



Plycem®



by
elementia
materials

Installation guide

PLYCEM CEILINGING AND EAVES



IMPACT
RESISTANT



LIGHTWEIGHT



PLAGUE
RESISTANT



EASY TO
INSTALL



NON
COMBUSTIBLE

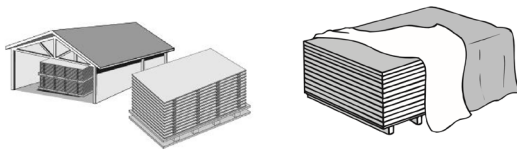


THERMAL AND
ACOUSTIC COMFORT

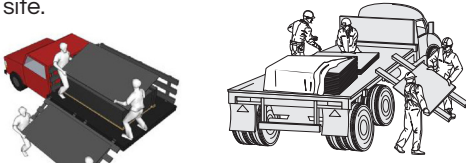
A complete line of fiber cement ceilings specially designed to satisfy the most varied tastes. Due to their technical characteristics, they can be used in residential, industrial, institutional or commercial applications. Non-combustible product, resistant to humidity and fungus.

TRANSPORTATION

Always store the panels indoors in ventilated and dry areas; both in the commercial warehouse and on the construction site. Do not expose the panels to the outside (rain, sun or snow). In flat surfaces, stack them on pieces of wood (do not leave them directly on the ground). If you leave them temporarily outside, you must cover the pallet with a waterproof mantle.



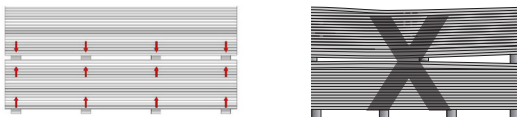
Ceilings panels must be loaded by at least 2 people. Transport the covered panels with a waterproof mantle, preventing them from getting wet on the trip to the commercial warehouse or the construction site.



Always handle the boards on their edges, avoiding deflections in a horizontal position.



Always stack the boards in the correct position on aligned supports. Avoid deformation during stacking. Do not stack more than 3 pallets one on top of the other.

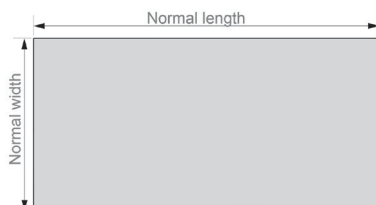


SYSTEM COMPONENTS

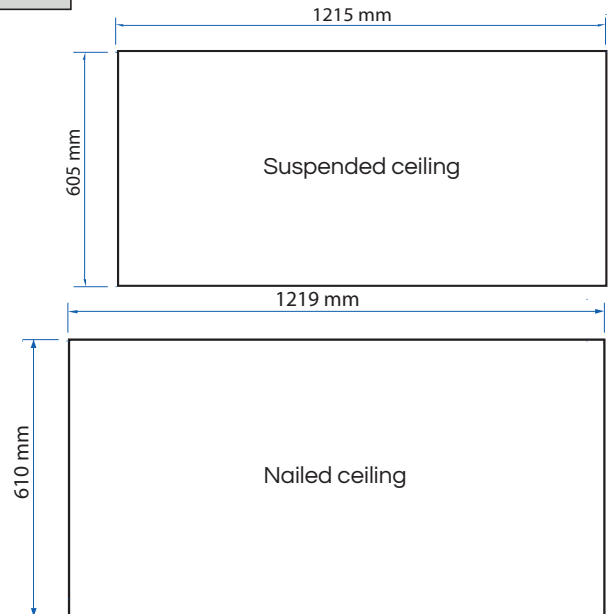
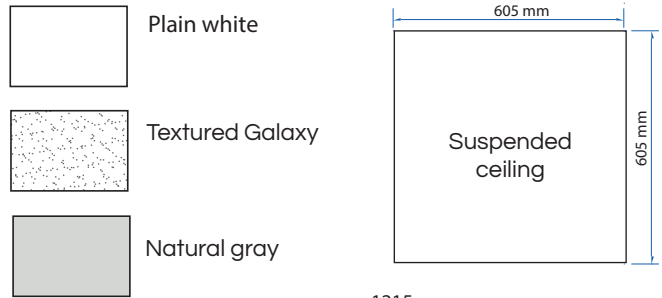
Plycem Ceilings is a line of decorative ceilings for all types of applications in public and private spaces. Plycem Ceilings are an easy to maintain and exceptionally durable solution. They are smooth or textured fiber cement boards for ceilings and eaves. See technical data sheets at www.plycem.com

Plycem Ceiling Panel and Plycem Interior

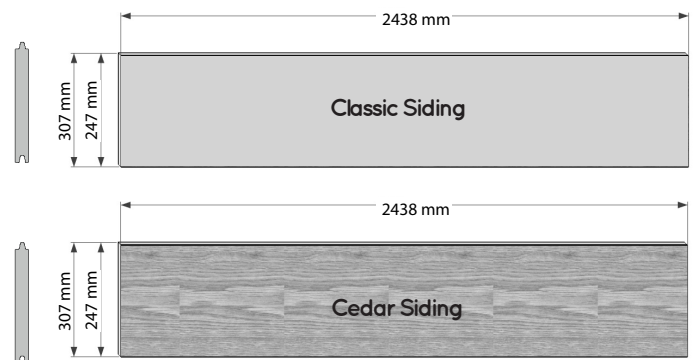
Thicknesses of 5mm with dimensions of 610mm x 1219mm and boards of 6 and 8mm with dimensions of 1219mm x 2438mm.



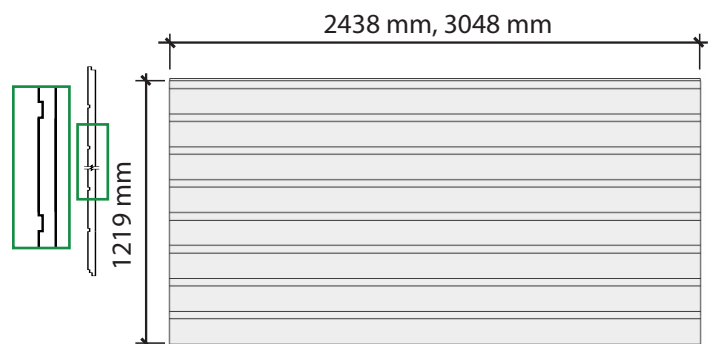
Plycem Fibrocel



Plycem Siding

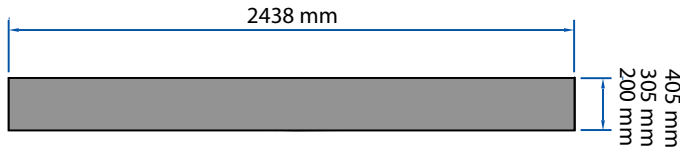


Plycem Slotted Boards: 8-11 mm



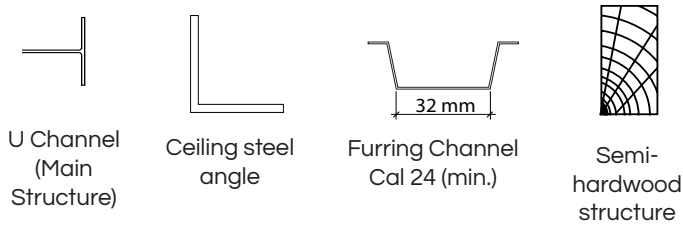
Plycem Fascias

The Plycem fascias are 8 and 10mm thick, 200, 305 and 405 wide and 2438mm long.



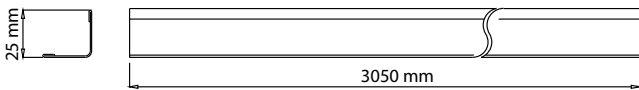
Ask for minimum production quantity and inventory available.

Supporting structure - suspended ceilings

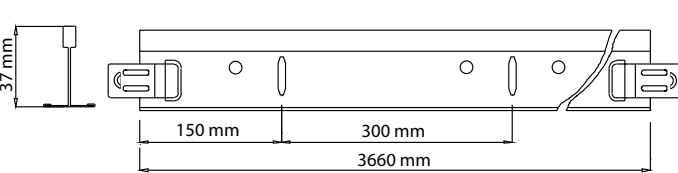


Structure for Plycem Suspended Ceilings

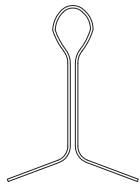
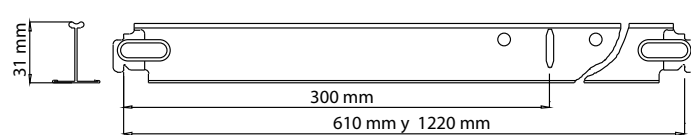
Perimeter Angle



Main tee

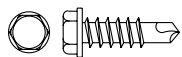


Cross tee



Clip or pin

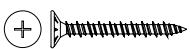
Fastenings



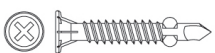
MM 10-075 SCREW (structure)
Structural joints between profiles



LH 8-050 SCREW (structure)
Joint between profiles, furring channel, and



TYPE PL 6-100 galvanized SCREW Fastening Plycem to wood or 24 GA steel



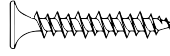
PH 8-125 SCREW (Plycem on steel)
Fastening of Siding to metal structure



PL 8-175 galvanized SCREW fastening Plycem on wood



SPH7-162 SCREW
Exposed fastening of Siding #1 squarehead



TORNILLO PL 7-150 Fastening Plycem to wood or 24 GA steel



Nails of 25mm, 50mm, 75mm and 100mm.



STEEL POWDER ACTUATED DRIVE PIN 25.4 mm(1")

Finishing



PAINT



FILLER



POLYURETHANE SIKAFLEX15 LM, 1APlus OR THE LIKE

Tools



Hand riveter



Drill



Circular saw diamond blade



Philips tip Square tip No.1



Hammer



Aviation shears



Roller



Construction level



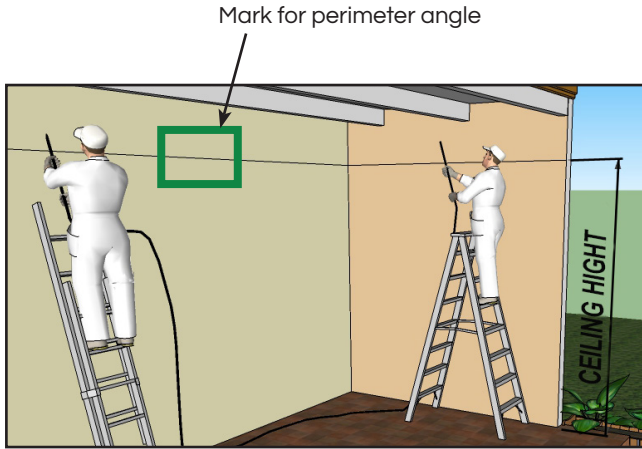
Hand saw

INSTALLATION INSTRUCTIONS

Metal structure for screwed ceilings

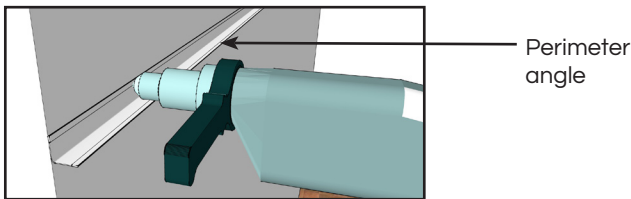
1- Define the ceiling level

The first step is to define the height of the ceiling. Starting from the finished floor level and as specified in the project, clearly locate the level of the ceiling. Using the tube as a communicating vessel level, move the reference line every 3 m. You can also use a laser level to trace the ceiling.



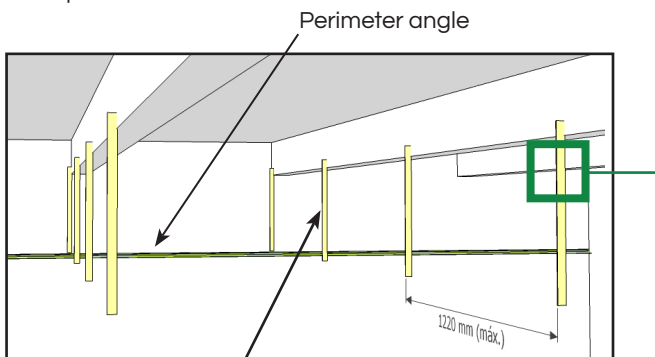
2- Place the perimeter angles

Fasten the angle with screws or steel powder actuated drive pin @ 610 mm.



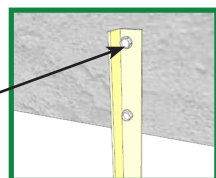
3- Place angles to support the ceiling (hanger angle)

The angle brace is attached to the main structure, either truss or structural joist.



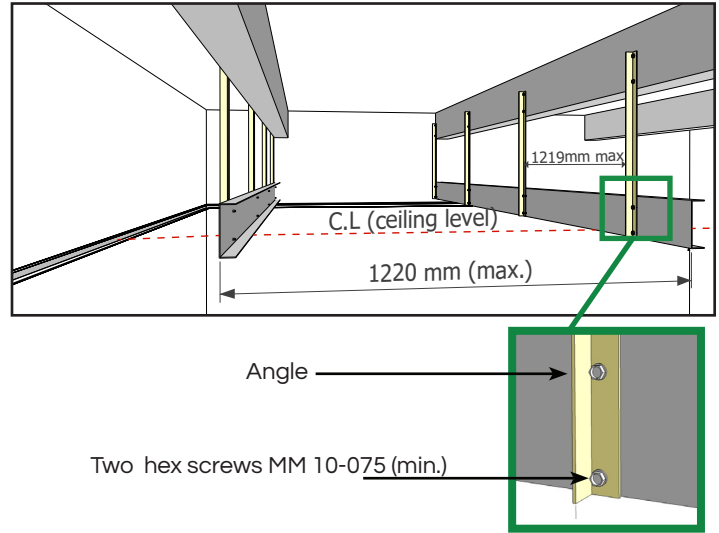
Support angle for ceiling structure (hanger angle)

Fastened to the supporting structure of the roof or slab with 2 hex screws MM10-075.



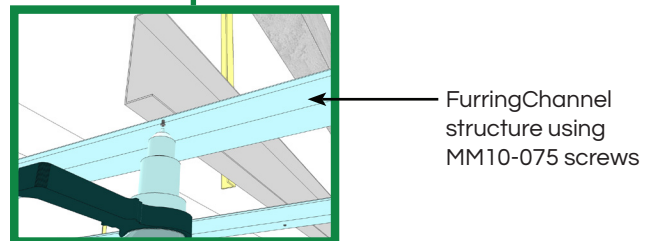
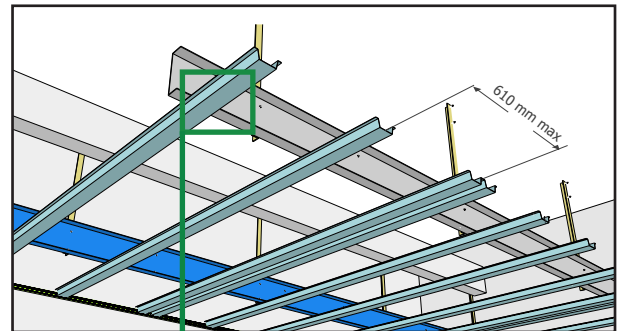
4- Place "U" Channel

Once the angle is placed, the "U" channel is installed, which will support the ceiling structure (furring channel).



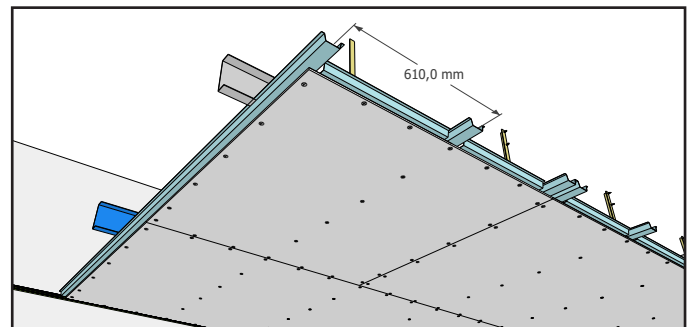
5- Place the furring channel

Fasten the U-channel, install the furring channel every 405 mm or 610 mm as required, where the Plycem ceiling is fastened. Screw through the edges of the furring channel.



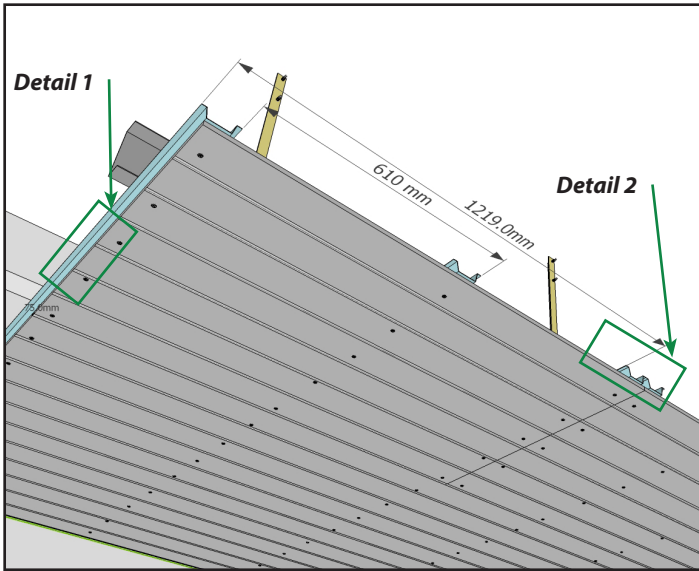
Fastening of Plycem Interior boards

Fibrolit ceiling boards are fastened to the structure with PL6-100 screws. Preferably use Plycem Interior 8mm minimum.



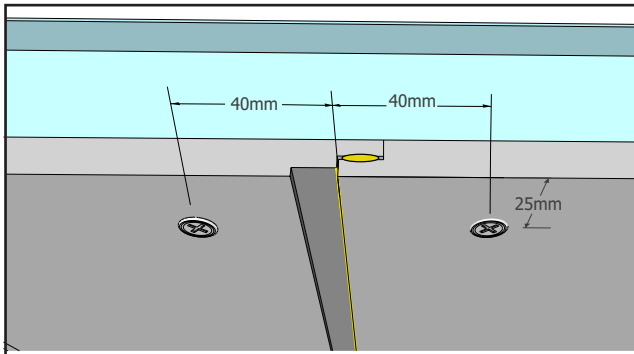
Plycem Slotted Boards fastening in the ceiling

Plycem Slotted Boards boards are fastened to the structure with PL6-100 screws.



Detail 1

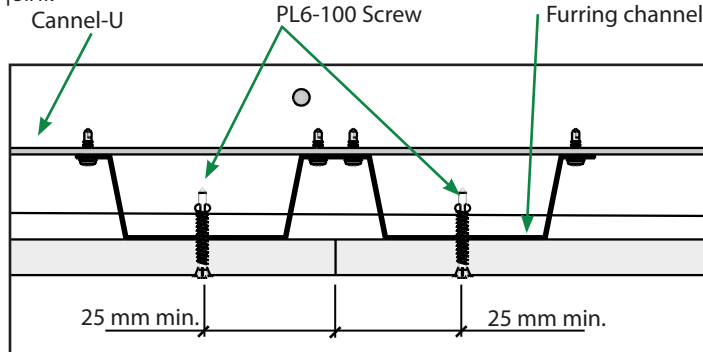
Fasten the ceiling on the long side with a screw at least 40mm from the edge and 200 mm from each other. Use PL6-100 screw.



Joining of 11 mm or higher Plycem Slotted boards.

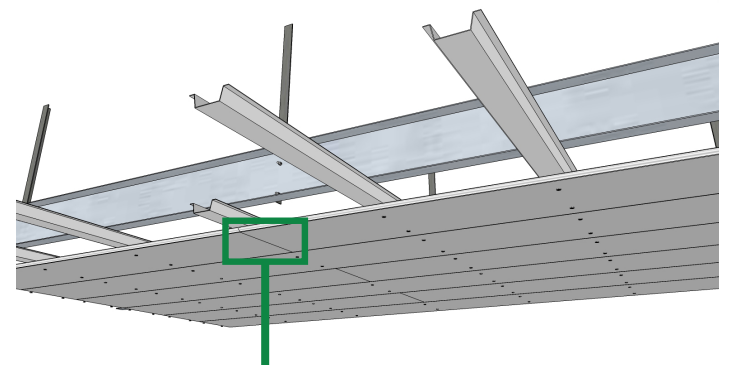
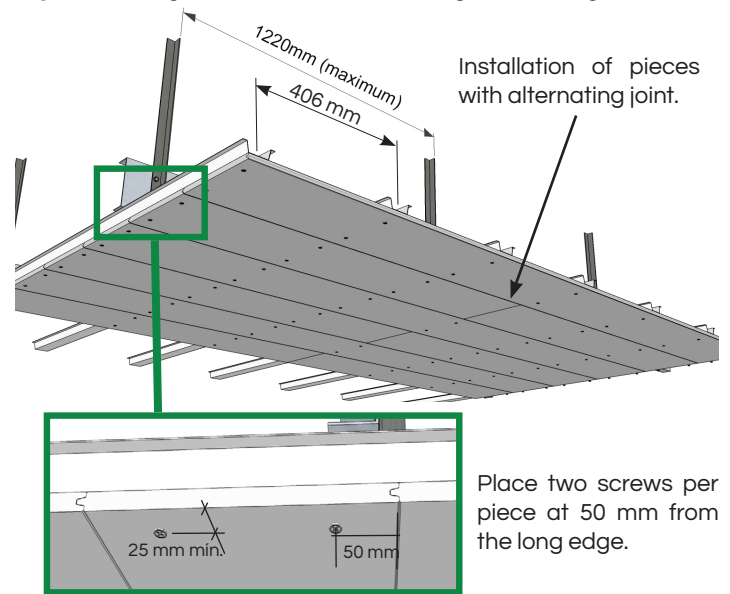
Detail 2

Fastening of two boards that meet on the short side of Plycem Slotted ceiling at double furring profile with PL6-100 screws on the joint.

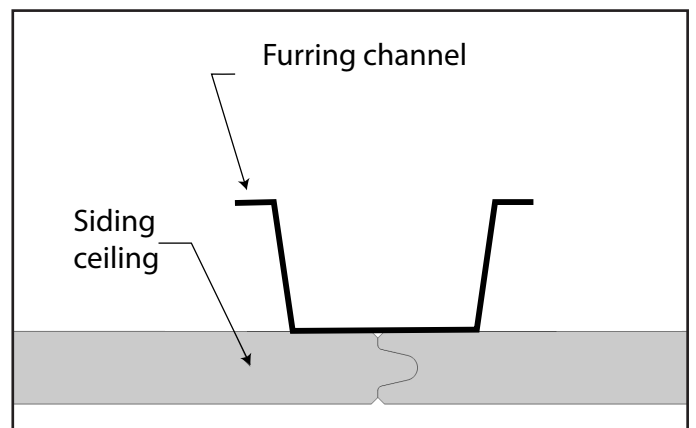


Fastening of Siding to the ceiling

Plycem Tongue and Groove Siding for ceilings



Note: The short tongue and groove joint should not be screwed. Fasten boards with staggered joints.

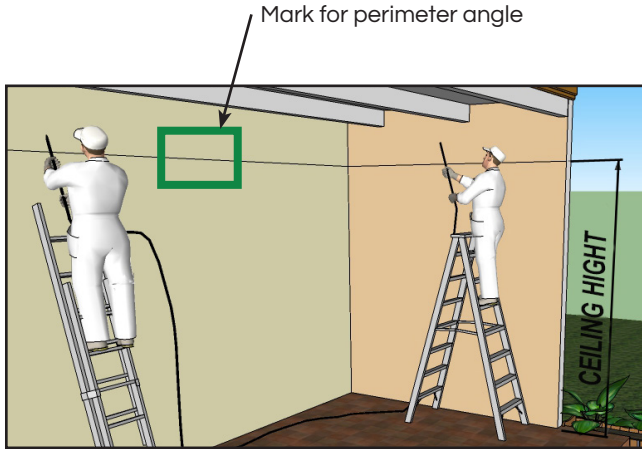


Wooden structure for nailed ceilings

Plycem nailed ceilings must be installed on treated wood structure.

1- Define the ceiling level

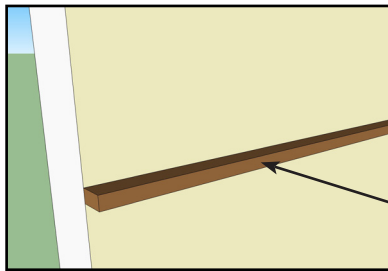
The first step is to define the height of the ceiling. Starting from the finished floor level and as specified in the project, clearly locate the level of the ceiling. Using the tube as a communicating vessel level, move the reference line every 3 m. You can also use a laser level to trace the ceiling.



Mark for perimeter angle

2- Place a perimeter wood piece

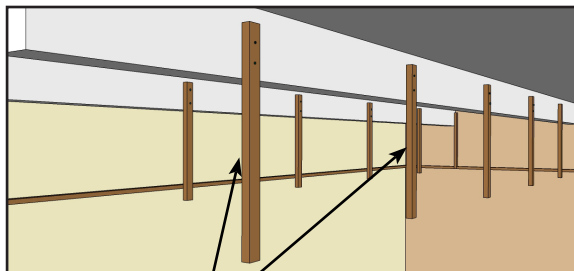
Fasten the wood piece with screws or steel nails depending on the type of wall.



Perimeter wood piece
50 x 25 mm min.

3- Place pieces to support the ceiling template (hanger)

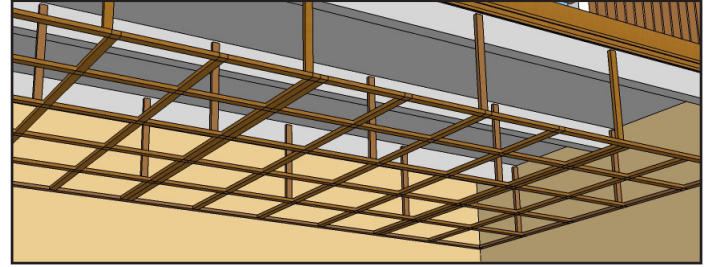
The wooden template is fastened to the main structure, either truss or structural joist with 25x50 mm minimum hanger every 122 cm max.



Semi-hardwood vertical support structure(hanger)

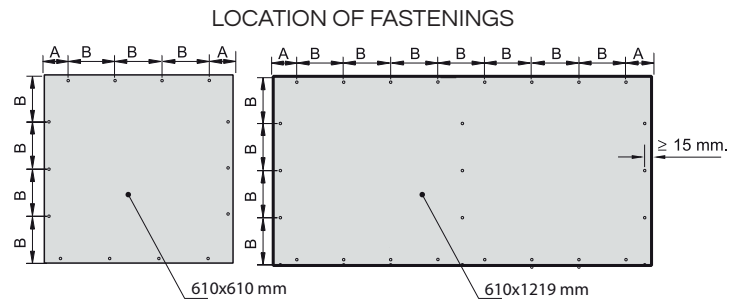
4- Ceiling structure

Install the typical 610x610mm structure. Use dry and treated wood.

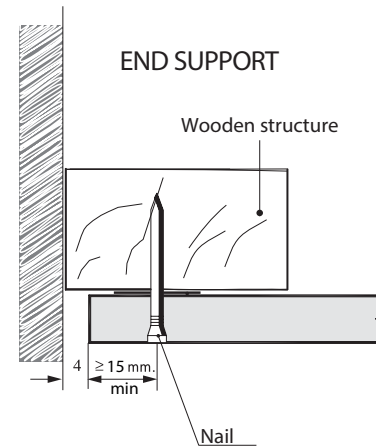


5- Placing the ceiling boards

The ceiling is fastened to the structure with nails leaving a separation of at least 3 mm between boards.



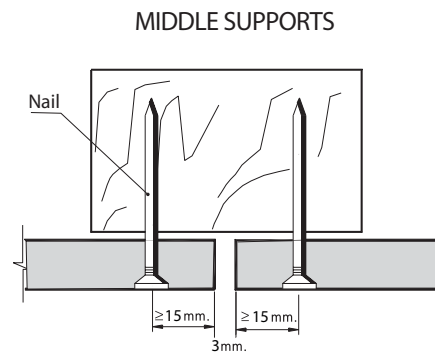
A= 50-75 mm
B= 100-150 mm



END SUPPORT

Wooden structure

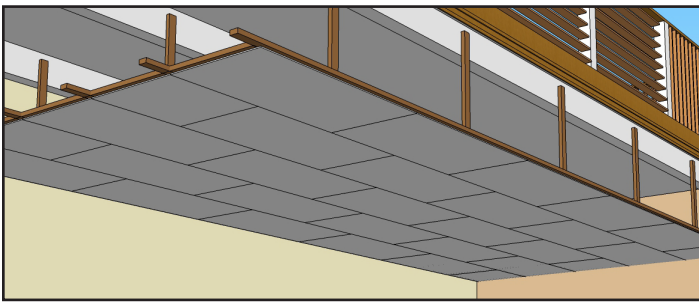
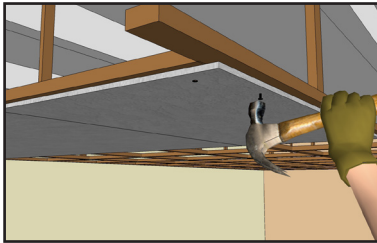
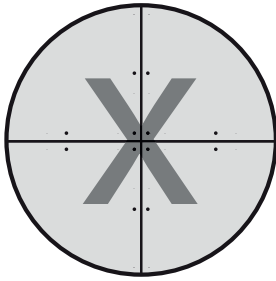
Nail



MIDDLE SUPPORTS

Nail

Do not fasten in the corner



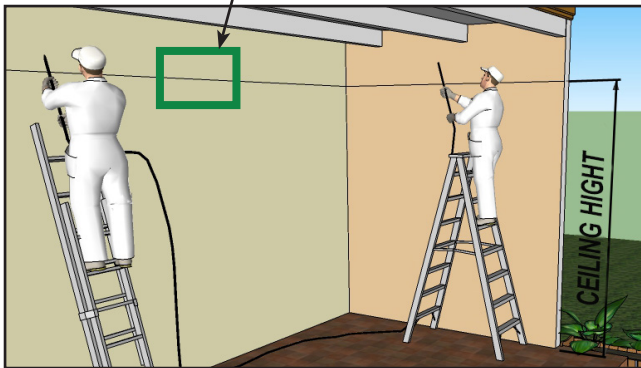
Metal structure with suspended ceilings

Plycem Fibrocel Suspended Ceilings

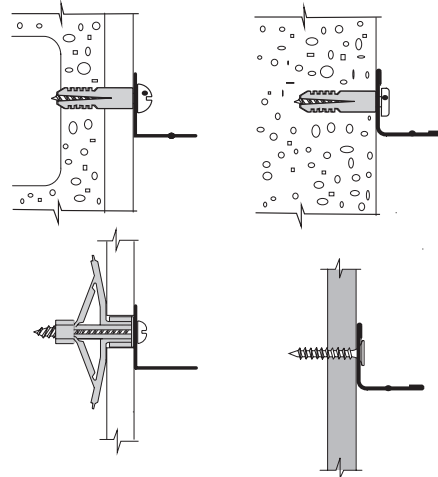
1- Define the ceiling level

The first step is to define the height of the ceiling. Starting from the finished floor level and as specified in the project, clearly locate the level of the ceiling. Using the tube as a communicating vessel level, move the reference line every 3 m. You can also use a laser level to trace the ceiling.

Mark for placing perimeter steel angle

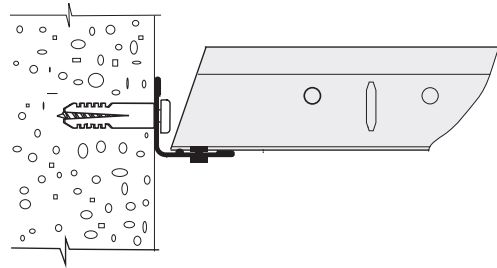


Anchorage of the perimeter angle

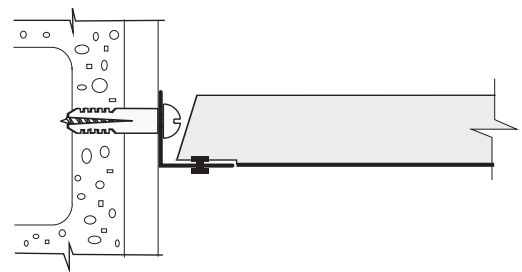


Anchorage of the perimeter angle to the ceiling

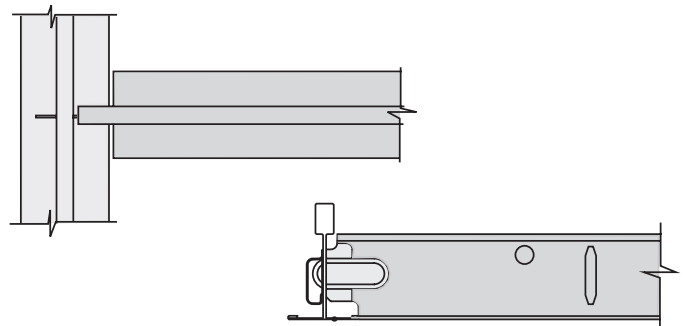
Main tee



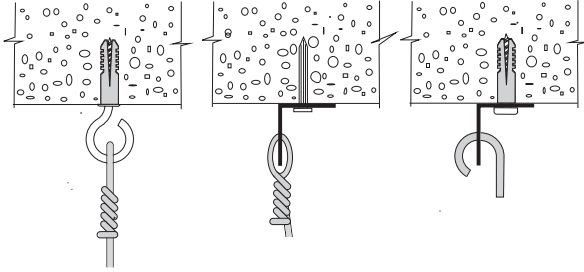
Cross tee



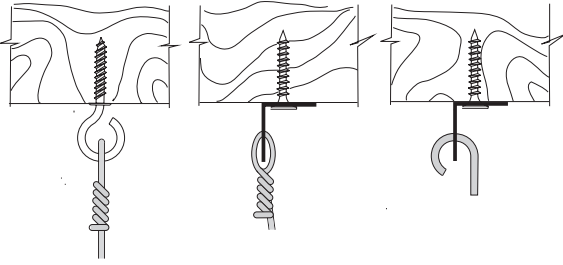
Intersection of profiles with the perimeter angle



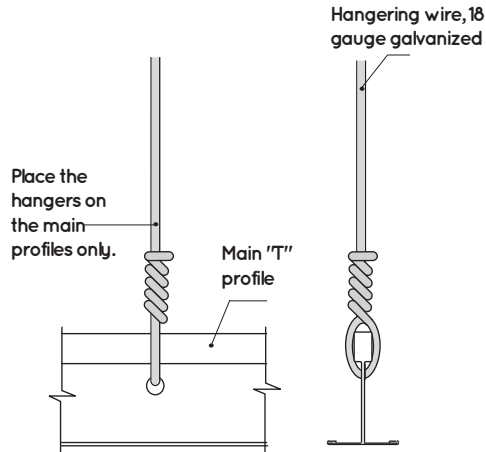
Anchorage of hanger wires to concrete structure



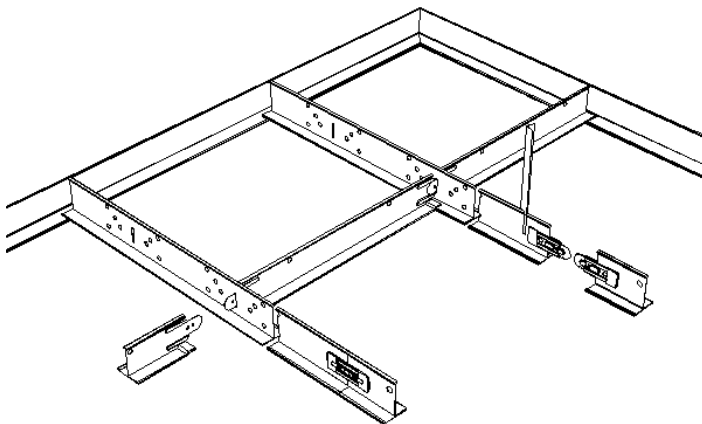
Anchorage of hangers to wood structure



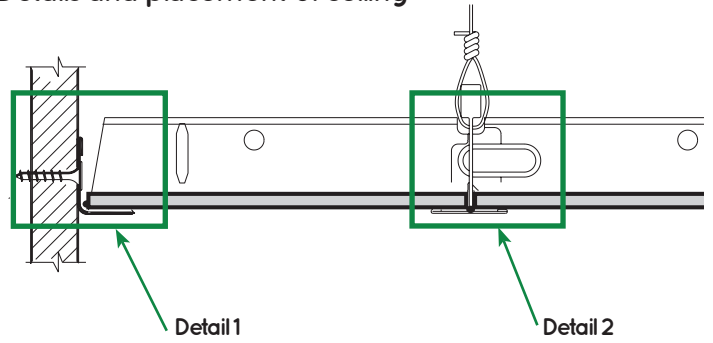
Hanger Wire



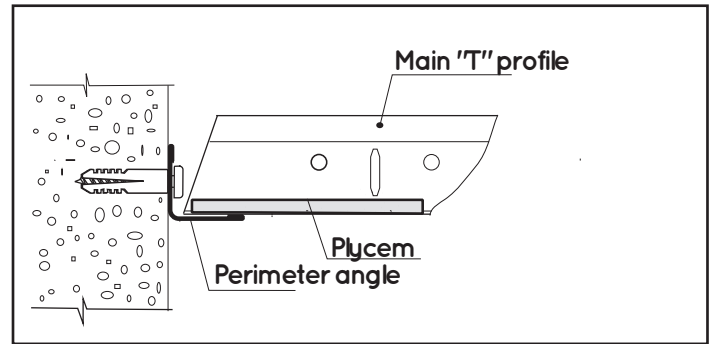
Structural assembly



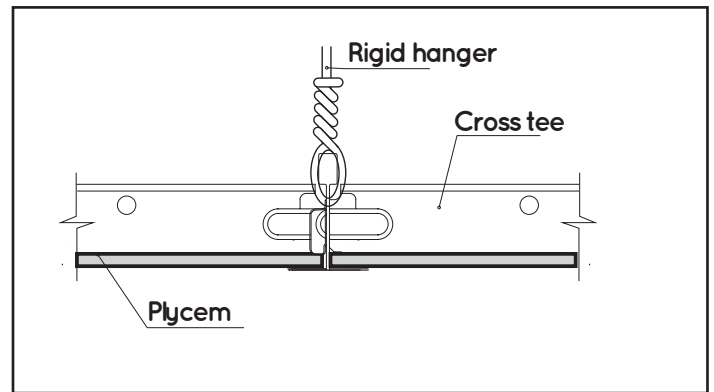
Details and placement of ceiling



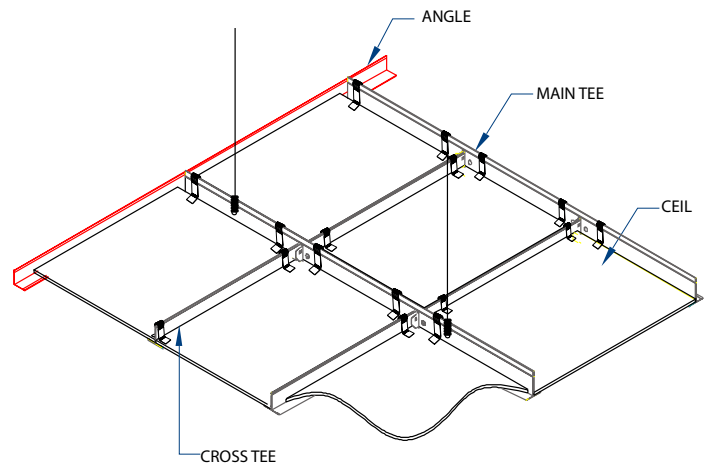
Detail 1



Detail 2

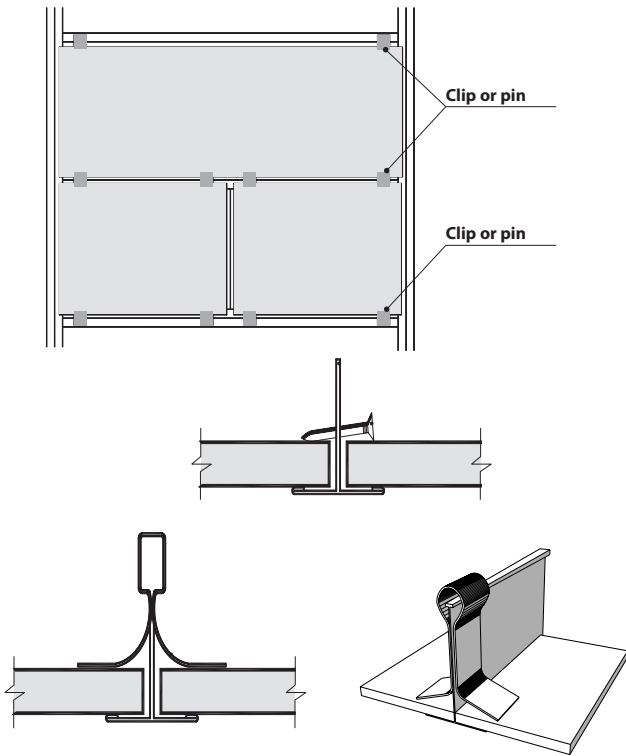


Complete suspended ceiling



Adjusting the boards

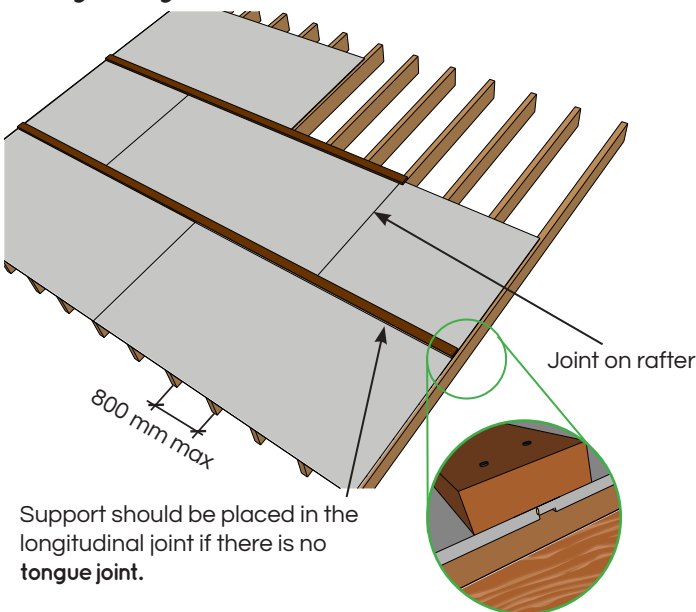
Fibrocel boards should be fastened to the structure with pins or mechanical presses. Screws may be used as pins.



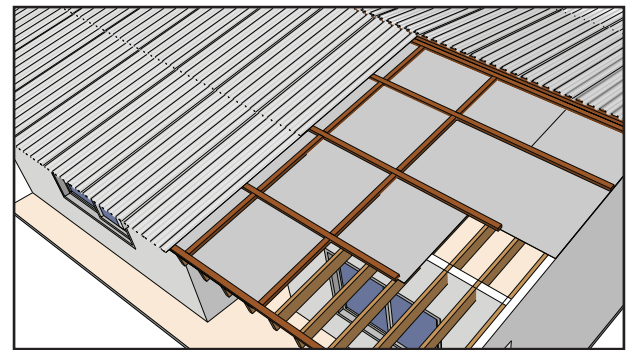
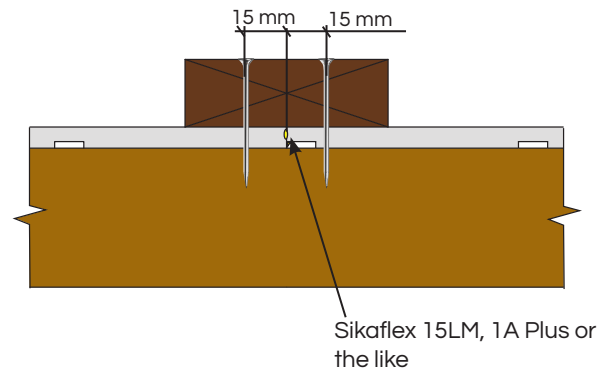
Coffered ceiling - exposed structure

Ceilings with exposed structure (coffered ceiling)

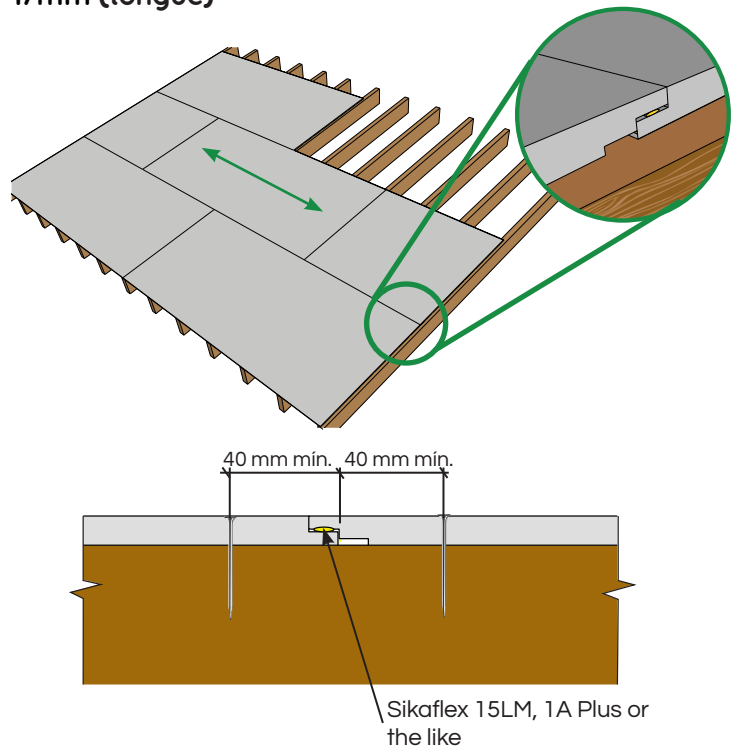
Longitudinal joint in Plycem Slotted 8 mm (straight edge)



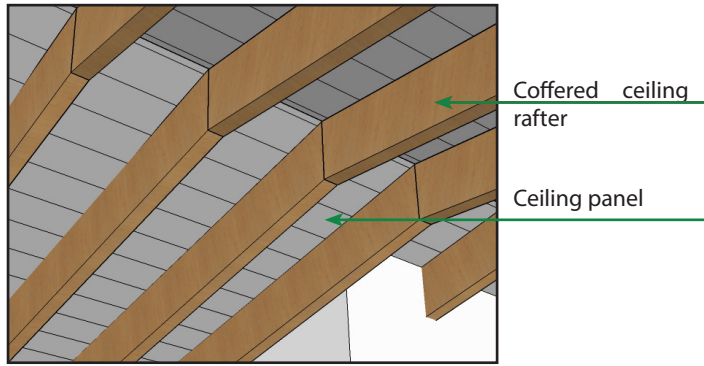
Support should be placed in the longitudinal joint if there is no tongue joint.



Longitudinal joint in Plycem Slotted 11 mm, 14mm and 17mm (tongue)



Note: On Plycem Slotted, it is suggested to seal the joints with Sikaflex 15 LM, 1A Plus or the like.

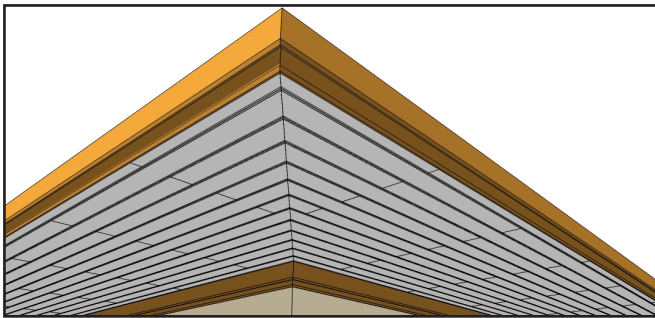


TYPES OF SOFFITS IN EAVES

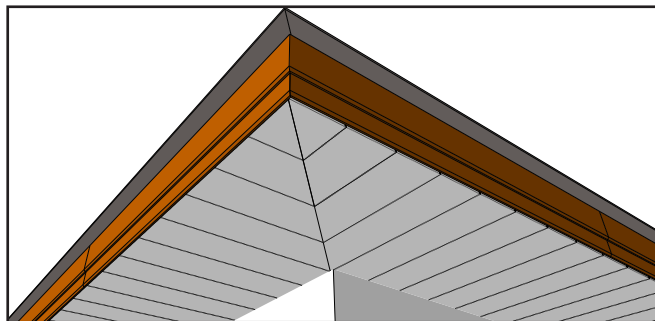
Placement of the fascias in the eaves.

1- Plycem Tongue and Groove Siding

11 Longitudinal direction

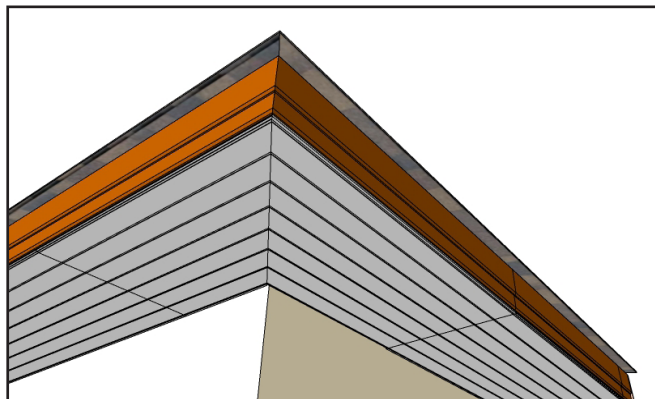


12 Transversal Direction

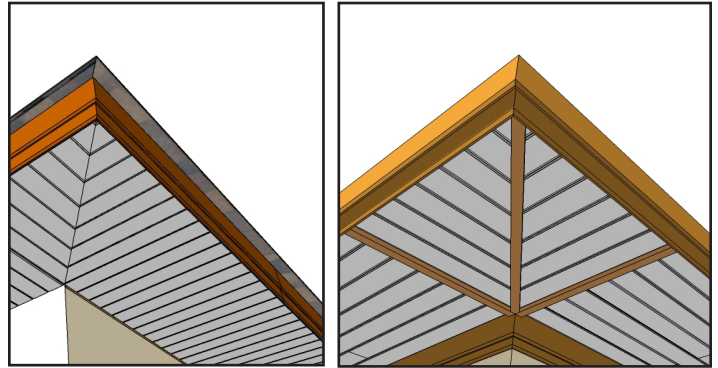


1- Plycem Slotted of 8 or 11 mm thickness

11 Longitudinal direction

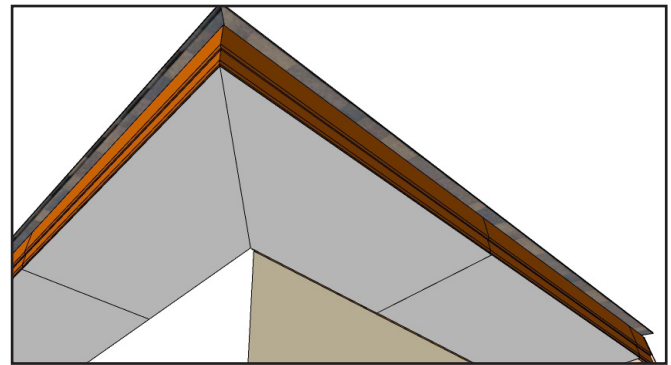


12 Transversal Direction

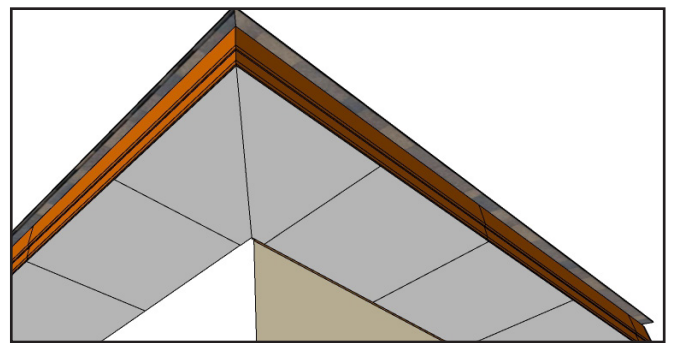


1- Plycem Ceiling Panel

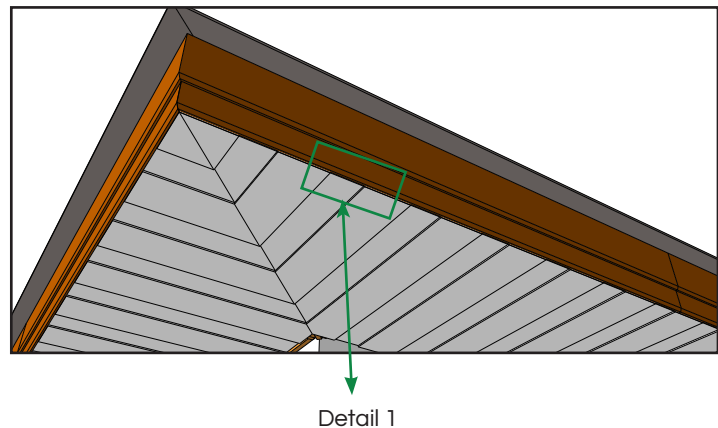
11 Longitudinal direction



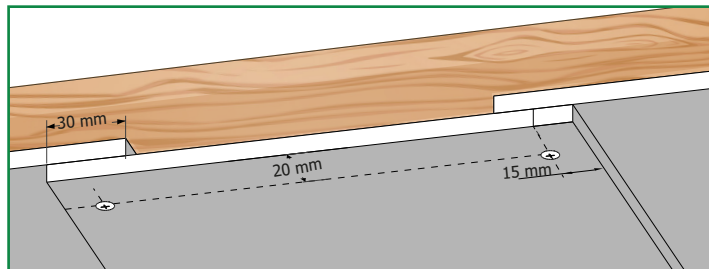
12 Transversal Direction



1- Overlapping fascia

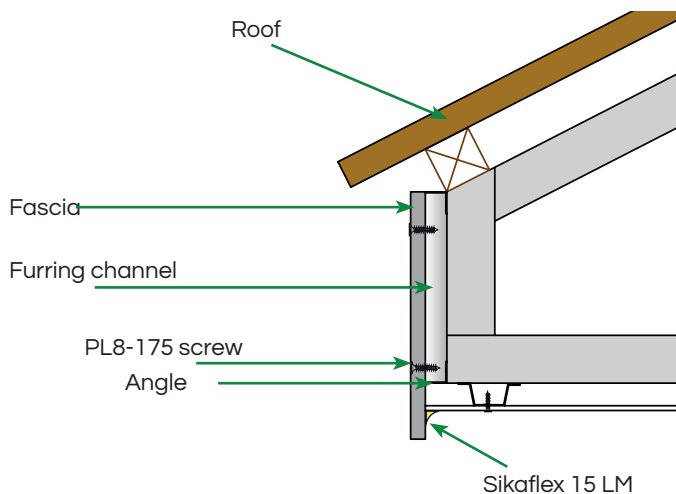


Detail 1

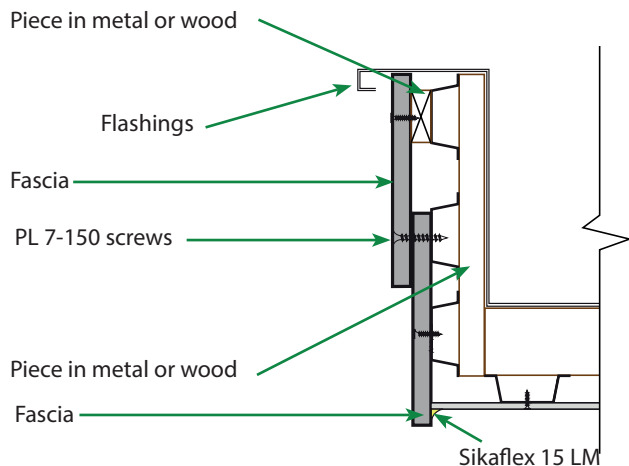
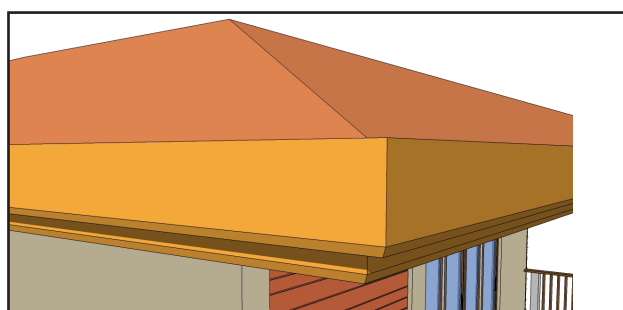


The fastening of the pieces on the long side is 15mm from the edge and 200mm from each other. Use PL7-150 screw min.

Details of fascia fastening

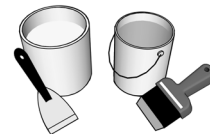


Detail of overlapping fascia



PAINTE

To finish the Ceiling System , use highquality 100% acrylic latex paint or coating. Always follow the manufacturer's instructions. To guarantee the maximum coverage of the product, apply a 100% primer and paint to all the areas that have been cut.



According to the INTE/ISO 8336:2018 standard, this product is manufactured for outdoor and indoor uses (Category B, Class 1).

The recommendations and instructions given in this manual represent an adequate guide for the use, storage and handling of the product. This guide does not replace the responsibility of the responsible engineer, structural engineer or supervisor of each of the projects in which the product is used. In case of projects in which special measures or manufacturing conditions are requested, the product will be manufactured according to plans and the design given by the client, assigned constructor or engineer, the installation instructions given by the client being applicable, without any responsibility on the part of PLYCEM. PLYCEM does not assume responsibility for misuse of the product, improper handling, improper storage or use of materials other than the suggested complementary ones. PLYCEM does not co-help in the installation and management part of structural design, so this manual does not represent a co-responsibility in that area, being the responsibility limited to the material only.



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