

How to Measure for Your New Entry Door

A step-by-step guide for homeowners and contractors. Measure once, carefully, and your made-to-order Vault door will fit the first time.

01

Before you start

Every Vault door is built to order for your opening. We don't measure on site, so the sizes you send are the sizes we build to. They're confirmed on your shop drawings before anything is made, and once you approve those drawings the sizes are final.

Measure in **inches, to the nearest 1/8"** (or in millimetres). Write every number down as you go, and use the worksheet on page 8.

What we need from you

- ☐ **Width** of the opening, measured in 3 places
- ☐ **Height** of the opening, measured in 2 places
- ☐ **Wall thickness**, measured in 6 places
- ☐ **Handing and swing** (which side the hinges are on, and in or out)
- ☐ **Photos** of the opening from outside and inside

Tools

- Steel tape measure (25 ft)
- 4 ft level
- Framing square
- Pencil and this worksheet
- Phone camera
- Pry bar (to lift trim)

GET A SECOND OPINION

If a contractor will install your door, ask them to measure too, or to check your numbers. Two sets of numbers that agree are the best protection against mistakes.

BIG DOORS

Vault doors can be made up to 16 ft tall, and each door panel up to 6.5 ft wide. Wider openings use double doors or sidelights.

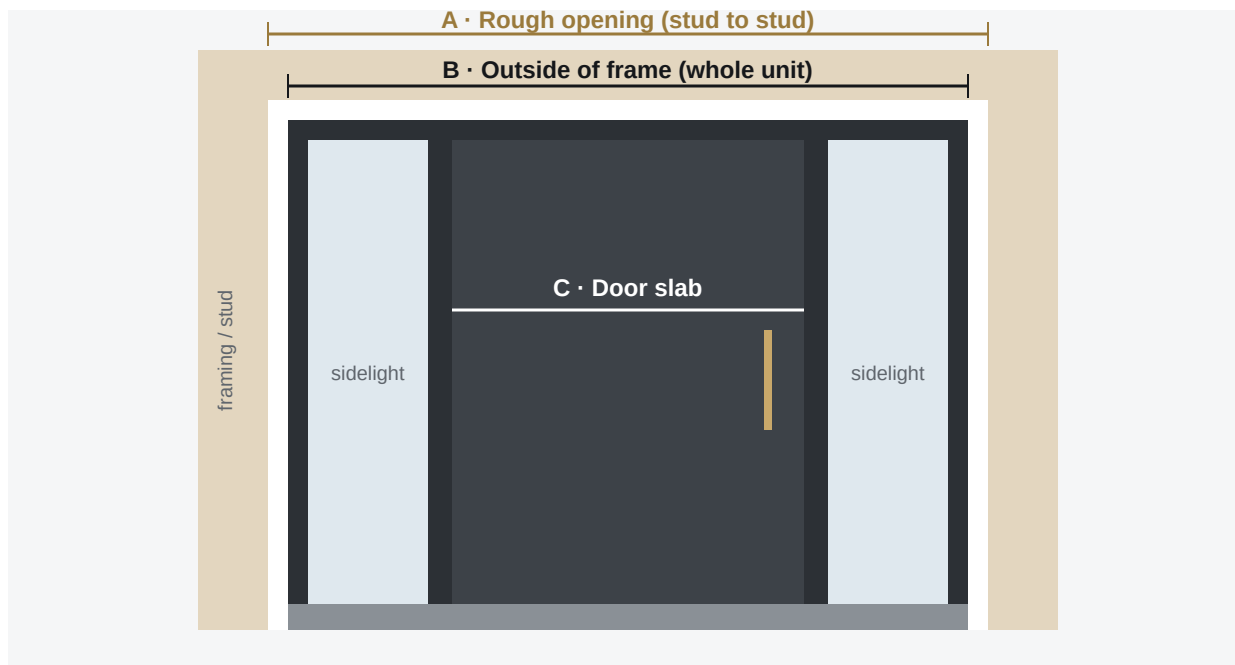
NEVER GUESS

If a number looks odd, measure again. If you're not sure what you're measuring, send us photos with the tape measure in the shot and we'll help.

02

Three sizes, and why they matter

People say "door size" and mean three different things. Our door designer asks which one you measured, then works out the other two for you.



SIZE	WHAT IT IS	WHEN TO USE IT
A · Rough opening	The framed hole in the wall, stud to stud and subfloor to header, with the old door and trim removed.	Best choice. Most reliable, and what installers work from.
B · Outside of frame	The outside edges of the whole unit, including sidelights and transom. About $\frac{3}{4}$ " smaller than the rough opening in width and height, leaving room to shim and level.	When the old frame is still in, or you're working from plans.
C · Door slab	Only the panel that swings.	When you know the exact door width you want. We build the frame and glass around it.

WHY THE DOOR SLAB MATTERS MOST

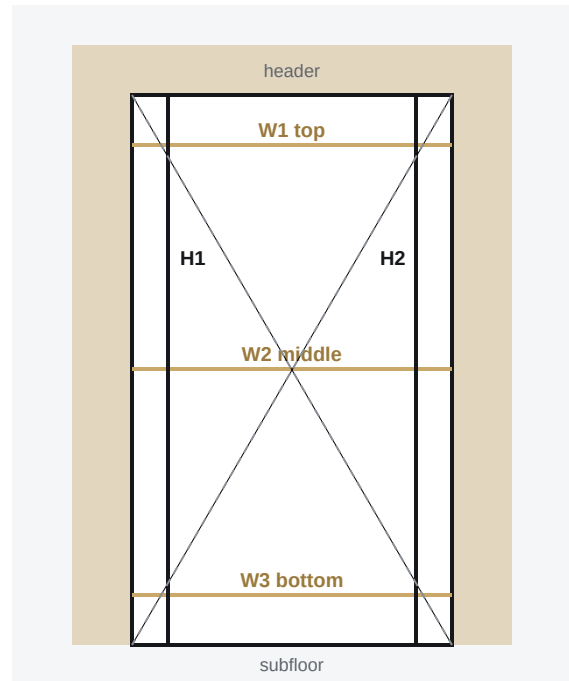
Sidelights share the width of the opening. Adding two 12" sidelights to a 70" opening leaves a door only about 35" wide. The designer shows the door width before you order, and warns you if it's getting narrow. Most front doors should be at least 36" wide.

03

Measure the rough opening

For an accurate rough opening, remove the interior trim (casing) so you can see the studs and header. For a replacement, the old door usually has to come out first. If it can't yet, see page 5.

- A Width, 3 places.** Measure stud to stud at the top (about 6" below the header), the middle and the bottom (about 6" above the floor). **Write down the smallest.**
- B Height, 2 places.** Measure from the subfloor to the underside of the header on the left and right sides. **Write down the smallest.**
- C Square.** Measure both diagonals, corner to corner. They should be within about $\frac{1}{4}$ " of each other.
- D Level, plumb and flat.** Check the subfloor/sill is level and the sides are plumb. The outside face of the opening should be flat, with less than $\frac{1}{8}$ " twist corner to corner.
- E Wall thickness, 6 places.** Measure from the outside face of the sheathing to the inside face of the drywall, top, middle and bottom on both sides. **Write down the largest.**



Use the smallest width and smallest height

FLOOR FINISH

Measure height from the subfloor. If new tile, hardwood or in-floor heat is going in, tell us its thickness so the threshold and interior floor line up. Low-profile and accessible thresholds need this most.

WALL THICKNESS

Vault frames are European-style and may be shallower or deeper than your wall. Your wall thickness tells us what interior extension or trim to plan for.

04

Replacing an existing door

If you can remove the interior trim

Gently pry off the interior casing on the sides and top. You'll see the gap between the old frame and the studs. Measure stud to stud and subfloor to header exactly as on page 4. This gives you the true rough opening.

If you can't open anything up yet

Measure the **outside of the existing frame**, not counting the exterior trim (brick mould):

- ☐ Width: outside edge of frame to outside edge, top, middle and bottom. Use the smallest.
- ☐ Height: bottom of the sill to top of the frame, left and right. Use the smallest.

In the designer, choose "**Outside of frame**". Your rough opening is usually a little larger than the old frame, often $\frac{1}{2}$ " to $1\frac{1}{2}$ " in each direction, so plan to confirm the rough opening before you approve shop drawings.

DON'T MEASURE THE OLD DOOR SLAB AND ADD A GUESS

Old frames, sills and trim vary a lot. A slab measurement alone is the most common cause of a door that doesn't fit.

Brick, stone and concrete openings

Measure the masonry opening from brick to brick (or stone to stone) at the same points. Note where the old frame sits in the depth of the wall, and whether there is a wood buck (frame) lining the opening. Photos help a lot here.

Heavy-door check

A Vault door with frame typically weighs 265–330 lb, more for tall or double doors. Before you order, have your contractor confirm the header and framing are solid, and that there's no rot in the sill or subfloor.

Take these photos

- ☐ Straight on from outside, and from inside
- ☐ Close-ups of the sill, header and both sides
- ☐ Your tape measure in the shot at each measurement
- ☐ Anything nearby: steps, railings, light switches, alarm sensors, a porch roof

05

Sidelights, transoms and arches

Measure the **whole opening**, including the space for any sidelights and transom, not just the door. In the designer, pick your sidelight width and transom height, and it shows the door size that's left.

ROUGH OPENING WIDTH	LAYOUT	APPROXIMATE DOOR WIDTH
42"	Single door, no sidelights	about 36"
70"	Single door, two 12" sidelights	about 35"
70"	Double door, no sidelights	about 32" each
76"	Single door, two 14" sidelights	about 36¾"

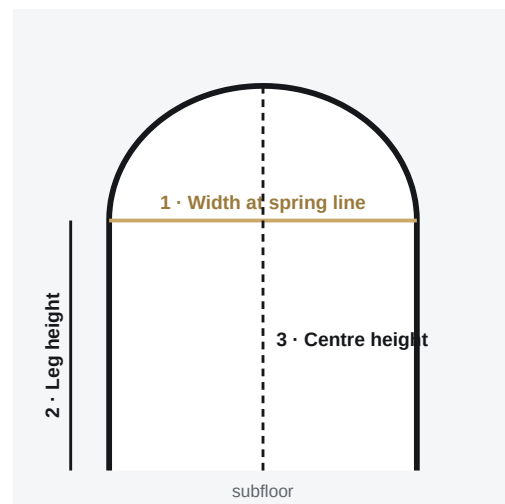
Approximate, for planning only. Exact frame and joint sizes are confirmed on your shop drawings.

Arched openings

For an arched opening or curved transom, take three measurements:

1. **Width** at the widest point, where the arch starts (the spring line).
2. **Leg height**: subfloor to the spring line, on both sides.
3. **Centre height**: subfloor to the highest point of the arch.

The rise is the centre height minus the leg height. If the arch isn't a smooth curve, trace it onto cardboard or paper and send us a photo of the template with a tape measure beside it.



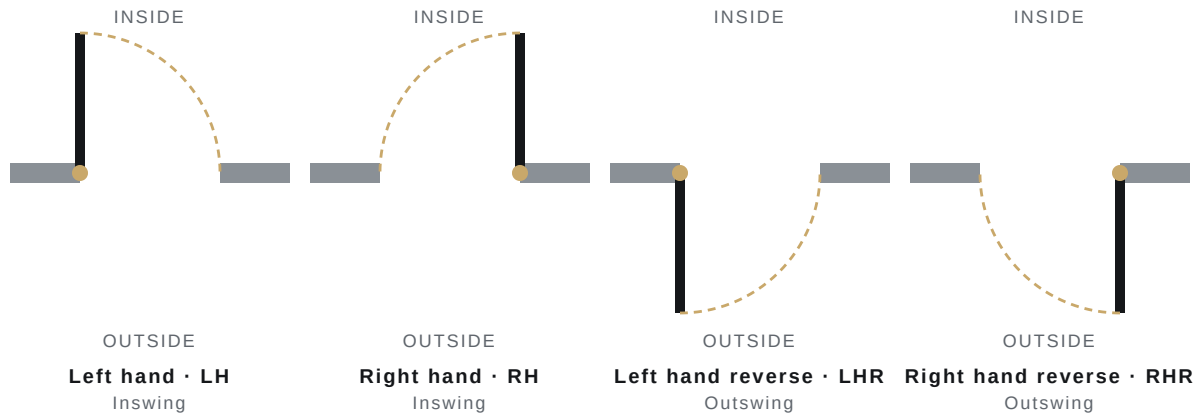
DOUBLE DOORS

Measure the full opening. Each door panel can be up to 6.5 ft wide, and both open or one stays fixed, whichever you choose.

06

Handing, swing and clearances

Stand **outside, facing the door**. The side the hinges are on is the "hand". Doors that open away from you are inswing; doors that open toward you are outswing.



Plan view, standing outside facing the door · ● hinge side

Check the swing

- ☐ An inswing door needs clear floor space inside, past stairs, closets, switches and furniture.
- ☐ An outswing door needs a landing outside and clearance from railings, steps and storm doors.
- ☐ Check nothing sits in the arc of a tall pull handle.
- ☐ Look for alarm contacts, doorbell wiring and lights that may need moving.

Double-check before you send

- ☐ Smallest width and smallest height recorded
- ☐ Diagonals within about $\frac{1}{4}$ "
- ☐ Largest wall thickness recorded
- ☐ Finished floor thickness noted
- ☐ Handing and swing confirmed from outside
- ☐ Photos taken with the tape in view

LOCAL CODE

Egress, landing, step height and glass-safety rules vary by city. Your contractor or building department can confirm what applies to your home.

07

Measuring worksheet

PROJECT

Name / address

Which door (front, side, patio...)

What I measured

☐ Rough opening ☐ Outside of frame ☐ Masonry opening

WIDTH (USE THE SMALLEST)

W1 top · W2 middle · W3 bottom

_____ · _____ · _____

HEIGHT (USE THE SMALLEST)

H1 left · H2 right

_____ · _____

Arched: leg height · centre height

_____ · _____

SQUARE, LEVEL AND WALL

Diagonal 1 · Diagonal 2

_____ · _____

Wall thickness (use the largest)

New floor finish thickness

Wall type

☐ Wood frame 2×4 ☐ 2×6 ☐ Brick / stone ☐ Concrete ☐ Steel

LAYOUT

Door

☐ Single ☐ Double

Sidelights · width each

☐ None ☐ Left ☐ Right ☐ Both _____

Transom · height

☐ None ☐ Straight ☐ Arched _____

Handing · swing

☐ LH ☐ RH ☐ LHR ☐ RHR ☐ Inswing ☐ Outswing

Measured by · date

08

What happens next

- 1 **Design your door online.** At vaultbuilt.ca/door-designer, choose your style, glass, colour and hardware. On the Size step, pick what you measured (rough opening, outside of frame or door slab) and enter your numbers. You'll see your door, frame and rough opening sizes and an instant estimate.
- 2 **Send it to us.** Email your design from the designer, then reply to our email with your photos and this worksheet.
- 3 **Review your shop drawings.** We send detailed drawings with every size, the handing and the hardware. Check them against your opening, ideally with your installer.
- 4 **Approve and build.** Once you approve, your door is built to those sizes. Because it's made to order, sizes can't be changed after approval.
- 5 **Install.** Your contractor installs the door following the Vault Built Installation Guide. The rough opening must be level, plumb and square, with the sill flashed, before the door arrives.

WE'RE HERE TO HELP

Not sure what you're looking at? Send photos of your opening with a tape measure in view, and we'll tell you what to measure.

vaultbuilt.ca

This guide is general guidance. Vault Built does not take site measurements and is not responsible for measurements supplied by the customer or their contractor. All sizes are confirmed on shop drawings approved by the customer before manufacturing. Approximate door widths shown are for planning only.