Jouplast®

DIRECTIONS FOR USE

USING PROFILDECK® TO CREATE A PAVED TERRACE

ALUMINIUM JOIST - HEIGHT 27 MM

TMP CONVERT

10 WARRANTY YEARS

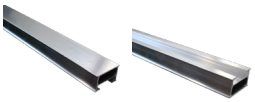
www.jouplast.com

100% recycled

MADE IN FRANCE · FABRIQUÉ EN FRANCE ·

PROFILDECK® RANGE

Aluminium joist / height 27 mm



One side for installing terrace paving and one side for installing wooden and composite decking.
To be used with paving and decking riser pedestals with the exception of the 8/20 mm paving riser pedestal.

Profildeck® screw

Self-drilling screw. Secures brackets, adapter directly into the joist. Dimensions : 4.8 x 19 mm.

Slab spacer

Creates a 3 mm drainage channel between paving elements. Tabs can be split easily.

Adapter

Secures the Profildeck® joist to the «Essential» and «Elevo» riser head and clips onto all Jouplast® riser heads. (Except paving riser HD 8/20). Use the adapter to link to 2 joists together with the 4 fixing points.
Raises the height of the riser by 5 mm.

Rubber tape

Fixes the paving slabs to the Profildeck® joist, as weel as reduces noise and resonance when walking on the terrace.
To be positioned on the support rails of the slab side joist.

Horizontal junction angle bracket

For reinforcing 90° joints.
Pre-drilled for easy screwing.

MINIMAL TOOLS REQUIRED :

› A tape measure.
› A level.
› A screwdriver.
› A mitre saw or chop saw with a multicut or similar blade. Alternatively, an angle grinder with an aluminium or all-purpose disc (minimum diameter 125 mm) or a hacksaw.
› A metal file for deburring cut ends.
› Chalk or line marking spray.

Safety first ! Use protective glasses and safety gloves.

VIDEO
Click on the QR CODE or scan it, you will be redirected to the «Product» video

PROFILDECK®

RECOMMENDATIONS

› FOR PAVING INSTALLATION

DIRECTION OF LAYING

From an aesthetic perspective, it is better to lay cut slabs against walls (whole slabs on the outside).

PLEASE NOTE

Always follow paving manufacturer recommendations to ensure the suitability of paving products for use with riser pedestals and the number of risers per m^2 to use. Qualification of compulsory "SELF-SUPPORTING" slabs, of class T7, T11 according to standard EN 1339:2004-02.

BEFORE STARTING :

Before starting work, it's important - essential even - to prepare a joint layout plan* clearly showing:

› the cuts.
› the spacing between joist centrelines.
› the quantity of accessories required : adapters, riser pedestal, etc...
› the levels.
› the joists connection joints. We do not recommend the use of aluminium joist lengths less than 500 mm. If, when you reach the end of the terrace, the length of aluminium joist is less than 500 mm, we recommend cutting the previous length of aluminium joist to 500 mm, so that the run to the end of the terrace can be finished with a longer section. The shorter cut section can then be used in the next run of aluminium joist.

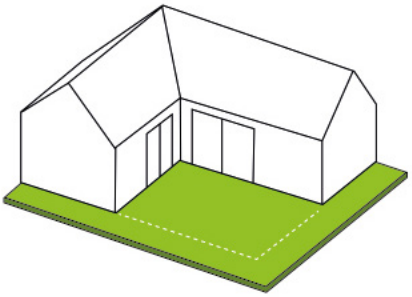
Also check that the height beneath the paved surface is not less than 5.5 cm at any point. (Riser pedestal (mini. 20 mm) + aluminium joist + adapter + rubber tape = 5,5 cm).
For a 20 mm ceramic slabs, the total height of the paved terrace is 7,5 cm.

** Joint layout plan: the plan to follow when laying your paving.*

1 PREPARING THE TERRACE INSTALLATION AREA

1.1. MARK OUT THE TERRACE INSTALLATION AREA

› Mark out the location of the future terrace on the ground.

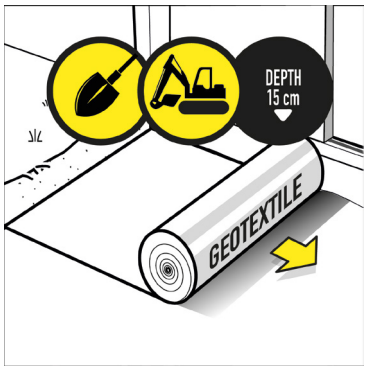


Prepare the ground in one of two ways:

› Make sure the area is clean and the ground is stable.

On uneven ground :

› Remove about 15 cm of topsoil.
› Lay a geotextile membrane.
› Lay a base layer of 0/31.5 grade aggregate.
› Compact with a vibrating plate compactor (wacker).

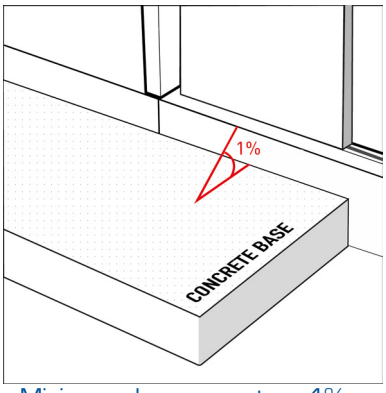


N.B.:
› Depending on the nature of the soil, a draining foundation layer can be laid upstream by depositing a layer of 30/60 or 40/80 crushed stone.
› If the resulting surface is still uneven, we recommend laying a bed of quarry sand or 0/4 crushed sand. This will made it easier to install low riser pedestals.
› We recommend using the vibrating plate compactor between each layer.

On a concrete support :

› Remove any debris, stones, etc. that could make it more difficult to position and stabilise the riser pedestals.
› Check that the levels are correct according to the layout plan and that there is at least 5.5 cm of clear space below the paving at the lowest point.
N.B.:
› Riser pedestal (mini. 20 mm) + aluminium joist + adapter + rubber tape = 5.5 cm.

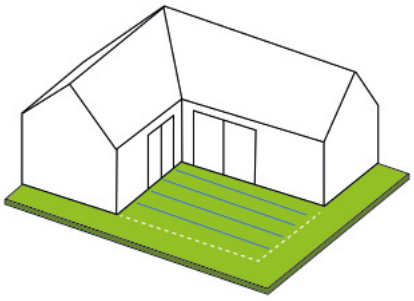
For a 20 mm ceramic slabs, the total height of the paved terrace is 7,5 cm.



Minimum slope percentage 1%.

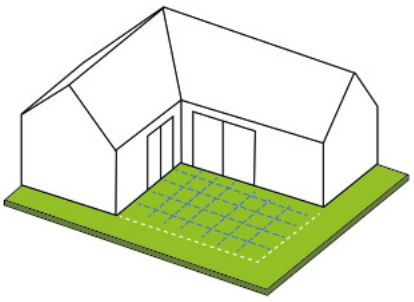
1.2. MARK OUT THE POSITION OF THE JOISTS

› Use a chalk line to clearly mark the spacing between joist centrelines* shown on the layout plan.
› The spacing between joist centrelines is dictated by the size of the paving tile and/or its manufacturer's recommendations.



1.3. MARK OUT THE RISER PEDESTAL POSITION ON THE GROUND

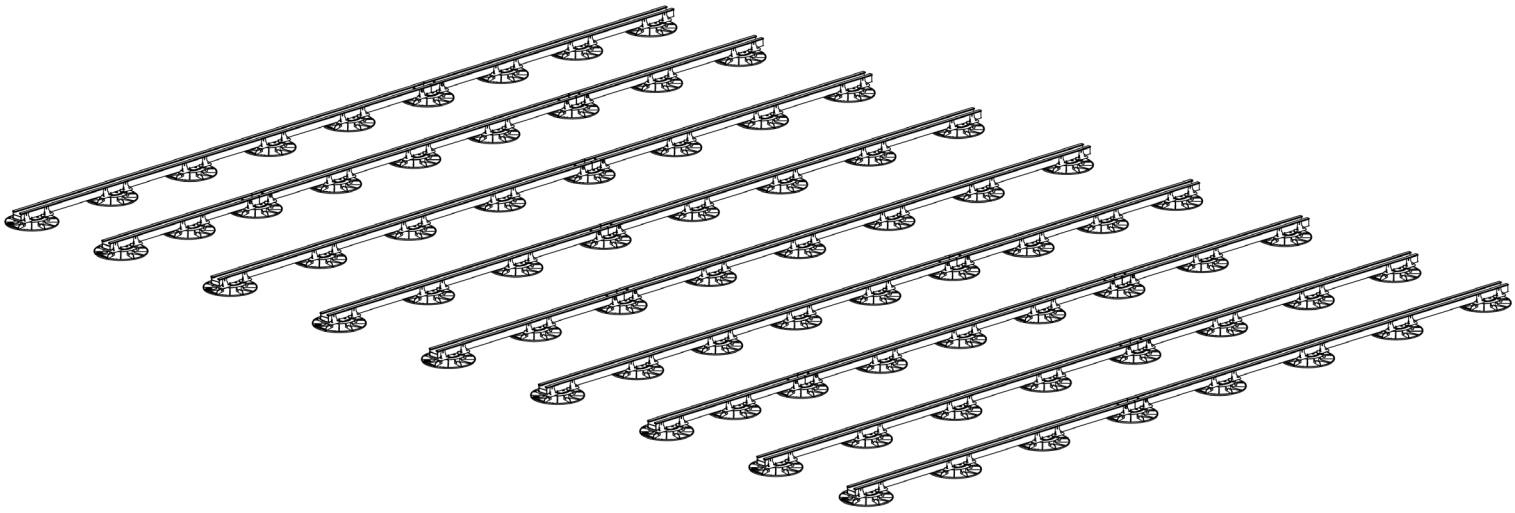
› Use a chalk line to clearly mark the position of each line of riser pedestals at right angles to the recommended joist centreline spacing.
› The recommended spacing distance for riser pedestals is 48 cm.
(i.e. 6 riser pedestal per joist, including the ends.)



** Spacing between joist centrelines: the distance between the centrelines of two joists.*

2 ASSEMBLE THE STRUCTURE

OPTION 1 - SIMPLE STRUCTURE



2.1. POSITION THE PROFILDECK® ALUMINIUM JOISTS AND RISER PEDESTALS

› Choose your starting point from your layout plan.

› Place the first Profildeck® joist in the location shown on the plan.

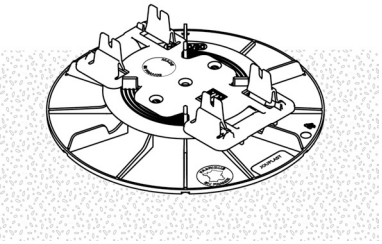
› Clip the adapters onto the riser pedestals.

› Clip the joist to the riser pedestal at each end by pushing the joist until it clicks into place then set the level using the nut.

› Then clip the joist into the intermediate riser pedestals and adjust the height to your desired level.

› Maintain the centreline spacing between riser pedestals as recommended in § 1.3.

› Set the levels and position string lines, stakes or other markers using the first Profildeck® joist installed as your reference, and repeat the operation for all other joists.



N.B.: remember to take account of features like inspection covers, junction boxes, skimmer inlets, door thresholds, etc.

2.2. APPLY THE SELF-ADHESIVE RUBBER TAPE

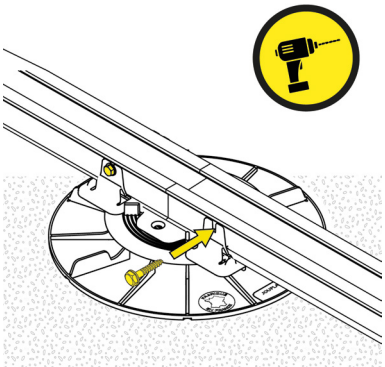
› As you progress, and ensuring that the joist is clean and dry, apply the self-adhesive rubber tape to the face on which the paving will be laid.

2.3. JOINING ALUMINIUM JOISTS

› Position a riser pedestal fitted with an adapter beneath each joint.

› Screw the adapter to the joist at all 4 fixing points using self-drilling Profildeck® screws. We recommend leaving a gap of 2 mm between joists to allow for expansion.

› Repeat for each joist joint.

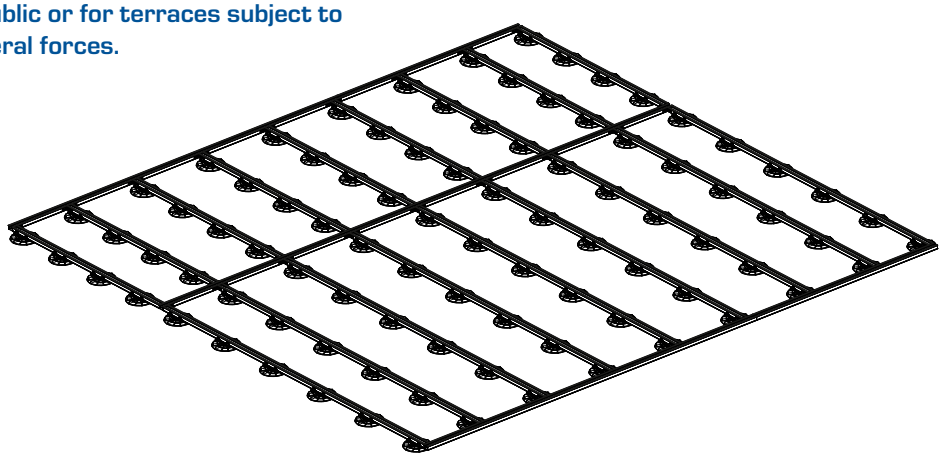


N.B.: the torque rating for our structural screws is 2.5 Nm ±0.5. As a guide, a torque rating of 2.5 Nm normally corresponds to position 8 on the adjuster of a 20-position 18-volt drill/driver.*

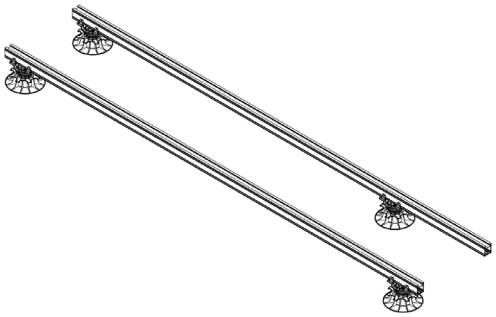
2 ASSEMBLE THE STRUCTURE

OPTION 2 - REINFORCED STRUCTURE

This option is recommended for projects intended for use by the general public or for terraces subject to high levels of lateral forces.



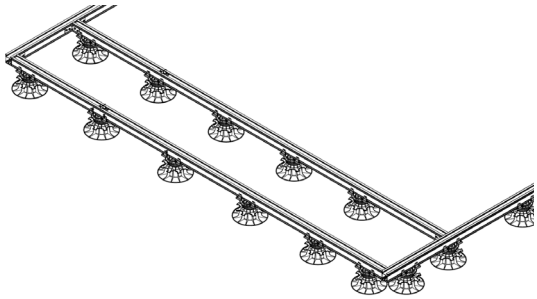
2.1. POSITION THE PROFILDECK® ALUMINIUM JOISTS AND RISER PEDESTALS



› Choose your starting point from your layout plan.
› Place the Profildeck® joist in the location shown on the plan.
› Clip the adapters onto the riser pedestals.
› Clip the joist to the riser pedestal at each end by pushing the joist until it clicks into place - then set the level using the hand adjuster.
› Position the second joist in the same way, respecting the centreline spacing distance shown on the layout plan, and continue until your structure looks like the one in the diagram.

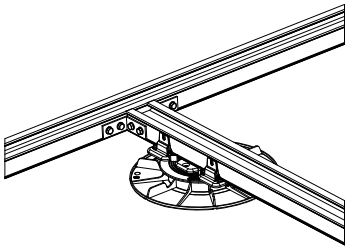
N.B.: remember to take account of features like inspection covers, junction boxes, skimmer inlets, door thresholds, etc.

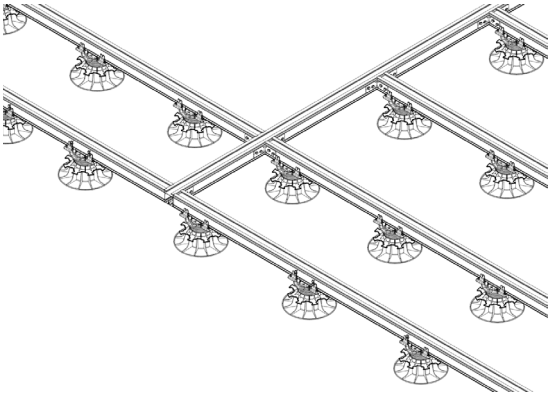
2.2. ATTACH THE REINFORCEMENTS



› To reinforce the structure, we recommend installing 1 reinforcement with the horizontal bracket every 2.40 metres.
When attaching the reinforcement, we recommend leaving an expansion gap of 2 mm between joists.

N.B.: the torque rating for our Profildeck® screws is 2.5 Nm ±0.5. As a guide, a torque rating of 2.5 Nm normally corresponds to position 8 on the adjuster of a 20-position 18-volt drill/driver.



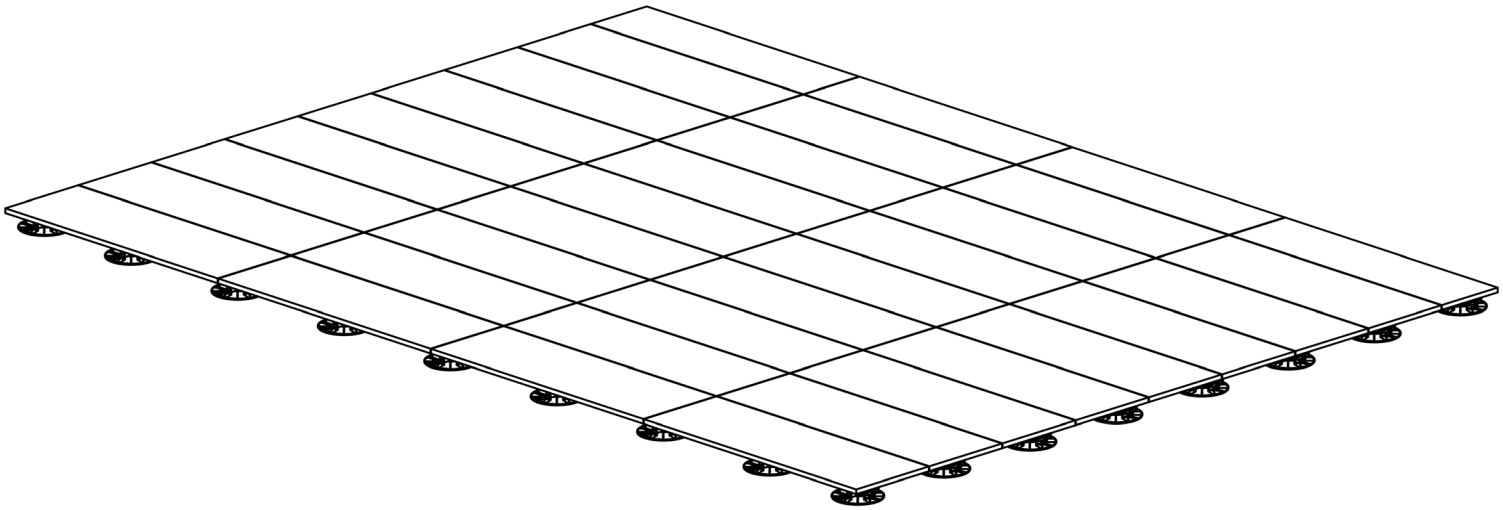


› Then clip the joist into the intermediate riser pedestals and adjust the height to your desired level.
› Repeat the process with the remaining joists.

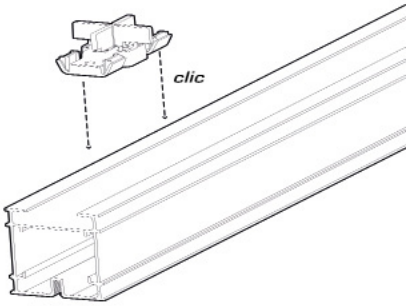
2.3 APPLY THE SELF-ADHESIVE RUBBER TAPE

› As you progress, and ensuring that the joist is clean and dry, apply the self-adhesive rubber tape to the face on which the paving will be laid.

3 LAY THE PAVING



3.1. USE THE SPACER

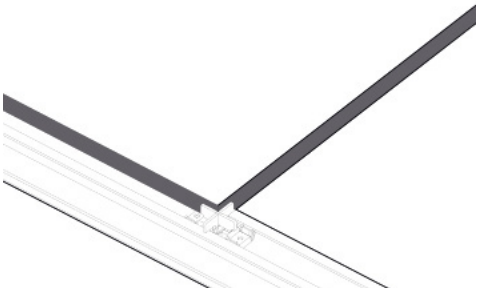


› Lay the paving, starting at the corner of the layout plan.

› As you progress, click the spacers into the central rail of the aluminium joist.

› If you are laying your paving in a staggered pattern, break off any tabs that are not required.

› Readjust the centreline spacing distance and level as you progress.

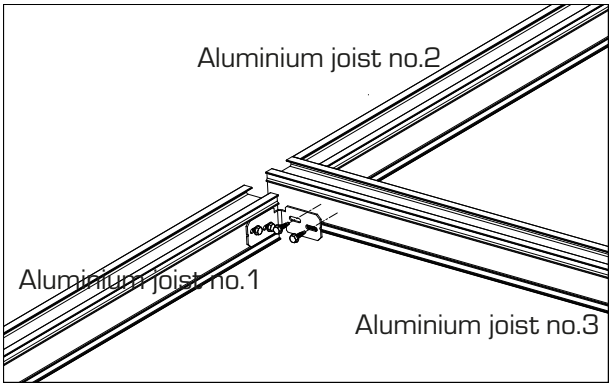


4 SPECIAL APPLICATIONS

BUTT JOINTING OF ALUMINIUM JOISTS

If it is not possible to join 2 joists using an adapter, the joint can be made using horizontal brackets. e.g.: against a wall (see diagram).

We recommend leaving a gap of 2 mm between joists to allow for expansion.



Special application : Butt jointing of joists with horizontal brackets

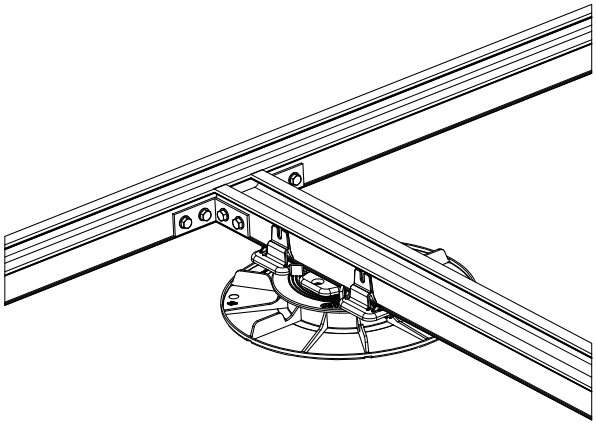
USING HORIZONTAL BRACKET

› To connect 2 joists at 90° to each other.
› To attach braces* (for reinforced structures).
› To create L-shaped terraces.
› To create U-shaped terraces.

› Locate the horizontal bracket between the outer rails of joist no. 1.
› Use 2 Profildeck® screws to attach the horizontal bracket to the joist through the slotted holes, but do not tighten at this stage.
› Locate joist no. 2 against the horizontal bracket and secure using 2 Profildeck® screws.
› Adjust the position of the joists and tighten all 4 structural screws.

We recommend leaving a gap of 2 mm between joists to allow for expansion.

Tighten Profildeck® screws to a torque rating of 2.5 Nm. As a guide, set the adjuster of a 20-position 18-volt drill/driver to position 8.



Horizontal bracket use