



## The FRP Retrofit Experts

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# Product Data Sheet QuakeBond™ 333 Saturating Resin

## DESCRIPTION

QuakeBond™ 333 is a two-component, high-strength, low viscosity resin that cures underwater. QuakeBond™ 333 is primarily used for saturating QuakeWrap® carbon or glass fabrics such as VU18C or VB26G for repair and strengthening of piles underwater. The resin is mixed in 2:1 ratio by weight or 100:56 by volume (i.e. 100 parts resin to 56 parts hardener). The resin is applied to the fabric to achieve a composite laminate with a 45%-50% volumetric ratio of resin.

## USE

- Saturating carbon and glass fabrics for retrofit & strengthening of structural elements underwater
- As a binder for epoxy mortar repairs
- NSF-61 certified for potable water pipe and tank repair

## ADVANTAGES

- High strength, low-viscosity structural adhesive
- 100% solvent free
- Fully compatible and excellent adhesion to QuakeWrap® carbon and glass fabrics
- 100% solids, zero VOCs, no solvents

## COVERAGE

Applied as a saturating resin to a fabric with a density of 24 oz/yd<sup>2</sup> (813 gm/m<sup>2</sup>) achieves a yield of 75 square feet per gallon (0.55 liter per square meter). Yield varies slightly for different fabric densities.

## PACKAGING

Each of the components is supplied in 55-gallon (208L) drums or 5-gallon (19L) containers, resulting in 450-lb (204 kg) or 40-lb (18 kg) kits. Ships DOT regulated.

## SHELF LIFE

QuakeBond™ 333 components should be stored in sealed containers at 60 – 90°F in a dry area. Under these storage conditions, the shelf life is 2 year.

## CERTIFICATE OF COMPLIANCE

Material Safety Data Sheet (MSDS) will be supplied upon request and is included with each shipment.

## APPLICATION

Use QuakeBond™ 333 with our saturating machines to impregnate QuakeWrap® carbon or glass fabrics for wet lay-up applications. For smaller projects, the fabrics may be saturated by hand. Spread the fabric on a plastic-covered flat surface or table, pour mixed QuakeBond™ 333 resin over the fabric and use a trowel or squeegee to spread the resin into the fabric; it may be necessary to turn the fabric over and repeat this process to ensure full saturation of the fabric. Remove excess resin with a squeegee before installing the fabric on the structural element. Once the saturated fabric is installed, remove all entrapped air bubbles with glove-protected hands. A plastic laminating roller or a porcupine roller can also be used. Do not disturb installed saturated fabric for 24 hours.

All epoxy components shall be preconditioned to a temperature between 65-85 °F (18-29 °C) prior to the time of mixing.

## LIMITATIONS

Minimum application temperature of the epoxy is 45 °F (7 °C). Do not thin this epoxy with solvents.

## FIRST AID

In case of skin contact, wash thoroughly with soap and warm water. For eye contact, flush immediately. For respiratory problems, remove to fresh air. Wash clothing before reuse. Consult MSDS for detailed information.

## CLEANUP

Collect with absorbent material, flush with water. Dispose of in accordance with local disposal regulations. Uncured materials can be removed with approved solvent. Cured materials can only be removed mechanically.

QuakeBond™ 410 PROPERTIES		
Tensile Strength (psi)	(ASTM D-412)	9,750
Elongation (%)*	(ASTM D-412)	5.0
Flexural Strength (psi)		15,530
HDT (°F) ASTM D648-264		170
Shore D Hardness		85
Viscosity, CPS@77°F (25°C)		150-250
Gel Time @ 77°F (150 Grams)		30 - 40 minutes
Thin Film Set Time @ 25°C		<4 hours
Cure Time @ 25°C		12 - 24 hours

KEEP OUT OF REACH OF CHILDREN.  
NOT FOR INTERNAL CONSUMPTION.

FOR INDUSTRIAL USE ONLY.  
KEEP CONTAINER CLOSED TIGHTLY.

QuakeWrap, Inc. warrants this product for one year from date of installation to be free from manufacturing defects and to meet the technical properties on the current technical data sheet if used as directed within shelf life. User determines suitability of product for intended use and assumes all risks. Buyer's sole remedy shall be limited to the purchase price or replacement of product exclusive of labor or cost of labor.  
NO OTHER WARRANTIES EXPRESS OR IMPLIED SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.  
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