



I do a lot of routing using templates and bushings. But, quite often the small base on my router doesn't provide the stability I need for a safe, clean cut. Instead, I figured out a way to make a larger base for my router that accepts a Porter-Cable-style bushing.



The process starts by cutting a square blank of 1/4"-thick acrylic or polycarbonate plastic. Next, I worked on forming the stepped hole sized to fit the bushings and locking collar. This requires using a couple different hole saws.



First, start with a 13/8"-dia. hole saw. This forms the "rabbet" or step for the flange around the bushing. The drilling depth should match or be slightly deeper than the flange thickness on the bushing.

Leaving the base clamped in place, switch to a 13/16"-dia. hole saw. This time, you can drill through the base to create the hole for the threaded portion of the bushing. You'll want to take it slow to avoid melting the plastic. The final step is to install a bushing in the plate and bit in your router to help center the plate over the arbor so you can locate the mounting holes.