

# LOHAS

AUSTRALIA

ROOF TILE COLLECTION

# PLASMA ROOF TILE SPEC GUIDE

1  
2  
3

123

LOHASAU.COM

# WHY TERRACOTTA ROOF IS MORE THAN JUST A ROOF?

## NATURAL

**MIXTURE** OF CLAY AND MANGANESE DELIVERS TO IMBUE NATURAL COLOURS AND ELIMINATES FADE

**REDUCED** RISK OF MOULD, ROT AND COLOUR LOSS



**LIFE-LONG MAINTANENCE**



## H - CASSETTES

**BAKED** IN EXTREMELY HIGH TEMPERATURES IN AN INDIVIDUAL MOULD GIVES THE TILES EXCESSIVE STRENGTH AND HIGH THERMAL PERFORMANCE

**REDUCED** WATER ABSORPTION RATE!

**3- 5% LOW WATER** ABSORPTION RATE PREVENTS CRACKS INCREASED DURABILITY MAKES FOR

**LOW NEED FOR MAINTENANCE!**

**IF ROOFTILES ARE MADE DIFFERENTLY?**

**CONCRETE TILES HAVE**

**8-10%** WATER ABSORPTION RATE

**HIGH RISK** TO GET GREEN MOSS

**LESS STRENGTH**



**“EWW.. BAD ROOF!”**

**WHAT'S MORE?**

**“PERFECTLY TIGHT INTERLOCKING SYSTEM ”**



**CLIP LOCK!**

ENGINEERED DESIGN OF SECURE INTERLOCKING SYSTEM

**EXCITING** FACT!

**ALL DIFFERENT ROOF**

ACCESSORIES ARE AVAILABLE TO SUIT ANY ROOFING PLANS YOU HAVE.

# WHY LOHAS TERRACOTTA ROOFTILES?

## LOHAS ROOF TILE

## GENERAL ROOF TILE

**HIGH  
TEMPERATURE  
BAKED**



**LOW  
TEMPERATURE  
BAKED**



**LOW  
WATER  
ABSORPTION  
RATE**



**HIGH  
WATER  
ABSORPTION  
RATE**

**SECURE  
COLOUR  
PROTECTION**



**INSECURE  
COLOUR  
PROTECTION**

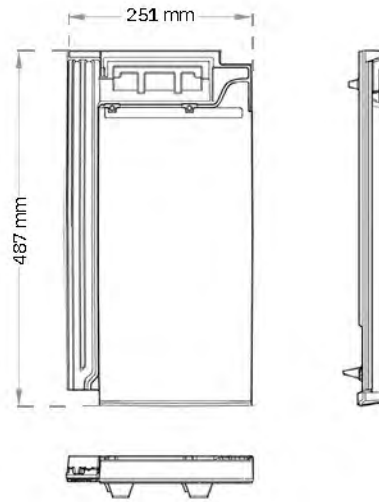


**LOW  
RISK LIFE  
MAINTENANCE**



**HIGH  
RISK LIFE  
MAINTENANCE**

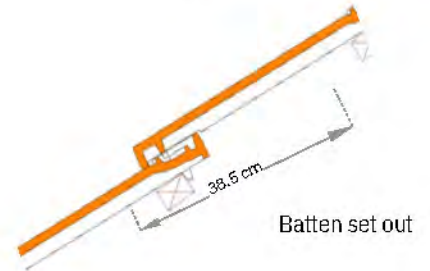
# PLASMA



12.5 Tiles/sqm

6 Tiles per pack

4 kg Weight



Flexural Strength



Impermeability



Frost Resistance

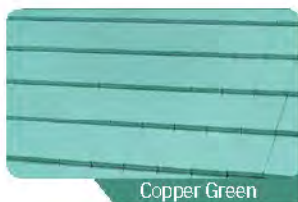


Geometric Characteristics



Roofing & Facade

## Colours



## Accessories



RIDGE



STARTER



3-WAY APEX

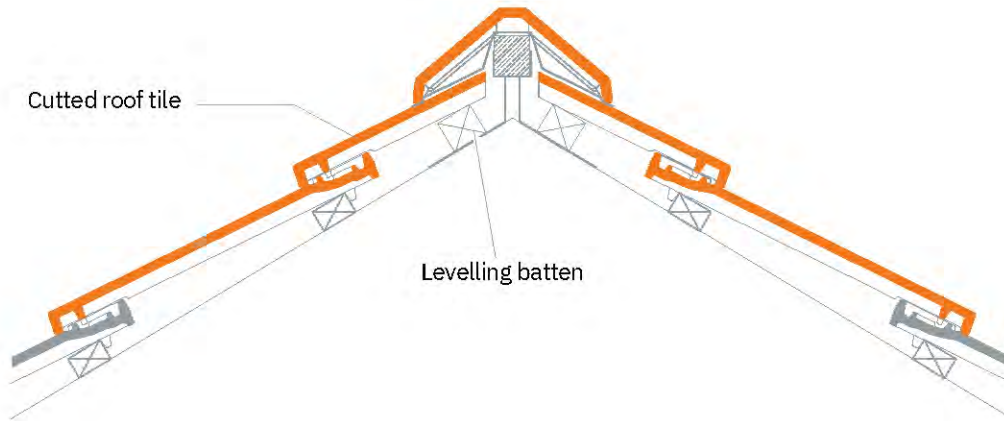
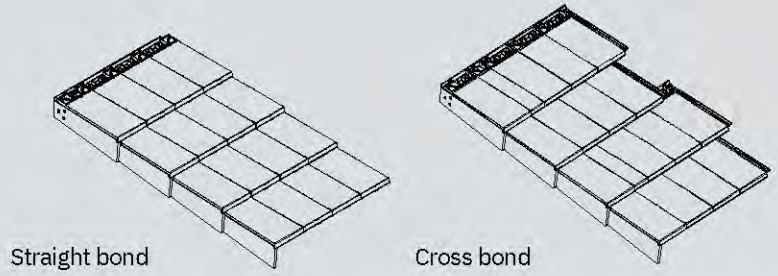


HALF TILE

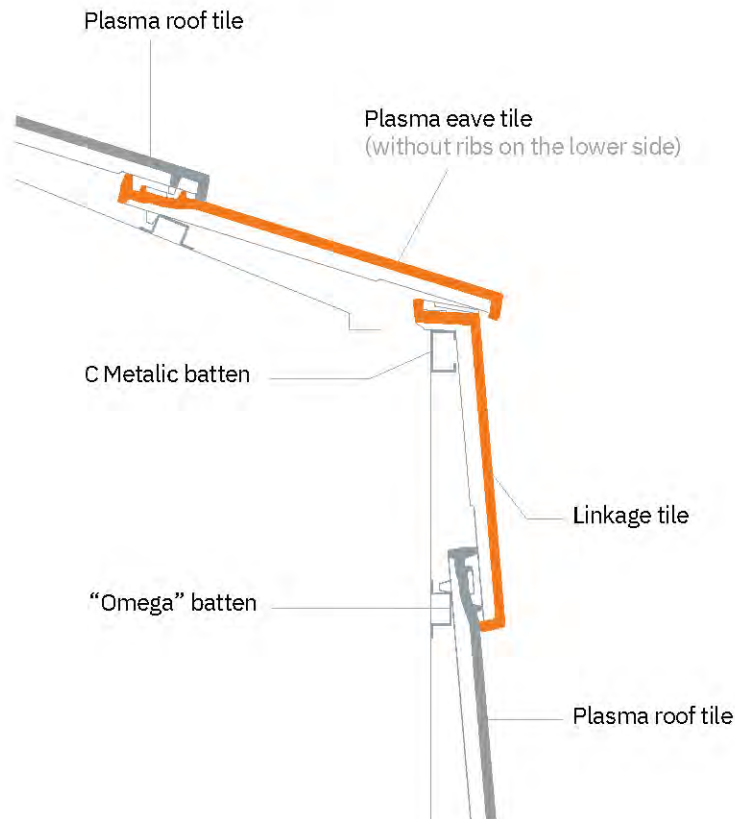


BARGE

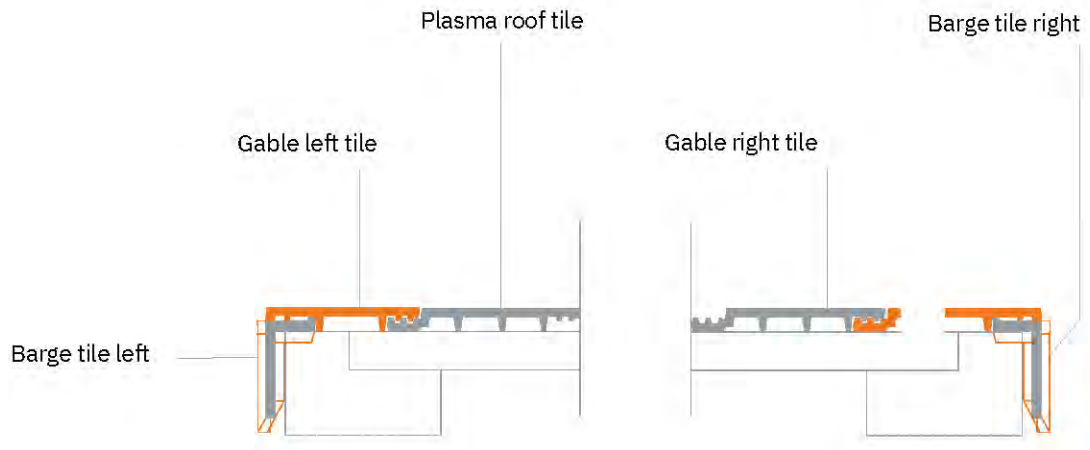
# technical drawings



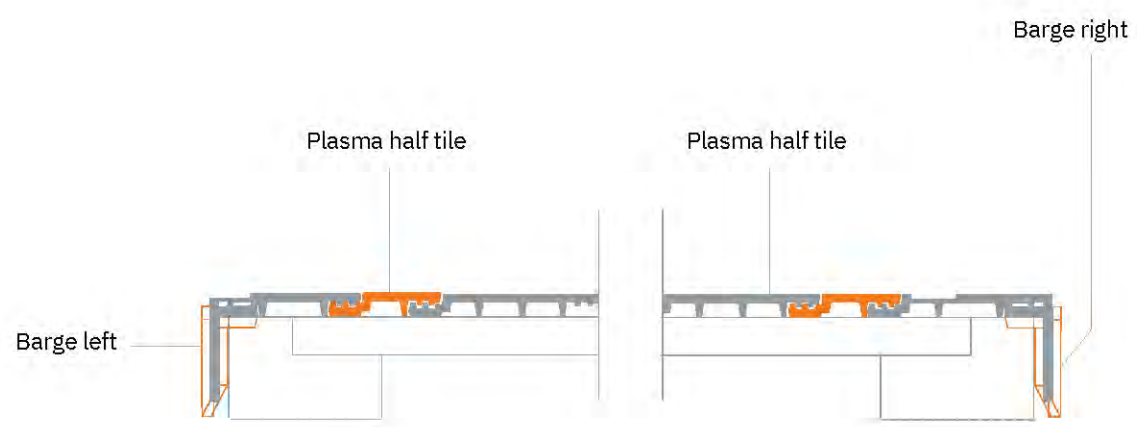
1



2

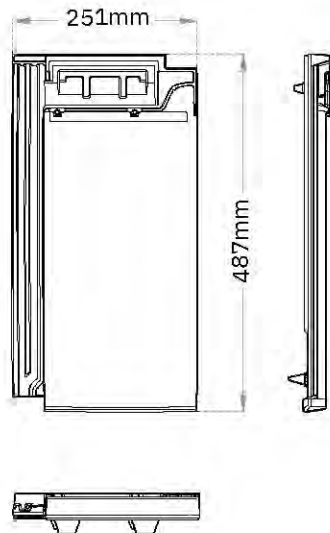


**3**

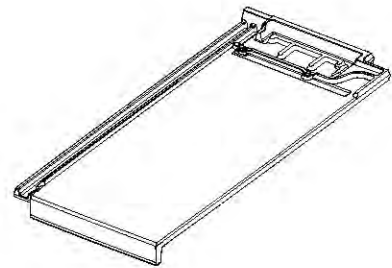


**4**

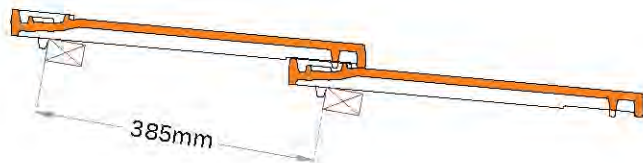
# Plasma Technical Drawing Detail



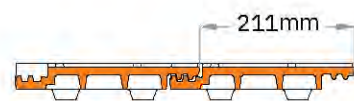
1. Transversal and longitudinal views



2. Isometric view



3. Average gauge length



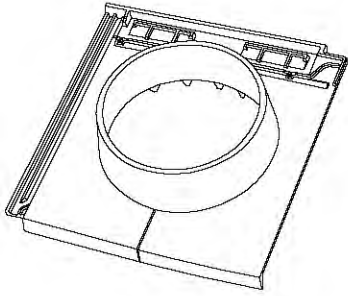
4. Coverage width of 1 Plasma roof tile

## Notes:

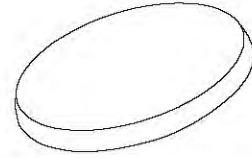
The presented measures are approximate values in "mm". Please consult LOHAS technical department to clarify any doubt. We strongly advise not using PVC batten due to its flexibility and way of attachment to the structure (often using nails or bolts with a significant "head") that may interfere with the proper support of the PLASMA tile.

It is not advisable to fix Plasma roof tile using nails, however, opting for this method the tip of the nail should be adapted to prevent cracking or breaking during application.

# cap and roof tile with opening 250mm

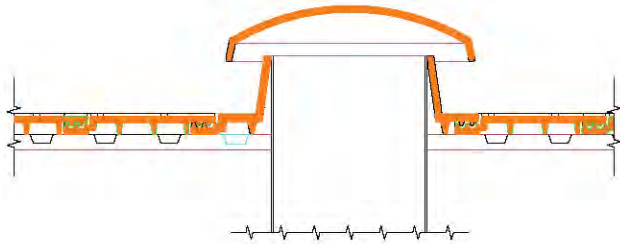


1. Isometric view of roof tile with opening 250mm

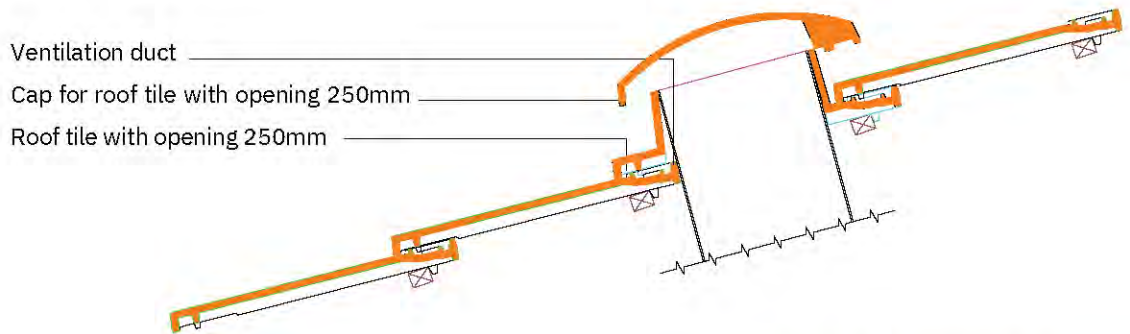


2. Isometric view of cap

## Ventilation duct solution

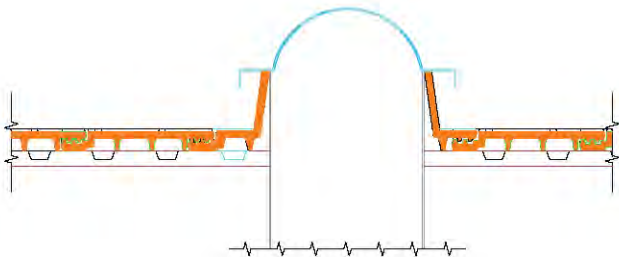


3. Cross-view  
4. Longitudinal cut

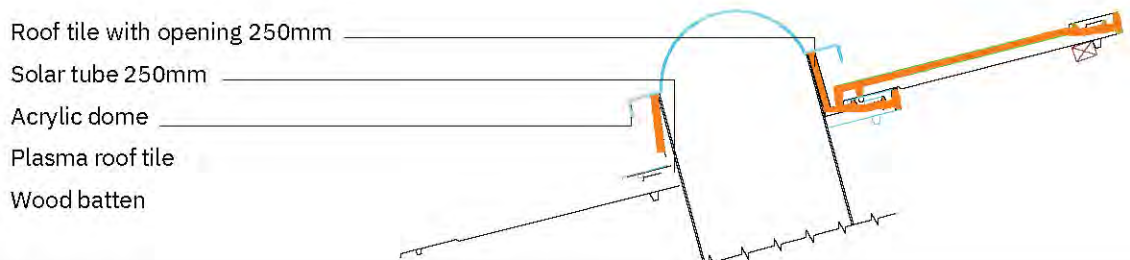


Ventilation duct  
Cap for roof tile with opening 250mm  
Roof tile with opening 250mm

## Solar tube solution



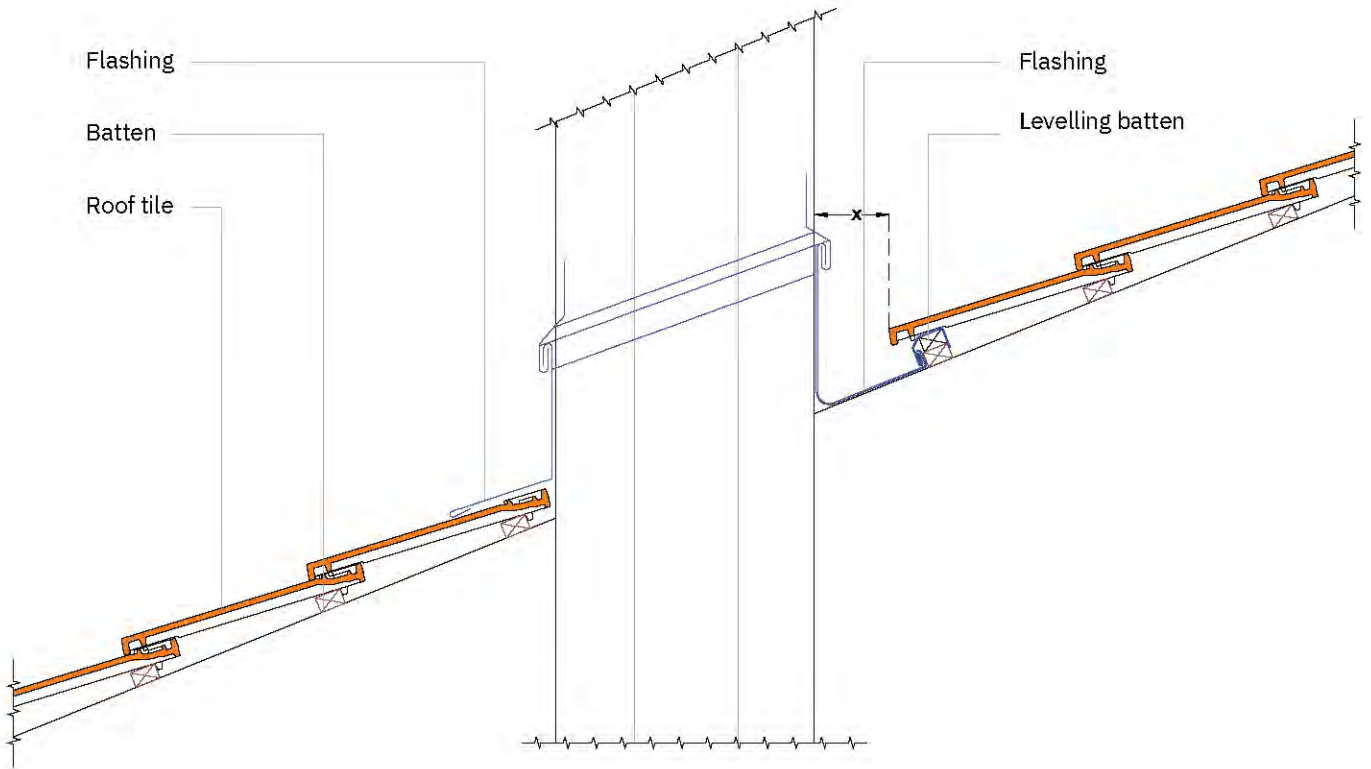
5. Cross-view  
6. Longitudinal cut



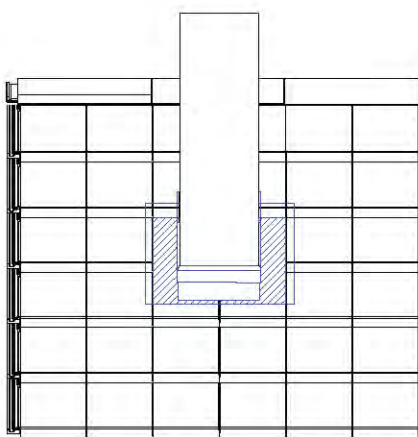
Roof tile with opening 250mm  
Solar tube 250mm  
Acrylic dome  
Plasma roof tile  
Wood batten



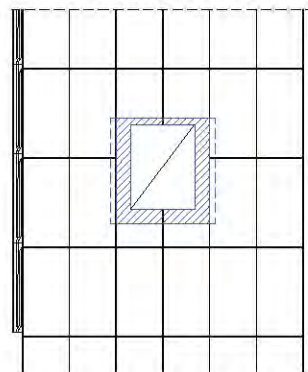
# Chimney Flashing



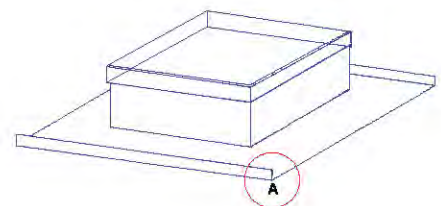
X = Variable measure depending on the length of the sloping plane and the expected amount of water carried on the flashing. However, this measure should be, at least, 150mm.



Elevation

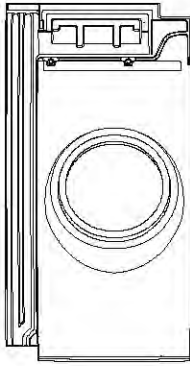


Plan view

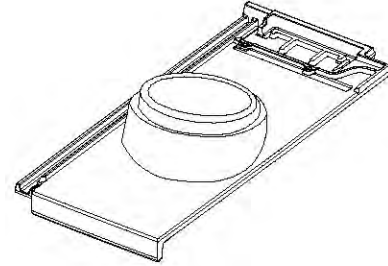


A = It should be created in the casing flange to prevent water from entering the roof. The height of the flange depends on the type of roof structure, and must be at least 20mm (measurement indicative).

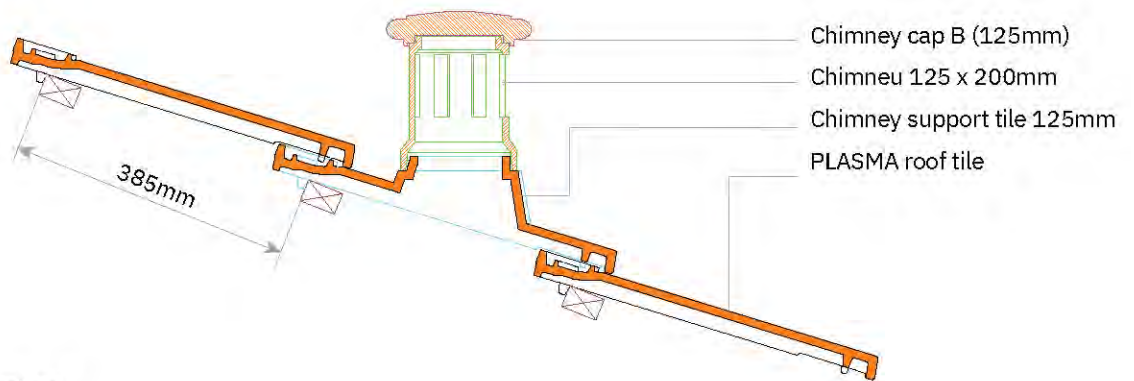
# Chimney support tile



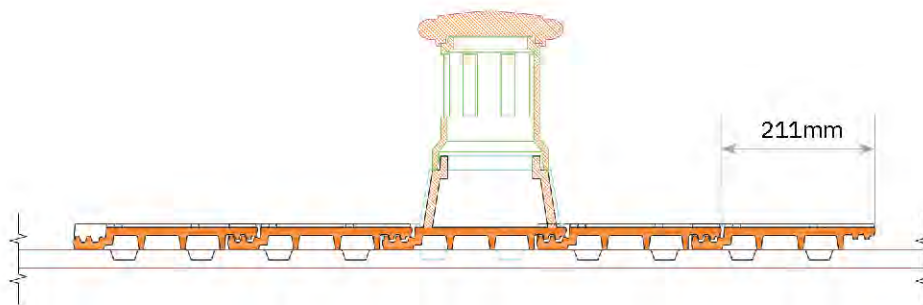
1. Chimney support tile 125mm



2. Isometric view



3. Longitudinal cut

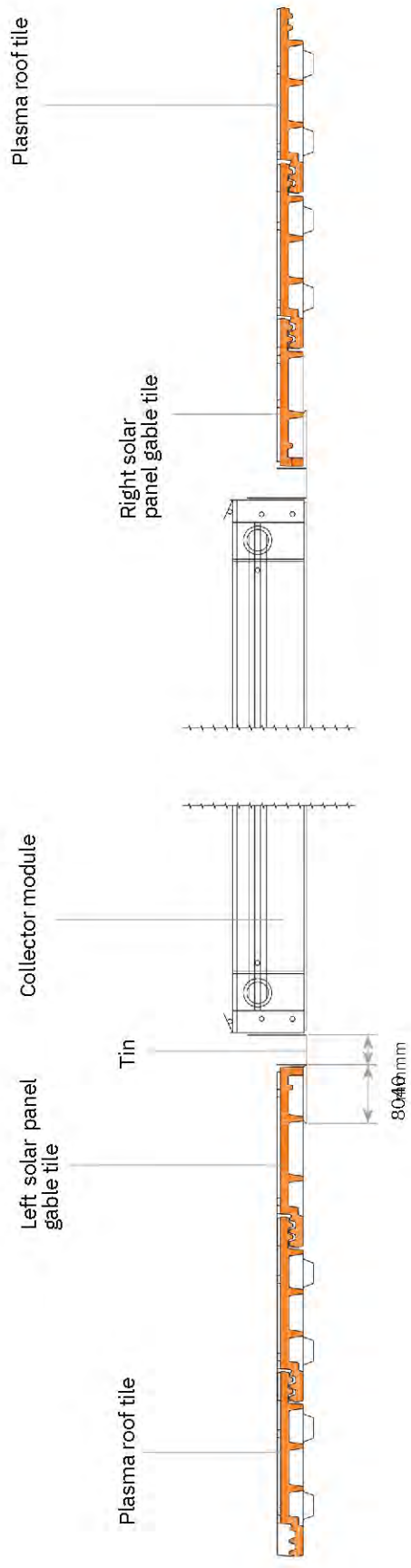


4. Cross-section

## Notes:

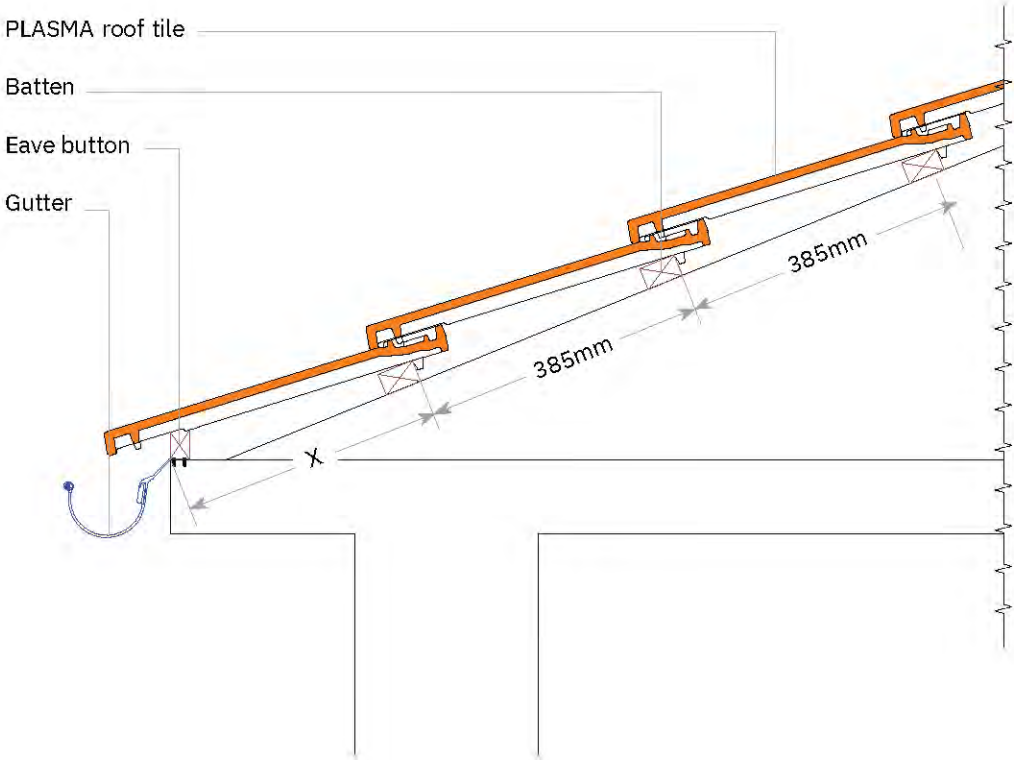
- Chimney support tile 125mm PLASMA is designed for an average slope of 22°(40%). For other inclinations, the combination of the base with the chimney flue must be adjusted on site.
- The presented measures are approximate values in "mm". Please consult LOHAS technical department to clarify any doubt.

# collector solar module



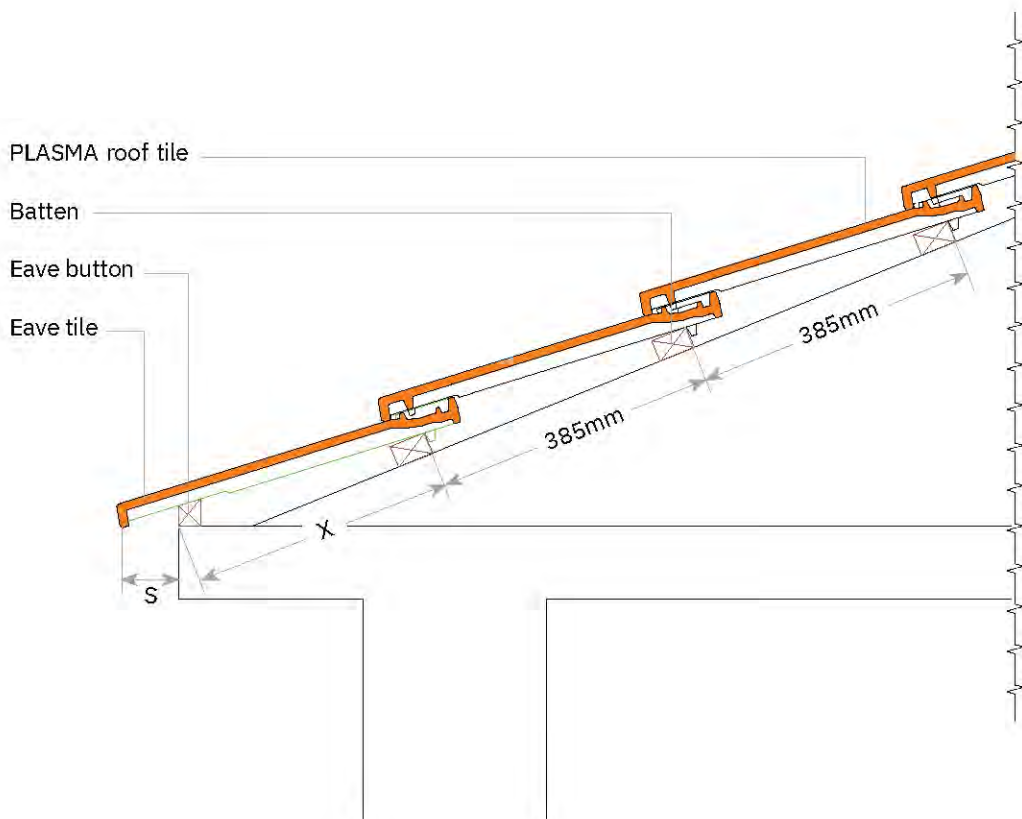
Horizontal cut

# eave detail with gutter



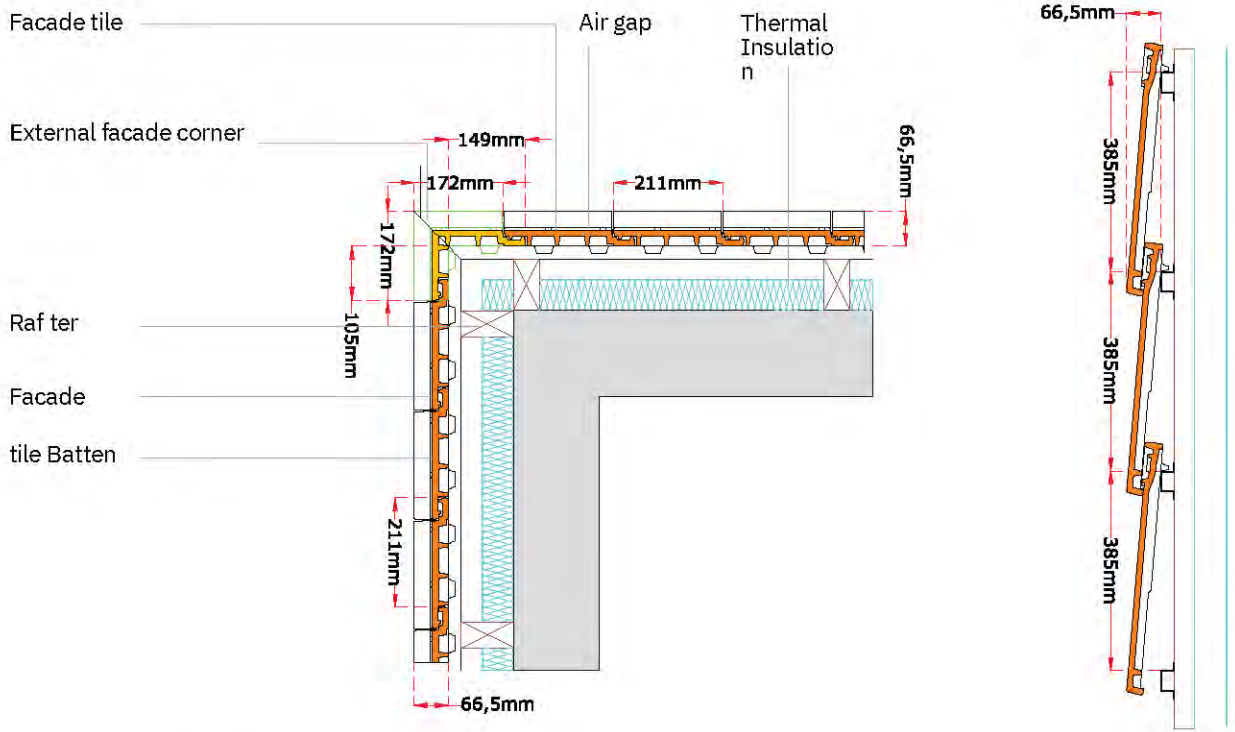
X = Variable measure depending on the roof pitch.

# eave detail



X = Variable measures depending on the roof pitch and measure expected to be projected beyond the wall (S). S = Measure advised to be between 50 e 150mm, for Plasma roof tile.

# external facade corner



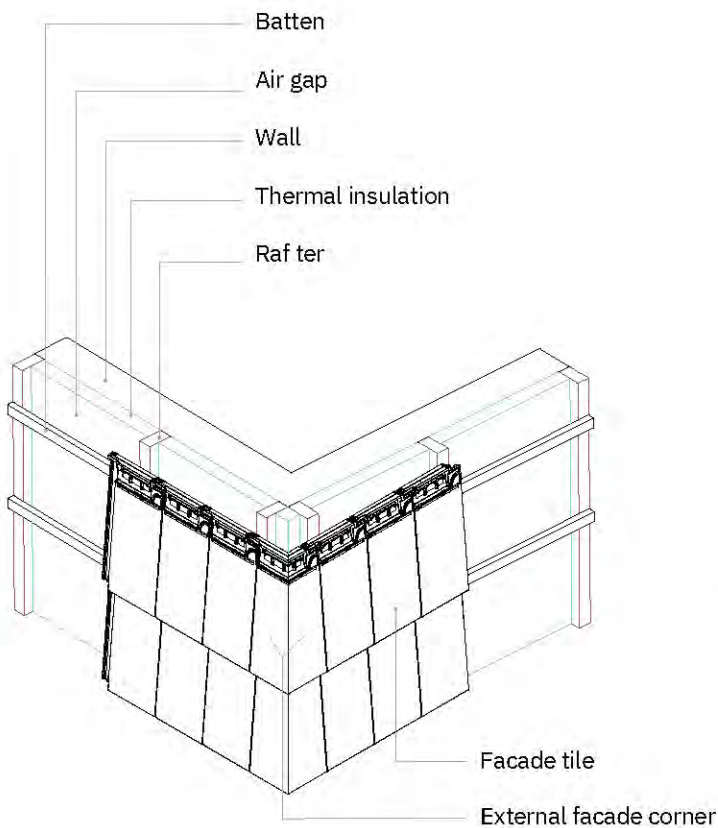
1. External facade corner

The intersection angle of two vertical planes may not necessarily be 90. These fittings can be adapted to different angles (please consult LOHAS Technical Department).

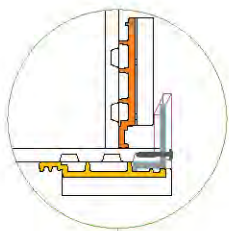
Plasma allows the possibility of simultaneous use on the roof as well as on the facade (there are specific accessories to do this interface). It has two pre-holes so that it can be vertically fixed, with self-drilling screws and washers, our factory also developed an additional metallic "clip" for using one in each tile of the facade. The use of Plasma roof tile on the facade, should always implicate the previous evaluation and advising from LOHAS technical department, through the analysis of the architecture project.

It is not advisable to fix Plasma roof tile using nails, however, opting for this method the tip of the nail should be adapted to prevent cracking or breaking during application.

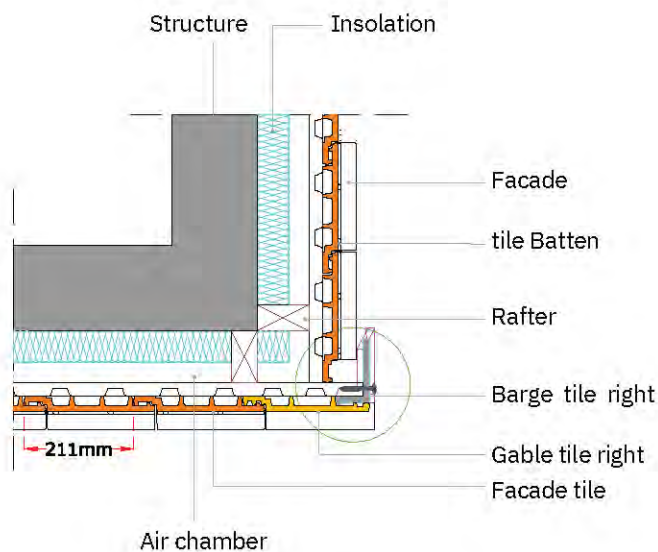
2. External facade corner - isometric view



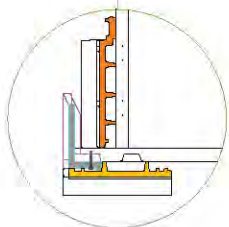
# finishing the corner with Barge Tiles



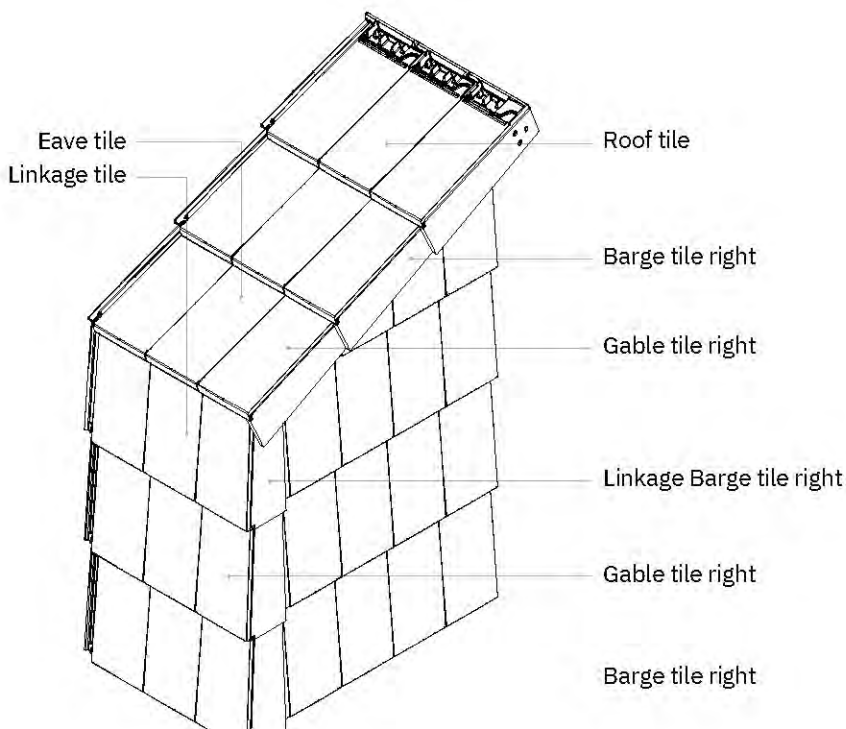
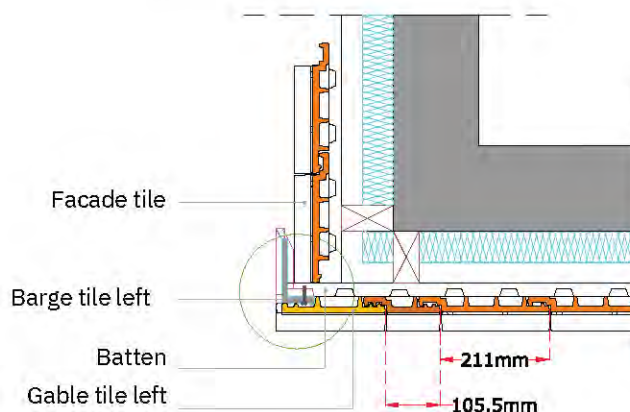
1.Right corner



When applying the barge tile on the corner, the batten should be as much salient as possible, to allow the fixing of the trim strip to the barge, via a screw, placed on top of the gable or on sideways.



2.Left corner



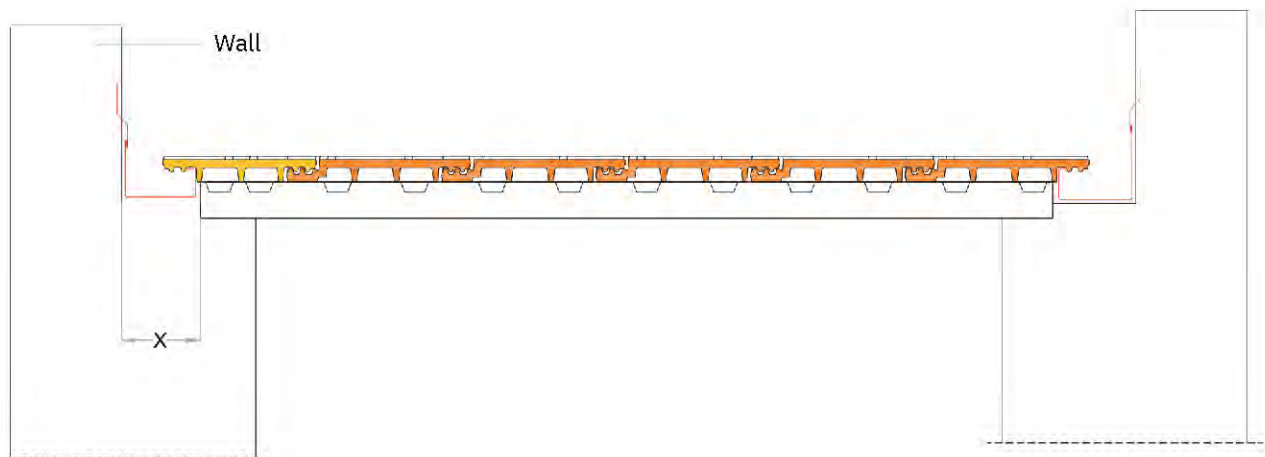
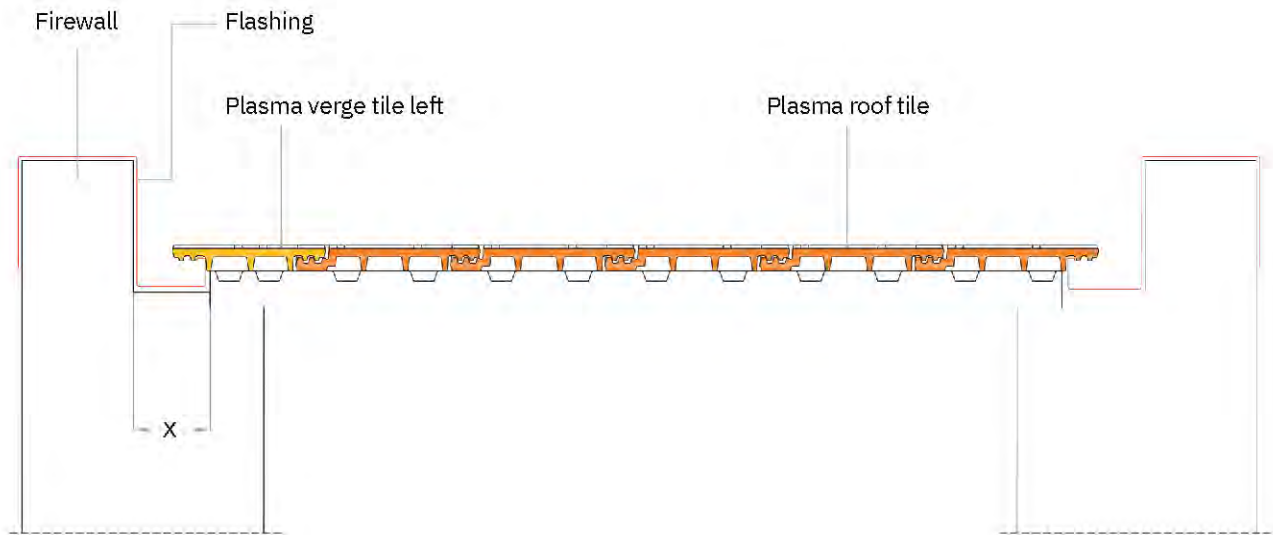
3.Isometric view of the right corner in the facade

## Notes:

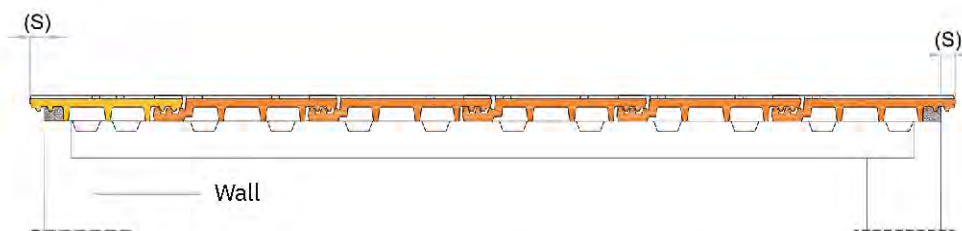
In areas of high exposure of the roof, the fixing can be achieved by applying screws and washers to pre-existing holes in the roof tiles.

Our factory also developed an additional metallic "clip" for joint application, using one for each tile on the facade. The application of the Plasma roof tile on the facade always involves the preliminary assessment and counseling by LOHAS Technical Department, by providing the elements of architectural design.

# finishing the roof edge with/without wall



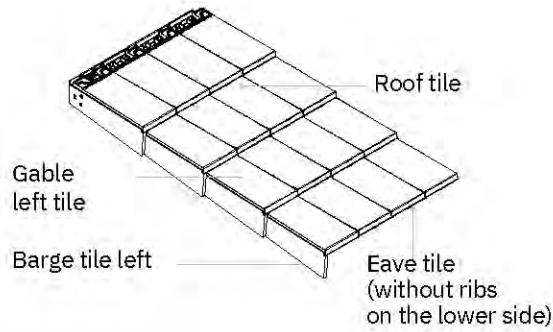
X - Variable measure depending on the length of the sloping plane and the expected amount of water carried on the flashing.



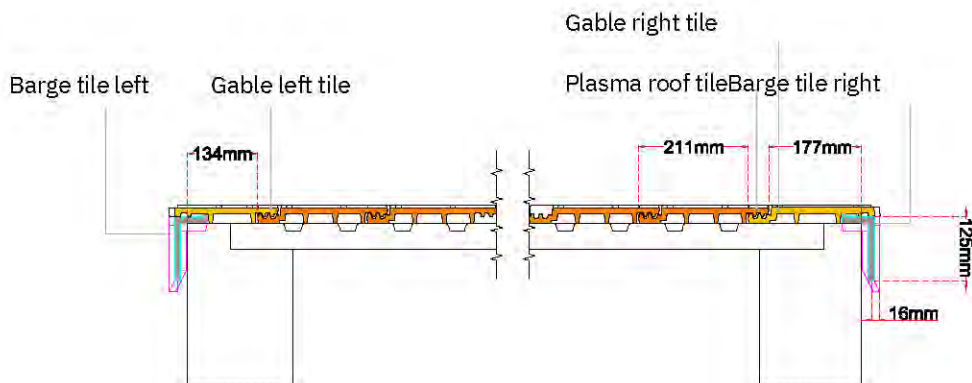
(S) - Plasma roof tile and left verge tile lateral overhang, should be between 15 and 20mm creating a "drip" effect preventing the water flow in the wall. These pieces fixation is made by applying mortar or other similar products of low absorption (eg. FLEXIM). In areas of high exposure of the roof, the fixing can be achieved by the application of screws and washers in the pre-existing holes.



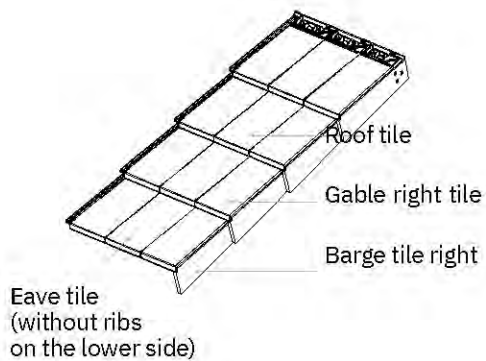
# finishing the roof edges with Barge Tiles



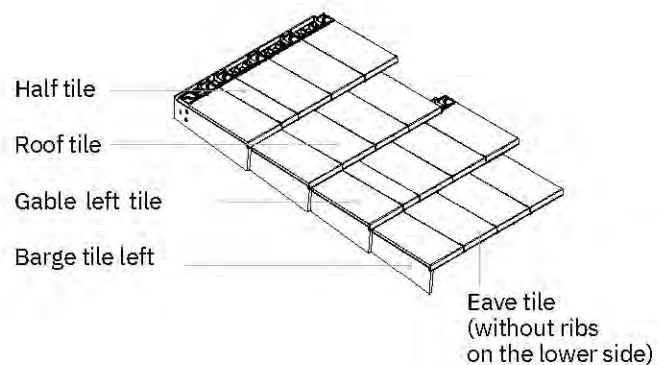
1. Aligned joint. The roof left edge.



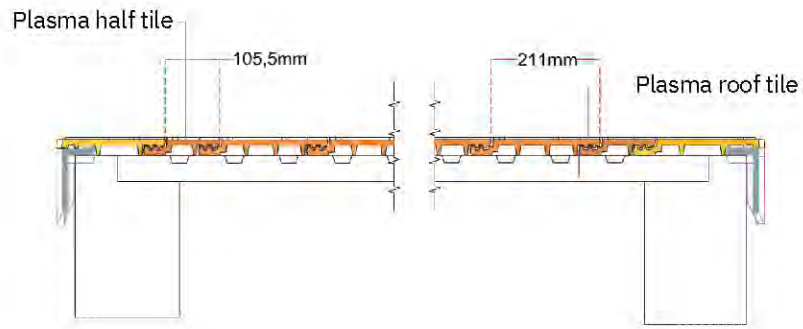
2. Aligned joint. Cross-section.



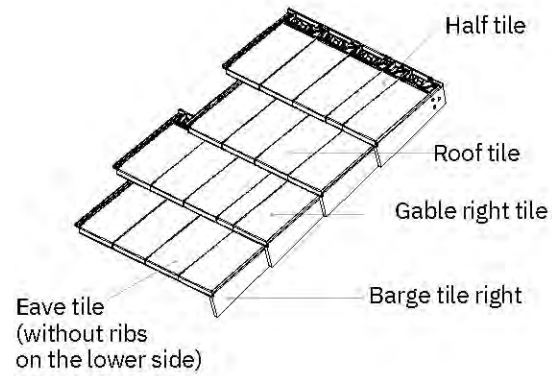
3. Aligned joint.



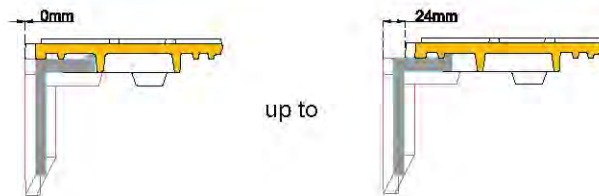
4. Crossed joints. The roof left edge.



5. Crossed joints. Cross-section



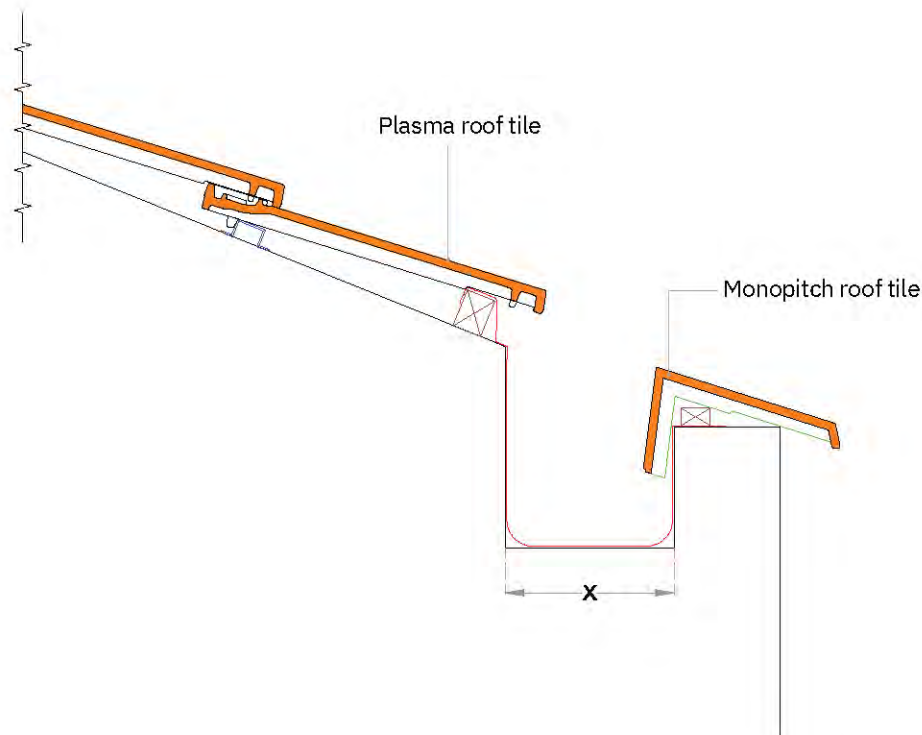
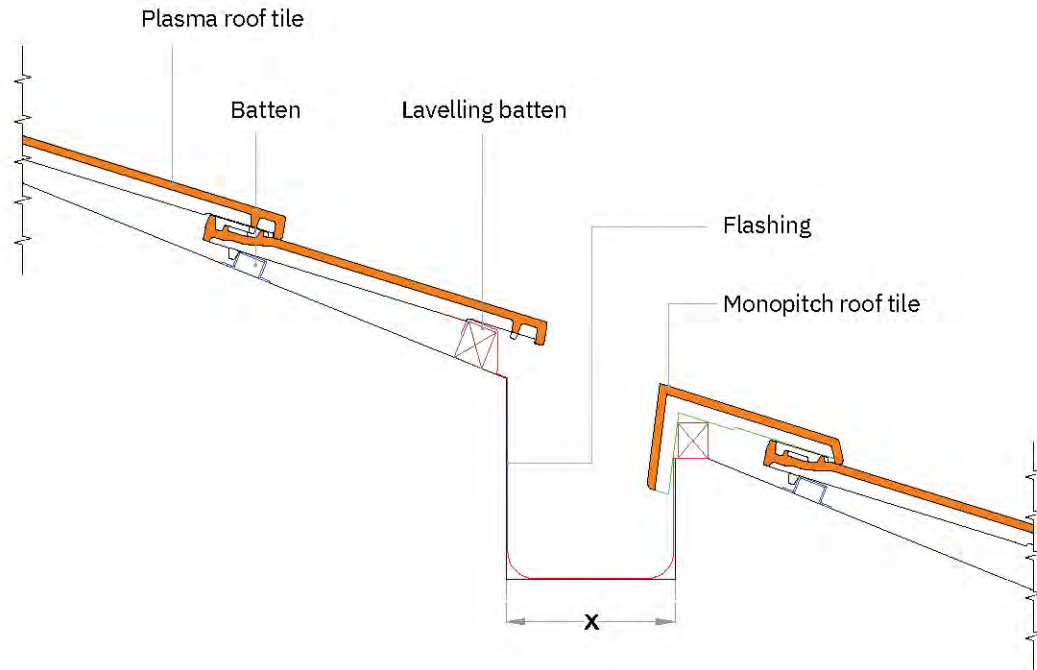
6. Crossed joints. The roof right edge.



7. Barge tile allowed covering extend.

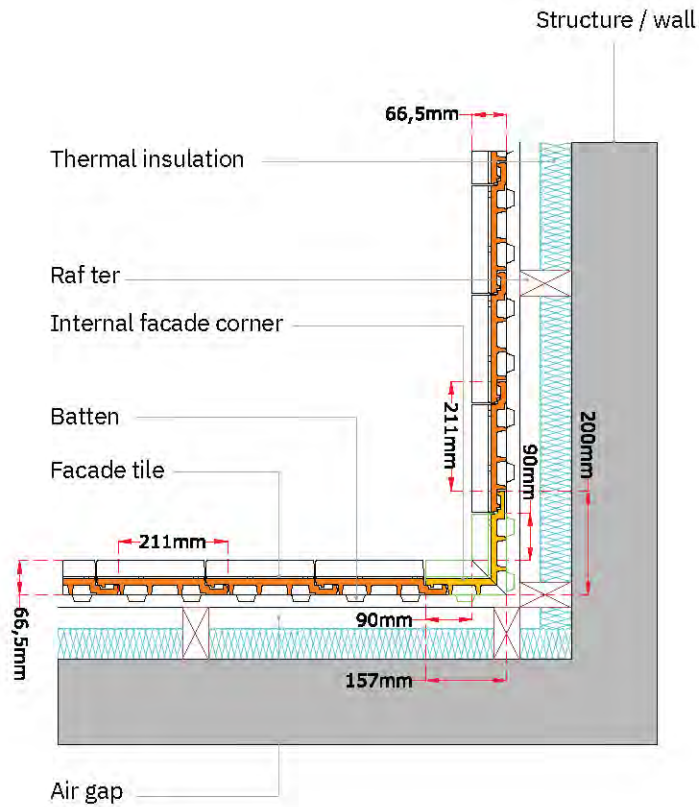
Note 1 : The presented measures are approximate values in mm.  
 Note 2 : The average width of 4 Plasma roof tile is 844mm.

# imbedded gutter finish detail

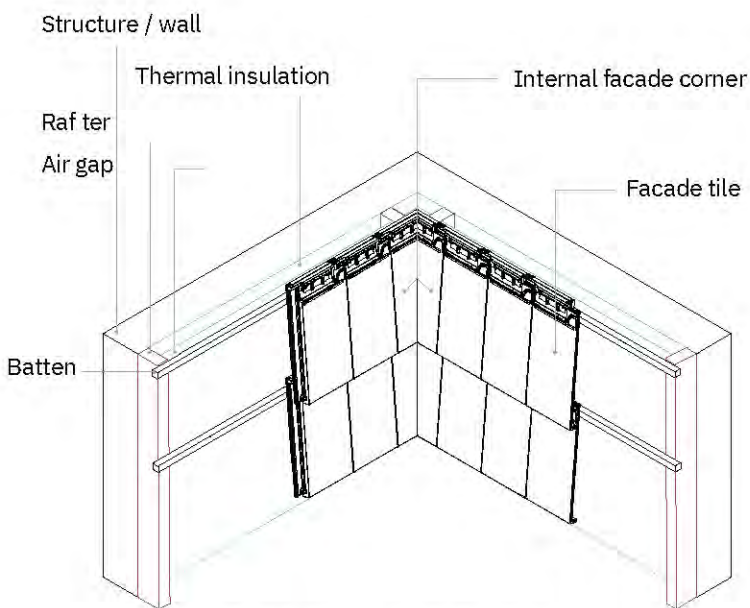
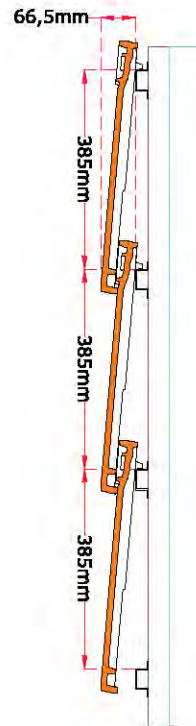


X = Variable measure depending on the length of the sloping plane and the expected amount of water carried on the flashing.

# internal facade corner



1. Internal facade corner



2. Internal facade corner - isometric view

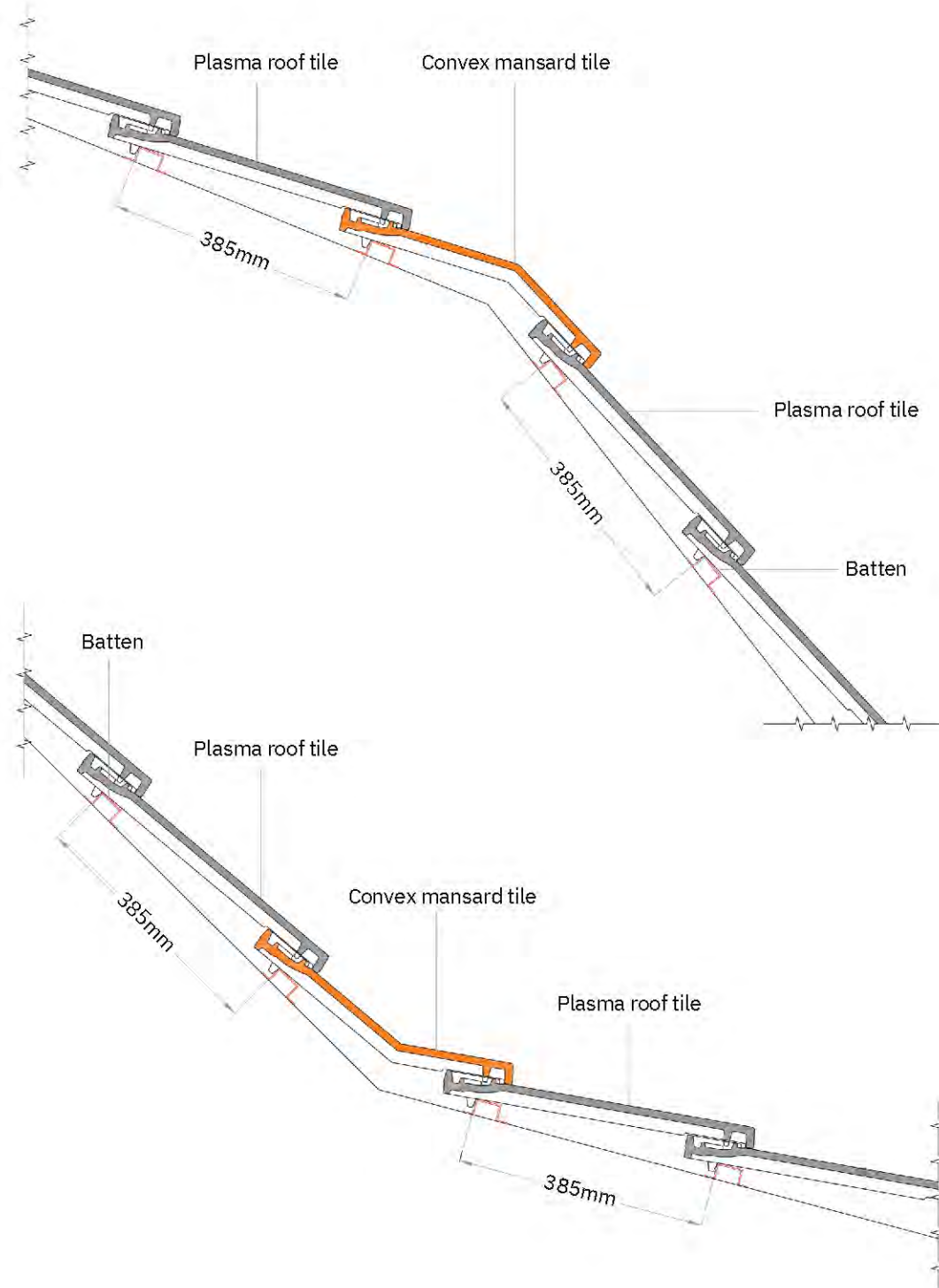
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The use of Plasma roof tile on the facade, should always implicate the previous evaluation and advising from LOHAS technical department, through the analysis of the architecture project.

It is not advisable to fix Plasma roof tile using nails, however, opting for this method the tip of the nail should be adapted to prevent cracking or breaking during application.

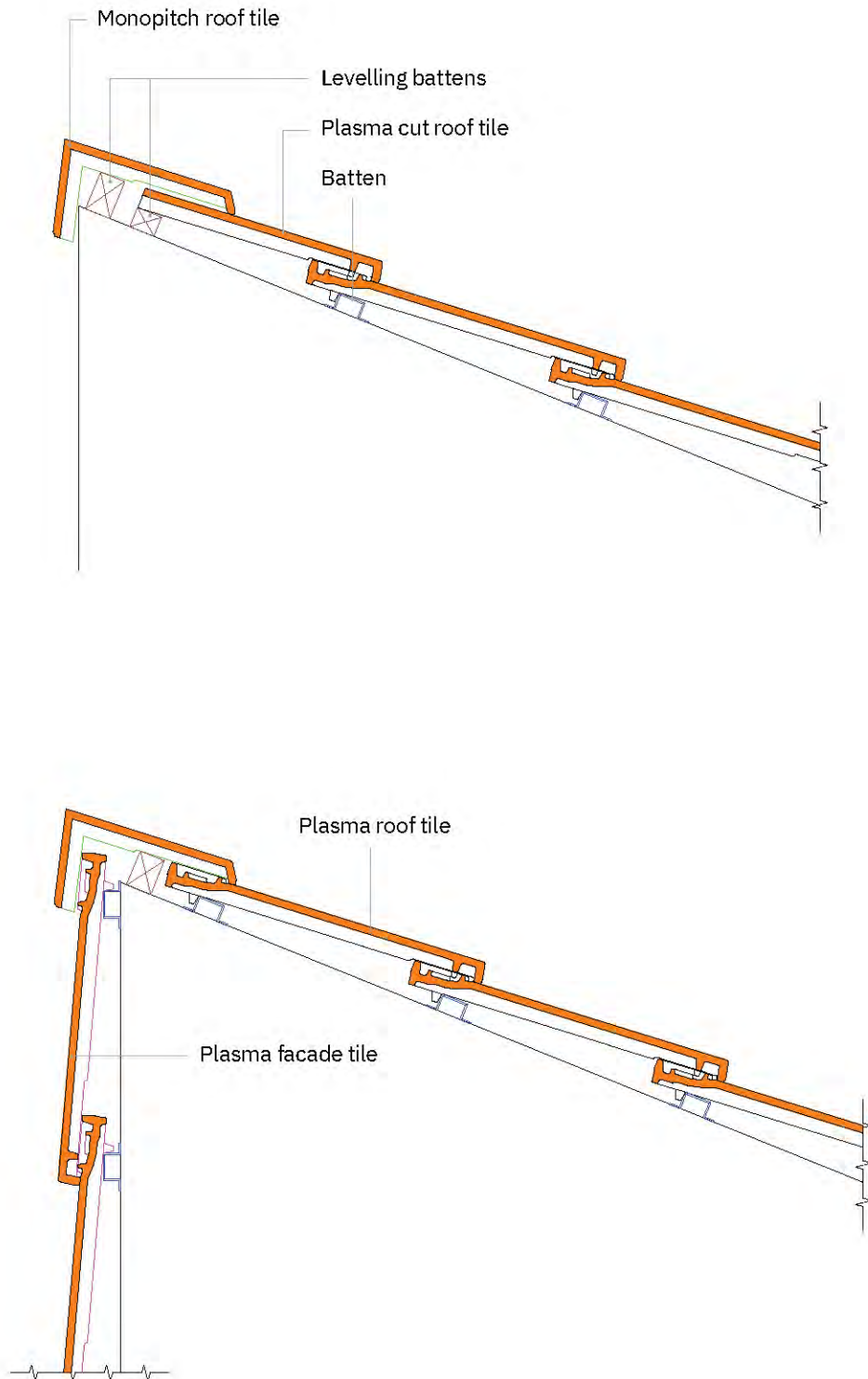
# mansard tile detail



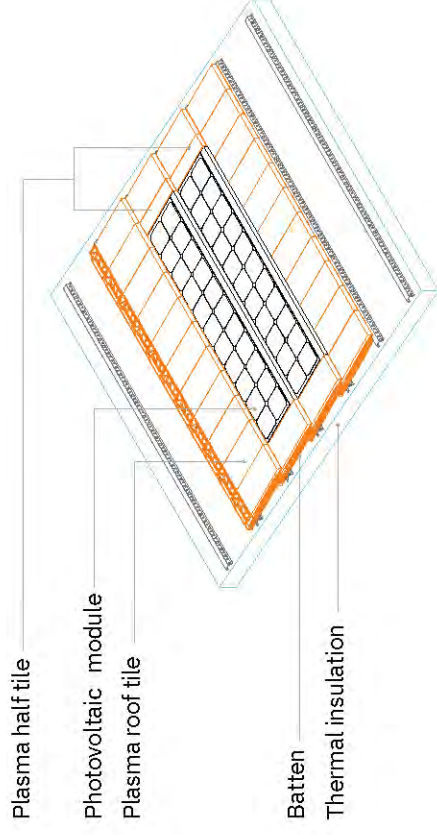
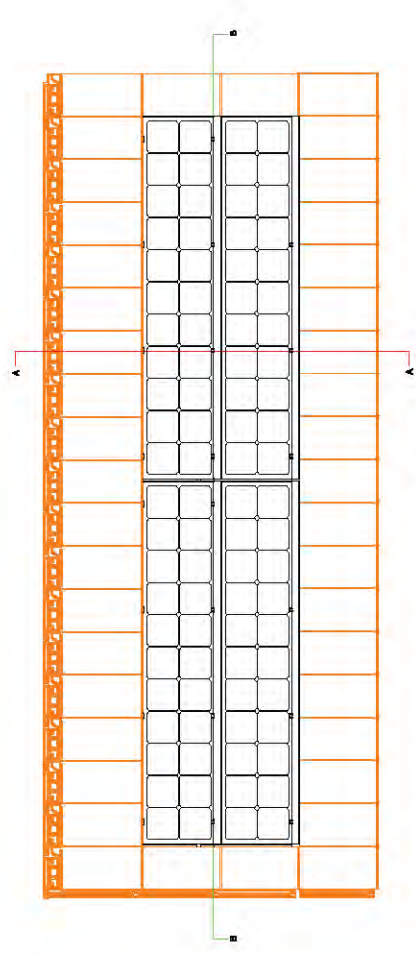
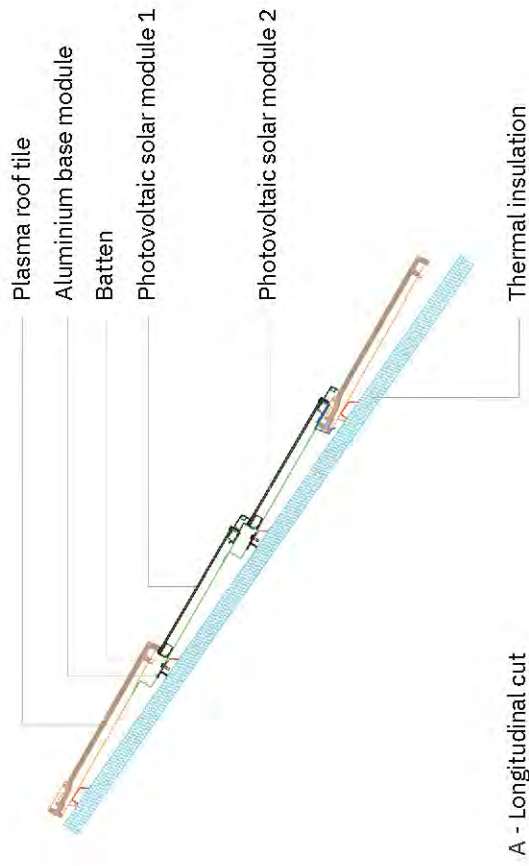
## Notes:

- Pieces available in various angles.
- The presented measures should be considered approximate. More questions, please contact the LOHAS Technical dept.

# monopitch roof detail

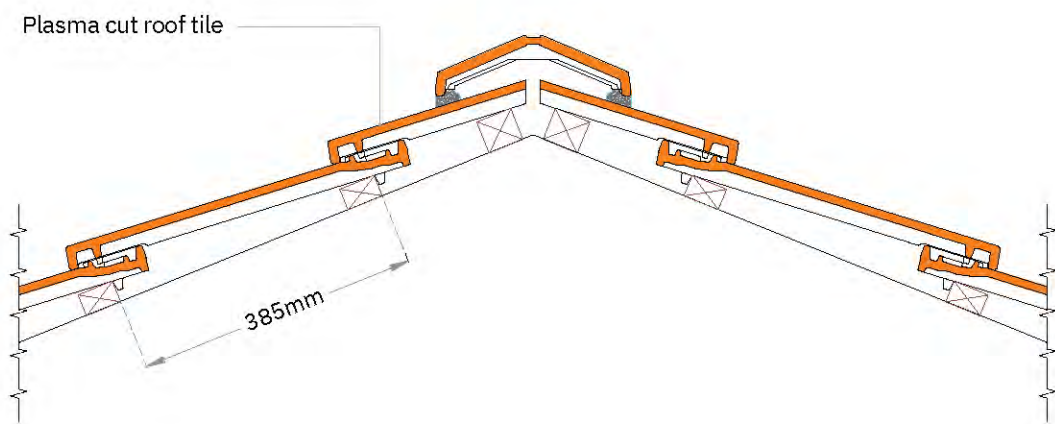
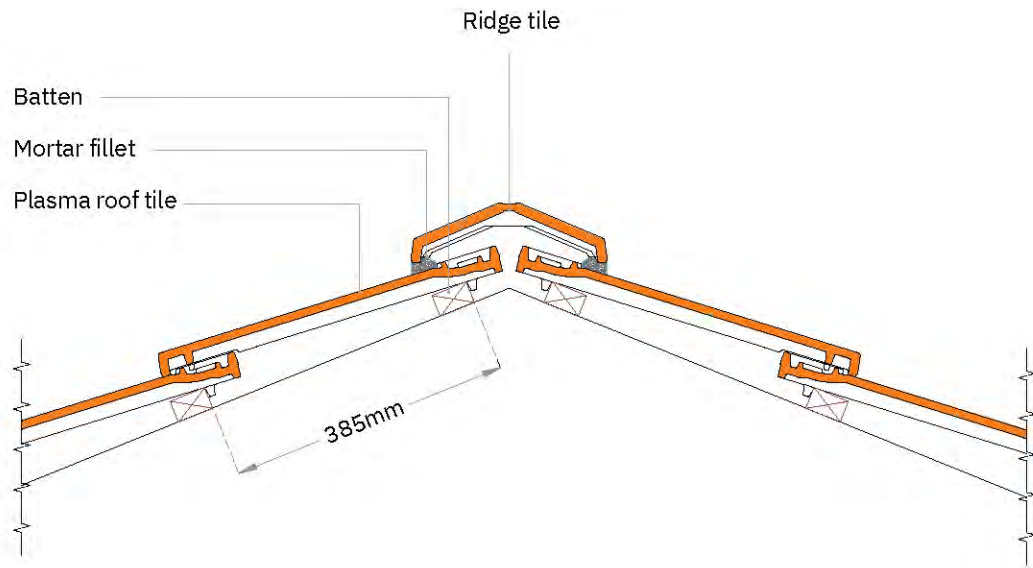


# photovoltaic solar module



# ridge tile detail

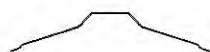
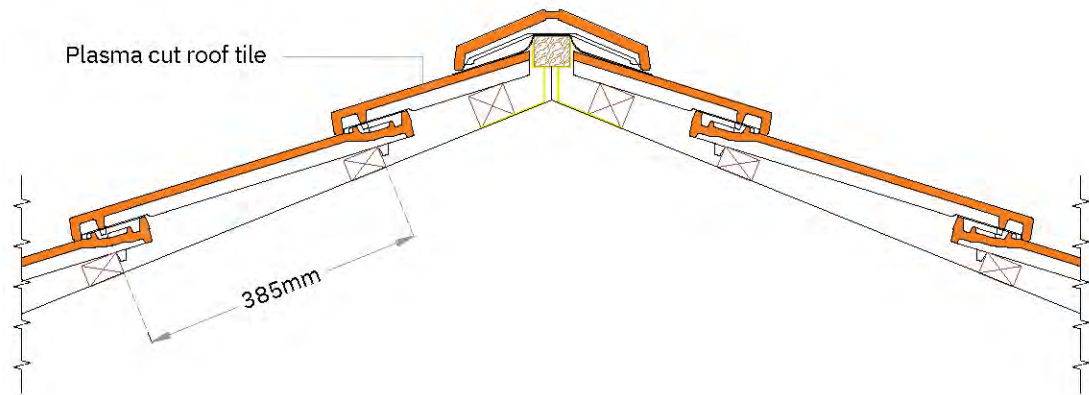
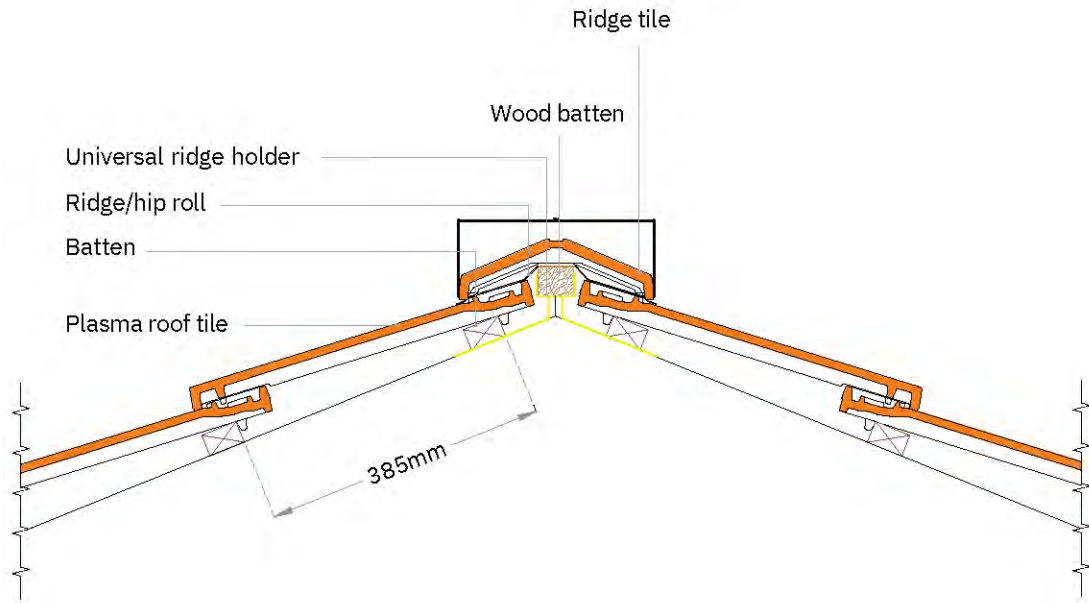
application with mortar





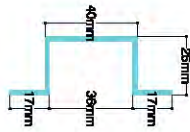
# ridge tile detail

Dry application

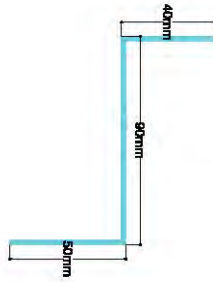


Roll to use on ridges and hips.

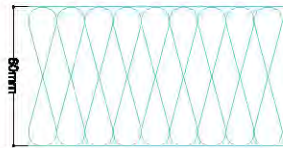
# Lohas PLASMA Aluminium Profiles



Omega aluminium profile



"Z" Aluminium profile



Thermal insulation  
(expanded polystyrene - plates with  
1000 x 1000 x 60mm)

Omega aluminium profile

Plasma facade tile

Thermal insulation  
Wall

Fixing clip (10mm)

"Z" aluminium profile

self-drilling screw  
4.8mm x 50mm

sealing washer (16mm)

90mm

Fixation point

Fixation point

"Z" aluminium profile

Omega aluminium profile

Plasma facade tile  
Plasma facade tile

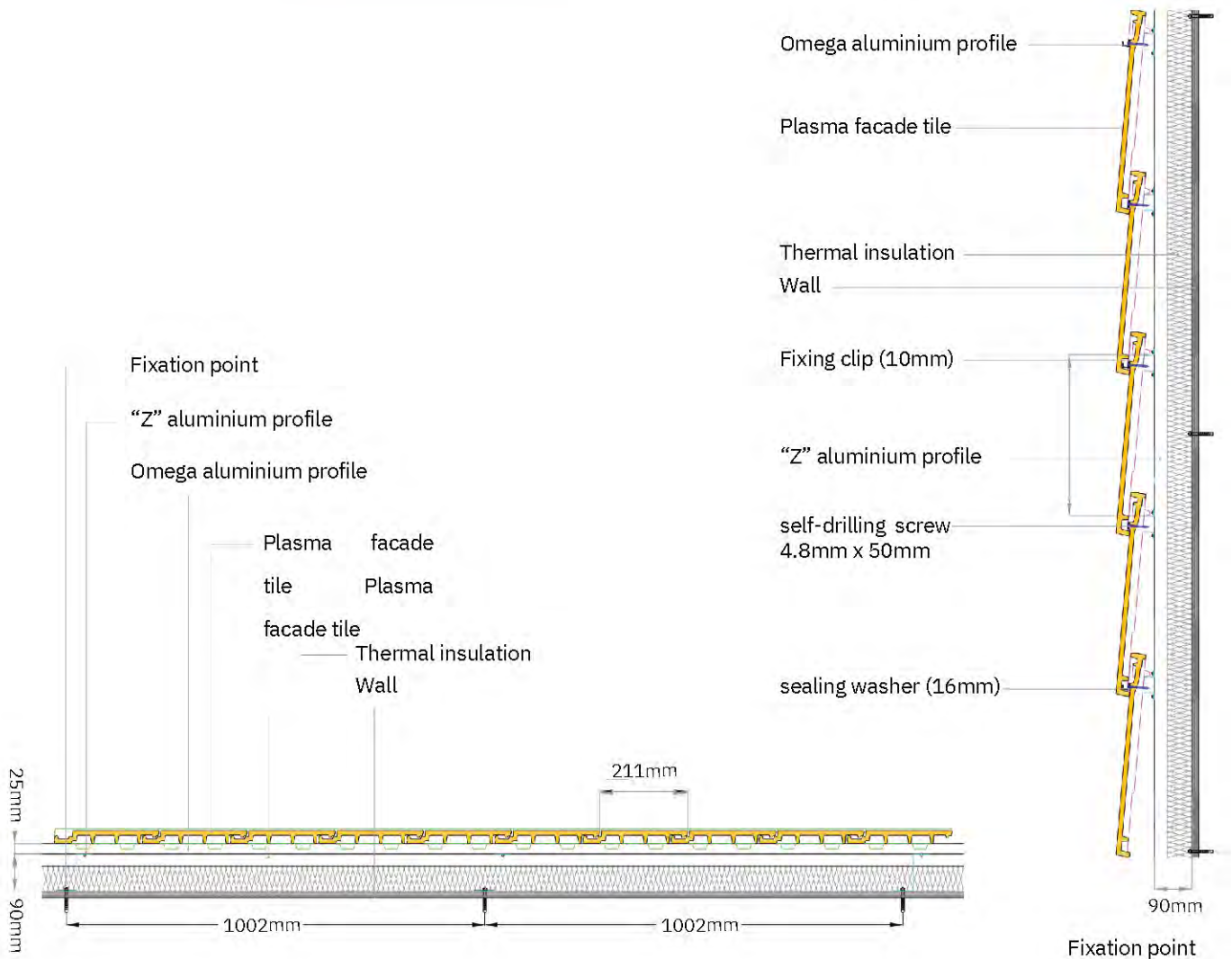
Thermal insulation  
Wall

25mm  
90mm

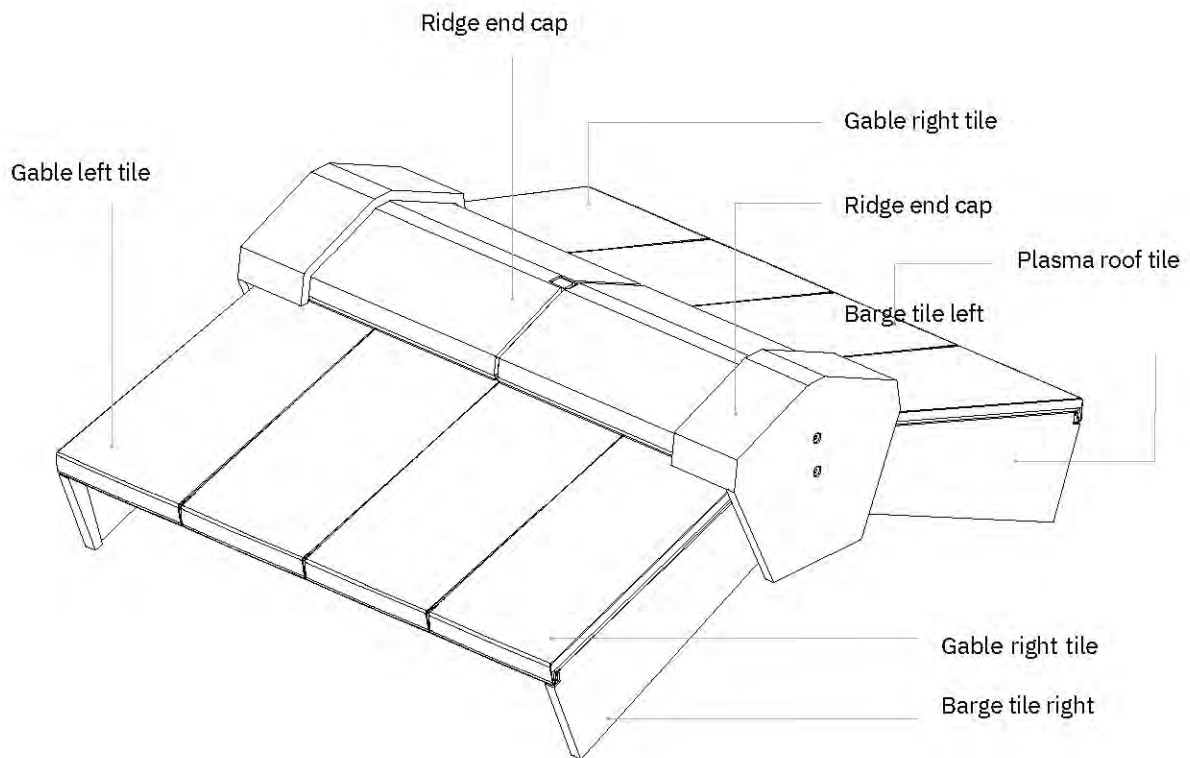
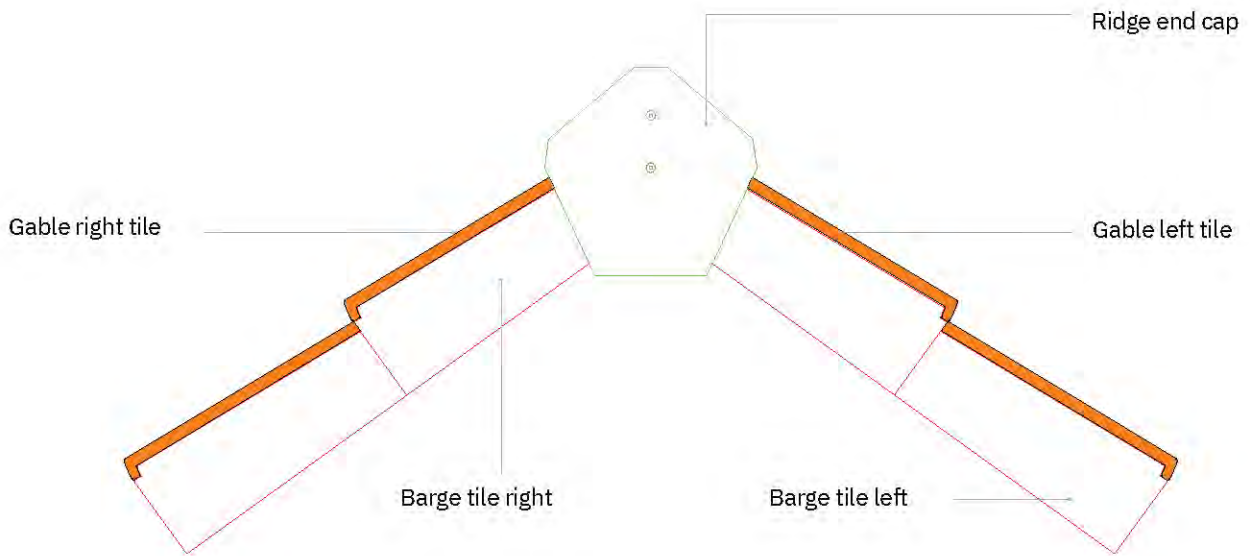
211mm

1002mm

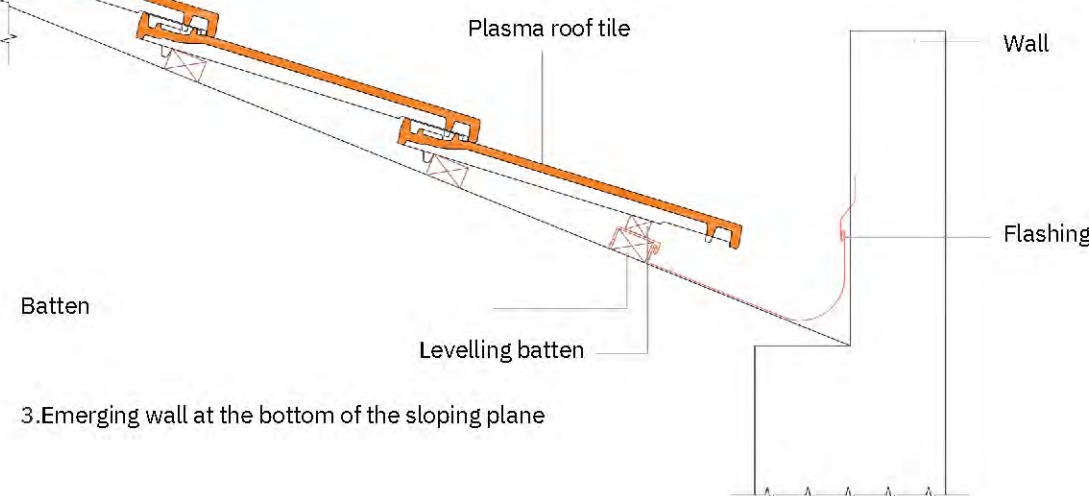
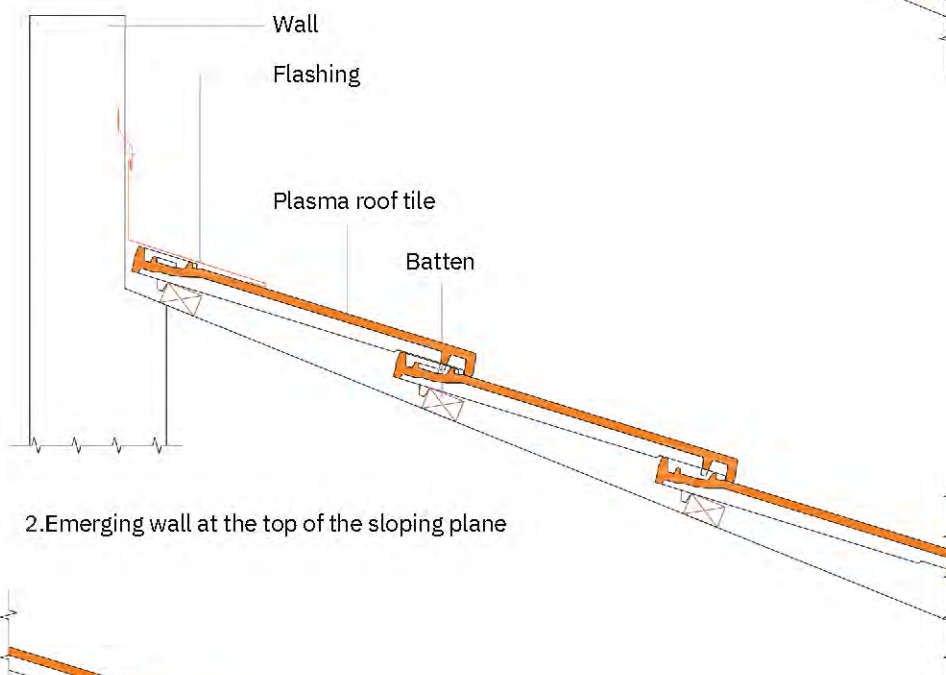
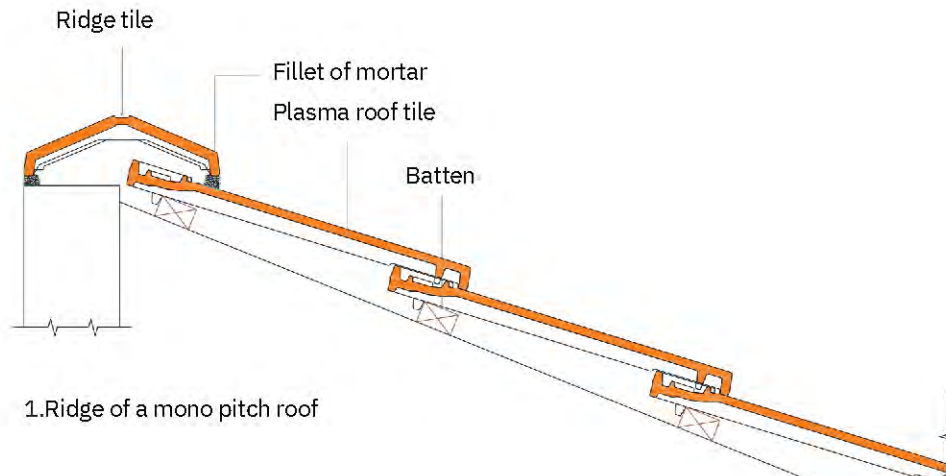
1002mm



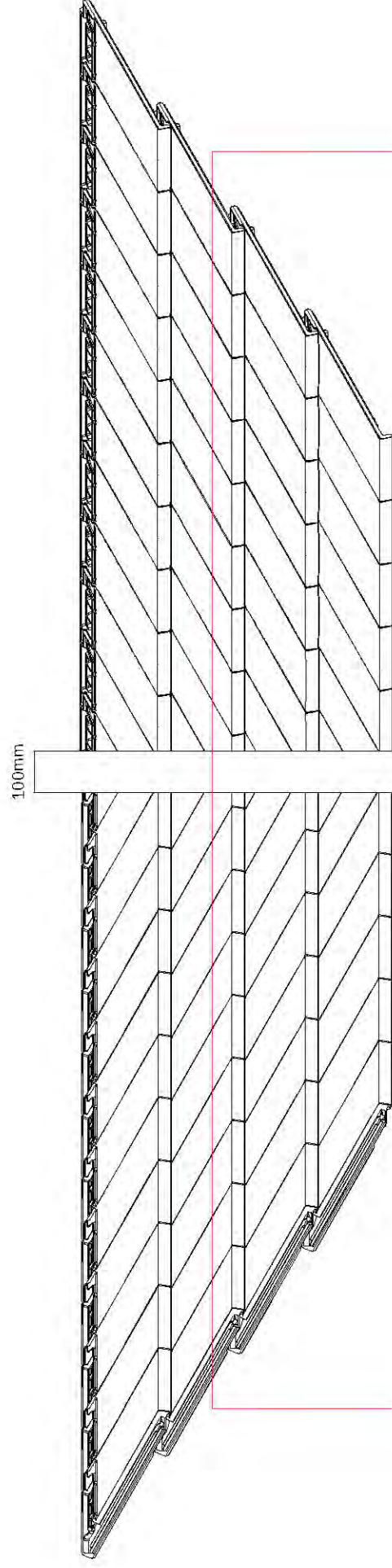
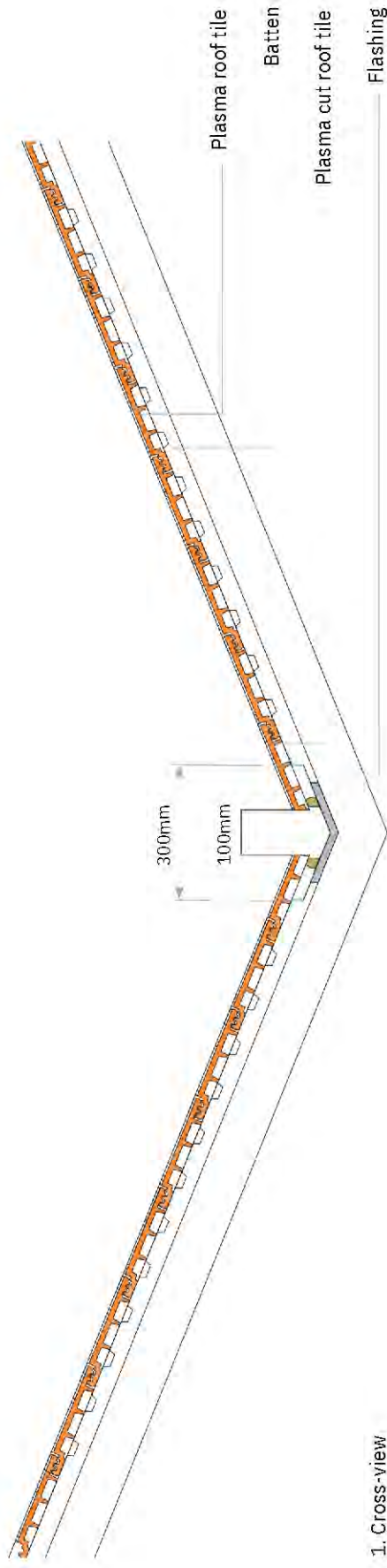
# RIDGE DETAIL



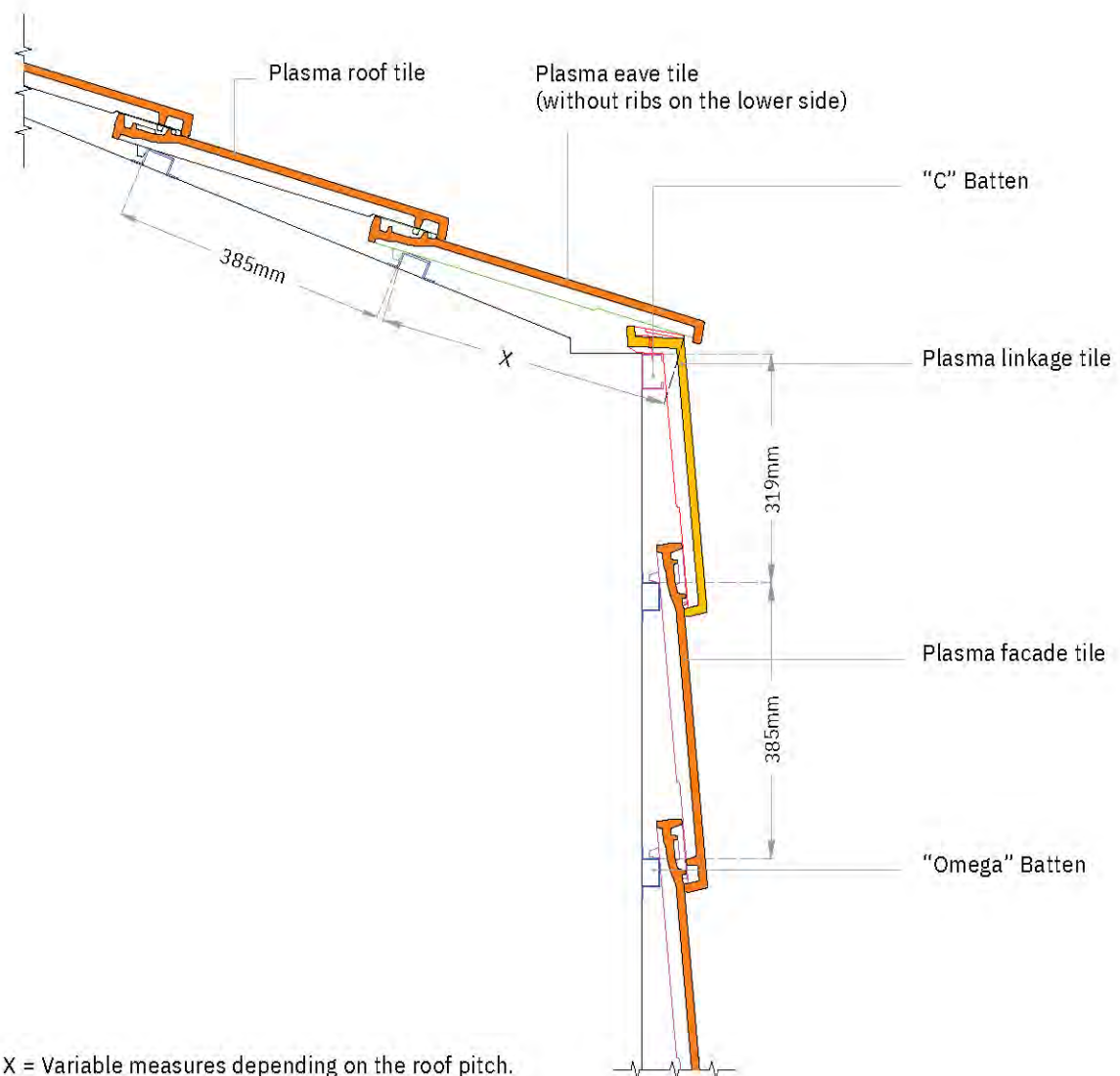
# special finishing situations



# valley detail



# wall roof linkage



## Notes:

Plasma allows the possibility of simultaneous use on the roof as well as on the facade (there are specific accessories to do this interface). It has two pre-holes so that it can be vertically fixed, with self-drilling screws and washers, LOHAS also developed an additional metallic "clip" for using one in each tile of the facade. The use of Plasma roof tile on the facade, should always implicate the previous evaluation and advising from LOHAS technical department, through the analysis of the architecture project. It is not advisable to fix Plasma roof tile using nails, however, opting for this method the tip of the nail should be adapted to prevent cracking or breaking during application.

# LOHAS

## CONTACT US

P 02 9566 2114  
E [info@lohasau.com](mailto:info@lohasau.com)

W [lohasau.com](http://lohasau.com)  
IG [@lohas\\_australia](https://www.instagram.com/lohas_australia)

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