

"state of the art in fire protection technology"





UNIVER NINZ Doors

FIRE RATED VERSION

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WHAT MAKES THEM SPECIAL?

“Quality first”

- Fully galvanized door, including the “hidden” parts
- Made of “Sendzimir” processed hot-galvanized sheet metal
- Corrosion protection also provided along cut edges of the metal sheets
- Painted with epoxy-polyester thermoset powders in a 180 degrees (Celsius) oven
- Substantial paint layer (70 microns plus)
- Optimal corrosion resistance demonstrated by 500 hour salt-fog test
- Unaffected by severe climate changes, demonstrated by 2000 hours with +60° to -10° cycles at 75% humidity
- Finishing with high-quality aesthetics
- Orange skin anti-scratch structured paint
- Customizable with wide selection of RAL colors

“Practicality of use”

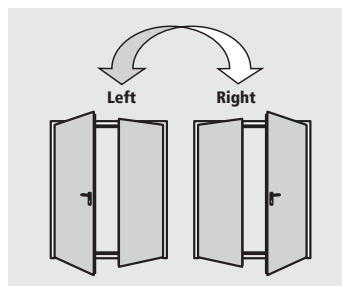
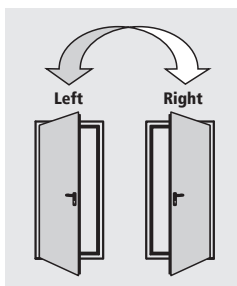
- Door reversibility
- Indication of door opening direction not necessary
- Reduction of stock for retailers
- Simplifies choices for end-customers
- Multiple installation methods for each door
- Type approvals for anchors for mortar fixing or expansion screws

“Conformity to standards”

- In-house Ninz R&D with specialized testing equipment
- Fire testing in accordance with UNI 9723 and EN 1634-1
- Mechanical testing for the CE marking of accessories
- CE-marked door accessories studied and sized to meet standard European requirements
- Careful selection of materials and manufacturing methods
- Strict product testing for conformity to declared technical standards
- Absolute functional certainty over time
- Doors “type approved” in compliance with M.D. 21 June 2004
- Products delivered with the documentation required by current regulations

“Manufacturing technology”

- Manufacturing in modern and functional facilities which employ the latest technologies to maintain high quality levels and product uniformity
- The entire production process - from raw materials to painted and packaged products - takes place inside Ninz’s own facilities, ensuring a 360 degree door control



One-leaved doors available in the following classes:



Two-leaved doors available in the following classes:



STANDARD ELEMENTS

Door leaf

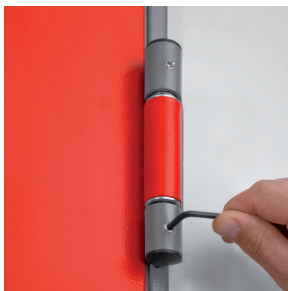
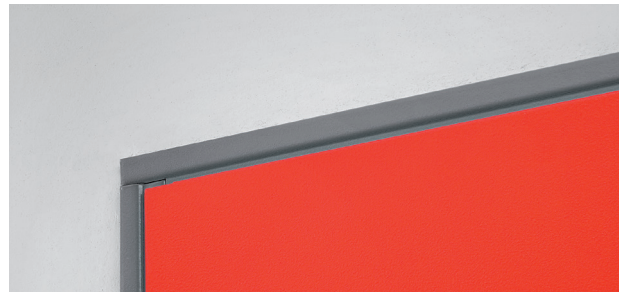
- Made of "Sendzimir" processed hot-galvanized sheet metal, press folded and electro welded
- Perimetral rebate on 4 sides
- Internally reinforced with hot-galvanized steel profiles
- Heat-insulated with treated mineral wool
- Internal stiffeners for overhead door closer and panic bar

Doorframe

- Made of "Sendzimir" processed hot-galvanized sheet metal
- Grooves for thermo expansive sealing and rebate sealing
- Suitable for anchors for mortar fixing or expansion screws
- Detachable rebate for application on finished flooring
- Removable threshold for thresholdless installation
- Strike plates in black plastic for lock bolt and safety bolts
- Assembled doorframes for one-leaved doors
- Assembly required for two-leaved doorframes

Thermo expansive sealing

- Mounted on vertical doorframe profiles and central vertical profiles on two-leaved doors
- For on-site mounting on the doorframe's upper cross-beam
- Mounted above and below the EI₂90 and REI 120 leaves



Hinges

- Nr. 2 three-wing hinges for each leaf
- of which one ball-bearing hinge with screws for vertical adjustment of the leaf, CE marked as per EN 1935, classified for up to 160 kg load, 200.000 cycles durability, suitable for fire door use
- and one hinge with self-closing spring

Safety bolts

- Nr. 2 safety bolts on hinge side leaf edge

Locking mechanism

- Reversible locking mechanism with bolt and central lock
- CE marked in conformity with EN 12209 standard
- Insert with patent key, Euro profile cylinder ready



Handle

- Fire rated handle in black plastic with steel core
- Steel installation plate with cylinder hole
- Cover plate in black plastic
- Fastener screws and patent key insert

INCLUDED ACCESSORIES

Closing regulator

- Two-leaved doors include an RC/STD closing regulator to ensure the correct closing sequence of the leaves
- CE marking in conformity with EN 1158 standard

Locking mechanism for inactive leaf

- "Flush-bolt" automatic locking of the inactive leaf
- Lever control for unlocking

Upper coupling system for the inactive leaf

- Inactive leaf lock activated device which inserts rod into the upper strike box
- Upper strike box in black plastic with steel roller

Lower coupling system for the inactive leaf

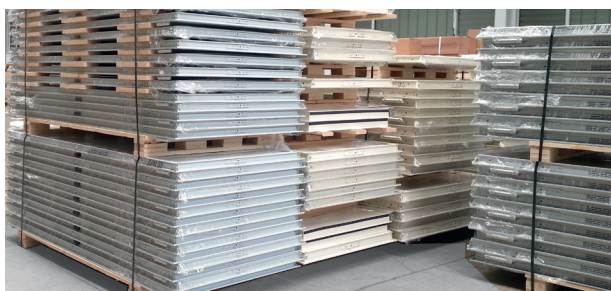
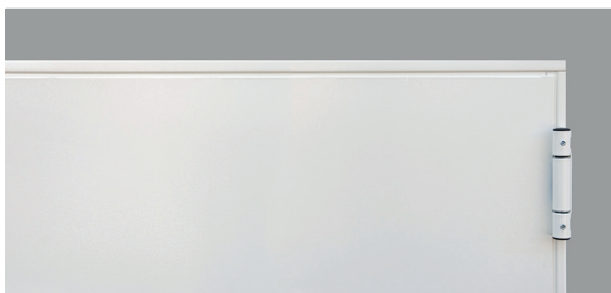
- Vertical rod with steel point which inserts into lower strike box
- Floor catch (floor-mounted floor catch) made of self-extinguishing black plastic, for doors without threshold
- Floor catch in black plastic with a steel roller, for doors with threshold

Identification plate

- Metal tag with door identification data, in accordance with current regulations



Standard paint - group 01: RAL 9010



Finishing

- Standard painted with epoxy-polyester thermoset powders in a 180 degrees oven, orange skin, anti-scratch finishing
- Standard paint RAL 9010

Standard packaging

- Single door wrapped into stretchable polyethylene (PE) film
- Assembled doorframes for one-leaved doors
- Assembly required for doorframes for two-leaved doors
- Palletized on wooden pallets

Door weight

class	kg/m ² of wall opening	
	1 leaf	2 leaves
E 60	23	-
EI,60	36	35
EI,90, REI 120	43	41

NOTE

If the door ever needs to be repainted, follow the precise instructions on the "Painting" section.

OPTIONAL ACCESSORIES

A wide variety of accessories and surface finishes are available on request for maximum value enhancement of Univer doors to your own specific needs.

The proper accessories can help resolve:

Safety-related needs

- Doors for panic exits (see panic bars)
- Doors for emergency exits (see emergency exit handles)
- Open doors which must be closed in case of fire (see leaf holding systems)

Installation and utilization needs

- Frame extensions
- Drip steel-profile
- Special fastener screws
- Kick and protection plates in stainless steel
- Roofing

Access-related control issues

- Electrically-activated lock mechanisms
- Electric handle mechanisms
- Magnetic blocking mechanisms

Performance enhancing

- Sealing
- Cylinders
- Door closers
- Special closing regulators
- Special handles



Customized finishing

- Select finishing from a wide variety of RAL colours
- Stainless steel handles
- Colored handles

Packaging for maximum protection

Sturdy wooden crates protect all doors and related accessories:

- On construction sites
- During shipping abroad
- For special transport

NOTE

Details on the optional accessories may be found in the following chapters of this brochure:

- Painting
- Accessories for metal doors
- Emergency handles and panic bars

Right-opening doors are the default selection if opening direction is not specified.

Specific optional accessories

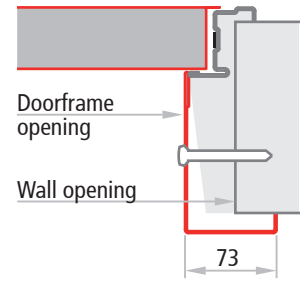
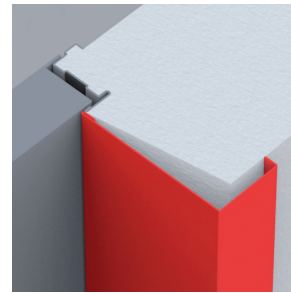
UNIVER Fire doors

FRAME EXTENSIONS FOR UNIVER DOORS

IM 12

Frame extensions to be mounted in addition to the Univer frame acting as a wall cladding. Made of "Sendzimir" processed hot-galvanized sheet metal and painted the same color as the doorframe with epoxy-polyester powders. Profile on three sides, upper corners with 90 degree joint, fixing with screws and plugs (screws and plugs not included).

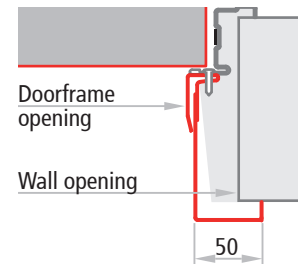
IM 12: for installation on 80mm (min.) wall thickness



IM 14

Telescopic frame extensions to be screwed to the Univer doorframe acting as a wall cladding. Consists of two overlapping profiles with a 25mm adjustable range. Made of "Sendzimir" processed hot-galvanized sheet metal painted the same color as the doorframe with epoxy-polyester powders. Profile on three sides, upper corners with 90 degree joint. Complete with fastener screws. To mount the frame extension, fixing holes need to be drilled into doorframe on site. Combine with sealing to conceal the screw heads.

IM 14: for installation on 135mm (min.) wall thickness



REBATE SEALING

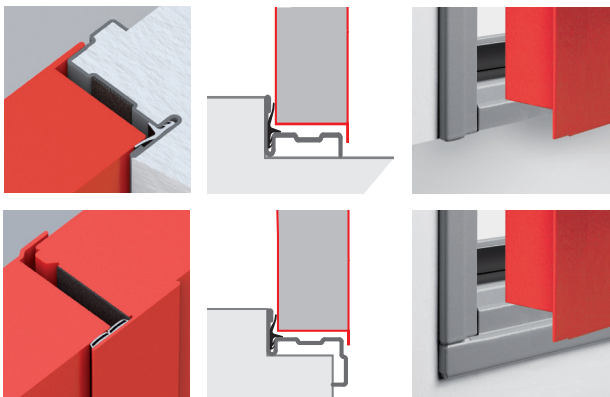
CR sealing (for E and EI₂ doors) and sealing (for REI doors) in black extruded profile to cut and to be pressed into the dedicated groove in the perimetral frame. Sealing in black extruded profile self-adhesive to cut for application to the central joint of two-leaved doors.



S200, C5 ENHANCED PERFORMANCES

Mandatory accessories

Enhanced performance	features	type	mandatory optional accessories	reference in brochure
EI ₂ 60-S200	Smoke control Door	1 leaf	- rubber seal CR - Nr. 1 automatic door sweep	UNIVER fire door ACCESSORIES
		2 leaves	- rubber seal CR - Nr. 2 automatic door sweep	UNIVER fire door ACCESSORIES
EI ₂ 60-C5	Durability: 200,000 cycles	1 leaf	- Nr. 1 door closer	ACCESSORIES
		2 leaves	- Nr. 2 door closers	ACCESSORIES



MECHANICAL STRENGTH PERFORMANCES

Performance requirements and classifications

class	tested FM L X H dimensions	type	description of the performance	reached class	standard reference
EI ₂ 60	2000 (1000 + 1000) x 2125	2 leaves	resistance to vertical load	4	EN 1192:2002
			resistance to static torsion	4	EN 1192:2002
			resistance to soft and heavy body impact	4	EN 1192:2002
			resistance to hard body impact	3	EN 1192:2002

Additional performances

UNIVER Fire doors

NINZ[®]
FIRE DOORS

INTERNAL PEDESTRIAN DOORS

Test report No. CPR/35/05/2019 (E 60)

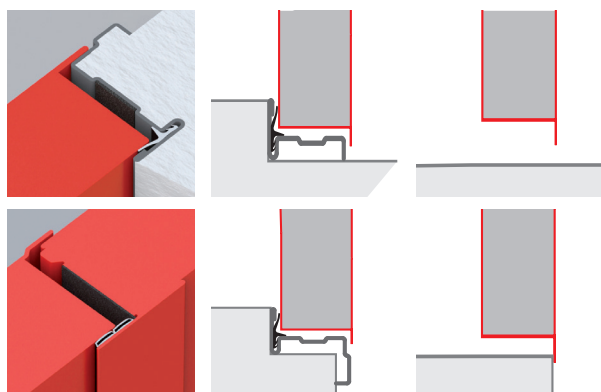
Test report No. CPR/35/04/2019 (EI₂60)

Test report No. CPR/35/06/2019 (REI 120/EI₂90)



Pedestrian interior doors are not yet subject to marking as the relevant standard EN 14351-2 has not yet entered into force. The performances contained in the standard can however be a reference for classifying the door for indoor, such as:

- air permeability according to EN 1026:2001
- thermal transmittance according to EN ISO 10077-1:2018 e EN ISO 10077-2:2018



All performance values indicated in the table are valid only in presence of the following accessories or enhancements:

- Combo Thermo/CB (with lower threshold):
 - frame on all 4 sides
 - if the door is installed on an escape route, it is necessary to fill the difference in height on the push side between the floor and the lower threshold with cement mortar
 - isolation of the door frame with the filling of cement mortar
 - installation of rubber seals along the entire perimeter of the door frame including the central rebate for double leaved doors
 - sealing of the perimeter of the frame (push side)
- Combo Thermo/SB (without lower threshold):
 - isolation of the door frame with the filling of cement mortar
 - installation of rubber seals along the 3 sides of the frame including the central rebate for two-leaved doors

ATTENTION

For the dimensional limits, minimum border measurements or production possibilities please refer to the specific pages of this brochure.

The values for the thermal transmittance W/m^2K shown in the table on the next page are given by the calculation according to the norm EN ISO 10077-1 done on samples of the dimensions 1,23x2,18 for areas $\leq 3,6m^2$ and on samples of the dimensions 2,00x2,18 for areas $> 3,6m^2$.

Additional performances

UNIVER Fire doors



INTERNAL PEDESTRIAN DOORS



Test report No. CPR/35/05/2019 (E 60)

Test report No. CPR/35/04/2019 (EI₂60)

Test report No. CPR/35/06/2019 (REI 120/EI₂90)



UNIVER
fire door

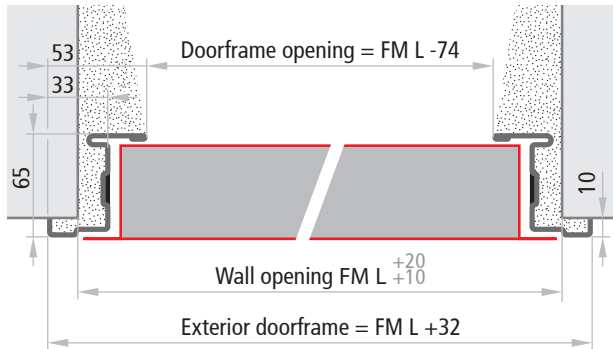
TYPE	FM L x H	Class	Combo Thermo/CB with lower threshold and gasket on all 4 sides		Combo Thermo/SB without lower threshold and gasket on 3 sides	
			air permeability according to UNI EN 1026:2001	thermal transmittance according to UNI EN 10077-1:2018 UNI EN 10077-2:2018	air permeability according to UNI EN 1026:2001	thermal transmittance according to UNI EN 10077-1:2018 UNI EN 10077-2:2018
without window 	≤ 3,6 m ²	EI ₂ 60	classe 2	1,5 W/m ² K	-	1,5 W/m ² K
		E 60	classe 2	1,6 W/m ² K	-	1,6 W/m ² K
		REI 120/EI ₂ 90	classe 2	1,5 W/m ² K	-	1,5 W/m ² K
without window 	≤ 3,6 m ²	EI ₂ 60	classe 3	1,9 W/m ² K	-	1,9 W/m ² K
	> 3,6 m ²	EI ₂ 60	classe 3	1,5 W/m ² K	-	1,5 W/m ² K
	≤ 3,6 m ²	E 60	classe 3	2,0 W/m ² K	-	2,0 W/m ² K
	> 3,6 m ²	E 60	classe 3	1,6 W/m ² K	-	1,6 W/m ² K
	≤ 3,6 m ²	REI 120/EI ₂ 90	classe 3	1,9 W/m ² K	-	1,9 W/m ² K
	> 3,6 m ²	REI 120/EI ₂ 90	classe 3	1,5 W/m ² K	-	1,5 W/m ² K

Door cross sections - Measurements

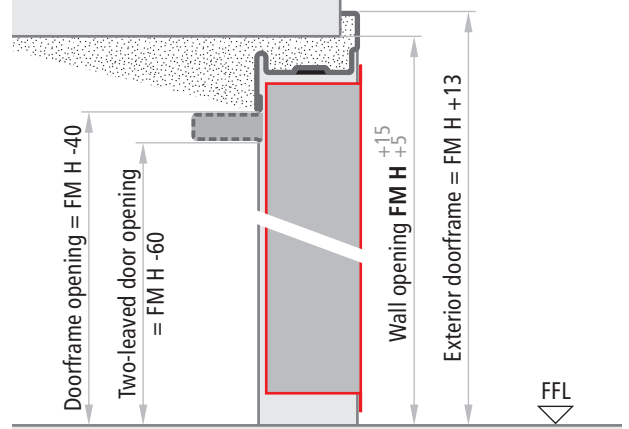
UNIVER Fire doors



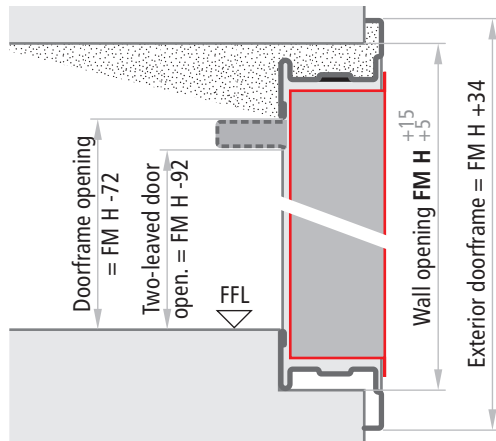
One-leaved doors Horizontal cross section



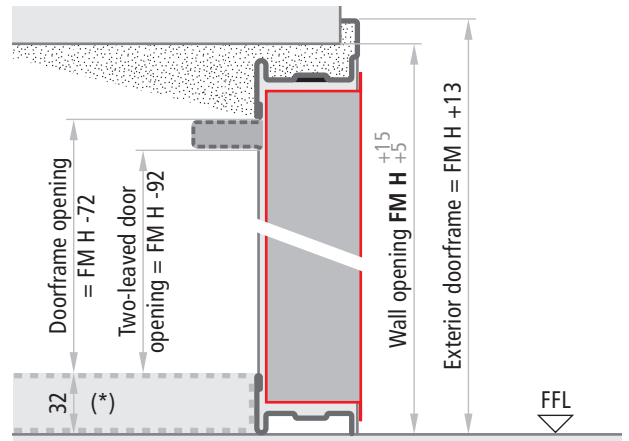
Doors without lower threshold Vertical cross section



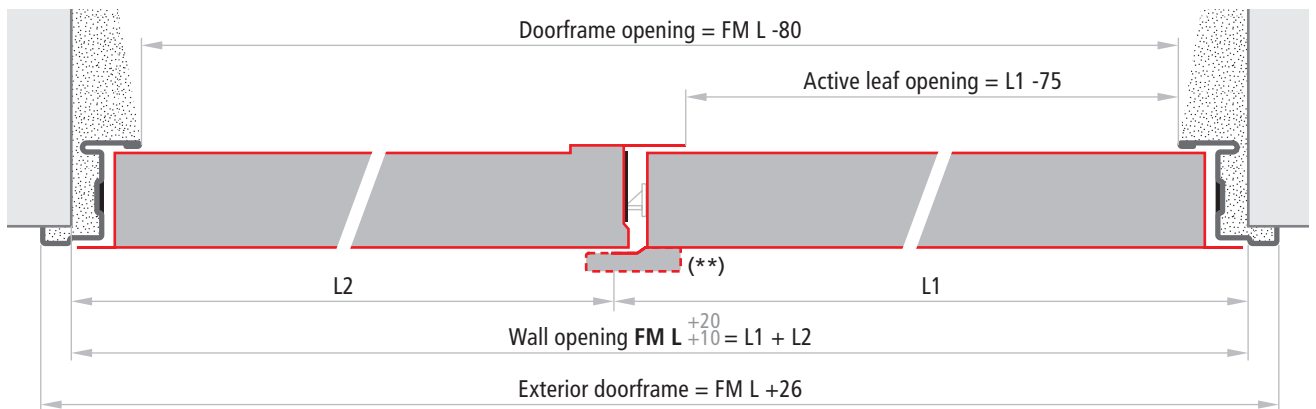
Doors with internal and external lower thresholds Vertical cross section



Doors with internal lower threshold Vertical cross section



Two-leaved doors Horizontal section



Leaves thickness

Fire doors	60 mm
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NOTE

The tolerances $FM L +20$, $FM H +15$ of the indicated measurements make it easier to fill the gap between the wall and the doorframe with cement mortar.

(*) Shimming to be done, mandatory in case of installation onto emergency exit routes.

(**) Only for EI₂90 fire rated doors

Installation methods

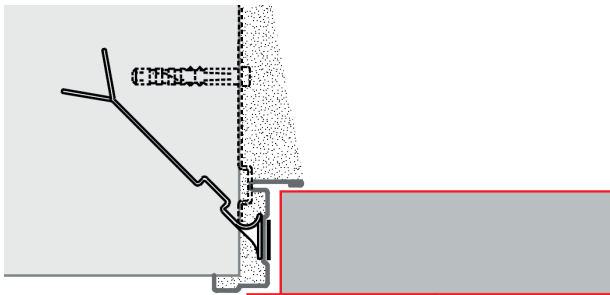
UNIVER Fire doors



INSTALLATION WITH ANCHORS FOR MORTAR FIXING

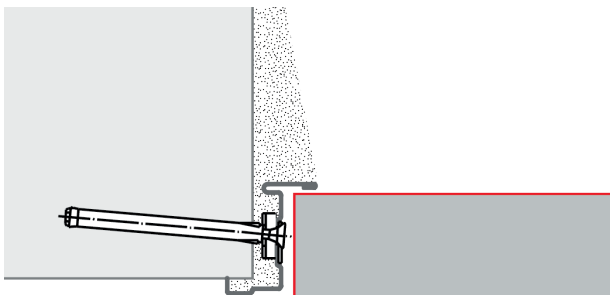


For mortar fixing, appropriate cuts will need to be created in the walls (section 80 x 200 mm). The anchors should be bent and blocked inside the wall. For fire sealing purposes and a perfect mechanical fit, the space between the door-frame and the masonry shall always be filled with concrete mortar.



INSTALLATION FOR EXPANSION SCREWS FIXING

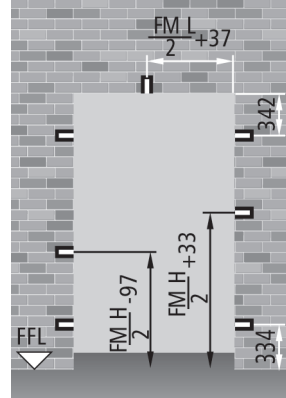
For the installation with expansion screws, the anchors serve as spacers and should not be bent. Using Würth type art. 0910436112 plugs or similar (supplied at the customer's expense), installation requires holes to be drilled through the thermo expansive sealing. The doorframe has pre-drilled holes. For fire sealing purposes and a perfect mechanical fit, the space between the doorframe and the masonry shall always be filled with concrete mortar.



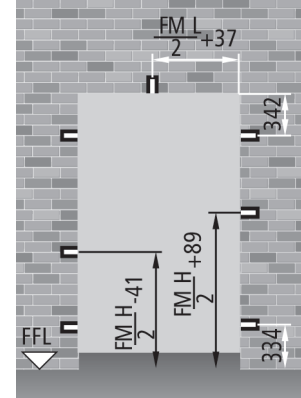
ANCHOR POSITIONING

One-leaved doors

Right opening

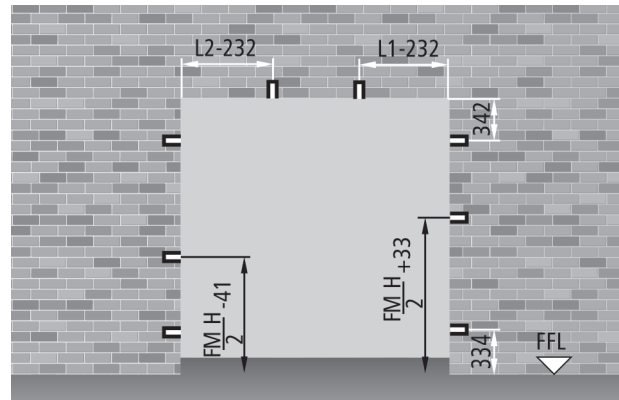


Left opening

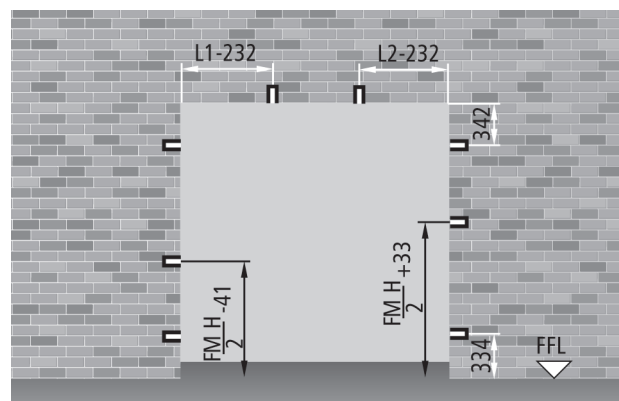


Two-leaved doors

Right opening



Left opening

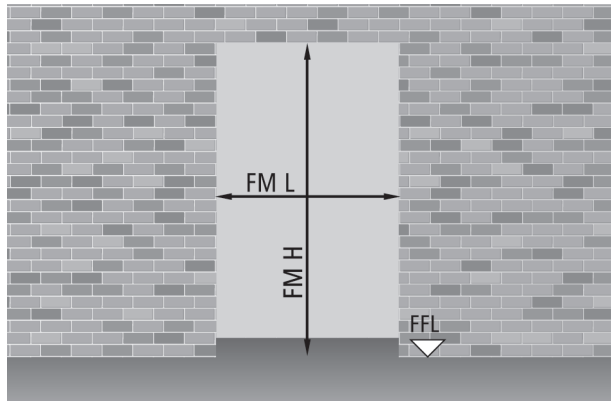


NOTE

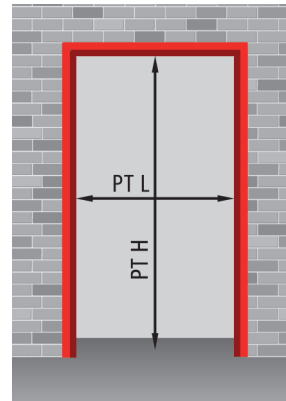
Proper installation requires 80 x 200 mm holes to be dug into the masonry.

ORDER MEASUREMENTS

Wall opening



Doorframe opening



One-leaved doors

PT L = FM L - 74
PT H = FM H - 40

Two-leaved doors

PT L = FM L - 80
PT H = FM H - 40

E 60 one-leaved doors FM L x FM H

standard dimensions			PT L x PT H		fire-rating
			doorframe opening		class
800	x	2050 / 2150	726	x 2010 / 2110	E 60
900	x	2050 / 2100 / 2150	826	x 2010 / 2060 / 2110	E 60
1000	x	2050 / 2100 / 2150	926	x 2010 / 2060 / 2110	E 60

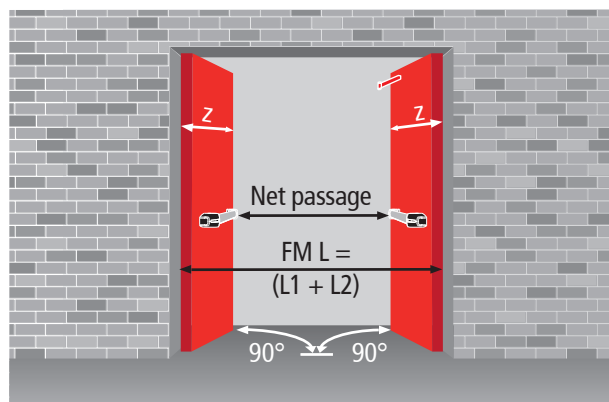
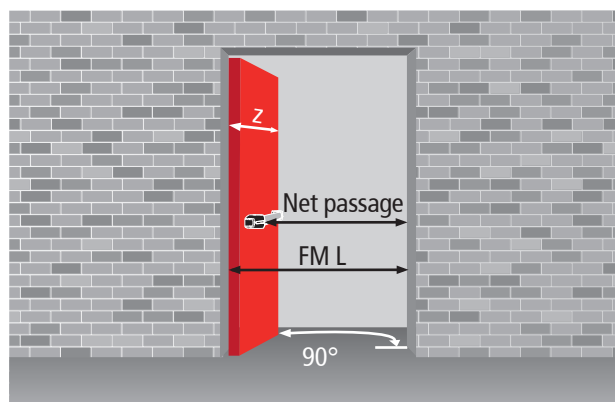
EI and REI one-leaved doors FM L x FM H

standard dimensions			PT L x PT H		fire-rating
			doorframe opening		class
800	x	2050 / 2150	726	x 2010 / 2110	EI,60, EI,90, REI 120
900	x	2050 / 2100 / 2150	826	x 2010 / 2060 / 2110	EI,60, EI,90, REI 120
1000	x	2050 / 2100 / 2150	926	x 2010 / 2060 / 2110	EI,60, EI,90, REI 120
1100	x	2050 / 2150	1026	x 2010 / 2110	EI,60, REI 120
1200	x	2050 / 2150	1126	x 2010 / 2110	EI,60, EI,90, REI 120
1300	x	2150	1226	x 2110	REI 120
1350	x	2150	1276	x 2110	REI 120

EI and REI two-leaved doors FM L x FM H

standard dimensions			PT L x PT H		H net passage	fire-rating
			doorframe opening		for RC/STD encumbrance	class
1200	(700 + 500)	x	2150	1120 x 2110	2090	EI,60
1200	(800 + 400)	x	2050 / 2150	1120 x 2010 / 2110	1990 / 2090	REI 120
1300	(800 + 500)	x	2150	1220 x 2110	2090	EI,60
1300	(900 + 400)	x	2050 / 2150	1220 x 2010 / 2110	1990 / 2090	REI 120
1400	(900 + 500)	x	2150	1320 x 2110	2090	EI,60
1400	(1000 + 400)	x	2050 / 2150	1320 x 2010 / 2110	1990 / 2090	REI 120
1600	(800 + 800)	x	2050 / 2150	1520 x 2010 / 2110	1990 / 2090	EI,60, EI,90, REI 120
1800	(900 + 900)	x	2050 / 2150	1720 x 2010 / 2110	1990 / 2090	EI,60, EI,90, REI 120
2000	(1000 + 1000)	x	2050 / 2150	1920 x 2010 / 2110	1990 / 2090	EI,60, EI,90, REI 120

OPENING MEASUREMENTS AND OVERALL DIMENSIONS WITH 90 DEGREE OPENING



Net passage calculation

panic bar type		protrusion	E 60	EI ₂ 60 - EI ₂ 90 - REI 120	EI ₂ 60 - EI ₂ 90 - REI 120
			one-leaved doors	one-leaved doors	two-leaved doors
EXUS	125		FML - 226	FML - 236	FML - 404
TWIST	100		FML - 201	FML - 211	FML - 354
SLASH	75		FML - 176	FML - 186	FML - 304
FAST TOUCH	75		FML - 176	FML - 186	FML - 304
without panic bar		-	FML - 101	FML - 111	FML - 154
z = leaf protrusion relative to the wall			FML + 29	FML + 29	L1 + 35 L2 + 64

OVERALL DIMENSIONS WITH 180 DEGREE OPENING - HANDLE HEIGHT

One-leaved doors

$$x = FML + 5$$

$$h \text{ handle} = FMH/2 + 50$$

Two-leaved doors

$$x = L1 + 5 \quad y = L2 + 35$$

$$h \text{ handle} = FMH/2 + 50$$

b = 130 (only in the presence of panic bars or M14 handles)

