

Is the Insulation Dry Yet?

by Hank Spies

Q. What is the typical drying time for wet-spray cellulose insulation? What happens if the insulation freezes before it dries? Will it dry after it warms up in the spring?

A. Extensive research has been done on the drying of wet-spray cellulose by the Canada Mortgage and Housing Corporation (CMHC). The CMHC found that if the insulation was applied with the proper amount of water, the moisture content of the wood studs, plate, and sheathing rose considerably during the first 30 days after installation. However, the sheathing and framing dried to near normal levels in two to five months. The presence of a vapor retarder and/or wall ventilation did not seem to affect the drying time or the final moisture levels. A slight amount of fastener corrosion and mold growth did occur, but not enough to be of concern.

In another test, "worst case" conditions were simulated by using wet lumber and very wet cellulose, in a very humid climate (Newfoundland). In that case, the insulation and wood had not dried after two years. There have been other cases reported of walls not drying out and water dripping out from the baseboards. But in these cases the insulation was too wet when installed, and was trapped between a polyethylene vapor retarder on the inside and foil-faced insulation board on the outside.

Freezing of the wet insulation before it dries will delay the drying process, but does not seem to cause any problems. There will be no mold growth or significant corrosion at temperatures below freezing.

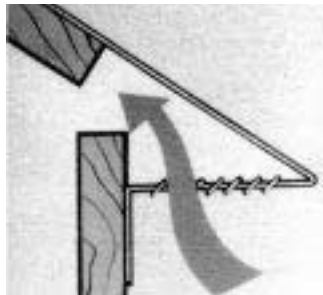
MR Drywall on Porches

Q. Is moisture-resistant drywall an appropriate ceiling material for an open porch?

A. I would not consider moisture-resistant (MR) drywall appropriate for use on an open porch. While MR drywall is resistant to deterioration from moisture, it may sag from direct exposure to moisture. MR drywall is designed to be used behind bathroom finishes, but not to be directly exposed to water. The joints and nails in MR drywall are usually left unfinished, since they will be concealed with tile or other finish materials. The joint compound would not withstand the weather exposure on a porch.

Venting Without Soffits

Q. How can I ventilate the eaves of a roof that has no soffit, but has a gutter on the fascia?



Lomanco's Starter Vent is a combination drip edge and continuous soffit vent.

A. I know of one company, Lomanco (P.O. Box 519, Jacksonville, AR 72076; 800/643-5596), that makes a combination drip edge and continuous soffit vent (see illustration). For the vent to work, a gap must be left between the lower edge of the roof sheathing and the top edge of the wall sheathing. The vent/drip edge is then nailed along the eaves and roofed over.

Rising Water Worries

Q. We are planning to build on a site with fine sand and silt soil. Code requires a foundation depth of at least 2 feet, but during the summer the water table rises to within 2 feet of the surface because of the irrigation of adjacent fields. How should the footing be designed to prevent possible settlement?

A. Washed sand, with particles that have been rounded, acts differently than "sharp" sand, when it is wet. It may be necessary to support the footing on piles to prevent movement with the extreme changes in soil moisture content at your site. This is an instance when the services of a soils engineer are well worth their cost. Without knowing detailed information about the soil, including the shape of the sand particles and the type of subsoil, there can be no definitive answer. ■

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