

INSTALLATION, USE AND MAINTENANCE HANDBOOK FOR REI 60, REI 120, EI₂ 60, EI₂ 90, EI₂ 120 AND MULTIPURPOSE PROGET DOORS

REI homologations:

BZ050REI060P004F1
BZ050REI060P005F1
BZ050REI060P012F2

BZ050REI060P013F2
BZ050REI060P014F2
BZ050REI060P016F2
BZ050REI120P002F1
BZ050REI120P006F1

BZ050REI120P007F1
BZ050REI120P008F2
BZ050REI120P010F2
BZ050REI120P011F2
BZ050REI120P015F2

EI₂ classifications:

EI₂ 60: C-11-000095-PR04
EI₂ 90: P.V. RS-12-077
EI₂ 120: P.V. RS-06-092

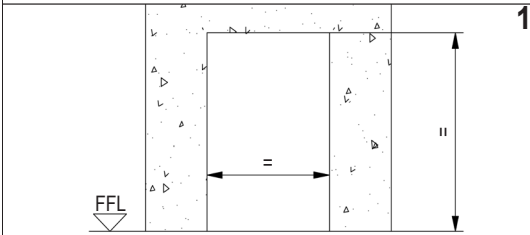
NINZ S.p.A.
corso Trento, 2/A
I-38061 ALA (TN) / ITALY

152-GB

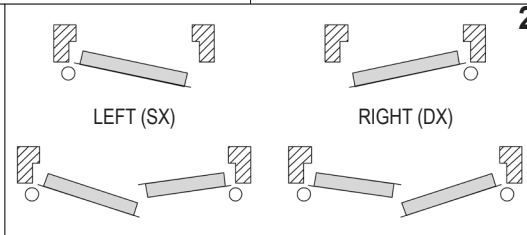
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06/13

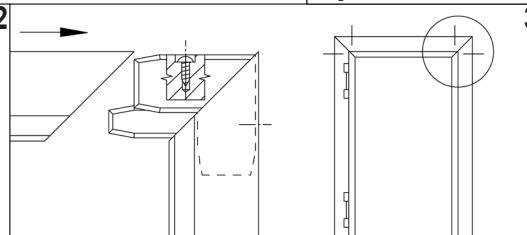
1/3



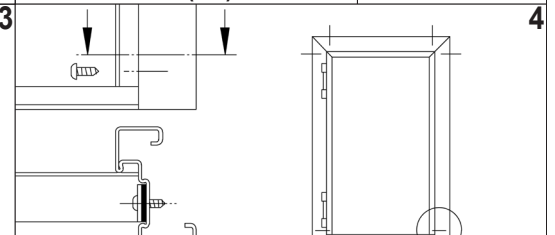
1 Unpack the doorframe and verify the correspondence between the wall opening and the dimension printed on the sticker applied on the frame. Establish the Finished Floor Level (FFL).



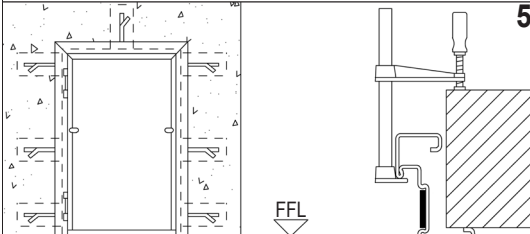
2 For door with environmental characteristics see also the enclosed complementary installation instructions. Verify the opening direction of the door.



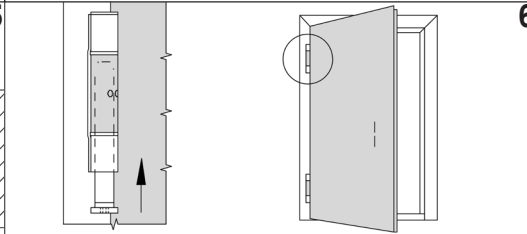
3 Set together the frame profiles with black joints, unfasten the screws present in the joints so that they enter the existing holes on frames until the connections get rigid.



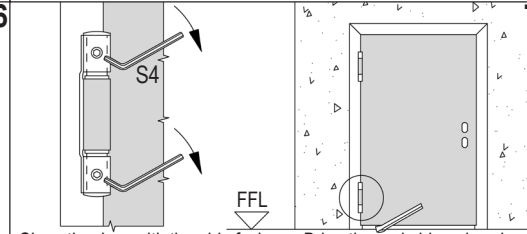
4 Unfasten the screws at the bottom part of the two jambs and fix them again inserting the lower spacer, without removing the self expanding gasket (to be present in fire-rated doors only).



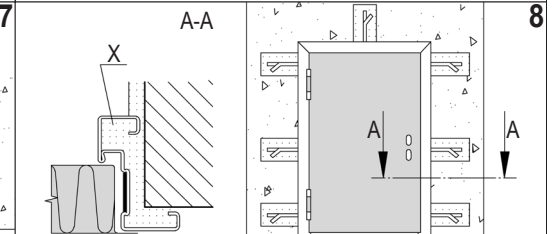
5 Bend up the frame-brackets and mark on the wall their positions respecting the FFL. Create the holes in the wall for the brackets. Insert the doorframe in the wall opening respecting the FFL and fasten it temporarily with clamps.



6 Unpack door leaf without removing spacers and wedges of PA. Place it in the doorframe inserting pivot with spring in upper hinge on left doors and in lower on right doors.

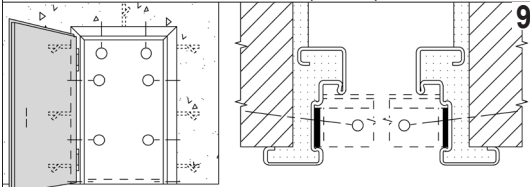


7 Close the door with the aid of a lever. Bring the main hinge bearings in contact with each other through the use of the screw thread. Operation to be carried out with the maximum care and without forcing. Verify the squareness of the whole door, respecting the FFL and the plumb line. Fix definitively the doorframe with the clamps.

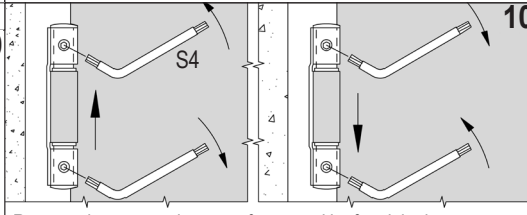


8 Fix the brackets with rapid setting cement. Fill up the space between frame and wall with mortar (detail X) without curving frame.

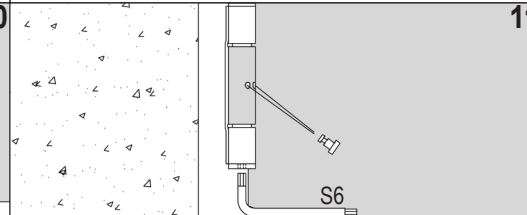
ADDITIONAL FIXING FOR EI₂ 60, EI₂ 90, EI₂ 120 DOORS



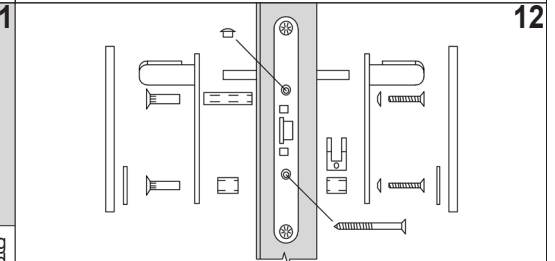
9 In case of EI₂ fire-rated door fasten additionally the doorframe, by drilling with a Ø6mm drill bit, at an intermediate distance between the frame-brackets in the (○) position and fix through all holes using MRS-H Ø7x120mm type wall screws. Remove the lower spacer and use the holes below for a further fixing of the jambs.



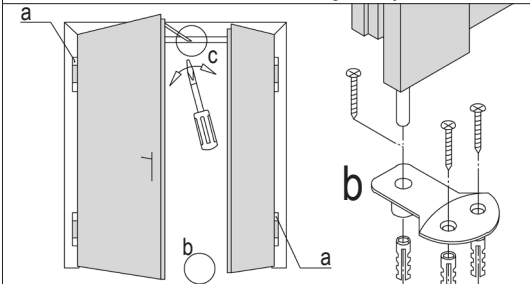
10 Remove the spacers between frame and leaf and the lower spacer. Regulate the vertical leaf's position. To raise the door leaf: unscrew the upper blocking screw, screw on the lower one, screw on the upper one again. To lower the door leaf: unscrew the lower blocking screw, screw on the upper one. Operation to be carried out with the maximum care with the aid of a lever.



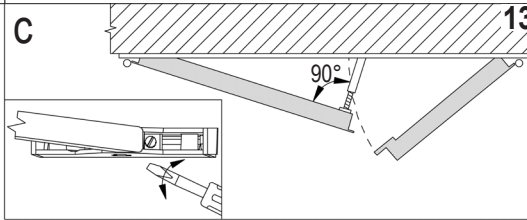
11 Wind up the spring hinge in the opening direction inserting the tension pin. Even if self closing is not needed or overhead doorclosers are installed, wind up the hinge spring anyway blocking it with the tension pin. The self closing it is mandatory for fire-rated doors.



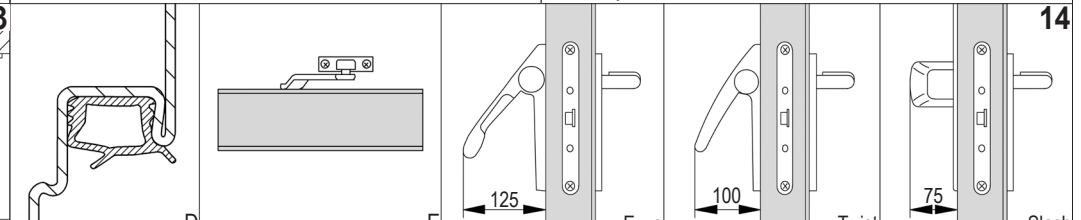
12 Mount the handle. Remove the sticker from the doorframe by means of hot air, or clean any remains using the product "Ecosolvente A/955" by "Recoll".



13 RC/STD (part "c") obligatory only for fire-rated doors; RC2 obligatory for fire-rated doors with environmental characteristics.



14 For two-leaved doors use the same assemble procedure adding: a) load two pivot with springs; b) install the catch set in the floor; c) in case of RC/STD adjust the closing regulator (arm position perpendicular to the main leaf).



Optional: D) rebate sealing - E) overhead doorcloser (the spring must be anyhow slightly loaded) - Exus, Twist or Slash panic bar.

INSTALLATION, USE AND MAINTENANCE HANDBOOK FOR REI 60, REI 120, EI₂ 60, EI₂ 90, EI₂ 120 AND MULTIPURPOSE PROGET DOORS

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GENERAL NOTES

STANDARD: the assemble instructions have to be followed in every detail to respect the test conditions and assure the perfect functioning of the door, including the self-closing for fire-rated doors. Furthermore a regular service is necessary. Multipurpose doors are not endowed with thermoexpanding gaskets and closing regulators.

LIABILITY: it is duty of the installer to follow the installation instructions in any detail, specifically point 7, 10 and 11 in order to guarantee the safety of the end-users.

MASONRY WORKS: it's the customer's responsibility to keep the wall integral particularly in the anchor points of the door, to fill the space between doorframe and wall with mortar as indicated in box 8 of the present instructions and to execute the masonry works in accordance with the following criteria

- for REI doors according to standard UNI 9723.1990/A1;
- for EI doors according to standard EN 1363-1 checking that the walls are made of blocks, bricks or homogeneous cement with a density of 1200±400 kg/m³ and a thickness of min. 150 mm.

All this is particularly valid for fire-rated doors.

FINISHING: the serial door is finished with an epoxy-polyester powder paint oven-baked at 180 °C. The surface is orange-skin and particularly resistant. In case an additional paint is desired we advise to follow these instructions:

- make smooth the surfaces with sandpaper and dust them;
- give a first hand of opaque 2 components epoxide using the product ALCEA EPOX 5203 / 0059 (beige);
- finish the surfaces with enamels or paints to your choice.

CLEANING: the doors are supplied from the factory clean and packed. We suggest to use a clothe and soaped water only. Do not scratch the surfaces.

WARRANTY: the manufacturer gives warranty as per Italian law (C.C.1495). Any claim for missing or damaged goods have to be recorded by inserting a written remark in the delivery notes and must be notified the maximum within eight days from the date of materials receipt.

CURRENT CE MARKED ACCESSORIES FOR FIRE-RATED DOORS:

Std015 lock:	CE 0497/CPD/4265/11	- EN 12209:2003/AC	- 3 M 3 1 0 C 2 H A 2 0
Hinges:	CE 0789-CPD-2005	- EN 1935:2004	- 4 7 7 1 1 4 0 1 4
RC/STD closing regulator:	CE CPD-0425-1153	- EN 1158:2003	- 3 5 5/3 1 1 4

The CE marking of the Std 019 lock for inactive leaf of two-leaved doors is only valid if a panic bar or emergency handle is installed onto main leaf.

USE AND MAINTENANCE INSTRUCTIONS FOR PROGET DOORS

All fire-rated doors located in escape routes need regular maintenance in order to verify that no damage occurred and that they close regularly. The scheduled maintenance shall guarantee that the leaf swings correctly and that the self closing mechanism works properly. The doors shall be kept free from any obstructions.

Any 5.000 opening cycles but at least every 6 months the following operations shall be carried out:

- lubricating the ball-bearing hinge;
- lubricating the spring hinge and the spring after removing the tension pin;
- wind up the spring inserting the tension pin. Verify that the closing force is sufficient to shut the door if opened to 30±2°;
- lubricating the lock and the latch.

For double leaf doorsets additional controls shall be carried out:

- verify the functionality of the secondary leaf's rods and lubricate its guide rail;
- clean the hole of the floor catch set;
- lubricate the lock and the self-locking device (top onto passive leaf);
- verify the regular functionality of the closing regulator (in case of RC/STD, the arm must be in perpendicular position to the main leaf); lubricate the mobile parts of the closing regulator.

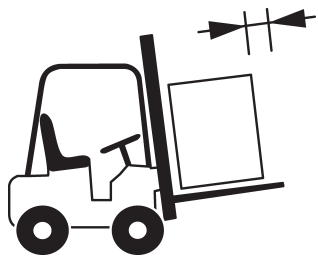
Verify the regular functionality of the doors accessories (handle, panic bar, overhead doorcloser etc.). Their mobile parts shall be lubricated too, following the dedicated instructions.

In case of irregular functioning of the door or its accessories contact an authorized installer or replace the damaged accessories.

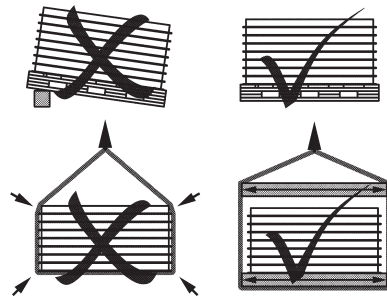
Note: for lubrication use viscous products.

HANDLING AND STORAGE - COMPLAINTS

Handling: in case of handling with webbing slings/ropes, place them under the feet of the pallet; avoid to place them under the boards; avoid that the action of slings/ropes produces too much pressure upon the doors, by means of spacers interposed in the upper part. Do not handle the leaves using suction caps. **Storage:** it is duty of the company/person taking over the doors to store them in a suitable place so that they will be protected from the natural agents and from the direct sun rays. If during transportation or truck unloading it rains or snows on the doors it is necessary to remove immediately the nylon film from each leaf and doorframe put them in vertical position to dry appropriately. **Complaints:** in case of external visible defects on doors, they have to be marked in the copy of the transportation document to be returned to the forwarder and notified to the manufacturer by registered mail within 48 hours. We remember that according to our general conditions intrinsic defects have to be notified to the manufacturer within 8 days from the delivery date by registered mail. Goods with defects never have be utilized or assembled, they should be stored at disposal for controls by the manufacturer appointed person.



Move the materials with appropriate means.



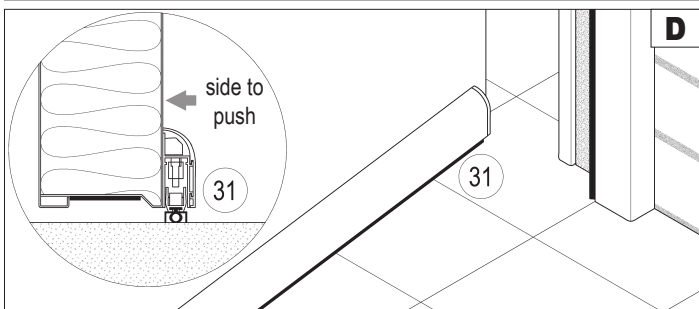
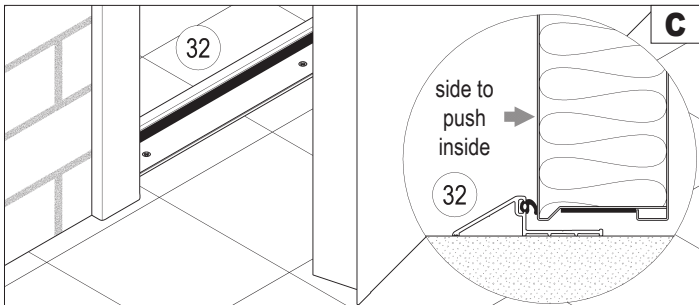
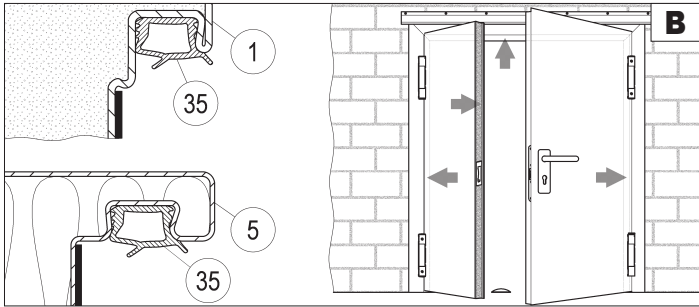
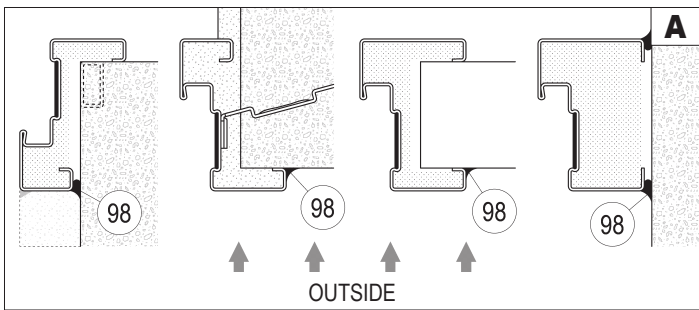
Store and handle the materials with care.



Assemble by qualified staff only.



Do not expose the materials to the natural agents.



COMPLEMENTARY INSTALLATION INSTRUCTIONS FOR PROGET FIRE-RATED DOORS WITH ENVIRONMENTAL CHARACTERISTICS AND PROVIDED WITH APPROPRIATE OPTIONAL

ATTENTION

- If the PROGET door should provide also environmental characteristics, these complementary installation instructions must be strictly followed.
- **The installation with push-side exposed outside is not suitable for escapes routes and also the water-tightness will be lost too.**
- The certified acoustic performance is valid only for EI₂90, EI₂120 and REI 120 fire-rated doors with angular frame.

COMPLEMENTARY INSTALLATION INSTRUCTIONS

- Protect the door from direct weathering action. If necessary, install a canopy roofing immediately above it, which prevent the water infiltration in the upper part of the door.
- If the door was ordered without a coating for exterior use, it is duty of the customer to apply a suitable paint, by following the instructions in the dedicate section for re-painting of surfaces.

Drawing A

- It is necessary to seal with neutral silicone (98 - not supplied) the perimeter edge of doorframe, in the angle formed with the external side of the wall.

Drawing B

- Cut the FF rebate sealing (35) to measure with upper corners of 45 degree. Insert the sealing into appropriate channels (showed in drawing by arrows) of the doorframe (1), and, in case of two-leaved door, of the central joint of the passive leaf (5). Place the sealings with profiles turned as shown in sections.

Drawing C - VERSION WITH THRESHOLD

KIT AMB P1 series, with performances of: thermal transmittance, air permeability, water-tightness and resistance to windload.

- Install the fixed threshold (32), keeping in mind that in order to achieve all the expected performances, this application is possible only with the door installed with the pull side inside. For the installation of the fixed threshold follow meticulously the A170 instruction, supplied with the KIT AMB.

Drawing D - VERSION WITH AUTOMATIC DOOR SWEEP

KIT AMB P2, KIT AMB P3, KIT AMB P4 and KIT AMB P5 series, with performances of: thermal transmittance, air permeability and, for fire-rated EI₂90, EI₂120 and REI120 door with angular frame, acoustic insulation.

- Install the automatic doorsweep (31) follow meticulously the IF01 instruction supplied with the KIT AMB. When the installation is complete, verify that the automatic door sweep do not inhibit the opening of the door; otherwise regulate properly the doorsweep following his installation instructions.

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TREES AND TIMBER INSTITUTE

Consiglio Nazionale delle Ricerche

TABELLA RIASSUNTIVA RAPPORTI DI PROVA DITTA NINZ - PORTE TAGLIAFUOCO

modello	classe	ante	soglia	misure	finis. 400x600	classificazione	n° RP
PROGET EI60, EI120, REI60, REI120	1	SOGLIA FISSA	1140x2145		Aria, Acc, Ven	2, 1A, C1	09/02/2010
PROGET EI60, EI120, REI60, REI120	1	GUARNIZIONE SOTT.	1140x2145		Aria	2	09/03/2010
PROGET EI60, EI90, REI60, REI120	2	SOGLIA FISSA	2294x2152		Aria, Acc, Ven	3, 2A-4B, C1	09/06/2010
PROGET EI60, EI90, REI60, REI120	2	GUARNIZIONE SOTT.	2294x2152		Aria	3	09/05/2010

TRASMITTANZA TERMICA

modello	classe	ante	soglia	misure	trasmissione termica (W/m²K)		n° RP
					finis. 300x400	senza finestr.	
PROGET EI60, REI60	1	GUARNIZIONE SOTT.	1230x2180		1,89	1,37	09/20/2010
PROGET EI60, REI60	1	SOGLIA FISSA	1230x2180		1,88	1,35	09/21/2010
PROGET EI120, REI120	1	GUARNIZIONE SOTT.	1230x2180		1,84	1,39	09/22/2010
PROGET EI120, REI120	1	SOGLIA FISSA	1230x2180		1,83	1,38	09/23/2010
PROGET EI60, REI60 > 3.6 m²	2	GUARNIZIONE SOTT.	2000x2180		2,14	1,45	09/46/2010
PROGET EI60, REI60 ≤ 3.6 m²	2	GUARNIZIONE SOTT.	1230x2180		2,91	1,80	09/46/2010
PROGET EI60, REI60 > 3.6 m²	2	SOGLIA FISSA	2000x2180		2,08	1,44	09/47/2010
PROGET EI60, REI60 ≤ 3.6 m²	2	SOGLIA FISSA	1230x2180		2,80	1,78	09/47/2010
PROGET EI60, REI120 > 3.6 m²	2	GUARNIZIONE SOTT.	2000x2180		2,03	1,47	09/48/2010
PROGET EI60, REI120 ≤ 3.6 m²	2	GUARNIZIONE SOTT.	1230x2180		2,70	1,80	09/48/2010
PROGET EI90, REI120 > 3.6 m²	2	SOGLIA FISSA	2000x2180		2,02	1,46	09/49/2010
PROGET EI90, REI120 ≤ 3.6 m²	2	SOGLIA FISSA	1230x2180		2,69	1,79	09/49/2010

TELAJ SPECIALI

modello	classe	ante	soglia	misure	finis. 400x600	senza finestr.	n° RP
PROGET EI60, REI60 ABBRACCIANTE	1	GUARNIZIONE SOTT.	1230x2180		2,02	1,51	09/20e41/2010
PROGET EI60, REI60 ABBRACCIANTE	1	SOGLIA FISSA	1230x2180		2,01	1,50	09/19e41/2010
PROGET REI120 ABBRACCIANTE	1	GUARNIZIONE SOTT.	1230x2180		1,97	1,53	09/22e41/2010
PROGET REI120 ABBRACCIANTE	1	SOGLIA FISSA	1230x2180		1,96	1,52	09/23e41/2010
PROGET EI120, REI120 TUNNEL	1	GUARNIZIONE SOTT.	1230x2180		1,98	1,54	09/22e41/2010
PROGET EI120, REI120 TUNNEL	1	SOGLIA FISSA	1230x2180		1,97	1,53	09/23e41/2010
PROGET EI60, REI60 ABBRAC. > 3.6 m²	2	GUARNIZIONE SOTT.	2000x2180		2,24	1,55	09/46e41/2010
PROGET EI60, REI60 ABBRAC. ≤ 3.6 m²	2	GUARNIZIONE SOTT.	1230x2180		3,04	1,93	09/46e41/2010
PROGET EI60, REI60 ABBRAC. > 3.6 m²	2	SOGLIA FISSA	2000x2180		2,17	1,54	09/47e41/2010
PROGET EI60, REI60 ABBRAC. ≤ 3.6 m²	2	SOGLIA FISSA	1230x2180		2,94	1,91	09/47e41/2010
PROGET REI120 ABBRAC. > 3.6 m²	2	GUARNIZIONE SOTT.	2000x2180		2,12	1,58	09/48e41/2010
PROGET REI120 ABBRAC. ≤ 3.6 m²	2	GUARNIZIONE SOTT.	1230x2180		2,83	1,93	09/48e41/2010
PROGET REI120 ABBRAC. > 3.6 m²	2	SOGLIA FISSA	2000x2180		2,11	1,55	09/49e41/2010
PROGET REI120 ABBRAC. ≤ 3.6 m²	2	SOGLIA FISSA	1230x2180		2,82	1,92	09/49e41/2010
PROGET EI60, REI120 TUNNEL > 3.6 m²	2	GUARNIZIONE SOTT.	2000x2180		2,13	1,58	09/48e41/2010
PROGET EI60, REI120 TUNNEL ≤ 3.6 m²	2	GUARNIZIONE SOTT.	1230x2180		2,85	1,95	09/48e41/2010
PROGET EI90, REI120 TUNNEL > 3.6 m²	2	SOGLIA FISSA	2000x2180		2,12	1,56	09/49e41/2010
PROGET EI90, REI120 TUNNEL ≤ 3.6 m²	2	SOGLIA FISSA	1230x2180		2,84	1,94	09/49e41/2010

Test Report Summary & Expert Statement
Airborne sound insulation of building components

Report-No. 12-001195-PR01
(GAS-C02-04-en-01)

Client **NINZ s.p.a.**
Corso Trento 2/A
38061 ALA
Italy

ift
ROSENHEIM

EN ISO 10140-1: 2010
EN ISO 10140-2: 2010
EN ISO 717-1: 1995+A1: 2006
EN 14351-1: 2006
Documentation for test series 11-000271 referring to sound insulation measurement of door sets.

Product **Fire door, single and double leaf**

Designation **PROGET REI 120 - PROGET EP 90 / 120**

Door frame **Steel frame variants with infill panel**

Coordinating dimensions **Width 0.80 m ... 1.34 m (single leaf)/1.00 m ... 2.66 m (double leaf), height: 2.00 m ... 2.67 m**

Door leaf **Steel door with insulating insert and optional glazed panel**

Door leaf dimensions **Width 0.40 m ... 1.327 m, Height: 1.99 m ... 2.66 m**

Glazing **Variants: single, laminated or insulating glass unit**

Rebate seals **1 frame rebate seal**

Floor seals **1 automatic floor seal (drop seal)**

Instructions for use
This test report serves to demonstrate the airborne sound insulation of building elements. For Germany the following applies:
- R_w as per DIN 4109: (R_w corresponds to R_w, R_w = R_w - 5 dB)
- R_w for Construction Products List (Bauelemente)

Validity
The data and results given refer solely to the tested and described test specimen.
Testing to one performance characteristic does not allow any statement to be made on any further characteristics of the present construction regarding performance and quality.

Notes on publication
The IfT Guidance Sheet "Conditions and Guidance for the Use of IfT Test Documents" applies.
The cover sheet can be used as an abstract.

Contents
The report comprises a total of 12 pages.
1 Object
2 Procedure
3 Detailed results
4 Instructions for use

Weighted sound reduction index R_w
Spectrum adaptation terms C_w and C_{tr}

Design variants up to
R_w (C_w; C_{tr}) = 36 (-1, -3) dB
as per Section 4.2

ift Rosenheim
10.05.2012

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