

PRODUCT DATA

CARBOCOMP TEXTILE 225

DESCRIPTION

CarboComp Textile 225 is a unidirectional carbon fibre textile with strand oriented in longitudinal direction. This textile is adhered to the surface with 5800 Carbo LPL.

APPLICATIONS

Increasing the bearing capacity of columns in bridges and buildings and the shear strength of beams.

Examples include:

- Repair of the original load bearing capacity, eg. after fire damage or corrosion of embedded reinforcement.
- Increase the load bearing capacity of beams and columns.
- To repair construction errors.
- Seismic upgrading of structures.

ADVANTAGES

- High tensile strength and stiffness.
- Easy to apply.
- Minimal creep.
- Flexible in use.
- Excellent corrosion, acid and alkali resistance.
- High durability.
- Minimal thermal expansion.
- Maintenance free, does not corrode.
- Suitable for both wet and dry lay process.

APPLYING - DRY LAY

Apply the Carbo 5800 LPL resin onto the prepared surfaces of the element to be reinforced. Press the CarboComp Textile into the wet resin and roll with a profiled roller to remove entrapped air. Immediately after rolling, apply a second layer of 5800 Carbo LPL onto the carbon fibre textile. The consumption of 5800 Carbo LPL varies depending on the roughness and porosity of the surface (estimated consumption: 500-800 g/m²).

APPLYING - WET LAY

Applying a primer layer of CarboComp 5800 LPL onto the prepared substrate of the element to be reinforced. Saturate the CarboComp textile in a suitable resin bath. Ensure the fibers are fully "wet out" and apply to the surface to be strengthened. Apply saturated textile in such a way as to eliminate air entrapment.

TYPICAL DATA (TYPICAL VALUES)

Properties	Technical Characteristics
Weight:	226 g/m ²
Roll Width:	± 300 mm
Roll Length:	150 m
Primary Fibre Direction:	0°
Fabric Equivalent Thickness:	0.125 mm
Fabric Cross Surface Area Per Unit Width:	125 mm ² /m
Tensile Strength:	4,000 MPa
Stiffness:	240 GPa
Maximum Elongation:	1.60%
Density:	1.80 g/cm ³
Water Absorption:	<0.1 percent by weight
Electrical Resistivity:	0.0016 Ω - cm
Operating Temperatures:	-40°C to +130°C

Laminate Properties	Technical Characteristics
Tensile Strength (Ultimate):	2,662 N/mm ²
Tensile Modulus:	242,800 N/mm ²
Tensile Elongation:	1.09%
Ply Thickness:	3.0 mm

Once the textile is in place, use brushes, or profiled rollers to remove any remaining trapped air.

Finish the exposed surface of the CarboComp by brush to provide even resin distribution (estimated consumption 800 - 1000 g/m²).

COATINGS

Should coatings be required, apply a layer of adhesive evenly over the surface and broadcast with quartz aggregate to provide mechanical key. Allow to cure for 24 hours and then apply chosen coating system. Stonhard recommends Carboguard 690 and Carbothane 134.

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NOTES

- Safety Data Sheets for CarboComp Textile 225 products are available upon request.
- A staff of Technical Service Engineers is available to assist with installation or to answer questions related to CarboComp Textile 225 products.
- Requests for technical service or literature can be made through local sales representatives and offices or corporate offices located worldwide.

Important:

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