

# Solidian Parking Decks

It is quite boring to talk about corrosion of steel reinforcements in parking decks and underground parking.

It is more interesting, that there is a solution to avoid structural damages, high maintenance costs and shortened life-time of parking decks: solidian products are durable, saves resources and enable economic structures.









## solidian GRID solidian FLEX GRID

are textile reinforcements made from various fibers such as carbon, glass, basalt or hybrid and therefore are ultra-lightweight. Compared to classic steel reinforcement, **solidian** reinforcements have up to 7 times higher tensile strength and do not corrode.

Our reinforcements are extremely versatile and can be used in areas where usually only stainless steel reinforcement or structures with increased concrete cover are used. **solidian** reinforements require only the minimum concrete cover and thus contribute to savings in material and transport costs.

**solidian** reinforcements are primarily intended for use in precast plants, but can also provide valuable services in refurbishment projects. Our reinforcements stands for flexibility and design freedom, because even free shapes are no obstacle. Specially designed coatings, fillers and production technologies ensure superior bonding with matrix.



Lightweight and easy to install



Up to 7x stronger than steel



### Features solidian FLEX GRID

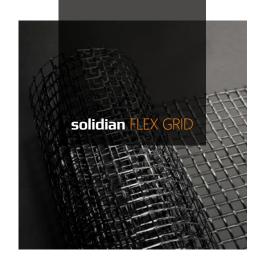
- Flexibility without compromising strength
- Easy installation on site as it comes in roll
- Simple, large-area installation due to common standard dimensions
- Tensile strength up to 6 times higher than steel
- Excellent for restoration application due to flexible and easy installation properties
- High mechanical strength
- Electrically conductive (for monitoring and heating) solidian eGRID
- Very high elastic modulus for small deflections in building elements
- · Ultra-Lightweight
- Roll option in different dimensions
- · Panels optional on request



Economically and ecologically sustainable



Versatile use in a wide range of applications



More economical due to reduced consumption of materials



Minimum concrete cover due to corrodibleresistant reinforcement



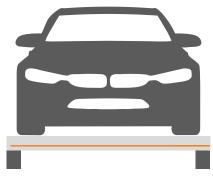
Enormous design freedom for architects



20% less concrete 20% less weight 20% less ressources

#### Features **solidian** GRID

- Standard panels and the possibility of making in rolls on request
- Standardized L-angles made of solidian GRID
- Tensile strength up to 4.000 N/mm
- Resource-saving due to relevant savings of cement, water and sand
- Excellent Load-bearing performance
- For high demand concrete installations
- Individual designed shapes & forms are possible on request
- Excellent Tg properties
- · Superior mechanical properties



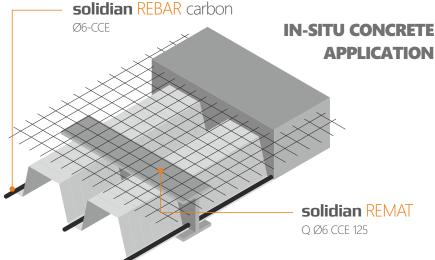
PRECAST PARKING DECK APPLICATION

#### solidian REBAR

combine high strength fibers with extreme resistant resins in the production process named pultrusion. Here carbon or glass fibers are oriented extremely straight, impregnated by epoxy resin and houred.

- built for extreme demands
- non-corrosive





#### solidian REMAT

**solidian** REMAT is produced of our non-corrosive and extremely strong **solidian** REBAR. The rebars are attached to each other by durable and solid injection molded crossing points forming the grid mat.

- combine the extreme mechanical properties of **solidian** REBAR
- on solidian REMAT you can even walk
- are not corroding



#### 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

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,

range of solutions to improve

construction structure.



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.

Other Products

solidian.com/products

check out our NEW website for more

products and innovative solutions



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 have a particularly positive influence on crack formation in concrete components.



solidian CONNECTOR

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



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.



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



The solidian REMAT transfer 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.

build solid.





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adhesives, and dry-mix compounds.

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