



## 1 INTRODUCTION

This manual has been written by the manufacturer to provide the necessary information to those authorised to perform installation and maintenance of the product. The pages and content contained within this manual may not be removed, rewritten or modified in any way. The operations described herein must be performed by persons with the training/skills required by applicable national standards and legislation.

This manual must be kept intact in an easily accessible location.

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

The Manufacturer reserves all rights concerning this manual: no reproduction shall be permitted, in whole or in part, without its express written authorisation.

### 1.1 - Symbols used in this manual

The WARNING symbols used in this manual are given below.



**INFORMATION AND WARNINGS: Instructions and advice necessary for correct assembly of the awning. Failure to follow these instructions may compromise the product's integrity and/or strength.**



**CAUTION: Operator hazard! Instructions and warnings to be read and followed carefully. Failure to observe these instructions may put people's safety at risk.**

### 1.2 - Worker Requirements

Workers performing these operations must have technical knowledge of the product acquired by at least two years of experience or by a technical training course.

### 1.3 - Equipment Necessary

To ensure correct installation of the awning, and thereby ensure that the finished product works optimally, the following equipment is required:

- Drill driver
- Spirit level
- Twine
- Complete set of tools
- Equipment for working at height (trestles, ladders, scaffolding, aerial platforms etc.) which meets applicable health and safety legislation.



**All screws used on the aluminium components must be closed to a maximum tightening torque of 20Nm (=2Kgm). If a tightening torque greater than this is used, the castings and stainless-steel screws will be damaged. We therefore recommend using torque wrenches and drivers.**



**Use low-torque drivers: applying high torque to stainless-steel hardware can cause the threads to seize, particularly for stainless-stainless or stainless-aluminium screws and threads.**

## 2 SAFETY

### 2.1 - General Safety Information

During all work described in this manual, ensure that **ONLY** authorised workers are present in the work zone (See 1.2 - Worker Requirements).

Do not place objects on the awning fabric.

It is forbidden for people to hang on or support themselves from the awning – this would create a serious risk of injury as well as potentially damaging the awning itself.

Wear the personal protective equipment and any other safety clothing required by health and safety legislation.



**Installation, adjustment and extraordinary maintenance operations on the awning must only be performed by specialised and qualified technicians.**



**A minimum clearance of 500 mm between the terminal of the open awning (external edge) and any fixed obstacle (wall, terrace etc.) must be provided.**



**No ladders or other fixed objects must be installed or positioned near the awning which could reduce the space required by it.**

## 2.2 - Requirements for Working in Safety

The installation must be performed following all requirements of Italian Presidential Decree 164/56 and legislative decree 494/96 as concerns health and safety.

Check that any temporary structures (trestles, scaffolding, ladders etc.) and all personal protective equipment (safety slings and harnesses etc.) meet code and are in good condition before use.

Always use adequate PPE.

If there is more than one installer, the work must be coordinated.

The operators must follow the safety instructions they have received.

If the awning is to be installed above the ground-floor level of a building, the area must be cordoned off while the awning is being lifted to this level to ensure nobody is beneath the suspended load.

Solidly fasten the awning by wrapping the cable or belt around the pre-assembled parts so that the components are not able to slide, with a resulting risk of falling from height.

## 2.3 - Working Environment

Installation and extraordinary maintenance must be performed in an environment sufficiently lit by natural or artificial light (per applicable standards/legislation). The worker must have good visibility of the work to perform and must also prevent any unauthorised persons from approaching the awning work zone.



**Some instructions given in this manual are of a general nature, and must therefore be adapted to the model of awning you are assembling.**



**ALL MEASUREMENTS ARE GIVEN IN MILLIMETRES UNLESS OTHERWISE INDICATED.**

## 2.4 - General motorised awning safety information



**Motorised versions must not be installed in potentially explosive (ATEX) atmospheres.**



**Use a lockable (key) switch if the awning is to be installed in sensitive locations such as schools, hospitals, rest homes etc. If the awning is fitted with remote control, this must be located outside the reach of children.**



**If fitted, the opening/closing switch must be installed in a protected position, at a minimum height of 1500 mm from the ground and in an area which is not dangerous to access.**



**The awning must be installed at a minimum height of 2500 mm; if this is not possible, models controlled by automatic devices must have a warning buzzer installed.**

### 2.4.1 -Electrical connections and installation



**Electrical connections must be made by qualified and authorised persons with the power supply shut off.**



**It is not permissible to connect two or more motors to the same switch, as there is a risk of induced currents which could damage the motors.**

Installation of the motorised awning involves the same procedure as that for the manual awning, with the exception of installation of the rod, except for motors with emergency control.

Instructions for electrical connection and operational programming are given in the "Motor Manual", supplied as an annex.

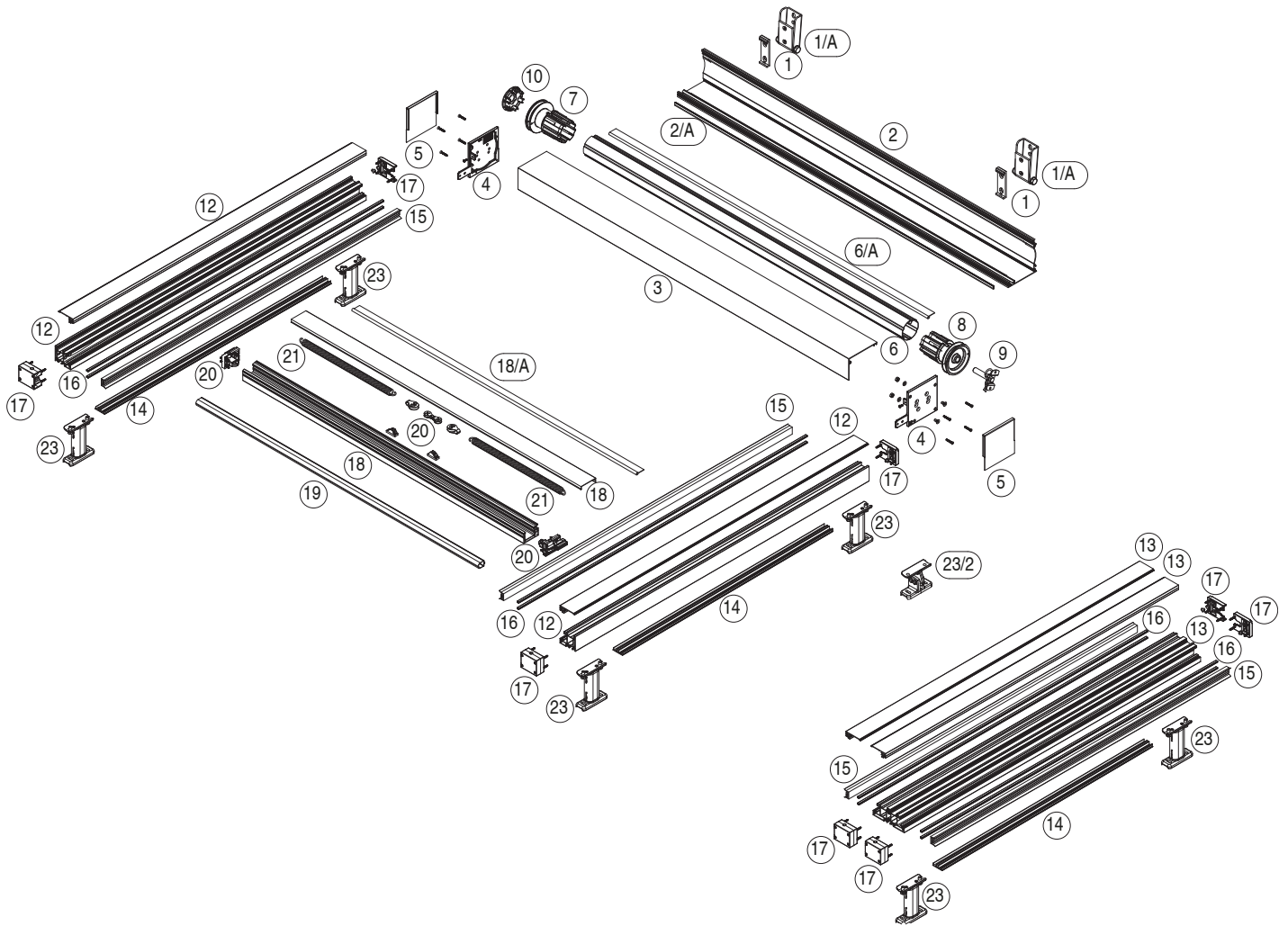
## 3 OPTIONAL ACCESSORIES

### 3.1 - Automatic control devices (only for motorised awnings)

**Wind meter, Rain sensor, Twilight Sensor:** installation of these optional extras is described in the manuals for the requested automatic control devices and controls.



**For models controlled by automatic devices, the awning must be installed at a minimum height of 2500 mm; if this is not possible a warning buzzer must be installed.**



## KEY FOR EXPLODED VIEW DIAGRAMS SCREENY 130 GPZ TENS

- 1 Wall/ceiling mounting brackets for cassette
- 1/A Adjustable wall/ceiling mounting bracket for cassette
- 2 36317 Upper cassette Profile 130
- 2/A Gasket
- 3 36313 Inner cassette profile "Square 130"
- 4 Cassette end covers "Square 130"
- 5 Covers for cassette end Covers "Square 130"
- 6 Ø70mm "Rollerbat"
- 6/A Ø8mm PVC spline for blind roller
- 7 D70mm pulley for motor
- 8 D70mm pulley with hole
- 9 H30mm plate with sliding round pin
- 10 Motor support SOMFY 50
- 10/1 Motor support MOON 50
- 11 Zipper "Zip"
- 12 "Tens" guide set profiles
- 13 "Tens" middle guide set profiles
- 12/A Screws for cover profile
- 14 30804 Guide cover profile "Tens"
- 15 Inside guide profile "Zip"
- 16 Gasket
- 17 Guide end caps
- 18 "Tens" end bar set profiles
- 18/A Ø8mm PVC spline for drop front bar
- 19 Gasket
- 20 Tightening kit and front bar caps
- 21 Ø19mm spring
- 22 Ø3mm polyester rope

### GPZ TO

- 23 Adjustable guide support on the side
- 23/1 Inclinable and adjustable guide support
- 23/2 Adjustable guide support

## 5 TECHNICAL TABLES FOR INSTALLATION

### 5.1 - Table of case bracket distances

**!** DUAL MODULE: consider two single modules.

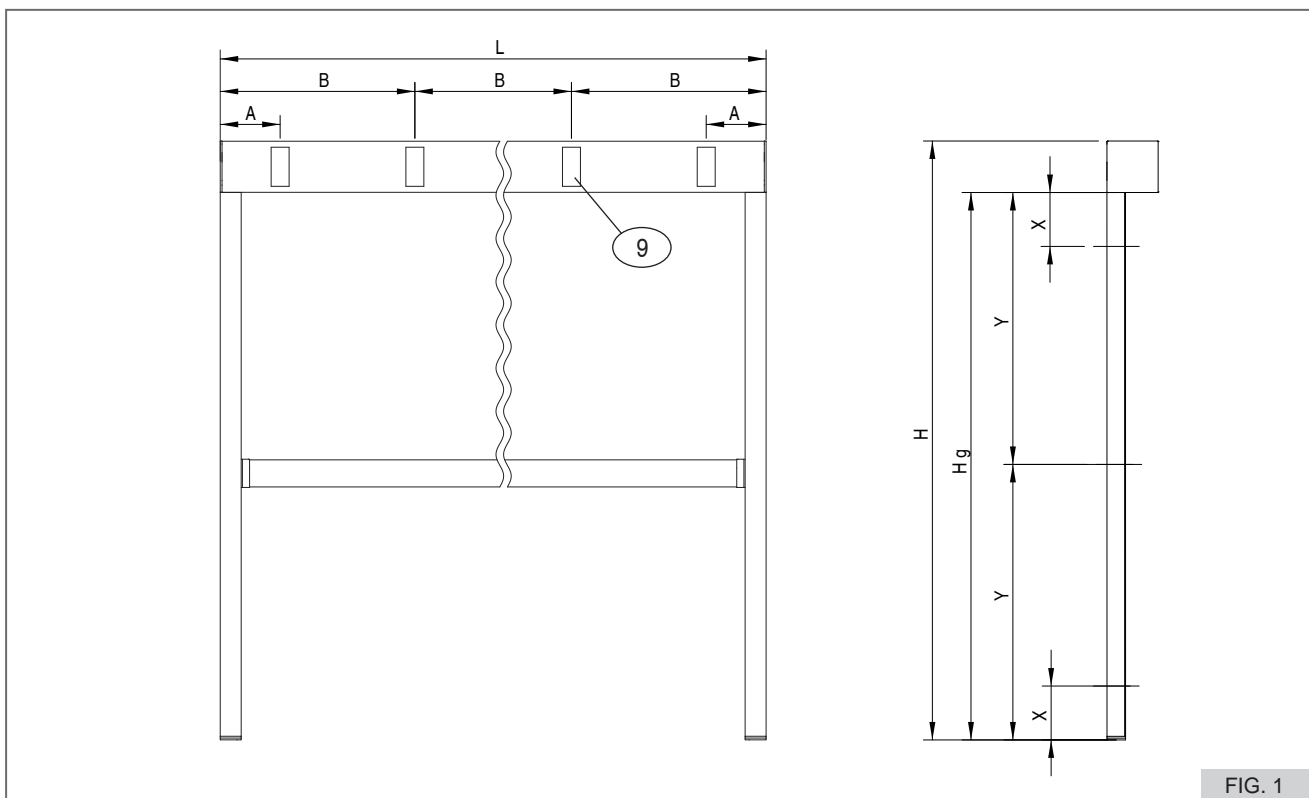


FIG. 1

L supports		A	B	H Fastening holes		X	Y
0-1500	2	150	-	0-1000	2	90	-
1501-3000	3	150	L/2	1001-2000	3	90	Hg/2
3001-4000	4	150	L/3	2001-3000	4	90	Hg/3

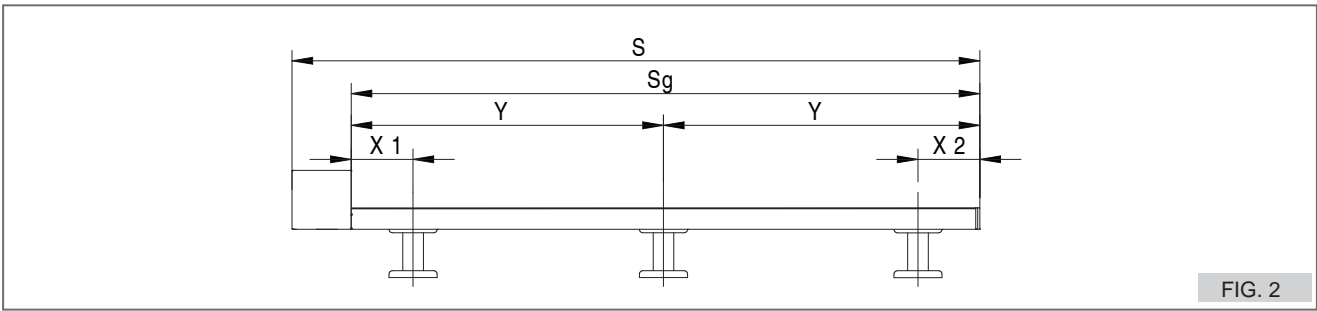
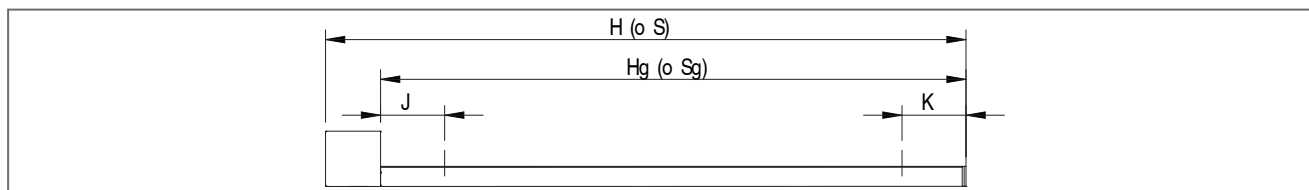


FIG. 2

S	supports	$X_1$	$X_2$		Y
			min	max	
0-1000	2	100	100	200	-
1001-2000	2	100	100	200	-
2001-3000	3	100	100	500	$S_g / 2$



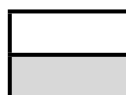
PROFILO COPERTINA PER GUIDA			
H (o S)		J	K
<i>hole fastening</i>			
0-1000	2	150	-
1001-1700	3	150	Hg (o Sg) / 2
1701-2300	4	100	Hg (o Sg) / 3
2301-3000	5	100	Hg (o Sg) / 4

### 5.2 - Technical spring tightening tables

 **DUAL MODULE: consider two single modules.**

#### SPRING TIGHTENING

LENGTH SPRING (CM) *		SINGLE SPRING		SPRING DOUBLE	
ALTEZZA (cm) o SPORGENZA	100	441	599	456	607
	150	447	601	457	608
	200	452	603	458	609
	250	457	606	473	622
	300	462	608	488	634



SPRING 364 mm

SPRING 540 mm

\*Spring length to set  $\frac{3}{4}$  of the opening of the awning



## 5.3 - Loading table of plugs for fastening awnings based on type of support surface



Calculations for plugs have been performed on the basis of the awnings' wind resistance class, per EN 13561.

N = tensile strength  
T = shear strength

The values in the tables are given in KN and represent the force required to extract the most stressed plug. These values are necessary to choose the most suitable anchor based on the type of support surface the awning is to be installed on. Choose the anchor with reference to the recommended load values listed in the Hilti General Catalogue.



The choice of anchor depends both on the type and condition of the support surface material. The installer must therefore also check the condition of the supporting surface material before installing the awning. The installer is not necessarily required to use Hilti anchors.

E.g. INSTALLATION OF WALL BRACKETS:

Awning size: 250cm x 200cm

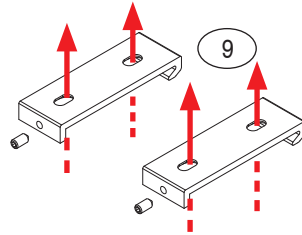
Load on wall plug: 0.176 KN

Support surface material: hollow brick

Recommended plug: HUD - L 8x50 (see technical characteristics of plugs in Hilti General Catalogue).



THE TABLES BELOW PROVIDE PURELY APPROXIMATE INFORMATION, WHICH IS UPDATED TO THE BEST OF OUR KNOWLEDGE AT THE TIME OF GOING TO PRINT. BAT S.P.A. IS NEVERTHELESS UNABLE TO GUARANTEE THE ACCURACY, RELIABILITY OR COMPLETENESS OF THIS INFORMATION. IT IS THE USER'S RESPONSIBILITY TO CHECK THE SUITABILITY AND COMPLETENESS OF THIS INFORMATION.

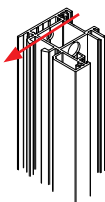


WALL INSTALLATION																					
N (kN)		WIDTH (cm)																			
		50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
HEIGHT (cm)	50	0,092	0,097	0,101	0,106	0,111	0,115	0,120	0,124	0,129	0,134	0,113	0,115	0,118	0,120	0,122	0,124	0,127	0,129	0,131	0,134
	100	0,097	0,106	0,115	0,124	0,134	0,143	0,152	0,161	0,171	0,180	0,138	0,143	0,148	0,152	0,157	0,161	0,166	0,171	0,175	0,180
	150	0,101	0,115	0,129	0,143	0,157	0,171	0,184	0,198	0,212	0,226	0,164	0,171	0,178	0,184	0,191	0,198	0,205	0,212	0,219	0,226
	200	0,106	0,124	0,143	0,161	0,180	0,198	0,217	0,235	0,254	0,272	0,189	0,198	0,208	0,217	0,226	0,235	0,244	0,254	0,263	0,272
	250	0,111	0,134	0,157	0,180	0,203	0,226	0,249	0,272	0,295	0,318	0,214	0,226	0,238	0,249	0,261	0,272	0,284	0,295	0,307	0,318
	300	0,115	0,143	0,171	0,198	0,226	0,254	0,281	0,309	0,337	0,364	0,240	0,254	0,268	0,281	0,295	0,309	0,323	0,337	0,351	0,364
	350	0,120	0,152	0,184	0,217	0,249	0,281	0,314	0,346	0,378	0,411	0,265	0,281	0,298	0,314	0,330	0,346	0,362	0,378	0,394	0,411
	400	0,124	0,161	0,198	0,235	0,272	0,309	0,346	0,383	0,420	0,457	0,291	0,309	0,328	0,346	0,364	0,383	0,401	0,420	0,438	0,457
	450	0,129	0,171	0,212	0,254	0,295	0,337	0,378	0,420	0,461	0,503	0,316	0,337	0,358	0,378	0,399	0,420	0,441	0,461	0,482	0,503
	500	0,134	0,180	0,226	0,272	0,318	0,364	0,411	0,457	0,503	0,549	0,341	0,364	0,388	0,411	0,434	0,457	0,480	0,503	0,526	0,549

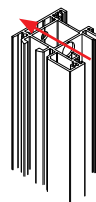
# Crown - CTS-L Installation Manual

CEILING INSTALLATION																					
N (kN)		WIDTH (cm)																			
		50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
HEIGHT (cm)	50	0,050	0,054	0,058	0,063	0,067	0,071	0,075	0,080	0,084	0,088	0,069	0,071	0,073	0,075	0,078	0,080	0,082	0,084	0,086	0,088
	100	0,054	0,063	0,071	0,080	0,088	0,097	0,105	0,114	0,122	0,130	0,092	0,097	0,101	0,105	0,109	0,114	0,118	0,122	0,126	0,130
	150	0,058	0,071	0,084	0,097	0,109	0,122	0,135	0,147	0,160	0,173	0,116	0,122	0,128	0,135	0,141	0,147	0,154	0,160	0,166	0,173
	200	0,063	0,080	0,097	0,114	0,130	0,147	0,164	0,181	0,198	0,215	0,139	0,147	0,156	0,164	0,173	0,181	0,190	0,198	0,207	0,215
	250	0,067	0,088	0,109	0,130	0,152	0,173	0,194	0,215	0,236	0,258	0,162	0,173	0,183	0,194	0,205	0,215	0,226	0,236	0,247	0,258
	300	0,071	0,097	0,122	0,147	0,173	0,198	0,224	0,249	0,275	0,300	0,186	0,198	0,211	0,224	0,236	0,249	0,262	0,275	0,287	0,300
	350	0,075	0,105	0,135	0,164	0,194	0,224	0,253	0,283	0,313	0,342	0,209	0,224	0,239	0,253	0,268	0,283	0,298	0,313	0,328	0,342
	400	0,080	0,114	0,147	0,181	0,215	0,249	0,283	0,317	0,351	0,385	0,232	0,249	0,266	0,283	0,300	0,317	0,334	0,351	0,368	0,385
	450	0,084	0,122	0,160	0,198	0,236	0,275	0,313	0,351	0,389	0,427	0,255	0,275	0,294	0,313	0,332	0,351	0,370	0,389	0,408	0,427
	500	0,088	0,130	0,173	0,215	0,258	0,300	0,342	0,385	0,427	0,469	0,279	0,300	0,321	0,342	0,364	0,385	0,406	0,427	0,448	0,469

# Crown - CTS-L Installation Manual



wall installation



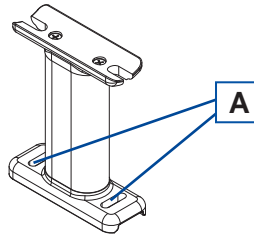
niche installation

FRONT INSTALLATION GUIDE																					
N (kN)	WIDTH (cm)																				
	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	
HEIGHT (cm)	50	0,003	0,005	0,008	0,011	0,013	0,016	0,018	0,021	0,024	0,026	0,029	0,032	0,034	0,037	0,039	0,042	0,045	0,047	0,050	0,053
	100	0,005	0,011	0,016	0,021	0,026	0,032	0,037	0,042	0,047	0,053	0,058	0,063	0,068	0,074	0,079	0,084	0,089	0,095	0,100	0,105
	150	0,008	0,016	0,024	0,032	0,039	0,047	0,055	0,063	0,071	0,079	0,087	0,095	0,102	0,110	0,118	0,126	0,134	0,142	0,150	0,158
	200	0,011	0,021	0,032	0,042	0,053	0,063	0,074	0,084	0,095	0,105	0,116	0,126	0,137	0,147	0,158	0,168	0,179	0,189	0,200	0,210
	250	0,013	0,026	0,039	0,053	0,066	0,079	0,092	0,105	0,118	0,131	0,144	0,158	0,171	0,184	0,197	0,210	0,223	0,236	0,249	0,263
	300	0,016	0,032	0,047	0,063	0,079	0,095	0,110	0,126	0,142	0,158	0,173	0,189	0,205	0,221	0,236	0,252	0,268	0,284	0,299	0,315
	350	0,018	0,037	0,055	0,074	0,092	0,110	0,129	0,147	0,165	0,184	0,202	0,221	0,239	0,257	0,276	0,294	0,312	0,331	0,349	0,368
	400	0,021	0,042	0,063	0,084	0,105	0,126	0,147	0,168	0,189	0,210	0,231	0,252	0,273	0,294	0,315	0,336	0,357	0,378	0,399	0,420
	450	0,024	0,047	0,071	0,095	0,118	0,142	0,165	0,189	0,213	0,236	0,260	0,284	0,307	0,331	0,354	0,378	0,402	0,425	0,449	0,473
	500	0,026	0,053	0,079	0,105	0,131	0,158	0,184	0,210	0,236	0,263	0,289	0,315	0,341	0,368	0,394	0,420	0,446	0,473	0,499	0,525

**!** If the case installation is to be self-supporting, double the loads.












NICHE INSTALLATION GUIDE																					
N (kN)	WIDTH (cm)																				
	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	
HEIGHT (cm)	50	0,004	0,009	0,013	0,017	0,022	0,026	0,030	0,034	0,039	0,043	0,029	0,032	0,034	0,037	0,039	0,042	0,045	0,047	0,050	0,053
	100	0,009	0,017	0,026	0,034	0,043	0,052	0,060	0,069	0,077	0,086	0,058	0,063	0,068	0,074	0,079	0,084	0,089	0,095	0,100	0,105
	150	0,013	0,026	0,039	0,052	0,065	0,077	0,090	0,103	0,116	0,129	0,087	0,095	0,102	0,110	0,118	0,126	0,134	0,142	0,150	0,158
	200	0,017	0,034	0,052	0,069	0,086	0,103	0,121	0,138	0,155	0,172	0,116	0,126	0,137	0,147	0,158	0,168	0,179	0,189	0,200	0,210
	250	0,022	0,043	0,065	0,086	0,108	0,129	0,151	0,172	0,194	0,215	0,144	0,158	0,171	0,184	0,197	0,210	0,223	0,236	0,249	0,263
	300	0,026	0,052	0,077	0,103	0,129	0,155	0,181	0,207	0,232	0,258	0,173	0,189	0,205	0,221	0,236	0,252	0,268	0,284	0,299	0,315
	350	0,030	0,060	0,090	0,121	0,151	0,181	0,211	0,241	0,271	0,301	0,202	0,221	0,239	0,257	0,276	0,294	0,312	0,331	0,349	0,368
	400	0,034	0,069	0,103	0,138	0,172	0,207	0,241	0,276	0,310	0,344	0,231	0,252	0,273	0,294	0,315	0,336	0,357	0,378	0,399	0,420
	450	0,039	0,077	0,116	0,155	0,194	0,232	0,271	0,310	0,349	0,387	0,260	0,284	0,307	0,331	0,354	0,378	0,402	0,425	0,449	0,473
	500	0,043	0,086	0,129	0,172	0,215	0,258	0,301	0,344	0,387	0,431	0,289	0,315	0,341	0,368	0,394	0,420	0,446	0,473	0,499	0,525

**!** If the case installation is to be self-supporting, double the loads.



GUIDE SUPPORT																					
N (kN)	WIDTH (cm)																				
	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	
HEIGHT (cm)	50	0,011	0,023	0,034	0,046	0,057	0,068	0,080	0,091	0,102	0,114	0,125	0,137	0,148	0,159	0,171	0,182	0,193	0,205	0,216	0,228
	100	0,023	0,046	0,068	0,091	0,114	0,137	0,159	0,182	0,205	0,228	0,250	0,273	0,296	0,319	0,341	0,364	0,387	0,410	0,432	0,455
	150	0,034	0,068	0,102	0,137	0,171	0,205	0,239	0,273	0,307	0,341	0,375	0,410	0,444	0,478	0,512	0,546	0,580	0,614	0,648	0,683
	200	0,046	0,091	0,137	0,182	0,228	0,273	0,319	0,364	0,410	0,455	0,501	0,546	0,592	0,637	0,683	0,728	0,774	0,819	0,865	0,910
	250	0,057	0,114	0,171	0,228	0,284	0,341	0,398	0,455	0,512	0,569	0,626	0,683	0,739	0,796	0,853	0,910	0,967	1,024	1,081	1,138
	300	0,068	0,137	0,205	0,273	0,341	0,410	0,478	0,546	0,614	0,683	0,751	0,819	0,887	0,956	1,024	1,092	1,160	1,229	1,297	1,365
	350	0,080	0,159	0,239	0,319	0,398	0,478	0,557	0,637	0,717	0,796	0,876	0,956	1,035	1,115	1,194	1,274	1,354	1,433	1,513	1,593
	400	0,091	0,182	0,273	0,364	0,455	0,546	0,637	0,728	0,819	0,910	1,001	1,092	1,183	1,274	1,365	1,456	1,547	1,638	1,729	1,820
	450	0,102	0,205	0,307	0,410	0,512	0,614	0,717	0,819	0,921	1,024	1,126	1,229	1,331	1,433	1,536	1,638	1,740	1,843	1,945	2,048
	500	0,114	0,228	0,341	0,455	0,569	0,683	0,796	0,910	1,024	1,138	1,251	1,365	1,479	1,593	1,706	1,820	1,934	2,048	2,161	2,275

5.4 - Table of recommended anchors depending on support surface

Anchor extraction force (KN)		
Hilti HRD - U10		CONCRETE SOLID BRICK HOLLOW BRICK
Hilti HRD - S10		
HUD - 1		CONCRETE SOLID BRICK HOLLOW BRICK
HUD - L		
HSL - 3 -SK		CONCRETE
Hilti HST		CONCRETE CONCRETE WITH SLOTS HARD NATURAL STONE
Hilti HSA		CONCRETE HARD NATURAL STONE
Hilti HIT-HY 150 con HAS		CONCRETE
Hilti HIT-RE 500 con HAS		CONCRETE HARD NATURAL STONE FULL BRICK WOOD
Hilti HIT-HY 50		GAS BETON MATTONE PIENO LEGNO
Hilti HIT-HY 20		PERFORATED BRICK

5.5 - Anchor fastening sequence

 Refer to the Hilti General Catalogue in any case for correct installation of anchors.

MECHANICAL ANCHOR		CHEMICAL ANCHOR	
	1 Make a hole with the appropriate size drill bit, depending on the type of anchor		1 Make a hole with the appropriate size drill bit, depending on the type of anchor
	2 Ensure you drill to the correct depth		2 Ensure you drill to the correct depth
	3 Remove any dust and residue from the hole (compressed air is ideal)		3 Use a brush to remove any dust and residue
	4 Fit the anchor		4 Blow out any residual dust with compressed air
	5 Screw in to the specified tightening torque (see Hilti General Catalogue)		5 Inject the chemical adhesive
	6 Final configuration		6 Insert and adjust the anchor, letting it rest for the required time before positioning the plate (see product cartridge)
			7 After the "T cure" time has passed, position the plate and tighten to the specified tightening torque (see Hilti General Catalogue)

## 6 SUPPORT BRACKETS

Optional Head Box Ceiling/Wall Cleats:

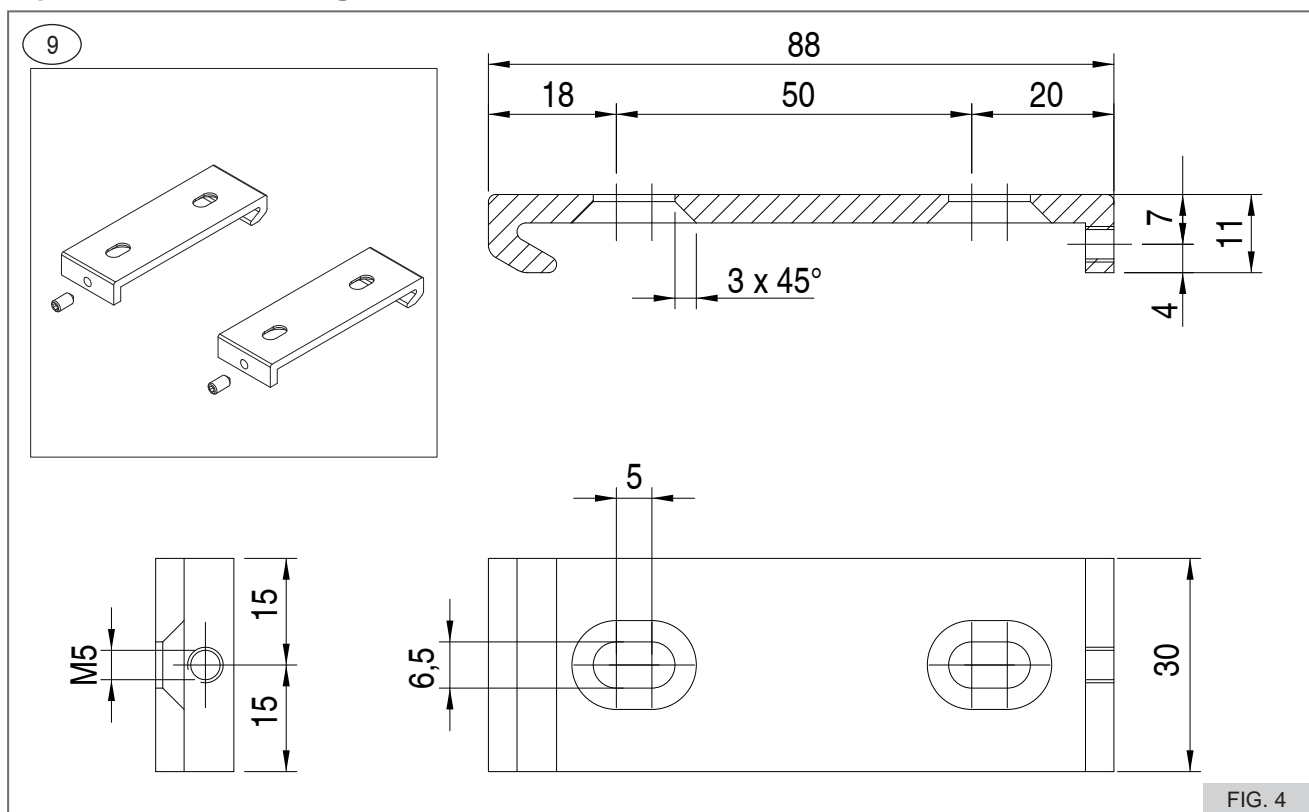


FIG. 4

Optional Stand-Off Legs

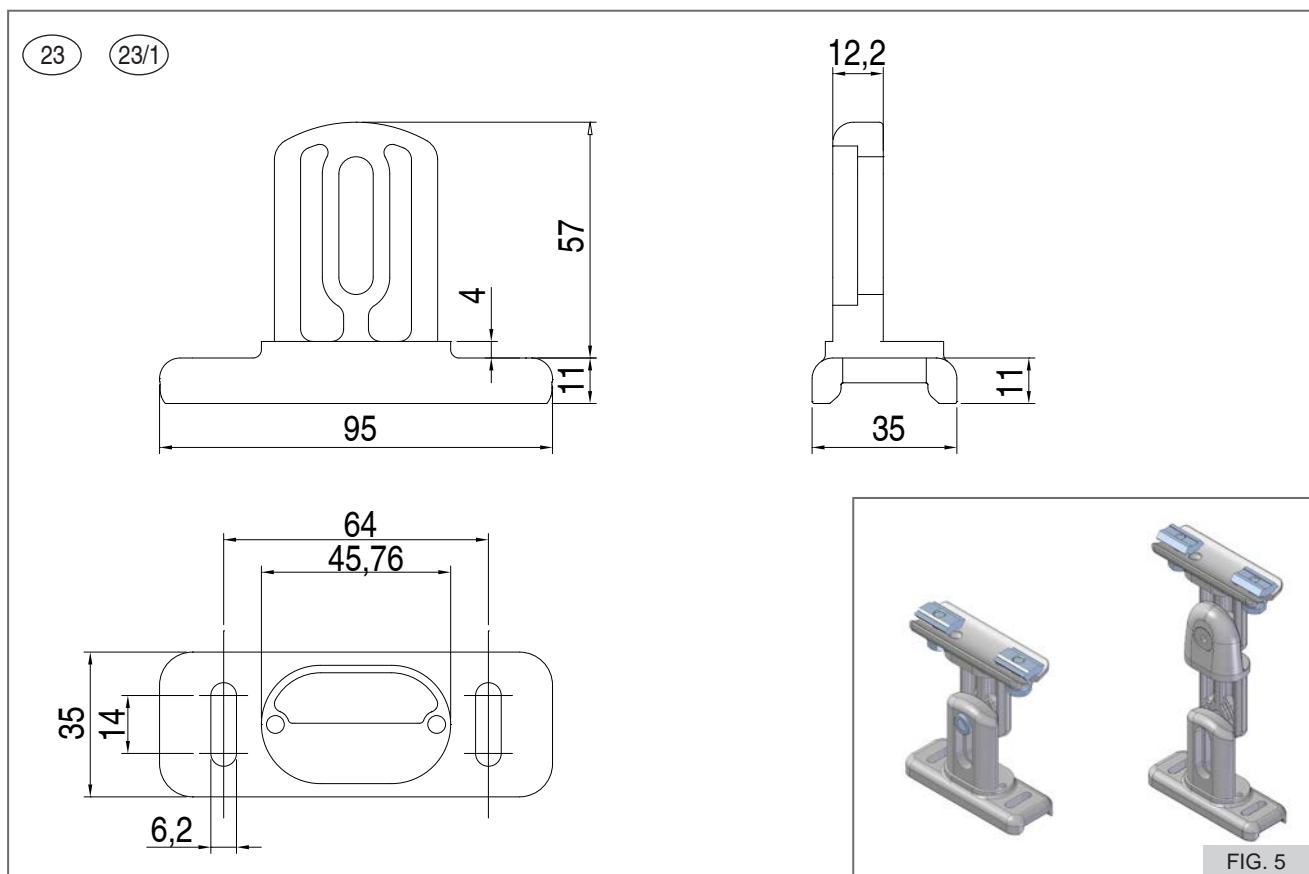
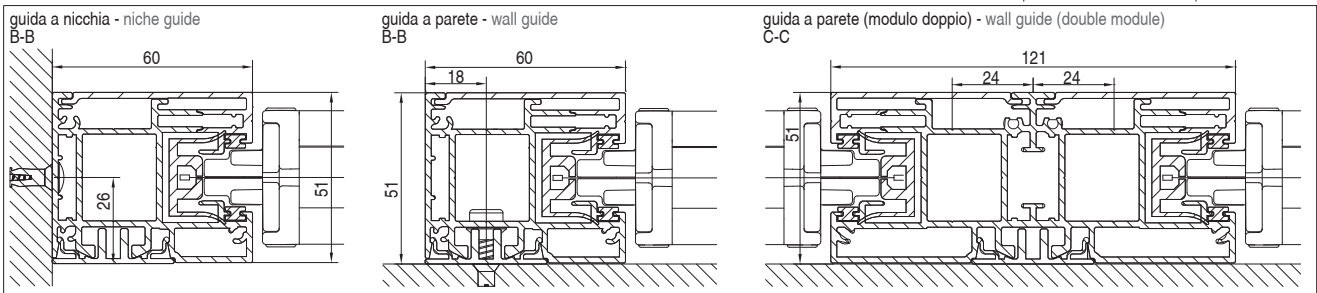
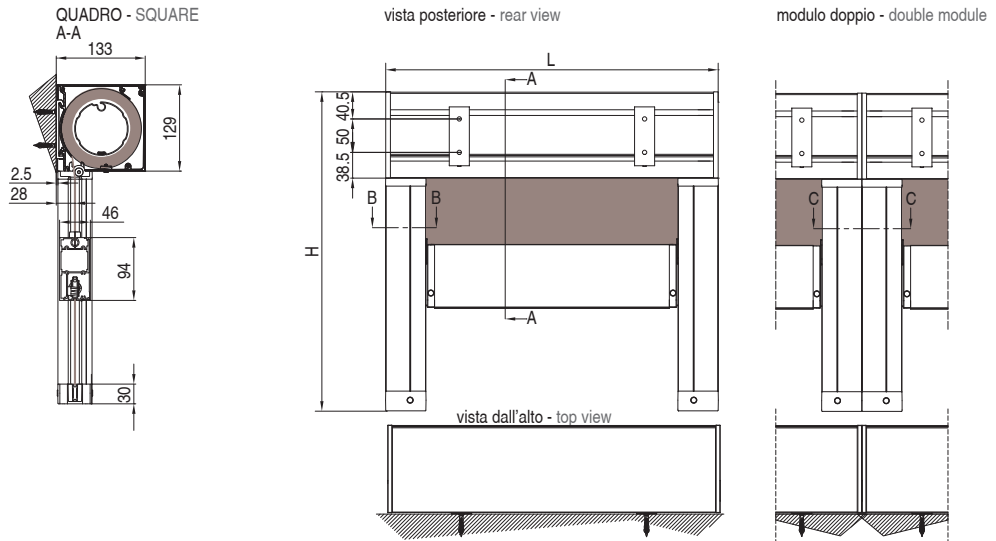


FIG. 5

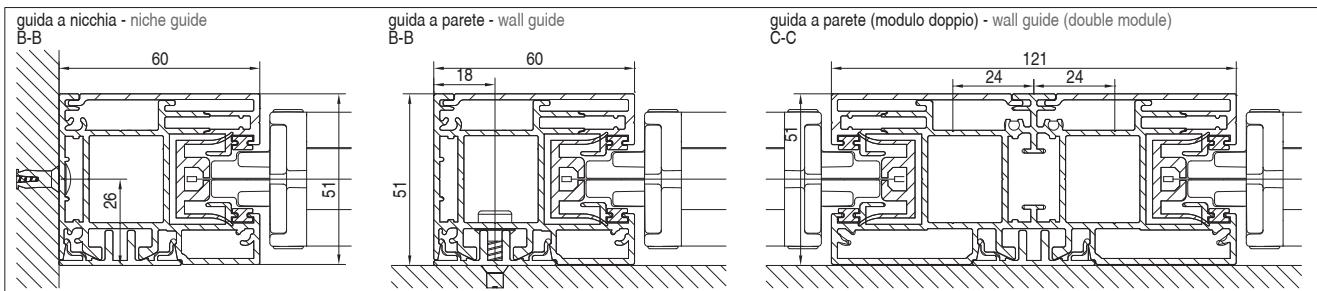
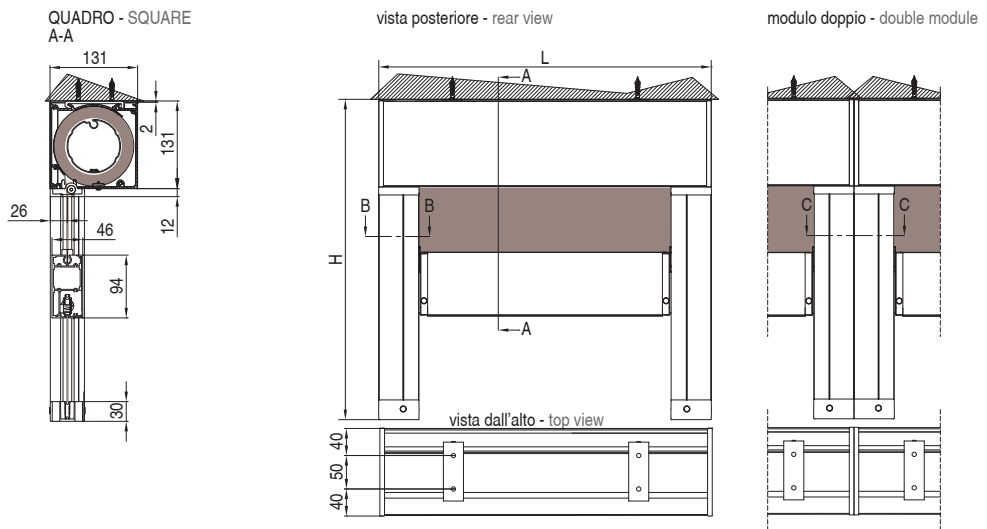
7 DIMENSIONS

SCREENY GPZ T

WALL INSTALLATION



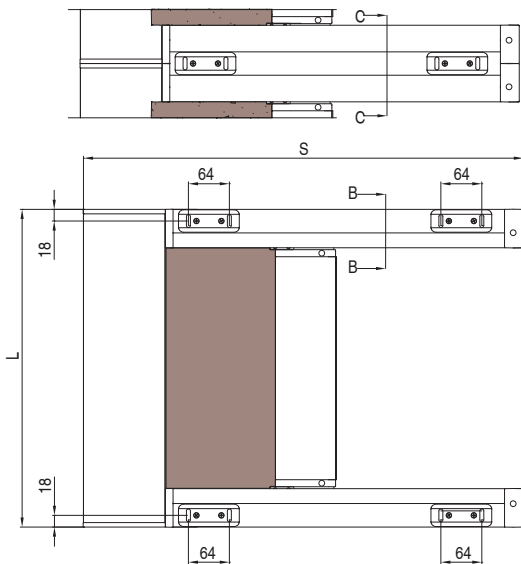
CEILING INSTALLATION



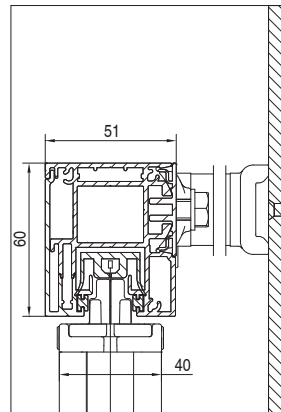


## FREESTANDING INSTALLATION

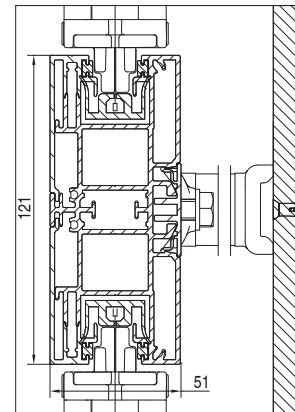
vista posteriore - rear view



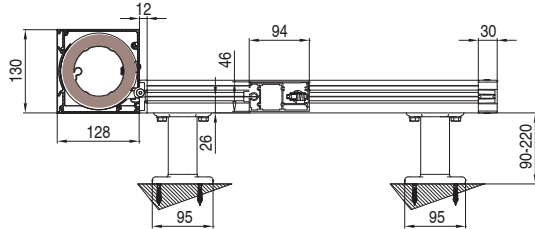
guida a parete - wall guide  
B-B



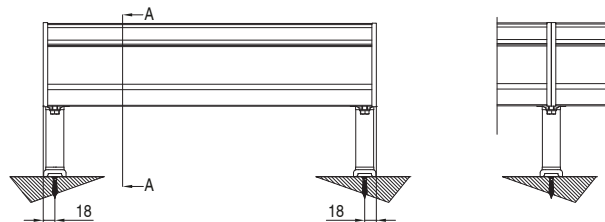
modulo doppio - double module



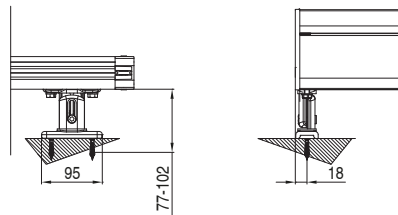
QUADRO - SQUARE  
A-A



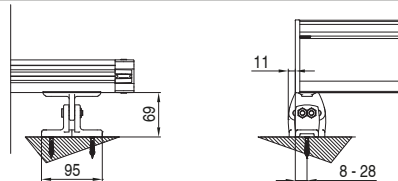
vista dall'alto - top view



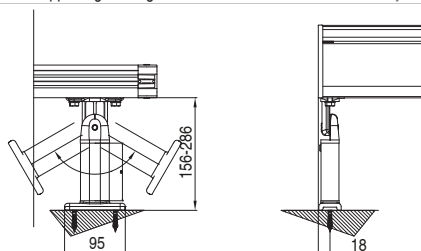
supporto guida regolabile - Adjustable guide support



supporto guida regolabile lateralmente - Adjustable guide support on the side

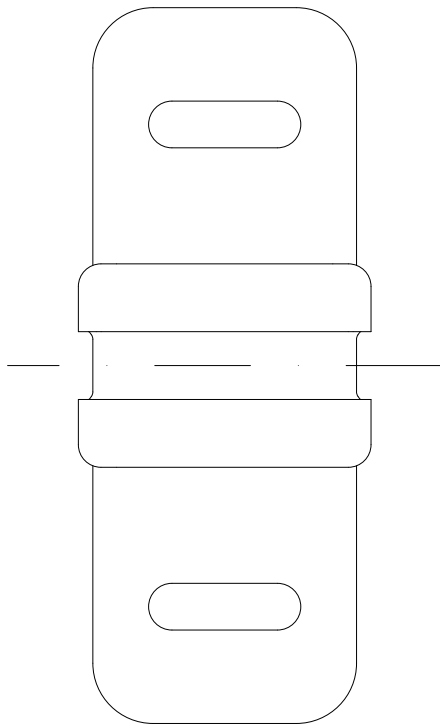


supporto guida regolabile e inclinabile - Inclinable and adjustable guide support

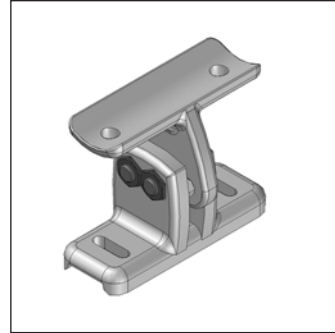


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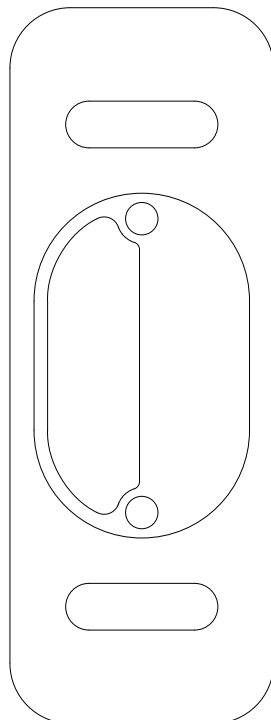
## FOOT FOR HORIZONTAL-LATERAL ADJUSTMENTS



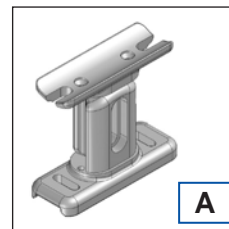
scale 1:1



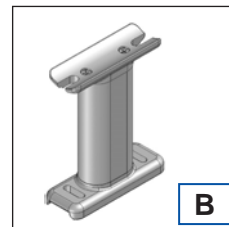
## FOOT FOR VERTICAL (A) ADJUSTMENTS VARIABLE HEIGHT (B). AND VARIABLE HEIGHT WITH INCLINE (C)



scale 1:1



A



B

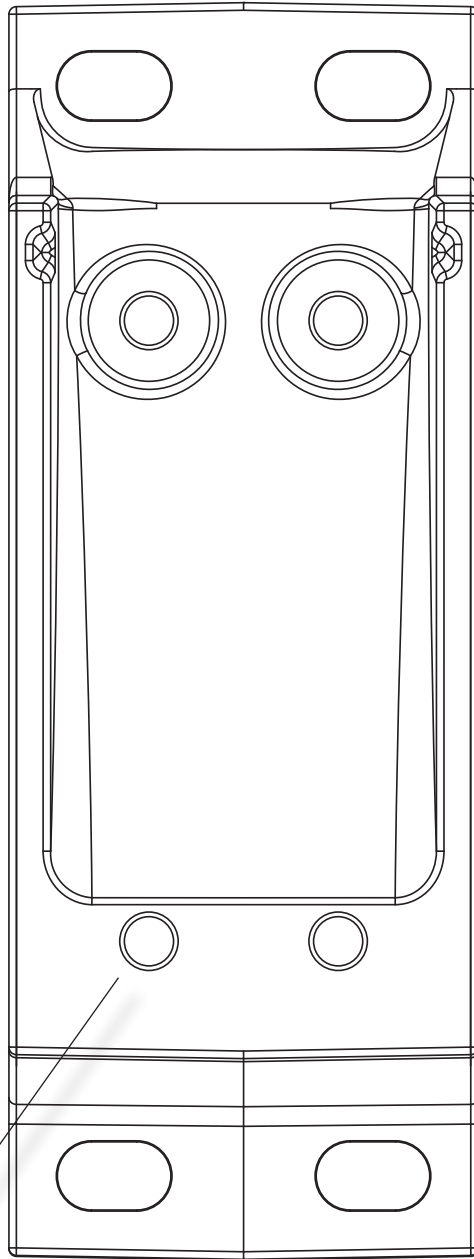


C

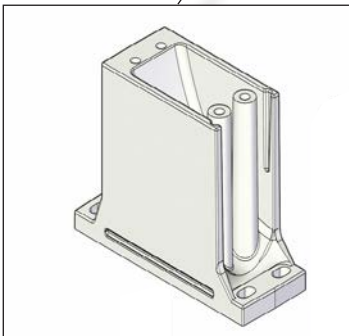
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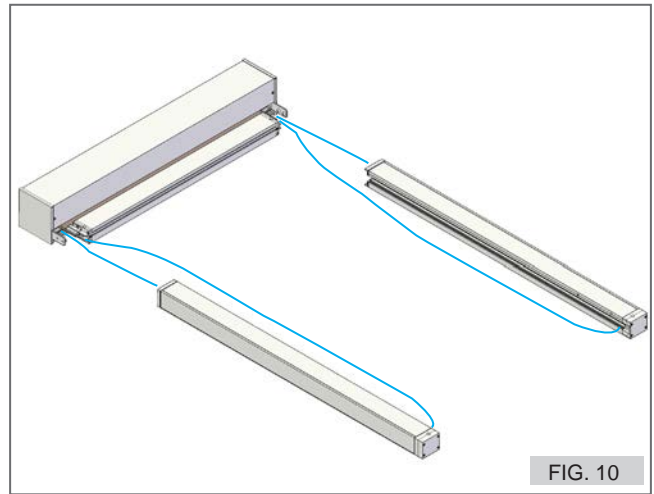
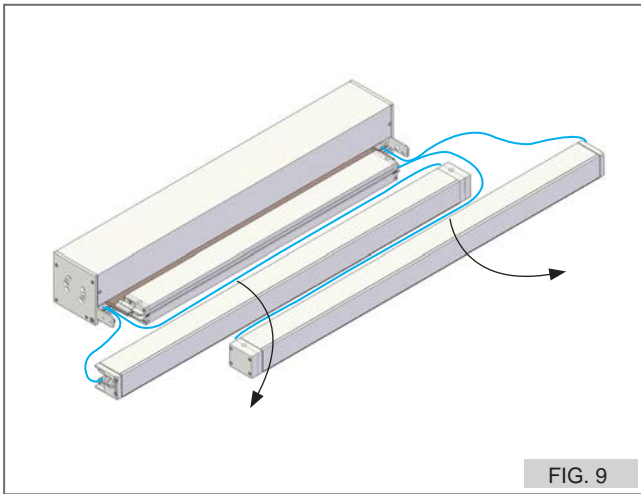
FOOT



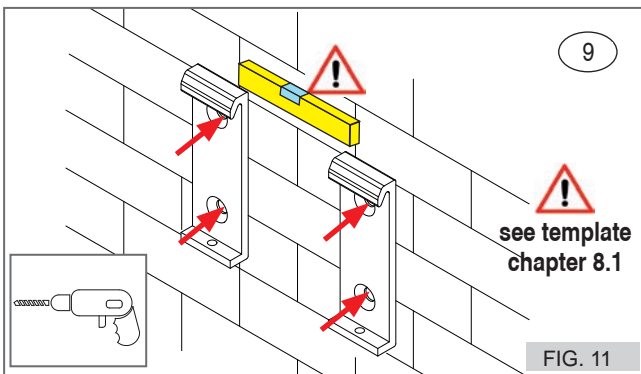
scale 1:1



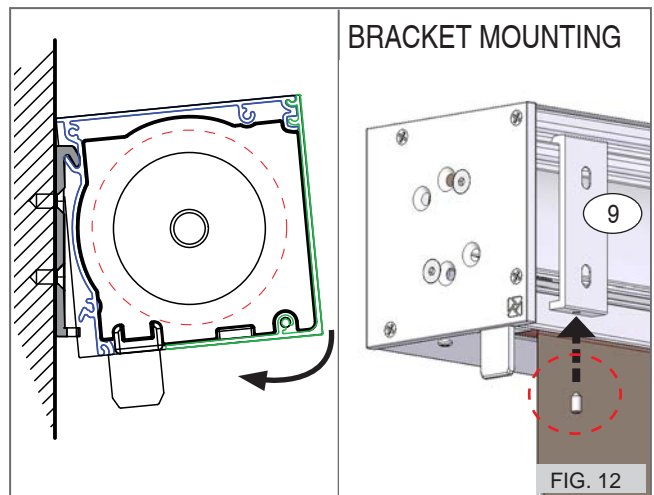
## 8.2 - Installation of brackets and guides



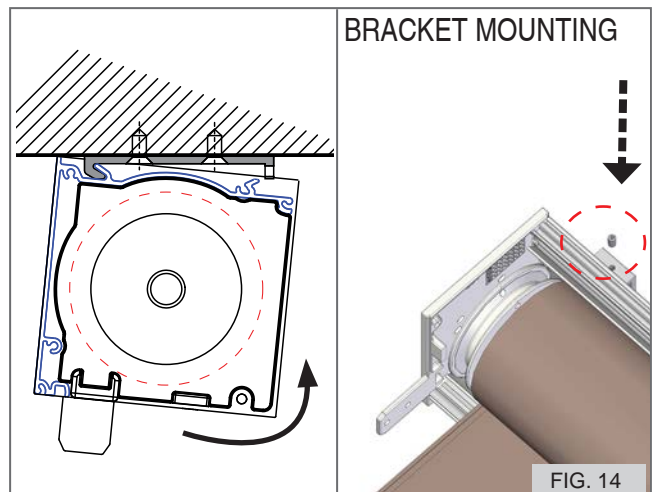
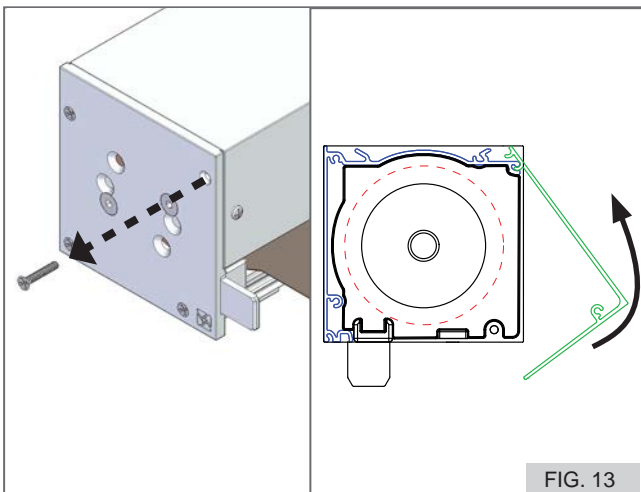
### Option A: Mounting Head Box Using Bracket Cleats:

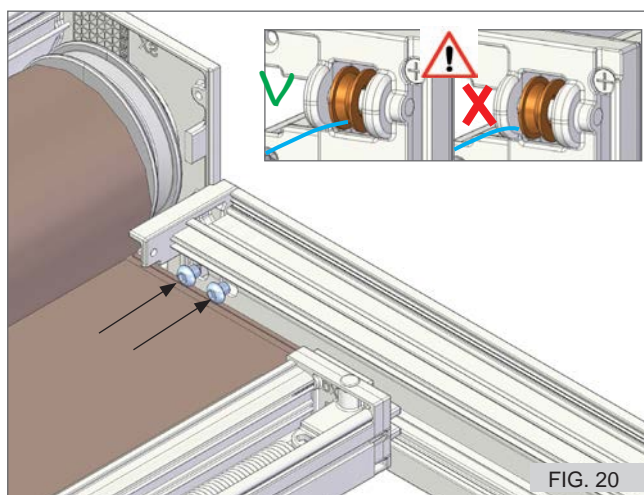
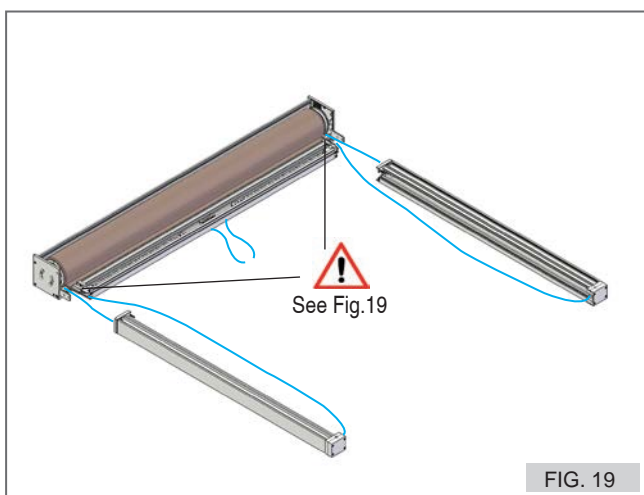
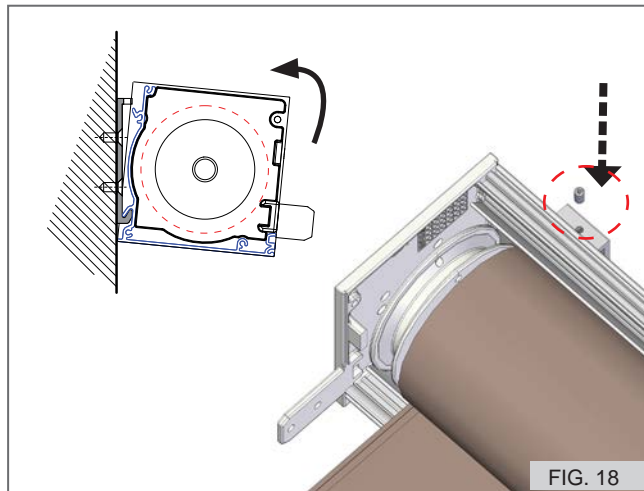
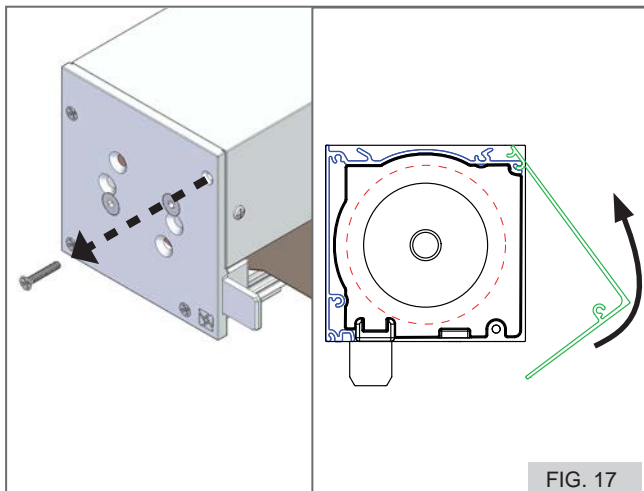


**!** Check that the brackets are correctly aligned, adding spacers if necessary to ensure linearity for correct installation.



### CEILING INSTALLATION

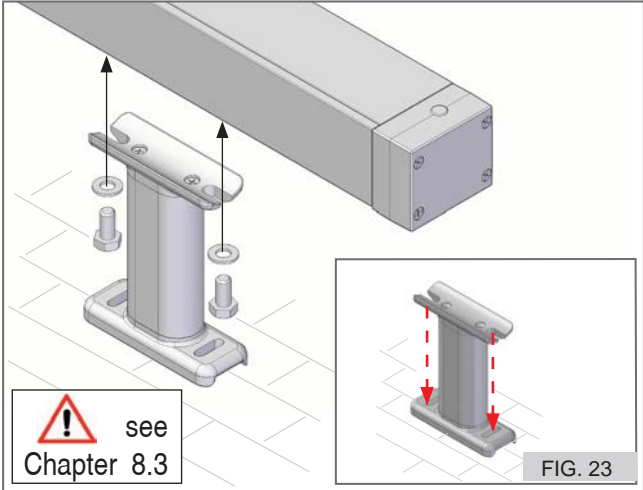
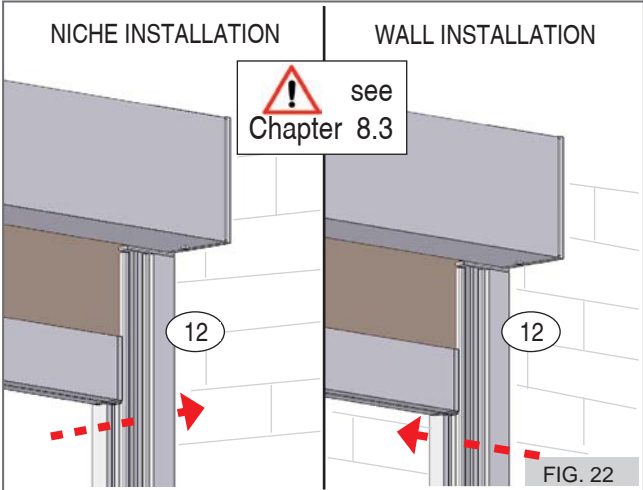
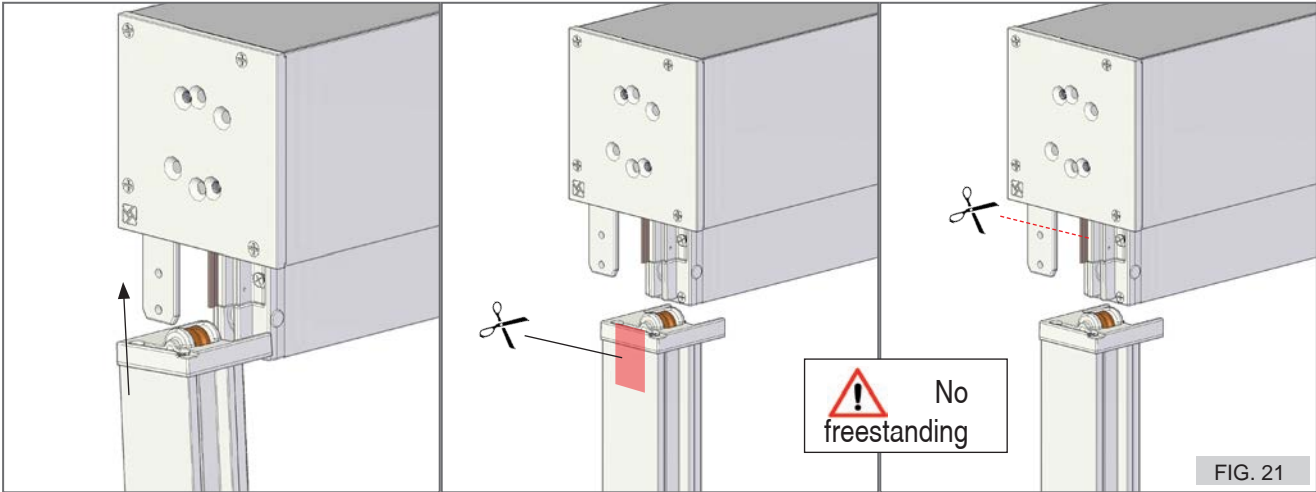


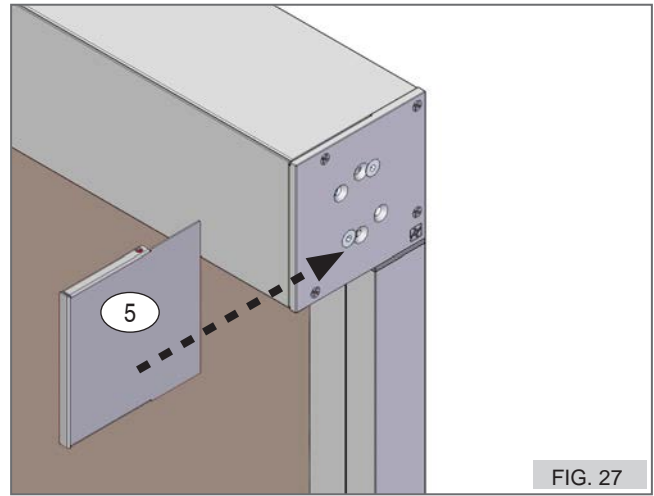
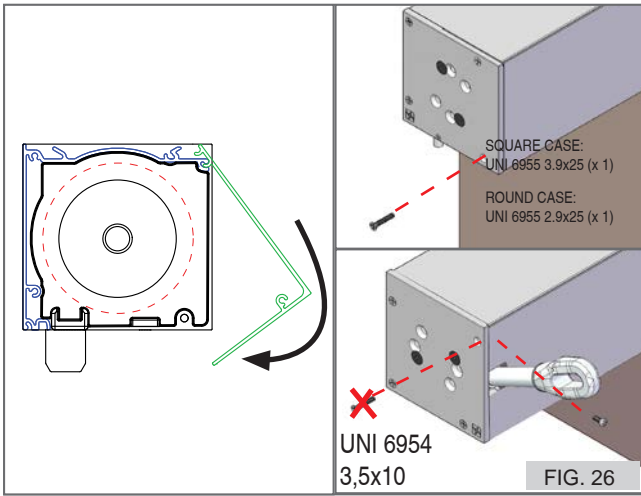


1 METHOD

2 METHOD

3 METHOD

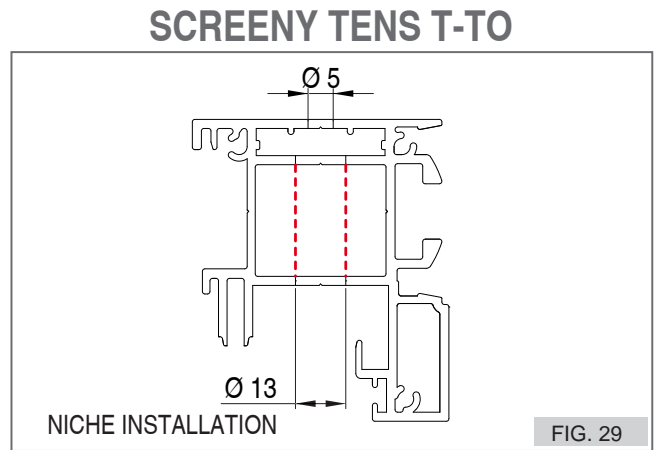
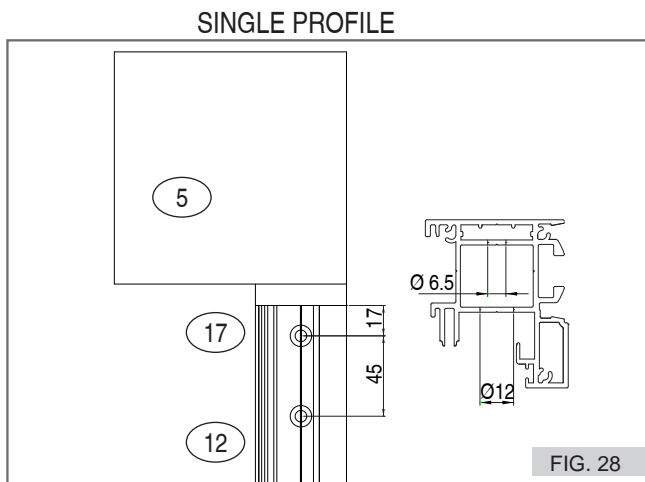




8.3 - Guide fastening

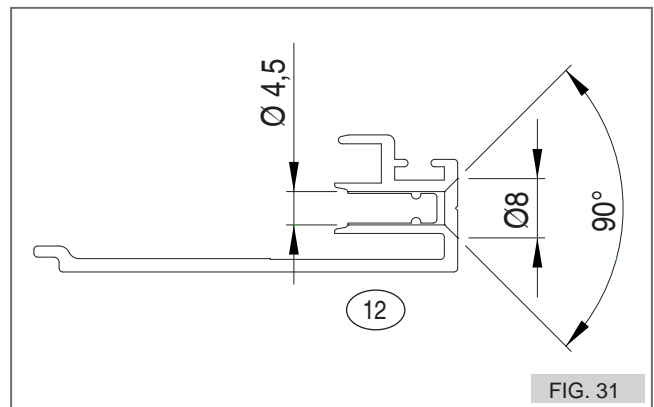
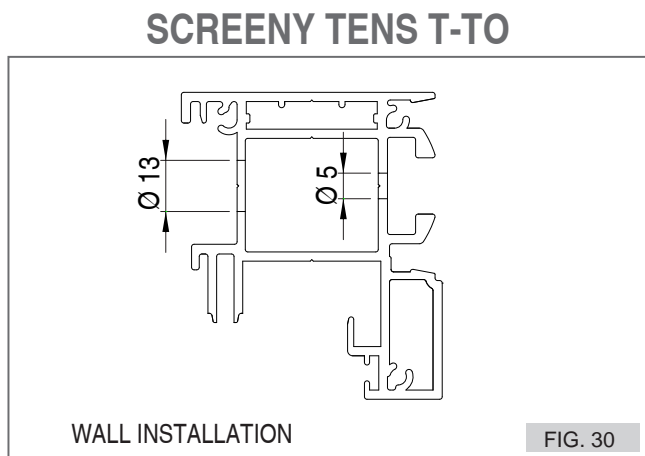
8.3.1 - Guide preparation

**!** For the number of holes to drill in the guides, see Chapter 5.1- "Bracket and support positioning layouts", page.10.

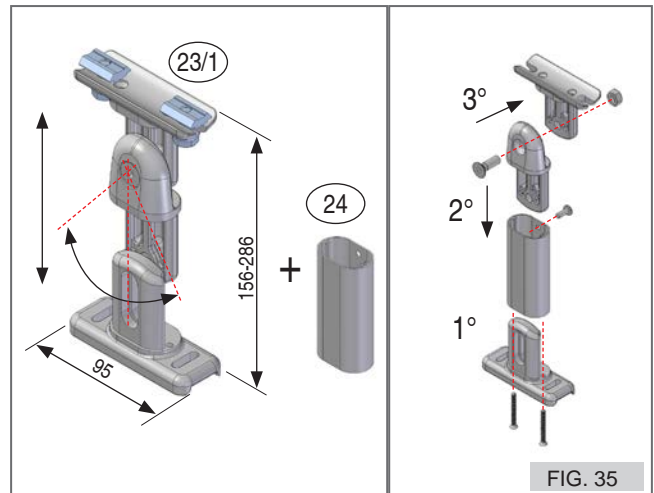
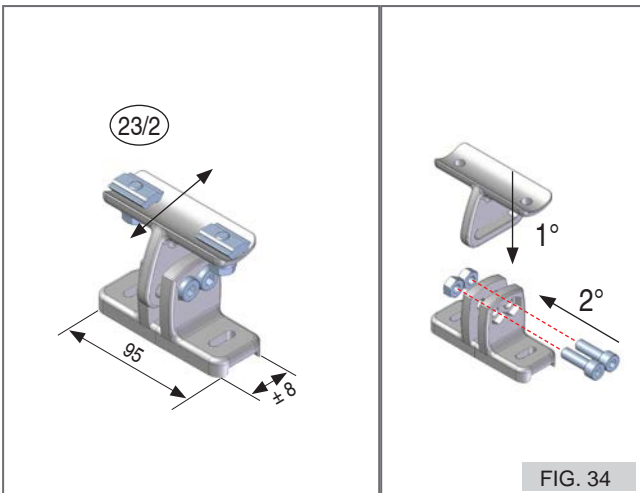
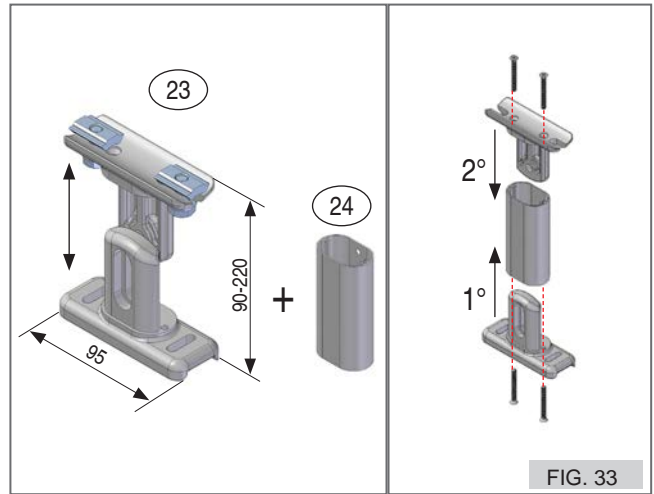
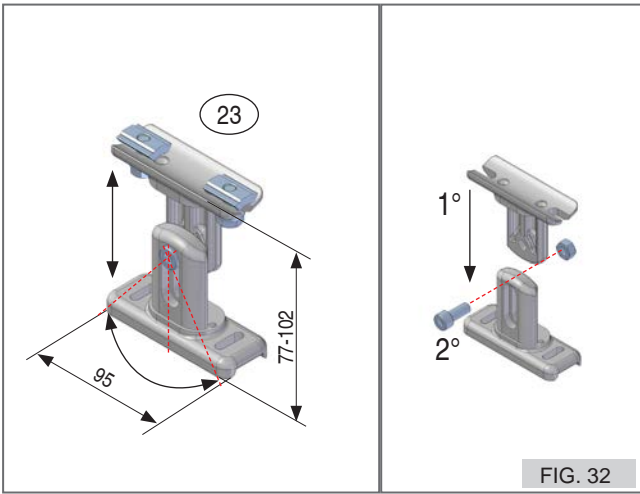


**!** For the number of holes to drill in the guides, see Chapter 5.1- "Bracket and support positioning layouts", page.10.

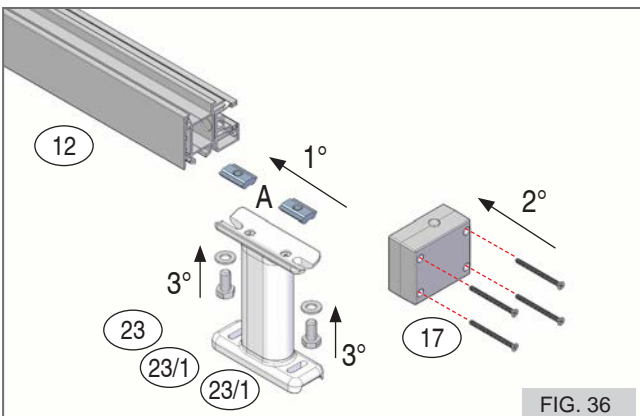
**!** For the number of holes to drill in the guides, see Chapter 5.1- "Bracket and support positioning layouts", page.10.



**SUPPORTS SCREENY TO**

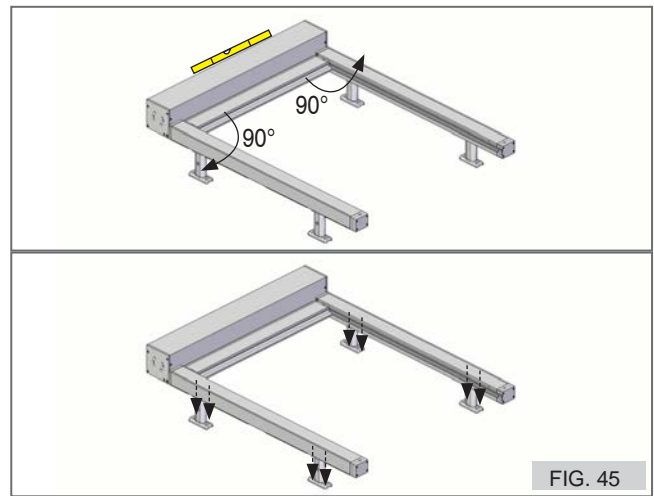
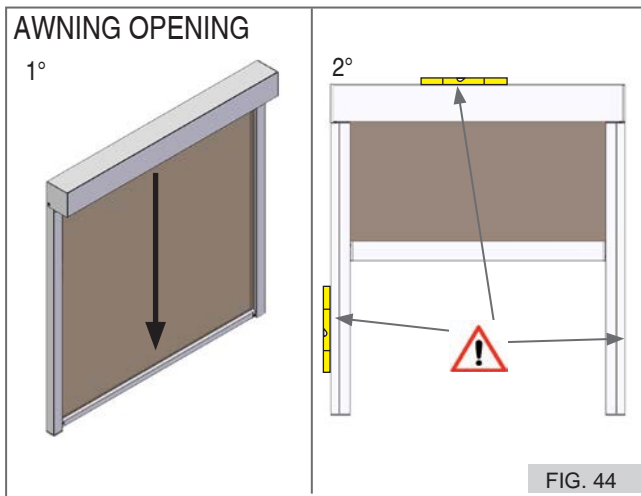


**!** insert 2 plates (a) every pin. for the amount of pins see tab.cap.5.1.

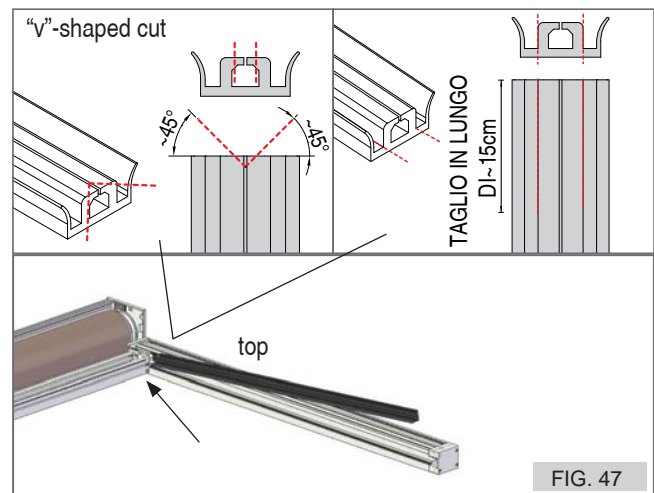




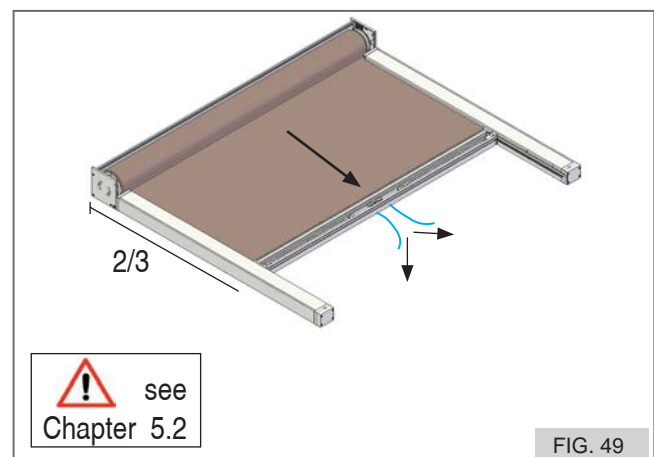
**8.3.2 - Squaring the structure**



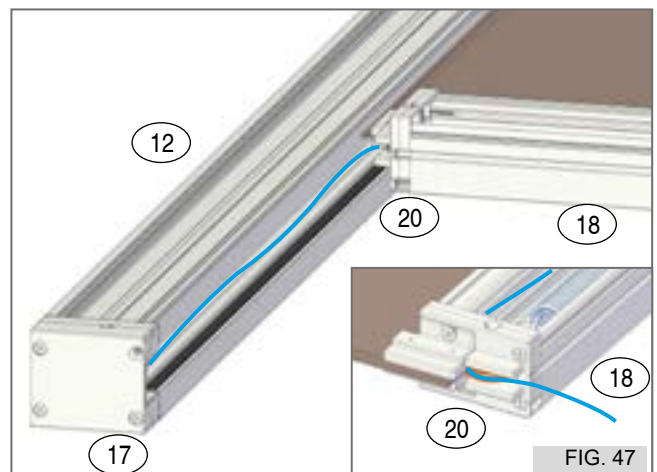
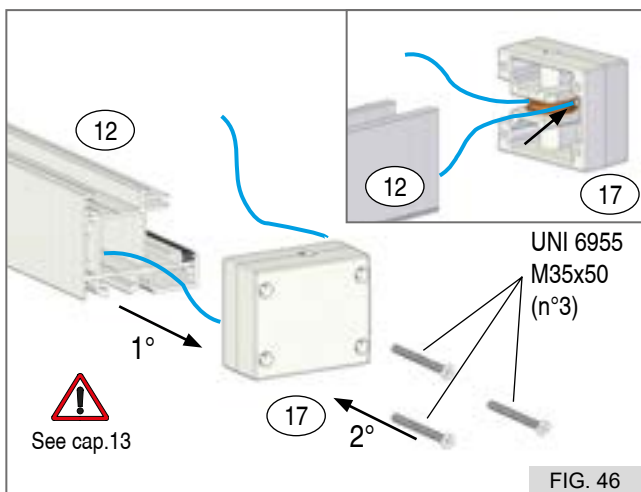
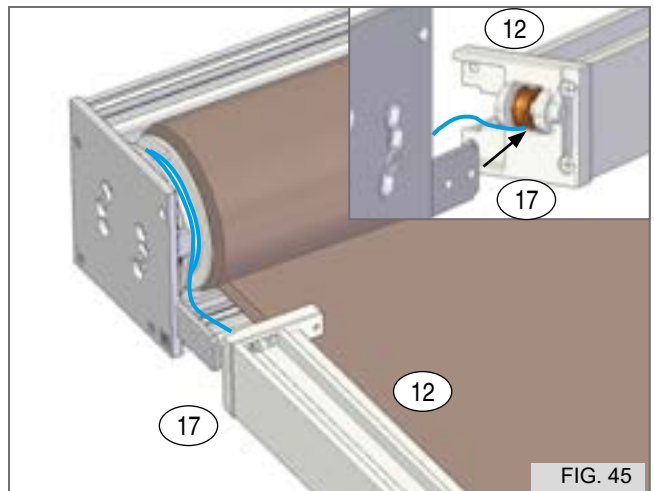
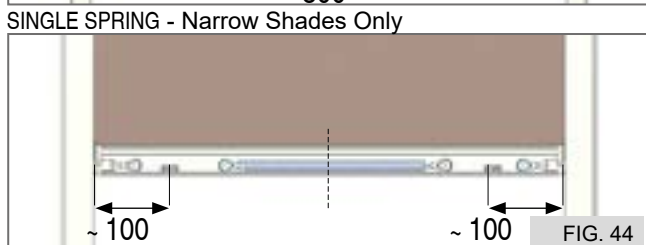
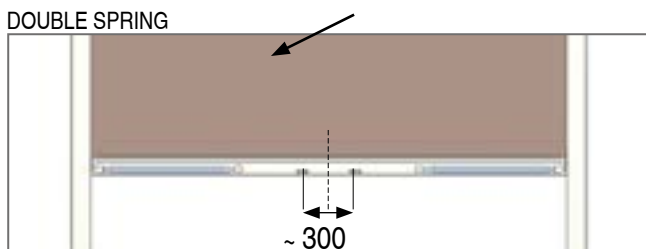
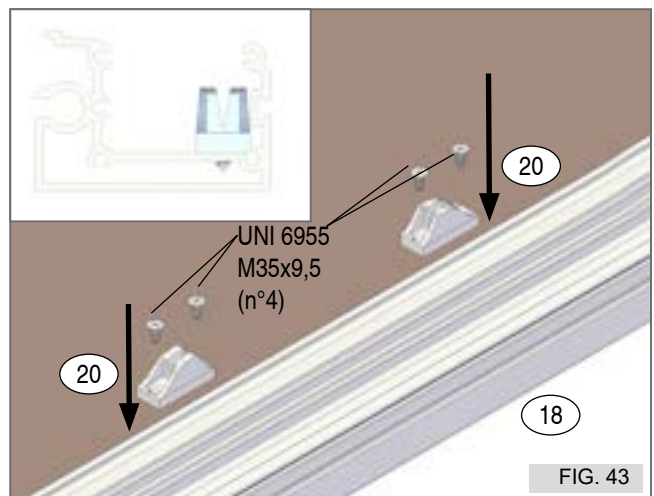
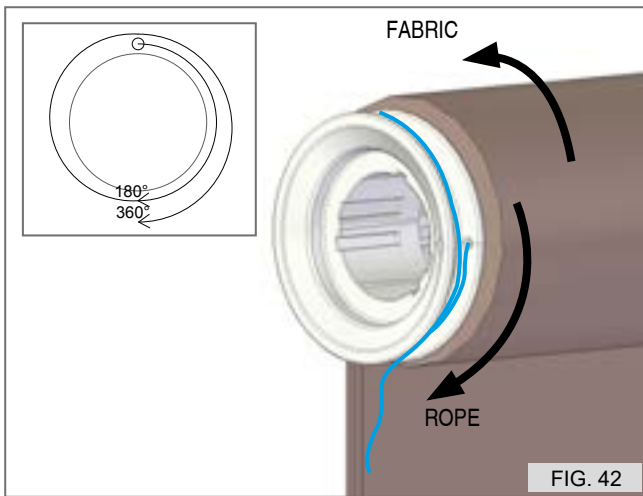
**8.3.3 - ZIP and cover insertion**



**8.4 - Rope tightening**

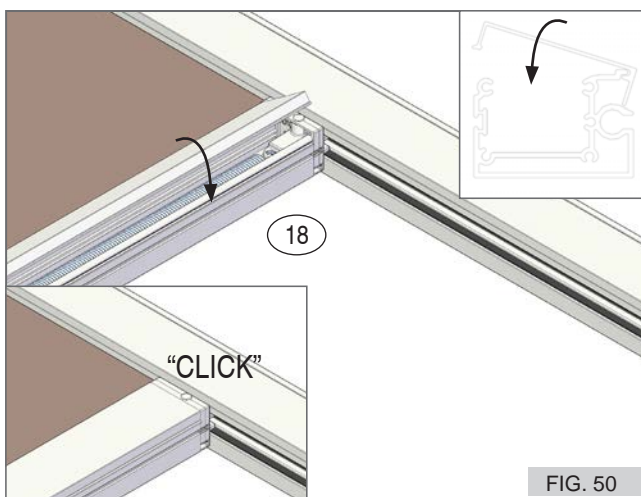


## 11.2 - Rope inserting



Run shade out to approximately the half way point. Now pull the tension ribbon on each side as tight as possible and then insert the ribbon into the clam cleats within the bottom bar. Make a tick mark on the ribbon just where it exits the clam cleat. Remove ribbon from clam cleat and tie a triple knot on the tick mark. Then re-insert the ribbon into the clam cleat. The knot will act as a safety backup to keep the ribbon from pulling through clam cleat.

Run the shade all the way out. Notice the fabric panel, if there is too much fabric sag or if the bottom bar did not make its way all the way to the end of the side rails before stopping you can add more tension to the springs. To do this you will run the shade back to the half way point (this is the point in the system where the springs are the most relaxed). Pull the ribbon on each side more taught and tie a new triple knot to secure the new position. The old knot will now be outside of the clam cleats and not technically useful.

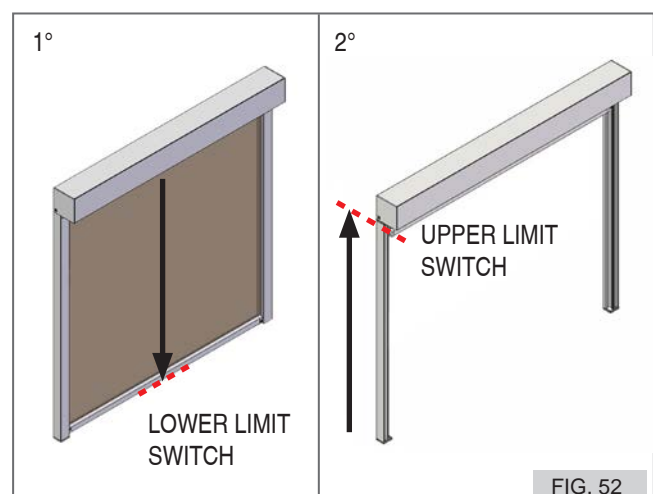


## 9 AWNING ADJUSTMENT

**!** Roll up the fabric and check that with the awning closed, the terminal is in line with the case; if not, check that the fabric is square.

### 9.1 - Motorised awning adjustment

**i** Before installation, check that the calibration of the limit switch is correct; if adjustment is necessary, follow the instructions given in the annexed "Motor Manual".



## 10 EXTRAORDINARY MAINTENANCE

### 10.1 - Troubleshooting Table

#### MANUAL AWNING

PROBLEM	CAUSES	SOLUTIONS
Fabric does not roll up evenly (forms cone)	Fabric not of even thickness	Roll up the fabric completely
The terminal does not lower, or jerks when lowering	The guides are not parallel	See Chap. 8.3 Guide fastening and ZIP insertion, page 28.
The fabric is not evenly taut	The ZIP is coming out of the internal guide	Fully close the awning and reopen it