

Fitting instructions



PROJECT

1	Introduction	03
1.1	Performance characteristics	03
1.2	General provisions for handling and storage	04
1.3	Unpacking	04
2	Standard supply	05
3	Equipment	05
4	Building site features and preliminary checks	06
4.1	Tekno door frame preliminary checks	06
5	Fitting and adjustment sequence	10
5.1	Pin hinge fastening on door frame	11
5.2	Fitting of frame covering profiles	11
5.3	Door leaf fastening	14
5.4	Finishing touches and adjustments	16

1 Introduction

This manual aims at being an helpful support for easing the installation of a Tekno safety door, as well as at providing hints for solving the most common technical issues. **The observance of all instructions herein provided is an essential requirement for assuring the attainment of all product performance characteristics.** To highlight some particularly relevant parts of the text symbols are used, whose meaning is described here below.



Important

It highlights particularly relevant technical information that shall not be neglected.

For any problem or if a specific case is not described in this manual, refer to your area dealer.

1.1 Performance characteristics

Tekno is a line of safety doors with high performance characteristics.



Break-in resistance
Class 3



Acoustic insulation 43 dB



Fire resistance EI 90



Air



Water



Wind

According to the model, type of standard equipment and the use of any additional kits, the features listed above may change from door to door. The attainment of these high performance characteristics is directly linked to the proper installation and adjustment of the product in compliance with the instructions given here below, as well as to a proper maintenance along the time.



Important

All performance characteristics were laboratory measured; therefore, they were measured under optimal installation and adjustment conditions. These performance results may be different in the products installed at the building site due to several possible types of installation, adjustment, existing masonry, construction, etc.



Important

The handling and installation of a Tekno safety door shall be performed by specialized technical personnel.

1.2 General provisions for handling and storage

- To assure the security and safety, provide for suitable transport and handling systems carefully considering the incidence of the door weight (about 50 kg/sqm).
- Do not expose the product to bad weather.
- Avoid exposing the product to sunlight and excessive heat. They may cause the adhesion of the package to the product and the “raising” of the paint layer.
- The product has to rest vertically, observing the up - down orientation.
- Avoid any type of bump even when the leaf is still packaged.
- Before opening the package make sure to be able to proceed with the fitting.
- Any protective films on facing panels or any other item shall be removed only once the installation procedure is completed.

1.3 Unpacking

The procedure to unpack the product shall be carried out with utmost care to avoid denting, scratching and spoiling the product. Do not use any cutters or other cutting tools to open the package. The packaging material has to be disposed observing the local regulations on waste disposal, based on the following information concerning the materials used.

Expanded polystyrene	recyclable	plastic
Polyphrene film (padding)	recyclable	plastic
Bubble wrap film	recyclable	plastic
Cardboard	recyclable	paper
Straps	recyclable	plastic

2 Standard supply

The door is usually supplied with:

- box containing the accessories;
- tube containing the frame covering profiles;
- packaged leaf.



3 Equipment

To install Tekno, it is necessary to use common equipment usually included in the standard one that installers use.

- Pencil and yardstick
- Straight edge

- Spirit level
- Plumb-bob
- Square
- Broom and pan
- Handling straps
- 4-rungs-ladder
- Box(es) with various small hardware and screws
- Blanket or cloth to lean tools on it
- Spatulas and brushes
- Drill
- Clutch screw gun
- Silicone gun
- Extensions of electric cables
- Set of bits for drilling metals
- Set of bits for drilling masonry
- Set of bits for drilling wood
- Set of inserts for screw gun PH1, PH2, PH3
- Set of "T"-wrenches with hexagonal head
- Set of cross and flat screwdrivers
- Spray lubricant (type WD-40)
- Neutral silicone (type Fischer SNF)
- Acrylic silicone (type Fischer SA)
- Miscellaneous assortment of fillers, sealants, waxes, retouching felt-tip pens, etc.
- Air bearings
- Ratchet for adjusting the hinges

4 Building site features and preliminary checks

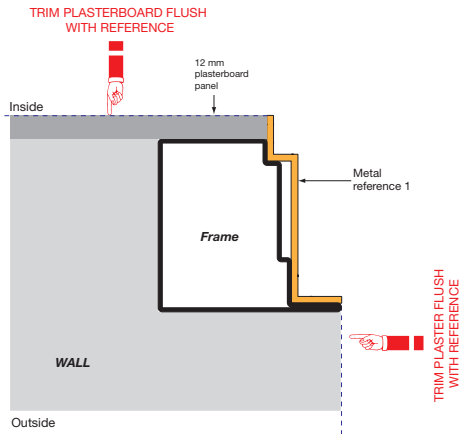
4.1 Tekno door frame preliminary checks

To assure a proper installation of Tekno it is essential to verify that the frame has been properly walled up. A careful check and verification of the frame measures carried out before proceeding with the installation allows obtaining the best final result.

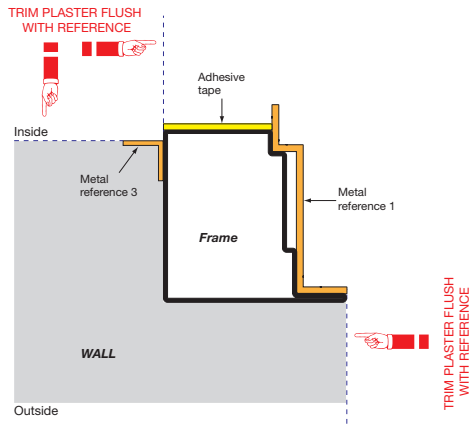
Step 1

Verify the correct positioning with reference to the internal wall alignment according to the type of selected fitting (flush with internal wall, flush with internal wall with wall system, coplanar with surrounding frame).

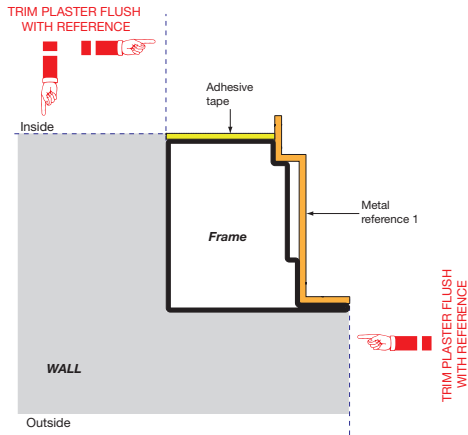
Fitting flush with internal wall



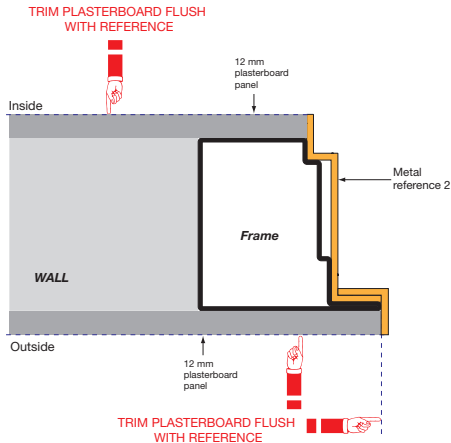
Fitting flush with internal wall with SWS



Fitting coplanar internally with surrounding frame



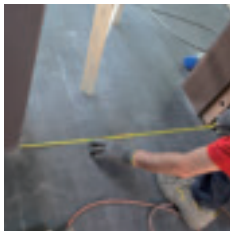
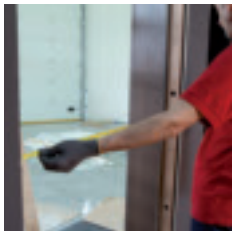
Fitting flush with external wall



Step 2

Check the width measure paying attention to check it at least on 3 points (on the top, on the bottom and in the center).

It is necessary to observe the rated Hole Opening measure with ± 1 mm tolerance.

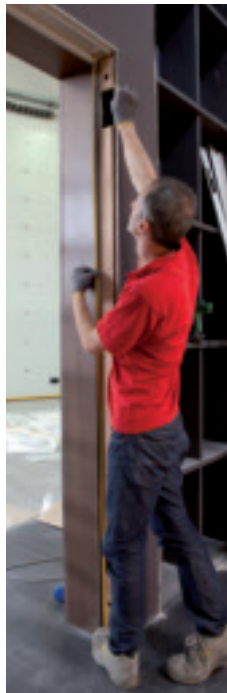


Step 3

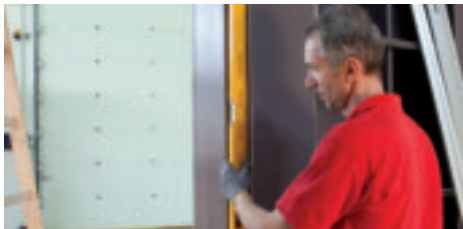
Check the height measure, verifying the measure on at least two angles. It is necessary to observe the rated Hole Opening measure with ± 1 mm tolerance.

Step 4

Verify the leveling of the frame jambs comparing the alignment with reference to the plumb-bob, carefully checking the measure on at least 3 points (on the top, on the bottom and in the middle) with ± 1 mm tolerance.



Moreover, check the jambs also using the spirit level that has to show a perfect leveling.



Step 5

Using the spirit level check the upper transom of the frame. It should be perfectly leveled.

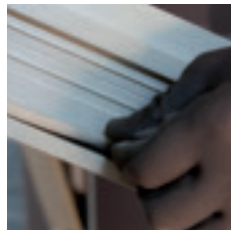


5 Fitting and adjustment sequence

Tekno installation sequence is very easy and develops through well defined and compulsory steps. Following the order of the operations described here below, it will be possible to complete the installation safely and easily. Special attention has to be paid to the adjustment operations in order to obtain the perfect alignment of leaf and frame, as well as the best aesthetic and functional result.

Step 1

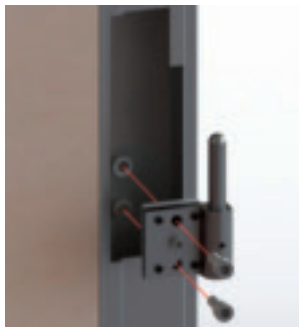
Unpack the leaf and the profiles, disposing the packing material properly. Verify the matching of the frame with the measurements done and the



leaf opening direction. Verify that the sealing strips are inserted in the suitable seats present in the aluminum facings (1 horizontal + 2 vertical).

5.1 Pin hinge fastening on door frame

Properly place the hinges on the suitable fastening seats located on the frame and anchor them using the supplied screws.

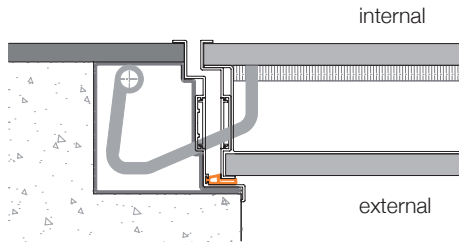


Important

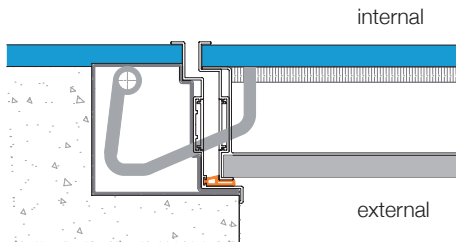
After having fastened the hinges to the frame, remove the central screw.

5.2 Fitting of frame covering profiles

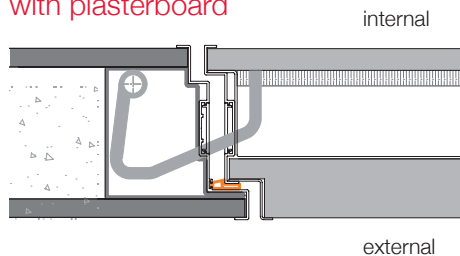
Flush with internal wall
with plasterboard



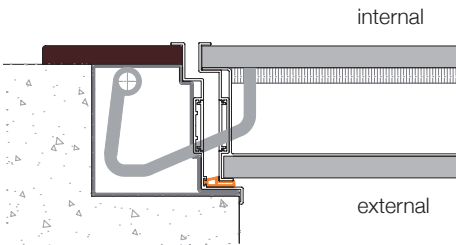
Flush with internal wall with SWS



Flush with external wall with plasterboard



Coplanar with surrounding frame (90x12)



Step 1

To fasten the covering profiles to the frame use the suitable standard supplied self-threading screws and clips.



Step 2

Place the aluminum covering profile of the upper transom.



Step 3

Place and fasten the covering profile on the hinge side using the suitable standard supplied clips and screws.

Then, position and tighten to the frame the aluminum covering profile on the lock side.



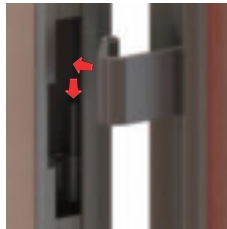
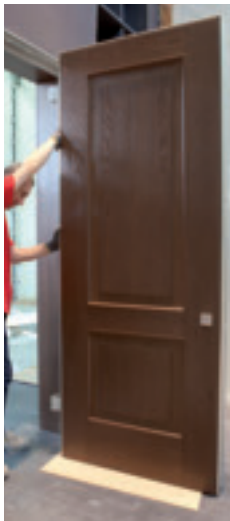
Important

Let the 45° angles of the frame sealing strips adhere in order to avoid any shifts along the time, if necessary, blocking them by “squeezing” the fastening seat.

5.3 Door leaf fastening

Step 1

Place the leaf perpendicularly to the Hole Opening and move it close to the frame matching the hinge holes.



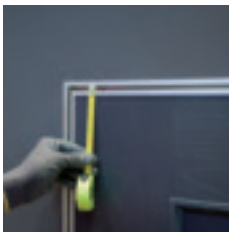
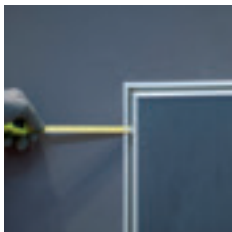
Step 2

Lift the door using the spacers (the use of air bearings is recommended) and once it has reached the proper height, move it letting the hinges get into their proper seats.



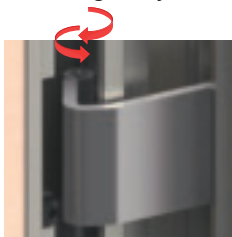
Step 3

Close the door and verify that the leaf is centered with reference to the frame opening. Correct any differences by acting on the adjustment points.



Step 4

Door height adjustment. Act on the adjustment screw positioned on the upper part of the hinges; unscrewing and screwing them with an 6 mm Allen wrench it is possible to correct any height misalignment.



Step 5

Door width adjustment. Act on the anchoring elements fastening the hinges to the frame, by loosening the fixing screws by two turns with a 6 mm Allen wrench; then, adjust the four positioning screws using a 3 mm Allen wrench. By screwing them up, the leaf moves to the lock side; by unscrewing them, it moves to the hinge side. (One 360° rotation corresponds to 1 mm shift). Once the adjustments have been made, tighten the fixing screws.



Step 6

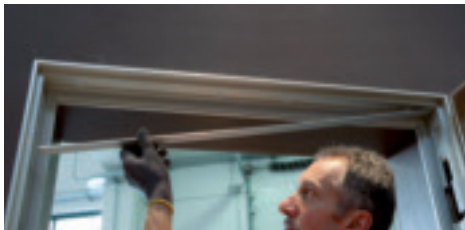
Insert the hinge covering elements in their seats.



5.4 Finishing touches and adjustments

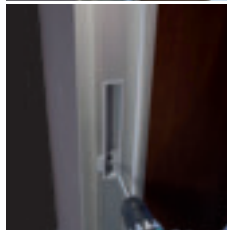
Step 1

Fit the aluminum screw cover plates (starting from the upper transom) by snap mounting them on the fixing clips.



Step 2

Fit the plugs housing the dead bolts and hinge hole tray switchlocks by pressing them into the arranged holes in the aluminum facings.



Caution: The first element to be inserted and fastened is the latch adjustment element; then proceed with the other plugs.

Step 3

If necessary, adjust the draught excluder. Using a 3 mm Allen wrench act on the small piston that is accessible from the strike plate on the hinge side with open door. By screwing and unscrewing it is possible to respectively increase or decrease the stroke of the draught excluder. With closed door, it is important to check which is the most suitable position to attain the best closing of the opening under the door.



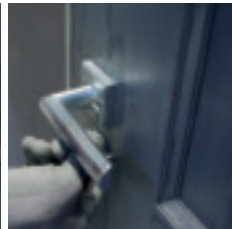
Important

The draught excluder attains its maximum effectiveness on perfectly smooth and flat surfaces (e.g. marble). This does not occur if the threshold is made of stone or terracotta tiles, or if it is excessively warped; in this case, the draught excluder sealing strip cannot close properly and will tend to become worn quickly.



Step 4

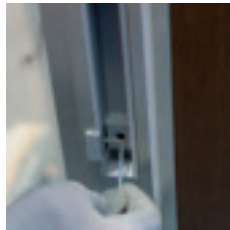
Handle fitting.



Step 5

To adjust the latch strike plate, loosen the central screw. Shift the plate to the wished point, acting on the side adjustment screw with a 2.5 mm Allen wrench (by screwing, the latch stroke is increased;

by unscrewing it, it is decreased). Then, block it screwing it up again until the complete tightening of the central screw is reached.





Step 6

Verify the opening and closing.

