

Installation instruction
for under plaster systems **SP, SP-E**
certified by the **Passivhaus Institut**



The content of the technical documentation is protected in accordance with the act dated on 4th February 1994 regarding Copyright and Related Rights (Journal of Laws of 2006. No. 90, item 631, as amended). Any downloading and reproduction for further distribution all or part of the documentation, without the consent of Aluprof SA is illegal and will result in criminal and civil law.

General recommendations

It is necessary to comply with occupational health and safety regulations, in particular concerning the safety of electrical equipment and work at heights.

Installation requirements:

- a) If the installation is performed to the reinforced concrete lintel or on a solid brick - use rawplugs \varnothing 8 mm.
- b) If the installation is performed to a wall made of porous materials – use suitable installation systems for this type of walls.
- c) If the installation is performed to the walls made of cavity brick or aerated concrete, etc. - use plugs for cavity brick.

Installation conditions:

- a) For walls - perform an installation to even surfaces of a proper durability, made in accordance with effective regulations of Building Law.
- b) For metal constructions – perform an installation to materials with a proper thickness of walls, joined with one another in accordance with effective rules of metalworking.

Installation requirements:

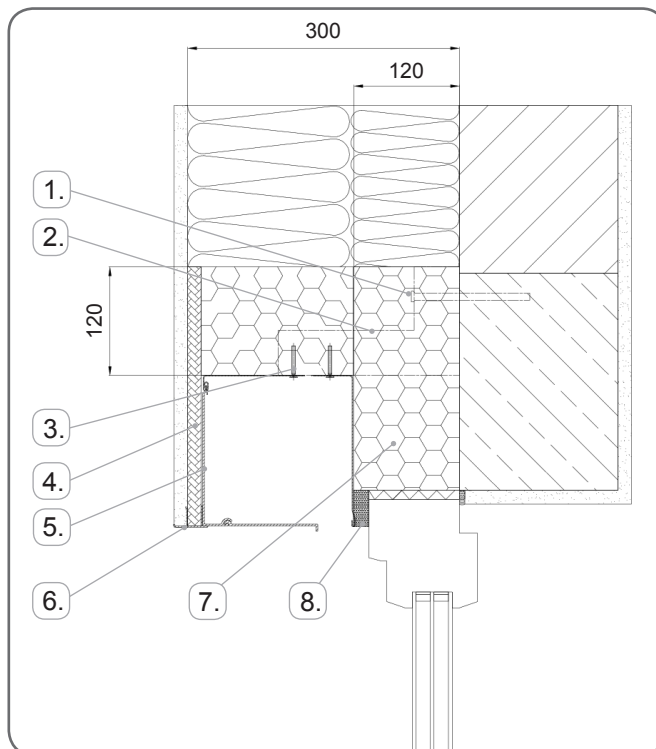
- a) Insulation should be performed in accordance with engineering practices behind and above the roller shutter with a thickness of 120mm, made of PUR board with coefficient of thermal transmittance $\lambda=0.024$ W/mK or of a material having better insulation properties.
- b) Fixing the shutter box to the structural part of the building using polyurethane insulation angle with coefficient of thermal conduction $\lambda=0.086$ W/mK.
- c) Application of plaster foundation made of Heraklith (wood wool $\lambda=0.09$ W/mK) or styrodur XPS (extruded polystyrene, $\lambda=0,033$ W/mK).

Passivehaus Institut requirements:

- a) Application of the window meeting the following requirements $U_w=0.80$ W/(m²K) or $U_g=0.70$ W/(m²K).
- b) Application of roller shutter box with enough space for the curtain enabling installation of the window extending to the floor - this requirement is fulfilled by roller shutter boxes SP 165, SP-E 165. In case of a specific project it is allowed to use accordingly smaller shutter box.

Storage and preparation requirements for plaster foundation NT/XPS:

- a) Before bonding the material should be kept for 48 hours at room temperature.
- b) All surfaces should be protected from the weather and moisture.
- c) The material should not be stored longer than 12 months.
- d) Remove the adhesive back paper immediately prior to bonding, in order to maintain the desired properties of the adhesive.
- e) The total curing time is 48 hours at 20°C.



1. Steel anchor in PVC sleeve
2. PU angle
3. Stainless steel screws
4. Plaster foundation
5. Roller shutter box SP 165, SP-E 165
6. Aluminium bracket
7. Polyurethane (PUR/PIR)
8. Expansion tape

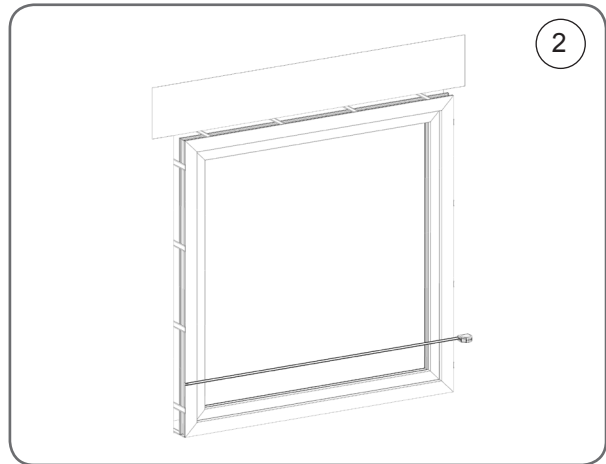
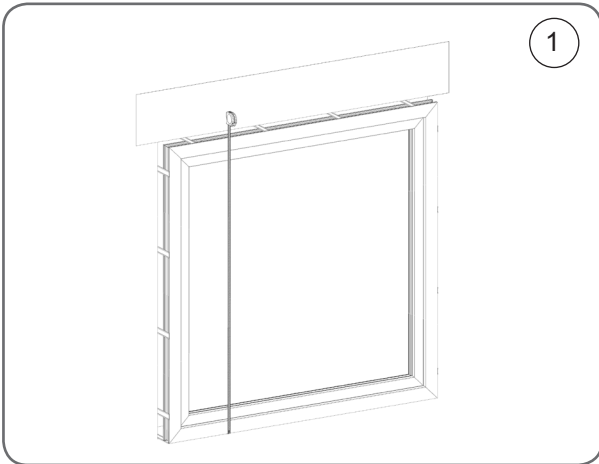


Passivhaus Institut Certificate

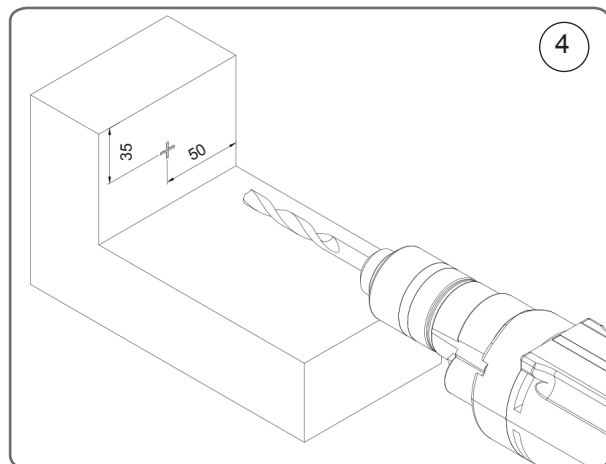
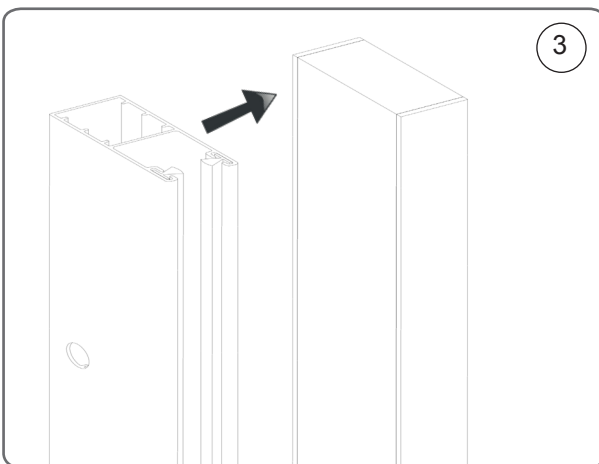
UNDER PLASTER SYSTEM SP 165 and SP-E 165 - INSTALLATION TO THE WALL USING THE ANGLES K/PU

Installation sequence

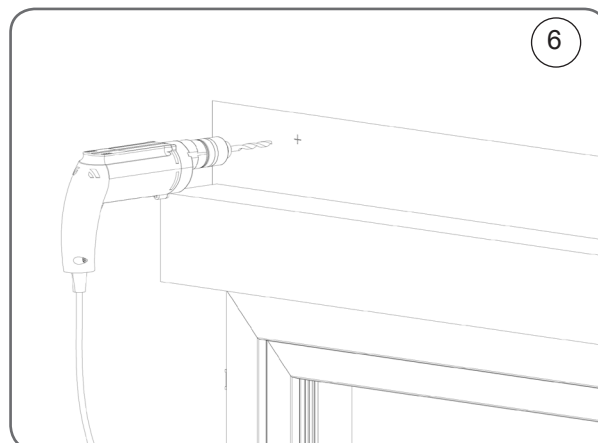
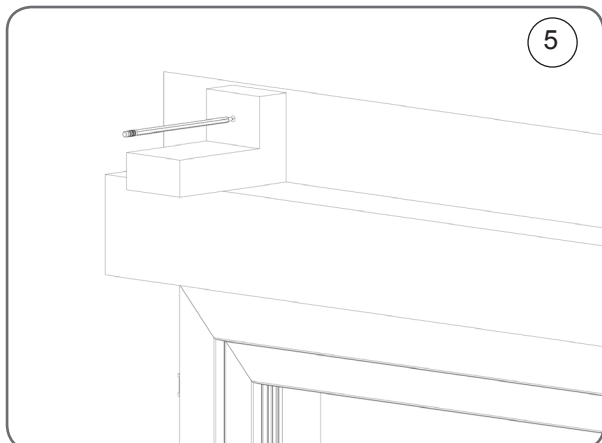
Check the dimensions and horizontal and vertical position of the window [1], [2].



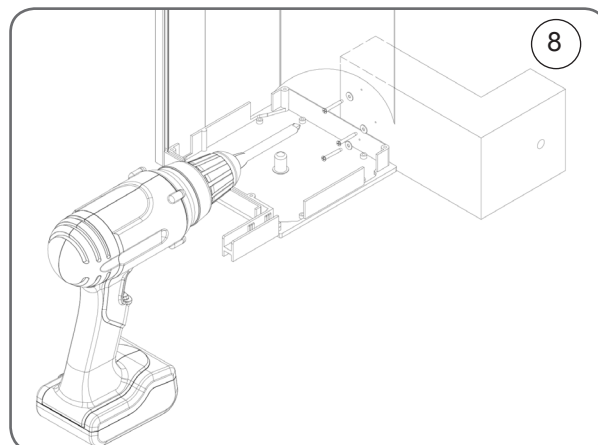
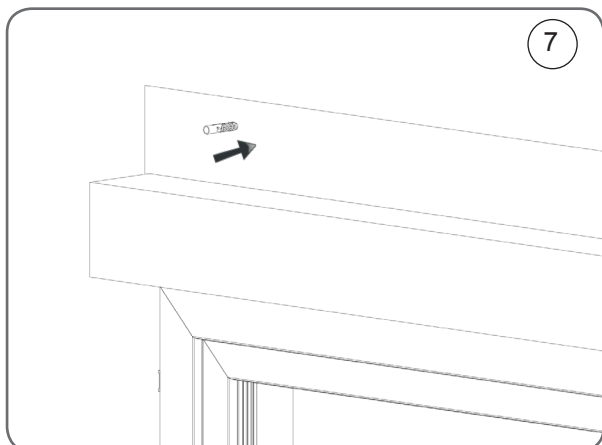
Bond the distance slat for guide channel (LDP-C) to the guide channels [3] using, for example, double-sided adhesive tape. Cut the 10 cm sections of the polyurethane angle (K/PU) then make holes in the middle of the shorter arm for the mounting pins [4].



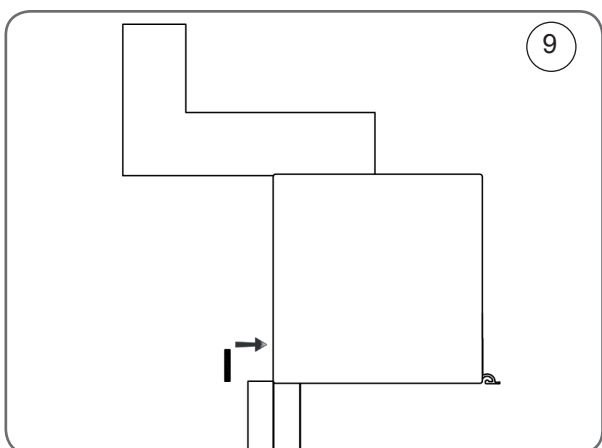
Place the angle to the wall and mark the place for the mounting pin [5], then drill the holes in the marked locations [6]. Insert the plastic rawplugs into drilled holes [7].



Using at least 2 stainless steel self-drilling screws, screw the polyurethane angles K/PU to the end cap for shutter box or to the shutter box as close as possible to the end cap [8].



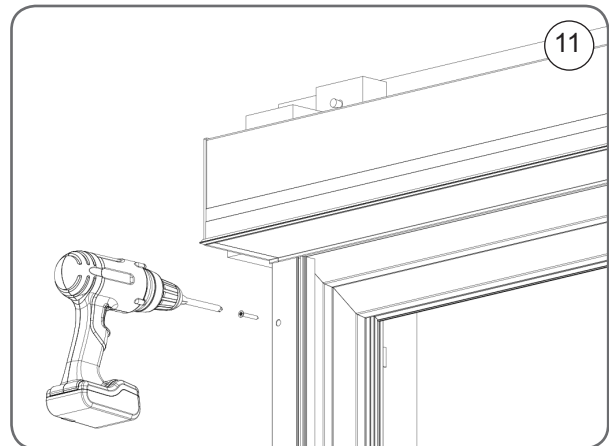
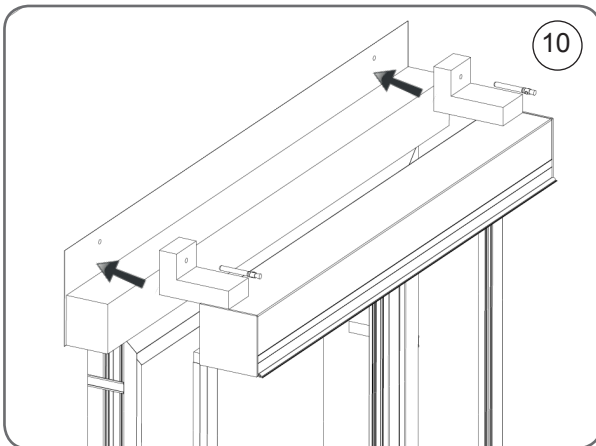
Place the expansion tape carefully in the bottom part of the shutter box [9]. When laying the tape along the window, simultaneously remove the protective cover glue. Insert the guide channels with the distance slat for guide channel (LDP-C) into the end cap pins. Then anchor the angles with the shutter box in previously prepared holes in the wall [10].



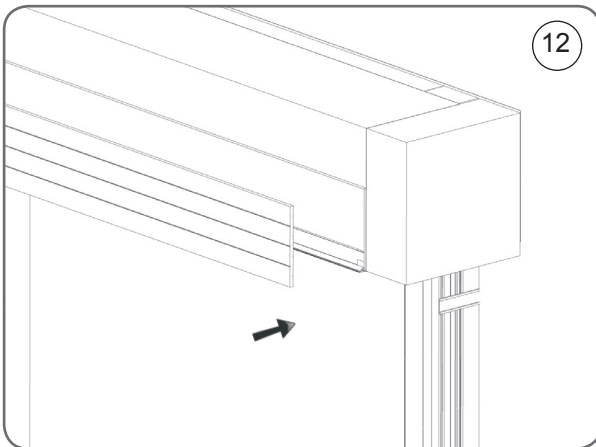
The anchor materials must be set according to the following rules:

- holes in the lintel should correspond to the diameter of the anchor,
- clean the mounting holes of dust and debris,
- push the plugs and set them in drilled holes by hitting them lightly with a hammer,
- observe the minimum permissible embedment depth for the pins and clearance gauge for the adequate materials,
- tighten plugs and anchor materials with a permissible torque.

Fasten the guide channels to the window woodwork in previously drilled holes [11]. Depending on the window frame use screws of adequate length.



Before bonding the plaster foundation NT/XPS, clean and degrease the shutter box surface, then cut the board according to the height and width of the shutter box and board of PUR foam located above the shutter box. Perform the cutting of the panel from the side of the protective foil. To bond the plaster foundation remove the protective foil securing the adhesive surfaces and then apply evenly and press for 15-20 seconds to the surface of the shutter box and board [12].



The plaster foundation NT/XPS is made of extruded polystyrene (XPS styrodur) covered on the one side with self-adhesive coating and on the other side with transverse grooves, which improves the adhesion of the plaster mortar.

NOTE: The plaster foundation NT/XPS is dedicated to thin-layer plaster in system ETICS or BSO. The plaster foundation should be built (plaster) according to the ETICS and BSO technology up to 3 months from the date of the plate exposure to atmospheric conditions (installation of roller shutters at the construction site).

After plastering take off the protective foil of the shutter box, guide channels and other elements. Plug the holes in guide channels.



Headquarters; Production plant in Bielsko-Biała

Warszawska 153, 43-300 Bielsko-Biała, Poland
tel. +48 33 81 95 300, fax +48 33 82 20 512

Production Plant in Opole

ul. Goławicka 3, 45-446 Opole, Poland
tel. +48 77 40 00 000, fax +48 77 40 00 006
e-mail: aluprof@aluprof.eu