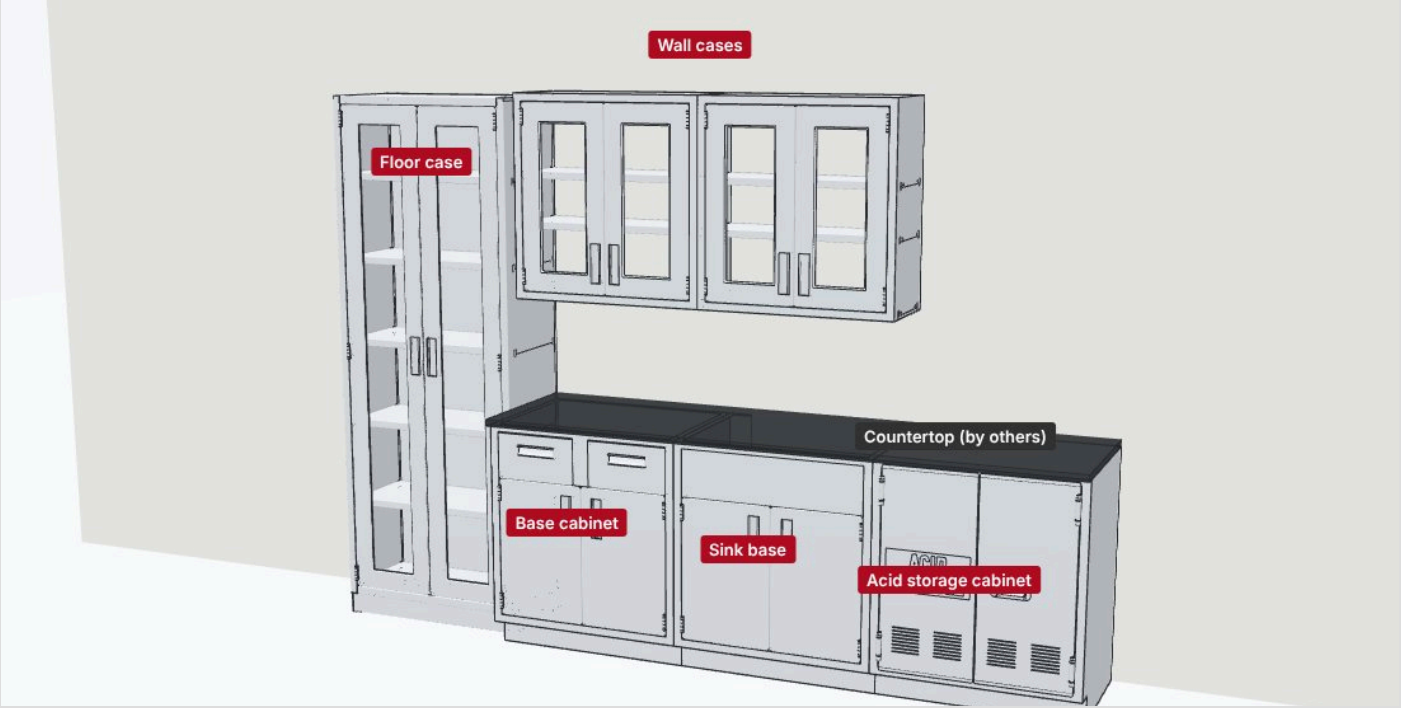
LabSpace Solutions

INSTALLATION GUIDE

Steel Laboratory Casework

Installation, adjustment and care. An animated version of this guide is available from LabSpace Solutions.

Base cabinets | Sink bases | Acid and flammable storage | Mobile cabinets | Wall cases | Floor cases | Fillers and panels



Read before you start

- Read this whole guide before you begin.
- Cabinets are heavy. Use enough people or lifting equipment to move them safely.
- Floor cases and wall cases must be fastened to the wall. An unsecured case can tip or fall.
- Make sure the wall and its anchors can carry the loaded cases.
- Plumbing and electrical work must be done by qualified trades, to local code.
- Never stand or climb on cabinets or countertops.

OVERVIEW

About this guide

This guide covers receiving, installing, adjusting and caring for LabSpace steel casework: base cabinets, sink bases, acid and flammable storage cabinets, mobile cabinets, wall cases, floor cases, and the fillers and panels that join them into a finished run.

All LabSpace casework has inset fronts: doors and drawer fronts sit inside the cabinet frame with a 1/8" gap all around.

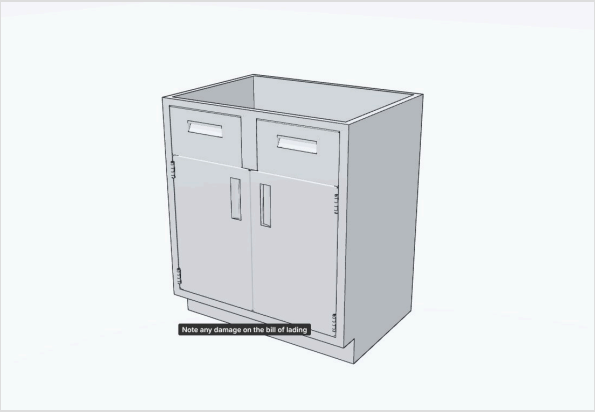
Level, 24" and 48" | 1/4" wrench or socket | Phillips screwdriver | Drill / driver | #8 sheet metal screws | Wall anchors to suit the wall | Wood blocking | Thin pry tool

> Install in this order: base cabinets, then fillers and panels, then countertops and sinks, then wall and floor cases. Remove drawers before you move or set base cabinets, and reinstall them last.

PART 1

General information

Check every shipment when it arrives, before the driver leaves.



WHEN IT ARRIVES

Freight damage

Inspect every carton and cabinet for damage before you accept the shipment. Do not refuse the shipment. If anything is damaged, write a specific description of the damage on the bill of lading before you sign it.

Call us right away at 616-407-0252 about any damage, including damage you find after unpacking (concealed damage). Carriers set short deadlines for freight claims. If damage is not noted on the bill of lading, or not reported quickly, the claim may be denied.

FINISH

Repairing paint scratches

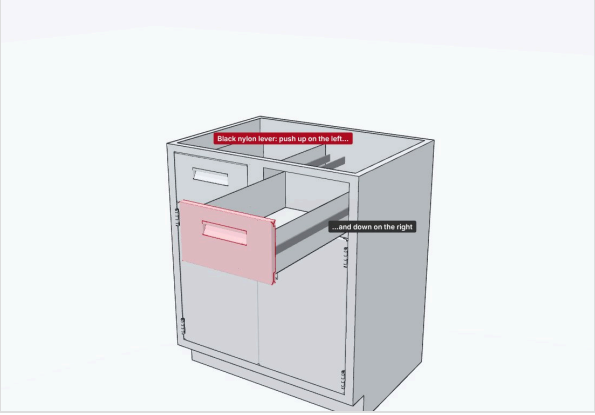
Casework is finished in a durable, chemical-resistant epoxy powder coat. Work through these in order:

1. **Clean it.** Many scuffs come off with a non-abrasive cleaner. A mildly abrasive cleaner can be used with care, but it can change the sheen and make the finish glossy.
2. **Touch up.** Touch-up paint is available to match all standard colors. Call us with your color.
3. **Replace the part.** As a last resort, order a replacement door, drawer front or panel.

PART 2

Base cabinets

Drawers are installed at the factory. Take them out before you move and set the cabinets, and put them back once the cabinets are level and secure.



1 BEFORE SETTING

Remove the drawers

The drawer body comes off its slides without tools, using the black nylon lever built into each slide.

1. Pull the drawer out to full extension and find the black nylon lever on each side.
2. Push the lever **up** on the left side and **down** on the right side while pulling gently on the drawer. On some slides the levers push in instead.
3. Pull the drawer body out of the slides. Note how the ball bearings in the slide run in grooves. You will line them up the same way to reinstall.

> Mark each drawer and its cabinet. Drawers that go back in their original openings need little or no adjustment.



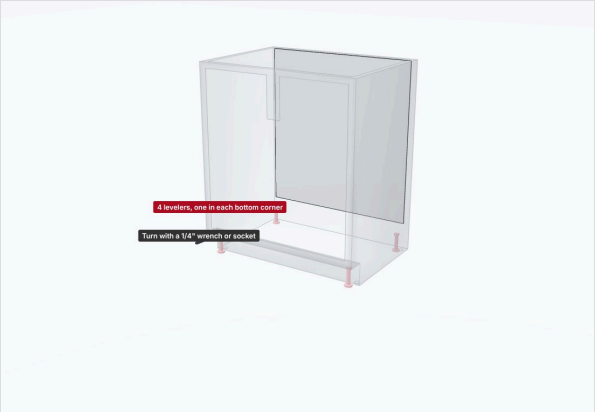
2 ACCESS

Remove the bottom and back panels

Base cabinets have removable bottom and back panels for access to wall outlets and plumbing, and to reach the levelers. Drawer-only cabinets have an open bottom.

1. Empty the cabinet and remove the shelves.
2. Lift the bottom panel at its back edge, tilt it and lift it out.
3. Find the two bent tabs in the top flange of the back panel. They are bent at the factory to hold the back in place in shipping. Bend them straight.
4. Slide the back panel up, tilt its bottom edge forward and remove it.

Reinstall in reverse order. Bend the tabs back over once the back panel is in place.



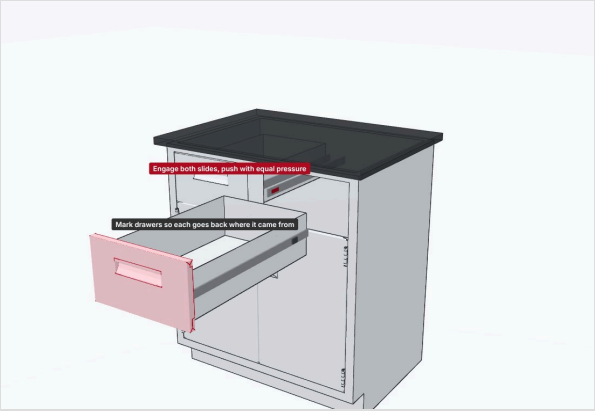
3 SETTING

Position and level the cabinets

Each base cabinet has four levelers, one in each bottom corner, to take up uneven or sloping floors.

1. Remove the shelves and the bottom panel (step 2).
2. Set the cabinet in place and turn each leveler with a 1/4" wrench or socket until the cabinet is level side to side and front to back, and its top lines up with the cabinets next to it.
3. Fasten adjoining cabinets to each other and secure the run to the wall as the job requires, then replace the bottom panel and shelves.

1/4" wrench or socket | Level

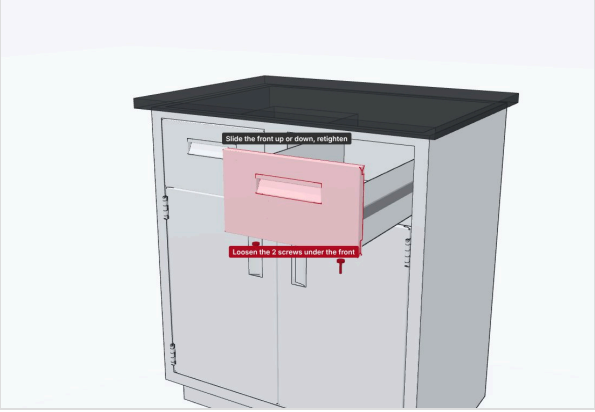


4 AFTER SETTING

Reinstall the drawers

Reinstall drawers once the cabinets are level and the tops are secured.

1. Pull the bearings on both cabinet slides all the way forward.
2. Line up the drawer slides inside the cabinet slides.
3. Push the drawer in with equal pressure on both sides. The nylon levers lock it in place.



5 ADJUSTMENT

Adjust the drawer fronts

Each drawer front should have a 1/8" gap on all sides. If the gap at the top or bottom is uneven:

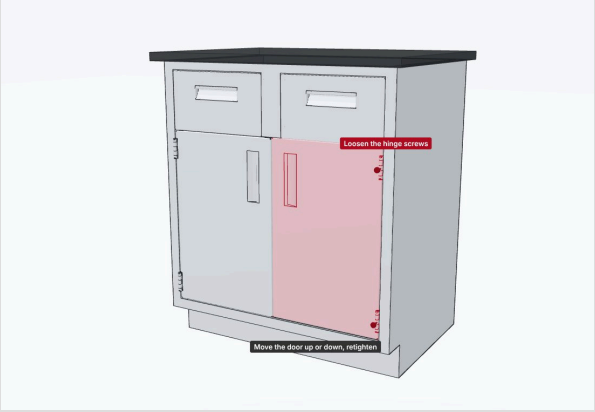
1. Loosen the two screws at the bottom of the drawer front.
2. Slide the front up or down.
3. Tighten the screws and check the gaps. Repeat if needed.



6 REPAIR

Replace a drawer front

1. With a thin blade, pry out the nylon glide on each side of the drawer front.
2. Remove the two Phillips screws at the bottom of the front.
3. Pull the front slightly out and up to lift it off the drawer body.
4. Set the new front on the drawer body and tighten the two screws.
5. Push in the two nylon glides, then adjust the gaps (step 5).

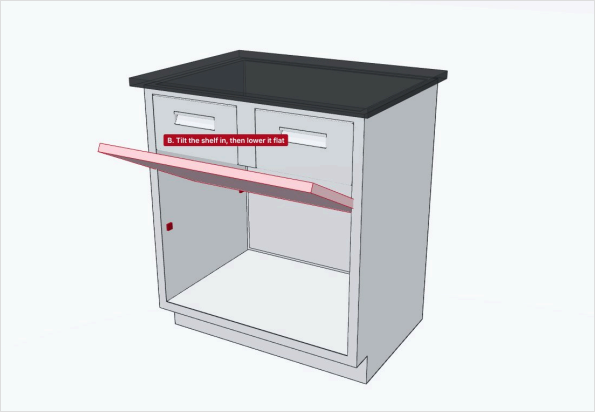


7 ADJUSTMENT

Adjust the doors

Doors should have a 1/8" gap on all sides, including between a pair of doors.

To move a door up or down, loosen its hinge screws, shift the door, then tighten the screws securely.



8 INTERIOR

Install and adjust shelves

Shelves sit on adjustable shelf clips and adjust in 1-3/8" steps.

1. Put a clip in each of the four corners at the height you want.
2. Tilt the shelf to get it into the cabinet without scratching the inside, then lower it flat onto the clips.
3. At the very top or bottom position, it can be easier to fit the rear clips, set the shelf on them, then fit the front clips while holding up the front of the shelf.



SUPPLEMENTAL

Installing a lock in the field

Locks ordered with the cabinet are installed at the factory, so this is not normally needed. Use these steps only to add or replace a LOCK1 lock on site. Lock sets are available for base cabinets, wall cases and floor cases.

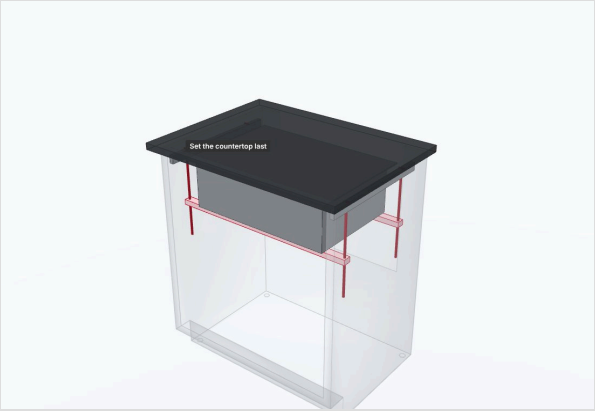
1. Push the lock cylinder through the lock hole from the front.
2. From inside, thread on the retaining nut and tighten it.
3. Fit the cam on the back of the cylinder and test that it engages the cabinet frame when locked.

> Follow the instructions packed with the lock set if they differ.

PART 3

Sink bases, panels and specialty cabinets

Sink supports, knee space parts, end pedestals, aprons, mobile cabinets and storage cabinets.



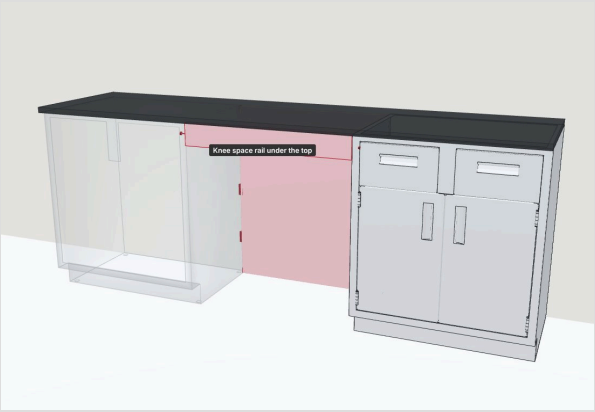
SINK BASES

Sink base cabinets and sink supports

Sink base cabinets accept a range of sink styles. The back is open for plumbing and electrical access, and support channels inside the top of each side carry the sink support assembly (SS-18 to SS-58, sold separately). Each assembly has threaded rod hangers and sink supports.

1. Hook the threaded rod hangers over the support channels at each side. The rods are extra long to suit different sink depths.
2. Set the sink supports on the nuts and washers at the bottom of the rods.
3. Set the sink on the supports and adjust the nuts until the sink rim is at least 1" below the top of the cabinet.
4. Install the countertop after the sink is set and adjusted.

> The sink back panel, where supplied, installs into slots at the back of the cabinet.



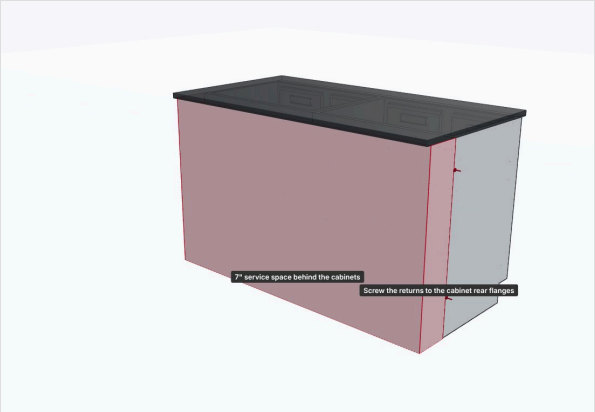
KNEE SPACES

Knee space panels and rails

Knee space panels (KSP) close the back of an open knee space between two cabinets. They mount on standard filler clips.

1. With #8 sheet metal screws, fasten three filler clips up each side of the knee space, on the adjoining cabinets.
2. Slide the panel into the clips. It holds by friction, so no other fasteners are needed.

A knee space rail (KSR0430 to KSR0448) runs across the front of the knee space under the countertop. Fasten it to the adjoining cabinet sides with #8 sheet metal screws, with its top flush with the cabinet tops.



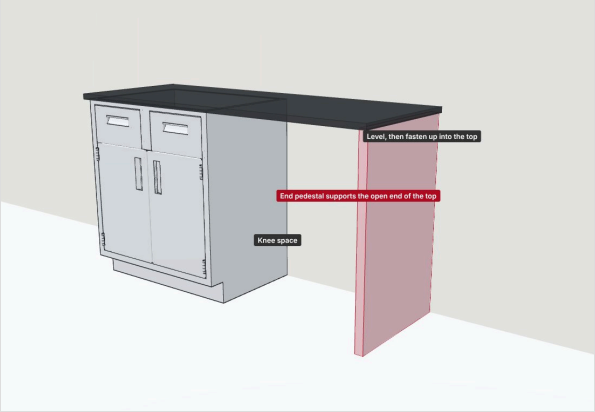
ISLANDS

Rear enclosure panels

Rear enclosure panels (REP) close the exposed back of a base cabinet run in an island, leaving a 7" service space behind the cabinets for plumbing and electrical.

1. Run services before you close the back.
2. Set the panel behind the cabinets with its returns against the cabinet ends.
3. Fasten the returns to the cabinet rear flanges with #8 sheet metal screws, at the top and bottom of each return.

> Panels come 29", 33" (ADA) and 35" high, from 18" to 60" wide.

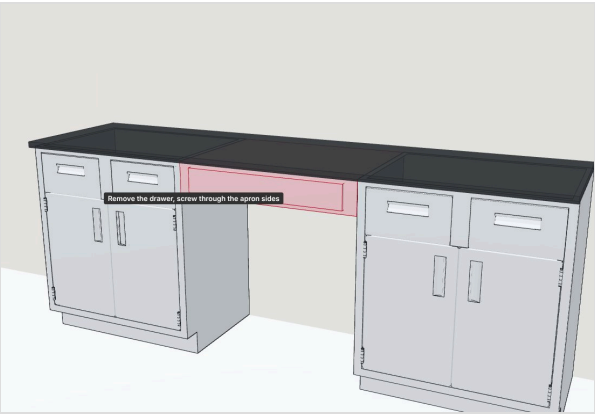


OPEN ENDS

End pedestals

End pedestals (EP) support the open end of a countertop at a knee space or table end, so the top is supported without a cabinet under it.

1. Set the pedestal under the end of the countertop, flush with the front of the cabinets.
2. Adjust its levelers until it is plumb and the top is level.
3. Fasten up through the pedestal into the countertop, or to the cabinet or wall as the layout allows.

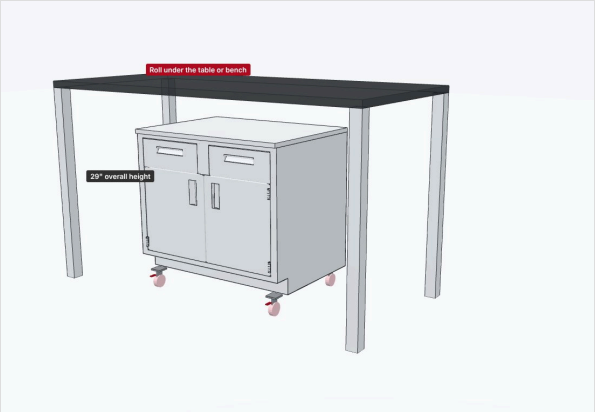


KNEE SPACES

Aprons

An apron spans a knee space between base cabinets and carries a drawer. If no legs are used, it must be fastened to the adjoining cabinets or walls.

1. Remove the apron drawer.
2. Hold the apron with its top level with the tops of the adjoining base cabinets.
3. Fasten through the sides of the apron into the adjoining cabinets or walls with sheet metal screws or bolts.
4. Reinstall the drawer.

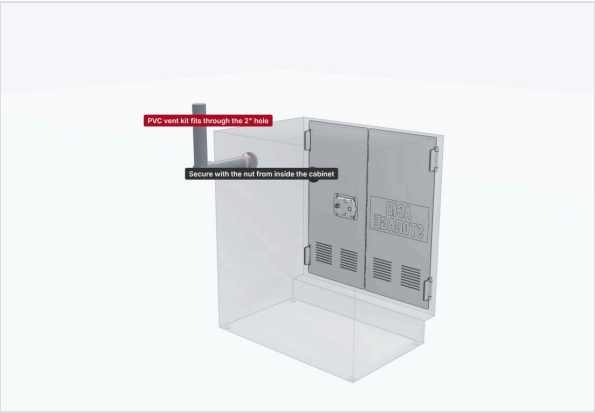


MOBILE

Mobile base cabinets

Mobile base cabinets are 29" high overall and roll on casters under tables and benches. They ship with an open top. A solid metal top is available.

- Check that all four casters turn freely and that the locking casters lock.
- Roll the cabinet into place and step on the caster locks to hold it there.
- Do not fasten a mobile cabinet to fixed casework. Release the locks before moving it.
- Drawers, doors and shelves adjust the same way as fixed base cabinets.



STORAGE

Acid storage cabinets: venting

The back of an acid storage cabinet has two venting holes, closed with 2" hole plugs. To prevent corrosive fumes from building up, acid cabinets must be vented. The installer is responsible for making sure the venting is right for what will be stored. Poor venting can corrode the cabinet and its hardware.

1. Remove the hole plug from each hole you will vent through. Leave the plugs in if the cabinet is not vented.
2. Push the PVC vent kit (AVK2, sold separately) through the 2" hole.
3. Secure it with the nut from inside the cabinet.
4. Connect it to a suitable exhaust (by others).

> The back panel is removable, which can also be used for venting. The doors are self-closing. Do not prop them open.



STORAGE

Flammable storage cabinets

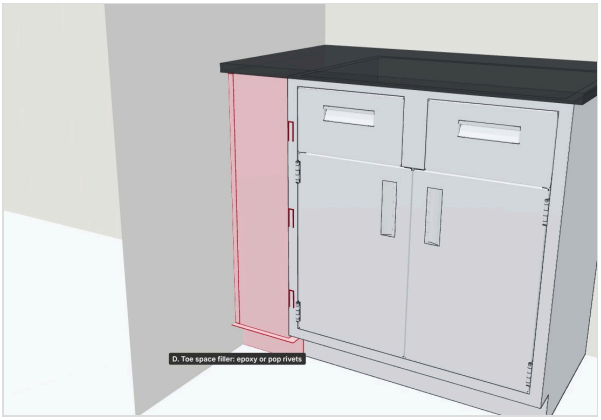
Flammable storage cabinets are built to NFPA 30. The doors are self-closing. Install the cabinet level, so the doors swing shut and latch fully on their own.

- Leave the vent bungs in both sides in place. Vent the cabinet only if your fire marshal or local code requires it.
- If venting is required, vent to the outdoors with metal duct, following local code.
- Never prop the doors open. Keep the warning labels visible. Do not drill or cut the cabinet.
- Confirm storage limits and placement with your safety team and local authority.

PART 4

Base cabinet fillers

After the base cabinets are positioned, find the fillers called for in the plan layout. Fillers hold by friction in filler clips. Fasten each clip with #8 sheet metal screws.



CABINET FRONT TO WALL

L-front fillers (FFL)

L-front fillers close the gap between the front edge of a base cabinet and a wall. They come with a slip joint, three filler clips and a toe space filler.

1. Fasten three filler clips up the front edge of the cabinet.
2. Fasten the slip joint to the wall with wall anchors and screws.
3. Slide the filler into the slip joint and the clips. It holds by friction.
4. Close the gap below with the toe space filler. Lap it over the cabinet's toe kick and fix it with epoxy or pop rivets.

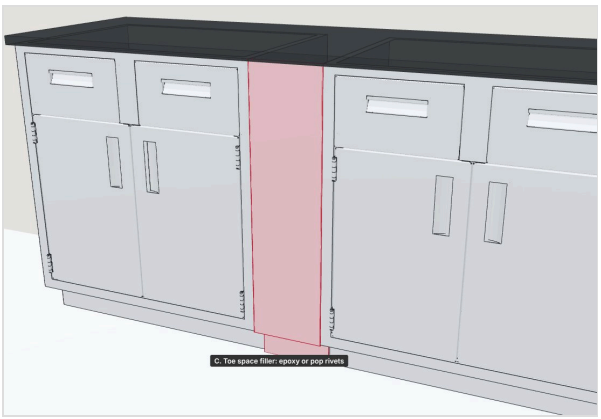


CABINET BACK TO WALL

L-fillers (LF)

L-fillers close the gap between the back of a base cabinet and the wall, and hide plumbing and other services. They come with a slip joint and three filler clips.

1. Fasten the slip joint to the wall with wall anchors and screws.
2. Slide the L-filler into the slip joint. It holds by friction.
3. Fasten the front return of the L-filler to the rear edge of the cabinet with #8 sheet metal screws, through the slotted holes near the top and bottom of the cabinet's rear flange.

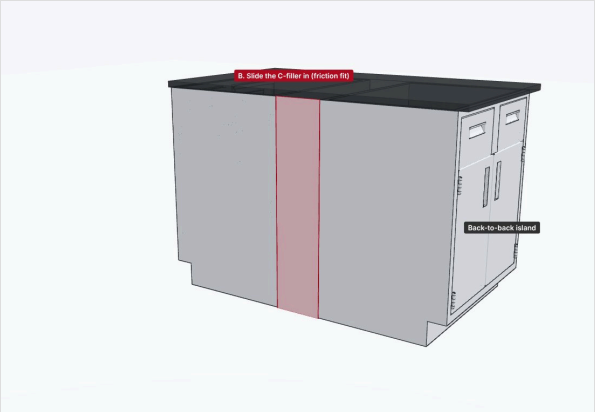


BETWEEN CABINETS

C-front fillers (FFC)

C-front fillers close the gap between the fronts of two cabinets. They come with six filler clips and a toe space filler.

1. Fasten three filler clips up the side face of each cabinet.
2. Slide the C-front filler into the clips. It holds by friction.
3. Close the gap below with the toe space filler, lapped over the toe kick and fixed with epoxy or pop rivets.

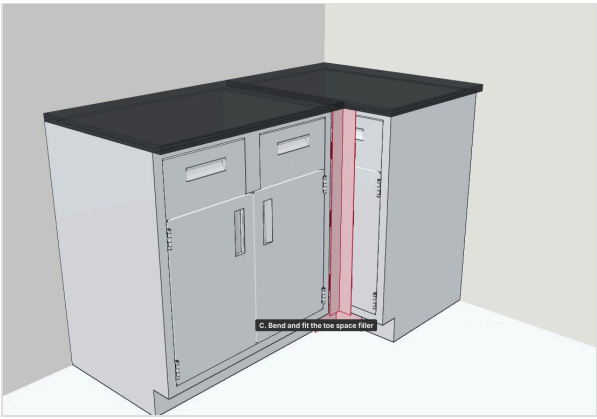


ISLAND ENDS

C-fillers (CF)

C-fillers close the gap between the backs of two base cabinets at the end of a back-to-back island. They come with six filler clips.

1. Fasten three filler clips up the rear edge of each cabinet.
2. Slide the C-filler into the clips. It holds by friction.



CORNERS

Inside corner fillers (ICF)

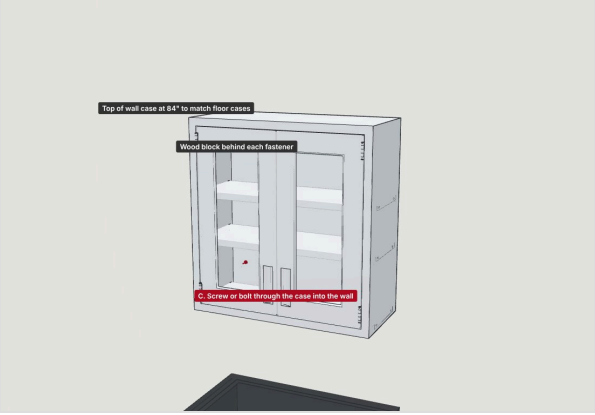
Inside corner fillers close the corner where two runs of base cabinets meet. They come with six filler clips and a toe space filler.

1. Fasten three filler clips up the side face of each cabinet at the corner.
2. Slide the corner filler into the clips. It holds by friction.
3. Bend the toe space filler to fit the corner, lap it over the toe kicks and fix it with epoxy or pop rivets.

PART 5

Wall cases

Mounting height can vary, but to line up with floor cases the top of a wall case goes 84" above the floor. The installer is responsible for fastening wall cases securely to the wall.



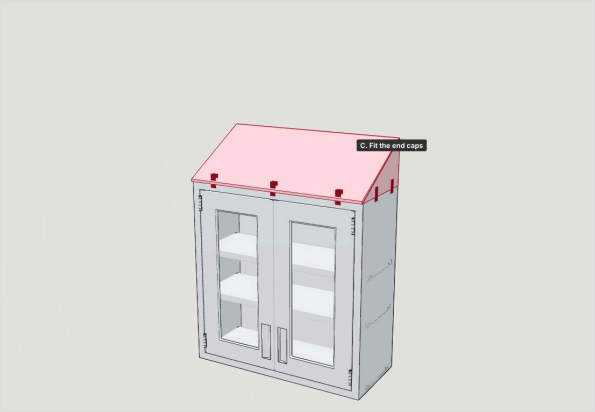
1 MOUNTING

Hang a wall case

Each wall case comes with a wall hanging bracket. The top rear rail of the case is formed to slide down over it.

1. Fasten the bracket to the wall 1/8" below the finished top height of the case.
2. Hold the case slightly above the bracket, flat against the wall, and slide it down over the bracket.
3. Screw or bolt through the case into the wall. The bracket only aligns and supports the case. These fasteners keep it from being lifted off.

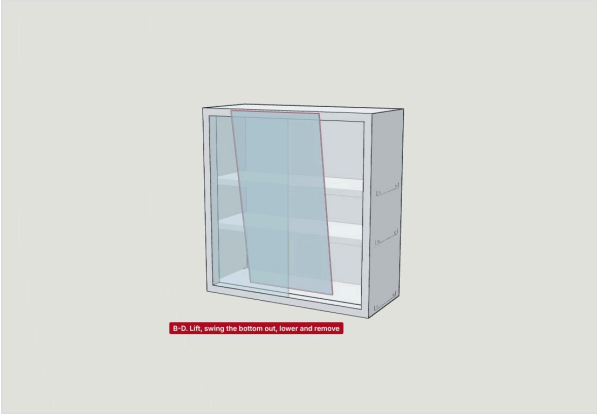
> There is a gap between the wall and the case back. Put a block of wood in the gap behind each fastener, or tightening the screws can dent the back.



2 OPTION

Install a sloping top

1. After the case is fastened to the wall, fasten filler clips along the top front edge and both top side edges of the case with #8 sheet metal screws.
2. Slip the flanged edges of the sloping top (ST13 or ST16 for 13" or 16" deep wall cases, ST21 for 21" deep floor cases, plus the width, for example ST13-36) into the front clips.
3. Fit an end cap on each side, sliding its flanges into the side clips on the case and the filler strips under the sloping top.



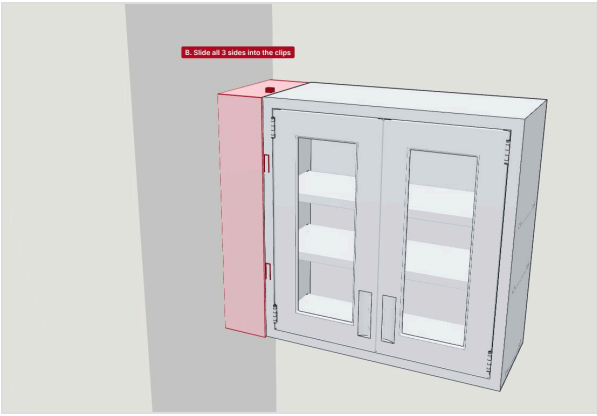
3 SLIDING DOORS

Remove sliding doors

Glass and metal sliding doors lift out.

1. Slide the outer door to the center of the case.
2. Hold its sides, lift it up and swing the bottom edge out.
3. Once the bottom clears the front of the case, lower the door and remove it.
4. Lean the shelves against the back of the case to make room. There is no need to remove them.
5. Remove the inner door the same way, except its bottom edge swings into the case.

> Floor case sliding doors come out the same way.

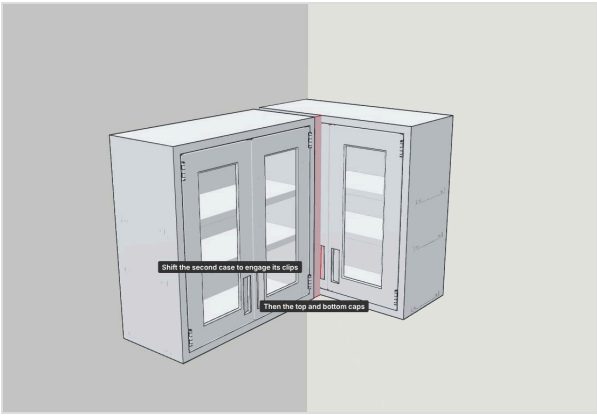


4 FILLERS

Wall case front fillers (WCFF)

Front fillers close the gap between the front of a wall case and a wall.

1. Fasten filler clips up the front edge of the case: two clips on 24" and 30" high cases, three on 36" and 48" cases. Also fasten one clip on the top edge and one on the bottom edge.
2. Slide all three sides of the filler into the clips. The filler flexes slightly so the top and bottom can be eased into their clips. It holds by friction.



5 FILLERS

Wall case inside corner fillers (WCCF)

Fit the front angle of a corner filler before you fasten the cases to the wall, so the cases can still be shifted to fit it.

1. Fasten filler clips up the front edge of each case (two or three, as for front fillers), plus one each on the top and bottom edges.
2. Slide the front angle into the clips on one case.
3. Move the second case up to the angle and engage its clips, shifting either case side to side as needed.
4. Slide the top and bottom caps into their clips, then fasten both cases to the wall.

PART 6

Floor cases

Floor cases are tall and must be secured to a wall or otherwise braced to prevent tipping.

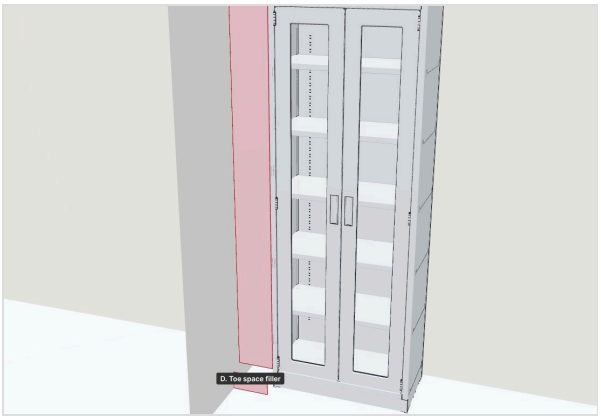


1 MOUNTING

Secure a floor case

1. Level the case with its levelers.
2. Fasten through the inside of the case into the wall, near the corners where possible. Use at least three fasteners per side.

> Put a block of wood in the gap behind the case at each fastener, so the back stays flat and does not dent.



2 FILLERS

Floor case front L-fillers

Front L-fillers close the gap between the front edge of a floor case and a wall. They come with a slip joint, four filler clips and a toe space filler.

1. Fasten four filler clips up the front edge of the floor case.
2. Fasten the slip joint to the wall with wall anchors and screws.
3. Slide the filler into the slip joint and the clips. It holds by friction.
4. Close the gap below with the toe space filler, lapped over the toe kick and fixed with epoxy or pop rivets.

SUPPORT

Questions or parts

Call 616-407-0252 or email sales@labfurniture.com. Have your order number and the cabinet part numbers ready. Cut sheets and other manuals are on the Resources page at www.labfurniture.com.