



ASSEMBLY MANUAL: ALUMINIUM PERGOLA

1. INTRODUCTION

PLEASE READ THE INSTALLATION INSTRUCTIONS CAREFULLY BEFORE INSTALLING THE PERGOLA CONSTRUCTION. THIS STRUCTURE IS DESIGNED ONLY FOR SUN, RAIN, AND WIND PROTECTION AND CANNOT BE CONSIDERED WATERPROOF. IMPROPER USE OR IMPROPER INSTALLATION COULD HAVE RESULT IN WARRANTY.

The anchor material must be chosen appropriately, given the structure into which the pergola will be anchored. It is necessary to consider many circumstances: texture, insulation, strength, and look of the surface.

2. LIST OF NECESSARY INSTRUMENTS AND TOOLS

- two ladders adjustable according to the height of the pergola, telescopic sliding jack
- spirit level, tape measure
- gola set, wrenches, hex keys, hammer drill
- flat screwdriver, Torx screwdriver T15
- silicone sealing putty transparent suitable for exterior or plumbing putty

3. INSTALLATION INSTRUCTIONS

GROUND INSTALLATION - VARIANT A

A.1 Place the stand feet on the ground according to the proportions of the pergola and based on the previous measurement. Identify one side and orient the location of each leg diagonally in the plane. Then mark the anchor holes. Anchor the stand feet with a suitable anchoring system (threaded rod, chemical anchor). Do not tighten the nuts on the threaded rods. The recommended height of the threaded rods is 30 mm above the anchor plane.

If you want to prepare the anchorage in advance, you can use a template after inserting the location of the pergola - inserted on the last page of the manual in a 1:1 scale.

A.2 Insert the cover profile of the stand and slide the stand A1 onto the foot A1. Make sure that the correct stand is in the right place. If the motor supply cable passes through the stand, pass it through the hole which is designed for that.

If the stand foot is used for water drainage, insert the funnel and any water drainage pipe (not included in the delivery) into the stand and treat the funnel with silicone according to. Fig. D.1.

A.3 Adjust the height of the stand A1 according to the specific floor height (the height of the stand can be adjusted to +/- 2 cm) and tighten 4x countersunk screw M8.

During placing the foot on the stand whis is in the position - 2 cm from the specified height.

A.4 Repeat steps **A.2** and **A.3** for the other stands.

A.5 Perimeter profile A1A3 Insert into the reinstalled A1 stand and A3 stand.

Caution! Do not grasp the perimeter profile only for the gutter part, but hold it by the main supporting profile. It could damage the gutter.

If the pergola is placed under a roof or trusses, it is necessary to take into account that you need at least 380 mm above the upper level of the standing foot.

A.6 Connection of the circumferential profile A1A3 and the stand A1 arrange with the help of pre-installed screws (4x countersunk screw M8 for each stand)

A.7 Connection of the circumferential profile A1A3 and the stand A3 arrange with the help of pre-installed screws (4x countersunk screw M8 for each stand)

A.8 Repeat steps **A.5** to **A.7** for the circumferential profile C1C3 and the stand C1 and the stand C3

A.9 Install the circumferential profile A1C1 by connecting the already installed circumferential profile A1A3 and the circumferential profile

Before installation, treat the side cover of the drain channel with silicone according to pic. D.2. Slide the circumferential profile A1C1 between the stand A1 and the stand C1 so that the pre-installed 6HR screws fit into the prepared grooves. Tighten the pre-installed 6HR screws on both sides of the A1C1 perimeter profile.

A.10 Insert M10x20 half head screws (2x into each corner) into the frame and tighten it up.

A.11 Insert M10x340 screws with 6HR head (1x into each corner) and tighten up.

If the pergola is located under a roof or truss, and there is not enough space above the pergola to insert the screws, do not use the screws. It does not affect the functionality of the pergola.

A.12 Repeat steps in A.9 and in A.10 for the circumferential profile A3C3

A.13 Check the parameters of the diagonals, check the flatness of the frame and the perpendicularity of the stand foot. Adjust them if it is necessary.

A.14 If everything is in order, tighten the nuts in the feet and cover the gap with the cover profile of the stand.

A.15 Insert the individual slats into the corresponding side cases and secure them with a lock. Insert first lamella No. 1 (it is without sealing rubber).

A.16 Connect the motor and hide the cable inside the perimeter profile.

A.17 If the pergola includes LED lighting, connect them to each other with connectors.

A.18 Connect the LED lighting unit with the power supply box with a cable with a Hirschmann terminal.

A.19 Test the function of the slats, the end positions of the slats are set at the factory.

Caution! End stop cannot be edited for opening. The mechanism could collide.

A.20 Screw the end covers onto the perimeter profiles.

GROUND INSTALLATION - VARIANT A – pictures for the installation described above

A.1



A.2



A.3



A.5



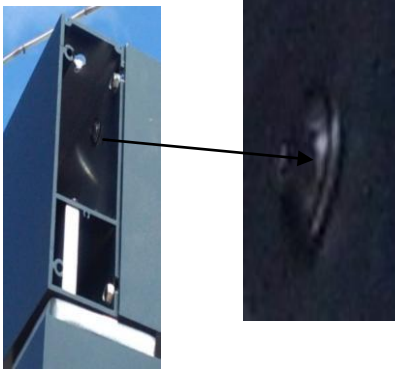
A.6, A.7



A.9



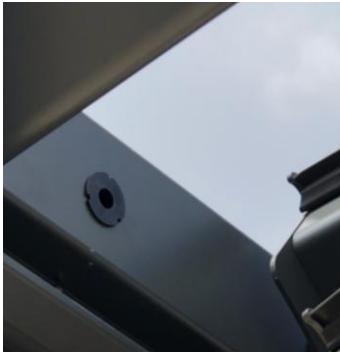
A.10



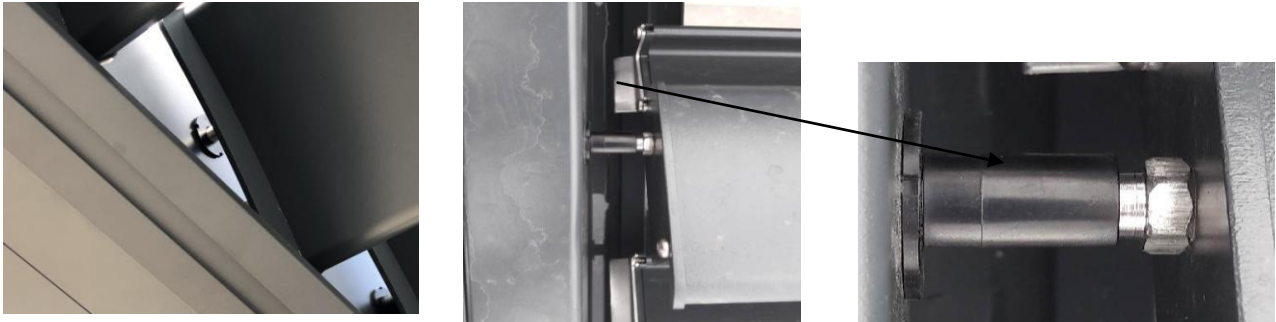
A.11



A.15



A.19



A.20



WALL INSTALLATION - VARIANT B

B.1 On the wall, in places A1 and C1, mark the positions for the installation of the supporting parts of the perimeter profiles based on the measurement. Measure by defining one side and measure the placement of the individual feet in the diagonal in its plane. Then mark the anchoring holes. Pay special attention to alignment during this operation.

B.2 Prepare anchor points for the installation of the A3 stand and the C3 stand.

Then follow points A.1 to A.4

B.3 Insert the circumferential profile A1 A3 into the reinstalled stand A3 and press it to the mounting point in the wall A1. Caution, do not hold the perimeter profile only by the gutter part, but by the main support profile. This could damage the gutter. **Before fitting the drain profile, treat the profiles of the other parts with silicone according to fig. D.3**

B.4 Connect the perimeter profile A1A3 to the wall at A1 using a suitably selected and pre-prepared anchoring system. During this operation, pay special attention to the alignment of the settings.

Then follow points A.8 to A.20

WALL INSTALLATION - VARIANT B - pictures for the activities described above

B.3



B.4



WALL INSTALLATION - VARIANT C

C.1 Mark the position for the installation of the A1A3 perimeter profile on the wall, based on the measurement. Measure by defining one side and measure the placement of the individual feet in the diagonal in its plane. Pay special attention to alignment during this operation

C.2 Remove the gutter from the circumferential profile A1A3.

C.3 Drill holes in the space under the gutter for anchoring to the wall.

C.4 Install the circumferential profile A1A3 using a suitable anchoring system (eg: M10 threaded rod, chemical anchor).

C.5 Screw the gutter back onto the circumferential profile A1A3.

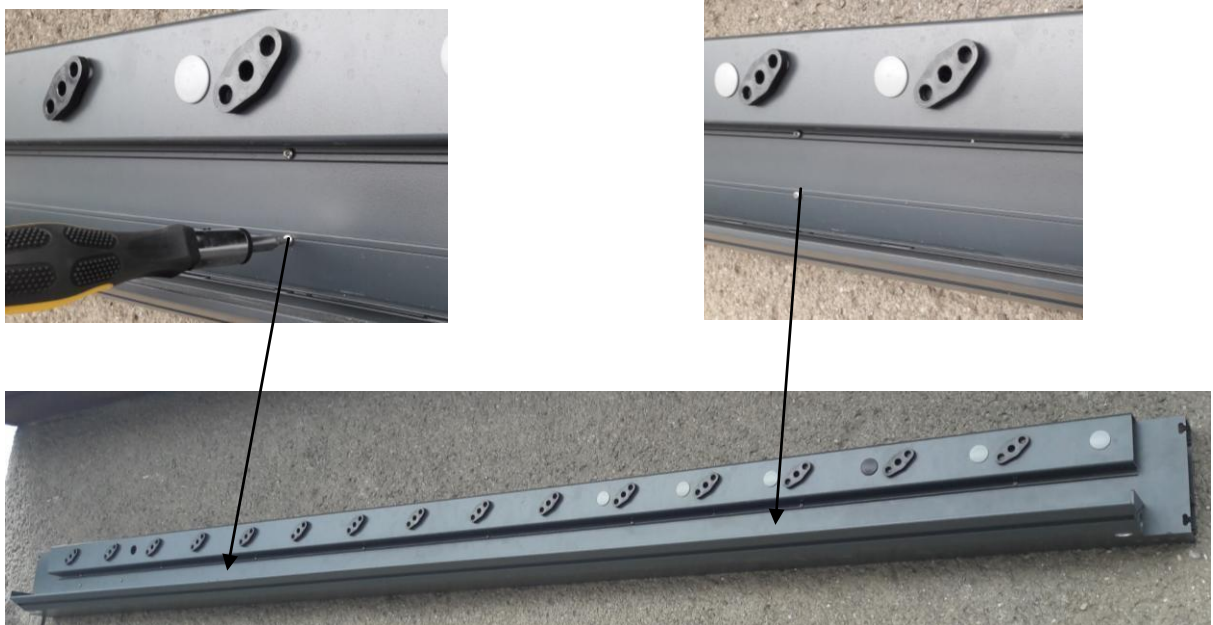
Then follow points **A.1** to **A.20**

WALL INSTALLATION - VARIANT C - pictures for the activities described above

C.1, C.3, C.4



C.5

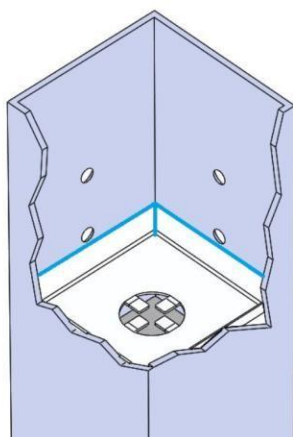




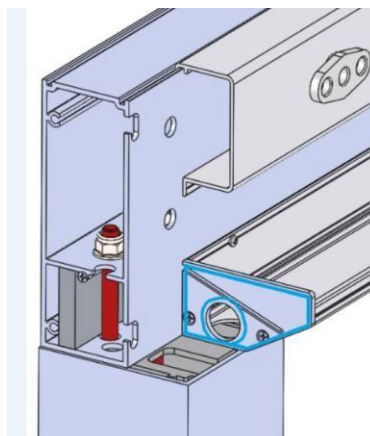
PARTS OF THE CONSTRUCTION THAT NEEDS TO BE TREATED WITH SILICONE

USE TRANSPARENT SILICONE SEALANT, SUITABLE FOR EXTERIOR

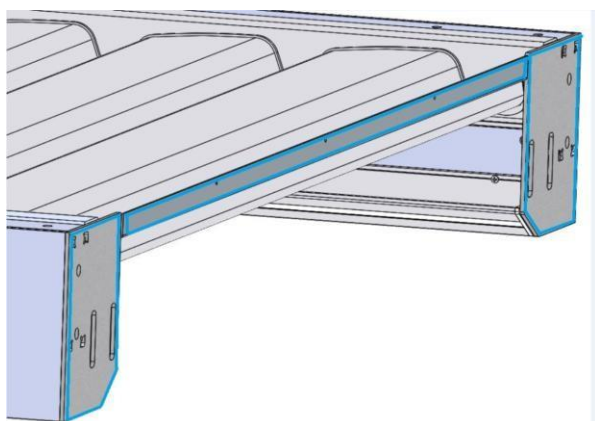
D.1



D.2



D.3



ELECTRICAL INSTALLATION

Pergolas are controlled by one to 3 motors, individual sections can be controlled separately or together

The central power supply box is located in the profile together with the motors and provides a 220V power supply for both motors and LED lighting, the box can be removed if necessary (for pairing motors). Two cables with Hirschmann terminal protrude from the box, 1. pc for connecting the LED power supply unit and 2. pc for connecting the pergola to the input power supply



The Somfy io motor is used as standard, the Somfy Situo 5 Variation io controller

Pergolas can be equipped with lighting with LED strips DC24V, warm white, CRI 90+. LED strips are integrated from below in the drain channel, the strips are located on both longitudinal sides of the pergola.

The power LED unit is located in the cross-section space. The unit is powered from the central box using a Hirschmann terminal.

The LED lighting unit contains a 220 / 24V transformer, LED receiver io, junction box.

The unit can be removed from the transverse profile.



The LED strips are powered by cable equipped with screw connectors enable quick connection

The complete power supply of all electrical parts of the pergola is ensured by one power cable terminated with a Hirschmann terminal. Below is the connection of the Hirschmann ending.

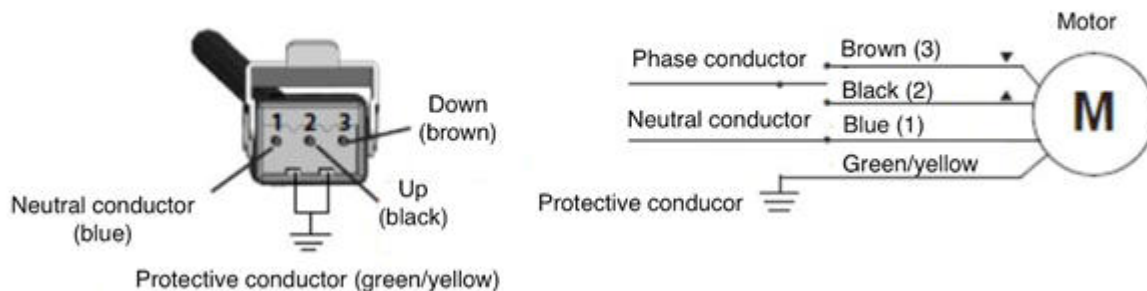
Multi-engine pergolas

The control is performed with the Situo 5 Variation io controller

If the pergola is delivered with a controller, the individual motors are paired with the controller, including the lighting, and the extreme positions of the motors are set (starting and ending position of the slats)

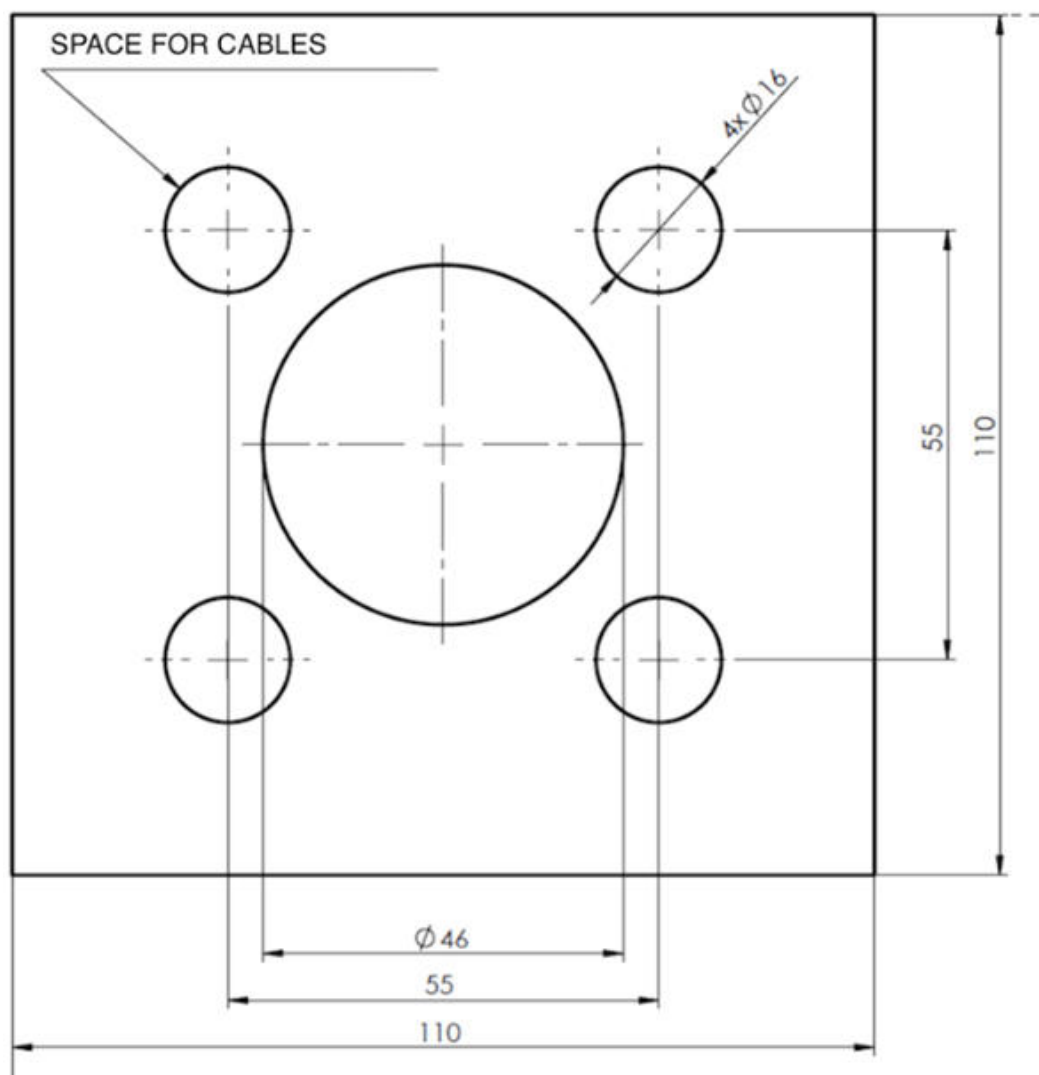
If the controller is not included in the delivery, only the extreme positions of the motors are set. In this case, the motors must be paired with the controller before installation. It is necessary to remove the central power supply box from the upper profile (picture below) , open it, and with the Wago clamps leave only one motor energized and pair it (only one motor that can be paired can be connected to the voltage).

Motor connection





Template for pergola anchoring:



The cable entry hole is always oriented to the outside of the pergola.

View of the foot from the inside of the pergola

