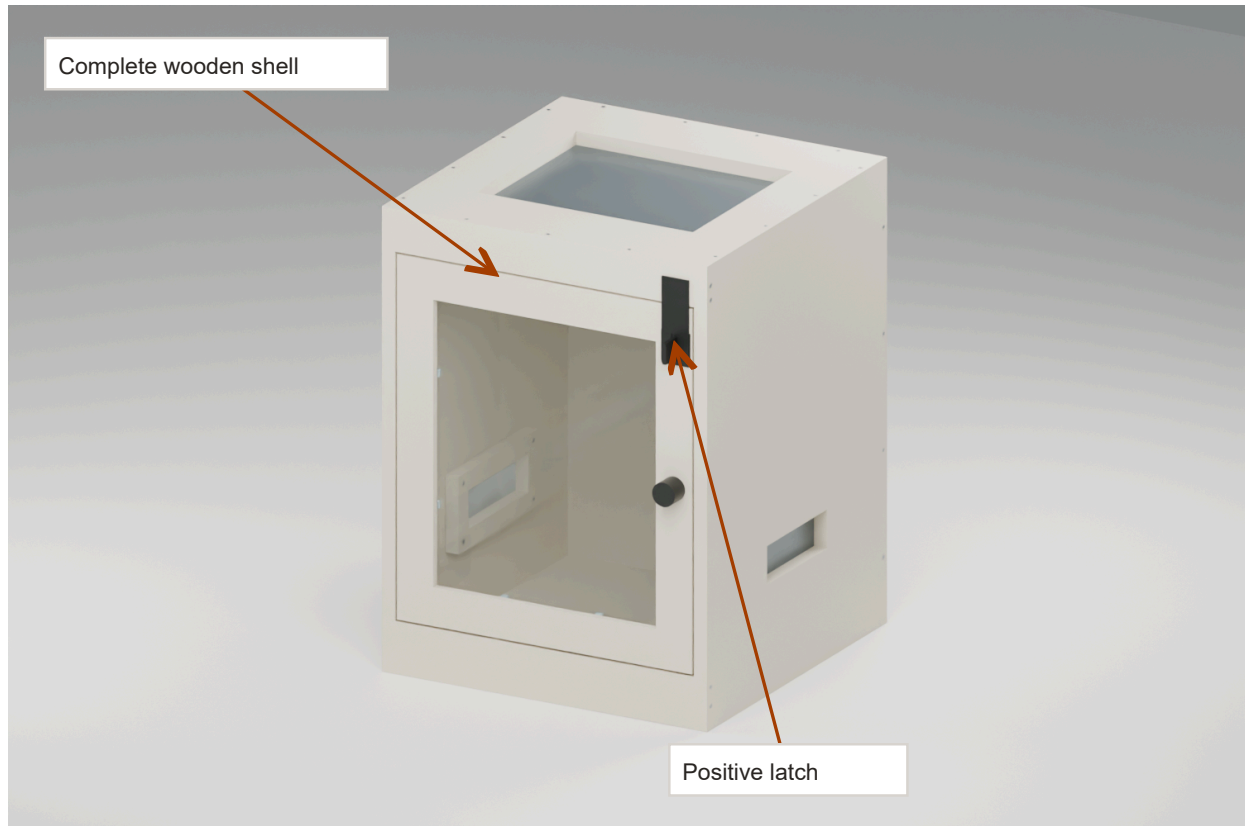


START HERE

Build the wooden enclosure

18 in W × 18 in D × 24 in H · N07 V5 illustrated plan



A picture-led guide to checking the parts, building the box and fitting the door and screens. Each numbered operation has a picture, a short action list and a check before moving on.

Research-based plan. Complete the checks before building or use.

The physical wood and hardware trials, restraint attachment and intended-use checks still need completion. This enclosure has not been built or physically tested.

Construction: v5-candidate-01 · Guide: clear-guide-02 · 3 October 2026

Published 3 October 2026. Read the receiving checks before cutting and the installation holds before use.

START HERE

Before you build

This is an **intermediate woodworking project**. You need controlled saw cuts, guided routing, stopped drilling and careful hinge fitting. Clearer instructions make the work easier to follow; they do not remove the need for those skills.

What the size describes	Reference size
Nominal size and uncoated wooden body	18 × 18 × 24 in (457.2 × 457.2 × 609.6 mm)
Body including planned finish only	18.006 × 18.006 × 24.006 in (457.35 × 457.35 × 609.75 mm)
Clear shell, before local fittings	16.56 × 17.28 × 22.56 in (420.62 × 438.91 × 573.02 mm)
Main unobstructed floor	16.56 × 16.56 in (420.62 × 420.62 mm)
Raw front opening	16.56 × 19.06 in (420.62 × 484.12 mm)
Planning space for installation/service	25 × 41 × 27 in (635 × 1041.4 × 685.8 mm)

Width is left-to-right while facing the open front. The clear shell does not subtract local hinges, the lower front strip or screen frames. Knob/hasp and rear restraint project beyond the body. The planning space includes access, not a verified heat clearance.

How the box goes together

The plywood walls sit in shallow edge recesses in the bottom and roof. Glue and screws join them, and the full back helps keep the box square. The drawings show each recess and screw position.

A **rabbet** is a shallow recess cut along a panel edge. **Crosscut** means shorten a piece; **rip** means make it narrower.

Scope: Indoor wooden shell only. No standing water, saturated substrate, outdoor use, stacking, casters or equipment supported by the mesh. No species suitability or load rating is established.

START HERE

Find the next operation

Follow the numbered operations in order. Open the referenced drawing only when that operation calls for it. The workshop pages hold exact settings and buying details so they do not crowd each practical step.

Stage	Operations / pages
Get ready	1. Check the plywood before cutting (p. 18) 2. Check the actual hardware (p. 19) 3. Try the joints and fittings on offcuts (p. 20)
Prepare the parts	4. Cut the plywood into rough blanks (p. 21) 5. Finish-size and label every piece (p. 22) 6. Cut the shallow case joints (p. 23) 7. Cut the side and roof openings (p. 24) 8. Make the pieces that hold the screens (p. 25) 9. Drill the holes the screws pass through (p. 26) 10. Cut the door window and pane recess (p. 27) 11. Bore the two hinge cups (p. 28) 12. Cut the clear pane and three screens (p. 29)
Try the box together	13. Start with the bottom and sides (p. 30) 14. Add the back, front pieces and roof (p. 31) 15. Clamp lightly, then check the shape (p. 32) 16. Drill the matching screw pilots (p. 33)
Glue the box	17. Glue the lower box together (p. 34) 18. Glue on the upper strip and roof (p. 35)
Try the fittings	19. Try the hinges and uncoated door (p. 36) 20. Try the latch and door knob (p. 37) 21. Mark the clear-pane clips (p. 38) 22. Check movement, then strip for finishing (p. 39)
Finish and cure	23. Prepare the wood for coating (p. 40) 24. Coat the box and loose wood parts (p. 41) 25. Let the coating fully cure (p. 42)
Final assembly	26. Refit and adjust the door (p. 43) 27. Fit the two side screens (p. 44) 28. Fit the roof screen and check removal (p. 45) 29. Install the clear pane (p. 46) 30. Refit the knob and latch; weigh the door (p. 47)
Installation	31. Place it on a full, stable support (p. 48)
Before use	32. Commission it for the intended use (p. 49)
Maintenance	33. Keep it clean and serviceable (p. 50)

Shopping (p. 5) · **Cut list** (p. 10) · **Cutting layouts** (p. 13) · **Workshop drawings** (p. 51) · **Records** (p. 86)

GET READY

Set up the workspace

Use a flat, stable bench with room for supported sheets and a clamped case. Keep a separate clean space for the door, pane, hardware and curing parts. Arrange a helper for loose-wall assembly, turning the clamped box and handling the door.

Have ready	What it is for
Tape/rule, square, straightedge and caliper	Check stock, set finished sizes and record thickness. A caliper measures thickness accurately.
Supported saw, suitable blades and guides	Break sheets into blanks and finish straight, square edges. Use carriers/push devices for narrow stock.
Guided router, straight cutter, template and chisel	Make shallow case joints, vent openings and the pane recess. Keep the work and waste supported.
Stopped drill/drill press or verified hinge jig	Control hole position and depth. A depth stop prevents drilling through a thin face.
35 mm hinge bit; 11/64 in clearance bit; 3/16 in knob bit	These are specific operations, not a universal drill set. Use metric hinge tooling directly.
Pilot bits, starting trials at 7/64 in for #8 and 3/32 in for #6	Confirm with the real screw root, material and depth before drilling finished parts.
Four 24 in clamps, two 30 in clamps; at least 4 in throat	Rehearse actual bar, pad and driver clearances. Use protective wood strips and stable supports.
Hand driver, brush, sanding supplies and dust extraction	Controlled screw seating, glue cleanup and finish preparation.
Acrylic-compatible cutting tools; mesh snips and handling gloves	Use OPTIX guidance and protect the cut wire edges. No gloves near rotating cutters.
PPE, ventilation and lighting directed by tools/products	Read their manuals and labels. Protect eyes, hearing and breathing as the operation requires.

Time: Active cutting and assembly time depends on skill and equipment. Plan separate offcut trials, stock stabilization, two glue stages and coating cure. Do not schedule occupancy from an invented weekend estimate.

GET READY

Shopping list

Exact models are kept with the guide. A replacement product can change holes, clearances, exposure limits or capacity. Verify delivered parts before cutting.

Plywood sheets PLY

Birch sanded plywood project panel · **128220**

3 plywood sheets.

Nominal 2 × 4 ft project panels. Each must provide the minimum 23½ × 47½ in before trimming. The layouts produce all fourteen wooden pieces.

[Selected product and buying link](#)

Clear acrylic sheet ACRYLIC

OPTIX clear acrylic sheet · **21232102**

1 acrylic sheet.

Selected 0.220 in × 24 × 48 in sheet. Cut one clear pane and reserve sound offcuts for fitting trials.

[Selected product and buying link](#)

Wood glue GLUE

Titebond III Ultimate Wood Adhesive, 16 fl oz · **1414**

1 bottle, 16 fl oz.

An allowance for the joints and trials, not a measured consumption.

[Selected product and buying link](#)

Clear wood coating FINISH

Varathane Triple Thick satin brush-on water-based polyurethane · **284473-7482**

1 two-can pack: 2 quarts total.

Follow the actual product coverage and film instructions. Include edges, trials and application losses.

[Selected product and buying link](#)

No complete, current location-qualified price quote is supplied. Check delivery size, taxes, stock condition and pack changes. Unused pack contents are not installed hardware.

GET READY

Shopping list · continued

Exact models are kept with the guide. A replacement product can change holes, clearances, exposure limits or capacity. Verify delivered parts before cutting.

Box screws SHELL

Hillman #8 × 1¼" stainless flat-head wood screws · **35312**

2 boxes of 40 screws.

Use 46 in the box. The remaining 34 are unused pack contents.

[Selected product and buying link](#)

Screen-frame screws RETENTION

Power Pro #8 × 1¼" stainless flat-head wood screws · **42487**

1 box of 45 screws.

Use 18 for the screen retainers: eight on the sides and ten at the roof. The remaining 27 are unused.

[Selected product and buying link](#)

Swivel hasp V5H03

National Hardware black swivel-staple safety hasp, 3-1/4 inch · **N305-979**

1 hasp.

One complete base, swinging leaf and swivel-staple assembly. Check all seven fixing positions on the delivered product.

[Selected product and buying link](#)

Hasp screws HASP-SCREWS

Everbilt #10 × 5/8-inch zinc-plated Phillips flat-head wood screws, 12-pack · **825391**

1 pack of 12 screws.

Use seven. Five remain unused.

[Selected product and buying link](#)

No complete, current location-qualified price quote is supplied. Check delivery size, taxes, stock condition and pack changes. Unused pack contents are not installed hardware.

GET READY

Shopping list · continued

Exact models are kept with the guide. A replacement product can change holes, clearances, exposure limits or capacity. Verify delivered parts before cutting.

Restraint kit V5H06

Hillman Simple Mount furniture anti-tip kit · **9976524**

1 restraint kit.

HOLD: the attachment to this exact plywood still needs manufacturer confirmation. Buying the kit does not resolve that connection.

[Selected product and buying link](#)

Stainless mesh MESH

McNICHOLS304 stainless woven20x20 mesh · **38201636C1**

1 sheet, 36 × 48 in.

304 stainless, 20 × 20 woven mesh. Cut two side screens and one roof screen. It must lie flat for retention.

[Selected product and buying link](#)

Door hinges V5H01

Blum inset CLIP top BLUMOTION hinge, nickel · **71B3750**

2 hinges, sold individually.

Both use the listed separate mounting plate. Confirm screw-on 71B3750, not a different fixing version.

[Selected product and buying link](#)

Hinge mounting plates V5H02

Blum zero-height screw-on wing plate · **173L6100**

2 plates, sold separately.

Buy these in addition to the two hinges. A similar plate can move the door or require other holes.

[Selected product and buying link](#)

No complete, current location-qualified price quote is supplied. Check delivery size, taxes, stock condition and pack changes. Unused pack contents are not installed hardware.

GET READY

Shopping list · continued

Exact models are kept with the guide. A replacement product can change holes, clearances, exposure limits or capacity. Verify delivered parts before cutting.

Hinge screws HINGE-SCREWS

Blum deep-thread wood fixing screw · **606N-100**

1 box of 100 screws.

Use eight, reserve two as requested spares and keep the other 90 as surplus. Loose supplier quantities may reduce waste only for the same 606N screw.

[Selected product and buying link](#)

Clear-pane clips V5H04

Rockler clear polymer glazing clips with supplied screws · **55346**

1 pack of 8 clips with screws.

Use all eight. No spare clip is included. Verify the supplied screw length during the trial.

[Selected product and buying link](#)

Door knob V5H05

Liberty Classic Round matte-black knob · **PN2001-FB-C**

1 knob with its supplied screw.

Check the 8-32 × 1 in screw against the actual knob thread depth and this door.

[Selected product and buying link](#)

Consumables ABRASIVES

Abrasives, glue brush, clean cloths, brush/foam applicator and masking · **shop consumables**

Shop supplies as needed.

Abrasives, applicators, cleanup cloths and masking depend on the stock and work. Price them separately.

No complete, current location-qualified price quote is supplied. Check delivery size, taxes, stock condition and pack changes. Unused pack contents are not installed hardware.

GET READY

Shopping list · continued

Exact models are kept with the guide. A replacement product can change holes, clearances, exposure limits or capacity. Verify delivered parts before cutting.

Trial offcuts COUPONS

Labeled plywood/finish/hardware trial coupons · **offcuts from PLY sheets**

Reserve sound layout offcuts.

Keep plywood and acrylic pieces for the joint, hardware and coating trials. No extra sheet is assumed.

Optional equipment EQUIPMENT

Separately selected lighting/heating and cable protection · **unselected**

Not included in this shell plan.

Select lighting, heating, cable protection and their supports separately for the intended use.

No complete, current location-qualified price quote is supplied. Check delivery size, taxes, stock condition and pack changes. Unused pack contents are not installed hardware.

PREPARE THE PARTS

Cut list

Quantity: one of each ID. Sizes below follow each part's first and second drawing directions, u and v. Use the exact values for fabrication. A rough blank is larger; the saw cut is allowed between blanks, not subtracted from the finished part.

Part	Thickness	Finished u × v	Rough u × v	Details
Bottom P01 PLY	0.72 in (18.29 mm)	18 in (457.2 mm) × 18 in (457.2 mm)	18 1/8 in (460.38 mm) × 18 1/8 in (460.38 mm)	Part drawing (p. 59)
Roof P02 PLY	0.72 in (18.29 mm)	18 in (457.2 mm) × 18 in (457.2 mm)	18 1/8 in (460.38 mm) × 18 1/8 in (460.38 mm)	Part drawing (p. 60)
Left wall P03L PLY	0.72 in (18.29 mm)	18 in (457.2 mm) × 23.06 in (585.72 mm)	18 1/8 in (460.38 mm) × 23.185 in (588.9 mm)	Part drawing (p. 61)
Right wall P03R PLY	0.72 in (18.29 mm)	18 in (457.2 mm) × 23.06 in (585.72 mm)	18 1/8 in (460.38 mm) × 23.185 in (588.9 mm)	Part drawing (p. 62)
Back P04 PLY	0.72 in (18.29 mm)	17.06 in (433.32 mm) × 23.06 in (585.72 mm)	17.185 in (436.5 mm) × 23.185 in (588.9 mm)	Part drawing (p. 63)
Lower front strip P05 PLY	0.72 in (18.29 mm)	16.56 in (420.62 mm) × 2 in (50.8 mm)	16.685 in (423.8 mm) × 2 1/8 in (53.97 mm)	Part drawing (p. 64)

Plywood: matched veneer-core cabinet stock; 0.720 in reference thickness. Acrylic: selected 0.220 in OPTIX. Mesh: selected 304 stainless, 20 × 20, 0.032 in overall. Do not interchange these materials.

General panel length/width tolerance: $\pm 1/64$ in (± 0.397 mm). Door: ± 0.010 in (± 0.254 mm). Matched walls: within 0.010 in. Joint depth: ± 0.005 in (± 0.127 mm). These are this plan's shop targets, not universal woodworking standards.

PREPARE THE PARTS

Cut list · continued

Quantity: one of each ID. Sizes below follow each part's first and second drawing directions, u and v. Use the exact values for fabrication. A rough blank is larger; the saw cut is allowed between blanks, not subtracted from the finished part.

Part	Thickness	Finished u × v	Rough u × v	Details
Upper front strip P06 PLY	0.72 in (18.29 mm)	16.56 in (420.62 mm) × 1 1/2 in (38.1 mm)	16.685 in (423.8 mm) × 1 5/8 in (41.27 mm)	Part drawing (p. 65)
Door D01 PLY	0.72 in (18.29 mm)	16.32378 in (414.62 mm) × 18.82378 in (478.12 mm)	16.44878 in (417.8 mm) × 18.94878 in (481.3 mm)	Part drawing (p. 66)
Left screen frame V01L PLY	0.72 in (18.29 mm)	8 in (203.2 mm) × 4 in (101.6 mm)	8 1/8 in (206.38 mm) × 4 1/8 in (104.77 mm)	Part drawing (p. 67)
Right screen frame V01R PLY	0.72 in (18.29 mm)	8 in (203.2 mm) × 4 in (101.6 mm)	8 1/8 in (206.38 mm) × 4 1/8 in (104.77 mm)	Part drawing (p. 68)
Front roof strip V02F PLY	0.72 in (18.29 mm)	14 in (355.6 mm) × 1 in (25.4 mm)	14 1/8 in (358.77 mm) × 1 1/8 in (28.57 mm)	Part drawing (p. 69)
Back roof strip V02B PLY	0.72 in (18.29 mm)	14 in (355.6 mm) × 1 in (25.4 mm)	14 1/8 in (358.77 mm) × 1 1/8 in (28.57 mm)	Part drawing (p. 70)

Plywood: matched veneer-core cabinet stock; 0.720 in reference thickness. Acrylic: selected 0.220 in OPTIX. Mesh: selected 304 stainless, 20 × 20, 0.032 in overall. Do not interchange these materials.

General panel length/width tolerance: ±1/64 in (±0.397 mm). Door: ±0.010 in (±0.254 mm). Matched walls: within 0.010 in. Joint depth: ±0.005 in (±0.127 mm). These are this plan's shop targets, not universal woodworking standards.

PREPARE THE PARTS

Cut list · continued

Quantity: one of each ID. Sizes below follow each part's first and second drawing directions, u and v. Use the exact values for fabrication. A rough blank is larger; the saw cut is allowed between blanks, not subtracted from the finished part.

Part	Thickness	Finished u × v	Rough u × v	Details
Left roof strip V02L PLY	0.72 in (18.29 mm)	1 in (25.4 mm) × 10 in (254 mm)	1 1/8 in (28.57 mm) × 10 1/8 in (257.18 mm)	Part drawing (p. 71)
Right roof strip V02R PLY	0.72 in (18.29 mm)	1 in (25.4 mm) × 10 in (254 mm)	1 1/8 in (28.57 mm) × 10 1/8 in (257.18 mm)	Part drawing (p. 72)
Clear pane G01 ACRYLIC	0.22 in (5.59 mm)	12.94878 in (328.9 mm) × 15.44878 in (392.4 mm)	12.94878 in (328.9 mm) × 15.44878 in (392.4 mm)	Part drawing (p. 73)
Left screen M01L MESH	0.032 in (0.81 mm)	7 in (177.8 mm) × 3 in (76.2 mm)	7 in (177.8 mm) × 3 in (76.2 mm)	Part drawing (p. 74)
Right screen M01R MESH	0.032 in (0.81 mm)	7 in (177.8 mm) × 3 in (76.2 mm)	7 in (177.8 mm) × 3 in (76.2 mm)	Part drawing (p. 75)
Roof screen M02 MESH	0.032 in (0.81 mm)	13 in (330.2 mm) × 11 in (279.4 mm)	13 in (330.2 mm) × 11 in (279.4 mm)	Part drawing (p. 76)

Plywood: matched veneer-core cabinet stock; 0.720 in reference thickness. Acrylic: selected 0.220 in OPTIX. Mesh: selected 304 stainless, 20 × 20, 0.032 in overall. Do not interchange these materials.

General panel length/width tolerance: $\pm 1/64$ in (± 0.397 mm). Door: ± 0.010 in (± 0.254 mm). Matched walls: within 0.010 in. Joint depth: ± 0.005 in (± 0.127 mm). These are this plan's shop targets, not universal woodworking standards.

PREPARE THE PARTS

Cutting layout · PLY-1

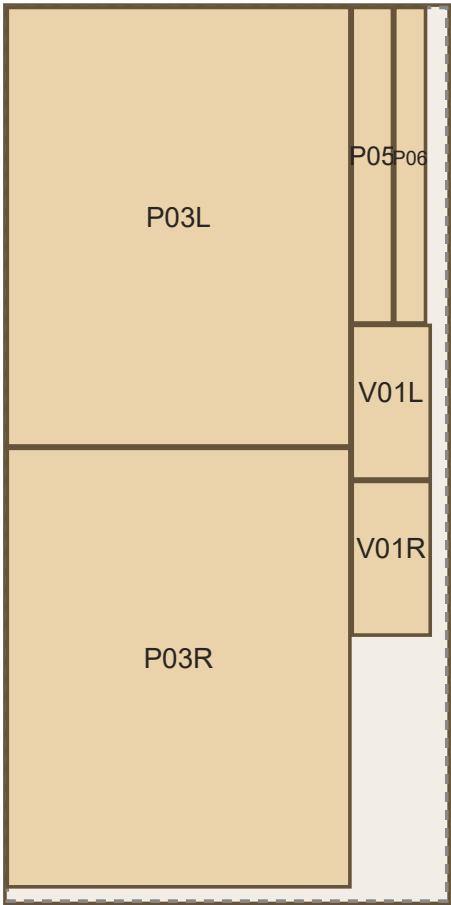
Keep the grain arrow and the labeled offcuts. The rectangles are rough blanks. Measure your actual sheet and saw kerf first; defects can invalidate this arrangement.

THE CREATURE CORNER

v5-candidate-01

Purchasing proof | PLY-1

PLY-1 | raw minimum 23.5 x 47.5in | trim each edge 0.125in | kerf 0.125in



Rough blanks, not finished cuts

- P03L 18.125 x 23.185in
stock origin 0.125, 0.125; rotated False
- P03R 18.125 x 23.185in
stock origin 0.125, 23.435; rotated False
- P05 2.125 x 16.685in
stock origin 18.375, 0.125; rotated True
- P06 1.625 x 16.685in
stock origin 20.625, 0.125; rotated True
- V01L 4.125 x 8.125in
stock origin 18.375, 16.935; rotated True
- V01R 4.125 x 8.125in
stock origin 18.375, 25.185; rotated True

- 1. Inspect defects and actual size before cutting.
 - 2. Square the long reference edge and adjacent end.
 - 3. Reserve the right-hand strip before crosscutting.
 - 4. Crosscut main blanks in the shown order.
 - 5. Process offcuts with a carrier/jig and push blocks.
 - 6. Bring each blank to final dimensions; label it.
- Arrows/grain run vertically on this stock view.
This is a feasible layout, not a proven optimum.

Dimensions govern. Not a full-size template. Do not scale. Unbuilt plan. Complete installation checks.
nb20260929-n07 | stock-PLY-1 | source 5401ace7ba2cb88f

For plywood, square the long edge and adjacent end, separate the large-part block from the narrow side strip, then cut the large blanks and supported small pieces. Keep the full layout nearby; do not discard a strip before checking its parts.

PREPARE THE PARTS

Cutting layout · PLY-2

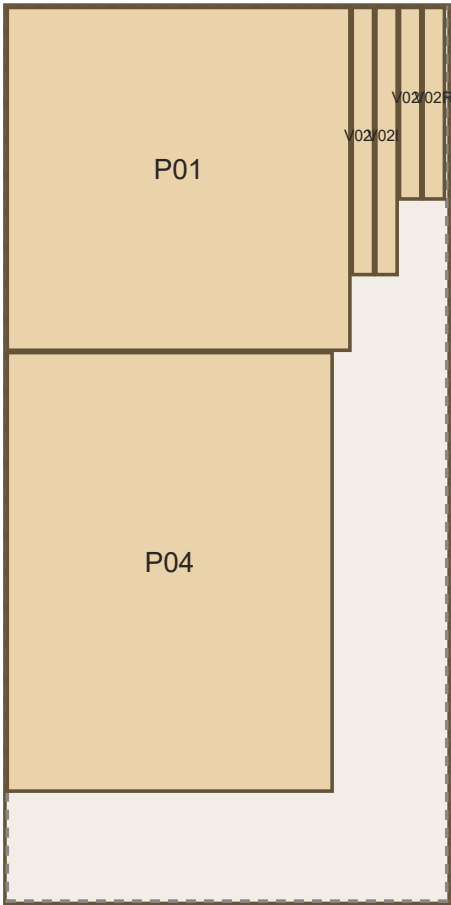
Keep the grain arrow and the labeled offcuts. The rectangles are rough blanks. Measure your actual sheet and saw kerf first; defects can invalidate this arrangement.

THE CREATURE CORNER

v5-candidate-01

Purchasing proof | PLY-2

PLY-2 | raw minimum 23.5 x 47.5in | trim each edge 0.125in | kerf 0.125in



Rough blanks, not finished cuts

- P01 18.125 x 18.125in
stock origin 0.125, 0.125; rotated False
- P04 17.185 x 23.185in
stock origin 0.125, 18.375; rotated False
- V02F 1.125 x 14.125in
stock origin 18.375, 0.125; rotated True
- V02B 1.125 x 14.125in
stock origin 19.625, 0.125; rotated True
- V02L 1.125 x 10.125in
stock origin 20.875, 0.125; rotated False
- V02R 1.125 x 10.125in
stock origin 22.125, 0.125; rotated False

1. Inspect defects and actual size before cutting.
 2. Square the long reference edge and adjacent end.
 3. Reserve the right-hand strip before crosscutting.
 4. Crosscut main blanks in the shown order.
 5. Process offcuts with a carrier/jig and push blocks.
 6. Bring each blank to final dimensions; label it.
- Arrows/grain run vertically on this stock view.
This is a feasible layout, not a proven optimum.

Dimensions govern. Not a full-size template. Do not scale. Unbuilt plan. Complete installation checks.
nb20260929-n07 | stock-PLY-2 | source 5401ace7ba2cb88f

For plywood, square the long edge and adjacent end, separate the large-part block from the narrow side strip, then cut the large blanks and supported small pieces. Keep the full layout nearby; do not discard a strip before checking its parts.

PREPARE THE PARTS

Cutting layout · PLY-3

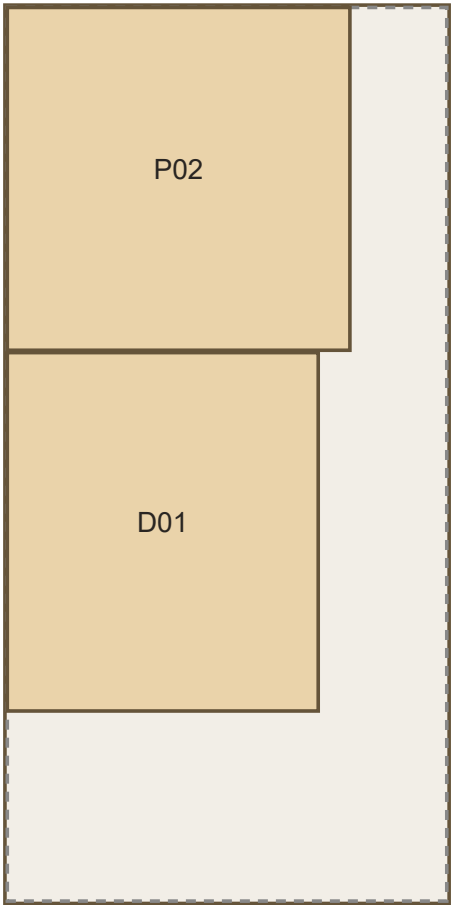
Keep the grain arrow and the labeled offcuts. The rectangles are rough blanks. Measure your actual sheet and saw kerf first; defects can invalidate this arrangement.

THE CREATURE CORNER

v5-candidate-01

Purchasing proof | PLY-3

PLY-3 | raw minimum 23.5 x 47.5in | trim each edge 0.125in | kerf 0.125in



Rough blanks, not finished cuts

P02 18.125 x 18.125in
stock origin 0.125, 0.125; rotated False
D01 16.4488 x 18.9488in
stock origin 0.125, 18.375; rotated False

- 1. Inspect defects and actual size before cutting.
 - 2. Square the long reference edge and adjacent end.
 - 3. Reserve the right-hand strip before crosscutting.
 - 4. Crosscut main blanks in the shown order.
 - 5. Process offcuts with a carrier/jig and push blocks.
 - 6. Bring each blank to final dimensions; label it.
- Arrows/grain run vertically on this stock view.
This is a feasible layout, not a proven optimum.

Dimensions govern. Not a full-size template. Do not scale. Unbuilt plan. Complete installation checks.
nb20260929-n07 | stock-PLY-3 | source 5401ace7ba2cb88f

For plywood, square the long edge and adjacent end, separate the large-part block from the narrow side strip, then cut the large blanks and supported small pieces. Keep the full layout nearby; do not discard a strip before checking its parts.

PREPARE THE PARTS

Cutting layout · ACRYLIC-1

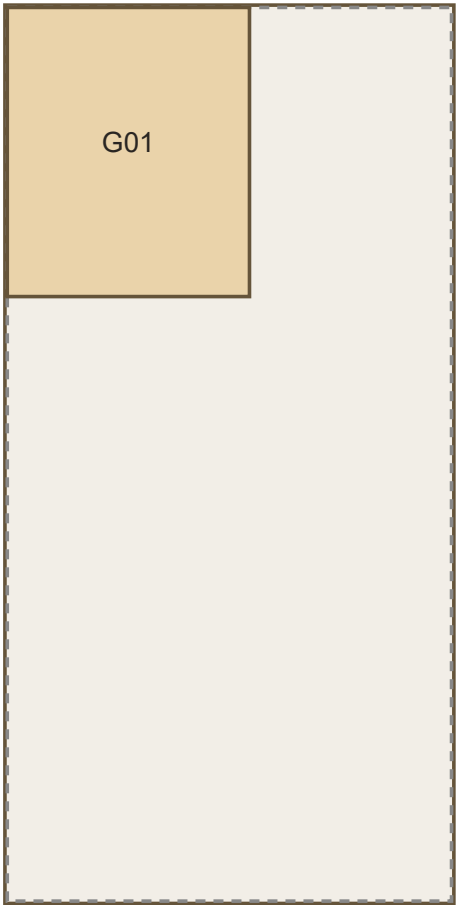
Keep the grain arrow and the labeled offcuts. The rectangles are rough blanks. Measure your actual sheet and saw kerf first; defects can invalidate this arrangement.

THE CREATURE CORNER

v5-candidate-01

Purchasing proof | ACRYLIC-1

ACRYLIC-1 | raw minimum 24 x 48in | trim each edge 0.125in | kerf 0.125in



Rough blanks, not finished cuts

G01 12.9488 x 15.4488in
stock origin 0.125, 0.125; rotated False

- Cut on supported stock with suitable tooling.
- Acrylic: leave masking on during cutting.
- Mesh: gloves for handling; capture every cut edge.
- No automatic claim that a coiled sheet lies flat.

Dimensions govern. Not a full-size template. Do not scale. Unbuilt plan. Complete installation checks.
nb20260929-n07 | stock-ACRYLIC-1 | source 5401ace7ba2cb88f

Support acrylic fully and retain its masking while cutting. For mesh, protect all wire ends during handling. These layouts establish a feasible purchase quantity; they do not claim an optimum.

PREPARE THE PARTS

Cutting layout · MESH-1

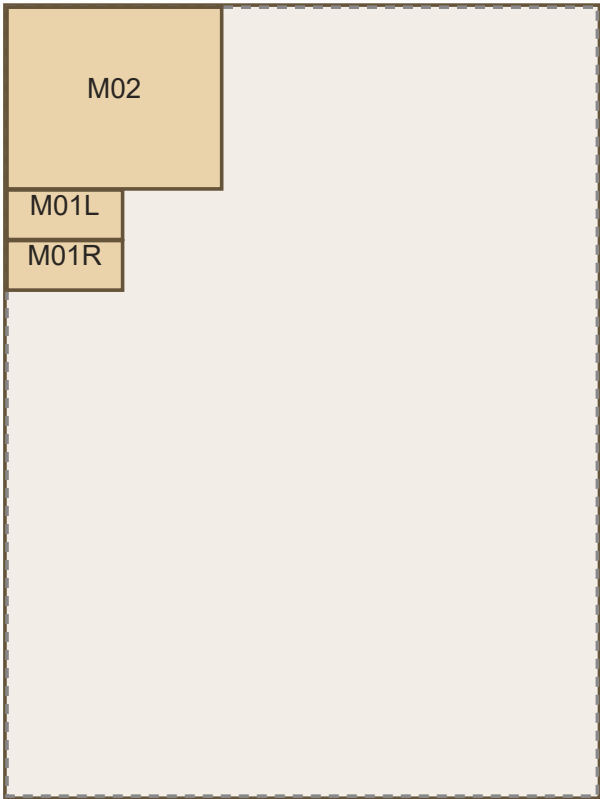
Keep the grain arrow and the labeled offcuts. The rectangles are rough blanks. Measure your actual sheet and saw kerf first; defects can invalidate this arrangement.

THE CREATURE CORNER

v5-candidate-01

Purchasing proof | MESH-1

MESH-1 | raw minimum 36 x 48in | trim each edge 0.125in | kerf 0.0625in



Rough blanks, not finished cuts

M02 13 x 11in
stock origin 0.125, 0.125; rotated False

M01L 7 x 3in
stock origin 0.125, 11.1875; rotated False

M01R 7 x 3in
stock origin 0.125, 14.25; rotated False

Cut on supported stock with suitable tooling.
Acrylic: leave masking on during cutting.
Mesh: gloves for handling; capture every cut edge.
No automatic claim that a coiled sheet lies flat.

Dimensions govern. Not a full-size template. Do not scale. Unbuilt plan. Complete installation checks.

nb20260929-n07 | stock-MESH-1 | source 5401ace7ba2cb88f

Support acrylic fully and retain its masking while cutting. For mesh, protect all wire ends during handling. These layouts establish a feasible purchase quantity; they do not claim an optimum.

GET READY · 1 OF 33

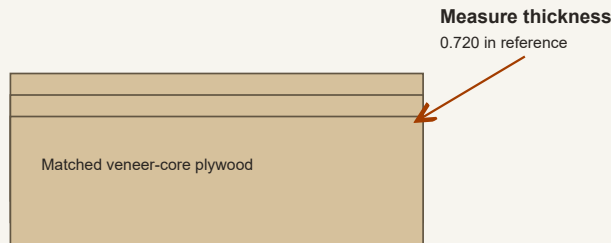
1. Check the plywood before cutting

Parts: All wooden pieces

Have ready: Caliper, straightedge, square, pencil and a flat place to store the sheets.

Before you start: These cuts use 0.720 in (18.288 mm) plywood. That is a design input, not a measurement of your wood. Stop if your batch differs.

Three plywood sheets: measure the actual batch



Minimum usable sheet: $23\frac{1}{2} \times 47\frac{1}{2}$ in

Then trim $\frac{1}{8}$ in from each edge.

Reject voids at joints, hinge cups and screw lands.

Construction illustration. Not to scale.

1. Lay the three sheets flat on full support. Choose the outward-facing surface of each and mark the direction of the visible grain.
2. Measure each sheet at several sound edges. It must provide at least $23\frac{1}{2} \times 47\frac{1}{2}$ in (596.9 × 1206.5 mm) before the edge trimming shown in the layouts.
3. Reject bowed sheets, separated layers or missing core wood where joints, hinges or screws will go. Use one matched batch of veneer-core cabinet plywood. Do not substitute MDF, particleboard or treated wood.
4. Write the measurements on the receiving sheet. If thickness, usable size or kerf differs, have the coordinated cut list, drawings and model regenerated before cutting. Do not plane away the face veneer.

Check before continuing: The batch measurements match the plan and the sound cutting areas are marked.

Watch out: Buying by the “ $\frac{3}{4}$ inch” label alone.

Allow time: Let the wood settle in the intended indoor workspace. Stable measurements and condition matter more than a fixed number of hours.

The use and installation limits on the Before you build page also apply. This is an indoor wooden shell, not a tank or a stacked enclosure.

Keep beside this step: [Receiving](#) (p. 86)

GET READY · 2 OF 33

2. Check the actual hardware

Parts: Delivered fittings and trial pieces

Have ready: The shopping list, delivered products, their instructions, caliper and labeled bags.

Before you start: Buy the exact hinge and separate mounting plate. A similar-looking fitting can need different holes.

Keep the buying groups together

2 hinges Blum 71B3750 Verify the delivered item.	2 separate plates Blum 173L6100 Verify the delivered item.	8 hinge screws Blum 606N Verify the delivered item.
1 swivel hasp National N305-979 Verify the delivered item.	8 pane clips + screws Rockler 55346 Verify the delivered item.	1 knob + screw Liberty PN2001-FB-C Verify the delivered item.

Also check all case/retainer screws and the restraint kit.

Construction illustration. Not to scale.

1. Match every model number to the shopping list. Keep the two Blum hinges, two mounting plates and eight hinge screws together.
2. Check the delivered latch hole pattern, eight glazing clips and their screws, knob screw and restraint kit. Check screw lengths and head shapes before any drilling.
3. Keep the supplier instructions with each group. The clips need a trial to establish their fixing holes; the knob screw must engage without bottoming out.
4. The restraint-to-plywood connection still needs manufacturer confirmation. Resolve that connection and the intended support location before treating the enclosure as ready to install.

Check before continuing: Every fitting is identified and incompatible or unconfirmed items are set aside.

Watch out: Assuming the plate comes with the hinge.

The latch is the positive closure. Soft-close hinges do not replace it.

Keep beside this step: [Shopping](#) (p. 5) · [Receiving](#) (p. 86)

GET READY · 3 OF 33

3. Try the joints and fittings on offcuts

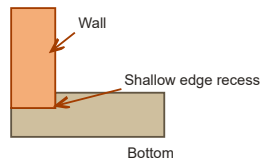
Parts: Delivered fittings and trial pieces

Have ready: Sound plywood offcuts, the real hinges/plates/clips, acrylic offcut, router, stopped drill and coating supplies.

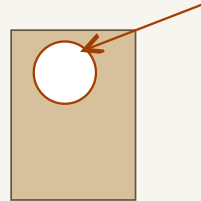
Before you start: Do not machine the finished door until these trials work. Use the same thickness and tools as the real parts.

Prove the setup on the same plywood

Close-up: the bottom joint



Hinge trial



Use the real hinge, plate and screws.

1. Bare-wood joint trial

2. Hardware and cured-coating trial

Keep the accepted settings and the trial pieces.

Construction illustration. Not to scale.

1. Make a shallow edge recess on an offcut. Fit another piece of the same plywood into it. It should seat without hammering or a loose gap.
2. Reproduce the hinge cup, mounting plate and their pilots using the hinge detail. Check that the screws seat without splitting, stripping or coming through the far face.
3. Make a small pane recess and try a real clip with acrylic. Prepare and fully cure a separate coated sample, then check that the pane lies flat and the clip holds it gently.
4. Record the accepted settings, photograph the trials and keep the samples. A failed trial means stop and correct the setup, not force the finished part to fit.

Check before continuing: Bare-wood joints and the complete cured hardware stack both fit.

Watch out: Skipping the coated trial because the bare wood fits.

Allow time: The finish sample needs full cure before its fit can be accepted. Use the coating schedule later in this guide.

A trial piece is also called a coupon. It checks fit and workmanship; it does not prove load capacity or animal suitability.

Keep beside this step: [Joints](#) (p. 54) · [Hinge Detail](#) (p. 55) · [Glazing Section](#) (p. 56)

PREPARE THE PARTS · 4 OF 33

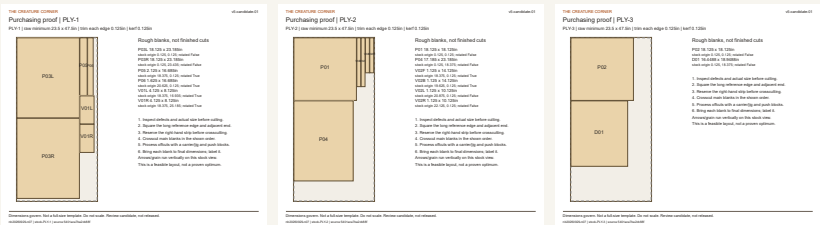
4. Cut the plywood into rough blanks

Parts: All wooden pieces

Have ready: Supported sheet saw or table saw, suitable blade, guides, square, push devices and offcut support.

Before you start: Follow your saw’s instructions. Secure the sheet and offcuts; do not cut narrow pieces freehand. Do not wear handling gloves near rotating machinery.

Follow the layouts before cutting the small parts



The full-size reader layouts are in the cutting section. No scaling from pictures.

Construction illustration. Not to scale.

1. Read all three plywood layouts before cutting. Measure the blade’s actual cut width on scrap. The layouts allow a 1⁄8 in (3.175 mm) saw cut and a 1⁄8 in trim at each sheet edge.
2. Square one long edge and the adjacent end. Separate the main block from the marked narrow side strip, then crosscut the large blanks in the shown order.
3. Cut the smaller pieces from the side strips with safe support or a carrier. Keep the grain direction shown. Reserve sound scraps for trials.
4. Leave each rough blank 1⁄8 in (3.175 mm) larger overall in each long direction than its finished size. Do not subtract the saw cut from a required part size.

Check before continuing: All fourteen plywood blanks are present, with their rough sizes and grain direction intact.

Watch out: Treating an offcut as waste before checking the small-part layout.

The layouts prove a workable fit, not the cheapest possible arrangement. Larger saw cuts, defects or undersize sheets require a revised layout.

Keep beside this step: [Layouts](#) (p. 13) · [Cutlist](#) (p. 10)

PREPARE THE PARTS · 5 OF 33

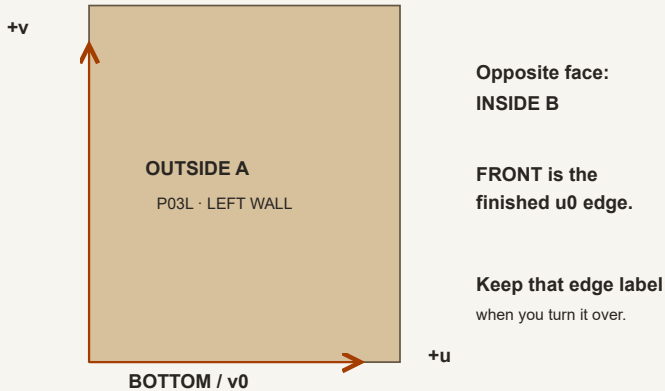
5. Finish-size and label every piece

Parts: All wooden pieces

Have ready: The finished cut list, square, fine-rule measuring tool, caliper, pencil and removable tape.

Before you start: A readable fraction marked “about” is an aid only. Use the exact setting value for the final cut.

Label faces and measuring edges before flipping a panel



Construction illustration. Not to scale.

1. Bring each blank to the finished dimensions in the cut list. Check opposite edges for parallel cuts and the corners with a square. Keep the door flat.
2. Make the left and right walls as a matched pair. Their corresponding dimensions must differ by no more than 0.010 in (0.254 mm).
3. Label every piece with its plain name and ID. Mark OUTSIDE A, INSIDE B and FRONT where applicable. Mark the two measuring edges shown on its drawing.
4. Keep the labels visible when flipping a panel. In a drawing, u means the first measuring direction and v means the second; neither always means enclosure width or height.

Check before continuing: Each piece has the correct size, thickness, grain direction and measuring-edge marks.

Watch out: Mirroring the left wall just because its outside face is turned over.

The shallow plywood joints need accurate routing. Use the joint drawings and the accepted trial pieces.

Keep beside this step: [Cutlist](#) (p. 10) · [Drawing Key](#) (p. 51)

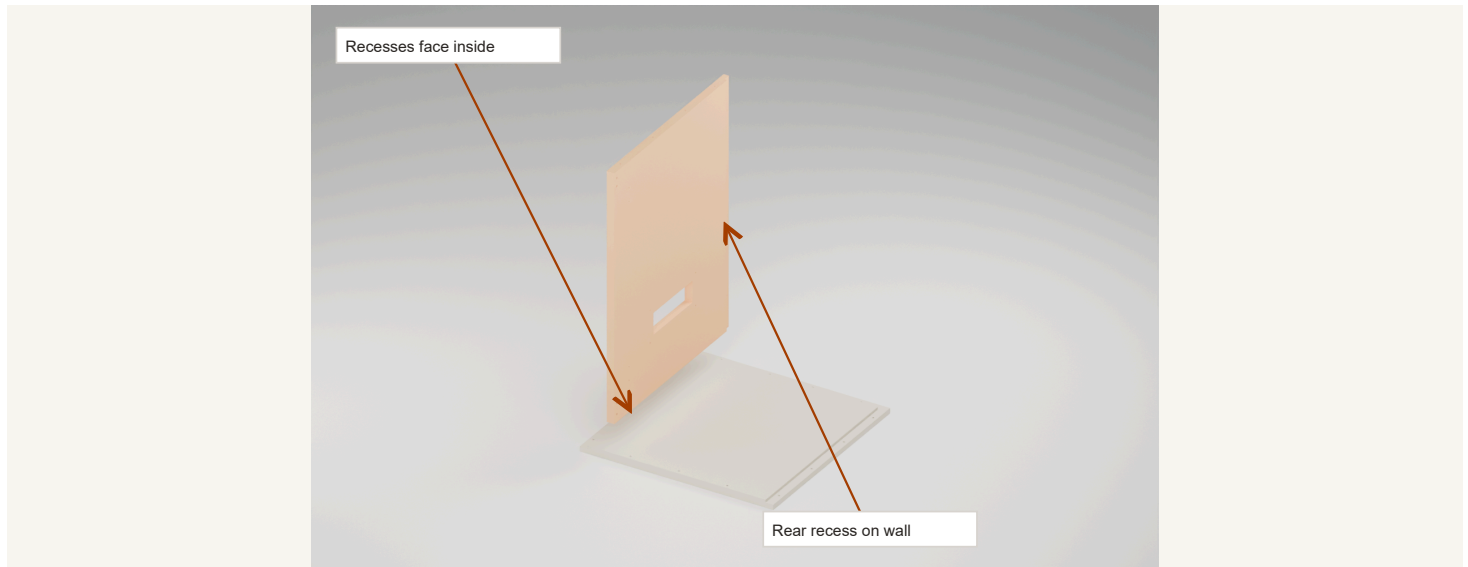
PREPARE THE PARTS · 6 OF 33

6. Cut the shallow case joints

Parts: Bottom P01 · Roof P02 · Left wall P03L · Right wall P03R

Have ready: Guided router, suitable straight cutter, depth gauge, clamps, support board and the accepted trial piece.

Before you start: Clamp the work to a full support board. Keep the glue-contact faces square and bare. Stop if routing exposes a void at a joint or screw location.



Inside faces and the three recessed bottom edges. A shallow recess along an edge is called a rabbet.

1. Put the bottom inside face up. Cut the recesses along its left, right and back edges. Cut the matching roof recesses on its inside face, which faces down when assembled.
2. Set the recess depth to $\frac{1}{4}$ in (6.35 mm). Set its width to the measured mating plywood, with 0 to 0.005 in (0 to 0.127 mm) extra for fit. Prove both settings on scrap first.
3. Cut the rear-edge recess on the inside face of each wall. Keep the FRONT labels visible so the recess goes at the rear.
4. Use controlled passes and your router's specified feed direction. Clear the overlapping rear corners fully so the back can seat; leave the bearing surfaces flat.

Check before continuing: The panels seat by hand. Bottom and roof retain 0.47 in (11.94 mm) of wood beneath each recess.

Watch out: Routing the outside face or leaving a lump at a rear corner.

Keep beside this step: [Joints](#) (p. 54) · [P01](#) (p. 59) · [P02](#) (p. 60) · [P03L](#) (p. 61) · [P03R](#) (p. 62) · [Opening and recess sizes](#) (p. 90)

PREPARE THE PARTS · 7 OF 33

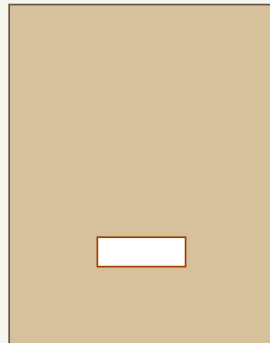
7. Cut the side and roof openings

Parts: Roof P02 · Left wall P03L · Right wall P03R

Have ready: Part drawings, square, drill, saw, guided router or sharp chisel and a support board.

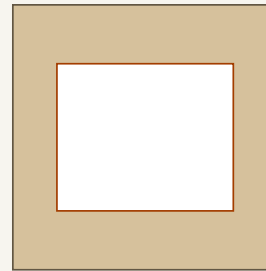
Before you start: Support and restrain the waste piece before finishing the cut. It must not drop into the blade or pull out a veneer.

Cut the openings from finished reference edges



P03L · WALL

Two low side openings



P02 · ROOF

One roof opening

Construction illustration. Not to scale.

1. Mark each opening from the finished measuring edges shown on the part drawing. Both wall openings are low in the case; the roof opening belongs in the roof.
2. Drill a starter hole inside the waste, saw near the line, then finish to the exact line with a guided cutter or chisel.
3. Check the corners and remove rough fibers. Keep any eased wall-opening corners inside the stated rectangular boundary. Do not enlarge an opening to hide a poor cut.

Check before continuing: Both side openings match each other, and every opening matches its drawing.

Watch out: Measuring from a rough edge or cutting the roof opening in the bottom.

Keep beside this step: P02 (p. 60) · P03L (p. 61) · P03R (p. 62) · Opening and recess sizes (p. 90)

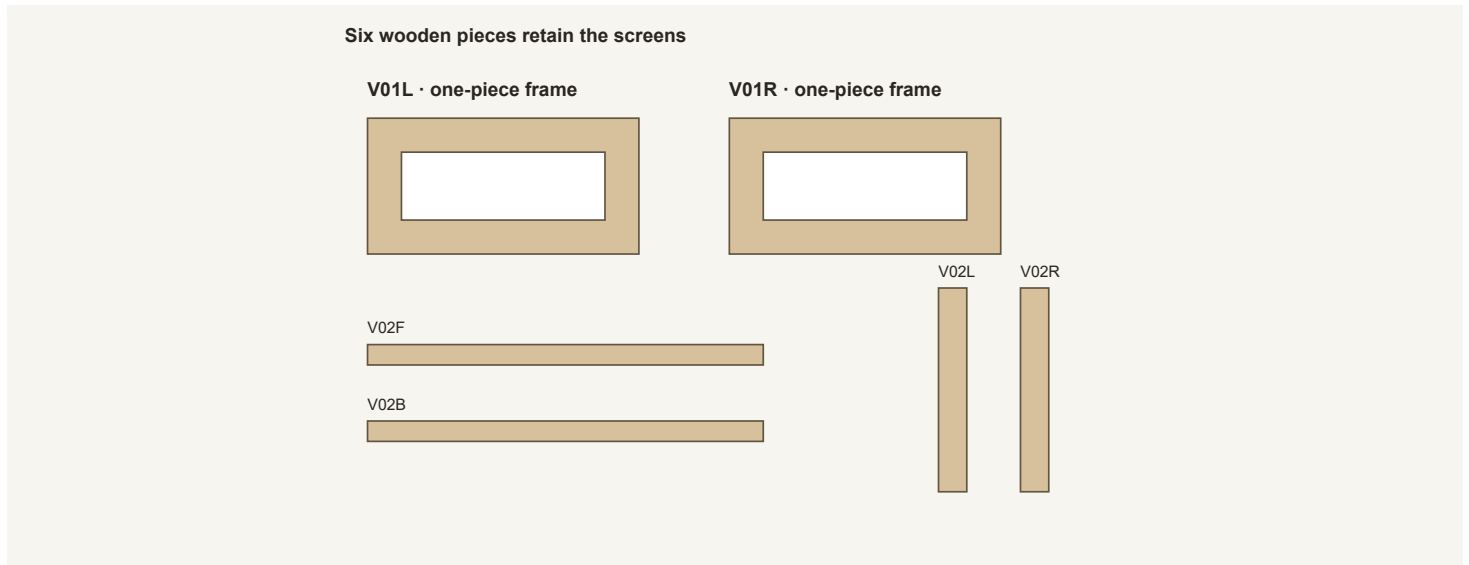
PREPARE THE PARTS · 8 OF 33

8. Make the pieces that hold the screens

Parts: Left screen frame V01L · Right screen frame V01R · Front roof strip V02F · Back roof strip V02B · Left roof strip V02L · Right roof strip V02R

Have ready: Cut list, screen-frame drawings, supported saw/router and square.

Before you start: Cut each small side frame from a complete blank. Do not hold a tiny loose piece against a cutter.



Construction illustration. Not to scale.

1. Cut the opening from each rectangular side-frame blank. Keep the surrounding wood intact as one piece.
2. Finish the four roof strips to their listed sizes. Their ends meet squarely; no angled joints are needed.
3. Match each frame or strip to its opening. Mark the face that will press against the screen and label every position.

Check before continuing: The wood openings line up with the vents and leave the specified border around the mesh.

Watch out: Swapping a long roof strip with a side strip.

These pieces are removable screen retainers. They protect the cut wire edges; they are not supports for lamps or equipment.

Keep beside this step: V01L (p. 67) · V01R (p. 68) · V02F (p. 69) · V02B (p. 70) · V02L (p. 71) · V02R (p. 72) · Opening and recess sizes (p. 90)

PREPARE THE PARTS · 9 OF 33

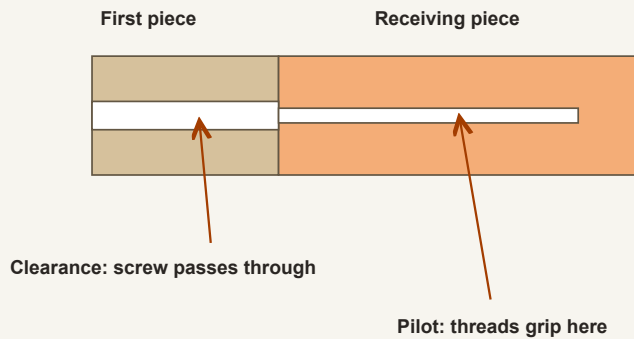
9. Drill the holes the screws pass through

Parts: Complete enclosure / parts identified in the picture

Have ready: Part drawings, stopped drill, 11/64 in bit, countersink, square and sacrificial support.

Before you start: Check the entry face on the drilling sheet. A pass-through hole and a smaller screw-gripping pilot do different jobs.

Two different holes make one screw joint



Section is enlarged and schematic. Check the exact entry face on each part drawing.

Construction illustration. Not to scale.

1. At the stations marked C, drill the 11/64 in (4.3656 mm) clearance holes through the outer piece. Support the exit face to reduce tear-out.
2. Use the actual screw head to set the countersink. The head must finish flush without crushing the face veneer.
3. Leave the receiver pilots for the clamped dry fit. Those smaller holes must line up through the assembled joint; do not guess their position from the opposite face.

Check before continuing: Every C hole is present, at the correct face and location, with an undamaged head seat.

Watch out: Drilling all holes the same diameter or boring pilots freehand into thin edges.

A clearance hole lets the screw pass through the first piece. A pilot guides its threads into the receiving piece.

Keep beside this step: [Drilling Key](#) (p. 77) · [P01](#) (p. 59) · [P02](#) (p. 60) · [P03L](#) (p. 61) · [P03R](#) (p. 62) · [V01L](#) (p. 67) · [V02F](#) (p. 69)

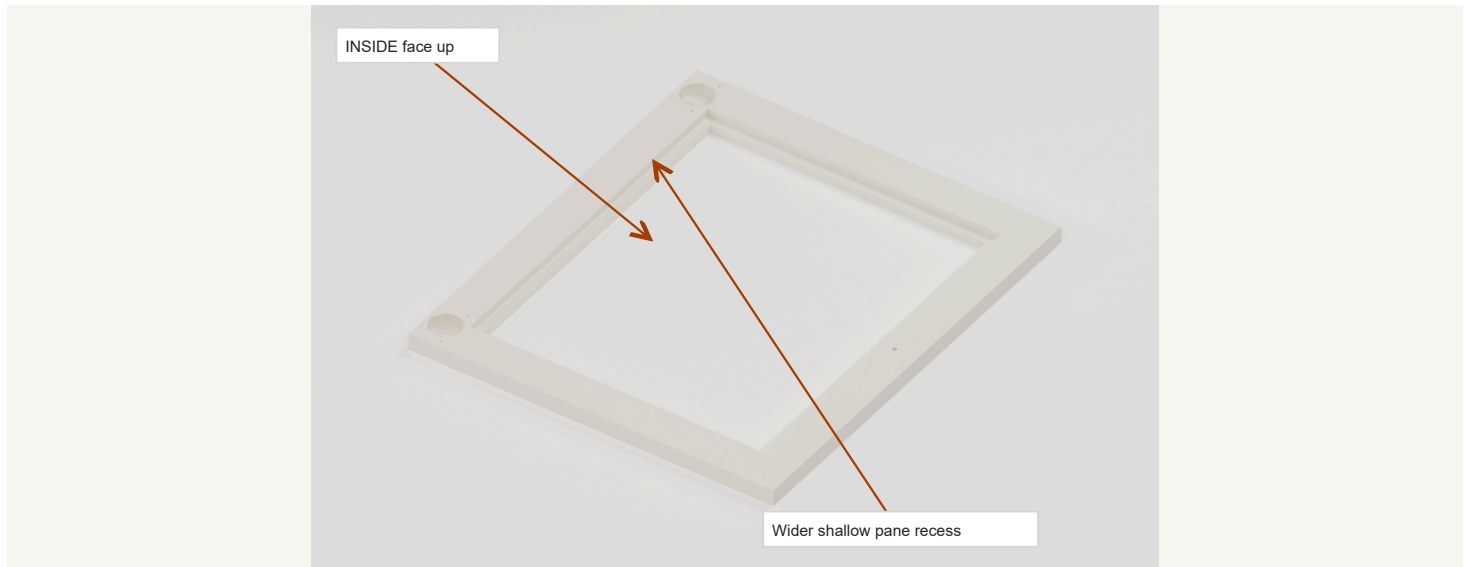
PREPARE THE PARTS · 10 OF 33

10. Cut the door window and pane recess

Parts: Door D01

Have ready: Door drawing, square, guided router/template, chisel and flat sacrificial support.

Before you start: Use the accepted pane-and-clip trial. Lay the door INSIDE B face up and preserve the hinge-edge label while flipping it.



Construction illustration. Not to scale.

1. Check the door blank against the exact cut list. Mark its viewing window and the wider recess around it from the door drawing; the wood border is 2 in (50.8 mm).
2. Cut the viewing opening through the door. From the inside, cut the wider recess to 0.345 in (8.76 mm). That depth combines this pane's thickness and the selected clip offset.
3. Square the recess corners with a chisel. Ease the exposed viewing edges lightly without reducing the lip supporting the pane. Keep the outer door edges accurate.

Check before continuing: The recess is flat and its corners will not trap the pane. The door stays flat.

Watch out: Routing the outside face or gluing the pane into its recess.

The wider, shallow area around the opening is the glazing rebate. It supports the clear pane while clips keep the pane removable.

Keep beside this step: [D01](#) (p. 66) · [Glazing Section](#) (p. 56) · [Opening and recess sizes](#) (p. 90)

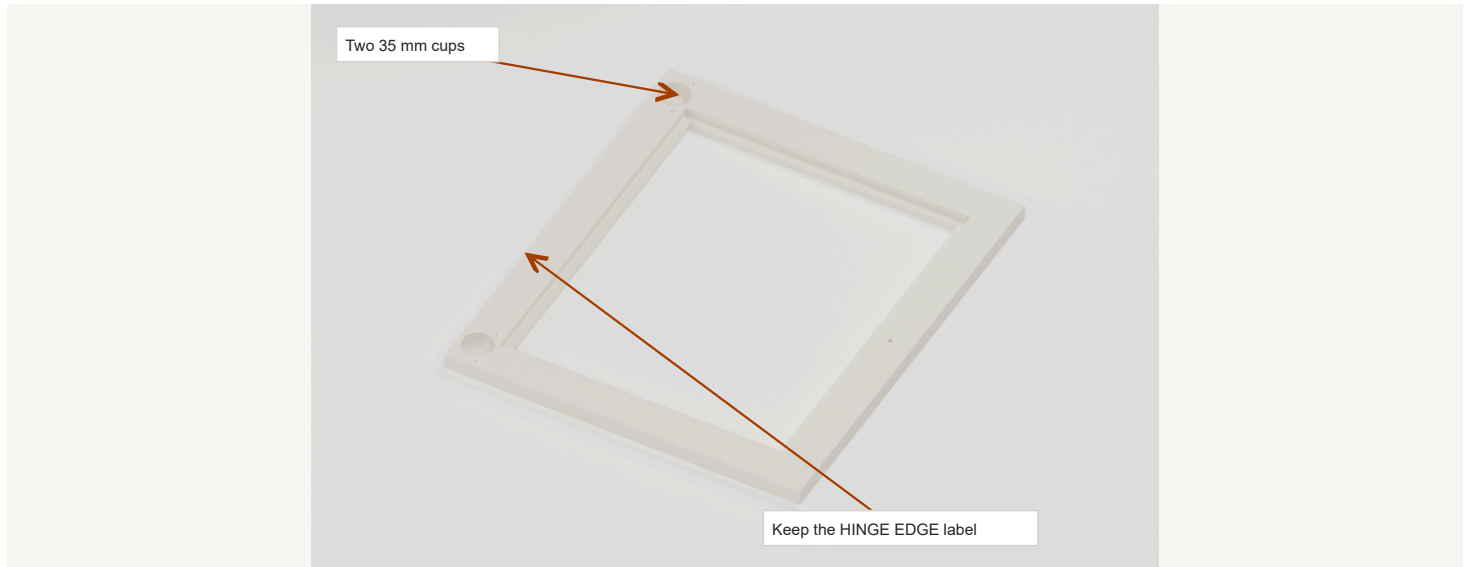
PREPARE THE PARTS · 11 OF 33

11. Bore the two hinge cups

Parts: Door D01

Have ready: Verified Blum boring jig or controlled drill-press setup, 35 mm bit, depth stop and accepted offcut.

Before you start: Stop if the stock, jig, drill point or real hinge differs from the trial. Bore from the inside face only.



Construction illustration. Not to scale.

1. Place each cup center 21.5 mm from the hinge edge. Place the lower and upper centers $1 \frac{3}{16}$ in (30.1625 mm) from their respective door ends.
2. Bore the 35 mm cups 13 mm deep. Use those metric hardware sizes directly, not an approximate fractional bit or a $\frac{1}{2}$ inch depth.
3. For the screw-on hinges, mark the 45 mm fixing pitch with the fixing line 9.5 mm farther inward from the cup center. Use the accepted stopped #6 screw pilot trial; $\frac{3}{32}$ in is only the starting trial size.
4. Check the thin wood beside the pane recess and around the cup flange. Reject splitting, torn veneers or a loose fixing instead of using a larger screw.

Check before continuing: Both cups seat fully. Nominal front wood below a cup is 0.20819 in (5.29 mm).

Watch out: Drilling the 8 mm fixing holes shown for a different, press-in hinge.

Keep beside this step: [D01](#) (p. 66) · [Hinge Detail](#) (p. 55)

PREPARE THE PARTS · 12 OF 33

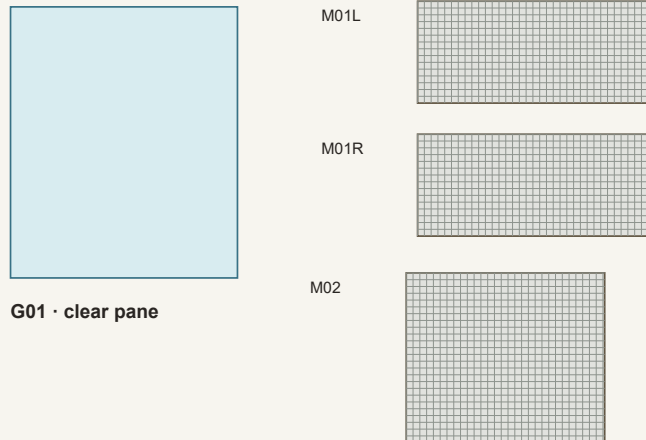
12. Cut the clear pane and three screens

Parts: Clear pane G01 · Left screen M01L · Right screen M01R · Roof screen M02

Have ready: The acrylic/mesh layouts, acrylic-compatible cutting tools, snips and mesh handling gloves.

Before you start: Cut mesh edges are sharp. Keep them covered during handling. Use gloves for handling mesh, not near rotating cutters.

One pane, two side screens and one roof screen



Construction illustration. Not to scale.

1. Leave the acrylic's masking in place. Support it and cut at room temperature using the OPTIX fabrication method and the exact pane size in the cut list.
2. Smooth the acrylic edges and ease sharp corners without reducing the listed support overlap. Do not force a saw intended for another material through it.
3. Cut two side screens and one roof screen from the mesh layout. Flatten gently without breaking or sharply kinking wires. Keep all sharp ends contained.

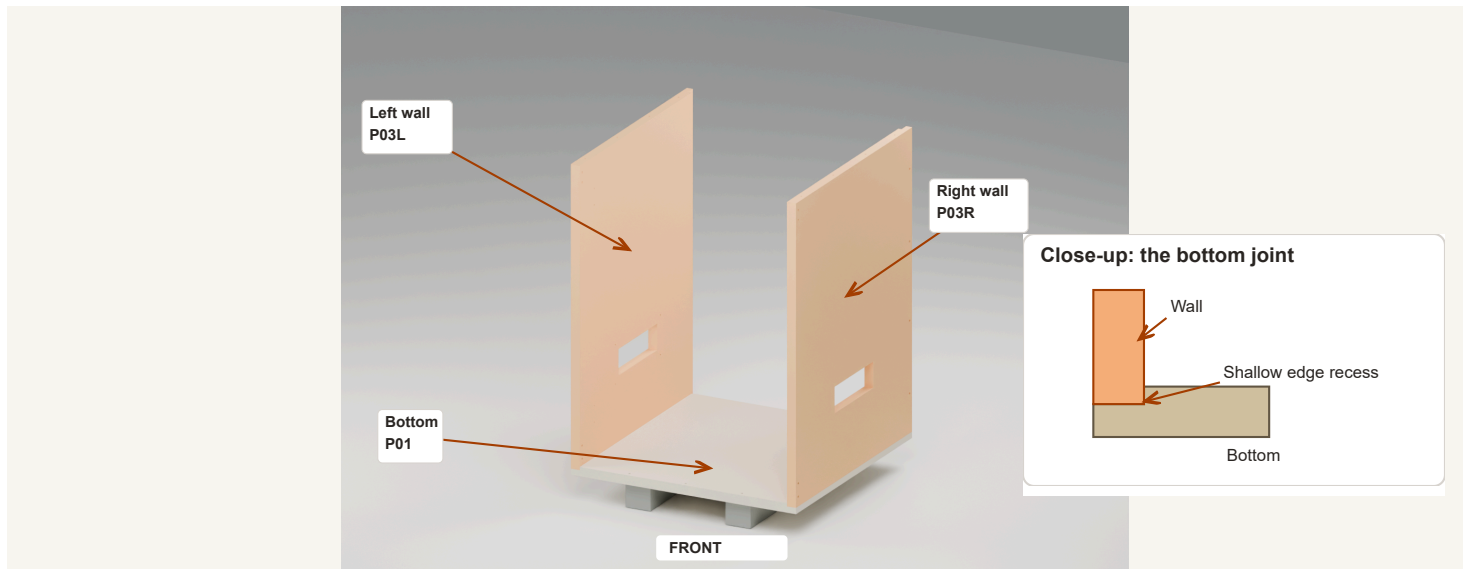
Check before continuing: All eighteen fabricated pieces are now present. The pane is flat and the three screens match their listed sizes.

Watch out: Using a thicker replacement pane without rechecking the recess and clips.

Keep beside this step: [G01](#) (p. 73) · [M01L](#) (p. 74) · [M01R](#) (p. 75) · [M02](#) (p. 76) · [Layouts](#) (p. 13)

TRY THE BOX TOGETHER · 13 OF 33

13. Start with the bottom and sides

Parts: Bottom P01 · Left wall P03L · Right wall P03R**Have ready:** Flat bench, two stable padded blocks 2 in (51 mm) high and a helper.**Before you start:** No glue or screws yet. Have a helper hold the walls until the whole box is clamped. Loose panels can fall.

Front is nearest you. Added parts are orange. Gray blocks are temporary bench aids.

1. Rest the bottom on the padded blocks shown. Its shallow edge recesses face up; its FRONT mark faces you.
2. Set each wall into the recess along its side of the bottom. Put the left wall on your left as you face the open front.
3. Keep both vent openings near the bottom. The left wall is the wall that will carry the hinges; keep its INSIDE B face toward the opening.

Check before continuing: The wall bottoms seat fully. Their outside faces line up with the bottom edges.**Watch out:** Swapping the walls or forcing a tight joint.

The plywood panels join directly with glue and screws. The full back helps keep the assembled box square.

Keep beside this step: P01 (p. 59) · P03L (p. 61) · P03R (p. 62)

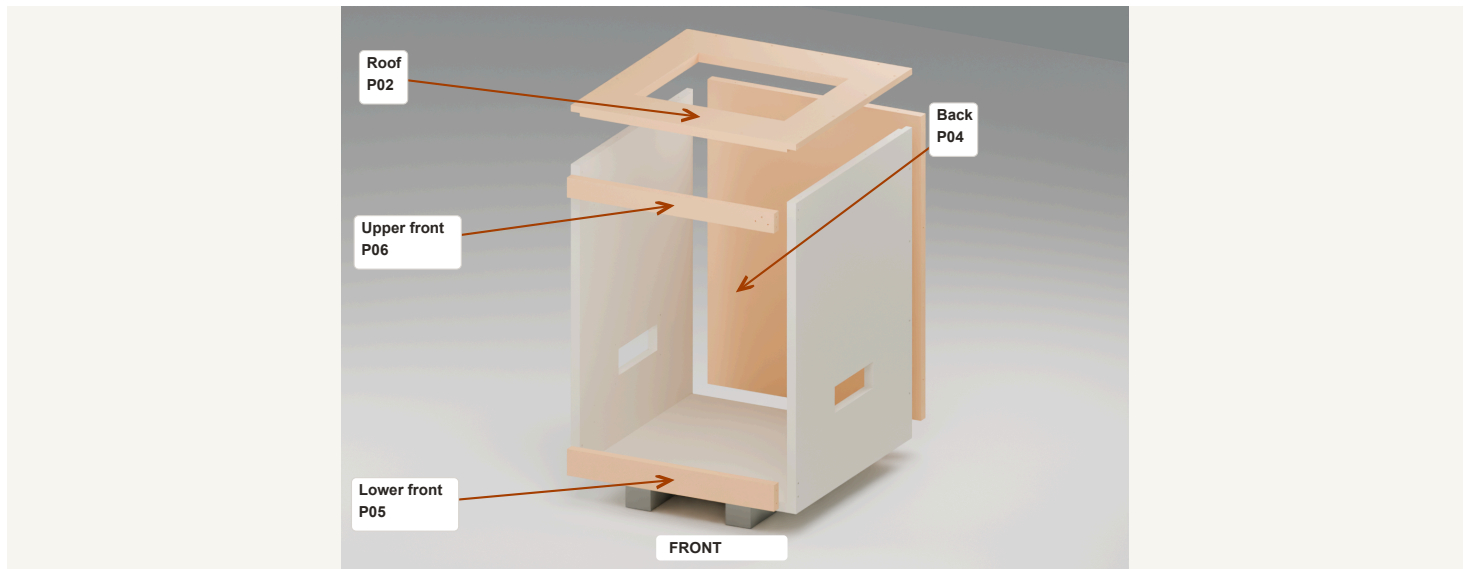
TRY THE BOX TOGETHER · 14 OF 33

14. Add the back, front pieces and roof

Parts: Bottom P01 · Left wall P03L · Right wall P03R · Back P04 · Lower front strip P05 · Upper front strip P06 · Roof P02

Have ready: Same bench setup and helper. Keep all six padded clamps within reach.

Before you start: Keep the walls supported. The separated picture shows where parts go; the pieces must touch in the dry fit.



Added pieces are orange and separated for visibility. Move them into contact before clamping.

1. Lower the back into the recesses at the rear of the walls and bottom. Check that it reaches the bottom all the way across.
2. Place the taller front strip between the walls, on top of the bottom. Line up its front face with the wall fronts.
3. Have your helper hold the shorter front strip at the top. Fit the roof over the walls and back, with its recesses facing down. The upper strip sits directly beneath the roof.

Check before continuing: All seven pieces are present. The back is seated and the roof is fully down.

Watch out: Lifting the loose box by its roof.

Trying the pieces together without glue is called a dry fit. It catches a backwards panel or a poor joint while you can still correct it.

Keep beside this step: [Overall](#) (p. 52)

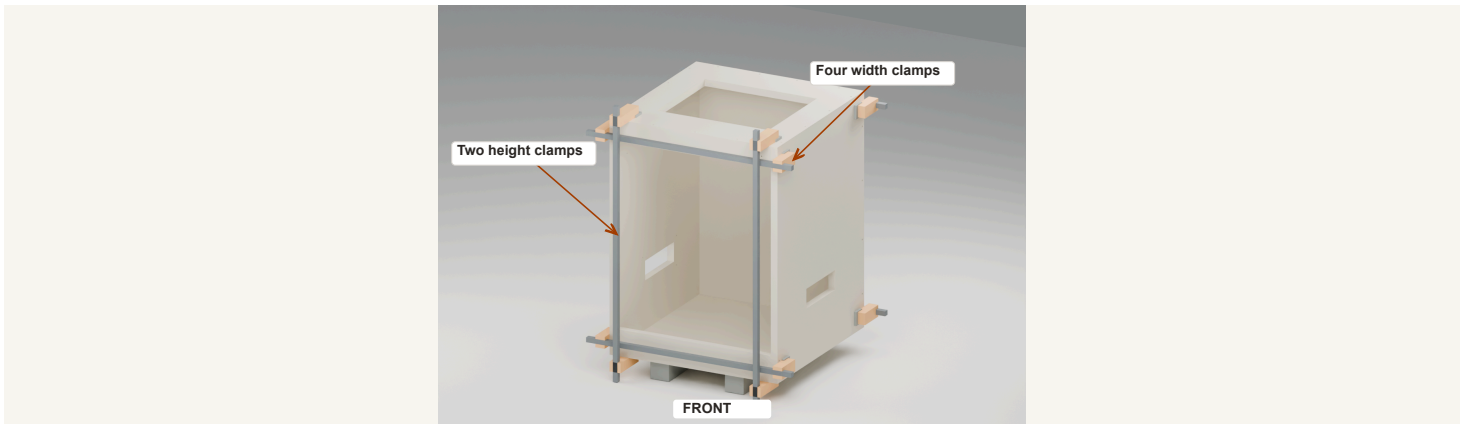
TRY THE BOX TOGETHER · 15 OF 33

15. Clamp lightly, then check the shape

Parts: Bottom P01 · Left wall P03L · Right wall P03R · Back P04 · Lower front strip P05 · Upper front strip P06 · Roof P02

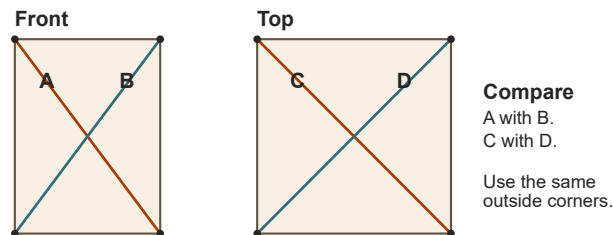
Have ready: Four 24 in clamps, two 30 in clamps, padded wood strips, square and fine-rule measuring tool. Each clamp needs at least 4 in reach from bar to pad.

Before you start: Keep your helper steadying the box while you fit the clamps. Keep the support blocks clear of the lower jaws.



Six clamps in total. Two rear clamps are partly hidden. Generic clamp shapes; rehearse with your own.

1. Fit four clamps across the width: low and high at both front and back. Add two from bottom to roof, one near each side. Pad every jaw.
2. Tighten only enough to close the joints. Keep pads on solid wood, clear of vents and screw holes. Stop if a panel bends or a joint will not seat.
3. Compare the two corner-to-corner measurements on the front, then the two on the top. Each pair must differ by no more than 1/32 in (0.79 mm). Check the corners with a square too.
4. Check the uncoated outside size: 18 × 18 × 24 in (457.2 × 457.2 × 609.6 mm). Check the front opening: 16.56 in (420.62 mm) wide and 19.06 in (484.12 mm) high.



Check before continuing: All joints close, the opening matches, and the bottom does not rock. Record both pairs of diagonals.

Watch out: Pulling a warped panel straight by overtightening.

The box is still unglued. Keep it clamped and supported for the next operation.

Keep beside this step: [Clamp Plan](#) (p. 58) · [Overall](#) (p. 52)

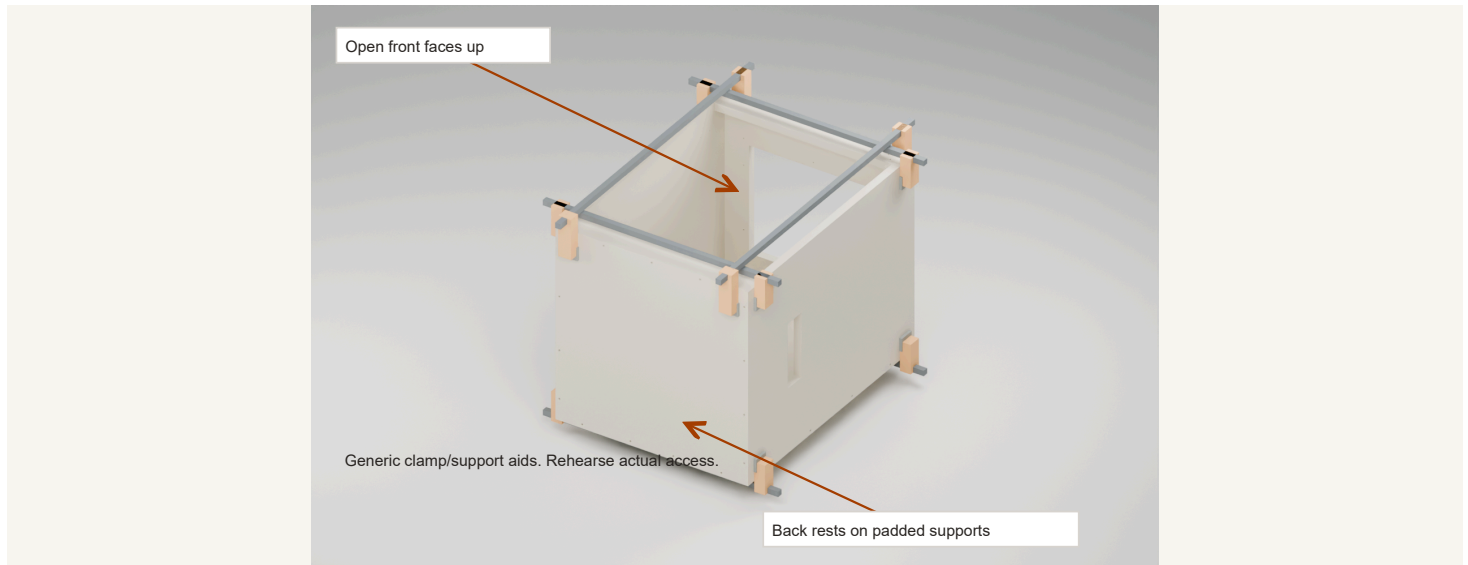
TRY THE BOX TOGETHER · 16 OF 33

16. Drill the matching screw pilots

Parts: Bottom P01 · Left wall P03L · Right wall P03R · Back P04 · Lower front strip P05 · Upper front strip P06 · Roof P02

Have ready: Helper, stable padded supports, stopped drill, accepted pilot bit, screw-location drawings and hand driver.

Before you start: Keep the box fully clamped while your helper turns it onto its back. Do not lift by the roof. Reposition one clamp at a time only when the others keep the joints seated.



Construction illustration. Not to scale.

1. Place the clamped box on stable padded supports under its back. The open front now faces up. Keep clamp bars, jaws and drill paths clear of the bench.
2. Drill the smaller receiving holes through the existing clearance holes. Start the #8 screw trial at 7/64 in (2.7781 mm), then use the accepted size for the real screw root and this plywood. Set a depth stop to avoid breaking through.
3. Check each edge-entry and face-entry location on the drilling drawings. Test-fit the shell screws by hand; the head must seat without splitting, stripping or an exposed point.
4. Temporarily position the screen frames and roof strips at their drawings' stations, using mesh offcuts to reproduce the 0.032 in (0.8128 mm) layer. Transfer and drill their stopped receiver pilots. Remove the trial pieces afterward.
5. Mark the matching joints, then carefully take the box apart with your helper. Keep all labels and accepted drill settings.

Check before continuing: All 46 shell and 18 screen-retainer stations align, with sound receiving wood and safe screw tips.

Watch out: Drilling receiver pilots while the joint is loose or forgetting the mesh layer.

A pilot is the smaller hole that guides the screw's threads. This guide does not assign a load rating to the screw pattern.

Keep beside this step: [Drilling Key](#) (p. 77) · [Clamp Plan](#) (p. 58) · [Vent Detail](#) (p. 57)

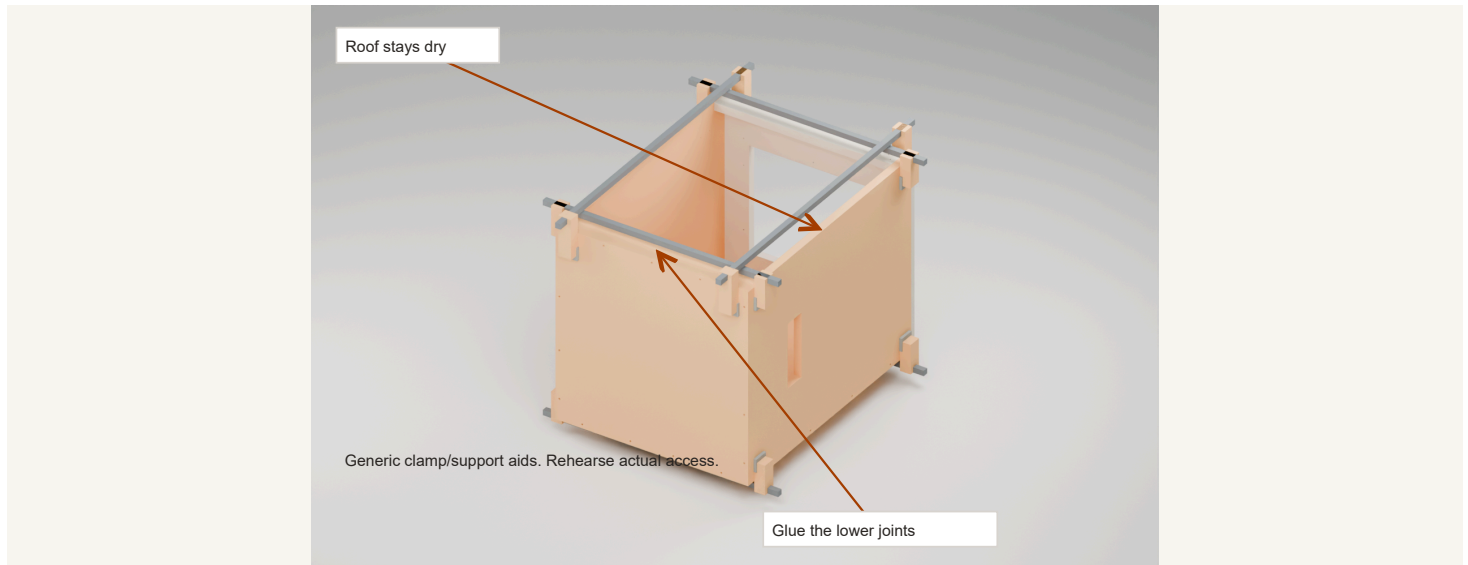
GLUE THE BOX · 17 OF 33

17. Glue the lower box together

Parts: Bottom P01 · Left wall P03L · Right wall P03R · Back P04 · Lower front strip P05 · Upper front strip P06 · Roof P02

Have ready: Titebond III, brush, damp cleanup cloth, helper, rehearsed clamps and #8 × 1¾ in shell screws.

Before you start: Rehearse first. Titebond III has a limited working time; do not begin a glue-up you cannot seat and clamp in time. Leave the roof and upper front strip unglued in this stage.



Construction illustration. Not to scale.

1. Use the same supported position and clamp sequence you rehearsed. Apply glue only to the bare-wood joints of the bottom, walls, back and lower front strip.
2. Seat those parts and put the roof on dry to hold the spacing. Close the clamps lightly and repeat the opening, diagonal and flush-face checks.
3. Drive the matching lower-joint screws by hand or with controlled torque. Keep the screw heads flush without crushing the veneer. Wipe fresh squeeze-out without soaking the plywood.

Check before continuing: The lower joints are seated and square. The roof remains removable because it has no glue yet.

Watch out: Gluing every joint at once before rehearsing the sequence.

Allow time: Follow the delivered glue label. Plan an overnight, at least 24-hour undisturbed wait before stressing this new assembly or removing the dry roof for the next glue stage. This is a conservative shop sequence, not a universal clamp-time rule.

At 70°F (21°C) and 50% RH, the maker lists 8–10 minutes open time and 20–25 minutes total assembly time. Current application guidance says above 47°F (8°C). Actual conditions and the label govern.

Keep beside this step: [Clamp Plan](#) (p. 58) · [Joints](#) (p. 54) · [Drilling Key](#) (p. 77)

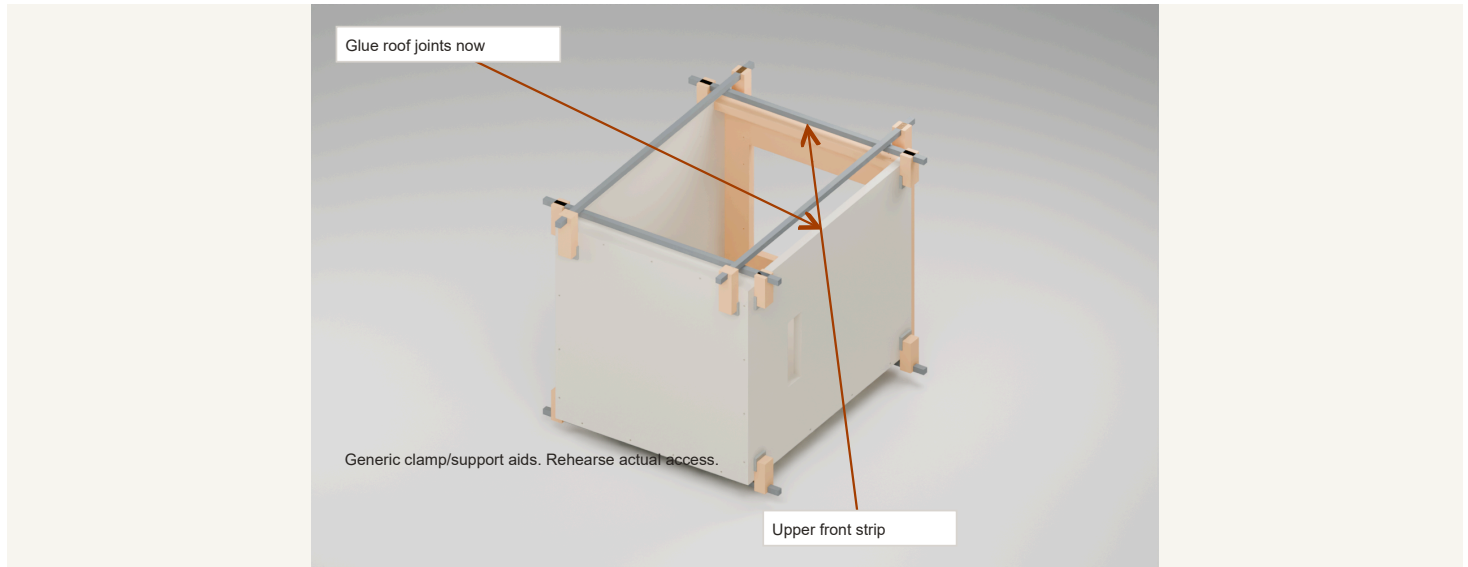
GLUE THE BOX · 18 OF 33

18. Glue on the upper strip and roof

Parts: Bottom P01 · Left wall P03L · Right wall P03R · Back P04 · Lower front strip P05 · Upper front strip P06 · Roof P02

Have ready: Same glue, helper, clamps, square, measuring tool and remaining shell screws.

Before you start: First confirm the lower assembly has set. Support the box throughout; do not pull on a newly glued joint.



Construction illustration. Not to scale.

1. Lift off the dry roof. Clean any stray glue from its seating surfaces and confirm the upper front strip and roof still fit.
2. Apply glue to the upper strip's mating joints and the roof joints. Seat both parts, reclamp and repeat the opening and diagonal checks.
3. Install the remaining shell screws at their listed stations. There are 46 shell screws in the completed box. Clean squeeze-out and leave the assembly undisturbed.
4. After the glue has cured, inspect every seam and screw head. Remove dried glue without digging into the veneer.

Check before continuing: The roof and header are fixed, seams are closed and all 46 shell screw heads are sound.

Watch out: Leaving a glue ridge where a later fitting must sit.

Allow time: Do not stress the new joints for at least 24 hours. Follow the actual glue's clamp and cure instructions for the temperature and joint condition.

The glued roof is permanent. Later screen maintenance happens through the open front, not by removing the roof.

Keep beside this step: P02 (p. 60) · P06 (p. 65) · Drilling Key (p. 77)

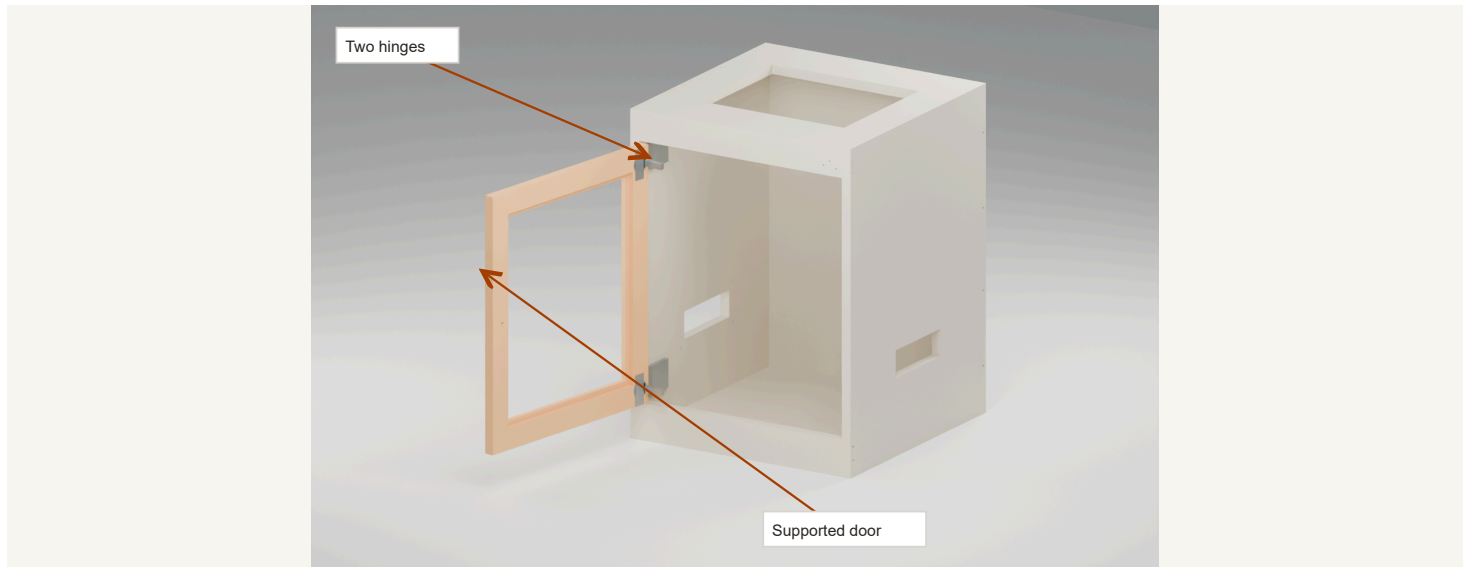
TRY THE FITTINGS · 19 OF 33

19. Try the hinges and uncoated door

Parts: Bottom P01 · Left wall P03L · Right wall P03R · Back P04 · Lower front strip P05 · Upper front strip P06 · Roof P02 · Door D01

Have ready: The exact two hinges, two plates, eight #6 × $\frac{5}{8}$ in screws, jig, stopped drill, hand driver and helper.

Before you start: Support the door while clipping or unclipping a hinge. Follow the accepted offcut setup; do not drill a new pattern to make the wrong plate fit.



Construction illustration. Not to scale.

1. Transfer the mounting-plate stations from the left-wall drawing onto its inside face. The fixing line is 2.23875 in (56.86 mm) behind the raw front; each plate has a 32 mm fixing pitch.
2. Drill the accepted stopped pilots and fit the two plates. Fit the two screw-on hinges in the door cups. Seat screws gently by hand.
3. With your helper holding the door, clip both hinges onto their plates. Confirm both connections engage fully.
4. Adjust the bare door to an even 3 mm (about $\frac{1}{8}$ in) gap around the opening. The hinge centers are 16.44878 in (417.8 mm) apart; check the real hinge action before proceeding.

Check before continuing: The door sits flush, moves without rubbing and remains supported by two fully engaged hinges.

Watch out: Using hinge adjustment to disguise a twisted box or incorrectly cut door.

The two hinge centers are slightly farther apart than the door is wide. Digital open-door pictures are illustrative; the real hinge trial is the motion check.

Keep beside this step: [Hinge Detail](#) (p. 55) · [P03L](#) (p. 61) · [D01](#) (p. 66)

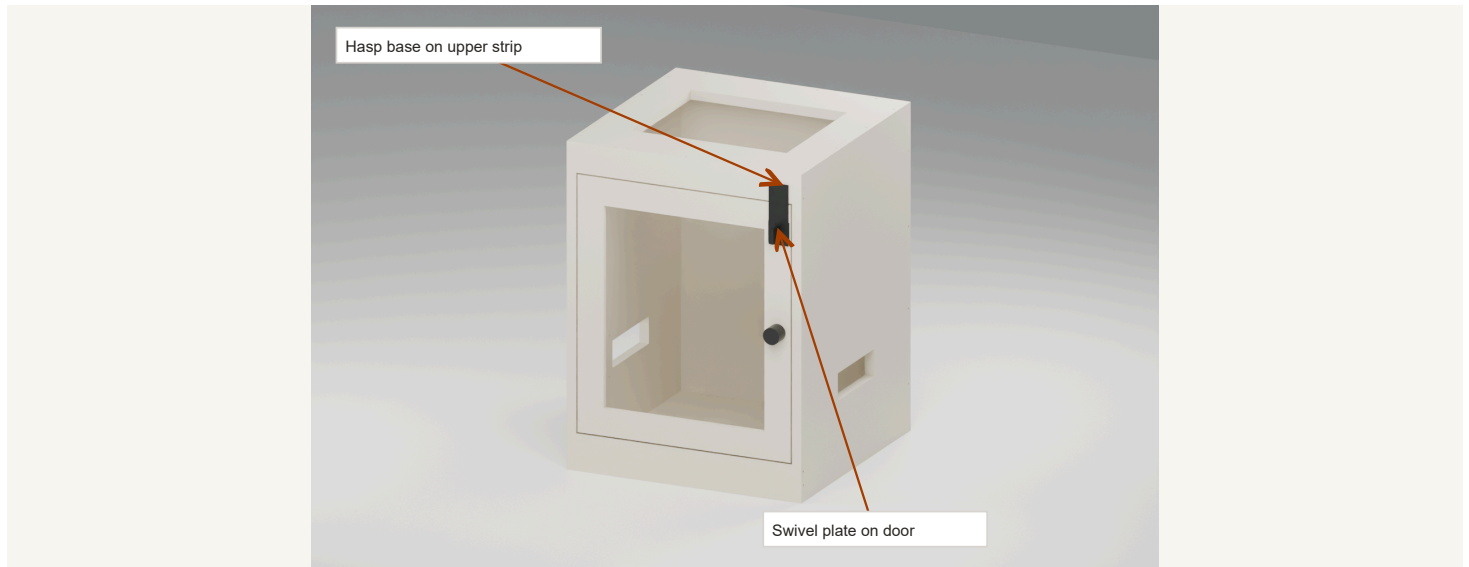
TRY THE FITTINGS · 20 OF 33

20. Try the latch and door knob

Parts: Door D01 · Upper front strip P06

Have ready: National N305-979 hasp, seven #10 × $\frac{5}{8}$ in screws, Liberty knob, square, stopped drill and hand driver.

Before you start: Close and support the door before marking. Keep every latch screw in full wood, clear of the pane recess. Do not force the latch to pull a misaligned door shut.



Construction illustration. Not to scale.

1. Place the hasp base on the upper front strip at its drawing location. Its swinging leaf reaches the swivel staple on the upper-right wood of the door.
2. Use the actual fitting to transfer all seven fixing holes, starting from the nominal stations shown. Confirm that the staple turns freely and the screw locations clear all recesses.
3. Drill stopped pilots and fit the hasp with its specified screws. Open and close it several times without forcing the door.
4. Drill the knob's $\frac{3}{16}$ in (4.7625 mm) pass-through hole at the door drawing station. Fit its supplied 8-32 × 1 in machine screw. Verify engagement without bottoming out or crushing the wood.

Check before continuing: The knob is firm and the swivel hasp closes freely with all screws seated in sound wood.

Watch out: Drilling the hasp from an approximate picture instead of the actual product.

Keep beside this step: D01 (p. 66) · P06 (p. 65)

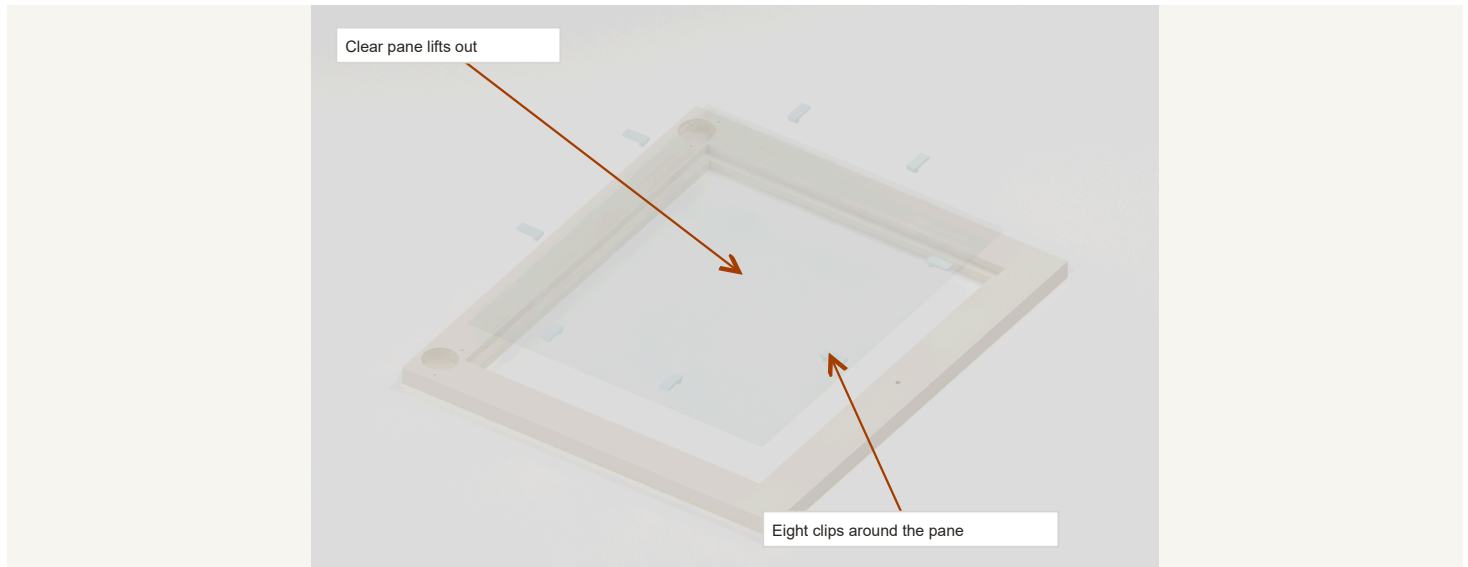
TRY THE FITTINGS · 21 OF 33

21. Mark the clear-pane clips

Parts: Door D01 · Clear pane G01

Have ready: The eight Rockler clips and supplied screws, pane, stopped drill, helper and flat padded bench.

Before you start: Support and unclip the door. Lay its inside face up. Keep drilling swarf away from the pane and remove the pane before boring.



Construction illustration. Not to scale.

1. Place the pane in the recess and try all eight clips at the nominal stations shown on the glazing drawing. Keep the pane centered and flat.
2. Transfer each real clip's fixing hole. The clip tip must overlap the pane by $\frac{1}{8}$ to $\frac{1}{4}$ in (3.175–6.35 mm). Keep the fixing center at least $\frac{1}{4}$ in (6.35 mm) from both the recess edge and the outside door edge.
3. Remove the pane, then drill the accepted stopped pilots. Actual screw penetration must be no more than 0.60 in (15.24 mm). Refit briefly to check gentle retention, without bending the pane.

Check before continuing: All eight real clip locations meet the edge and overlap limits, and no screw can break through the front.

Watch out: Filling the pane's expansion gap or tightening clips until the acrylic bows.

This is a measured hardware-transfer step, not “cut to fit.” The supplied clip hole offset is not fully dimensioned in the retained product evidence, so the real clip establishes the final fixing position before finishing.

Keep beside this step: [Glazing Section](#) (p. 56) · [D01](#) (p. 66)

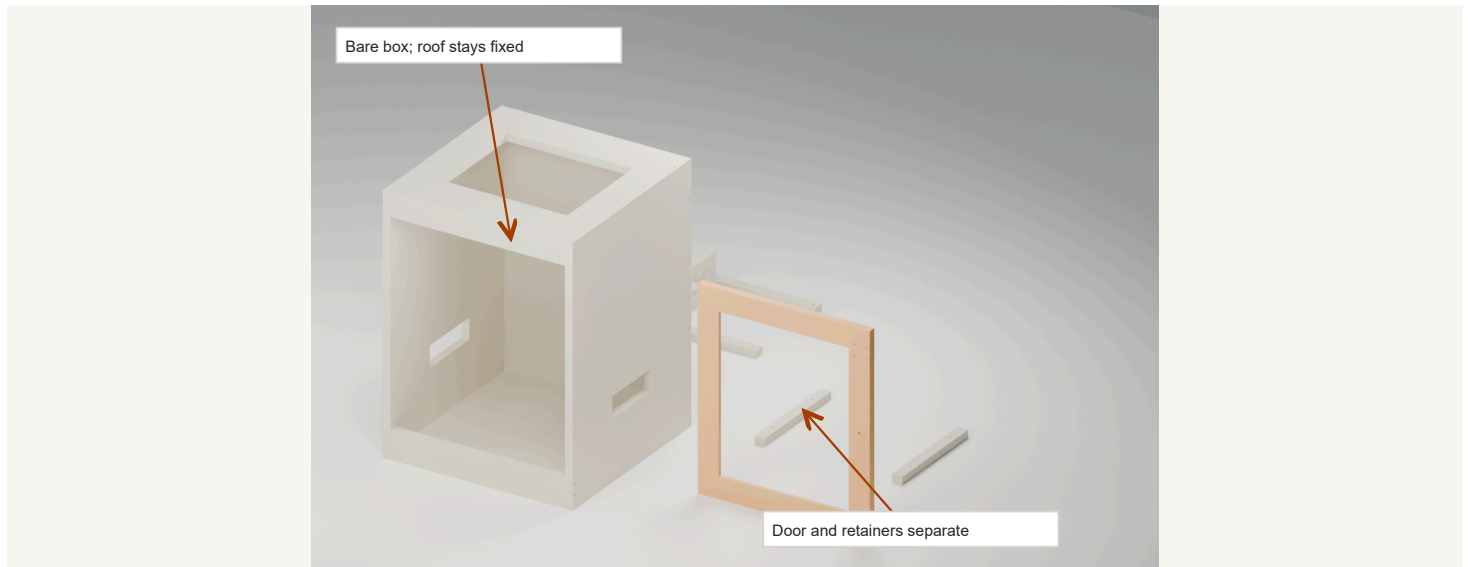
TRY THE FITTINGS · 22 OF 33

22. Check movement, then strip for finishing

Parts: Complete enclosure / parts identified in the picture

Have ready: Helper, hand driver, labels, camera and separate bags for each hardware group.

Before you start: Keep fingers clear of hinge joints. Hold the door when releasing either hinge. Never force it beyond the actual hardware's travel.



Construction illustration. Not to scale.

1. Rehang the trial door and test its full available movement. Check the hasp open and closed, hand access, pinch points and hinge-release access.
2. Photograph and record the accepted positions. Any rubbing, splitting or poor fit must be resolved before coating.
3. Support and unclip the door. Remove the pane, clips, hinges, plates, knob, hasp and all screen pieces. Label the hardware bags and keep the screws with their fittings.

Check before continuing: You have the bare wooden box, bare door and six screen-retaining pieces ready to finish.

Watch out: Coating around installed hardware or leaving a known fit problem until after curing.

The model communicates the parts and sequence. It does not replace this real movement and access check.

Keep beside this step: [Hinge Detail](#) (p. 55)

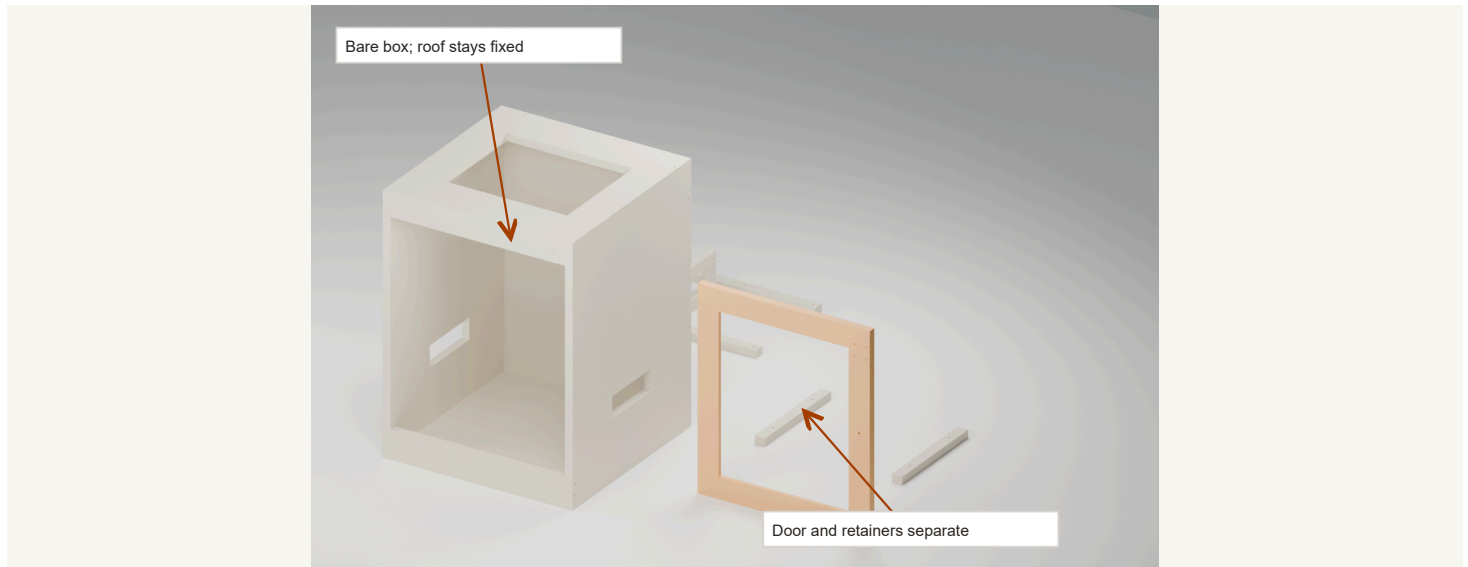
FINISH AND CURE · 23 OF 33

23. Prepare the wood for coating

Parts: All wooden pieces

Have ready: The coating label and safety sheet, suitable abrasives, dust extraction, soft brush and clean cloths.

Before you start: Follow the product's ventilation, protective equipment and waste-disposal instructions. Keep occupants, water and heat equipment away from the work.



Construction illustration. Not to scale.

1. Remove glue residue and layout marks. Sand in the product's stated preparation sequence, then remove dust thoroughly.
2. Lightly soften exposed sharp edges. Keep joint bearing faces, pane supports and door fitting edges accurate; do not round them over or sand through the face veneer.
3. Inspect every cut edge, vent opening, recess and screw hole. Repair damaged wood before coating; finish cannot restore a split or missing layer.

Check before continuing: The surface is clean, dry and sound, including hard-to-see cut edges.

Watch out: Rounding a fit-critical edge until the carefully checked clearance changes.

Keep beside this step: [Finish Record](#) (p. 87)

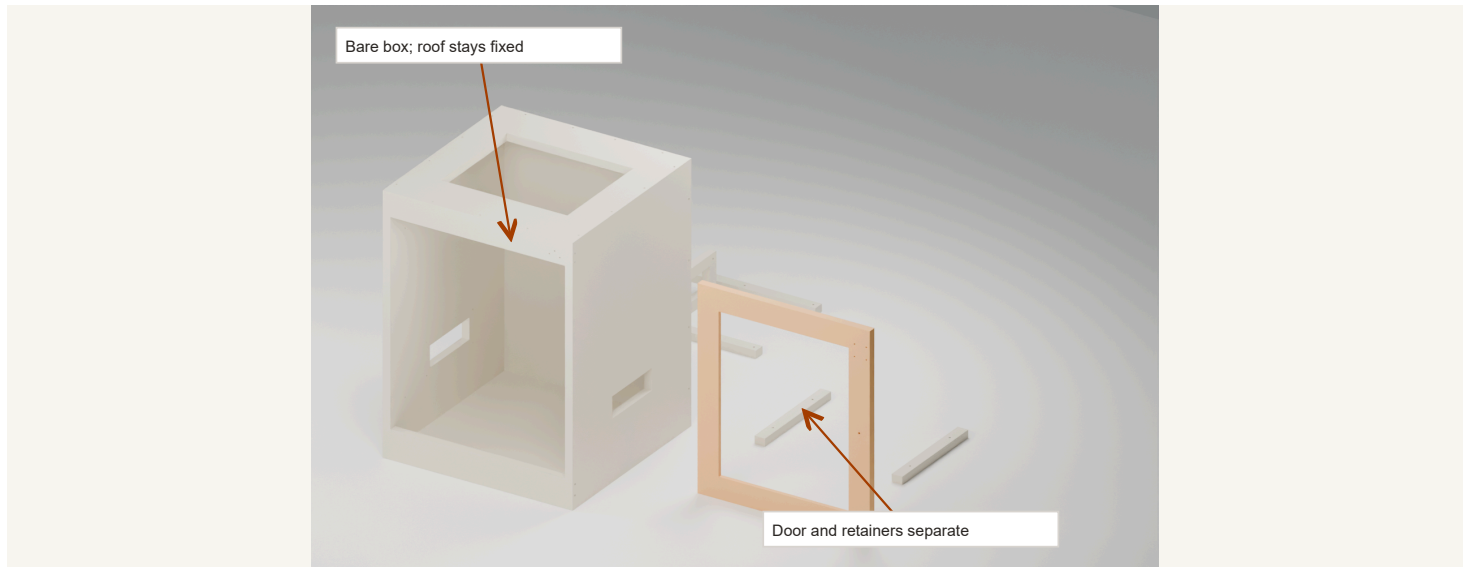
FINISH AND CURE · 24 OF 33

24. Coat the box and loose wood parts

Parts: All wooden pieces

Have ready: Retained Varathane 284473 Satin Triple Thick brush-on polyurethane, suitable applicator and finish-record sheet.

Before you start: This is an indoor, non-immersion coating. It is not a tank liner or proof of animal-contact suitability. Do not put wet substrate directly against the wood.



Construction illustration. Not to scale.

1. Read the delivered label and technical sheet before opening. Coat exposed faces, cut edges, vent edges, recesses and accessible hole walls. Keep fittings, acrylic and mesh off the work.
2. Apply evenly without pools in hinge cups, corners or pilot holes. The retained technical sheet gives 9 mil wet film, 3 mil dry film and nominal 50 ft² per quart; allow for losses and the actual surface.
3. Record batch, temperature, humidity, application time and any recoat time. The retained baseline is a 2-hour recoat interval, 48 hours before light use and 7 days for full cure at 70°F (21°C), 50% RH.
4. Follow the current label's temperature, humidity and recoat limits. Cooler or damper conditions can lengthen the wait. Gently clear a blocked pilot without enlarging it.

Check before continuing: All intended surfaces have continuous coverage without thick pockets or blocked fittings.

Watch out: Treating the stated coverage as a promise that one container will cover every loss.

Allow time: Keep parts separated and protected while they dry and cure. The 7-day baseline is full cure under stated conditions, not permission to assemble early because the surface feels dry.

Keep beside this step: [Finish Record](#) (p. 87)

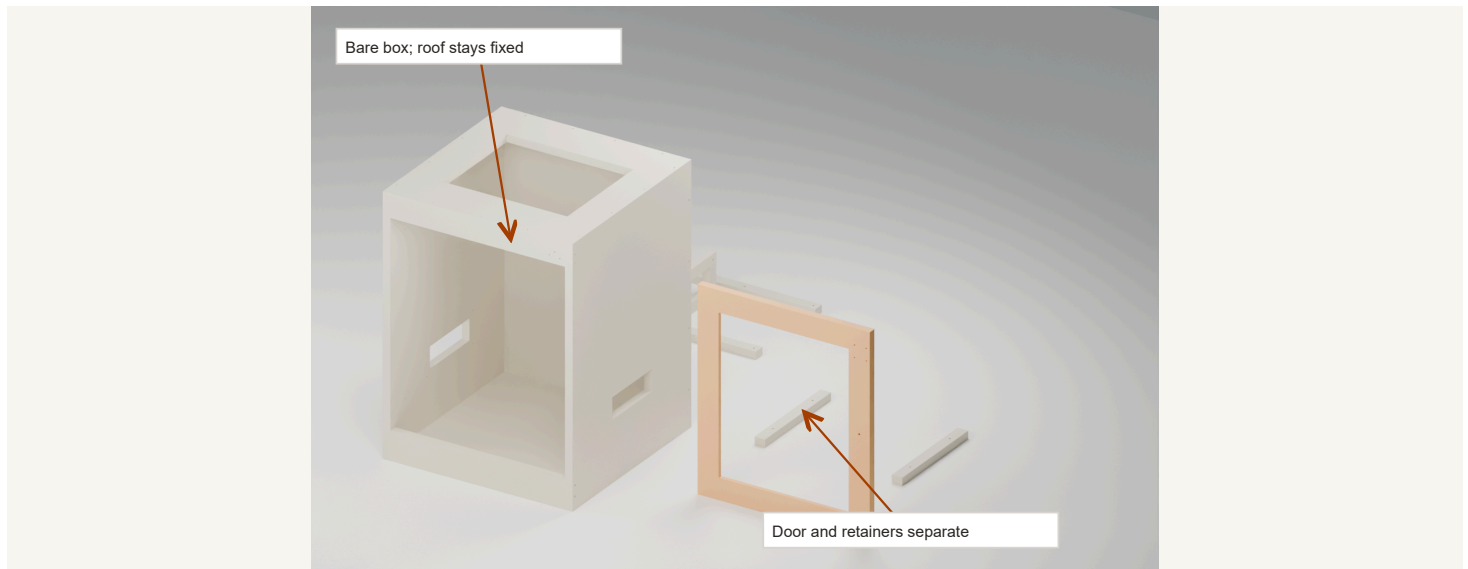
FINISH AND CURE · 25 OF 33

25. Let the coating fully cure

Parts: All wooden pieces

Have ready: Your finish record, the coated trial piece and good inspection light.

Before you start: Dry to the touch and odor-free do not establish full cure or animal safety. Keep use approval separate.



Construction illustration. Not to scale.

1. Check the actual elapsed time and conditions against the delivered product instructions. Leave more time if the conditions require it.
2. Inspect the coated trial and all parts for tackiness, soft pockets, missed edges or contamination. Correct defects using the product's repair instructions, then restart the relevant waiting period.
3. Repeat the pane-and-clip fit on the cured trial. Confirm the measured coating does not close a required gap or stop a fitting from seating.

Check before continuing: The coating has completed its documented cure and the cured fitting trial passes.

Watch out: Counting calendar days while ignoring low temperature, high humidity or pooled finish.

Allow time: No use, washing or final fit acceptance until the applicable full-cure requirement is met.

This remains a dry-shell coating specification. Intended animal contact, cleaning chemicals, humidity and equipment conditions still need their own acceptance.

Keep beside this step: [Finish Record](#) (p. 87)

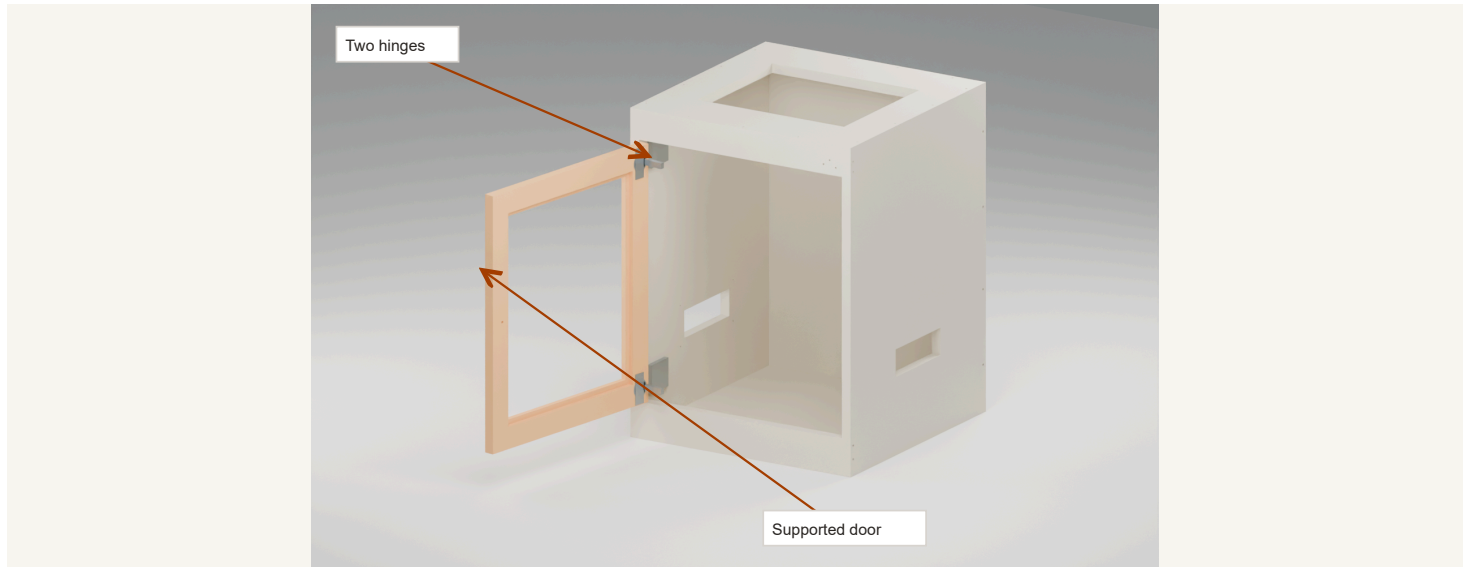
FINAL ASSEMBLY · 26 OF 33

26. Refit and adjust the door

Parts: Bottom P01 · Left wall P03L · Right wall P03R · Back P04 · Lower front strip P05 · Upper front strip P06 · Roof P02 · Door D01

Have ready: Labeled hinge bags, hand driver, helper and a fine-rule gap gauge.

Before you start: Protect the cured finish and support the door. Do not force a clip-on hinge or overdrive a screw into its old pilot.



Construction illustration. Not to scale.

1. Refit the plates and hinges in their accepted holes. Seat screws gently and check for coating chips or stripped threads.
2. Support the door, clip both hinges fully onto their plates and check its movement. Adjust in small amounts until the door is flush and the gaps are even.
3. With the planned coating, each nominal gap is about 0.11211 in (2.85 mm). Measure the real gaps; this calculation does not prove fit or escape resistance.
4. If both soft-close dampers prevent this light door from closing, trial the manufacturer's BLUMOTION switching adjustment. Keep the hasp as the positive closure.

Check before continuing: The actual finished door moves freely, closes consistently and has no trapped fingers or rubbing edges.

Watch out: Using hinge adjustment to compensate for a door that was cut too large.

Support and unclip the door again for the screen work that follows. Keep it on the padded bench.

Keep beside this step: [Hinge Detail](#) (p. 55)

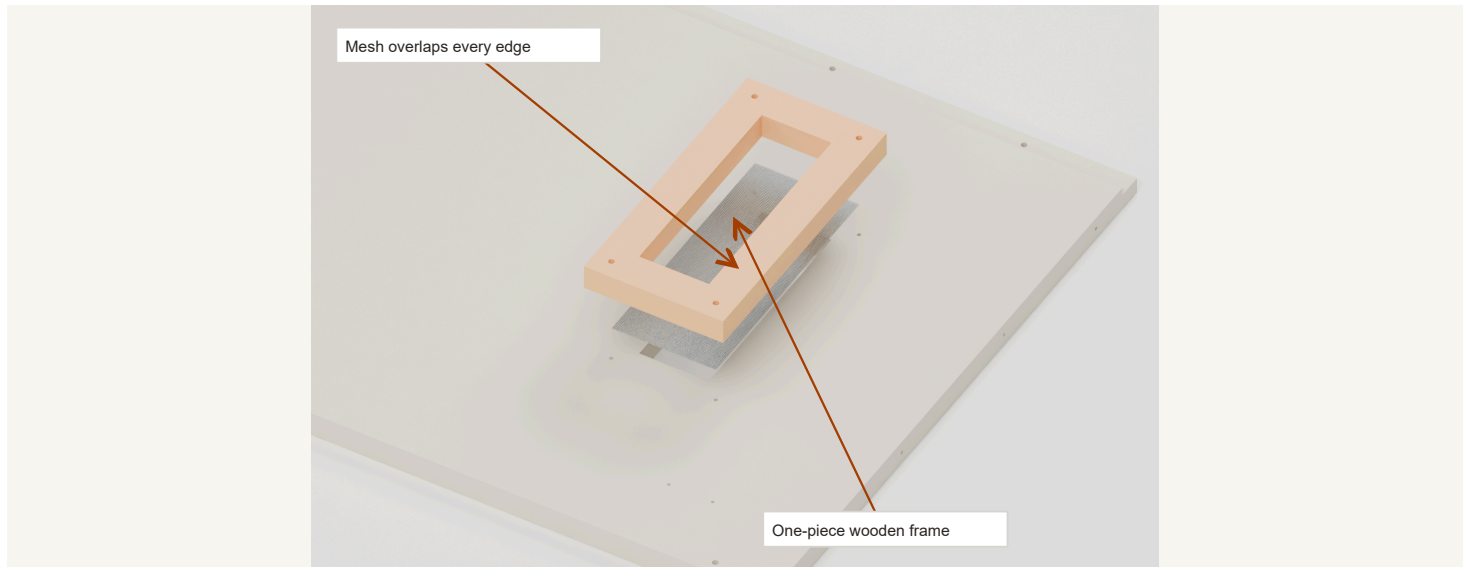
FINAL ASSEMBLY · 27 OF 33

27. Fit the two side screens

Parts: Left screen M01L · Right screen M01R · Left screen frame V01L · Right screen frame V01R

Have ready: Side meshes and one-piece frames, the listed retainer screws, hand driver, gloves for mesh and padded support.

Before you start: Work with the door removed. Support the box on its back or side so the driver reaches squarely. Keep cut wire edges covered.



Construction illustration. Not to scale.

1. Center a side mesh over its vent from inside the case. It overlaps the opening by $\frac{1}{2}$ in (12.7 mm) on every side.
2. Place the matching one-piece wooden frame over it. The 0.032 in (0.8128 mm) mesh layer sits between wood and wall. Do not add a gasket or deepen a recess without rechecking the design.
3. Fit the #8 × $1\frac{1}{4}$ in retainer screws at the prepared stations and tighten by hand until seated. Keep all cut wire ends under the wood.
4. Repeat on the other side. Wipe around the protected edges and inspect for loose corners, sharp ends, broken wires and sound screw engagement.

Check before continuing: Both screens are flat, fully retained and accessible for later removal.

Watch out: Letting a screw protrude outside or trapping a sharp wire beyond the frame.

The two side frames use eight of the eighteen retainer screws. Mesh attachment is not a load rating or a universal escape-resistance claim.

Keep beside this step: [Vent Detail](#) (p. 57) · [V01L](#) (p. 67) · [V01R](#) (p. 68)

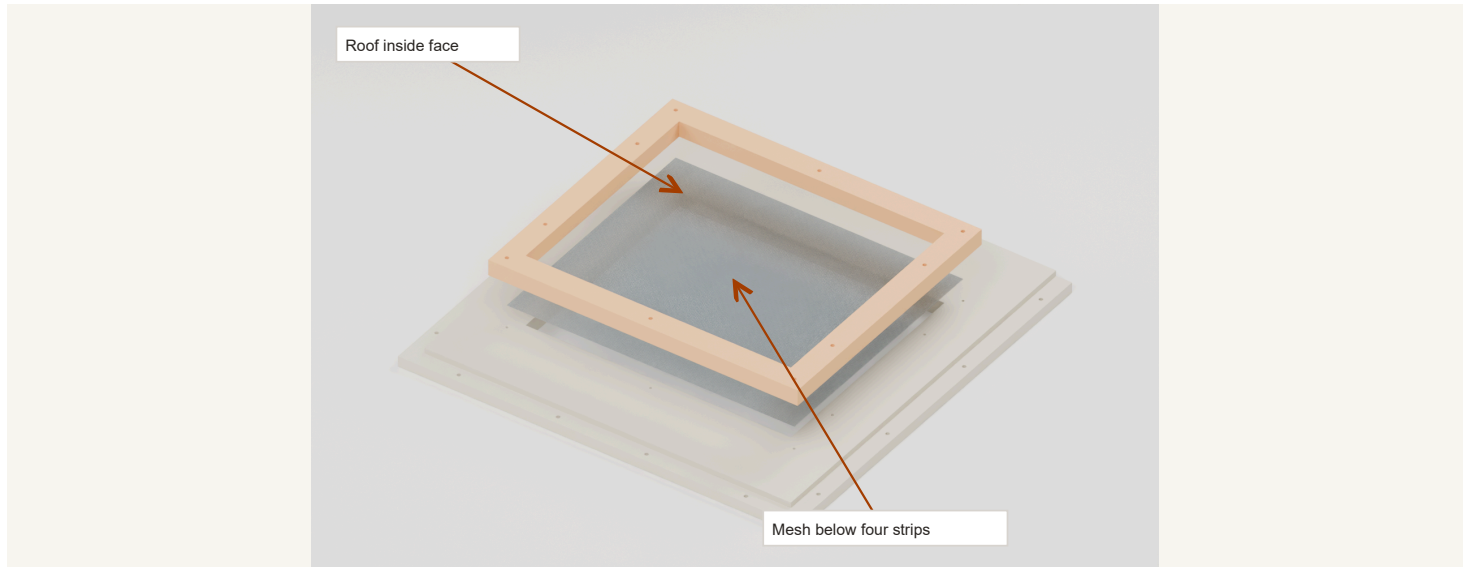
FINAL ASSEMBLY · 28 OF 33

28. Fit the roof screen and check removal

Parts: Roof screen M02 · Front roof strip V02F · Back roof strip V02B · Left roof strip V02L · Right roof strip V02R

Have ready: Roof mesh, four labeled strips, remaining retainer screws, hand driver and helper.

Before you start: Support the loose screen while fitting or removing strips. Never rest a lamp or other equipment on the mesh.



Construction illustration. Not to scale.

1. Work through the front, with the box supported for access. Center the roof mesh below the opening, with $\frac{1}{2}$ in (12.7 mm) overlap on each side.
2. Fit the four wooden strips in their labeled positions over the cut edges. Use the ten roof-retainer screws at the prepared stations and seat them by hand.
3. Rehearse service access: support the mesh, remove the strips and bring the 13 × 11 in (330.2 × 279.4 mm) screen out through the front opening. The roof itself stays fixed.
4. Refit and inspect the wood threads and wire edges. Stop and repair a stripped fixing before use; do not simply drive it tighter.

Check before continuing: All eighteen retainer screws are present and the screen replacement path works with your driver.

Watch out: Assuming the glued roof comes off for maintenance.

The illustration isolates the roof's inside face to explain the layers. The real roof remains attached to the box throughout this operation.

Keep beside this step: [Vent Detail](#) (p. 57) · [V02F](#) (p. 69) · [V02B](#) (p. 70) · [V02L](#) (p. 71) · [V02R](#) (p. 72)

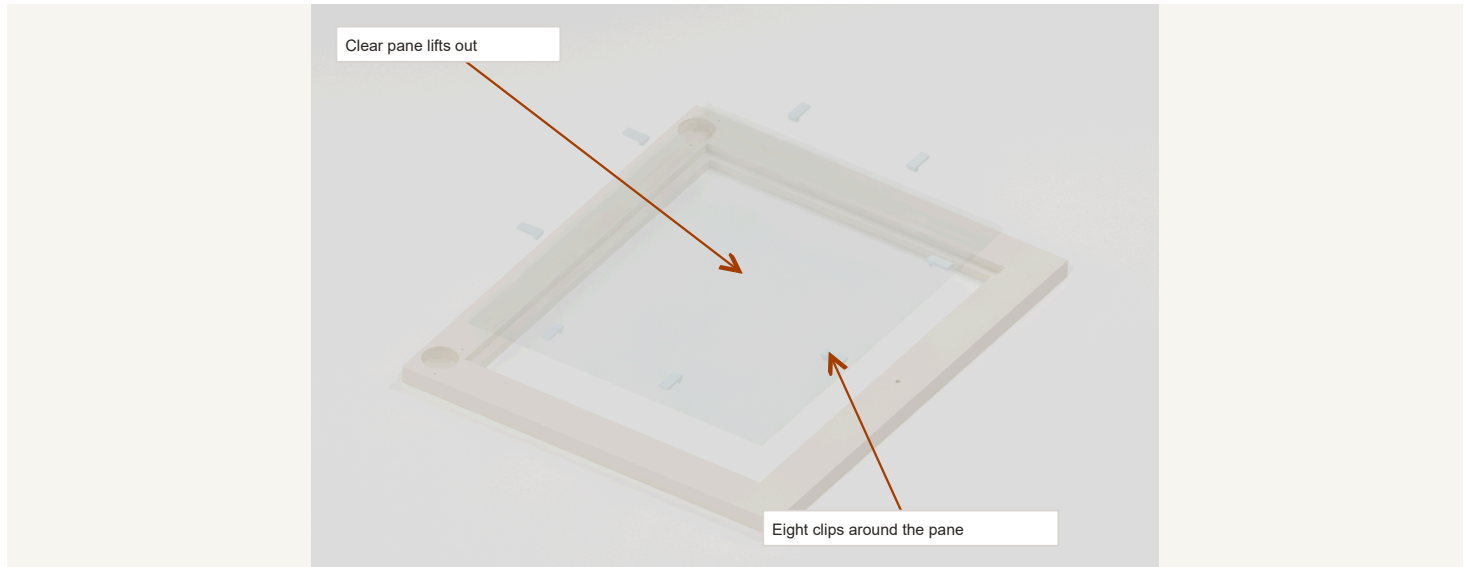
FINAL ASSEMBLY · 29 OF 33

29. Install the clear pane

Parts: Door D01 · Clear pane G01

Have ready: Cured door, clean pane, eight clips with their matched screws, hand driver and padded bench.

Before you start: Lay the supported door inside face up. Remove drilling dust and grit before setting down the pane.



Construction illustration. Not to scale.

1. Remove the acrylic masking and clean with the compatible OPTIX method. Place the pane flat in its recess without forcing it against an edge.
2. Check clearance on all four sides. The nominal uncoated edge allowance is 1/16 in (1.5875 mm) per side; coating and the actual pane must still leave room.
3. Refit the eight clips in the accepted holes. Tighten only enough to retain the pane gently. Do not bow the acrylic or fill its movement gap.
4. With a helper, lift the door upright over the padded bench and confirm that the pane remains retained. Return it flat if any clip is loose.

Check before continuing: The pane stays flat and secure while remaining removable.

Watch out: Using glue, sealant or excessive clip pressure to hide a bad fit.

Use a soft cloth and acrylic-compatible cleaner. Do not assume a glass cleaner, solvent, abrasive or disinfectant is safe for OPTIX.

Keep beside this step: [Glazing Section](#) (p. 56)

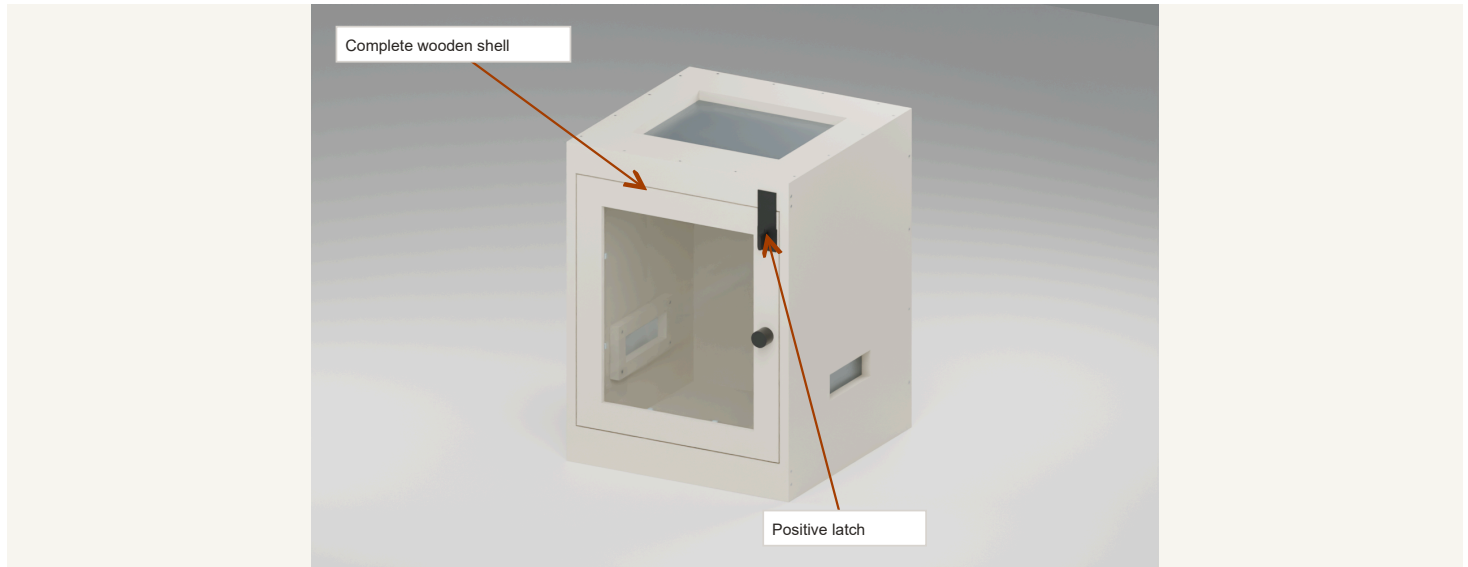
FINAL ASSEMBLY · 30 OF 33

30. Refit the knob and latch; weigh the door

Parts: Complete enclosure / parts identified in the picture

Have ready: Helper, hand driver, labeled fittings and a suitable scale.

Before you start: Never lift the enclosure by its door, knob, latch or mesh. Support the complete door whenever unclipping it.



Construction illustration. Not to scale.

1. Refit the knob and hasp in their trialed holes. Check machine-screw engagement and that the swivel staple turns freely.
2. Weigh the completed door with its pane and attached fittings. Record that measured mass and compare the real door size, mass and hinge spacing with the selected Blum planning guidance.
3. Rehang the supported door. Confirm both hinge clips engage, then test closure, latch access and full movement again.
4. Check that the pane clips and screen fixings remain accessible for replacement.

Check before continuing: The measured door mass and actual operation pass the product-specific checks.

Watch out: Treating an estimated model mass as a scale measurement.

Keep beside this step: [Receiving](#) (p. 86) · [Hinge Detail](#) (p. 55)

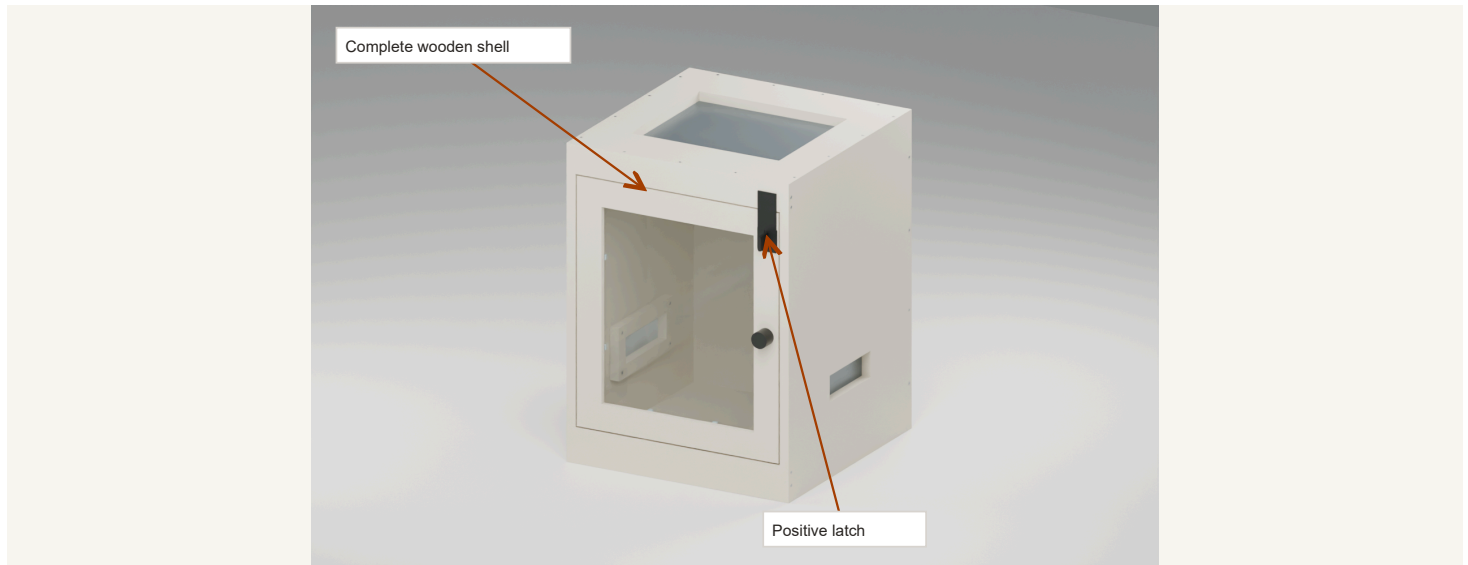
INSTALLATION · 31 OF 33

31. Place it on a full, stable support

Parts: Complete enclosure / parts identified in the picture

Have ready: Suitable support furniture, level, tape measure, helper and the restraint instructions.

Before you start: Move it empty with loose items removed. The restraint-to-plywood connection is unresolved; do not treat this candidate as installation-ready until that connection is confirmed.



Construction illustration. Not to scale.

1. Use a continuous, flat surface supporting the whole 18 × 18 in (457.2 × 457.2 mm) base. Level the supporting furniture. Do not put small shims directly under the enclosure or add legs, casters or another enclosure above it.
2. Check the complete enclosure and contents load, the furniture and the building floor separately. Average weight per square foot alone does not approve a floor.
3. Confirm the Hillman restraint's attachment into this plywood with its manufacturer. If added internal framing is required, stop and revise the coordinated design. Do not invent a screw connection.
4. Connect the wall end only as the kit directs into verified building support. Preserve access to release the restraint for service; never carry by the cable.
5. Check the planned service space: 25 in wide × 41 in deep × 27 in high (635 × 1041.4 × 685.8 mm), including front, left, rear and top access. This is not a heat-source clearance.

Check before continuing: The support, confirmed restraint connection and service space are documented before use.

Watch out: Calling the shell ready because it sits level while the support or restraint remains unknown.

This is a visible release hold, not a task a builder should solve by guessing. No filled tank, stacked unit or water-holding use is covered.

Keep beside this step: [Support Record](#) (p. 88)

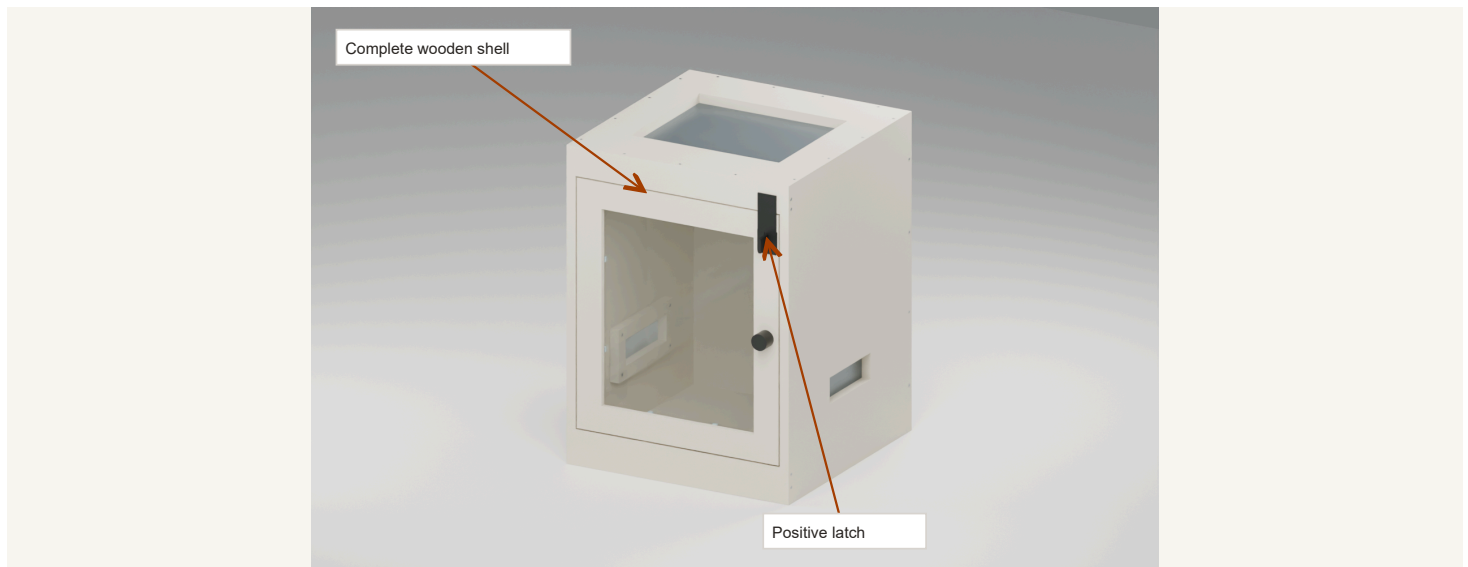
BEFORE USE · 32 OF 33

32. Commission it for the intended use

Parts: Complete enclosure / parts identified in the picture

Have ready: Inspection/receiving sheets, measuring tools and the selected equipment's installation instructions.

Before you start: The completed wooden shell alone does not establish suitability for an animal. No standing water, deep wet substrate or equipment load on the mesh is approved.



Construction illustration. Not to scale.

1. Record the actual size, opening, diagonals, door gaps and door mass. Inspect fixings, protected wire edges, coating and pane retention. Repeat opening, closing and replacement-access checks.
2. Resolve the species and life-stage requirements separately, including escape gaps, ventilation, substrate and cleaning. Fine mesh does not compensate for a gap around the door.
3. Provide independent equipment support, manufacturer-required heat clearances and protected cable routes separated from water. Do not cut an unreviewed hole for a cable or fitting.
4. Measure temperature and humidity under representative operating conditions before occupancy. Watch for condensation, wet floor seams or damaged penetrations and correct the cause.
5. Record what was actually checked. A digital check is not a built prototype, physical test, qualified review or publication approval.

Check before continuing: Every installation and intended-use hold is closed with evidence. Otherwise, keep the enclosure out of service.

Watch out: Treating a finished-looking shell as an approved habitat.

Keep beside this step: [Commission Record](#) (p. 89)

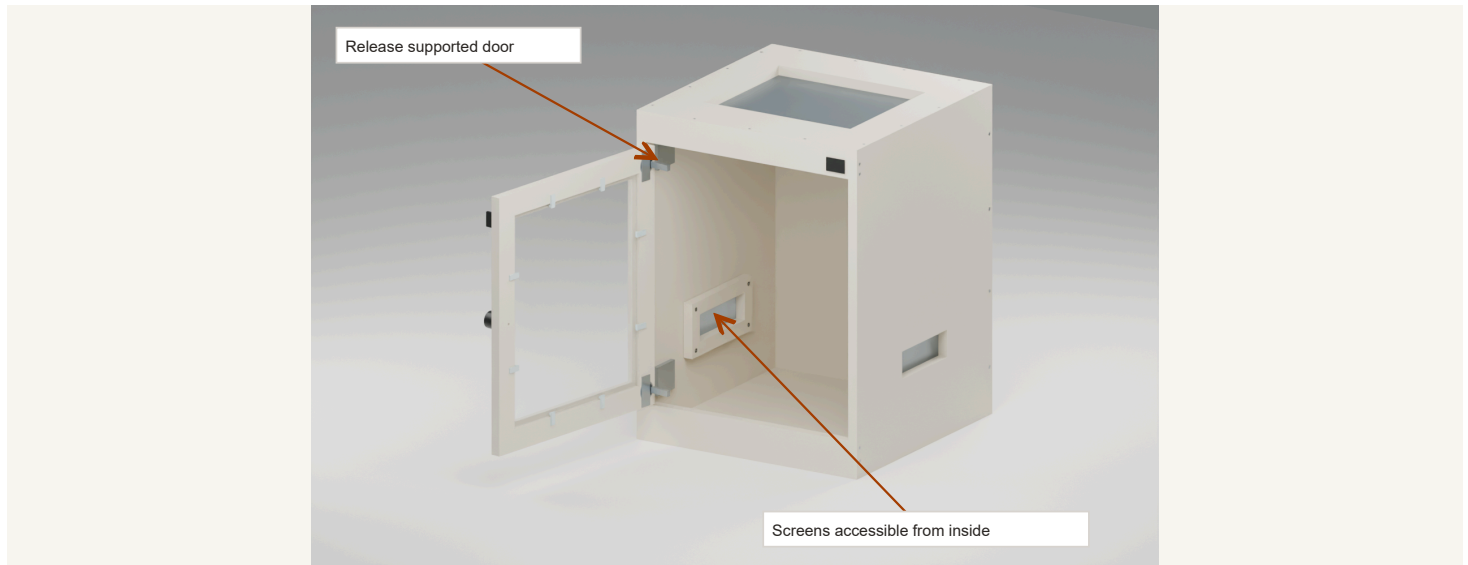
MAINTENANCE · 33 OF 33

33. Keep it clean and serviceable

Parts: Complete enclosure / parts identified in the picture

Have ready: Compatible cleaners, soft cloth, hand driver, helper and inspection log.

Before you start: Remove the occupant and disconnect equipment safely before maintenance. Support the door and loose screens when releasing their fittings.



Construction illustration. Not to scale.

1. Before use, check the latch, hinge engagement, pane clips and all screen edges. Stop using the enclosure if a fixing is loose, the coating has failed or a wire edge is exposed.
2. Use cleaners verified for each material. For the hinges, follow Blum's lightly water-dampened cloth method; do not spray the mechanism or soak the plywood.
3. After a moisture incident, dry, inspect and repair using the coating instructions. Do not hide softened wood, open seams or trapped moisture under a fresh coat.
4. Replace the pane with the door supported flat and clips removed. Replace screens through the open front. Inspect the wood threads every time a screw is removed.
5. Record replacements. Changing plywood, pane thickness, hinges, mesh, finish or support requires the relevant fit and use checks again.

Check before continuing: The maintenance log identifies defects, repairs and replacement parts.

Watch out: Reusing a stripped screw hole because the retainer still looks attached.

Keep beside this step: [Maintenance Record](#) (p. 89)

WORKSHOP REFERENCE

How to read the workshop drawings

The step pictures explain what to do. These drawings locate the exact cuts and holes. Keep the named drawing beside the corresponding step. None is a full-size template; **never measure a printed picture to size a part**.

Mark or term	Plain meaning
A / B	A is the outward/show face; B is the inside face. An inside operation may be drawn in the same coordinate projection as an outside view. Keep physical edge labels when flipping.
u0 / v0	The two finished measuring edges. Begin each location from these edges, not from the previous hole.
+u / +v	Directions measured across the part. The mapping to enclosure X/Y/Z appears beneath each drawing.
X / Y / Z	X goes right, Y goes toward the back, Z goes up, facing the access front.
Entry X+, X-, Y+, Y-, Z+, Z-	The drill travels in that direction from its listed starting face. For example, a bottom Z+ hole enters upward from below.
C / P	C is a clearance hole through the first piece. P is the smaller receiving pilot, accepted on a trial and transferred during the clamped fit.
Blue dashed shape / white opening	Blue locates a shallow recess; white is a cut completely through the part. Read its depth and entry face.
Field transfer	Use the delivered fitting at the stated checkpoint to locate its actual holes. Keep the stated margins, overlap and penetration limits.
Grain arrow	Keep the intended face-grain direction when nesting and labeling the parts.
Drawing versus schedule	The diagram labels can be abbreviated. The exact machining schedule on the following reference pages retains the source values.

Do not mirror the hinge side because a panel is turned over. Mark its original FRONT, BOTTOM and INSIDE face before any machining. If you cannot reconcile an entry direction with the joint section, stop before drilling.

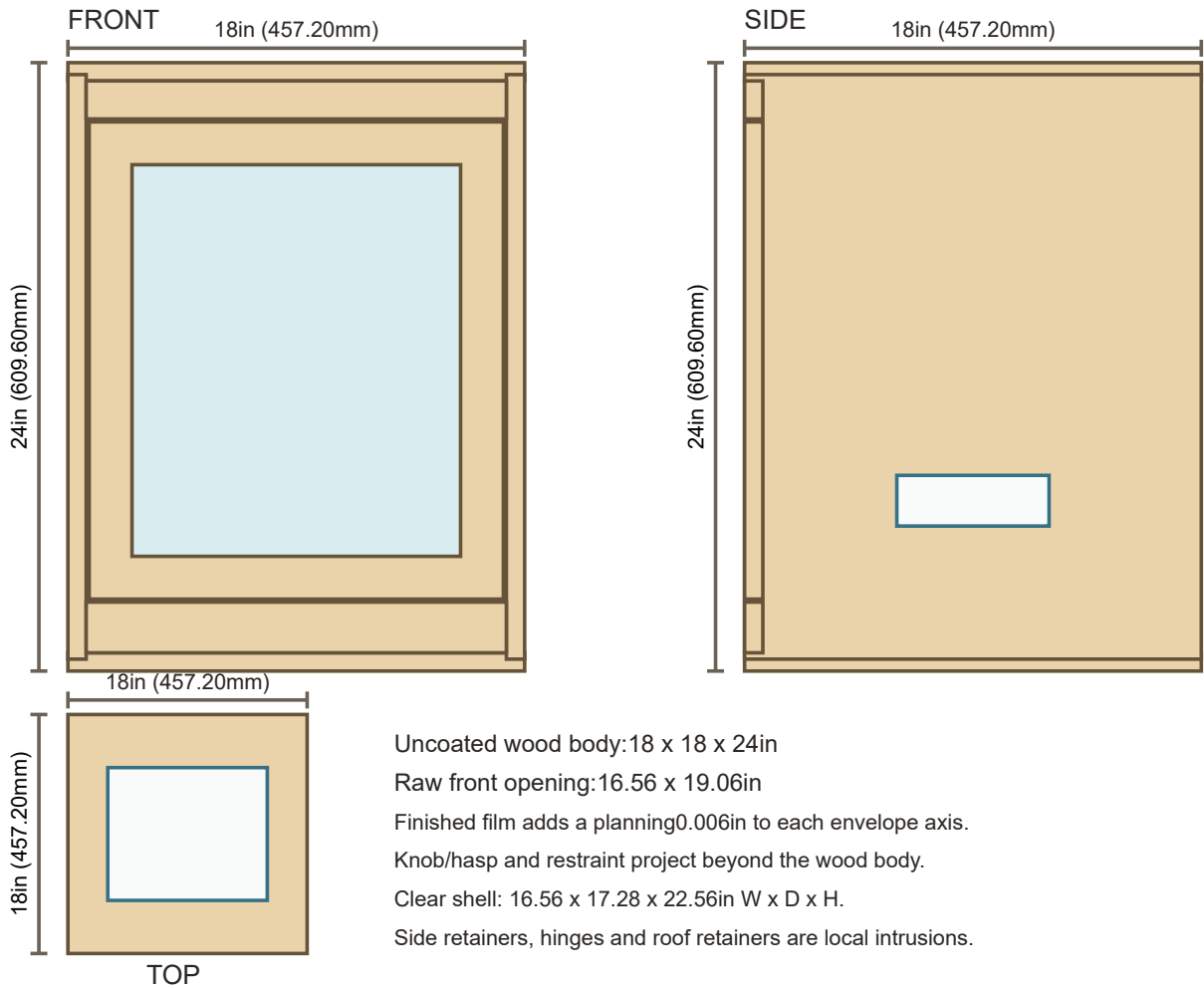
WORKSHOP REFERENCE

Workshop drawing · Overall

THE CREATURE CORNER

v5-candidate-01

Overall dimensions | orthographic views



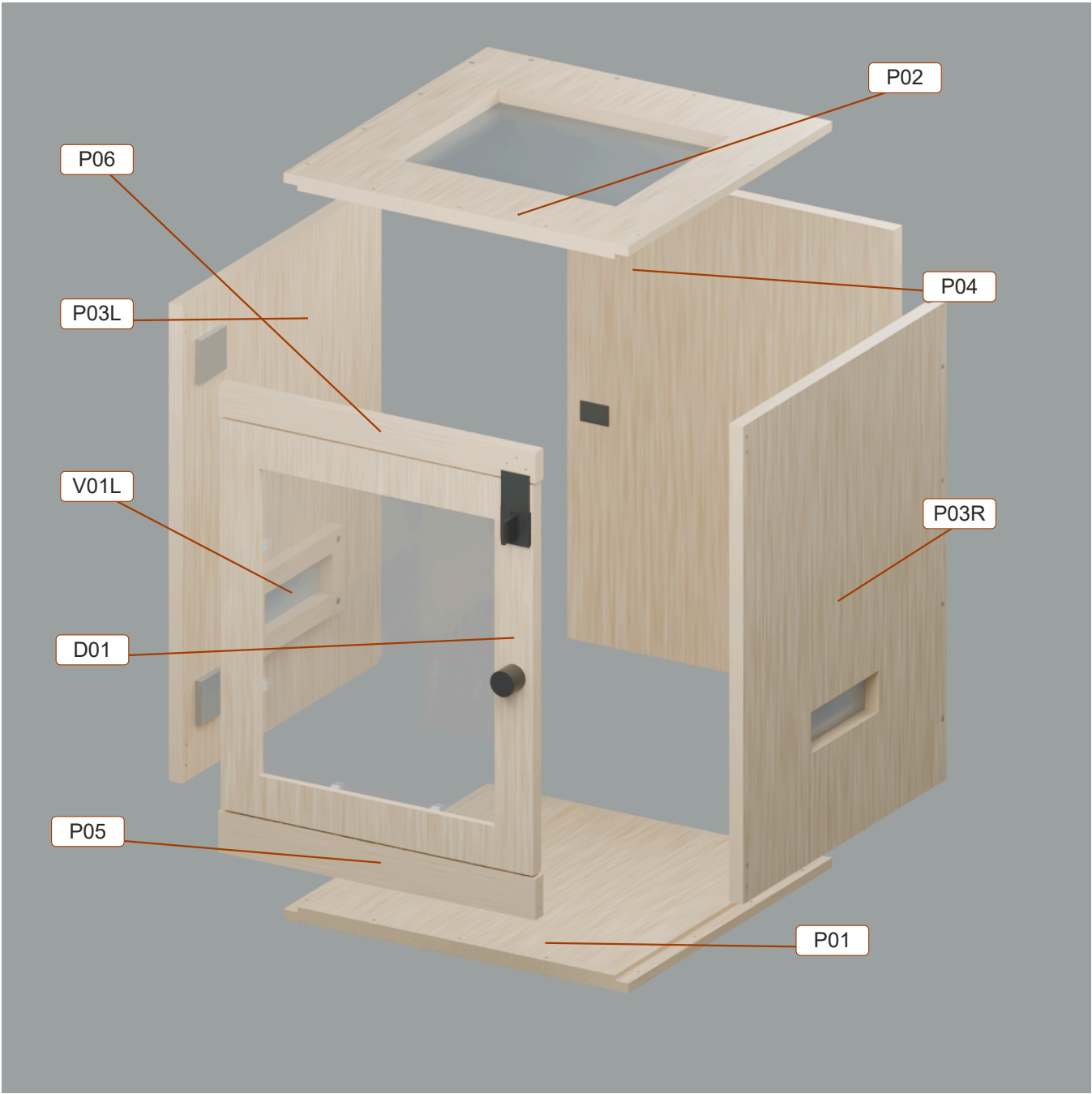
Dimensions govern. Not a full-size template. Do not scale. Unbuilt plan. Complete installation checks.
nb20260929-n07 | overall | source 5401ace7ba2cb88f

Source construction revision v5-candidate-01. Dimensions govern. Hardware envelopes and clamp shapes are explanatory, not manufacturer CAD or physical tests.

WORKSHOP REFERENCE

Workshop drawing · Exploded Assembly

N07 | exploded construction relationships
v5-candidate-01 | not to scale | hardware contours illustrative



Matched part IDs, source 5401ace7ba2cb88f. See part sheets for machining and fixed positions.

Source construction revision v5-candidate-01. Dimensions govern. Hardware envelopes and clamp shapes are explanatory, not manufacturer CAD or physical tests.

WORKSHOP REFERENCE

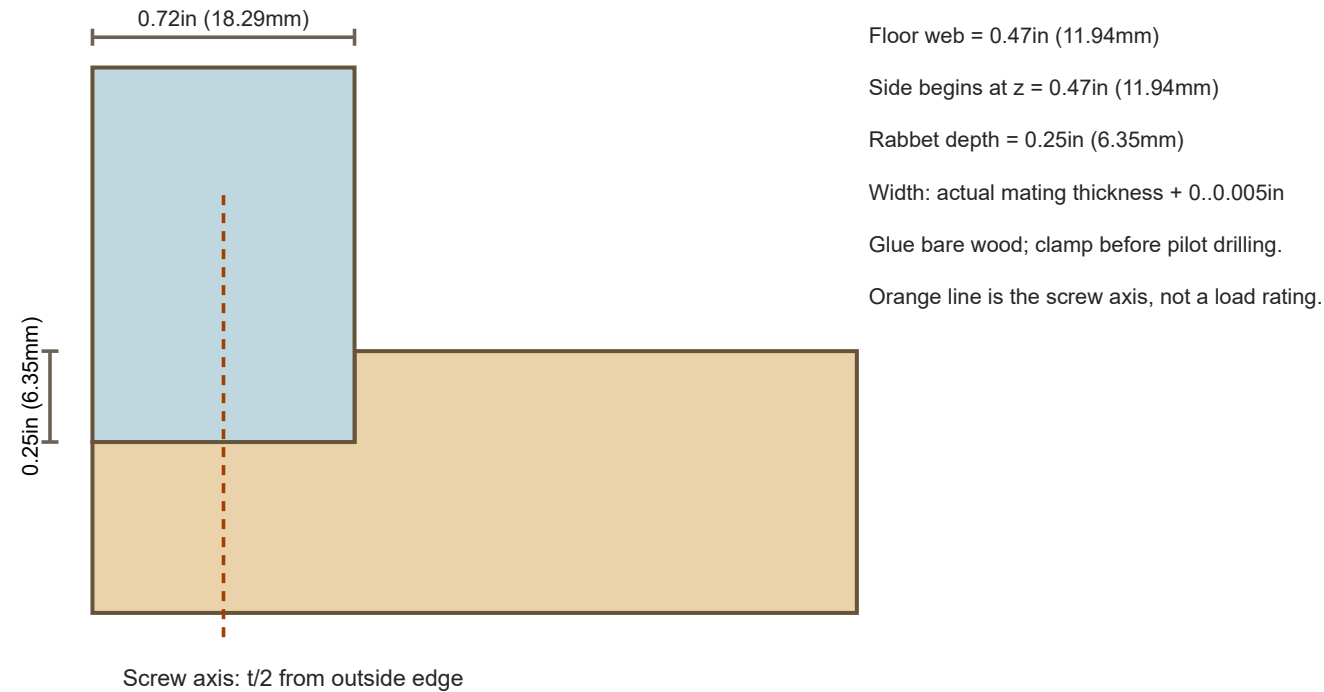
Workshop drawing · Joints

THE CREATURE CORNER

v5-candidate-01

Locating rabbets | actual section geometry

J01 | floor / side section, viewed toward the rear



J02 | back-to-side: the same section rotated into the rear vertical edge.

Height closure: $23.06 + 2 \times 0.47 = 24\text{in}$

Sill/header: square butt joints; their full end faces bear on the sides. See fixed drilling stations.

Pilot depth and tip cover follow machining-schedule.csv. Fit clearance does not change the exterior datum.

Dimensions govern. Not a full-size template. Do not scale. Unbuilt plan. Complete installation checks.

nb20260929-n07 | joints | source 5401ace7ba2cb88f

Source construction revision v5-candidate-01. Dimensions govern. Hardware envelopes and clamp shapes are explanatory, not manufacturer CAD or physical tests.

WORKSHOP REFERENCE

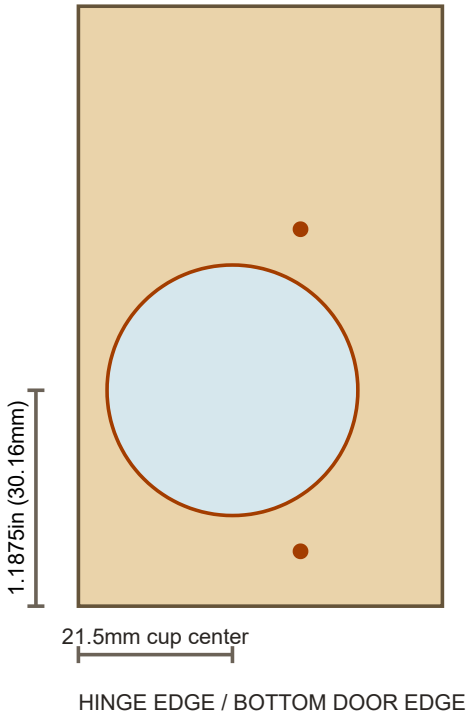
Workshop drawing · Hinge Detail

THE CREATURE CORNER

v5-candidate-01

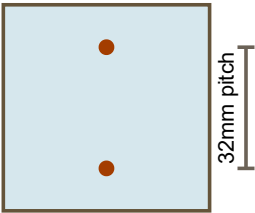
Blum71B3750 +173L6100 | verified boring interfaces

Outside-face coordinate projection | bore from opposite inside face



- Cup:35mm diameter ×13mm deep
- Screw-on cup fixings:45mm vertical pitch
- Fixing line:9.5mm inward from cup center
- Top hinge mirrors only the vertical end datum.
- Do not mirror the hinge edge to the right.
- Cup fasteners:Blum606N #6 ×5/8in
- Confirm actual flange and sound core on coupon.

Left side inside face: mounting plate



Screw line behind raw front: 2.2387in (56.86mm)

Cup centers z: 4.0256, 20.4744in above the exterior base datum.

Both products and the inset reveal table must match. See D01 and P03L for all machining coordinates.

Dimensions govern. Not a full-size template. Do not scale. Unbuilt plan. Complete installation checks.

nb20260929-n07 | hinge-detail | source 5401ace7ba2cb88f

Source construction revision v5-candidate-01. Dimensions govern. Hardware envelopes and clamp shapes are explanatory, not manufacturer CAD or physical tests.

WORKSHOP REFERENCE

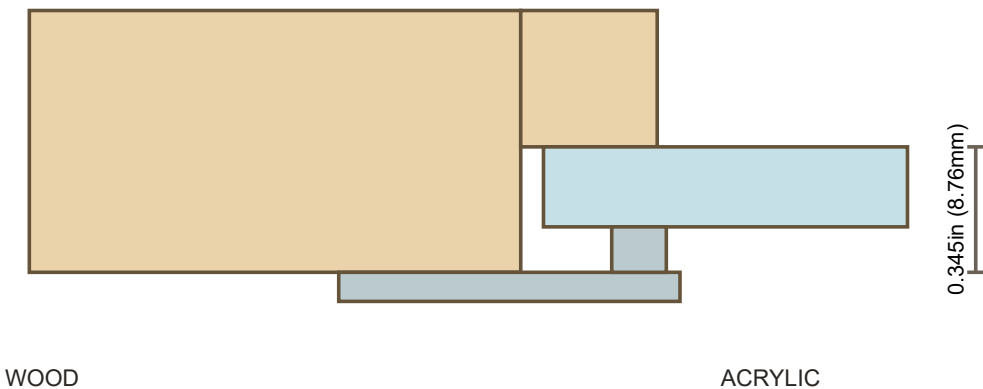
Workshop drawing · Glazing Section

THE CREATURE CORNER

v5-candidate-01

Replaceable glazing | restrained without bonding

Door edge section | outside above, inside below



Rebate depth = pane thickness + selected clip offset = 0.345in (8.76mm)

Peripheral gap = 0.0625in (1.59mm) each edge; do not fill it with adhesive.

Pane overlap onto wood = rebate width – edge gap = 0.3125in (7.94mm)

Clip profile shown schematically. Delivered clip hole/contour is not dimensioned by its maker.

During raw dry fit: place tip0.125..0.25in onto pane, then transfer the actual fixing hole.

Require fixing center≥0.25in from both pocket and outside edge, penetration≤0.60in.

Drill before coating; seal penetration and recheck after full cure. No compression gasket.

Dimensions govern. Not a full-size template. Do not scale. Unbuilt plan. Complete installation checks.

nb20260929-n07 | glazing-section | source 5401ace7ba2cb88f

Source construction revision v5-candidate-01. Dimensions govern. Hardware envelopes and clamp shapes are explanatory, not manufacturer CAD or physical tests.

WORKSHOP REFERENCE

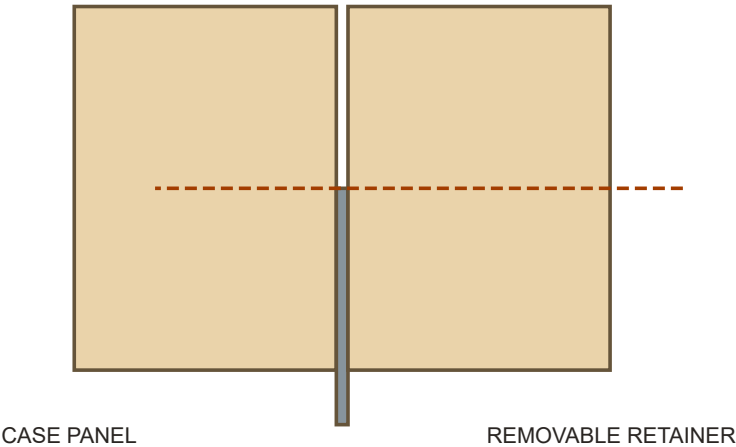
Workshop drawing · Vent Section

THE CREATURE CORNER

v5-candidate-01

Captured stainless mesh | serviceable edge detail

Section through one side vent edge | inside to the right



Screen is between faces.

Wire edge ends inside the retainer border.

Panel and retainer thickness: 0.72in (18.29mm); mesh envelope: 0.032in (0.81mm)

Each mesh cut edge overlaps the clear vent by 0.5in (12.70mm). Retainer border 1in (25.40mm).

Retainer screw passes through clearance hole, then mesh space, into case face.

1.25in screw – 0.752in stack = 0.498in nominal case penetration.

Remaining outside wood = 0.222in (5.64mm) before point/countersink tolerances.

Keep burrs, loose wires and every cut edge hidden. Hand tighten without stripping.

Roof uses the same layer order facing downward. The screen carries no equipment load.

Dimensions govern. Not a full-size template. Do not scale. Unbuilt plan. Complete installation checks.

nb20260929-n07 | vent-section | source 5401ace7ba2cb88f

Source construction revision v5-candidate-01. Dimensions govern. Hardware envelopes and clamp shapes are explanatory, not manufacturer CAD or physical tests.

WORKSHOP REFERENCE

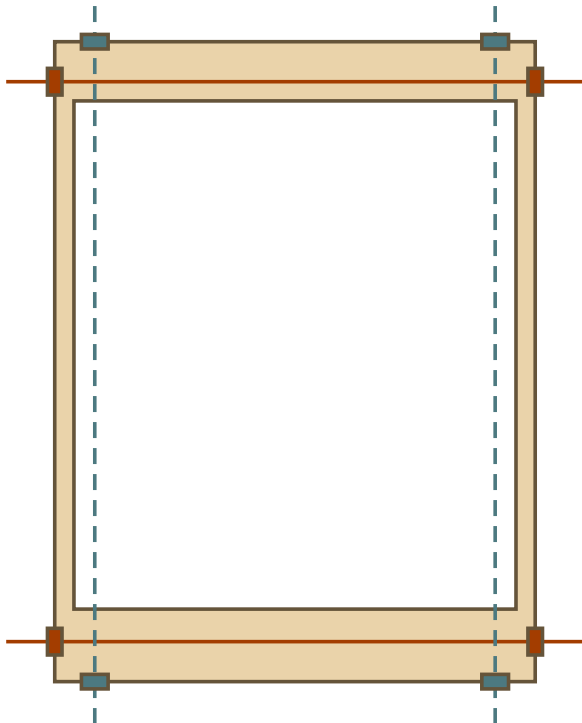
Workshop drawing · Clamp Rehearsal

THE CREATURE CORNER

v5-candidate-01

Six-clamp support plan | bounded envelope check

Rehearsal envelope | front projection, case resting on its padded back



ORANGE: four width clamps,24in capacity.
Two shown; two behind at matching heights.

BLUE: two floor-to-roof clamps,30in capacity.

All jaws require at least4in throat.

Front width bars y=-0.75; vertical bars y=-1.5.

Rear width bars y=18.75in. Bar envelope0.5in square.

Pads centered1.5in from adjacent panel ends.

Assume1in pads and0.25in cauls each face.

2in stable padded risers under the back
keep the rear bars clear of the bench.

Plan only: actual jaw shapes, pad pressure, hand space and screw access must be rehearsed with your clamps.

Move one clamp at a time if it blocks a screw; keep the dry roof and remaining clamps holding alignment.

Check every shoulder and the full back seat. Do not force a bowed panel into apparent alignment.

Dimensions govern. Not a full-size template. Do not scale. Unbuilt plan. Complete installation checks.

nb20260929-n07 | clamp-rehearsal | source 5401ace7ba2cb88f

Source construction revision v5-candidate-01. Dimensions govern. Hardware envelopes and clamp shapes are explanatory, not manufacturer CAD or physical tests.

WORKSHOP REFERENCE

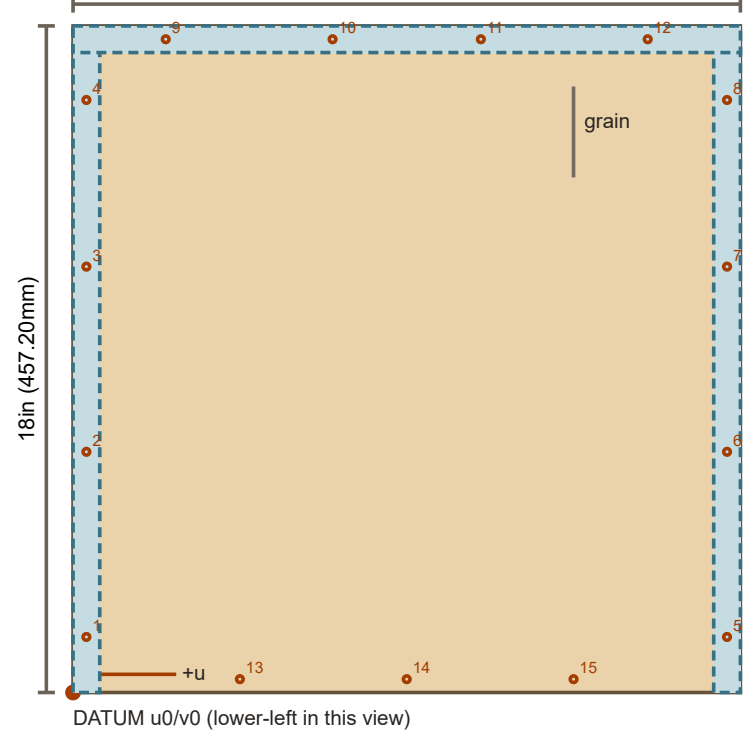
Workshop drawing · Bottom

THE CREATURE CORNER

v5-candidate-01

Floor | part drawing

P01 | Floor | qty1 | PLY | thickness 0.72in (18.29mm)
18in (457.20mm)



Machining key (inches; entry XYZ)

- # / operation u v dia / depth
- 1 F001C 0.36,1.5 Z+ 0.1719/0.47
 - 2 F002C 0.36,6.5 Z+ 0.1719/0.47
 - 3 F003C 0.36,11.5 Z+ 0.1719/0.47
 - 4 F004C 0.36,16 Z+ 0.1719/0.47
 - 5 F005C 17.64,1.5 Z+ 0.1719/0.47
 - 6 F006C 17.64,6.5 Z+ 0.1719/0.47
 - 7 F007C 17.64,11.5 Z+ 0.1719/0.47
 - 8 F008C 17.64,16 Z+ 0.1719/0.47
 - 9 F009C 2.5,17.64 Z+ 0.1719/0.47
 - 10 F010C 7,17.64 Z+ 0.1719/0.47
 - 11 F011C 11,17.64 Z+ 0.1719/0.47
 - 12 F012C 15.5,17.64 Z+ 0.1719/0.47
 - 13 F013C 4.5,0.36 Z+ 0.1719/0.72
 - 14 F014C 9,0.36 Z+ 0.1719/0.72
 - 15 F015C 13.5,0.36 Z+ 0.1719/0.72
- C = clearance; P = trial receiving pilot.
Exact station data: machining-schedule.csv.

Axis mapping: u=X, v=Y. Blue dashed areas are rebates; white areas are through openings.
Rough blank 18.125 x 18.125in. Length/width tolerance: +/-0.0156in.
All receiver pilots are established during clamped dry fit; confirm edge entry on the joint section before drilling.

Dimensions govern. Not a full-size template. Do not scale. Unbuilt plan. Complete installation checks.
nb20260929-n07 | P01 | source 5401ace7ba2cb88f

Bottom P01 · A: exterior/show face; B: inside face · none

Sand exposed plywood edges smooth, ease exposed edges 1/32in; keep glue faces square and bare; seal every exposed cut edge

Hole labels refer to [the exact machining schedule](#) (p. 77). Preserve u0/v0 when flipping this piece.

Locate every rectangular cut using [opening and recess sizes](#) (p. 90).

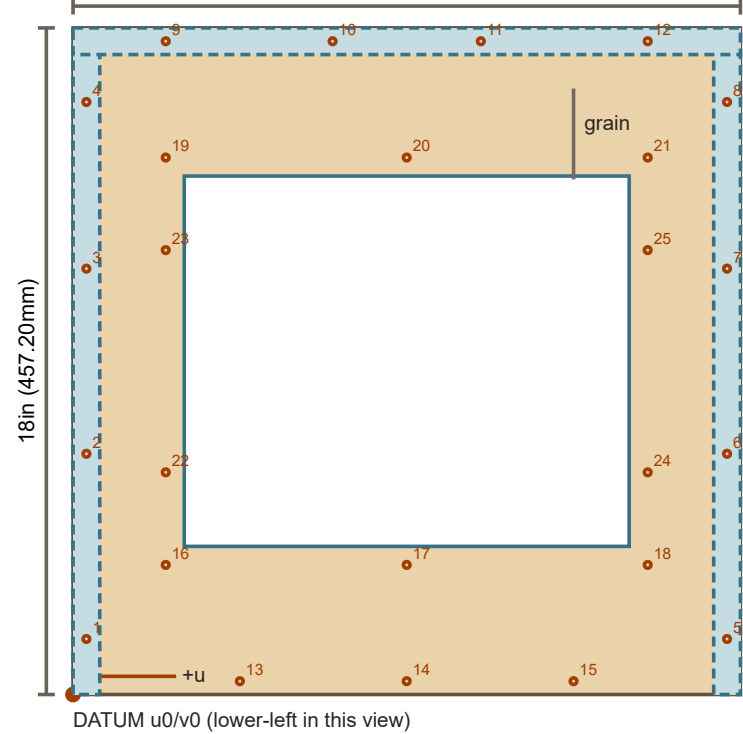
WORKSHOP REFERENCE

Workshop drawing · Roof

THE CREATURE CORNER

Fixed roof | part drawing

P02 | Fixed roof | qty1 | PLY | thickness 0.72in (18.29mm)
18in (457.20mm)



Machining key (inches; entry XYZ)

- # / operation u v dia / depth
- 1 F016C 0.36,1.5 Z- 0.1719/0.47
 - 2 F017C 0.36,6.5 Z- 0.1719/0.47
 - 3 F018C 0.36,11.5 Z- 0.1719/0.47
 - 4 F019C 0.36,16 Z- 0.1719/0.47
 - 5 F020C 17.64,1.5 Z- 0.1719/0.47
 - 6 F021C 17.64,6.5 Z- 0.1719/0.47
 - 7 F022C 17.64,11.5 Z- 0.1719/0.47
 - 8 F023C 17.64,16 Z- 0.1719/0.47
 - 9 F024C 2.5,17.64 Z- 0.1719/0.47
 - 10 F025C 7,17.64 Z- 0.1719/0.47
 - 11 F026C 11,17.64 Z- 0.1719/0.47
 - 12 F027C 15.5,17.64 Z- 0.1719/0.47
 - 13 F028C 4.5,0.36 Z- 0.1719/0.72
 - 14 F029C 9,0.36 Z- 0.1719/0.72
 - 15 F030C 13.5,0.36 Z- 0.1719/0.72
 - 16 R009P 2.5,3.5 Z+ 0.1094/0.498
 - 17 R010P 9,3.5 Z+ 0.1094/0.498
 - 18 R011P 15.5,3.5 Z+ 0.1094/0.498
 - 19 R012P 2.5,14.5 Z+ 0.1094/0.498
 - 20 R013P 9,14.5 Z+ 0.1094/0.498
 - 21 R014P 15.5,14.5 Z+ 0.1094/0.498
 - 22 R015P 2.5,6 Z+ 0.1094/0.498
 - 23 R016P 2.5,12 Z+ 0.1094/0.498
 - 24 R017P 15.5,6 Z+ 0.1094/0.498
 - 25 R018P 15.5,12 Z+ 0.1094/0.498

Axis mapping: u=X, v=Y. Blue dashed areas are rebates; white areas are through openings.
Rough blank 18.125 x 18.125in. Length/width tolerance: +/-0.0156in.
All receiver pilots are established during clamped dry fit; confirm edge entry on the joint section before drilling.

Dimensions govern. Not a full-size template. Do not scale. Unbuilt plan. Complete installation checks.

nb20260929-n07 | P02 | source 5401ace7ba2cb88f

Roof P02 · A: exterior/show face; B: inside face · none

Sand exposed plywood edges smooth, ease exposed edges1/32in; keep glue faces square and bare; seal every exposed cut edge

Hole labels refer to **the exact machining schedule** (p. 77). Preserve u0/v0 when flipping this piece.

Locate every rectangular cut using **opening and recess sizes** (p. 90).

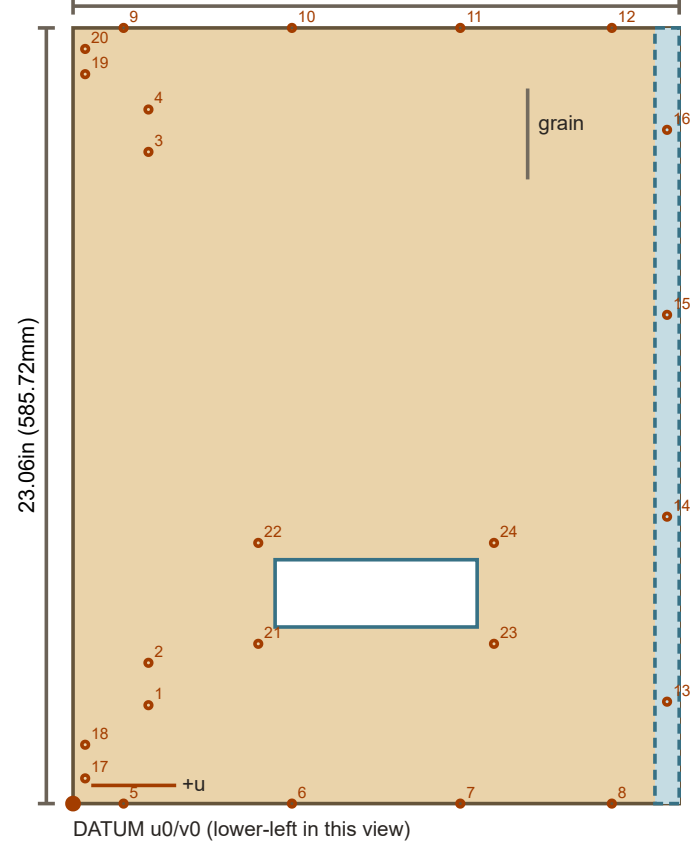
WORKSHOP REFERENCE

Workshop drawing · Left wall

THE CREATURE CORNER

Left side | part drawing

P03L | Left side | qty1 | **PLY** | thickness 0.72in (18.29mm)
18in (457.20mm)



Machining key (inches; entry XYZ)

- # / operation u v dia / depth
- 1 HP10 2.2387,2.9257 X- 0.0938/0.6
 - 2 HP11 2.2387,4.1855 X- 0.0938/0.6
 - 3 HP20 2.2387,19.3745 X- 0.0938/0.6
 - 4 HP21 2.2387,20.6343 X- 0.0938/0.6
 - 5 F001P 1.5,0 Z+ 0.1094/1.28
 - 6 F002P 6.5,0 Z+ 0.1094/1.28
 - 7 F003P 11.5,0 Z+ 0.1094/1.28
 - 8 F004P 16,0 Z+ 0.1094/1.28
 - 9 F016P 1.5,23.06 Z- 0.1094/1.28
 - 10 F017P 6.5,23.06 Z- 0.1094/1.28
 - 11 F018P 11.5,23.06 Z- 0.1094/1.28
 - 12 F019P 16,23.06 Z- 0.1094/1.28
 - 13 F031C 17.64,3.03 X+ 0.1719/0.47
 - 14 F032C 17.64,8.53 X+ 0.1719/0.47
 - 15 F033C 17.64,14.53 X+ 0.1719/0.47
 - 16 F034C 17.64,20.03 X+ 0.1719/0.47
 - 17 F035C 0.36,0.75 X+ 0.1719/0.72
 - 18 F036C 0.36,1.75 X+ 0.1719/0.72
 - 19 F037C 0.36,21.685 X+ 0.1719/0.72
 - 20 F038C 0.36,22.435 X+ 0.1719/0.72
 - 21 R001P 5.5,4.75 X- 0.1094/0.498
 - 22 R002P 5.5,7.75 X- 0.1094/0.498
 - 23 R003P 12.5,4.75 X- 0.1094/0.498
 - 24 R004P 12.5,7.75 X- 0.1094/0.498

Axis mapping: u=Y, v=Z. Blue dashed areas are rebates; white areas are through openings.
Rough blank 18.125 x 23.185in. Length/width tolerance: +/-0.0156in. Hand: LEFT: hinge mounting bores on inside face
All receiver pilots are established during clamped dry fit; confirm edge entry on the joint section before drilling.

Dimensions govern. Not a full-size template. Do not scale. Unbuilt plan. Complete installation checks.
nb20260929-n07 | P03L | source 5401ace7ba2cb88f

Left wall P03L · A: exterior/show face; B: inside face · LEFT: hinge mounting bores on inside face

Sand exposed plywood edges smooth, ease exposed edges 1/32in; keep glue faces square and bare; seal every exposed cut edge

Hole labels refer to **the exact machining schedule** (p. 77). Preserve u0/v0 when flipping this piece.

Locate every rectangular cut using **opening and recess sizes** (p. 90).

WORKSHOP REFERENCE

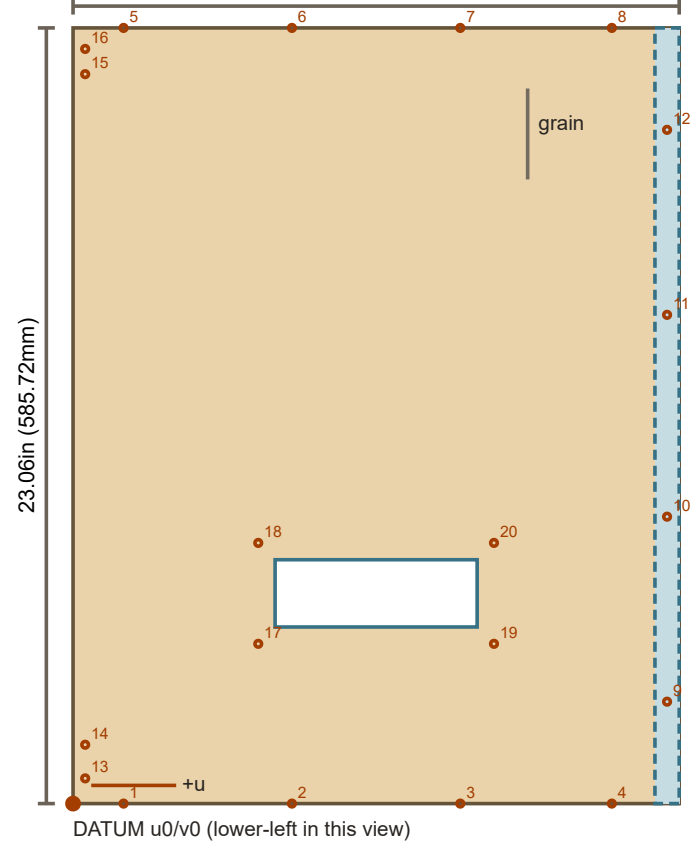
Workshop drawing · Right wall

THE CREATURE CORNER

Right side | part drawing

v5-candidate-01

P03R | Right side | qty1 | PLY | thickness 0.72in (18.29mm)
18in (457.20mm)



Machining key (inches; entry XYZ)

- # / operation u v dia / depth
- 1 F005P 1.5,0 Z+ 0.1094/1.28
 - 2 F006P 6.5,0 Z+ 0.1094/1.28
 - 3 F007P 11.5,0 Z+ 0.1094/1.28
 - 4 F008P 16,0 Z+ 0.1094/1.28
 - 5 F020P 1.5,23.06 Z- 0.1094/1.28
 - 6 F021P 6.5,23.06 Z- 0.1094/1.28
 - 7 F022P 11.5,23.06 Z- 0.1094/1.28
 - 8 F023P 16,23.06 Z- 0.1094/1.28
 - 9 F039C 17.64,3.03 X- 0.1719/0.47
 - 10 F040C 17.64,8.53 X- 0.1719/0.47
 - 11 F041C 17.64,14.53 X- 0.1719/0.47
 - 12 F042C 17.64,20.03 X- 0.1719/0.47
 - 13 F043C 0.36,0.75 X- 0.1719/0.72
 - 14 F044C 0.36,1.75 X- 0.1719/0.72
 - 15 F045C 0.36,21.685 X- 0.1719/0.72
 - 16 F046C 0.36,22.435 X- 0.1719/0.72
 - 17 R005P 5.5,4.75 X+ 0.1094/0.498
 - 18 R006P 5.5,7.75 X+ 0.1094/0.498
 - 19 R007P 12.5,4.75 X+ 0.1094/0.498
 - 20 R008P 12.5,7.75 X+ 0.1094/0.498
- C = clearance; P = trial receiving pilot.
Exact station data: machining-schedule.csv.

Axis mapping: u=Y, v=Z. Blue dashed areas are rebates; white areas are through openings.
Rough blank 18.125 x 23.185in. Length/width tolerance: +/-0.0156in. Hand: RIGHT: no hinge mounting bores
All receiver pilots are established during clamped dry fit; confirm edge entry on the joint section before drilling.

Dimensions govern. Not a full-size template. Do not scale. Unbuilt plan. Complete installation checks.
nb20260929-n07 | P03R | source 5401ace7ba2cb88f

Right wall P03R · A: exterior/show face; B: inside face · RIGHT: no hinge mounting bores

Sand exposed plywood edges smooth, ease exposed edges 1/32in; keep glue faces square and bare; seal every exposed cut edge

Hole labels refer to [the exact machining schedule](#) (p. 77). Preserve u0/v0 when flipping this piece.

Locate every rectangular cut using [opening and recess sizes](#) (p. 90).

WORKSHOP REFERENCE

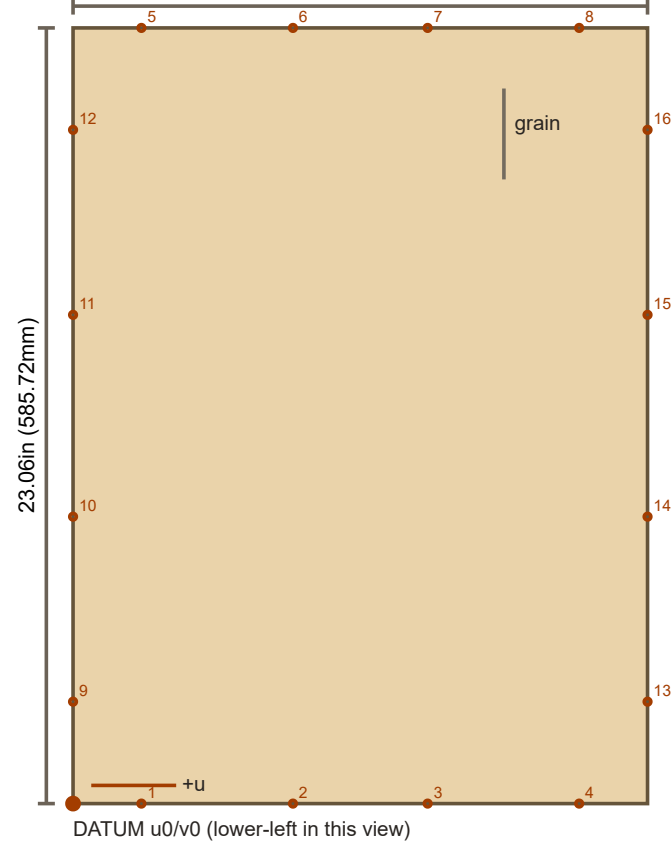
Workshop drawing · Back

THE CREATURE CORNER

v5-candidate-01

Full back | part drawing

P04 | Full back | qty1 | PLY | thickness 0.72in (18.29mm)
17.06in (433.32mm)



Machining key (inches; entry XYZ)

- # / operation u v dia / depth
- 1 F009P 2.03,0 Z+ 0.1094/1.28
 - 2 F010P 6.53,0 Z+ 0.1094/1.28
 - 3 F011P 10.53,0 Z+ 0.1094/1.28
 - 4 F012P 15.03,0 Z+ 0.1094/1.28
 - 5 F024P 2.03,23.06 Z- 0.1094/1.28
 - 6 F025P 6.53,23.06 Z- 0.1094/1.28
 - 7 F026P 10.53,23.06 Z- 0.1094/1.28
 - 8 F027P 15.03,23.06 Z- 0.1094/1.28
 - 9 F031P 0,3.03 X+ 0.1094/1.28
 - 10 F032P 0,8.53 X+ 0.1094/1.28
 - 11 F033P 0,14.53 X+ 0.1094/1.28
 - 12 F034P 0,20.03 X+ 0.1094/1.28
 - 13 F039P 17.06,3.03 X- 0.1094/1.28
 - 14 F040P 17.06,8.53 X- 0.1094/1.28
 - 15 F041P 17.06,14.53 X- 0.1094/1.28
 - 16 F042P 17.06,20.03 X- 0.1094/1.28
- C = clearance; P = trial receiving pilot.
Exact station data: machining-schedule.csv.
Field operation: see guide and specification.

Axis mapping: u=X, v=Z. Blue dashed areas are rebates; white areas are through openings.
Rough blank 17.185 x 23.185in. Length/width tolerance: +/-0.0156in.
All receiver pilots are established during clamped dry fit; confirm edge entry on the joint section before drilling.

Dimensions govern. Not a full-size template. Do not scale. Unbuilt plan. Complete installation checks.
nb20260929-n07 | P04 | source 5401ace7ba2cb88f

Back P04 · A: exterior/show face; B: inside face · none

Sand exposed plywood edges smooth, ease exposed edges 1/32in; keep glue faces square and bare; seal every exposed cut edge

Hole labels refer to [the exact machining schedule](#) (p. 77). Preserve u0/v0 when flipping this piece.

WORKSHOP REFERENCE

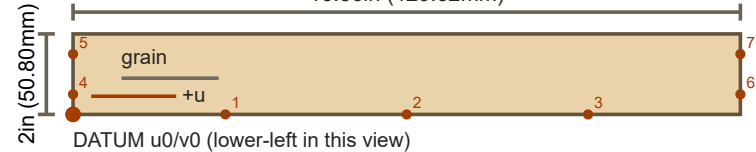
Workshop drawing · Lower front strip

THE CREATURE CORNER

v5-candidate-01

Front sill | part drawing

P05 | Front sill | qty1 | PLY | thickness 0.72in (18.29mm)
16.56in (420.62mm)



Machining key (inches; entry XYZ)

/ operation u v dia / depth

- 1 F013P 3.78,0 Z+ 0.1094/1.03
- 2 F014P 8.28,0 Z+ 0.1094/1.03
- 3 F015P 12.78,0 Z+ 0.1094/1.03
- 4 F035P 0,0.5 X+ 0.1094/1.03
- 5 F036P 0,1.5 X+ 0.1094/1.03
- 6 F043P 16.56,0.5 X- 0.1094/1.03
- 7 F044P 16.56,1.5 X- 0.1094/1.03

C = clearance; P = trial receiving pilot.
Exact station data: machining-schedule.csv.

Axis mapping: u=X, v=Z. Blue dashed areas are rebates; white areas are through openings.
Rough blank 16.685 x 2.125in. Length/width tolerance: +/-0.0156in.
All receiver pilots are established during clamped dry fit; confirm edge entry on the joint section before drilling.

Dimensions govern. Not a full-size template. Do not scale. Unbuilt plan. Complete installation checks.

nb20260929-n07 | P05 | source 5401ace7ba2cb88f

Lower front strip P05 · A: exterior/show face; B: inside face · none

Sand exposed plywood edges smooth, ease exposed edges 1/32in; keep glue faces square and bare; seal every exposed cut edge

Hole labels refer to **the exact machining schedule** (p. 77). Preserve u0/v0 when flipping this piece.

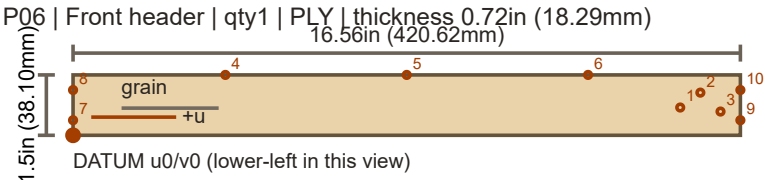
WORKSHOP REFERENCE

Workshop drawing · Upper front strip

THE CREATURE CORNER

v5-candidate-01

Front header | part drawing



Machining key (inches; entry XYZ)

#	/ operation	u	v	dia	/ depth
1	HASP1	15.0669	0.69	Y+	0.125/0.55
2	HASP2	15.5669	1.06	Y+	0.125/0.55
3	HASP3	16.0669	0.59	Y+	0.125/0.55
4	F028P	3.78	1.5	Z-	0.1094/1.03
5	F029P	8.28	1.5	Z-	0.1094/1.03
6	F030P	12.78	1.5	Z-	0.1094/1.03
7	F037P	0	0.375	X+	0.1094/1.03
8	F038P	0	1.125	X+	0.1094/1.03
9	F045P	16.56	0.375	X-	0.1094/1.03
10	F046P	16.56	1.125	X-	0.1094/1.03

C = clearance; P = trial receiving pilot.
Exact station data: machining-schedule.csv.

Axis mapping: u=X, v=Z. Blue dashed areas are rebates; white areas are through openings.

Rough blank 16.685 x 1.625in. Length/width tolerance: +/-0.0156in.

All receiver pilots are established during clamped dry fit; confirm edge entry on the joint section before drilling.

Dimensions govern. Not a full-size template. Do not scale. Unbuilt plan. Complete installation checks.

nb20260929-n07 | P06 | source 5401ace7ba2cb88f

Upper front strip P06 · A: exterior/show face; B: inside face · none

Sand exposed plywood edges smooth, ease exposed edges 1/32in; keep glue faces square and bare; seal every exposed cut edge

Hole labels refer to [the exact machining schedule](#) (p. 77). Preserve u0/v0 when flipping this piece.

WORKSHOP REFERENCE

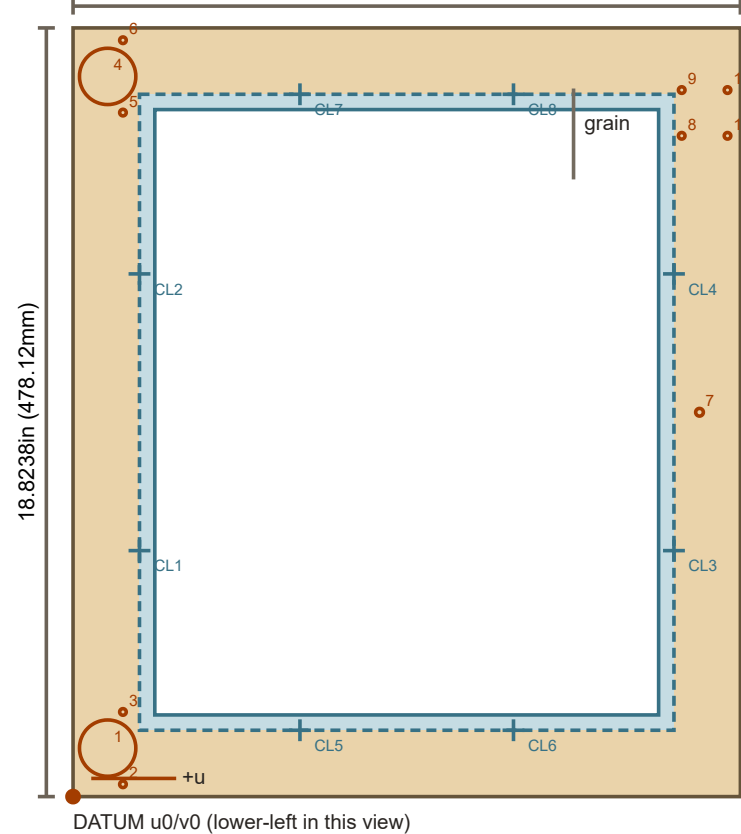
Workshop drawing · Door

THE CREATURE CORNER

v5-candidate-01

Inset glazed door | part drawing

D01 | Inset glazed door | qty 1 | PLY | thickness 0.72in (18.29mm)
16.3238in (414.62mm)



Machining key (inches; entry XYZ)

- # / operation u v dia / depth
- 1 CUP1 0.8465,1.1875 Y- 1.378/0.5118
 - 2 HC10 1.2205,0.3017 Y- 0.0938/0.6
 - 3 HC11 1.2205,2.0733 Y- 0.0938/0.6
 - 4 CUP2 0.8465,17.6363 Y- 1.378/0.5118
 - 5 HC20 1.2205,16.7505 Y- 0.0938/0.6
 - 6 HC21 1.2205,18.5221 Y- 0.0938/0.6
 - 7 KNOB 15.3238,9.4119 Y+ 0.1875/0.72
 - 8 HASP4 14.8888,16.1819 Y+ 0.125/0.55
 - 9 HASP5 14.8888,17.3019 Y+ 0.125/0.55
 - 10 HASP6 16.0088,16.1819 Y+ 0.125/0.55
 - 11 HASP7 16.0088,17.3019 Y+ 0.125/0.55
- C = clearance; P = trial receiving pilot.
Exact station data: machining-schedule.csv.
Cup bores from inside; stop depth controls.
Clip fixing holes are delivered-template transfer.
Do not use generic 8mm press-in cup fixing holes.
Glazing pocket corners must be squared.
Field operation: see guide and specification.

Clip centerlines at pocket edge: u, v (in)
CL1 1.625, 6.0236 | CL2 1.625, 12.8002
CL3 14.6988, 6.0236 | CL4 14.6988, 12.8002
CL5 5.5501, 1.625 | CL6 10.7737, 1.625
CL7 5.5501, 17.1988 | CL8 10.7737, 17.1988
Crosses locate clips, not screw holes. See glazing section.

Axis mapping: u=X, v=Z. Blue dashed areas are rebates; white areas are through openings.
Rough blank 16.4488 x 18.9488in. Length/width tolerance: +/-0.01in.
All receiver pilots are established during clamped dry fit; confirm edge entry on the joint section before drilling.

Dimensions govern. Not a full-size template. Do not scale. Unbuilt plan. Complete installation checks.
nb20260929-n07 | D01 | source 5401ace7ba2cb88f

Door D01 · A: exterior/show face; B: inside face · none

Sand exposed plywood edges smooth, ease exposed edges 1/32in; keep glue faces square and bare; seal every exposed cut edge

Hole labels refer to [the exact machining schedule](#) (p. 77). Preserve u0/v0 when flipping this piece.

Locate every rectangular cut using [opening and recess sizes](#) (p. 90).

WORKSHOP REFERENCE

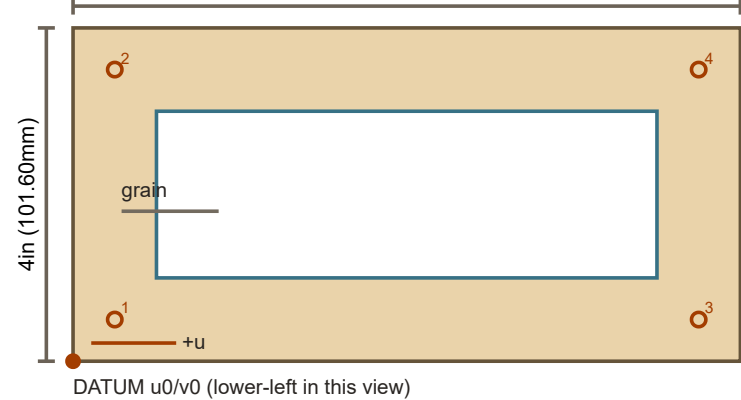
Workshop drawing · Left screen frame

THE CREATURE CORNER

v5-candidate-01

Side mesh retaining ring L | part drawing

V01L | Side mesh retaining ring L | qty1 | PLY | thickness 0.72in (18.29mm)



Machining key (inches; entry XYZ)
/ operation u v dia / depth
1 R001C 0.5,0.5 X- 0.1719/0.752
2 R002C 0.5,3.5 X- 0.1719/0.752
3 R003C 7.5,0.5 X- 0.1719/0.752
4 R004C 7.5,3.5 X- 0.1719/0.752

C = clearance; P = trial receiving pilot.
Exact station data: machining-schedule.csv.

Axis mapping: u=Y, v=Z. Blue dashed areas are rebates; white areas are through openings.
Rough blank 8.125 x 4.125in. Length/width tolerance: +/-0.0156in. Hand: L
All receiver pilots are established during clamped dry fit; confirm edge entry on the joint section before drilling.

Dimensions govern. Not a full-size template. Do not scale. Unbuilt plan. Complete installation checks.
nb20260929-n07 | V01L | source 5401ace7ba2cb88f

Left screen frame V01L · A: visible inner face; B: mesh bearing face · L

Sand exposed plywood edges smooth, ease exposed edges1/32in; keep glue faces square and bare; seal every exposed cut edge

Hole labels refer to **the exact machining schedule** (p. 77). Preserve u0/v0 when flipping this piece.

Locate every rectangular cut using **opening and recess sizes** (p. 90).

WORKSHOP REFERENCE

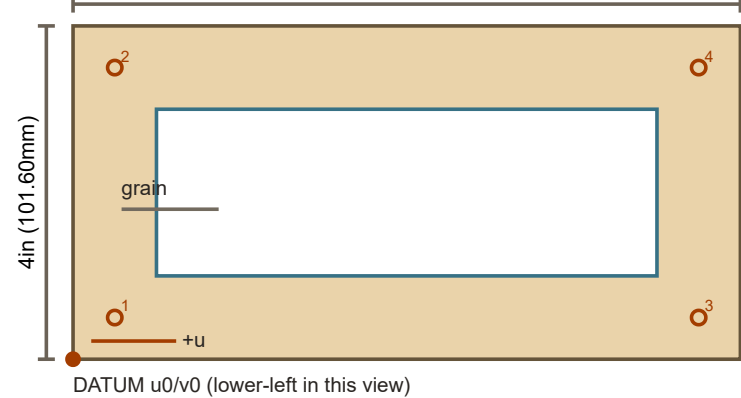
Workshop drawing · Right screen frame

THE CREATURE CORNER

v5-candidate-01

Side mesh retaining ring R | part drawing

V01R | Side mesh retaining ring R | qty1 | PLY | thickness 0.72in (18.29mm)



Machining key (inches; entry XYZ)
/ operation u v dia / depth
1 R005C 0.5,0.5 X+ 0.1719/0.752
2 R006C 0.5,3.5 X+ 0.1719/0.752
3 R007C 7.5,0.5 X+ 0.1719/0.752
4 R008C 7.5,3.5 X+ 0.1719/0.752

C = clearance; P = trial receiving pilot.
Exact station data: machining-schedule.csv.

Axis mapping: u=Y, v=Z. Blue dashed areas are rebates; white areas are through openings.
Rough blank 8.125 x 4.125in. Length/width tolerance: +/-0.0156in. Hand: R
All receiver pilots are established during clamped dry fit; confirm edge entry on the joint section before drilling.

Dimensions govern. Not a full-size template. Do not scale. Unbuilt plan. Complete installation checks.
nb20260929-n07 | V01R | source 5401ace7ba2cb88f

Right screen frame V01R · A: visible inner face; B: mesh bearing face · R

Sand exposed plywood edges smooth, ease exposed edges1/32in; keep glue faces square and bare; seal every exposed cut edge

Hole labels refer to [the exact machining schedule](#) (p. 77). Preserve u0/v0 when flipping this piece.

Locate every rectangular cut using [opening and recess sizes](#) (p. 90).

WORKSHOP REFERENCE

Workshop drawing · Front roof strip

THE CREATURE CORNER

v5-candidate-01

Roof screen retainer F | part drawing

V02F | Roof screen retainer F | qty1 | PLY | thickness 0.72in (18.29mm)
14in (355.60mm)

1in (25.40mm)

14in (355.60mm)

1 grain

2

3

DATUM u0/v0 (lower-left in this view)

Machining key (inches; entry XYZ)

/ operation u v dia / depth

1 R009C 0.5,0.5 Z+ 0.1719/0.752

2 R010C 7,0.5 Z+ 0.1719/0.752

3 R011C 13.5,0.5 Z+ 0.1719/0.752

C = clearance; P = trial receiving pilot.

Exact station data: machining-schedule.csv.

Axis mapping: u=X, v=Y. Blue dashed areas are rebates; white areas are through openings.
Rough blank 14.125 x 1.125in. Length/width tolerance: +/-0.0156in.
All receiver pilots are established during clamped dry fit; confirm edge entry on the joint section before drilling.

Dimensions govern. Not a full-size template. Do not scale. Unbuilt plan. Complete installation checks.
nb20260929-n07 | V02F | source 5401ace7ba2cb88f

Front roof strip V02F · A: visible underside; B: mesh bearing face · none

Sand exposed plywood edges smooth, ease exposed edges 1/32in; keep glue faces square and bare; seal every exposed cut edge

Hole labels refer to the exact machining schedule (p. 77). Preserve u0/v0 when flipping this piece.

WORKSHOP REFERENCE

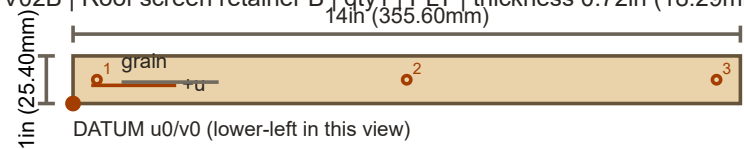
Workshop drawing · Back roof strip

THE CREATURE CORNER

v5-candidate-01

Roof screen retainer B | part drawing

V02B | Roof screen retainer B | qty 1 | PLY | thickness 0.72in (18.29mm)



14in (355.60mm)

1in (25.40mm)

1 grain

DATUM u0/v0 (lower-left in this view)

Machining key (inches; entry XYZ)

/ operation u v dia / depth

1 R012C 0.5,0.5 Z+ 0.1719/0.752

2 R013C 7,0.5 Z+ 0.1719/0.752

3 R014C 13.5,0.5 Z+ 0.1719/0.752

C = clearance; P = trial receiving pilot.

Exact station data: machining-schedule.csv.

Axis mapping: u=X, v=Y. Blue dashed areas are rebates; white areas are through openings.

Rough blank 14.125 x 1.125in. Length/width tolerance: +/-0.0156in.

All receiver pilots are established during clamped dry fit; confirm edge entry on the joint section before drilling.

Dimensions govern. Not a full-size template. Do not scale. Unbuilt plan. Complete installation checks.

nb20260929-n07 | V02B | source 5401ace7ba2cb88f

Back roof strip V02B · A: visible underside; B: mesh bearing face · none

Sand exposed plywood edges smooth, ease exposed edges 1/32in; keep glue faces square and bare; seal every exposed cut edge

Hole labels refer to [the exact machining schedule](#) (p. 77). Preserve u0/v0 when flipping this piece.

WORKSHOP REFERENCE

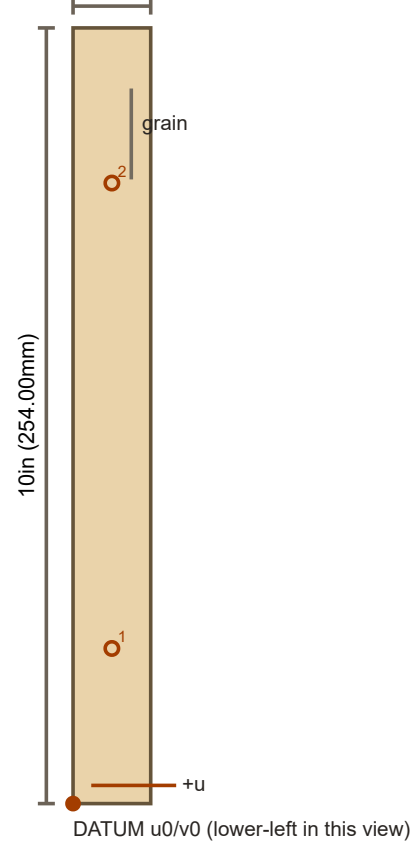
Workshop drawing · Left roof strip

THE CREATURE CORNER

v5-candidate-01

Roof screen retainer L | part drawing

V02L | Roof screen retainer L | qty1 | PLY | thickness 0.72in (18.29mm)



Machining key (inches; entry XYZ)
/ operation u v dia / depth
1 R015C 0.5,2 Z+ 0.1719/0.752
2 R016C 0.5,8 Z+ 0.1719/0.752

C = clearance; P = trial receiving pilot.
Exact station data: machining-schedule.csv.

Axis mapping: u=X, v=Y. Blue dashed areas are rebates; white areas are through openings.
Rough blank 1.125 x 10.125in. Length/width tolerance: +/-0.0156in.
All receiver pilots are established during clamped dry fit; confirm edge entry on the joint section before drilling.

Dimensions govern. Not a full-size template. Do not scale. Unbuilt plan. Complete installation checks.
nb20260929-n07 | V02L | source 5401ace7ba2cb88f

Left roof strip V02L · A: visible underside; B: mesh bearing face · none

Sand exposed plywood edges smooth, ease exposed edges 1/32in; keep glue faces square and bare; seal every exposed cut edge

Hole labels refer to **the exact machining schedule** (p. 77). Preserve u0/v0 when flipping this piece.

WORKSHOP REFERENCE

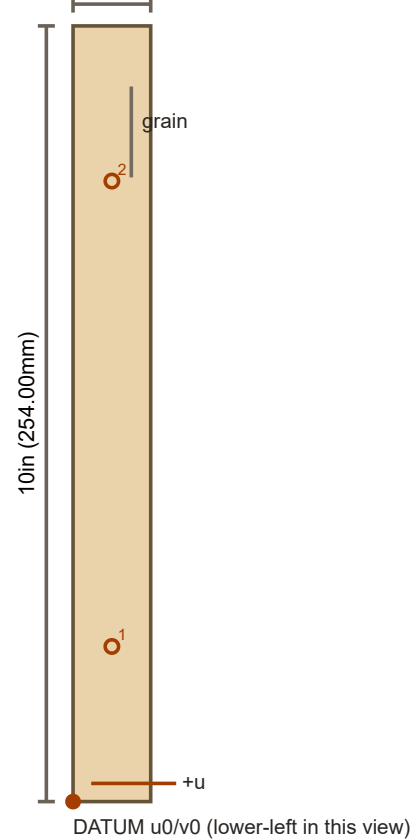
Workshop drawing · Right roof strip

THE CREATURE CORNER

v5-candidate-01

Roof screen retainer R | part drawing

V02R | Roof screen retainer R | qty1 | PLY | thickness 0.72in (18.29mm)



Machining key (inches; entry XYZ)
/ operation u v dia / depth
1 R017C 0.5,2 Z+ 0.1719/0.752
2 R018C 0.5,8 Z+ 0.1719/0.752

C = clearance; P = trial receiving pilot.
Exact station data: machining-schedule.csv.

Axis mapping: u=X, v=Y. Blue dashed areas are rebates; white areas are through openings.
Rough blank 1.125 x 10.125in. Length/width tolerance: +/-0.0156in.
All receiver pilots are established during clamped dry fit; confirm edge entry on the joint section before drilling.

Dimensions govern. Not a full-size template. Do not scale. Unbuilt plan. Complete installation checks.
nb20260929-n07 | V02R | source 5401ace7ba2cb88f

Right roof strip V02R · A: visible underside; B: mesh bearing face · none

Sand exposed plywood edges smooth, ease exposed edges 1/32in; keep glue faces square and bare; seal every exposed cut edge

Hole labels refer to **the exact machining schedule** (p. 77). Preserve u0/v0 when flipping this piece.

WORKSHOP REFERENCE

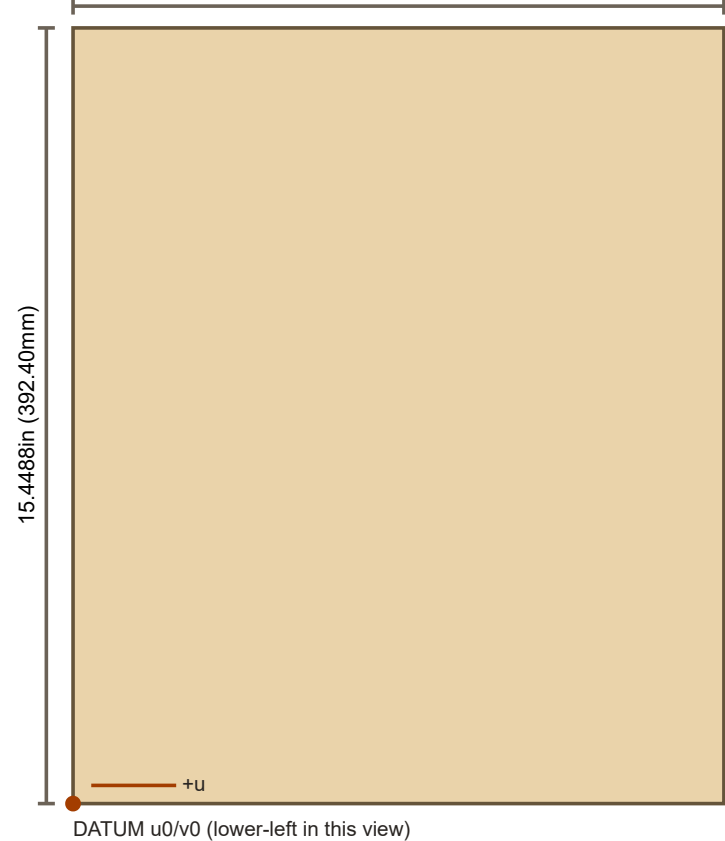
Workshop drawing · Clear pane

THE CREATURE CORNER

v5-candidate-01

Replaceable OPTIX pane | part drawing

G01 | Replaceable OPTIX pane | qty1 | ACRYLIC | thickness 0.22in (5.59mm)



Machining key (inches; entry XYZ)
/ operation u v dia / depth
No fixed drilling stations.

Axis mapping: u=X, v=Z. Blue dashed areas are rebates; white areas are through openings.
Rough blank 12.9488 x 15.4488in. Length/width tolerance: +/-0.0156in.
All receiver pilots are established during clamped dry fit; confirm edge entry on the joint section before drilling.

Dimensions govern. Not a full-size template. Do not scale. Unbuilt plan. Complete installation checks.
nb20260929-n07 | G01 | source 5401ace7ba2cb88f

Clear pane G01 · A: exterior/show face; B: inside face · none

Deburr/smooth cut edges; no sharp exposed corners

Hole labels refer to **the exact machining schedule** (p. 77). Preserve u0/v0 when flipping this piece.

WORKSHOP REFERENCE

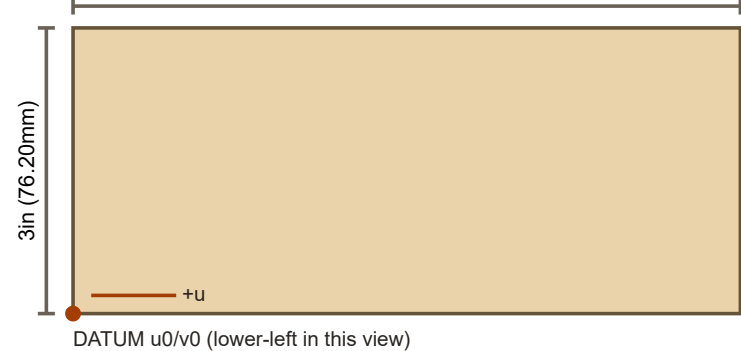
Workshop drawing · Left screen

THE CREATURE CORNER

v5-candidate-01

Side stainless screen L | part drawing

M01L | Side stainless screen L | qty 1 | MESH | thickness 0.032in (0.81mm)
7in (177.80mm)



Machining key (inches; entry XYZ)
/ operation u v dia / depth
No fixed drilling stations.

Axis mapping: u=Y, v=Z. Blue dashed areas are rebates; white areas are through openings.
Rough blank 7 x 3in. Length/width tolerance: +/-0.0156in.
All receiver pilots are established during clamped dry fit; confirm edge entry on the joint section before drilling.

Dimensions govern. Not a full-size template. Do not scale. Unbuilt plan. Complete installation checks.
nb20260929-n07 | M01L | source 5401ace7ba2cb88f

Left screen M01L · A: exterior/show face; B: inside face · none

Deburr/smooth cut edges; no sharp exposed corners

Hole labels refer to the exact machining schedule (p. 77). Preserve u0/v0 when flipping this piece.

WORKSHOP REFERENCE

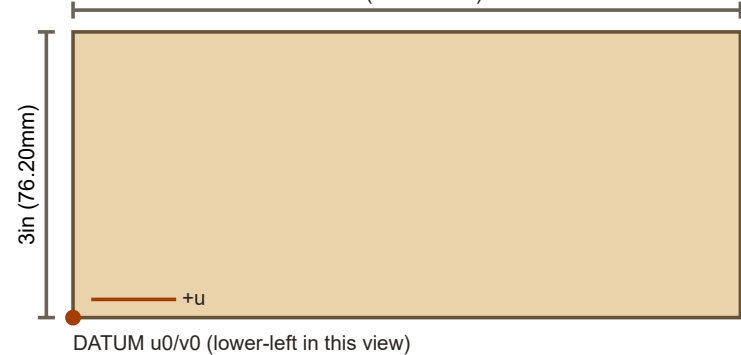
Workshop drawing · Right screen

THE CREATURE CORNER

v5-candidate-01

Side stainless screen R | part drawing

M01R | Side stainless screen R | qty1 | MESH | thickness 0.032in (0.81mm)
7in (177.80mm)



Machining key (inches; entry XYZ)
/ operation u v dia / depth
No fixed drilling stations.

Axis mapping: u=Y, v=Z. Blue dashed areas are rebates; white areas are through openings.
Rough blank 7 x 3in. Length/width tolerance: +/-0.0156in.
All receiver pilots are established during clamped dry fit; confirm edge entry on the joint section before drilling.

Dimensions govern. Not a full-size template. Do not scale. Unbuilt plan. Complete installation checks.
nb20260929-n07 | M01R | source 5401ace7ba2cb88f

Right screen M01R · A: exterior/show face; B: inside face · none

Deburr/smooth cut edges; no sharp exposed corners

Hole labels refer to **the exact machining schedule** (p. 77). Preserve u0/v0 when flipping this piece.

WORKSHOP REFERENCE

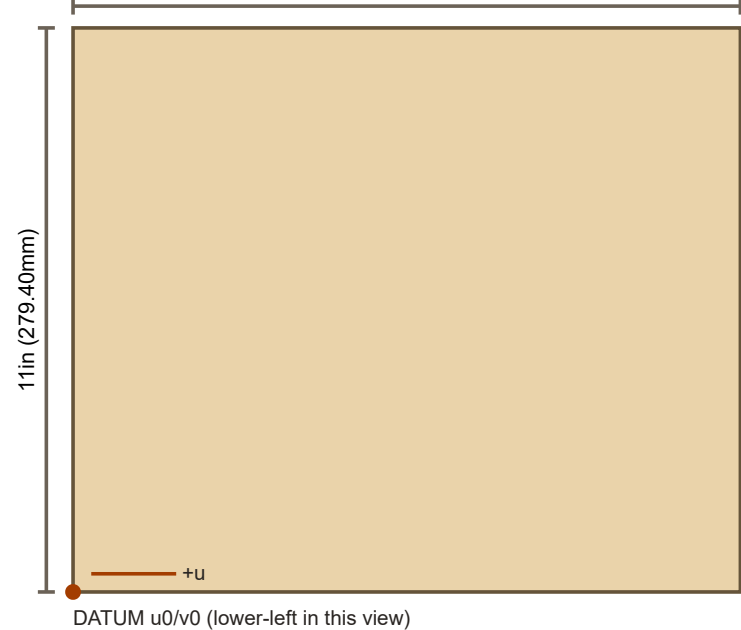
Workshop drawing · Roof screen

THE CREATURE CORNER

v5-candidate-01

Roof stainless screen | part drawing

M02 | Roof stainless screen | qty1 | MESH | thickness 0.032in (0.81mm)
13in (330.20mm)



Machining key (inches; entry XYZ)
/ operation u v dia / depth
No fixed drilling stations.

Axis mapping: u=X, v=Y. Blue dashed areas are rebates; white areas are through openings.
Rough blank 13 x 11in. Length/width tolerance: +/-0.0156in.
All receiver pilots are established during clamped dry fit; confirm edge entry on the joint section before drilling.

Dimensions govern. Not a full-size template. Do not scale. Unbuilt plan. Complete installation checks.
nb20260929-n07 | M02 | source 5401ace7ba2cb88f

Roof screen M02 · A: exterior/show face; B: inside face · none

Deburr/smooth cut edges; no sharp exposed corners

Hole labels refer to **the exact machining schedule** (p. 77). Preserve u0/v0 when flipping this piece.

WORKSHOP REFERENCE

Exact drilling schedule

All values in this table are inches, derived from the canonical schedule. Do not round these positions to the nearest fraction. Verify depth and entry face on the part drawing. Receiver pilots require the real screw/material trial.

Part / hole	u from u0	v from v0	Entry	Diameter	Depth	Operation
P01 F001C	0.36	1.5	Z+	0.17188	0.47	clearance + countersink
P01 F002C	0.36	6.5	Z+	0.17188	0.47	clearance + countersink
P01 F003C	0.36	11.5	Z+	0.17188	0.47	clearance + countersink
P01 F004C	0.36	16	Z+	0.17188	0.47	clearance + countersink
P01 F005C	17.64	1.5	Z+	0.17188	0.47	clearance + countersink
P01 F006C	17.64	6.5	Z+	0.17188	0.47	clearance + countersink
P01 F007C	17.64	11.5	Z+	0.17188	0.47	clearance + countersink
P01 F008C	17.64	16	Z+	0.17188	0.47	clearance + countersink
P01 F009C	2.5	17.64	Z+	0.17188	0.47	clearance + countersink
P01 F010C	7	17.64	Z+	0.17188	0.47	clearance + countersink
P01 F011C	11	17.64	Z+	0.17188	0.47	clearance + countersink
P01 F012C	15.5	17.64	Z+	0.17188	0.47	clearance + countersink
P01 F013C	4.5	0.36	Z+	0.17188	0.72	clearance + countersink
P01 F014C	9	0.36	Z+	0.17188	0.72	clearance + countersink
P01 F015C	13.5	0.36	Z+	0.17188	0.72	clearance + countersink
P02 F016C	0.36	1.5	Z-	0.17188	0.47	clearance + countersink
P02 F017C	0.36	6.5	Z-	0.17188	0.47	clearance + countersink

35 mm and 13 mm hinge cup dimensions remain manufacturer metric settings. Nominal pilots listed here are trial starting values; the accepted settings must be recorded before drilling.

WORKSHOP REFERENCE

Exact drilling schedule · continued

All values in this table are inches, derived from the canonical schedule. Do not round these positions to the nearest fraction. Verify depth and entry face on the part drawing. Receiver pilots require the real screw/material trial.

Part / hole	u from u0	v from v0	Entry	Diameter	Depth	Operation
P02 F018C	0.36	11.5	Z-	0.17188	0.47	clearance + countersink
P02 F019C	0.36	16	Z-	0.17188	0.47	clearance + countersink
P02 F020C	17.64	1.5	Z-	0.17188	0.47	clearance + countersink
P02 F021C	17.64	6.5	Z-	0.17188	0.47	clearance + countersink
P02 F022C	17.64	11.5	Z-	0.17188	0.47	clearance + countersink
P02 F023C	17.64	16	Z-	0.17188	0.47	clearance + countersink
P02 F024C	2.5	17.64	Z-	0.17188	0.47	clearance + countersink
P02 F025C	7	17.64	Z-	0.17188	0.47	clearance + countersink
P02 F026C	11	17.64	Z-	0.17188	0.47	clearance + countersink
P02 F027C	15.5	17.64	Z-	0.17188	0.47	clearance + countersink
P02 F028C	4.5	0.36	Z-	0.17188	0.72	clearance + countersink
P02 F029C	9	0.36	Z-	0.17188	0.72	clearance + countersink
P02 F030C	13.5	0.36	Z-	0.17188	0.72	clearance + countersink
P02 R009P	2.5	3.5	Z+	0.10938	0.498	trial pilot; coupon gate
P02 R010P	9	3.5	Z+	0.10938	0.498	trial pilot; coupon gate
P02 R011P	15.5	3.5	Z+	0.10938	0.498	trial pilot; coupon gate
P02 R012P	2.5	14.5	Z+	0.10938	0.498	trial pilot; coupon gate

35 mm and 13 mm hinge cup dimensions remain manufacturer metric settings. Nominal pilots listed here are trial starting values; the accepted settings must be recorded before drilling.

WORKSHOP REFERENCE

Exact drilling schedule · continued

All values in this table are inches, derived from the canonical schedule. Do not round these positions to the nearest fraction. Verify depth and entry face on the part drawing. Receiver pilots require the real screw/material trial.

Part / hole	u from u0	v from v0	Entry	Diameter	Depth	Operation
P02 R013P	9	14.5	Z+	0.10938	0.498	trial pilot; coupon gate
P02 R014P	15.5	14.5	Z+	0.10938	0.498	trial pilot; coupon gate
P02 R015P	2.5	6	Z+	0.10938	0.498	trial pilot; coupon gate
P02 R016P	2.5	12	Z+	0.10938	0.498	trial pilot; coupon gate
P02 R017P	15.5	6	Z+	0.10938	0.498	trial pilot; coupon gate
P02 R018P	15.5	12	Z+	0.10938	0.498	trial pilot; coupon gate
P03L HP10	2.23875	2.92569	X-	0.09375	0.6	coupon_pilot
P03L HP11	2.23875	4.18553	X-	0.09375	0.6	coupon_pilot
P03L HP20	2.23875	19.37447	X-	0.09375	0.6	coupon_pilot
P03L HP21	2.23875	20.63431	X-	0.09375	0.6	coupon_pilot
P03L F001P	1.5	0	Z+	0.10938	1.28	trial pilot; coupon gate
P03L F002P	6.5	0	Z+	0.10938	1.28	trial pilot; coupon gate
P03L F003P	11.5	0	Z+	0.10938	1.28	trial pilot; coupon gate
P03L F004P	16	0	Z+	0.10938	1.28	trial pilot; coupon gate
P03L F016P	1.5	23.06	Z-	0.10938	1.28	trial pilot; coupon gate
P03L F017P	6.5	23.06	Z-	0.10938	1.28	trial pilot; coupon gate
P03L F018P	11.5	23.06	Z-	0.10938	1.28	trial pilot; coupon gate

35 mm and 13 mm hinge cup dimensions remain manufacturer metric settings. Nominal pilots listed here are trial starting values; the accepted settings must be recorded before drilling.

WORKSHOP REFERENCE

Exact drilling schedule · continued

All values in this table are inches, derived from the canonical schedule. Do not round these positions to the nearest fraction. Verify depth and entry face on the part drawing. Receiver pilots require the real screw/material trial.

Part / hole	u from u0	v from v0	Entry	Diameter	Depth	Operation
P03L F019P	16	23.06	Z-	0.10938	1.28	trial pilot; coupon gate
P03L F031C	17.64	3.03	X+	0.17188	0.47	clearance + countersink
P03L F032C	17.64	8.53	X+	0.17188	0.47	clearance + countersink
P03L F033C	17.64	14.53	X+	0.17188	0.47	clearance + countersink
P03L F034C	17.64	20.03	X+	0.17188	0.47	clearance + countersink
P03L F035C	0.36	0.75	X+	0.17188	0.72	clearance + countersink
P03L F036C	0.36	1.75	X+	0.17188	0.72	clearance + countersink
P03L F037C	0.36	21.685	X+	0.17188	0.72	clearance + countersink
P03L F038C	0.36	22.435	X+	0.17188	0.72	clearance + countersink
P03L R001P	5.5	4.75	X-	0.10938	0.498	trial pilot; coupon gate
P03L R002P	5.5	7.75	X-	0.10938	0.498	trial pilot; coupon gate
P03L R003P	12.5	4.75	X-	0.10938	0.498	trial pilot; coupon gate
P03L R004P	12.5	7.75	X-	0.10938	0.498	trial pilot; coupon gate
P03R F005P	1.5	0	Z+	0.10938	1.28	trial pilot; coupon gate
P03R F006P	6.5	0	Z+	0.10938	1.28	trial pilot; coupon gate
P03R F007P	11.5	0	Z+	0.10938	1.28	trial pilot; coupon gate
P03R F008P	16	0	Z+	0.10938	1.28	trial pilot; coupon gate

35 mm and 13 mm hinge cup dimensions remain manufacturer metric settings. Nominal pilots listed here are trial starting values; the accepted settings must be recorded before drilling.

WORKSHOP REFERENCE

Exact drilling schedule · continued

All values in this table are inches, derived from the canonical schedule. Do not round these positions to the nearest fraction. Verify depth and entry face on the part drawing. Receiver pilots require the real screw/material trial.

Part / hole	u from u0	v from v0	Entry	Diameter	Depth	Operation
P03R F020P	1.5	23.06	Z-	0.10938	1.28	trial pilot; coupon gate
P03R F021P	6.5	23.06	Z-	0.10938	1.28	trial pilot; coupon gate
P03R F022P	11.5	23.06	Z-	0.10938	1.28	trial pilot; coupon gate
P03R F023P	16	23.06	Z-	0.10938	1.28	trial pilot; coupon gate
P03R F039C	17.64	3.03	X-	0.17188	0.47	clearance + countersink
P03R F040C	17.64	8.53	X-	0.17188	0.47	clearance + countersink
P03R F041C	17.64	14.53	X-	0.17188	0.47	clearance + countersink
P03R F042C	17.64	20.03	X-	0.17188	0.47	clearance + countersink
P03R F043C	0.36	0.75	X-	0.17188	0.72	clearance + countersink
P03R F044C	0.36	1.75	X-	0.17188	0.72	clearance + countersink
P03R F045C	0.36	21.685	X-	0.17188	0.72	clearance + countersink
P03R F046C	0.36	22.435	X-	0.17188	0.72	clearance + countersink
P03R R005P	5.5	4.75	X+	0.10938	0.498	trial pilot; coupon gate
P03R R006P	5.5	7.75	X+	0.10938	0.498	trial pilot; coupon gate
P03R R007P	12.5	4.75	X+	0.10938	0.498	trial pilot; coupon gate
P03R R008P	12.5	7.75	X+	0.10938	0.498	trial pilot; coupon gate
P04 F009P	2.03	0	Z+	0.10938	1.28	trial pilot; coupon gate

35 mm and 13 mm hinge cup dimensions remain manufacturer metric settings. Nominal pilots listed here are trial starting values; the accepted settings must be recorded before drilling.

WORKSHOP REFERENCE

Exact drilling schedule · continued

All values in this table are inches, derived from the canonical schedule. Do not round these positions to the nearest fraction. Verify depth and entry face on the part drawing. Receiver pilots require the real screw/material trial.

Part / hole	u from u0	v from v0	Entry	Diameter	Depth	Operation
P04 F010P	6.53	0	Z+	0.10938	1.28	trial pilot; coupon gate
P04 F011P	10.53	0	Z+	0.10938	1.28	trial pilot; coupon gate
P04 F012P	15.03	0	Z+	0.10938	1.28	trial pilot; coupon gate
P04 F024P	2.03	23.06	Z-	0.10938	1.28	trial pilot; coupon gate
P04 F025P	6.53	23.06	Z-	0.10938	1.28	trial pilot; coupon gate
P04 F026P	10.53	23.06	Z-	0.10938	1.28	trial pilot; coupon gate
P04 F027P	15.03	23.06	Z-	0.10938	1.28	trial pilot; coupon gate
P04 F031P	0	3.03	X+	0.10938	1.28	trial pilot; coupon gate
P04 F032P	0	8.53	X+	0.10938	1.28	trial pilot; coupon gate
P04 F033P	0	14.53	X+	0.10938	1.28	trial pilot; coupon gate
P04 F034P	0	20.03	X+	0.10938	1.28	trial pilot; coupon gate
P04 F039P	17.06	3.03	X-	0.10938	1.28	trial pilot; coupon gate
P04 F040P	17.06	8.53	X-	0.10938	1.28	trial pilot; coupon gate
P04 F041P	17.06	14.53	X-	0.10938	1.28	trial pilot; coupon gate
P04 F042P	17.06	20.03	X-	0.10938	1.28	trial pilot; coupon gate
P05 F013P	3.78	0	Z+	0.10938	1.03	trial pilot; coupon gate
P05 F014P	8.28	0	Z+	0.10938	1.03	trial pilot; coupon gate

35 mm and 13 mm hinge cup dimensions remain manufacturer metric settings. Nominal pilots listed here are trial starting values; the accepted settings must be recorded before drilling.

WORKSHOP REFERENCE

Exact drilling schedule • continued

All values in this table are inches, derived from the canonical schedule. Do not round these positions to the nearest fraction. Verify depth and entry face on the part drawing. Receiver pilots require the real screw/material trial.

Part / hole	u from u0	v from v0	Entry	Diameter	Depth	Operation
P05 F015P	12.78	0	Z+	0.10938	1.03	trial pilot; coupon gate
P05 F035P	0	0.5	X+	0.10938	1.03	trial pilot; coupon gate
P05 F036P	0	1.5	X+	0.10938	1.03	trial pilot; coupon gate
P05 F043P	16.56	0.5	X-	0.10938	1.03	trial pilot; coupon gate
P05 F044P	16.56	1.5	X-	0.10938	1.03	trial pilot; coupon gate
P06 HASP1	15.06689	0.69	Y+	0.125	0.55	verify_delivered_template
P06 HASP2	15.56689	1.06	Y+	0.125	0.55	verify_delivered_template
P06 HASP3	16.06689	0.59	Y+	0.125	0.55	verify_delivered_template
P06 F028P	3.78	1.5	Z-	0.10938	1.03	trial pilot; coupon gate
P06 F029P	8.28	1.5	Z-	0.10938	1.03	trial pilot; coupon gate
P06 F030P	12.78	1.5	Z-	0.10938	1.03	trial pilot; coupon gate
P06 F037P	0	0.375	X+	0.10938	1.03	trial pilot; coupon gate
P06 F038P	0	1.125	X+	0.10938	1.03	trial pilot; coupon gate
P06 F045P	16.56	0.375	X-	0.10938	1.03	trial pilot; coupon gate
P06 F046P	16.56	1.125	X-	0.10938	1.03	trial pilot; coupon gate
D01 CUP1	0.84646	1.1875	Y-	1.37795	0.51181	exact
D01 HC10	1.22047	0.30167	Y-	0.09375	0.6	coupon_pilot

35 mm and 13 mm hinge cup dimensions remain manufacturer metric settings. Nominal pilots listed here are trial starting values; the accepted settings must be recorded before drilling.

WORKSHOP REFERENCE

Exact drilling schedule • continued

All values in this table are inches, derived from the canonical schedule. Do not round these positions to the nearest fraction. Verify depth and entry face on the part drawing. Receiver pilots require the real screw/material trial.

Part / hole	u from u0	v from v0	Entry	Diameter	Depth	Operation
D01 HC11	1.22047	2.07333	Y-	0.09375	0.6	coupon_pilot
D01 CUP2	0.84646	17.63628	Y-	1.37795	0.51181	exact
D01 HC20	1.22047	16.75045	Y-	0.09375	0.6	coupon_pilot
D01 HC21	1.22047	18.52211	Y-	0.09375	0.6	coupon_pilot
D01 KNOB	15.32378	9.41189	Y+	0.1875	0.72	exact
D01 HASP4	14.88878	16.18189	Y+	0.125	0.55	verify_delivered_template
D01 HASP5	14.88878	17.30189	Y+	0.125	0.55	verify_delivered_template
D01 HASP6	16.00878	16.18189	Y+	0.125	0.55	verify_delivered_template
D01 HASP7	16.00878	17.30189	Y+	0.125	0.55	verify_delivered_template
V01L R001C	0.5	0.5	X-	0.17188	0.752	clearance + countersink
V01L R002C	0.5	3.5	X-	0.17188	0.752	clearance + countersink
V01L R003C	7.5	0.5	X-	0.17188	0.752	clearance + countersink
V01L R004C	7.5	3.5	X-	0.17188	0.752	clearance + countersink
V01R R005C	0.5	0.5	X+	0.17188	0.752	clearance + countersink
V01R R006C	0.5	3.5	X+	0.17188	0.752	clearance + countersink
V01R R007C	7.5	0.5	X+	0.17188	0.752	clearance + countersink
V01R R008C	7.5	3.5	X+	0.17188	0.752	clearance + countersink

35 mm and 13 mm hinge cup dimensions remain manufacturer metric settings. Nominal pilots listed here are trial starting values; the accepted settings must be recorded before drilling.

WORKSHOP REFERENCE

Exact drilling schedule · continued

All values in this table are inches, derived from the canonical schedule. Do not round these positions to the nearest fraction. Verify depth and entry face on the part drawing. Receiver pilots require the real screw/material trial.

Part / hole	u from u0	v from v0	Entry	Diameter	Depth	Operation
V02F R009C	0.5	0.5	Z+	0.17188	0.752	clearance + countersink
V02F R010C	7	0.5	Z+	0.17188	0.752	clearance + countersink
V02F R011C	13.5	0.5	Z+	0.17188	0.752	clearance + countersink
V02B R012C	0.5	0.5	Z+	0.17188	0.752	clearance + countersink
V02B R013C	7	0.5	Z+	0.17188	0.752	clearance + countersink
V02B R014C	13.5	0.5	Z+	0.17188	0.752	clearance + countersink
V02L R015C	0.5	2	Z+	0.17188	0.752	clearance + countersink
V02L R016C	0.5	8	Z+	0.17188	0.752	clearance + countersink
V02R R017C	0.5	2	Z+	0.17188	0.752	clearance + countersink
V02R R018C	0.5	8	Z+	0.17188	0.752	clearance + countersink

35 mm and 13 mm hinge cup dimensions remain manufacturer metric settings. Nominal pilots listed here are trial starting values; the accepted settings must be recorded before drilling.

RECORDS

Record the stock and fitting trials

Blank fields are intentional. Fill them from the actual delivered batch and accepted trials; printed reference values are not receiving measurements.

Receiving / trial item	Your measured result or evidence
Plywood batch, core/grade and date	
Sheet 1 thickness range / usable W × L	
Sheet 2 thickness range / usable W × L	
Sheet 3 thickness range / usable W × L	
Actual saw kerf and allowed edge trim	
Hinge / plate / screw models match	
Cup depth and pilot trial accepted	
Pane thickness / clip offset and screw length	
Pane-clip fixing transfer / no breakthrough	
Knob thread depth and engagement	
Hasp actual holes / full wood verified	
Cured coating trial / date / fit result	
Completed door mass / scale / hinge check	

A mismatch changes the dependency, not merely this receiving sheet. Regenerate all affected cuts, model, drawings and guide under a revised construction identity before proceeding.

RECORDS

Record glue and coating waits

Checkpoint	Actual product / conditions / time / result
Glue model/lot and label revision	
Lower glue stage started / clamped	
Temperature / humidity	
Lower stage undisturbed wait / release	
Upper glue stage / wait / inspection	
Coating product, sheen, lot and label	
Surface preparation / trial piece ID	
Coating application date/time	
Temperature / humidity during application	
Recoat time, if required by the product	
Full cure date / actual conditions	
Tack, pockets, edges and bores inspected	
Cured pane/hinge/clip fit accepted	

Glue clamp release, glue full strength, coating dry-to-touch, recoat, light-use and full-cure times are different checkpoints. Keep the applicable manufacturer instructions with this record.

RECORDS

Record support and commissioning

Hold to resolve	Evidence / actual result
Continuous base support and furniture condition	
Actual shell + contents load	
Furniture acceptance / building-floor questions	
Exact restraint-to-plywood confirmation	
Wall support and restraint access	
Measured installation and removal space	
Intended species/life stage and escape review	
Ventilation / temperature / humidity checks	
Substrate / splash / cleaning compatibility	
Equipment support and heat clearances	
Actual finished size / opening / diagonals	
Door gaps / repeated operation / latch	
Pane/screen replacement paths checked	

Unresolved critical inputs keep the enclosure out of service. Do not substitute appearance, model fit or a generic kit marketing load for site and product confirmation.

RECORDS

Use and maintenance log

Copy this page for each inspection. Keep records with the enclosure and its replacement-part list.

Date / condition	Observed result / correction
Before occupancy	
Latch / hinges / pane retention	
Mesh edges / screen screws	
Coating / seams / moisture	
Temperature / humidity / condensation	
Cleaning product compatibility	
Replacement / revised component ID	
Retest after repair / next inspection	

Remove the occupant before servicing. Changes to pane, hinges, finish, mesh, plywood or support require the relevant checks again.

Keep the status labels separate

Status	This guide
Research	Selected product evidence, glue/application instructions and communication references recorded.
Dimensions / calculations	Source geometry and scoped calculations checked; document consistency checked separately.
Digital checking	Source, document, model and browser checks completed within their recorded scope; no physical testing.
Prototype / physical testing	Not built / not physically tested.
Qualified review	Not obtained.
Published	Owner authorized publication on 3 October 2026. Physical and installation status remain separate.

WORKSHOP REFERENCE

Opening and recess sizes

Use this table with the named part drawing. **All values below are inches.** Start at that drawing's u0 and v0 edges, then measure in its +u and +v directions. These are part-edge measurements, not heights above the assembled enclosure base.

Part / cut	u from u0	v from v0	Size u × v	Cut depth
J-P01-L (p. 59)	0	0	0.72 × 18	0.25, inside
J-P01-R (p. 59)	17.28	0	0.72 × 18	0.25, inside
J-P01-B (p. 59)	0	17.28	18 × 0.72	0.25, inside
J-P02-L (p. 60)	0	0	0.72 × 18	0.25, inside
J-P02-R (p. 60)	17.28	0	0.72 × 18	0.25, inside
J-P02-B (p. 60)	0	17.28	18 × 0.72	0.25, inside
V-P02 (p. 60)	3	4	12 × 10	Through
J-P03L-B (p. 61)	17.28	0	0.72 × 23.06	0.25, inside
V-P03L (p. 61)	6	5.25	6 × 2	Through
J-P03R-B (p. 62)	17.28	0	0.72 × 23.06	0.25, inside
V-P03R (p. 62)	6	5.25	6 × 2	Through
W-D01 (p. 66)	2	2	12.32378 × 14.82378	Through
G-D01 (p. 66)	1.625	1.625	13.07378 × 15.57378	0.345, inside
V-V01L (p. 67)	1	1	6 × 2	Through
V-V01R (p. 68)	1	1	6 × 2	Through

An opening goes through the full thickness. A recess is the shallow area cut from the inside face. For locating joints, the listed 0.720 in width is the reference; match the actual mating plywood with the approved 0 to 0.005 in fit clearance. Cut all joint shoulders square.

Wall vent example: mark 6 in from FRONT and 5¼ in from the finished wall bottom, then mark a 6 × 2 in rectangle. The assembled height is different because the wall starts in the bottom recess. Keep any rounded vent corners inside the rectangle.

Door: the viewing opening starts 2 in from each adjacent edge. The wider pane recess starts 1½ in from those edges and is 0.345 in deep. Preserve the hinge-edge label when turning the door over.

REFERENCES

Sources and revision notes

Product references are listed below; the detailed research and check records are retained with this revision. Consult original product instructions for the delivered model; names alone do not establish compatibility.

Product / question	Original source
Blum hinge/plate planning	Blum Concealed Hinges, US v18 (2025), pp. 2, 10, 48
Swivel hasp	National N305-979 technical drawing
Pane clips	Rockler glass-door retainer clip instructions, 05/16
Acrylic fabrication and cleaning	OPTIX Fabrication Guide FAB004, 01/2025
Glue application	Titebond III product application guidance and clamping/cure FAQ
Finish	Retained Varathane VAR-35 Triple Thick technical sheet and delivered 284473 label; indoor non-immersion scope. See packaged selected evidence and V5 finish research.
Communication method	Microsoft procedural-writing guidance; iFixit instructional photography guidance.

Access date for this guide work: 3 October 2026. Source evidence has limits: receiving and hardware transfer remain required, and no source certifies the completed enclosure.

This illustrated plan contains 33 operations, exact workshop drawings, purchasing schedules and blank inspection records. Use the same construction revision for every drawing and schedule.

Source fingerprint: 5401ace7ba2cb88fa316c36d51aad640f849ad8b634498f8741f9c1238851987

Keep this plan and its product instructions with the enclosure for adjustment, maintenance and replacement parts.