

These cladding panels are made from Ultra High Performance Concrete (UHPC), which allows for thin, large, flat elements with high durability, a wide range of colours and finishes, and strong 3D surface customisation.

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The incorporation of glass fibre reinforcement gives the product excellent mechanical bending strength and tensile strength, making it possible to produce large sizes up to 1200 x 4000 mm, with a thickness of 15 mm, to meet any architectural requirement.

The cladding slabs offer compressive strength of 110-130 MPa (EN 12390-3), bending strength of 14-18 MPa (EN 1170-5), and excellent abrasion resistance (mass loss of 0.64 g according to ASTM C 501-84).

The EN AW-6060 T6/T66 (AlMgSi) aluminium alloy Concrete.Covering substructure system is made up of extruded brackets and risers of suitable section, with a minimum thickness of 2 mm, connected by means of AISI 304 and 316 stainless steel fittings and fastening technologies that allow free thermal expansion of all components, independently of each other, thus avoiding harmful stresses.

The concealed fastening system is achieved by factory drilling suitable undercut holes with an internal diameter of 9 mm, an external diameter of 7 mm, and a depth of 10 mm, in the position and number required to withstand the stresses to which the slab will be subjected during operation. A Keil HS 10mm expansion anchor or equivalent is then inserted into the holes and the clip is anchored to the substructure using a special bolt tightened to a torque of 2.0-4.0 Nm.

An EPDM gasket is inserted between the bracket and the slab to improve the coupling between the two surfaces and act as an anti-vibration element. The slabs, fitted with clips, are then fastened to the suitably prepared substructure, leaving a minimum 8 mm joint between adjacent slabs, which can be adjusted using the specific adjustment screws on the fastening clips. This technology allows individual panels to be removed even after the entire cladding has been installed.

The completely mechanical fastening does not require the use of adhesives or chemicals, thus guaranteeing mechanical characteristics that are predictable and do not change over time. Its reaction to fire is class A1 according to the European standard UNI EN 13501-1. When the system comes into contact with fire, it does not release any toxic gases or fumes. Concrete.Covering is fireproof.