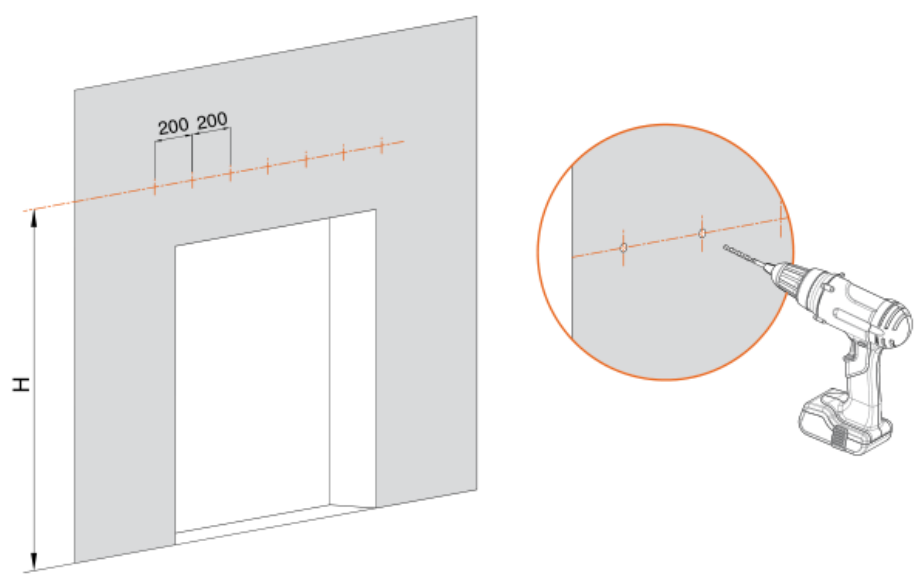
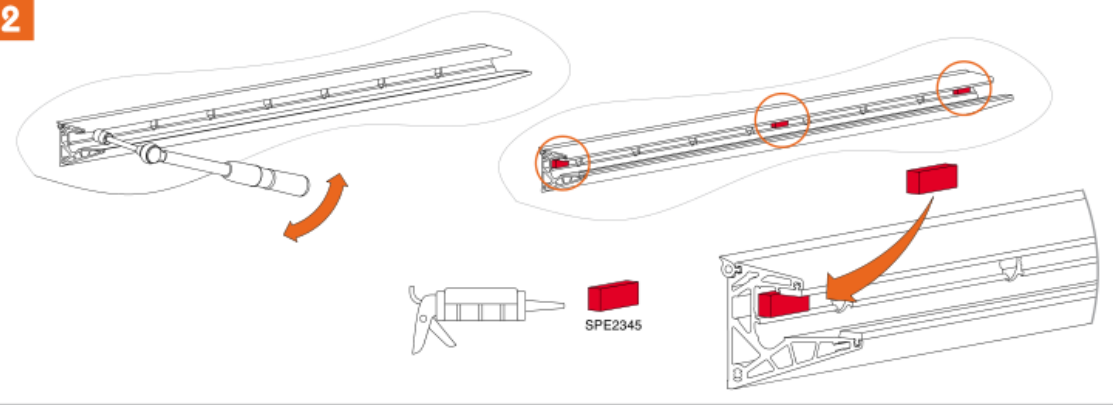


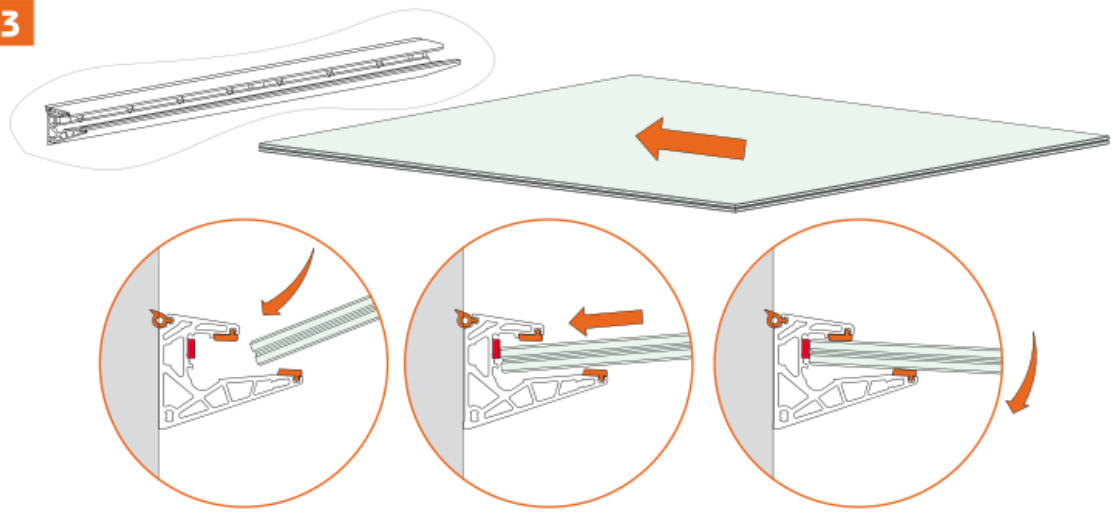
1



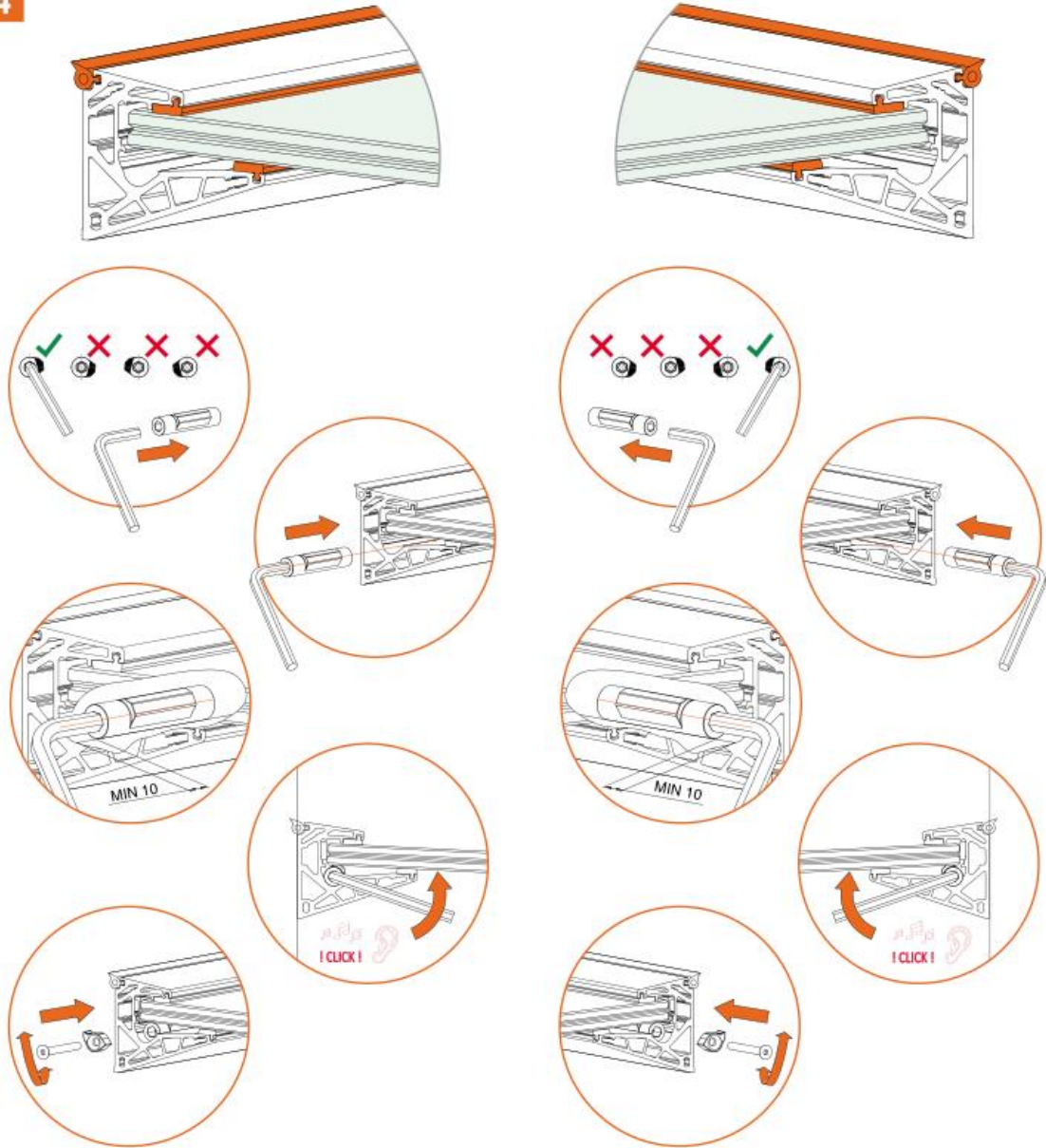
2



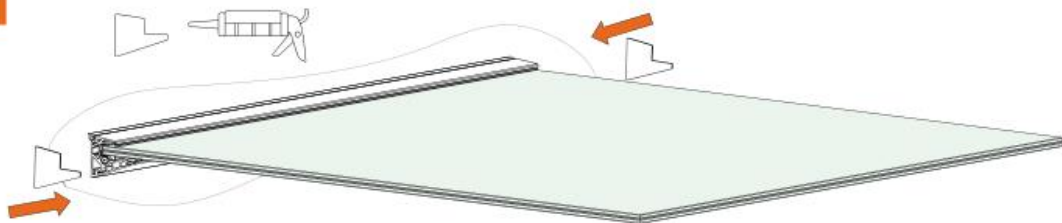
3



4



5



### Cantilever [cm]

	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<sup>2</sup>: 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  $\geq$  130 mm (extraction load max 2.6 kN)

**"Orange"**: chemical anchor on solid brick wall, anchoring depth  $\geq$  100 mm (extraction load max 3.6 kN)

**"Red"**: chemical anchor on cracked concrete wall, anchoring depth  $\geq$  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<sup>2</sup>

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  $F_e = 2.8$  kN.

The installer must install La Pensilina using anchors with an extraction resistance equal to or greater than the value of  $F_e$ .

**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).