

New Product Prevents Damage When Condensation Forms Under Metal Roofing

Metal roofing is becoming more popular by the day. For many architects and building owners, it is now the product of choice for both new construction and renovations. But as the use of metal roofing continues to grow, so too grows the number of buildings that have suffered damage because of condensation dripping from the underside of the metal roofing panels.

Condensation forms when the surface temperature of the panels is below the dew point of the surrounding air. Once condensation begins to form, it will continue until such time as a sufficient amount of moisture has been released from the air—thus altering the dew point—or until the temperature of the surface of the metal becomes higher than the dew point. Dripping will start at just 0.16 ounce of condensate per square feet. This is very visible in buildings with non-insulated single-skin roofs.

Insulation, vapor barriers and ventilation are supposed to work in concert to prevent condensation problems. But in some situations, for a variety of reasons, they don't. The results of hidden condensation can be cataclysmic, causing the panels to corrode from the inside out and leading to the deterioration of building materials and building contents below. There are also health issues related to the development of mold and mildew in wetted materials.

As an added measure of protection from condensation problems, metal roofed buildings in Europe often have absorptive fleece affixed to the undersides of the metal roof panels to catch and store condensation until such time as it once again turns to vapor. One of those fleece products is CondenStop, manufactured by Lantor CondenStop.

CondenStop fleece is designed to be attached to the panels at the time of production, whether the panels are formed in the factory or the field. CondenStop is self-adhering, with the adhesive side protected by a release film. Attaching the fleece is very much like applying a plastic film to protect the panel's exterior side during roll forming and transit. Rolls of fleece are decoiled from above or beneath to meet what is going to be the interior side of the panel. The release film is pulled back and recoiled to expose the adhesive. Prior to entering the roll former, the fleece is applied to the

metal sheet. The pressure applied by the entry rolls of the line then permanently bonds the fleece.

CondenStop fleece absorbs and



When condensation forms on the underside of a metal roof panel, it drips onto whatever is below. With CondenStop, the moisture is held in a fleece blanket until it once again turns to vapor.

stores condensate and then releases it back into the ambient air. The product performs effectively in spaces subject to cyclic or relatively frequent condensation situations.

In many cases, the material replaces anti-condensation blankets and vapor retarders, resulting in lower building costs. Grades range from light to heavy and CondenStop is shipped from five locations in the U.S.

Lantor CondenStop
www.CondenStop.com
Circle #111



CondenStop is bonded to the panel undersides as they are roll-formed. This can be accomplished in either the field or the factory.