What is Glass Fiber Reinforced Concrete

Glass-fiber Reinforced Concrete (GFRC) is a cement-based composite material reinforced with alkali-resistant fibers. The fibers add flexural, tensile and impact strength and the resulting material allows the production of strong yet lightweight products used in architectural, building, civil engineering and many other applications.

cement, sand, AR glass fibre, water …
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Composite material polycon is reinforced with alkali-resistant fibers. AR glassfiber is specially formulated to have a high degree of resistance to alkali attack and high durability in cement.
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Material can be pigmented in a mass during the production process by adding of a pigment according to a customers request.
Special properties | TiO2

A special kind of GFRC polycon with a photocatalytic cement technology for self-cleaning and pollution-reducing. Technology can reduce organic and inorganic pollutants that are present in the air around the facade.
Polycon products are produced by a method of a hand spray where a special spray gun is used to simultaneously deposit chopped glass fiber and cementitious slurry onto a mould.
Processing

Cutting, Drilling, Milling …
Surfaces

Smooth surfaces,
Fine structures,
Patterns,
Graphic concrete,
Photo-Engraving
Surfaces

Smooth surfaces, Fine structures, Patterns, Graphic concrete, Photo-Engraving
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Smooth surfaces,
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Dimensions and shapes

Products are manufactured in a different shapes and thicknesses according to a customer requests …
Dimensions and shapes / Flat panels

Products are manufactured in different thicknesses depending on the size and complexity of the individual elements and according to a customer requests,

The most common thicknesses:
12mm; 13mm; 15mm; 16mm; 19mm …
Dimensions and shapes / Flat panels
Dimensions and shapes / Structured panels

Products are manufactured in different structures and thicknesses depending on the size and complexity of the individual elements and according to a customer requests,

The most common thicknesses:
12mm; 13mm; 15mm … + structure
Dimensions and shapes / Structured panels
Dimensions and shapes / **Structured panels**

... more then 200 structures
Dimensions and shapes / 3D elements

Products are manufactured in different shapes and thicknesses depending on the size and complexity of the individual elements and according to a customer requests,

The most common thicknesses:
3D elements: 12mm; 13mm; 15mm …
Dimensions and shapes / 3D elements
Dimensions and shapes / 3D elements
Dimensions and shapes / 3D special

Special 3D elements are designed and created for an individual project and specific use according to a customer needs …
Dimensions and shapes / 3D special
Dimensions and shapes

... all panels and elements are produced exactly according to the project, thus there no arises waste, which is positively reflected in the overall cost of the project!
Use of polycon products

Facades,
Interior wall Cladding,
Acoustic panels,
Design and furniture,
Others …
Use of polycon products

Facades,
Interior wall Cladding,
Acoustic panels,
Design and furniture,
Others …
Use of polycon products

Facades,
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Others …
Use of polycon products

Facades,
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Others …
Use of polycon products

Facades,
Interior wall Cladding,
Acoustic panels,
Design and furniture,
Others …
Type of fixing

Undercut anchors,
Bonding,
Rivets and Screws,
Others …
Type of fixing

Undercut anchors,
Bonding,
Rivets and Screws,
Others …
Type of fixing

Undercut anchors,
Bonding,
Rivets and Screws,
Others …
Type of fixing

Undercut anchors,
Bonding,
Rivets and Screws,
Others …
Type of fixing

Undercut anchors,
Bonding,
Rivets and Screws,
Anchors, Socket Anchors …
References
Netherlands, Venlo

polycon
Czech Republic, Ostrava
Switzerland, Amriswil
Czech Republic, Olomouc

polycon
New York - Manhattan, USA

polycon
Belgium, Antwerp
Czech Republic, Zlín