LOGLI
MASSIMO®
glass system technology

NEW PRODUCT

La Tensilina

La Pensilina

A perfect balance between elements

"La Pensilina", with balanced proportions and novel forms, uses a minimalist approach, providing a clean and luminous look.

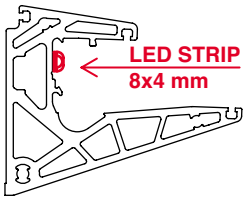

2018

KIT FOR CANTILEVER HORIZONTAL GLAZING, NO RODS AND NO GLASS CUT OUT REQUIRED

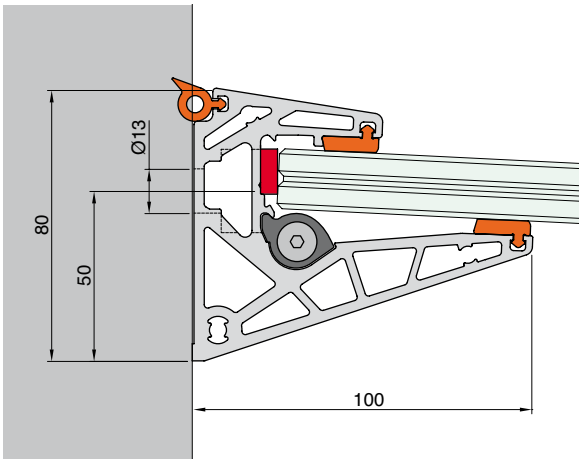
The kit is made up of a load-bearing profile in aluminium, seals, and safety accessories and includes terminal finishing caps without visible screws.

Features:
Load-bearing extruded aluminium 6063-T6 for glass composition 88.2 (16.76 mm) or 88.4 (17.52 mm).
TPE glass holder and wall seals, grey coloured.
Grivory® locking cams and safety elements for maximum mechanical and ageing resistance.
End caps in aluminium, to be applied with silicon.

Finishes: Matt aluminium, brushed-steel-effect aluminium, RAL 9010 (polished white), raw aluminium. Other anodised and RAL finishes are available on request.



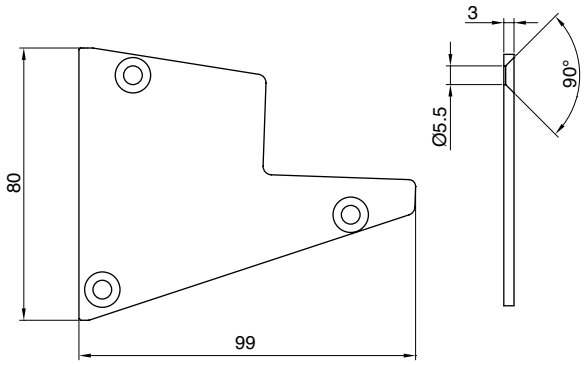
It is possible to insert LEDs between the profile and the glass.



Art.	Description	Length	Q.ty
PENKIT10	La Pensilina Kit H80 x D100 mm for glass 88.2 or 88.4	1000 mm	1 Set
PENKIT15	La Pensilina Kit H80 x D100 mm for glass 88.2 or 88.4	1500 mm	1 Set
PENKIT20	La Pensilina Kit H80 x D100 mm for glass 88.2 or 88.4	2000 mm	1 Set
PENKIT30	La Pensilina Kit H80 x D100 mm for glass 88.2 or 88.4	3000 mm	1 Set

CAP KIT WITH SCREWS

Material: aluminium caps, class A4 fastening screws.
Features: two caps with screw-fastening fixation for each profile.
Fastening screw included in the kit.
Finishes: Matt aluminium, brushed-steel-effect aluminium,
RAL 9010 (polished white), raw aluminium.



Art.	Description	Q.ty
PENT03	Two end caps with fastening screws	1 Set

CUSTOM CUTTING FOR LA PENSILINA KIT

Art.	Description	Q.ty
PENTAGLIO	Custom cutting for La Pensilina kit	1 Pc

La **Pensilina** is a cantilever horizontal glazing system requiring no rods and no glass cut out. The pane is held by a continuous honeycomb aluminium profile, designed to resist operating loads covering all possible load combinations (snow and wind), in addition to the weight of the glass itself. The profile is anchored to the wall by means of mechanical or chemical anchors, depending on the type of support.

Logli Massimo S.p.A. performed resistance tests at ISTITUTO GIORDANO.

The test was carried out by applying increasing loads, distributed evenly over the surface of the pane. In order to test the actual resistance of the glass and profile together, La Pensilina was anchored to a steel beam.

Tests prove that La Pensilina can reach, and even exceed, an excess load of 350 Kg/m^2 of snow, with 1200 mm deviation without breakage. Obviously, the system's load-bearing capacity depends on the composition of the pane: the aforementioned figure refers to a plate made of two tempered layers of laminated glass, with SentryGlas®. The reports for the three configurations tested can be viwed by logging on **www.loglimassimo.it**

Please note that the maximum admissible cantilever crucially depends on the solidity of the wall: the installer must know the composition of the façade and, with the support of an engineer, identify the most suitable type of anchor, in order to establish the allowed cantilever.

We provide here below an abacus of the different stresses applied to the wall by the individual fastening, in relation to the cantilever in the pane and to the snow load prescribed by Technical Codes in the area of installation.

Cantilever [cm]

snow load [kg/m²]	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120
50	0.69	0.78	0.88	0.99	1.10	1.21	1.33	1.46	1.59	1.72	1.86	2.01	2.16	2.31	2.47
60	0.73	0.84	0.95	1.07	1.19	1.32	1.46	1.60	1.75	1.90	2.06	2.22	2.39	2.57	2.75
70	0.78	0.90	1.02	1.15	1.29	1.43	1.58	1.74	1.90	2.08	2.25	2.44	2.63	2.83	3.03
80	0.83	0.96	1.09	1.24	1.39	1.54	1.71	1.88	2.06	2.25	2.45	2.65	2.87	3.09	3.32
90	0.88	1.02	1.16	1.32	1.48	1.65	1.83	2.02	2.22	2.43	2.65	2.87	3.10	3.35	3.60
100	0.93	1.08	1.23	1.40	1.58	1.76	1.96	2.17	2.38	2.61	2.84	3.09	3.34	3.61	3.88
110	0.98	1.14	1.30	1.48	1.67	1.87	2.09	2.31	2.54	2.78	3.04	3.30	3.58	3.87	4.16
120	1.03	1.20	1.38	1.57	1.77	1.98	2.21	2.45	2.70	2.96	3.23	3.52	3.82	4.13	4.45
130	1.08	1.26	1.45	1.65	1.87	2.09	2.34	2.59	2.86	3.14	3.43	3.74	4.05	4.39	4.73
140	1.13	1.31	1.52	1.73	1.96	2.21	2.46	2.73	3.02	3.31	3.63	3.95	4.29	4.64	5.01
150	1.18	1.37	1.59	1.82	2.06	2.32	2.59	2.87	3.18	3.49	3.82	4.17	4.53	4.90	5.29
160	1.22	1.43	1.66	1.90	2.15	2.43	2.71	3.02	3.33	3.67	4.02	4.38	4.77	5.16	5.58
170	1.27	1.49	1.73	1.98	2.25	2.54	2.84	3.16	3.49	3.85	4.22	4.60	5.00	5.42	5.86
180	1.32	1.55	1.80	2.06	2.35	2.65	2.96	3.30	3.65	4.02	4.41	4.82	5.24	5.68	6.14
190	1.37	1.61	1.87	2.15	2.44	2.76	3.09	3.44	3.81	4.20	4.61	5.03	5.48	5.94	6.42
200	1.42	1.67	1.94	2.23	2.54	2.87	3.22	3.58	3.97	4.38	4.80	5.25	5.72	6.20	6.71
225	1.54	1.82	2.12	2.44	2.78	3.14	3.53	3.94	4.37	4.82	5.29	5.79	6.31	6.85	7.41
250	1.67	1.97	2.29	2.64	3.02	3.42	3.84	4.29	4.77	5.26	5.79	6.33	6.90	7.50	8.12
275	1.79	2.12	2.47	2.85	3.26	3.69	4.16	4.65	5.16	5.71	6.28	6.87	7.50	8.15	8.83
300	1.91	2.26	2.65	3.06	3.50	3.97	4.47	5.00	5.56	6.15	6.77	7.41	8.09	8.80	9.53

Key:

- Extracting force acting on the anchors in kN: the abacus contains the values of the extraction force acting on the individual anchor in relation to the cantilever and to the snow load, presuming that there are 5 fastenings per metre of length of the roof.
- Snow load in kg/m^2: the snow load is defined in the technical codes in relation to the geographical area, the altitude, and exposure.

The colours identify the fields of application, with different types of anchor depending on the type of support:
"**Green**": chemical anchor on Alveolater wall, anchoring depth between 80 and 130 mm (extraction load max 1.8 kN)
"**Yellow**": chemical anchor on Double UNI wall, anchoring depth ≥ 130 mm (extraction load max 2.6 kN)
"**Orange**": chemical anchor on solid brick wall, anchoring depth ≥ 100 mm (extraction load max 3.6 kN)
"**Red**": chemical anchor on cracked concrete wall, anchoring depth ≥ 120 mm (extraction load max 10.4 kN)
Note: these examples are provided considering use of an M10 threaded rod in class A4

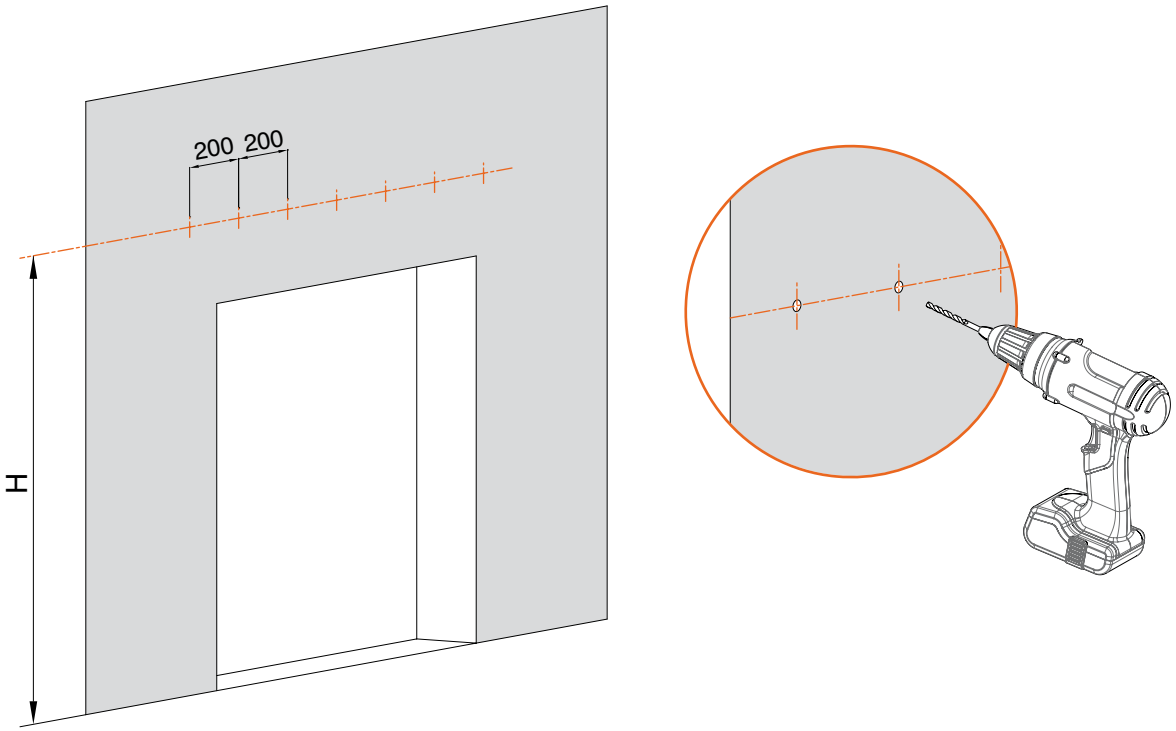
Example:
Installation zone: Florence - snow load 100 kg/m^2
Design cantilever: 100 cm

Use the abacus of anchor extraction force values, finding the combination of design bend and extraction load for each anchor. In the case in question, we find Fe = 2.8 kN.
The installer must install La Pensilina using anchors with an extraction resistance equal to or greater than the value of Fe.

WARNING! The resistance of the anchor is influenced by:
- Type of support (e.g. wall, block wall, concrete beam, etc.)
- Type and dimensions of the anchor (e.g. mechanical, chemical, etc.)
- Anchor depth

Should it not be possible to reach the required resistance level with any of the commercially available anchoring systems suitable for the structure, the panel depth will have to be reduced (by moving leftwards on the table's raw until the maximum resistance of the available bolt is met.

1



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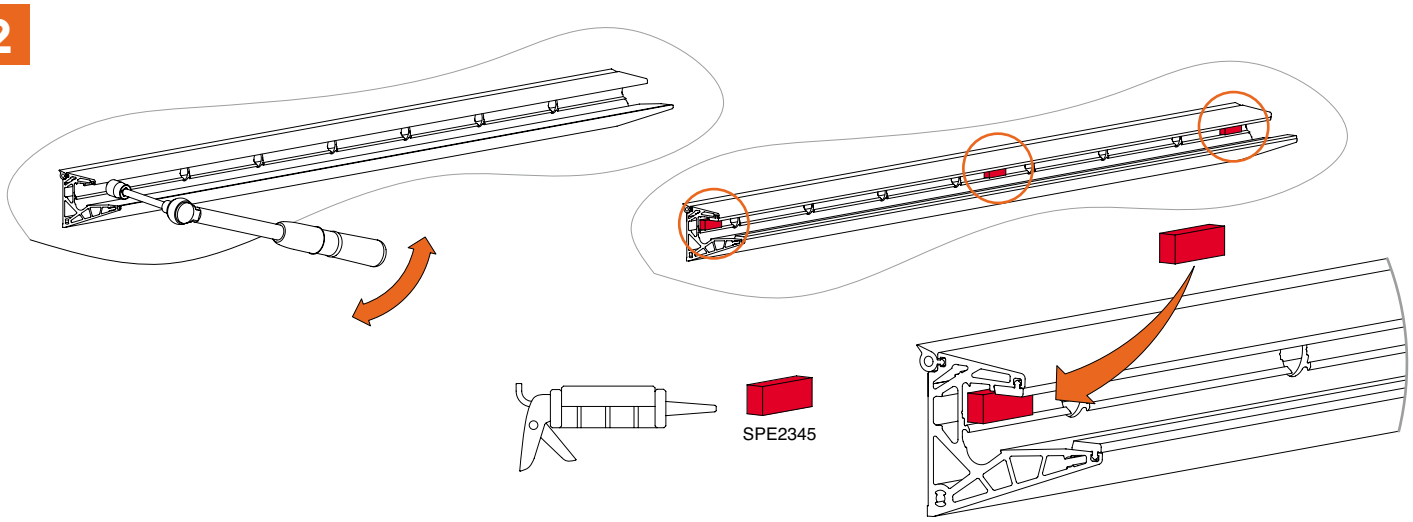

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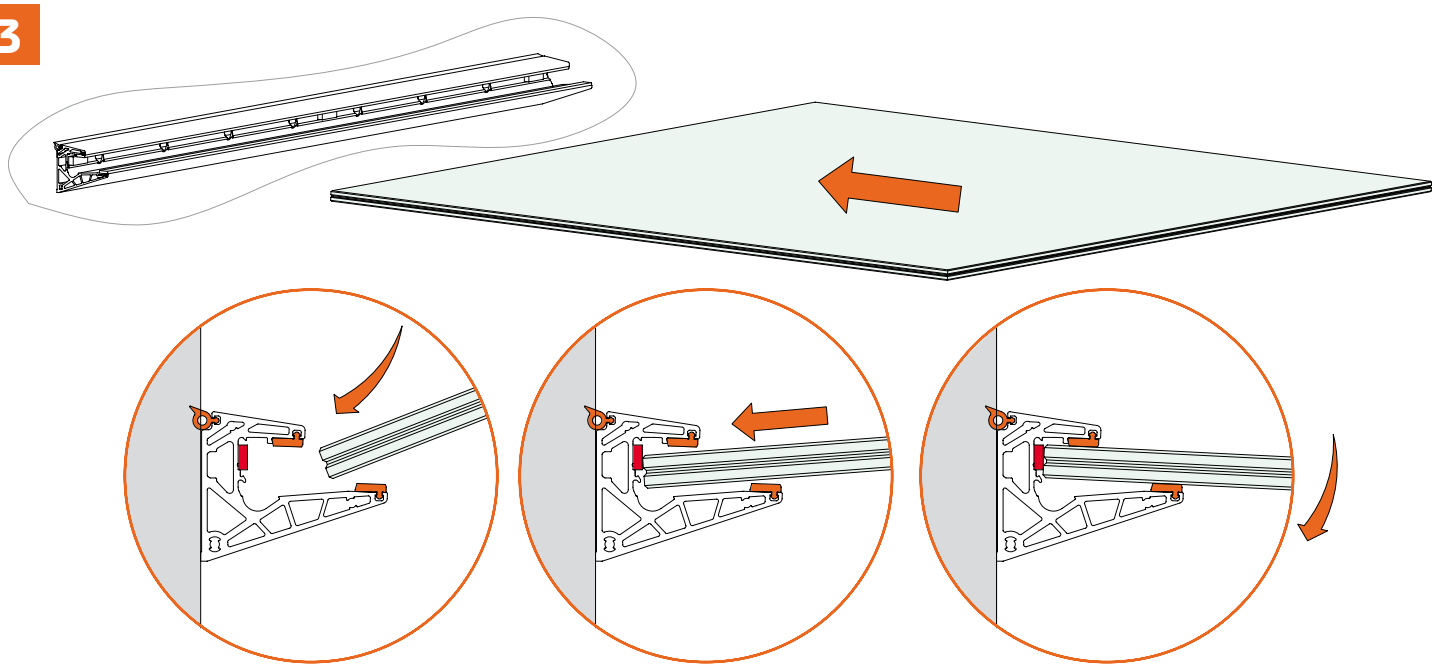

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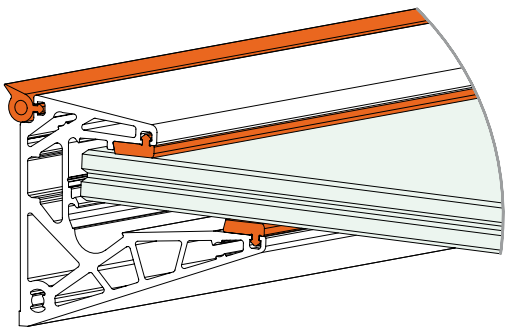

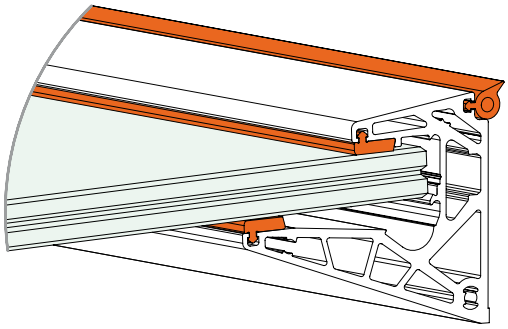

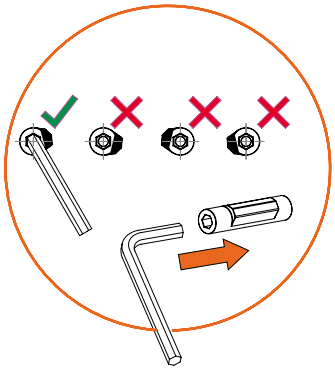

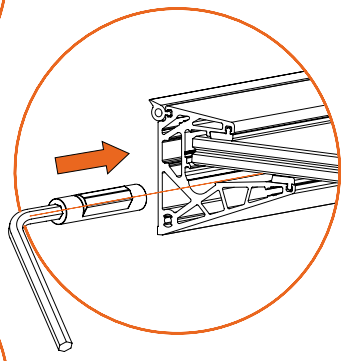

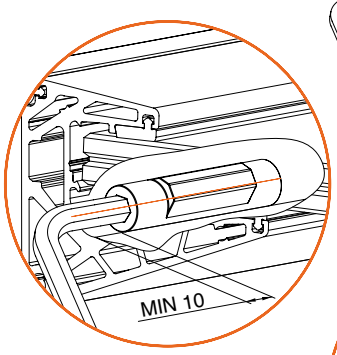

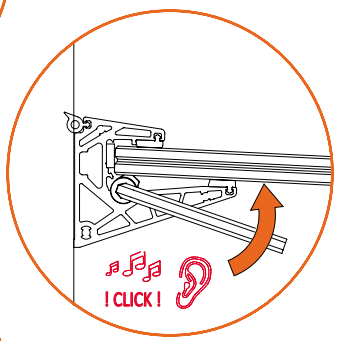

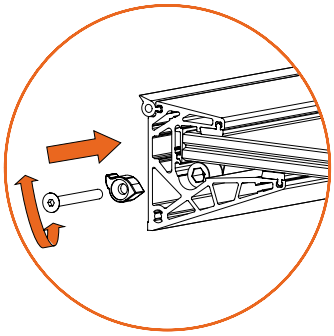

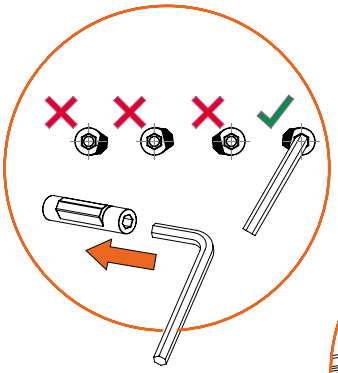

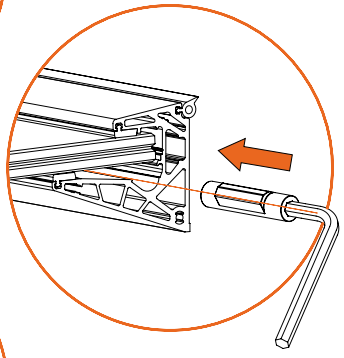

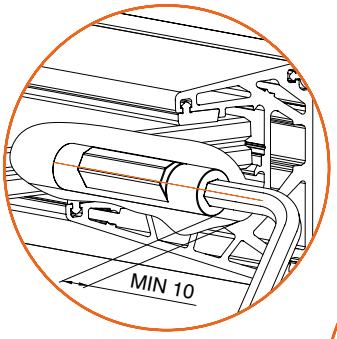

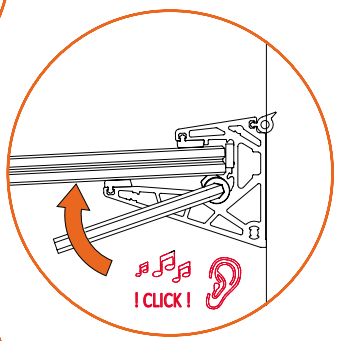

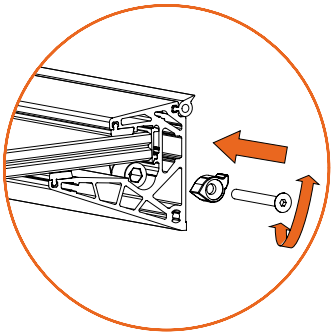

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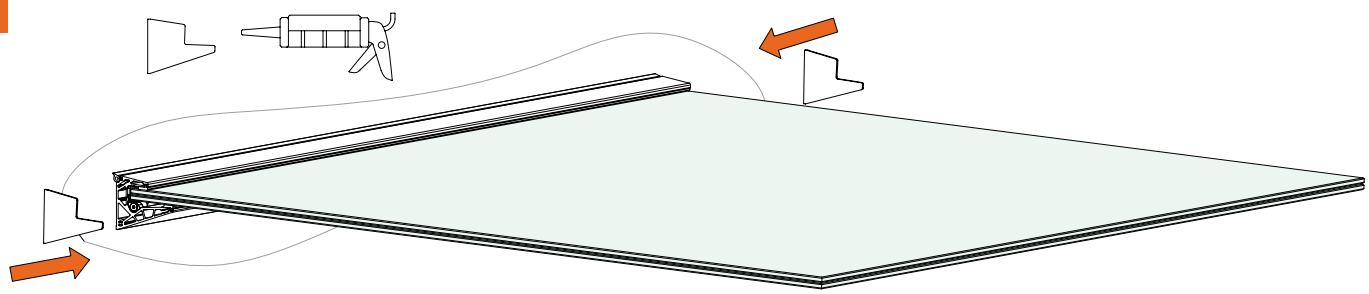

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