

Installation manual

N°1010

10/19

MURAX P110 SHUTTERS DENTEL GRILLE

DIRECT PULL



(Document reserved for installers)

This document is the exclusive property of FTFM La Toulousaine and must on no account be copied. The document may be modified at any time in accordance with product changes.



Contents

Equipment required for installation	p.2
Installation instructions	p.3
Installing the guiding rails and the axle	p.4, p.6
Shutter installation principle	p.5
Finishes	p.8
In case of problems maneuvering the shutter	p.8
Emergency operation	p.11

Equipment required for installation

- Lifting equipment
- Clamps
- Spirit level
- Plumb bob
- Tape measure (5m)
- Hammer drill

- Flat wrenches : 8, 10, 15 and 17 mm
- Hexagon keys : 5 mm - Socket wrenches : 10, 15 and 17 mm
- Screwdriver
- Grease and brush
- Multi-grip pliers



Installation instructions

CAUTION !



To ensure that this product is assembled, used and maintained in complete safety, it is important to follow the instructions provided in this document. For everyone's safety, please observe the precautionary measures below.



- * Before beginning the assembly, read this manual carefully.
- * This closure must be installed by a properly trained, professional technician.
- * All the parts delivered are specifically sized for this product. Adding and/or using other parts may be detrimental to safety and may affect the product's warranty.
- * Any modification or improvement of this closure must be compliant with the standard EN 13241 + A2.
 In this case, a "modification/transformation" file must be created by the installer as per the standard EN 12635 annex C.
- Considerable force is exerted by the torsions springs or spring boxes, in the case of compensated shutters or grilles. This work must therefore be carried out in accordance with the safety instructions. Use the appropriate tools to install these products. Ensure that the work is carried out on a stable floor.
- * Ensure that the assembly area is adequately lit, clear, clean and clearly marked out.
- * Ensure that no other people are present at the assembly site apart from the installers. Non-authorized persons (children for example !) who are present at the site risk injury during assembly.
- * All the components of this closure must be installed in compliance with the installation instructions provided in this manual.
- * All the requirements of the standards EN 13241 + A2 must be met and verified if necessary.

Max. locking torque :

- Assembly screw : **10 Nm**
- Shutter clip screw : 12 Nm

Min. working load per attachment point :

- Plates : 300 daN
- Guiding rails : 40 daN
- <u>Please note</u> : If installing on an iron structure, the guiding rails and plates can be welded to the building. In this case, a cord of approximately 50 mm must be attached to each side, roughly 800 mm apart.



Installing the guiding rails and the axle



For the hurricane slides and the noise reduction clips : Different clearances (refer to the corresponding enclosed manual).

End-slat

The inner clearance on each side of the end-slat must be observed in accordance with the depth of the guiding rail

Bottom clearance of guiding rail	Depth of guiding rail
8 mm	40 / 60 mm
8 mm	80 / 100 mm

Intermediate slats or Corrugated tubes

The inner clearance on each side of the intermediate slats and the corrugated tubes must be observed in accordance with the depth of the guiding rail

Bottom clearance of guiding rail	Depth of guiding rail
8 mm	40 / 60 mm
12 mm	80 / 100 mm



- 1- Firmly attach the guiding rails, ensuring that they are plumb. To do so, use the end-slat, maintaining the required clearance*.
 - Ensure that this slat is horizontal.
 - Firmly attach the winding plates to the wall using the support brackets because they will bear the entire weight of the shutter.



Tip : If installation of a box.

Draw and drill cheek mounting holes and possible consoles before mounting the axle. (See the installation manual of Box 3K).

2- Insert the axle into the bushings.

Before positioning the spring-loaded shaft, check that :

- The pins are horizontal (obligatory).
- The dowel must be pointing downwards and the spikes toward the guiding rail. (2)
- 3- Firmly tighten the bolts H M10x80 + nuts.





Shutter installation principle

LA TOULOUSAINE

Rolling direction

SOLID or MICROPERFORATED MURAX SHUTTER

A Microperforated shutter always requires 3 full roller slats in the upper section



DENTEL SHUTTER

A Dentel shutter always requires 3 full roller slats in the upper section



Clips



The height and the rolling of the shutter are calculated with a precise number of slats. All the slats provided must be installed.

4- Create the shutter by threading the slats together, without forgetting the clips. Start with the end slat.



Roll the assembled shutter starting from the clips and moving towards the end-slat.



To avoid scratching the slats while unrolling them, ensure that the axle is protected (e.g. with a box, etc.).

- 5- Unroll the shutter in the guiding rails starting from the end-slat.
- 6- Attach the clips to the rounded plates in the captive nuts using the round head screws HC M6x20.
- 7- Adjust the starting curves.
- 8- Remove the pins by pushing the shutter forward using a bar, while checking that the shutter clips stay attached to the rounded plates.



Never unpin the spring-loaded shaft when the shutter is not properly attached.





(4)





<u>Please note</u> : Shutters with a weight \leq to 120 Kg ; Are not equipped with an anti-fall guard.

10/19

9- Attach the 2 stops on the ends of the end slat and the handle to the center (screw TC M6x16 + nuts M6). Between the walls, drill a passage for the lock rod behind the guiding rail.

- 10- Mount the stops onto the guiding rails (nuts M5). - Ensure that they stop the shutter at its highest position.
- 11- If the shutter is equipped with an anti-fall guard :





p.7







Finishes



IMPORTANT !

Carefully grease the inside of the guiding rails and the winding plates

In case of problems maneuvering the shutter

If the shutter is crooked when moving up and down

(Gap larger than 4 cm on the end-slat)





Remove any blockages from inside the guiding rails



Check that the guiding rails are correctly aligned and that the axle is perfectly horizontal



If the shutter is difficult to raise and descends too quickly, tighten the springs by one rotation, in the direction of the descent.



- **1** Reset the bottom end position by extending the trajectory and put the shutter in the high position.
- **2** Attach a cord to the shutter, pass it around the axle and remove the stops.
- **3** Take the shutter out of the guiding rails and rotate it once in the direction of the descent by pulling the cord.
- **4** Reposition the shutter in the guiding rails.
- 5 Put back the stops, remove the cord and set the end positions.

If the shutter is difficult to lower and ascends too quickly, untighten the springs by one rotation, in the direction of the ascent.



- 1 Reset the end positions by extending the trajectory.
- **2** Attach a cord to the shutter, and remove the stops.
- 3 Let the shutter unroll by one full rotation carefully controlling it with the cord.
- **4** Reposition the shutter in the guiding rails.
- **5** Put back the stops, remove the cord and set the end positions.

Please note : The shutter must remain balanced and stable at mid-height.





To be displayed next to the closure

Emergency operation



Instructions for use of shutters equipped with a anti-fall guard



- Raise or lower the shutter smoothly and slowly to avoid activating the anti-fall guard.

If the anti-fall guard is activated while lowering the shutter :

Quickly raise the shutter by 10 centimeters (The anti-fall guard will be released). Then lower the shutter again smoothly and slowly.

This document is the exclusive property of FTFM La Toulousaine and must on no account be copied. The document may be modified at any time in accordance with product changes

(Installer's stamp)