

Illustrated shop packet

Cut list / part drawings / joint details / machining / assembly

1 parts / 0 joints / 1 components

0.50 board feet

Generated 9/7/2026 / kerf allowance 1/8"

Shop use

Part and joint references are generated from the resolved GrainDraft model. Teal areas identify removed material in reference views. Dimension labels and machining schedules are authoritative; drawings are not full-scale templates.

Resolve blocking model issues before fabrication. Confirm actual lumber, grain, moisture, cutter diameter, machine datum, workholding and safe tool operation at the bench.

Master cut list

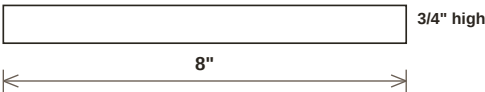
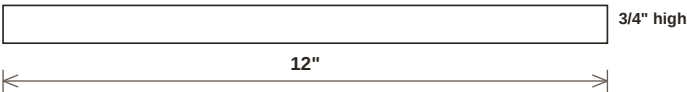
Rough allowance is added to length and width; finished thickness is unchanged.

Ref	Part	Qty	Component	Rough L	Rough W	Finished T	Material	BF
P01	Practice board	1	Ungrouped	12-1/8"	8-1/8"	3/4"	Neutral Wood	0.50
TOTAL		1						0.50

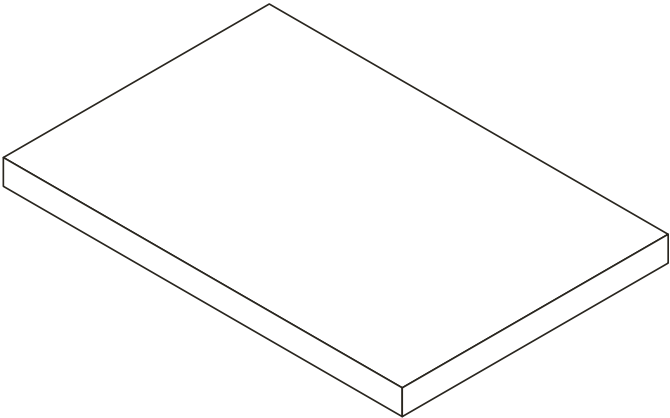
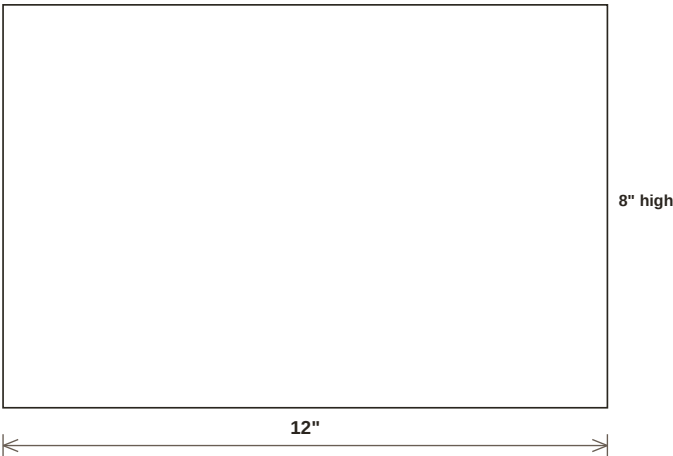
General arrangement

What the finished piece measures. Every other page is subordinate to this one.

FRONT 1 : 4 SIDE 1 : 4



TOP 1 : 4 ISOMETRIC



Overall 12" wide x 8" deep x 3/4" high

All three orthographic views share one scale, so a dimension taken from one transfers to another.

How to read this packet

Five minutes here saves an afternoon at the bench.

References

P01, P02 ... name boards. The number appears on the isometric, in the cut list, on the part sheet and in the assembly steps, and always means the same board.

A range like P06-P07 is one sheet covering identical boards. Make as many as the Qty column says.

J1, J2 ... name joints. A card headed J1-J6 is one joint specification cut six times, not six different joints.

Dimensions

Every dimension is in inches, to the nearest 1/16 unless the joint needs finer, in which case it prints to 1/64.

Length is the longest dimension of a board, width the next, thickness the least - regardless of how the part is oriented in the finished piece. A leg 21 inches tall is 21 inches LONG here.

Rough length and width include the trim allowance. Finished thickness does not: it is what the board measures when it comes off the planer.

A part sheet measures every feature from one marked datum corner. Measure from that corner too - accumulating from feature to feature stacks the errors.

Marking and grain

Mark a face side and a face edge on every board as it comes off the planer, and take every measurement from those two surfaces.

The grain arrow on a part sheet runs along the length of the board. On a drawer bottom or a panel, it also says which way the panel is free to move.

Method

Joinery instructions in this packet are written for: Shaper Origin. Handheld CNC. Cut files carry their own depths; the numbers below are for setup and verification.

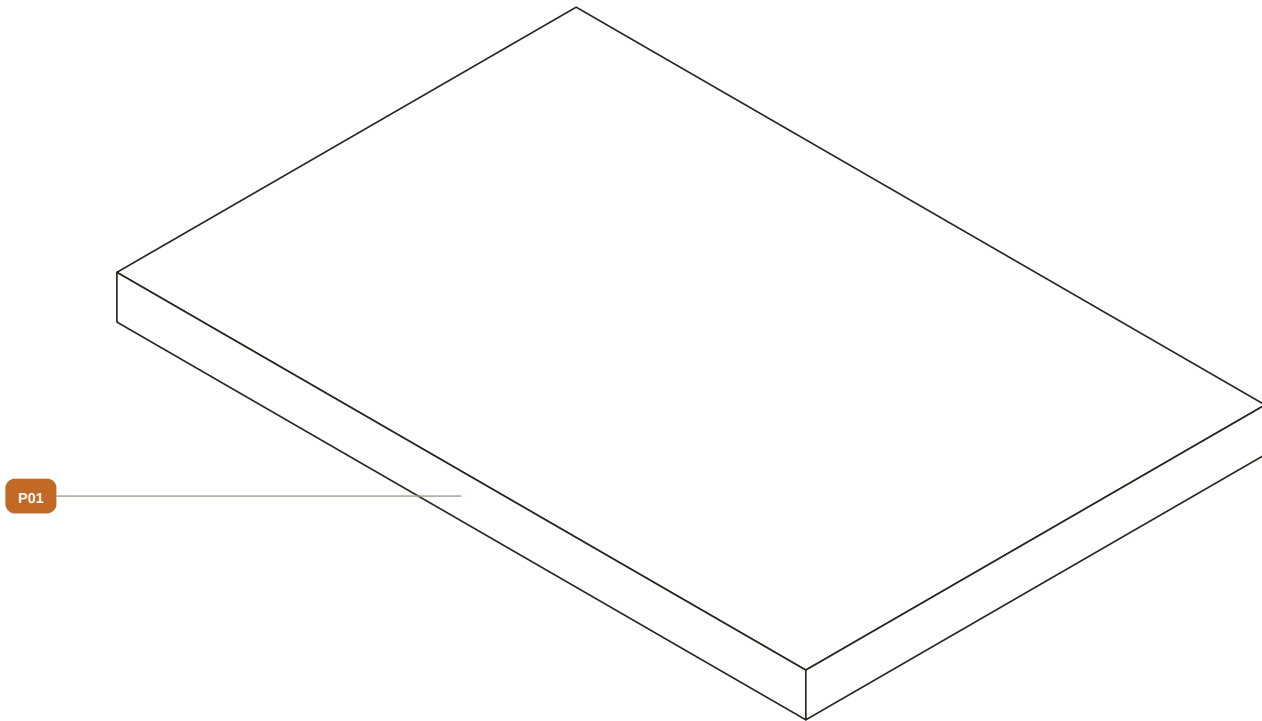
Dimensions never change between methods. Only the way you reach them does.

Drawings are fitted to the page and are not 1:1 templates. Where a drawing and a printed dimension disagree, the dimension is right.

Indexed assembly overview

Use part references to move from the model to the cut list, part sheets and joint details.

part reference



Overall 12" wide x 8" deep x 3/4" high

Numbered isometric. Bubbles carry the part reference used by the cut list, the part sheets and the joint cards.

Ungrouped

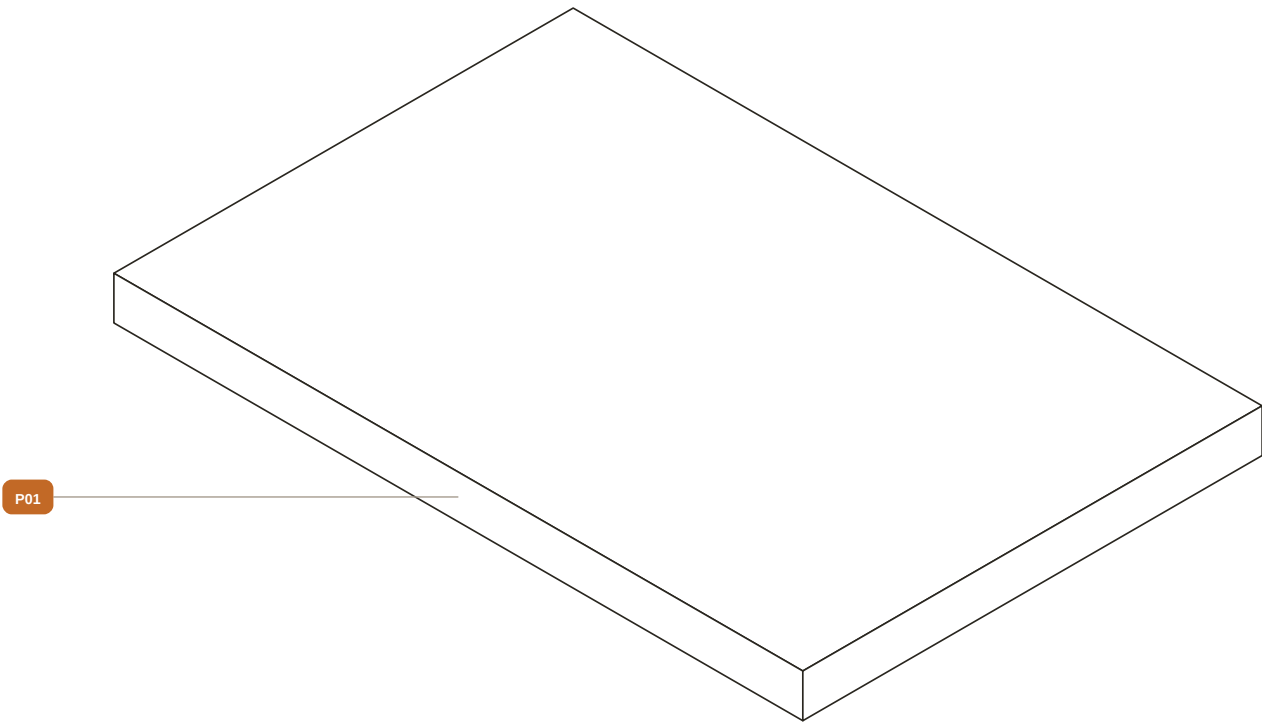
P01 Practice board

Not joined in the model: P01 Practice board. Decide how these are fixed before you build - the packet cannot tell you, because the model does not say.

Exploded view

Where each part goes, and which way round it goes there.

part reference



Parts are drawn pulled straight out from the centre of the piece. Nothing rotates on the way in.

 material removed, near face
 removed, far face
 datum / this part

12" long x 8" wide x 3/4" thick, finished

Views are dimensioned references, not 1:1 cutting templates.



E1: 2-63/64" from the left end, 2-31/64" from the near edge, 2-1/64" x 1-1/64"
E2: 7-15/64" from the left end, 4-15/64" from the near edge, 1-33/64" x 1-33/64"

No joinery on this part. Mill to the finished dimensions above.

Machining

Shaper Origin - Handheld CNC. Cut files carry their own depths; the numbers below are for setup and verification

check before you cut the restruins stock if skipped

Before any joinery

- Mill every board flat, square and to the finished thickness on the cut list before any joinery is cut. Joinery referenced off a twisted board is twisted.
- Mark a face side and a face edge on each board and take every measurement from those two surfaces throughout.
- Leave parts long where the cut list shows a rough length, and cut to final length only after the shoulders are cut.

Hardware and tooling

Quantities are rolled up by exact specification. Tooling is what the shaper origin route needs.

Qty	Hardware
-	No hardware joints in this project

Tools for this packet

No joinery tooling is required for this project.

Bits and cutters

Confirm cutters from the machining pages.

Assembly

No assembly steps were generated for this model.

Validation report

This report captures the model state at export time. Errors are blocking fabrication findings.

Status	Ref	Code	Finding	Suggested action
PASS	-	no-reported-issues	No joint validation issues were reported at export time.	-

A clean report means GrainDraft found no modeled conflict under its current rules; it is not a substitute for inspecting real stock, machine setup or safe woodworking practice.

Setup index

Tick them off. The order is the plan, not a suggestion.

P01 Practice board

- ☐ Setup 1 - back face - E1, E2 - operator bit - 49/64" deep

Setups

One card is one clamp-up: tape once, datum once, Z-touch once, cut everything shown.

■ pocket ■ datum / this board ■ keep clamps off

SETUP 1

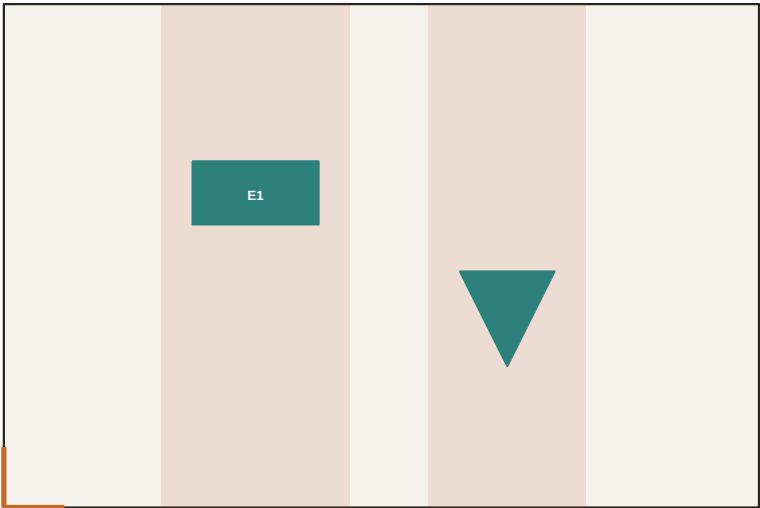
P01 Practice board

back face - E1, E2

Back face up, DATUM-END mark to your left. Datum is the near-left corner. top face up; datum at -x / +z stock corner; +x right, -z up

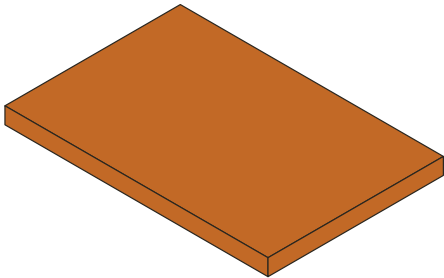
- Bit: operator choice
- Max depth 49/64" - see each cut
- Cut type Mixed
- 2 cuts

File: graindraft-p01-setup-1-back-face-practice-board.svg
E1 Inside cut: Pocket / 1/4" in
E2 Profile cut: Inside / 49/64" in



12" 8"
E1: 3" across, 4-1/2" up, 2" x 1", 1/4" deep

THIS BOARD, IN THE PIECE



First of its kind: cut this one, dry-fit it against its partner, then run the rest at the same setting.

Clamp outside 2-1/2" to 5-1/2", 6-3/4" to 9-1/4" from the datum end. The shaded bands are cutter and tape territory.