Acryon 3D

3D Thermoformable Acrylic Composite







ACRYON 3D

ACRYON 3D is a new generation of acrylic-mineral composite materials, made of acrylic resin and mineral fillers.

It combines the benefits of solid surface materials with the flexibility of cast acrylic sheets and offers unique thermoforming properties, opening up the possibility of previously unattainable solid surfaces for making unique products.

The material combines safety and aesthetics, and provides plenty of scope for creative, individual solutions. With its stone-like yet warm appearance, non-slip surface and ease of forming, ACRYON 3D makes the perfect choice especially for sanitary ware and bathroom furniture.

Its structure is suitable wherever the requirement is for a high-quality, perfectly smooth surface that repels water even when the material is installed in a thin layer. With a satin surface, ACRYON 3D gives a product a noble and classy look. Despite their velvety impression, the surfaces are smooth, resistant to wiping and easy to care for.

The stone-like appearance, distinctive surface and ease of formation offer a variety of design options for walls, washbasins, low-profile trays and other furniture. It is a friendly material to work with. It can be thermoformed, bonded, sawn, laser-cut, edge-polished, drilled, engraved, etc. The possibilities are limitless and final look turns your idea into a design product.

When an Acryon 3D material is chosen, it has a long service life and always looks clean and elegant, yet requires little maintenance.

One side has a glossy surface and one side has a satin surface, so you can choose which suits you best.



Application

Owing to these properties, ACRYON 3D is suitable for both horizontal and vertical applications in indoor and outdoor areas.

Indoors

- Wall panels / wall protection
- Furniture, shelves and windowsills
- Sanitary ware such as bathtubs and shower solutions, sinks
- Displays, signs
- Unique home products

Outdoors

- Facades / wall panels
- Windowsills and decor profiles
- Urban design
- Objects of all kinds

Market Segments

- Sanitary ware and bathroom furniture
- Hotel engineering
- Restaurants
- Healthcare and medical equipment
- Wellness
- Shop fitting
- The furniture industry
- Marine and caravan design

Processing

ACRYON 3D can be machined using all conventional woodworking and plastic processing machines. It allows the VACUUM technique.

It is easy to saw, drill, polish and form and can be installed without joints, including directly on site.



ENDLESS POSSIBILITIES WHEN THE SURFACE SOLUTION IS **ACRYON 3D**.





Product Options

Aglas ACRYON 3D sheets come **ready to use with one side glossy and one side satin (matt)**. Both sides are protected with PE film and they are thermoformable on the glossy side.

Standard thicknesses are: **6, 8, 10 and 12 mm**The currently available size is **2550 x 1260 mm**

Used mostly for 2D or 3D formed applications:

- Sinks,
- Shower trays,
- bowls,
- wall / surface coverings,
- · furniture, etc.

Properties

- 2D thermoforming with a very narrow radius
- 3D vacuum thermoforming is possible
- · A wide selection of thicknesses
- · Available in custom colours
- Improved chemical resistance
- · High UV stability
- Water-resistant
- Anti-slip surface (satin grade)
- Can be additionally treated (UV print, CNC cut, ...)
- Easy-to-clean surface
- · Resistant to bacteria
- Warm to the touch



3D vacuum formable



Anti-slip surface



Warm to the touch

Colours

Standard sanitary white and a wide range of colours.





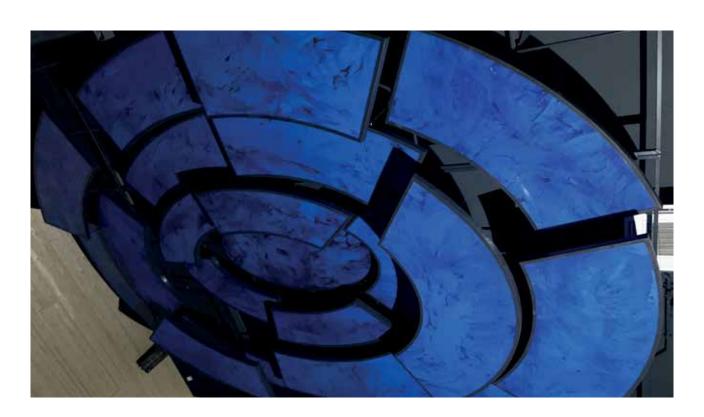




Technical Properties

Properties	Value	Units	Standard
Density	1,54	g/cm ³	ISO 1183
Modulus of elasticity	Min. 4700	MPa	ISO 178
Flexural strength	78	MPa	ISO 178
Tensile strength	Min. 40	Мра	ISO 5272/1B/5
Coefficient of linear thermal expansion	50 x 10 ⁻⁶	1/K	DIN 53752-A
	0.5 mm/m/10°K		
Heat deflection temperature HDT	100 - 108	°C	ISO 75
Vicat softening temperature	>105	°C	ISO 306/B50
Forming temperature 3D	160 - 210	°C	Internal
Forming temperature 2D	Min. 140	°C	internal
Abrasion - Taber test	145-160	mg	DIN14688/2006
Barcol hardness	50-70		DIN EN 59
Anti-slip	Class C		DIN 51097
Fire behaviour	Е		DIN EN 13501-1
Fire behaviour	B2		DIN 4102 Part 1
Resistance to thermal cycling (hot/cold water)	No cracks/crazing/ detachment		DIN EN 14688/2003

^{*}Some of the technical properties are currently still undergoing testing. The values are of an informative nature.









More into:

Akripol, d.o.o.

+386 7 34 81 600 | info@akripol.si | **www.akripol.si**