

ENDOORS

FIRE RATED DOORS AND GATES
ENGLISH CATALOGUE



ENDOORS' history

Endoors srl. was established in 2005 to operate in the production of fire rated metallic and multipurpose doors and the trade of related products. Having established a national presence, the company has steadily expanded into foreign markets. Endoors' staff includes individuals with previous experience in both the commercial and manufacturing sectors of this industry. This ensures a comprehensive knowledge of products and regulations, and a familiarity with the market and customer expectations. This has become and shall continue to be the capital of Endoors as a company.



Factory Endoors srl. in Polesine Parmense / PR

ENDOORS' compliance to standards and prescriptions



The forthcoming harmonisation of fire door standards in EU has prompted Endoors srl. to meet from the requirements of the European Construction Products Regulation (EU) No 305/2011 from the moment it comes into effect. The majority of Endoors srl. production is already tested according to EN 1634-1 "Fire resistance tests for door and shutter assemblies" and EN 13501-2 "Fire classification of construction products and building elements" introduced in Italy by the "Decree June 21st 2004" and published in the Official Gazette number 155 of July 5th 2004. All the components of the doors are rigorously certified and CE marked as far as prescribed by the new regulations and the latest standards. These features conform with the intentions and principles that underlie the CE marking procedure and that will be extended probably in June 2019 to the whole door as foreseen in the prEN 16034 "Pedestrian doorsets, industrial, commercial, garage doors and openable windows – Product standard, performance characteristics – Fire resistance and/or smoke control characteristics" approved and prepared by CEN/TC 33 the secretariat of which is held by AFNOR by mandate of the European Commission supporting essential requirements of EU Directives. Please see the section "Certificates and legislation" where this aspect is illustrated with more details.

ENDOORS' products



The target of Endoors srl. was and remains the fabrication of attractive, technically innovative and competitive products, well packed, sent to the customers within a reasonable time and easy to install.

The Endoors srl. range of products comprises:

REVERSIBLE DOORS OF STANDARD SIZES single leaf EI2 60, EI2 120 and Multipurpose without vision panels for the stockselling dealers*.

HANDED DOORS IN SPECIAL AND STANDARD SIZES single and double leaf EI2 60, EI2 120 and Multipurpose, with or without vision panels and other special accessories or colors for the dealers or installers of doors for definite building sites.

SPECIAL DOORS single and double leaf EI2 60, EI2 120 and Multipurpose like STAINLESS STEEL DOORS, WOODEN IMITATION

DOORS, SOUND REDUCTION DOORS, DOORS FOR INSTALLATION ON PLASTERBOARD PARTITIONS, DOORS WITH SUBFRAMES.

SLIDING INDUSTRIAL GATES single and double leaf EI2 120

HINGED BIG ROTATION INDUSTRIAL GATES single and double leaf EI2 60 - EI2 120

GLAZED DOORS single and double leaf EI2 30 - EI2 60 - EI2 90 - EI2 120

Many references evidence of the vast diffusion of such products. List available upon request.

*These doors listed in red colour are available at stock for immediate delivery.

ENDOORS' certificates and tests



Endoors company in addition to the Italian certificates has obtained until the end of 2018 several other certifications which allow the sale of fire rated shutters for civil, public, commercial and industrial buildings in various countries of the world. Following the list of the main awards currently applicable to Endoors' products.

- **ITALIAN** homologations released by the Italian Ministry of Interiors obtained by testing doors according to Italian standard UNI 9723 and FA1 extension sheet.
- Certificates according to **EUROPEAN** standards EN 13501-2 and EN 1634-1 obtained by testing doors in EFECTIS / France and APPLUS / Spain laboratories.
- Certificates according to **AMERICAN** standard UL 10-B obtained by testing doors in accredited UL laboratory, more models and solutions in process of testing during 2019.
- CE marked products according to the new European standards introduced in november 2019
- Certificates according to **ROMANIAN** standard EI-C obtained by local authorities.
- Certificates according to **BULGARIAN** prescriptions obtained by local authorities.
- Homologation according to **URUGUAYAN** standard



Destructive tests beyond limit



GENERAL IMPORTANT NOTICE

All information in this catalogue could change without notice. Binding information have to be specifically reconfirmed by writing.

The client, before ordering the products, is supposed to verify the adequacy of the certificates, homologations, measures and conformity of the products and technical features to the regulations, national and local laws, both general or specific for the fire rating in the door's destination place, according to the purpose of the building, the use in escape ways and the local climate.

The product must be protected from the natural agents, especially the fire rated glasses deteriorate if exposed to the sun or to the water even if still in the factory's packing and they consequently lose the guarantee.

According to the laws of many countries all doors used for exits, emergency or escape ways should have a minimum height of 2000 mm net passage.

EI2 European Standard single leaf doors with corner "Z" frame

Door EI2 60 – EI2 120 single leaf

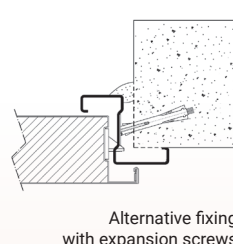
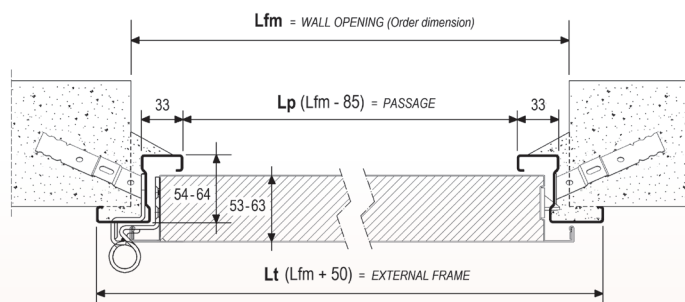
Door metallic fire rated 60 or 120 minutes single leaf **REVERSIBLE** or DX-SX **HANDED** models, supplied assembled with high resistance steel frame on 4 sides with clamps to bend open and holes for fixing with expansion screws, 1 hinge with spring and 1 bearing hinge, lower side of frame removable after installation and leaf of total thickness 53 mm (EI2 60) or 63 mm (EI2 120) of galvanized double steel sheet with fire rating core and thermo-expanding gasket between

frame and leaf, 1 bolt (EI2 60) and 2 bolts (EI2 120) at hinge side, painted with epoxy-polyester powders oven hardened embossed finishing RAL 9010 tone, CE marked lock with tongue and turns, black safety handle with steel core, plates and Patent key, conformity mark metallic label, sticker with data, booklet for installation use and maintenance, copy of classification report and conformity declaration upon request.

Door multipurpose single leaf

Door metallic multipurpose single leaf **REVERSIBLE** or DX-SX **HANDED** models, supplied assembled with high resistance steel frame on 4 sides with clamps to bend open and holes for fixing with expansion screws, 2 bearing hinges of reduced dimensions mm 98 x 16,5 Ø, lower side of frame removable after installation and leaf of total thickness 53 mm of galvanized double steel sheet with mineral wool or fiber honeycomb core, painted with epoxy-polyester powders oven hardened

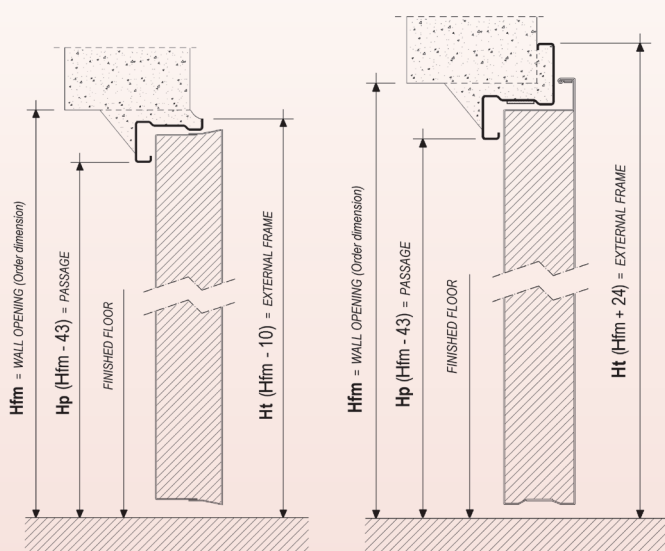
embossed finishing RAL 9010 tone (some reversible models available also only galvanized or with pre-coated finishing and polystyrene core), CE marked lock with tongue and turns, black safety handle of plastic, plates and Patent key, sticker with data, booklet for installation use and maintenance. Door available also with ventilation holes of triangular shape symmetric at the 4 corners of leaf.



Horizontal section of reversible + handed doors



Removable sill



Vertical section of reversible doors

Vertical section of handed doors



Standard finishing ral 9010 embossed



Ventilation holes at the 4 corners, optional on multipurpose

RANGE AND MEASUREMENTS OF SINGLE LEAF DOORS WITH CORNER "Z" FRAME

EI2 60 or EI2 120 single leaf doors FOR INTERNAL APPLICATIONS

Supplied with a classification report and declaration of conformity upon request.

EI2 60 or EI2 120 and MULTIPURPOSE 1-leaf DOORS CE marked FOR OUTDOOR APPLICATION

Supplied with CE marking and DoP - Declaration of Performance.

EI2 120 and MULTIPURPOSE single leaf DOORS fully made of AISI 304 stainless steel

EI2 60 or EI2 120 1-leaf DOORS WITH SMOKE RETENTION Sa

WALL OPENING MEASUREMENTS OF SINGLE LEAF DOORS WITH "Z" FRAME

Unless otherwise mentioned in writing, all measurements always refer to the wall opening. Manufactured with the width and height measurements rounded to the centimetre. Standard sizes: width 800, 890, 990, 1100, 1200, 1300 x height 2060 or 2150. Semi-standard measures: variable width up to 1300 x height 2060 or 2150. Special sizes: variable width and height up to 1300 x 2500 according to approval. The hands are meant to push, see illustration below.

EXTERNAL FRAME MEASUREMENTS OF 1 LEAF DOOR WITH "Z" FRAME

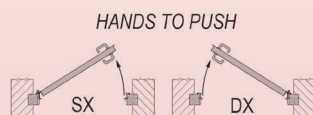
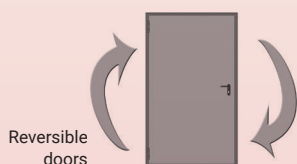
Width = Wall hole + 50 mm

Height = Wall hole + 24 mm.

NET PASSAGE TO THE "Z" FRAME WITH LEAVES OPEN OF MORE THAN 90°

Width = Wall opening - 85 mm

Height = Wall opening - 43 mm.



EI2 European Standard double leaf doors with corner "Z" frame

Door EI2 60 – EI2 120 double leaf

Door metallic fire rated 60 or 120 minutes double leaf DX-SX **HANDED** model, supplied assembled or unassembled depending on dimensions, with high resistance steel frame on 3 sides with clamps to bend open and holes for fixing with expansion screws, 2 hinges with spring and 2 bearing hinges, lower side of frame removable after installation and leaf of total thickness 53 mm (EI2 60) or 63 mm (EI2 120) of galvanized double steel sheet with fire rating core and thermo-expanding gasket between frame and leaves, 2 bolts (EI2 60) and 4 bolts (EI2 120) at hinge sides, painted with epoxy-polyester

powders oven hardened embossed finishing RAL 9010 tone, CE marked lock with tongue and turns in main leaf and mortise-lock with self closing device with rods for the upper and lower closing of secondary leaf, floor socket, black safety handle with steel core, closing regulator, plates and Patent key, conformity mark metallic label, sticker with data, booklet for installation use and maintenance, copy of classification report and conformity declaration upon request.

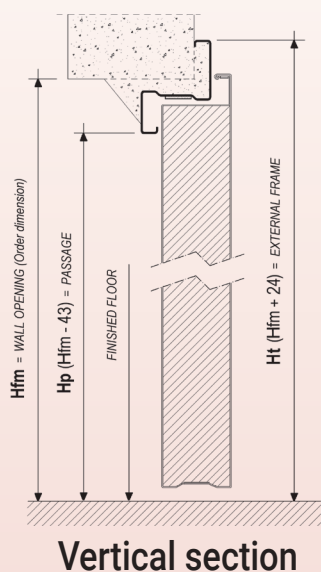
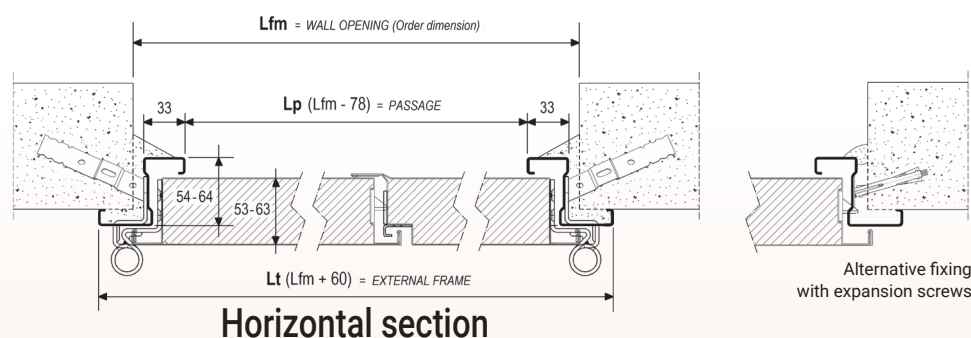


Door multipurpose double leaf

Door metallic multipurpose double leaf DX-SX **HANDED** model, supplied assembled or unassembled depending on dimensions, with high resistance steel frame on 3 sides with clamps to bend open and holes for fixing with expansion screws, 4 bearing hinges of reduced dimensions mm 98 x 16,5 Ø, lower side of frame removable after installation and leaves of total thickness 53 mm of galvanized double steel sheet with mineral wool or fiber honeycomb core, painted with

epoxy-polyester powders oven hardened embossed finishing RAL 9010 tone, CE marked lock with tongue and turns in main leaf and manual latches for the upper and lower closing of secondary leaf, black safety handle of plastic, plates and Patent key, floor socket, sticker with data, booklet for installation use and maintenance.

Door available also with ventilation holes of triangular shape symmetric at the 4 corners.



RANGE AND MEASUREMENTS OF DOUBLE LEAF DOORS WITH CORNER "Z" FRAME

EI2 60 or EI2 120 double leaf doors FOR INTERNAL APPLICATIONS

Supplied with a classification report and declaration of conformity upon request.

EI2 60 or EI2 120 and MULTIPURPOSE 2-leaves DOORS CE marked FOR OUTDOOR APPLICATION

Supplied with CE marking and DoP - Declaration of Performance.

EI2 120 and MULTIPURPOSE double leaf DOORS fully made of AISI 304 stainless steel

EI2 60 or EI2 120 2-leaves DOORS WITH SMOKE RETENTION Sa

WALL OPENING MEASUREMENTS OF DOUBLE LEAF DOORS WITH "Z" FRAME

Unless otherwise mentioned in writing, all measurements always refer to the wall opening. Manufactured with the width and height measurements rounded to the centimetre. Standard sizes: width 1200, 1290, 1390, 1490, 1600, 1780, 1980 x height 2060 or 2150. Semi-standard measures: variable width up to 2530 x height 2060 or 2150. Special sizes: variable width and height up to 2530 x 2500 according to approval. The hands are meant to push, see illustration below.

EXTERNAL FRAME MEASUREMENTS OF 2 LEAVES DOOR WITH "Z" FRAME

Width = Wall hole + 60 mm Height = Wall hole + 24 mm.

NET PASSAGE TO THE "Z" FRAME WITH LEAVES OPEN OF MORE THAN 90°

Width = Wall opening - 78 mm Height = Wall opening - 43 mm.

For different fixing systems see "special doors" in next section. It is duty of the client to check that the certificates which Endoors srl. will supply with the doors are accepted in the country of destination and that the doors respect the local rules about net passage dimensions and/or other prescriptions. In case of doubt ask details before to place the order. Dimensional tolerances +/- 3 mm. All information in this catalogue could change without notice. Binding information have to be specifically reconfirmed by writing.



Standard finishing ral 9010 embossed

Standard accessories

All doors are always supplied with following accessories included in the prices.



Handle and plate
fire rated
To DIN 18255 standard



Handle and plate
multipurpose



"Patent" key
with plastic insert
fire rated and multipurpose



Locks fire rated
and multipurpose
CE marked according to standard
EN 12209, standard lock (left)
and antipanic lock (right) for use
with antipanic crossbars



Hinge
multipurpose
mm 98 x 16,5 Ø



Hinges fire rated
CE marked according to standard
EN 1935 Hinge with spring (left)
and bearing hinge (right)



Bolts fire rated
Bolts on leaf and strikes
in the frame



Self expanding
gasket fire rated
For retaining the hot
smokes



Conformity
mark fire rated
Metallic label prescribed
by law



Clamps fire rated
and multipurpose
To bend open for the fastening
with mortar



Additionally with the double leaf doors:



Closing regulator fire rated
CE marked according to standard EN 1158 in closed position (left) and open (right)



Lock for secondary
leaf fire rated



Floor socket
fire rated and multipurpose
Strike for lower rod in floor



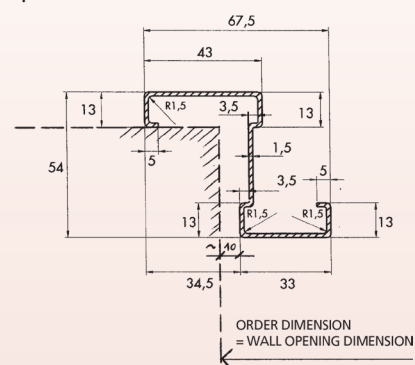
Latch in secondary
leaf multipurpose



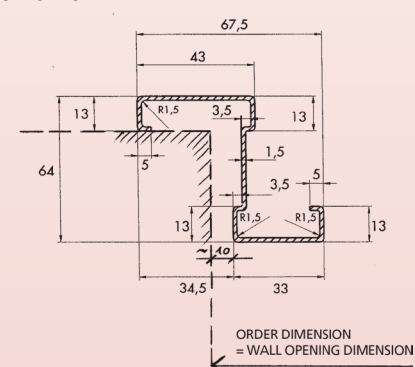
Self-blocking
in secondary leaf fire rated
Blocks the secondary leaf in closed position

Frame dimensions

Multipurpose and EI2 60 frame



EI2 120 frame



Encumbrances of corner “Z” frame

Single leaf doors

A = 42 mm

B → Doors 60 min. + Multipurpose = 19 mm

B → Doors 120 min. = 29 mm

C = A + B

D → TWIST = 110 mm

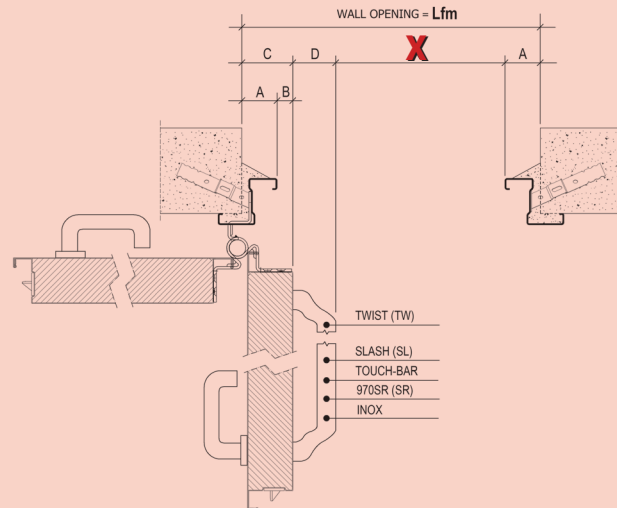
D → SLASH = 75 mm = < 80 mm ***

D → TOUCH BAR = 72 mm = < 80 mm ***

D → 970SR = 100 mm

D → INOX = 100 mm

D → Std. handle = 70 mm = < 80 mm ***



$$X = L_{fm} - C - D - A$$

Double leaf doors

A = 42 mm

B → Doors 60 min. + Multipurpose = 19 mm

B → Doors 120 min. = 29 mm

C = A + B

D → TWIST = 110 mm

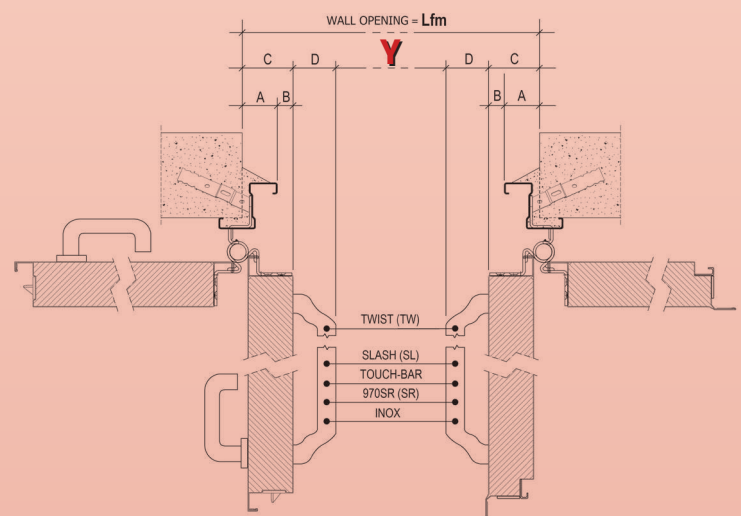
D → SLASH = 75 mm = < 80 mm ***

D → TOUCH BAR = 72 mm = < 80 mm ***

D → 970SR = 100 mm

D → INOX = 100 mm

D → Std. handle = 70 mm = < 80 mm ***



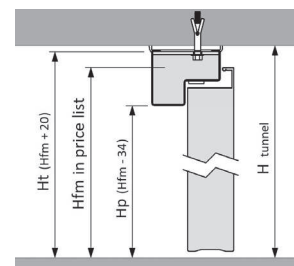
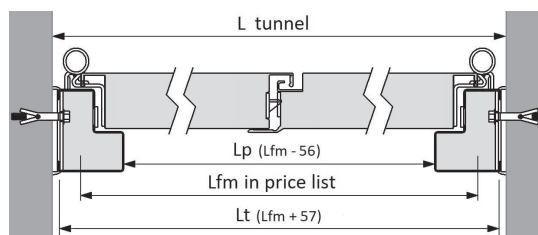
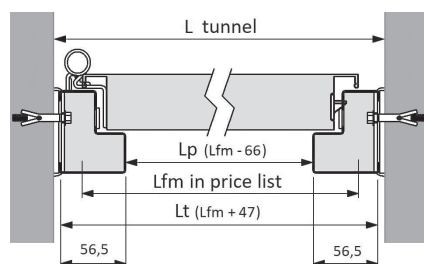
$$Y = L_{fm} - (2 \times C) - (2 \times D)$$

Special frames and doors

Fire doors with tubular frame for tunnel applications

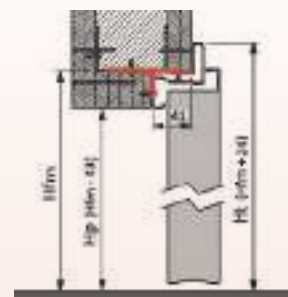
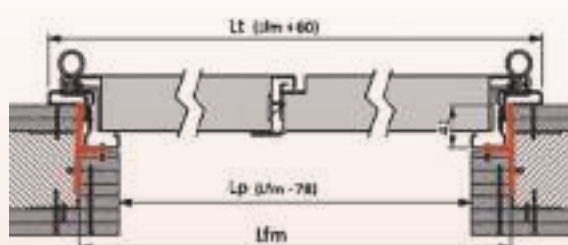
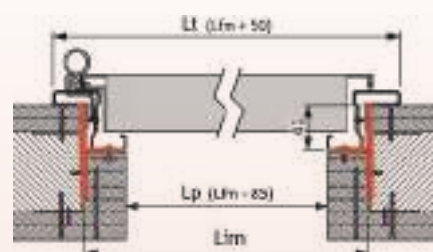
Construction like the 1 or 2 leaf handed type fire doors described on the previous pages but with frame having flat support on 3 sides with fixing plates for the "tunnel" application painted with epoxy polyester powders with the same finishing and RAL shade as the doors. The raw plugs for fixing to the wall are not included.

Doors certified according to the new European standard EN 1634



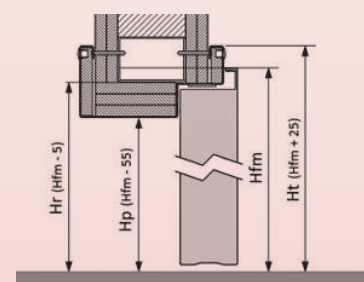
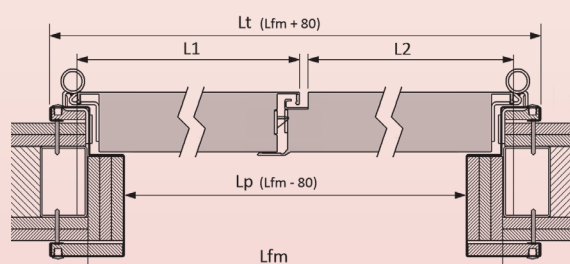
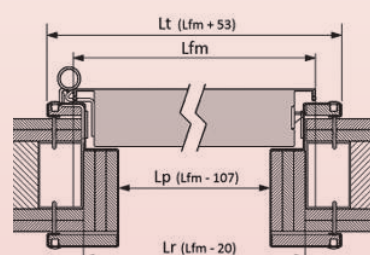
Fire doors with corner frame for plasterboard walls

Construction like the handed type 1 or 2 leaf fire doors described on the previous pages but with an additional kit consisting of screws, "T" brackets for fixing the frame to the metal frame of the plasterboard wall and additional self-expanding gasket to be glued along the outside perimeter of the frame before inserting the door into the wall.



Fire doors with embracing frame for plasterboard walls

Construction like the handed type 1 or 2 leaf fire doors described on the previous pages but certified and approved with embracing type frame in 1.5 mm thick galvanized steel profile for total wall thickness of 125 or 150 mm painted with epoxy polyester powders with the same finishing and RAL shade as the doors. The supply includes fixing screws and caps for closing the holes on the frame.

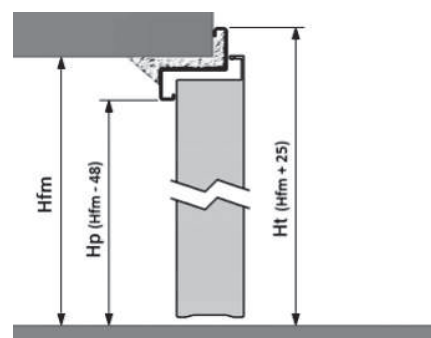
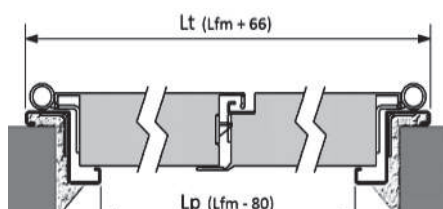
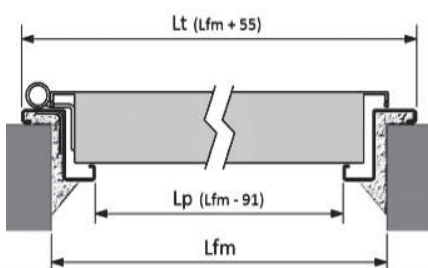


Special frames and doors



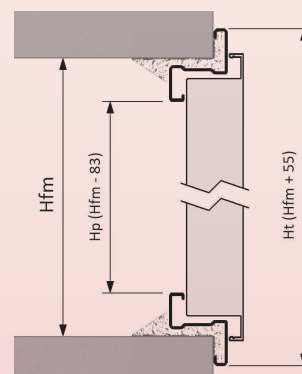
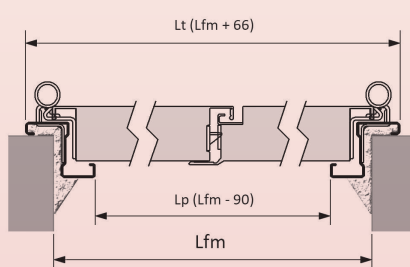
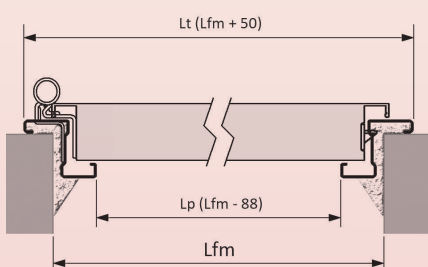
Fire doors completely made of AISI 304 stainless steel

Fire doors built and certified fireproof EI2 120 with 1 or 2 leaves right or left handed, with corner "Z" frame and leaf 63 mm of thickness, fully made of high-resistance AISI 304 stainless steel, lower spacer, foldable clamps, bearing hinges in stainless steel, 120 minutes fire-fighting internal pack, self-expanding perimeter gaskets, stainless steel bolts on the hinge sides, CE certified locks with stainless steel faceplate with latch and throws, pair of safety handles with plates and cylinder hole in stainless steel, compulsorily equipped with overhead door closers (non-spring stainless steel hinges), metallic plate with conformity mark, sticker with data, booklet with installation, use and maintenance instructions, copy of classification report and declaration of conformity upon request.



Metallic fire rated shaft doors

Door metallic fire rated, single or double leaf **REVERSIBLE model**, supplied assembled with high resistance steel frame on 4 sides with foldable clamps and holes for fixing with expansion screws, 1 hinge with spring and 1 bearing hinge on each leaf, and total thickness 53 mm (EI2 60) or 63 mm (EI2 120) of galvanized double steel sheet with fire rating core and thermo-expanding gasket between frame and leaf, painted with epoxy-polyester powders oven hardened embossed finishing RAL 9010 tone, CE marked lock with latch and throws, with square / triangle key, or black safety handle with steel core upon request, conformity mark metallic label, sticker with data, booklet for installation use and maintenance, copy of classification report and conformity declaration upon demand



Optional accessories

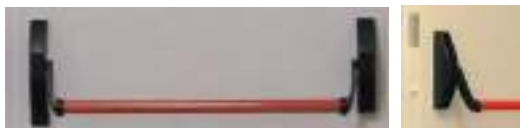
Panic bars

Certified and CE marked supplied with instructions for use and maintenance according to the current European standard UNI EN 1125. There are 7 models available for different needs:

TWIST-TECNO model, lever type, black base, natural aluminium coloured bar, crossbar sold and used for years due to the convenient price, easy assembly, perfect functioning. CE marked 376B1422AA. 110 mm jutting.



970 SR model, lever type, black base, red bar, relatively new handle, very reliable and practical as an alternative to the Twist model due to the colour of the bar. CE marked 376B1322AA. 100 mm jutting.



INNOVA model, lever type, black base, natural aluminium coloured bar, NEW, in fact, despite being a lever, it protrudes as much as the push models, therefore it is an alternative at a lower cost. CE marked 376B1422AA. 80 mm jutting.



SLASH-TECNO PLUS model, push type, black base, natural aluminium coloured bar, handle used when a small footprint is needed on doors that only open to 90°. CE marked 376B1322BA. 75 mm jutting.



TOUCH BAR model, push type, black base, red bar, crossbar used when a small footprint is needed on doors that open at 90°, alternative to the Slash model due to the colour of the bar. CE marked 0425 CISA prod. 72 mm jutting.



ENDURANCE model, push type, stainless steel-like bar and base, very elegant and good functioning, handle used when a small footprint is needed on doors that open only 90°. Marked CE377B1422BA. 63 mm jutting.



INOX model, lever type, stainless steel base, stainless steel bar, crossbar made entirely of stainless steel, elegant, highly reliable, easy to assemble and with perfect functioning. CE marked 37611322A. 100 mm jutting.



Cylinders

Complete or half cylinders, all different or uniformed to replace the insertion with Patent key supplied as standard.



Doorclosers

Certified and CE marked, delivered with installation instructions and servicing instructions under existing legislation European standard EN 1154. Doorclosers can be installed also lateron.



Electromagnets

To keep the doors normally open, lowvoltage operation and conform to standard CE 1155. It is necessary the connection to control units.

Vision panels and grills

Vision panels EI2 60 and EI2 120

Fire rated vision panels, not openable, delivered installed in our standard sizes. Glasses for internal use only, they deteriorate if installed outdoors. Visible glazing bead fixing screws. It is preferable to equip leaves with vision panels with openings greater than 0.15 m2 with door closers. EI2 60 glass thickness mm 23-25, EI2 120 glass thickness mm 50-53.



Multipurpose openings, grilles, fanlights

Laminated vision panels and grilles, not openable, delivered installed in our standard sizes. Visible fixing screws. The use of laminated safety glass is foreseen. Glass installed at the top on door minimum width L 700. Grids installed at the bottom unless otherwise specified by the customer when ordering a door with minimum width L 800. It is possible to insert more glasses or grilles on the same door. Fanlights in perforated sheet metal for construction site doors.





Upper profile for reversible doors

To cover the portion of the wall above the door and create perimeter uniformity with the 2 vertical jambs.



Stainless steel handle

A stainless-steel handle, if a tone of elegance is needed in particular environments.



Stainless steel push plates and kick plates

Made in stainless steel. Ideal for qualifying and strengthening heavy traffic doors.



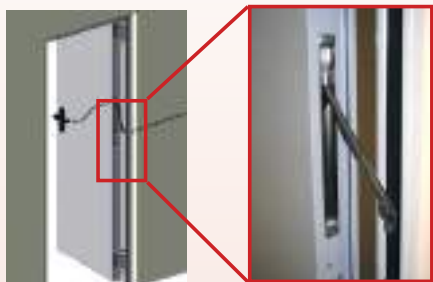
Third hinge

Standard in doors with a height greater than 240 cm and available as an option for lower heights.



Mobile thresholds (drop down seal)

Guillotine operation by closing the door. 2 models available: it can be either applied on the surface of the push side of the leaf after the door installation, or it can be integrated into the leaf for a more professional solution.



SCA

SCA = Access Control System by means of electrical consent. The electromechanical mechanism is entirely contained in the lock, and the wiring is inside the leaf. The bridge between the door and the frame is obtained by means of a chromed cable guide. Operation at 12 V AC/DC absorption 860 mAh. The buyer can connect any electronic management device for control such as buttons, card readers, people recognition, finger print etc. to the electrical connection terminal on the frame on the hinge side. Versions available for operation with panic bar (1 controlled side = SCA1) or single lever handle on 2 door sides (2 controlled sides = SCA2).

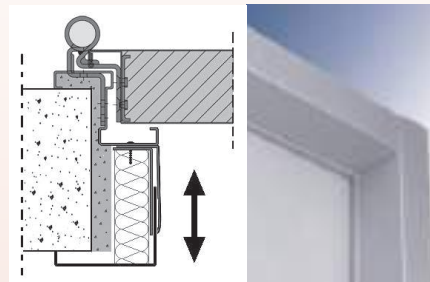


Ledge gaskets

Elastic rebate gaskets for sash (to the left) and frame (to the right) and many more. An optional low-cost item that gives the door quality when closing, acoustic and smoke rating performance.

Sound reduction kits

The sound reduction doors are the fire rated EI2 120 doors equipped with sound-reduction kits (picture) composed by a ground seal and rubber gaskets on the door. Maximum performance available 42 dB on single leaf doors and 34,5 dB on double leaf doors. To achieve the desired noise reduction level the installation must be done with care and maintenance performed regularly.



Telescopic frame extensions for corner frame

Made of galvanized and painted steel profile of the same colour as the door and to be screwed to its corner frame. They complete the door by enveloping the entire wall thickness.



American standard UL 10B single leaf doors

Door UL 10B single leaf

Door metallic fire rated 120 minutes according to the standard ANSI/UL "Fire Tests of Door Assemblies" single leaf DX-SX handed model, supplied assembled with high resistance steel frame on 3 sides with clamps to bend open and/or holes for fixing with expansion screws, 1 hinge with spring and 1 bearing hinge, lower side of frame removable after installation and leaf of total thickness 53 mm of galvanised double steel sheet with fire rating core and thermo expanding gaskets between frame and leaf, bolts at hinge side, painted with epoxy-polyester powders oven hardened embossed finishing RAL 9010 tone, lock with tongue and turns, black safety handle with steel core and plates, patent key, UL mark metallic label, sticker with data, booklet for installation use and maintenance.



Fire rated doors single leaf are available with 3 different frames:

Z frame

Doorset with "Z" shaped frame

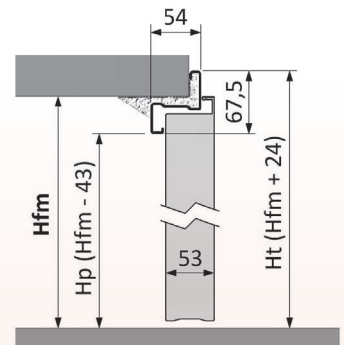
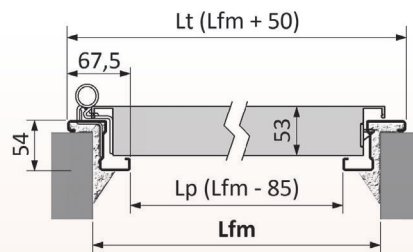
Order doors specifying dimensions Lfm x Hfm in cm.

Maximum dimension of door Lfm 1100 x Hfm 2150

Specify hand to push right = DX or left = SX

Options:

Different color, stainless steel handles and plates, stainless steel hinges without self-closing spring (overhead doorcloser becomes compulsory), wall embracing telescopic frame extension, any other UL listed technically fittable accessory



Midwall frame

Doorset for mid-wall installations or in corridors

Order doors specifying dimensions Lfm x Hfm in cm. or Lr x Hr

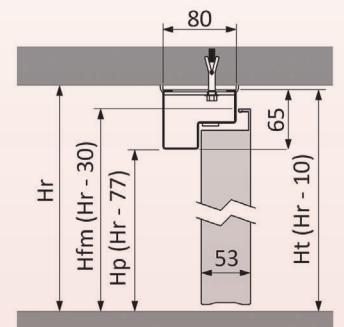
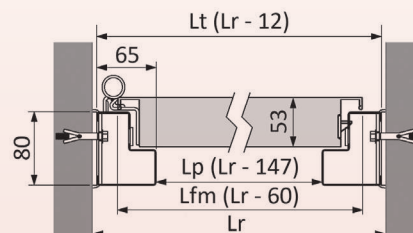
Maximum dimension of door

Lfm 990 x Hfm 2150 = Lr 1050 x Hr 2180

Specify hand to push right = DX or left = SX

Options:

Different color, stainless steel handles and plates, emergency crossbar rim type, any other UL listed technically fittable accessory



Mini-midwall frame

Doorset for mid-wall installations of low encumbrance

Order doors specifying dimensions Lfm x Hfm in cm. or Lr x Hr

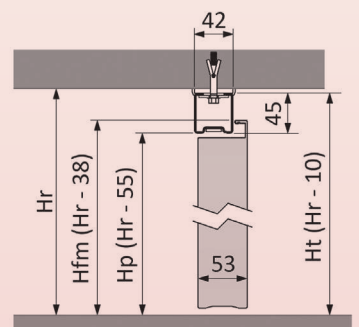
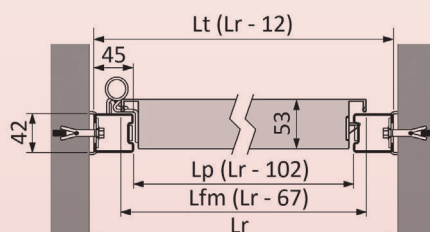
Maximum dimension of door

Lfm 1100 x Hfm 2150 = Lr 1167 x Hr 2188

Specify hand to push right = DX or left = SX

Options:

Different color, stainless steel handles and plates, any other UL listed technically fittable accessory



american standard UL 10-B double leaf doors

Door UL 10B double leaf

Door metallic fire rated 120 minutes according to the standard ANSI/UL "Fire Tests of Door Assemblies" double leaf DX-SX handed model, supplied assembled or unassembled, with high resistance steel frame on 3 sides with clamps to bend open and/or holes for fixing with expansion screws, 2 hinges with spring and 2 bearing hinges, lower side of frame removable after installation and leaf of total thickness 63 mm of galvanised double steel sheet with fire rating core and thermo expanding gaskets between frame and leaf, bolts at both sides, painted with epoxy-polyester powders oven hardened embossed finishing RAL 9010 tone, lock with tongue and turns in main leaf and mortise-lock with self closing device with rods for the upper and lower closing of secondary leaf, floor socket, black safety handle with steel core and plates, patent key, closing regulator, UL mark metallic label, sticker with data, booklet for installation use and maintenance.

Fire rated doors double are available with Z type frame

Doorset with "Z" shaped frame

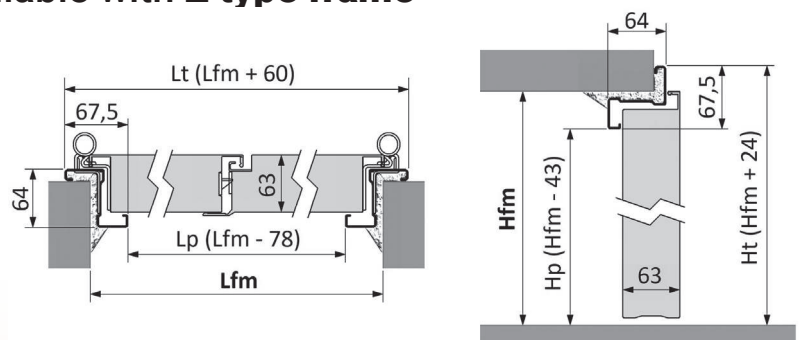
Order doors specifying dimensions Lfm x Hfm in cm.

Maximum dimension of door Lfm 1500 (750+750) x Hfm 2150

Specify hand of main leaf to push right = DX or left = SX

Options:

Different color, stainless steel handles and plates, stainless steel hinges without self-closing spring (overhead doorclosers becomes compulsory), wall embracing telescopic frame extension, any other UL listed technically fittable accessory



Accessories for UL10B doorsets



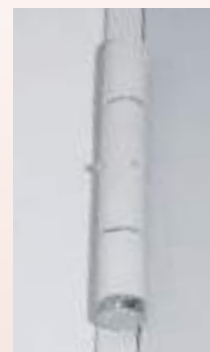
Black handle with steel core (standard)



Stainless steel handle



Bearing hinge (standard)



Hinge with spring (standard)



Stainless steel hinge



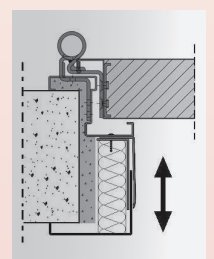
Emergency crossbar rim type



Closing regulator on double leaf door (standard)



Overhead doorcloser



S section of wall embracing telescopic frame extension

Finishings

Standard finishing

Our doors are delivered with leaf's steel sheet and frame painted with epoxypolyester powders oven hardened at 180 °C - RAL 9010 tone embossed finishing.



Other RAL tones available



Special paintings with epoxy-polyester powders RAL range

Painting with epoxy-polyester powders oven hardened semi brilliant embossed finishing or matt textured finishing suitable on external environments, for leaf and frame. Most of the RAL tones are available except the pearly and the phosphorescent. Finishing suitable for interiors only, they fade if exposed to direct sun.



On the left matt textured version, on the right semi brilliant goffered version, depending on the intensity or incidence of the light they have a different yield.

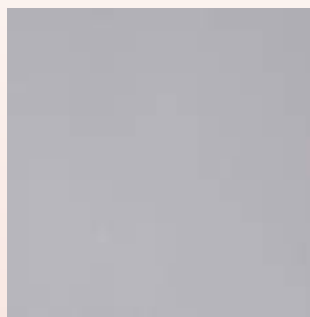
PVC coatings with film to peel-off

PVC imitation aluminium and stainless steel

Use of steel sheet coated with PVC imitation aluminium and stainless steel with protection film to peel off. Finishing suitable for interiors. 2 colours are available with different finishing: F16 Aluminium smooth glossy, F12 Stainless steel smooth glossy (colours with print tolerance, in doubt request samples of PVC). Maximum width wall opening L 1090 per leaf. Frame and profiles for windows painted with RAL 9007 smooth.



PVC F12 Stainless steel smooth glossy



PVC F16 Aluminium smooth glossy



Example of F12 PVC stainless steel imitation

Digital print

Digital photo print – drawings – notices –

Request us the catalogue or the file of available decorations or supply us the file with the desired decoration and we will submit you a personalized proposal.



Digital photo print – drawings – notices – fantasies – examples

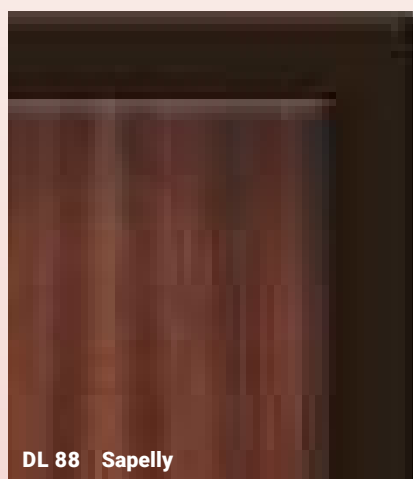
Finishings

PVC imitation wood

Use of steel sheet coated with PVC imitation wood and protection film to peel off. Finishing suitable for interiors only. The 10 type of wood illustrated in this catalogue are available (colours with print tolerance, in doubt request samples of PVC). Maximum width wall opening L 1090 per leaf. Frame and profiles for windows painted with RAL 8017 matt texturized surface.

By the years the PVC coating increased its quality and some finishes have veins in relief, looking like real wood from close sight.

Always check availability and timing of the desired finish before ordering finishings of this type!



Sliding fire doors CE MARKED

Premise

Sliding fire doors close large openings in the industrial sector. They are also used in smaller formats in the civilian sector. It must be said that EI sliding doors are heavy and not suitable for being opened several times a day. In case of frequent traffic, it is preferable to keep them normally open with holding electromagnets managed by smoke and heat sensors and they close by themselves due to the gravitational counterweights loaded manually when the leaves open.

The sliding fire doors are available EI 60, EI 90 and EI 120 with 1 or 2 leaves. The walls must be suitable and the holes must have sufficient space on the 2 sides to fully open the doors and a portion of the vertical wall above to fix the guide. The external sliding door and the wall must be coplanar and without obstacles for the entire part affected by its external frame measurement. Sliding doors are manufactured in several types precisely to adapt to the effective space available in the desired installation site.

CE marked sliding fire doors for European countries

Fireproof metal doors compliant with EN 16034 and EN 13241 standards, CE marked, for use indoors to be kept normally open or closed, which can be installed on masonry walls or on plasterboard walls with internal reinforcing metal structure or on sandwich panel walls to be reinforced externally with an insulated and protected metal structure as a support to the door. Upper guide drilled for fixing with screws or raw plugs (not included) in special low-friction steel profile for the sliding of overhead trolleys fixed to the panels forming the wings. Doors composed of modular panels in double sheet metal with special fire-proof insulation between them, total thickness of 120 mm in the EI 120 version and 100 mm in the EI 60 version with push-fit joints to be assembled using screws, sometimes in sight, with recessed handles on the 2 sides of each door, without lock and keys. Upper and lower stiffening structure in sheet steel. Counterweights for self-closing connected to the leaves by steel cables. Labyrinths against the penetration of fire and smoke in bent sheet metal for the cover of the upper guide and the counterweight. Thermo-expanding gaskets placed on all the labyrinths and between the panels. Accessories normally included in the price: end of stroke shock absorbers, hydraulic stroke brakes, electromagnets, 2- or 3-wheel pulleys (called sizes) in the case of low and wide doors. Check our offers because the accessories included may vary according to the type and size of the door. Doors made without floor thresholds up to a width LN of 4.90 metres. Beyond this width with threshold 50 x 20 H mm protruding from the finished floor in the EI 120 version and 30 x 20 H mm in the EI 60 version, lower edge of the doors with cavity for the sliding of olives positioned on the ground beyond the light. Finishing with base coat of thermoset epoxy-polyester powders in RAL 7035 colour. Other shades available at extra cost. On request, manufacture of doors with leaves and cover casing in AISI 304 or 316 stainless steel. Metal plate with identification data and CE marking affixed to the recessed handle in compliance with the provisions of the law. Documentation supplied: installation, use and maintenance instructions, DoP declaration of performance, declaration of conformity of the machinery directive. Maximum dimensions in 2022, extensions in progress: EI 120 maximum hole 50 m2 and within measurements 10 x 8.22 H meters with 1 leaf, 5.6 x 5.02 H meters with 2 leaves, EI 60 meters 10 x 8.22 H with 1 and 2 leaves. No standard sizes are manufactured, all made upon demand. Approximate weight of the doors 50 kg/m2. Packing on disposable metal trestles, guides supplied separately. Assembly to be carried out by specialized personnel.



Sliding fire doors CE MARKED

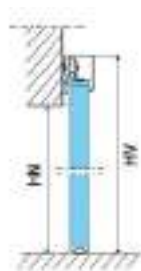
Typology

Below are the drawings of the main types.

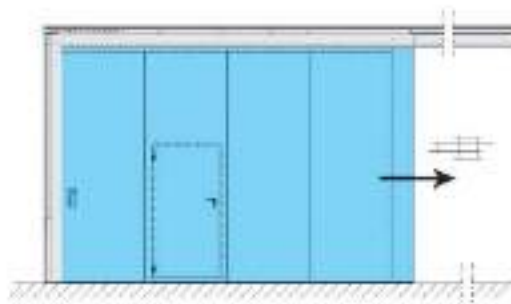
The standard fixing of the guide without surcharge is the one called "on reinforced concrete beam" illustrated in the vertical section. The ceiling fixing with extra charge is called "beam in light" and is illustrated in the optional elements.

The front counterweight is the standard of the 1 leaf door. 2 opposing external counterweights are the standard for 2-leaf doors. Differently positioned counterweights are available at a surcharge.

The pedestrian door is inserted with dotted drawings since it is optional.



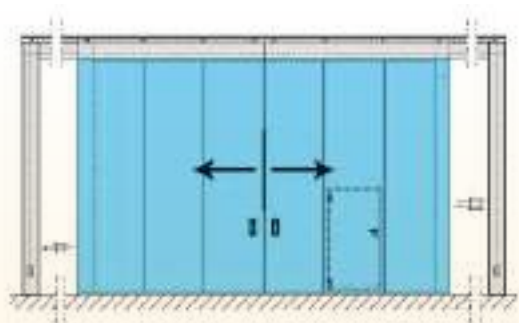
VERTICAL SECTION
OF SLIDING DOOR 1-2 LEAVES
WITH STANDARD FIXING CALLED
"ON REINFORCED CONCRETE BEAM"



PROSPECTUS OF SLIDING DOOR 1 LEAF WITH STANDARD FRONT COUNTERWEIGHT



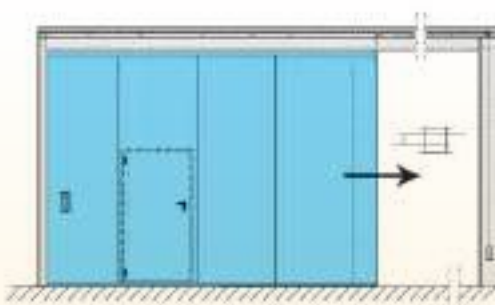
HORIZONTAL SECTION OF SLIDING DOOR 1 LEAF WITH STANDARD FRONT COUNTERWEIGHT



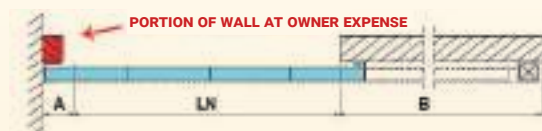
PROSPECTUS OF SLIDING DOOR 2 LEAVES WITH STANDARD COUNTERWEIGHTS



HORIZONTAL SECTION OF SLIDING DOOR 2 LEAVES WITH STANDARD COUNTERWEIGHTS



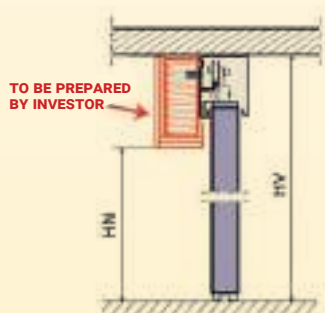
PROSPECTUS OF SLIDING DOOR 1 LEAF WITH OPPOSITE SIDE COUNTERWEIGHT



HORIZONTAL SECTION OF SLIDING DOOR 1 LEAF WITH OPPOSITE SIDE COUNTERWEIGHT

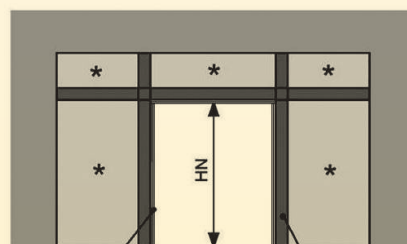
Beam in light

For fixing the door to the ceiling if there is no portion of the wall above the hole to fix the guide to. The net passage in height will obviously be reduced. Metal tubular beam normally with a section of 100 x 200 mm H insulated with 150 kg/mc rock wool and covered with REI plasterboard. It is a preparation of the hole that the buyer or a trusted locksmith can also prepare.



VERTICAL SECTION WITH OPTIONAL FIXING
ON CEILING CALLED "BEAM IN LIGHT"

Wall with insulated and protected load-bearing structure or on sandwich panels



PROTECTION WITH
PLASTERBOARD LAYERS
INSULATED METALLIC
SUPPORT STRUCTURE
* FIRE RATED TAMPONAGE

Sliding fire doors CE MARKED

Optional accessories

Finishing in colour other than standard RAL 7035

All colours of the RAL range are available except pearlescent, phosphorescent, particular yellows, etc.

Pedestrian doors

In the following variables: with or without panic bar, which can be installed by pushing or pulling with respect to the supporting wall, passage width mm 850 or 1140, with threshold H 92 mm or completely without threshold.

Manufacturing doors and frames in stainless steel

Doors, frames, guide covers, counterweight containment box are available in stainless steel.

Lock with keys

The gates are supplied without lock. The door remains leaning against the closing stop due to the effect of the gravitational counterweight. It is possible to order doors with a lock in order to be able to lock them with a key on both sides. On doors that have already been installed, it is only possible to add a closure that can be positioned at the rear and accessible only from the side of the wall on which the door was installed.



Vertical sliding fire door

Premise

El vertical sliding doors, also called guillotines, are normally used in medium-small size openings such as windows, closures for industrial freight elevators, kitchens, conveyor belts, etc. to limit the spread of fire in the event of a fire.

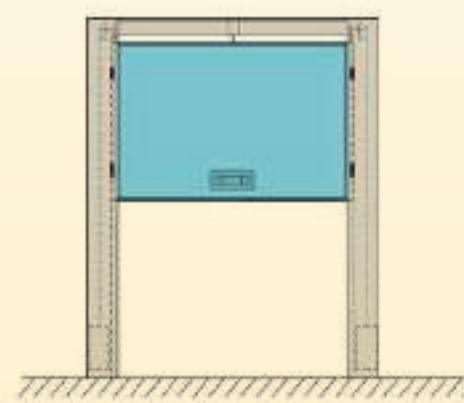
They are also available in larger formats for holes up to over 4 x 4 meters or square metres. total 13.

El vertical sliding doors

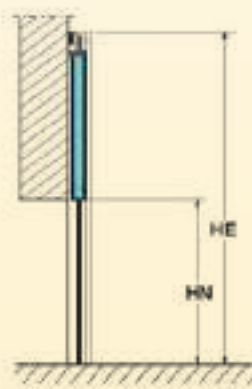
El 120 fire-resistant metal doors with vertical sliding compliant with EN 16034 and EN 13241 standards, CE marked, to be kept normally open or closed, or REI 120 in compliance with UNI 9723 standard and approved by the Ministry of the Interior if in small non-pedestrian sizes.

Door made with one or more modular panels in double sheet metal with a special fireproof panel in between, without lock, built-in handles on 2 sides. Adjustable balancing counterweights connected to the leaf. Fixed lateral labyrinths in press bent sheet metal, sliding on lateral guides and anti-friction flame arrester slides. Thermo-expanding gaskets placed on the labyrinths. Accessories normally included in the price: electromagnet and if the dimensions require them, the stroke end shock absorber and the hydraulic stroke brake. Finishing with base coat of thermoset epoxy-polyester powders in RAL 7035 colour. Other RAL shades with extra charge. Metal plate with identification data affixed to the recessed handle in compliance with the provisions of the law. Documentation supplied: installation, use and maintenance instructions, DoP declaration of performance, declaration of conformity of the machinery directive or Declaration of Conformity and Ministerial Approval. Maximum dimensions: maximum area 13.27 m² and within measurements L 4.35 x 4.20 H. Approximate weight 50 kg/m².

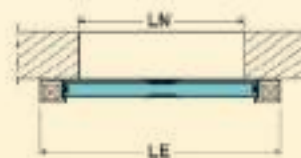
Packing on disposable stands. Assembly to be carried out with specialized personnel.



PROSPECTUS



VERTICAL SECTION



HORIZONTAL SECTION

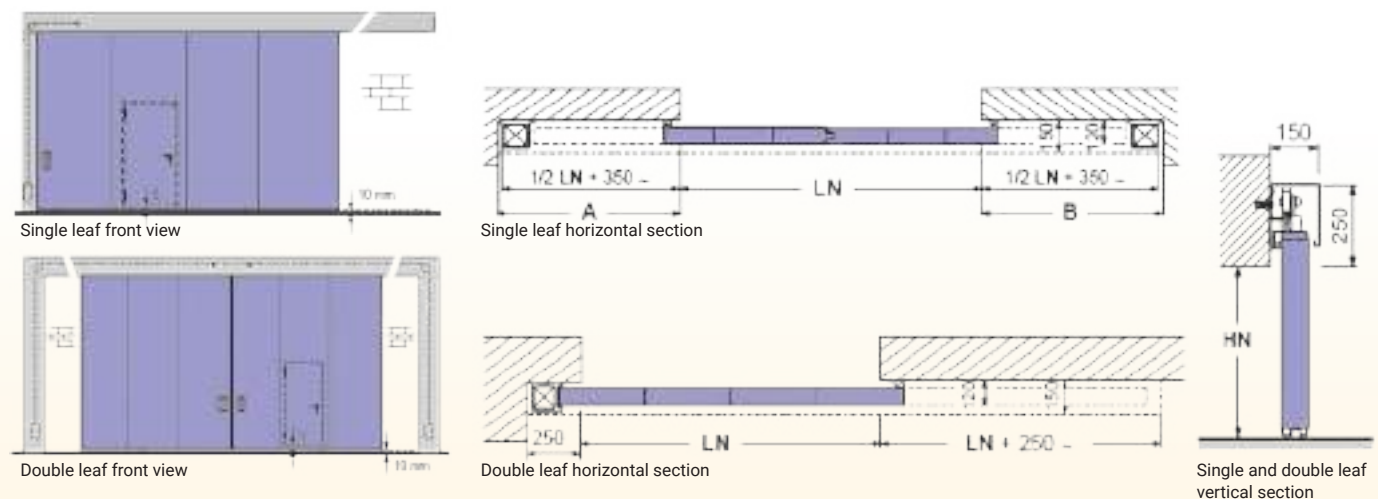
Sliding fire doors for non-European sales

Premise

The task of these sliding doors is to protect from fire spread in interiors of buildings like industrial warehouses, factory sheds, malls, garages, hangars, fair halls and similar where forklifts, trucks or bigger transportation means or goods have to pass through. They are used also in smaller formats because they require less space during movement if compared to normal hinged doors.

Sliding fire doors according to EN 1634 standard, not CE marked

Sliding doors fire rated tested according to the standard UNI 9723 and/or European EN 1634 for low traffic purposes composed by rail for upper side made of profiled high resistance steel with low friction carriages predrilled for the fastening with screws or expansion screws. Special labyrinths against fire and smoke penetration. Leaves made of modular panels flush joining of double metal sheet with special fire fighting core total thickness 80 mm for EI 60 version and 100 mm for EI 120 version, without lock and recessed handles on both sides. Gate without sill, lower edge of the leaves with cavity for a floor-bolt to slide in it to install beyond the wall opening. Electromagnet included as door retainer with release button and counterweight for the self-closing of the gate with metallic rope. Protection casing made of press-folded steel sheets for the upper rail and the counter-weight. Thermo-expanding gaskets on all overlapping labyrinths and under the leaf. Primer varnishing with epoxy-polyester powders oven hardened light grey RAL 7035. Packing on disposable one-way metal containers. Approximate weight 45 kg. /sq.m. Conformity mark metallic label. Copy of certificate or homologation. Conformity declaration. Booklet with installation and maintenance instructions. Door suitable for internal uses to be installed either on one or the other side of a flush and plumb wall. Assemble by qualified staff only.

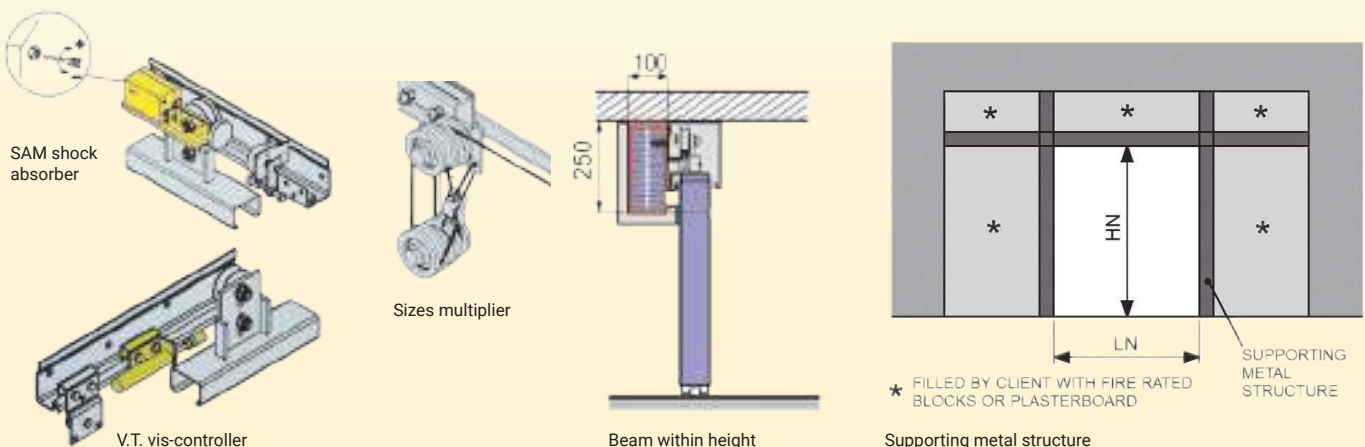


Special manufacturing and accessories

Special manufacturing: opposite side counterweight and off-axis counterweight. Compulsory accessories needed for the safety or due to door's dimensions: SAM SHOCK ABSORBER to mitigate the final stroke of the leaf on the frame, V.T. VISCOTROLLER (cruise control) breaking device to avoid acceleration and keep constant the closing speed to approx 30 cm/second, SIZES MULTIPLIER if the length of the leaf/leaves is much more than the height to avoid the counterweight to touch

the ground before gate closes completely.

Optional accessories: BEAM WITHIN HEIGHT for the fastening of the door directly to the ceiling if there is no portion of vertical wall above the opening to fix the rail, PEDESTRIAN DOOR with and without sill and panic crossbar, SPACER to distance the door from the wall in some case with pedestrian door, NIGHT LOCK, SPECIAL DOOR STOP, SUPPORTING METAL STRUCTURE.



Big rotation fire doors

MAGNUM

Premise

The EI fire big rotation doors (also called Magnum) hinged on vertical axes are installed as an alternative to sliding doors when there is no lateral space to place a sliding door.

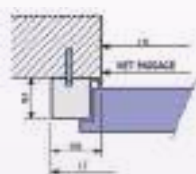
It must be said that EI big rotation doors are heavy and not suitable for being opened several times a day. In case of frequent traffic, it is advisable to keep them normally open, held by electromagnets.

EI big rotation doors

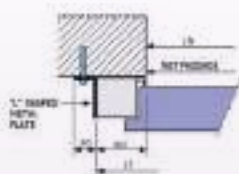
EI big rotation metal doors compliant with EN 16034 and EN 13241 standards, CE marked, to be kept normally open or closed, which can be installed in the opening or beyond the opening on masonry walls or on plasterboard walls equipped with an internal reinforcing metal structure. Frame in 90 x 90 mm tubular press-bent or "Z" profiled steel profile of high resistance on 3 sides with holes for fixing with expansion raw plugs (not included). Doors composed of mechanically coupled modular panels 75 or 100 mm thick in double sheet metal with a special fireproof panel interposed, with 2 extra strong hinges per door or 3 if the dimensions require it. For automatic reclosing, 1 large hydraulic overhead door closer per leaf with adjustment of opening force, closing speed, final stroke. For very large door dimensions, a supplementary return spring or booster depending on the case. Guaranteed self-closing with doors open at 150°, self-closing to be checked for larger openings, variable according to the size/weight of the doors. Thermo-expanding gaskets placed on the vertical sides of the frame, on the lower and upper heads of the leaf and in the central ledge in the case of a 2-leaf door. Lock complete with through cylinder, handle with steel core covered in black nylon or stainless steel with plates and keys. The 2-leaf door also includes the closing regulator and in the secondary leaf insert counter-lock with self-locking device for closing in the frame at the top and in the bushing to be installed on the floor at the bottom. Doors made without floor thresholds within the measurements included in the direct application fields of standard EN 1634 with 1 leaf cm 333 x 333 H and with 2 leaves cm 594 x 423 H and in larger formats in extended application according to standard EN 15269. Finishing with base coat with thermoset epoxy-polyester powders in RAL 7035 shade. Other RAL colours with surcharge. Metal plate with identification data and CE marking affixed to the doors in compliance with the provisions of the law. Documentation supplied: installation, use and maintenance instructions, DoP declaration of performance. Approximate weight 50 kg/m². Packing on disposable stands. Assembly to be carried out with specialized personnel.



Types of wall-fixing and reference measurement



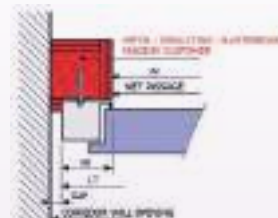
Tubular frame fixing on wall surface



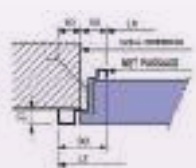
Tubular frame fixing on wall surface through external "L" shaped metal



Tubular frame fixing in corridor and masonry portion of wall



Tubular frame fixing in corridor and metallic portion of wall insulated and protected



Corner "Z" frame, standard fixing



Corner "Z" frame, fixing in corridor and masonry portion of wall



Corner "Z" frame, fixing in corridor and metallic portion of wall insulated and protected

Optional accessories

Finishing in colour other than standard RAL 7035

All colours of the RAL range are available except pearlescent, phosphorescent, particular yellows.

Electromagnets

Lever or push type **panic bars**.

Application hooks

with top-bottom closure for greater resistance to air pressures

Leaves and frame made stainless steel

Fixing with "L" shaped metal on surface of the wall by dowels.

Access control system with **electric lock**.

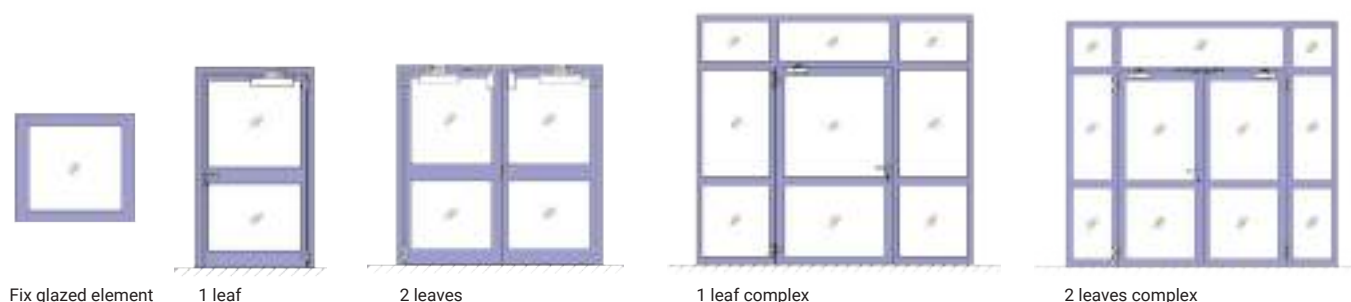
Glazed fire doors

GLASS FIRE DOORS with additional fire-proof performance certified for 30 - 60 - 90 - 120 minutes, made with steel or aluminium profiles with the smallest possible section, with the largest possible glass mirrors inserted to obtain shared aesthetic solutions that leave the maximum to transparency and infuse lightness and elegance to the observer. The profiles, in addition to being made of metal, are made up of special fire protection and insulation materials. The multi-layered glass is interspersed with transparent gels which become opaque and expand in the event of fire,

creating a barrier to flames and smoke and an insulating shield against the passage of heat. They are normally used for aesthetic reasons or the need for transparency in buildings such as banks, museums, public buildings, shopping centres, hotels, theatres, offices, restaurants, factories, sheds to compartmentalize halls, corridors, stairs, doors and windows adjacent to external emergency stairs, passageways, separations for meeting rooms or between offices and warehouses and similar situations.

Types available

- Glazed doors with 1 and 2 leaves, schematically shown below with or without side panels (complex) or fanlights, both glazed and solid

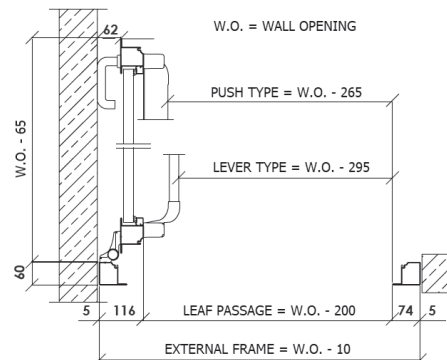
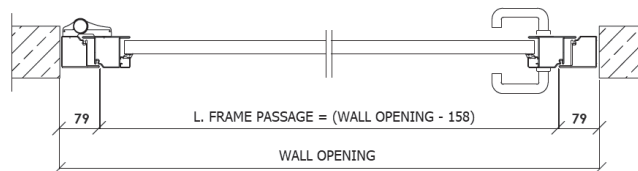


- 1 and 2-sash opening windows with 4-sided frame
- Fixed glazing with 1 or more glasses with 4-sided frame
- Window with transom opening



Range

- Steel profiles for interiors
EI30 – EI60 – EI90 – EI120
- Aluminium profiles for interiors
EI30 – EI60 – EI90 – EI120
- Aluminium profiles for exteriors
EI30 – EI60 – EI90 – EI120



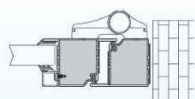
Accessories included in the price

Standard finishes of the profiles: steel profiles in 10 colours to choose from, natural anodized aluminium profiles for interiors, aluminium profiles for exteriors in cream white RAL 9010, adjustable 3-wing hinges, overhead door closers, recessed lock with double stainless steel handle with plates and cylinder with keys, in the case of 2-leaf doors lock for the secondary leaf, 2 door closers, track-operated closing regulator and floor socket.

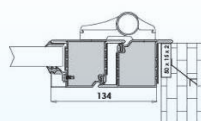
Optional accessories and finishes

Lever or push model panic exit devices in various colours or imitation stainless steel, wall and floor electromagnets, electric strikes or electro-handles. Finishing profiles with thermosetting powders in all the colours of the RAL range or bronze/black anodizing.

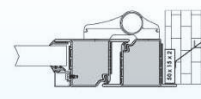
FIXING TYPES AVAILABLE



FRAME TYPE "L"
FLAT SUPPORT
WITHOUT WING

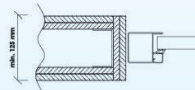


FRAME TYPE "Z"
WITH EXTERNAL WING

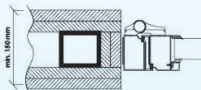


FRAME TYPE "T"
WITH INTERNAL WING

FIXING TO FLEXIBLE WALLS

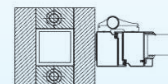


FIXING ON
PLASTERBOARD
WALLS



FIXING ON WALLS
WITH CALCUIM SILICATE

FIXING ON INSULATED WALLS



DATA / PERFORMANCE	FOR INDOORS								FOR OUTDOORS			
	TEMPERATURE RANGE - 10% / +45° - NO WATER AND DIRECT SUN											
	PROFILI IN ACCIAIO				PROFILI IN ALLUMINIO				PROFILI IN ALLUMINIO			
Request specific reconfirmation, data may change without notice.	EI 30 STEEL	EI 60 STEEL	EI 90 STEEL	EI 120 STEEL	EI 30 ALUMINIUM	EI 60 ALUMINIUM	EI 90 ALUMINIUM	EI 120 ALUMINIUM	EI 30 ALUMINIUM	EI 60 ALUMINIUM	EI 90 ALUMINIUM	EI 120 ALUMINIUM
TOTAL WINDOW THICKNESS mm.	60	60	80	80	74	79	94	104	75	75	89	89
TOTAL WEIGHT OF GLASS INCLUSIVE kg/m2.	45	60	95	115	50	70	95	115	50	65	80	100
ONLY GLASS THICKNESS mm.	16	25	38	50	16	25	38	50	32	41	48	51
THERMAL INSULATION Ug (W/m2k)	5,4	5,1	4,8	4,5	5,4	5,1	4,8	4,5	1,2	1,2	1,2	4,5 *
NOISE REDUCTION (Rw-Db)	38	42	45	46	38	42	45	46	38	42	45	46
LIGHT TRANSMISSION %	85	81	76	71	85	81	76	71	76	72	67	61
REACTION TO FIRE	CLASS A1 ACCORDING TO EN 13501-1											
IMPACT RESISTANCE	CLASS 1/B/1 ACCORDING TO EN 12600											
THICKNESS AND DIMENSIONS TOLERANCES	ACCORDING TO EN 12543											
UV STABILITY	ACCORDING TO EN 12543-6											

* With sun protective film only

The **GLASS DOOR OFFER FORM** is available in the **DOWNLOAD** section on our website **WWW.ENDOORS.IT** to be filled in and sent to us when requesting an offer.

Endoors' main references since year 2010



Akasya Mall - Istanbul



Ancon Tower - Panama



Antasya Residence - Istanbul



Bolshevik Mall - Kiev



Fairmont Hotel - Rabat



Inceneritor - Bolzano - Italy



Hospital San Gerardo - Milan



Grand Tower - Panama

Endoors' main references since year 2010



King's Avenue Mall - Cyprus



Nicosia Mall - Cyprus



Tunnel - Brescia - Italy



Tocumen Airport - Panama



Q Tower - Panama



Titanium Tower - Panama



Megapolis - Panama



Tower Control - Algiers



Vlas Resort - Bulgaria

Endoors' main references since year 2010



Bambu Shopping Centre - El Salvador



Hospital Bolnica Dobo - Bosnia and Herzegovina



Hospital Punta Pacifica - Panama



Icon Tower - Cyprus



Remedica Pharmaceutical - Cyprus



Ritz Carlton Residences - Cyprus



Soho Resort - Cyprus



Stadium in Tirana - Albania

100%

This image shows a single sheet of white paper with horizontal blue ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

“the manufacturing ”



Production facilities

Endoors srl. has one production plant with outlying warehouse and offices located in Polesine Parmense / PARMA, in the middle of the northern part of Italy. The interaction with its 2 sister companies located in the south of Italy and abroad creates a synergy with consequent experience and improved performance. These activities work in favor of the product's quality and make Endoors srl. a specialist in the complete range of metallic fire rated shutters and give it the capability to compete successfully with the major names in Europe.



Machinery

The manufacturing facilities consist of a complete production line ending with very sophisticated varnishing machinery for the fabrication of metallic doors, shafts and general shutters and their components and accessories.

All of Endoors srl. production conforms to certified prototypes and the performance of single items are constant because they are surveyed and guaranteed by the quality system of very modern and technologically advanced equipment and innovative manufacturing procedures as per UNI – EN standards.

The factory is very flexible and can produce simultaneously, standard and custom-built fire rated and multipurpose doors in different colours and finishes, organise complex supplies by adding to its own products the traded products of the sister companies of the group like sliding gates and complete glazed doors, satisfying the needs of the clients who prefer a unique, active and reliable partner for its entire range of products.



Raw materials

Endoors srl. uses only top quality sheet metal and frame profiles as well as the best in components such as handles, locks, cylinders, hinges, self expanding gaskets and closing regulators. All metallic parts are completely galvanized.

The door wings feature a fire resistant core of advanced technology material all studied and developed by Endoors srl. The quality of the raw materials is important.

It influences the structural resistance and the fire rating performance of the final product which must be reliable. Tested prototypes have been submitted to compulsory hard slamming cycles, stress and fire tests.

The everyday production guarantees the continuity of the performance to the strict parameters of the new European standards for mechanical durability and fire resistance.

WWW.ENDOORS.IT

INFO@ENDOORS.IT