

Product Overview:

UltraBond CF is a high-performance adhesive specifically formulated for impregnating carbon fibers and bonding carbon fiber fabrics to concrete surfaces. This versatile epoxy effectively penetrates and bonds to a wide range of substrates, including concrete, steel, ceramic, stone, wood, and various fiber fabrics such as carbon, glass, basalt, and aramid fibers. Its low viscosity ensures excellent impregnating properties, allowing it to infiltrate carbon fiber fabrics with ease, while its thixotropic characteristics facilitate easy application.

UltraBond CF demonstrates excellent compatibility with carbon fibers and offers superior anti-corrosion properties, including resistance to humidity, moisture, and chemical corrosion. Upon curing, it delivers outstanding physical properties, including superior toughness and elasticity, making it an ideal choice for demanding bonding and impregnating applications.

Technical Data:

All values listed are approximations.

Component A:

Makeup	Liquid
Colour:	Grey
Viscosity at 23°C (Pas)	1.76

Component B:

Makeup	Liquid
Colour:	Brown/ red
Viscosity at 23°C (Pas)	1.25

A + B

Mixing Ration (A : B)	2 : 1
Operation temperature	5 – 40°C
Distortion limit	≥ 65 °C
Touch dry time (hrs)	1 - 2
Total Curing time (25°C)	3 – 7 days
Consumption (300 GSM)	0.6 – 0.9 kg/m ²
Consumption (600 GSM)	1.0 – 1.2 kg/m ²
Fracture elongation	720%

Although the information and specifications provided in this document are, to the best of our knowledge, accurate and truthful, Deutsch Master recommends that users conduct a trial to confirm the suitability of the product for the intended application. Please note that regional climatic conditions may result in variations in the product's performance. No warranty, express or implied, is provided or implied in connection with any recommendations or suggestions made by Deutsch Master, its representatives, agents, or distributors. The information contained in this technical data sheet is effective from the date shown and supersedes all previous data. Customers should check with their local Deutsch Master office to ensure they are referencing the current version.

Application Instructions:**1. Surface Preparation:**

- Use a grinder to remove the coating from the concrete surface.
- Polish the surface thoroughly.
- If there are angular edges, grind them into a smooth, rounded shape.

2. Setting Out:

- Clean the concrete surface and ensure it is dry before proceeding.

3. Apply Primer:

- Apply primer adhesive evenly onto the prepared concrete surface.

4. Apply Putty/Levelling:

- If necessary, apply putty to repair and level the surface.

5. Fabric Cutting:

- Cut the carbon fibre fabric to the specified sizes as per design.

6. Preparing the Impregnation Adhesive:

- Weigh and mix the adhesive according to the specified ratio.
- Stir the adhesive until the colour is uniform, being careful to avoid the formation of air bubbles.

7. Applying Impregnation Adhesive:

- Apply the impregnation adhesive when the primer is touch dry.
- (If the primer is not required, the impregnation adhesive can be applied directly.)

8. Apply Carbon Fiber Fabric:

- Apply the carbon fibre fabric to the concrete surface as designed.
- Level the fabric from one end to the other.

9. Check for Gaps or Bubbles:

- Apply the impregnation adhesive again to ensure it fully impregnates the fabric.
- The surface should be flat, with no air bubbles.
- Repeat the process from fabric cutting if applying two or more layers.

Storage:

UltraBond CF has a minimum shelf life of 12 months, in dry conditions as temperatures between 15-25°C. Product should be kept out of direct sunlight. Should you wish to use the product after 12 months, we recommend a sample be sent to Deutsch Master for quality testing.

Disposal:

General waste can be used for small quantities of reacted product. Singular components should be disposed of in accordance with local laws.

Although the information and specifications provided in this document are, to the best of our knowledge, accurate and truthful, Deutsch Master recommends that users conduct a trial to confirm the suitability of the product for the intended application. Please note that regional climatic conditions may result in variations in the product's performance. No warranty, express or implied, is provided or implied in connection with any recommendations or suggestions made by Deutsch Master, its representatives, agents, or distributors. The information contained in this technical data sheet is effective from the date shown and supersedes all previous data. Customers should check with their local Deutsch Master office to ensure they are referencing the current version.