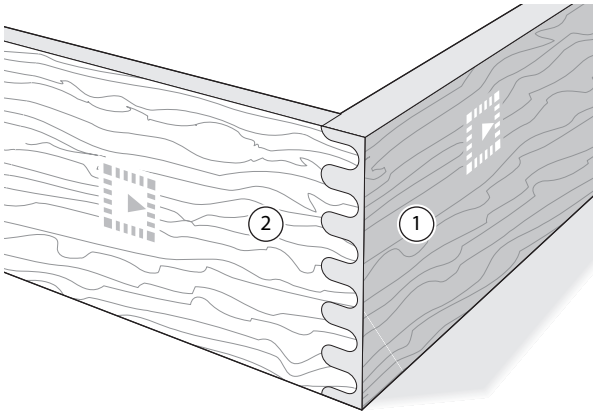
F2, F1600 **CHAPTER 7**

Rounded Half-Blind Finger Joint Procedures

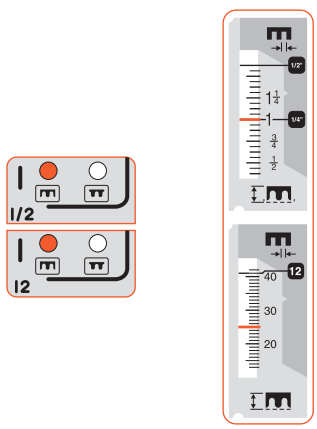
Rounded Finger Joints can only be created using the 24"[600mm) F2 and F2M.



7-1 F2-24" and F2M(600mm) Only

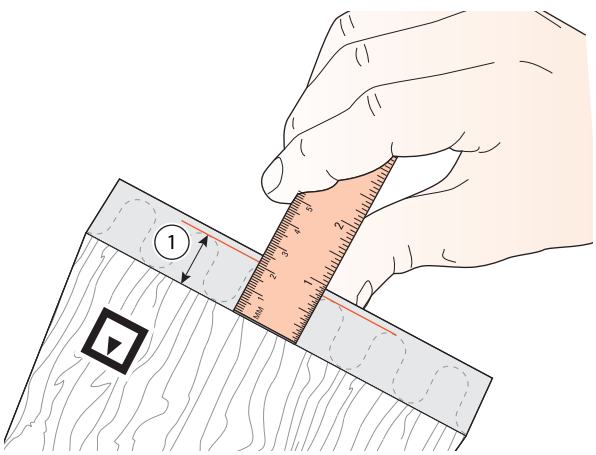
Rounded half-blind finger joints make an attractive drawer front ① to side ② connection.

Before starting, check the board width charts on pages 32-33 and see Appendix II for cutter selection.



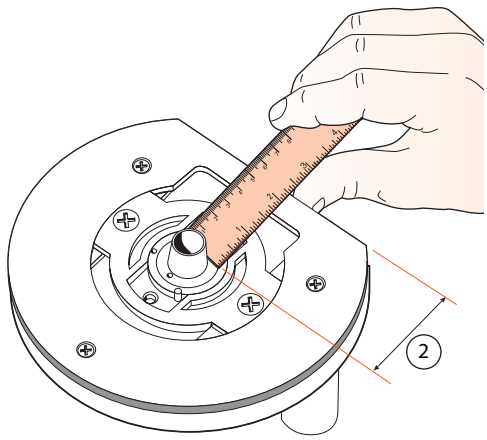
7-2 Routing Half-Blind Joints

Set the template scale to the thickness of the pin board on the grey scale, e.g. 1"[25mm] shown here. Set the template pin in the hole.

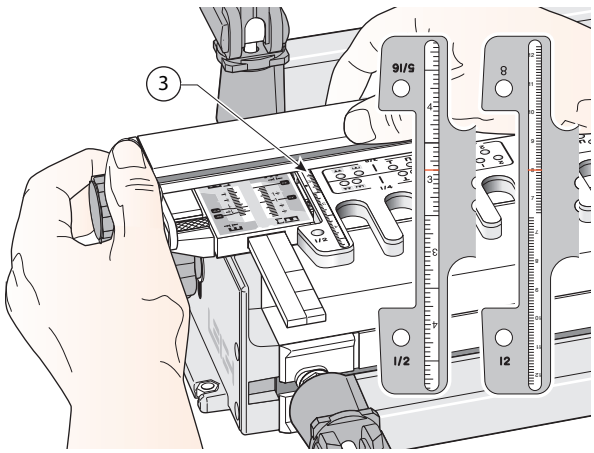


7-3

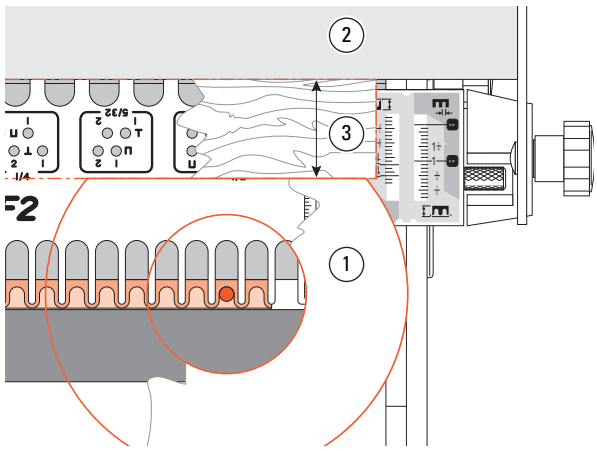
Measure the required depth of horizontal cut into the pin board ①, usually ⅛"[3mm] less than the board thickness.



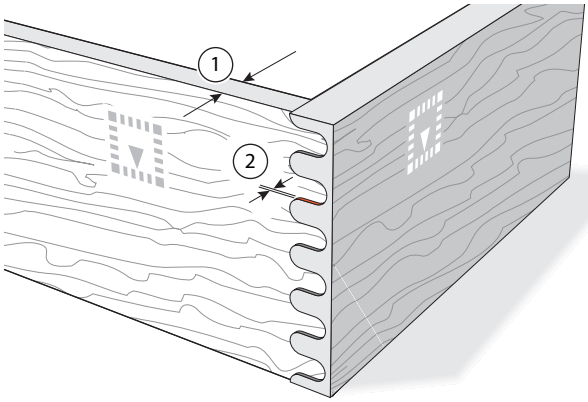
7-4
Measure the distance from the guidebush to the rear edge of the router base ②.



7-5
Add dimensions ① and ②. Set the router stop fence to this total on the fence scale ③ at both ends of the template. Tighten the fence knobs. If your router base is small, see 7-6 below.

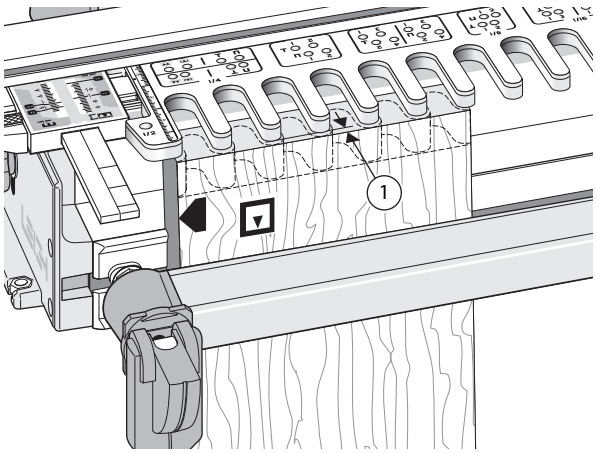


7-6
Some router bases ① are quite small and it may not be possible to get the router fence ② far enough forward to be effective. Use a parallel-sided block ③ between the router and fence. Offset the fence setting by the width of the block.



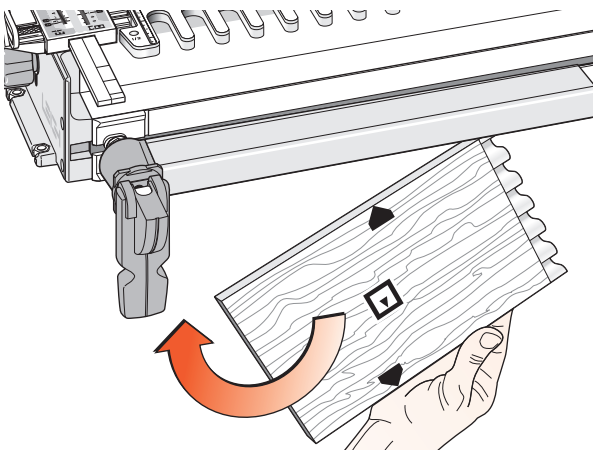
7-7

Set the depth of cut to slightly greater than the thickness of the side board ①. You want the drawer front fingers to come through the side sockets by no more than 1/64"[0,25mm] ② for cleanup later, just like half-blind dovetails.



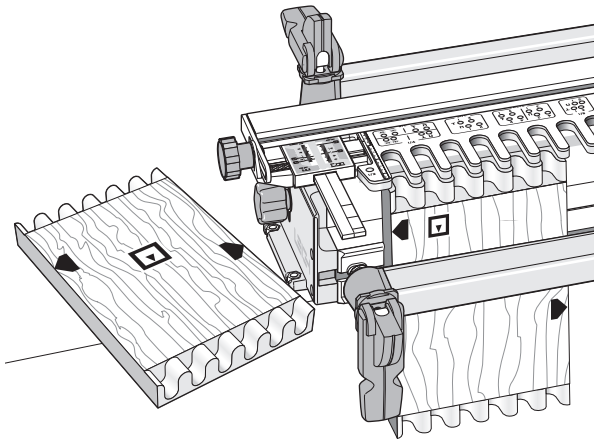
7-8

Clamp the pin board vertically against the side stop with the end edge flush under the template. The inside face ⊡ of the finished boards face away from the jig body. With the scale set on the pin board thickness, the board should project 1/8"[3mm] in front of the guide tips ①.



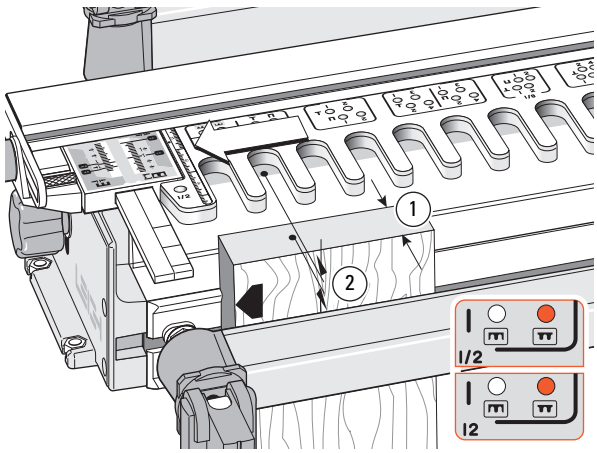
7-9

The inside face ⊡ of all boards used for making rounded half-blind joints always face away from the jig body just like half-blind dovetail boards on the dovetail jig. So alternate side edges go against the side stop and **boards must all be exactly the same width**.



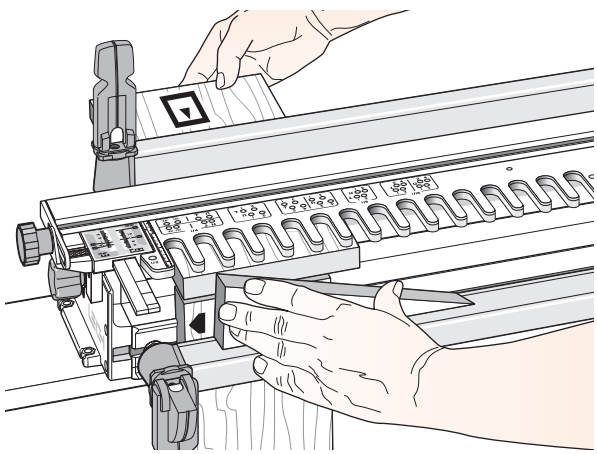
7-10

Rout the rounded pins. Do not push against the router fence. The router should just touch the fence. Rout both ends of both pin boards at this setting. Do not change the fence setting.



7-11

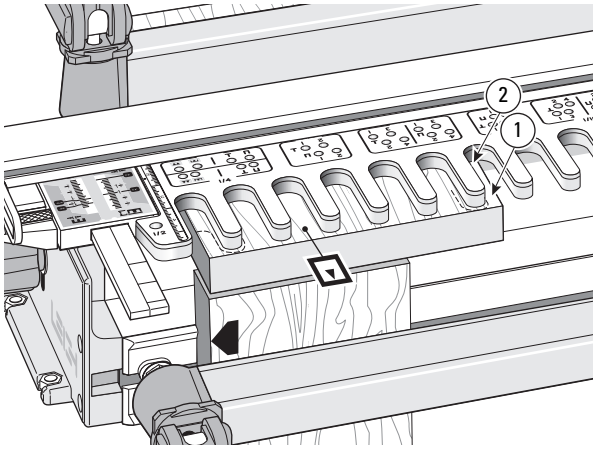
Insert the template pin in the hole. Do not change any other setting. Clamp a scrap board ① **of exactly the same thickness as the pin board** in the front clamp, with the top end edge slightly below the top surface of the jig body ②.



7-12

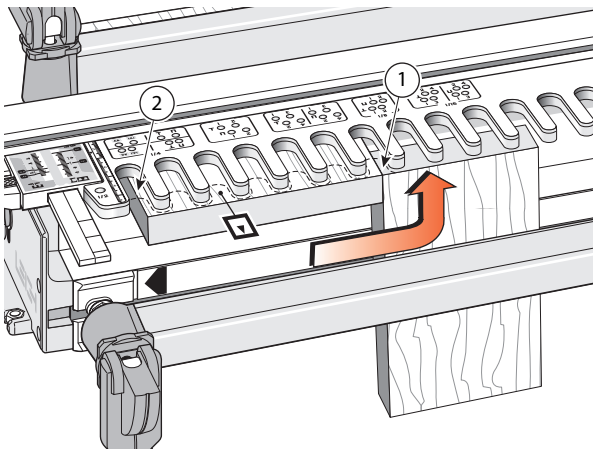
Clamp one of the box side boards horizontally in the rear clamp, with the inside face of the board facing away from the jig body and the end edge **flush with the outer edge of the vertical scrap board**.

Tear-out Warning! Do not rout this board before reading the following:



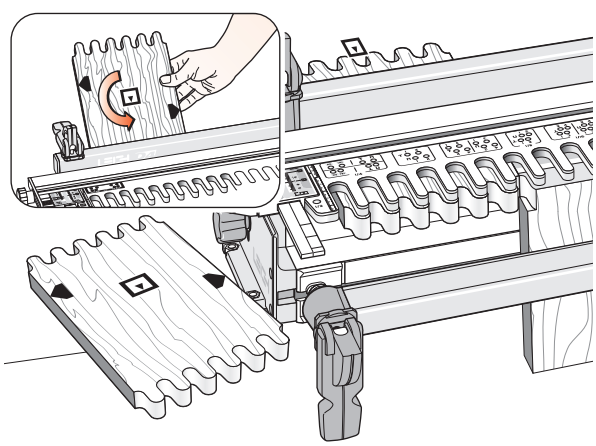
7-13

If you rout this horizontal board in the conventional way you may tear away the right hand board edge ①, although some woods will rout quite cleanly. If a plunge router is used, gently plunge down at the rear of the socket ② and rout out toward you.



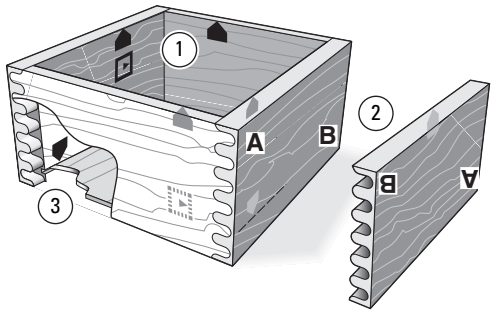
7-14

When using combs at the left end of the jig, the best way to avoid the right-edge tearout problem is to clamp the front scrap ① against the right side edge of the board. Simply clamp it under the front clamp bar, making sure it's firmly against the edge of the board. By rotating and flipping its position, one scrap will be good for 4 cuts. The edge at ② may cause the router to pull itself quickly into the template comb, so good router control is important.



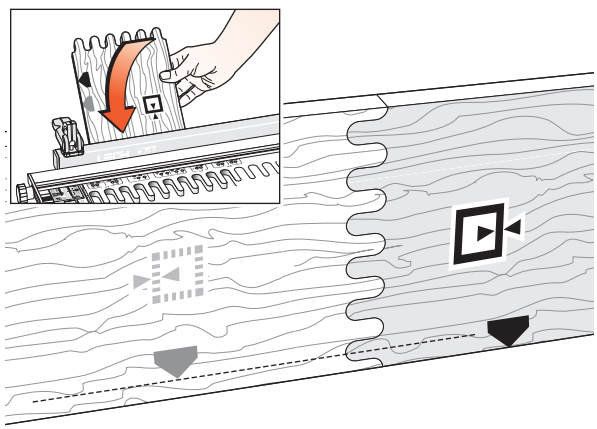
7-15

Rout both ends of both side boards, with inside faces ⊡ away from the jig body.



7-16

Rounded finger joint boards must be assembled with the inside faces inwards ① but unlike square box joints, the sides edges may be up or down ②. So you can decide on the preferred board orientation before marking and routing the box bottom grooves ③. You will probably need to clamp in both directions when gluing-up.

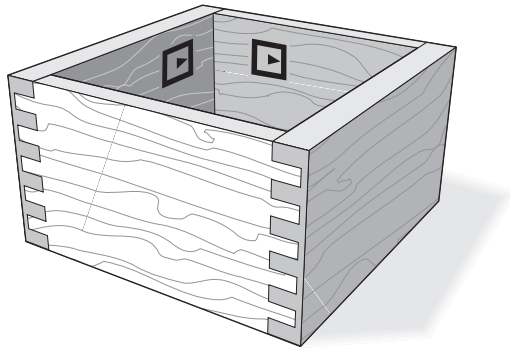


7-17 Rounded End-on-End Joints

These are routed exactly the same way as the box–side boards in the previous instruction, except that you must keep the same side edges against the side stop and alternate face side up/face side down. Rout half the boards at the setting and the other half at the setting. ■

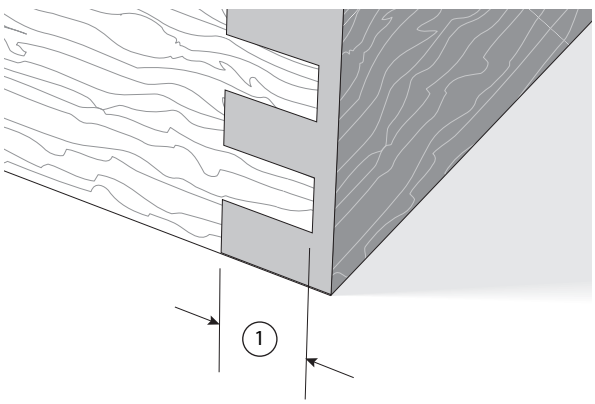
F2, F1600 ***CHAPTER 8***

Square Half-Blind Box Joint Procedures



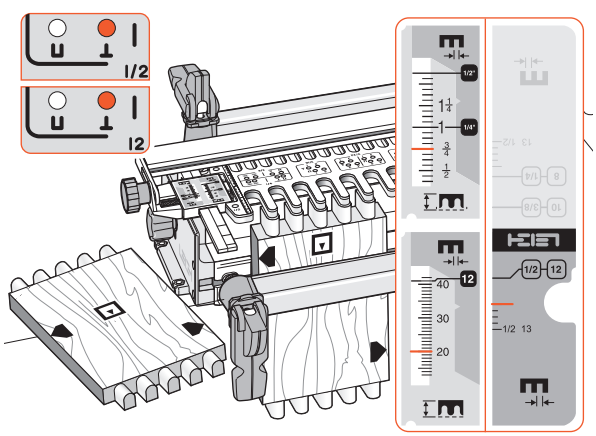
8-1 Square Half-Blind Joints

Just like the rounded half-blind joints: boards must be exactly the same width, inside faces ⊡ always face away from the jig body, and alternate edges are placed against the side stop. Even though part of this joint is rounded, we use the square pitch pin settings to rout it.



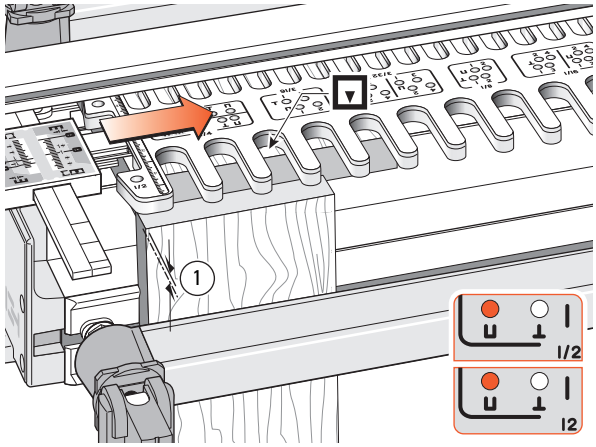
8-2

Set the depth of cut ① to about ⅛"[3mm] less than the drawer-front thickness.



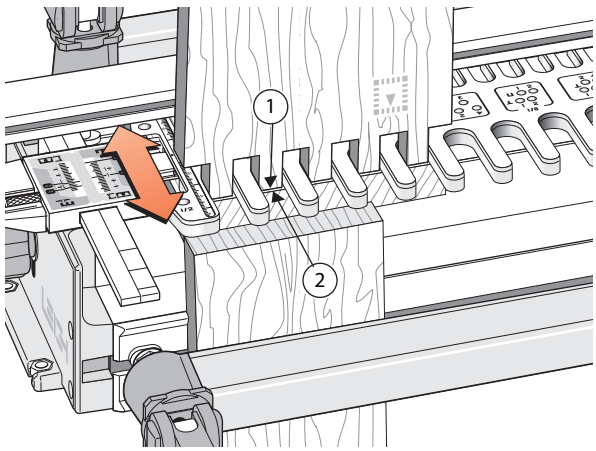
8-3

Set the template pin on the ⊥ setting and the scales to the thickness of the box sides, e.g. ¾"[20mm] shown here. Move the F2 router fence to the rear, it is not used in this procedure. Rout the box side ends vertically in the front clamp.



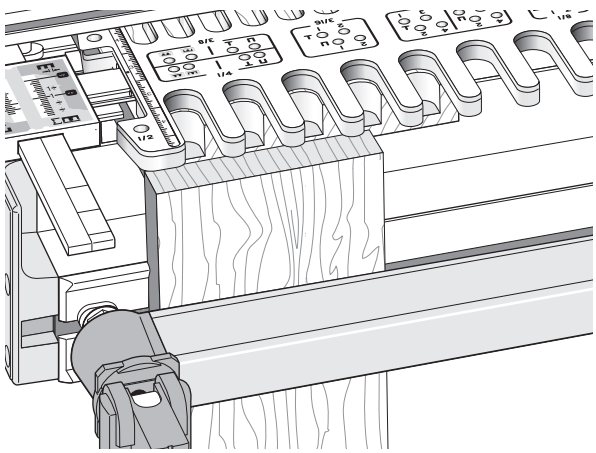
8-4

Set the template pin on U. Clamp a scrap piece vertically in the jig front with its top end slightly above the jig body ①. Clamp a box front horizontally with the inside face ⊡ away from the jig body, and the front end edge against the scrap board.



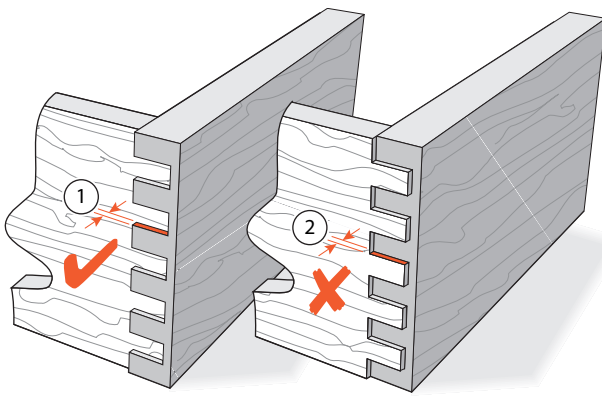
8-5

Place one of the routed box sides vertically through the template with the rounded part of the fingers in the rounded guide crotches. Adjust the template so the front face of the side board ① is 1/16"[1,5mm] **in from the end** edge of the box front ②. Lock the scales on the same setting at both ends.



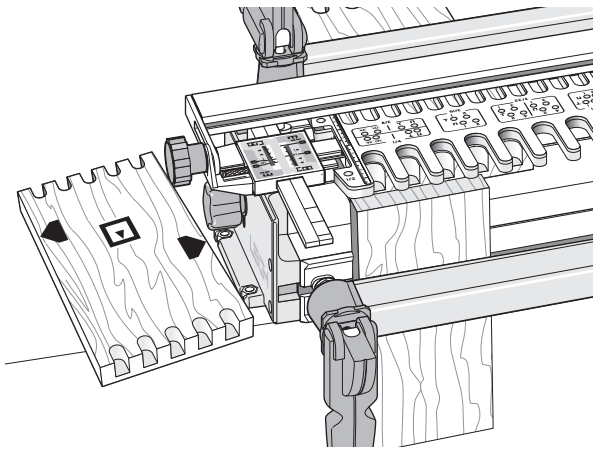
8-6

Rout a test piece to test the scale setting for joint flushness and adjust the template in or out to produce the required flush fit.



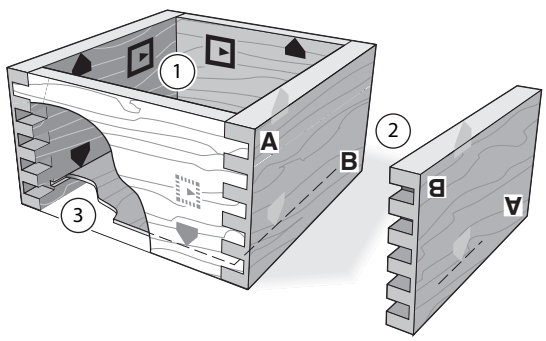
8-7

The drawer front pins should project through the side sockets by no more than 1⁄64"[0,25mm] for clean-up ①. If the sides project ②, adjust the template inward to suit.



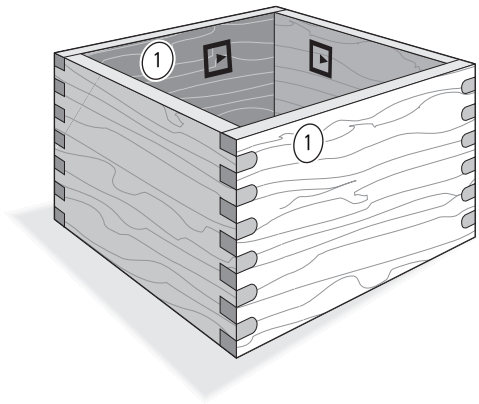
8-8

When satisfied with the flushness fit, rout all the ends of the box fronts and backs in this mode.



8-9

Square half-blind box joint boards must be assembled with the inside faces inwards ① but unlike box joints, the sides edges may be up or down ②. So you can decide on the preferred board orientation before marking and routing the box bottom grooves ③. You will probably need to clamp in both directions when gluing-up.



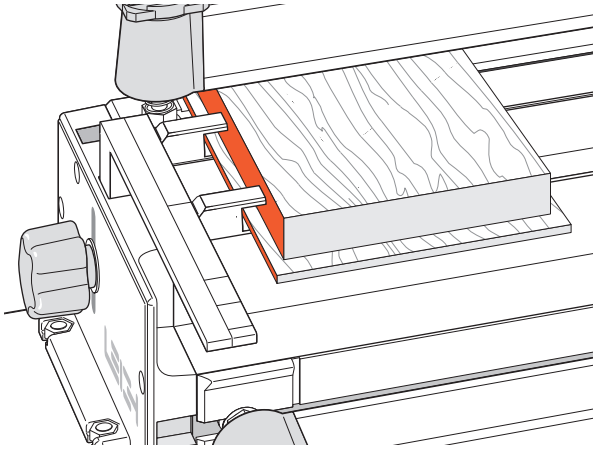
8-10 Rounded Square Box Joints*

These are routed the same way as square half-blind box joints, but the depth of cut is slightly greater than the thickness of the front and rear boards ①. ■

* *Cannot be routed on the F1600 ½"[F1600M 12mm] combs.*

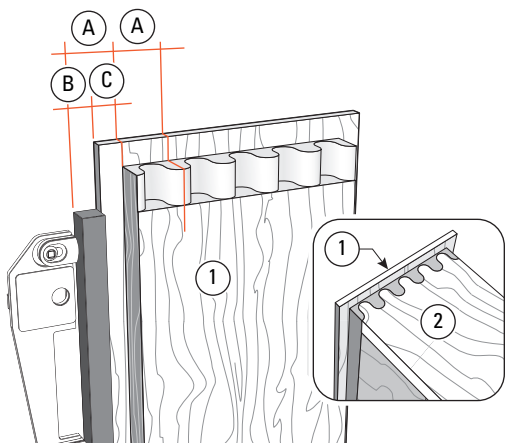
F2, F1600 ***CHAPTER 9***

Rabbeted Half-Blind Finger Joints



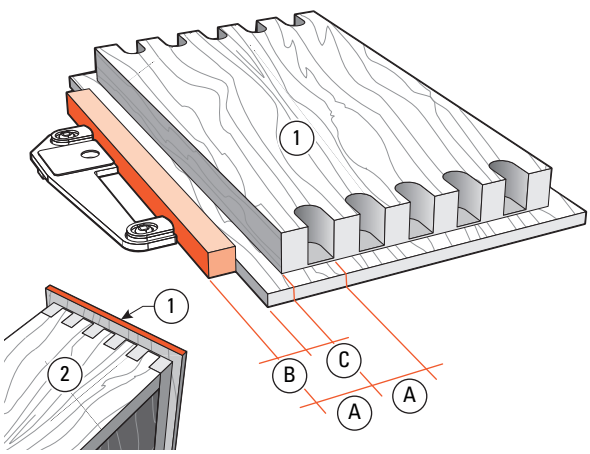
9-1 Rabetted Round Half-Blind Finger Joints

On the D4R and D1600 jigs, rabbeted square half-blind workpieces do not require blocking if the rabbet is 3/8" or less.



9-2

On all other Leigh jigs, rabbetted drawer fronts ① and the mating sides ② have to be blocked away from the side stops. Block drawer sides ② away from the side stops by one complete comb pitch (A). Block the drawer front ① away by (B) which is comb pitch (A) minus rabbet width (C).



9-3

The same rule applies to rabbetted square box joints. ■