



FOAMGLAS®

PITTWRAP® IW50 AL JACKETING

Description and Area of Application

PITTWRAP® IW50 AL jacketing is a 1.27 mm (50 mil) thick self-sealing, modified bituminous membrane with an aluminum foil laminate for protecting above ground FOAMGLAS® insulation systems under a metal or UV resistant jacket finish. Ideal for use where insulation has been roller coated with asphalt prior to jacketing. Manual pressure seals the jacketing without the use of a torch or heater. PITTWRAP® IW50 AL jacketing may be factory or field applied to the insulation.

PITTWRAP® IW50 AL jacketing consists of a polymer modified bituminous compound reinforced with a 0.03 mm (1 mil) aluminum foil top film and release film backing.

Field Application

Always read and understand information contained within product datasheets and safety datasheets before attempting to use this product. If you have questions regarding fitness of use of this product for a particular application, consult Owens Corning.

Substrate Preparation

All surfaces should be dry and free of dust, loose scale, oil, grease and frost.

Insulation should be secured to the pipe with fiberglass reinforced strapping tape, 2 pieces per section overlapped by at least 50%.

Cellular Glass Application Guidelines

Cut a length of jacketing to provide at least a 50 mm (2 in.) overlap at the longitudinal seam. Slit the release film at this overlap, taking care not to slit jacket. Strike a horizontal line along the insulation convenient for starting jacket positioning and to insure a uniform lap line. Remove release film except at the overlap. Dirt and dust must be kept off jacketing.

Place the end of the jacketing containing the release film in alignment with the struck line. The first piece of jacketing should be straight. Smooth the remaining jacket into place working around the pipe cover. Avoid entrapment of air bubbles. Once the jacketing is completely around the insulation, lift the overlap and pass the opposite end beneath the overlap. Remove the remaining release film on the overlap and press tightly to seal the longitudinal joint.

Any gaps or folds should be removed and resealed immediately. An ordinary wallpaper seam roller has been found to be particularly useful for applying pressure to the overlap areas.

When temperature is below 10°C (50°F), or if jacketing surface is dusty, apply a thin coat of PITTWRAP® SS Primer (FI-155) by brush to the bituminous surface in the overlap area. If temperature is below 10°C (50°F) and surfaces are clean, the overlap may be warmed with a heater or torch, taking care not to burn through the jacket.

The second and succeeding sections are applied in the same manner. Succeeding sections are placed to overlap the previous section of jacket a minimum of 50 mm (2 in). All longitudinal joints should be started on the same line to facilitate placement of succeeding sections.

After application, inspect all joints, smooth and re-press any loose areas. Use primer or heat the same as for applying the jacket, if required.



Fittings or Changes in Thickness

With any jacketing or coating, any change in insulation thickness, such as screwed ell covers, pipe step downs, etc., should be field tapered to make a smooth transition. These transitions should be treated as a fitting, PITTCOTE® 300E coating (FI-120e) and PC® Fabric 79 (FI-159) polyester fabric or PC® 150 mesh (FI-332).

Fittings may be covered with jacketing cut in shapes to fit, or with PITTCOTE® 300E coating and fabrics referenced above. Coating should be extended over the aluminum surface of the jacketing by 100 mm (4 in.). Apply coating and fabric over the fitting.

Clean Up and Disposal

Dispose of excess jacketing, release film and packaging in accordance with local, state and federal regulations.

Type of Delivery and Storage

- Rolls: 91.4 cm x 22.9 m (36 in x 75 ft.), Gross weight approx. 28 kg (61.5 lb).
- DO NOT store where it may come in contact with hydrocarbon solvents such as petroleum spirit and diesel oil or other organic solvents.
- Store on end, under cover and protected from mechanical damage.
- Store in a well-ventilated room and at a maximum temperature of 38°C (100°F).
- Store in a heated area for cold weather application.
- Consult Safe Use Instruction Sheet for additional storage and handling information.

Coverage

Standard Application of Jacketing to FOAMGLAS® Insulation

The required amount of jacketing for a section of insulated pipe can be calculated as follows:

- Required Jacketing Area (A)

Equation 1, SI, metric Units

$$A = [1.06 \times [\pi \times (d + 2t) + 50] \div 1000] \times l$$

Equation 2, Imperial Units

$$A = [1.06 \times [\pi \times (d + 2t) + 2] \div 12] \times l$$

Where d = actual pipe diameter in mm or inches and t = insulation thickness in mm or inches, and l = pipe length in meters or feet.

Figures DO NOT include losses.

Typical Properties

PROPERTY ^A	METHOD	SI	ENGLISH
Color		Silver (Aluminum)	
Thickness, Total Foil + Bitumen - Release Film		1.27mm	50 mil
Weight (nominal), Foil + Bitumen - Release Film		~1.4kg/m ²	~0.29lb/ft ²
Application Temperature, Minimum Minimum W/Primer		10°C -7°C	50°F 20°F
Service Temperature ^B Maximum Minimum		75°C -20°C	167°F -4°F
Chemical Resistance Water Alkali Acid Petroleum Solvent			Good Good Good Poor
Lap Adhesion	ASTM D882	219 ± 9 kPa	3.17 ± 1.3 psi
Tensile Strength (average) Machine Direction Cross Direction	ASTM D882	4.8 MPa 5.4 MPa	697 psi 782 psi
Elongation	ASTM D1000	≥ 30%	
Puncture Resistance	ASTM E154	43.7 kgf	96.3 lbf
Permeance	ASTM E96	≤0.05 ng / Pa • s • m ²	0.0009 perm
Water Vapor Permeability	ASTM E96 (Wet Cup)	0.00 ng / Pa • s • m	0.00 perm-in

A. Properties are subject to change. Consult Owens Corning.

B. Service temperature limits are derived from laboratory evaluation of the product. Variations in substrates, loading conditions, or other external factors may further limit service temperature. Always consult Owens Corning® FOAMGLAS® Insulation System Specification for suitability for use recommendations for a specific application.

Limitations

- DO NOT use over combustible insulations or install where open flames are not permitted.
- DO NOT use where jacketing will be exposed to solvents that will dissolve asphalt.
- DO NOT allow jacketing to remain exposed to sunlight and/or weather for more than 6 months.
- Not intended for indoor use.
- For above ground use only.

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