



**Product Data Sheet**  
**PipeMedic™ PG5.5**  
**for Structural Strengthening and Leak Proofing**

**DESCRIPTION**

PipeMedic™ PG5.5 is a very thin and flexible high-strength biaxial protruded laminate constructed with glass fibers. The laminate has virtually the same mechanical properties in both longitudinal and transverse directions. The FRP laminate is bonded to the substrate using QuakeBond™ J201TC (Tack Coat). The PipeMedic™ laminate is ideal for repair and retrofit of small diameter pipes; the laminate can fit pipe diameters as small as 3 inches (75mm).

**USE.**

➤ Repair of small diameter pipes, culverts and tanks to achieve strengthening and water-proofing.

**ADVANTAGES.**

- The laminates are manufactured in our plant with the highest quality control.
- Leak proofing and strengthening achieved simultaneously.
- No excavation required (access using packers).
- Corrosion-resistant system can withstand various chemicals.
- Non-toxic, odorless resins allow installation with little ventilation.
- No reduction in inside diameter of pipe.
- Smooth finish reduces friction losses in pipe.
- Laminates can be installed in individual rings or as a continuous spiral.
- Same laminate fits any pipe with a diameter of 3 inches or larger, as well as circular tanks and silos.

**PACKAGING**

Standard rolls are 60 in. X 130 yards (1.52 m X 119 m). PipeMedic™ laminates can be easily cut in the field to any dimension with ordinary scissors.

**SHELF LIFE**

Unlimited shelf life in proper storage conditions.

**STORAGE CONDITIONS**

Store in dry place at 30°-120° F (0°-50° C).

**APPLICATION**

Surface must be clean and sound; it may be dry or damp but must be free of standing water and frost. Remove dust, laitance, grease, curing compounds, disintegrated materials and other bond inhibiting materials from the surface. Existing uneven surfaces must be filled with an appropriate repair mortar. The adhesive strength of the substrate must be verified after surface preparation by random pull-off testing (ACI 503R) at the discretion of the engineer. Minimum tensile strength of 200 psi (1.4 MPa) with substrate failure is required.

Blast clean, shot-blast, scarify, hydro-blast or use other approved mechanical means to clean the substrate surface. Any sharp edges (i.e. fins, form-marks, etc.) must be ground smooth and flush.

- 1) Wipe PipeMedic™ with appropriate cleaner (e.g. acetone or MEK) using clean cloth.

- 2) Apply QuakeBond™ J201TC onto the back side of PipeMedic™ with a trowel or spatula to a nominal thickness of 40 mil (1.0 mm). A notched trowel may be used for this application.
- 3) Wrap PipeMedic™ around a packer device such that the uncoated surface is placed against the packer.
- 4) Position the packer into pipe at the desired location, making sure that the epoxy does not rub against the pipe surface during the positioning process.
- 5) Inflate the packer to allow PipeMedic™ stick against the surface of the pipe.
- 6) Maintain pressure in the packer while the epoxy hardens.
- 7) Deflate and remove packer from pipe.
- 8) If necessary, repeat the procedure with additional pieces of PipeMedic™ installed in a similar manner with appropriate overlap length along the axis of the pipe.
- 9) Provide adequate overlaps in the hoop and longitudinal directions.
- 10) The bonded PipeMedic™ laminate should not be disturbed for 24 hours.

Installation of QuakeWrap® products must be performed only by specially trained and approved contractors.

PipeMedic™ PG5.5 laminates can be cut to appropriate length using ordinary scissors. Care must be taken to support both sides of the laminate to avoid splintering. Since dull or worn cutting tools can damage, weaken or fray the fiber, their use should be avoided.

**LIMITATIONS**

For application in pressurized pipes, design calculations must be made and certified by a licensed professional engineer.

**CAUTION**

PipeMedic™ PG5.5 is non-reactive and fully cured. It does not require a Material Safety Data Sheet (MSDS). Gloves must be worn to protect against potential skin irritation. Care must also be taken when cutting the laminates to protect against airborne glass dust generated by the cutting procedure.

<b>PIPEMEDIC™ PG5.5 PROPERTIES</b>		
	US Units	SI Units
Ply Thickness	0.011 in.	0.28 mm
Tensile Strength (ASTM D638)	49 ksi	350 MPa
<b>Pressure rating of various pipes sizes Retrofitted with a single layer of PG5.5:</b>		
3 inch (75 mm) Diameter Pipe	350 psi	2.48 MPa
4 inch (100 mm) Diameter Pipe	270 psi	1.85 MPa
6 inch (150 mm) Diameter Pipe	180 psi	1.24 MPa
8 inch (200 mm) Diameter Pipe	135 psi	0.93 MPa

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

FOR INDUSTRIAL USE ONLY.  
 KEEP CONTAINER CLOSED TIGHTLY.