NINZ®
FIREDOORS

# UNIVER Fire doors

# Features
## UNIVER Fire doors

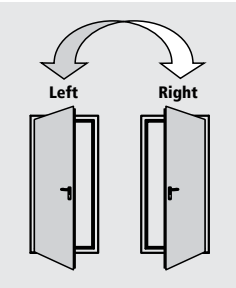
### *WHAT MAKES THEM SPECIAL?*

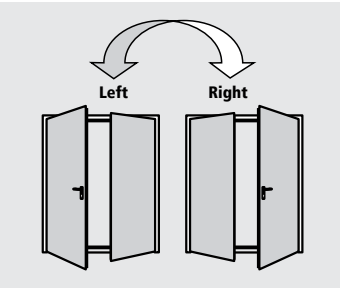
**"Quality first"**
- Fully galvanized door, including the "hidden" parts
- Made of "Sendzimir" processed hot-galvanized sheet metal
- Corrosion protection also provided along cut edges of the metal sheets
- Painted with epoxy-polyester thermoset powders in a 180 degrees (Celsius) oven
- Substantial 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:

EW 60 | $EI_2$ 30 | $EI_2$ 60 - Sm - C5 | $EI_2$ 90 | RE 90 | REI 60 - 120

Two-leaved doors available in the following classes:

$EI_2$ 60 - Sm - C5 | $EI_2$ 90 | RE 90 | REI 60 | REI 120

*except in combination with certain optional accessories

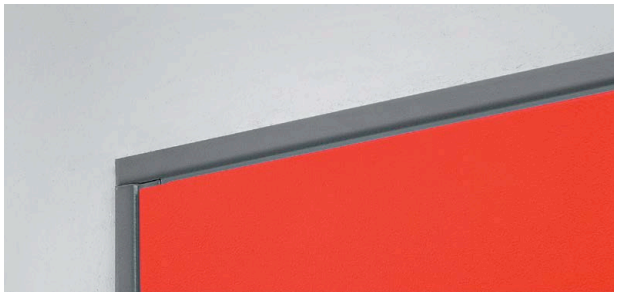
## *STANDARD ELEMENTS*

*which comprise Univer fire doors:*

### 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
- 50 or 60 mm thickness, depending on fire rating

### 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 (except for doors with environmental characteristics)
- 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 $EI_2$90 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*

*which are part of the Univer fire doors:*

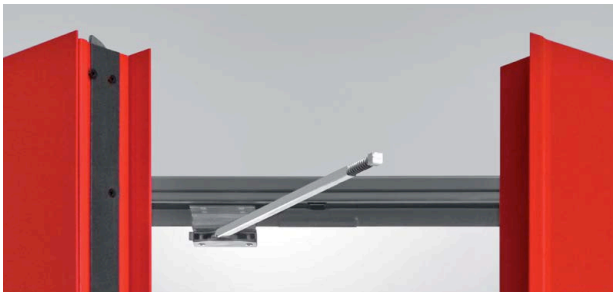
### Closing regulator
- Two-leaved doors include an RC/STD closing regulator to ensure the correct closing sequence of the leaves
- CE marking in conformity with EN 1158 standard

### 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:

leaf color NCS 4020-B50G

frame color NCS 5020-B50G

### Finishing
- Standard painted with epoxy-polyester thermoset powders in a 180 degrees oven, orange skin, anti-scratch finishing
- Standard pastel turquoise color, lighter tone for the leaf (NCS4020-B50G), darker tone for the frame (NCS5020-B50G)

### 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 | | kg/m² of wall opening |
|---|---|---|
| class | 1 leaf | 2 leaves |
| EW 60 | 23 | - |
| EI$_2$30 | 34 | - |
| EI$_2$60 | 36 | 35 |
| RE 90, REI 60 | 34 | 33 |
| EI$_2$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
- Windows
- 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

NINZ DIGITAL DECOR

### Customized finishing
- Select finishing from a wide variety of RAL colours
- NDD – Ninz Digital Decor, graphic images applied with special ink jets and protected by a transparent topcoat. Infinite varieties of customizable decorations in harmony with specific door settings
- Stainless steel handles
- Colored handles

### Packaging for maximum protection
Sturdy wooden crates protect all doors and related accessories
- For NDD decorated doors
- 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 and NDD decorations
- Accessories for metal doors
- Emergency handles and panic bars

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

The following optional accessories make Univer doors irreversible, requiring the indication of the door opening direction when the order is placed:
- SLASH panic bar
- Panic bar for inactive leaves
- Windows
- MAC lock
- ELM/cisa and ELM/mt electric handle
- Special locks (016 tir- Stel 15)

# Specific optional accessories
**UNIVER Fire doors**

## *WINDOW WITH FIRE RATED GLASS*

Upon request all one- and two-leaved fire doors, excluding those EW 60 and $EI_2$30 rated, may be equipped with round or rectangular windows with fire rated stratified glass and respective window frames fixed with screws. The window frame carters are included for round window and available as an optional accessory for the rectangular one. Windows not possible for one-leaved REI doors with FM L (wall opening) above 1167mm.

### Limits prescribed by standard
According to standards UNI 9723 and EN 1634-1, windows may be smaller but not larger than the test sample size, and the reverse holds true for the border strip around the window which may be wider but not thinner.
The following limits correspond with these restrictions.

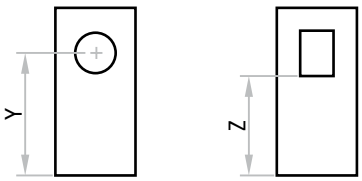
### Borders, window position
"Border measurement" refers to the distance from the edge of the window to the wall opening of the door.

### Elevation for round windows

| window size | FM H | position |
|---|---|---|
| Ø 300 | minimum 2050 | Y=1600 |
| Ø 300 | less than 2050 | Y=FM H - 450 |
| Ø 400 | minimum 2150 | Y=1600 |
| Ø 400 | from 2050 to 2149 | Y=1550 |
| Ø 400 | less than 2050 | Y=FM H - 500 |

### Elevation for rectangular windows

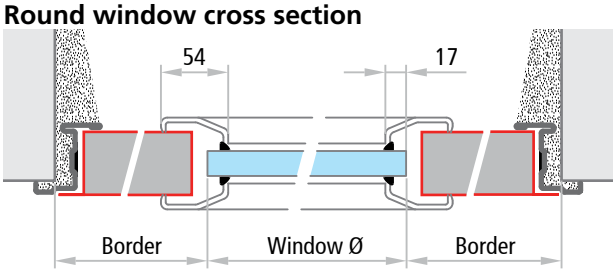
| window dimensions L x H | FM H | position |
|---|---|---|
| 250/300 x 400 | minimum 2150 | Z=1450 |
| 250/300 x 400 | from 2050 to 2149 | Z=1350 |
| 250/300 x 400 | less than 2050 | Z=FM H -700 |



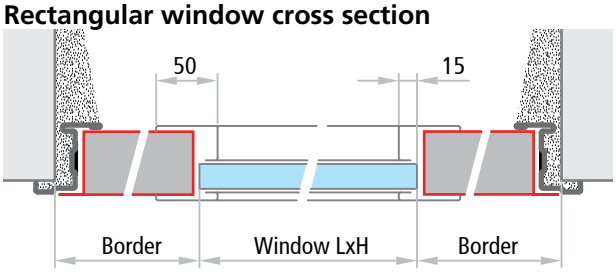

**NOTE**
The positions indicated above are those standard.
Different positions may be considered as long as they respect the minimum "a" and "b" border strips. The window itself may not be supplied separately except for replacements. It is always advisable for doors with windows to be equipped with door closers for controlled closing.

**NOTE**
For the rectangular windows the frame carters are an optional accessory

### Round window cross section




### Rectangular window cross section



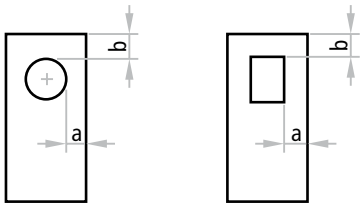

**ATTENTION**
In case of external installation use windows designed for this purpose.
For special instructions and recommendations for glazed fire-rated products, see the "Notices" section on the last page of the present brochure.

# Specific optional accessories
UNIVER Fire doors



| Window dimensions | | min. border $EI_2$ a | min. border $EI_2$ b | min. border RE, REI a | min. border RE, REI b | dimensions FM L min. |
|---|---|---|---|---|---|---|
| ○ | Ø 300<br>Ø 400 | 220 | 300 | 220 | 300 | 740<br>840 |
| ○ □ | Ø 300<br>Ø 400 | 220 | 300 | 220 | 300 | L1 740 + L2 min.<br>L1 840 + L2 min. |
| ○ ○ | Ø 300<br>Ø 400 | 220 | 300 | 220 | 300 | L1 740 + L2 740<br>L1 840 + L2 840 |

| Window dimensions | | min. border $EI_2$ a | min. border $EI_2$ b | min. border RE, REI a | min. border RE, REI b | dimensions FM L min. |
|---|---|---|---|---|---|---|
| □ | 250 x 400<br>300 x 400 | 250 | 300 | 300 | 300 | $EI_2$=750 RE, REI=850<br>$EI_2$=800 RE, REI=900 |
| □ □ | 250 x 400<br>300 x 400 | 300 | 300 | 300 | 300 | L1 850 + L2 min.<br>L1 900 + L2 min. |
| □ □ | 250 x 400<br>300 x 400 | 300 | 300 | 300 | 300 | L1 850 + L2 850<br>L1 900 + L2 900 |

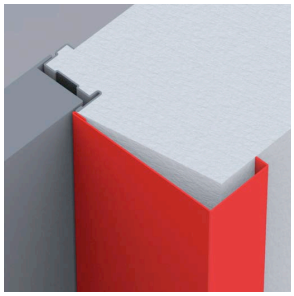


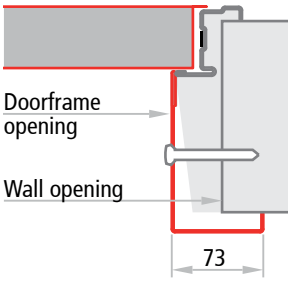

**NOTE**
Round and rectangular windows not possible for one-leaved REI doors with FM L (wall opening) above 1167mm.

## *FRAME EXTENSIONS FOR UNIVER DOORS*

**IM 11 - 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 45 degree joint, fixing with screws and plugs (screws and plugs not included).

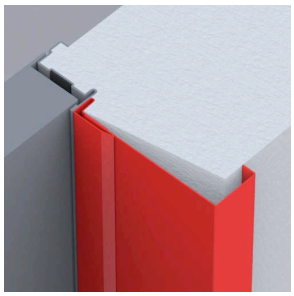
**IM 11: for 50mm door thickness, for installation on 70mm (min.) wall thickness**
**IM 12: for 60mm door thickness, for installation on 80mm (min.) wall thickness**

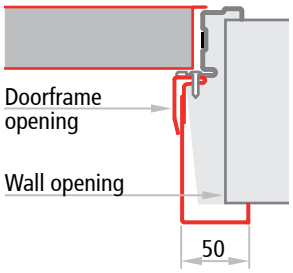





**IM 13 - IM 14**
Telescopic frame extensions to be screwed to the Univer doorframe acting as a wall cladding. Consists of two overlapping profiles with a 25mm adjustable range. Made of "Sendzimir" processed hot-galvanized sheet metal painted the same color as the doorframe with epoxy-polyester powders. 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 13: for 50mm door thickness, for installation on 125mm (min.) wall thickness**
**IM 14: for 60mm door thickness, for installation on 135mm (min.) wall thickness**






## *REBATE SEALING*

FF/CR sealing (for EW and $EI_2$ doors) and FF sealing (for RE and REI doors) in black extruded profile to cut and to be pressed into the dedicated groove in the perimetral frame.

FF sealing in black extruded profile self-adhesive to cut for application to the central joint of two-leaved doors.

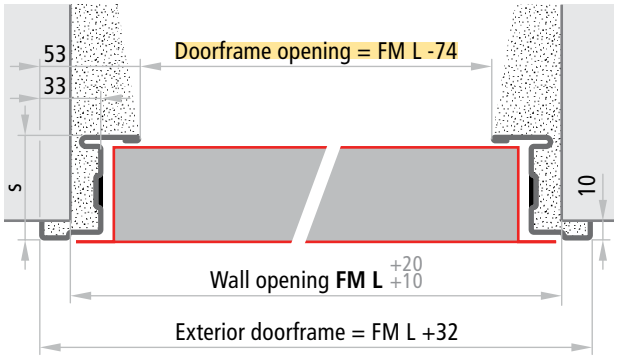
# Door cross sections - Measurements

**UNIVER Fire doors**



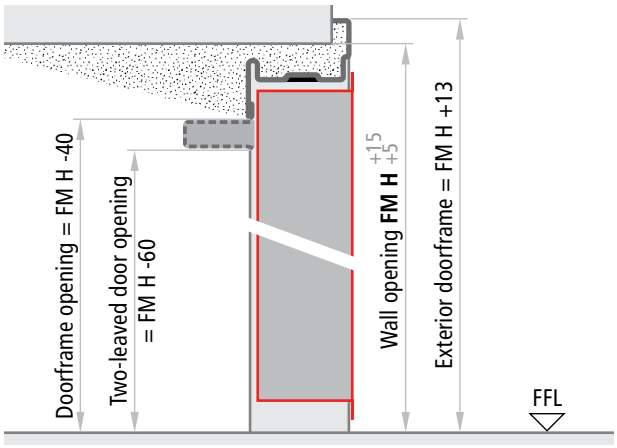
## One-leaved doors

Horizontal cross section



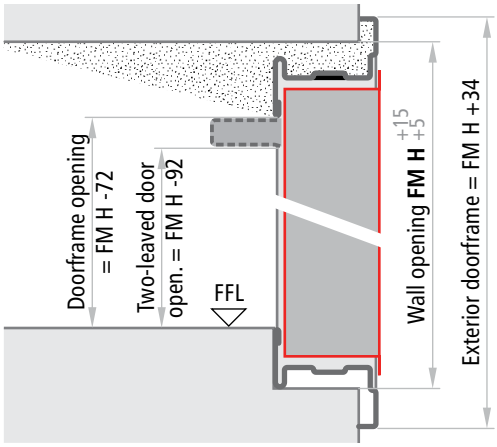

## Doors without lower threshold

Vertical cross section



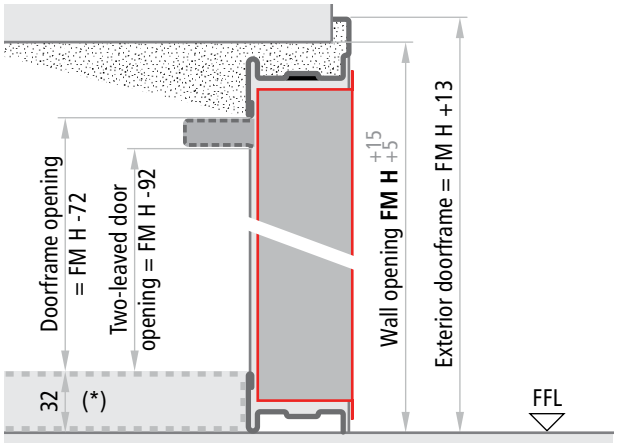

## Doors with internal and external lower thresholds

Vertical cross section



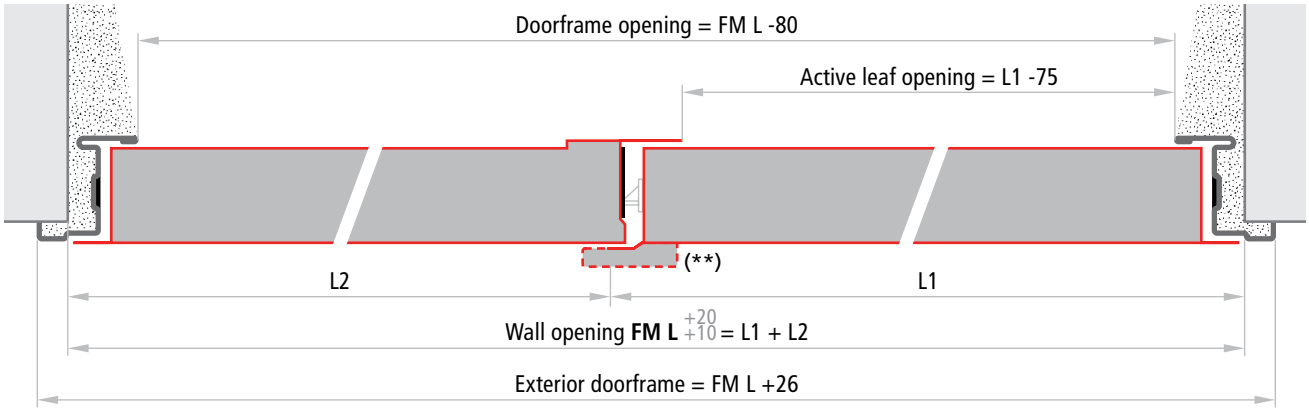

## Doors with internal lower threshold

Vertical cross section




## Two-leaved doors

Horizontal section




## Thicknesses

| class | leaves | doorframe |
|---|---|---|
| **EW 60, EI$_2$30, RE 90, REI 60** | 50 mm | s = 55 mm |
| **EI$_2$60, EI$_2$90, REI 120** | 60 mm | s = 65 mm |

**NOTE**

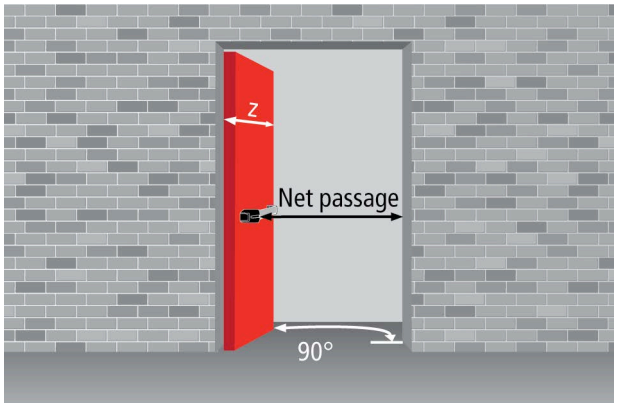
The tolerances FM L $^{+20}_{+10}$, FM H $^{+15}_{+5}$ of the indicated measurements make it easier to fill the gap between the wall and the doorframe with cement mortar.
(*) Shimming to be done, mandatory in case of installation onto emergency exit routes.
(**) Only for EI$_2$90 fire rated doors

# Opening measurements - Overall dimensions
UNIVER Fire doors

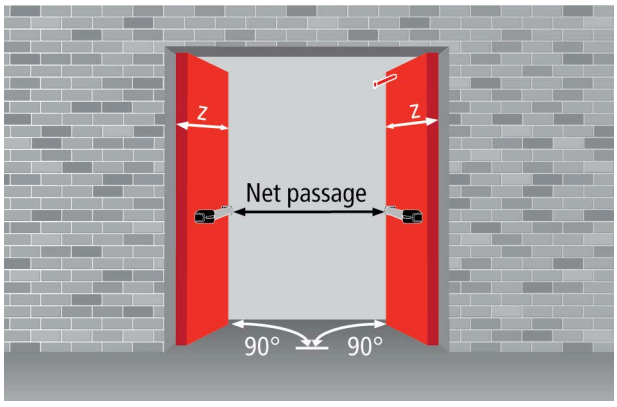


## *OPENING MEASUREMENTS AND OVERALL DIMENSIONS WITH 90 DEGREE OPENING*

### One-leaved doors with panic bar




### Two-leaved doors with panic bars



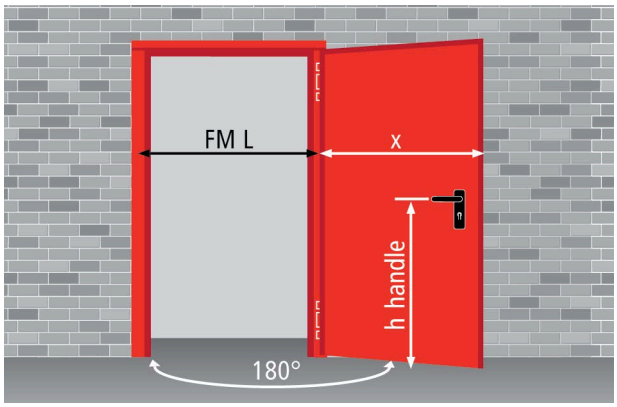

| Net passage calculation | | EW 60 - EI$_2$30 - RE 90 - REI 60 | RE 90, REI 60 | EI$_2$60 - EI$_2$90 - REI 120 | EI$_2$60 - EI$_2$90 - REI 120 |
|---|---|---|---|---|---|
| **panic bar type** | **protrusion** | **one-leaved doors** | **two-leaved doors** | **one-leaved doors** | **two-leaved doors** |
| **EXUS** | 125 | FML - 226 | FML - 384 | FML - 236 | FML - 404 |
| **TWIST** | 100 | FML - 201 | FML - 334 | FML - 211 | FML - 354 |
| **SLASH** | 75 | FML - 176 | FML - 284 | FML - 186 | FML - 304 |
| **FAST TOUCH** | 75 | FML - 176 | FML - 284 | FML - 186 | FML - 304 |
| **without panic bar** | - | FML - 101 | FML - 134 | FML - 111 | FML - 154 |
| **z = leaf protrusion relative to the wall** | | FML + 29 | L1 + 35<br>L2 + 64 | FML + 29 | L1 + 35<br>L2 + 64 |

## *OVERALL DIMENSIONS WITH 180 DEGREE OPENING - HANDLE HEIGHT*

### One-leaved doors

x = FML + 5

h handle = FMH/2 + 50

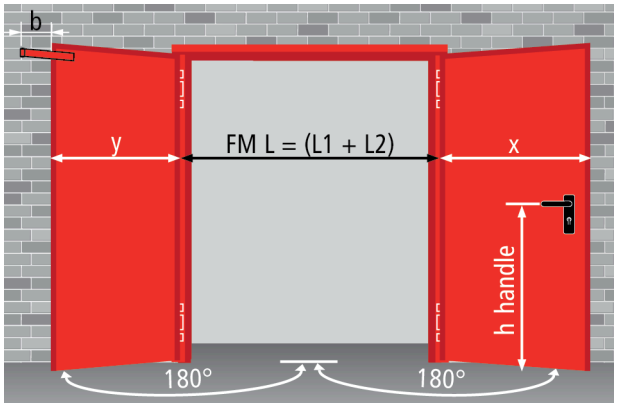



### Two-leaved doors

x = L1 + 5  y = L2 + 35

h handle = FMH/2 + 50

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



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NINZ® FIREDOORS

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