

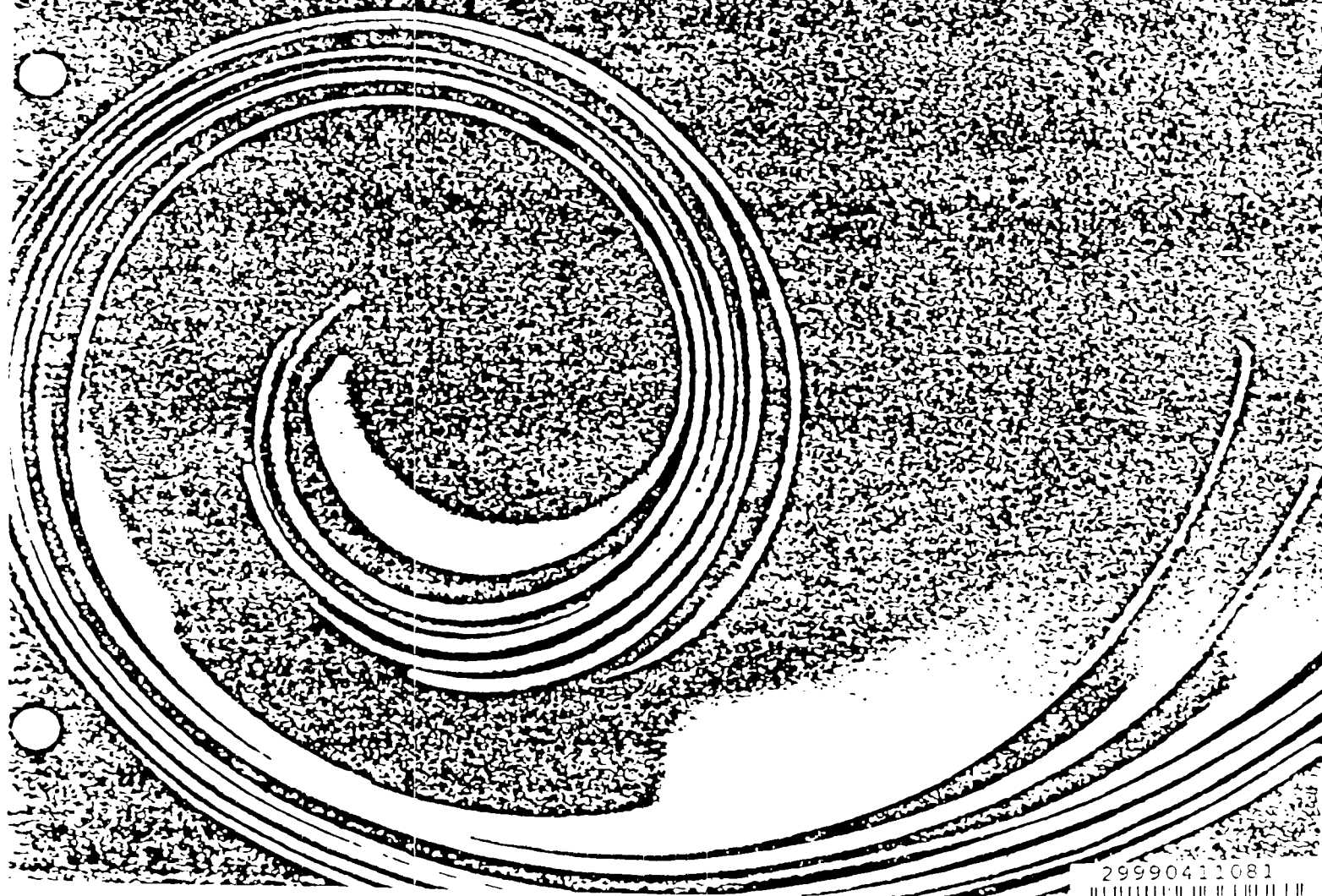


GAF T/NA 100 AND T/NA 100 VAPOR BARRIER MULTIPURPOSE INSULATION JACKETINGS

Superior Appearance

Superior Resistance to Atmospheric Conditions

No Specialized Installation Required



**GAF T/NA 100[®] Insulation and T/NA 100[®] Vapor Barrier—
A Simplified Solution to Insulation Jacketing Problems**

GAF T/NA 100 INSULATION JACKETING

GAF T/NA 100 jacketing represents a major break-through in the field of insulation. It is the first and only flexible, fire-resistant jacketing which provides unparalleled resistance to outdoor weathering. Its flexibility, workability, and versatility simplifies application, reduces installation costs, and makes it effective for covering large tank units as well as for protecting extended pipelines.

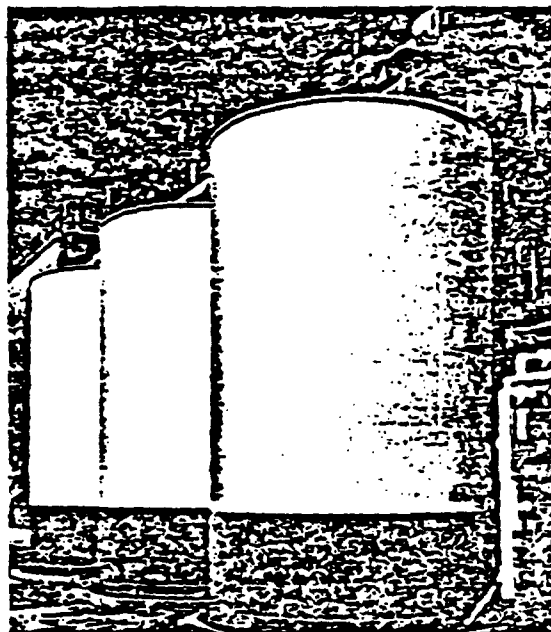
T/NA 100 multi-purpose insulation jacketing combines asbestos fiber, an inorganic material of established durability and flame resistance, with Tedlar[®] a unique PVF film. This film is laminated to the asbestos felt with an elastomeric adhesive. Initial peel bond strengths between the film and asbestos felt average 800 grams per inch of width. After two years (tested in Florida at 45° South) the bond strength is unchanged. Accelerated weatherometer testing (3,000 hours) also reveals no change in bond strength.

CHEMICAL PROPERTIES

GAF T/NA 100 jacketing and T/NA 100 Vapor Barrier have excellent resistance to a variety of chemicals. The laminate was unaffected after two weeks immersion (at room temperature) in the following chemicals: ammonium hydroxide (conc.), methanol, Varsol #1, carbon tetrachloride, gasoline, perchloroethylene; and 10% solutions of hydrochloric acid, nitric acid, sulfuric acid, and sodium hydroxide. The laminate was also unaffected after being immersed in water for one year.

GAF T/NA 100 VAPOR BARRIER

T/NA 100 Vapor Barrier provides a finished laminate of T/NA 100 insulation and 0.001 inch Saran film that has all the desirable properties of T/NA 100 plus a low moisture vapor permeability of 0.05 perms. Saran is a vinylidene chloride vinyl chloride copolymer film known for its low moisture and gas permeability, strength, excellent aging, negligible water absorption and chemical resistance.



PHYSICAL AND THERMAL PROPERTIES OF T/NA 100 JACKETING AND T/NA 100 VAPOR BARRIER

Properties	Typical Values	Test Methods
Tensile Strength, M.D., lbs./in.	42	ASTM D-828
Mullen Burst Strength, psi	88	ASTM D-744
Elmendorf Tear Strength, C.M.D., gms	448	ASTM D-689
Moisture Vapor Transmission, perms	0.88*	ASTM E-96
	0.05**	
Reflectivity	72.3%	Hunter Gardner Reflectometer
Underwriters' Rating (Tedar exposed)*		
Spread of flame	25*	Underwriters'
Fuel contributed	none*	Laboratories
Smoke contributed	45*	Test U.L. 723*
Discoloration		
225°F.	slight	20 days in oven
200°F.	trace	20 days in oven
Flexibility After Heat Aging		
200°F.	slight decrease	20 days in oven
175°F.	no change	20 days in oven

FEATURES

Flexible—Tough and flexible over a wide temperature range from -50°F to 200°F.

Flame Resistant—Virtually incombustible, T/NA 100 jacketing has been tested and labeled by Underwriters' Laboratories with a Flame Spread Rating of 25.

Weather Resistant—Jacketing's exposed Tedlar surface is essentially unaffected by ultra-violet light; will not craze or erode on exposure in industrial atmospheres.

Chemical and Solvent Resistant—Jacketing retains both form and strength when boiled in strong acids and bases; unaffected at ordinary temperatures by common solvents, including hydrocarbons and chlorinated solvents; impermeable to greases and oils; strength and appearance unaffected by soil bacteria.

Designed for Multipurpose Use—Flexibility permits use over large areas as well as narrow diameter pipelines.

Puncture and Abrasion Resistant—Tough Tedlar surface is designed to withstand wear and tear.

Easy to Repair—Damage through abuse can be readily repaired by patching with T/NA 100⁹ Finishing Tape.

Neat Appearance—Jacketing has a smooth finish and is an attractive bright white color.

Savings in Installation—Wraps easily into position and may be secured with an ordinary staple gun.

WEATHERABILITY

T/NA 100 jacketing and T/NA 100 Vapor Barrier have a predicted weathering life of 10 years.

TYPICAL WEATHERING TESTS

Material	Time	Condition
Clear Tedlar	12 yrs. — Florida at 45° South	flexible and strong
White Tedlar	7 yrs. — Florida at 45° South	no appreciable change
T/NA 100	4 yrs. — Florida at 45° South	unchanged
	3,000 hrs. — Weatherometer	unchanged

GAF T/NA 100 JACKETING FIELD APPLICATION SPECIFICATIONS

1. Scope

This specification covers field application of T/NA 100 Insulation Jacketing on rigid insulating materials such as calcium silicate, cellular glass and glass fiber, urethane and polystyrene foam.

2. Materials

T/NA 100 Insulation Jacketing

T/NA 100 Finishing Tape, 2" wide

Metal Bands

Lap Adhesive—Foster[®] Drilon[®] Contact Bond Cement, White
Flammable Solvent #85-56; Non-Flammable Solvent
#25-75

Flashing Compound—Foster Elastolar Sealant,
White #95-49

Mastic Finish—Foster Sealas[®] G-P-M[®] Mastic,
White #35-00; For Vapor Barrier—Foster Monolar
Mastic, White #60-36

Coating Finish—Foster Vitect Vinyl, White #57-15

Glass Cloth—Foster Mast-A-Fab[®] Synthetic Membrane

3. Pipe Insulation Application

Pipe insulation shall be applied in standard approved manner with precautions taken to eliminate projections of bands or wires above the surface of the insulation. On lines operating above 600°F insulation shall be applied in double layer with all joints staggered.

4. Pipe Jacketing Application

The T/NA 100 Jacketing shall be cut into sheets appropriate to the insulation size with an allowance for a 2-inch minimum lap joint. Each sheet of jacketing shall be applied snugly to the insulation with an overlap of the adjacent sheet being a minimum of 2 inches. On horizontal lines the lap shall be installed so that water runs over the lap joint rather than into it. On vertical lines the overlap should be outside the sheet below it.

a. **Method A**—Apply a uniform band of the selected lap adhesive a minimum of 2 inches wide to the asbestos face of the jacketing at the rate of 450 to 500 lineal feet per gallon. Position jacketing into place on the insulation and press laps together firmly to assure good contact and check for tight seal.

b. **Method B**—Apply 2-inch T/NA 100 Finishing Tape to all laps. Rub tape firmly after application to insure good contact.

c. **Method C**—For hot lines only. Secure jacketing with aluminum bands on 6-inch centers.

6. Fittings Insulation Application

Fittings and elbows shall be insulated with molded or fabricated insulation snugly fitted to the surface of the fitting. Thickness shall be at least equal to the adjacent pipe insulation.

6. Fittings—Finish

All fittings shall be protected by an application by trowel or trowel of Foster Sealfas G-P-M Mastic, White to the insulation surface at the rate of 2 gallons per hundred square feet. Imbed into the mastic coat a layer of Mast-A-Fab Synthetic Membrane, overlapping all seams a minimum of 2 inches and continuing onto the surface of the adjacent straight-run piping a minimum of 2 inches. Apply a finish coat of Foster Sealfas G-P-M Mastic to the entire cloth surface at the rate of 4 gallons per hundred square feet. Apply T/NA 100 Jacketing to overlap the fitting finish and to assure a neat edge appearance.

Where desired T/NA 100 Jacketing and Finishing Tape may be specified by the field in place of mastic.

Where a glossy finish is required on fittings, allow the Sealfas G-P-M Mastic application to become thoroughly dry then apply two brush coats of Foster Vitect Vinyl, White to the mastic surface at the rate of 150 square feet per gallon per coat.

Where T/NA 100 Vapor Barrier is used, substitute Foster Monolar Mastic, White #60-36 applying same coverage as indicated in section 6(a).

7. Flashing

All protrusions and points where pipe hangers may protrude through jacketing, it is imperative that the flashing compound be applied to completely seal the opening to stop moisture penetration. Prior to application, make all surfaces clean and apply sufficient flashing compound to extend over all intersecting surfaces to complete the seal. If a white finish is required at this point, allow 8 hours drying of the flashing compound and apply a heavy brush coat of Sealfas G-P-M Mastic, White.

8. Pipe Hangers

Pipe hangers must not damage jacketing finish.

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MATERIAL SPECIFICATIONS

Width of Roll 35.5 inches
Length 166.7 linear feet
Area (gross) 500 square feet
Approx. Shipping Weight 60 pounds

Note: Colors of T/NA 100 are available in rolls,

4 inches wide x 166.7 linear feet.

T/NA 100 tape is available in rolls, 2 inches wide x 166.7 linear feet.

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GAF
T/NA 100

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