



# IPG Building & Construction Solutions: **VAPOR BARRIER TAPE**

## WHAT ARE VAPOR BARRIERS?

From concrete slabs and foundations to basements and crawlspaces, vapor retarders and vapor barriers provide an additional layer of protection through mitigation of moisture and air. These important tools save time, money and energy-reducing damage, mold, musty odor and water penetration.

Vapor retarders and vapor barriers provide different levels of protection depending on the application, price and needs of the contractor or installer. These different types of products, from polyethylene film to woven fabrics to metalized or foil covered substrates, provide different levels of permeance or water vapor transmission.

## HOW DO VAPOR BARRIER TAPES WORK?

To provide effective installation of vapor retarders and vapor barriers, pressure-sensitive VAPOR BARRIER TAPES are important in sealing, repair and seaming the retarders or barriers during the various applications.

## IPG VAPOR BARRIER TAPES

While different geographies, topical applications and regions require different properties, IPG recommends the following products for vapor retarder and vapor barrier seam, seal and repair:

- **PE9 Polyethylene Tape** - Seal polyethylene, film, woven fabric and foil vapor retarders and barriers
- **Tuck® 219 BOPP Film Tape** - Seam in-wall vapor barrier insulation used in cold-weather environments (meets Canadian CCMC 14018-12 for interior in-wall installation of PE film)
- **PE7 Polyethylene Tape** - Economical, but robust, option to seal polyethylene, film, woven fabric and foil vapor retarders and barriers

### USES FOR VAPOR BARRIER TAPES

Seal overlap seams during installation of under slab and concrete; in basements and crawlspaces and in areas where insulation and the prevention of moisture ingress is important.

Attach vapor retarders or barriers to the top of the footing and against the wall.

Repair damaged vapor retarders or barriers and areas where cuts were made to install.

Seal protrusions such as pipes, duct work, rebar or wire bundles.



## PRODUCT ATTRIBUTES

PRODUCT	IMAGE	ADHESIVE	THICKNESS (mils)	ADHESION TO STEEL (oz/in)	SERVICE TEMP	WVTR* (gr/inHg-hr-ft <sup>2</sup> )
PE9		Synthetic Rubber	9.0	95	20°F – 200°F -7°C – 93°C	0.080
Tuck 219		Solvent Acrylic	4.1	60	-40°F – 212°F -40°C – 100°C	0.068
PE7		Synthetic Rubber	7.5	85	20°F – 200°F -7°C – 93°C	0.100

\*ASTM E96 and ASTM D3833 Methods

## COMPLIANCES

VAPOR BARRIER TAPES are essential to comply with ASTM E1643 and are effective in sealing vapor retarders and barriers specified in ASTM E1745. The aggressive adhesive and film employed by these tapes provide effective sealing, seaming and protection to meet the most demanding applications.

IPG offers a range of VAPOR BARRIER TAPES designed to aid the DIYer and contractor alike- providing properties designed to meet professional installation standards. IPG's tapes are tested by independent laboratories to ASTM D3833/D 3833M and/or ASTM E96 standards. They will aid in complying with ASTM E1643 (underlayment, concrete, slab) as well as IRC 408.3 requiring crawlspace and basements with exposed dirt or soil to be sealed.

*"Exposed earth is covered with a continuous Class I vapor retarder. Joints of the vapor retarder shall overlap by 6 inches (152 mm) and shall be sealed or taped. The edges of the vapor retarder shall extend at least 6 inches (152 mm) up the stem wall and shall be attached and sealed to the stem wall or insulation".*

### References:

ASTM D 3833/D 3833M Standard Test Method for Water Vapor Transmission of Pressure Sensitive Tapes

ASTM E96 Standard Test Methods for Water Vapor Transmission of Materials

ASTM E1643 Standard Practice for Selection, Design, Installation, and Inspection of Water Vapor Retarders Used in Contact with Earth or Granular Fill Under Concrete Slabs

ASTM E1745 Standard Specification for Plastic Water Vapor Retarders Used in Contact with Soil or Granular Fill under Concrete Slabs

NREL 3.1401.1 Basements Connected to Crawl Spaces- Sealing and Insulating

IRC 408.3 Unvented Crawl Space

CCMC 14018-R Pressure Sensitive Tapes used over Air and Vapour Barrier Material

Product being used: Tuck 219 in wall vapor barrier insulation



Application being shown: Vapor barrier in basement/crawlspace



Application being shown: Vapor barrier in basement/crawlspace



Application being shown: Vapor barrier seaming in concrete underlayment application

