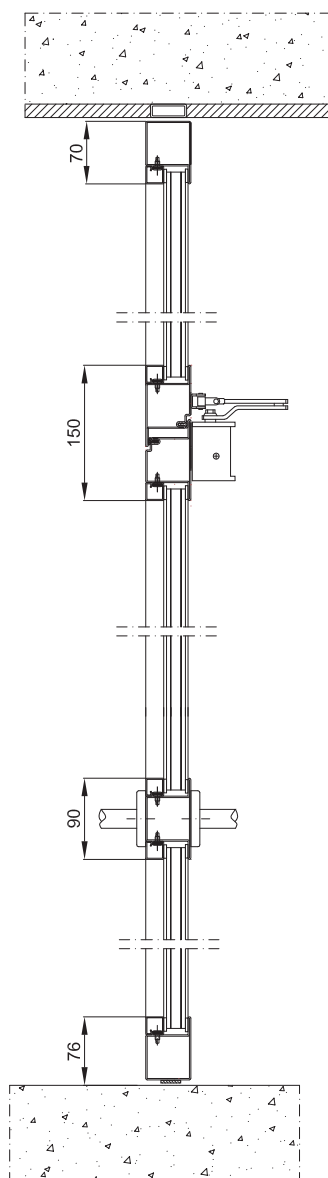
"T" frame installation

STAHLGLASS, REI 30-60 - RE 120, complex glazed door

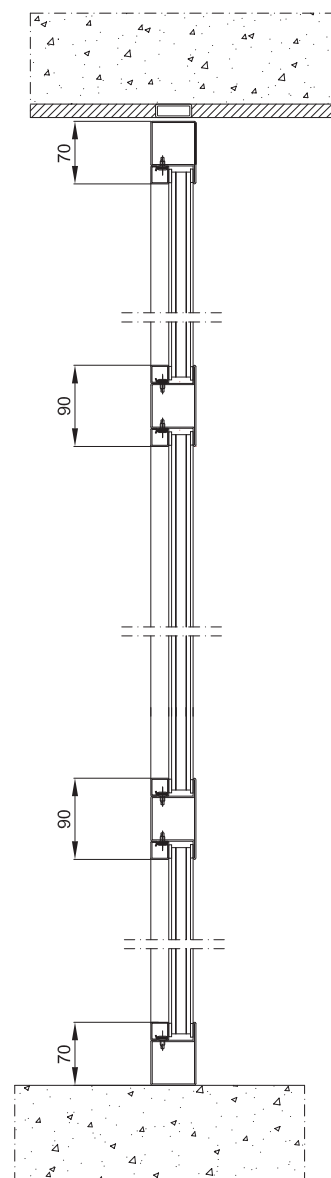




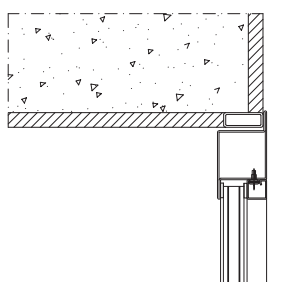
section A-A



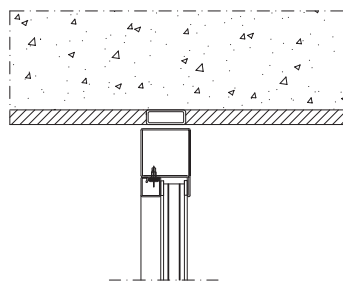
section C-C



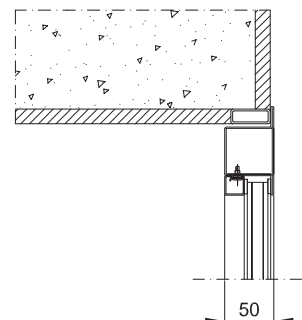
section D-D



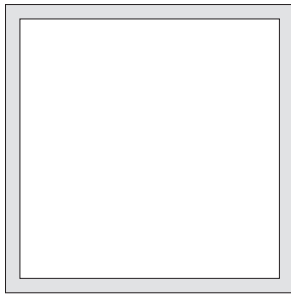
"Z" frame installation



"L" frame installation



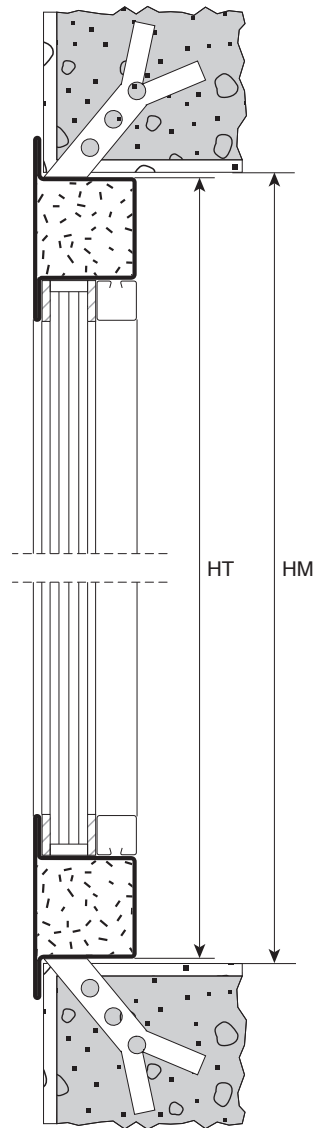
"T" frame installation



fixed glass panel
single glass

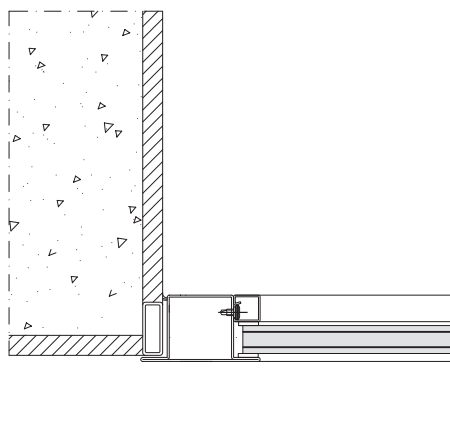


double fixed glass

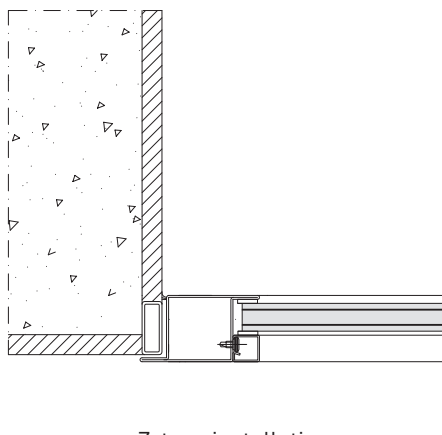


Fire proof fixed glazing certified according to UNI 9723

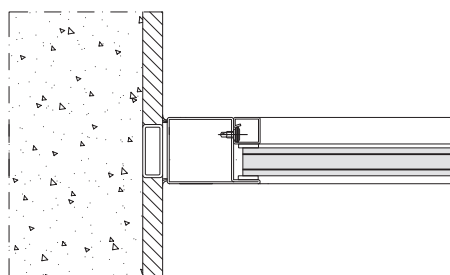
- For practical and aesthetic reasons, certain areas must necessarily have fire-rated doors with glass panels which, in addition to ensuring fire resistance, allow the light to pass through them, or make it possible to "see through" them. Fixed glass panels are used for these applications: they are normally installed on stairwells, observation walkways in departments at high risk for fires, offices with views on machining departments, processing centres, etc.
- Rated, welded 15/10 thick tubular steel frame profiles. Profiles are filled with a special sublimating material and feature a special finish in order to reduce thermal conductivity between the two sides of the door.
- REI fire-rated laminated glass, consisting of several glass sheets filled with a normally clear material that turns to an opaque foam and gives out water vapour during a fire. Glass panels are fastened with flush glazing beads, with special self-extinguishing seals that do not keep the material inside the glass from swelling at high temperatures.
- Can be fixed to the wall with brackets, on any counterframe that has been pre-walled by the customer, or with dowels.
- Fire paint finish in a range of RAL colours (see list on page 1).



T-type installation



Z-type installation



L-type installation

General Notes on Glass Panels

Fire-resistant glass panels are classified according to their performance:

- Fire-resistant and insulated (Italian classification REI 30/60/90/120, European classification EI 30/60/90/120)
- Fire-resistant, but uninsulated (Italian classification REI 30/60/90/120, European classification EI 30/60/90/120)
- Fire-resistant and sunlight control (Italian classification REI 30/60/90/120, European classification EI 30/60/90/120)

Glass panels with a single fire resistant feature (RE - E) are usually monolithic; they come in toughened glass to withstand fire for a short length of time or highly flame retardant glass ceramics. Glass ceramics can easily withstand high temperature for up to 180 minutes, but is less transparent than plain glass, with a slightly wavy surface and small internal imperfections.

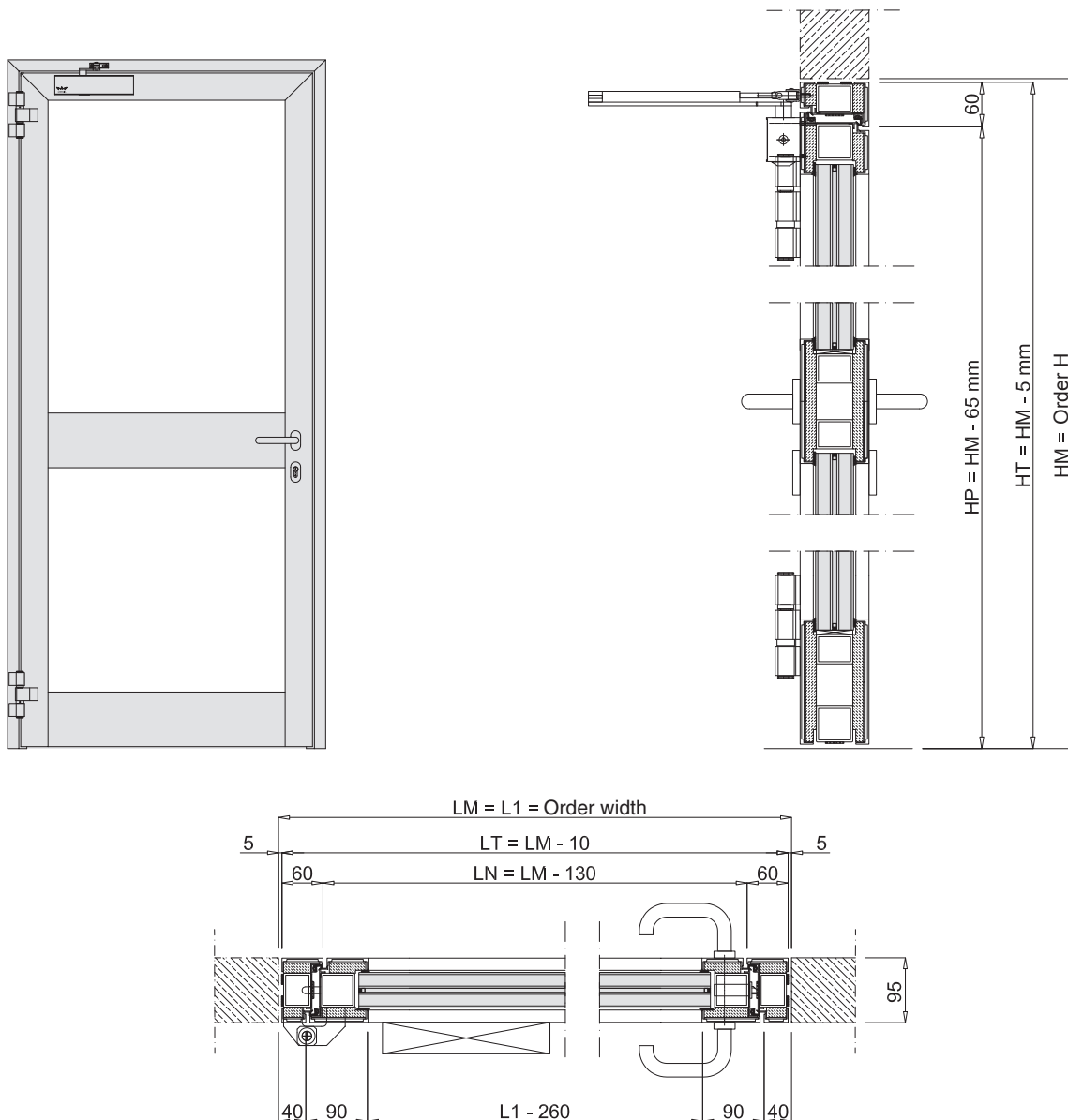
Insulated glass (REI – EI) consists of two glass plates bonded by transparent mineral hydrogel, which becomes opaque and releases self-cooling water vapour under high temperatures.

Due to their construction, fire-resistant glass has an operating temperature of -20 to +50 Celsius degrees. Some types (not all) are sensitive to direct sunlight. Because they have no insulating gas chambers, their transmittance coefficients are close to 5. As a result, before considering their possible use as an exterior door, it is always necessary to first assess the expected degree of solar radiation and the required thermal performance. Mechanical strength is normally 1B1

In addition to fire insulation and resistance, a better performance can be obtained by including special equipment that make it possible to achieve a higher level of thermal insulation, burglar resistance, horizontal seal, etc.

TYPICAL FEATURES OF FIRE-RATED GLASS PANELS (WITH FIRE-RESISTANCE ONLY)				
Fire rating class	EI 30	EI 60	EI 90	EI 120
Thickness (mm)	17 - 20	24 - 26	32 - 38	35 - 55
Weight (kg/mq)	38 - 40	45 - 60	52 - 81	57 - 130
Light transmission %	70 - 85 %			
RW sound reduction (dB)	39	40	41	45
Safety class	1/B/1			
Reaction to fire	A1			
Operating temperature	+ 50°C / -20°C			

ALUSTAHL, EI 120 single leaf glazed door



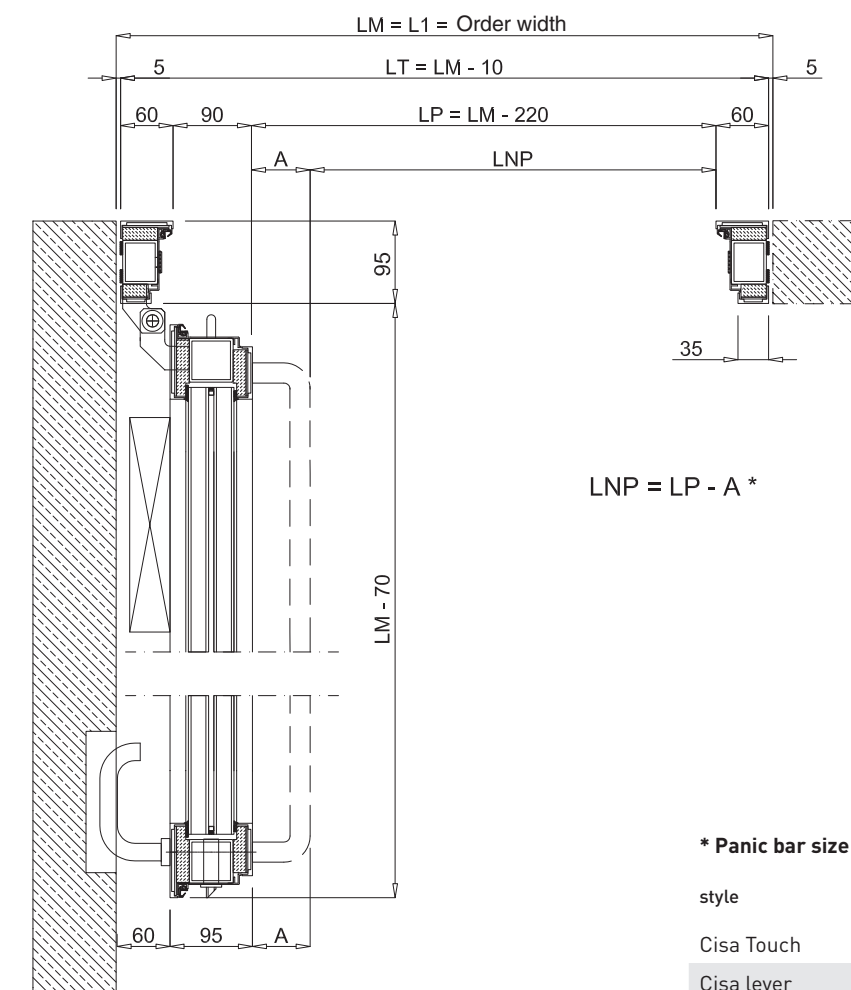
Alustahl fire proof glazed door, certified according to EN 1634

- Frame and panel profiles made of 30/10 mm thick tubular steel profile with welded joints; coated on both sides with silicate fibre sheets, secured to the tubular profile with steel plates. All is covered with extruded aluminium casings coated with electrically conductive or plain paint. Profiles are designed to ensure that the door panel is flush with the frame.
- REI fire-rated laminated glass, consisting of several glass sheets filled with a normally clear material that turns to an opaque foam and gives out water vapour during a fire. Glass panels are fastened with flush glazing beads, covered with an aluminium coating, with special self-extinguishing seals that do not keep the material inside the glass from swelling at high temperatures.
- 2 bearing hinges of the appropriate size.
- Fireproof lock with three-key cylinder.
- Black hydraulic door closer.
- Nylon handle with steel core.
- Intumescent seals placed on the fixed frame against the frame/leaf (panel seals).
- Aluminium surface coated with electrically conductive paint or RAL colours (see list on page 1).
- Installed on a counterframe that has been previously wallied by the customer.

NOTES:

- Given the considerable weight of the product (about 150 kg per sq.m) and its concentration on small surfaces, it is advisable to first check the equipment and facilities at the installation site. In addition, it is advisable to check for compatibility with the regulations on the removal of architectural barriers.

90° opening

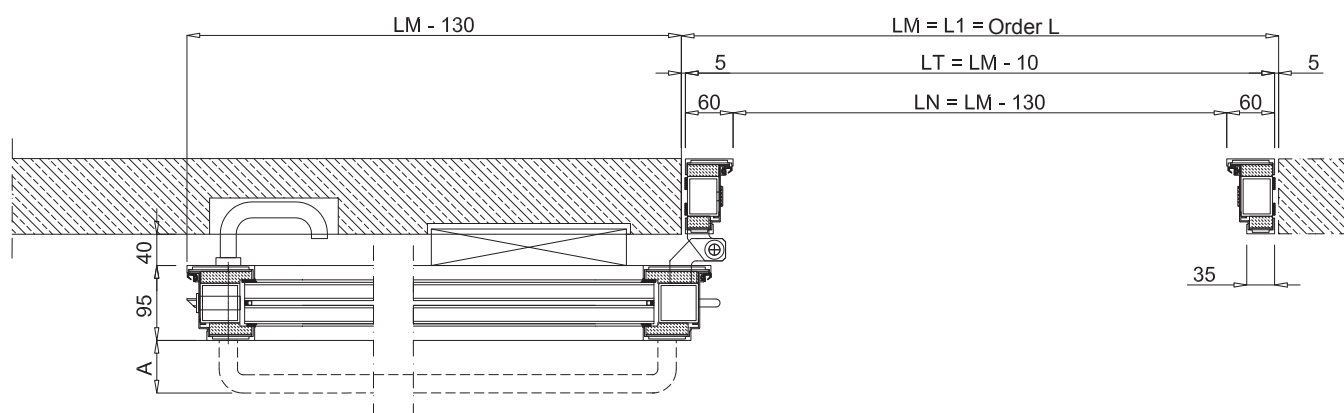


$$LNP = LP - A *$$

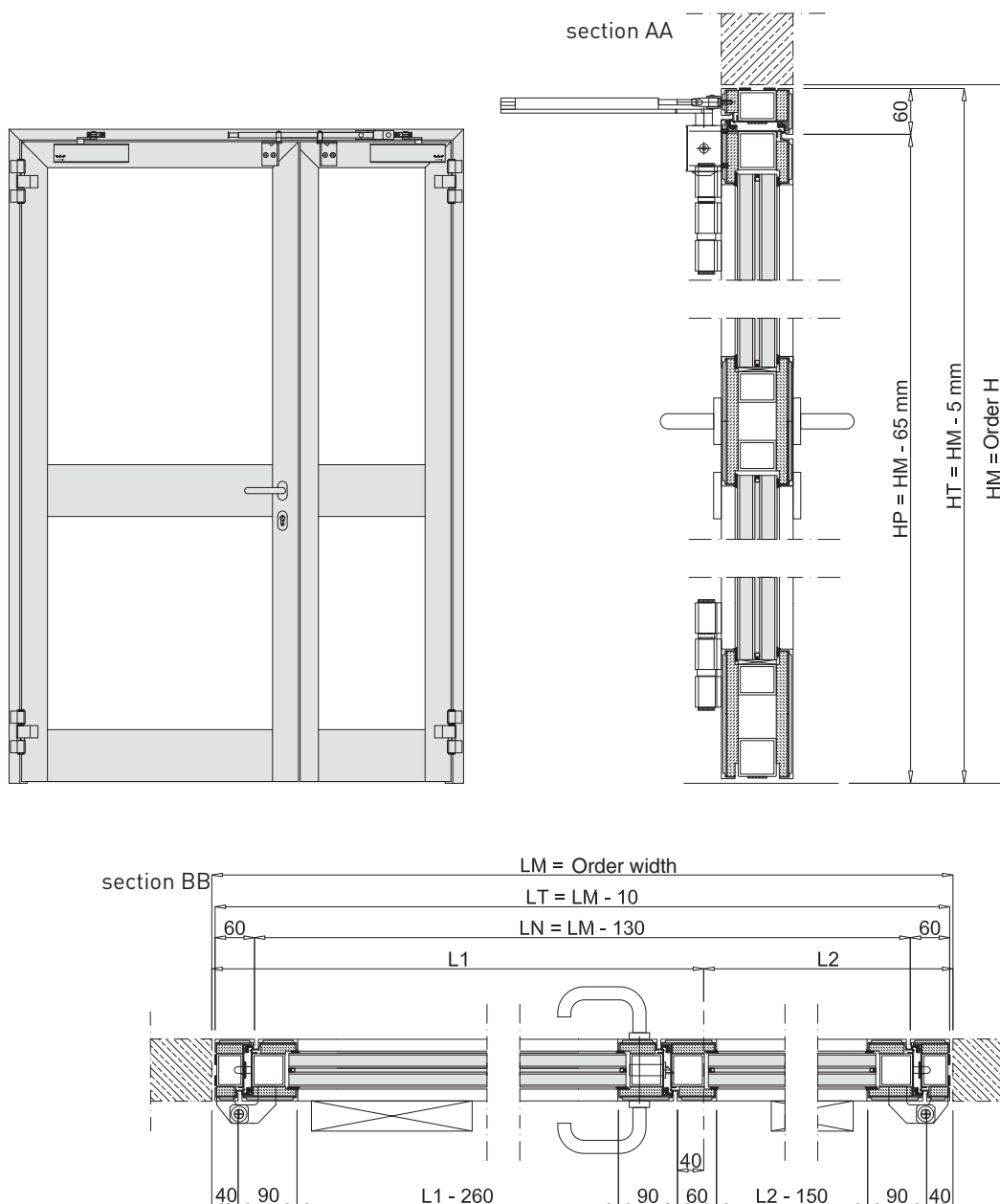
*** Panic bar size**

style	size	"A" **
Cisa Touch	75 mm	0 mm
Cisa lever handle	105 mm	105 mm
EPN Touch	80 mm	0 mm
EPN Bar	103 mm	103 mm

** According to Italian Ministerial Decree 03.08-2015, par. G. 1.9.16



ALUSTAHL, EI 120 double leaf glazed door



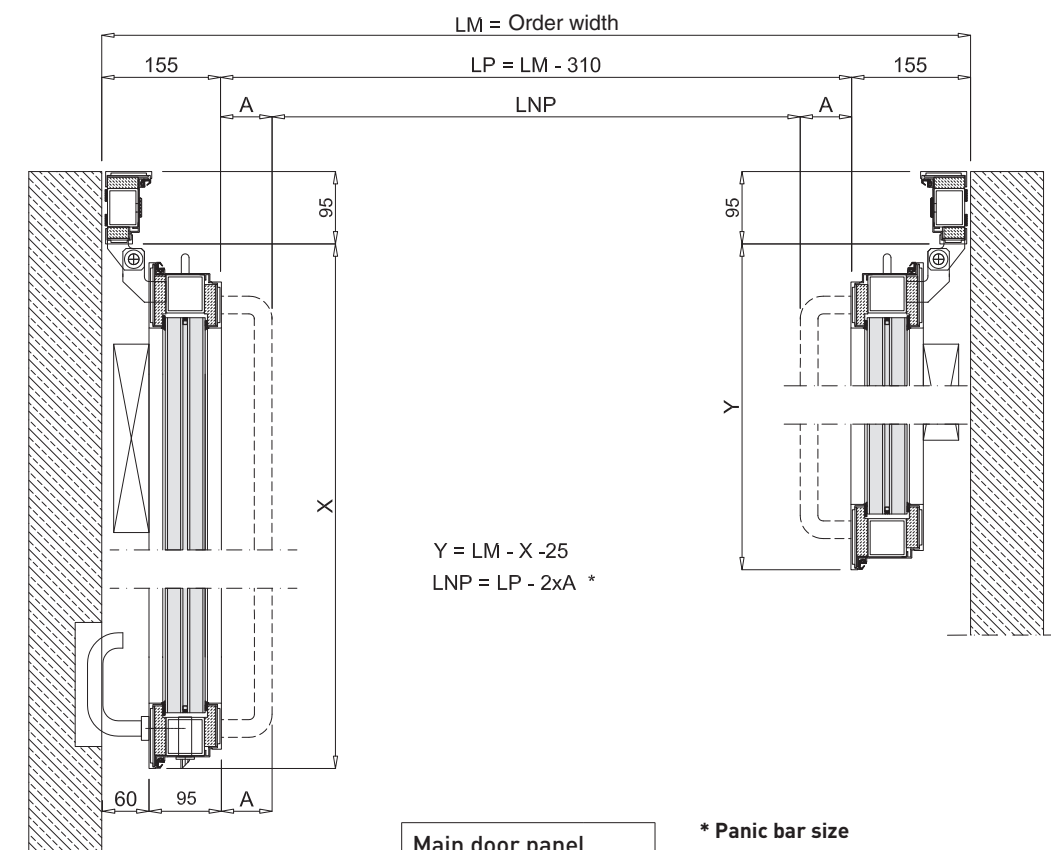
Alustahl fire proof glazed door, certified according to EN 1634

- Frame and panel profiles made of 30/10 mm thick tubular steel profile with welded joints; coated on both sides with silicate fibre sheets, secured to the tubular profile with steel plates. All is covered with extruded aluminium casings coated with electrically conductive or plain paint. Profiles are designed to ensure that the door panel is flush with the frame.
- REI fire-rated laminated glass, consisting of several glass sheets filled with a normally clear material that turns to an opaque foam and gives out water vapour during a fire. Glass panels are fastened with flush glazing beads, covered with an aluminium coating, with special self-extinguishing seals that do not keep the material inside the glass from swelling at high temperatures.
- 2 bearing hinges of the appropriate size.
- Fireproof lock with three-key cylinder.
- Black door closer arm.
- Black hydraulic door closer.
- Nylon handle with steel core.
- Intumescent seals placed on the fixed frame against the frame/leaf (panel seals).
- Aluminium surface coated with electrically conductive paint or RAL colours (see list on page 1).
- Installed on a counterframe that has been previously walled by the customer.

NOTES:

- Given the considerable weight of the product (about 150 kg per sq.m) and its concentration on small surfaces, it is advisable to first check the equipment and facilities at the installation site. In addition, it is advisable to check for compatibility with the regulations on the removal of architectural barriers.

90° opening

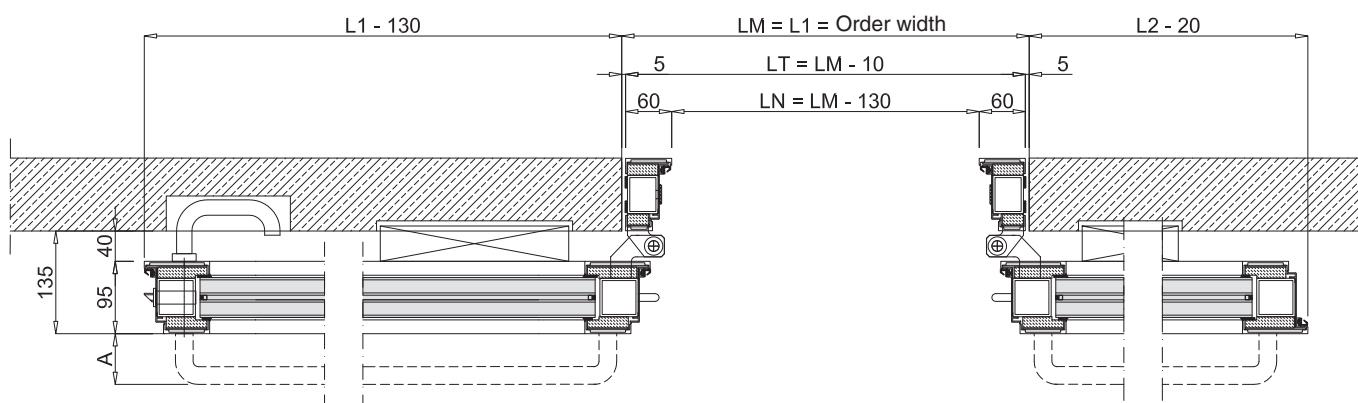


Main door panel	
Main door panel order size	X
800	730
900	830
1000	930

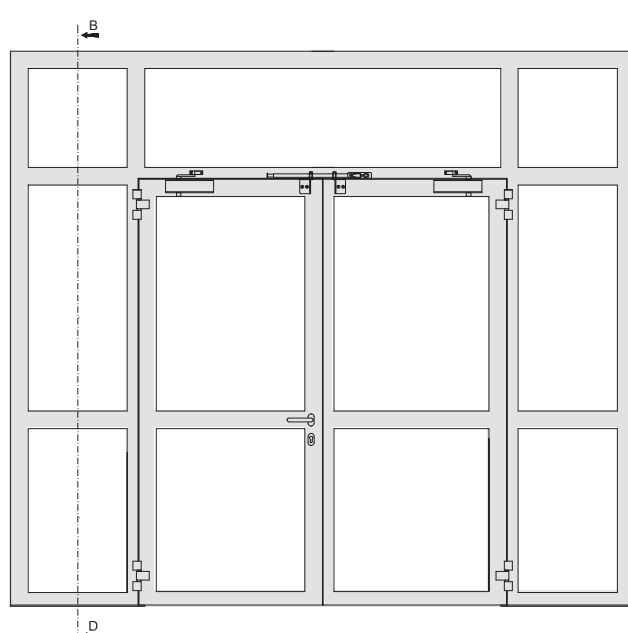
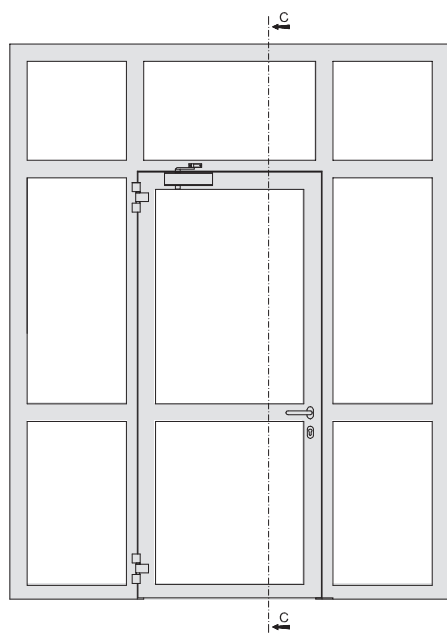
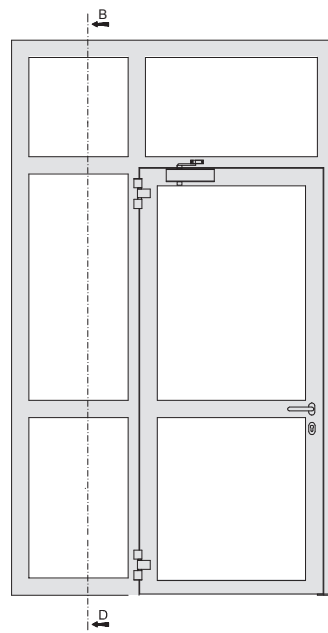
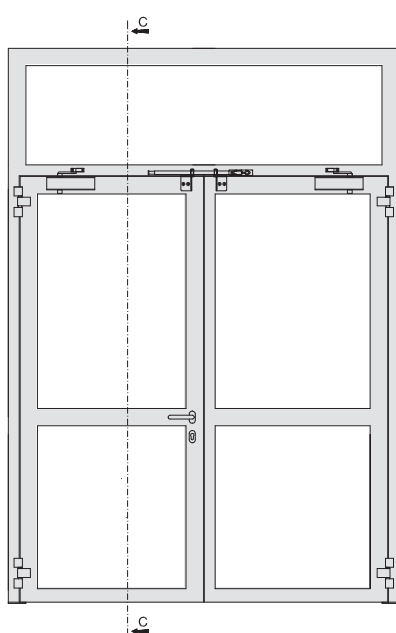
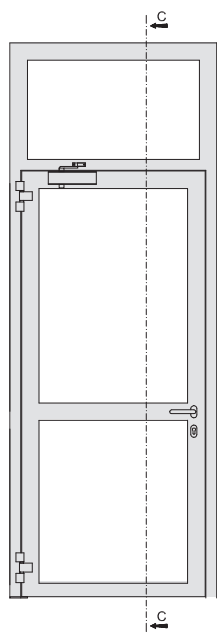
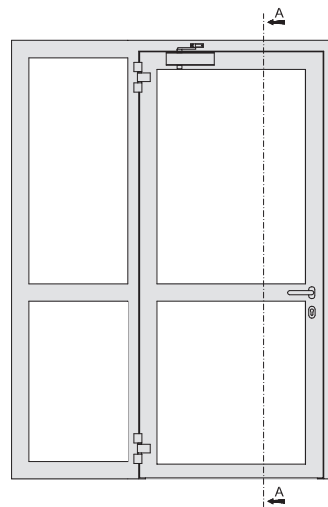
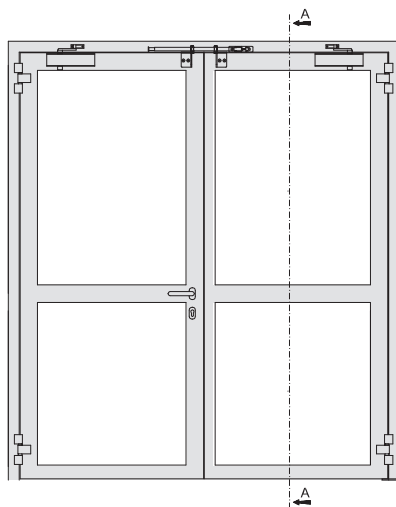
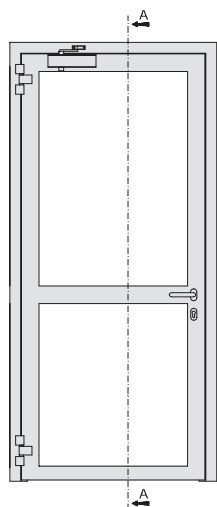
*** Panic bar size**

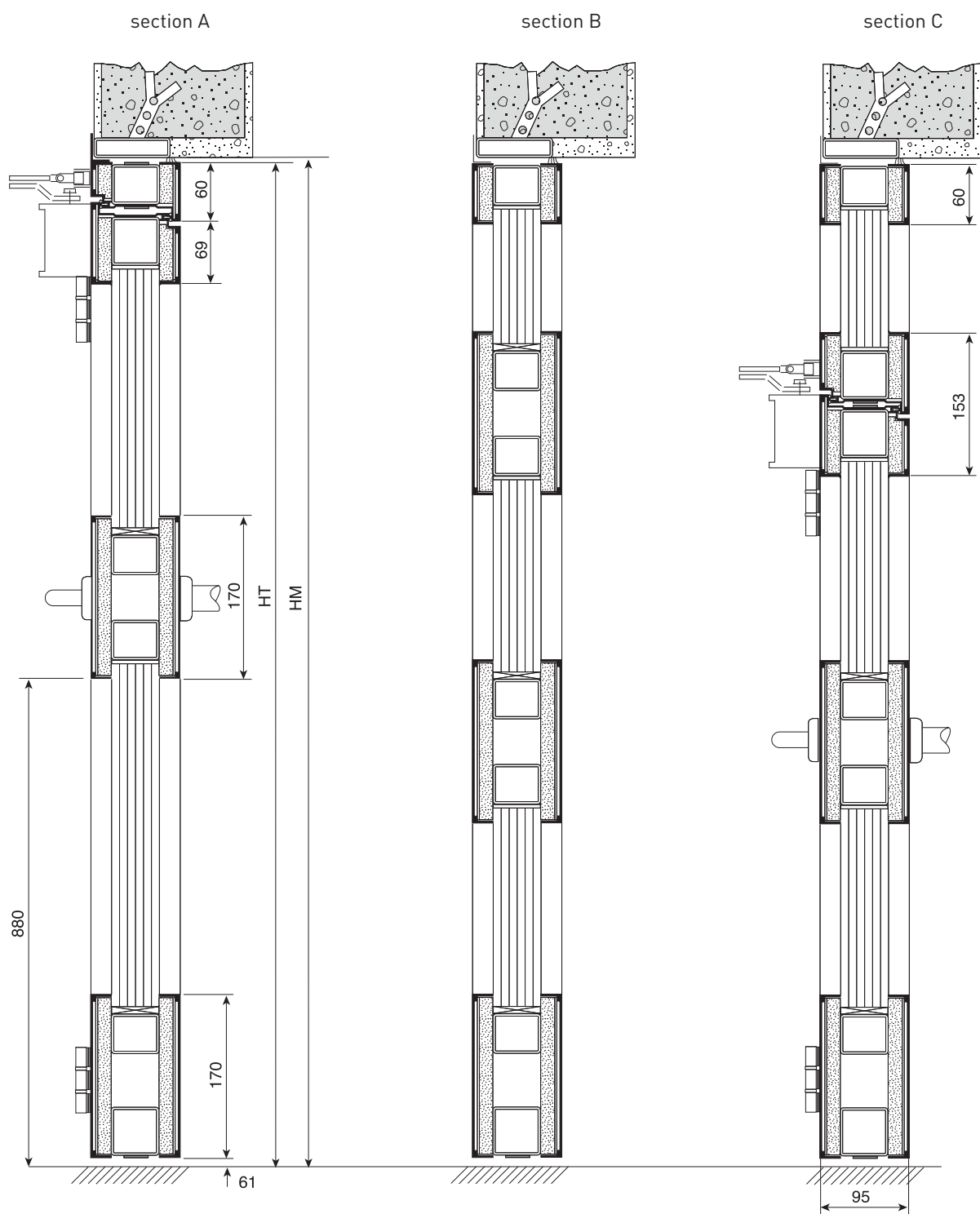
style	size	"A" **
Cisa Touch	75 mm	0 mm
Cisa lever handle	105 mm	105 mm
EPN Touch	80 mm	0 mm
EPN Bar	103 mm	103 mm

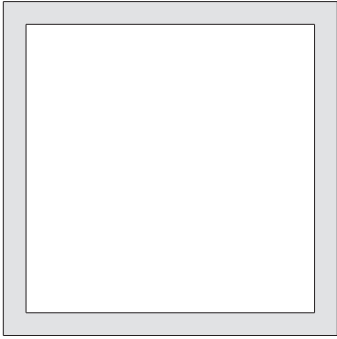
** According to Italian Ministerial Decree 03.08-2015, par. G. 1.9.16



ALUSTHAL, EI 120 complex glazed door







fixed glass
single glass



fixed glass
double glass

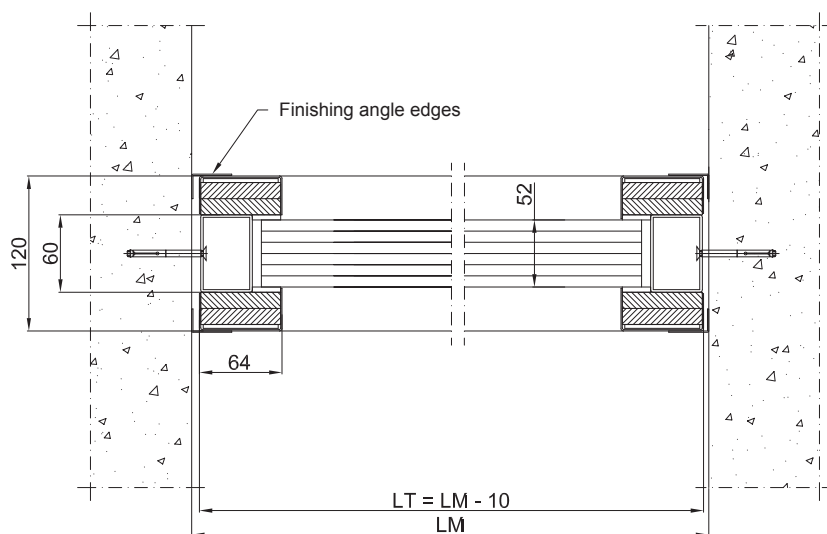
Fire proof fixed glazing

- For practical and aesthetic reasons, certain areas must necessarily have fire-rated doors with glass panels which, in addition to ensuring fire resistance, allow the light to pass through them, or make it possible to "see through" them.

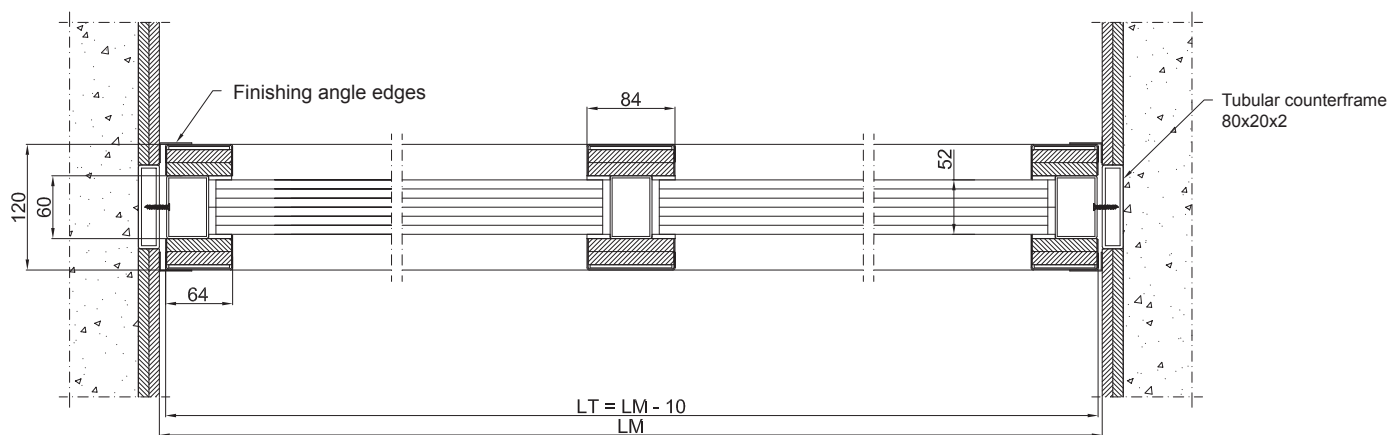
Fixed glass panels are used for these applications: they are normally installed on stairwells, observation walkways in departments at high risk for fires, offices with views on machining departments, processing centres, etc.

- Frame profiles with 30/10 mm thick tubular steel profile; coated on both sides with silicate fibre sheets, secured to the tubular profile with steel plates. Profiles are covered with "Alustahl" extruded aluminium casings coated with electrically conductive paint, in "Fixglass" painted steel casings in a range of RAL colours (see list on page 1).
- REI fire-rated laminated glass, consisting of several glass sheets filled with a normally clear material that turns to an opaque foam and gives out water vapour during a fire. Glass panels are fastened with flush glazing beads, covered with an aluminium coating, with special self-extinguishing seals that do not keep the material inside the glass from swelling at high temperatures.
- Intumescent seals placed on the fixed frame.

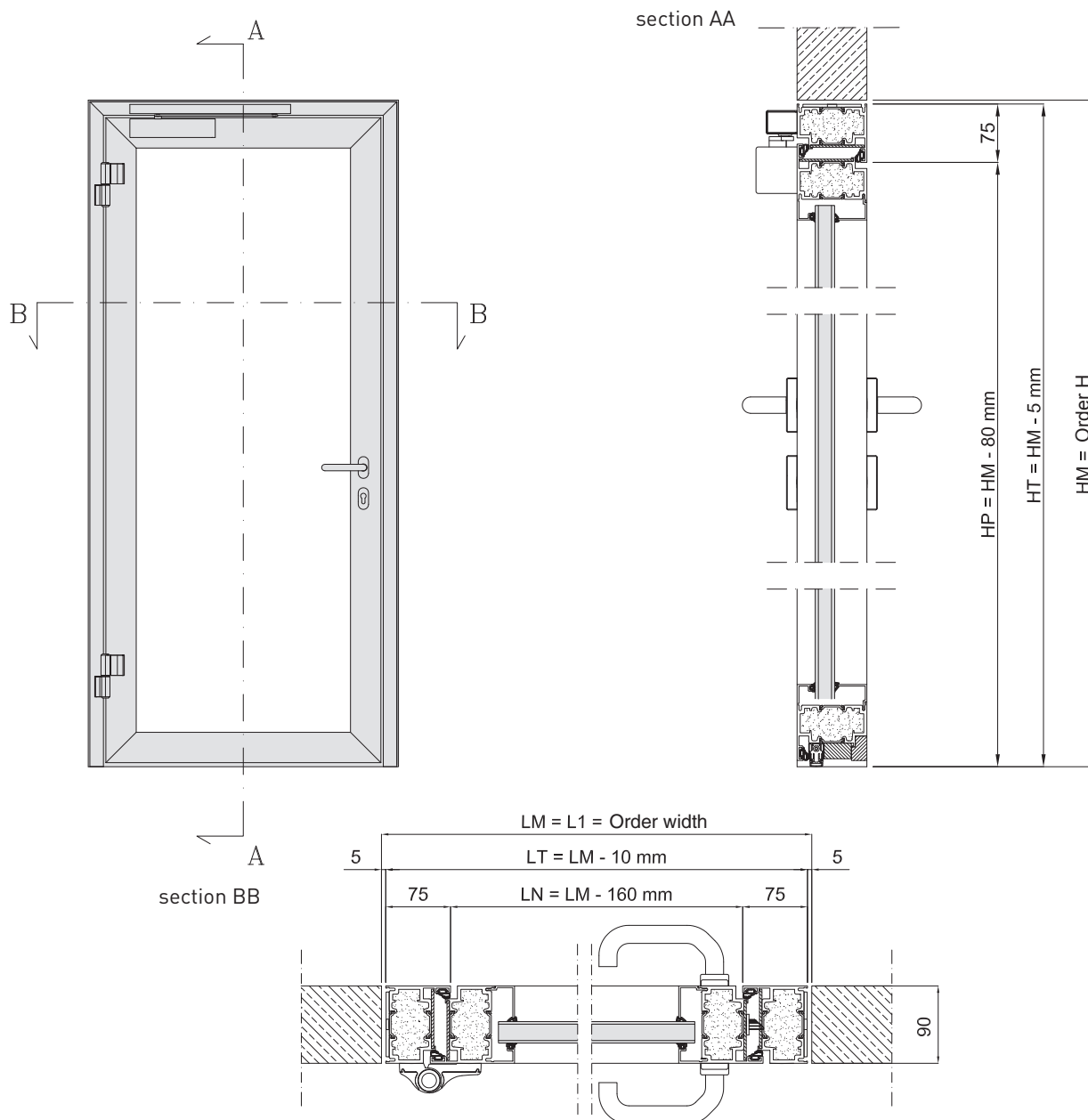
Single fixed glass



Double fixed glass

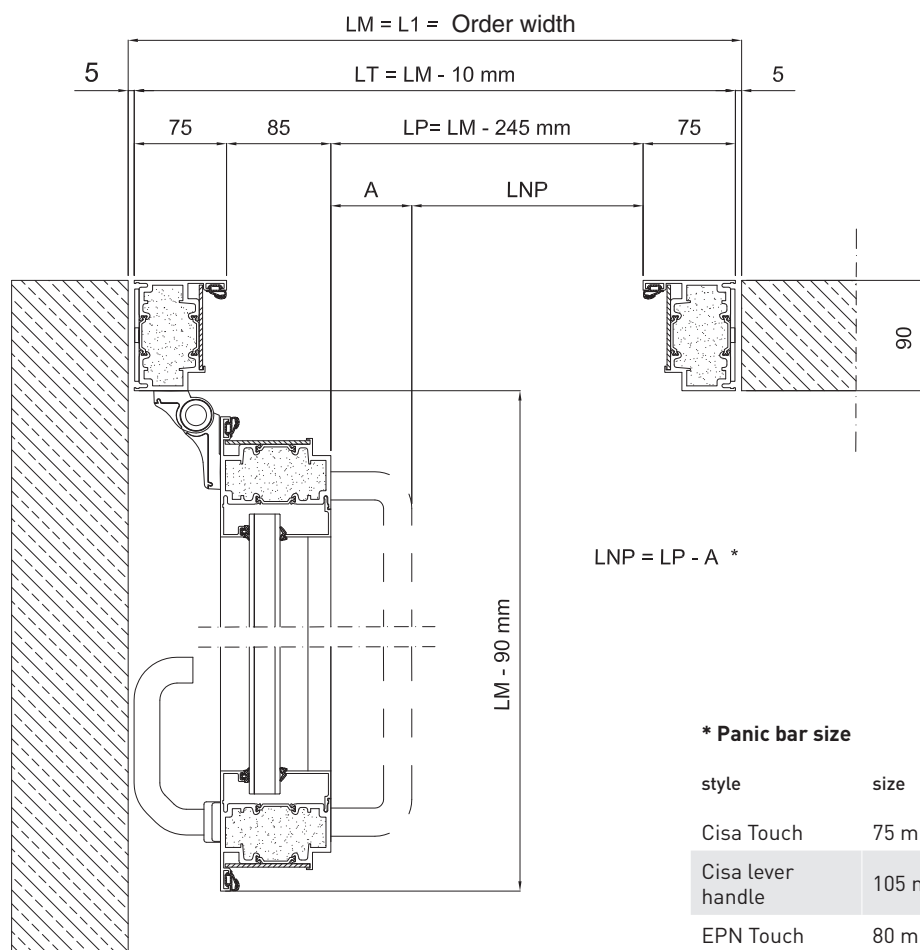


NOVOFIRE, single leaf glazed door



Novofire EI 60 – EI 90 glazed door, certified according to European standard EN 1634

- Fixed frame consisting of an extruded aluminium profile (90x75 mm), a 20 mm recess, with reinforced polyamide profile for thermal insulation. Profiles are filled with mineral self-coolant mix that changes its molecular structure by releasing water vapour at high temperatures;
- the load-bearing structure of movable door leaves consists of tubular extruded aluminium, 90x100 mm, 20 mm recesses with the same finish as the frame. Door panels include glass parts, consisting of several float glass plates with intumescent layers, which turn into refractory, opaque cellular screens in case of high temperatures. Glass panels are secured to perimeter support profiles with metal clips and flush inter-locked aluminium glazing beads;
- 52 mm thick blind panels, consisting of 2 metal sheets with a refractory insulating panel in between, can be fitted on request. All is secured to perimeter support profiles with metal clips and flush aluminium glazing beads;
- 2 aluminium door hinges, 3D adjustable, with stainless steel centre pivot, secured to the fixed frame and door profile with M8 steel screws; in the event of a fire, connection to the frame is provided by the bolts;
- black intumescent seals with graphite;
- lock with stainless steel lever handle;
- security bolts;
- door closer;
- movable drop seal integrated into the door leaves;
- standard finish: silver anodised aluminium; also available in a range of RAL colours on request (see list on page 1);
- glass panels should not be exposed to direct sunlight, water, humidity or condensation, and high temperature fluctuations.
- burglar resistance class RC1 or RC2 according to EN V1627;
- available for exteriors on request.

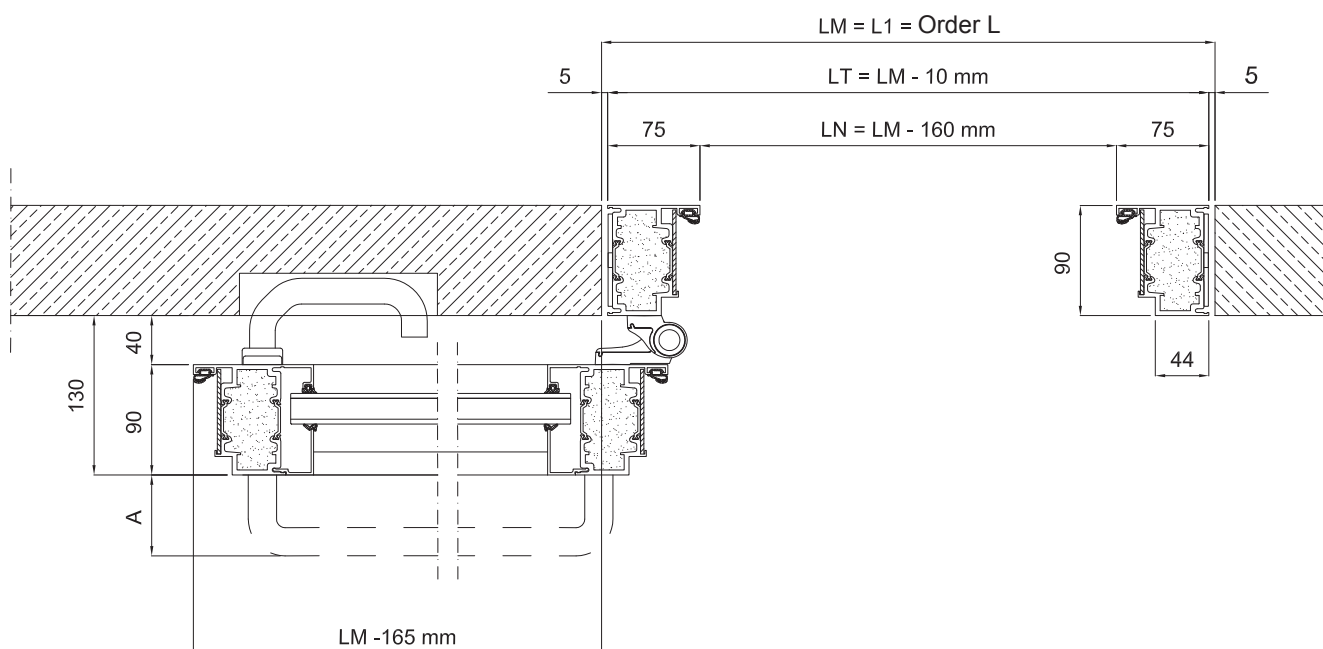


$$LNP = LP - A *$$

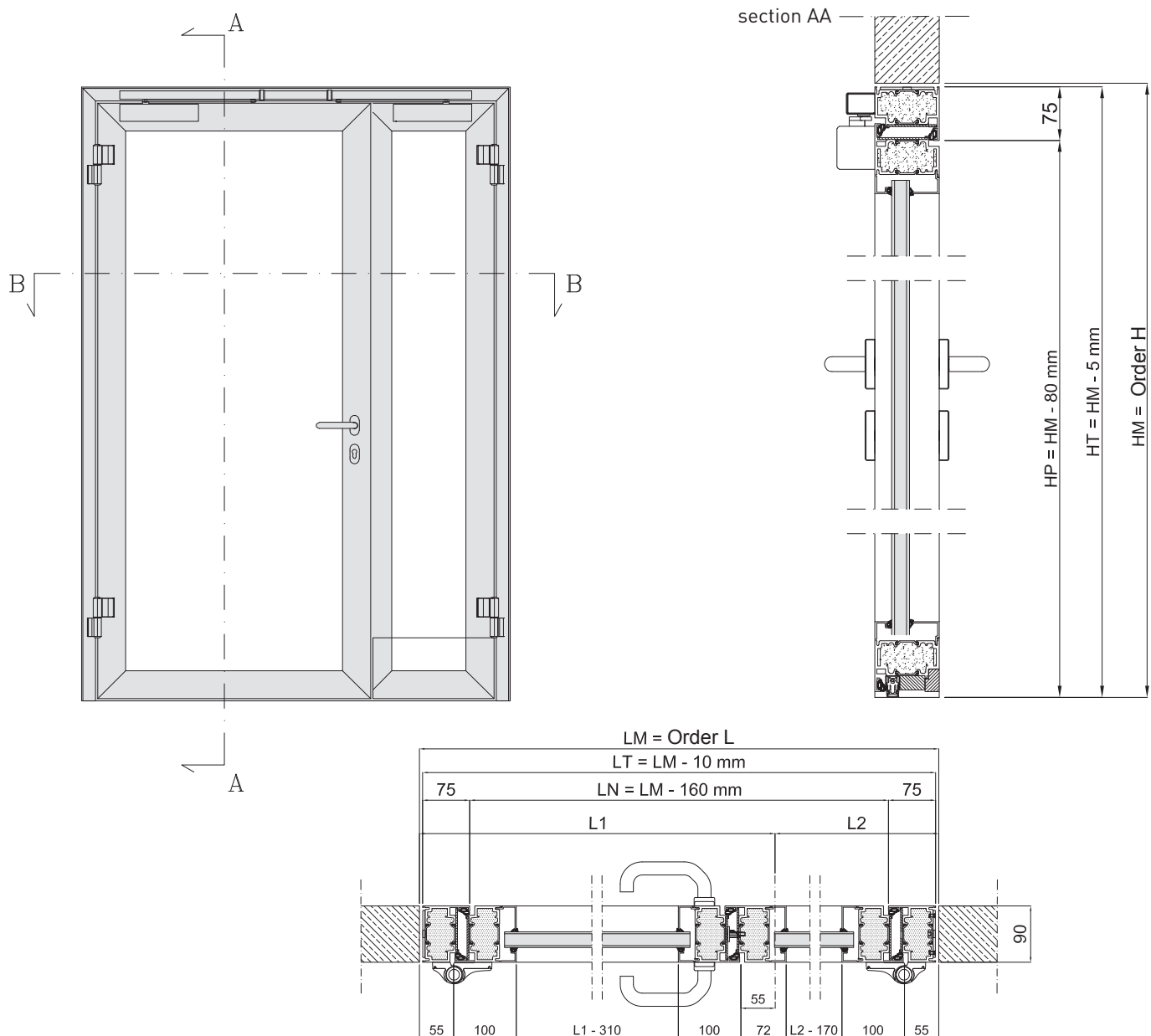
* Panic bar size

style	size	"A" **
Cisa Touch	75 mm	0 mm
Cisa lever handle	105 mm	105 mm
EPN Touch	80 mm	0 mm
EPN Bar	103 mm	103 mm

** According to Italian Ministerial Decree 03.08-2015, par. G. 1.9.16

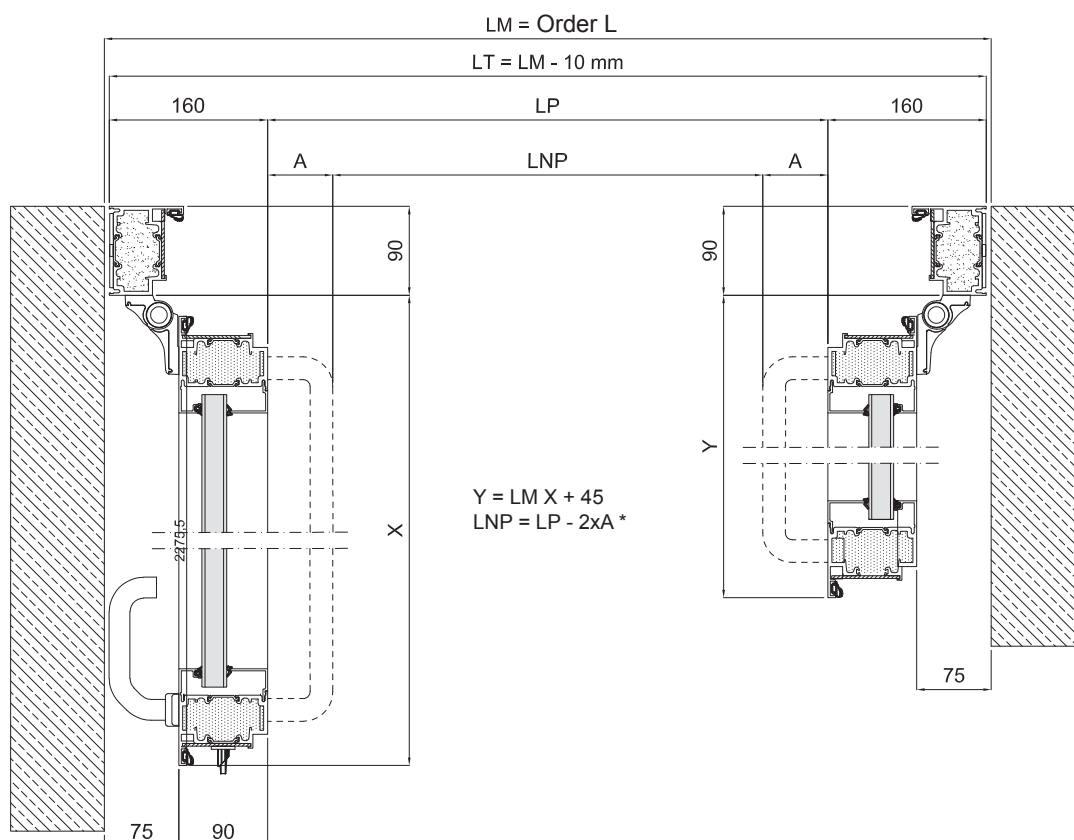


NOVOFIRE, double leaf glazed door



Novofire EI 60 - EI 90 glazed door, certified according to European standard EN 1634

- Fixed frame consisting of an extruded aluminium profile (90x75 mm), a 20 mm recess, with reinforced polyamide profile for thermal insulation. Profiles are filled with mineral self-coolant mix that changes its molecular structure by releasing water vapour at high temperatures;
- the load-bearing structure of movable door leaves consists of tubular extruded aluminium, 90x100 mm, 20 mm recesses with the same finish as the frame. Door panels include glass parts, consisting of several float glass plates with intumescent layers, which turn into refractory, opaque cellular screens in case of high temperatures. Glass panels are secured to perimeter support profiles with metal clips and flush inter-locked aluminium glazing beads;
- 52 mm thick blind panels, consisting of 2 metal sheets with a refractory insulating panel in between, can be fitted on request. All is secured to perimeter support profiles with metal clips and flush aluminium glazing beads;
- 2 aluminium door hinges, 3D adjustable, with stainless steel centre pivot, secured to the fixed frame and door profile with M8 steel screws; in the event of a fire, connection to the frame is provided by the bolts;
- black thermo-expanding seals with graphite;
- lock with stainless steel lever handle, safety lock on smaller leaf;
- security bolts;
- door closer with integrated closing sequence control for double doors;
- movable drop seal integrated into the door leaves;
- standard finish: silver anodised aluminium; also available in a range of RAL colours on request (see list on page 1);
- glass panels should not be exposed to direct sunlight, water, humidity or condensation, and high temperature fluctuations.
- burglar resistance class RC1 or RC2 according to EN V1627;
- available for exteriors on request.



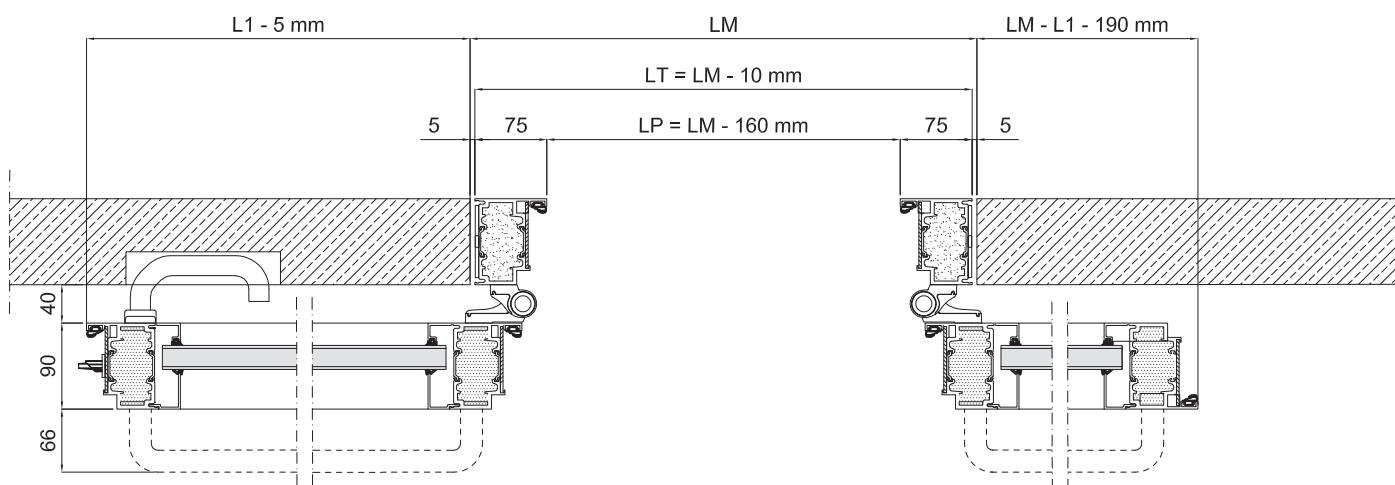
90° DOOR DIVISION

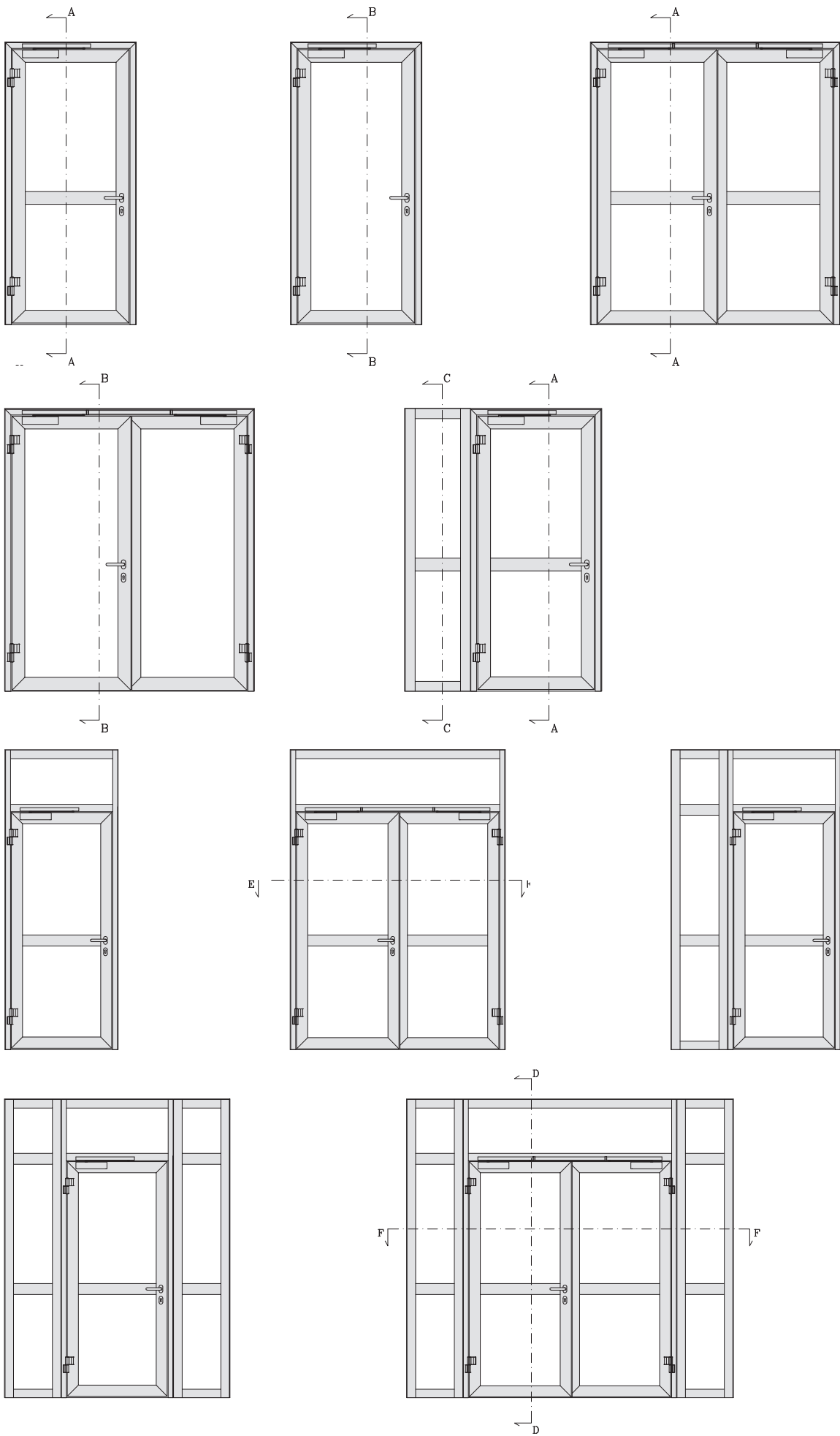
Main door panel order size	X	Y
800	710	LM - X - 45
900	810	
1000	910	

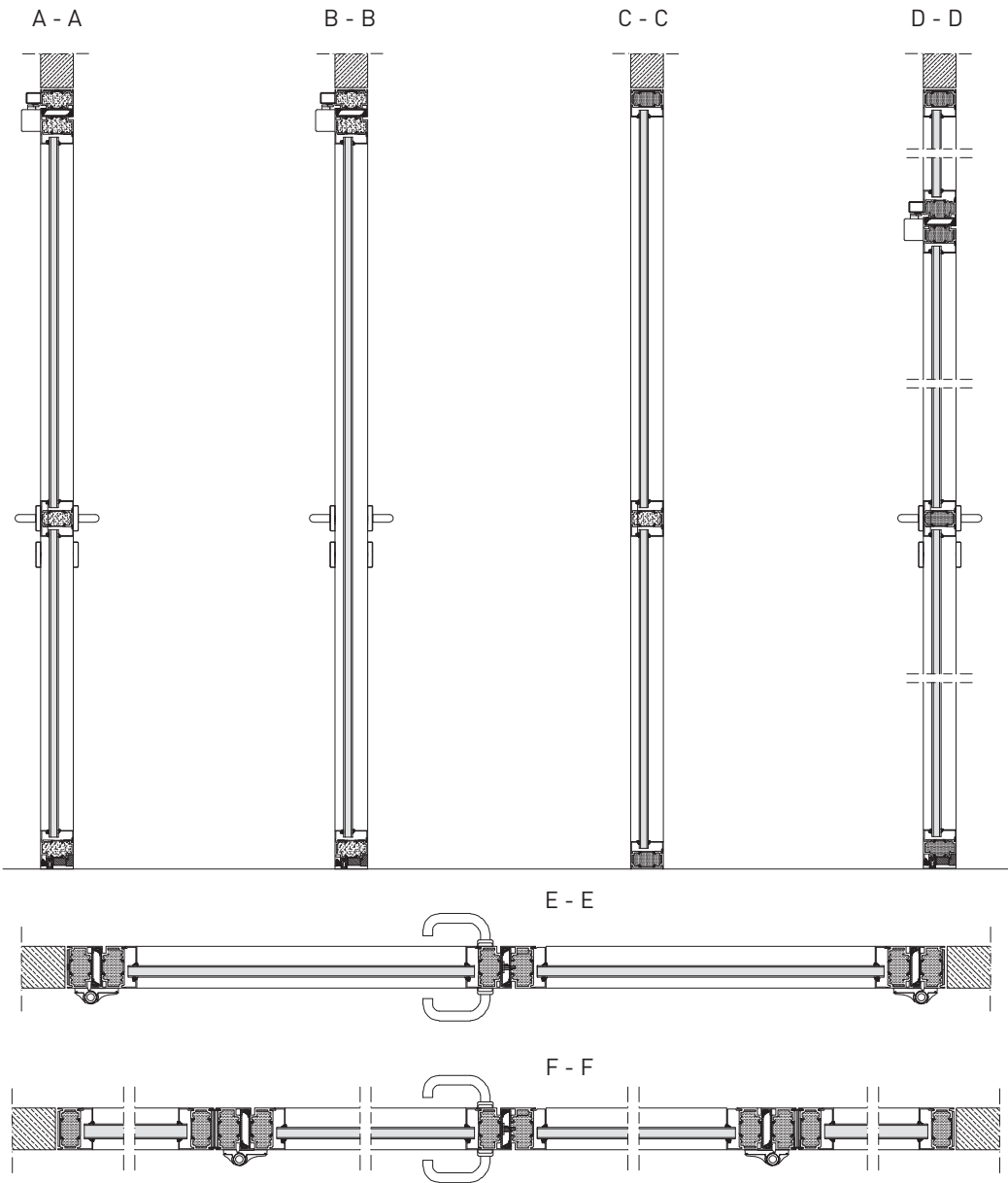
* Panic bar size

style	size	"A" **
Cisa Touch	75 mm	0 mm
Cisa lever handle	105 mm	105 mm
EPN Touch	80 mm	0 mm
EPN Bar	103 mm	103 mm

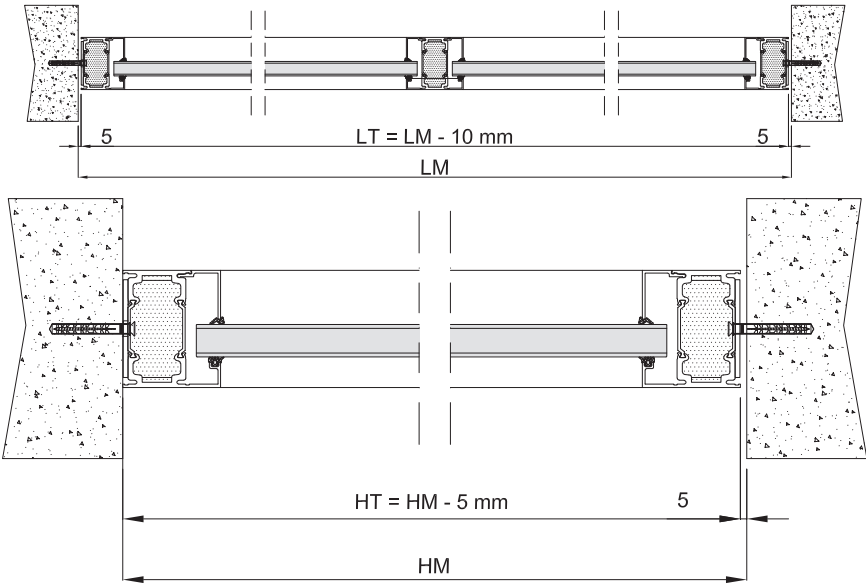
** According to Italian Ministerial Decree 03.08-2015, par. G. 1.9.16







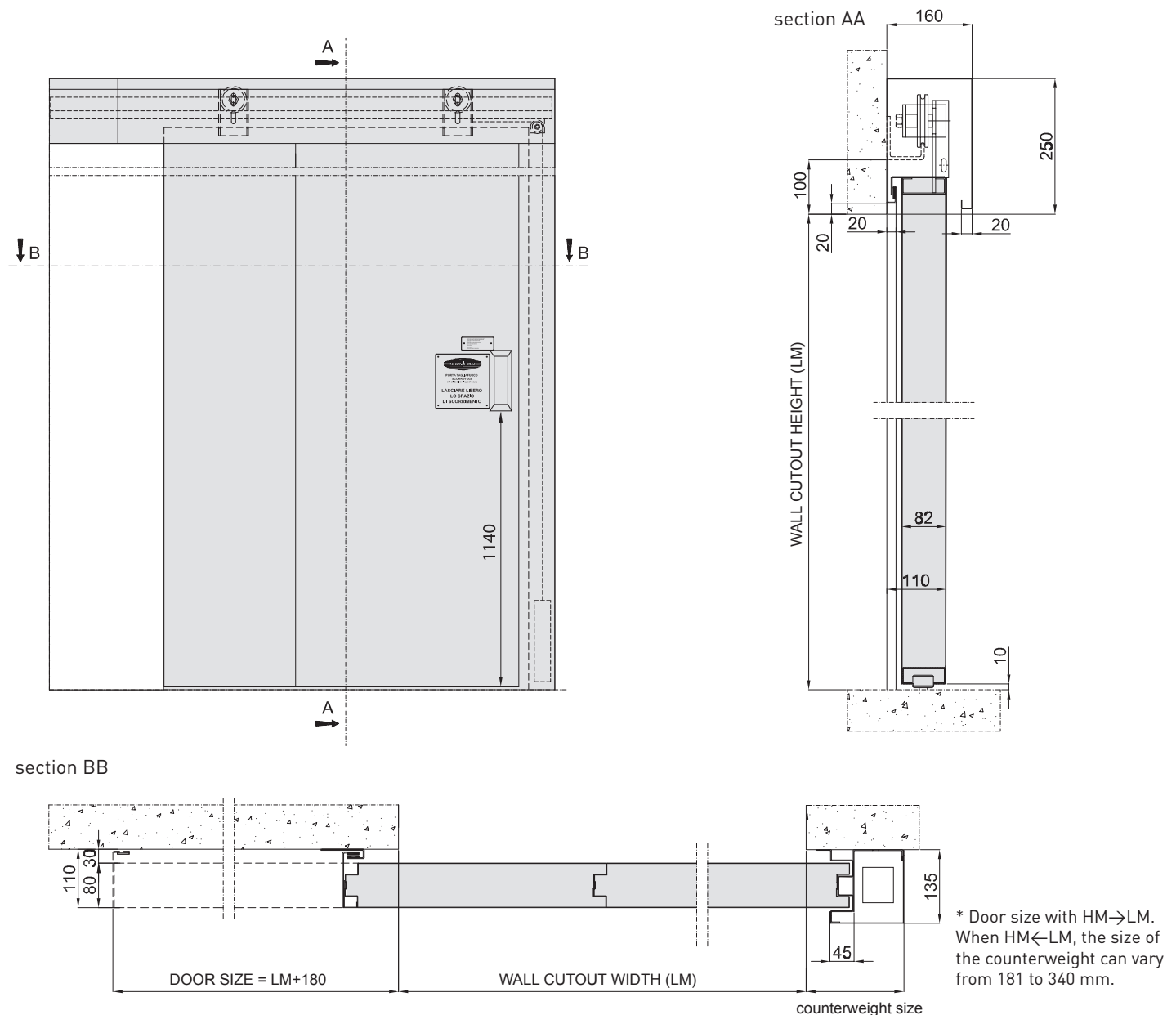
Fixed glass sections



NOTES

LARGE AND SLIDING DOORS

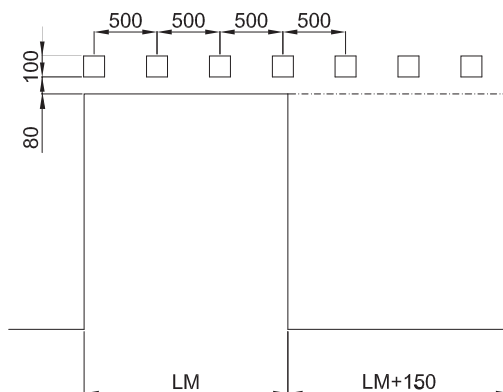
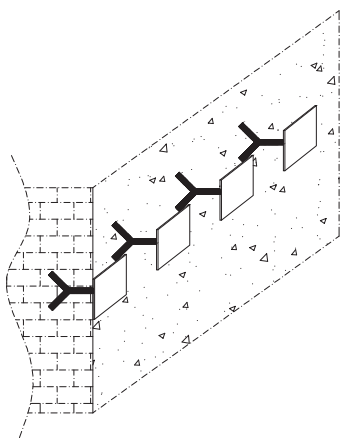
NOVOSLIDE REI 120, single sliding door



Fire proof single sliding door, certified according to UNI 9723

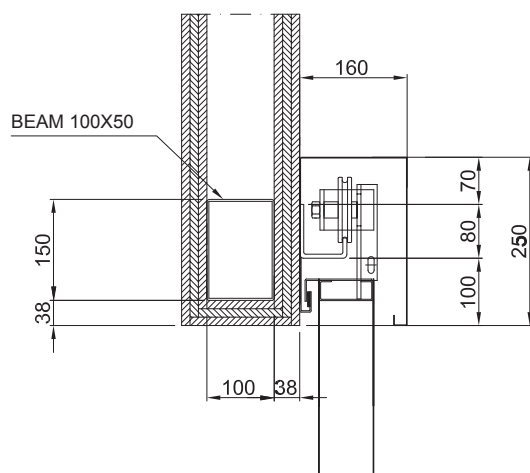
- Panels made of pressed, welded sheet steel with high-density insulation.
- Strike beam with guide rail and counterweight, to close the door in case of fire.
- Labyrinth seals around the perimeter of movable panel.
- Top rail with special mounting brackets for installation in reinforced concrete lintels.
- Pressed sheet metal track cover casing, divided into modular elements.
- Intumescent seal around the perimeter.
- Fixed handles for opening the door.
- This door has no floor rail; perpendicularity is maintained by a bottom roller guide. Slides gently and smoothly thanks to wheels mounted on double ball bearings.
- A special construction allows for easy inspection of all motion mechanisms.
- Surface finished with textured and/or embossed epoxy polyester powder in the available RAL colours (see list on page 1).
- Doors are normally equipped with a counterweight self-closing device, operated by a thermal fuse (rated at 68°C).
- Where there is a pedestrian door, the colour of the sliding door panel used for the pedestrian door will be slightly different from the rest of the door.

Installation on walls with low mechanical strength.



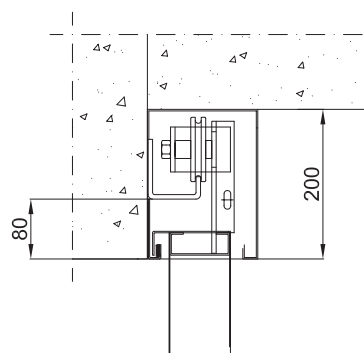
Support beam

Example of a customer-provided beam coating (not binding). Installation will be agreed upon with the firm in charge of fire compartmentation.

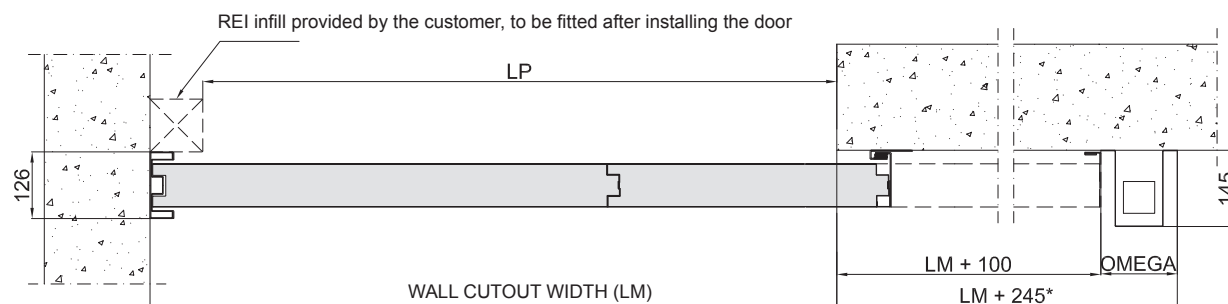


Min. 200 mm

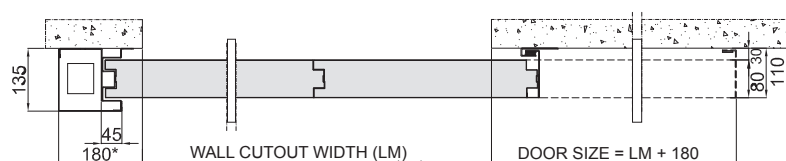
For special cases, please contact the Company.



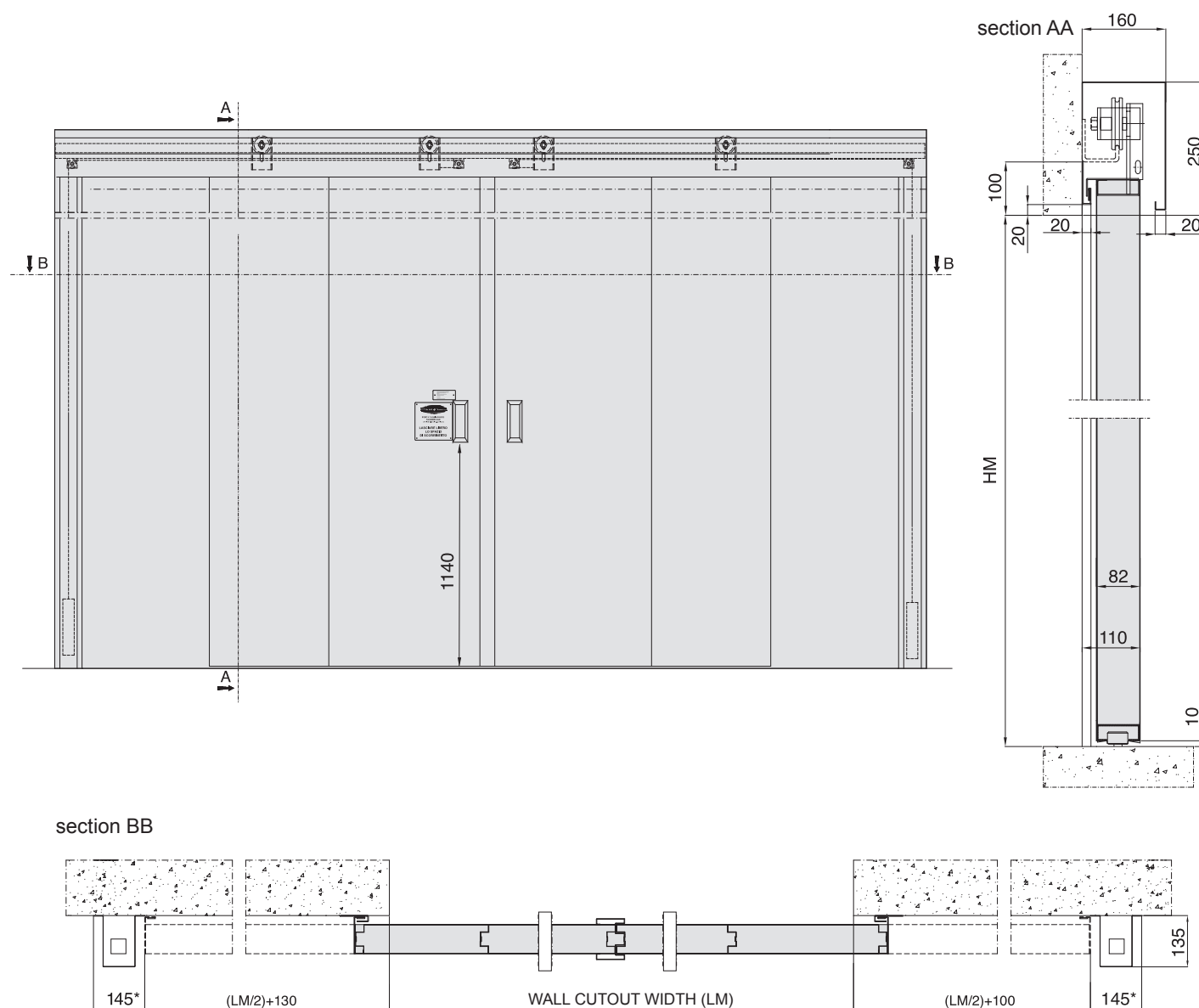
Flat strike, counterweight on the opposite side



Standard strike



NOVOSLIDE REI 120, double sliding door



* Door size with HM→LM. When HM←LM, the size of the counterweight can vary from 181 to 340 mm.

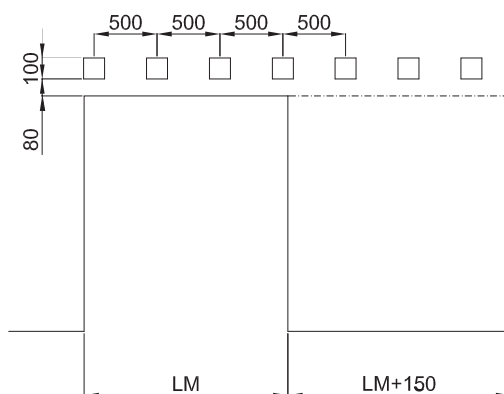
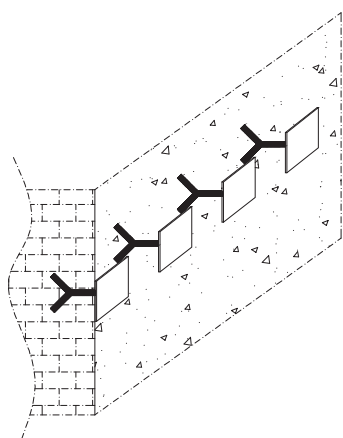
Fire proof double sliding door, certified according to UNI 9723

- Panels made of pressed, welded sheet steel with high-density insulation.
- Strike beam with guide rail and counterweight, to close the door in case of fire.
- Labyrinth seals all around the movable panels;
- Top rail with special mounting brackets for installation in reinforced concrete lintels.
- Pressed sheet metal rail cover, divided into modular elements.
- Intumescent seal around the perimeter.
- Fixed handles for opening the door.
- This door has no floor rail; perpendicularity is maintained by a bottom roller guide. Slides gently and smoothly thanks to wheels mounted on double ball bearings.
- A special construction allows for easy inspection of all motion mechanisms.
- Doors are normally equipped with a counterweight self-closing device, operated by a thermal fuse (rated at 68°C).
- Surface finished with textured and/or embossed epoxy polyester powder in the available RAL colours (see list on page 1).
- The door is supplied as a standard of a continuous and/or limit stop damper as required by Italian law 81/08.

Special conditions

Brackets for concrete walls

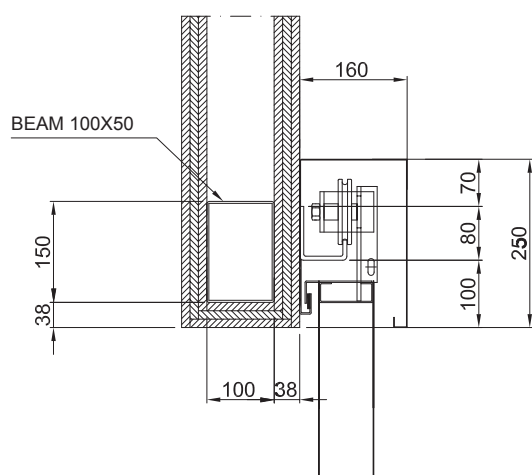
Installation on walls with low mechanical strength



N.B.: For installation on flat walls or doors with very low height/width ratio, ask the company.

Support beam

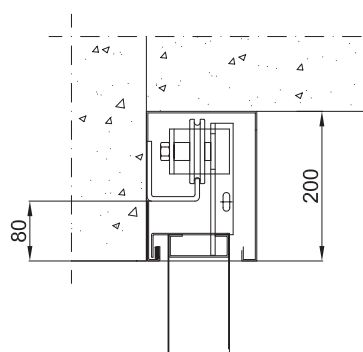
Example of a customer-provided beam coating (not binding). Installation will be agreed upon with the firm in charge of fire compartmentation.



Lower lintel

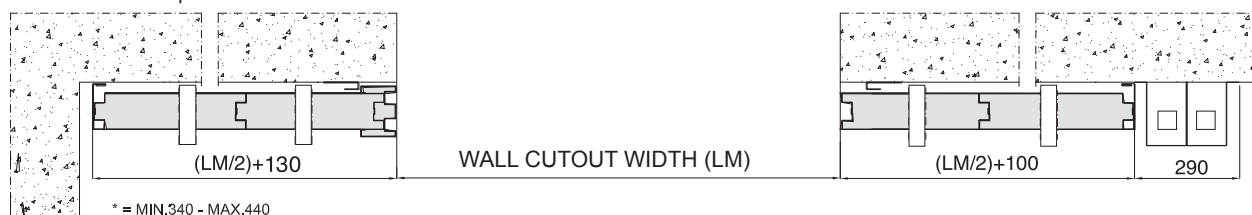
Min. 200 mm

For special cases, please contact the Company.

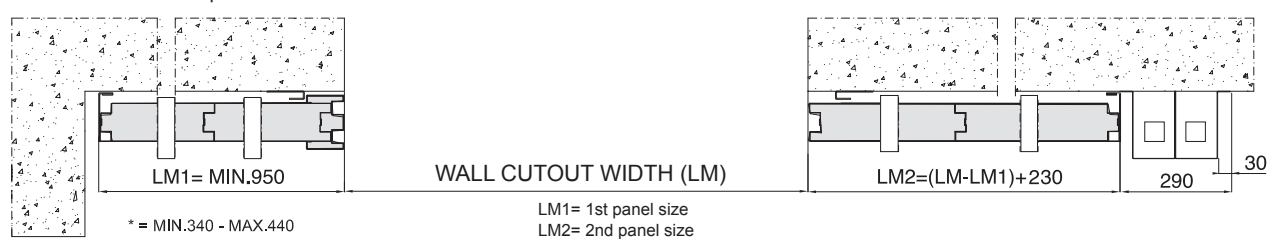


Counterweights on the opposite side

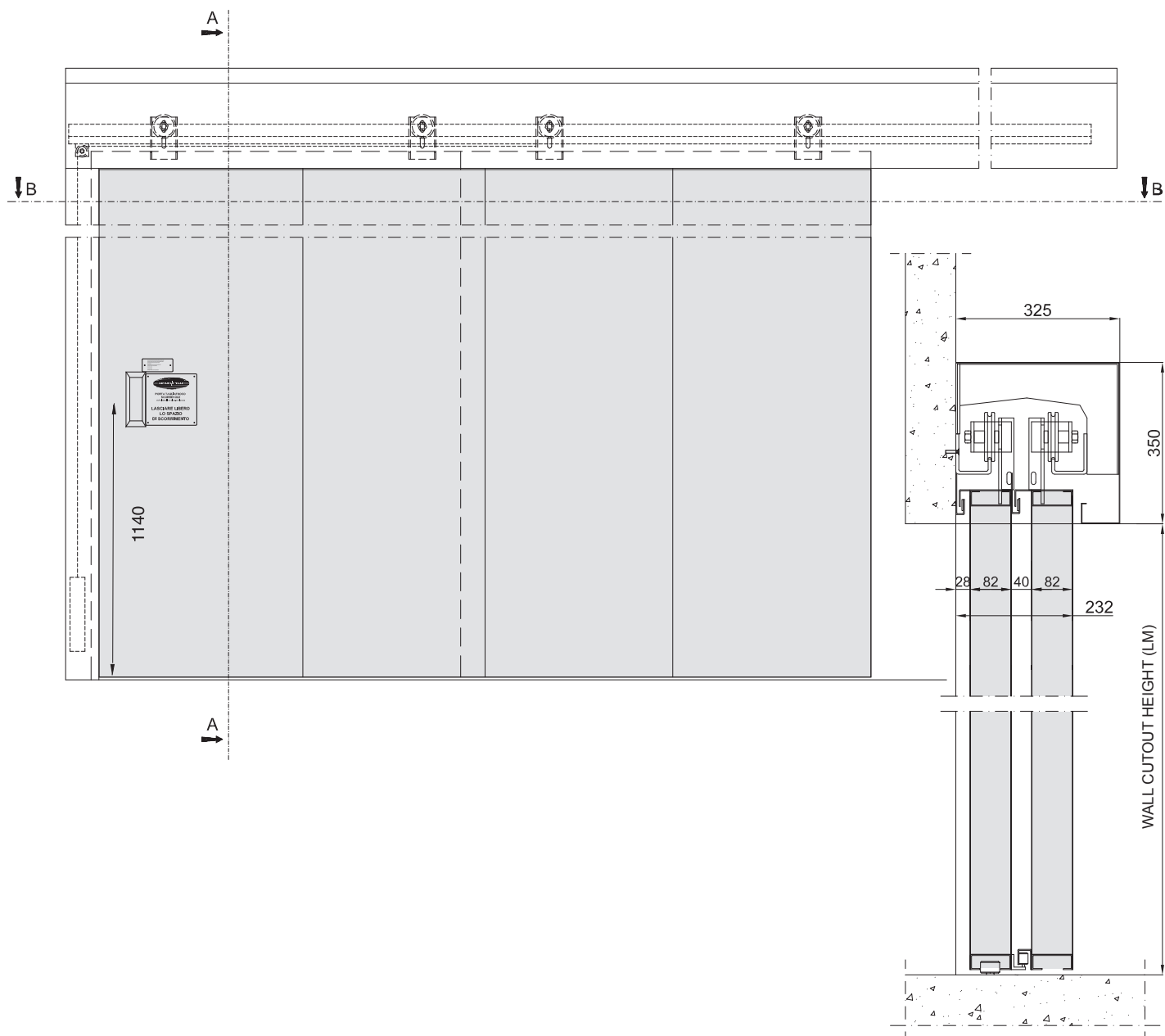
With same-size panels



With different-size panels

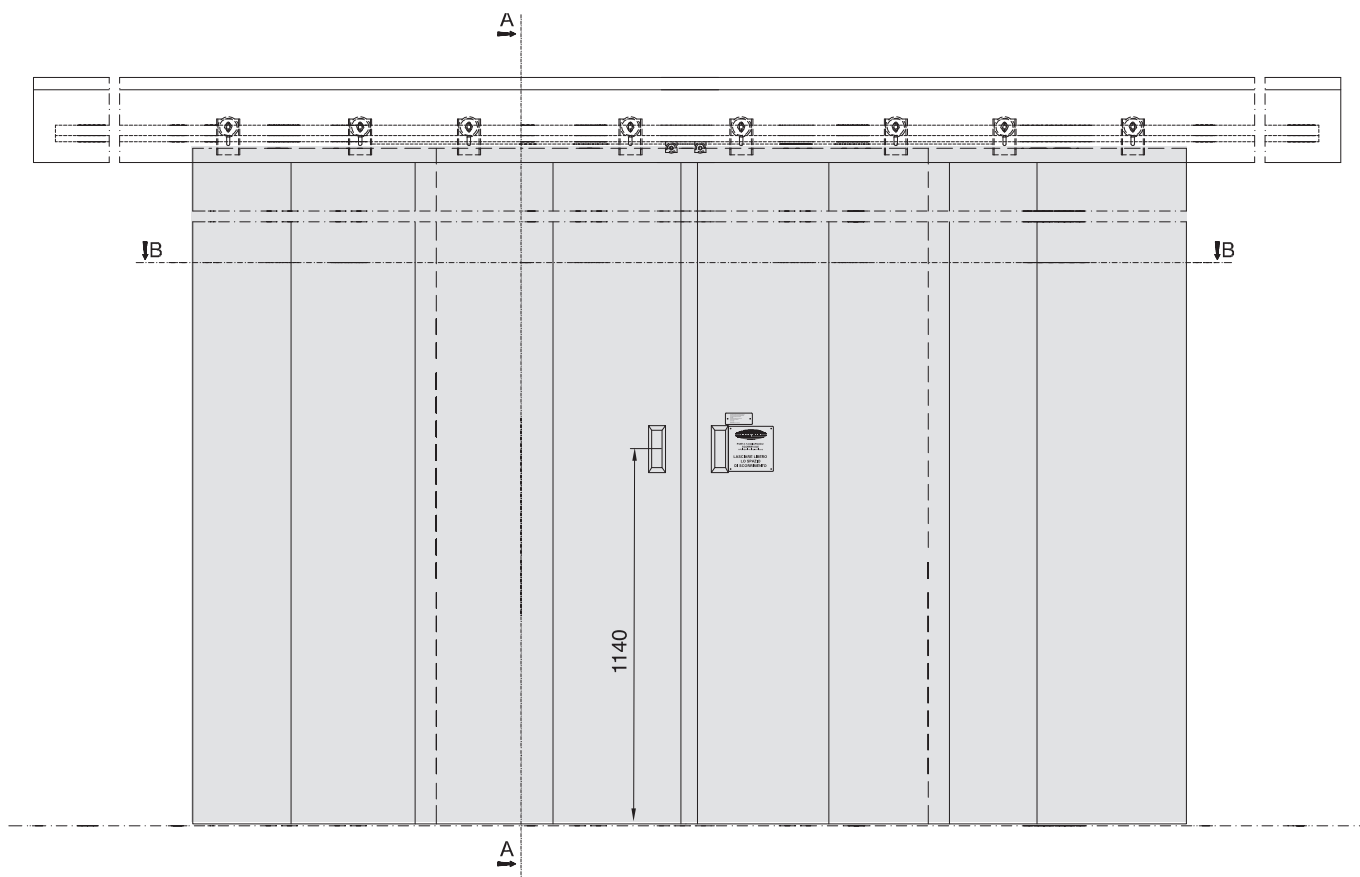


NOVOSLIDE REI 120, bypass sliding door



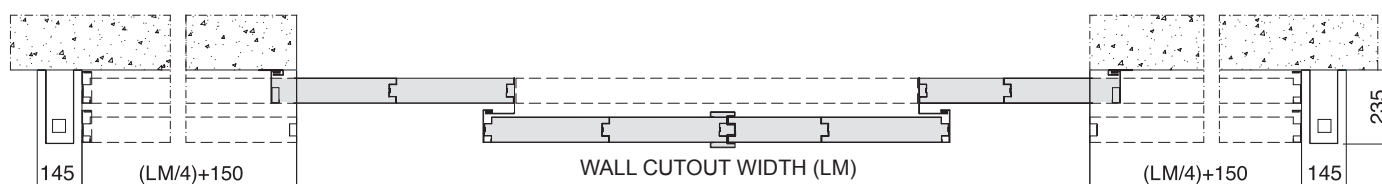
Fire proof bypass sliding door, certified according to UNI 9723

- Panels made of pressed, welded sheet steel with high-density insulation.
- Strike beam with guide rail and counterweight, to close the door in case of fire.
- Labyrinth seals all around the movable panels.
- Low-friction double rail at the top, with special mounting brackets for installation in reinforced concrete lintels.
- Pressed sheet metal rail cover, divided into modular elements.
- Intumescent seal around the perimeter.
- Fixed handles for opening the door.
- This door has no floor rail; perpendicularity is maintained by a bottom roller guide. Slides gently and smoothly thanks to wheels mounted on double ball bearings.
- A special construction allows for easy inspection of all motion mechanisms.
- Doors are normally equipped with a counterweight self-closing device, operated by a thermal fuse (rated at 68°C).
- Surface finish with textured epoxy polyester powder, RAL 7035.
- The door is supplied as a standard of a continuous and/or limit stop damper as required by Italian law 626.
- Doors are normally equipped with a counterweight self-closing device, operated by a thermal fuse (rated at 68°C).
- Surface finished with textured and/or embossed epoxy polyester powder in the available RAL colours (see list on page 1).
- The door is supplied as a standard of a continuous and/or limit stop damper as required by Italian law 81/08.



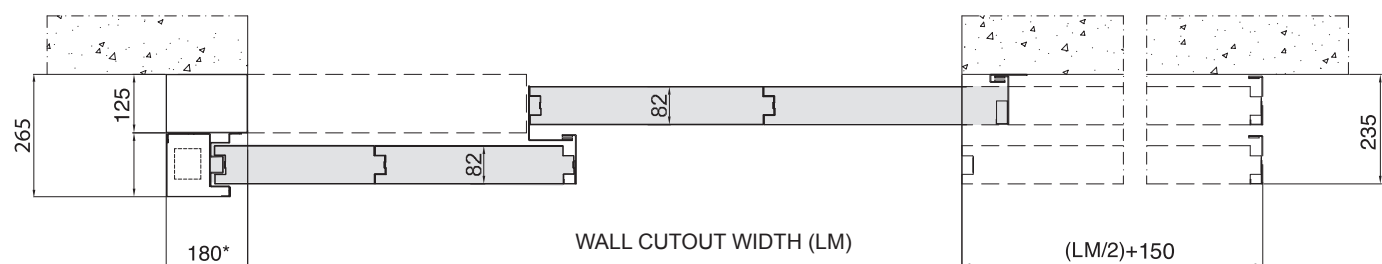
Bypss sliding door 2+2 panels

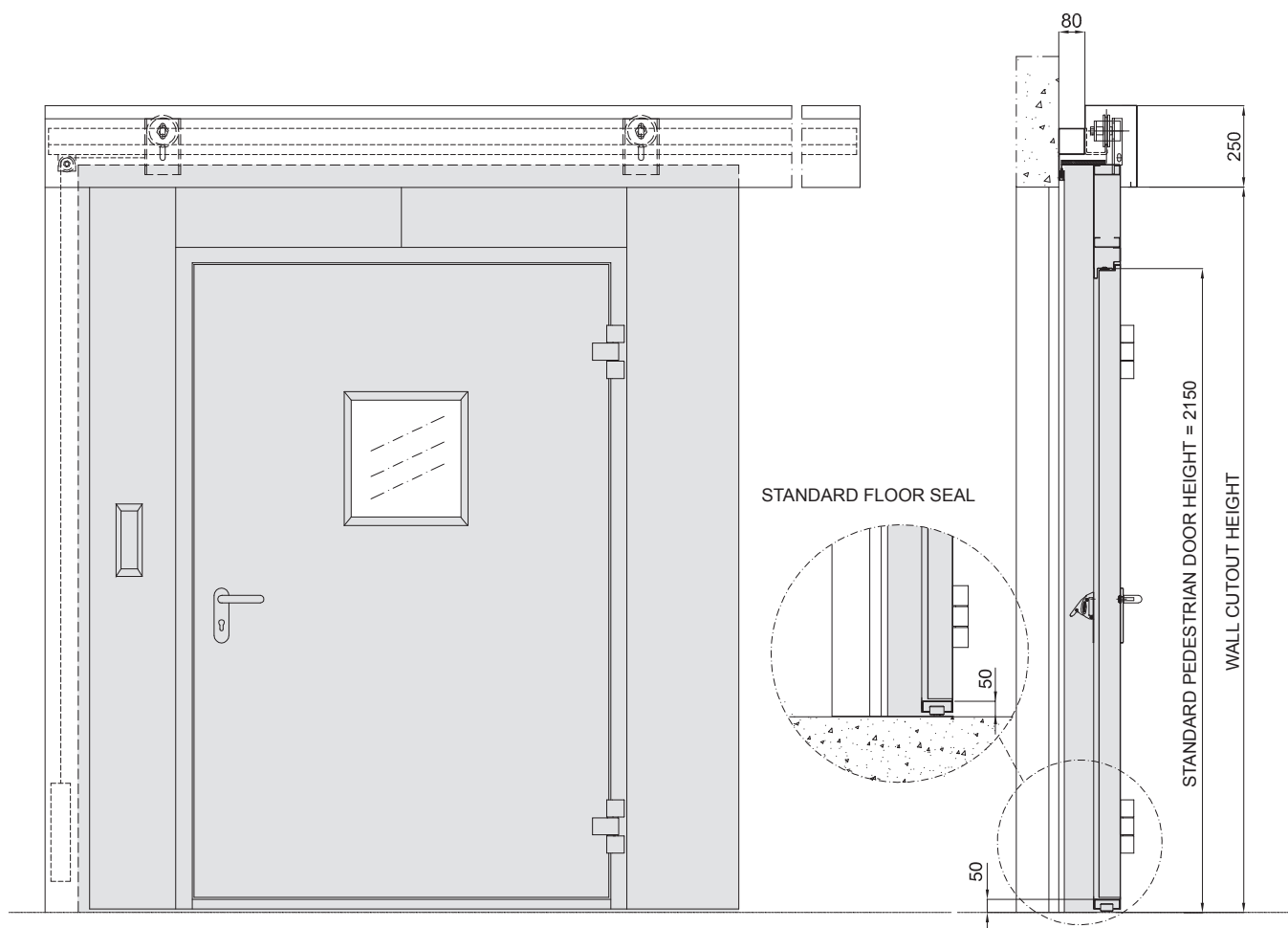
section BB



Bypss sliding door 2+0 panels

section BB



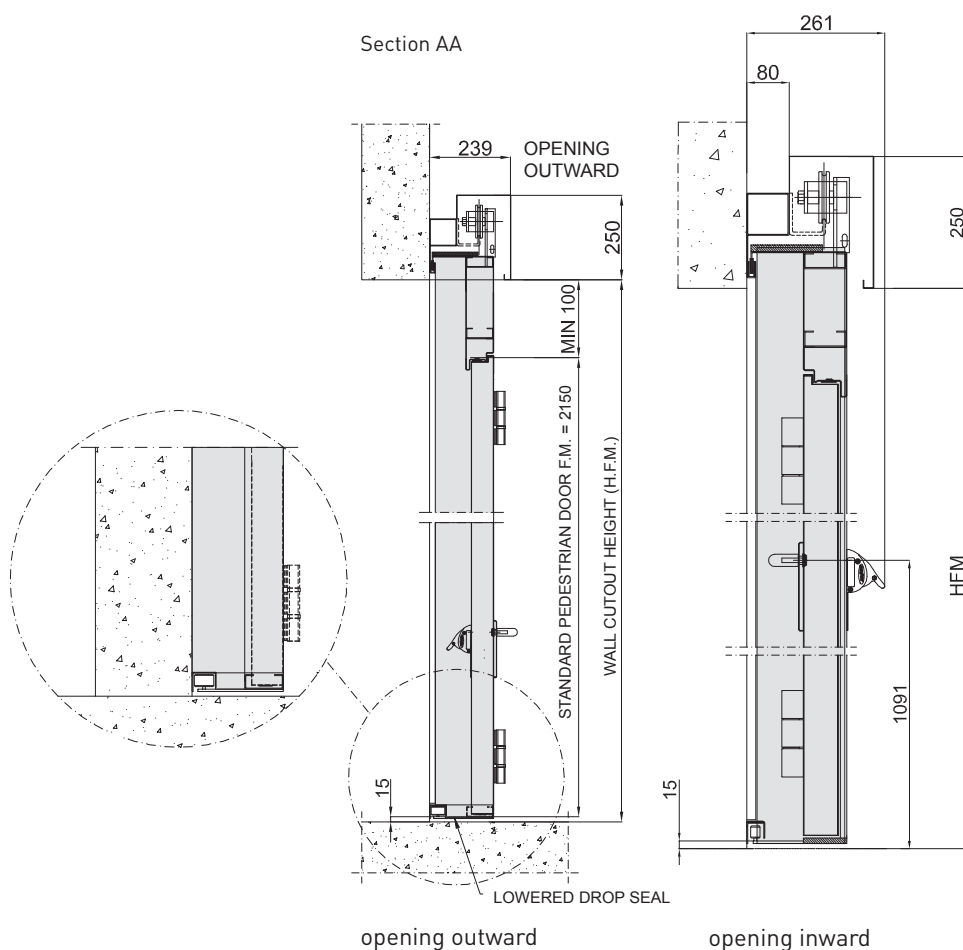


Pedestrian door on Novoslide REI 120 sliding entrance door

The Novoslide REI 120 sliding door can be equipped with a pedestrian hinged door. The pedestrian door is built into one of the panels of the sliding door, excluding the first and last panels.

As a standard, it is equipped with a PVC handle with cylinder and three keys, two adjustable hinges, perimeter seal. Upon request, it can be fitted with a door closer, a glass fanlight, a panic bar on the push side. Because it is equipped with a lowered drop seal, a pedestrian door can also be used as an emergency exit where necessary.

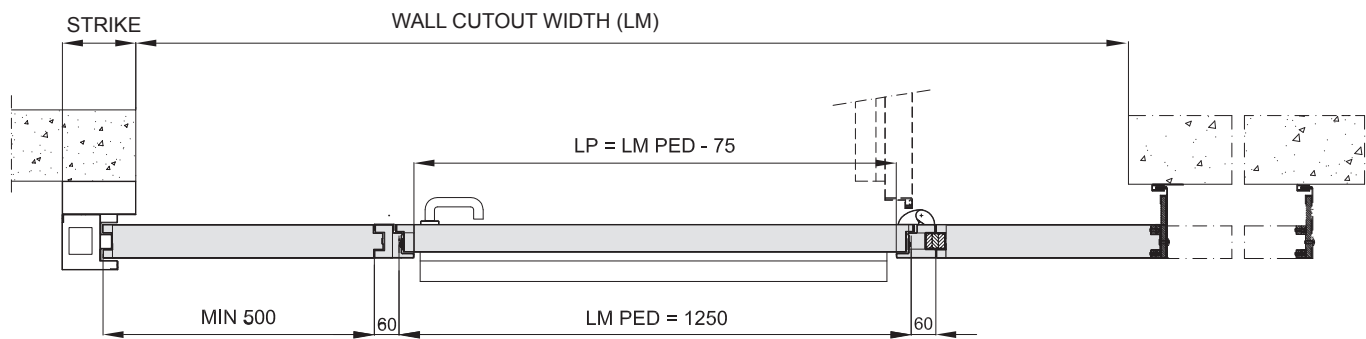
Pedestrian door size: 1250 x 2150h mm.
Fanlight size: 300 x 400h mm.



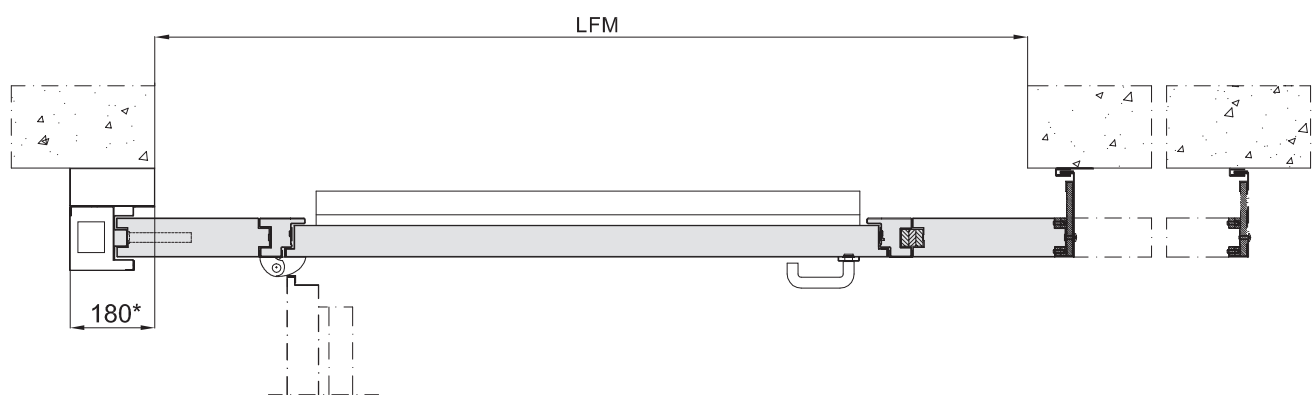
opening outward

opening inward

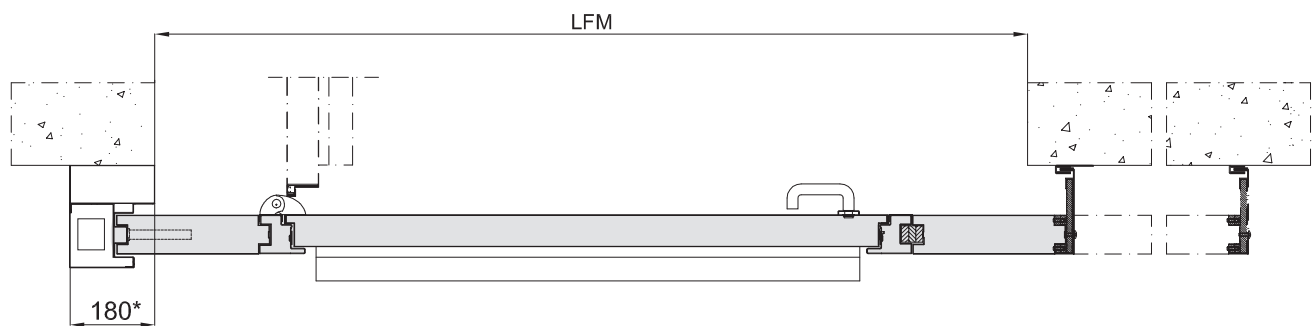
TYPE A (DXM) pedestrian door, right hand outswing, wall side



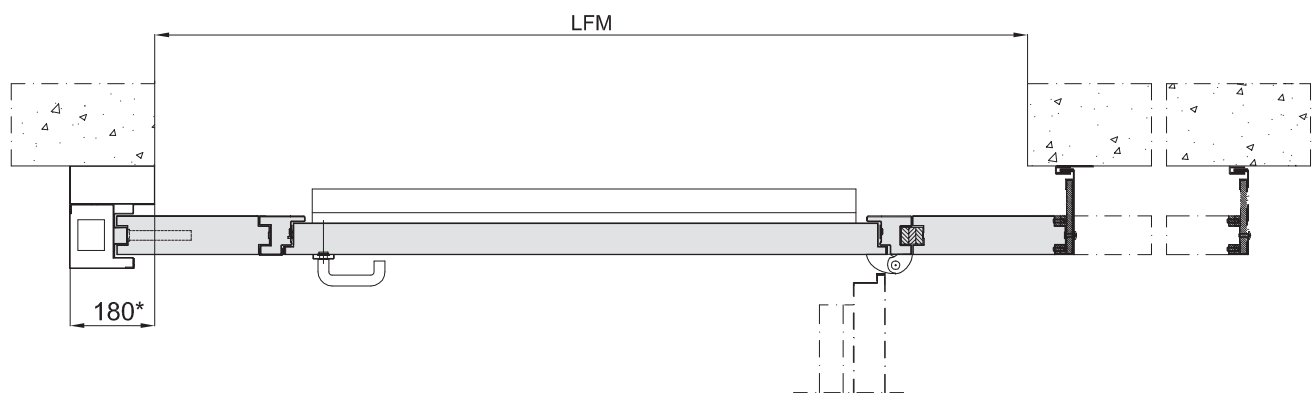
TYPE B (DXL) pedestrian door, right hand outswing, opening side

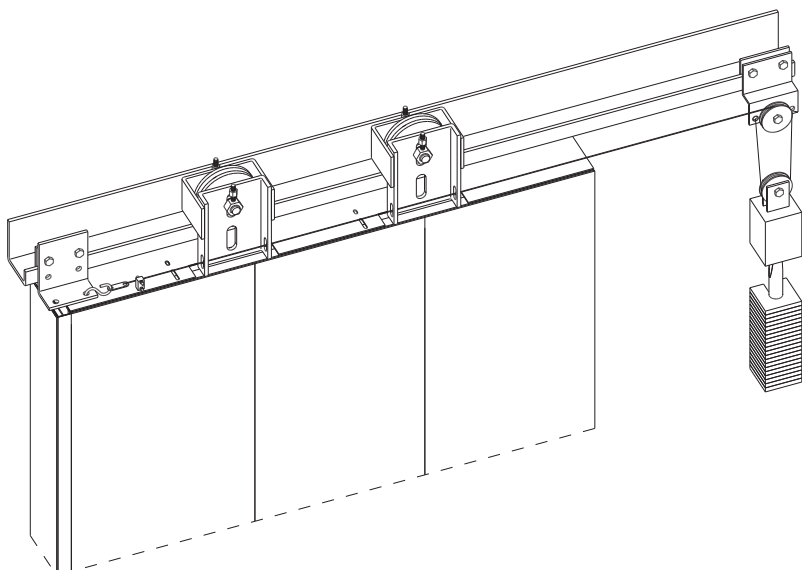


TYPE C (SXM) pedestrian door, left hand outswing, wall side



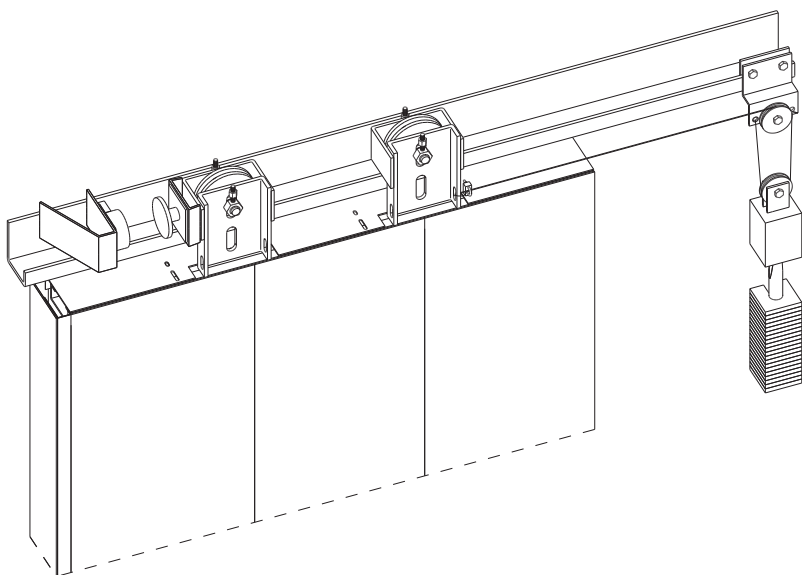
TYPE D (SXL) pedestrian door, left hand outswing, opening side





Operation with thermal fuse

The Novoslide REI 120 door is normally operated by a thermal fuse. Under normal conditions, the sliding panel can be moved manually and placed in any position. In the event of a fire at temperatures above 70°C, the fuse breaks and releases the cable connected to the counterweight that drags the panel close. The continuous and/or limit stop damper cushion the closing speed and the final impact.



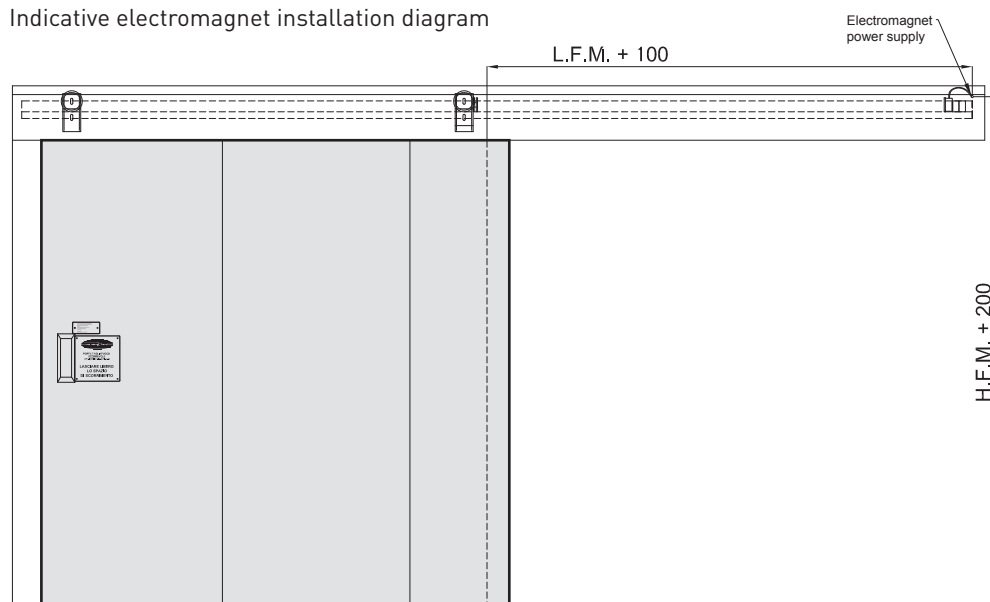
Operation with sealing electromagnet

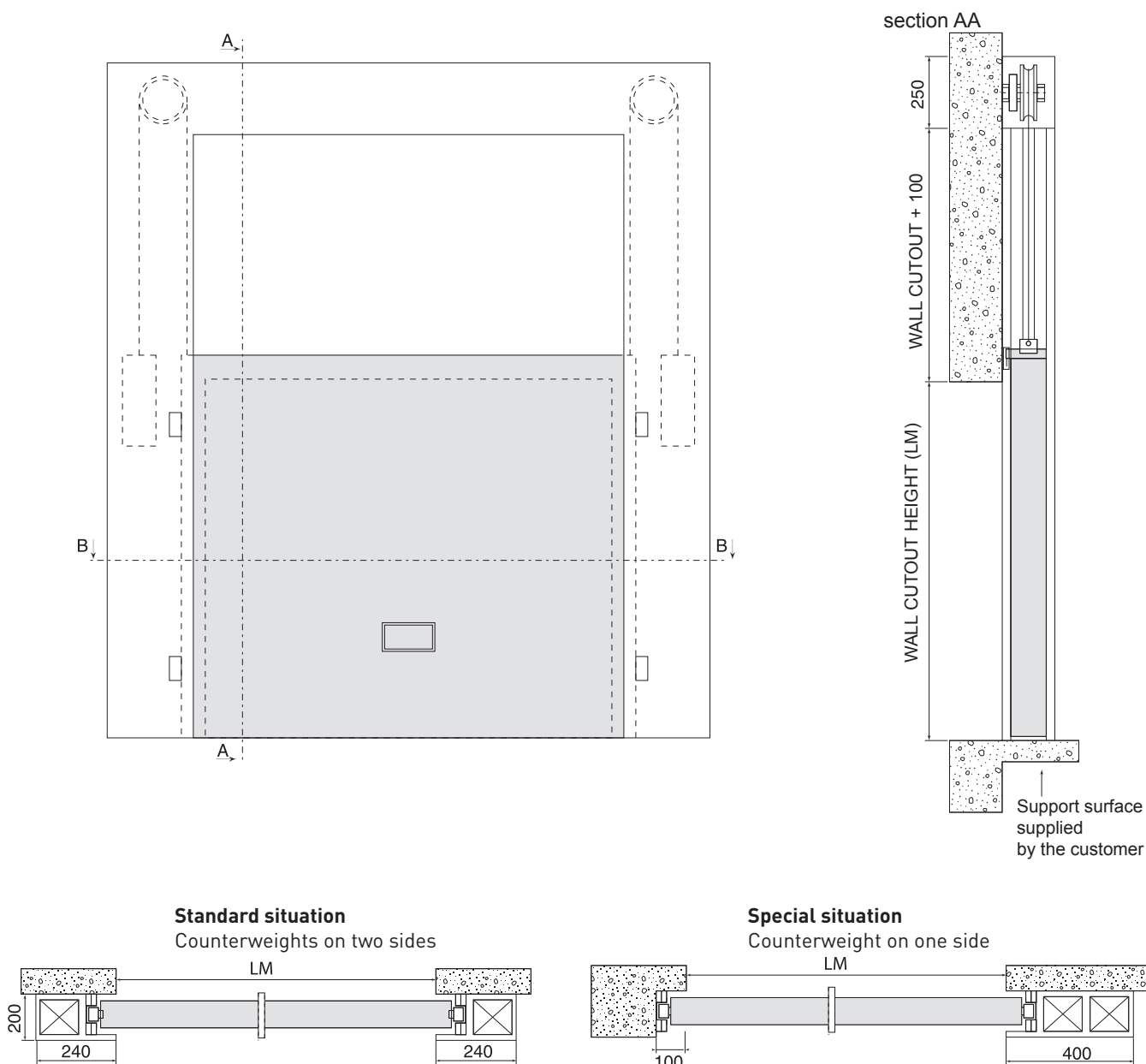
The Novoslide REI 120 door with electromagnet is normally kept fully open by an electromagnet powered by the fire detection system. The door closes fully when the electromagnet is de-energised:

- 1) in case of fire. When the control unit detects smoke or high temperature, it cuts off power from the electromagnet;
- 2) with a manual release button. For periodic or emergency checks, or for any other needs, the button will disengage the electromagnet.

When left free, the door is dragged closed by the counterweight and its movement is slowed down by dampers.

Indicative electromagnet installation diagram

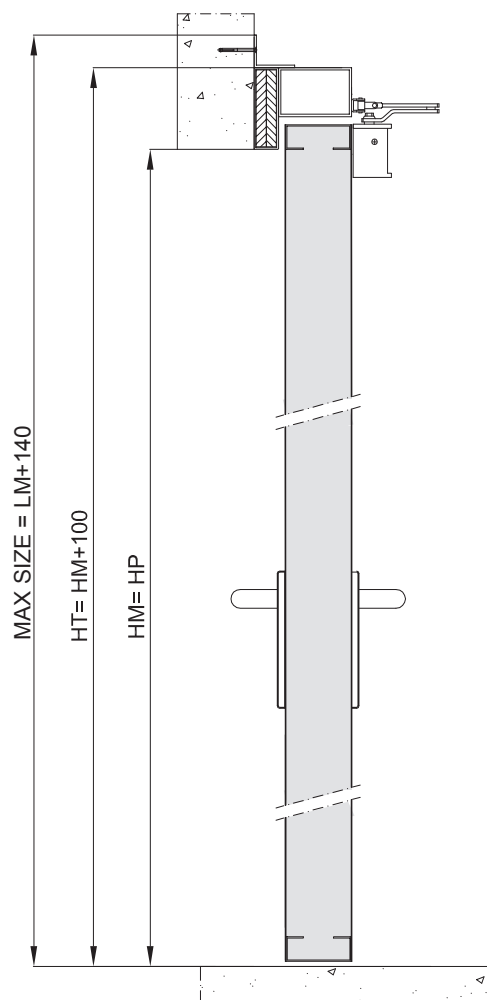
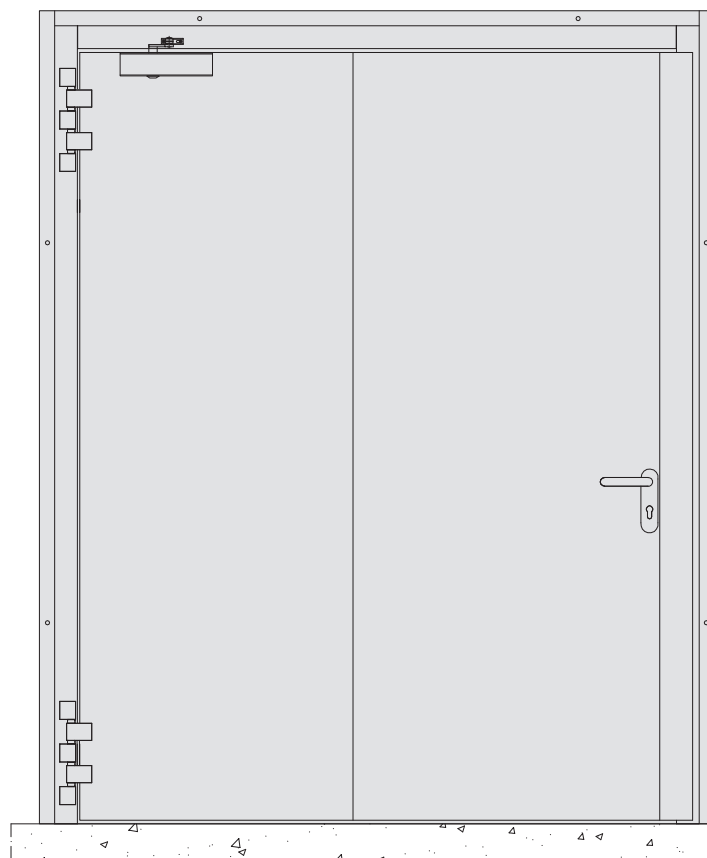




Fire proof vertical sliding door, certified according to UNI 9723

- Movable panels made of pressed, welded steel with high-density insulation.
- Boxed top beam and side guides complete with sliding rails, counterweight, labyrinth seals, roller wheels on ball bearings for smooth sliding.
- Self-closing system with thermal fuse.
- Intumescent fire seals.
- End of travel dampers, supplied as standard.
- Surface finished with textured and/or embossed epoxy polyester powder in the available RAL colours (see list on page 1).
- Can be connected to the fire detection and control system via an electromagnetic door retainer.
- Certified size:
 - minimum 500x500h mm
 - max mm 2070x1540h (sqm 3.15).

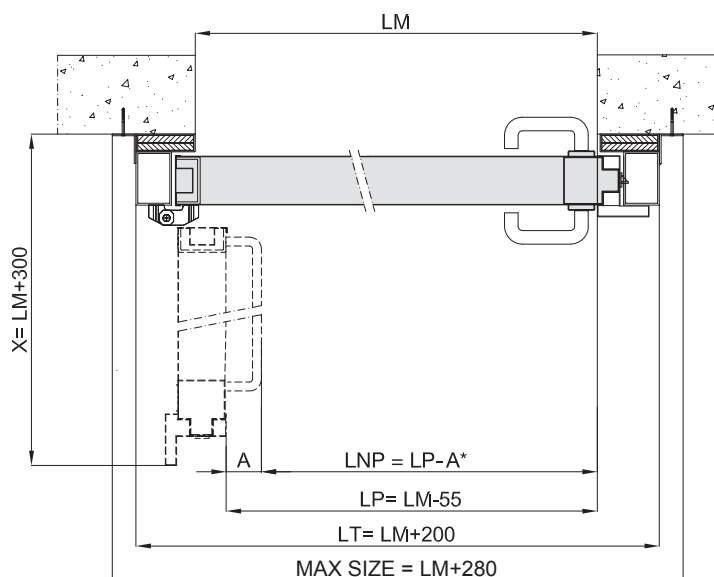
MAGNUM REI 120, big-size single leaf door installed behind the opening



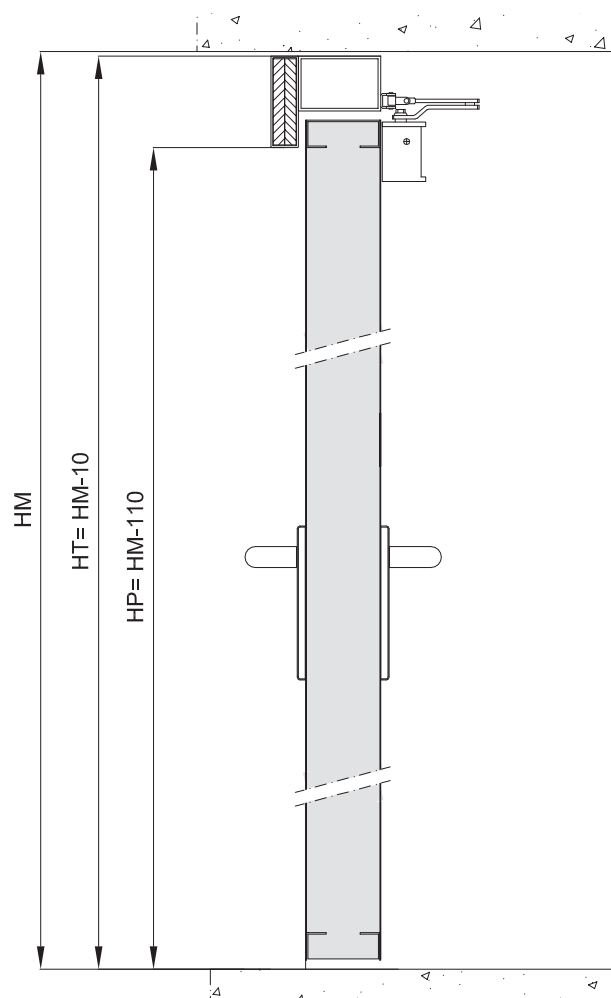
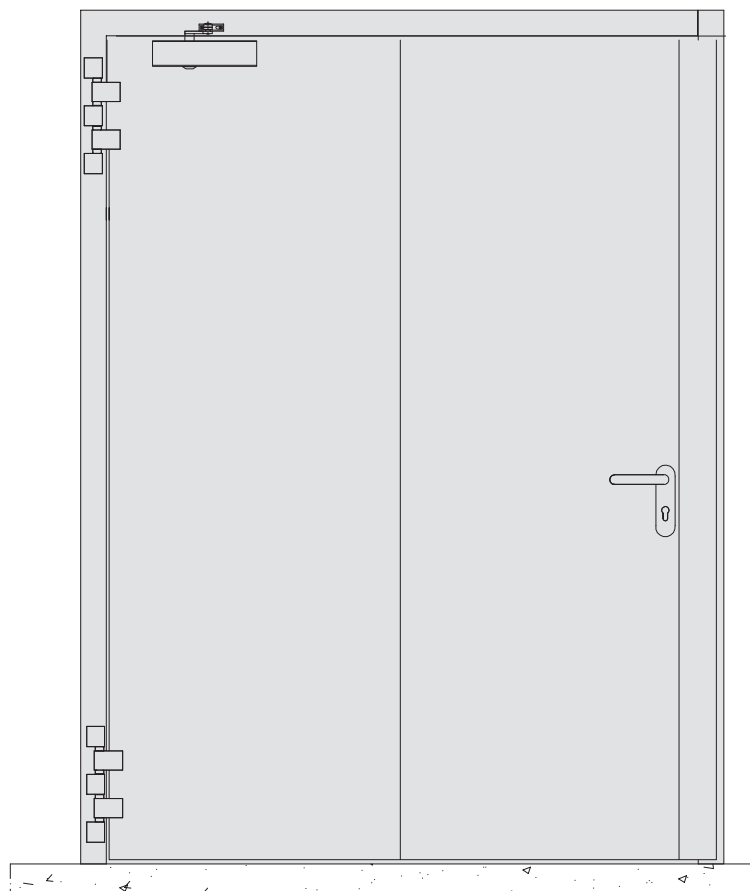
Magnum fire proof door, certified according to UNI 9723

- Vertical modular panels (to be assembled on site), 80 mm thick, consisting of 8/10 mm thick double sheet metal with mineral fire insulation inside.
- 60x90 mm tubular steel frame, suitable for installation behind the wall.
- Intumescent seal around the perimeter.
- Door closer system with hydraulic air pump and/or counterweight for large doors.
- Slides on adjustable multisector bearing hinges.
- Door closing sequence selector for double doors;
- Fire-rated lock with three-key cylinder on main door panel;
- Flush-bolt self-locking system on second door panel, with lever opening;
- Black resin handle with steel core.
- Surface finished with textured and/or embossed epoxy polyester powder in the available RAL colours (see list on page 1).

N.B.: The Novopush panic bar cannot be installed on this type of door.

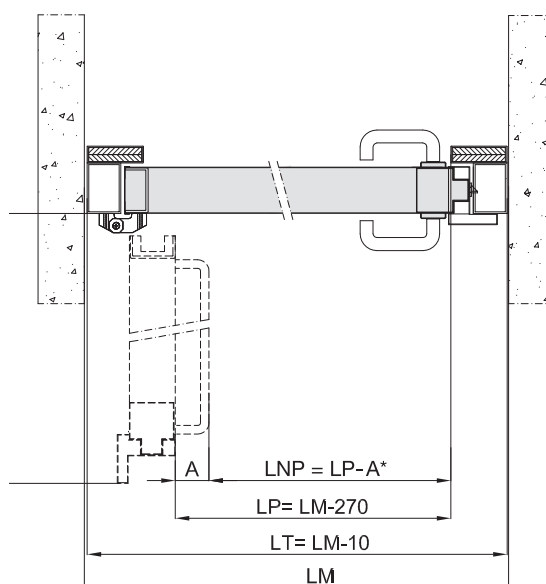


MAGNUM REI 120, big-size single leaf door installed in the opening

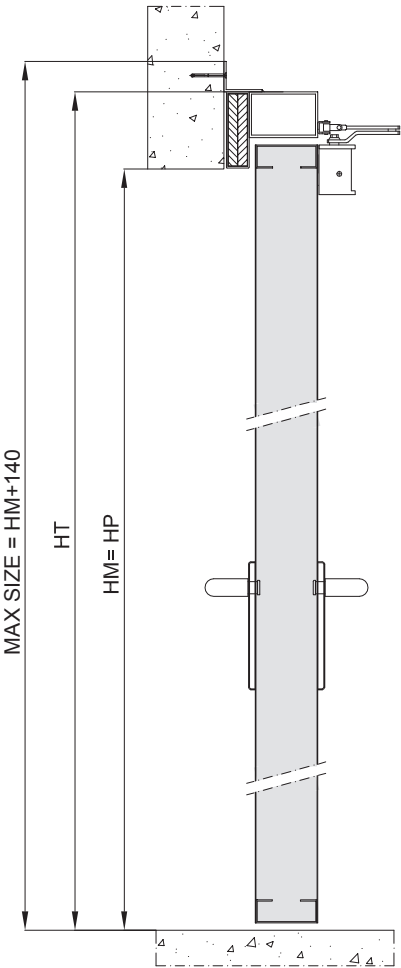
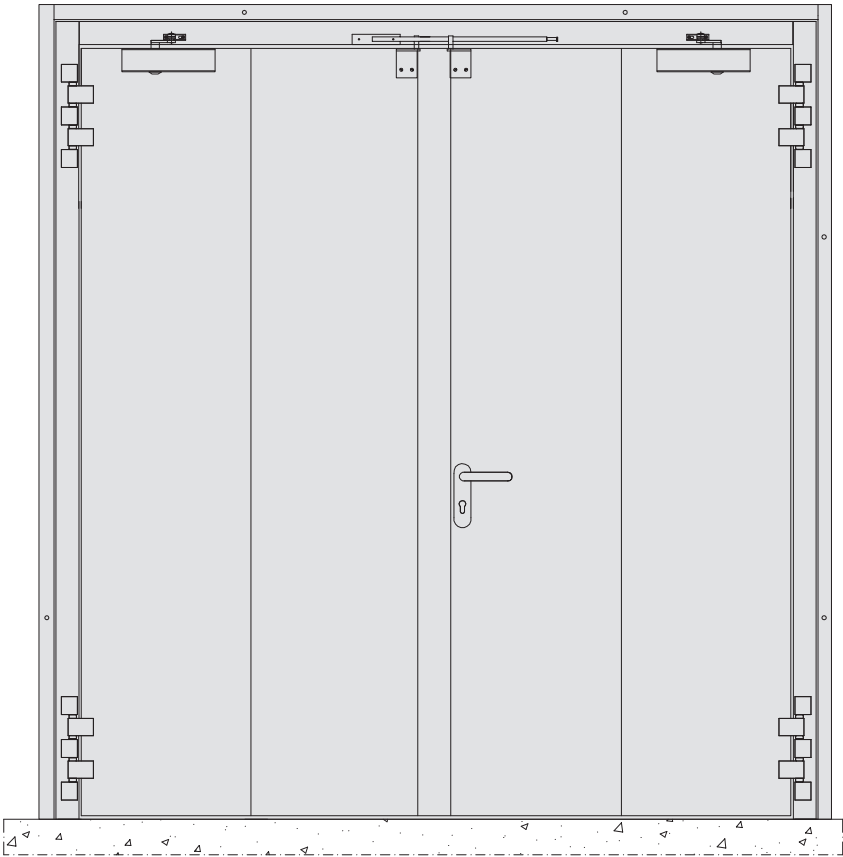


Magnum fire proof door, certified according to UNI 9723

- Vertical modular panels (to be assembled on site), 80 mm thick, consisting of 8/10 mm thick double sheet metal with mineral fire insulation inside.
- 60x90 mm tubular steel frame, suitable for installation in the door span.
- Intumescent seal around the perimeter.
- Door closer system with hydraulic air pump and/or counterweight for large doors.
- Slides on adjustable multisector bearing hinges.
- Door closing sequence selector for double doors;
- Fire-rated lock with three-key cylinder on main door panel;
- Flush-bolt self-locking system on second door panel, with lever opening;
- Black resin handle with steel core.
- Surface finished with textured and/or embossed epoxy polyester powder in the available RAL colours (see list on page 1).



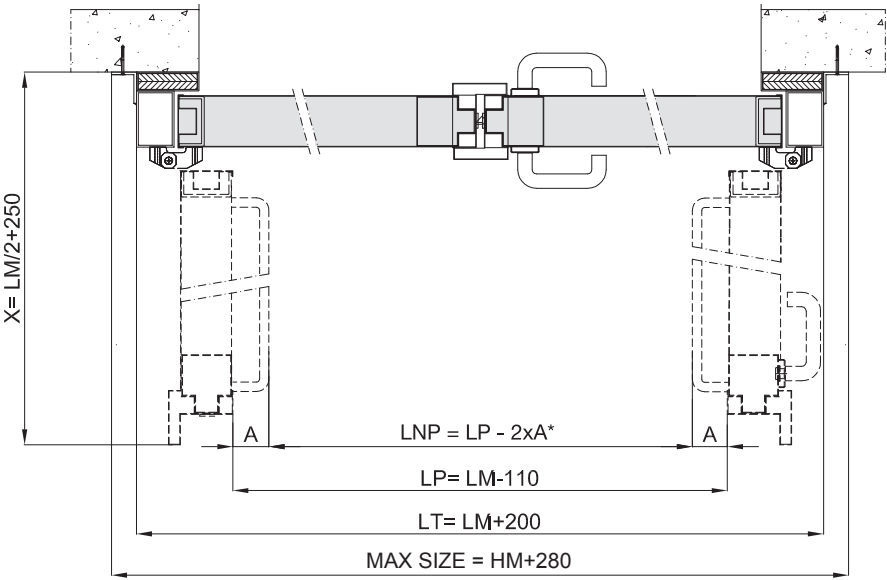
MAGNUM REI 120, big-size double leaf door installed behind the opening



MAX SIZE = HM+140

HT

HM= HP

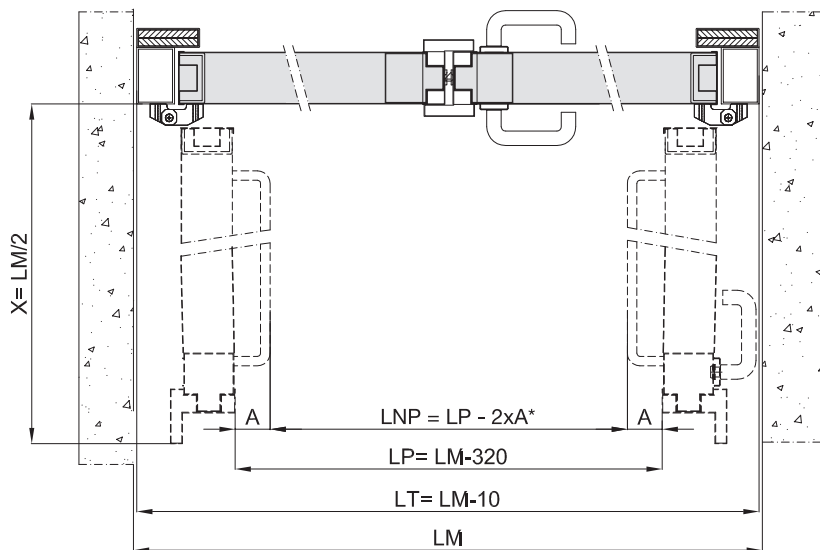
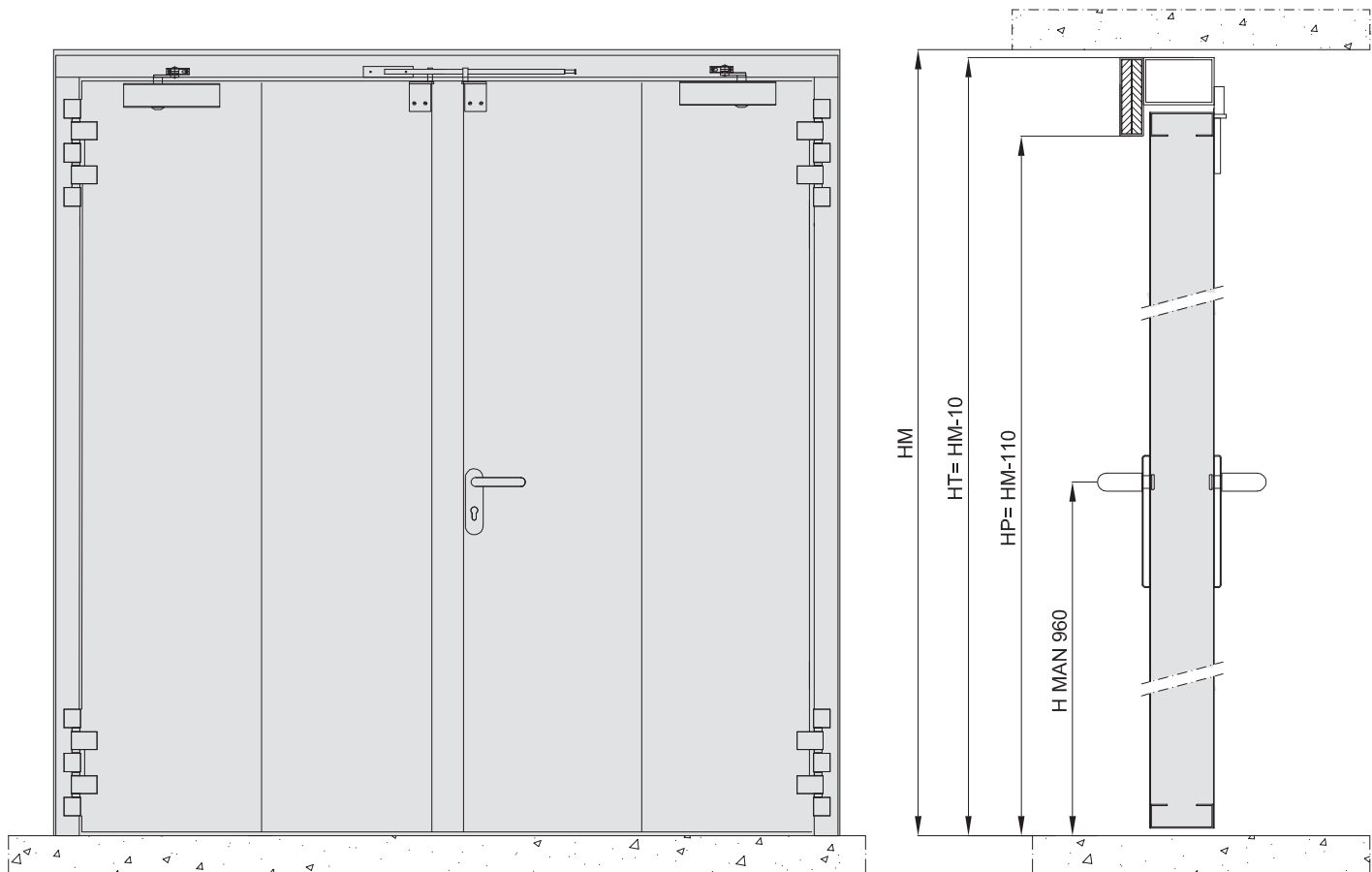


* Panic bar size

model	size	"A" **
Novoguard	79 mm	0 mm
Cisa Touch	75 mm	0 mm
Cisa lever handle	105 mm	105 mm
EPN Touch	80 mm	0 mm
EPN Bar	103 mm	103 mm

** According to Italian Ministerial Decree 03.08-2015, par. G. 1.9.16

MAGNUM REI 120, big-size double leaf door installed in the opening



* Panic bar size

model	size	"A" **
Novoguard	79 mm	0 mm
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Cisa lever handle	105 mm	105 mm
EPN Touch	80 mm	0 mm
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** According to Italian Ministerial Decree 03.08-2015, par. G. 1.9.16

NOTES

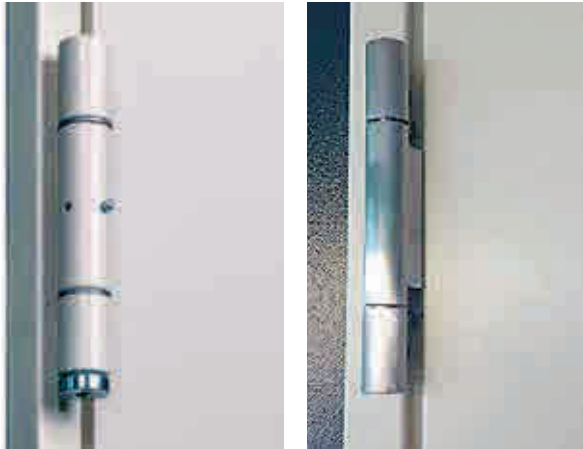
A series of horizontal dotted lines for writing notes.

ACCESSORIES

Closing systems

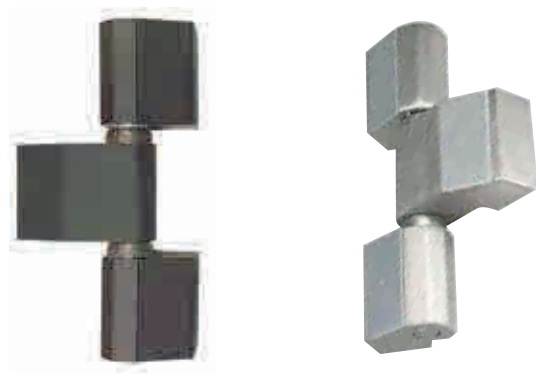
Spring hinge for Elite Premio doors

Pressed steel spring hinge; adjustable, with hidden screws.
Painted as a standard; also available in stainless steel (AISI 304).



Hinges for glazed doors

Three-part hinge, pivoting on ball bearings in three directions; adjustable.
Black as a standard; also available in stainless steel.



Door closer for Novoglass+ and Elite Premio doors

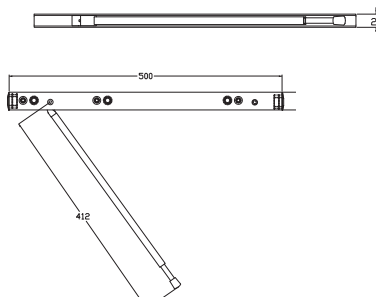
Closes painted steel doors; screwed onto the top beam of the door frame.
Black as a standard.
Other colours available on request.



Closed arm view

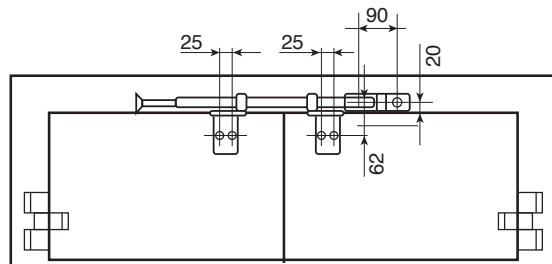


Open arm view



Door closers for Stahlglass, Alusthal, Magnum and Scudo doors

Coordinates door closure.
Closer arm screwed onto the frame; two supports on the doors.
Grey on request.



Door closer with standard arm

Pinion and rack type, with adjustable closing force, EN 3/4 size, adjustable closing speed with two independent valves and adjustable end stroke.
With visible standard arm.
Black, silver or stainless steel on request.



Door closer with parallel sliding arm

Pinion and rack type, with adjustable closing force, EN 3/4 size, adjustable closing speed with two independent valves and adjustable end stroke.
Works on a horizontal external slide track.
Black or silver on request.

Max door opening: 180°.



Double door closer set with built-in closing selector

Hydraulic door closer driven by a rack spring, installed on the movable panel to gently guide the doors to their closed positions. Equipped with a dual closing speed adjustment device: A) with an opening angle of more than 10°; B) with an opening angle of less than 10° (approx.).

Works with an arm moving on a horizontal external slide placed on the fixed frame of the door. Coordinates of the closing sequence with a sequencer device placed inside the slide.

Covered with silver or black casings.

Max door opening: 180°.



Accessories: knobs and handles

Handles for Elite and Novoglass doors

PVC handle

"U" shaped for accidental grips with steel core and cover plate with cylinder hole. Includes cylinder with 3 keys.

Black as a standard.

Other colours available on request.



	Colour	Handle
standard		Yes
on request		Yes
		Yes
		Yes
		Yes
		Stainless steel

Handles for Stahlglass and Alustahl doors

PVC handle

"U" shaped for accidental grips, with rosette with cylinder hole. Includes cylinder with 3 keys.

Black as a standard; stainless steel on request.



Fixed knob

Includes cover plate with or without cylinder hole.



Black resin

Stainless steel

Stainless steel handle

Includes cover plate with or without cylinder hole.



Stainless steel handle

"U" shaped for accidental grips, with rosette with cylinder hole. Includes cylinder with 3 keys.



Locks for Elite Premio and Novoglass doors

Also available with stainless steel front plate.



Yale lock

Anti-panic lock

European cylinder

Yale cylinder with three keys.



Accessories: Panic Devices

Novoguard panic bar

EN1125 certified. Works with a lock installed inside the door panel, reversible. Ball-bearing lever operation requiring minimum effort. Aluminium bar of different lengths; length can be easily reduced during installation. Black or grey drive mechanisms.



Novoguard aluminium bar, size mm 79.



Novoguard brushed stainless steel bar, size 79 mm

Novopush panic bar

EN1125 certified. Works with a lock installed inside the door panel, reversible. Ball-bearing bar operation. Compact black painted or stainless steel bar of different lengths; length can be easily reduced during installation. Black or grey covers. **Cannot be installed on Magnum and Glass doors**




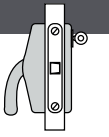

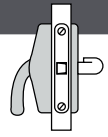
Stainless steel effect Novopush bar, size mm 73.



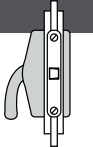
Novopush black bar with photoluminescent strip, size mm 73.

Possible solutions:

First leaf

MA No operation from the outside 	MAC With external key 	MACM With handle and handle locking system with key on the external side 	MAM With external side handle 
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Second leaf

M For secondary panel with high-low latch 

EPN stainless steel panic bar

EN1125 certified. Works with a lock installed inside the door panel, reversible. Fully made of brushed stainless steel. Stainless steel compact or lever bar, stainless steel mechanisms. Pair with black or stainless steel handle on the pull side.



Stainless steel EPN-Bar,
size mm 103.



Stainless steel EPN-Touch,
size mm 80.

CISA panic bar

EN1125 certified. Works with a lock using mechanisms inside the door panels. Reversible. Door can also be opened from the smaller door panel. Door with lever bar or compact bar of various lengths; length is adjustable during installation. Various colour combinations available on request.



Cisa lever handle,
size mm 100.



Cisa Touch bar,
size mm 73.

Electrical Accessories: Access Control

118F electric strike

Fail Secure type electric door opener. In the event of a power failure, the door can only be opened with a key or a panic device. **Only for single doors.**



Specifications:
Power Supply: 12/24 V.
Absorption: 280/560 mA.

Fail secure: current passing through the device opens the electric strike (standard solution).

Fail safe: always powered; power failure opens the electric strike.

All Fail Secure electric strikes are now compatible with either 12V or 24V and work with either direct and/or alternating current (DC and AC).

Fail Safe strikes are continually powered and need a defined voltage (12V or 24V) and DC only. To be specified when ordering.

Electrical contacts

They are installed on doors with access control to reduce the risk of burglary.



Magnetic sensor

Flush mounted, wire connection.

Specifications:
Operation: NC output reed switch with a magnet nearby.
Operating temperature: -25°C +70°C
Max voltage: 200 Vcc.
Max current: 1 A.

Max power: 10W.



High-security magnetic contact

Flush mounted, secured with screws, wire connection. Triple-tuned magnetic circuits.

Specifications:
Operation: NC output reed switches with a magnet nearby.
Operating temperature: -10°C +40°C
Max current: 300 mA.
Max power: 3W.

Electric handle

For remote door opening control.

Reversible, neutral when there is a power failure, the door opens with a key (the key activates the handle; by removing the key, the handle is deactivated). With permanent release, the handle opens only while there is an electric impulse.

Led integrated into the handle body to display the door status.

Nickel plated steel box, painted aluminium casing (black or grey).



Specifications:
Rated voltage: 12/24 V
Operating voltage:
min. 5 V, max 28 V.
Absorption: 800 mA.

Electric lock for Elite Premio and Novoglass doors only

Reversible. The handle is free (in neutral) when there is a power failure (Fail Secure). In the presence of power supply, the door can be opened with the handle. With permanent release, the handle opens only while there is an electric impulse. Also available with Fail Safe operation on request (handle turns freely when there is power).

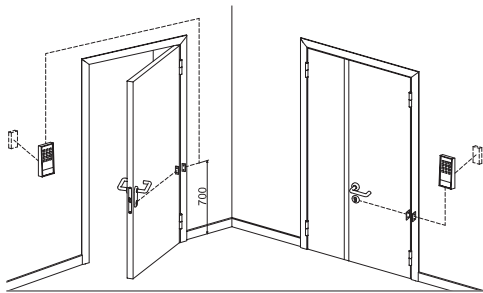


Specifications:
Power Supply: 12 V DC.
Absorption: 800 mA.

Door arrangement diagram with electric lock

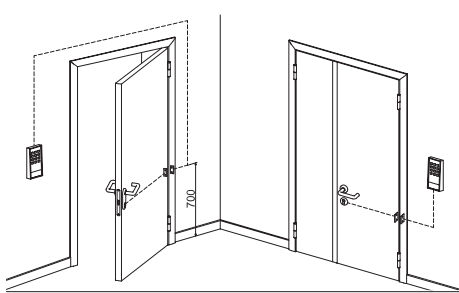
Yale electric lock

- Button on the push side.
- Keycard lock on the pull side.
- Power supply 12Vcc.



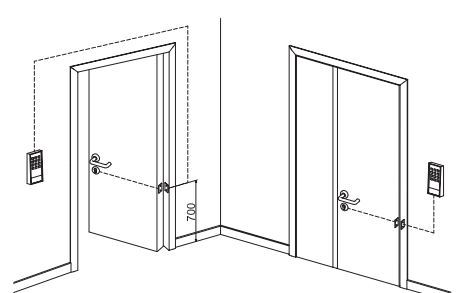
Electric lock with panic device on the push side

- Panic bar or handle on the push side.
- Keycard lock, pull side.
- Power supply 12Vcc.



Electric lock with panic device on the pull side

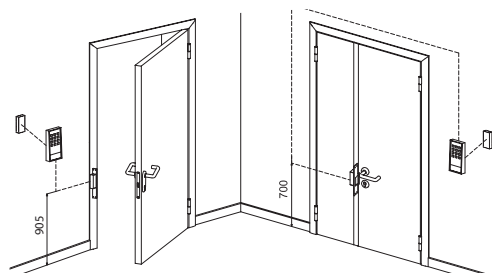
- Keycard lock on the push side.
- Handle on the pull side.
- Power supply 12Vcc.



Door arrangement diagram in case of electric strike

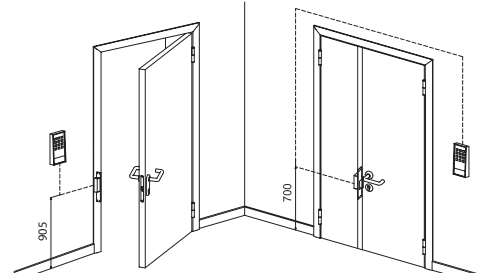
- Button on the push side.
- Keycard lock on the pull side.
- Power Supply: 12Vac/dc.

Metal doors only



- Panic bar or handle on the push side.
- Keycard lock on the pull side.
- Power Supply: 12Vac/dc.

Metal doors only



N.B.: The panic bar must be installed on the larger door panel, and not on the smaller one.

Electromagnetic retainer

Door retainer device with built-in release button;
normally equipped with a pivoting plate for installation.
Designed to keep doors open.

Specifications:
Strength: 50 Kg
Power Supply: 24 V
Absorption: 60 mA



Wall-mounted electromagnet, consisting of a black plastic base and a white cover.

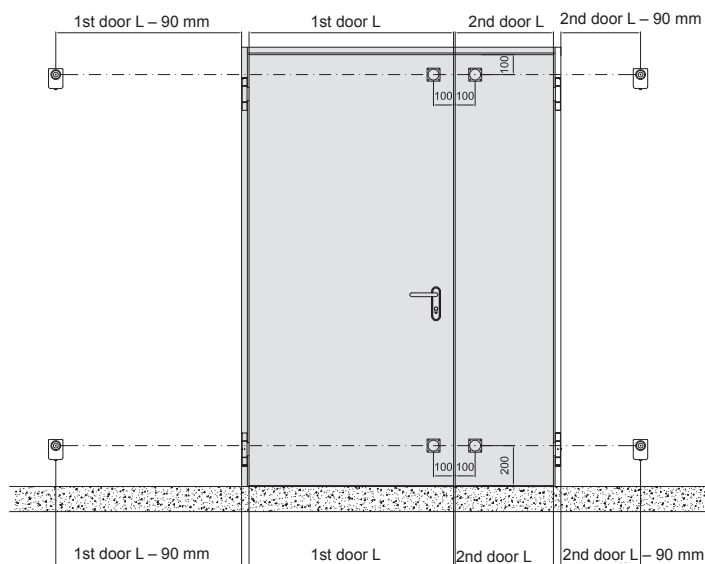
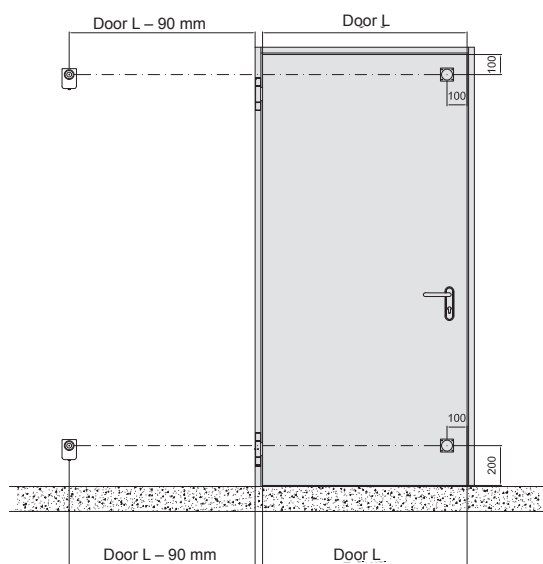


Floor/ceiling electromagnet consisting of black plastic tube with adjustable height.

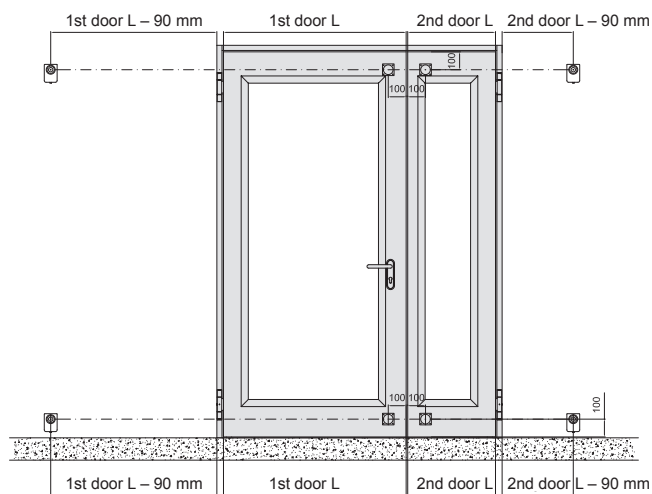


Pivoting plate.

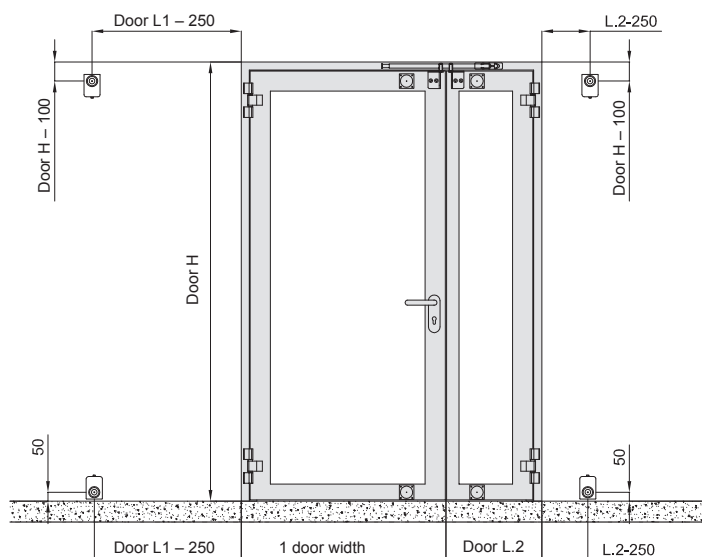
Indicative diagram for electromagnetic retainer installation on Elite Premio door



Indicative diagram for electromagnetic retainer installation on Novoglass door



Indicative diagram for electromagnetic retainer installation on Stahiglass door



Electromagnetic safety lock

A door sealing device designed to keep security doors closed. Suitable for access control systems, the electromagnet is unlocked in emergency situations so that the door can be opened freely.

Specifications:

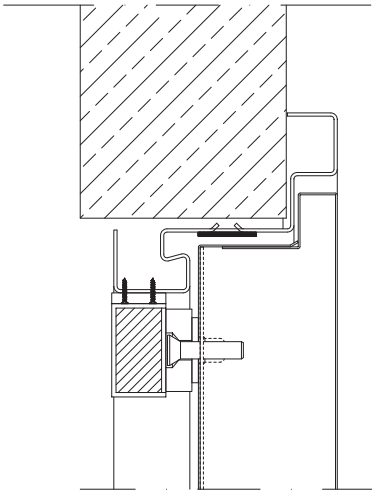
Strength: 300 Kg

Power Supply: 12/24 V

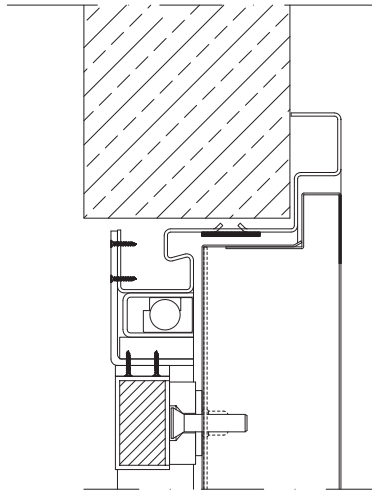
Absorption: 290/590 mA



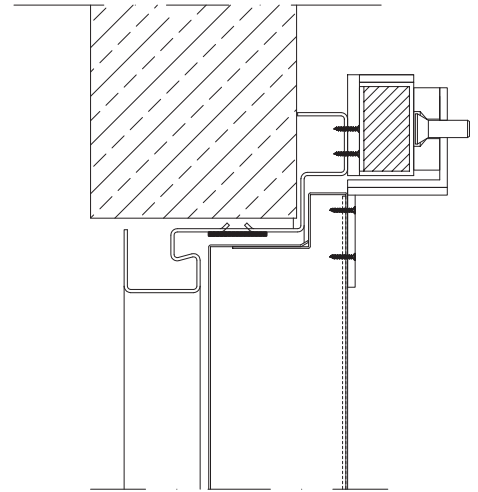
Installation on the push side
- single door -



Installation on the push side
- double door -



Installation on the pull side



NOVOSLIDE REI 120: accessories

Electromagnetic retainer

Door retainer device, normally equipped with a pivoting plate for installation. Designed to keep doors open.

Emergency release button available on request.

Specifications:

Strength: 50 kg.

Power Supply: 24 V.

Absorption: 60 mA.



Electromagnet



Fixed plate



Release button

Standard equipment

Fire-rated door sliding doors are equipped with a closing speed control system.

Equipped as standard with continuous magnetic induction regulator and end-of-travel rack damper.

A hydraulic damper is installed in special cases (e.g. bypass sliding doors).



Rack damper

NB: It adjusts the closing stroke, not the slowing motion



Continuous magnetic induction
regulator or stroke brake

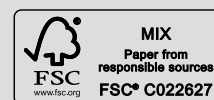


Hydraulic oil



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Edition 05.2018



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