

ENDOORS

FIRE RATED AND MULTIPURPOSE METALLIC DOORS

**HINGED
DOORS**



FIRE RATED 60
FIRE RATED 120
MULTIPURPOSE 0

**SLIDING
DOORS**



FIRE RATED 120

**BIG
ROTATION
DOORS**



FIRE RATED 60
FIRE RATED 120

**GLAZED
DOORS**



FIRE RATED 30
FIRE RATED 60
FIRE RATED 90
FIRE RATED 120

EN DOORS srl

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



Destructive tests beyond limit



Products strictly tested and certified according to the european standard EN 1634 and Italian UNI 9723.

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.



conformity to the standards and prescriptions

The forthcoming harmonisation of fire door standards in EU has prompted Endoors srl. to meet from the requirements of the Construction Products Directive (CPD) 89/106/CEE 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 in the near future 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” in final stage of approval 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.



finished 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 E12 60, E12 120 and Multipurpose without vision panels for the stock-selling dealers.

HANDED DOORS IN SPECIAL AND STANDARD SIZES single and double leaf E12 60, E12 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 E12 60, E12 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 E12 120

HINGED BIG ROTATION INDUSTRIAL GATES single and double leaf E12 60 - E12 120

GLAZED DOORS single and double leaf E12 30 - E12 60 - E12 90 - E12 120

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



...A STEP TO A SAFER WORLD

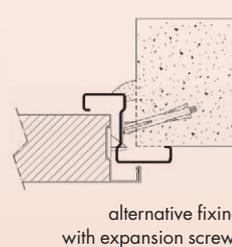
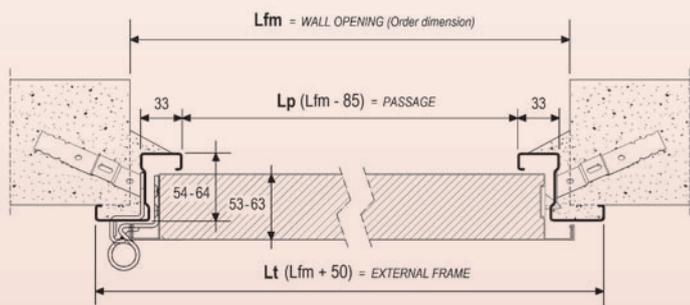
single leaf doors

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 homologation and conformity declaration.

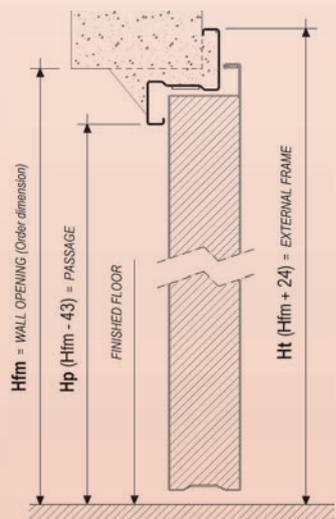
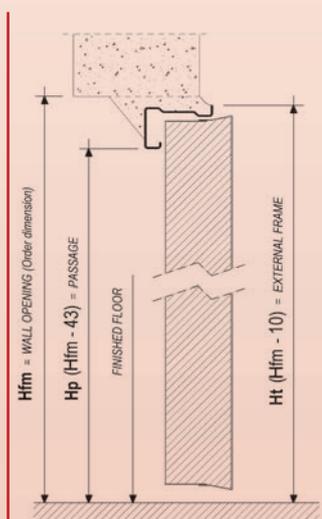
door multipurpose single leaf

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.

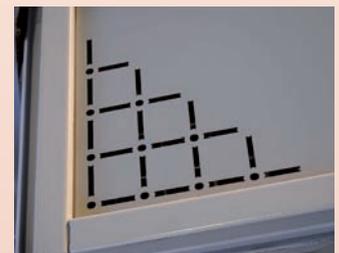


removable sill

horizontal section of reversible + handed doors



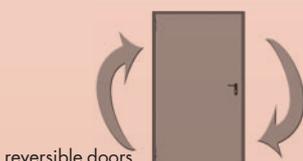
standard finishing RAL 9010 embossed



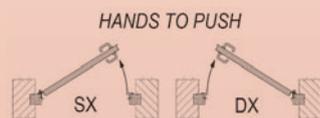
ventilation holes at the 4 corners, optional on multipurpose

vertical section of reversible doors

vertical section of handed doors



reversible doors



AVAILABLE DIMENSIONS OF SINGLE LEAF DOORS	WALL OPENING MM.
STANDARD DIMENSIONS Lfm x Hfm	700 * x 2060 or 2150 * multipurpose only 800 X 2060 or 2150 890 X 2060 or 2150 990 X 2060 or 2150 1100 X 2060 or 2150 1200 X 2060 or 2150 1300 X 2060 or 2150 1330 X 2060 or 2150
SEMI-STANDARD DIMENSIONS Lfm x Hfm	Lfm from 500 to 1330 ** Hfm 2060 or 2150 ** check certification coverage
SPECIAL DIMENSIONS Lfm x Hfm	Lfm from 500 to 1330 ** Hfm from 1760 to 2640 ** ** check certification coverage

double leaf doors

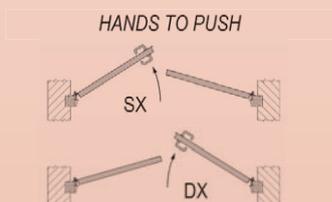
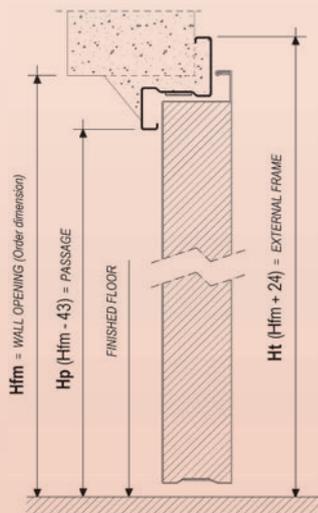
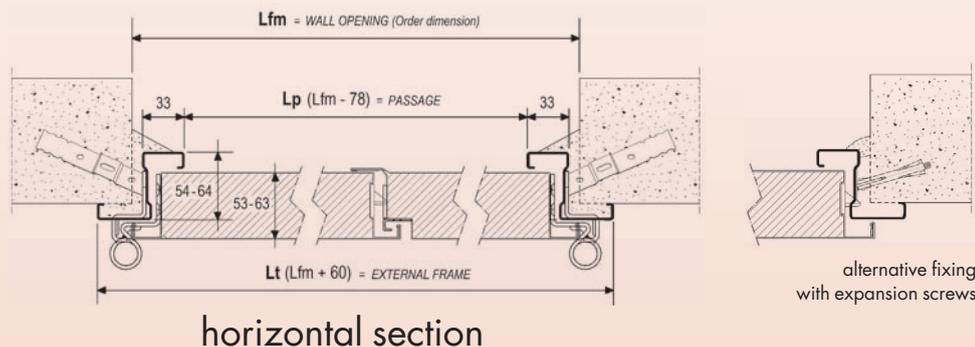
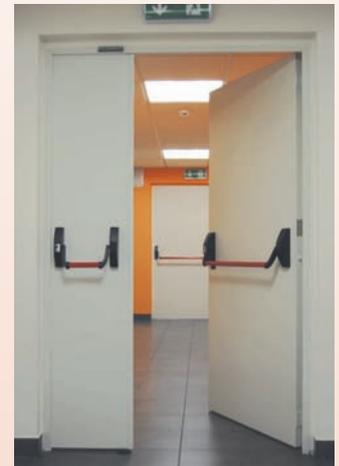
door EI2 60 – EI2 120 double leaf

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 homologation and conformity declaration.



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.



AVAILABLE DIMENSIONS OF DOUBLE LEAF DOORS	WALL OPENING MM.
STANDARD DIMENSIONS Lfm x Hfm	1200 X 2060 or 2150 1290 X 2060 or 2150 1390 X 2060 or 2150 1500 X 2060 or 2150 1600 X 2060 or 2150 1780 X 2060 or 2150 1980 X 2060 or 2150
SEMI-STANDARD DIMENSIONS Lfm x Hfm	Lfm from 900 to 2600 ** Hfm 2060 or 2150 ** check certification coverage
SPECIAL DIMENSIONS Lfm x Hfm	Lfm from 900 to 2600 ** Hfm from 1760 to 2640 ** ** check certification coverage

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

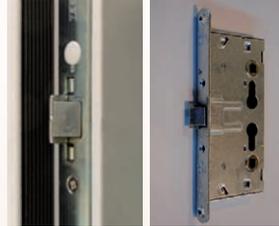
To DIN 18255 standard



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)



self-blocking in secondary leaf
fire rated

Blocks the secondary leaf in closed position



Lock for secondary leaf
fire rated



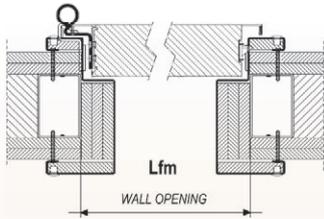
floor socket
fire rated and multipurpose

Strike for lower rod in floor



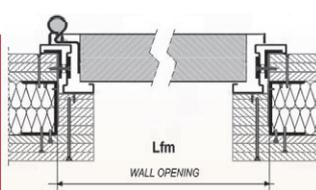
latch in secondary leaf
multipurpose

special doors



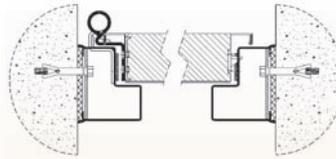
doors with embracing frame on plasterboard partitions

The door has a frame embracing the entire partition's thickness of 125, 150, 175 or 200 mm. The frame can be supplied insulated with plasterboard strips or not insulated. It is prepared with holes for the fastening to the partition and supplied with screws and caps to close the holes. The dimensions to indicate in the order are the nominal wall opening dimensions $L_{fm} \times H_{fm}$ while the real opening $L_r \times H_r$ to prepare in the partition is less in width 20 mm for the single leaf doors and 10 mm for the double leaf doors and less in height 5 mm for both.



doors on plasterboard partitions with corner frame

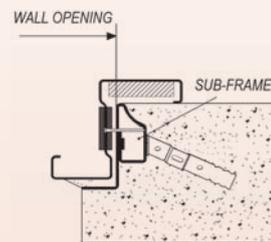
Identical doors to those of catalogue DX – SX handed, with frame completed of metallic T shaped plates for the fixing on fire rated partitions and additional self-expanding gasket for the perimeter of the door. Fastening screws not included.



doors for installation in corridors

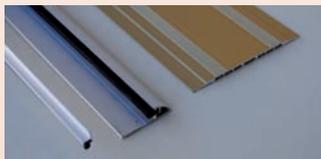
The door has a frame having even rest on 3 sides, galvanized and painted like the door. Holed plates for the fastening to the wall. Expansion screws excluded. For convenience reasons doors can be ordered

with the dimensions of the real opening $L_r \times H_r$. For the single leaf doors the nominal wall opening dimensions $L_{fm} \times H_{fm}$ are 53 mm less in width and 23 mm in height. Example: order for real wall opening $L_r 1043 \times 2173 H_r$ and nominal wall opening dimensions will be $L_{fm} 990 \times 2150 H_{fm}$. For the double leaf doors the nominal wall opening dimensions $L_{fm} \times H_{fm}$ are 63 mm less in width and 23 mm in height. Example: order for real wall opening $L_r 1653 \times 2173 H_r$ and nominal wall opening dimensions will be $L_{fm} 1590 \times 2150 H_{fm}$.



sub-frames

Sub-frames of tubular galvanized steel for the preparation to dry installation. For fire rated doors it is necessary to install also a thermal kit conform to the tested installation system.



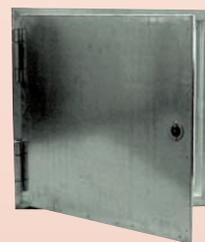
sound reduction doors

The sound reduction doors are the fire rated EI2 120 doors equipped with sound-reduction kits (picture) to choice between 3 different levels of noise reduction ranging from 39 to 44 dB. To achieve the desired noise reduction level the installation must be done with care and maintenance performed regularly. With some kits the sill must be installed before the door which will be placed over.



doors completely of stainless steel

Doors built with the 2 sheets of leaf, frame, handle, hinges and faceplate of lock completely of stainless steel. Steel type AISI 304 finishing anti fingerprints. Thickness of the leaf 63 mm (EI2 120) and maximum wall opening 1300. Available is also the "Kit inox" only, composed of handle, hinges, and face plate of lock made of stainless steel to install on normal steel doors.



small doors

Small single and double leaf doors are produced to close electric cabinets or similar, with fire rated certificates. Frames on 3 or 4 sides. Doors galvanized or painted.



windows and louvers

windows EI2 60 and EI2 120

Windows fire rated, installed, not openable. Glasses for exclusive use in interiors, they deteriorate if installed on exteriors. Screws for fastening of profiles in sight. It is preferable to fit with doorcloser the leaves with fire rated windows bigger than 0,15 sq.m. thickness of glass EI2 60 23-25 mm thickness of glass EI2 120 50-53 mm.



windows multipurpose and louvers

Windows multipurpose and louvers, installed, not openable. Screws for fastening in sight. Security glasses are used of type laminated or wired. Glasses installed in the upper part of doors minimum width L 700. Louvers installed in the lower part of doors unless different indication of the client at order time on doors of minimum width L 800. It is possible to insert more than one glass or louver in the same door.



optional accessories

emergency crossbars

Certified and CE marked, delivered with installation instructions and servicing instructions under existing legislation European standard EN 1125.

5 models are available for different needs:

Model TWIST, lever type, black base, bar natural aluminium, crossbar sold and used for years for the convenient price, the easy installation, the perfect operation. Marked CE 376B1422AA. Jutting 110 mm.



Model 970 SR, lever type, black base, bar of red color, crossbar relatively new as a very reliable and practical alternative to the model Twist for the color of the bar. Marked CE 37611322A. Jutting 100 mm.



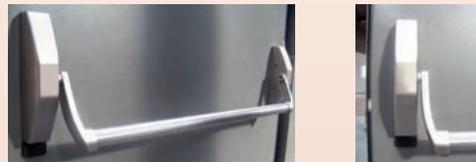
Model SLASH, push type, black base, bar natural aluminium, crossbar used when a low encumbrance is needed on doors which open 90° only. Marked CE 36611322B. Jutting 75 mm.



Model TOUCH BAR, push type, black base, bar of red color, crossbar used when a low encumbrance is needed on doors which open 90° only, alternative to the model Slash for the color of the bar. Marked CE 0425 prod. CISA. Jutting 72 mm.



Model INOX, lever type, made of complete stainless steel base and bar, elegant, of high reliability, easy installation and perfect operation. Marked CE 37611322A. Jutting 100 mm.



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.



rubber gaskets

Elastic seals for leaf and frame. An optional article of low cost that gives quality of closing to the door.



stainless steel handle

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



frame extensions

Frame extensions of galvanized steel painted the same color as the door to fasten with screws to its frame. They complete the door embracing the entire wall thickness.



electromagnets

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



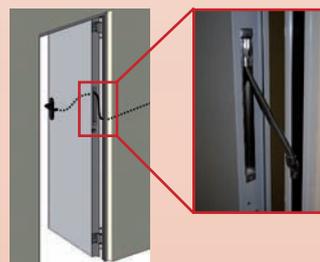
third hinge

Used in doors with a height exceeding 240 cm and available as an option for lower heights.



push plates and kick plates

Made of stainless steel or aluminum. Ideal for upgrading and strengthening the doors under heavy traffic.



sca access control systems

SCA = Access Control System working via electrical consensus. The mechanism is

all contained in the electromechanical lock and wiring is internal to the leaf. The bridge between leaf and frame is achieved by stainless steel foldaway tube or a wireless contact. Operation at 12 Vdc 800 mA absorption. The client can connect to the terminal on the frame at hinge side any device for the electronic management such as buttons, card readers, people recognizer etc. Versions available for the use with emergency crossbars or lever handles on the 2 sides of door.

finishings

standard finishing

The series doors have the leaf's steel sheet and frame painted with epoxy-polyester powders oven hardened RAL 9010 embossed finishing. To order it is possible to have different tones in RAL range.



standard finishing RAL 9010 embossed

paintings in RAL range

special paintings with epoxy-polyester powders ral range

Painting with epoxy-polyester powders oven hardened semi brilliant embossed finishing for leaf and frame. All RALs are available except the pearly and the phosphorescent. Finishing suitable for interiors only, they fade if exposed to direct sun.

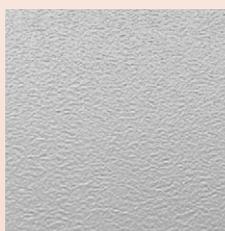


PVC coatings with peel-off film

pvc plain color white

Use of steel sheet coated with PVC plain color white and protection film to peel off. Finishing suitable for exteriors and interiors.

Finishing embossed as shown in the picture. Maximum width wall opening L 1090 per leaf. Frame and profiles for windows painted similar to RAL 9003.



PVC plain color, white finishing embossed



PVC F12 Stainless steel smooth glossy

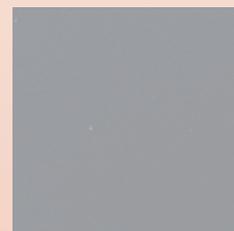
pvc imitation aluminium and stainless steel

Use of steel sheet coated with PVC imitation aluminium and stainless steel with protection film to peel off.

Finishing suitable for exteriors and interiors. 3 colors are available with different finishing: F23 Grey aluminium embossed, F16 Aluminium smooth glossy, F12 Stainless steel smooth glossy (colors 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 F23 Grey aluminium embossed



PVC F16 Aluminium smooth glossy

digital print

digital photo print – drawings – notices – fantasies

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

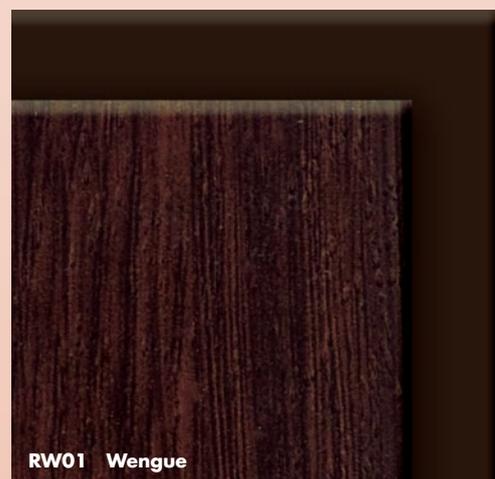
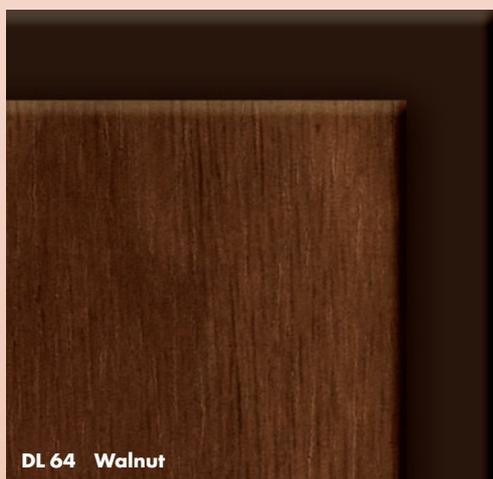
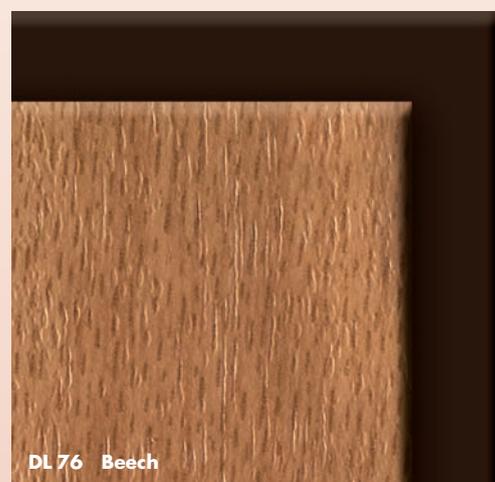
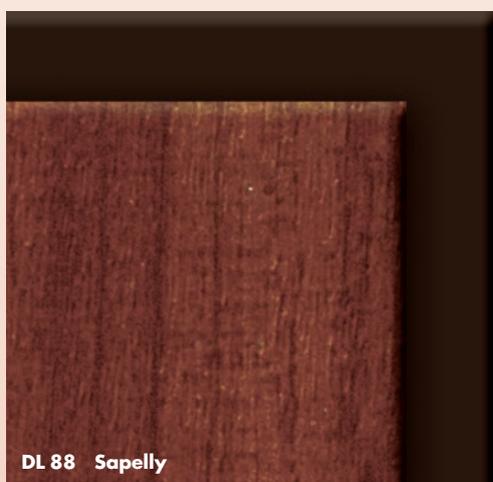
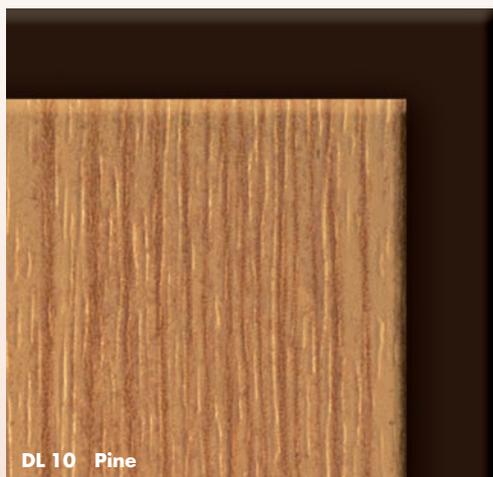
finishings

pvc imitation wood

Use of steel sheet coated with PVC imitation wood and protection film to peel off. Finishing suitable for exteriors and interiors.

The 8 type of wood illustrated in this catalogue are available (colors 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 testurized surface.



big rotation doors



fire rated

foreword

These big rotation doors are used when for reason of encumbrances it is not possible to install sliding doors which require less space during movement and generally have a lower price.

big rotation doors

Big rotation doors fire rated tested according to the standard UNI 9723 and/or European EN 1634 to install on reinforced concrete or masonry walls. High resistance "Tubular" or "Z" shaped steel frame on 3 sides with holes for fixing with expansion screws or clamps to fix with mortar. Leaves made of continuous modules of galvanized double steel sheet, flush joints, insulated with fire rated core and with 2 extra strong hinges per leaf (or 3 if required by dimensions). 1 overhead hydraulic doorcloser large size per leaf with regulation of opening force, closing speed, and final closure, silver color. Coil spring with mechanical functioning for larger sized leaves to increase the closing force. Thermo-expanding gasket along perimeter of frame. CE marked lock with tongue and turns and black safety handle with steel core with plates and key. Double leaf doors include closing regulator and in secondary leaf mortise lock and self-blocking device with rods closing at top and floor. Finishing with epoxy-polyester powders oven hardened RAL 7035 tone. Maximum opening 120° with doorcloser, 110° if with additional coil spring. Packing on disposable one-way metal containers. Weight approx 60 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.

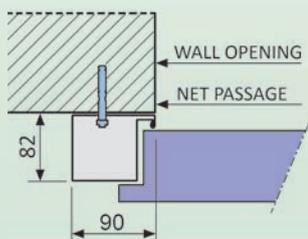


optional accessories

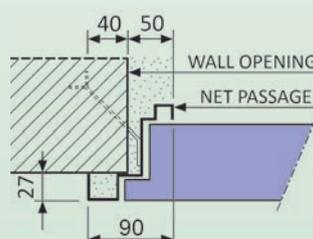
Antipanic crossbars, access control systems, electromagnets, finishing in special RAL tones.

available types

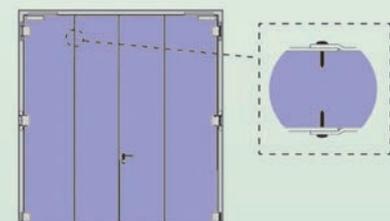
1 leaf fire rated 60 and 120 minutes. Dimensions up to mm. 2500 x 5000 H, bigger to request.
2 leaves fire rated 60 and 120 minutes. Dimensions up to mm. 5000 x 5000 H, bigger to request.



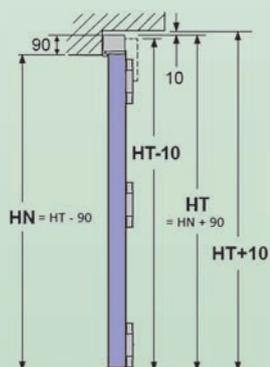
Type "Tubular" frame detail



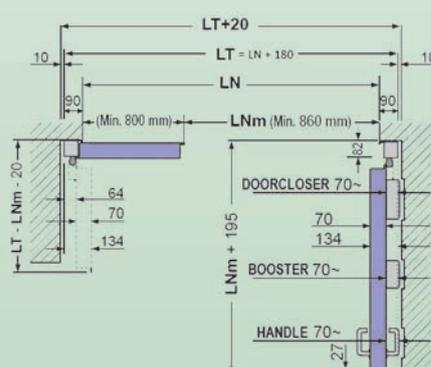
Type "Z" frame detail



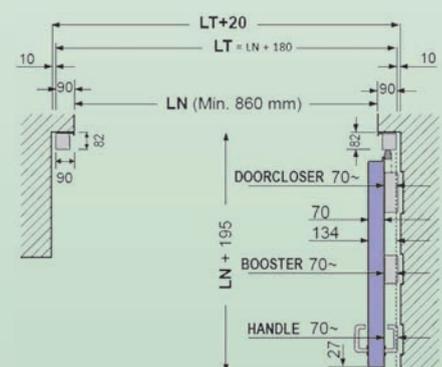
Leaf joints



Vertical section single and double leaf with tubular frame



Horizontal section double leaf with tubular frame



Horizontal section single leaf with tubular frame

sliding doors

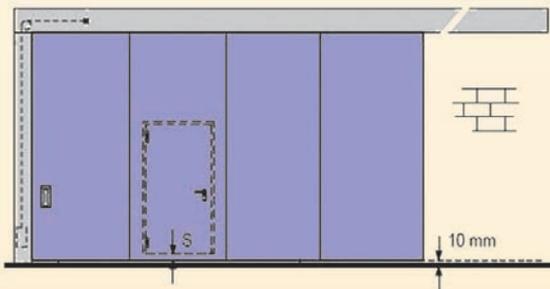
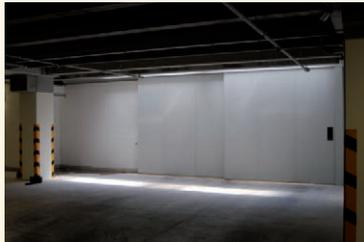
fire rated

foreword

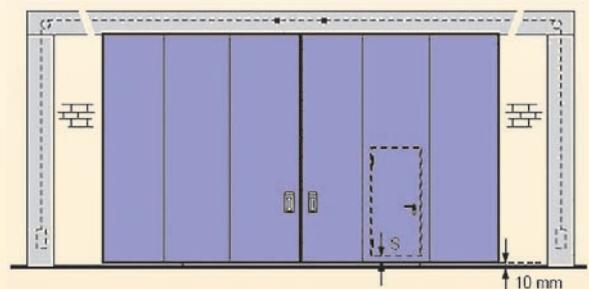
The task of these sliding doors is to protect from fire spread in interiors of buildings like industrial warehouses, factory sheds, malls, garages, hangars, fair halls and similar where forklifts, trucks or bigger transportation means or goods have to pass through. They are used also in smaller formats because they require less space during movement if compared to normal hinged doors. Sliding doors are not available multipurpose.

sliding doors

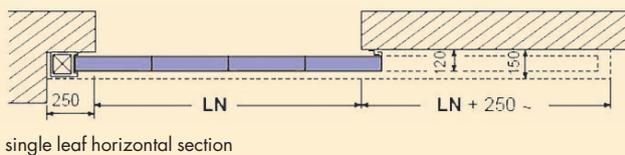
Sliding doors fire rated tested according to the standard UNI 9723 and/or European EN 1634 for low traffic purposes composed of rail for upper side made of profiled high resistance steel with low friction carriages pre-drilled for the fastening with screws or expansion screws. Special labyrinths against fire and smoke penetration. Leaves made of modular panels flush joining of double metal sheet with special fire fighting core total thickness 80 mm (120 mm for the version 180 minutes of resistance) 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. Counterweight for the self closing of the gate with rope and thermal fuse. If ordered with electromagnet the thermal fuse is omitted. 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. Weight approx 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. Assembly by qualified staff only. Manufactured dimensions: from small doors up to 18 sq.m. per leaf.



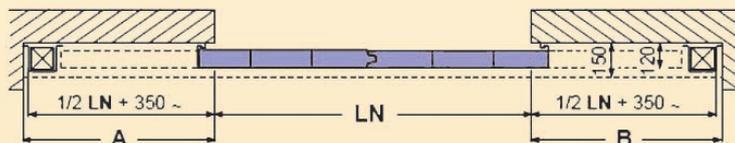
single leaf front view



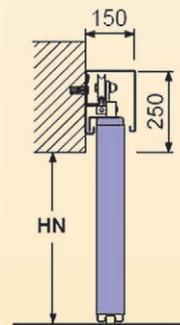
double leaf front view



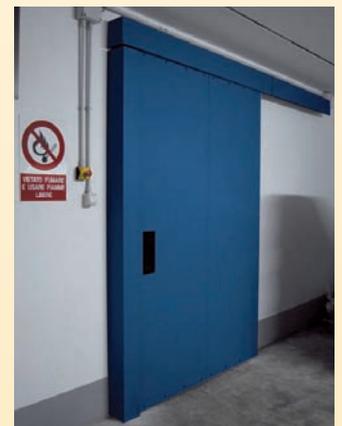
single leaf horizontal section



double leaf horizontal section

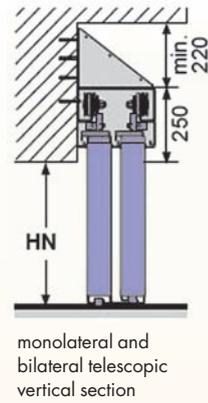
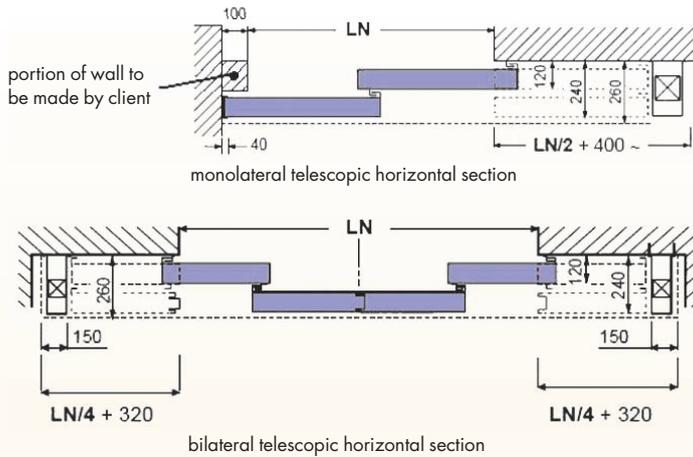


single and double leaf vertical section



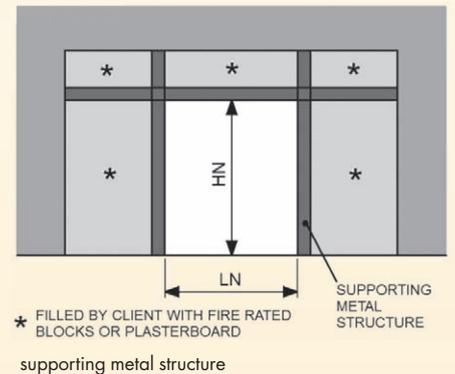
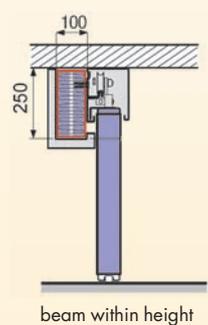
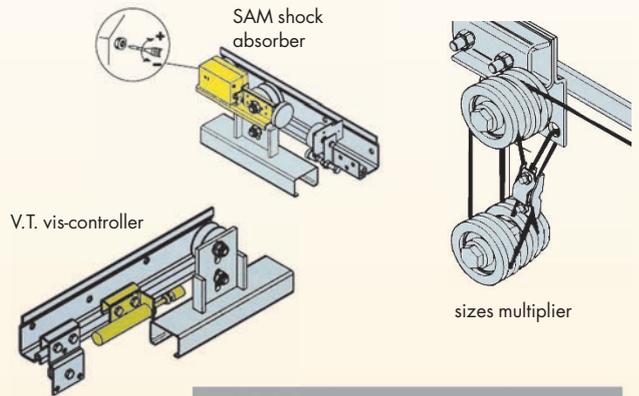
sliding doors

fire rated



special manufacturing and accessories

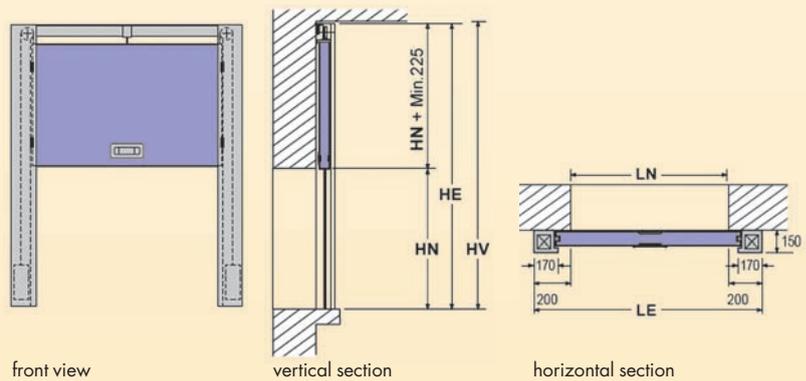
Special manufacturing: opposite side counterweight and off-axis counterweight.
 Compulsory accessories needed for the safety or due to door's dimensions:
 SAM SHOCK ABSORBER to mitigate the final stroke of the leaf on the frame, V.T. VISCONTROLLER (cruise control) breaking device to avoid acceleration 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, ELECTROMAGNET, RELEASE BUTTON, 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.



vertical sliding doors

fire rated

Vertical sliding doors fire rated tested according to the standard UNI 9723 for openings in the wall of medium-little size like windows or technical elevators of kitchens or industrial warehouses, conveyors in factories. Leaf sliding vertically on lateral anti-friction and anti-skid guides. Counter-weight on both sides for the self closing of the door with rope and thermal fuse. If ordered with electromagnet the thermal fuse is omitted. Single pre-assembled unit (consider for handling). Remaining details as per horizontally sliding doors. Manufactured dimensions: minimum mm 300 x 500 H up to mm 3000 x 3000.



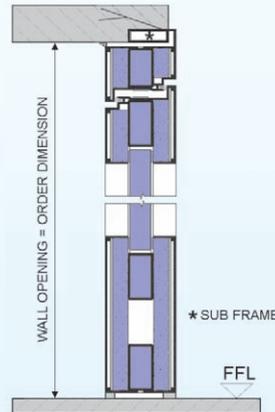
Glazed doors fire rated tested according to the Italian standard UNI 9723 or BS or European EN 1634 depending on progression of the certification process, composed of frame and structure of leaf made of hollow steel profiles insulated internally with asbestos-free inorganic silicate, fire rated glass tested to integrity or integrity and insulation, with adjustable steel hinges rotating on ball bearings and stainless steel pins, steel lock with nickel plated cylinder, hydraulic doorclosers on every leaf, thermo-expanding gaskets and rubber seal, stainless steel or black safety handle, finishing by painting with thermo-hardened powders smooth finish semigloss in RAL 7035 standard tone.

All doors and side panels with transom at handle height of 90 or 170 mm.

Double leaf doors include closing regulator type in sight and in secondary wing mortise lock and self-blocking device with rods closing at top and bottom, floor socket. Complex version of doors with fanlight and with side/s panel/s. Installation on galvanized steel sub-frame to fasten by clamps to the wall of proposed sections mm. 38x17x2 or 60x20x2 or 80x20x2 depending on type of door. Conformity mark metallic label and copy of homologation or certificate, conformity declaration, booklet with installation and maintenance instructions. Door suitable for internal uses, assemble by qualified staff only.

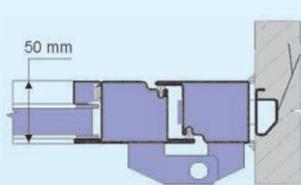


horizontal section (example)



vertical section (example)

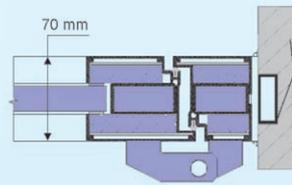
sections of available profiles



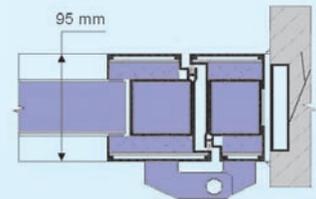
50 mm. steel profile



80 mm. steel profile



70 mm. aluminium covered profile



95 mm. aluminium covered profile

optional accessories and finishings

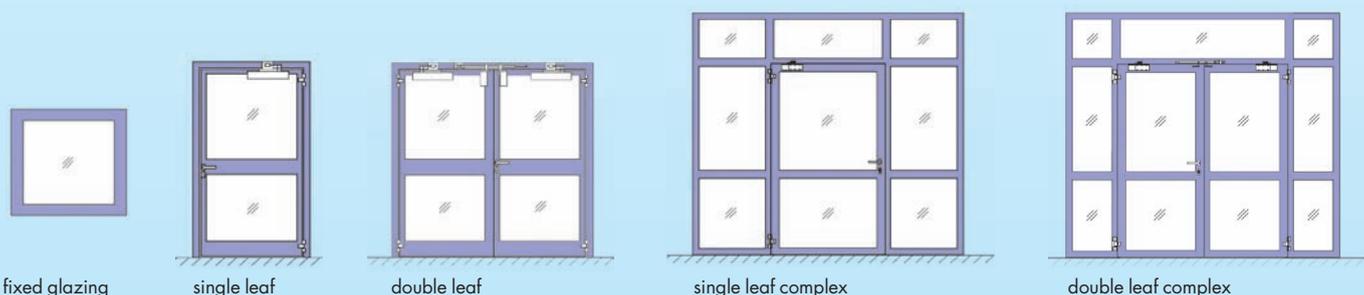
Antipanic crossbars, electromagnets, release switch, sub-frames, access control systems, special treatments of the glasses for the use outside.

Finishing in all colours of RAL range or aluminium anodizing OX silver, OX bronze or OX black tone.



available types

Glazed doors tested to integrity only, with monolithic glass thickness mm 5 or 6. Glazed doors tested to integrity and insulation, with multilayer fire rated glass thickness from mm 16-18 (30 minutes resistance) up to 52-55 (120 minutes resistance). With this type of glass strictly use indoor only, glass deteriorates soon if exposed to sun and rain.



fixed glazing

single leaf

double leaf

single leaf complex

double leaf complex



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