Composite Repair System

BELZONA®

SUPERWRAP II

Belzona SuperWrap II is a composite repair solution designed to restore strength to weakened or holed metallic substrates. Developed for applications on pipes and process vessels, it is also suitable for safety critical and pressurised systems, and can be used on bends, tees and other complex geometries.

A unique combination of a 100% solids resin, carbon and glass fibre reinforcement sheet, and a compression film ensures a quick and simple application. It can remain maintenance-free for up to 20 years.

Belzona SuperWrap II is available in a choice of three resin grades designed for applications in cooler or hotter climates, as well as for high temperature service of up to 150°C/302°F.

Testing Data/Key Features:	Values (up to):
Tensile shear adhesion (after 1000 hours in immersion)	**19MPa/2,748psi**
Tensile strength (hoop)	**524MPa/75.98 x 103 psi**
Tensile strength (axial)	**126MPa/18.27x 10^3 psi**
Service temperature range	**-60°C/-76°F - 150°C/302°F**
Application temperature range	**5°C - 40°C/41°F - 104°F**
Minimum back to service time	**24 hours**

**Please consult the Product Specification Sheet (PSS) and Instructions for Use (IFU) for the latest technical data.*

WINTER GRADE

Designed for colder climates with temperatures dipping close to zero, Belzona 1981 can be applied at 5°C – 20°C/41°F – 68°F. Once cured it resists temperatures up to 60°C/140°F.

TROPICAL GRADE

For applications in higher ambient temperatures, 20°C – 40°C/68°F – 104°F, Belzona 1982 resin was designed. Once cured it resists temperatures up to 80°C/176°F.

HIGH TEMPERATURE GRADE

For assets operating in high temperature service, up to 150°C/302°F, Belzona 1983 resin was formulated. It can be applied at 5°C – 40°C/41°F – 104°F.

Belzona SuperWrap II can be designed and applied in accordance with ISO 24817/ASME PCC-2 standards

1000 Series

BELZONA SUPERWRAP II

Application:

1. Preparation

Repair any thin- or through-wall defects prior to application.

2. Wetting Out

The substrate and the reinforcement sheet are wetted out with resin.

3. Wrapping

Wrap or patch is applied according to design or procedure.

4. Consolidating

Release film is used to compress and tighten the wrap.

5. Inspection

Once cured, release film is removed and the wrap is inspected.

Key Benefits:

- **Quick return to service**

Wet-on-wet application procedure and fast cure ensure minimum downtime.

- **Extensive damage repaired**

Through-wall defects can be repaired by bonding a plate under the wrap with a Belzona adhesive.

- **Engineered repair**

Belzona SuperWrap II designs and applications can be carried out in accordance with ISO 24817 and ASME PCC-2.

- **Strong and durable solution**

High Young's modulus and the ultra-high adhesion to the substrate ensure the long-term integrity of the repair and maximise performance, especially on through-wall defects.

- **Training and support**

Full validated training can be provided for Installers, Supervisors and Designers of the system.

Belzona SuperWrap II Components:

- **Choice of resin**

Belzona 1981, Belzona 1982 or Belzona 1983

- **Belzona 9381**

Glass and carbon fibre blend reinforcement sheet

- **Belzona 9382**

Release film for wrap consolidation

For more information, please contact your local Belzona representative:

QUALITY PRODUCTS – TECHNICAL SUPPORT

Belzona products are manufactured under an ISO 9001 Registered Quality Management System.

Belzona has a global distribution network of over 140 Distributors operating in 120 countries. Local support is provided by a trained Technical Consultant who will diagnose the problem, recommend the solution and provide 24-hour, on-site application supervision and advice.