

RE: 2021 INTERNATIONAL RESIDENTIAL CODE COMPLIANCE:

January 2024

VaporDry™ SA – self-adhered vapor permeable roof underlayment

The International Residential Codes (IRC) are the minimum design and construction requirements to ensure safe and resilient structures. The code evolves with new material development, performance requirements, and reacts to industry failures. VaporDry™ SA is a permeable self-adhered roof underlayment that is approved for use as an ice barrier and for full roof deck coverage while allowing interior moisture to dry to the exterior. VaporDry™ SA has a continuous acrylic adhesive which provides higher performance characteristics compared to the self-adhering polymer-modified bitumen underlayment which is commonly referenced in the code and accepted testing methods.

Test protocol ASTM D1970, originally designed to test and approve self-adhering polymer-modified bitumen underlayments, was the first test standard for this family of products. When polymeric self-adhered underlayments came to market, different test standards and performance criteria were developed and are detailed by the International Code Council Evaluation Service's (ICC-ES) Acceptance Criteria for Self-Adhered Roof Underlayments for Use as Ice Barriers (AC48).

Below is an excerpt from the ICC-ES testing guidelines for compliance with AC48:

"The purpose of this acceptance criteria is to establish the basis of evaluation in ICC-ES evaluation report of roof underlayments installed as ice barriers as specified in Chapter 15 of 2021, 2015, and 2012 IBC and Chapter 9 of the 2021, 2018, and 2015 IRC. The reason for development of this criteria is to provide an alternative means to qualify roof underlayments that are required by the IBC or IRC to comply with ASTM D1970: Specification for Self-Adhering Polymer Modified Bituminous Sheet Materials."


AC48 is comprised of eight testing protocols which include: tensile strength, water-vapor transmission, pliability, water-ponding, peel-adhesion, cycling and elongation, accelerated aging, and ultraviolet exposure. These tests simulate the severe temperature change, adhesive stress with expansion and contraction, UV exposure prior to final coverage, and hydrostatic pressure seen in ice damming locations.

VaporDry™ SA passed all the AC48 testing protocols as well as the nail sealability test used in ASTM D1970. VaporDry™ SA is code compliant when used as an ice barrier at all eaves, valleys, and approved for full roof deck coverage.

I hope that this information proves useful; should you have any questions regarding the information covered in this document or require any further technical assistance, please contact techsupport@obdyke.com at your convenience.

Thank You,

Kaylen Handly



Technical and Innovation Manager