

SOLAR-WRAP™

UV-CURABLE COMPOSITE REPAIR SYSTEM



Description

Solar-Wrap™ is a pre-impregnated, bi-directional fiberglass wrap utilizing a UV-curable polyester based resin system. It has been designed to be a very fast return-to-service product which can be applied at any temperature without extended curing times. This has been achieved by using a curing process that utilizes UV light and is relatively independent of temperature. Solar Wrap is provided as a roll of pre-impregnated, woven fiberglass tape in a UV-stable foil pouch and should not be removed outdoors without proper UV cover. Solar Wrap is an excellent and versatile solution for any industry where quick-action repair in adverse conditions is a critical aspect for successful operations.

Mechanical Properties

Test	Method	Result
Tensile Strength	ASTM D3039	62,785 psi (4.328 bar)
Tensile Modulus	ASTM D3039	2,859 ksi (197,121 bar)
Hardness: Shore D	ASTM D2240	72
Heat Distortion Temperature (HDT: of neat resin)	ASTM D648	160° F (71° C)
Thickness per ply	Measured	0.013" (0.33 mm)

Typical Applications

- Emergency repair
- Corroded pipes
- Irregular pipe fittings
- Force mains and gravity lines
- Joint, tee, and elbow repair

Benefits

- Controlled curing process
- Application in low temperature environment without extend cure time
- UV stable
- No field mixing or impregnating required
- Effectively seals out atmospheric conditions, preventing future corrosion

Physical Properties

% Solids: 61-65%

Working/Cure Times:

Strong UV (Bright Sun)

- Gels in 15 seconds
- Full Cure in 4-5 minutes

Medium UV (Partial Sun)

- Gels in 25 seconds
- Full Cure in 5-6 minutes

Low UV (Light/Overcast)

- Gels in 45 seconds
- Full Cure in 6-9 minutes

Resin Type: UV Curable Polyester

Resin Application: Pre-impregnated

Service and Application Temperature:

-50° to 133° F (-46° to 56° C)

Shelf Life: 4 months

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