FRTFZGXL : Through fixing kit for panels and anti-shatter systems

Features

The FRTFZGXL fixing kits are designed for the through fixing of insulating panels or for anti-shatter systems of brick and cement floors. The kit is composed of the FZGXL8 frame anchor, a special countersunk head screw with TORX T30 key and a low thickness FRT sealing washer in polymeric material.
The FRTFZGXL is characterized by considerable robustness. The FRTFZGXL items are available in different lengths to adapt to the different thicknesses of the panels and/or to anchor in depth of structural elements.

Applications

- Insulating panels.
- Anti-shatter systems.

Base Materials

- Concrete.
- Brick.
- Hollow brick.
- Stone.
- Lightweight concrete.

Materiali

Fixing and Washer :	Polyamide PA6 grey RAL 7035 compliant with REACH and RoHS directives.
Screw :	C1006-1008 steel zinc plated (3-5 µm) countersunk TORX T30.

Installazione

1 - Check the dimensions of the support (thickness and distance from the edges) to ensure that the dimensions of the dowel are correct.

2 - Position the object to be fixed.

3 - Make the hole of the correct diameter and using the method indicated for the type of support.

4 - Drill to a depth sufficient to ensure that the expansion zone of the plug penetrates completely inside the support and does not limit the subsequent installation of the screw.

5 - Clean the hole seat thoroughly. The presence of dust and loose materials reduces the sealing performance of the plug.

6 - Insert the plug with the washer through the object to be fixed.

7 - Insert the screw with the washer and tighten until the object is securely tightened.

Code	Plastic fixing ØxL	D	Drilling Hole	Screw dxl	Maximum Fixable Thickness
	mm	mm	mm	mm	mm
FRTFZGXL8X60	8x60	13	8	6x65	10
FRTFZGXL8X80	8x80	13	8	6x85	15
FRTFZGXL8X100	8x100	13	8	6x105	35
FRTFZGXL8X120	8x120	13	8	6x125	55
FRTFZGXL8X140	8x140	13	8	6x145	75
FRTFZGXL8X160	8x160	13	8	6x165	95

RECOMMENDED loads (1kN ≈ 100 kg forza)

RECOMMENDED LOAD (STATIC LOADS)	FRTFZGXL 8X60			FRTFZGXL 8X80 / FRTFZGXL 8X160		
	FZGXL 8X60		FRT50MM-DF088	FZGXL 8X80 / FZGXL 8X160		FRT50MM-DF088
	N racc (pull-out)	V racc (Shear)	N racc washer (pull-out)	N racc (pull-out)	V racc (Shear)	N racc washer (pull-out)
	kN	kN	kN	kN	kN	kN
Concrete C20/25	0,90	1,20	0,42	2,10	1,20	0,42
Brick (fb≥43MPa)	0,75	0,80	0,42	0,90	0,80	0,42
Hollow brick (fb≥8MPa)	0,40	0,60	0,42	0,40	0,60	0,42
Lightweight concrete (fb≥5MPa)	0,12	0,20	0,42	0,14	0,20	0,42

The anchorage holding loads (pull-out) depend on the combination of the type of anchor, screw and support. The washers have a holding load determined by the size of the screw head with which it is coupled and by the performance of the material with which it is made. For caution, consider the minimum value of the recommended pull-out loads. The limit resistance values have been determined through tests carried out in the internal BARTOLUCCI laboratory. The recommended values take into account a suitable safety factor in static load conditions. The FZGXL items are in the process of EAD 330284-00-0604 certification. The resistance capacity of an isolated anchor to bending stresses is poor, therefore its application is not recommended.
If there are situations subjected to dynamic stresses, the application must be tested for each specific situation.

Notes for correct installation

The installation method significantly influences the sealing performance expressed by a dry fastening system.
DIAMETER AND EXECUTION OF THE HOLE. The diameter of the hole for housing a dowel is indicated in the technical data sheet. In the tests carried out, tips for building materials were used that were 0.2 mm larger than the nominal size. Non-orthogonality and poor stability of the drilling operations can cause oscillations during the execution of the hole, which will result in an ENLARGED, CONICAL and/or OVALIZED hole.
DIAMETER AND LENGTH OF THE SCREW. Since the expansion is determined by the insertion of a screw inside the dowel, the interference that occurs between this and the internal diameter of the dowel determines the expansion and therefore the sealing action of the dowel. Smaller diameters determine lower expansions and therefore lower axial sealing performance. In terms of shear resistance, performance is generally determined by the screw used.
QUALITY OF THE SUPPORT. Since anchors are generally used to fix objects to various building materials, the quality and condition of the materials themselves is fundamental. For example, if the support material is CRACKED or has VOIDS, the holding action of an expansion anchor is compromised.
CLEANING OF THE SEAT. The presence of dust and particulate matter negatively influences friction and therefore the adhesion that will occur at the anchor/support material interface. NON-INTERFERENCE WITH OTHER STRUCTURAL ELEMENTS. During the drilling phases, it is necessary to pay attention to the point where the hole is made, especially in reinforced concrete. If any reinforcement elements, such as reinforcing bars, are intercepted, this may cause damage to the static and/or dynamic performance of the structure itself.

Packaging :

CODICE	pieces / box	box / Carton	Carton / pallet	Pieces / pallet
FRTFZGXL8X60	50	24	30	36000
FRTFZGXL8X80	50	24	30	36000
FRTFZGXL8X100	50	24	30	36000
FRTFZGXL8X120	50	24	30	36000
FRTFZGXL8X140	50	11	30	16500
FRTFZGXL8X160	50	11	30	16500

EURO pallet 80x120 maximum height 1,95 meters.

Use

Store in the original packaging in a covered and dry place.

Safety instructions

According to the current European regulations, the articles in question do not require a Safety Data Sheet (Reg.1906/2007/CE - REACH). During application, the use of gloves, dust mask and protective glasses is recommended. Follow the safety regulations in place in the workplace.