

INSULRAP™ 50 NG

A LAMINATED DIRECT BURIAL VAPOR BARRIER MEMBRANE



INSULRAP™ 50 NG is the "Next Generation" premier direct burial membrane in the insulation market used as a waterproofing and vapor-proofing jacket. It is the first jacket of its type offering true zero perm performance.

ADVANTAGES

- True Zero Perm performance
- Factory controlled product thickness is uniform. Jobsite labor does not control the thickness.
- Speeds up the project - no cure time.
- Significant labor savings from speed and elimination of cleanup.
- In either warm or cold conditions, the membrane will stretch and flex to accommodate movement of the substrate.
- Resistance to chemicals, acids, and alkalis.

DESCRIPTION

INSULRAP 50 NG is a composite membrane consisting of a tough polymer/foil laminate film coated with a layer of rubberized asphalt specially formulated for this application. **Insulrap 50 NG** is considered a "peel and stick" and self-healing membrane and uses a disposable silicone-coated release liner.

USES

INSULRAP 50 NG is used as the outer protective waterproofing jacket in a direct burial application where the backfill is uniform, clean and free of rocks and debris. When backfill contains rocks or debris, **INSULSHIELD™** rock shield should be used. For large pipe sizes, **OUTERWRAP** should be used.

INSULRAP 50 NG can also be used in as a zero perm self-sealing vapor barrier under a protective jacket in cryogenic, oil and gas and other industrial applications.

SURFACE PREPARATION

Insulation should be banded according to insulation manufacturer's instruction. Surface should be clear of dust, frost, moisture, and foreign matter. **Surface temperature of the insulation should not exceed 150°F.** Butt joints and longitudinal seams of insulation should be inspected for gaps so that excess heat from hot lines is not permitted to escape to the membrane.

PACKAGING AND STORAGE

INSULRAP 50 NG is available in 4"x50', 23" and 35" x 75' rolls. All material should be stored in a cool, dry place and kept from contact with the ground and protected from weather at all times. During cold weather, it is recommended that materials be stored in heated buildings between 70°F and 80°F.

APPLICATION

INSULRAP 50 NG can be applied by cigarette wrapping. The silicone treated release sheet should be removed immediately before application. Apply the adhesive surface to the dry insulation. Cigarette wrap applications should overlap a minimum 3" onto itself. If membrane is butted onto itself, cigarette wrapped 4" butt strips should be applied over the joints. Check all seams carefully to ensure waterproofing integrity at overlaps. Use pressure from a roller or otherwise to insure that the lap is well conformed to the surface underneath. In cooler weather, **Polyguard Liquid Activator**, a heat gun, or hair dryer can be used to insure adhesion. Lightly passing the heat source over the adhesive face of the membrane and substrate can greatly improve "grab" in marginal application conditions.

INSULRAP 50 NG can be used for fitting elbows & joints. Four inch (4") width **INSULRAP 50 NG** in a spiral wrap configuration is recommended for insulated pipe outside diameters up to 16". For outside diameters >16", 6" or 12" width **INSULRAP 50 NG** should be used. A 50% overlap should be used at all seams.

COVERING: INSULRAP 50 NG should not be exposed to ultraviolet light for over 30 days. It should either be covered with jacketing or **INSULSHIELD™**, or should be backfilled promptly.

DRAINAGE

The insulated pipe should be installed above the water table level on a gravel base with proper drainage using sand or a geotextile drain system provided by the architect or engineer. **INSULRAP 50 NG** is not designed for long term immersion in water.

APPURTENANCE DESIGN

Consult the engineer's application instructions for recommendations on wall penetrations (existing and new construction), insulation supports, line guide, line anchor, expansion-contraction joints, expansion chamber, and ditch configurations for drainage. Polyguard has detail drawings available at www.polyguardmechanical.com.

LIMITATIONS

INSULRAP 50 NG is a waterproofing or vapor-proofing membrane only. **DO NOT USE AS A SUBSTITUTE FOR BANDING OR MECHANICAL FASTENING OF INSULATION**. Refer to insulation manufacturers application instructions. The adhesive surface on **I-50 NG** loses a portion of its initial "tack" in cooler weather. Follow instructions above for surface preparation and application to insure maximum adhesion. Insulation surface temperature should be within normal engineering and safety standards (below 120°F) during operation of the system. **Solvent Based joint sealers** can emulsify the rubberized asphalt, consult joint sealer data sheet for harmful solvents.

KEEP OUT OF REACH OF CHILDREN

This material is offered for sale by **POLYGUARD PRODUCTS** only for the expressed purposes as described in this literature. Any use of the products described in this literature for purposes other than taught therein by **POLYGUARD PRODUCTS** shall be the responsibility of the purchaser and **POLYGUARD PRODUCTS** does not warrant nor will be responsible for any misuse of these products. **Read ALL SDS's prior to installation.**

TECHNICAL PROPERTIES AND TESTING

Membrane Property	Test Method	Results
Color		Black
Total Product Thickness(w/o liner)	Micrometer	50 mils
Weight per Sq. Ft.	Scale	0.32 lb.
Water Vapor Transmission	ASTM E96-00 Procedure A	0.00 perms
Breaking Strength	ASTM D882	52 lbs./in(M) 52 lbs./in(T)
Puncture Resistance	ASTM E154	77 Lbs.
Overlap Adhesion	ASTM D1000	>8.5 lb./in
Service Temperature(Max)	LAB	160°F

Polyguard Products, Inc. will replace F.O.B. Ennis, TX, material not meeting our manufacturing specifications up to one year from date of sale. Made in the U.S.A.