

Joining Rails of

Bridge Rail Fixtures That Will Join Rails of Different Sizes

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The NASG S-MOD "Physical Standards" are very specific on many details relating to trackwork and module interfacing. However, these standards are wisely silent as to size rail to be used. This allows the scaler to use either Code 100 or Code 83 rail. In turn, the Hi-railer can build a module in Codes 125, 148 or 172.

In practice most scale modules use Code 100 rail. Any module owner who uses a different code rail can join up by bringing along some BRIDGE RAILS which can be used to transition the different codes.

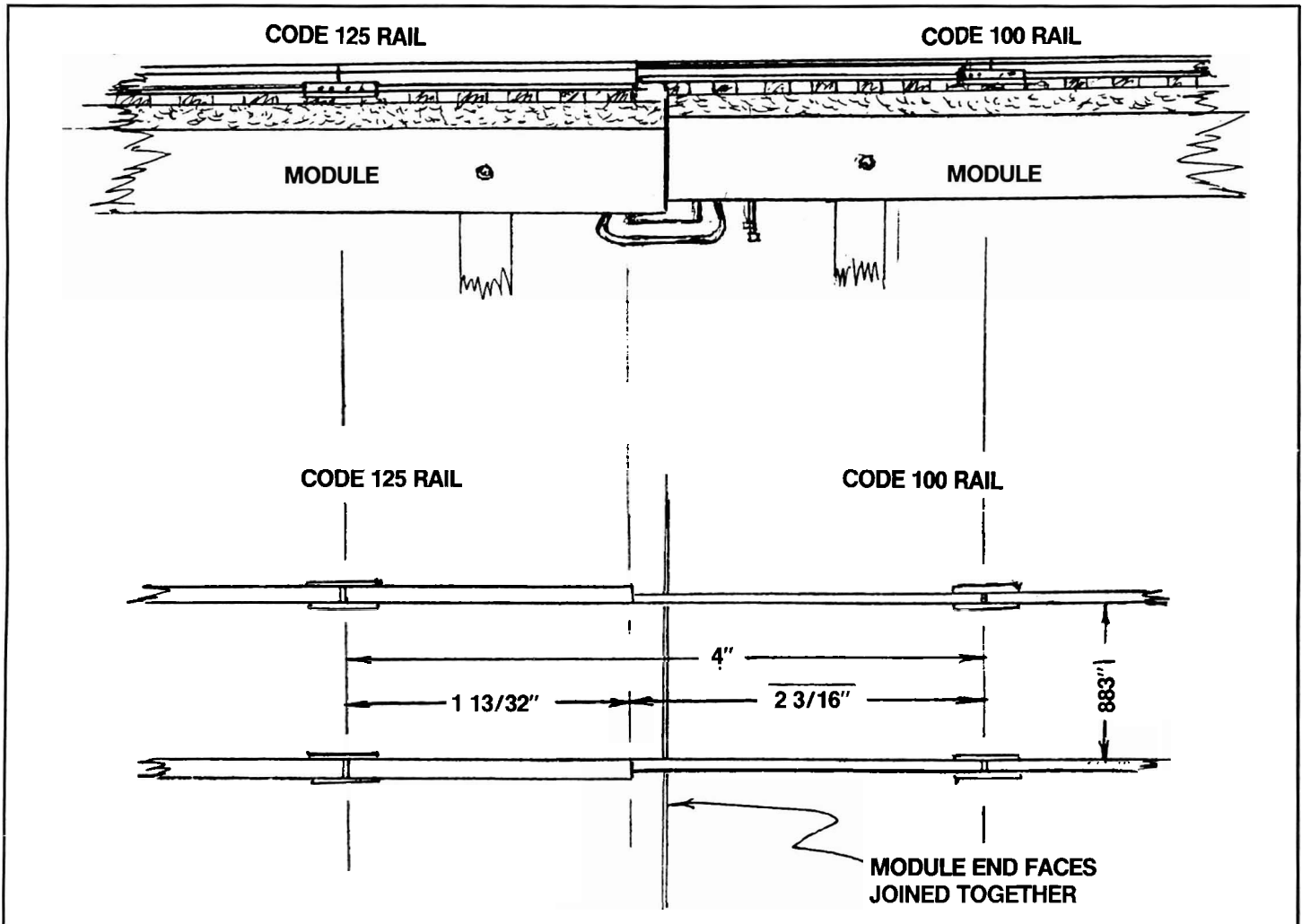
In operating my own modular layout I am forced to use Bridge Rails that make a transition from Code 125 to Code 100 rail sizes. Being a devout scaler, one half of my modules with Code 100 rail are for scale equipment only. The other half, using Code 125 rail and closed-frog turnouts, are built to operate with other Connecticut S gauge modules where the objective is to be able to operate both scale and Hi-rail equip-

ment together.

Drawing No. 1 illustrates a BRIDGE RAIL. A smooth surface is required where the two sized rails join together at the rail-head top and the inside surfaces. Study the Side and top view sketches. Note that the module having the smaller sized rail must be slightly elevated with respect to the other one. FOR THAT REASON, I have found it best to make the smaller rail $2\frac{3}{16}$ " in length and the larger rail $1\frac{13}{32}$ " to form the 4" Bridge Rails.

Obviously, the 4" composite Bridge Rail must be assembled upside down to keep the top of the rails joined smoothly. See Drawing No. 2. See Drawing No. 3 to see how the jigs are placed. I use a flat piece of pine to work on, and then use two pieces of $\frac{1}{16}$ " thick wood strips as my straight edges A and B. This height is a maximum so as not to interfere with the Code 100 rail base. Glue pieces A and B to the flat surface board about 2" apart.

Next, cut two pieces each of X-1 and Y-1 out the $\frac{1}{16}$ " strip. These will form the wedge that holds the Code 125 and Code 100 rails in place for being soldered together. Use the rail heads (upside down) as your guide. I used Carpenter's glue.



Different Sizes

**Module
Corner**
By Ted Larson

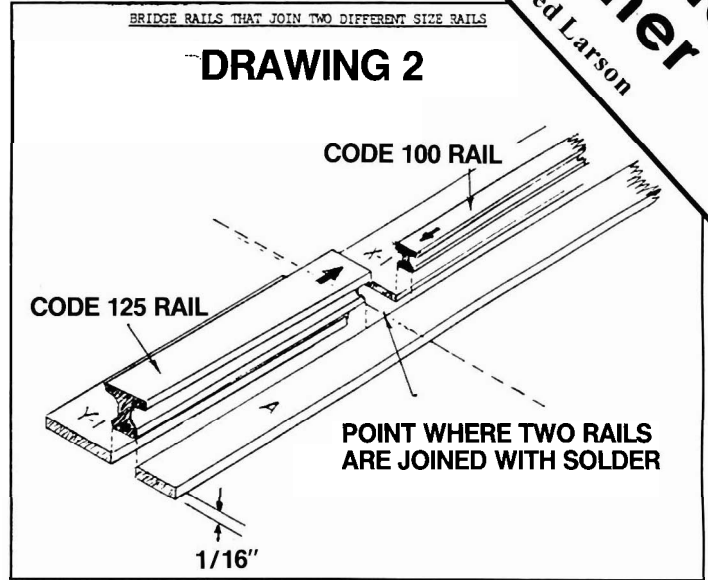
Be sure to leave a gap in the strips as shown on Drawing No. 3 so the soldering iron can fit in and do its work.

Butt solder the rails together. For those wanting a stronger joint use a solid wire on the outside of the joints to firm up the joint. Remember, don't put the wire on the flange side.

Keeping the rail sections perpendicular can be a problem too. Glue four more strips of wood to the jig shown as X and Y. Again, the thickness of the strips should not exceed the height of the rails. You can see how the composites support the rails.

Now you have a good dependable fixture to make all your Bridge Rails.

Note: I usually start out joining longer pieces of track together and then trimming to the 4" length.



DRAWING 3

