

# Why Not Coatings?

Why we work and others don't

Moisture Vapor

Coating on top

Transite Panel

## What is a vapor drive?

Vapor drive is the natural tendency for moisture vapor to diffuse from wetter areas to dryer areas. For roof coatings, vapor drive is detrimental when it causes moisture to penetrate through, which damages their bond to your roof. The rate of penetration is based on the roofs Perm Rating.

Moisture Vapor

## Permeability: Perm Rating

The state or quality of a material or membrane that causes it to allow liquids or gases to pass through it. The higher this rating is, the more a material allows water to penetrate it.

## Coatings have a high Perm-Rating. [2][3][4]

This means that they are letting vapor easily travel through the coating which then gets trapped below the coating. This trapped moisture then impedes the bond that keeps the coating in place on your roof. Over time this water damage can also impact the coatings heat resistance.

## Our Solution

The Thermal-Tec Multi-Ply roofing system boasts an impermeable rating [1]. The way it is designed not only makes our roofs waterproof but also airtight, eliminating uplift. Let us work with you to get the best performance out of your roof. For more information please visit our website at [www.Thermal-Tec.com](http://www.Thermal-Tec.com)

## Perm Ratings

10+	Permeable
1.0-10	Semi-Permeable
.1-1.0	Semi-Impermeable
<.1	Impermeable

0.005



4.0 - 8.0 | Transite [1]

45.5

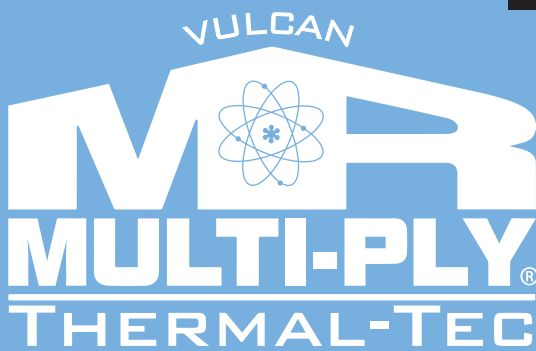
Acrylic Coatings [4]

1.0≥ | EPDM [5]

5.0 | Silicone [3]

10.0 | Open Cell Foam [2]

10+ | 1 - 10 | .<1 - 1  
Perm Rating



[1] University of Alaska Fairbanks, *Permeability of Common Building Material to Water Vapor*, 2021

[2] William Zoeller, *Which Spray Foam Is Right For You?*, 2009

[3] Gaco, *SP-S20-38-20*, 2021

[4] William A. Kirn, *Water Vapor Permeance of Roofing Construction Materials*, 2001

[5] InterNACHI & Nick Gromicko, *Inspecting EPDM*, 2020