PROFILES OF SUCCESS

VR-R PLUS Features Low .02 Permeance To Stop Water Vapor Transmission

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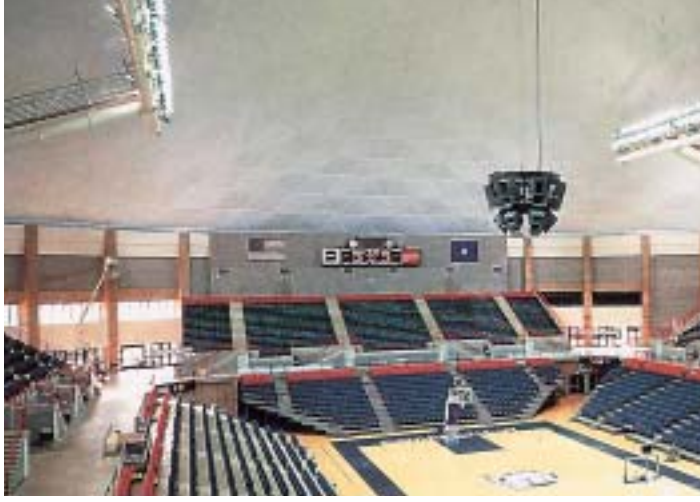
Insulation facings, or vapor retarders, are a vital part of the total insulation system in any pre-engineered building. The crucial role that insulation facings play begins with the concept of Water Vapor Transmission Rate (WVTR). It's as basic as the weather. Here's why. There are very few days in any climate when the temperature and humidity outdoors is the same as it is indoors, at least where climate-controlled buildings are concerned. This difference in temperature and humidity also causes a difference in water-vapor pressure between the interior and exterior of the building.

This vapor pressure differential is the driving force behind water vapor diffusion. Quality vapor retarders are essential for establishing a restrictive barrier to the vapor diffusion process and preventing moisture transfer between the inside and outside of the building. Low permeance vapor retarders combined with proper ventilation are required to control vapor transmission and the resulting condensation that collects in the insulation material and on the building panels. Liquid water resulting from condensation has a thermal conductivity approximately 15-times greater than most commercial thermal insulation — meaning that it carries heat out of the building much more effectively than insulation keeps it in. This demonstrates the critical economic and functional importance in selecting insulation facings with very low WVTR properties in climates and applications where condensation, and eventual rapid heat loss, are likely to occur. In addition, insulation facings provide secondary benefits such as aesthetic value and light reflectivity.



Featuring an attractive, smooth, bright white surface, VR-R PLUS is ideal for applications such as sports arenas, warehouses and light industrial plants.

Alpha Associates manufactures a full range of high-quality facings for insulation materials. Alpha was the first to develop a paperless vapor retarder that meets the .02 water vapor transmission rate required by the industry. VR-R PLUS was introduced to the market in August 2001 and quickly established itself as the paperless facing of choice.

Alpha VR-R PLUS is a triple-ply laminate of white polypropylene film, fiberglass scrim reinforcement and metalized polyester backing.

Alpha Associates began development work on VR-R PLUS with the objective of offering the metal building industry optimal performance in a product competitively priced with paper-backed facings. This meant VR-R PLUS had to have a low water vapor transmission rate (WVTR or perm), consistent high strength and opacity, excellent workability, and whiter color and better reflectivity than non-metal paper-backed facings. To make VR-R PLUS nonabsorbent to moisture and adhesive, an engineered film was specified in place of a paper backing.

A triple-ply laminate of bright white polypropylene film, strong fiberglass reinforcement scrim and metalized polyester film, VR-R PLUS has conclusively proven that a paperless vapor retarder can be economical enough for use on every application. In addition to its low permeance rating and attractive appearance, VR-R PLUS has the added benefit of all-plastic film construction. This unique composition helps eliminate moisture absorption and mitigate the mold concerns inherent in vapor retarders with paper or kraft backings. Superior performance has made Alpha VR-R PLUS the vapor retarder preferred by building engineers, architects and insulation laminators. And with its favorable price/performance ratio, VR-R PLUS lets metal building contractors provide greater insulation value to customers while using a durable material that is easy to work with, handle and install.

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