

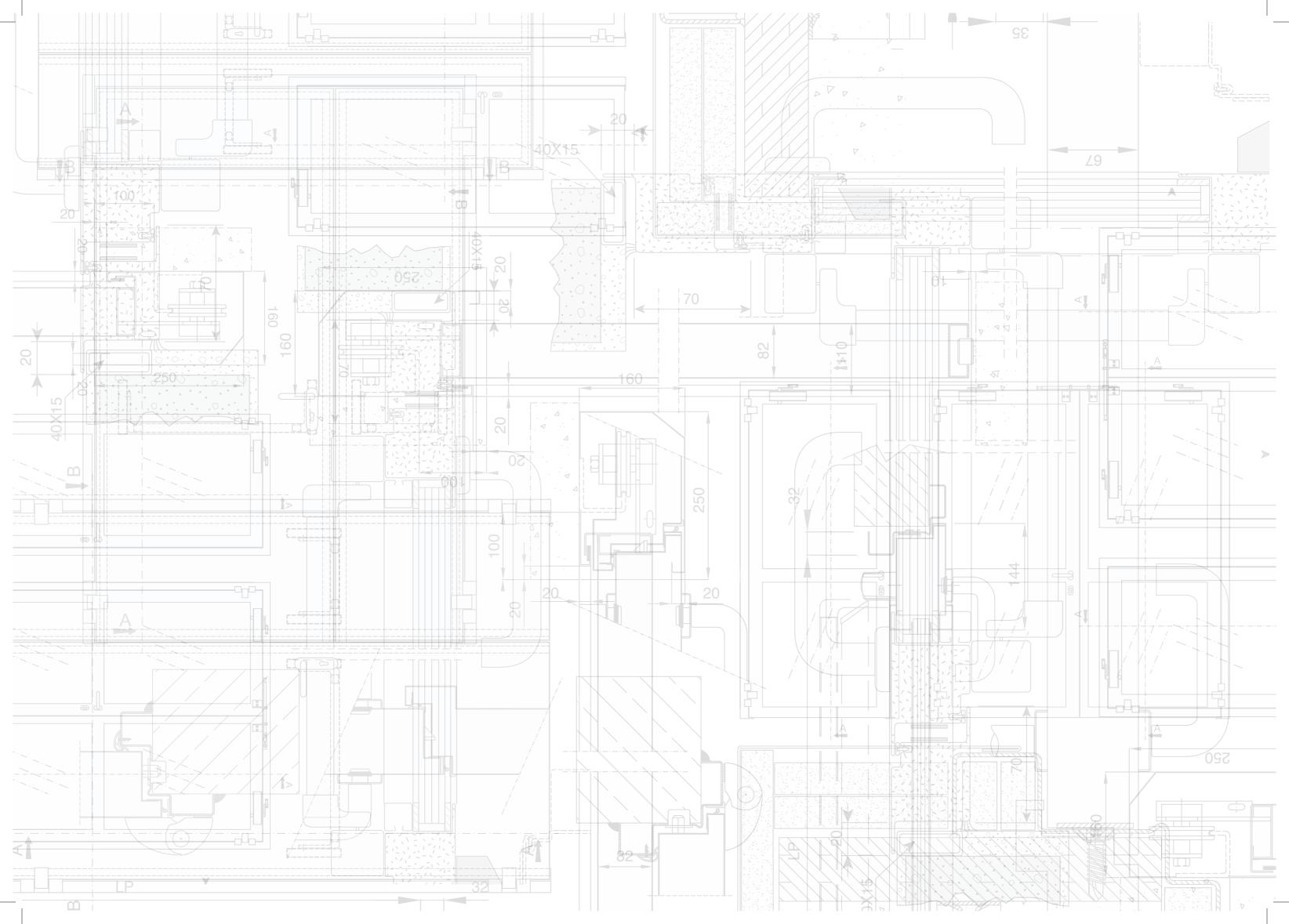
REV.02.2010.EN

35012 Camposampiero Padova (Italy) Via A. Volta, 1

Tel. +39 049 9315111 Fax +39 049 9301877

export@novoferm.it www.novoferm.it Door Glazed Sliding

FIRE PROOF TECHNICAL CATALOGUE



64

#### Sliding doors Magnum door Vertical sliding door

#### Elite blind doors

"Elite" REI 60-90-120 - metal	
One leaf door	2
Two leaves door	4
Door with glazing	6
"Elite" door with laminate	
One leaf door	8
Two leaves door	9
"Elite" - AA acoustic door	10
"Scudo" with wood covering	
One leaf door	12
Two leaves door	14
Standard equipment	16
Accessories	18
Mounting system	20
« H » system	23

Glazed doors

"StahlGlass" REI 30-60 e RE 120	
One leaf glazed door	24
Two leaves glazed door	26
Complex glazed doors	28
Fixed glazed door	30
"NovoGlass" REI 30-60-120	
One leaf glazed door	32
Two leaves glazed door	34
Complex glazed doors	36
"AluStahl" REI 120	
One leaf glazed door	38
Two leaves glazed door	40
Complex glazed doors	42
"Fixglass" Rei 90 - Rei 120	44
Standard equipment	46

One leaf sliding door	
one rear enamy acc.	48
Two leaves sliding door	50
Two leaves one side sliding door	52
Pass Door	54
Working Scheme	56
Accessories	57
"Magnum" REI 120	
Mounting behind the opening	58
Mounting in the opening	60
"Vertical Sliding Door" REI 120	62

#### **GLOSSARY**

LM / LFM	Wall size width or inside pre frame	LI	Max frame width	LM X HM
HP	Height passage	LNP	Light net passage	LT X HT
нт	External frame height	LF	Structural wall width	LN X HN
LP	Width passage	HF	Structural wall height	LP X HP
LT	External frame width	HNV	Net height glass	VICENOSCOS CARRY
нм	Wall height	LNV	Net light glass	
HI	Max frame height	STREET,	000 000 000 000 000 000 000 000 000 00	

Accessories

LT X HT | EXTERNAL FRAME SIZE
IN X HN | NOMINAL SIZE
LP X HP | LIGHT PASSAGE SIZE

STRUCTURAL WALL SIZE OR ORDER SIZE

Orders Form

47

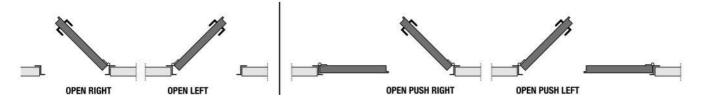
#### novoferm

#### **OPENING SYSTEM:**

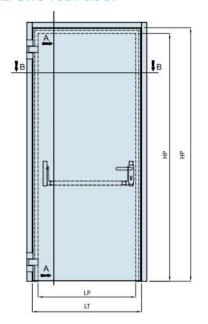
The opening side for Sliding door is determined from the guide side (inside view).

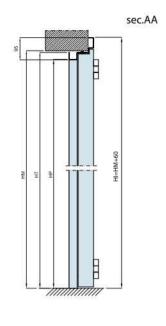


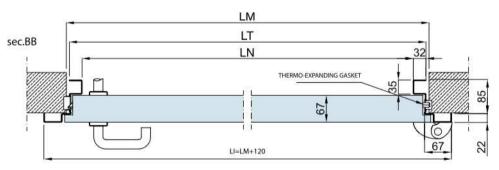
The opening side for leaf door is considered by pushing the door.

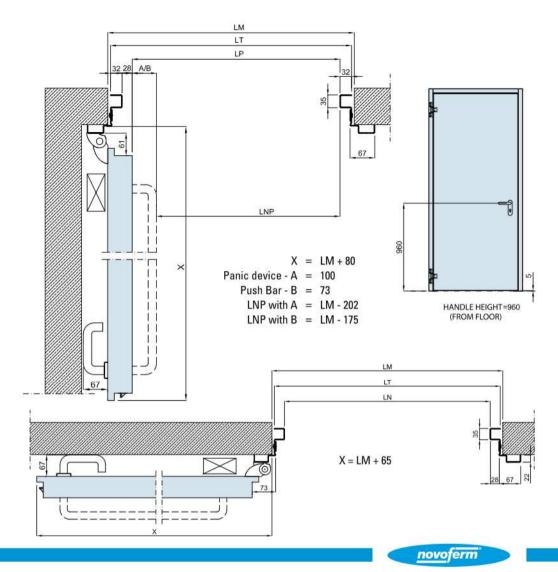


#### **ELITE** One leaf door









#### Fire proof door Elite, Metal, REI 60, REI 120 constituted by:

- Frame in galvanized steel, thickness mm. 15/10 "Z" profiled, conformed to allow coplanarity of leaf-frame, with room for insertion of intumescent strip, prearranged with steel strips for mounting on wall angles or holes for fixing on concrete. The connection between frame and corners occur through an unique system of joint, that first of all ensure excellent rigidity, than it avoid usual corrosion of welding.
- Leaf composed by double layer galvanized steel mm. 9/ 10, pressformed, welded, with high density insulating package inside, protected in lock zone with two layers of calcium sulphite based material.
- Nr. 2 hinges each leaf, made in sinterized steel, with sliding on two steel roller bearings, oversized for intensive usage in condition of heavy loads. Their construction allows the adjusting of the leaf position in every moment by means of special screws, normally hidden by plastic cups.

- · Fireproof lock type "flush botton" on secondary leaf
- Black arm selector closing (metal door excluded).
- Fireproof lock type "Patent" with cylinder and three keys
- PVC black handle with inside steel armour, "U" shaped for accidental grips.
- Thermo-expanding gasket around perimeter of the door (only for REI doors, Metal excluded).
- . Superficial finishing with powder colour RAL 7035 (brushed).
- The particular construction of the door permits a perfect alignment between leaf and frame, furthermore 19 mm. thick rebated minimizes accident risks in case of contact with person.
- Standard handle height is mm. 950 from the floor, different height on request.
- Certification range covers all ordinary type of fixing by mounting the door in case of metal pre-frame carton gypsun and dowels on

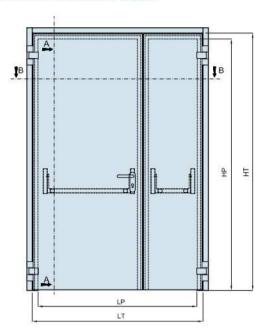
#### concrete

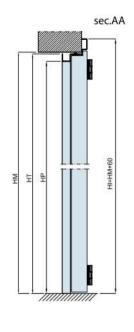
- Unless different agreements, door is equipped with following accessories: elements for attachment, fixing and filling for frame compartment (mechanical dowels + strips, clamps, self-tapping screws + strips, screws + strips for plasterboard kit).
- (\*) AS SPECIFIED IN THE ITALIAN LAW DLT 19/09/04 626 AND REVISIONS. STANDARD DOORS ARE NOT REVERSIBLE. WE NEED THE OPENING SIDE. \* PS: SIZES ARE EXPRESSED IN MM.

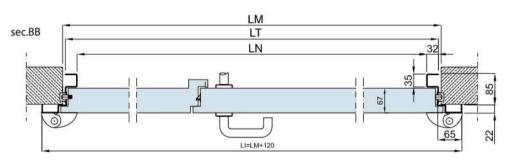
#### STANDARD DOOR H= 2050

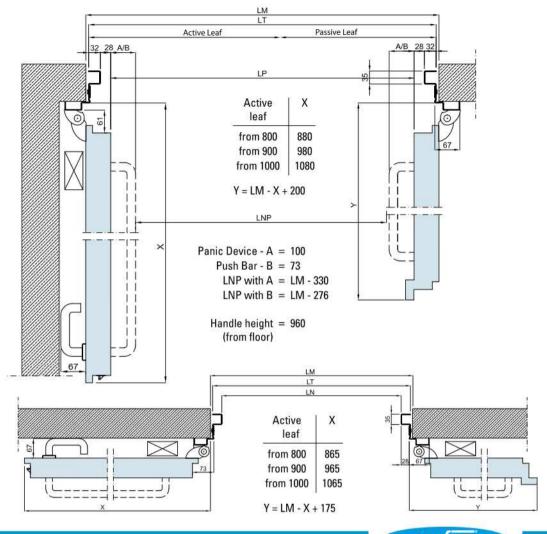
STRUCTURAL WALL SIZE ORDER SIZE (LMxHM)	FRAME (LT x HT)	NOMINAL SIZE (LN x HN)	LIGHT PASSAGE CLEAR WIDHT (LP x HP) *
800 x 2050	790 x 2045	726 x 2013	698 x 2013
900 x 2050	890 x 2045	826 x 2013	798 x 2013
1000 x 2050	990 x 2045	926 x 2013	898 x 2013
1250 x 2050	1240 x 2045	1176 x 2013	1148 x 2013
1350 x 2050	1340 x 2045	1276 x 2013	1248 x 2013
STANDARD DOOR H	= 2150		
800 x 2150	790 x 2145	726 x 2113	698 x 2113
900 x 2150	890 x 2145	826 x 2113	798 x 2113
1000 x 2150	990 x 2145	926 x 2113	898 x 2113
1250 x 2150	1240 x 2145	1176 x 2113	1148 x 2113
1350 x 2150	1340 x 2145	1276 x 2113	1248 x 2113

#### **ELITE** Two leaves door









#### Fire proof door Elite, Metal, REI 60, REI 90, REI 120 constituted by:

- Frame in galvanized steel, thickness mm. 15/10 "Z" profiled, conformed to allow coplanarity of leaf-frame, with room for insertion of intumescent strip, prearranged with steel strips for mounting on wall angles or holes for fixing on concrete.
- The connection between frame and corners occur through an unique system of joint, that first of all ensure excellent rigidity, than it avoid usual corrosion of welding.
- Nr. 2 hinges each leaf, made in sinterized steel, with sliding on two steel roller bearings, oversized for intensive usage in condition of heavy loads. Their construction allows the adjusting of the leaf position in every moment by means of special screws, normally hidden by plastic cups.
- Self closing mechanism by means of springs contained in the hinges, adjustable and invisible outside.
- · Fixed rostrum placed between the hinges.
- . Fireproof lock type "Patent" with cylinder and three keys.

- · Fireproff lock type "flush bolt" on secondary leaf.
- Black arm closing selector (metal door excluded).
- Braccetto selettore di chiusura colore nero (escluso su porte Metal Elite).
- PVC black handle with inside steel armour, "U" shaped for accidental grips
- Thermo-expanding gasket around perimeter of the door (only for REI doors, Metal excluded).
- . Superficial finishing with powder colour RAL 7035 (brushed).
- The particular construction of the door permits a perfect alignment between leaf and frame, furthermore 19 mm. thick rebated minimizes accident risks in case of contact with person. Standard handle height is mm. 950 from the floor, different height on request
- Certification range covers all ordinary type of fixing: by mounting the door in case of metal pre-frame, carton gypsum and dowels on concrete.
- · Unless different agreements, door is equipped with following

accessories: elements for attachment, fixing and filling for frame compartment (mechanical dowels + strips, clamps, self-tapping screws + strips, screws + strips for plasterboard kit).

\* AS SPECIFIED IN THE ITALIAN LAW DLT 19/09/04 - 626 AND REVISIONS. STANDARD DOORS ARE NOT REVERSIBLE. WE NEED THE OPENING SIDE. \* PS: SIZES ARE EXPRESSED IN MM.

#### <u>novoferm</u>

STRUCTURAL WALL SIZE ORDER SIZE (LMxHM)	FRAME SIZE (LT x HT)	NOMINAL SIZE (LN x HN)	LIGHT PASSAGE SIZE (LP x HP) *
1250 x 2050 (800 + 450)	1240 x 2045	1179 x 2013	1120 x 2013
1350 x 2050 (900 + 450)	1340 x 2045	1276 x 2013	1220 x 2013
1450 x 2050 (1000 + 450)	1440 x 2045	1376 x 2013	1320 x 2013
1600 x 2050 (800 + 800)	1590 x 2045	1526 x 2013	1470 x 2013
1800 x 2050 (1000 + 800)	1790 x 2045	1726 x 2013	1670 x 2013
2000 x 2050 (1000 + 1000)	1990 x 2045	1926 x 2013	1870 x 2013

1250 x 2150 (800 + 450)	1240 x 2145	1179 x 2113	1120 x 2113
1350 x 2150 (900 + 450)	1340 x 2145	1276 x 2113	1220 x 2113
1450 x 2150 (1000 + 450)	1440 x 2145	1376 x 2113	1320 x 2113
1600 x 2150 (800 + 800)	1590 x 2145	1526 x 2113	1470 x 2113
1800 x 2150 (1000 + 800)	1790 x 2145	1726 x 2113	1670 x 2113
2000 x 2150 (1000 + 1000)	1990 x 2145	1926 x 2113	1870 x 2113

#### **ELITE** Door with glazing

window on the leaf.

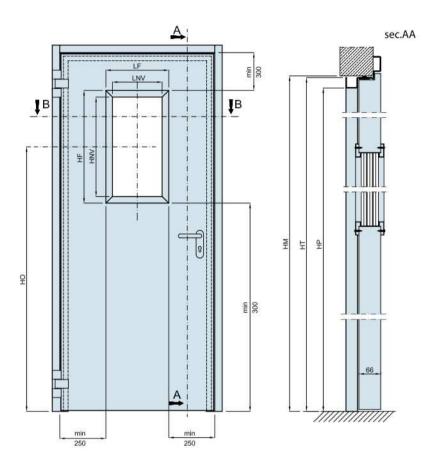
. The glasses are tested to be fire proof, composed by multiple stratum

action of the flame develops an opaque insulating foam.

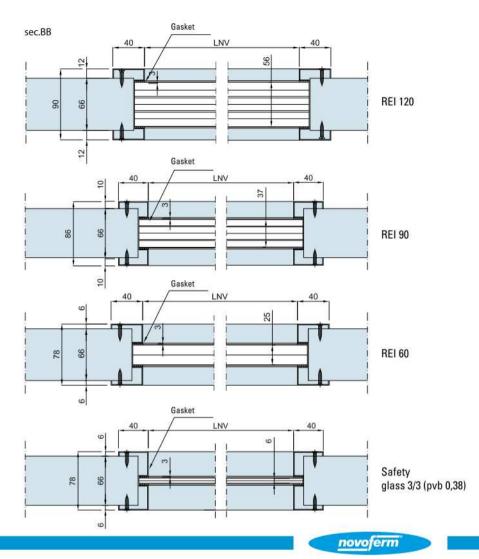
Glasses are fixed by metal profiles clipped on hidden screws, rubber gasket which avoid the growth of the glass at high temperature.

. We provide standard and, on request, special sizes.

of float glass and special transparent gel which, subjected to the



- On request it's possible to mount a rectangular or circular glazing
  - For frequent usage and in case of glass bigger than mm. 300\*400 we recommend the door closer.
  - · We deliver door with glass pre-mounted.
  - Fire glass deteriorates if exposed to direct sunlight or in contact with water.
  - Glass could have micro bubbles, which are not questionable if invisible at more than 3 meters.

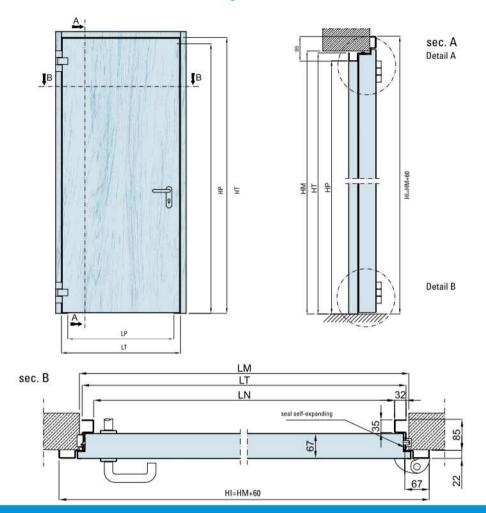


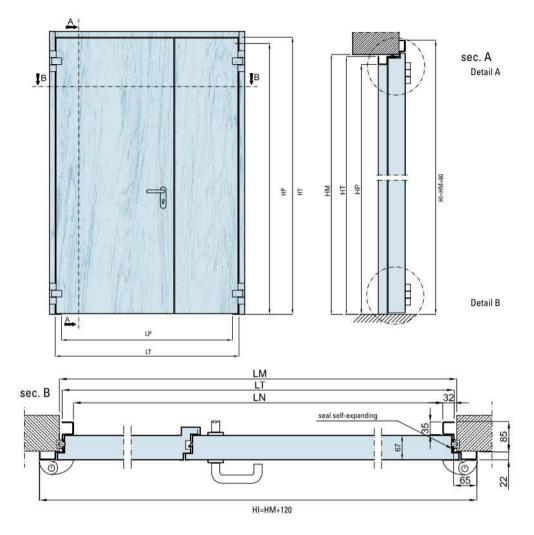
#### STANDARD GLAZING

GLAZING MIDDLE SIZE HEIGHT (HO)	GLAZING SIZE (B nomin. + H nomin.)	NET LIGHT GLAZING SIZE (LNV x HNV)	EXTERNAL PROFILE SIZE (LF x HF)
1600	300 x 400	270 x 370	350 x 450
1400	400 x 600	370 x 570	450 x 700
1600	300 Ø	270 Ø	350 Ø
1500	500 Ø	470 Ø	550 Ø

<sup>•</sup> ATTN:: size are express in mm

#### **ELITE** With laminate covering





#### Blind leaf door with laminate covering, constituted by:

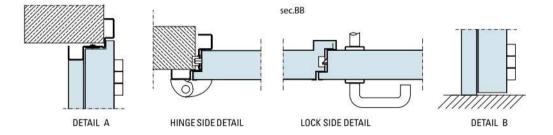
- Frame in galvanized steel, thickness mm. 15/10 "Z" profiled, conformed to allow coplanarity of leaf-frame, with room for insertion of intumescent strip, prearranged with steel strips for mounting on wall angles or holes for fixing on concrete.
- The connection between frame and corners occur through an unique system of joint, that first of all ensure excellent rigidity, than it avoid usual corrosion of welding
- Leaf composed by double layer galvanized steel mm. 9/ 10, pressformed and welded, and laminate covering with finishing as indicated in laminate covering list, finishing perimeter profile.
- Frame and finishing profile with powder colour RAL 8019.
- · High density insulating package inside the leaf.
- Nr. 2 hinges each leaf, made in sinterized steel, with sliding on two steel roller bearings, oversized for intensive usage in condition of heavy loads. Their construction allows the adjusting of the leaf

position in every moment by means of special screws, normally hidden by plastic cups.

- Fixed rostrum placed between the hinges.
- . Fireproof lock type "Patent" with cylinder and three keys.
- Fire proof lock type « Flush bolt » on scondary leaf.
- Black arm closing selector (Metal door excluded).
- PVC black handle with inside steel armour, "U" shaped for accidental grips.

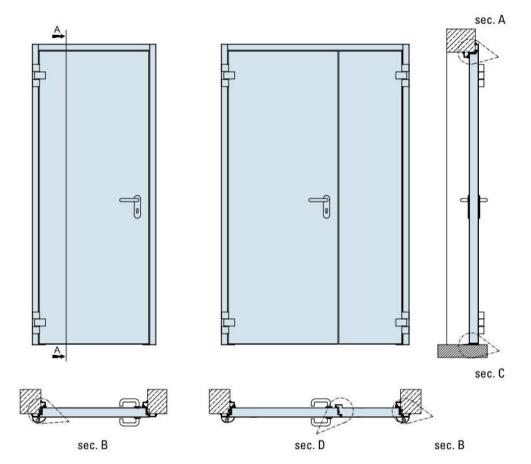
#### NOTE:

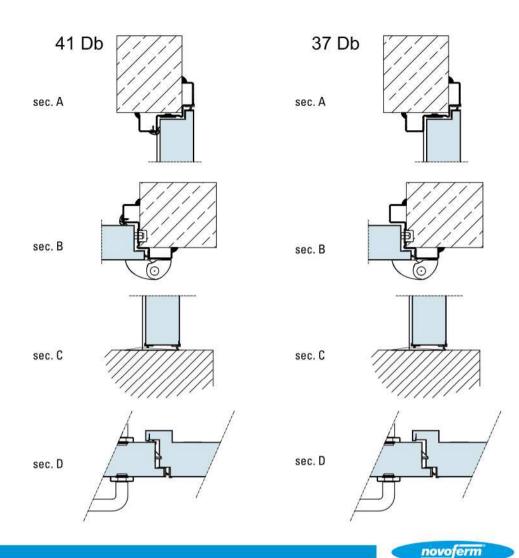
- Consider only special size doors.
- No window glazing inside.
- In accordance to UNI EN 1634, the laminate covering can be applied on REI 60 and REI 120 doors



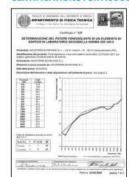
novoferm

#### **ELITE** Acoustic door

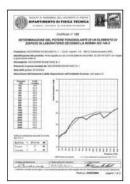




#### CERTIFICATIONS FOR ACOUSTIC DOOR







## STATEMENT OF PERSON TOWNS OF THE STATEMENT OF THE STATEME

#### NOTE:

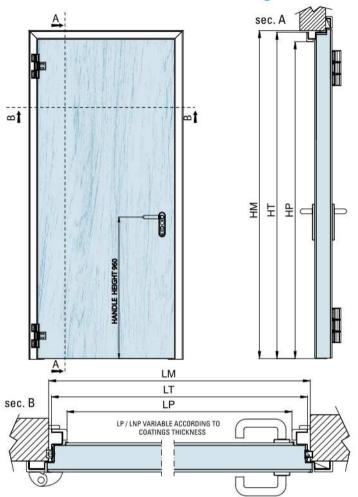
Available only REI 120, special size.

Fixing should be done with careful sealing of any remaining space between masonryand frame. The acoustic measurement must include an overall analysis of the environment in order to value sound transmission. The inclusion of windows is not recommended.

Values of insulation above 41 dB are achievable with "Scudo" door.

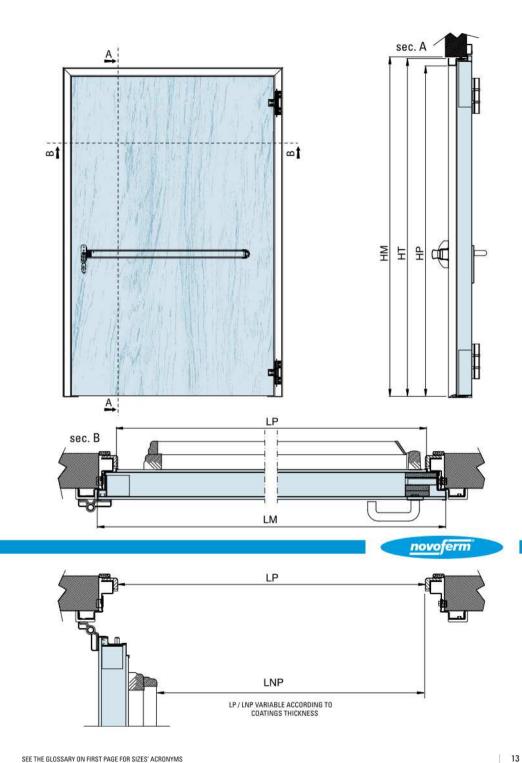
Acoustic door Elite need to install a 100mm. stainless steel floor threshold.

#### SCUDO One leaf door with wood covering REI 120

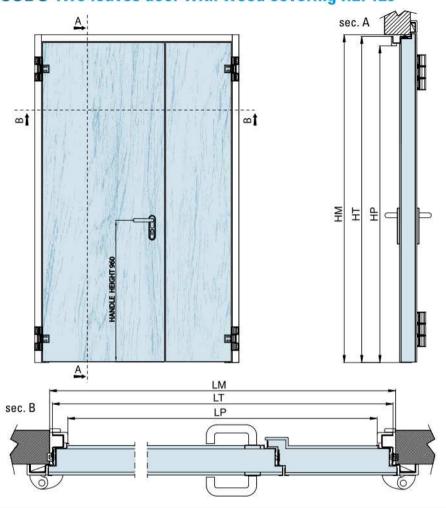


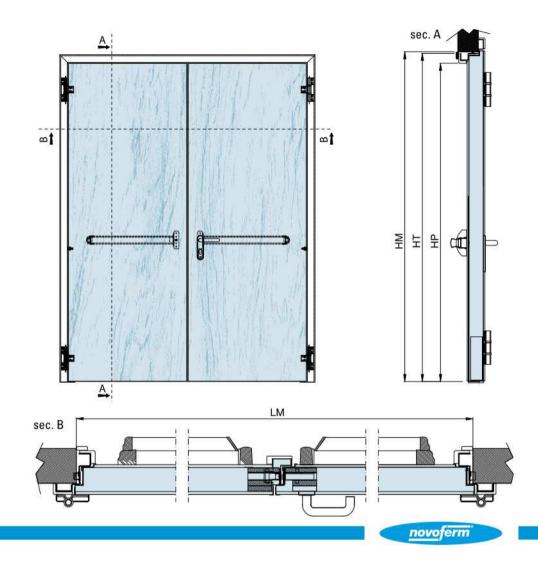
- door (pages 2-3-4-5).
- · Leaf-covering made from solid wood or pantographed compound, in different essences and finishes. Fixed on the border by a bended steel profile painted in RAL 8019 or combinated with the wood covering chosen.
- · Frame and wall covering profile are also coated on request.
- . The coatings are made with materials with aqueous base and protective impregnants. Those products guarantee long endurance and a easy maintenance
- Door realized with the same technical constructive features of Elite
   Standard handle height is mm. 960 from the floor, different height on
  - · Unless different agreements, door is equipped with following accessories: elements for attachment, fixing and filling for frame compartment (mechanical dowels + strips, clamps, self-tapping screws + strips, screws + strips for plasterboard kit).

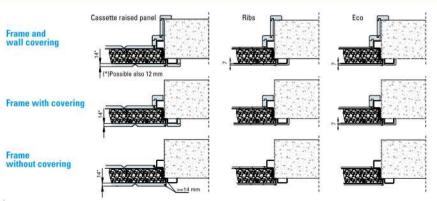
Attn.: It's not possible to install Novopush handle.

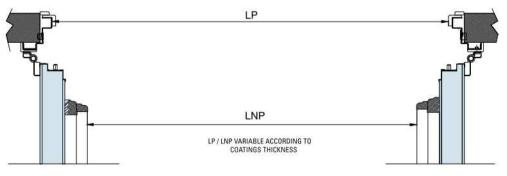


#### **SCUDO** Two leaves door with wood covering REI 120









14 SEE THE GLOSSARY ON FIRST PAGE FOR SIZES' ACRONYMS





#### novoferm







17



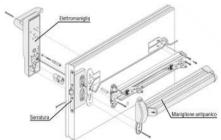
#### **Access Control**

#### The access control is made with three different instruments:

- 1 Electric handle: possible also on later filling
- 2 Electric lock: quite invisible, mounted on single and double leaf door.
- 3 Electric strike: possible only on single leaf door.
- 4 Magnet with high power



Mounting of electric handle in combination to a lock driven from inside by a panic device.





#### Electromagnets

Electromagnet on leaves composed by external box (white colour) and switch bottom on the top of it.

Technical details:

Protection

Voltage 1.5 W Power 690 N (60 kg) Adhesion power Insertion time 100% Working temperature -20 +80C



Moving plate





with switch bottom





IP 40 DIN 40050









#### Door closer

It works through a sping in oil mounted on the mobile leaf. The oil permits a soft closing of the door. The door closer is composed of a double system of speed regulation:

- a) When door opens more than 10°
- b) When door opens less than 10°

Operation by scissor action arm or slide action arm. Covered by a black box.





The NovoGuard panic device certified UNI EN 1125, has the less operating space in the market. On request photoluminescent strip high visibility (Novoferm patent). NovoGuard and Novopush completed the exclusive range of panic devices produced directly by Novoferm Schievano, a global reference point for fire proof closures and sectional doors.

novoferm

19

NovoGuard according to European Norm UNI EN1125, with CE mark, working on inside lock. Reversible, compact encumbrance mm. 79 and equipped by aluminium bar with an evicence green central plastic strip which highlights the way of escape (patented).

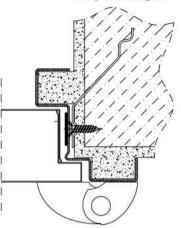
Equipped by a rotation device with lever working on pillow blocks with a minimum working stress (patented). Available in different lenghts, simply to shorten, absence of holes and cracks in any position, resistant to corrosion of salt fog.

Available with different finishing, with cylinder and handle outside.

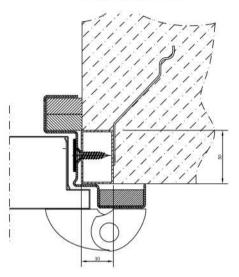
#### **ELITE Mounting system REI 60 - 90 - 120**

#### **ELITE Mounting system REI 60**

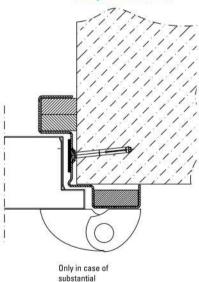
#### 1. By wall angles



#### 3. By counter frame

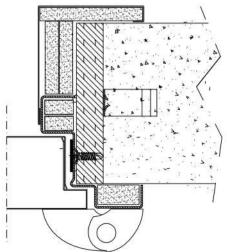


#### 2. By anchor bolts

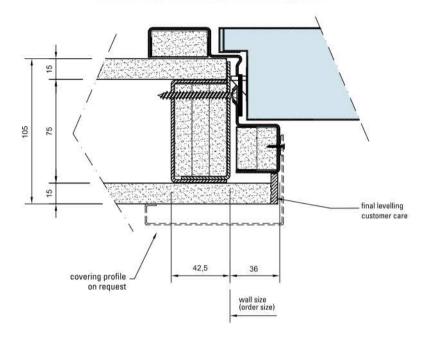


masonry

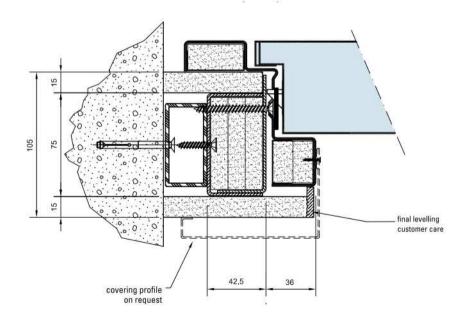
4. By wooden counter frame



#### 5. Door mounted on gypsum wall (type K2)

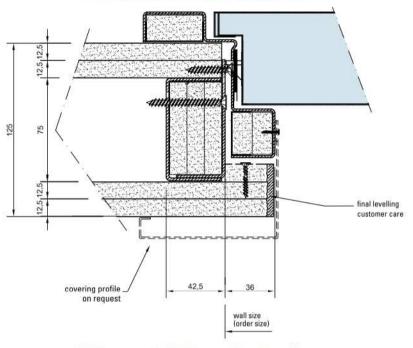


#### 6. Door mounted in the opening (type L)

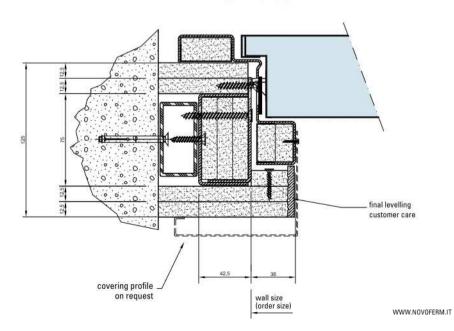


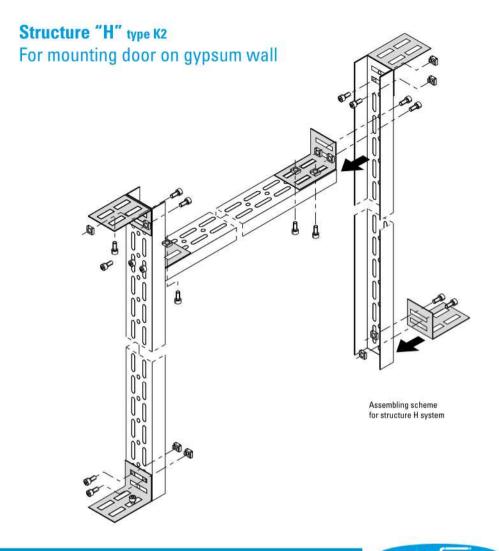
#### **ELITE Mounting system REI 120**

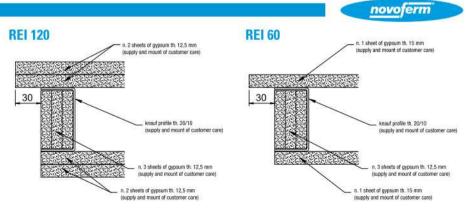
#### 7. Door mounted on gypsum wall (type K2)



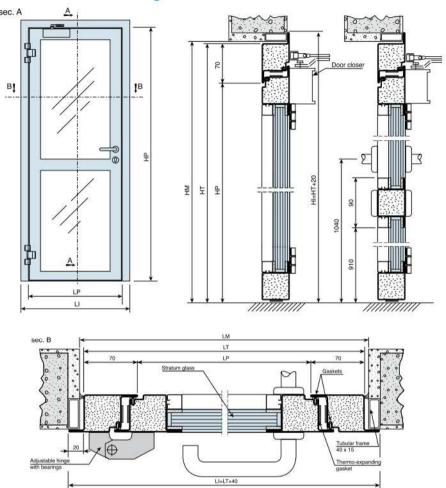
#### 8. Door mounted in the opening (type L)

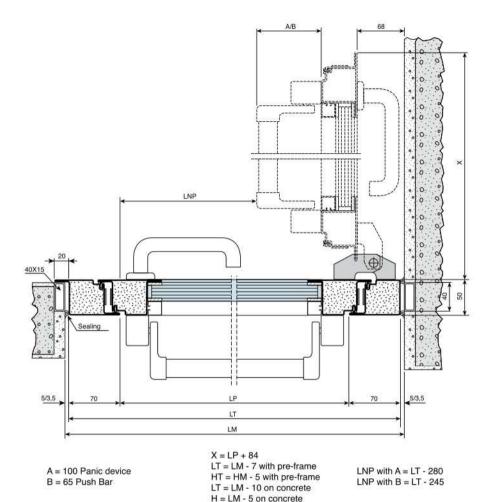






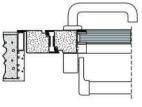
#### STAHLGLASS One leaf glazed door REI 30 - REI 60 - RE 120

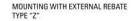


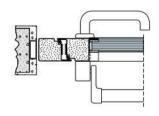


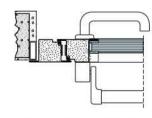
#### Fire proof glazed door one leaf according to norm UNI 9723

- · Frame and leaf frame manufactured in tubular profile 15/10 mm., calibrated, welded on angles, with double spaces to insert rubber gasket. The particular construction of the door permits a perfect alignment between leaf and frame. Tubular profiles are filled with a subliming substance and have a particular drilling on the hidden side in order to limit the thermical conduction. Themo-expanding gasket on the perimeter.
- . Glasses are composed by several stratum of float glass and special clear gel that, in case of fire, becomes blind and gives out refreshing steam. Glasses are fixed by metal profiles clipped on hidden screws.
- . n. 2 hinges each leaf, manufactured in sinterized steel sliding on two steel roller bearings, oversized for intensive usage in condition of heavy loads. Their construction allows the adjusting of the leaf position in every moment by means of special screws, normally hidden by plastic cups.
- Black handle with inside steel armour.
- Door closer colur black.
- Lock on the active leaf complete of cylinder with three keys
- · Painting in RAL colours (brushed) to choose from a list of available colours. On request with aluminium covering.
- Installation possible on tubular preframe already installed on customer care, or by dowels.
- Approx. Weight REI 30 = 40 kg/m<sup>2</sup>, REI 60 = 60 kg/m<sup>2</sup> RE 120 = 12,50 kg/m<sup>2</sup>.









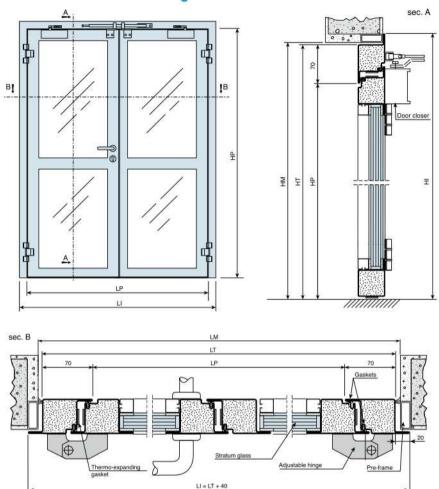
novoferm

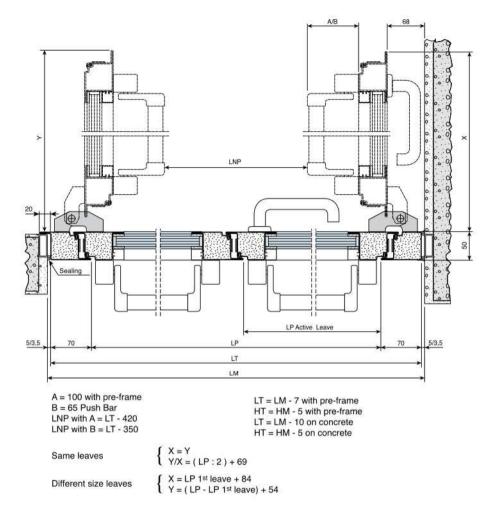
MOUNTING WITH INTERNAL REBATE TYPE "T"

MOUNTING WITH BLOCK FRAME

24

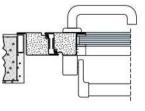
#### STAHLGLASS Two leaves glazed door REI 30 - REI 60 - RE 120



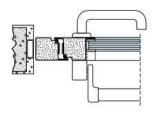


#### Fire proof glazed door two leaves according to norm UNI 9723

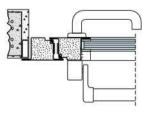
- Frame and leaf frame manufactured in tubular profile 15/10 mm., n. 2 hinges each leaf, manufactured in sinterized steel sliding on calibrated, welded on angles, with double spaces to insert rubber gasket. The particular construction of the door permits a perfect alignment between leaf and frame. Tubular profiles are filled with a subliming substance and have a particular drilling on the hidden side in order to limit the thermical conduction. Themo-expanding gasket on
- . Glasses are composed by several stratum of float glass and special clear gel that, in case of fire, becomes blind and gives out refreshing steam. Glasses are fixed by metal profiles clipped on hidden screws.
- two steel roller bearings, oversized for intensive usage in condition of heavy loads. Their construction allows the adjusting of the leaf position in every moment by means of special screws, normally hidden by plastic cups.
- Black handle with inside steel armour.
- Door closer colur black.
- Lock on the active leaf complete of cylinder with three keys.
- · Painting in RAL colours (brushed) to choose from a list of available colours. On request with aluminium covering.
- Installation possible on tubular preframe already installed on customer care, or by dowels.
- Approx. Weight REI 30 = 40 kg/m² REI 60 = 60 kg/m<sup>2</sup>, RE 120 = 12,50 kg/m<sup>2</sup>







MOUNTING WITH BLOCK FRAME

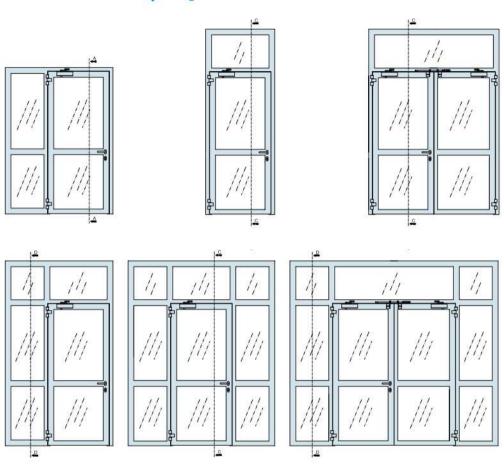


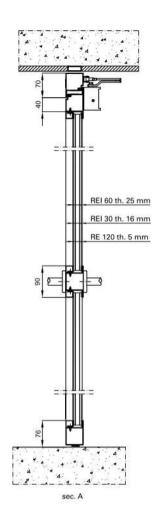
novoferm

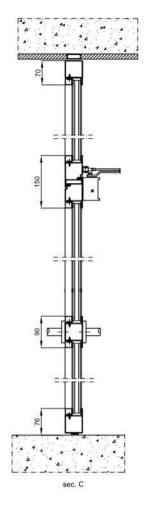
MOUNTING WITH INTERNAL REBATE TYPE "T"

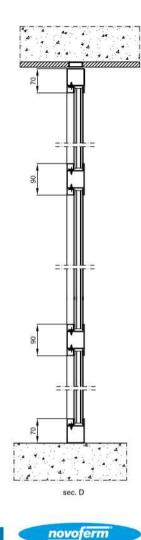
27

#### STAHLGLASS Complex glazed door REI 30 - REI 60 - RE 120

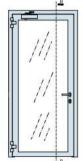


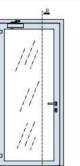


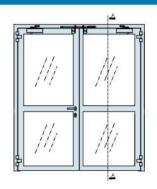


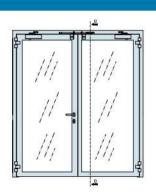




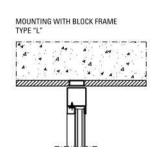








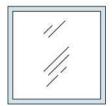




MOUNTING WITH EXTERNAL REBATE TYPE "Z"

#### **STAHLGLASS** Fixed glazed partition REI 60 - RE 120

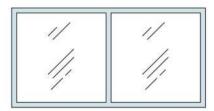
MAX SIZE FOR EACH GLASS MM. 2100 X 1100.
IN CASE OF BIGGER SIZE, THE FIXED PARTITION MUST BE DIVIDED.



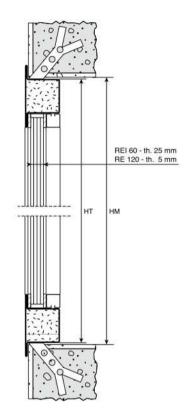
FIXED PARTITION ONE GLASS

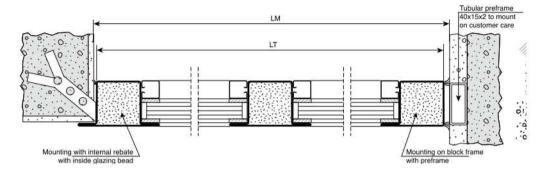


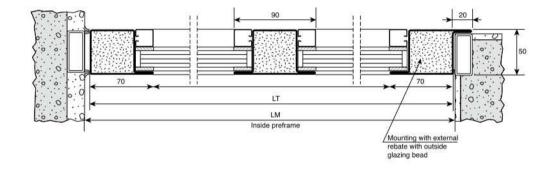
FIXED PARTITION ARC SHAPE



**FIXED PARTITION TWO GLASSES** 







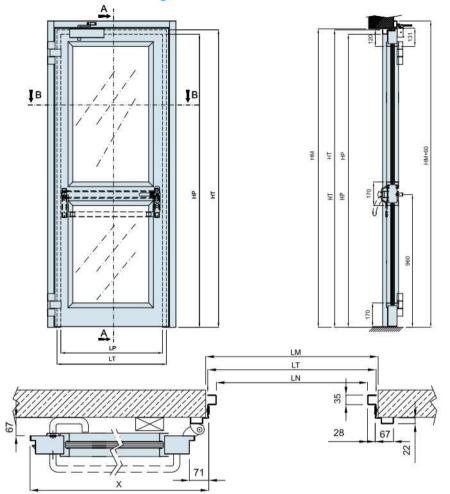
novoferm

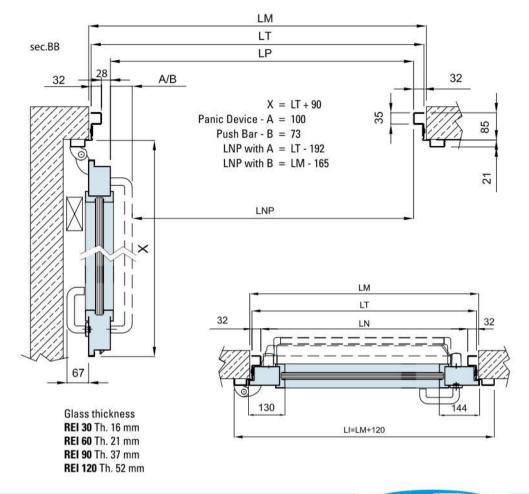
For aesthetical and practical reasons, the fire proof division of particular areas need to be fire proof glazed partition, not only to assure fire, but also to concur the transmission of light.

In these cases the glazed partitions are usually employed: normally they are installed on spaces scale, footbridges of observation in units to high fire risk, offices with sight on working units, etc.

- Frame and leaf frame manufactured in tubular profile 15/10 mm. calibrated and electro-welded steel. The profiles are filled with a special sublimating material and they are characterized from a special processing from the side of the depth in order to avoid the thermic conduction.
- Glasses are composed by several stratum of float glass and special clear gel that, in case of fire, becomes blind and gives out refreshing steam. Glasses are fixed by metal profiles, equipped with special gaskets which permit the swelling of the glass at high temperature.
- Installation possible by wall angles, on tubular preframe already installed on customer care, or by dowels.
- Painting in RAL colours (brushed) to choose from a list of available colours. On request with aluminium covering.
- Installation possible by wall angles, on tubular preframe already installed on customer care, or by dowels.

#### NOVOGLASS One leaf glazed door REI 30 - REI 60 - REI 90 - REI 120





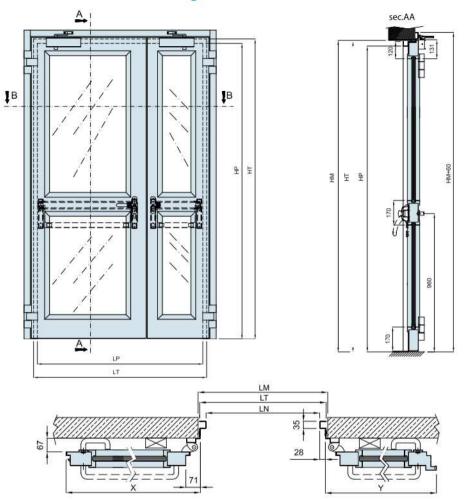
novoferm

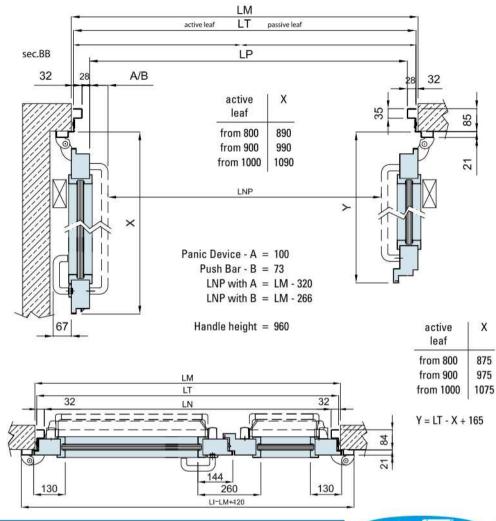
#### NOVOGLASS Fire resistant glazed door according to Italian rule UNI 9723.

- Perimeter frame in "Z" shaped galvanised steel profile th. mm. 15/10,
   Nr. 2 hinges each leaf, made in sinterized steel, with sliding on conformed to give complanarity between leaf and frame. It has spaces for the insertion of thermal-expanding gasket. Holes for wall fixing hidden after the assembly at site.
- . Leaf made by one perimeter structure in steel, with supporting section, realised by double galvanised steel sheet bended, boxed, welded, with inner inorganic insulating package. Leaf profile has a special working on the thickness from the side of glasses (invisible after the assembly at sitek) in order to limit the thermal conduction . Thermo-expanding gasket, rostrum between the two hinges between the two faces.
- . Stratified glasses, composed by different stratum of glass sheets . Painting in RAL colours (brushed) to choose from a list of available interposed with silicate-based gel that, normally clear, in fire becomes no screws on sight
- two steel roller bearings, oversized for intensive usage in condition of heavy loads. Their construction allows the adjusting of the leaf position in every moment by means of special screws, normally hidden by plastic cups.
- Black handle with inside steel armour
- Door closer colur black
- Lock on the active leaf complete of cylinder with three keys
- · Preframe on request
  - colours
- opaque and emits steam. Glasses are fixed by sturdy stoppers, with . Painting in RAL colours (brushed) to choose from a list of available colours.

The particular construction of the door permits a perfect alignment between leaf and frame, furthermore 19 mm. thick rebated minimizes accident risks in case of contact with person.

#### NOVOGLASS Two leaves glazed door REI 30 - REI 60 - REI 90 - REI 120





novoferm

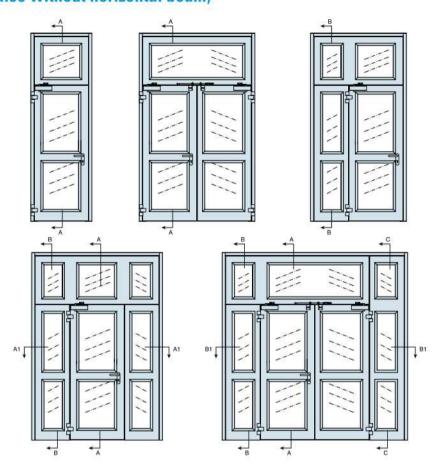
#### NOVOGLASS Fire resistant glazed door according to Italian rule UNI 9723

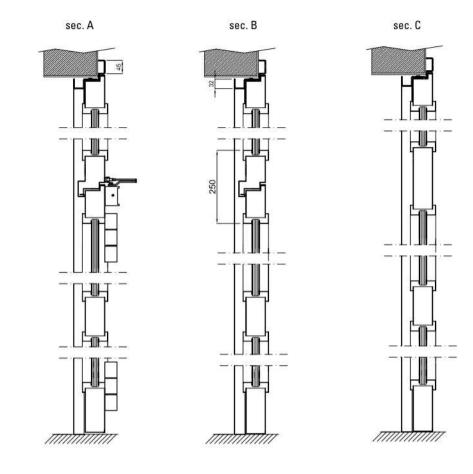
- Perimeter frame in "Z" shaped galvanised steel profile th. mm. 15/10, conformed to give complanarity between leaf and frame. It has spaces for the insertion of thermal-expanding gasket. Holes for wall fixing hidden after the assembly at site.
- · Leaf made by one perimeter structure in steel, with supporting section, realised by double galvanised steel sheet bended, boxed, welded, with inner inorganic insulating package. Leaf profile has a special working on the thickness from the side of glasses (invisible after the assembly at sitek) in order to limit the thermal conduction . Lock on the passive leaf type flush-bolt with lever opening.
- · Stratified glasses, composed by different stratum of glass sheets · Preframe on request interposed with silicate-based gel that, normally clear, in fire becomes . Painting in RAL colours (brushed) to choose from a list of available opaque and emits steam. Glasses are fixed by sturdy stoppers, with no screws on sight.
- . Nr. 2 hinges each leaf, made in sinterized steel, with sliding on two steel roller bearings, oversized for intensive usage in condition of heavy loads. Their construction allows the adjusting of the leaf position in every moment by means of special screws, normally hidden by plastic cups.
- · Black handle with inside steel armour
- Door closer colur black
- . Lock on the active leaf complete of cylinder with three keys
- . Thermo-expanding gasket, rostrum between the two hinges;

  - . The particular construction of the door permits a perfect alignment

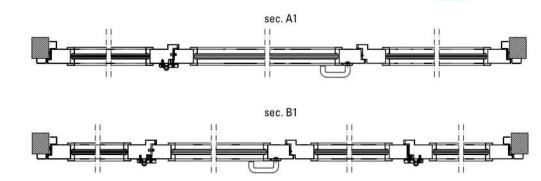
between leaf and frame, furthermore 19 mm. thick rebated minimizes accident risks in case of contact with person.

## NOVOGLASS Complex glazed door REI 30 – REI 60 (also without horizontal beam)





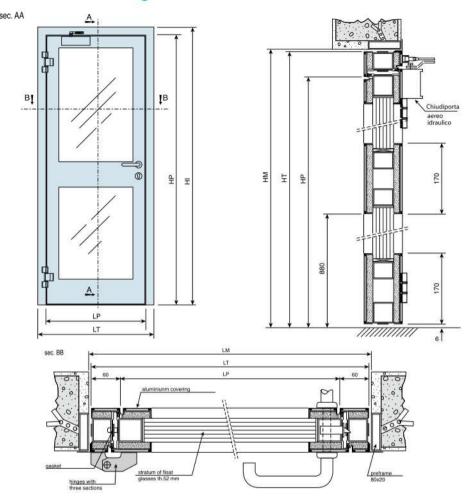
# gasket 3 gas

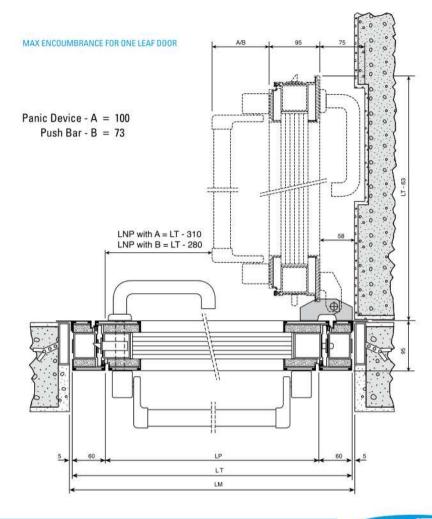


novoferm

37

#### **ALUSTAHL** One leaf glazed door REI 120





novoferm

#### Fire proof glazed door ALUSTAHL one leaf certified according to Italian rule UNI 9723.

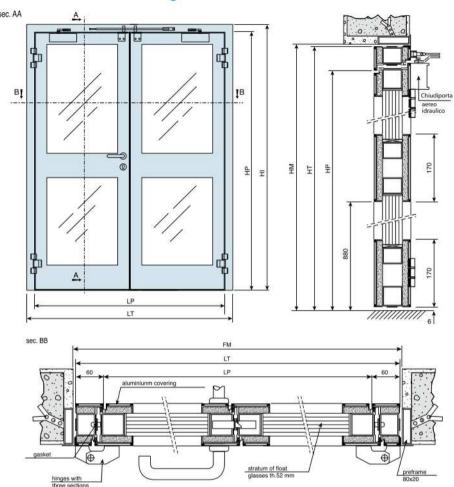
- Frame and leaf frame manufactured in tubular profile 30/10 mm. calibrated steel, with double spaces for insert rubber gasket and intumescent strip. Tubular profiles are filled with a subliming substance and have a particular drilling on the hidden side in order to limit the thermical conduction between the two leaf's sides. Everything covered by aluminium profiles electro-coloured or painted. The particular construction of the door permits a perfect alignment between leaf and frame, without any rise on the hinges.
- Glasses are composed by several stratum of float glass and special clear gel that, in case of fire, becomes blind and gives out refreshing steam. Glasses are fixed by metal profiles clipped on hidden screws.
- N. 2 hinges each leaf in sinterized steel sliding on two steel roller bearings, oversized for intensive usage in condition of heavy loads
- · Fire proof lock, cylinder with three keys.
- . Door closer black colour.

- . Thermo-expanding gasket around perimeter of the door.
- Handle with steel armour inside.
- Painting in RAL colours (brushed) to choose from a list of available colours
- . Installation on pre-frame already installed from the customer.

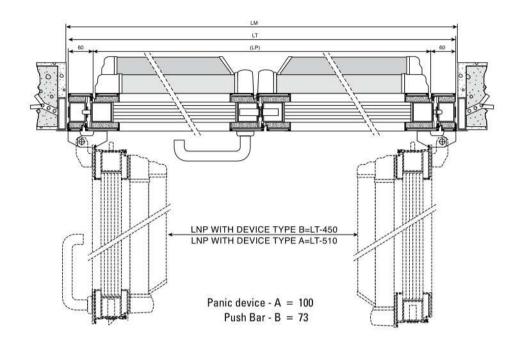
#### NOTE

 due to the high weight of the glass (approx. 150 kg/m2) and its concentration on limited surface, we suggest to verify carefully the structure of wall before installation.

#### **ALUSTAHL** Two leaves glazed door REI 120



#### MAX ENCOUMBRANCE FOR ONE LEAF DOOR



NOTE: in case of passive leaf with panic device, you must use it only with active leaf already opened. A different usage can cause a malfunctioning.

#### novoferm

#### Fire proof glazed door ALUSTAHL two leaves certified according to Italian rule UNI 9723.

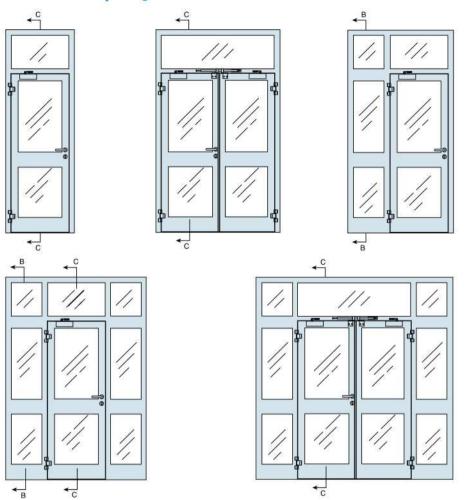
- Frame and leaf frame manufactured in tubular profile 30/10 mm. calibrated steel, with double spaces for insert rubber gasket and intumescent strip. Tubular profiles are filled with a subliming substance and have a particular drilling on the hidden side in order to limit the thermical conduction between the two leaf's sides. Everything covered by aluminium profiles electro-coloured or painted. The particular construction of the door permits a perfect alignment between leaf and frame, without any rise on the hinges.
- Glasses are composed by several stratum of float glass and special clear gel that, in case of fire, becomes blind and gives out refreshing steam. Glasses are fixed by metal profiles clipped on hidden screws.
- N. 2 hinges each leaf in sinterized steel sliding on two steel roller bearings, oversized for intensive usage in condition of heavy loads.
- Fire proof lock, cylinder with three keys.
- . Door closer black colour.

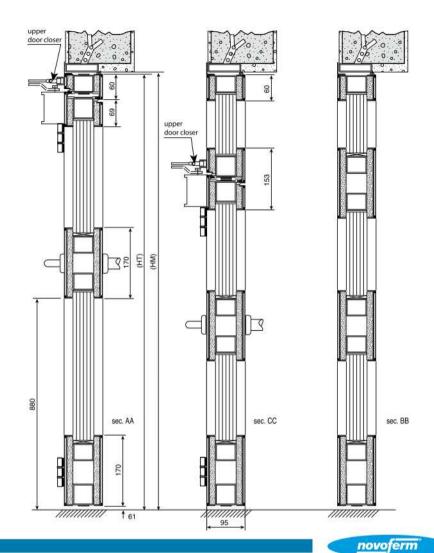
- Thermo-expanding gasket around perimeter of the door.
- Handle with steel armour inside.
- Painting in RAL colours (brushed) to choose from a list of available colours.
- . Installation on pre-frame already installed from the customer.

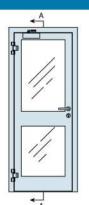
#### NOTE

 Due to the high weight of the glass (approx. 150 kg/m2) and its concentration on limited surface, we suggest to verify carefully the structure of wall before installation.

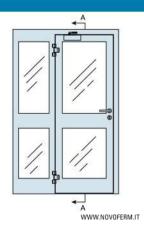
#### **ALUSTHAL** Complex glazed door REI 120





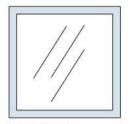




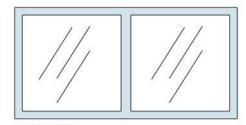


#### FIXGLASS - ALUSTAHL Fixed glass REI 120

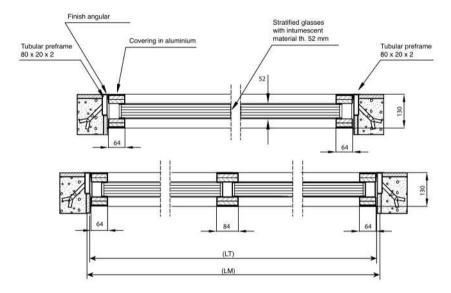
#### MAX SIZE FOR EACH GLASS MM. 2100 X 1100. IN CASE OF BIGGER SIZE, THE FIXED PARTITION MUST BE DIVIDED







FIXED PARTITION TWO GLASSES



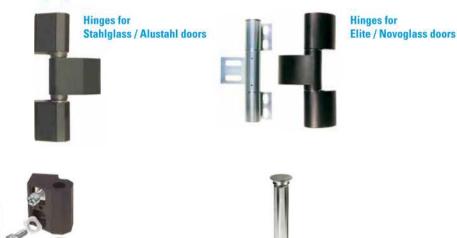
For aesthetical and practical reasons, the fire proof division of particular areas need to be fire proof glazed partition, not only to assure fire, but also to concur the transmission of light.

In these cases the glazed partitions are usually employed: normally they are installed on spaces scale, footbridges of observation in units to high fire risk, offices with sight on working units, etc.

 Leaf frame manufactured in tubular profile 30/10 mm. Covered on both sides with sheets of silicate, fixed to the tubular by steel plates.
 Everything covered by aluminium profiles electro-coloured or painted for Alustahl or by steel painted profiles for Fixglass.

- Glasses are composed by several stratum of float glass and special clear gel that, in case of fire, becomes blind and gives out refreshing steam. Glasses are fixed by metal profiles covered by aluminium. equipped with special gaskets which permit the swelling of the glass at high temperature.
- Thermo-expanding gaskets mounted on the fixed frame.

#### Standard equipment





novoferm

#### Handle with plate for Novoglass

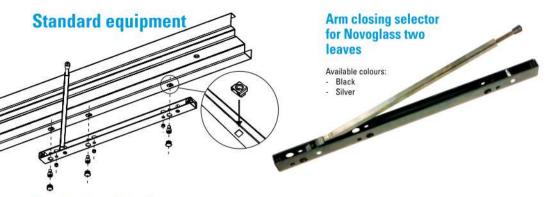
Nice design and U shape. Cylinder with three keys as standard equipment.

Standard black colour On request stainless steel.



### Handle with rosette for Stahlglass / Alustahl

Standard black colour
On request stainless steel.



Arm closing selector for Stahlglass / Alustahl (excluded Novoglass)

In case of concuttent opening of the two leaves, it guarantees the correct order of closing.

Standard on double leaves door Available colors:

- black





#### **Accessories for glazed doors**

#### **Electromagnets**

Electromagnet on leaves composed by external box (white colour) and switch bottom on the top of it.



Moving plate



Electromagnet with switch bottom

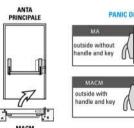
Technical details: Voltage

24 V Power 1,5 W Adhesion power 690 N (60 kg) 100% Insertion time -20 +80C

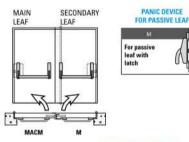
Working temperature Protection

IP 40 DIN 40050











47

novoferm

PANIC DEVICE



Door closer for double leavf door with arm closing selector mod. DORMA TS93 GSR





#### Door closer

It works through a sping in oil mounted on the mobile leaf. The oil permits a soft closing of the door. The door closer is composed of a double system of speed regulation: A)When door opens more than 10°. B)When door opens less than 10° Operation by scissor action arm or slide action arm. Covered by a black box.



#### NovoGuard

The NovoGuard panic device certified UNI EN 1125. has the less operating space in the market. MM 79



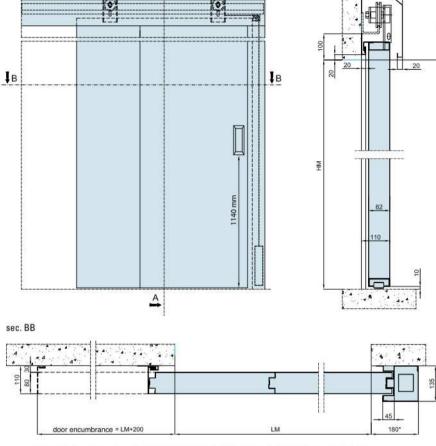
On request photoluminescent strip high visibility (Novoferm patent). NovoGuard and Novopush completed the exclusive range of panic devices produced directly by Novoferm Schievano, a global reference point for fire proof closures and sectional doors

NovoGuard according to European Norm UNI EN1125, with CE mark, working on inside lock, Reversible, compact encumbrance mm. 79 and equipped by aluminium bar with an evicence green central plastic strip which highlights the way of escape (patented).

Equipped by a rotation device with lever working on pillow blocks with a minimum working stress (patented). Available in different lenghts, simply to shorten, absence of holes and cracks in any position, resistant to corrosion of salt fog.

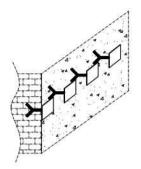
Available with different finishing, with cylinder and handle outside.

#### **SLIDING** One leaf sliding REI 120

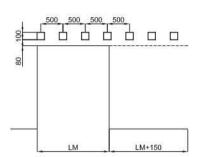


#### **Special Condition** sec. AA

#### Walled up stirrups

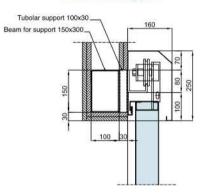


#### Installation on walls with a low mechanical strength



ATTN. For installation on flat ceiling or for sliding door with low height/width ration, please contact company

#### Beam for support



#### Gypsum cover at the customer's expense (\*)



#### \*SIZES FOR DOOR WITH HM>LM, IN CASE HM<LM, ENCUMBRANCE OF COUNTERWEIGHT COMPARTEMENT CAN REACH MM 440

- Modular panels realised in galvanised, prepainted and welded sheet of steel, with high density insulating package inside.
- . Upper strike beam equipped with guide and counterweight, which ensures closure in case of fire.
- . Smoke and flame labyrinth on the perimeter of the leaf.
- Upper hoisting rail, low friction, complete of special supports to mount on architrave in reinforced concrete, metallic cover inspectable.
- . Thermo-expanding gasket all around the door.
- · Fixed handles for the opening.
- . The sliding door has no floor guide, the alignment is maintained by a bottom wheel not visible. The sliding is sweet thanks to wheels with curve, mounted on double bearing.
- . The particular construction method allows easy inspection of all
- . The doors are normally equipped with self-closing device through counterweight, driven by a thermal fuse (rated at 68 ° C).
- . Superficial finish with primer colour RAL 7035 (brushed).
- . The door is equipped with a final or continuous shock absorber according necessity.

#### novoferm

## Flat strike / Counterweight Standard strike . . door encumbrance = LM+200

#### **SLIDING** Two leaves sliding REI 120

#### \*SIZES FOR DOOR WITH HM>LM. IN CASE HM<LM, ENCUMBRANCE OF COUNTERWEIGHT COMPARTEMENT CAN REACH MM 440.

LM

#### . Modular panels realised in galvanised, prepainted and welded sheet of steel, with high density insulating package inside.

- . Upper strike beam equipped with guide and counterweight, which ensures closure in case of fire.
- . Smoke and flame labyrinth on the perimeter of the leaf;

(LM/2)+150

- Upper hoisting rail, low friction, complete of special supports to mount on architrave in reinforced concrete, metallic cover inspectable.
- . Thermo-expanding gasket all around the door.
- Fixed handles for the opening.

sec.BB

- . The sliding door has no floor guide, the alignment is maintained by a bottom wheel not visible. The sliding is sweet thanks to wheels with curve, mounted on double bearing.
- . The particular construction method allows easy inspection of all

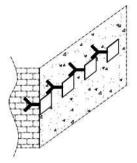
(LM/2)+150

sec.AA

- . The doors are normally equipped with self-closing device through counterweight, driven by a thermal fuse (rated at 68 ° C).
- . Superficial finish with primer colour RAL 7035 (brushed).
- . The door is equipped with a final or continuous shock absorber according necessity.

#### **Special Condition**

#### Walled up stirrups

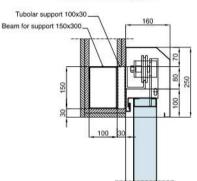


## LM+150

Installation on walls with a low mechanical strength

ATTN. For installation on flat ceiling or for sliding door with low height/width ration, please contact company

#### Beam for support

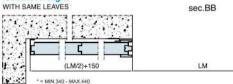


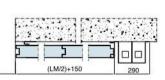
#### Gypsum cover at the customer's expense (\*)

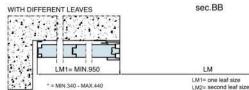


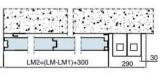
#### novoferm



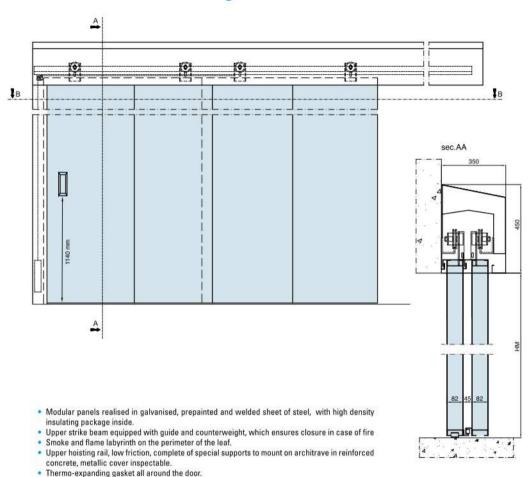


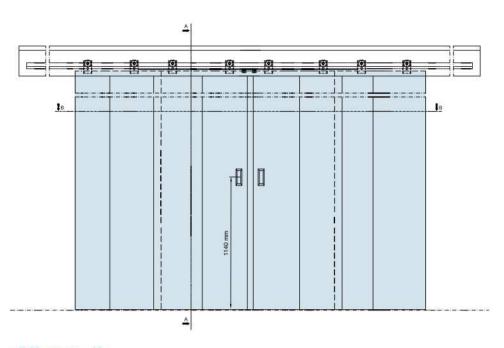




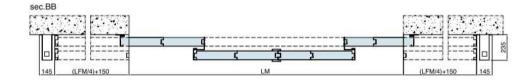


#### **SLIDING** Two leaves sliding one side REI 120





#### 2+2 Leaves two sides



novoferm

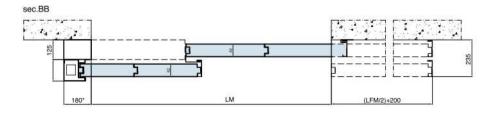
53

- The sliding door has no floor guide, the alignment is maintained by a bottom wheel not visible. The sliding is sweet thanks to wheels with curve, mounted on double bearing.
- . The particular construction method allows easy inspection of all mechanism.
- The doors are normally equipped with self-closing device through counterweight, driven by a thermal fuse (rated at 68 ° C).
- . Superficial finish with primer colour RAL 7035 (brushed).

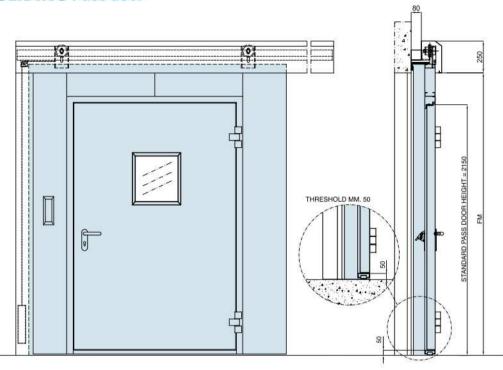
. Fixed handles for the opening.

The door is equipped with a final or continuous shock absorber according necessity.

#### 2 Leaves one side

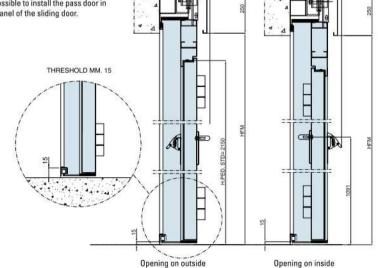


#### **SLIDING Pass door**





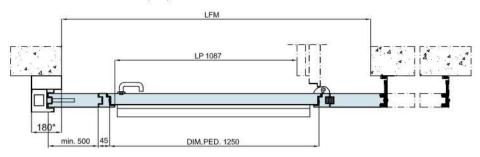
ATTN.: It's not possible to install the pass door in the first or last panel of the sliding door.



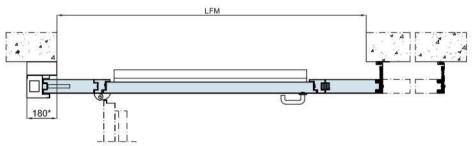
sec. AA

#### **Special solution**

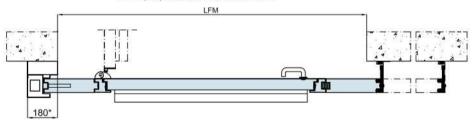
#### TYPE A (DXM) PASS DOOR DX WALL OPENING



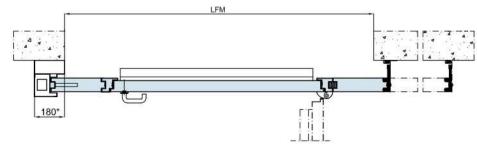
#### TYPE D (SXL) PASS DOOR DX LIGHT OPENING



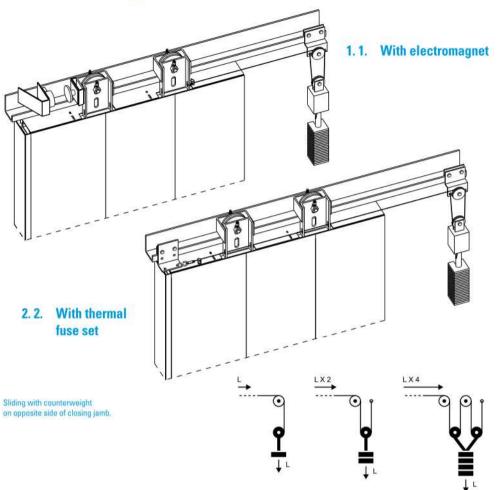
#### TYPE B (DXL) PASS DOOR SX WALL OPENING

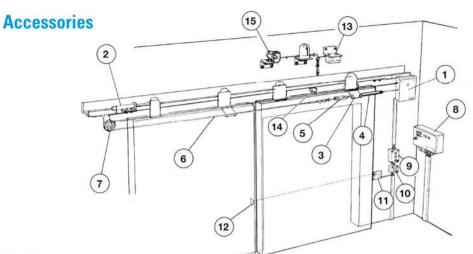


#### TYPE C (SXL) PASS DOOR SX LIGHT OPENING



#### **SLIDING** Working scheme





#### Motorization:

composed by a motor-gear trigged by electromagnet connected to the fire protection system , that in case of fire releases out of gear the door which close by counterweights. Suitable for areas with heavy traffic, opening is possible through remote control - Radar - foot pressure mat.

Using the control panel you can manage some functions: delay in opening and closing, opening speed, security systems such as photocells, flashing.

The doors can be equipped with various accessories that improve functionality and safety. On request self-closing device can be constituted by an electromagnet managed by electronic sensor. This will increase drastically the sensibility and the time of reaction in case of fire.

- 1 Motor
- 2 Final shock absorber
- 3 Cable connection
- 4 Spring for automatic cable tension adjustment
- 5 Cable tensioner
- 6 Traction cable
- 7 Pulley

- 8 Control panel
- 9 Open and close button
- 10 Alarm button
- 11 Photoelectric cell
- 12 Mirror cell
- 13 Smoke relevator
- 14 Final stroke contact
- 15 Horn





Electromagnet



Manual emergency push button

Fixed plate

#### novoferm



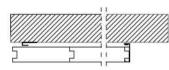
Continuous oil-hydraulic shock absorber

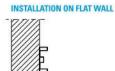


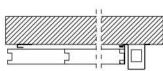
induction shock absorber

#### STANDARD INSTALLATION



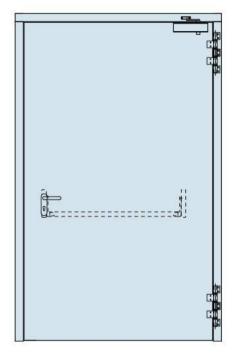


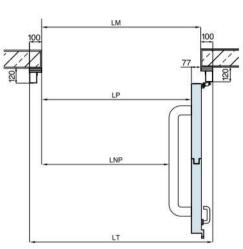


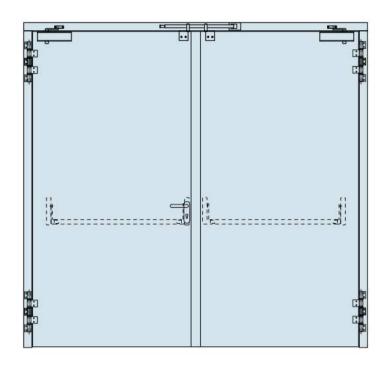


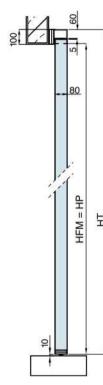
56

#### MAGNUM Big size door REI 120 «on the wall»



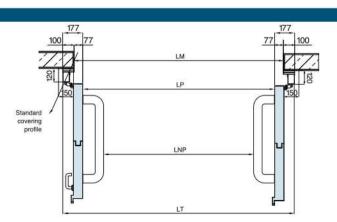






- · MAGNUM door with one or two leaves.
- Modular panels in vertical elements (to mount on site) thickness mm.80, constituted by sheet 8/10 with high density insulated package inside.
- Frame in tubular steel 60x90, suitable for installing on the wall.
- Thermo-expanding gasket all around the door.
- Closing system by means of upper aerial pump and/or counterweight in case of big dimensions.
- · Hinges with bearing, adjustable.
- Arm closing selector (included in double leaf door).
- Fire proof lock and cylinder with three keys,
- Lock type « flush-bolt » on secondary leaf.
- Black PVC handle.
- Superficial finish with primer colour RAL 7035 (brushed).

ATTN.: it's not possible to install novopush handle



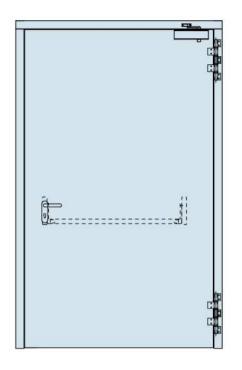
#### novoferm

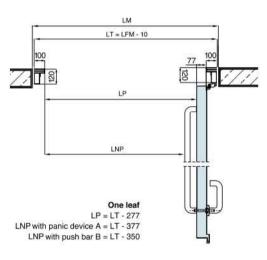
#### Two leaves

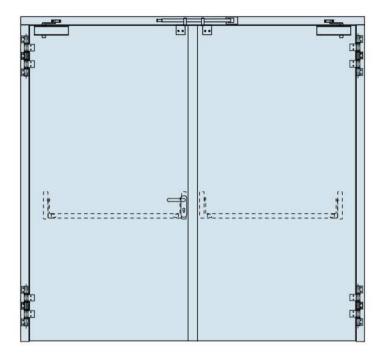
LP = LFM - 154

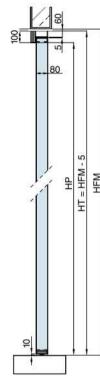
LNP with panic device A = LFM - 354 LNP with push bar B = LFM - 300

### MAGNUM Big size door REI 120 «on block frame» (in the opening)



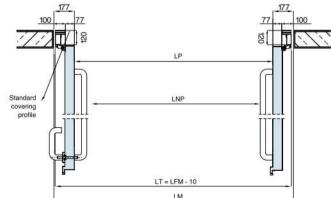






- · MAGNUM door with one or two leaves.
- Modular panels in vertical elements (to mount on site) thickness mm.80, constituted by sheet mm. 8/10 with high density insulated package inside.
- Frame in tubular steel 60x90, suitable for installing in the opening.
- Thermo-expanding gasket all around the door.
- Closing system by means of upper aerial pump and/or counterweight in case of big dimensions.
- Hinges with bearing, adjustable.

- · Arm closing selector (included in double leaf door).
- Fire proof lock and cylinder with three keys.
- Lock type « flush-bolt » on secondary leaf.
- Black PVC handle.
- Superficial finish with primer colour RAL 7035 (brushed).



#### novoferm

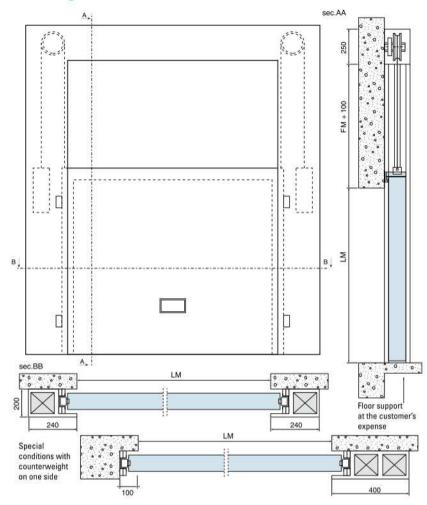
#### Two leaves

LP = LFM - 154

LNP with panic device A = LFM - 354 LNP with push bar B = LFM - 300

61

#### **Vertical sliding door REI 120**





63

- Movable panels realised in galvanised, prepainted and welded sheet of steel, with high density insulating package inside.
- Side guides and upper traverse box-shielded, complete of sliding guide, counterbalance, flame labyrinth, wheels on bearings in order to assure the sweet sliding.
- The automatic closing devices (inside the strike jamb) is composed by a weight controlled by a thermo-fuse.
- The door is equipped with a final shock absorber.
- Thermo-expanding gasket all around the door.
- Superficial finish with primer colour RAL 7035 (brushed).
- Possibility to connect to detenction and control fire system br electromagnet.

#### ORDER FORM **ELITE BLIND DOOR**



ELITE BLIND DO	OR			
☐ REI 60 ☐	REI 90	☐ RE	l 120	☐ METAL
1 LEAF Min. 500 x 17 Max. 1350 x 2		ſ		AVES 800 x 1750 . 2680 x 2640
min.250	2040 min.	250	IVIdA	. 2000 X 2040
1 / 1	Ħ	<u>7</u> .		-
<b>1</b> , T <sub>90</sub>	1600	4		900 1600
Type of opening				
1 OPEN PUSH		2 D OPEN PUSH LEFT		<i>*</i>
3 OPEN PUSH	-	4 OPEN PUSH LEFT	_/	—
MOUNTING SYS	ГЕМ			
By wall angles	By anchor	bolts	By cou	unter frame
By wooden counter	Door mou			mounted in the
frame	District Control	all (type K2)	506500	ng (type L)
Glazing windows	∷	tive leaf 600 🗀	☐ Pass ] Ø 300	sive leaf
Type of installation	on on the	wall ( Z -	L-T)	
Type Z		<u>•</u>		-
Type L	<u>0</u>	1		

900 □ Ø 500 )
)

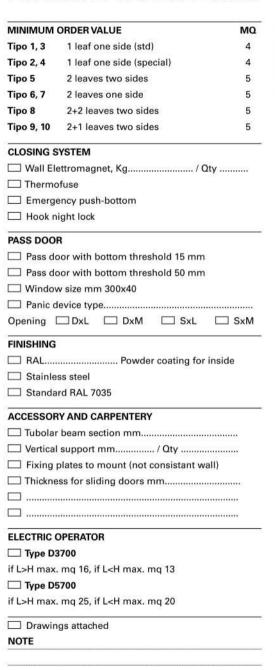
DATE	
COMPANY	
PAG 0	F
STRUCTURAL WA	LL SIZE
L x H (mm)	X
☐ 1 LEAF	2 LEAVES
f 2 Leaves	
Symmetric	Active leaf mm
Doors Qty:	
FINISHING	;
□ RAL	Powder coating for inside (brushed)
□ RAL	Powder coating for outside
□ RAL	frame
☐ Wood Covering	
	19
Stainless stee	el
Stainless stee	el
Stainless stee Laminate Cov	el vering Abet
Stainless stee Laminate Cov ACCESSORIES Electrical strik	vering Abet/ Qty/
□ Stainless stee     □ Laminate Cov     □ ACCESSORIES     □ Electrical strik     □ Electrical lock	vering Abet / Qty
□ Stainless stee     □ Laminate Cov     □ ACCESSORIES     □ Electrical strik     □ Electrical lock     □ Smoke detect	xer, Art
Stainless stee Laminate Cov ACCESSORIES Electrical strik Electrical lock Smoke detect Elettromagne	ce, Art/ Qty
Stainless stee Laminate Cov ACCESSORIES Electrical strik Electrical lock Smoke detect Elettromagne Doorcloser, A	xe, Art / Qty/ Qty
Stainless stee Laminate Cov ACCESSORIES Electrical strik Electrical lock Smoke detect Elettromagne Doorcloser, A Wall covering	xe, Art / Qty/ Qty
Stainless stee Laminate Cov ACCESSORIES Electrical strik Electrical lock Smoke detect Elettromagne Doorcloser, A Wall covering	ce, Art / Qty/ Qty
□ Stainless stee □ Laminate Cov  ACCESSORIES □ Electrical strik □ Electrical lock □ Smoke detect □ Elettromagne □ Doorcloser, A □ Wall covering □ standard  HANDLES	vering Abet
□ Stainless stee     □ Laminate Cov     □ Laminate Cov     □ Electrical strik     □ Electrical lock     □ Smoke detect     □ Elettromagne     □ Doorcloser, A     □ Wall covering     □ standard     □ HANDLES     □ PVC Black hair	ce, Art
Stainless stee  Laminate Cov  ACCESSORIES  Electrical strik  Electrical lock  Smoke detect  Elettromagne  Doorcloser, A  Wall covering  standard  HANDLES  PVC Black har	xe, Art
Stainless stee Laminate Cov ACCESSORIES Electrical strik Electrical lock Smoke detect Elettromagne Doorcloser, A Wall covering standard HANDLES PVC Black har PVC color har Stainless stee	rering Abet

Drawings attached

NOTE

#### ORDER FORM

#### FIRE PROOF SLIDING DOORS





DATE	
COMPAN	IY .
PAG	OF
Туре:	m)x
_ 1	A DEPOSITOR OF THE PROPERTY OF
_ 2	
□ 3	apagagaga ∑
_ 4	and
□ 5	
□ 6	M M
_ 7	200 E
□ 8	22247224 2 2
_ 9	PROPERTY OF THE PROPERTY OF TH
10	
	B C D
SXM	DXM DXM
SXL	DXL DXL

#### ORDER FORM

#### **FIRE PROOF GLAZED DOORS**

novo	ferm <sup>®</sup>	

☐ 1 LEAF	☐ 2 LEAVES
Min. 500 x 1750	Min. 800 x 1750
Max. 1460 x 2058	Max. on reques
STAHLGLASS	NOVOGLASS
REI 30	☐ REI 30
REI 60	REI 60
☐ RE 120	☐ REI 120
Without horizontal frame Horizontal frame	Without horizontal frame Horizontal frame
Type of opening	
1 2	2 🗆
OPEN PUSH OF RIGHT	PEN PUSH IGHT
3 QPEN PUSH OF	PEN PUSH
☐ Glazing beads, push side ☐ Glazing beads, pull side	
MOUNTING SYSTEM	
	ete (Without preframe)
	mana i tri sumuma are tu i ancome e e care e e
TYPE OF INSTALLATION ON	THE WALL ( Z - L -T )
Type Z	
Type L	
o	
Type T	

☐ Right, type installation ......☐ Left, type installation .....

☐ Height, type installation .....

DATE		 	
COMPANY		 	
PAG	OF		

STRUCTURAL	WALL SIZE
L x H (mm)	X
☐ 1 LEAF	2 LEAVES
If 2 leaves	
☐ Symmetric	
☐ First leaf m	m
Doors Qty:	
SPECIAL GLAZ	ING DOORS
Outside filt	erglass
Glass with	sand effect

RAL	Powder coating for inside
RAL	Powder coating for outside
Stainless steel	

Electrical strike, Art	/ Q.tà
Smoke detector, Art	/ Q.tà
Elettromagnets, Art	/ Q.tà

☐ Wall covering p	rofile,wall thickness
☐ standard	on request

ΗA	N	DI	ES	

ACCESSORIES

PVC black handle, steel armour
PVC colored handles, steel armour, RAL
Stainless steel satin handle
Knob, side

PANIC DEVICES type					
	17.7	□мам			
☐ Drawin	g attached				

NOIE	

#### ORDER FORM

#### FIRE PROOF COMPLEX GLAZED DOORS



8:			
COMPLEX G	LAZED DOORS		
☐ 1 LEAF		☐ 2 LEAVES	DATE
Min. 500 Max. on		Min. 800 x 1750 Max. on request	
	- I		COMPANY
STAHLGLAS	S	NOVOGLASS	PAG OF
REI 30		REI 30	7.07
REI 60		REI 60	The state of the s
RE 120 (d	only with horizontal fr	rame)	STRUCTURAL WALL SIZE
Horizont	al frame 🔲 Witho	ut horizontal frame	L x H (mm) X
		DIA 1 10	Light passage width mm
			Frame width tot
			If 2 leaves
			☐ Symmetric
l			First leaf mm
			Doors Ot u
op panel	Side panel	Top panel, one or more side panels	Doors Qty:
		100 400 A00 A00 A00 A00 A00 A00 A00 A00 A00	SPECIAL GLAZED DOORS
	(external view)	N° Side panel: □ DX □ SX	Outside filterglass
		(external view)	Glass with sand effect
Type of open	ning		FINISHING AND SPECIAL
1 D OPEN PUSH	2 □ OPEN PUSH		RAL Powder coating for inside
RIGHT	LEFT		RAL Powder coating for outside
			☐ Stainless steel
3 — — — — — — — — — — — — — — — — — — —	OPEN PUSH		ACCESSORIES
PART			☐ Electrical strike, Art / Q.tà
☐ Glazina I	beads, push side		☐ Smoke detector, Art / Q.tà
	beads, pull side		☐ Elettromagnets, Art / Q.tà
MOUTING S	VOTERA		☐ Wall covering profile, wall thickness
☐ Pre fram		Vithout preframe)	☐ Standard ☐ On request
			HANDLES
TYPE OF INS	TALLATION ON THE V	VALL ( Z - L - T )	PVC black handle, steel armour
Type Z	Trè .		PVC colored handles, steel armour, RAL
.,,,,,,			Stainless steel satin handle
NOOL THE			☐ Knob, side
Type L			Electric handlea
			PANIC DEVICE type
Type TStru	uctural size		□ MACM □ MAC □ MAM □ MA □ MA
			☐ Drawing attached
			NOTE
			<del></del>
Height, t	ype installation		