

# SARAN™ 520 CX Vapor Retarder Tape

SARAN™ 520 CX Vapor Retarder Tape is composed of durable, flexible polyvinylidene chloride (PVDC) coated with a pressure sensitive acrylic adhesive designed for effective and long-lasting adhesion to a variety of substrates. Designed specifically to protect the insulation system from moisture intrusion and energy loss, SARAN 520 CX Tape conforms easily to fittings, elbows and joints, creating a tight, water-resistant seal. A permeance rating of 0.03 perms meets standard industry requirements for vapor retarders in cold service.

## Applications

SARAN™ 520 CX Vapor Retarder Tape is used to wrap elbows and fittings in many high-moisture environments over a wide temperature range. The high performance tape is also used to seal butt joints and seams in the vapor retarder system.

Typical applications for SARAN 520 CX Tape includes:

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

ITW can provide general guidelines and recommendations on many typical applications for SARAN 520 CX Vapor Retarder Tape. Call 1-800-231-1024 or contact your local ITW representative for details.

### SIZE

SARAN™ 520 CX Vapor Retarder Tape is sold in rolls.

Width:	1" (2.5 cm)
	2" (5 cm)
	3" (7.5 cm)
Length:	50 yards (46 m)

### PHYSICAL PROPERTIES

SARAN™ 520 CX Vapor Retarder Tape exhibits the properties and characteristics indicated in Table 1 when tested as represented.

Consultation with local code officials or design engineers/specifiers is recommended before application.

Table 1

Physical Properties <sup>(1)</sup> of SARAN™ 520 CX Vapor Retarder Tape	
Property and Test Method	Value
Permeance <sup>(2)</sup> , ASTM E96, perm	0.03
Adhesion to Steel, ASTM D3330, oz/in	
Initial	40
After 3 days @ 72°	60
Adhesion to SARAN™ Film, ASTM D3330, oz/in	
Initial	60
After 3 days @ 72°	65
Backing Thickness, ASTM D374, mils, avg	4
Adhesive Thickness, ASTM D3652, mils, avg	1.5
Tensile Strength, ASTM D3759, lb/in <sup>2</sup>	20
Elongation at Break, ASTM D3759, %	120
Surface Burning Characteristics <sup>(3)</sup> , ASTM E84	
Flame Spread	0
Smoke Developed	5
Service Temperature Limits <sup>(4)</sup> , °F (°C)	-40 to 250 (-40 to 121)
Color	White

<sup>(1)</sup> 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.

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

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

<sup>(4)</sup> 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 tape flexibility during installation, it is recommended that SARAN Tape products be installed at ambient temperatures above 24°F (-4°C).

### Installation

SARAN™ 520 CX Vapor Retarder Tape can be installed at ambient temperatures as low as 0°F (-18°C). For maximum tape flexibility during installation, it is recommended that SARAN Tape products be installed at ambient temperatures above 24°F (-4°C). SARAN 520 CX Vapor Retarder Tape has service temperature limits of -40°F to 250°F (-40°C to 121°C).

The temperature during short term storage or shipping of cases cannot exceed 110°F (43°C).

Recommended shelf life is 12 months when stored at 60°F to 80°F (16°C to 32°C) and 50% R.H.

Because of the critical technical design aspects of many of the applications of SARAN 520 CX Vapor Retarder Tape, ITW recommends that qualified designers specify the total system. Detailed installation guidelines for SARAN Vapor Retarder Film and Tape are available at [www.itwinsulation.com](http://www.itwinsulation.com).

### Availability

SARAN™ 520 CX Vapor Retarder Tape is distributed through ITW's extensive Authorized Fabricator Network. For more information call: 1-800-231-1024

### Technical Services

ITW can provide technical information to help address questions when using SARAN™ 520 CX Vapor Retarder Tape. Technical personnel are available at: 1-800-231-1024

- **For Technical Information: 1-800-231-1024**
- **For Sales Information: 1-800-231-1024**
- ITW Insulation Systems
- 1370 East 40<sup>th</sup> Street, Building 7, Suite 1  
Houston, TX 77022-4104
- **[www.itwinsulation.com](http://www.itwinsulation.com)**

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COMBUSTIBLE: Protect from high heat sources. Local building codes may require a protective or thermal barrier. For more information, call ITW at 1-800-231-1024 or contact your local building inspector.

Building and/or construction practices unrelated to insulation could greatly affect moisture and the potential for mold formation. No material supplier including ITW can give assurance that mold will not develop in any specific system.