## ON THE HOUSE

# When Roof Meets Wall

by Henry Spies

#### Roof/Wall Intersection

**Q.** What is the best way to detail the connection of a pitched roof abutting a sidewall?

A. According to the National Roofing Contractors Association, when the rake edge of a pitched roof intersects a vertical wall, #15 felt should be laid under the shingles, extending 3 to 4 inches up the vertical wall. Metal step flashing (flashing shingles) should be used, with one flashing shingle for each row of shingles. The flashing shingle should be bent to extend under the asphalt shingles on the roof about 2 inches, and 4 inches up the vertical wall. Each metal shingle should be placed slightly up-roof from the bottom edge of the asphalt shingle which overlaps it. Nail the flashing shingle with one nail along

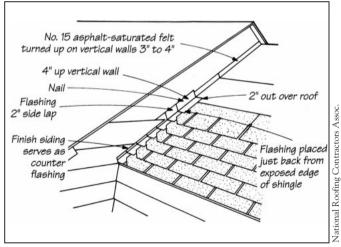
concrete subcontractors, and four have claimed that concrete expands as it sets and four claim that it shrinks. Which is correct?

A. Concrete shrinks as it cures, and will continue to shrink very slightly at a decreasing rate over time. There are special grouts used by millwrights for setting machinery which do expand when they cure, but these are not ordinarily used in construction.

### **End-Joist Blocking**

**Q.** I know blocking is needed in the mid-span area of a floor system. But is blocking necessary along the end-joist since this member is supported by the foundation and the subfloor?

A. I would recommend blocking along the end-joist just as you



Step flashing should be used when a pitched roof intersects a vertical wall.

the upper end of the vertical leg, as shown in the illustration.

The siding should be brought down over the flashing shingle to serve as a counterflashing, but cut the siding back a couple of inches, far enough to permit painting the ends of the wood siding. This will prevent water from wicking into the ends. If vinyl or metal siding is used, the flashing should be sealed to the sheathing with caulk or butyl tape. Vinyl and metal siding are not waterproof, and water blowing through the joints can run down the sheathing and behind the flashing.

#### Shrink or Swell?

 $Q_{ullet}$  I have talked to eight different

would in the rest of the floor system. If the floor is blocked only in the middle, the end-joist can tip if the foundation is displaced at any time. This can bulge the exterior sheathing or put a dip in the floor.

Blocking is often installed as an afterthought by a helper, but once the floor is decked, it is hard to get the block into the joist cavity near the foundation. As a result, end-blocking is usually left out. For this reason, the blocking should be installed before the subfloor.

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