MALPESA

IRIS SYSTEM

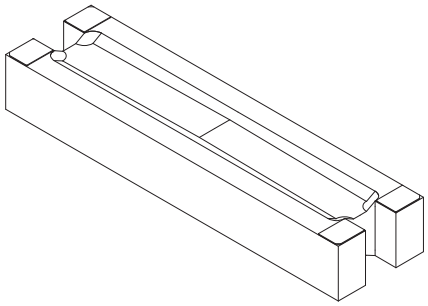
Assembly procedure

CONFINED LATTICEWORK

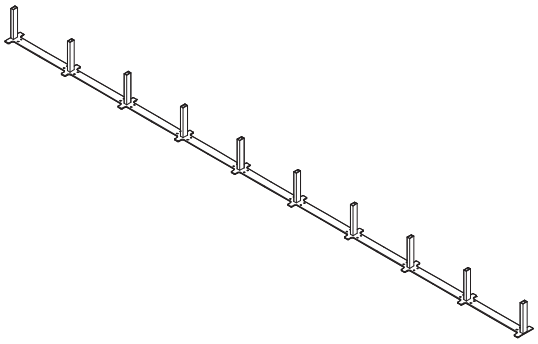
April 2025

Material

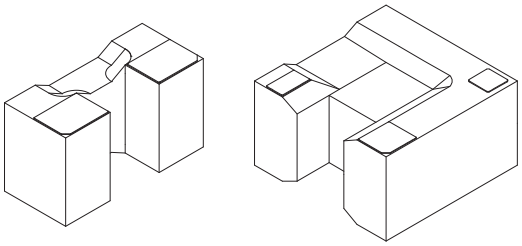
Standard brick 36x9x5 cm



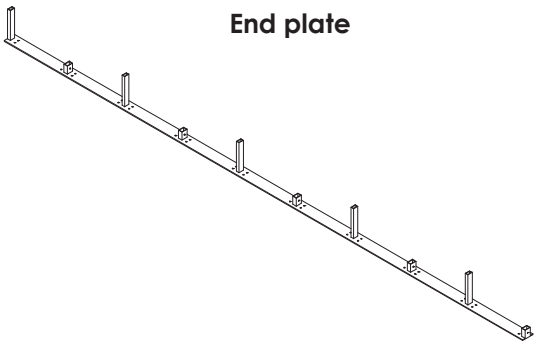
Starter plate



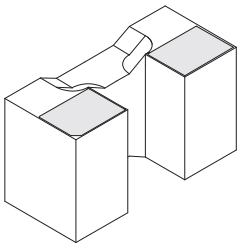
Side end pieces



End plate



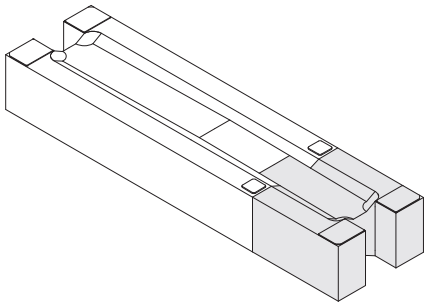
Side end pieces (with cut down)



Sliding profile



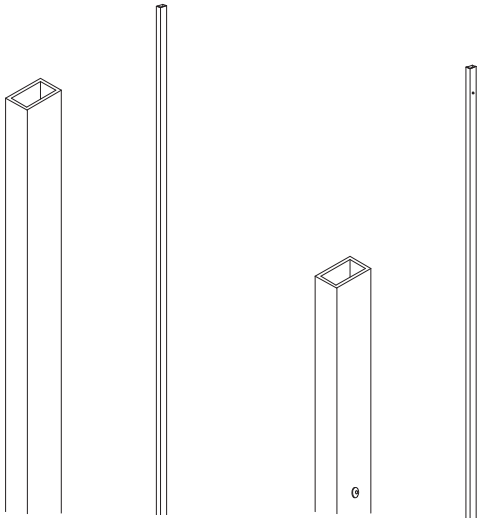
Adjustment brick according to stake out with leveling spacer



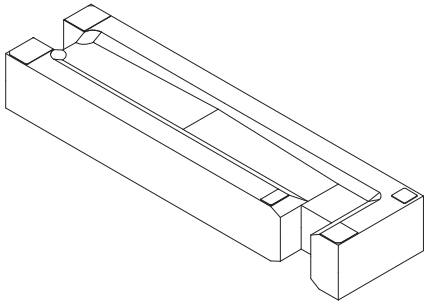
Vertical aluminium profile 30x20x2

Long

Short with rivet

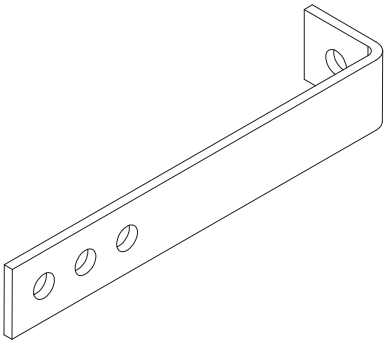


Corner brick

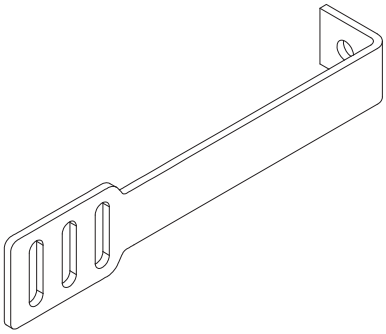


Material

Stainless steel fixed bracket

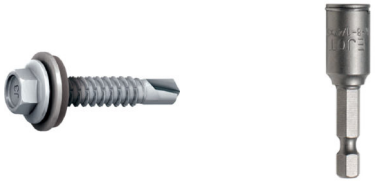


Stainless steel sliding bracket

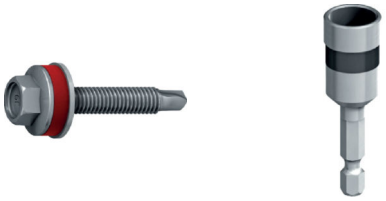


Fixing screws + Socket

· Ffixed bracket to aluminium profile

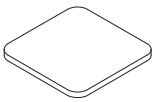


Sliding bracket to Aluminium profile
· Retention clips
· U-brackets between profiles

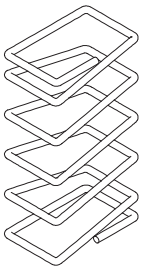


Additional material

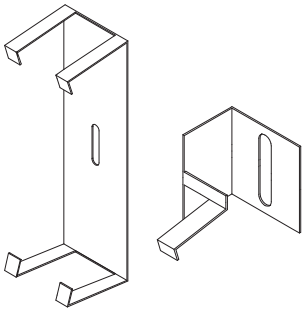
Leveling spacer



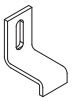
Thermal expansion spring



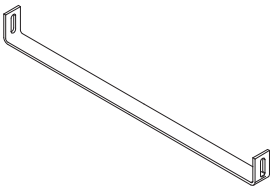
Retaining clips for side end pieces



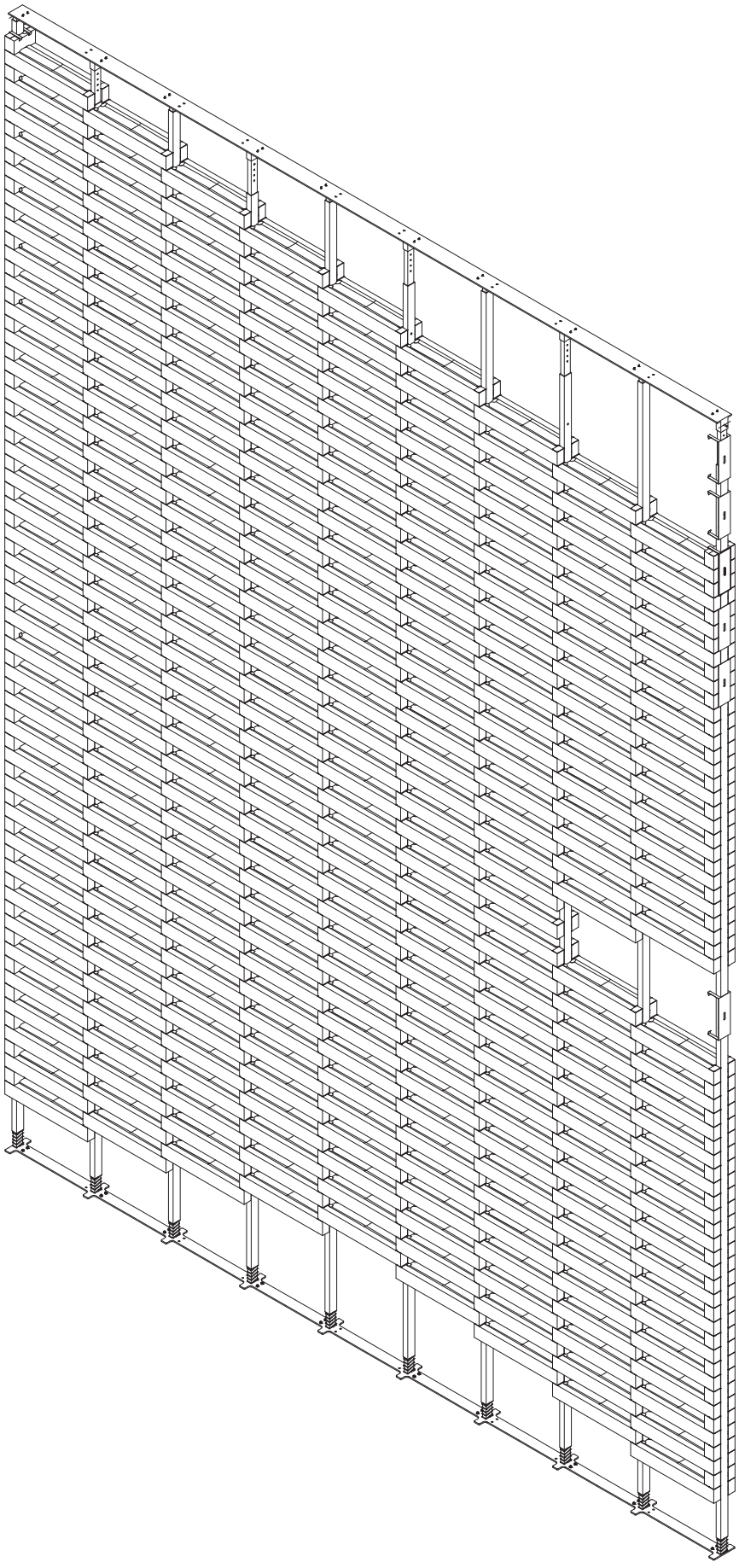
Corner piece retaining clip



U-brackets between corner profiles

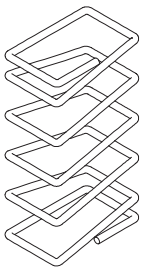


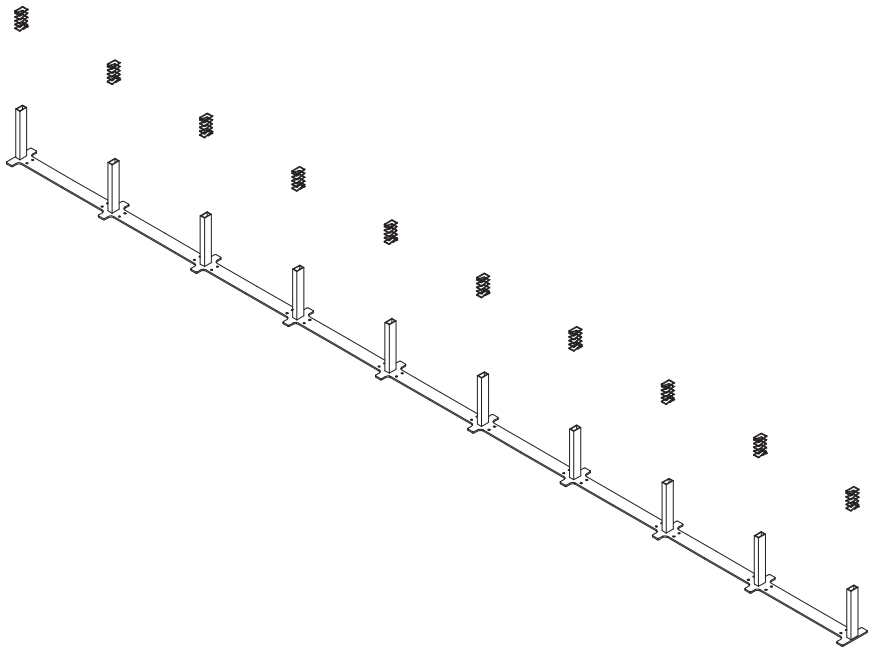
Overview



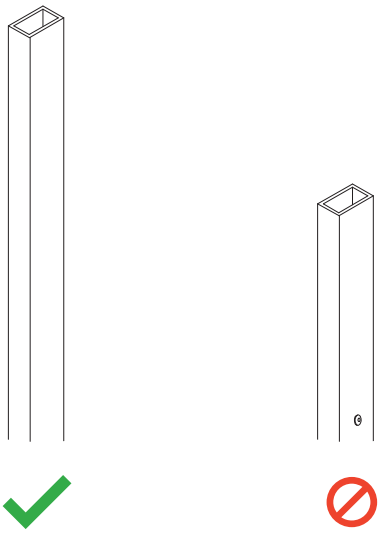
Phase 1: Structure assembly

1. Fit the thermal expansion springsc (rectangular springs) on the male profiles of the starter plate.

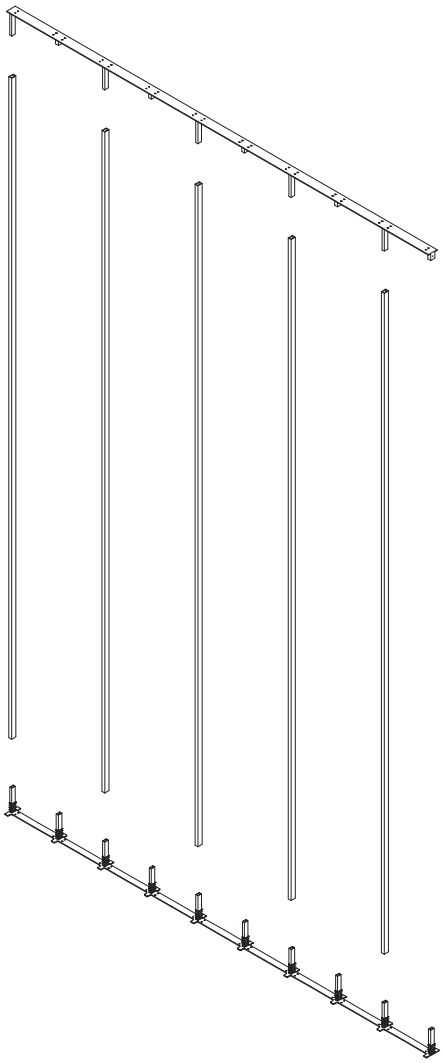




2. Lay out and insert the longest vertical aluminium profiles in the male profiles of the starter plate on the thermal expansion springs and in the male profiles of the end plate. Install one profile out of two.



To facilitate this operation, the components can be mounted horizontally. They are then rotated to their vertical position.



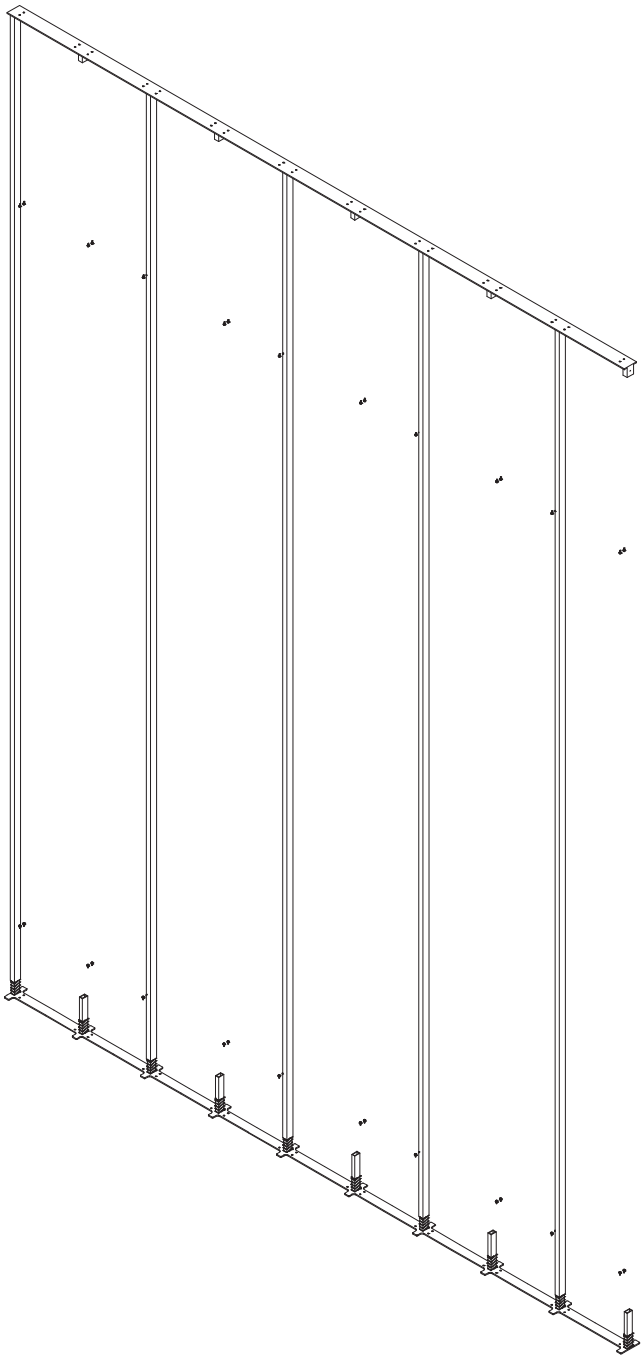
Phase 1: Structure assembly

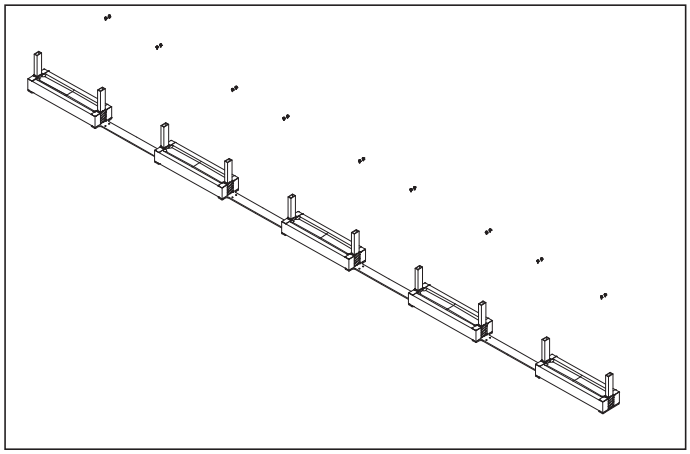
3 Present and lay out the assembly of the starting plate, vertical profiles and end plate. Pay special attention to the flatness of the floor slabs (fixing structure) between levels and to any possible differences in order to correctly position the starting and end plate.

Pay special attention to the correct levelling of the vertical profiles.

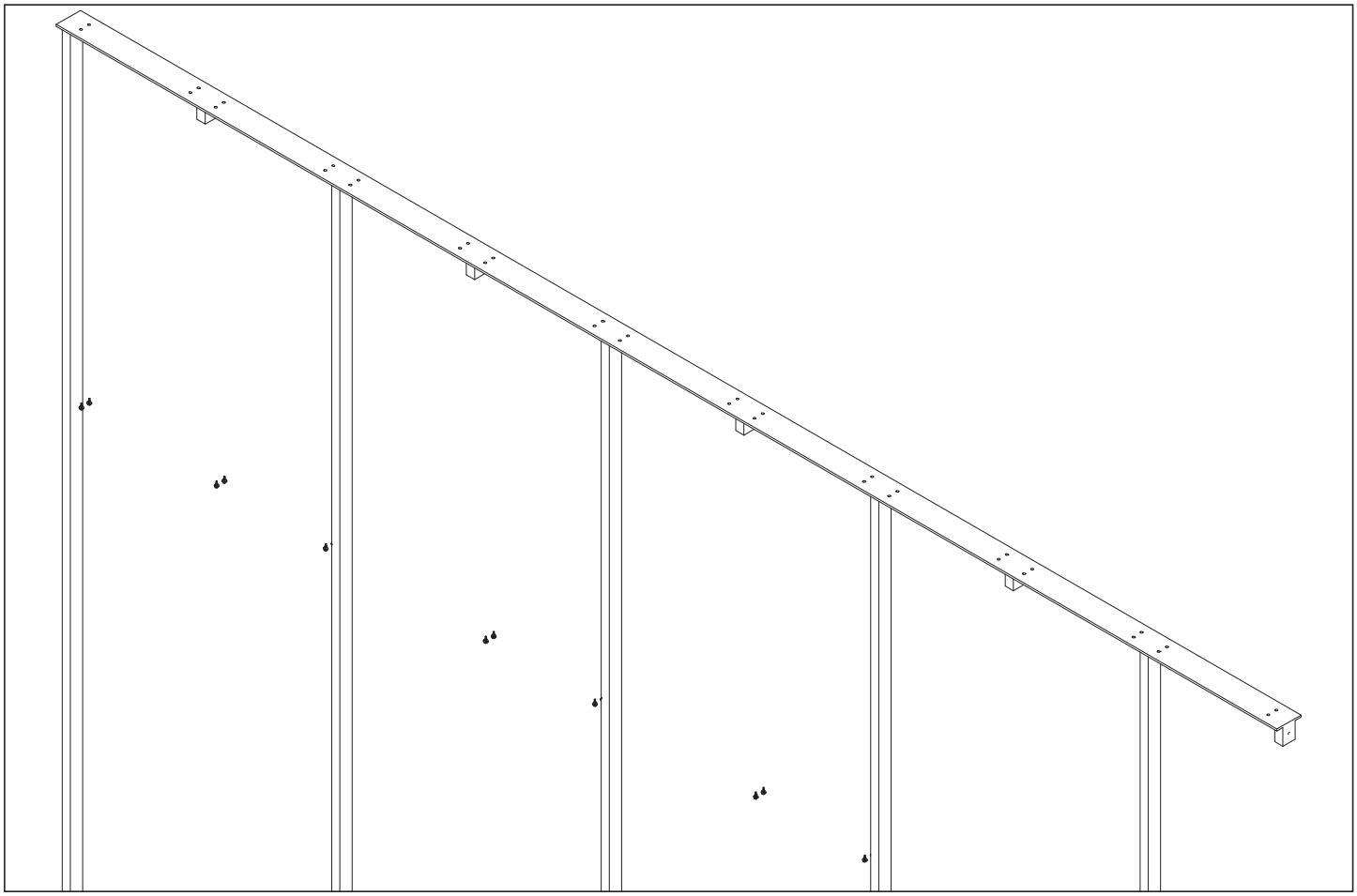
4 Fix the starting and end plates to the structural support, respecting the expansion joints. Fixing shall only be carried out in the support areas where there is no brickwork.

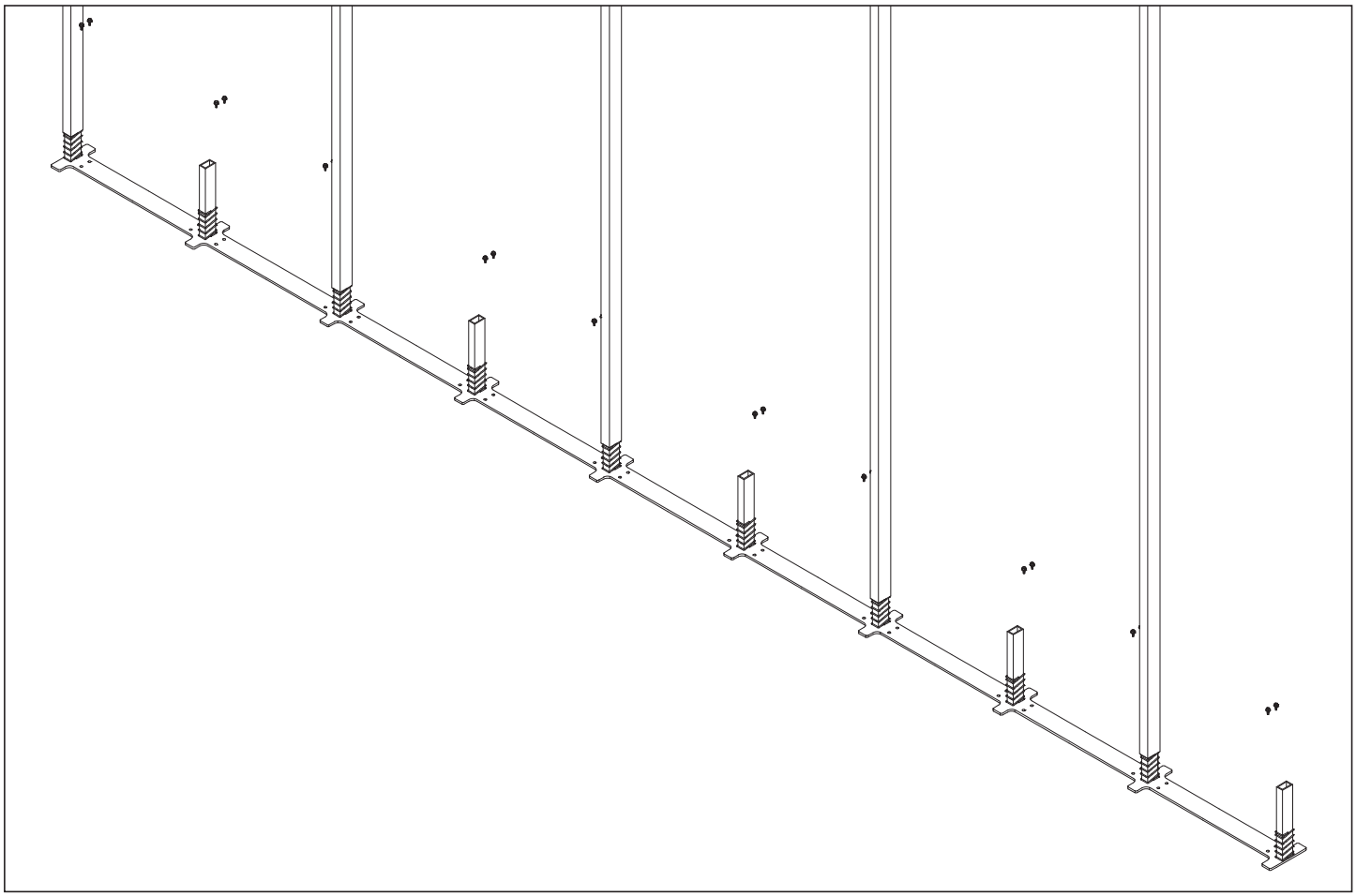
Regardless of this guideline, the plates shall always be fixed at their ends, even if there is brickwork, paying special attention that the head of the fixings is not in contact with the ceramic pieces.





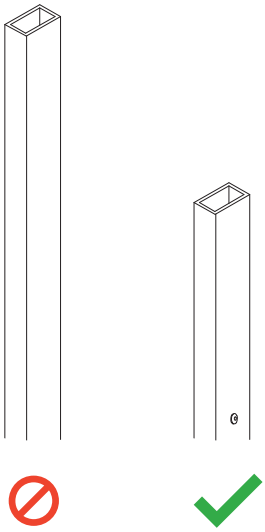
Phase 1: Structure assembly





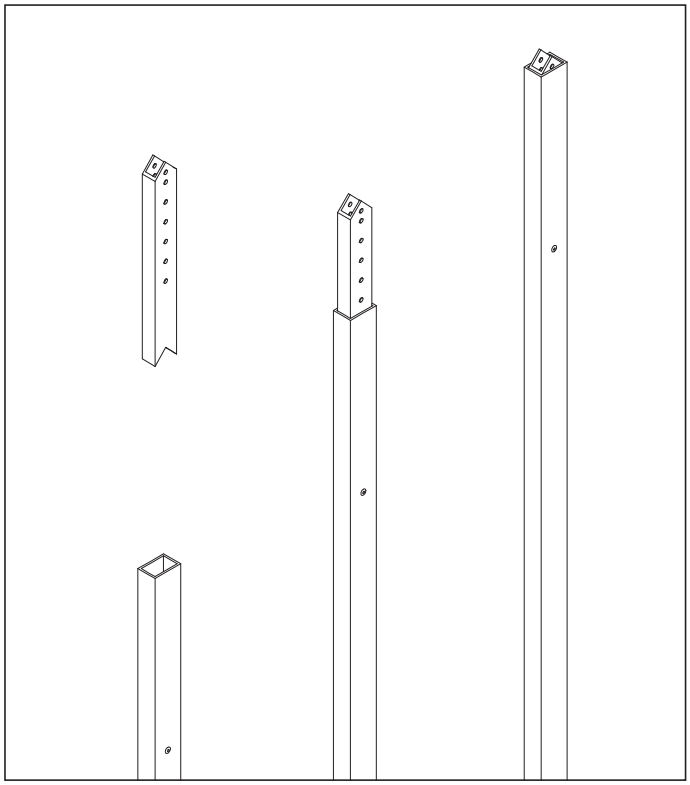
Phase 1: Structure assembly

5 Insert the sliding profiles into the shorter profiles at the end where they have a rivet on the side.

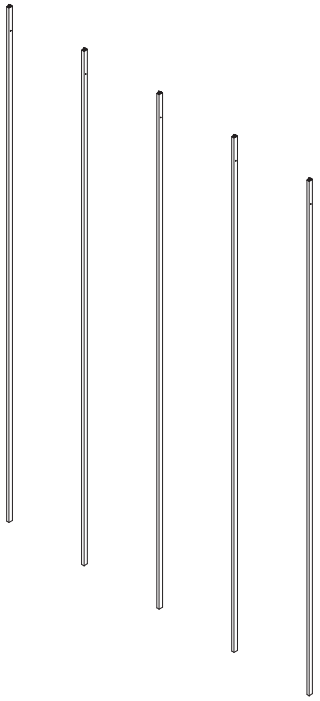


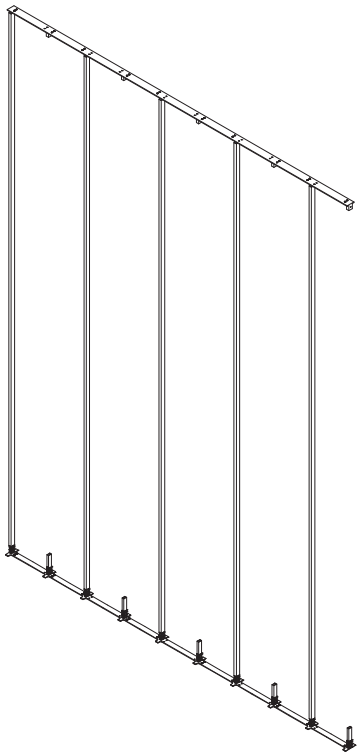


The sliding profile will touch the rivet, preventing it from being lost inside the 30x20 profile.

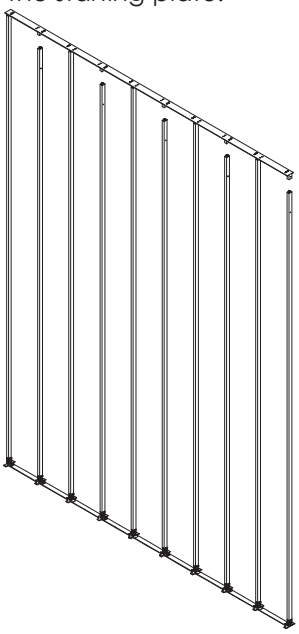


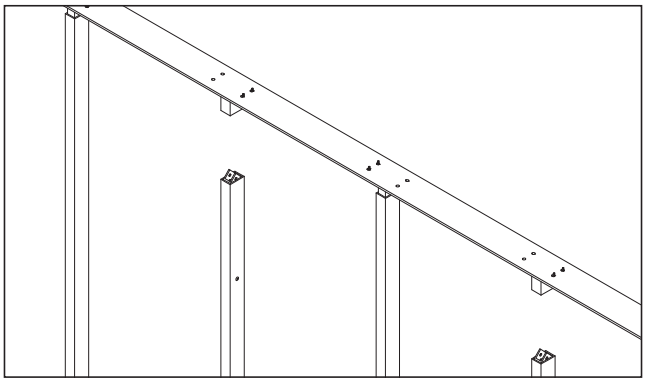
6 Place the shorter length profiles on the thermal expansion springs in the clearances of the starting plate.





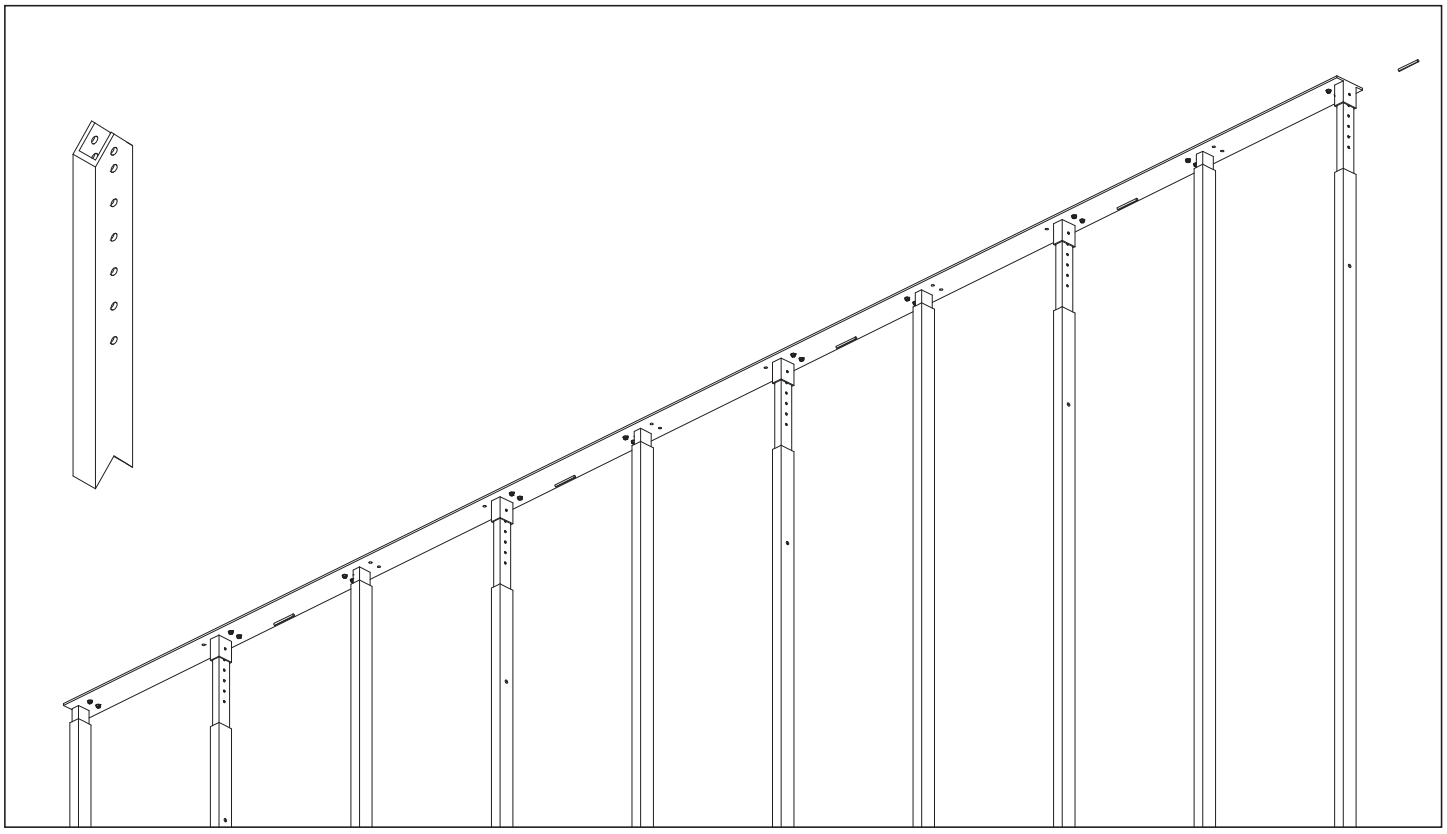
The inserted profiles will be temporarily disconnected when they meet the end plate.



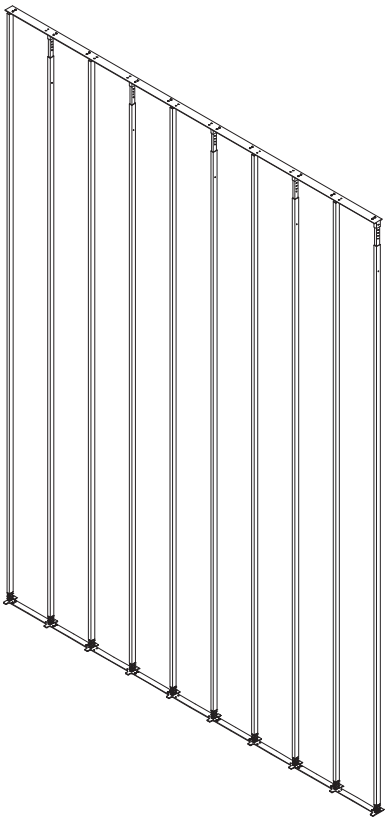


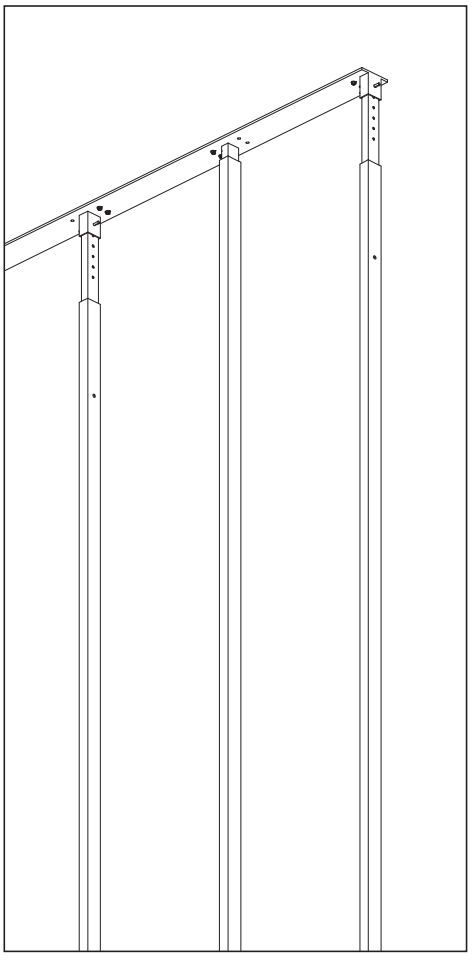
Phase 1: Structure assembly

7 Move the sliding profile up to the end plate and insert the pin so that the sliding profile is connected to the end plate and the vertical profile.



8 Continue in Phase 2 with the laying of the bricks.



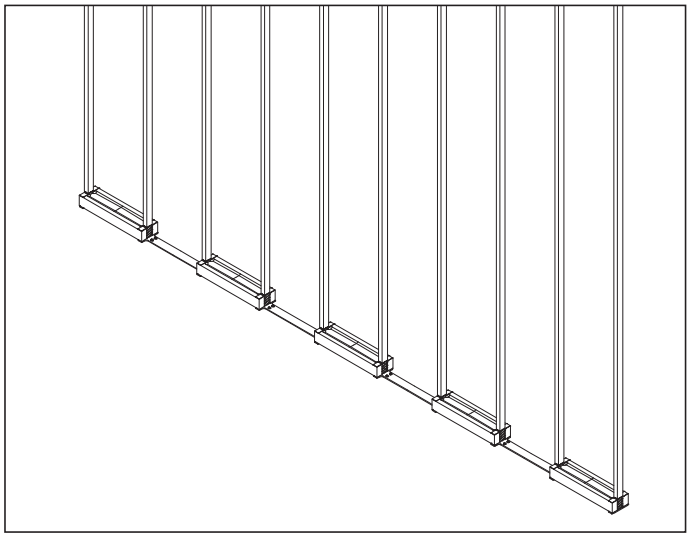


Phase 2: Laying the bricks

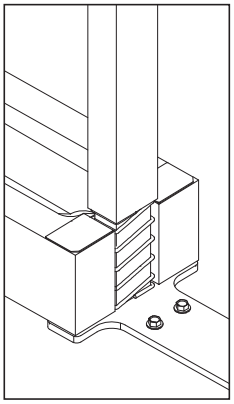
IMPORTANT NOTE

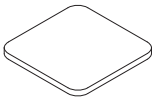
The brickwork used in this Phase 2 has dimensions of 3 m in length and 3 m in height for representation purposes only. What is indicated in this phase is applicable to different sizes of brickwork following the same installation criteria.

9 Install the bricks of the initial starter course. They shall rest on the supports of the starter plate, so that support is only provided at these points.

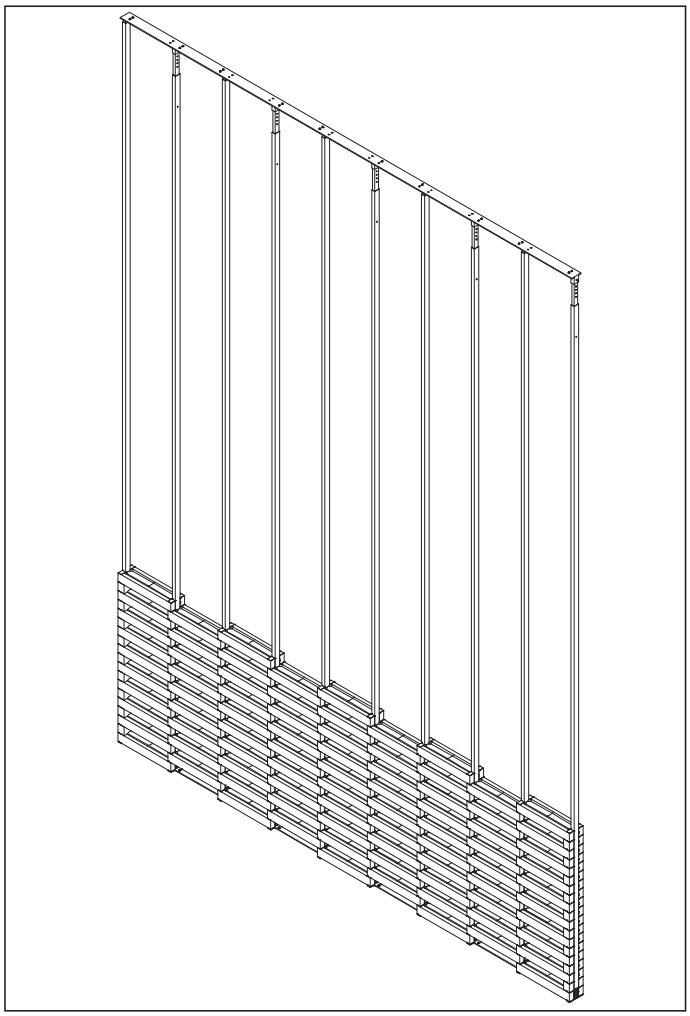


The bricks shall not rest directly on the starting base (supporting structure). After laying the second course, it shall be levelled, if necessary, by means of levelling spacers.





10 Lay the bricks of the lattice, levelling the courses with spacers and cut down pieces with the help of a cord like the one used for laying facing bricks or with the help of another similar auxiliary means (laser, large dimension level...).

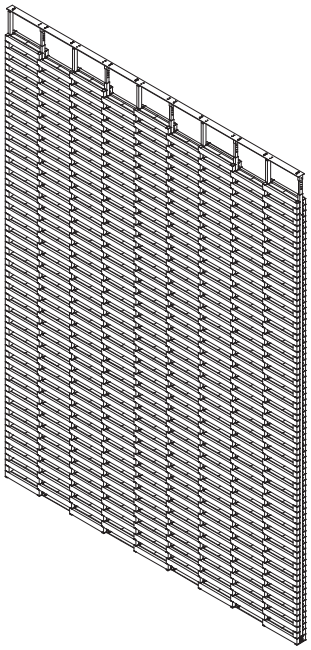


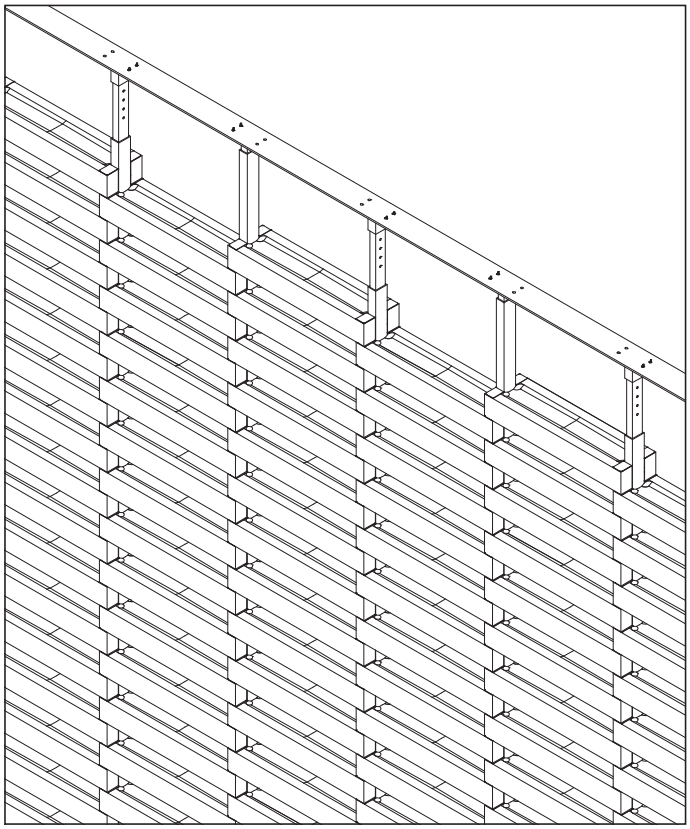
This levelling process will not be done every course, but approximately every 50 cm.

Following the usual recommendations for laying facing bricks, bricks from various packs should be mixed together, also taking the bricks from each pallet from top to bottom to ensure a better mixing of the pieces. In order to obtain a better façade finish, it is also recommended to lay the bricks in the position in which they come on the pallet (without turning them).

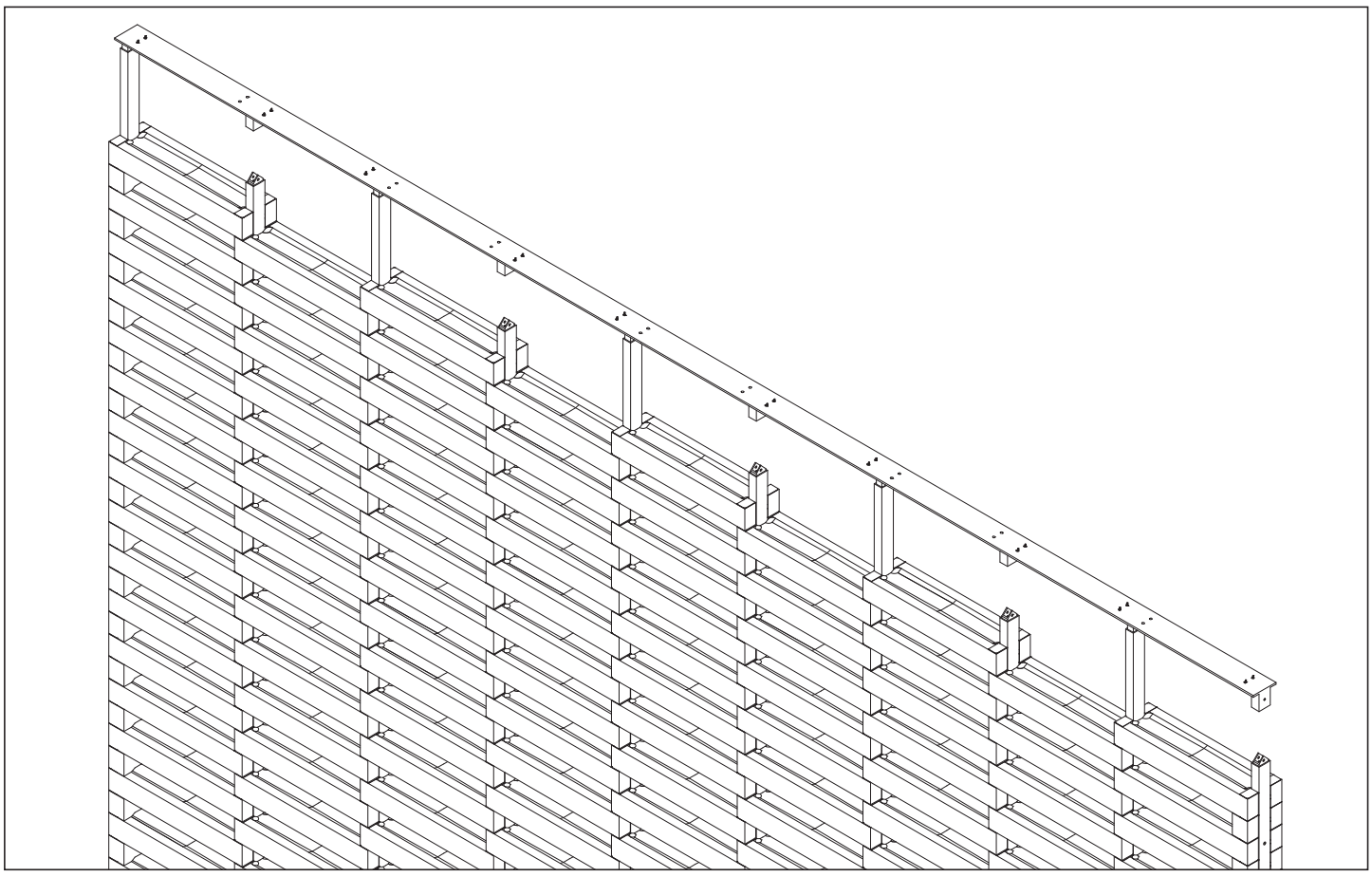
Phase 2: Laying the bricks

11 As it is a confined wall, there will come a time when it will not be possible to lay the last courses of bricks. It will not be possible to make the turn to place the bricks between the vertical profiles. This situation normally occurs in the last 3 courses.



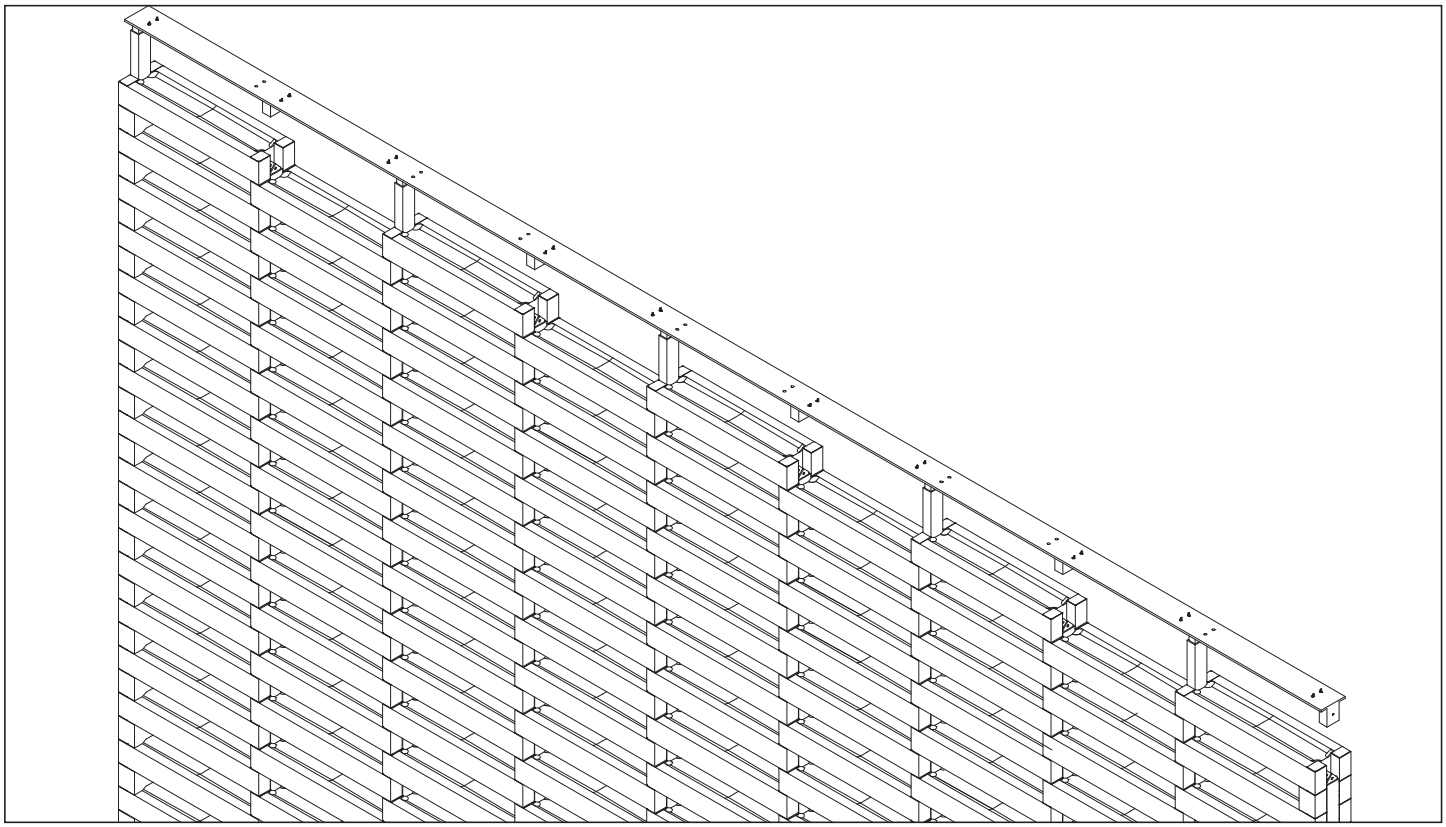


12 Remove the pins and lower the sliding profiles.

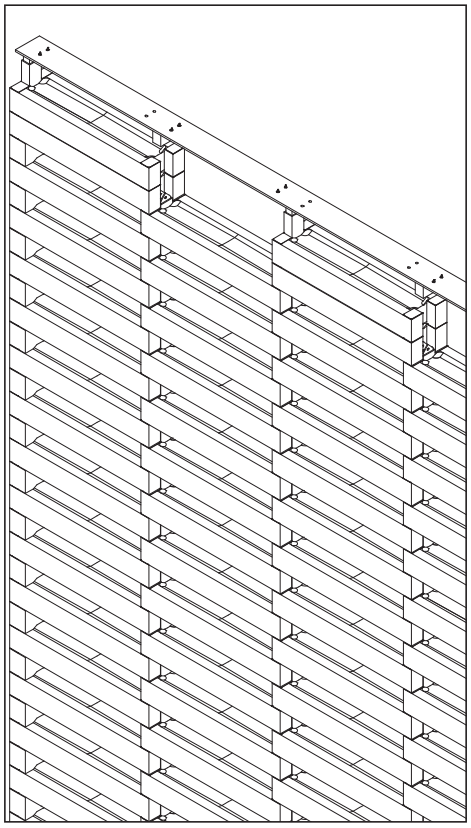


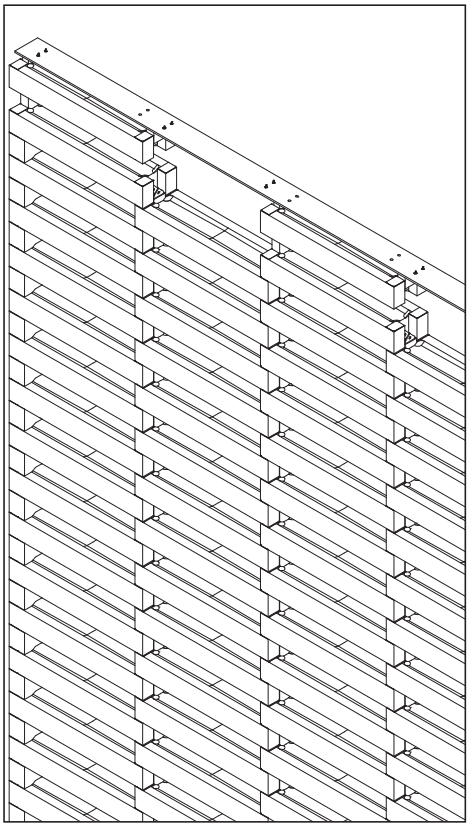
Phase 2: Laying the bricks

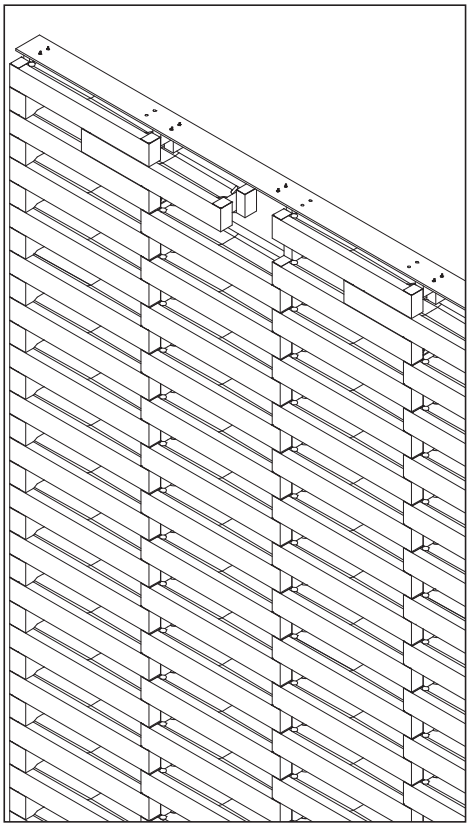
13 Lay the next course of bricks. As the sliding profile is lowered, the brick will enter from the front without the need to turn it.



14 Install another additional row on top of the previous one, move it upwards and with the help of another worker, proceed to place a row under the one that has just been lifted, sliding from left to right. The row that is slid upwards becomes the closing row of the lattice.

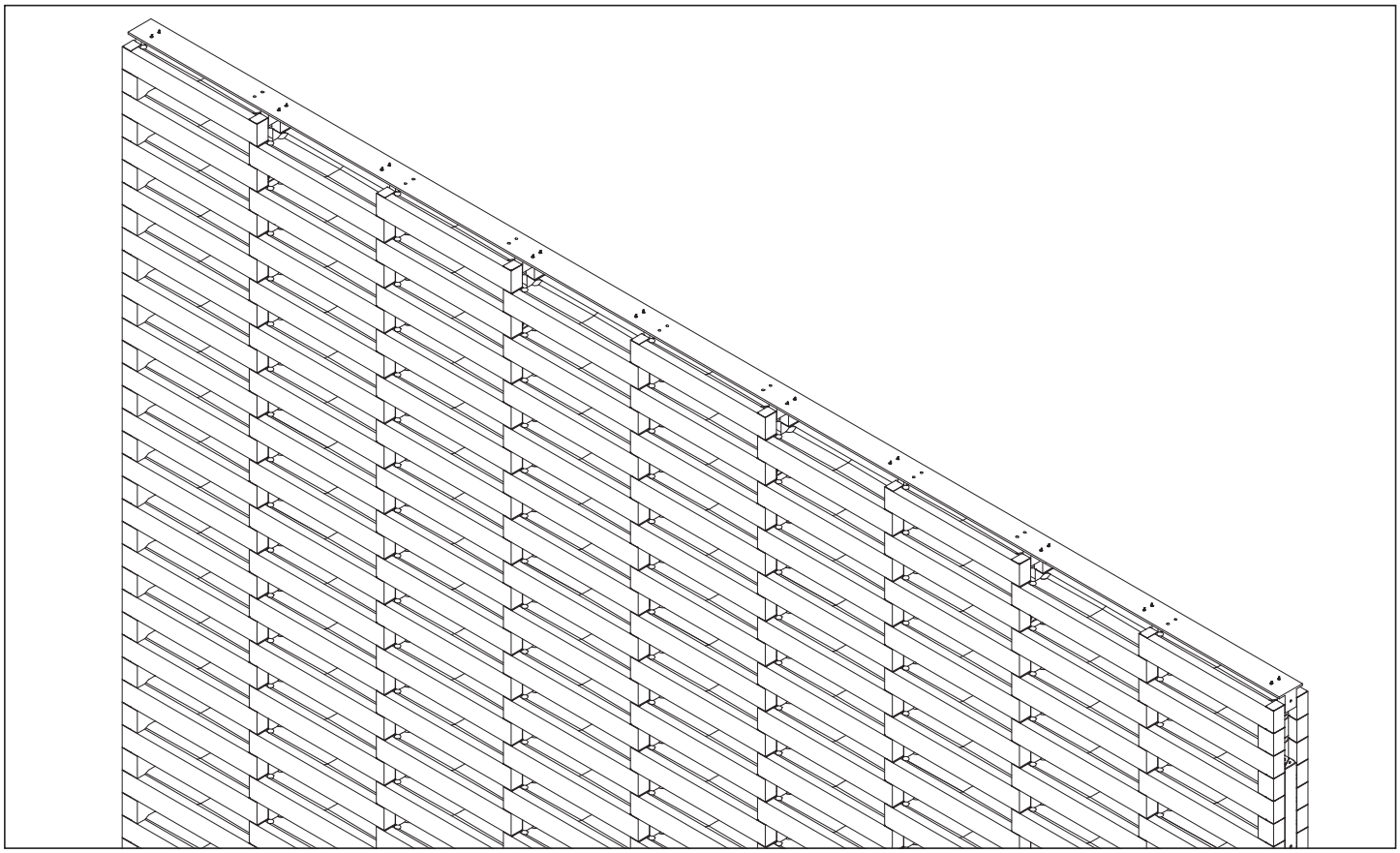


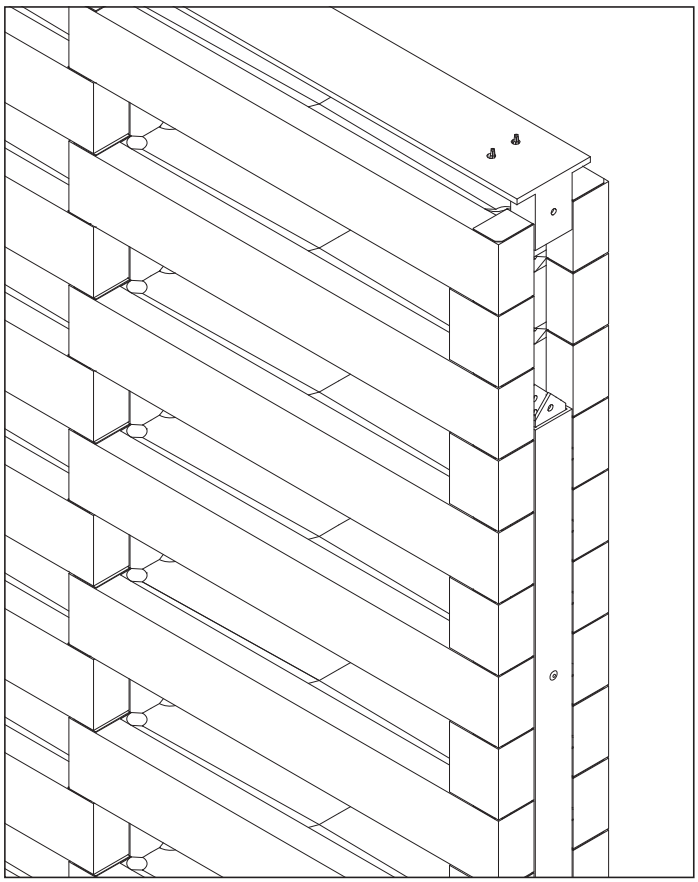


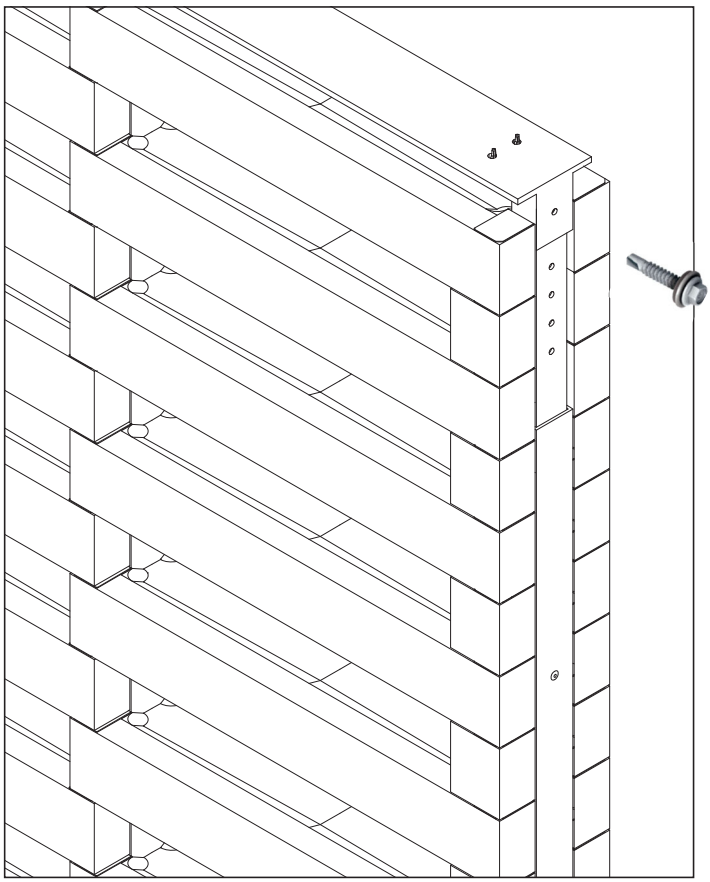


Phase 2: Laying the bricks

15 Once all the bricks have been laid, put the sliding profile back into position using the dowel pin and insert a screw to fix the sliding profile in its final position.







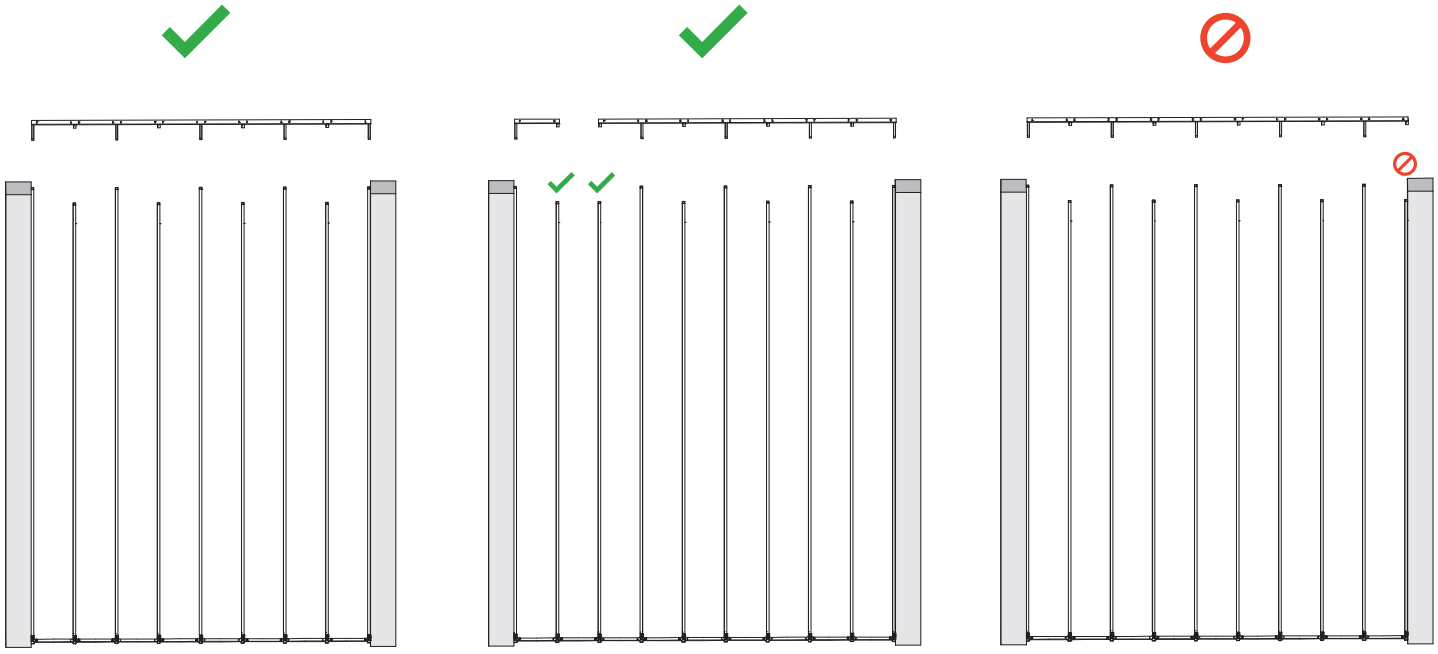
Singular points

A1

When the lattice is confined on both sides:
- If the number of profiles is odd, always start with long profile.
- If the number of profiles is even, start with a long profile followed by two short profiles.

When the lattice is confined on one side only:
- Start with long profile on the confined side.

A short profile should never be installed against a confined side, always start with a long profile, even if there is only one side confined.

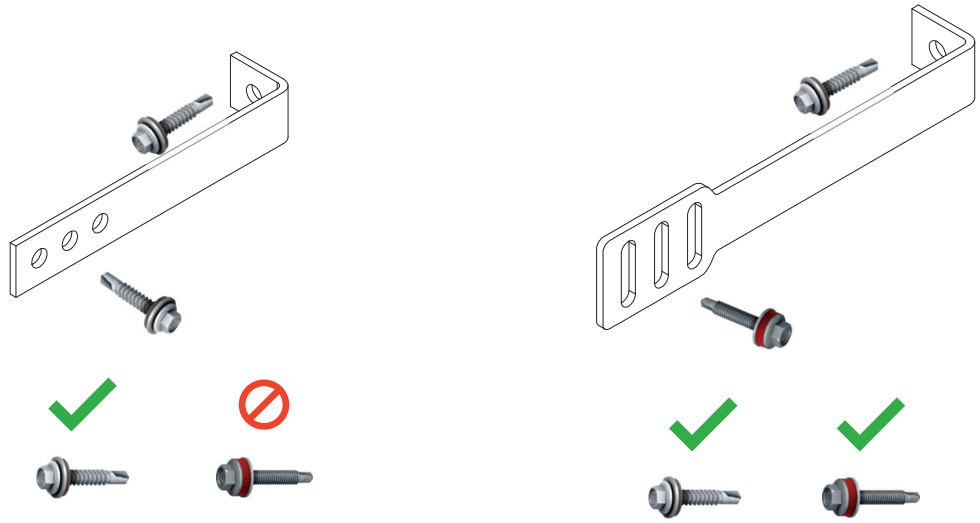


NO. PROFILES = ODD | NO. PROFILES = EVEN | NO. PROFILES = EVEN

A2

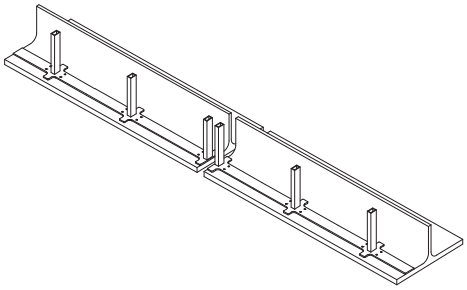
In situations where the confined lattice covers considerable heights, and whenever possible, fixed or sliding retaining brackets may be installed on the vertical profiles, after all the bricks have been laid, according to the following rule:
- Only one bracket for fixed points per profile section.
- The remaining fixing points on the same profile section shall be made with sliding brackets.

The following criteria for fixing points shall be followed:

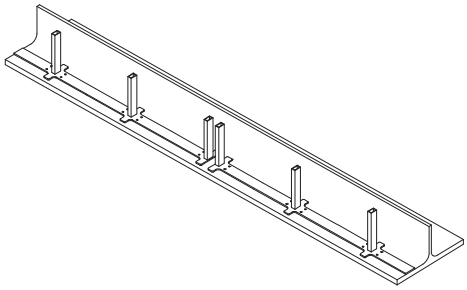


Singular points

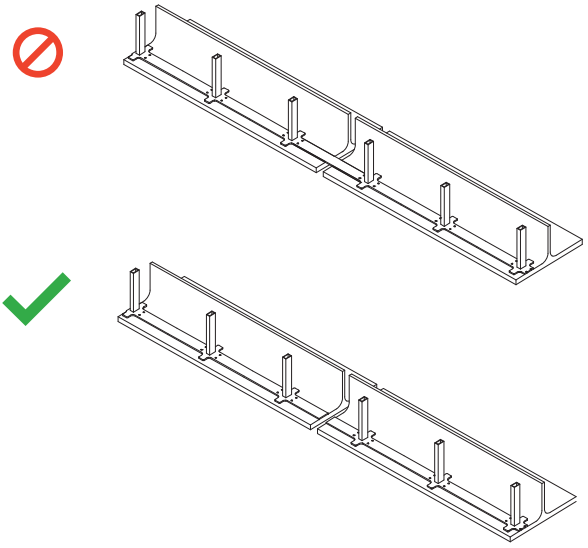
A3 When laying out the starter plates and during installation, it is important to respect the structural joint of the building if there is one. A starter plate shall be placed on each side of the structural joint. Each of these starter plates will belong to different facade panels.



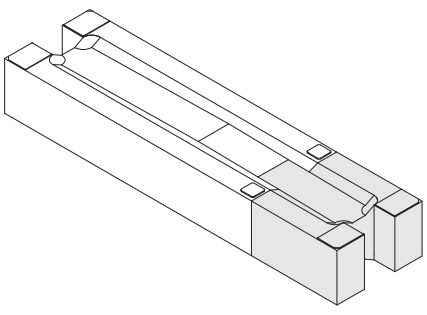
A4 The façade also has expansion joints, where necessary, which should be executed by installing separate starting plates as in the case of the structural joint.



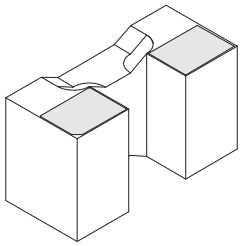
A5 When a starter plate passes over a joint between support profiles, it must be cut so that it does not interfere with the possible thermal expansion of the support profiles.



A6 At the start or horizontal ends of the façade walls, the standard piece that starts or ends the wall may be an adjustment piece. This means that its length will be different from the standard one, and it must be cut according to the plan or after the initial layout on site. In this case, it will be necessary to place levelling spacers on one of its faces during installation.

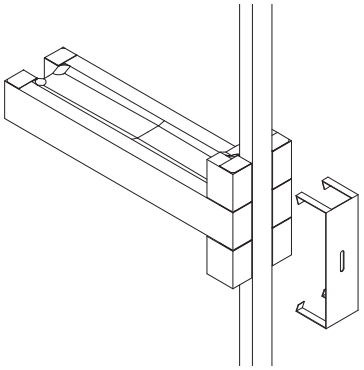


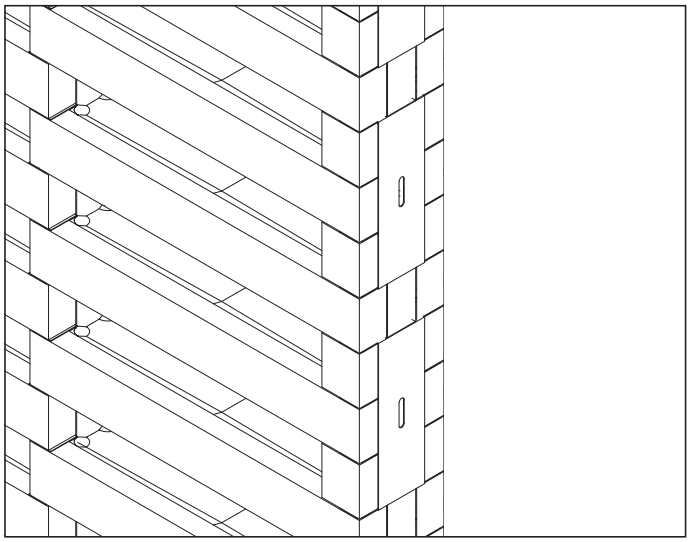
A7 Side trim pieces are available to assist the horizontal leveling of the courses. Cut down pieces shall be fitted where necessary according to on-site measurements.



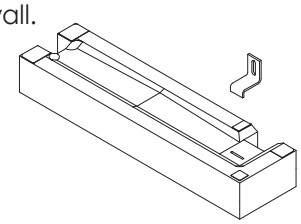
Singular points

A8 The side clips have to be placed on the last meter of the wall at the crown and also at mid-height between slabs. This part avoids the use of adhesives to fix the end pieces and at the same time makes it impossible to remove the side profile at the end of the panels.

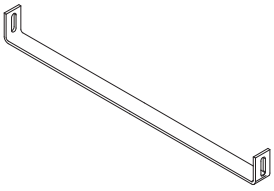


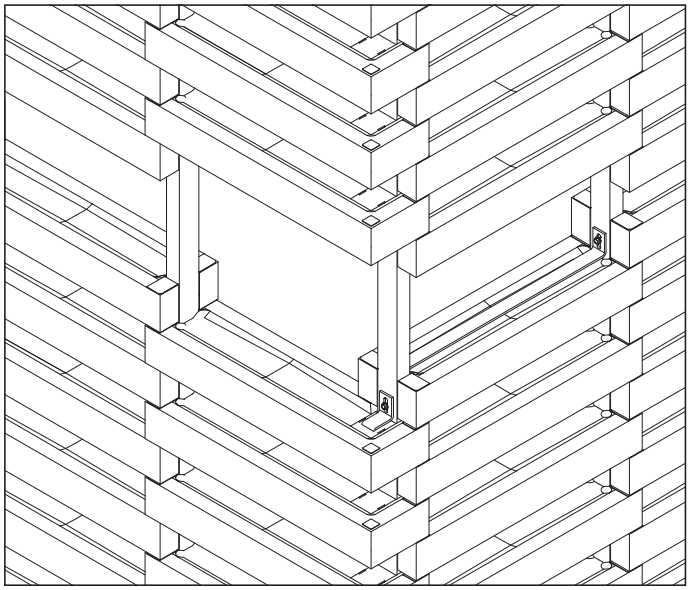


A9 The clips for corner pieces shall be placed at mid-height between slabs and in the last meter of the wall.

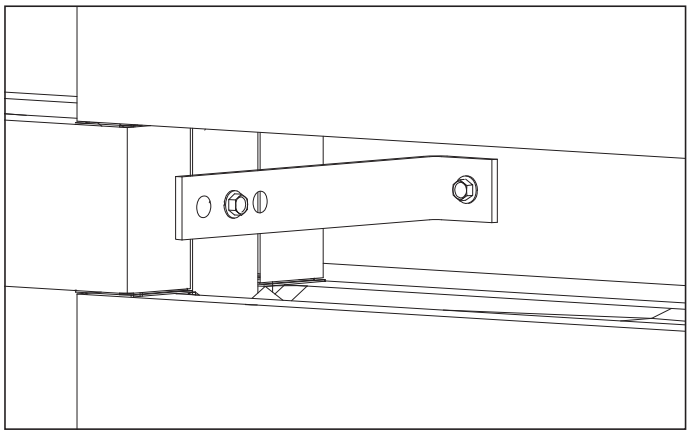


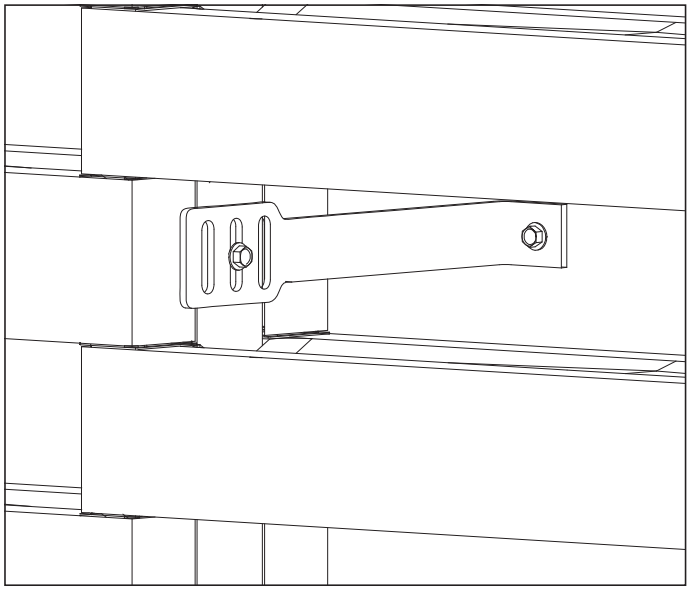
A10 U-brackets between vertical profiles shall be placed in the corner area, at mid-height between slabs and in the last meter of the wall together with the clips for corner pieces.





A11 The brackets shall be fixed at an intermediate height to avoid contact with the ceramic tiles. In the case of sliding brackets, the fixing screw shall be positioned centrally in the vertical plane.





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