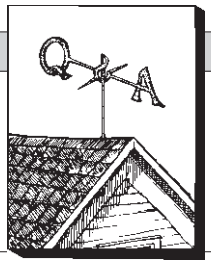
What's Best With a Roof-Top Deck?



by Hank Spies

Roofing Deck Dilemma

Q. *We plan to build a deck on the roof of a single-story addition but don't want the client to have to demolish the deck in a few years down the line to reroof. What would be the most durable roof to lay the sleepers on?*

A. Any deck on any roofing material will shorten the life of the roof. The best choice probably would be a mineral-surfaced bitumen roofing. An extra pad of the roofing material should be laid where the sleepers contact the membrane. The deck should be built in sections that are screwed or bolted together. These sections could then be removed periodically to allow debris that collects beneath the deck to be swept away.

Window Weatherstripping

Q. *What is the best way to weatherstrip double-hung windows with sash cords?*

A. If the sash-weights are to be kept in place, the most important areas to be sealed are between the weight box and the sheathing, and between the rough opening and the finish frame. These can be reached by removing the interior trim and sealing with expanding foam. The sash themselves should be weatherstripped with spring metal or plastic "v-fin" on the topmost and bottom-most rails and between the meeting rails. The sides of the sash should be weatherstripped with v-fin attached to the side jambs. A second option is to replace the sash weights with a spring balance and fill the weight box with insulation. A jamb liner, such as the "Window Fixer Kit" (Quaker City Manufacturing Co., 701 Chester Pike, Sharon Hill, PA 19079), with continuous spring weatherstrip can be installed against the side jambs after removing the inside stop and the parting stop. After the liner is installed, the inside stop is replaced.

Break-Away Walls

Q. *We are scheduled to build near a designated wetlands area. The ground floor will be built on pilings. The local code official has called for "break-away walls" on this floor. But he only seems to be able to provide very sketchy details about what they are and how to build them. Can you help?*

A. A break-away wall is a non-structural infill panel of light construction, with minimal fastening to the piers or posts supporting the structure. The framing of the panel is often 2x2, and the panel is usually held in place by friction and sealed with caulking.

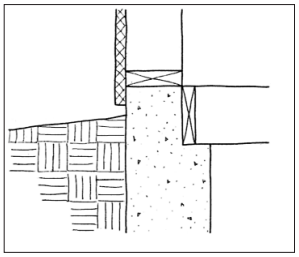
Break-away walls are used where a structure may be subject to flash flooding, or tidal or wave action, during severe storms. It should not be used, however, in flood plains where the change in water level is likely to be gradual. For those conditions, structures should allow the water to enter as it ruses to prevent the exertion of differential pressure on the walls. Unlike break-away walls, these walls should be heavily reinforced to prevent damage from wave action and floating debris.

A detailed analysis of flood-plain construction is provided in Elevating Flood-Prone Buildings: A Contractor's Guide (available for $5 from the Small Homes Council-Building Research Council, 1 East St. Mary's Rd., Champaign, IL 61820).

Foundation Flashing

Q. *Is there a foundation flashing detail that allows the finished grade to be raised about a foot above the first floor in a platform-framed house?*

A. There is no flashing detail that allows a wood stud wall to extend below grade. One option is to build a stepped foundation that supports the floor joists below grade and the stud wall above grade (see illustration). The floor joists would have to be of pressure treated wood if they touch the ground. And the foundation wall should include a membrane waterproofing, not just a mopped-on coating.



A stepped foundation lets floor joists go below the grade line while the stud wall remains above grade.

Nail Corrosion

Q. *Will using a copper-naphthenate wood preservative (such as green Cuprinol) on old 8x8 house sills corrode the existing fasteners?*

A. Copper naphthenate should have no significant effect on the existing fasteners. But the existing fasteners may already be rusty and pulling away from the wood due to shrinkage. You may wish to install metal joist hangers or connection plates in accessible areas. ■

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