

Straight Knife Hinges

Used where you want minimum visibility of hinges or where butt hinges are ineffective, knife hinges are recessed into the cabinet carcass and the door ends instead of the sides. Straight hinges are used for applications where the door is flush with the cabinet sides.

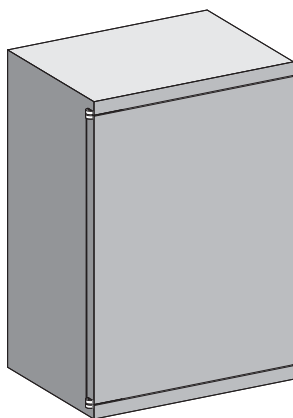


Figure 1: Door flush with cabinet.

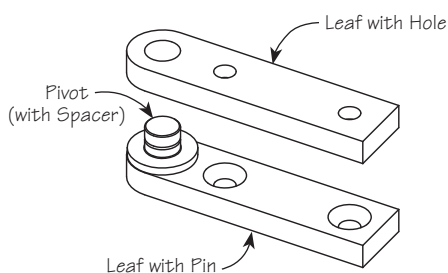


Figure 2: Straight knife hinge.

Notes on Knife Hinge Installation

- *Accurate layout is the most critical part of installing knife hinges. Once the mortises are cut and the hinges installed, there is no easy way to adjust for position.*
- *The height of the door must equal the cabinet opening dimension **minus** the thickness of the two hinge spacers (washers). The width of the door will be equal to the width of the cabinet.*
- *The mortises for the hinges in the cabinet carcass will need to be cut before the cabinet is assembled.*
- *The leaf with the pin is installed in the cabinet carcass and the leaf with the hole is installed on the door.*

Disconnect the hinge leaves. Position the hinge leaf with the pivot hole on top of the door so that it is centered on the width of the door and the center of the pivot hole is in line with the edge of the door, as shown in **Figure 3**.

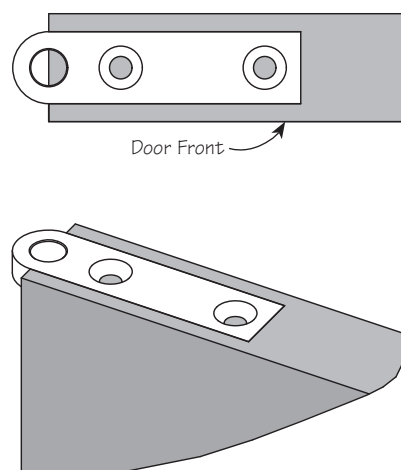


Figure 3: Positioning the hinge leaf on the door.

Mark a line around the perimeter of the hinge leaf using a striking knife. Set a marking gauge from the front of the door to the line at the front of the hinge leaf (**Figure 4**). Keep this setting, as you will use it to locate the other hinge leaves.

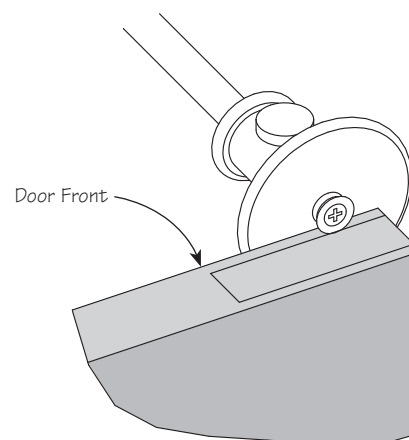


Figure 4: Setting a marking gauge to the front of the hinge.

Use a chisel to carefully cut out the mortise within the mark. The depth may be accurately cut using a small router plane set to the thickness of the hinge leaf. Alternatively, the mortise may be cut using a router and a straight bit set to a depth equal to the thickness of the hinge leaf. Test the fit of the hinge leaf in the mortise.

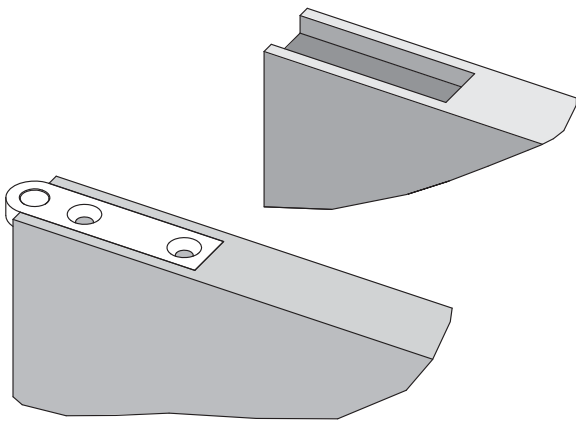


Figure 5: Cutting the mortise and testing the fit of the hinge leaf.

Using the setting on the marking gauge, strike a line for the front edge of the hinge leaf onto the bottom of the door. Position the hinge leaf to that line and mark the perimeter with a striking knife. Cut the mortise as above.

To ensure the front of the door is exactly flush with the cabinet, strike a line for the front edge of the hinge leaf on the bottom of the cabinet carcass using the same setting on the marking gauge, as shown in **Figure 6**.

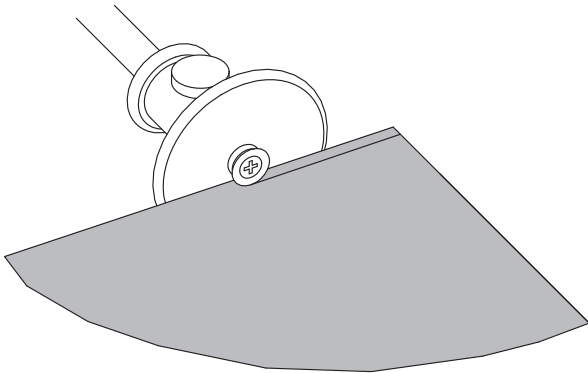


Figure 6: Striking a line on the bottom of the cabinet carcass.

Position the hinge leaf with the pin to the scribed line and the center of the pivot hole in line with the side of the cabinet. Mark the perimeter with a striking knife. Cut the mortise as above, and then repeat these steps for marking and mortising the remaining hinge leaf in the top of the cabinet carcass.

Once all the hinge mortises are cut, dry assemble the cabinet carcass and set the hinges in place to check the fit. Reconnect the two parts of the hinge, then position the hinges into the mortises in the cabinet carcass. Open the hinges and slide the door into position, such that the open hinge leaves catch in the door mortises, as shown in **Figure 7**. Check the door's alignment with the cabinet carcass and ensure that the gaps are even at the top and bottom.

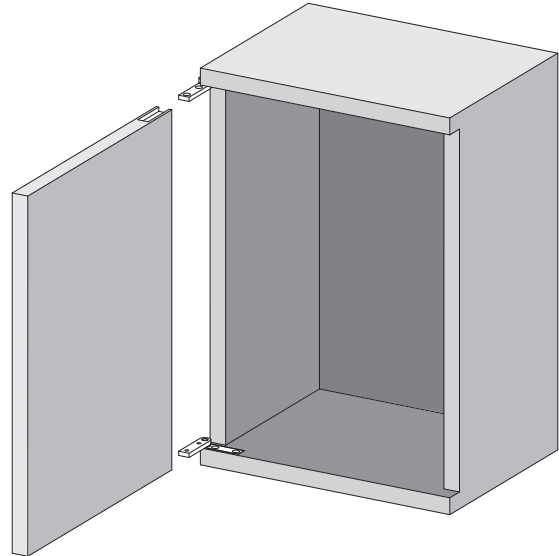


Figure 7: Installing the door.

Mark the hole centers for the hinge screws in the doors and cabinet carcass and drill pilot holes as required. Proceed with your project, then reposition the hinges in the cabinet carcass in their respective mortises and secure in place with screws. Slide the door into position on the hinges and secure in place with screws.