

SARANEX® 540 CX Vapor Retarder Film is composed of a film of the barrier polymer polyvinylidene chloride (PVDC) coextruded with other specialty polymers that provide strength and support. Working together, the portions of this coextruded film combine to create a vapor retarder and jacketing material for mechanical insulation systems that is durable, flexible and has excellent resistance to water vapor penetration. SARANEX 540 CX Film is designed specifically to help prevent water absorption and strongly resist moisture vapor drive into the insulation. A permeance rating of 0.02 perms meets or exceeds standard industry requirements for vapor retarders in cold service. SARANEX 540 CX Vapor Retarder Film is not a known nutrient source for mold or mildew.

APPLICATIONS

SARANEX 540 CX Vapor Retarder Film is a high-performance, cost effective vapor retarder used in many pipe insulation applications.

Typical applications for SARANEX 540 CX Film include:

- Food and beverage facilities
- Chilled water piping and HVAC systems
- Transport pipelines
- Chemical condensation tanks
- Cold storage systems
- Refrigerated transport
- Pharmaceutical plants
- Petrochemical plants

JM can provide general guidelines and recommendations on many typical applications for SARANEX 540 CX Vapor Retarder Film. Call 1-800-231- 1024 or contact your local JM representative for details.

SARANEX Films are FDA and USDA compliant

SIZE

SARANEX 540 CX Vapor Retarder Film is supplied either factory applied on straight lengths of TRYMER® or XPS PIB insulation or in easy-to-use rolls for field application.

Length: 375' (114 m)
 Width: 35.5" (90 cm)

PHYSICAL PROPERTIES

SARANEX 540 CX Vapor Retarder Film exhibits the properties and characteristics indicated in the table below when tested as represented. Consultation with local code officials or design engineers/ specifiers is recommended before application.

Physical Properties ⁽¹⁾ of SARANEX 540 CX Vapor Retarder Film	
Property & Test Method	Value
Thickness, ASTM D374	4 mils, avg.
Permeance ⁽²⁾ , ASTM E96	0.02 Perms
Yield	39.2 ft ² /lb, calculated
Water vapor Transmission Rate, ASTM F1249	0.065 g/100in ² *24 hr @100°F, 90%R.H.
Ultimate Tensile Strength, ASTM D882	MD: 2150 lb/in ² TD: 1890 lb/in ²
Ultimate Tensile Strength, ASTM D882	MD: 9 lb/in ² width TD: 8 lb/in ² width
Ultimate Elongation, ASTM D882	MD: 291% TD: 242%
2% Secant Modulus, ASTM D882	MD: 71700 lb/in ² TD: 72300 lb/in ²
Mullen Burst Strength, ASTM D774	75 lb/in ²
Unrestrained Shrink	MD: <1% in 100°C air TD: <1% in 100°C air
Surface Burning Characteristics ⁽³⁾ , ASTM E84	Flame Spread: 10 Smoke Developed: 20
Service Temperature Limits ⁽⁴⁾	-40°F to 250°F -40°C to 121°C
Color	White

⁽¹⁾ data shown are typical values obtained from representative samples. This data may be used as a guide for design purposes but should not be construed as specifications

⁽²⁾ 1 perm = 1 gr/hr/ft²/in•Hg @73°F, 50% R.H.

⁽³⁾ This numerical flame spread data is not intended to reflect hazards presented by this or any other material under actual fire conditions

⁽⁴⁾ Service temperature limits is defined as the temperature to which the jacket or coating may be subjected when applied over insulation. it does not refer to the operating temperature of the equipment, vessel, or pipe (Source: National Insulation Association).

For maximum film flexibility during installation, it is recommended that SARANEX film products be installed at ambient temperatures above 24°F (-4°C).

SARANEX® 540 CX
VAPOR RETARDER FILM**INSTALLATION**

SARANEX 540 CX Vapor Retarder Film is compatible with all current installation methods for vapor retarder films. It can be installed at ambient temperatures as low as 0°F (-18°C). For maximum film flexibility during installation, it is recommended that SARANEX Film products be installed at ambient temperatures above 24°F (-4°C). SARANEX 540 CX Vapor Retarder Film has service temperature limits of -40°F to 250°F (-40°C to 121°C).

Because of the critical technical design aspects of many of the applications of SARANEX 540 CX Vapor Retarder Film, JM recommends that qualified designers or consultants design the total system. Detailed installation guidelines for SARANEX Vapor Retarder Film and Tape products are available at www.jm.com.

AVAILABILITY

SARANEX 540 CX Vapor Retarder Film is distributed through JM's extensive Authorized Fabricator Network. For more information, call: 1- 800-231-1024.

TECHNICAL SERVICES

JM can provide technical information to help address questions when using SARANEX 540 CX Vapor Retarder Film. Technical personnel are available at: 1-800- 231-1024



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Technical specifications as shown in this literature are intended to be used as general guidelines only. Please refer to the Safety Data Sheet and product label prior to using this product. The physical and chemical properties of the product listed herein represent typical, average values obtained in accordance with accepted test methods and are subject to normal manufacturing variations. They are supplied as a technical service and are subject to change without notice. Any references to numerical flame spread or smoke developed ratings are not intended to reflect hazards presented by these or any other materials under actual fire conditions. Check with the Regional Sales Office nearest you for current information.

All Johns Manville products are sold subject to Johns Manville's standard Terms and Conditions, which includes a Limited Warranty and Limitation of Remedy. For a copy of the Johns Manville standard Terms and Conditions or for information on other Johns Manville thermal insulation and systems, visit www.jm.com/terms-conditions or call (800)654-3103.