

PC[®] CARBOCOMP ROD

Unidirectional carbon fibre rods for the reinforcement of structures

1. Description

Epoxy carbon fibre rods composed of unidirectional orientated carbon fibres.

Minimum fibre content: 68 volume %

Size:

$\varnothing n^{(1)}$ (mm)	$\varnothing r^{(2)}$ (mm)
6	8
8	10
10	12
12	14

(1) $\varnothing n$: nominal diameter, the characteristic value of fibre subjected to tensile.

(2) $\varnothing r$: real diameter, real value measured by calibre

Length: max. 5,0 m

2. Application

Reinforcing of beams, floors, walls and columns in concrete, wood and steel. Strengthening of bridges and buildings, for example in the following cases:

- Repair of the original bearing capacity, like after a fire or corrosion of the rebars.
- Local strengthening of construction elements, when making holes through floor plates or walls.
- To increase the load bearing capacity.
- To repair errors during construction.

3. Properties

Tensile strength average value min. value	2300MPa >2100MPa
Modulus of elasticity average. value min. value	165GPa >160GPa
Elongation min. value	>1,31%
Density	1,80 g/cm ³

4. Advantages

- High tensile strength and stiffness
- Light weight

- Very low creep
- Flexible in use
- Excellent corrosion, acid and alkali resistance
- High durability
- Little thermal expansion
- Requires little or no maintenance