

# Shingle Siding Layout

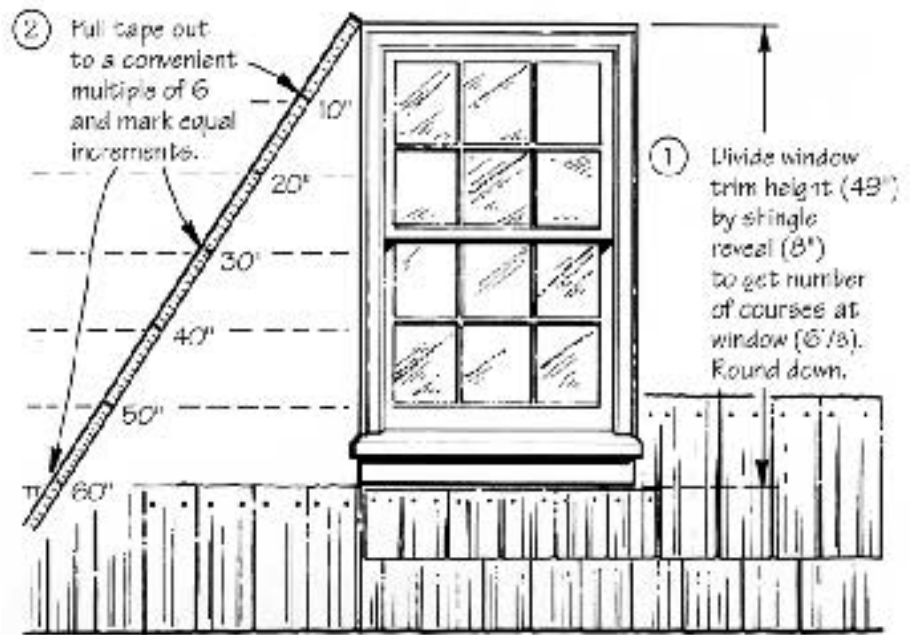
**Q.** How do you lay out shingle siding so the courses break evenly above and below windows? And what's the best way to secure the row of shingles below a window so the nails aren't exposed?

**A.** *Sal Alfano responds:* Follow this procedure to lay out shingle siding so the courses break on the same line as the window trim: First, measure the window height and add the width of any trim you might have, then divide by the shingle reveal. Most of the time, you won't have an even number of courses, and you'll have to adjust the shingle reveal slightly. To do that, ignore the fraction and choose the closest whole number; this will be the number of even courses that will fit between the window trim. Then pull your tape measure out to an even multiple of that number of courses, run it at a diagonal next to your window (see Figure 1), and tick off each multiple. These marks will be your course lines.

Let's take an example: Say your window height, including the head trim and apron, is 49 inches and your average shingle reveal is 8 inches. Since  $49 \div 8 = 6\frac{1}{8}$ , you will have six courses (ignoring the fraction). To find the exact width of each reveal, pull the tape out to some large multiple of six, say 60 inches, and run it at a diagonal from the point that will be the corner of the window head trim to a level line extended from the bottom of the soon-to-be-installed window apron. Mark the sheathing at 10, 20, 30, 40, 50, and 60 inches. You've now got even course lines that will break on the window trim.

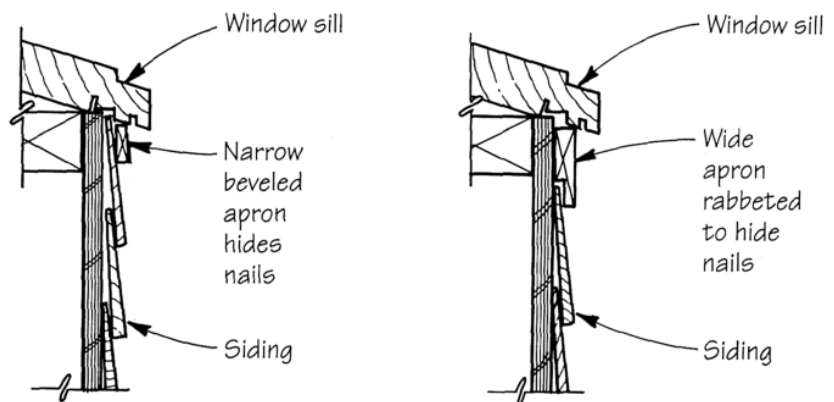
Repeat this procedure for the space between first- and second-floor windows, for the space between the trim for the second-floor windows, etc. Then, so you don't have to tick off all these different numbers all over the house, transfer the tick marks to a couple of long pieces of lumber, making two story

## How to Adjust Siding Courses



**Figure 1. Even shingle layout.** To find the number of shingle courses between the top and the bottom of a window: (1) Measure the window height plus the trim. Divide this number by the average shingle reveal. If the resulting number is a fraction, choose the nearest whole number. (2) Hold a tape measure at the corner where the head trim will be, and pull it out to an even multiple of six. To find the course lines, mark off the even multiples.

## Window Apron Options



**Figure 2. Apron trim.** To cover the nails holding the first course of shingles below a window, the shingle must be overlaid with trim. For narrow trim, rip it at an angle, so its surface stays flush with the side trim (left). For wide trim, cut a rabbet to conceal the nail line (right).

poles. You can then leapfrog these as you work your way around the building.

As for concealing the nails, the only way I've found to do this is with a piece of trim. Since the trim on the sides and at the top of the window won't necessarily lay over the siding, but the apron trim will, I usually rip the apron at an angle (if it's narrow) or notch it (if it's wide), as shown in Figure 2, previous page.

*Sal Alfano, formerly a builder for 20 years, is now editor of the Journal of Light Construction.*

## **Orienting a Foundation Drain**

**Q.** *Should the holes in a foundation perimeter drain face up or face down? And does the drain need to be pitched as it runs around the house?*

**A.** *Don Marsh responds:* There's no question the holes must face down (oriented approximately at 4 o'clock and 8 o'clock) to drain off any water rising from below. Keep in mind that if the drain is embedded in stone, as it should be, water will run through the stone as well as through the drain. In other words, the stone and pipe work together to drain the water away. You aren't limited to just the narrow trough of water between the holes in the pipe.

The drain should be placed at least 6 inches below the interior slab. If the holes were facing up, you might be able to carry off more water through the pipe itself, but in order to get into the pipe, the water level would rise dangerously close to the slab.

Ideally, the drain should pitch as it runs around the house, but often this isn't practical. To get a 1/8-inch-per-foot pitch, one corner of the drain on a 20x30-foot house would have to be 6 inches above the opposite corner, bringing the drain above the slab. To avoid this, the drain can be laid level around the house, but it must not have any dips or rises, and it must pitch away from the house to daylight. A pitch of 1/8 to 1/4 inch per foot is recommended.

*Don Marsh is a project manager with Dufresne-Henry Consulting Engineers in Montpelier, Vt.*