

Ampex Water Vapor Permeance

The Amvic's insulated radiant PEX panel has been tested by a third party independent testing laboratory (QAI Laboratories) as per ASTM E96 [Standard Test Methods for Water Vapor Transmission of Materials (desiccant method)]. The test was conducted using both Type II (Type 2), 1.5 lbs/ft³ (24 kg/m³) and Type IX (Type 3) 2.0 lbs/ft³ (32 kg/m³) nominal densities.

Test results are as following:

Specification for Rigid Polystyrene Insulation	Density	Water Vapor Permeance
Type II	1.5 lbs/ft ³	0.42 US Perm
Type IX	2.0 lbs/ft ³	0.31 US Perm
Type 2	24 kg/m ³	23.8 ng/Pa.s.m ²
Type 3	32 kg/m ³	17.5 ng/Pa.s.m ²

US

Effective with the 2009 IRC, there are three vapor retarder classes;

- Class I : 0.1 US perm or less
- Class II: 0.1 to ≤ 1.0 US perm
- Class III: 1.0 to ≤ 10 US perm

Ampex panel qualifies as a Class II vapor retarder.

Canada

The National Building Code of Canada (NBC) section 9.25.4 Vapour Barriers states the following:

9.25.4.2. Vapour Barrier Materials

- 1) *Vapour barriers* shall have a permeance not greater than 60 (ng/Pa.s.m²) measured in accordance with ASTM E96/ 96M, "Water Vapor Transmission of Materials," using the desiccant method (dry cup).

Since the tested values for vapor permeance fall below the established 60 ng/Pa.s.m² threshold, Ampex is an approved vapor barrier and no additional vapor barrier layer is required with the use of this product.