



TRASH BIN ENCLOSURE

Engineered Step-by-Step Build System

Includes Interactive 3D Build Model

This guide is your step-by-step companion to building a **strong, clean, and functional trash bin enclosure** — engineered with clarity, confidence, and real-world practicality. The product includes an **Interactive 3D Build Model** to help you understand the structure before and during assembly.

What's inside:

- Interactive **3D model** with real dimensions (mm & inches)
- Complete material & fastener list
- Individual part references for accurate cutting and fitting
- Step-by-step frame assembly with alignment and spacing guidance
- Wall, door, and lid construction instructions for a clean, durable finish

Before you start:

- Read through the full guide once to understand the build sequence and key checkpoints
- Measure twice and cut in stages — avoid bulk cutting before assemblies are confirmed
- Prepare a flat, stable base and verify level before starting the frame
- Use exterior-rated lumber and fasteners suitable for outdoor conditions
- Always follow basic safety practices when cutting, drilling, or lifting materials



Quick Start

Purpose of This Guide

This is a complete, step-by-step system for building a durable outdoor trash bin enclosure.

It is designed to remove uncertainty at every stage — from material preparation to final assembly.

You'll always know:

- what to cut
- where it goes
- and why it's done that way

What This Project is (and what it is not)

This project is:

- A practical outdoor trash bin enclosure designed for everyday use
- Built for **ventilation, durability, and weather resistance**
- Based on **straightforward framing logic** and repeatable assemblies
- Suitable for **DIY beginners and experienced builders**

This project is not:

- A complicated carpentry challenge
- A guess-as-you-go DIY concept
- Dependent on custom joinery or specialty tools

Estimated Build Time

Typical build time: 6–10 hours

Approximate breakdown:

- Material preparation & cutting: 2–3 hours
- Floor & frame assembly: 2–3 hours
- Roof structure & cladding: 2–4 hours

Required Skill Level

- **Skill level:** Beginner to Intermediate

This guide assumes:

- Basic measuring and cutting skills
- Familiarity with a drill/driver
- Basic understanding of square and level

This guide does **not** require:

- Advanced carpentry knowledge
- Complex joinery
- Structural calculations

Units, Dimensions & Tolerances

All dimensions are provided in both metric (mm) and imperial (inches).

Minor lumber variation is expected — adjust as needed, never force parts to fit.

Before you Start Building..

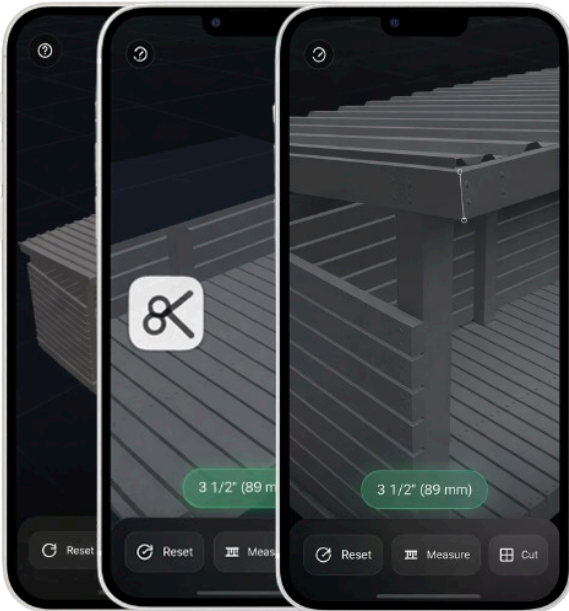
Before beginning assembly:

- Read through the entire guide once
- Prepare a flat, stable working surface
- Organize lumber by part type and length
- Separate fasteners by size and use
- Ensure adequate space for assembly and movement

INTERACTIVE 3D BUILD MODEL

See, Measure & Understand the Build Before You Start.

This project includes an interactive 3D model designed to help you fully understand the structure **before** you cut a single board.



Measure before you cut

✓ Check exact dimensions in inches & millimeters.

Cut through the build

✓ Use section views to understand connections.

Build with confidence

✓ Know how everything fits before you start.

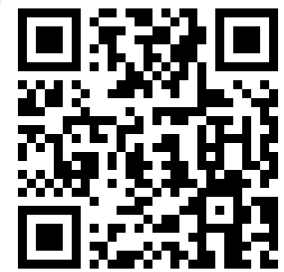
How to access the 3D model?

Scan the QR code with your **phone** or open link on desktop.

No app required.

Works on mobile and desktop browsers.

<https://viewer.craftframe.shop/?t=ENCL-45DVB>



What this 3D model helps you avoid

- ✓ Guessing dimensions
- ✓ Cutting materials twice
- ✓ Misaligned parts
- ✓ Unclear connections
- ✓ Costly on-site mistakes

⚠ Important Note

The 3D model is a visual reference. Always follow the written instructions.



General Notes

These general notes apply to the entire build and should be reviewed before starting construction.

Leveling & Materials

- Ensure the base is level within **$\pm 5 \text{ mm}$ ($\pm 3/16"$)** before assembly.
- Keep all frames square — diagonal differences should not exceed **5 mm ($3/16"$)**.
- Posts must be plumb within **$\pm 3 \text{ mm per 1 m}$ ($\pm 1/8"$ per 3 ft)**.
- Check alignment regularly as the structure is assembled — small deviations compound quickly.

Spacing & Gaps

- Walls & doors gaps: **$\sim 10 \text{ mm}$ ($1/2"$)**
- Lids gaps: **$\sim 10 \text{ mm}$ ($1/2"$)**

These gaps allow for airflow, moisture control, and natural wood movement.

Fastening

- Always use **exterior-rated fasteners**
- Pre-drill near board ends to reduce splitting
- Drive fasteners flush — do not over-tighten
- Each structural connection should use **a minimum of two fasteners**

Cutting & Tolerances

- Measure carefully before cutting
- Recommended cutting tolerance: **$\pm 2 \text{ mm}$ ($\pm 1/16"$)**
- When possible, confirm final lengths directly from the assembled structure

Outdoor Use

For long-term durability, apply an appropriate **wood preservative, oil, or paint** according to the product manufacturer's recommendations.



Tools Checklist

Before starting the build, make sure you have the following tools available.

Required Tools

- Tape measure
- Pencil or marker
- Circular saw or miter saw
- Drill / driver
- Spirit level
- Speed square or framing square
- Clamps (recommended for alignment)

Optional but Helpful

- Impact driver
- Countersink bit
- Rubber mallet
- Orbital sander
- Workbench or sawhorses

Safety Equipment

- Safety glasses
- Work gloves
- Hearing protection when cutting or drilling

Having the right tools ready before you begin will make the build smoother, safer, and more accurate.



Materials

This section outlines the recommended fasteners and materials required to complete the build. Exact quantities and cut lengths are provided in **Drawing No. 0**.

Lumber & Wood Materials

- Use **exterior-rated lumber** suitable for structural outdoor use
- Nominal sizes (e.g. 2×4", 4×4") may vary slightly in actual dimensions
- Select straight boards and avoid visible twisting or cracks

All required lumber sizes, quantities, and cut lengths are listed in **Drawing No. 0**.

Optional Finishing Materials

- Exterior wood oil, stain, or paint
- End-grain sealer for cut surfaces

Applying a protective finish will significantly extend the service life of the structure.

**CUT LIST**

Usage	Profile (in/mm)	Mark	Quantity	Length (in)	Length (mm)
Side Wall Cladding	1"x6"	CL1	14	3' - 0"	910
Side Wall Cladding	1"x6"	CL2	2	3' - 0"	910
Back Wall Cladding	1"x6"	CL3	8	4' - 10 1/2"	1485
Door Frame	1"x2"	D1	4	<varies>	745
Door Frame	1"x2"	D2	4	3' - 7 1/2"	1105
Door Frame	1"x2"	D3	2	4' - 3"	1290
Door Cladding	1"x6"	D4	16	2' - 5"	745
Main Frame	2"x4"	F1	4	2' - 11"	890
Main Frame	2"x4"	F2	2	2' - 11"	890
Main Frame	2"x4"	F3	6	3' - 2"	965
Main Frame	2"x2"	F4	2	4' - 7 1/2"	1410
Main Frame	2"x2"	F5	1	4' - 10 1/2"	1485
Lid Frame	1"x2"	L1	4	2' - 5"	745
Lid Frame	1"x2"	L2	4	2' - 8 1/2"	830
Lid Cladding	1"x6"	L3	12	2' - 5"	745
Lid Finishing	1"x2"	L4	2	3' - 0 1/2"	925
Lid Finishing	1"x2"	L5	2	2' - 6"	760

BOLTS, SCREWS AND CONNECTIONS LIST

Screw Size (in / mm)	Quantity
Door Latch	1
Hinges	8
Lid Handle	2
Screws #12 × 2 1/2" (6.0×60 mm)	218
Screws #12 × 3" (6.0×80 mm)	42
Screws #14 × 5 1/2" (6.3×140 mm)	24



1. Main Frame Assembly

This step creates the primary structural frame of the enclosure.

Accuracy at this stage is critical for proper wall, door, and lid alignment later.

Cut and prepare parts: F1, F2, F3, F4, F5

Refer to **Drawing No. 0** for quantities and lengths.

Step 1 – Build Two Identical Frames

1. Lay out parts **F1** and **F3** on a flat surface according to **Drawing No. 01**.
2. Assemble **two identical rectangular frames** using F1 and F3.
3. Fasten each joint with **2 exterior-rated screws per connection**.
4. Keep frames square – check diagonals before fully tightening.

Step 2 – Build One Different Frame

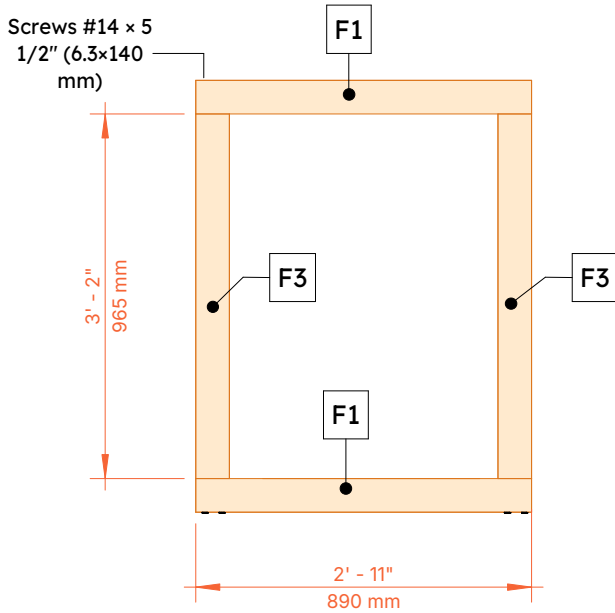
1. Assemble **one additional frame** using parts **F2** and **F3**, as shown in **Drawing No. 01**.
2. This frame differs slightly in layout – follow the drawing carefully.
3. Secure each joint with **2 screws per connection**.
4. Verify squareness before proceeding.

Step 3 – Position and Connect Frames

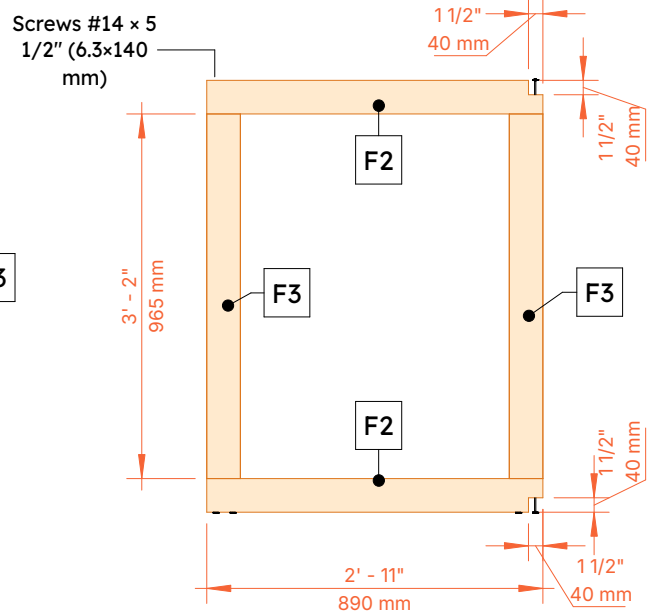
1. Place all **three frames** in their final positions according to the **3D layout** shown in **Drawing No. 01**.
2. Connect the frames together using:
 - **F4** – one at the bottom
 - **F4** – one at the top
 - **F5** – one at the top
(exact positions shown in the 3D layout)
3. Fasten each connection securely with exterior-rated screws.
4. Confirm overall alignment and squareness before moving on.

Refer to **Drawing No. 01** for framing layout, spacing, and orientation.

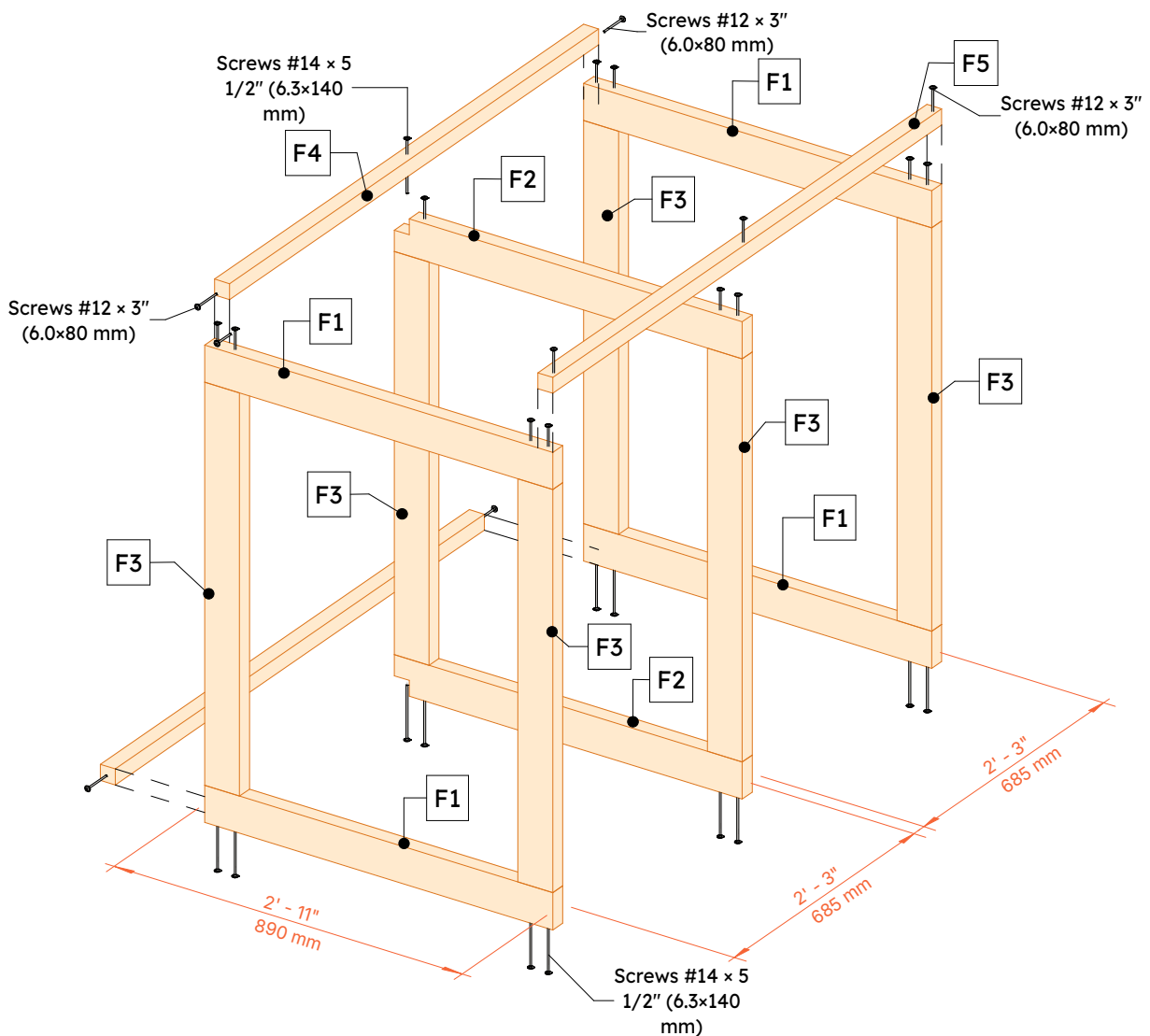
BUILD 2 IDENTICAL FRAMES:



BUILD 1 DIFFERENT FRAME:



JOIN FRAMES TOGETHER USING BEAMS F4, F5





2. Wall Cladding Installation

This step forms the main enclosure walls and defines the overall appearance.

Cut and prepare parts: CL1, CL2, CL3

Refer to **Drawing No. 0** for quantities and lengths.

Step 1 – Side Walls (2×)

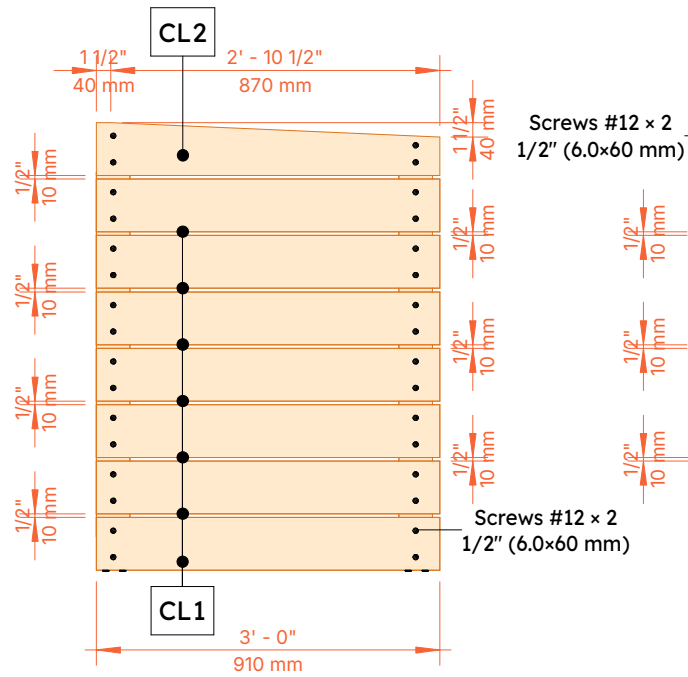
1. Begin with the **two side walls**.
2. Install cladding boards **CL1** horizontally as shown in **Drawing No. 02**.
3. Maintain consistent gaps of:
 - **1/2" (≈10–15 mm)** between boards
4. Cut and install the **top board CL2**, trimming it precisely according to the drawing.
5. Fasten all boards using exterior-rated screws.

Step 2 – Back Wall

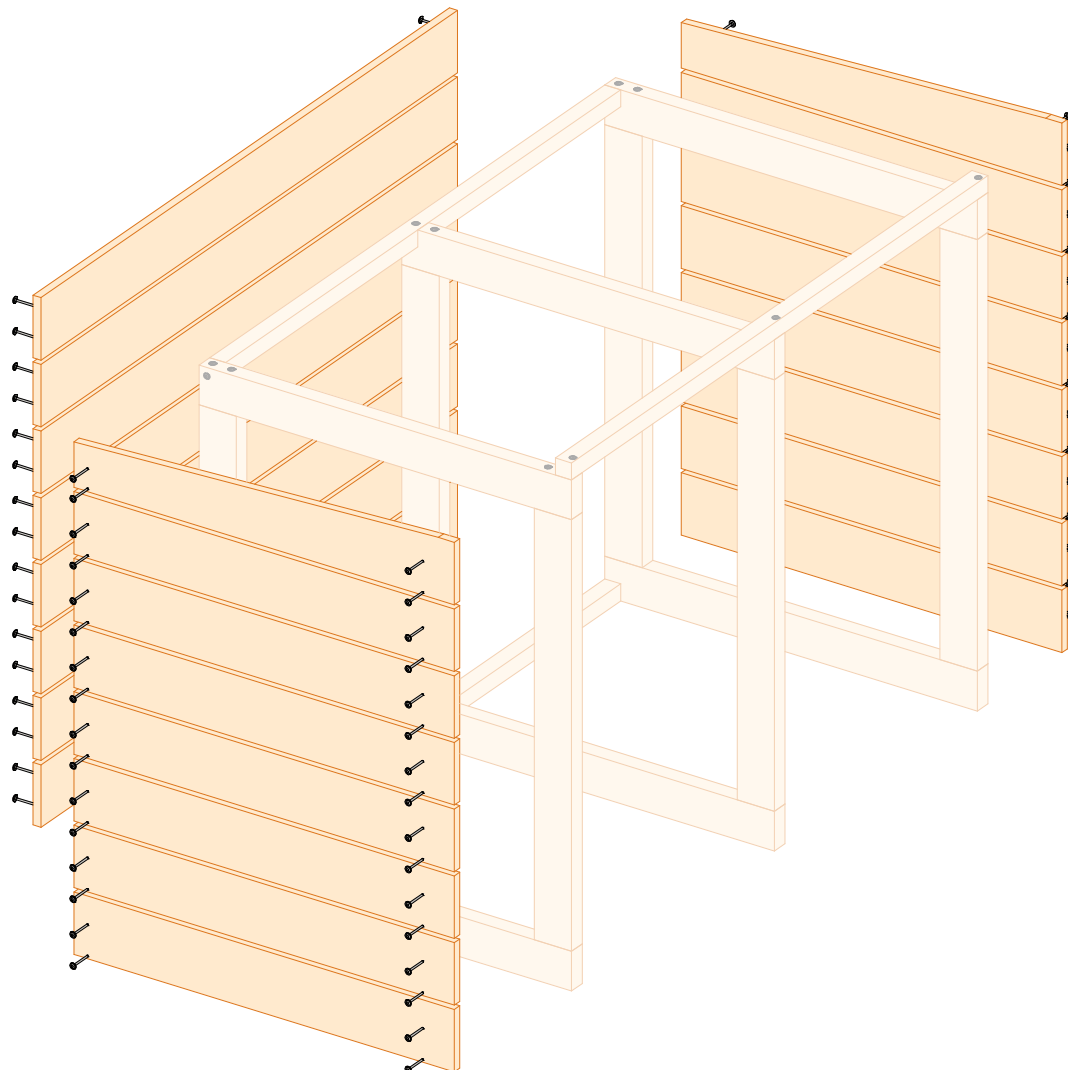
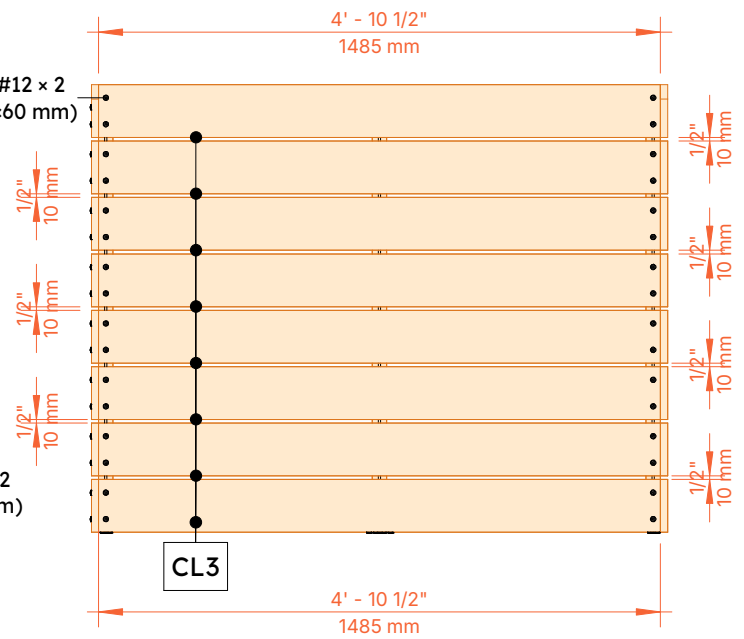
1. Install the back wall using **CL3** boards.
2. Board spacing must match the side walls:
 - **1/2" (≈10–15 mm)** gaps
3. Follow **Drawing No. 02** exactly for board layout and fastening locations.
4. Ensure all boards are aligned and securely fixed.

Refer to **Drawing No. 02** for walls cladding.

SIDE WALLS CLADDING:



BACK WALL CLADDING:





3. Door Assembly & Installation

You will build **two identical doors** in this step.

Cut and prepare parts: D1, D2, D3, D4

Refer to **Drawing No. 0** for quantities and lengths & **Drawing No. 3** for dimensions and angles.

Step 1 – Door Frame Assembly

1. Assemble the door frame using parts **D1** and **D2**.
2. Install **D3** as a diagonal brace.
3. Cut the ends of **D3** precisely so it fits flush into the frame, as shown in the drawing.
4. Secure all joints with exterior-rated screws.

Step 2 – Install Hinges

1. Attach **hinges** to the side of each door frame as shown in **Drawing No. 03**.
2. Hinge type and size can be selected according to your preference.
3. Ensure hinges are aligned to allow smooth door movement.

Step 3 – Door Cladding

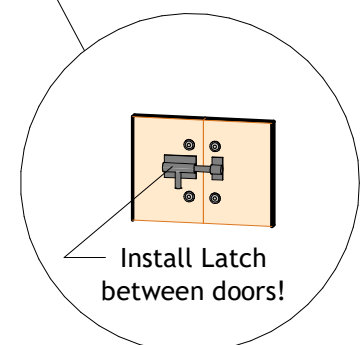
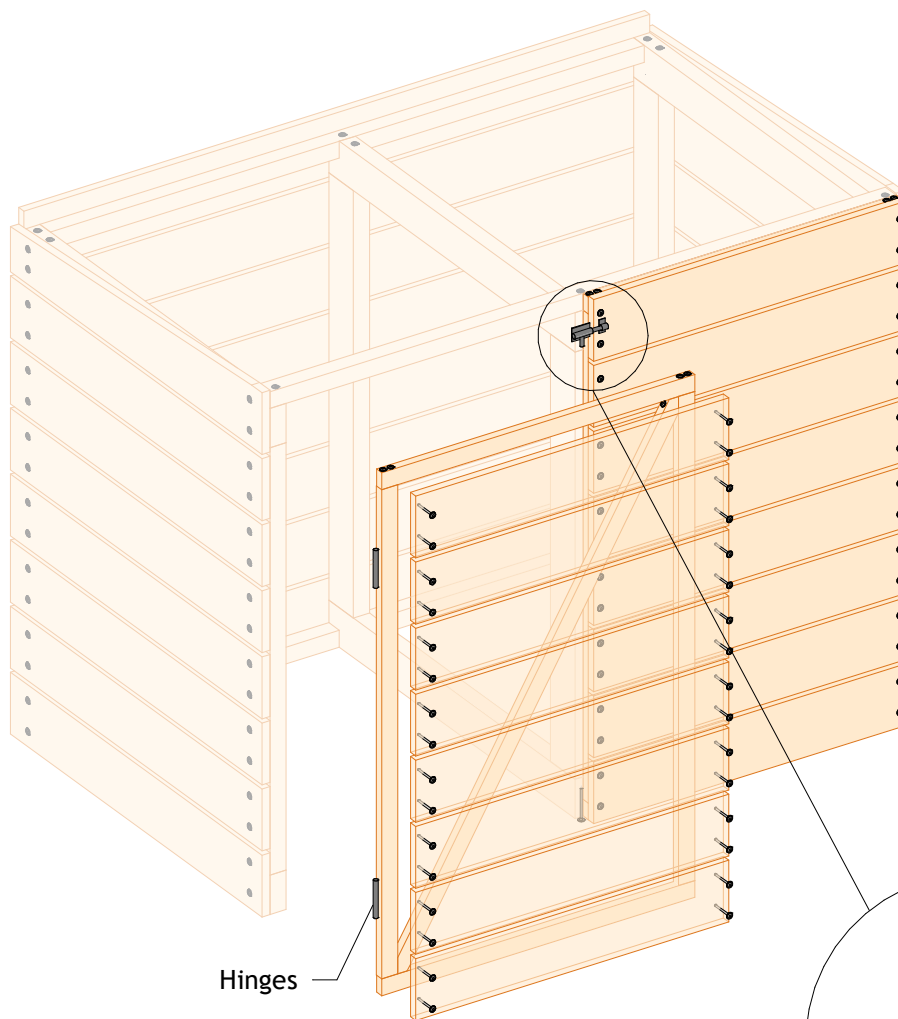
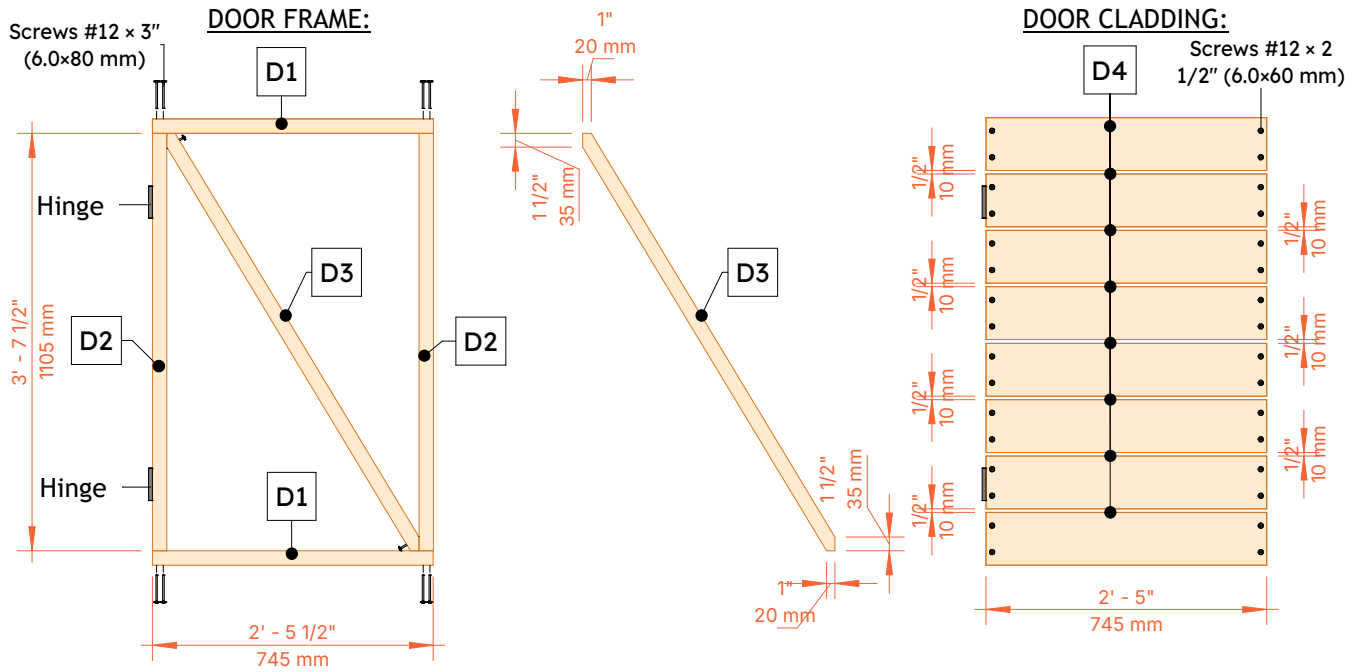
1. Install door cladding boards **D4** horizontally.
2. Maintain the same spacing as wall cladding:
 - **1/2" (≈10–15 mm)** gaps
3. Fasten each board with **two screws per end**.
4. Repeat all steps to create **two identical doors**.

Step 4 – Door Installation & Latch

1. Mount both doors to the main frame using the installed hinges.
2. Adjust alignment so doors open and close freely.
3. Install a **door latch** between the doors (type and model of your choice).
4. Confirm proper operation before proceeding

Refer to **Drawing No. 03** for doors assembly and installation.

CREATE 2 IDENTICAL DOORS





4. Lid Assembly & Installation

This step creates the hinged top lids.

You will build **two identical lids**.

Cut and prepare parts: L1, L2, L3, L4, L5

Refer to **Drawing No. 0** for quantities and lengths & **Drawing No. 04** for layout and dimensions.

Step 1 – Lid Frame Assembly

1. Assemble each lid frame using **L1** and **L2**.
2. Fasten every joint with **2 screws per connection**.
3. Attach **two hinges** to each lid frame as shown.

Step 2 – Lid Cladding

1. Install **L3** boards on top of the lid frame.
2. Maintain consistent gaps of:
 - **1/2" (≈15 mm)**
3. Secure boards with exterior-rated screws.

Step 3 – Edge Finishing

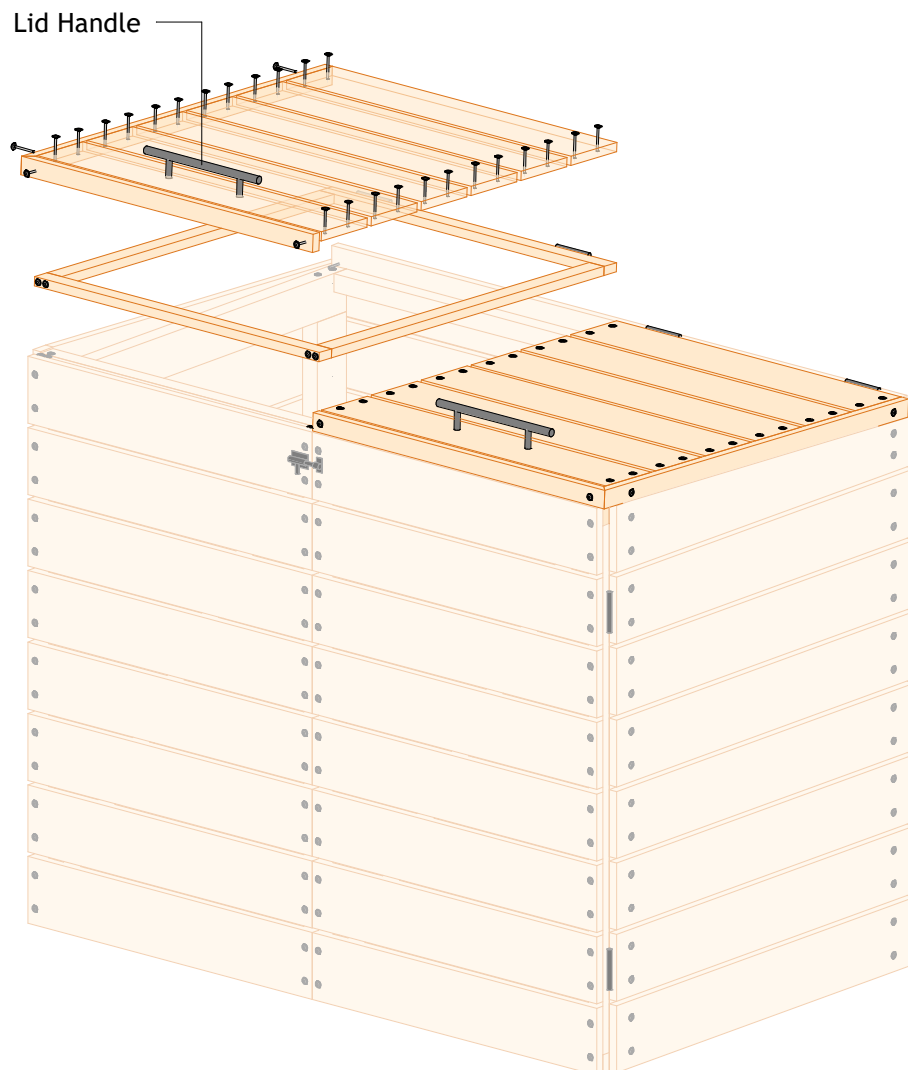
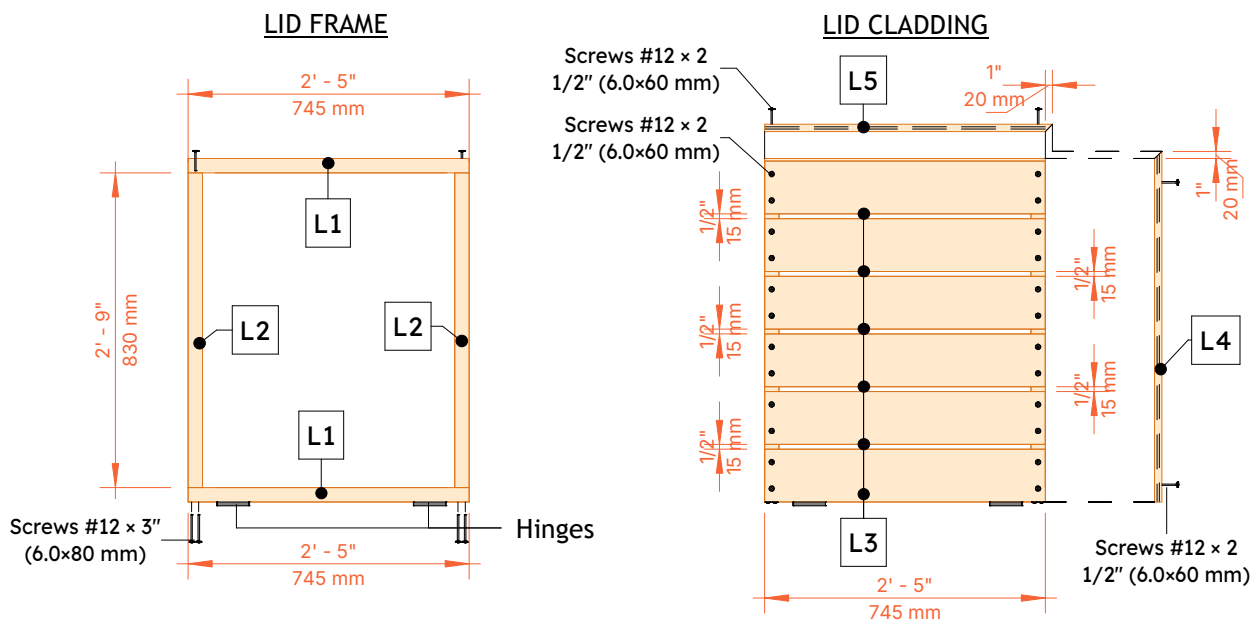
1. Cut and install edge boards **L4** and **L5**.
2. Trim these elements precisely according to **Drawing No. 04**.
3. Fasten securely to create a clean lid edge.

Step 4 – Handle Installation

1. Install a **handle** in a convenient location for opening the lid.
2. Handle placement is shown in the **3D layout in Drawing No. 04**.
3. Handle type can be selected according to preference.

Refer to **Drawing No. 04** for lids assembly & Installation.

CREATE 2 IDENTICAL LIDS



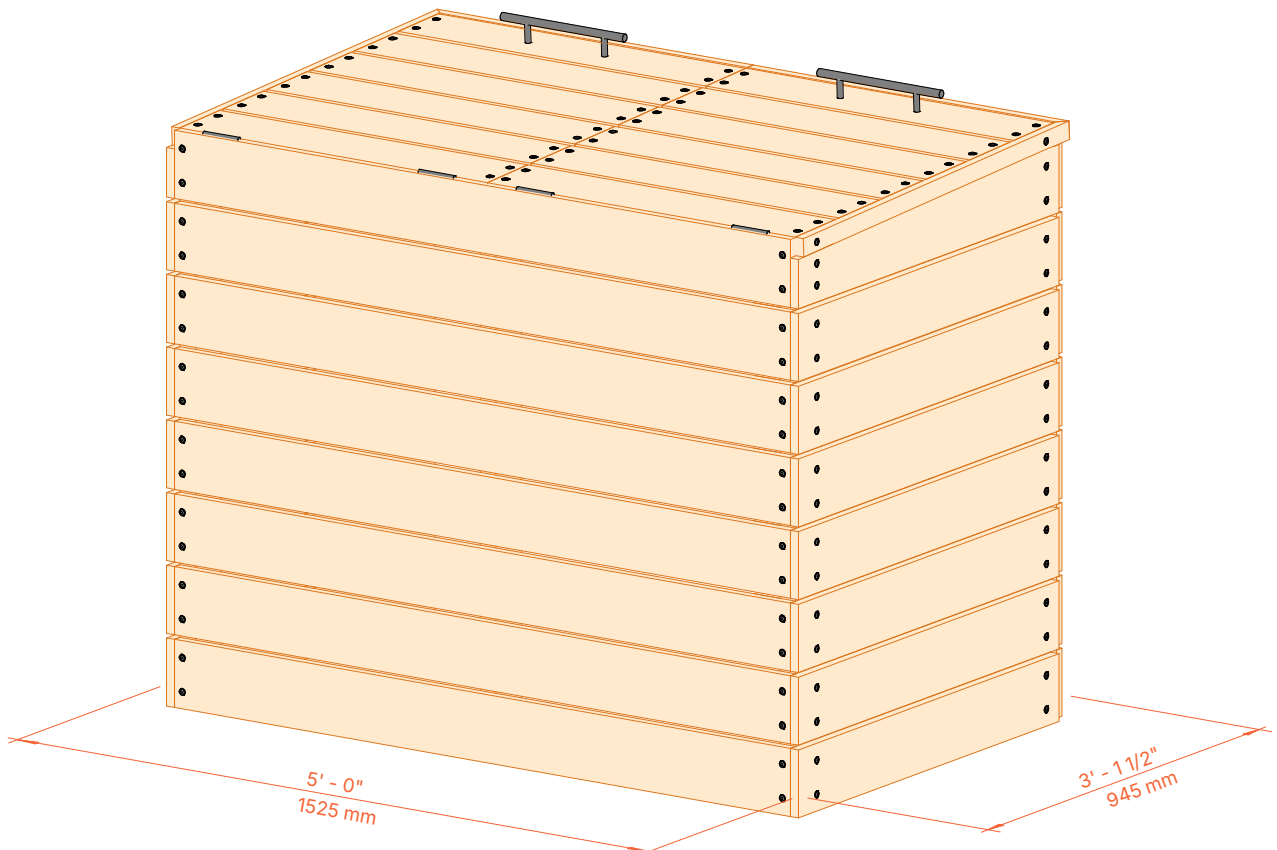
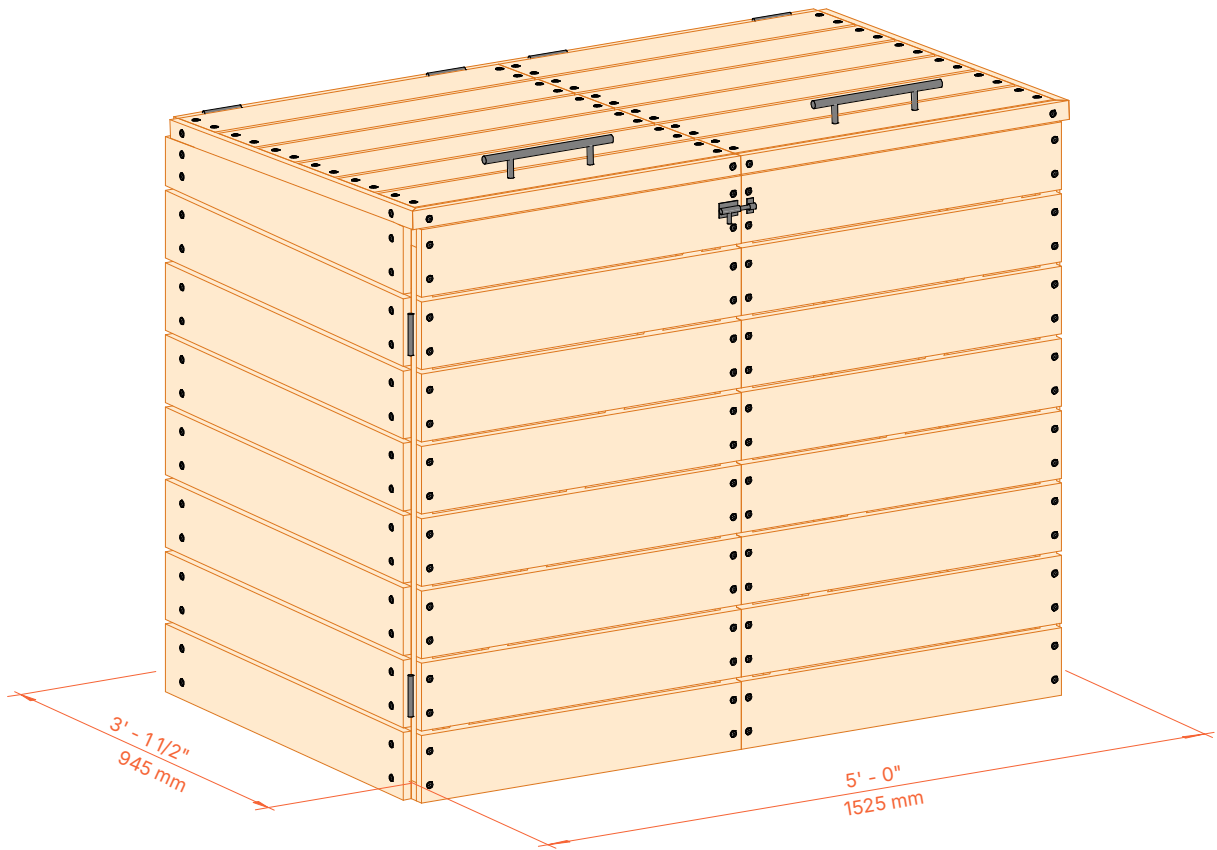


5. Final Assembly

- Install both lids onto the enclosure frame.
- Check all moving parts:
 - Doors open and close smoothly
 - Lids operate freely
- Tighten all fasteners as needed.
- Final dimensions and appearance should match **Drawing No. 05**.

Final Notes

- Always use **exterior-rated lumber and fasteners**.
- Pre-drill near board edges to prevent splitting.
- Maintain consistent gaps for airflow and wood movement.
- Apply an exterior wood finish or preservative for long-term durability.





Thank You!

Thank you for building with CraftFrame.

By choosing this guide, you didn't just follow a set of instructions — you took the time to build something properly, with care, accuracy, and intention. That mindset is what turns a simple DIY project into a durable, well-built structure you can rely on for years.

We believe good woodworking plans should feel **clear, calm, and logical**.

No guessing. No unnecessary complexity. Just practical steps supported by solid construction logic.

If you enjoyed this build, we invite you to explore more CraftFrame guides and future projects. Each one is created with the same goal: helping you build confidently and correctly, using designs that respect both materials and time.

We'd also love to see what you built.

Disclaimer: This document is for educational purposes only. CraftFrame assumes no liability for injuries, damages, or construction errors. Always follow safety guidelines and consult a professional when in doubt.

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