



# POLYCO 25/50 Smoke Safe™ PVC

## POLYCO 25/50 Smoke Safe™ PVC Fitting Covers and Jacketing

### Description:

The Polyco Smoke Safe™ PVC Insulated Fitting Covering System consists of preformed gloss white outdoor weatherable and gloss colored insulated covers for piping fittings. Their unique shapes fit screwed, Victaulic®, welded and flanged elbows, tees, valves, couplings, laterals, reducers and end caps.

The Polyco Smoke Safe™ PVC Jacketing System consists of gloss white outdoor weatherable and colored PVC sheet in either bulk rolls or precurled cut-to-fit pipe sizes. The Jacketing is available in .010", .015", .020", and .030" thicknesses.

The Jacketing and Fitting Covering Systems include solvent weld adhesives, stainless steel tack fasteners, silicone caulking and adhesive tapes.

A die-cut multi-temperature fiberglass insulation insert is available and sized for a full insulation over the exposed pipe fitting and under the overlay of the PVC Fitting Cover.

The Polyco Smoke Safe™ PVC Systems are designed to cover pipe fittings and other mechanical equipment from an outside diameter of 1-5/8" to 24" in accordance with ASTM C-585.

### Code Compliance:

Polyco Smoke Safe™ PVC Fitting Covers and Jacketing meet:

Military Specification LP-1035A, Type 11 Grade GU and Type 111, and LP-535E, Type 11 Grade GU and Type 111.

Federal Specification HH-I-558, Form B, Type 1 Class B.

Requirements of USDA and FDA for use in facilities of the food processing, beverage and pharmaceutical industries.

### Advantages:

The ease of installing Polyco Smoke Safe™ PVC Fitting Covers and Jacketing assures a uniform, neat, attractive insulation of piping fittings and other mechanical piping equipment. The high gloss PVC surface provides a cleaner, neater appearance; its surface remains more maintainably clean and highly corrosion resistant. Its outdoor weatherability (UV stable) provides greater flexibility of usage. The 25/50 fire class of all Polyco Smoke Safe™ Products provides greater universal building code acceptance. Polyco Smoke Safe™ PVC Fitting Covers and Jacketing provide a natural barrier to moisture, bacteria and mold; their unique shapes make an easy seal over an entire mechanical system.

**Applications:** Polyco Smoke Safe™ PVC Insulated Fitting Covers and Jacketing are designed for applications indoors



or out-of-doors in commercial, institutional and industrial facilities. The system has an applicable temperature range of -35°F to 500°F (-37°C to 260°C). The PVC surface should remain below 150°F (66°C) through the installation of sufficient insulation on higher temperature applications.

• **Colored Fitting Covers and Jacketing are not recommended for outdoor usage.**

### Physical Properties: Polyco Smoke Safe™ PVC:

Property	Test Method	Value
Flame Spread	ASTM E84	25 or less
Smoke Developed	ASTM E84	50 or less
Specific Gravity	ASTM 792	1.46
Tensile Strength @ yield lb./in. <sup>2</sup>	ASTM D638	7,000
Tensile Modulus PSI	ASTM D638	400,000
Izod Impact-ft.lb./in.	ASTM D256	15.0
Electrical Conductance	ASTM D257	None

### Physical Properties: Fiberglass Insulation

Property	Test Method	Value
Flame Spread	ASTM E84	25 or less
Smoke Developed	ASTM E84	50 or less
Thermal Conductivity (75°F/24°C)	ASTM C177	0.26

## Specification Data:

### Hot Systems:

All piping fittings shall be insulated by filling the total void over all fittings, between straight runs of pipe insulation, with Polyco die-cut fiberglass insulation, forming a uniform insulation thickness equal to or exceeding the adjacent pipe insulation. Finish all insulated pipe fittings by applying Polyco Smoke Save PVC Fitting Covers overlapping the adjacent pipe insulation outer covering. Secure the Polyco Fitting Covers with Polyco Stainless Steel Tack Fasteners, Polyco PVC Tape or by Welding PVC overlaps with Polyco Vinyl Adhesive. Caution should be exercised to be sure that the insulation surface temperature is maintained below 150°F (66°C) through the application of sufficient insulation under all PVC Covering.

### Cold Systems:

All piping fittings shall be insulated by filling the total void over all pipe fittings between straight runs of pipe insulation with Polyco die-cut fiberglass insulation, forming a uniform insulation thickness equal to, or exceeding, the adjacent pipe insulation. Finish all insulated pipe fittings by applying Polyco Smoke Safe PVC Fitting Covers overlapping the adjacent pipe insulation outer covering. The overlap of the throat of the PVC Fitting Cover and the ends of the Fitting Cover overlapping the adjacent pipe insulation vapor barrier jacketing shall be vapor sealed with compatible vapor barrier mastic. The ends of the PVC Fitting Cover overlapping the pipe insulation shall be further sealed by an outer wrapping of Polyco PVC Tape extending over the adjacent pipe insulation vapor barrier jacketing and overlapping its own juncture by at least two inches in the downward direction on the downward side.

## Chemical Resistance:

### Inorganic Acids:

Sulfuric, Nitric, hydrochloric, hydrofluoric      Excellent

(diluted or concentrated):

### Organic Acids:

Formic, acetic and propionic      Poor

### Alkalies:

Sodium and potassium hydroxides      Excellent  
Ammonium hydroxide      Excellent  
Caustic Soda      Excellent  
Soda Ash      Excellent

### Miscellaneous Corrosive Chemicals:

Phenol, resorcinol and creosol      Poor  
Iodine, crystals      Fair  
Iodine, tincture      Excellent  
Chlorine and bromine water      Excellent  
Potassium dichromate      Excellent  
Silver nitrate      Excellent  
Tannic acid      Excellent

### Solvent and Dilutents:

Alcohol and polyalcohols, including ethyl methanol, butanol and isopropyl alcohol      Excellent

### Ketones:

Lower boiling ketones      Dissolves  
Higher boiling ketones      Swells

### Ethers:

Ethyl      Softens  
Dichlorethyl ether      Swells  
Diethyl cellosolve      Swells  
Dioxane      Dissolves  
Propylene oxide      Dissolves

### Hydrocarbons:

Aromatics as gasoline, kerosene and petroleum oils      Excellent

### Oils, Fats and Waxes:

Animal, mineral and vegetable      Excellent