

# Tame Tricky Transitions



## CONTINUOUS CROWN

A line of crown molding can pass across a change in angle (such as at the top of the stairs) via a soffit. Built onto the angled wall, the soffit's width should be roughly equal to the widest part of the angle of the crown.



**Snap lines, and install the soffit.** Chalklines determine the lower position of the crown. The plywood soffit, beveled to the wall's angle, must be wide enough to create a surface perpendicular to the ceiling.



Mark the 1/4-in. reveal on the plywood soffit



Mark the top of the crown from the wall

## How one carpenter resolves conflicts between trim design and installation around the stairs



**Master Carpenter**

BY TUCKER WINDOVER

**O**ften, a builder or a homeowner hires an architect or designer to provide plans that include only enough detail to obtain a permit, which means that a lot of the design is left to work out in the field. Framers tend to focus on the bones and the structure, and it's not until the trim carpenter is on the job that the final details are resolved.

There might be a window installed close to the ceiling, and no one notices that the casing almost touches the ceiling until the trim guy tries to install the crown molding. Or the walk-in shower is framed, and no one has considered how the tile, the baseboard, and the curb to the shower will tie together. Another tricky spot is where a window is set close to an entry door—so close that they cannot be trimmed separately, meaning the trim carpenter has to make sense out of trimming them as a single unit.

Trim carpentry is the icing on the cake, and everything shows. Every house has some funky corner or door opening where I just stop and ask, "How are we going to trim this out?" It's the trim carpenter's job to resolve those challenges. What I mostly want to accomplish in these situations is a resolution that draws the

**Mark the top of the crown from the soffit**



**Tool of the trade.** Take a 2-in.-long slice from the intended crown molding, and use it to trace the desired spring angle onto a 12-in. by 6-in. piece of MDF or plywood. Cut out the basic angle of the crown, then remove enough of the rest of the blank so that it's easy to hold with one hand. Place this spring gauge against the ceiling to mark the crown's position and to check the 1/4-in. reveal on the plywood soffit.

### THE CRAFTSMAN

Tucker Windover has been a finish carpenter in the Boston area for the past 10 years. He's also written several great articles for *Fine Homebuilding*, including "8 Basic Rules to Master Trim Carpentry" (*FHB* #208 and online at [FineHomebuilding.com](http://FineHomebuilding.com)), which was distilled from the three-ring binder that he hands out to every new crew member. A native of western Massachusetts, Tucker received formal training in furniture construction at the College of the Redwoods in Eureka, Calif., before settling in Boston. When he's not trimming houses, he devotes time to his own remodeling projects and, if there's enough time left in the week, to fly-fishing.







## CONTINUOUS CAP TIES THE STRINGER TO THE BASEBOARD

Rather than terminate the two pieces of base cap at the intersection of the stringer and base, bisect the angle and miter them together to create a continuous line.



**Mark lines on the wall.** Use a scrap piece to establish the point where the two caps intersect. Hold the first piece in place, transfer the intersection and end points onto the stock, and cut the miter.



**Check the cut with scrap.** Position the mitered upper cap, and check to see that the miter's short point intersects the lower line. Repeat the process with the lower cap.



**Fine-tune the fit.** With both scrap miters in place, note any adjustments that are needed, cut the cap stock to length, and miter the ends.





## Use a miter-saw jig for cutting obtuse angles

To make the respective base caps of the stringer and the baseboard intersect equally, you have to split the angle formed at the inside intersection in half. The tricky part comes when you try to cut the angle, which is somewhere in the vicinity of 109°. I clamp a 90° jig onto the miter-saw fence, hold the stock against the jig, eyeball the marks on the stock, and cut the correct angle, which ends up at about 19°.

least amount of attention to the problem. I usually can accomplish this either by showing a clear termination point or by maintaining a clean, continuous line. These kinds of problems show up at the staircase in almost every house.

### Maintain continuous lines

*Running trim* refers to those elements such as baseboard, chair rail, or crown that travel around a room. Whenever I run trim, I try to maintain a continuous flow of lines and to avoid choppy alignments that seem arbitrary or illogical.

For example, in most situations, a chair rail should be aligned with the window stools. Unless there's a major separation between the two (as in the high paneling of the Arts and Crafts style), a slight discrepancy looks like the designer or installer didn't care.

One example I commonly face is when the crown molding intersects with a roofline or the underside of a stairwell. To get around this, I build a soffit onto the angled ceiling that allows the crown to run around the room without changing its relation to the wall.

The soffit is a piece of 1x stock beveled on one edge to match the angle of the ceiling. Its width is determined by the angles of the ceiling and the crown. It has to be wide enough so that the crown can turn the corner and still maintain its spring angle. I use a plywood gauge that mimics the specific crown angle to set the soffit's location. That location also should include a 1/4-in. reveal at the bottom of the crown. After snapping

5/8-in. baseboard  
(one piece)

Applied molding

3/4-in. stock

**Don't make the transition obvious.** When 5/8-in.-thick baseboard is used throughout a house, it isn't compatible with the heavier stringer stock used for stairs. The easiest solution is to use a run of thicker baseboard stock from the stairs to the next inner corner, where the transition from 3/4 in. to 5/8 in. won't be noticed.

# In a perfect world, walls are straight

Along a continuous line of trim, the points from corner to corner need to be straight. In many of the houses that I trim, I sometimes have to fix a mistake in the wall at the chair rail. The reason is that the chair rail becomes the demarcation line between the two paint colors of the drywall above and the paneling below. The different paints accentuate that line, so any deviation from a flat plane, such as a dip in the wall, becomes obvious. If the dip is especially bad, I fix it before the painters arrive.



**Prepare the grounds.** With a flat bar, pop out the chair rail so that it's straight. Rip a few shims into  $\frac{3}{4}$ -in.-wide strips. Measure the gap between the rail and the wall, then cut the fat end of the shims to match the gap. Insert the shims vertically, spaced at the width of the broad knife that you use. (The author's is 10 in. wide.) Tack them in place with a small nail.



**Apply the first coat.** Mix up some setting-type drywall compound, and trowel it onto the wall, using shims as grounds for the knife.



**Replace the grounds with mud.** When the compound is dry, remove the shims and fill the voids with more compound.

a reference chalkline, I nail the soffit to the ceiling, then continue the crown installation across the soffit.

## Resolve conflicts at the baseboard

The trim packages that we typically use feature a base cap as a detail on the underside of the outside stair stringer. You can address the intersection of the base and the stringer in two conventional ways. One of them is to use a triangular piece of stock below the stringer that creates a  $90^\circ$  angle into which

the base then butts. I like to use this method when the stair and base cap profiles don't match and can't be mitered.

I think it looks better to maintain the continuous lines of the molding when possible, rather than to have them stop and then start again. I prefer the second option, which is to fit the base to the angle of the stringer. I miter both pieces of cap into this obtuse angle, using a  $90^\circ$  jig on the miter saw.

There's also a potential problem with the compatibility of the baseboard and the

stair-stringer stock. Typically, the stringer is made from  $\frac{3}{4}$ -in. stock, but the base that's commonly installed (known as speed base) is  $\frac{5}{8}$  in. To avoid a glaring discrepancy at the intersection of the stringer and the base, I use a piece of  $\frac{3}{4}$ -in. stock as a transition piece from the stringer to the nearest inside corner, and cope it and the cap into the thinner stock. The transition is less noticeable and in a less prominent place. □

Photos by Charles Bickford.



Online members can watch the *Master Carpenter* video at [FineHomebuilding.com/extras](http://FineHomebuilding.com/extras).