6×4 Open-front Double-bin Shelter

Park two bins and take one out while the other stays put. This open-front example separates the parked footprint from the retrieval strip, then tests what a center post changes.

Does the opening work for a moving bin and the person holding it?

Read the parked bins and their straight retrieval strips first. Lid opening, cart tilt and the person’s position remain additional measurements, not conclusions of this plan.

What the study shows

Dimensioned layout example

The center-post alternative leaves two 27 in openings. Each is 1 in narrower than the selected 28 in retrieval strip, although still 3 in wider than the 24 in bin itself.

The drawing rejects that selected strip, not every possible cart movement. Tilt, handles, the person and lid clearance need actual measurements.

Good for
Two bins whose measured dimensions can replace the two 24×28 in illustrative footprints.

The key trade-off
Two parked bins do not establish lid clearance, tilt or the space for the person moving them.

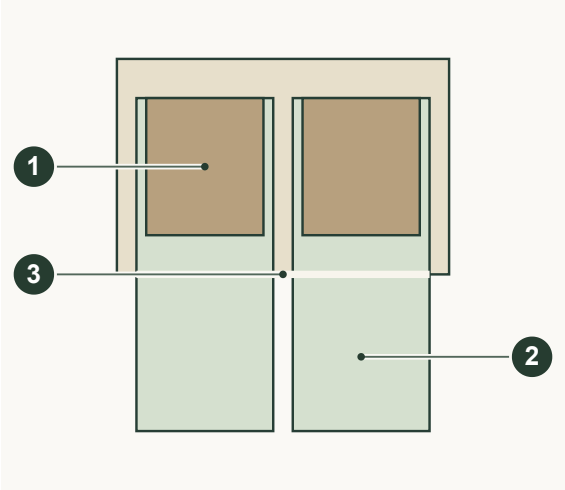
Reference material, not construction plans. Drawings disclose selected assumptions; they do not establish structural design, permit approval or species capacity.

Two bins & an open front

Independent roll-out

Center-post conflict

Distinguish the parked bins from their retrieval strips



Read the actual allocations. Authored rectangles; origin is the front-left corner.

Parked-bin width and retrieval width are different measurements.

1. Parked bin footprint

Each example bin occupies 24×28 inches. Handles, wheels and a particular cart model have not been specified.

2. Retrieval strip

Each selected strip is 28 inches wide, adding 2 inches on either side of the 24-inch bin. These are example allowances.

3. Open front

The selected clear front is 60 inches wide. The later comparison divides it with a centered 6-inch post; structural support is not designed here.

> **Try this with your own measurements**
>
> Measure the widest points of your carts, including handles and wheels, in both parked and moving states.

Follow the outlined bin; leave the solid bin in place

Check the bin in three different states

01

Parked, with the lid open

Measure the full lid motion against the lowest roof or beam obstruction. No height is supplied here.

02

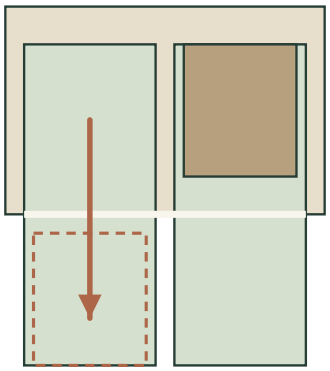
Tilted, with a person holding it

Record handles, wheels, cart tilt and the standing position. The plan's straight strip does not test these.

03

Rolling into the outside route

Take one bin out while the other stays parked, then check the threshold, turn and complete collection route.



Use the space one step at a time. The solid bin remains parked. The outlined bin moves straight forward without rotating while the other bin stays in place. Repeat the same check for the other side; both authored strips stay clear of the neighboring parked bin.

Take one bin straight out while the other stays parked.

Solid and outlined shapes

The solid bin stays put. The outlined position shows the other bin moving forward without rotating.

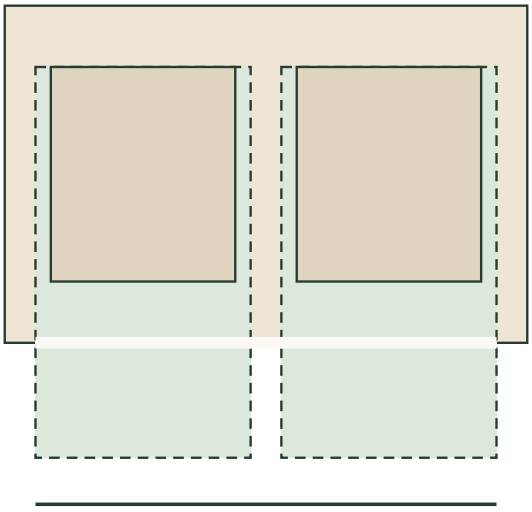
Continue beyond the drawing

The depicted 32-inch exterior strip does not establish enough space for the person, cart tilt or a turn.

> **Try this with your own measurements**
>
> Try each cart separately over the real threshold and along the complete outdoor collection route; check lid-open height too.

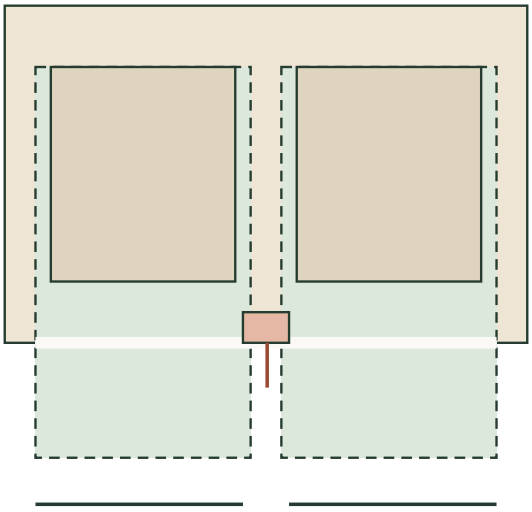
A center post divides one opening into two narrower ones

60-inch clear front



Two tan bin footprints sit within separate dashed retrieval strips. The front remains one continuous opening.

Two 27-inch openings



The small center post divides the front opening. The parked bins stay in the same positions; the retrieval-width comparison changes.

Read the marks. Tan rectangles: 24×28 in parked bins. Dashed green strips: selected 28 in retrieval widths. Short brown mark at the front: added post. The strips do not simulate cart tilt or a person.

Two 27 in openings: 1 in narrower than each selected retrieval strip, but 3 in wider than each bin. Actual cart handling remains untested.

> **Try this with your own measurements**
>
> Measure the finished openings and actual moving carts. Changing a post or roof support requires an independent structural design.

Study notes & exact inputs

Distinguish the parked bins from their retrieval strips

Original diagram. Authored reference; inches unless marked unknown.

The nominal category is 6×4 ft, with an independently authored 68×44 in clear floor. Two bins are each 24×28 in, located at (6,8) and (38,8). No commercial cart model or gallon capacity is implied.

Each selected straight retrieval strip is 28 in wide: 24 in body plus 2 in on each side. The 60 in open front extends from x=4 to x=64. The 32 in exterior strip shown is an illustration of the next part of the route, not a sufficient maneuvering recommendation.

Two example bins. Each footprint is 24×28 inches. No particular cart model or gallon capacity is implied.

Two retrieval strips. Each selected 28-inch strip adds 2 inches on each side of a 24-inch bin. These are example allowances.

Follow the outlined bin; leave the solid bin in place

Original diagram. Authored reference; inches unless marked unknown.

The solid bin remains parked. The outlined bin moves straight forward without rotating while the other bin stays in place. Repeat the same check for the other side; both authored strips stay clear of the neighboring parked bin.

Handles, wheel tilt, the person moving the bin and the rest of the outdoor route require real measurements. The drawing does not claim those checks pass. Check lid operation separately; a fixed roof cannot be approved from this plan view.

A center post divides one opening into two narrower ones

Each 27-inch opening is narrower than the selected 28-inch retrieval strip.

Tan rectangles: 24×28 in parked bins. Dashed green strips: selected 28 in retrieval widths. Short brown mark at the front: added post. The strips do not simulate cart tilt or a person.

Add a 6 in center post at x=31–37 across the front. The former 60 in opening becomes two 27 in openings. Each is 1 in narrower than its selected 28 in retrieval strip, even though the same two parked bins still fit on the floor.

This post is a geometric counterexample, not a framing recommendation. The baseline front and roof also require independent structural design. A wider shelter, different cart or different opening changes the inputs and must be checked again.

Read the opening arithmetic. The 60-inch front minus a centered 6-inch post leaves two 27-inch openings.

Keep the claim narrow. The parked bins still fit. This comparison concerns the selected straight retrieval strips, not whether a tilted cart or a structure is acceptable.

Reservation deficit is not a bin collision. The 24-inch bin is narrower than the 27-inch opening. The failed comparison is against the selected 28-inch strip; it does not simulate the cart or person moving.

Check the moving cart, not only the parked bin

Use the drawings as a starting point. Record the result of each check before carrying this arrangement into your own plan.

1. Compare the opening with the complete task

(60 − 6) ÷ 2 = 27 in per opening; 27 − 28 = −1 in against the selected strip, but 27 − 24 = 3 in against the bin width. See the drawing

Measure or try

Record the finished opening and widest moving cart state, including handles, wheels and your chosen working allowance.

Change the arrangement if…

If the complete task needs more width than is available, revise the arrangement. Do not infer a physical collision from a reservation deficit alone.

2. Continue past the front edge

The action drawing shows straight translation without rotation; the depicted 32 in outside strip does not establish the full handling space. See the drawing

Measure or try

Take each actual cart out while the other stays parked, then continue along the collection route.

Change the arrangement if…

If tilt, the person, threshold or a turn interrupts the trip, change the outside approach or parking arrangement and repeat it.

3. Open the lid in its intended position

The floor plan shows 24×28 in parked bins, without a specified cart model or open-lid height. See the drawing

Measure or try

Measure and try lid opening, the handle position and overhead obstructions at the parked location.

Change the arrangement if…

If normal use requires moving the bin first, either accept that routine or revise the enclosure dimensions with an appropriate design.

Record vertical and outdoor clearance separately

Lid-open height

Measure the actual cart's highest point and the lowest obstruction above it.

Moving envelope

Include the cart in its moving state and the person; do not reuse parked dimensions.

Each finished opening

Compare the measured opening with the real moving envelope. Roof support requires a separate design.

Where this reference fits

- Two bins whose measured dimensions can replace the two 24×28 in illustrative footprints.
- A direct forward retrieval arrangement with one bin remaining parked.

Trade-offs

- The open front removes front-door operation but does not provide a concealed or secured front face.
- A floor fit does not establish lid-open clearance, tipping space or usable outdoor access.

Still to assess

- Measure the actual cart body, handles, wheels, closed height and full lid motion.
- Measure roof underside, beams and other obstructions; no vertical dimension is supplied in this study.
- Check the full outdoor wheel route, thresholds, slope, turning and standing space.
- Confirm local collection rules, siting, animal access, cleaning and weather exposure; no containment or pest-proofing claim.

Appearance & material choices

A cedar-toned shelter that reads as garden furniture. Two views show the same intention: both bins parked, then one moved forward while its neighbor remains in place.

Choose how much enclosure you need

The open front removes front-door operation and leaves the bins visible. Timber slats and a dark roof soften the garden view, but do not establish security, weather containment or pest exclusion.

Read the two views as a sequence

The charcoal bin moves out first in the retrieval concept; the green bin stays parked. Camera perspective, apparent clearances and movement distance are illustrative. Use the deterministic diagram for the disclosed straight-route assumptions.

Keep the lid question unanswered until measured

The images show closed lids. No roof height, beam clearance or full lid motion has been supplied, so the study cannot establish that either lid opens inside. Check the actual cart and the lowest obstruction before selecting a fixed-roof enclosure.

Notice what a front post changes

Adding a central member can leave the parked floor arrangement unchanged while dividing the opening. The diagram compares this explicitly. It is a geometry example, not a recommendation to omit a structural support or specify a roof span.

Declared facts & assumptions

Nominal exterior class only. All clear dimensions below are authored example inputs, not a product specification.

Usable width: 68 in

planning assumption · Independent authored input, not inferred from a wall assembly. [editorial]

Usable depth: 44 in

planning assumption · Independent authored input; verify actual finished dimensions. [editorial]

Selected clear front: 60 in

planning assumption · Authored reference, not a minimum requirement. [editorial]

Illustrative cart width: 24 in

planning assumption · Includes only the selected footprint; no model or gallon rating. [editorial]

Illustrative cart depth: 28 in

planning assumption · Replace with actual handles, wheels and body dimensions. [editorial]

Available lid-open clearance: not supplied

planning assumption · Roof underside and full lid motion have not been supplied. [editorial]

Sources & current resource status

Original assumptions and diagram manifest

ShedBuildPlans · US reference; confirm local conditions · Checked 2026-10-08

Defines this study’s authored geometry and questions; not built-project evidence.

/project-resources/2026-10-08-outdoor-v1/editorial-manifest.json