



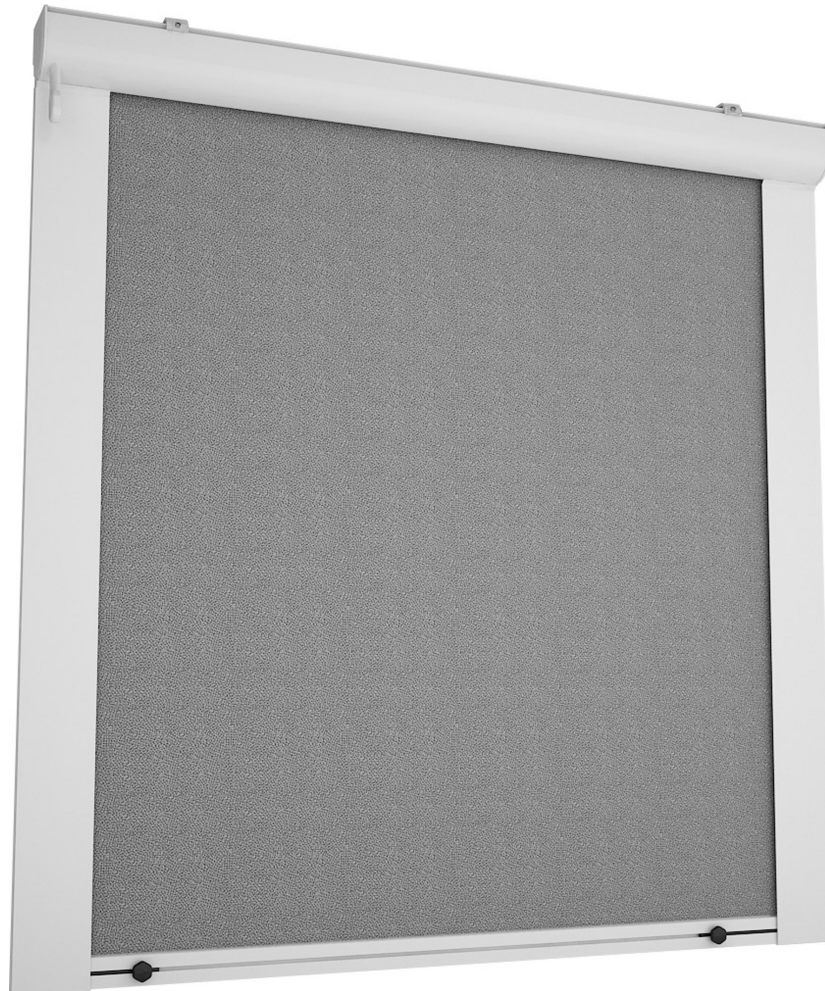
Professional Awning
Manufacturers Association



Industrial Fabrics Association International
Proud Member



Parma



installation
manual



All information contained in this document was provided by the manufacturer of the components of this model. As a fabricator, Retractableawnings.com claims no liability with respect to these documents as we are not engineers and did not complete any of the information, engineering or calculations in this document.

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1 INTRODUCTION

This manual was prepared by the Manufacturer to provide the necessary information to those authorized to install and perform special maintenance on the product. It is prohibited to remove, rewrite or in any way modify the pages of the manual and their content.

Operations must be carried out by personnel with the technical and professional skills required by current applicable national laws or standards.

This manual must be kept complete in all its parts in an easily accessible place.

The manufacturer reserves the right to update products and corresponding manuals without the obligation to update previous products and manuals.

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1.1 Symbols used in the manual

The WARNING symbols used in the manual are shown below.

i INFORMATION AND PRECAUTIONS

Useful advice and instructions to be observed to ensure proper installation and/or maintenance of the awning. Failure to observe these messages may compromise the integrity and/or the resistance of the product.

! WARNING

DANGER TO OPERATOR! Instructions to be evaluated and followed carefully. Failure to comply with these messages may compromise individual safety.

1.2 Personnel requirements

Personnel assigned to this operation must have technical knowledge of the product obtained either through two years' experience or by means of a suitable technical training course.

1.3 Required equipment

To ensure proper installation of the awning, and consequently best operation of the finished product, the following equipment is required:

- power screwdriver;
- a level;
- string;
- complete tool set;
- equipment for working at heights (scaffolding, ladders, aerial platforms, etc.) which are compliant with current standards of individual safety in the workplace.

2 SAFETY

2.1 General safety information

- **During all operations described in this manual, make sure that ONLY individuals involved in the work are in the work zone (see Chap. 1.2 "Personnel requirements") .**
- Do not set objects on the canvas of the awning.
- It is prohibited to stand on or hang from the awning. This would create the risk of severe personal injury, as well as damaging the awning.
- Wear personal protective equipment and clothing as required by current standards on safety in the workplace.

! WARNING

Installation, adjustment, and special maintenance of the awning must be carried out only by specialized, skilled technical personnel.

! WARNING

It is necessary to ensure a distance of at least 500 mm between the end of the fully-opened awning (outermost part) and any fixed obstacle (wall, terrace, etc.).

! WARNING

It is prohibited to install or place ladders or any fixed object near the awning which may reduce the space required by the awning.

2.2· Requirements for working in safety

- Installation must be performed in full compliance with standards set forth by Presidential Decree 164/56 and Legislative Decree 494/96 for all that which concerns individual safety.
- Before use, check that all temporary structures (scaffolding, ladders, etc.) and all individual safety gear (harnesses, belts, etc.) are compliant with standards and in good condition.
- Always use suitable individual protection gear.
- If there is more than one installation technician, their work must be coordinated.
- Operators must work in compliance with the safety instructions given to them.
- If the awning is to be installed above ground level, the area underneath the awning must be marked off and guarded so that no one can get underneath the hanging load.
- Firmly tie the ropes or straps around the pre-assembled parts, so that the components do not slip and risk falling.

2.3· Working environment

- Installation and special maintenance must be carried out in a place that is sufficiently illuminated (based on specific standards) by either natural or artificial lighting. The operator must have a clear view of the work to be performed, and he must also prevent third persons from approaching the work area around the awning.

3 TECHNICAL TABLES FOR INSTALLATION

3.1 Diagram of awning bracket distances and minimum footprints

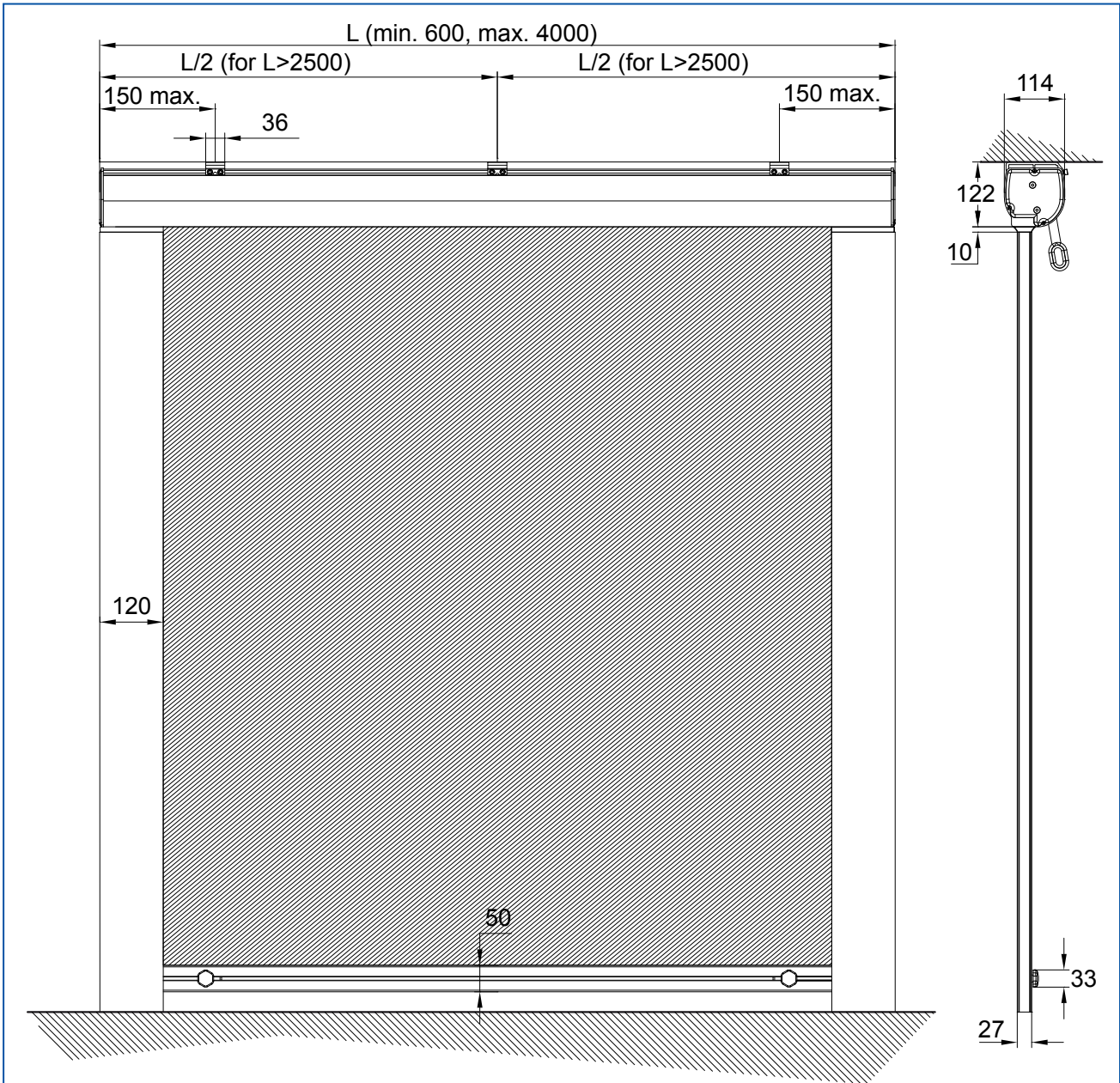


FIG. 1

3.2 · Table of Loads on Awning Fastening Plugs, based on type of attachment

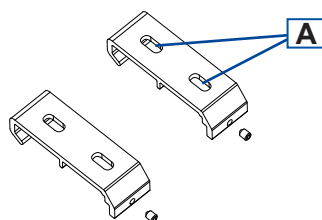
i INFORMATION AND PRECAUTIONS

The calculations for the plugs were made on the basis of Class 2 wind resistance as per standard EN 13561.

3.2.1 · Table of loads for box support brackets CEILING INSTALLATION

i INFORMATION AND PRECAUTIONS

Calculation of the plugs for CEILING installation, for when fastening the wall/ceiling brackets into holes (A).

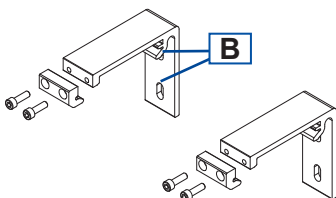


PARMA CEILING INSTALLATION							
Extraction load on anchoring devices (KN)		WIDTH (m)					
		1,5	2	2,5	3	3,5	4
HEIGHT (m)	1	0.14	0.19	0.24	0.28	0.33	0.38
	1,5	0.21	0.28	0.35	0.41	0.48	0.55
	2	0.27	0.37	0.46	0.55	0.64	0.73
	2,5	0.34	0.45	0.57	0.68	0.79	0.91
	3	0.41	0.54	0.68	0.81	0.95	1.08

WALL INSTALLATION

i INFORMATION AND PRECAUTIONS

Calculation of the plugs for WALL installation, for when fastening the universal "L" brackets into holes (B).



PARMA WALL INSTALLATION							
Extraction load on anchoring devices (KN)		WIDTH (m)					
		1,5	2	2,5	3	3,5	4
HEIGHT (m)	1	0.17	0.22	0.28	0.33	0.39	0.44
	1,5	0.24	0.33	0.41	0.49	0.57	0.65
	2	0.32	0.43	0.54	0.64	0.75	0.86
	2,5	0.40	0.53	0.67	0.80	0.93	1.07
	3	0.48	0.64	0.80	0.96	1.12	1.27

The value in the table is in KN and expresses the extraction load of the plug that is under the greatest stress. These values are required for the selection of the most suitable anchoring, based on the type of material upon which the awning will be installed. Choose the anchoring by referring to the recommended load values in the Hilti General Catalogue.

Example: Droppy GB/GP ceiling installation:

awning dimensions: 4x2

load on plug: 0.73 kN

base material: non-cracked concrete

Suggested plug: Hilti HST M8 (see the plug technical specifications in the Hilti General Catalogue).

WARNING







The selection of the most suitable fastening element depends on the type of base material and on its physical state. It is the responsibility of the installer to check the state of the base material before installing the awning. The installer is not obliged to use Hilti plugs.

WARNING

THE ABOVE LISTED TABLES ARE PURELY INDICATIVE. THE INFORMATION IS UP TO DATE ACCORDING TO THE AVAILABLE KNOWLEDGE. BAT S.p.A. DOES NOT PROVIDE ANY GUARANTEE REGARDING ACCURACY, RELIABILITY, AND COMPLETENESS OF THE INFORMATION CONTAINED HEREIN. IT IS THE USER'S RESPONSIBILITY TO ENSURE THE SUITABILITY AND COMPLETENESS OF THIS INFORMATION.

3.3- TABLE OF SUGGESTED ANCHORING DEVICES




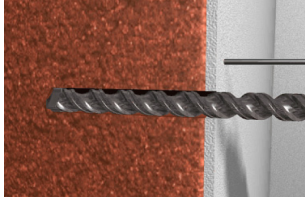
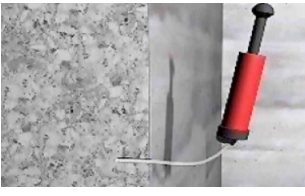
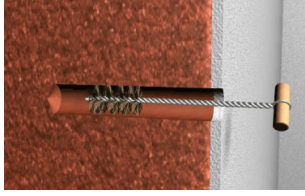
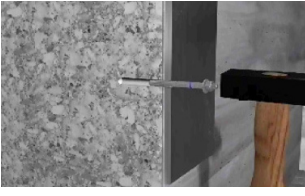


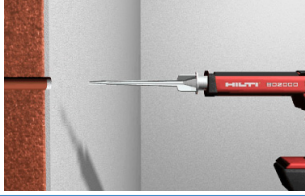
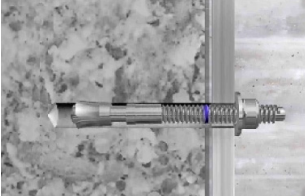
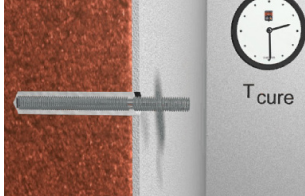
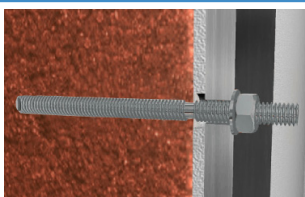
3.3.1 -Types of anchoring devices for different base materials

Extraction load on anchoring devices (KN)		
Hilti HST		CONCRETE CRACKED CONCRETE HARD NATURAL STONE
Hilti HSA		CONCRETE HARD NATURAL STONE
Hilti HIT-HY 150 with HAS		CONCRETE
Hilti HIT-RE 500 with HAS		CONCRETE HARD NATURAL STONE SOLID BRICK WOOD
Hilti HIT-HY 50		BETON GAS SOLID BRICK WOOD
Hilti HIT-HY 20		PERFORATED BRICK

i INFORMATION AND PRECAUTIONS

For corrosive environments, we suggest using stainless steel anchoring devices. For additional information, contact Hilti Italia S.p.A. technical service. (e-mail:tecnicisti@hilti.com)

3.3.2 - Sequence for installation of anchoring devices

MECHANICAL ANCHORING DEVICE		CHEMICAL ANCHORING DEVICE	
	1° Make a hole with a drill bit that is suitable for the anchoring device		1° Make a hole with a drill bit that is suitable for the anchoring device
	2° Pay attention to how deep you make the hole		2° Pay attention to how deep you make the hole
	3° Remove dust and debris from the hole (preferably using compressed air)		3° Remove dust and debris using a brush
	4° Install the anchoring device		4° Remove residual dust with compressed air
	5° Tighten until achieving recommended tightening torque (see Hilti General Catalogue)		5° Inject the chemical adhesive
	6° Final configuration		6° Insert and settle the anchoring device. Comply with the setting time required before placing the plate (see product cartridge)
			7° After the time "T cure" has elapsed, place the plate and tighten until achieving recommended tightening torque (see Hilti General Catalogue)

! WARNING

For proper installation of the anchoring devices, refer to the Hilti General Catalogue

3.4 · Box support brackets

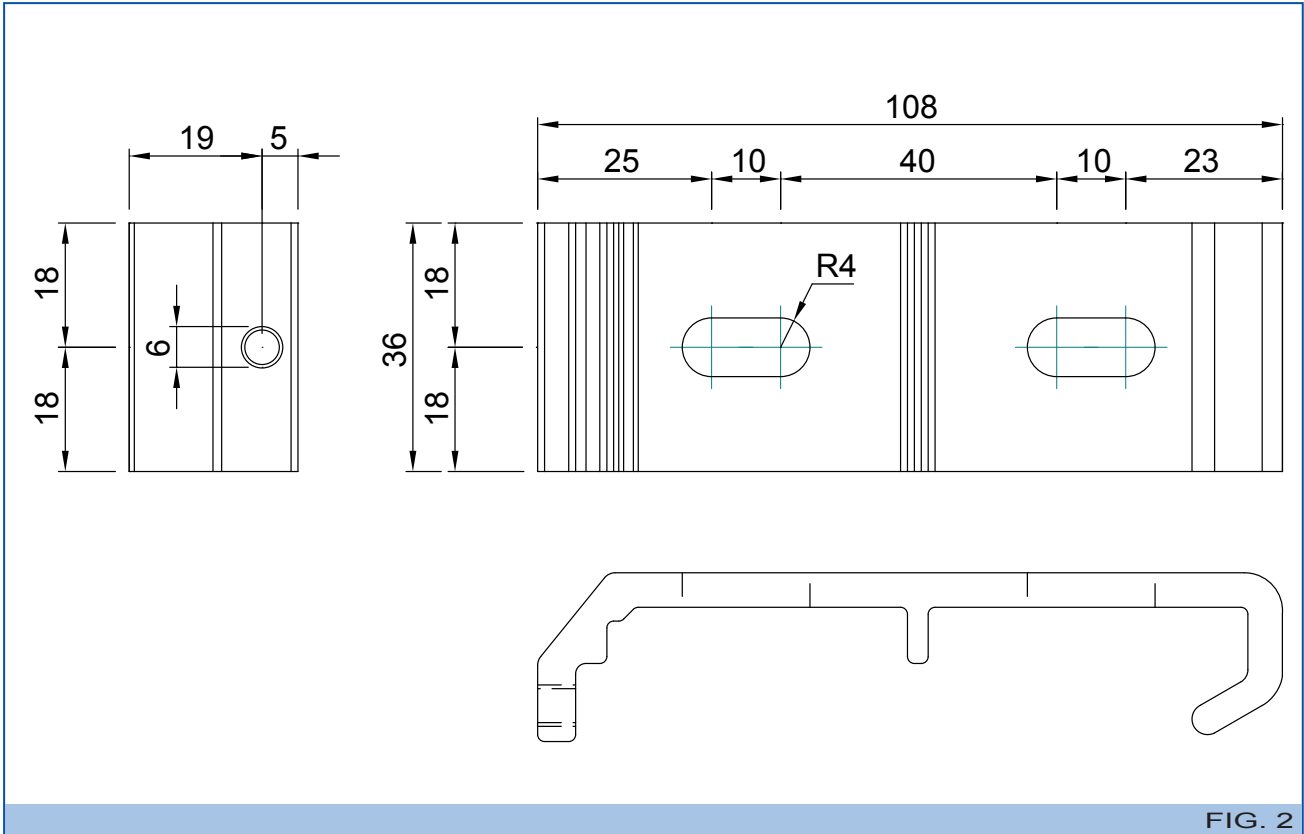


FIG. 2

UNIVERSAL "L" BRACKET FOR BOXES

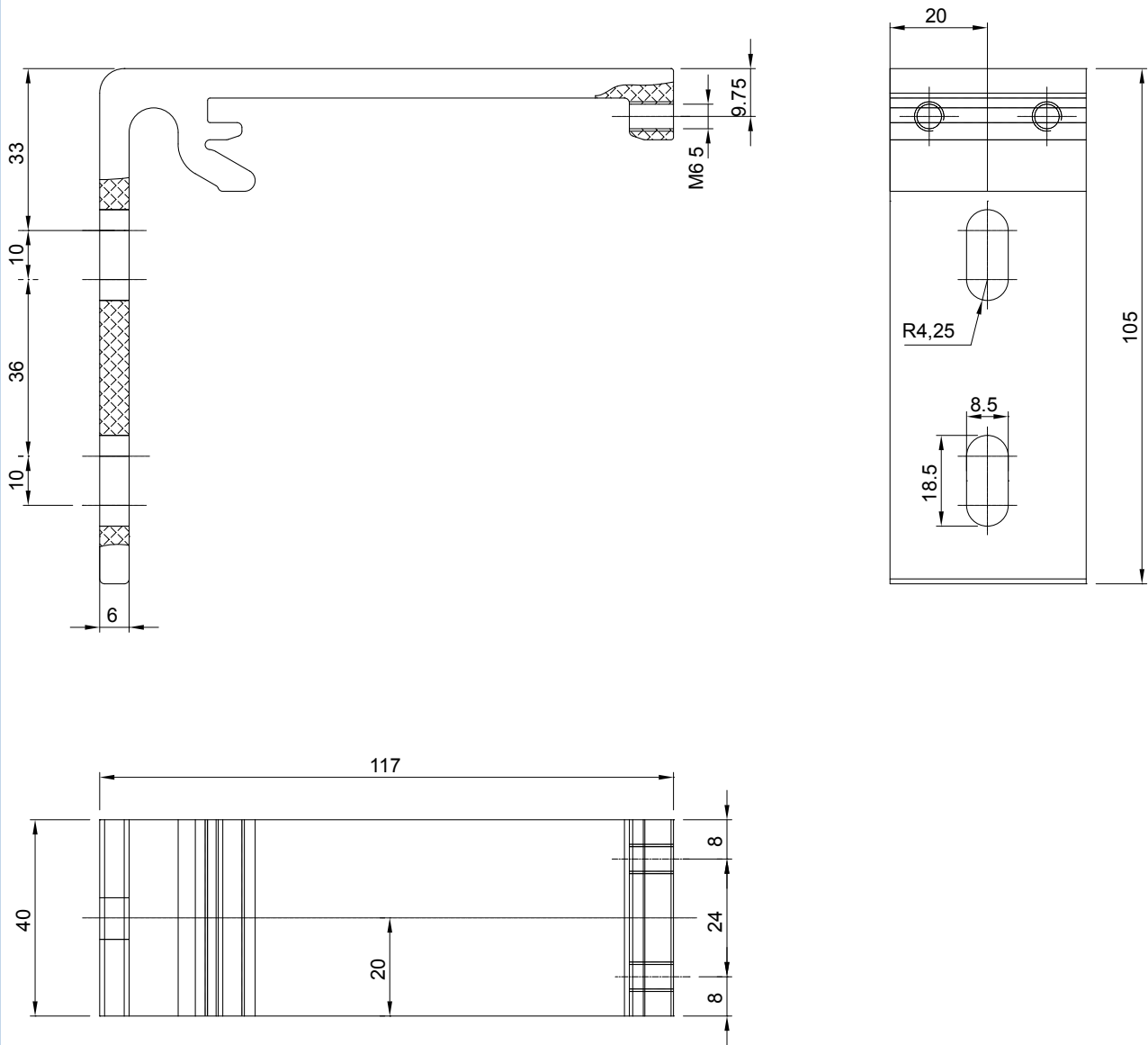


FIG. 3

4 INSTALLATION OF MANUAL AWNING

The Parma awning is ceiling-mounted; if any optional extras are provided, **please read** Chapter 6 ("Options") first.

This procedure must be performed by at least two workers.

WARNING

All movement and lifting must be done with extreme care. Ensure that individuals not involved in the work are kept at a safe distance, so that no one is standing under hanging loads, whether they are moving or standing still.

WARNING

Ensure a minimum space of 500 mm between the open awning and any fixed obstacle.

The awning must be installed at a minimum height of 2500 mm. If this is not possible, for awnings equipped with automations it is obligatory to install an acoustic warning device.

INFORMATION AND PRECAUTIONS

Use the most suitable plugs for the type of wall where the awning is to be installed (see Chap. 3.2.1)

INFORMATION AND PRECAUTIONS

For CEILING INSTALLATION, DO NOT FASTEN THE BRACKETS TO THE BLOCKS. The awning may fall with the risk of serious injury to individuals and damage to the product.

4.1 Fastening the brackets to the wall

INFORMATION AND PRECAUTIONS

The instructions that follow are of a general nature and must therefore be adapted to the model of awning being assembled.

- 1° Before starting installation, take note of the following information, which is indispensable to find the right position for fastening the brackets:
 - dimensions of the awning (height and width of box);
 - dimensions of support brackets (see chapter 3.4)
 - side of awning where control is located;
 - dimensions of the wall/ceiling where the awning is to be installed.

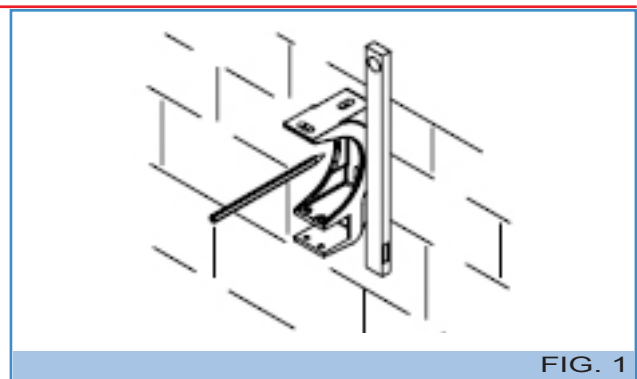
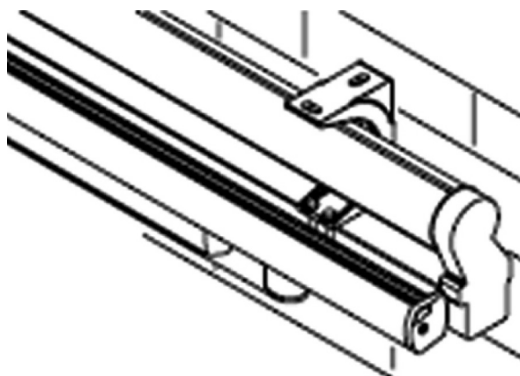


FIG. 1

- 2° Position the holes for the brackets: measure the width of the awning and, referring to the data in the diagram in Chap. 3.1 "Diagram of awning bracket distances", calculate the position of the holes.
- 3° Using a string and a level, mark the position of the holes to be made on the wall.

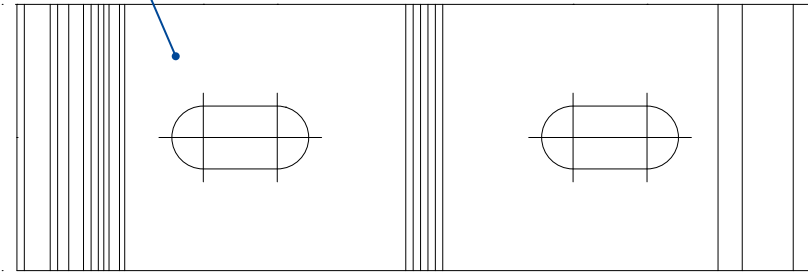
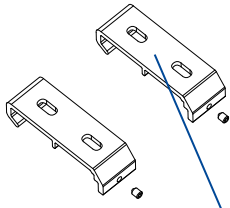
INFORMATION AND PRECAUTIONS

To make installation easier, you can print this page in A4 format and use it as a template to find the best position for the holes.

WARNING

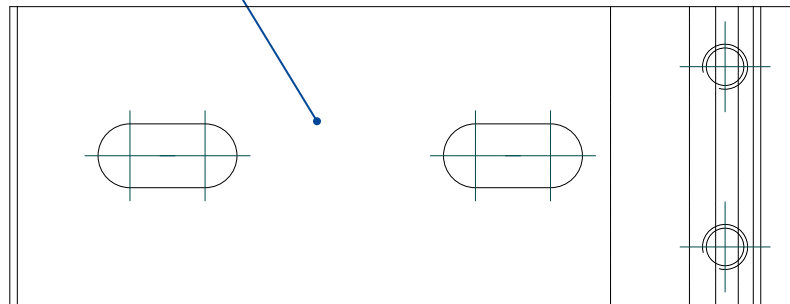
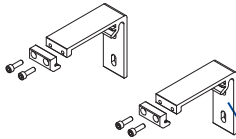
TO AVOID GROSS ERRORS, MAKE SURE THE PRINT-OUT IS ON A SCALE OF 1:1, CHECKING THE MEASURE INDICATED ON PAPER WITH A RULER OR CALLIPER IN RELATION TO THE DIMENSIONS INDICATED ON PAGE 10.

WALL/CEILING BRACKET



Scale 1:1

UNIVERSAL "L" BRACKET



Scale 1:1

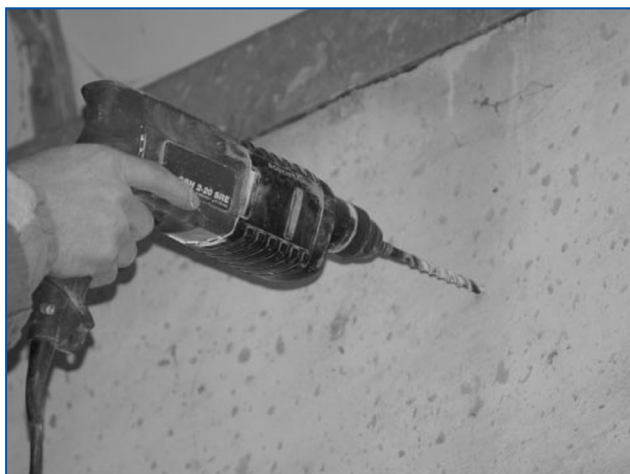


FIG. 2

4° Drill a hole in the wall based on the type of screws available and the type of masonry.

4.2 - Bracket installation

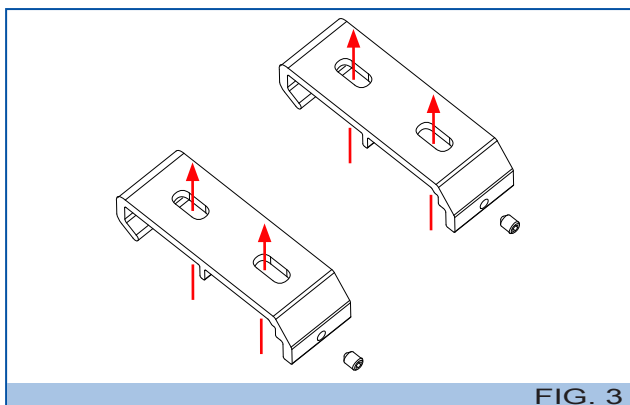


FIG. 3

5° Attach the brackets to the ceiling. Insert the plugs in the holes prepared and secure the brackets with the relevant plugs.

i INFORMATION AND PRECAUTIONS

If the wall is off-square, it may difficult to install the box on the support brackets. It is therefore advisable to check the alignment of the brackets (especially if there are more than two of them) and to provide inserts to ensure proper alignment for good installation. Use a string to check alignment.

4.3 - Box installation

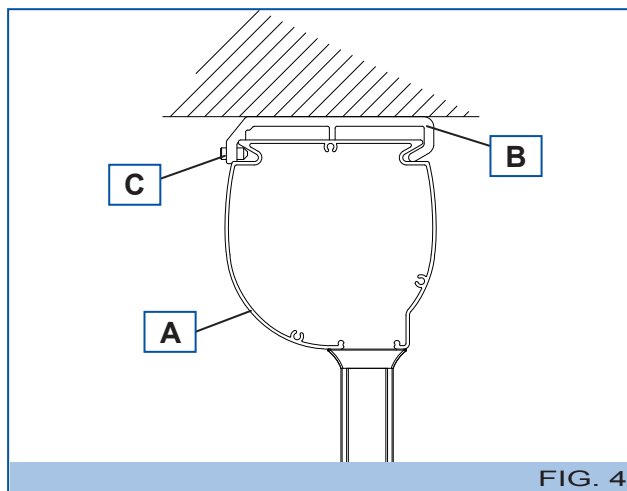


FIG. 4

6° Place the box on the brackets as shown in the figure, checking that it fits perfectly.

7° Fasten the box (A) to the universal plate (B) using rivet (C).

This operation must be performed by at least two workers.

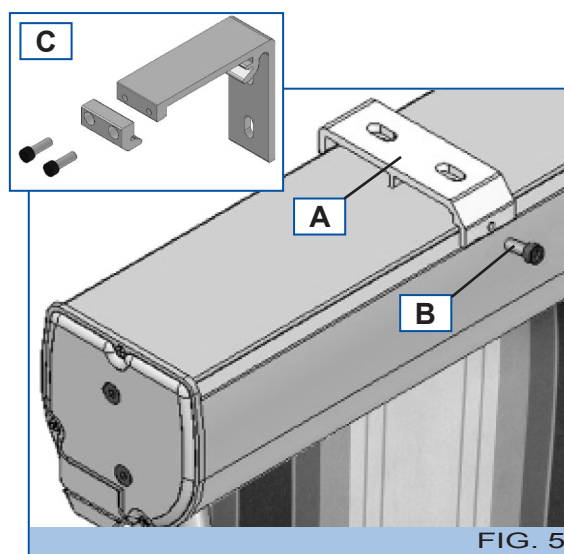
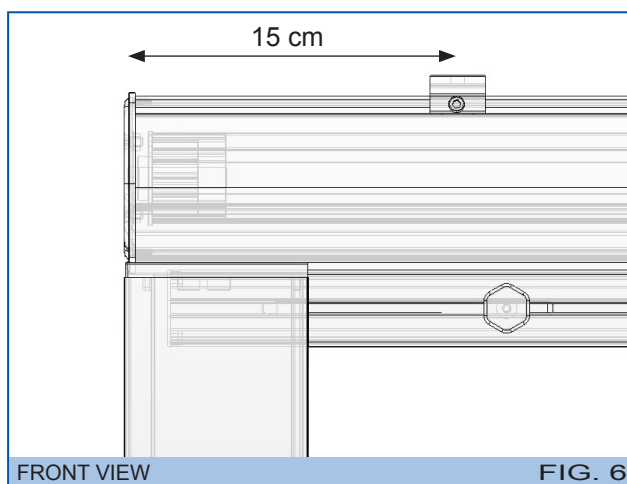


FIG. 5



FRONT VIEW

FIG. 6

8° Fasten the universal bracket to the ceiling, at approximately 15 cm from the side wall, using the dedicated screw (B - Fig. 5).

i **INFORMATION AND PRECAUTIONS**

The awning can also be wall mounted, using the universal "L" bracket (C, fig. 5).

4.4 · Installation of lateral guides and locking bolts

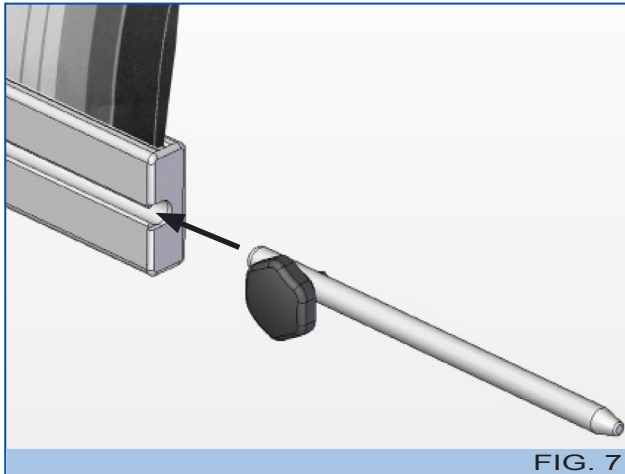


FIG. 7

9° Insert the locking bolts in the hub in the terminal, on both sides. Make sure the knob is positioned towards the inside of the awning.

10° Completely roll up the canvas.

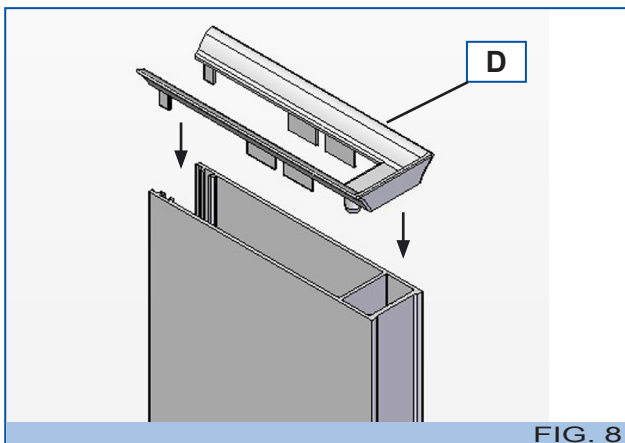


FIG. 8

11° Fasten the conveyor (D) to the upper part of the guide.

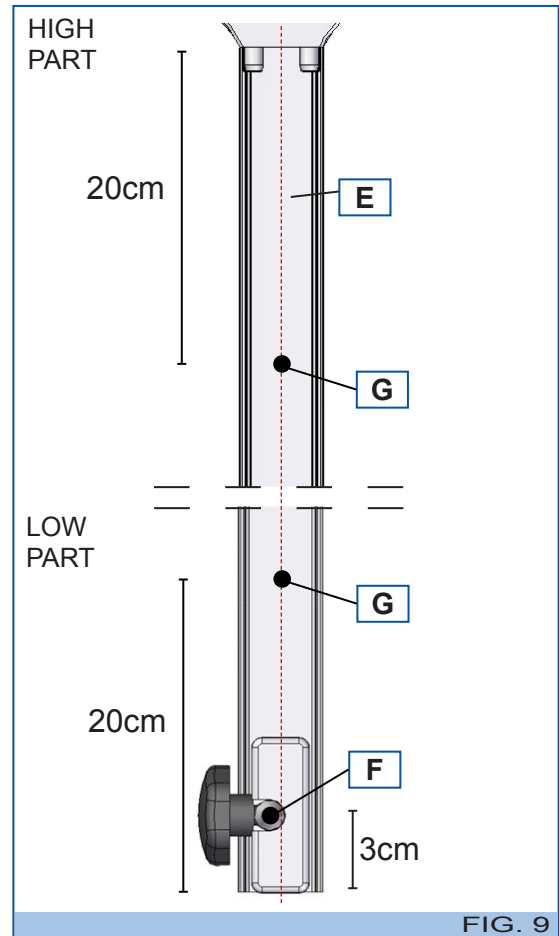


FIG. 9

12° To insert the bolt, make a hole (F) in the lower part of the guide at ~ 3 cm from the ground (see instructions, point 14).

13° To fix the guide to the wall, make two holes (G), one in the upper part and the other in the lower part of the guide (E), at ~20 cm (see instructions, point 15).

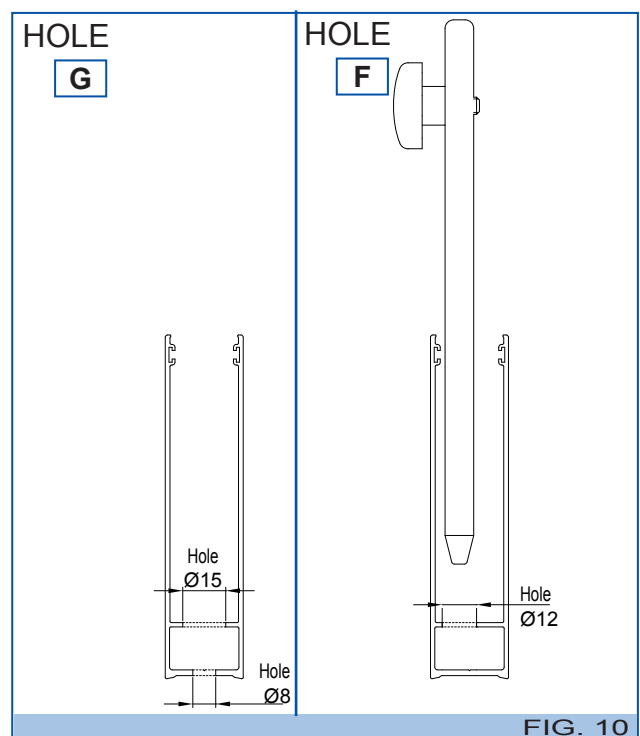


FIG. 10

14 ◦ **HOLE (F)**: make a hole of Ø 12 mm to admit the bolt (see figure 10).

! WARNING

Since the locking bolt is off-centre with respect to the guide (E), make the hole (F) in the proper position, so that the bolt enters the hole (see fig. 10).

15 ◦ **HOLE (G)**: make a hole of Ø 8 mm in the outer part of the guide which will come into contact with the wall, and a Ø 15 mm hole in the inner part, to admit the screw head (see figure 10).

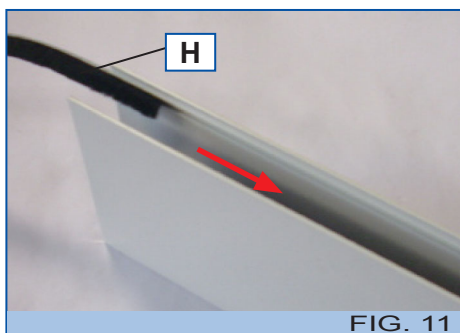


FIG. 11

16 ◦ Insert the brush (H) in the guides (the brush is as long as the guide).

i INFORMATION AND PRECAUTIONS

The length of the brush is the same as the length of the lateral guides.

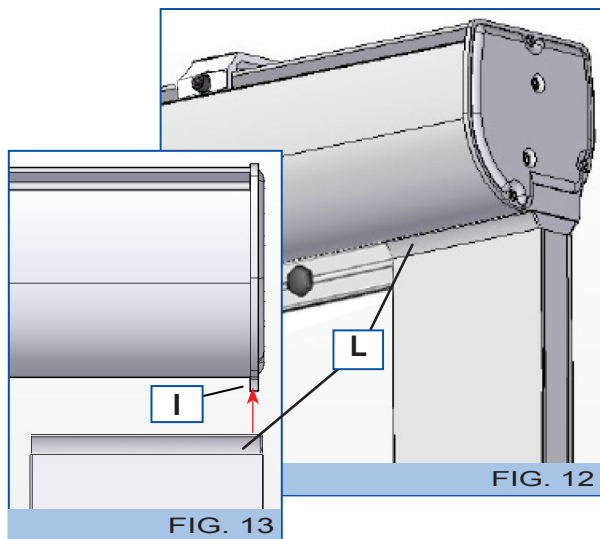


FIG. 13

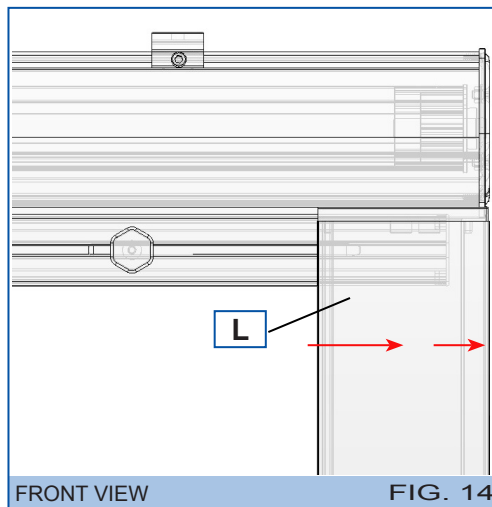
FIG. 12

17 ◦ Completely wind up the awning and insert the guides in the sides, inserting the terminal in the guides.

! WARNING

Position the conveyor of the guide as in figure 11. Make sure you insert the tab (I) of the box plug in the inner part of the conveyor.

18 ◦ Before securing the position of the two guides, use a level to check for proper alignment.



FRONT VIEW

FIG. 14

19 ◦ With the canvas rolled up, fasten the guides to the wall with plugs, in the holes (G - Fig.10) made previously.

20 ◦ Fully open the awning and check that the bolts enter their respective holes (F- Fig.10).

4.5 -Completing the installation

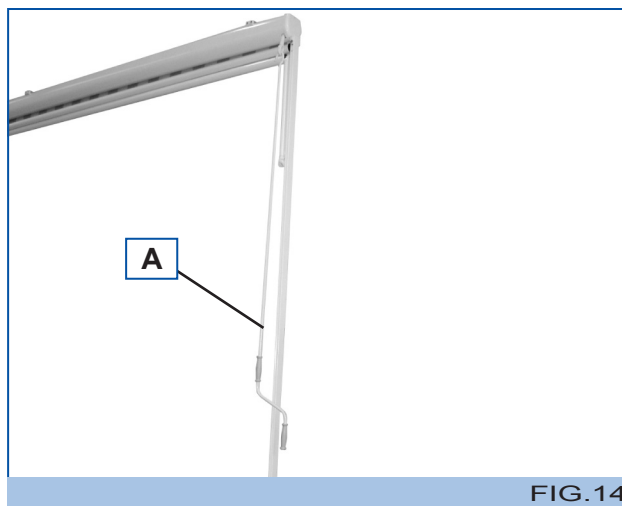


FIG.14

21 ◦ Fasten the manoeuvre rod (A) to the winch.

22 ◦ Completely unroll the canvas until the terminal is aligned with the bolt holes. Fasten the terminal with the bolts and turn the manoeuvre rod once in the opposite direction of that for rolling up the canvas in order to tighten the fabric.

5 INSTALLATION OF MOTORIZED AWNING

! WARNING

IT IS PROHIBITED to install the motorized product in an explosive atmosphere.

! WARNING

Use a locking switch (with key) if the awning is installed in sensitive locations such as schools, boarding schools, hospitals, retirement homes, etc. If the awning is equipped with a radio control, keep it out of the reach of children.

! WARNING

If there is an opening/closing switch, it must be located in a protected position at a height of at least 1500 mm above ground level and in a safe place.

! WARNING

The awning must be installed at a minimum height of 2500 mm. If this is not possible, for awnings equipped with automations it is obligatory to install an acoustic warning device.

5.1 - Limit switch calibration

i INFORMATION AND PRECAUTIONS

Before installation, check that the limit switch is properly calibrated. If it requires adjustment, follow the instructions in the attached "Motor Manual".

5.2 - Electrical connections and installation

! WARNING

The electrical connections must be performed by qualified personnel and with the electrical energy disconnected.

i INFORMATION AND PRECAUTIONS

It is prohibited to connect two or more motors to the same switch due to the risk of induced current which would result in damage to the motors.

Installation of the motorized awning is performed with the same procedure as for the manual awning, except for the application of the crank rod and except for the motors with emergency control (Chap. 4.5, "Completing the installation").

Instructions for electrical connection and programming the type of operation are described in the "Motor Manual" which is attached.

6 OPTIONS

6.1 - Automations

(Only for motorized awnings)

Wind gauge, rain gauge, twilight sensor: installation of these optional is described in the manuals for automations and for requested controls.

! WARNING

For awnings with automations, the awning must be installed at a minimum height of 2500 mm. If this is not possible, it is obligatory to install an acoustic warning device.

7 SPECIAL MAINTENANCE

7.1 Troubleshooting table

MANUAL AWNING

PROBLEMS	CAUSES	SOLUTIONS
Conical rewinding of canvas	Uneven fabric thickness	Roll the canvass all the way back up

MOTORIZED AWNING

Without electronic control unit

PROBLEMS	CAUSES	SOLUTIONS
Conical rewinding of canvas	Uneven fabric thickness	Roll the canvass all the way back up
The awning does not roll up all the way. The awning does not open up all the way.	Incorrect adjustment of limit switch. Motor crown shifts during movement	See manual for motor (attached) See manual for Assembly, Chap. 7
The motor is very noisy	Incorrect wiring Motor failed	See manual for motor (attached) See manual for motor (attached)
The motor shuts down after 4-5 minutes of continuous operation	Thermal protection of motor trips	Let the motor cool off for a few minutes

With electronic control unit

PROBLEMS	CAUSES	SOLUTIONS
The awning does not move	Fuse blown Incorrect wiring	Replace the fuse as shown in the attached manual See manual for motor (attached)
The awning moves in jerks (moves for 50 cm, stops, etc.)	Faulty wind gauge	See instructions on automations (attached)
The awning does not roll up in high winds.	Fuse blown Faulty wind gauge	Replace the fuse as shown in the attached manual See instructions on automations (attached)
The awning does not roll up in heavy rain.	Fuse blown Rain gauge defective	Replace the fuse as shown in the attached manual See instructions on automations (attached)
With radio control, the awning opens or closes by itself.	Battery dead Radio remote control damaged	Replace battery in radio remote control (see instructions concerning controls) Replacement of radio remote control





Professional Awning
Manufacturers Association



Manufacturing Facility:

Retractableawnings.com
16255 NW 54 Avenue
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