

Facade cladding with Lapitec[®] sintered stone panels with structural adhesives for concealed anchoring

Provision and installation of rear-ventilated facade cladding with Lapitec[®] sintered stone completed using the following system:

Load-bearing structure, in natural extruded aluminium, composed of “L” anchoring brackets and suitable thick “T” and “L” profiles.

The brackets will be fixed to the wall using wall plugs that will comply the static requirements of the project. The depth of the brackets will be equal to the thickness of any insulation plus the size of the ventilation chamber (min 4 cm).

The “T” and “L” profiles will be vertically fixed to the brackets using screws or rivets. The span distance between uprights will be determined on the load requirements of the project and of the slabs used for cladding, but always in compliance with the maximum span distance allowed by the manufacturer (about 750 mm).

The structure will need to be sized on the basis of the expected stress and maximum permissible deformation with special attention to areas subject to significant loads (e.g.: peripheral areas, edges...)

The structure will be able to absorb the dilation caused by changes in temperature.

Manufacturing includes all excess material, the creation of dilation joints, mechanical fixings and any other complementary service to achieve a work that is complete under every aspect.

LAPITEC[®] sintered stone panels _____ finish. The colour, engrained in the body, will be selected by Construction Management from the standards available.

The cladding panels will have the following specifications: Dimensions: 1,500x3,365 mm (EN 14617-16); Thicknesses available: 12-20-30 mm (EN 14617-16); Density: 2,400 kg/m³ (EN 14617-1); Elastic modulus (E): 60 GPa (EN 14617-2); Flexural strength (σ_k): 42 MPa (EN 14617-2); Compressive strength: 483 N/mm² (ASTM C170); Linear thermal expansion coefficient: $6.3 \times 10^{-6} \text{ }^\circ\text{C}^{-1}$ (EN 14617-11); Reaction to fire: A1 (EN 13501-1); Resistance to acids and bases: C4 – Resistant (EN 146217-10).

The cladding panels will be squared and cut according to the architectural design, in consideration of the standard format (maximum usable size 1,500x3,365 mm). **Thickness of the panel: _____ mm.**

The panel layout will have gaps that are **in-line/alternated/random.**

Vertical and horizontal gaps will be ≥ 10 mm and will be **open / closed by pre-varnished black aluminium sheet metal profiles press-folded to design, thickness 6/10 mm.**

Corners and edges will have 45° angle cuts and/or corners in sheet metal and/or overlapping heads.

Panel installation will be carried out, using the load-bearing structure described, by means of adhesive kits composed of: cleaner to clean contact surfaces; primer to increase the adhesion of the cladding to the structure; double-sided tape and **polyurethan/single component silicone adhesive.**

Adhesion will be achieved using sufficiently thick bands with break in continuity and not by points.

NB The system demands installation only under suitable weather conditions (temperature and humidity under control).

An L-shaped micro-perforated profile will be placed at the base and summit of the facade to allow for ventilation while preventing the entry of insects or small animals. The profile in 8/10 mm thick pre-varnished black aluminium sheet metal will be based on the depth of the gap and will be fixed to the vertical uprights by means of screws or rivets.

Total m²	0,00
Total €/m²	0,00
Total €	0,00

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