



solidian.com/grid

Solicion GRID non-metallic, load-bearing reinforcements

for the future generations





rusty buildings should be my future? no thanks!

build solid

solidian GRID

is a non-metallic reinforcement grid made of glass or carbon fibers. The textile clutches are soaked in epoxy resin and cured in an oven. They can be manufactured either as flat, planar reinforcing grids or as shaped, curved ones.

Compared to steel reinforcements, **solidian** reinforcements do not corrode, have more tensile strength than steel and are very lightweight.

The reinforcements are extremely versatile and can be used in areas where only stainless steel reinforcements or structures with increased concrete cover are normally used. However, non-metallic reinforcements, because they do not rust, require minimal concrete cover.

The thinner design can save resources, transportation costs and CO_2 emissions. This makes it a sustainable solution to build with concrete for future generations.

existing concrete structures.

solidian GRID is ideal for use in new buildings,

strengthening, as well as repair of all types of

but also for structural rehabilitation and



characteristics

Thinner, more

filiaree concrete

components

Lightweight

and easy to install

Economically

and ecologically

sustainable

More economical

due to reduced

consumption of

materials

chloride and

media resistant



Sophisticated, shaped concrete components



more tensile strength than steel



Enormous design freedom for architects



less concrete less weight less ressources



Durable and long service life



dimensions Standard: 6.0m x 2.3m

Individual: max. 8.0m x 3.0m possible on request Roll possible on request

Individual shapes: Possible on request



applications

The use of non-metallic reinforcement is particularly useful when the reinforcement can show its advantages. For example, generally for exterior components or structures that have to withstand (dew) salt loads. This is where the corrosion-free properties of glass or carbon reinforcement can be beneficial.

The reinforcement can also score points in repairs or the structural reinforcement of concrete parts in order to protect the structure from further damage. Crack widths can be limited and the new concrete layer applied can be kept very thin. This saves weight and space, which can be extremely relevant with regard to the static load and clearance height in a parking garage.



In concrete with non-metallic reinforcement, the usual steel reinforcement is replaced by grid structures made of carbon or glass fibers. These do not corrode, which is why the concrete cover can be lower, making the concrete components significantly lighter and thinner.

In this way, up to **50% of resources** (cement, sand, water) and up to **30% of CO₂ emissions** can be saved, and in some cases even more, depending on the design. This represents a great potential for how we can better manage our resources and help build more climate neutral for generations to come.

A certified **EPD** (Environmental Product Declaration) is also available for **solidian** GRID, so that sustainability aspects can already be incorporated into the life cycle assessment of the building during the planning stage. It is important here that the complete life cycle is considered and taken as a basis for the calculation.





Bridge construction



Concrete slabs



Exterior Concrete Elements



Tunnel & mining constructions



™ Balconies & façades



Repair of the Concrete Structures



Maritime applications



Parking decks & garages



Structural Strengthening

About solidian

Always one step ahead with innovative products we can offer you perfect solutions for your needs

solidan has made a name for itself as a leading company that provides a wide range of solutions to improve construction structure.

We made a commitment to clients to provide them with customer service, technical support and being the leader in providing global innovative fiber material solutions. We use advanced technologies to produce special solutions according to your needs. Our functional grids are used to optimize product and processing properties in a wide variety of applications - including concretes, UHPC, cement-based mortars, adhesives, and dry-mix compounds.

Other Products



check out our website for more products and innovative solutions



solidian eGRID

Specially developed flexible grids in combination with electro conductive coatings provide high tensile strength and outstanding electro conductive properties. solidian eGRID is now also available with different conductive surface treatments for special applications in which electrical conductivity is important.



solidian Briksy

High-tech, non-Corrosive, AR glass or Carbon fiber reinforcement brick mesh on a roll for efficient crack control specially designed for any wall width.



is a further development of our reinforcement solidian GRID, which functions specifically as crackeliminating reinforcement. The carbon reinforcement can be laid close to the surface and thus has a particularly positive influence on crack formation in concrete components.



The rod-shaped reinforcement solidian **REBAR** is combining highstrength fibers with extreme resistant resins. solidian REBAR is the right choice where ever high loads occur and components are permanently exposed to aggressive environmental influences.



solidian CONNECTOR

Non-corrosive Carbon, Basalt, or AR-Glass connector with Single or Double Open End suitable for construction reinforcement in masonry, arches and vaults. Perfect for reinforcement of buildings in earthquake-affected areas



The solidian **REMAT** transfers all the outstanding properties of our barshaped reinforcements, the solidian REBAR, to the mesh format. The result is robust and walkable mats for more efficient handling on the construction site.

build solid.





Croatia

- 💡 Dr. Slavka Rozgaja 3 47000 Karlovac Croatia - EU +385 47 693 314

sales@solidian-kelteks.com

♀ Sigmaringer Straße 150 72458 Albstadt, Germany - EU + 49 7431 103135 sales@solidian.com

Germany

Türkiye

- Mistral Tower Izmir K:42 D:42135170
- 35500 Izmir, Türkiye
- + 49 7431 103135
- ≥ sales-turkiye@solidian-kelteks.com