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## BCB-II, Base Coat

**DESCRIPTION:** CarbonWrap™ BCB-II Base Coat is a high strength, toughened, structural epoxy adhesive for the bonding of composite fabrics to substrate. CarbonWrap™ BCB-II Base Coat is a two phase (toughened) epoxy resin produced using a CTBN elastomer and a flexible resin backbone for maximum stress and fatigue resistance. CarbonWrap™ BCB-II Base Coat bonds with an immediate high tack consistency, a long working life and a quick cure time.

Two available hardeners provide a very wide temperature application window. In lower ambient temperatures (45° F - 75° F), or where faster work life and set times are desired, the Fast hardener is used to provide early “green strength” (1.5-3.0 hours) and fast positive full cures. In warmer environments (75° F - 100° F), and where a very long work life is needed, the Slow hardener is indicated, providing > 2 hour working life with full cures occurring between 6-12 hours depending on cure temperature. The Slow and Fast Hardeners may be combined to achieve optimal work and cure times.

Unlike most epoxy adhesives, CarbonWrap™ BCB-II Base Coat adhesive cured at ambient temperatures provides heat resistance well in excess of most engineering limits (HDT of 180° F). The material mixes at 2:1 by volume, or 100:44 by weight (resin to hardener). The convenient color-coded components form a uniform color when properly mixed. CarbonWrap™ BCB-II Base Coat adhesive is designed for high production meter/mix ram dispensing and although highly thixotropic, have very fast application rates. With low odor and toxicity, CarbonWrap™ BCB-II Base Coat adhesive is solvent free, and 100% solids.

CarbonWrap™ BCB-II Base Coat adhesive is highly recommended for use as a “tack coat” in bonding pre-cured epoxy laminate to itself and dissimilar materials (concrete, steel, and or wood in the areas of seismic retrofit and structural upgrades.

**ADDITIONAL BENEFITS:** CarbonWrap™ BCB-II Base Coat adhesive is formulated to improve the intimate bond between the epoxy adhesive and composite laminates. This formulation technique results in increased physical properties due to better surface wetting and increased bond strength to E-glass fibers. Of equal, if not greater significance is the retention of physical properties after exposure to heat, cycle fatigue, water, expected adverse environmental reagents such as salt spray, acid rain, etc. The formulation of CarbonWrap™ BCB-II Base Coat adhesive results in minimal degradation of the cured adhesive’s physical properties as compared to epoxy systems not containing the proprietary formulation constituents of CarbonWrap™ BCB-II Base Coat adhesive. This technology offers the increased product life and long term durability.

The information contained herein is offered without charge for use by technically qualified personnel at their discretion and risk. All statements, technical information and recommendations contained herein are based on test and data which we believe to be reliable, but the accuracy or completeness thereof is not guaranteed and no warranty of any kind is made with respect thereto. Always read, understand, and comply with the hazard warnings described in the products’ Material Safety Data Sheet(s) before use.

**PHYSICAL PROPERTIES OF CarbonWrap™ BCB-II BASE COAT RESIN (PART A) with FAST and SLOW HARDENERS (PARTS BF and BS):**

CarbonWrap™ BCB-II Base Coat	Part A: Resin	w Part BS: Slow Cure	w Part BF: Fast Cure
Weight per Gallon	9.7 – 9.8 lbs	8.65 – 8.75 lbs	8.55 – 8.65 lbs
Viscosity	Thixotropic Gel	Thixotropic Gel	Thixotropic Gel
Color	Yellow	Blue	Blue
Color Mixed	-	Green	Green
Mix Ratio by Weight	100	44	44
Mix Ratio by Volume	100	50 (2:1)	50 (2:1)
Working Life, 1000 grams @ 77°F	-	>240 minutes	20-30 minutes
Initial Cure Time	-	6 – 8 hours	1.5 – 3.0 hours
Shore D Hardness	-	85	85
Heat Deflection Temperature	-	85°C (175°F)	85°C (175°F)

**RECOMMENDED CURING OF JEFFCO 102 ADHESIVE:**

- 1) Gel at ambient + 8 hours @ 50°C
- 2) Gel at ambient + 6 hours @ 70°C
- 3) Gel at ambient + 7 days @ ambient

**ADHESION and FAILURE MODE of CarbonWrap™ BCB-II BASE COAT**

Epoxy Laminate to itself	Laminate fails prior to adhesive failure
Polyester Laminate to itself	Laminate fails prior to adhesive failure
Galvanized Steel to itself	Galvanized coating fails prior to adhesive failure
Carbon Steel to Epoxy Laminate	Laminate fails prior to adhesive failure
Carbon Steel to Polyester Laminate	Laminate fails prior to adhesive failure
Epoxy Laminate to Concrete	100% Concrete failure
CarbonWrap™ BCB-II Base Coat	

**CarbonWrap™ BCB-II Base Coat is available in 3 gallon, 15 gallon and 165 gallon kits. Shipped FOB Tucson, Arizona.**