NINZ®
FIREDOORS

Aluminium windows

NINZ aluminum windows

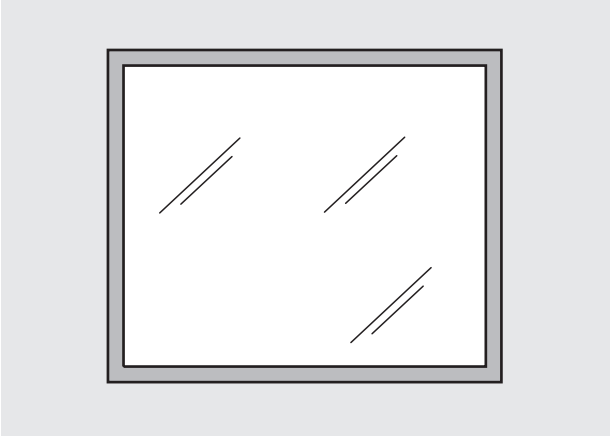
FIRE RATED WINDOWS

Features
Aluminum windows

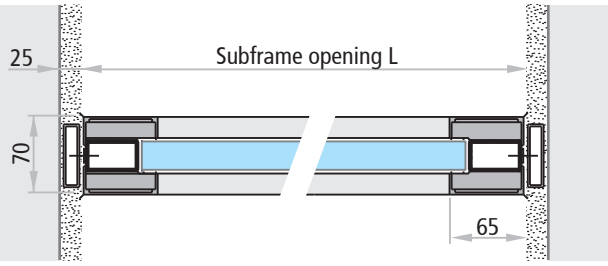
REI 60 WITH BLOCK FRAME

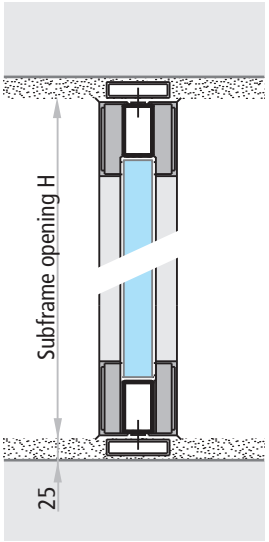
Aluminum windows, REI 60 (MI Circ. 91) mounted on subframe composed of:

- REI 60 window with fire resistant casing, manufactured with special steel/aluminum profiles. Cross-beams and/or uprights are positioned in accordance with manufacturing criteria.
- Fire resistant glass is supplied un-mounted and consists of extra-clear float panels with thermo-expansive fire proof material interposed for a total thickness of approx. 23mm.
- Special finishing with thermoset powders, colors to select from our wide variety (see "painting" page).
- Subframe to be ordered separately, made of hollow galvanized steel profiles with anchors for mortar fixing.



Data table	REI 60
casing thickness	70 mm
glass door weight	75 kg/m²
approx. glass thickness	23 mm
maximum dimensions L x H	1600 x 2800
maximum dimensions recommended for each glazed pane	approx. 2 m²





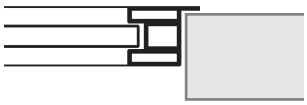
ATTENTION
These types of fire closures are required for internal compartmentalization and should be installed in areas that are protected from direct sunlight, other sources of heat and atmospheric agents. The use of suitable colors and glasses is required for doors located areas that are partially exposed to direct sunlight.

NOTE
For purposes of handling, transport and installation plus the risk of breaking the glass, the manufacturer reserves the right, on a case by case basis, to decide whether to use 2 or more glazed panes while making windows.

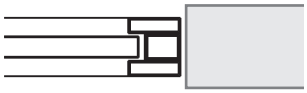
The transverse and/or upright dividers inside each window are invoiced as separate items. Price supplements are required for panels with surface areas greater than 2 m².

Any telescopic joints which might required to reduce the size requirements for transport and on-site maneuvering shall be invoiced as separate items.

Application (1)
Mounting on external rebate



Application (2)
Mounting onto block frame

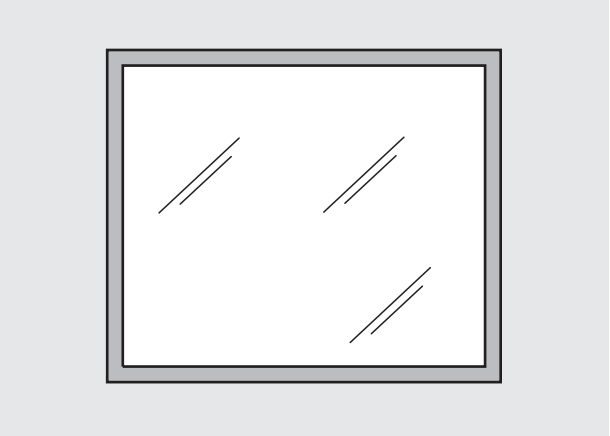


Application (3)
Mounting on internal rebate

REI 90 OR REI 120 WITH BLOCK FRAME

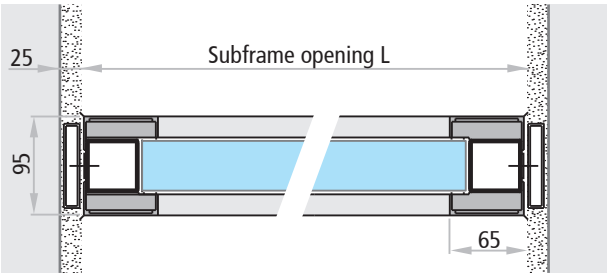
Glazed pane fixed in aluminum REI 90 or REI 120 (MI Circ. 91) mounted on subframe composed of:

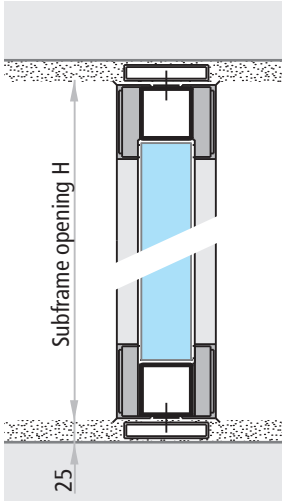
- REI 90 or REI 120 fire rated glass casing made of special hollow steel/aluminum profiles. Cross beams and/or uprights, when necessary, are positioned according to manufacturing criteria. Total thickness of the casing 95 mm.
- Fire resistant glass is supplied un-mounted and consists of extra-clear float panels with thermo-expansive fire proof material interposed for a total thickness of approx. 48 mm for REI 90 and approx. 52 mm for REI 120.
- Special finishing with thermoset powders, colors to select from our wide variety (see "painting" page).
- Subframe to be ordered separately, made of hollow galvanized steel profiles with anchors for mortar fixing.



Data table

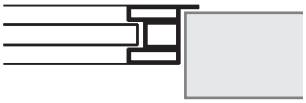
	REI 90	REI 120
casing thickness	95 mm	95 mm
glass door weight	125 kg/m²	135 kg/m²
approx. glass thickness	48 mm	52 mm
maximum dimensions L x H	1400 x 2000	1400 x 2000
maximum dimensions recommended for each glazed pane	approx. 1,2 m²	approx. 1,2 m²



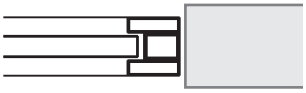


ATTENTION
These types of fire closures are required for internal compartmentalization and should be installed in areas that are protected from direct sunlight, other sources of heat and atmospheric agents. The use of suitable colors and glasses is required for doors located in areas that are partially exposed to direct sunlight.

Application (1)
Mounting on external rebate



Application (2)
Mounting onto block frame



Application (3)
Mounting on internal rebate

NOTE
For purposes of handling, transport and installation plus the risk of breaking the glass, the manufacturer reserves the right, on a case by case basis, to decide whether to use 2 or more glazed panes while making windows.

The transverse and/or upright dividers inside each window are invoiced as separate items. Price supplements are required for panels with surface areas greater than 1.2 m².

Any telescopic joints which might required to reduce the size requirements for transport and on-site maneuvering shall be invoiced as separate items.

GENERAL NOTES
The use of suitable colors and glasses is required for doors located in areas that are partially exposed to direct sunlight or other heat sources. The casing must not be exposed to atmospheric agents in any case. For special instructions and recommendations regarding fire rated glass, see the "Notices" reported on the last page of the glass door accessories section of the present brochure.

Ninz reserves the right to modify the product. Installation should be executed by qualified technicians. Modifications may only be made as indicated in the installation instructions.
Original NINZ replacement parts must be used for all repair work.

Painting
For fire rated glazed doors

PAINTING FOR STEEL GLAZED DOORS WITH BLOCK FRAME

The glazed steel doors come with special finishing in thermoset powder paints. The colors reported in the table (side) are always available. Other tints are available on request only.

ATTENTION
The paint deteriorates upon exposure to direct sunlight or atmospheric agents

Colors always available:

RAL 1013	RAL 3000	RAL 5010	RAL 6005	RAL 7035
RAL 8017	RAL 9005	RAL 9006	RAL 9010	
NCS 4020-B50G	NCS 5020-B50G			

PAINTING FOR STEEL/ALUMINUM GLAZED DOORS

The glazed aluminum doors come with special finishing in thermoset powder paints. The colors reported in the table (side) are always available. Other tints are available on request only.

ATTENTION
The paint deteriorates upon exposure to direct sunlight or atmospheric agents

Due to artifacts of the printing process, the colors depicted here may not correspond exactly to the colors of actual doors. Please refer to RAL or NCS samples.

Colors available:

RAL 1013	RAL 3000	RAL 5010	RAL 6005	RAL 7035	RAL 8017	RAL 9010
RAL 9005	RAL 9006	NCS 4020-B50G	NCS 5020-B50G			

Anodized colors:

silver	light bronze	dark brown	black

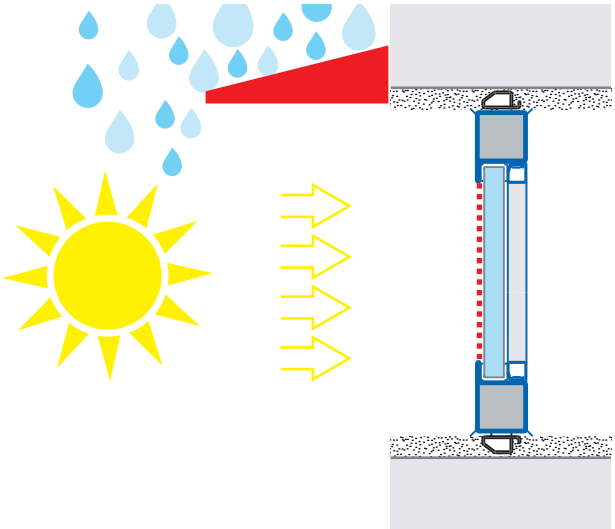
Special treatments

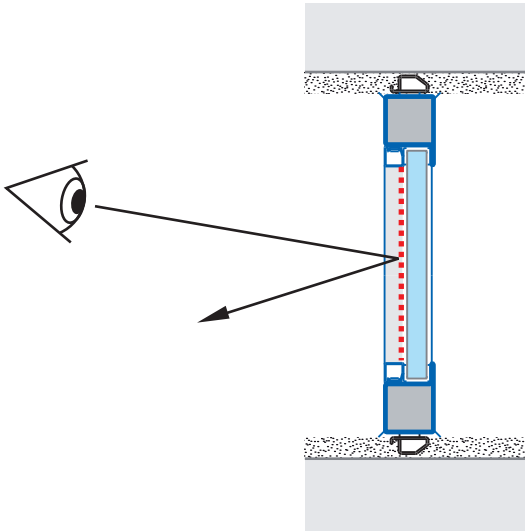
For fire rated glazed doors

TREATMENTS FOR EXTERIOR USE

When glazed doors are used in locations exposed to direct UV rays from sunlight or internal lighting, special glass protection and coloration/paint is available to adapt to this environment. The side of the glass that requires special treatment will need to be specified (the glass-stop side or the opposite side). If left unspecified, the special treatment will be applied to the side opposite to the glass stops. A sticker will be applied to indicate the protected side for purposes of assembly and installation.

Glazed doors for external environments should always be protected from water.
Painting and glass treatment for external environments is only available for REI 30, REI 60 and REI 120 closures with block frames!





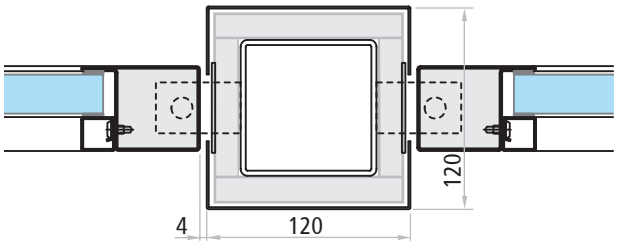
FILM

To reduce or prevent external visibility while maintaining optimal internal visibility, REI 30, REI 60 and REI 120 glasses with block frames may be equipped with opacifying or covering films (black or white) that have been designed for the purpose. The side of the glass that requires special treatment will need to be specified (the glass-stop side or the opposite side). If left unspecified, the film will be applied to the glass-stop side.

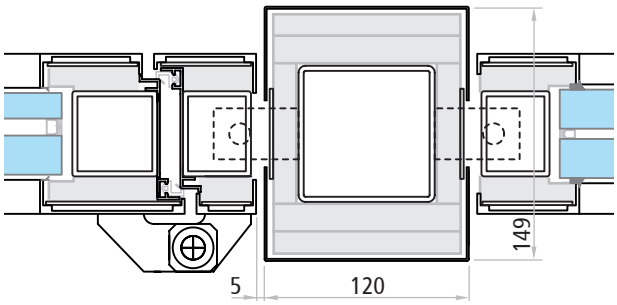
Film application is only available for REI 30, REI 60 and REI 120 closures with block frames!

PYLON

Pylon and/or transverse element for the reinforcement or partitioning of complex elements. Made of an internal steel profile measuring 80 x 80 x 3 mm and surfaced with Promatec panels, with visible edges being finished with painted metal plates with the same finishing as the casing itself. Manufactured to measure and ready for attachment.



Pylon for REI 30 and REI 60 glazed doors, 120 x 120 section

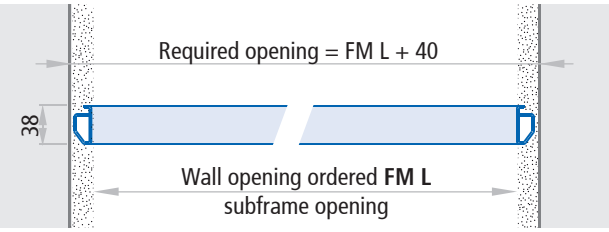


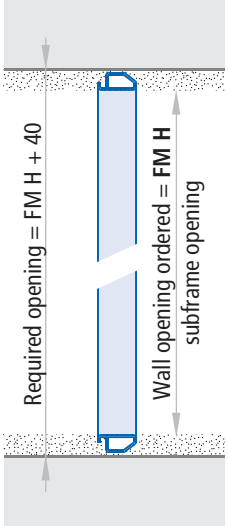
Pylon for REI 90 and REI 120 glazed doors, 120 x 149 section

Subframes
For fire rated glazed doors

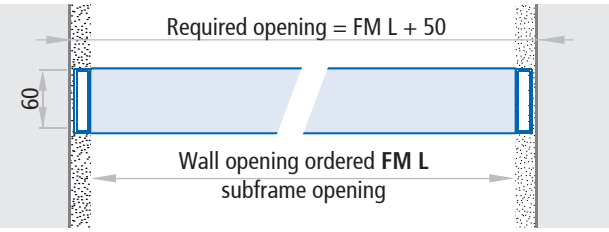
FOUR-SIDED SUBFRAME

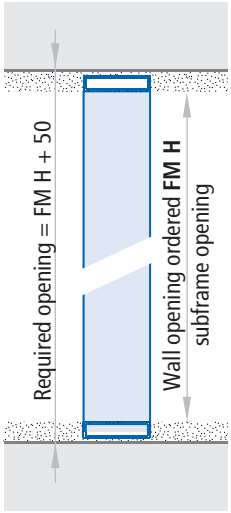
REI 30 or REI 60 in steel
Subframe ready for assembly for REI 30 and REI 60 steel windows with block frame. Made of hollow galvanized steel profiles with a 38 x 17 x 2 mm shaped section. Includes spacers that can be disassembled and anchors for mortar fixing.



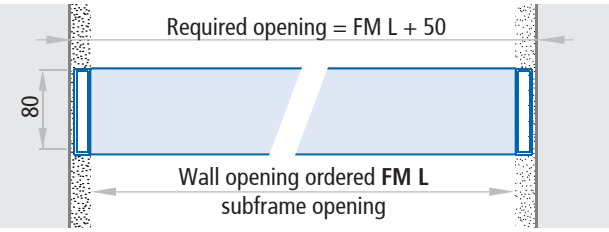


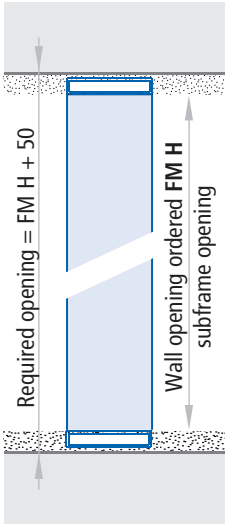
REI 60 in steel/aluminum
Subframe for REI 60 steel/aluminum windows with block frame. Made of hollow galvanized steel profiles with a 60 x 20 x 2 mm rectangular section. Includes spacers that can be disassembled and anchors for mortar fixing.





REI 90 or REI 120 in steel/aluminum
Subframe for REI 90 and REI 120 steel/aluminum windows with block frame. Made of hollow galvanized steel profiles with a 80 x 20 x 2 mm rectangular section. Includes spacers that can be disassembled and anchors for mortar fixing.





NOTE
The subframe option needs to be expressly ordered.

ATTENTION
The order measurements for the subframe are equal to its internal measurements, which correspond to the order measurements (FM) for the glazed door.

ATTENTION
Glazed doors and windows are required for internal compartmentalization and should be installed in areas that are protected from direct exposure to sunlight, other heat sources and atmospheric agents. If these products are used in locations exposed to direct sunlight, special paints must be used for this environment, and in such cases it is recommended to consult with our technical division.

Fire rated glass is sensitive to temperature, to water (humidity) and to the UV rays of solar radiation or particular forms of internal lighting.

Recommendations regarding the AMBIENT TEMPERATURE of the installation area.
The glass remains stable in a temperature range of -40°C +50°C. Whenever the temperature of the glazed pane exceeds +50°C, the sodium silicate understands such temperatures as fire-related and begins developing an irreversible opaqueness. Please contact us should the glazed pane ever exhibit any degree of opaqueness.
The presence of an internal ventilation or air conditioning system could benefit the installation of fire rated glazed panes. First, however, it is necessary to verify the specific ambient conditions with our technical division. Please do not hesitate to contact us in this regard.

Recommendations regarding the presence of WATER or HUMIDITY in the area of installation.
The sodium silicate found in fire rated glass is water-soluble. If water gets inside the glass frame, or even in the presence of high levels of atmospheric humidity, therefore, the sodium silicate liquefies and creates unsightly bubbles around the edges or even inside the glass, and these bubbles can increase in size over time. The fire rated properties of sodium silicate are nullified when it dissolves in water. For this reason, it is essential to take good care of the tape that seals the entire edge of the glass. This function of this tape is to keep water vapor out. Improper handling or usage that causes tears in the perimetral tape can create pathways through which water or humidity could attack the sodium silicate. Please contact us should any tears in the perimetral tape be detected during storage or installation.

Recommendations regarding the presence of UV RAYS in the installation area.
The sodium silicate found within the layers of fire rated glass is sensitive to the UV rays of solar radiation and certain types of internal lighting. When the glass is exposed to sources of UV radiation, the sodium silicate polymerizes irreversibly and creates unsightly bubbles. At first the bubbles are only the size of the tip of a pin. With continued exposure, however, their size increases over time. Please consult the instructions contained in the "REI Product Handling" form.
For this reason it is fundamental for the order form to indicate when fire rated glass is for EXTERNAL USE (exposure to the UV rays of solar radiation) or for use in the presence of UV-generating lamps.
Improper storage of the material (at the work-site, for example) could also result in the emergence of unsightly bubbles over time. Therefore we invite you to follow with scrupulous attention the instructions contained in the "REI Product Handling" form.

Recommendations regarding the STORAGE of fire rated glazed panes.
Fire rated glazed panes need to be stored in a vertical position (maximum deviation of 6° from vertical) as reported in the "REI Product Handling" form. The utilization of standard glassmaker racks is optimal for this purpose because of how they allow for proper weight distribution of the glazed pane and proper contact with the pane surface itself.
Improper storage of fire rated glazed panes may create significant deformities in the panes (inflection or curvature). These types of deformations are irreversible. If improper efforts are made to reverse the deformations, the glazed panes could break irreparably. Please contact us to avoid unpleasant inconveniences for which we cannot be held responsible.

Recommendations regarding the HANDLING of fire rated glazed panes.
The production of fire rated glass involves the stratification of extra-clear float glass with sodium silicate. The limited mechanical strength of float glass makes it necessary to store the glass in a vertical position and never in a horizontal position. In the horizontal position, the load generated by the weight of the glass itself can cause the panes to break. Should one of the panes of the multi-layer glass break, the fire-resistance capacity and safety performance of the glass is not necessarily compromised.
Panes of fire rated glass should never be rotated using one of their corners as a pivot point. Vertically-stored panels may at times need to be rotated by 90°. The considerable weight of large pieces of glass could induce workers to rotate such panels by pivoting the pane with only one corner touching the ground. The concentration of the pane's weight on a single corner could very well cause the glass to break.
Fire rated glass may be handled using the normal suction pads used by glassmakers.

Installation should only be executed by qualified technicians. The installation instructions indicate the only allowable modifications.
Original NINZ replacement parts must be used for all repair work.
The bearing capacity of the walls and crossbeams involved needs to be verified due to the considerable weight of glazed doors.

Ninz reserves the right to make unannounced technical changes to any of the contents of this entire form. All measurements are in mm.

Ninz reserves the right to modify the product. For any additional clarifications, our technical division is available with special forms to fill out to stylize your order or request estimates.

5002009/2 - C10
EDITION 01/2011
date of print: 01.12.2010

NINZ®
FIREDOORS

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