

# PITTWRAP® IW30 JACKETING

# **Description and Area of Application**

PITTWRAP® IW30 jacketing is a 30 mil-thick (0.76 mm), self-sealing, modified bituminous membrane for protecting above-ground FOAMGLAS® insulation

systems on chilled-water and hotwater service pipelines under a metal or UV-resistant jacket finish. Metal or UV-resistant jacketing must be used over the PITTWRAP® IW30 jacketing for UV protection.

Manual pressure seals the jacketing without the use of a torch or heater. PITTWRAP® IW30 jacketing may be factory- or field-applied to the insulation.

PITTWRAP® IW30 jacketing consists of a polymer modified bituminous compound reinforced with a 4 mil (0.1 mm) high-density, crosslaminate polyethylene top film and release film backing.



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

### **Cleanup and Disposal**

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

# **Type of Delivery and Storage**

#### Rolls:

- 35.5 in. x 100 ft (90.2 cm x 30.5 m)
- Gross weight: approx. 56 lb (25.4 kg)
- DO NOT store where it may come in contact with hydrocarbon solvents, such as petroleum spirit, 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 100°F (38°C).
- Store in a heated area for cold weather application.
- Consult Safety Data Sheet for additional storage and handling information.

#### **Field Application**

Always read and understand the information contained within product data sheets and safety data sheets before attempting to use this product. If you have questions regarding fitness of use of this product for an 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, two pieces per section, overlapped by at least 50%.

Cut a length of jacketing to provide at least a 2 in. (50 mm) 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 ensure a uniform lap line. Remove release film, except at the overlap. Dirt and dust must be kept off jacketing.

# **Cellular Glass Application Guidelines**

PITTWRAP® IW30 jacketing may be shop- or field-applied. See supplemental application instructions at the end of this document.

# 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, using PITTCOTE® 300E coating (FI-120e) and PC® Fabric 79 (FI-159) polyester fabric or PC® 150 mesh (FI-332).

#### 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, Imperial Units
A = [1.06 x [π x (d + 2t) + 2] ÷ 12] x I
Equation 2, SI, metric Units
A = [1.06 x [π x (d + 2t) + 50] ÷ 1000] x I

Where d = actual pipe diameter in inches or mm, t = insulation thickness in inches or m, and I = pipe length in ft or m.

#### Limitations

- DO NOT use over combustible insulations or install where open flames are not permitted.
- DO NOT use above ground without a metal or other UV-resistant jacket.
- DO NOT use where jacketing will be exposed to solvents that will dissolve asphalt.
- · Not intended for indoor use.
- ALWAYS observe practical precautions when backfilling so not to puncture jacket.

<sup>\*</sup>Figures DO NOT include losses.

## **Typical Properties**

PROPERTY	TEST METHOD	SIUNITS	IMPERIAL UNITS
Color		Black	
Total Thickness		0.76 mm	30 mil
Weight (Nominal), Foil + Bitumen - Release Film		~0.93 kg/m <sup>2</sup>	~0.19 lb/ft²
Application Temperature Minimum Minimum w/ Primer		10°C -7°C	50°F 20°F
Service Temperature <sup>1</sup> Maximum Minimum		75°C -20°C	167°F -4°F
Chemical Resistance Water Alkali Acid Petroleum Solvent		Good Good Good Poor	
Reaction to Fire		Combustible	
Permeance	ASTM E96 Procedure A	0.97 ng/Pa-s-m <sup>2</sup>	0.017 perms
Tensile Strength	ASTM D882	43 N/cm	25 lbf/in.
Elongation % min.	ASTM D882	200	
Puncture Resistance	ASTM E154	267 N	60 lbf
Lap Adhesion	ASTM D882	18 N/cm	10.0 lbf/in.

<sup>1</sup> Service temperature is the approved exposure temperature at the jacket derived from laboratory evaluations. Variations in substrates, loading conditions, or other external factors may further limit service temperature. Always consult FOAMGLAS® Insulation System Specification for suitability for use recommendations for a specific application.

## **Supplemental Instructions for Field-Applied Jacketing**



**Step 1**After FOAMGLAS® insulation is installed, strike a horizontal line along the insulation convenient for starting jacket positioning and to ensure a uniform lap line.



**Step 2**Cut a section of jacketing long enough to fit around the insulated pipe and have a 2 in. (50 mm) overlap.



**Step 3**Slit the release film at this overlap, taking care not to slit jacket. Remove release film except at the overlap. Dirt and dust must be kept off jacketing.



**Step 4**Starting on the chalk line, press the surface of the jacketing halfway around the FOAMGLAS® insulation. Best results are achieved when the starting point results in the overlap terminating in a water shedding position.



**Step 5**Apply pressure to ensure that jacket achieves adhesion without trapping air.



**Step 6**Remove the remaining release film on the overlap and press tightly to seal the longitudinal joint.



Step 7

Apply pressure with spreader to ensure that the jacketing overlap is well adhered and without air bubbles. This completes installation of one section of jacketing.



#### Step 10

Apply pressure to ensure that jacket achieves adhesion without trapping air.



#### Step 8

Start subsequent section of jacketing with a 2 in. (50 mm) overlap and a 2 in. (50 mm) offset from the starting point of the adjacent section. The red line represents the starting point of the subsequent section, which avoids the build-up of more than three layers at the overlap.



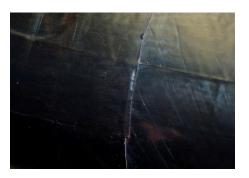
#### Stan 1

Remove the remaining release film on the overlap and press tightly to seal the longitudinal joint.



#### Step 9

Continue applying jacketing sections as described above, taking care to overlap and offset the starting point of each section from the previous one.



#### Step 12

Best results are achieved when overlaps are positioned one above, one below, one above configuration.

For additional information on FOAMGLAS® Insulation Systems, please contact Owens Corning or visit us at www.foamglas.com.

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