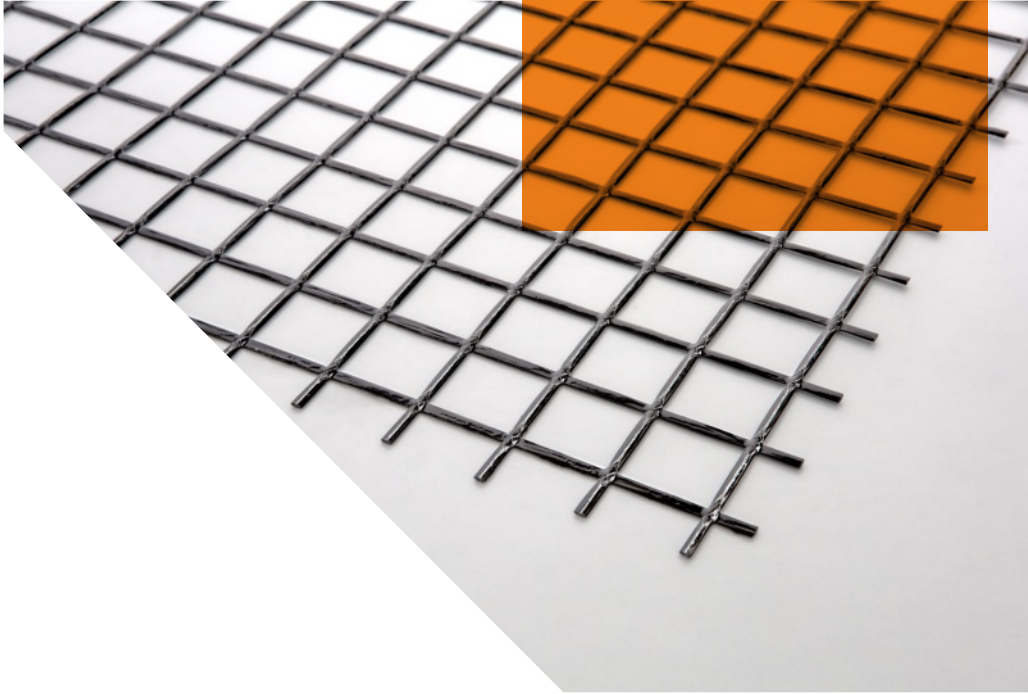




**solidian**



# **solidian** GRID

NON-METALLIC, LOADBEARING  
REINFORCEMENTS  
FOR FUTURE GENERATIONS

**build solid.**



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<sub>2</sub> emissions. This makes it a sustainable solution to build with concrete for future generations.



**solidian GRID** is ideal for use in new buildings, but also for structural rehabilitation and strengthening, as well as repair of all types of existing concrete structures.

## characteristics



Thinner, more filigree concrete components



Sophisticated, shaped concrete components



Lightweight and easy to install



more tensile strength than steel



Economically and ecologically sustainable



Enormous design freedom for architects



More economical due to reduced consumption of materials



less concrete  
less weight  
less resources



Corrosion free, chloride and media resistant



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

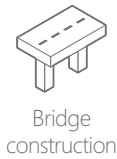
Individual shapes:  
Possible on request



## 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 (de) 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.



Bridge construction



Tunnel & mining constructions



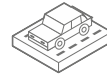
Maritime applications



Concrete slabs



Balconies & façades



Parking decks & garages



Exterior Concrete Elements



Repair of the Concrete Structures



Structural Strengthening

## Sustainability & EPD

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 CO<sub>2</sub> 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.

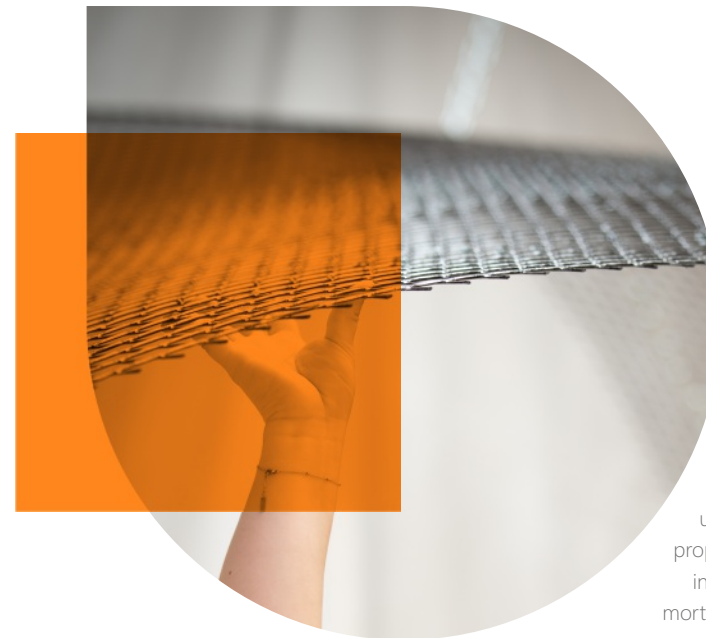
A certified **EPD** (Environmental Product Declaration) is also available for **solidian GRID**, so that sustainability aspects can already be incorporated into the life cycle assessment of the building during the planning stage. It is important here that the complete life cycle is considered and taken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



solidian GRID

About **solidian**

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



solidian 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.

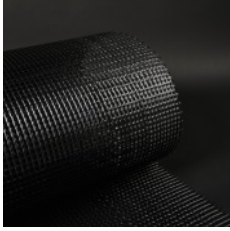
discover our  
industry-leading  
reinforcements & systems

**build solid.**

# Other Products

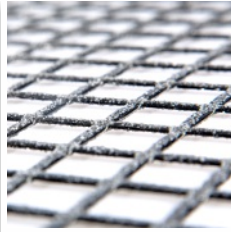


check out our website for more products and innovative solutions



**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.



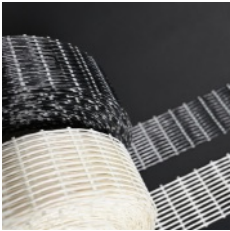
**solidian Anticrack**

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



**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.



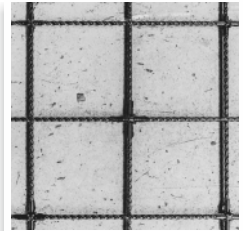
**solidian Briksy**

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.



**solidian REBAR**

The rod-shaped reinforcement solidian REBAR is combining high-strength 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 REMAT**

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

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ISO 9001 - ISO 14001  
BUREAU VERITAS  
Certification

