

PRODUCT DATA

CARBOCOMP 5800/BL EPOXY ADHESIVE

PRODUCT DESCRIPTION

CarboComp 5800/BL is a two-component, solvent-free epoxy adhesive used for bonding CarboComp carbon fibre laminates and other structural elements.

APPLICATION

CarboComp 5800/BL is designed to bond:

- CarboComp carbon fibre laminates onto concrete, timber and steel.
- As a steel plate bonding adhesive to reinforce concrete or steel structures.
- Bonding of concrete elements to each other.

PROPERTIES

CarboComp 5800/BL is an epoxy adhesive with exceptional adhesion to concrete, steel and carbon fibre laminates.

APPLYING

- Mix the A and B Components until a uniform grey mass is obtained.
- Apply this mixture onto the plate which is to be bonded using a trowel, spatula or suitable form.
- After positioning the plate it is pushed onto the substrate (eg. with a small hard roller) until a minimum quantity of adhesive is extruded on both sides. Steel plates have to be jacked or bolted for a minimum of 24 hours.

PACKAGING

- A-Component: 5.15 kg
- B-Component: 2.35 kg
- Weight of the Mixture: 7.5 kg

CLEANING

Unreacted product can be removed with CarboComp PC 5900 cleaning agent.

PRECAUTIONS AND SAFETY REQUIREMENTS

- Avoid contact with skin and eyes.
- Wear protective clothing to include gloves, overalls and safety glasses.
- Prevent contact of CarboComp 5800/BL with water.
- For more information: See Safety Data Sheet (SDS).

TYPICAL DATA (TYPICAL VALUES)

A-Component:	Black Paste
B-Component:	White Paste
Density of the Cured Material:	1.480 kg/l
Mixing Ratio:	5.15 kg A / 2.35 kg B
VOC Content (ASTM 2369-10):	5.136 g/l
Compressive Strength (EN12190)	
• After 24 Hours at 20°C:	56 N/mm ²
• After 7 Days at 20°C:	88 N/mm ²
Modulus of Elasticity in Compression (EN13412):	7.5 GPa
Flexural Strength (EN13892-2, after 7 Days at 20°C):	45 N/mm ²
Tensile Strength (EN527-2, after 7 Days at 20°C):	24.3 N/mm ²
Adhesion to Concrete (EN1542):	>2.5 N/mm ² (Rupture in Concrete)
Adhesion to Metal (EN1542):	23.83 N/mm ²
Shear Strength at an Orthogonal Stress = 0 (EN12188):	28 N/mm ²
Modulus of Elasticity:	>2,000 N/mm ²
Slant Shear Strength (EN12188)	
• At $\Theta = 50^\circ$:	63.7 N/mm ²
• At $\Theta = 60^\circ$:	67.4 N/mm ²
• At $\Theta = 70^\circ$:	92.5 N/mm ²
Shrinkage (EN12614-1):	0.06%
Coefficient of Thermal Expansion (EN1770):	<100 10 ⁻⁶ /K
Glass Transition Temperature T _g (EN12614):	78.36°C
Durability (Thermal & Moisture Cycles According to EN13733):	Pass (EN1504-4)
Pot Life @ 20°C (EN ISO 9514):	5.15 kg A / 2.35 kg B Minimum 40 Minutes
Consumption:	± 1.5 kg/m ² per mm layer thickness *See Table 1 for Typical Consumption
Curing Time:	Any temporary supports can be removed after 24 hours (20°C). This time is reduced at higher temperatures and increases at lower temperatures

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CLEANING

- Safety Data Sheets for CarboComp 5800/BL products are available upon request.
- A staff of Technical Service Engineers is available to assist with installation or to answer questions related to CarboComp 5800/BL products.
- Requests for technical service or literature can be made through local sales representatives and offices or corporate offices located worldwide.

TYPICAL DATA (TYPICAL VALUES)

Application Temperature:	Minimum 10°C, maximum 30°C (both ambient & substrate temperature)
Load Bearing Capacity:	Fully Cured After: <ul style="list-style-type: none"> • 2 Days @ 30°C • 3 Days @ 20°C • 7 Days @ 10°C
Shelf Life:	24 months from production date in the original, unopened & undamaged packaging. CarboComp 5800/BL has to be stored in dry conditions between +5°C & +30°C

TABLE I

WIDTH OF CARBOCOMP LAMINATE (mm)	TYPICAL CONSUMPTION RANGE (kg/m Length of Plate)
50	0.25 - 0.35
60	0.30 - 0.40
80	0.40 - 0.55
100	0.55 - 0.80
120	0.65 - 1.00
150	0.85 - 1.25

NOTE: These are typical values

Important:

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