

How to Install a Cabinet Drawer

Undermount slides show off the joinery.

by Greg Larson

WHEN YOU'VE TAKEN the time to build dovetailed drawers for your cabinets, it's a crime to cover them up with side-mount drawer slides. Undermount slides, a hallmark of high-end kitchens, show the beauty of this classic joinery because they're completely hidden underneath the drawer.

I'll show you how to install drawers using the undermount slides we use at the New England School of Architectural Woodworking (see "Drawer Slides with Euro Hinge Adjustability," below and Sources, page 61). These slides feature an integrated soft-close feature that kicks in during the final inch or two as the drawer is closing, which is great if you have family members who like to slam drawers.



Drawer Slides with Euro Hinge Adjustability

Blum Tandem undermount slides and inset locking devices make installing drawers easier than ever. The slides mount in the cabinet's 5mm dia. system holes; the locking devices mount on the bottom of the drawer. Each locking device has an adjustment lever for incrementally moving its side of the drawer up and down. Another lever at the back of each sliding rail raises and lowers the back of the drawer on each side, making it possible to adjust the drawer front so it's perfectly in plane with the face frame. Finally, each locking device has an adjustment screw that moves the drawer in and out so it can be aligned flush with the face frame.



1

Use the system holes to install undermount drawer slides in the cabinet. Once the drawer is installed, these slides virtually disappear.



2

Cut notches for the drawer slides in the back of the drawer box, using a dado set. You'll have to reset the fence and make a second pass to complete each wide notch.



3

Drill a hole above each notch using a jig that's available from the slide manufacturer. These holes secure the slides to the back of the drawer.



4

Install inset locking devices on the bottom front corners of the drawer box. The same jig used in the last step makes it easy to locate and drill the pilot holes.

Mount the slides

Unlike side-mount slides, nearly all of the hardware for an undermount slide mounts inside the cabinet. The slides we use (and virtually all modern drawer slides) have mounting holes that are optimized for the 32mm system. So, if you follow the system rules to drill 5mm dia. holes in the sides of your cabinets (see "Cabinet-Building Essentials," page 32), you simply screw in the drawer slides, using 5mm x 13mm Euro screws (**Photo 1** and Sources). The beauty of using the 32mm system is that the installed slides will automatically be parallel and have the proper setback, making their installation much quicker and more accurate.

Install the drawer box

The drawer box must be slightly modified for use with undermount slides. First, cut 1-3/8" wide x 1/2" deep notches in the back corners, adjacent to the box sides (**Photo 2**). The notches should just graze the drawer bottom. When making the first pass, stop advancing the box as soon as the notch is cut. Then reset the fence and make a second stopped pass to complete the notch. To cut the notch in the other corner, move the fence to the opposite side of the blade and repeat the process.

Next, drill a stopped 6mm dia. x 10mm deep hole above each notch (**Photo 3**). For one or two drawers, it's easy enough to locate and drill the holes by hand, but for a larger quantity, it's more efficient to use the manufacturer's jig (see Sources).

Use the same jig to drill pilot holes for installing the inset locking devices that engage the drawer slides, which are installed on the underside front corners of the drawer box (**Photo 4**). The mounting screws install at a slight angle, so the jig is very handy to have. Install the locking devices using #6 x 1/2" truss-head screws (see Sources).

Installing the drawer box is easy (**Photo 5**). Just set the drawer onto the slides' rails and push it into the opening until the locking devices engage at the front and the pins engage at the back. To remove the drawer, simply reach under and squeeze the locking devices.

Mount the drawer front

Start by drilling two 5/16" holes through the front of the drawer box, 1" down from

the top and 1-1/2" from the inside face of each side. To avoid tear-out when drilling the holes, use a brad point bit and a piece of scrap wood as a backer. Trim the drawer front to fit the opening with 3/32" gaps all around. Use shims to center it in the opening and hold it in position (**Photo 6**). Then mark pilot hole locations on its back by pushing the same drill bit through each hole from inside the box and twisting it (**Photo 7**). Use these marks to drill stopped pilot holes for #8 screws in the back of the drawer front. This method ensures that when the drawer front is centered in the opening, its pilot holes are perfectly centered in relation to the holes in the drawer box.

Attach the drawer front to the drawer box using #8 x 1-1/8" washer-head drawer-front mounting screws (**Photo 8** and Sources). Because the drawer front's pilot holes are perfectly centered, the oversized holes in the drawer box still allow nearly 1/16" adjustment in any direction, so you can adjust the drawer front if any uneven gaps appear after the cabinet has been installed.

Installing the drawer pull pins the drawer front in position, so do not install the pull until the cabinet is installed and final centering adjustments are made to the drawer front.

To mount the pull, center it on the drawer front and then drill holes sized to match the shanks of the mounting screws through both the front and the drawer box. To better secure a tall drawer front, angle additional screws up from the bottom of the drawer box front into the applied front. 🛠️

SOURCES

- McFeelys, mcfeelys.com, 800-871-8158, Euro Screws, 5mm x 13mm, #0513-ECS-C, \$5.70 per box of 100 screws; Super Round Washer Head Screws, #8 x 1-1/8", 0811-SRZ-C, \$7.35 per box of 100 screws.
- Woodworker's Hardware, wwhardware.com, 800-383-0130, Blum Tandem 562H Full-Extension Undermount Drawer Slide w/ Blumotion, 21", #B562H 5330B, \$24.44 per pair; Blum Inset Locking Device, #BT51.1700PV, \$8.08 per pair (one L and one R); Blum Tandem Boring Template, #BT65.1000.02, \$53.34; Blum #2 Pozi Screw Driver, #B POZI, \$8.33.
- Kitchen Cabinet Hardware, kitchen-cabinet-hardware.com, 800-530-8245, Delicate Pull, 96mm, #P84729-SN, \$3.29.

Use the notches on the back to engage the slides when you install the drawer box. A pin on each sliding rail anchors the box at the back; the locking devices installed on the bottom secure it at the front.



Use 3/32" shims to center the drawer front after trimming it to fit the opening. The shims securely hold the drawer front in position for the next step.



Mark pilot hole locations on the drawer front after drilling oversized mounting holes through the drawer box. Use the same drill bit so the pilot holes will be perfectly centered.



Fasten the drawer front with washer-head screws. The oversized mounting holes and perfectly-centered pilot holes allow making minor adjustments, if necessary, after the cabinet is installed.



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