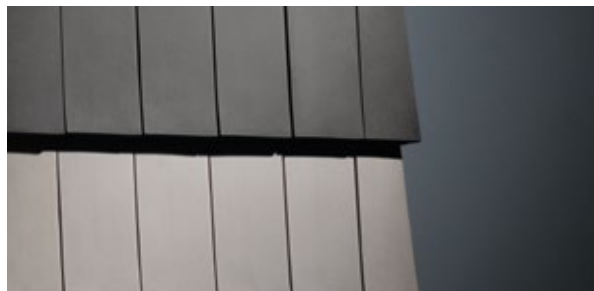


Plasma^(↵)





Plasma façade is a new type of ventilated façade, which external cladding is made of Plasma clay tiles.

←
Plasma TX1,
colour Anthracite
and Plasma TX2,
colour Steel Grey.

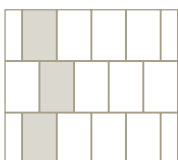
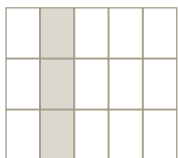


Ventilated façades are nowadays a building process recognized for its good performance:

- Rain protection;
- Avoid thermal bridges;
- Avoid internal condensation (given the possibility of applying the thermal insulation on the outside surface of the walls);
- Help temperature dissipation (solar radiation is partially reflected, and the thermal transmission between the external cladding and the wall is very low due to the air circulation between the two elements).

Plasma Façade offers a set of **additional advantages:**

- It is non-combustible (class M0);
- Resists atmospheric agents, keeping its appearance and colour unchanged over time;
- Ensures total water sealing through the interlocking system between the tiles;
- Provides a fixing system always hidden;
- Allows horizontal adjustments, facilitating alignment with sills and lintels;
- Allows the use of direct fixing structures, with no need for adjusting systems;
- It is a more economical ventilated façade solution, due to the cost of the external cladding, and the cost of the fixing structure;
- It is a solution not only for new buildings, but especially suited for rehabilitation.



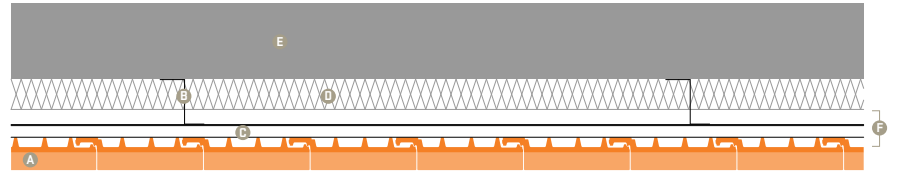
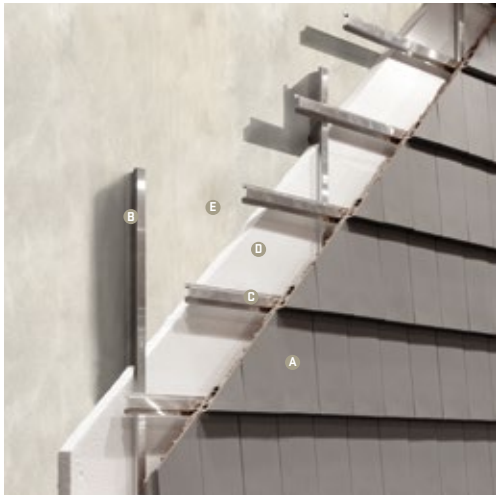
According to the intended aesthetic aspect, **Plasma tile may be laid with its joints either aligned or crossed**, ensuring identical performance in both situations, concerning water entry.



Cladding of curved surfaces
(minimum radius of 1.6 m with normal tiles and 0.8 m with half tiles).



Plasma Façade Complete building system

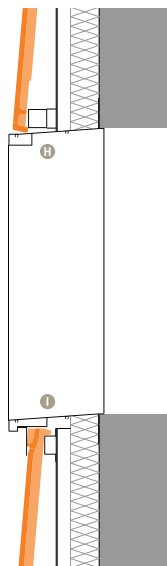


Support structure. It consists of two aluminium profiles:

- **“Z” profiles**, directly fixed on the wall, acting as vertical supports;
- **“Omega” profiles**, screwed to the “Z” profiles, are where Plasma tiles are going to be screwed to.

Thermal insulation. “Z” profiles must be spaced to ensure total use of the expanded polystyrene panels of 1000 x 1000 x 60 mm, or the black agglomerated cork panels of 1000 x 500 x 60 mm, fixed on the wall with appropriate adhesives.

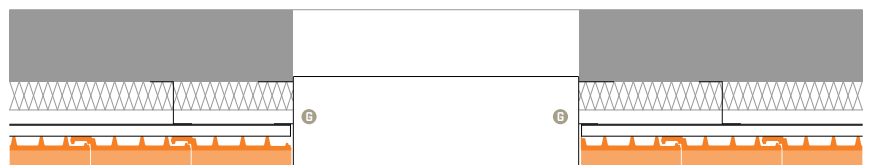
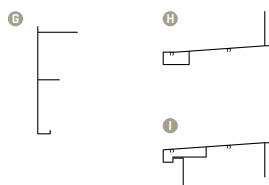
- A Plasma tile.
- B “Z” profile.
- C “Omega” profile.
- D Insulation.
- E Wall.
- F Air gap.



Specific points I

- Finishings between tiles and bays: three aluminium profiles - **sill, jamb and lintel** - ensure the perfect transition between the external plane of the façade and the frame of windows or doors, whichever the type of opening (hinged or sliding).

- G Jamb profile.
- H Lintel profile.
- I Sill profile.



Specific points II

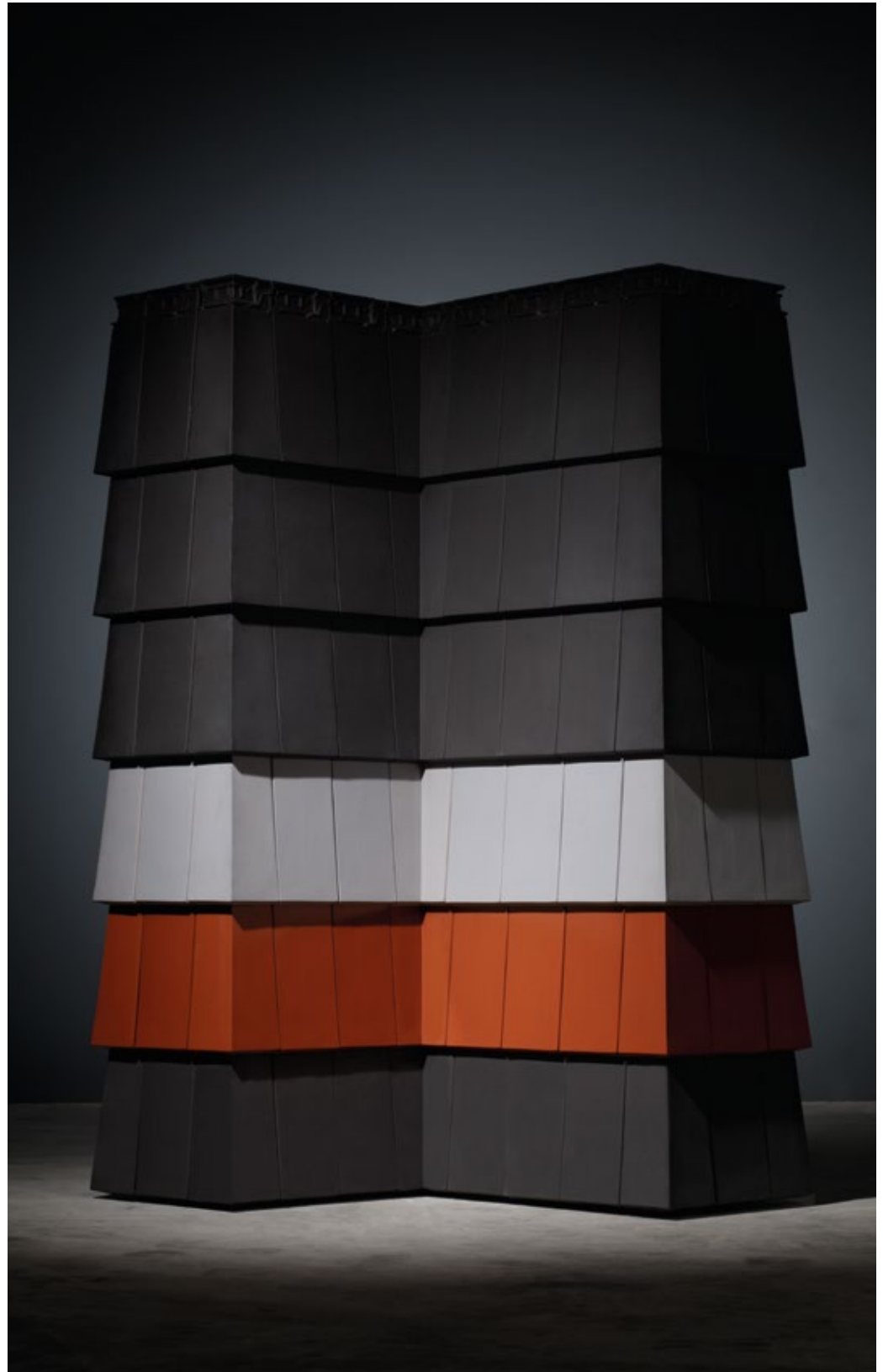
- External and internal façade corners: by industrially cutting and gluing the clay pieces, a new single L-shaped tile is created with the desired angle.



Internal façade corner.



External façade corner.





Note: Printed colours may not be an exact match to the real colours of the products.



N.00 Natural Red



M.32 Copper Green



L.34 Natural Glazed



M.31 Steel Grey



M.30 Anthracite



L.33 Pearl White



L.38 Metallic Grey



M.31 Steel Grey TX1



M.30 Anthracite TX1



L.33 Pearl White TX1



L.38 Metallic Grey TX1



M.31 Steel Grey TX2



M.30 Anthracite TX2

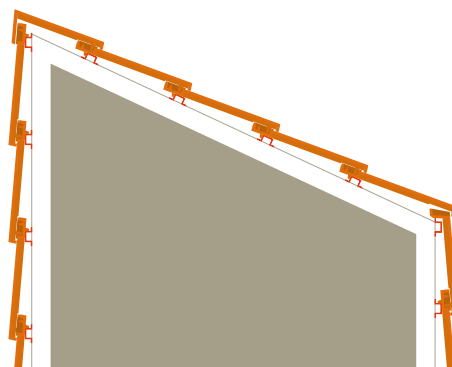


L.33 Pearl White TX2



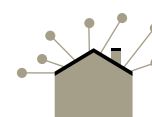
L.38 Metallic Grey TX2

Plasma is **the Premium quality brand plain interlocking roof tile of CS**



With an innovating design, totally flat and extremely smooth, after being installed seems like a perfect rectangle.

It is intended not only to cover roofs but also façades, pointing to a whole new concept of complete clay covering.



More than **40 fittings** available

Produced using state-of-the-art technology, namely in pressing and firing processes, Plasma features laterally a system of perfectly defined, high and vertical double ribs

and, at its top, a large expansion chamber that ensure **the best water-tightness, even in very harsh climatic situations.**



The high firing temperatures to which Plasma is subjected guarantees an optimal level of water absorption and the necessary **physical and chemical characteristics to ensure the best behaviour in presence of ice.**



Plasma is produced **with a smooth or textured (TX) surface.** Manufactured in natural red only for the smooth surface option, it can also be finished with **high quality engobes or enamels** in uniform patterns, in a range of satin natural tones, shock and friction resistant.

GEOMETRIC CHARACTERISTICS

EN 1024



FROST RESISTANCE

EN 539-2



FLEXURAL STRENGTH

EN 538



IMPERMEABILITY

EN 539-1





Applicable norm: EN 1304

Clay roofing tiles for discontinuous laying.
Product definitions and specifications.

Test	Applicable standard	Standard requirements	Plasma
Flexural strength	EN 538	Resistance > 900N	Exceed
Impermeability	EN 539-1	According to level 1 (model 2)	Accomplish
Frost resistance	EN 539-2	Resistance Level 3 (method E)	Exceed
Geometric characteristics	EN 1024	Planarity ≤ 1.5%	Accomplish
		Rectilinearity ≤ 1.5%	Accomplish



Roof tile dimensions (approx.)	48.8 x 25.2 cm
Roof tile weight (approx.)	4 kg
Roof tiles per m ² (approx.)	12.5
Roof tiles per pallet	200
Pallet weight (approx.)	815 kg



CS Info
+351.244 479 200



CS - Coelho da Silva

Albergaria
2480-071 Juncal
Portugal

fax +351.244 479 201
www.cs-rooftiles.com
info@coelhodasilva.pt

