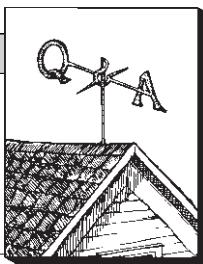


Upside Down Drain Tiles

by Hank Spies



Q. Why do most sources say to put the foundation drain tile with the holes

A. The common corrugated plastic drain tile has holes around the entire circumference. The perforated PVC pipe designed for use in septic seepage fields, however, has holes on one side only. If you use this type (which is a lot more expensive), the holes should face down so the water can enter the pipe as soon as the footing area starts to fill with water. With the holes up, the water would have to rise another few inches before entering the pipe and draining away.

Man vs. Mildew

Q. My client's house has mildew stains all over the white exterior paint, which she says is just a few years old. What can I do to get rid of the mildew (for good) before repainting these areas?

A. Mildew is an increasing problem, particularly on white paint, because of changes in paint composition. Mildew grows in the presence of water and any organic material, such as dust or the film caused by air pollution. White lead was a mildew inhibitor, but that is no longer permitted in paint. The best that I can offer is to wash the mildewed areas with a solution of chlorine bleach, diluted about 1 to 4 with water, to kill the mildew spores that are present and bleach out the stain. A mildew inhibitor should be added to the paint if it is not built into the paint formula you are using. This is not a permanent cure, but is the best that I know of now. Washing the house periodically to remove the surface film helps.

Crowns Up or Down?

Q. Should I place the crowns face down on cantilevered joists to help them better resist deflection?

A. Yes, but not if the area supported by the cantilever is outside and the slope would cause water to run back to the structure.

Supporting a Stone Veneer

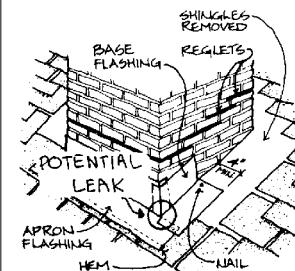
Q. We are building a house with 9-inch limestone veneer and 2x4 studding. How can we support the structure without building a 14-inch-thick foundation wall?

A. If you use a 2 x 4 mud sill (3½-inch) with a 1½-inch cavity, there should be no problem. The CABO code, Section R-404-2, permits corbels on a masonry veneer wall as long as the total horizontal projection of the corbel does not exceed 2 inches and individual corbels do not project more than one-third the thickness and one-half the height of the unit. ■

Therefore, if the minimum height of the bottom course of stone was four inches, it would be permissible to overhang the two inches necessary to set the stone on a 12-inch wall. While some building officials may interpret that section differently, that is how it is accepted here.

Leaky Flashings

Q. Your May, 1988, issue had an article on chimney flashing [Restoration Primer, page 67]. I do not understand the detail shown for chimney corners. It appears that there is a small hole right at the corner. How should this be handled?



A. You are correct. The illustration shows how it is usually done, and roofing cement is used to seal the corner. However, the only sure way to prevent the small hole which appears when the sheet metal is bent as shown is to solder a piece of metal in the corner to provide coverage. I realize that many roofers do not own a soldering iron, but it is the only correct way to do it.

Is Foam Sheathing Sound?

Q. Is it structurally sound to put one inch of rigid foam insulation under the plywood sheathing instead of over it? Also, will the foam trap moisture in the walls? I use the tongue-and-groove type.

A. There is no reason the plywood could not be installed over the foam to serve as a nail base for the siding. However, the plywood would not serve as corner bracing. The corners would have to be braced as though the sheathing were non-structural. Rigid foam sheathings are relatively impermeable, but the effects are no worse than that of the plywood. While the wood veneers in plywood are permeable, the glue lines are relatively impermeable. Furthermore, the foam provides some protection by warming the wall cavity to some extent. ■

Henry Spies is with the Small Homes Council-Building Research Council of the University of Illinois. Questions for this column should be sent to him at Journal of Light Construction, P.O. Box 5059, Burlington, VT 05402.