

INSTALLATION OF ALUMINIUM STRUCTURE

Aluminium terrace base structure system of Onewood is developed for simple and fast assembly of terraces. Special bolt connections are used for installing the base structure as well as terrace boards. This enables later reconstruction and reuse of the entire system.

Aluminium base beams of the system have two sizes: 40x40x4000 mm and 40x75x4000 mm. They can also be combined, if necessary.



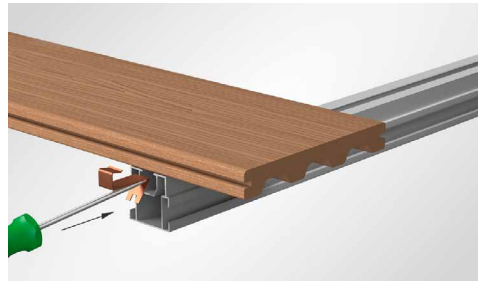
304309 Aluminium base beam
40x40x4000 ALU



304310 Aluminium base beam
40x75x4000 ALU

INSTALLATION OF THE FIRST TERRACE BOARD

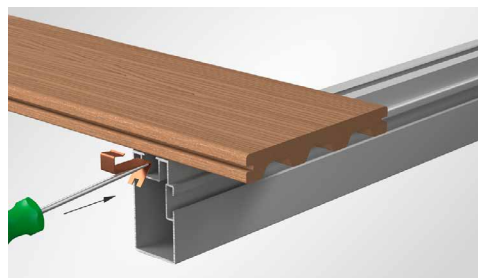
When the base beams are installed, install the first terrace board with starting clamp. For more comfortable installation we recommend to use a screwdriver. Installation of the starting clamp is similar for both base beams.



1 Installation of a starting clamp on 40x40 mm base beam



304301 Starting clamp 15x34x7
ALU (20 pcs in package)



2 Installation of a starting clamp on 40x75 mm base beam



INSTALLATION OF TERRACE BOARD

When the first terrace board is installed, install the subsequent boards with fixing clamps. Place the fixing clamp in the groove of the aluminium beam, so that longer side of the nut is located in longitudinal direction of the aluminium beam. During fixing, the fixing clamp stays in correct position due to its lateral supports. Slide the fixing clamp along the aluminium beam, until it enters the groove of the terrace board, and tighten the bolt of the fixing clamp. Repeat the process with all subsequent terrace boards. Use cordless drill and a special drill bit for tightening the fixing clamp. To prevent overtightening the bolt, use clutch mode with the cordless drill.



304302 Fixing clamp 20x40
ALU (50 pcs in package)



1 Installation of a fixing clamp on 40x40 mm
base beam



2 Installation of a fixing clamp on 40x75 mm
base beam

EXTENSION OF ALUMINIUM BEAMS

For extending aluminium beams, use the extension coupling. Extension couplings are equipped with stainless steel bolts and nuts. Place the beam on an installation plate and fix it with supplied stainless steel bolts and nuts.



304303 Extension coupling for beam 40x40 ALU with two bolts and nuts



304304 Extension coupling for beam 40x75 ALU with four bolts and nuts

During installation account shall be taken of the fact that the length of aluminium base beams changes approximately 0.23 mm in case of 10 °C temperature difference. In case of larger surfaces, calculate expansion and contraction carefully before installation. When extending aluminium beams, at least 10 mm gap shall be left between beams, walls or other objects.



Extension of 40x40 mm aluminium beam with an extension coupling



Extension of 40x75 mm aluminium beam with an extension coupling

FIXING ALUMINIUM BEAMS ON CONCRETE PLATE OR WOODEN BEAMS

MULTI FIXING ANGLE

Base beams can be fixed on concrete plate (1) as well as wooden beams (2) with multi fixing angle. Fix the multi fixing angle to the aluminium beam with supplied stainless steel bolt and nut. For fixing the fixing angle to concrete and wood, use suitable fixing details depending on the situation.



304306 Multi fixing angle for beams ALU



FIXING ANGLE WITH SUPPORT FOR BEAM 40x75

Base beam 40x75 can be fixed to wooden beams also with a fixing angle, which has a support supporting the base beam. Fix the fixing angle to the aluminium beam with supplied stainless steel bolt and nut. For fixing the fixing angle to wood, use suitable fixing details depending on the situation.



304305 Fixing angle with support for beam 40x75 ALU with bolt and nut



CROSSING OF BASE BEAMS

CROSSING CLAMP FOR BASE BEAMS 40x75

For mutual crossing of base beams, the most comfortable method is to use a crossing clamp equipped with stainless steel bolt and nut.



304308 Crossing clamp for beams ALU with bolt



Connecting 40x40 and 40x40 aluminium beams with a crossing clamp



Connecting 40x40 and 40x75 aluminium beams with a crossing clamp

RIGHT ANGLE FIXTURE FOR BASE BEAMS 40x40 and 40x75

In case of transverse crossing of base beams it is recommended to use a right angle fixture. Connect the right angle fixture to the base beams with supplied stainless steel bolts and nuts.



304307 right angle fixture for beam ALU with four bolts and nut



Connecting 40x40 and 40x40 aluminium beams with right angle fixture



Connecting 40x40 and 40x75 aluminium beams with right angle fixture

INSTALLATION ON RUBBER BASE MATS

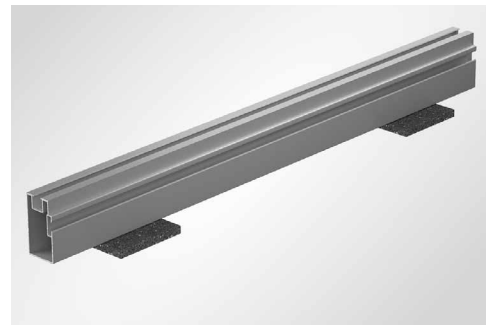
In a situation, where base beams can be installed directly on the substrate, it is recommended to use rubber mats 96x96x10 mm under the aluminium beams in order to ensure good drainage and ventilation. Rubber mat also helps to minimize impact and stepping noise. Lay a rubber mat after every 500 mm in case of 40x40 base beams and after every 1000 mm in case of 40x75 base beams, in longitudinal direction under the aluminium beams.



304212 Rubber base mat 10x96x96 mm



Aluminium beam 40x40 ALU on rubber base mats



Aluminium beam 40x75 ALU on rubber base mats

INSTALLATION OF BASE BEAMS ON ADJUSTABLE TERRACE FEET

it is especially convenient to install aluminium base structure on adjustable terrace feet. Adjustable feet enable to achieve suitable height and inclination of base beams by turning the gearwheel at the side of the terrace feet. To do this, use a cordless drill with suitable drill bit. If the adjusted height is insufficient, use elevations of terrace feet. Each elevation provides 40 mm additional height. We also recommend to use 96x96x10 mm rubber mats under the terrace feet.



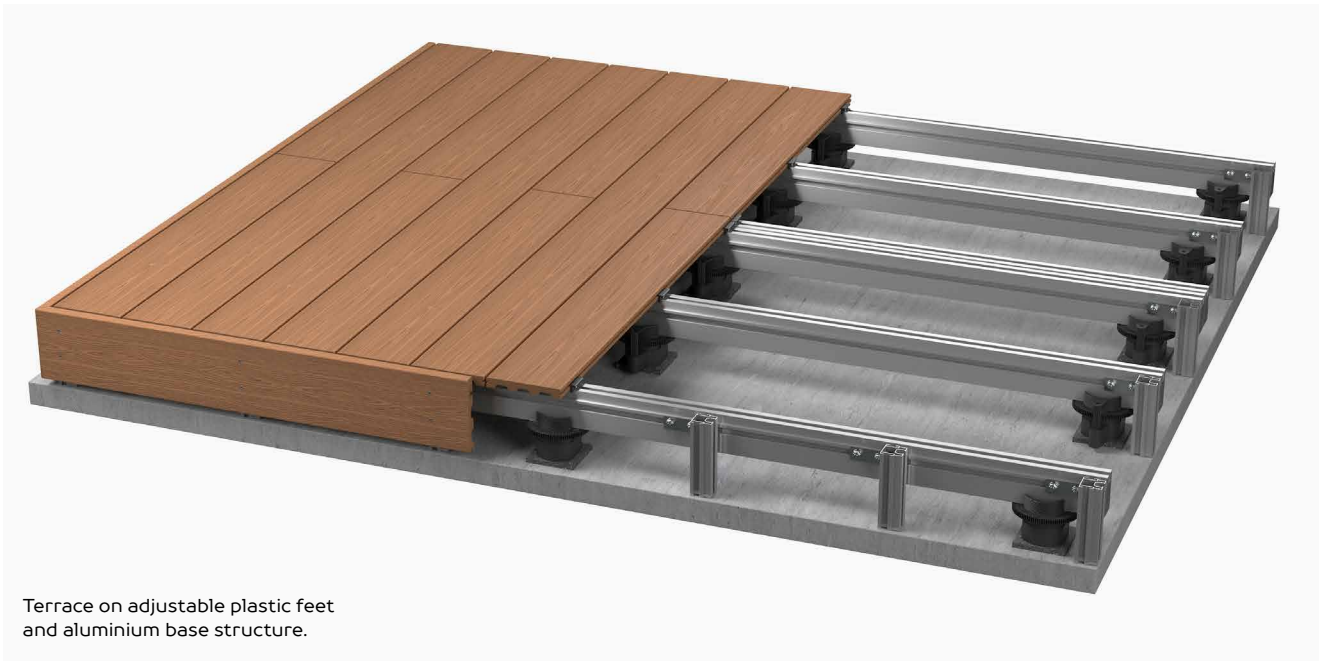
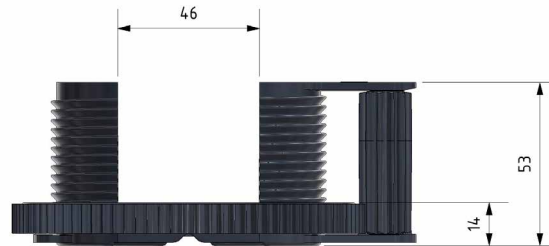
304311 Adjustable terrace foot with support plate OW (up to 50 mm)



304312 Elevation of terrace foot 40 mm OW



Adjustable terrace foot with elevation and support plate



Terrace on adjustable plastic feet and aluminium base structure.

SAFETY, TOOLS AND PROTECTION EQUIPMENT

When processing materials, always use suitable protection equipment; gloves, safety goggles and earmuffs. Follow the safety regulations of the manufacturers of power tools.

For cutting aluminium beams, use a hand saw, angle grinder or buck saw. Always use a suitable saw blade intended for cutting aluminium. For tightening the fixing clamps, use a hand tool or cordless drill.

NB! Preferably use clutch mode for tightening the clamps; finger-tight is enough.

Fix the clamps with bolts and nuts according to the instructions provided in the package.