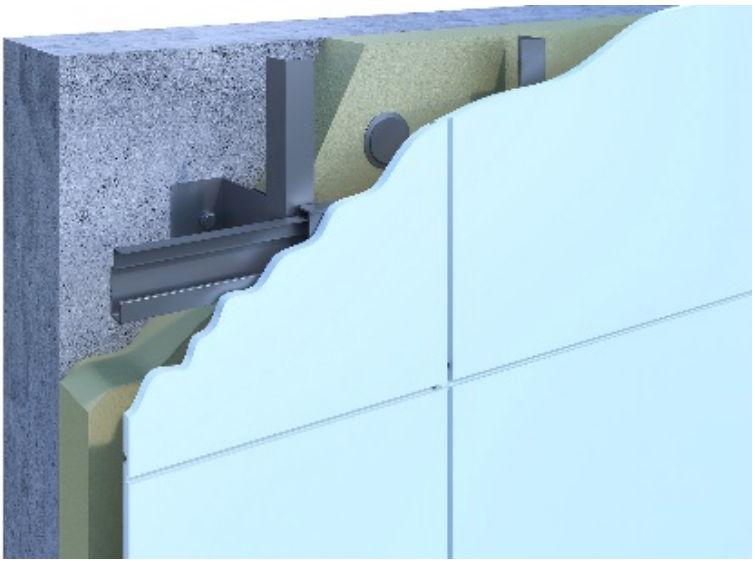
CORIAN®

EXTERIORS

CORIAN®SOLID SURFACE Exterior Cladding

SPECIFICATION TEXT

JANUARY 2020



Acrylic polymer composite wall panel material

- Material Composition: 1/3 Acrylic Resin (also known as Polymethyl Methacrylate or PMMA), 2/3 of Aluminium Trihydrate (also known as ATH) filler and pigments/colourants.
- Manufacturer: Corian® Design business of DuPont de Nemours, Inc. , www.corian.com, www.dupont.com
- Thickness: *[12mm] [19mm (for specific applications)]*
- Size of the sheets: *[760*3658*12mm] / [1300*3658*12mm] / [1500*3658*12mm]*
- Size of the module installed: *[up to 5500*3500] with glued and reinforced panels*
- Finish: Provide panel with uniform finish characteristics: *[Matte] / [Semi-Gloss] / [Gloss] / [Ridged] /[Thermoformed]*
- [Thermoform panels in shapes as indicated in Drawings.]
- Colours as Standard:
  [Glacier White] [Designer White] [Bisque] [Cameo White] [Vanilla]
  [Deep Anthracite] [Deep Night Sky] [Deep Nocturne] [Deep Titanium]
  Other custom colours are available on demand
- Joint type: *[Overlap] [Open] [Seamed], thermal expansion should be considered (3mm/m)*
- Fire rating: *[Euroclass B,s1,d0]*
- Certification: *[CSTB certified, "Avis Technique" including Seismic] [European technical approval – ETA] [CWCT Certified]*
- The fabrication and installation of the panels shall be done in accordance with the technical guidelines as specified in the product bulletin: "DuPont™ Corian® as an external cladding solution" / Certifications.
- Material Warranty: Corian® Exteriors panels installation has to be carried out by an authorised certified EC converter to be covered by the Corian® Solid Surface product warranty.
  The limited warranty applies only to defects appearing within ten (10) years from the date of permanent installation or twenty (20) years in the specific case of peeling, swelling and delaminating of Corian® Exteriors panels.

Fixing Corian® Exteriors panels

- Corian® Exteriors panels are mechanically fixed to a durable (aluminium or stainless steel) substructure fixed to the external wall of new or existing (retrofit) buildings.
- Corian® Exteriors panels must be mounted on an adequate substructure with corrosion resistant fixings in such way the panels are not subject to any kind of tension and can move (expand and contract) freely, relative to one fixation point of each panel.
- The substructure (fixing system) usually used to mount Corian® Exteriors panels is a mechanical fixing system based on an aluminium grid system, consisting of vertical profiles (L or T shape), mounted on brackets to connect to the wall. The substructure supplier has to check the substrate, according to official construction recommendations/regulations.
- Façade consultants/installers/architects should provide static calculations. The calculations must be shown for the panel dimensions, fasteners, connectors, substructure, wall brackets, and anchoring.
- Wall brackets are designed with both fixed and flexible points to allow for thermal expansion of the profile.
- The cladding panels are hung on the horizontal profile by the clamps that are attached in a concealed (No through fastener) way to the panel with a specific undercut invisible fastener: Keil Ref: 7.555.020.804 anchor AA Hs = 7mm.
- Other fasteners: suitability must be shown with a certification (i.e. SFS-TU).
- Number and location of fasteners: Consult with your sub-frame supplier for recommendations and details.
- The façade structure must be built according to the construction details. The contractor must present a verifiable structural calculation and construction drawings before installation begins.
- The thermal expansion of the panels must be taken into consideration. In order to avoid tension and possible cracking, the expansion gap (joint width) in the panel must be as large as the expected expansion (rule of thumb: 3mm /metre of panel in all directions)
- Air gap: 20 mm minimum between the front of the insulation and the back of the rail. Consult with your sub-frame supplier for recommendations and details.
- Wall brackets and profiles have to be CE marked according to EN 1090 of alloy EN AW 6063 T66 , otherwise from a local source according to nationally approved standards.