

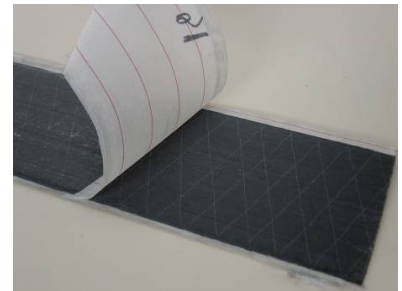
PC[®] CARBOCOMP

Unidirectional carbon fibre laminates for the reinforcement of structures

1. Description

Epoxy carbon fibre laminate composed of unidirectional carbon fibres.

Minimum fibre content:	65 volume %
Width:	50, 60, 80, 100, 120 mm



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

Effective thickness	1,2mm	1,0mm
Tensile strength	>2375 MPa	>2850 MPa
Modulus of elasticity	>165 GPa	>198 GPa
Maximum elongation	1,44%	1,44%
Density	1,6 g/cm ³	1,6 g/cm ³
Water absorption	<0,1 % by weight	<0,1 % by weight
Application temperature	-40° C to +130° C	-40° C to +130° C

4. Advantages

- High tensile strength and stiffness
- Light weight
- Very low creep
- Flexible in use
- Great lengths can be jointless installed

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- Excellent corrosion, acid and alkali resistance
- High durability
- Little thermal expansion
- Requires little or no maintenance
- The finishing with paint or plaster demands no special requirements.
- The laminate is protected by a peel ply that must be removed before application. Thanks to this no roughening, cleaning and degreasing is necessary.

5. Processing

- Remove the peel ply.
- Concrete, steel, wood: the surface must be cleaned, prepared and smoothed.
- Concrete: the surface has to be free of grease, cement and dust.
- Repair unevenness and weak zones (the adhesion strength should, if possible, be superior to 1,5 N/mm²). Smoothen the surface, remove all dust and make dry.
- Metal: degrease and remove all rust, high pressure cleaning is preferred.
- Apply the epoxy glue PC[®] 5800/BL on the surface of the laminate that has to be glued:
- Mix the components of PC[®] 5800/BL, apply on the laminate with a spatula and make sure that no air is being enclosed.
- Consumption: ± 3 à 5 kg/m² depending on the roughness of the surface.
- Pot life: ca 30 min at 20°C
- After positioning the laminate on the surface, it must be pressed until a minimal quantity of glue comes out from underneath the laminate.
- Remove the glue that is pressed out with PC[®] 5900.

6. Dimensions and shelf life

Longitude: 100 m
Shelf life: unlimited

7. Precautions and safety requirements

- **PC[®] Carbocomp:**
The laminate can have sharp edges, so wear protective gloves.
Keep it away from electricity.
- Epoxy glue: see technical data sheet PC[®] 5800/BL
- Cleaner: see technical data sheet PC[®] 5900