These cladding panels are made of extruded aluminium alloy and are available in various shapes and heights up to 300 mm with a minimum thickness of 2 mm. Coated with polyester powder with a minimum thickness of 60 microns (according to the Qualicoat standard) or anodised with a minimum thickness of 15 microns in accordance with the regulations in force regarding anodising for outdoor use (according to the Qualanod standard), with ΔE always less than 3. The guarantee on the finish can be up to 30 years depending on the technological process chosen.
To produce the cladding, Aliva uses extrusion, cutting, and machining systems that guarantee extremely close tolerances for the finished product, in compliance with UNI EN 12020-2. Flatness is ensured by a guaranteed tolerance of ± 0.8 mm. Sharp edges ensure bending radii of less than 0.2 mm.
All the phases of the production process are monitored by sophisticated control equipment in order to achieve the best quality level of the Alu.Covering line, in accordance with the standards set by the company's quality system, which complies with UNI EN ISO 9001 and 14001 standards. The aluminium alloy used in its production is EN AW-6060 [AlMgSi] in compliance with European standard UNI EN 573-3 with physical delivery state T5 with minimum mechanical properties in compliance with European standard UNI EN 755-2.

MECHANICAL CHARACTERISTICS

Ultimate tensile strength Rm: 160 MPa.
Elasticity limit load Rp0.2: 120 MPa.
Elongation %: ≥ 8%.
These standards guarantee excellent corrosion resistance, exceptional durability, and a surface homogeneity that results in superb aesthetics. The Alu.Covering system poses no fire risk as it is made from solid aluminium.
The aluminium alloy used to manufacture the system is environmentally friendly, 100% recyclable, and can contain up to 80% recycled material by weight.
The EN AW-6063 T6/T66 (AlMgSi) aluminium alloy 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 fastening system for the cladding panels uses a device (clip) specially designed to guarantee resistance to accidental loads (wind), while at the same time allowing the panels to expand and be fastened in a concealed manner.
This 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.
The cladding panels are fitted with an interlocking system, with or without a visible longitudinal joint, depending on the model chosen.

The system guarantees an exceptional wind load resistance of up to 6 kN/m² (600 kg/m²)*, excellent impact strength and resistance, withstanding a soft-body impact energy of 500 J from a 50kg mass and a hard-body impact energy of 10 J from a 1kg steel ball (according to standard EOTA TR001) without breakage or detachment of material.
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. Alu.Covering is fireproof.

*Tests performed in accordance with ETAG 034-1