

# APD (Internal Tab with Routed Channel) Construction Tips Prepared for the Barony of Borealis Collegium

AS XXXVI  
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Materials: Bandsaw/mitre box, cutting jig attached to mitre gauge, olfa cutter with hooked blade, ¼ inch core box router bit, router table, routing jig, dremel with two cutoff discs mounted on a mandrel.

The mitre gauge cutting jig is made from a single piece of 2 by 2 approximately 20 inches long. Position it so that 9 inches extend past the edge of the gauge towards the blade and attach it to your gauge with screws. Make a shallow cut with the gauge set to 90°. Remove the jig from the gauge. Measure 2 1/8 inches from the far edge of the cut. Center and mark this point with a pencil. Measure a second point 5 7/16 from the far edge of the cut. Center and mark this as well. Locate a 3 ½ inch nail and drill a hole at the first point that is just big enough to accommodate the nail without binding. At the second point, screw in a # 8 1 ½ inch screw and cut off the head. When pushed in, the nail acts as a stop for 90° cuts. When pulled out, the gauge is swiveled to 45° and the screw acts as a stop for the angled cuts. These specifications will give APD's that measure approximately ¾ of an inch across the top.



If a suitable power saw is not available then a mitre box can be used.



The routing jig consists of a seven inch piece of 4 by 4 with a 1 3/8 hole drilled in one end centered 13/16 from the edge. The hole is 7/8 of an inch deep. A two inch finishing nail was hammered into the center top of the hole to act as a wedge when the APD is inserted.



Note: align the jig with the router table fence so the core box bit cuts through the bottom center of the 1 3/8 hole. Raise the bit to ensure an APD cut depth between 1/16 to 1/32 of an inch.

Production steps: Use a hack saw to cut the APD pipe into pieces you can easily handle. With power cutting equipment you do not want to be struggling to control large pieces. Having all

your fingers at the end of the day is a nice bonus.

Cut out individual APD's using the above mentioned jig or mitre box.

Trim each APD using the Olfa cutter with the curved blade. Try different hand positions until you find one that is comfortable. The cut I use reminds me of the motions a person goes through when trying to peel an apple.

Push the trimmed APD into the router jig and align the APD so that the bottom (longest side down) is dead center on the bottom of the jig. Use a small piece of wood to hold the APD in place while running it over the router bit.



Use a dremel tool with two cut-off disks to cut the internal tab of 5/8



of an inch. Clean out any debris that may remain in the internal tab slots. Leaving debris in the slots makes it tough to tape them in place.



Your APD is now complete and ready to install.

Please note: ensure that the black plastic pipe used conforms to society standards. These may be found at: <http://www.combat-archery.com/>

Many thanks are due to Siegfried Sebastian Faust for his ideas and permission to use the mitre box and dremel photos.