

SAMPLE PLAN – from a fixed sample project · Plan your own workbench: [parabuilder3d.com](#)

Workshop plan

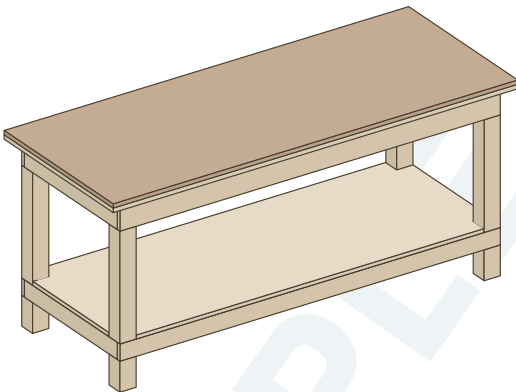
Sample: assembly bench 2000 × 800

Created on 18 October 2026 · Template: Assembly bench · Placement: Freestanding
Compact plan for shopping, cutting and assembly.

1 Project overview

This is a sample plan

It shows the structure and content of the build plans using the fixed sample project “Assembly bench 2000 × 800 mm”: the complete workshop plan and, as an excerpt from the detail plan, two part drawings. Create both plans for your own workbench from your project in the app.



Overall view (schematic, not to scale)

1.1 Main dimensions and equipment

Item	Value
Overall size (L × D × H)	2000 × 800 × 900 mm (height = working height)
Worktop	19 mm MDF (replaceable) + 21 mm Birch plywood = 40 mm
Frame (L × D)	1880 × 720 mm, Spruce
Overhangs	left 60 mm · right 60 mm · front 40 mm · back 40 mm
Legs	4 pieces, 80 × 80 mm, 860 mm long, 2 leg pairs
Rails	upper 120 × 40 mm · lower 80 × 40 mm (height × thickness)
Joints	Half lap · glued
Feet	Fixed feet
Shelf	Full, surface 240 mm above floor, 18 mm thick
Not planned	Back panel, Drawers, Table saw, Router table, Dog holes
Weight	approx. 93 kg (rough estimate without machines and tools)
Scope	17 parts in 10 parts list positions, 29 joints
Material (known prices)	€311.13
Load	Medium · planning assumption, no guaranteed load capacity

1.2 Check status

0 errors 0 warnings 2 notes

All check notes and open points are listed in the last section ([jump to section](#)).

Important note

This plan is a planning aid. It is not a structural calculation and no proof of load capacity or safety. Load classes and deflections are simplified planning assumptions.

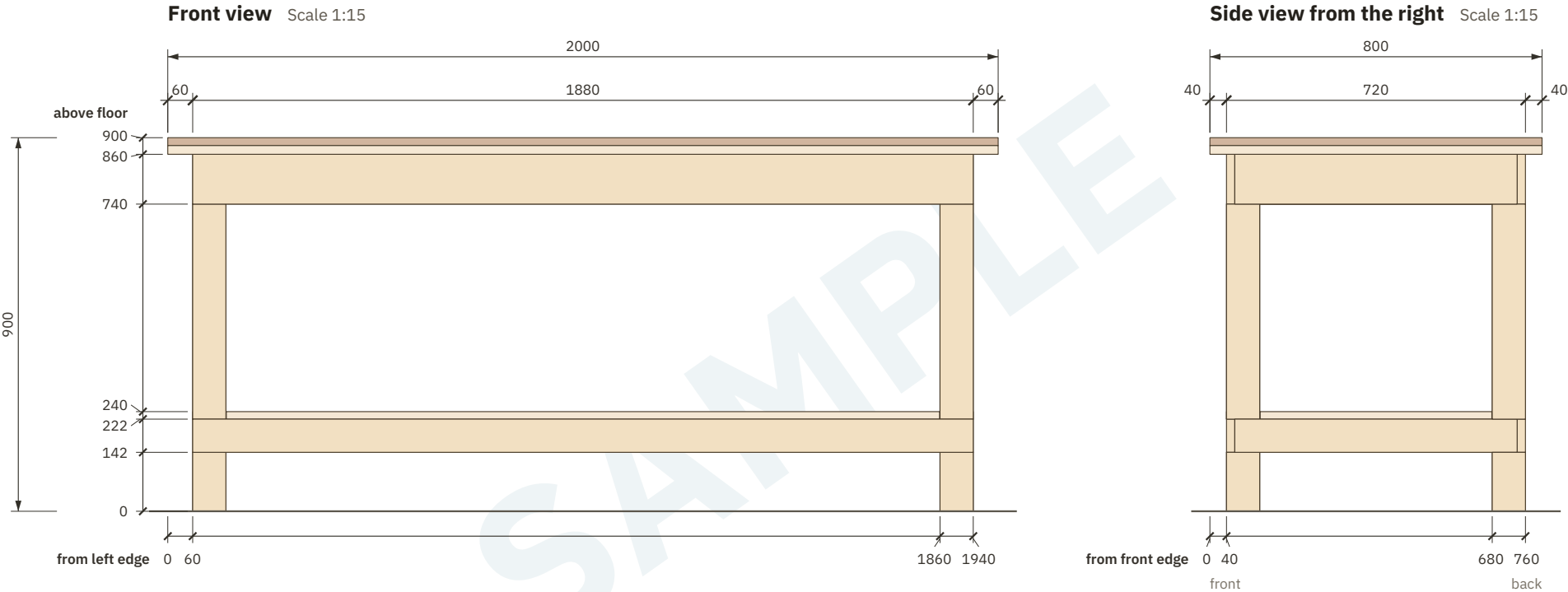
Contents

1 Project overview	1
1.1 Main dimensions and equipment	1
1.2 Check status	1
2 Views and main dimensions	3
2.1 Front view and side view	3
2.2 Top view	4
3 Parts list	5
4 Shopping list	6
5 Cutting	7
5.1 Timber	7
5.2 Sheets	7
6 Assembly instructions	8
6.1 Step 1: Cut and machine the parts	8
6.2 Step 2: Build the end frames	9
6.3 Step 3: Fit the lower long rails	9
6.4 Step 4: Lay in the shelf	10
6.5 Step 5: Fit the upper long rails	10
6.6 Step 6: Fit the worktop supports	11
6.7 Step 7: Fit the worktop (core layers)	11
6.8 Step 8: Fasten the wear layer	12
6.9 Step 9: Final check	12
7 Joints	13
7.1 Half lap – Lap on leg (16×)	13
7.2 Half lap – Stopped T half lap from above (4×)	14
7.3 Worktop bracket (4×)	15
7.4 Panel screws (5×)	16
8 From the detail plan: part drawings	17
8.1 Pos. 2: Leg · B1, B4	17
8.2 Pos. 4: Lower long rail · L1, L3	18
9 Check notes and open points	18
9.1 Important note	18

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2 Views and main dimensions

2.1 Front view and side view



Dimensions in mm. Heights above floor, leg positions from the left edge of the worktop, leg rows from the front edge. The scale applies when printed at original size (100 %).

Heights above floor

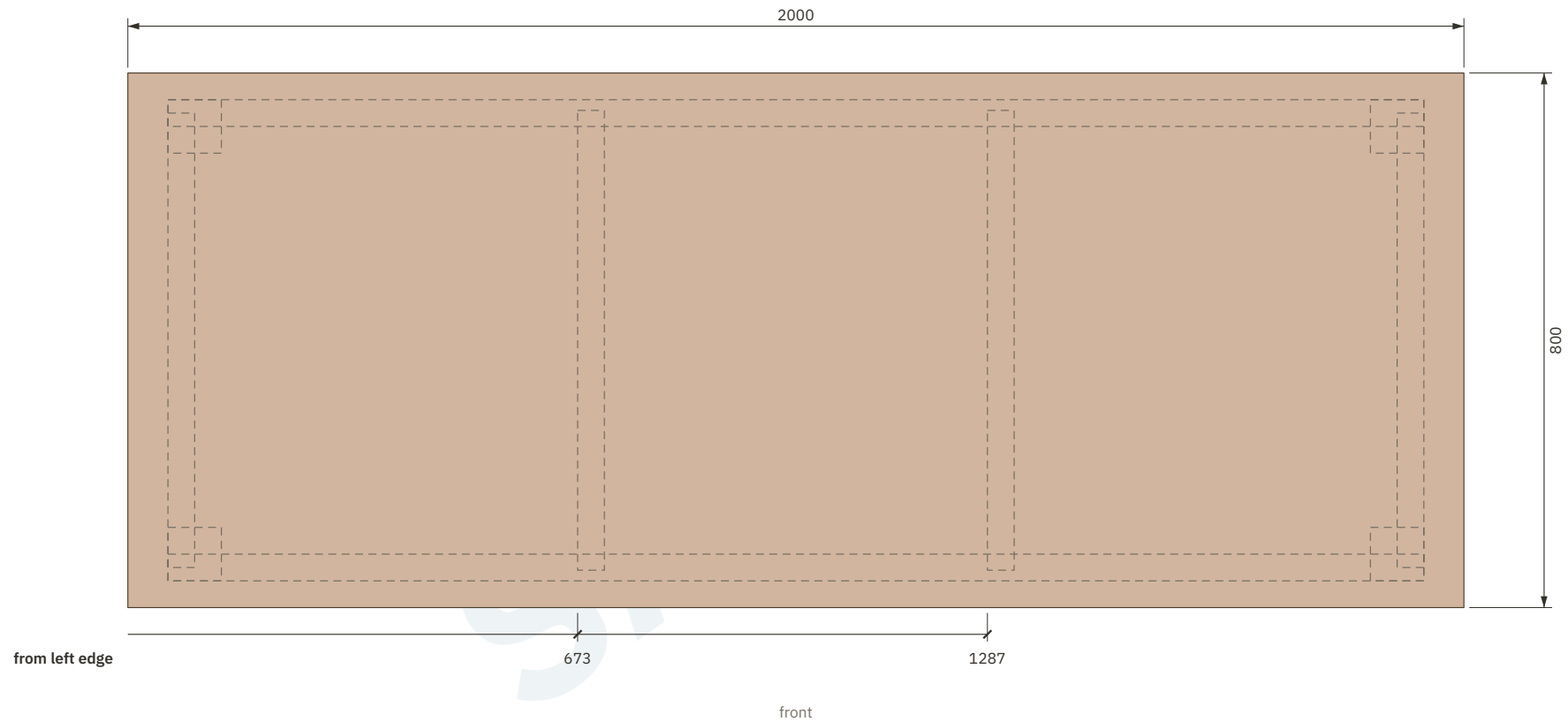
Height	above floor
Floor	0 mm
Bottom of lower rails	142 mm
Top of lower rails	222 mm
Shelf surface	240 mm

Height	above floor
Bottom of upper rails	740 mm
Underside of worktop	860 mm
Working height (top of worktop)	900 mm

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2.2 Top view

Top view of the worktop Scale 1:10



Dashed: frame parts below the worktop (hidden). Cut-outs, notches and worktop supports: position of their edges from the left edge and from the front edge.

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3 Parts list

17 parts in 10 positions. Parts that are identical to make are grouped.

Pos.	Parts	Qty	Description	Material	Finished L × W × T	Machining
Frame						
1	A1, A2	2	Worktop support	Spruce	688 × 120 × 40	2× half-lap 24 × 60 mm 4× hole Ø 6 mm, 60 mm deep
2	B1, B4	2	Leg	Spruce	860 × 80 × 80	Half-lap 120 × 20 mm Half-lap 80 × 20 mm Half-lap 120 × 60 mm, 20 mm deep Half-lap 80 × 60 mm, 20 mm deep 8× hole Ø 3 mm, 30 mm deep
3	B2, B3	2	Leg	Spruce	860 × 80 × 80	Half-lap 120 × 20 mm Half-lap 80 × 20 mm Half-lap 120 × 60 mm, 20 mm deep Half-lap 80 × 60 mm, 20 mm deep 8× hole Ø 3 mm, 30 mm deep
4	L1, L3	2	Lower long rail	Spruce	1880 × 80 × 40	2× half-lap 80 × 20 mm 6× hole Ø 2.5 mm, 22 mm deep 4× hole Ø 5 mm, 20 mm deep
5	L2, L4	2	Upper long rail	Spruce	1880 × 120 × 40	2× half-lap 80 × 20 mm 2× half-lap 40 × 60 mm, 24 mm deep 12× hole Ø 2.5 mm, 28 mm deep 4× hole Ø 3.5 mm, 40 mm deep 4× hole Ø 5 mm, 20 mm deep
6	Q1, Q3	2	Lower cross rail	Spruce	680 × 80 × 40	2× half-lap 60 × 20 mm 3× hole Ø 2.5 mm, 22 mm deep 4× hole Ø 5 mm, 20 mm deep
7	Q2, Q4	2	Upper cross rail	Spruce	680 × 120 × 40	2× half-lap 60 × 20 mm 4× hole Ø 2.5 mm, 28 mm deep 4× hole Ø 5 mm, 20 mm deep
Worktop						
8	P1	1	Wear layer (layer 1, replaceable)	MDF	2000 × 800 × 19	19× hole Ø 2.5 mm, 10 mm deep
9	P2	1	Worktop – layer 2 of 2	Birch plywood	2000 × 800 × 21	19× hole Ø 4.5 mm, through 32× hole Ø 2.5 mm, 18 mm deep 19× counterbore Ø 9 mm, 1 mm deep
Shelf						
10	F1	1	Shelf	Birch plywood	1880 × 720 × 18	4× notch 81 × 81 mm 18× hole Ø 4.5 mm, through

Finished sizes in mm: L = length (grain direction), W = width, T = thickness. Tenons are included in the length.

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4 Shopping list

To tick off at the DIY store or timber merchant. Timber and sheets are listed as you buy them (stock sizes), not as individual parts.

Quantity	Item	Size / type	Unit price	Total
Timber Total €69.90				
☐ 1 length	Spruce timber	40 × 80 × 2000 mm	€5.80	€5.80
☐ 1 length	Spruce timber	40 × 80 × 4000 mm	€11.60	€11.60
☐ 1 length	Spruce timber	40 × 120 × 3000 mm	€12.90	€12.90
☐ 1 length	Spruce timber	40 × 120 × 4000 mm	€17.20	€17.20
☐ 1 length	Spruce timber	80 × 80 × 4000 mm	€22.40	€22.40
Sheet material Total €220.00				
☐ 1 sheet	Birch plywood	2500 × 1250 × 18 mm	€89.00	€89.00
☐ 1 sheet	Birch plywood	2500 × 1250 × 21 mm	€99.00	€99.00
☐ 1 sheet	MDF	2500 × 1250 × 19 mm	€32.00	€32.00
Hardware & fasteners Total €12.73				
☐ 32 pcs	Wood screw	4 × 20 mm	€0.03	€0.96
☐ 51 pcs	Wood screw	4 × 30 mm	€0.03	€1.53
☐ 18 pcs	Wood screw	4 × 40 mm	€0.04	€0.72
☐ 32 pcs	Wood screw (securing the half lap)	5 × 50 mm	€0.06	€1.92
☐ 8 pcs	Wood screw (securing the half lap)	6 × 100 mm	€0.15	€1.20
☐ 16 pcs	Worktop bracket (steel angle, 40 mm legs, at least 2 mm thick) – not fully determined, check manufacturer data	40 mm	€0.40	€6.40
Consumables Total €8.50				
☐ 1 bottle	Wood glue (assumption: 1 bottle per approx. 40 glued joints, here 20)	–	€8.50	€8.50

Total of known prices: €311.13

Unknown prices: none – every item has a price

Prices come from your settings under Purchasing. The defaults are example prices, not current market prices.

Timber and sheet quantities follow from the cutting plan (heuristic, not guaranteed optimal).

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5 Cutting

Cutting method

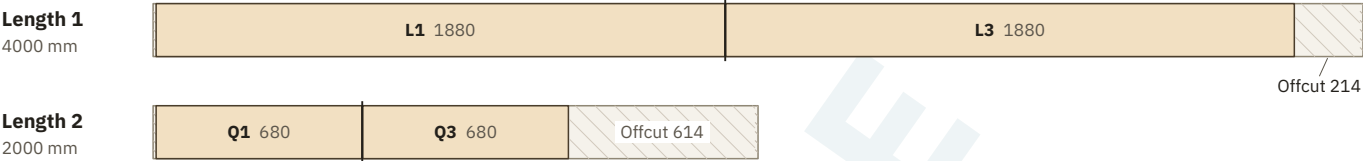
Heuristic cutting plan – not guaranteed optimal: a fast approximate method finds a good plan, but not necessarily the one with the least waste.
Timber: the longest parts go on a length first, shorter ones fill the rest; the stock length is chosen so that little is left over. Sheets: only straight cuts from edge to edge, as with a track saw or panel saw. Planned in: kerf 3 mm per cut, end trim 10 mm at each end of a length (to cut off uneven ends) and edge trim 10 mm per sheet edge (factory edges are rarely clean).
Check the dimensions and the grain before sawing.

Hatched: end trim / edge trim and offcuts. Thick lines: saw cuts. Dimensions in mm (raw length incl. allowance).

5.1 Timber

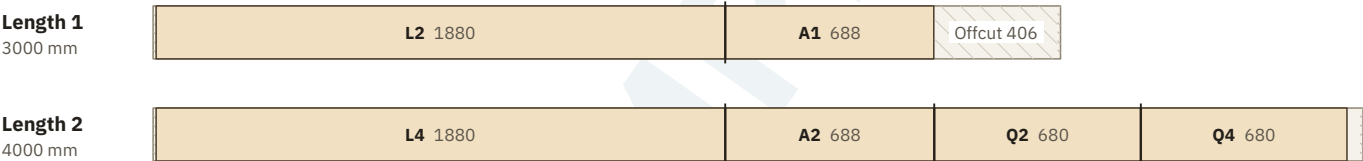
Timber Spruce 40 × 80 mm

Buy 2 lengths: 1 × 4000 mm, 1 × 2000 mm



Timber Spruce 40 × 120 mm

Buy 2 lengths: 1 × 4000 mm, 1 × 3000 mm



Timber Spruce 80 × 80 mm

Buy 1 length: 1 × 4000 mm



5.2 Sheets

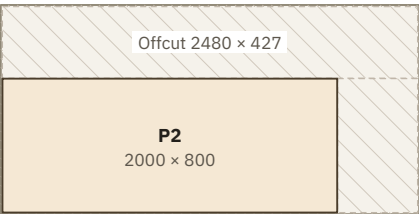
Birch plywood, 18 mm
2500 × 1250 mm · Yield 43 %

Grain →

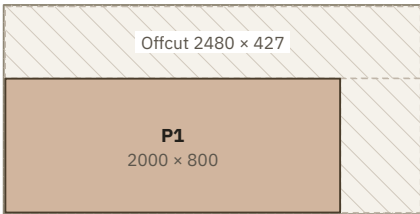


Birch plywood, 21 mm
2500 × 1250 mm · Yield 51 %

Grain →



MDF, 19 mm
2500 × 1250 mm · Yield 51 %



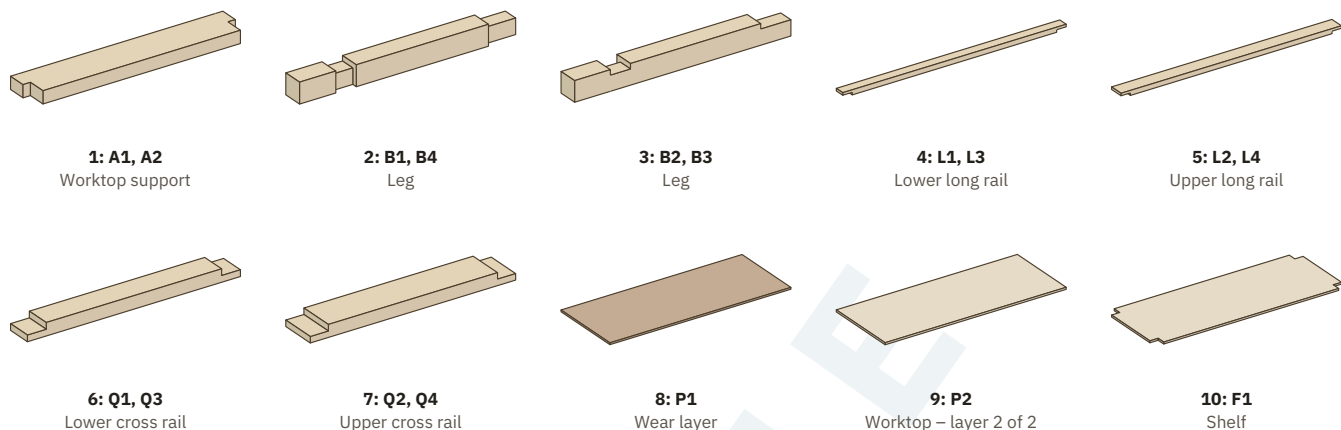
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6 Assembly instructions

Work through the steps in order. Each graphic shows the state after the step. Part drawings with all machining dimensions are in the detail plan (chapter Part drawings) – this sample plan shows two of them in the chapter “From the detail plan”.

 New in this step  Already assembled

6.1 Step 1: Cut and machine the parts



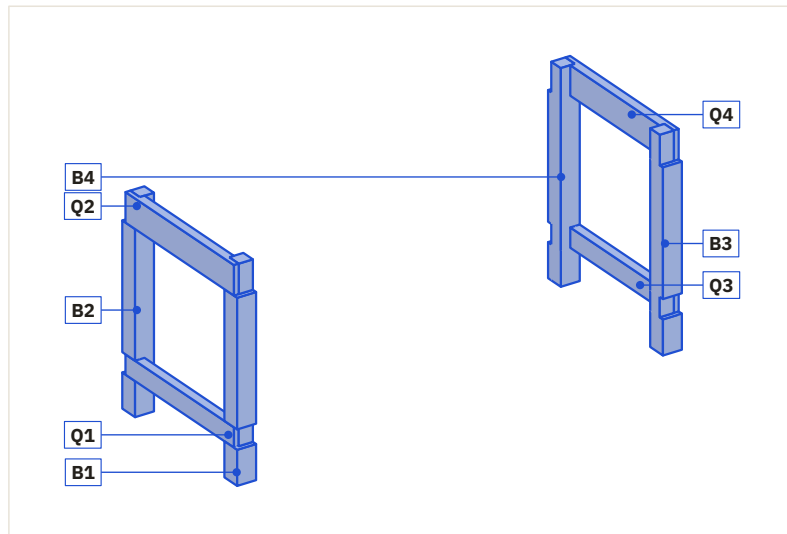
All parts list positions, shown individually (not to scale)

How to

1. Cut all parts according to the cutting plan (14 timber parts, 3 sheet parts) and label every part with its number right away (e.g. B1, L2).
 2. Positions in these instructions: “from the left edge” and “from the front edge” of the worktop, heights “above the floor”. Dimensions in the part drawings refer to the reference edge given there.
 3. Mark out the half laps from the part drawings, saw the shoulders and chop out with a chisel; dry-fit each joint.
 4. Drill the through holes and counterbores as shown in the part drawings. Drill the pilot holes in the mating parts only during assembly, through the existing hole.
 5. Sheet parts: cut notches, openings, rebates and grooves as shown in the part drawings.
- Tools: Saw (mitre, hand or table saw), Tape measure or folding ruler, Try square, Cordless drill/driver with matching bits, Wood drill bit Ø 2.5 mm, Wood drill bit Ø 3 mm, Wood drill bit Ø 3.5 mm, Wood drill bit Ø 4.5 mm, Wood drill bit Ø 5 mm, Wood drill bit Ø 6 mm, Forstner bit Ø 9 mm, Chisel, Mallet, Jigsaw

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6.2 Step 2: Build the end frames

**Parts**

- 2× B1, B4 – Leg
- 2× B2, B3 – Leg
- 2× Q1, Q3 – Lower cross rail
- 2× Q2, Q4 – Upper cross rail

Fasteners and bought items

- 16× Wood screw (securing the half lap) 5 × 50 mm

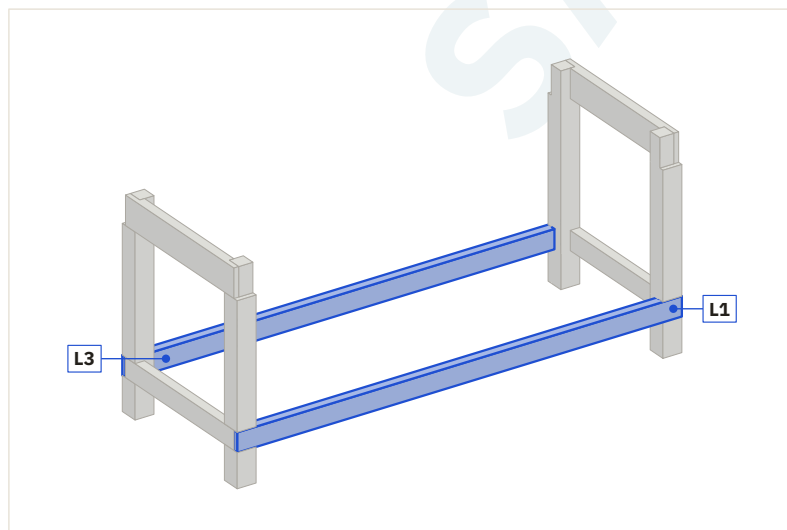
How to

1. Build the 2 end frames flat on a level surface – each frame is one leg pair with its cross rails: B1 + B2; B3 + B4.
2. Lay the legs down with the laps for the cross rails facing up.
3. Upper cross rails Q2, Q4: top edge flush with the upper leg end (later 860 mm above the floor), flush with the outer faces of the legs.

How to (continued)

4. Lower cross rails Q1, Q3: top edge 222 mm above the floor, measured on the leg from its lower end, flush with the outer faces of the legs.
 5. Half laps: spread wood glue on the laps, lay Q2, Q4 into the laps of B1, B3 and secure each lap with 2 screws 5 × 50 – 30 mm from the front rail end, 96 / 48 mm below the top edge.
 6. Half laps: spread wood glue on the laps, lay Q2, Q4 into the laps of B2, B4 and secure each lap with 2 screws 5 × 50 – 30 mm from the back rail end, 96 / 48 mm below the top edge.
 7. Half laps: spread wood glue on the laps, lay Q1, Q3 into the laps of B1, B3 and secure each lap with 2 screws 5 × 50 – 30 mm from the front rail end, 64 / 32 mm below the top edge.
 8. Half laps: spread wood glue on the laps, lay Q1, Q3 into the laps of B2, B4 and secure each lap with 2 screws 5 × 50 – 30 mm from the back rail end, 64 / 32 mm below the top edge.
 9. Square each frame before the final tightening: both diagonals must be equal.
 10. Let the glue set as specified by the manufacturer before moving the frames.
- Glue: spread a thin layer on the joint faces, screw together, wipe off squeeze-out right away.
 - Tools: Tape measure or folding ruler, Try square, Mallet, Chisel, Wood glue and glue brush, Clamps, Cordless drill/driver with matching bits, Wood drill bit Ø 3 mm

6.3 Step 3: Fit the lower long rails

**Parts**

- 2× L1, L3 – Lower long rail

Fasteners and bought items

- 8× Wood screw (securing the half lap) 5 × 50 mm

How to

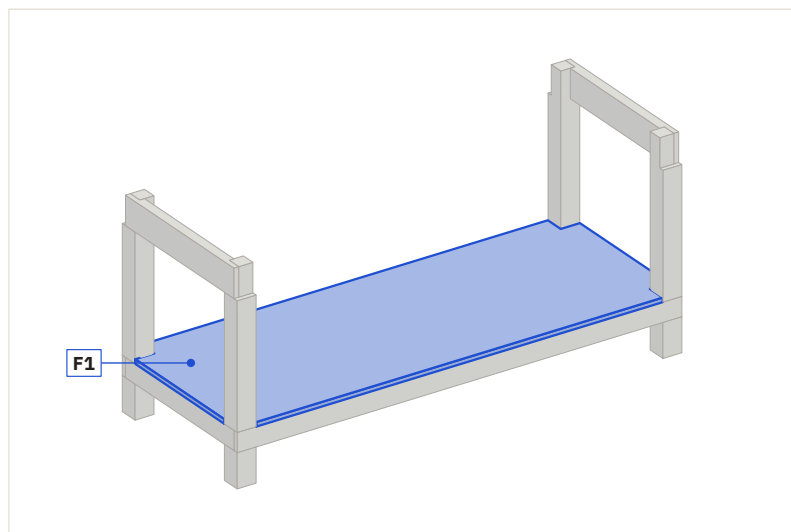
1. Stand the frames up and secure them against tipping with a helper or clamps. The leg pairs stand at 60 / 1860 mm from the left edge (left face of each leg).
2. Lower long rail (front) L1: top edge 222 mm above the floor, flush with the outer faces of the legs.
3. Lower long rail (back) L3: top edge 222 mm above the floor, flush with the outer faces of the legs.
4. Half laps: spread wood glue on the laps, lay L1, L3 into the laps of B1, B2 and secure each lap with 2 screws 5 × 50 – 40 mm from the left rail end, 48 / 16 mm below the top edge.

How to (continued)

5. Half laps: spread wood glue on the laps, lay L1, L3 into the laps of B3, B4 and secure each lap with 2 screws 5 × 50 – 40 mm from the right rail end, 48 / 16 mm below the top edge.
 6. Plumb the legs (spirit level), then tighten the joints.
- Glue: spread a thin layer on the joint faces, screw together, wipe off squeeze-out right away.
 - Tools: Tape measure or folding ruler, Spirit level, Mallet, Chisel, Wood glue and glue brush, Clamps, Cordless drill/driver with matching bits, Wood drill bit Ø 3 mm, A second person to hold and lift

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6.4 Step 4: Lay in the shelf

**Parts**

- 1× F1 – Shelf

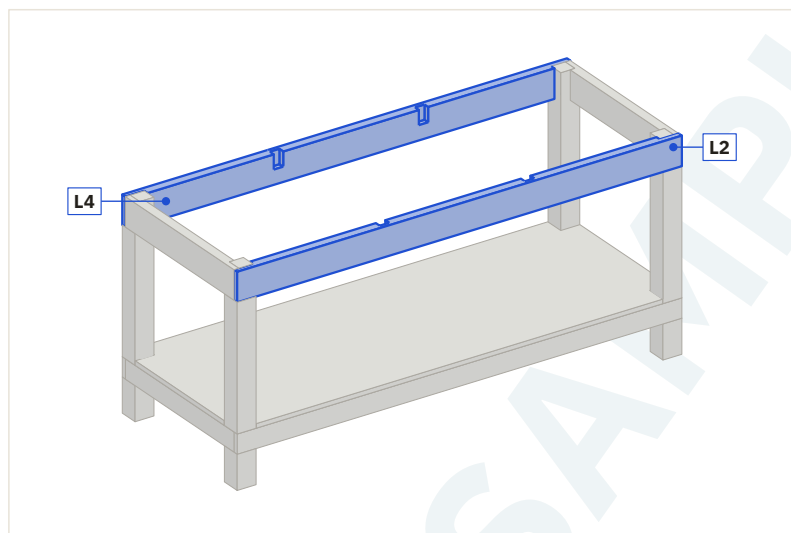
Fasteners and bought items

- 18× Wood screw 4 × 40 mm

How to

1. Lay in the shelf now – once the upper long rails are fitted it no longer fits through.
 2. To do so, tilt F1, slide one end under the upper cross rail and then lower it.
 3. Lay shelf F1 onto the lower rails: top face 240 mm above the floor, the notches fit around the legs.
 4. Screw F1 to Q1, Q3: 6 screws 4 × 40.
 5. Screw F1 to L1, L3: 12 screws 4 × 40.
- Tools: Cordless drill/driver with matching bits, Wood drill bit Ø 2.5 mm, A second person to hold and lift

6.5 Step 5: Fit the upper long rails

**Parts**

- 2× L2, L4 – Upper long rail

Fasteners and bought items

- 8× Wood screw (securing the half lap) 5 × 50 mm

How to

1. Upper long rail (front) L2: top edge flush with the leg ends (860 mm above the floor), flush with the outer faces of the legs.
2. Upper long rail (back) L4: top edge flush with the leg ends (860 mm above the floor), flush with the outer faces of the legs.
3. Half laps: spread wood glue on the laps, lay L2, L4 into the laps of B1, B2 and secure each lap with 2 screws 5 × 50 – 40 mm from the left rail end, 72 / 24 mm below the top edge.

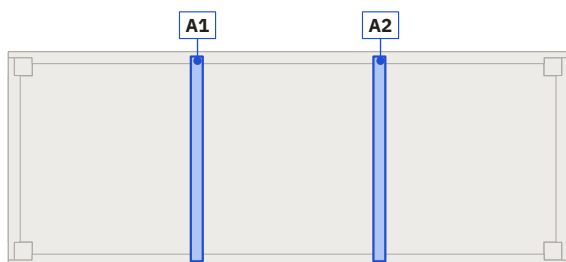
How to (continued)

4. Half laps: spread wood glue on the laps, lay L2, L4 into the laps of B3, B4 and secure each lap with 2 screws 5 × 50 – 40 mm from the right rail end, 72 / 24 mm below the top edge.
5. Align the frame before tightening everything: both diagonals equal, legs plumb.
 - Glue: spread a thin layer on the joint faces, screw together, wipe off squeeze-out right away.
 - Tools: Tape measure or folding ruler, Spirit level, Mallet, Chisel, Wood glue and glue brush, Clamps, Cordless drill/driver with matching bits, Wood drill bit Ø 3 mm

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6.6 Step 6: Fit the worktop supports

View from above · front at the bottom ↓

**Parts**

- 2× A1, A2 – Worktop support

Fasteners and bought items

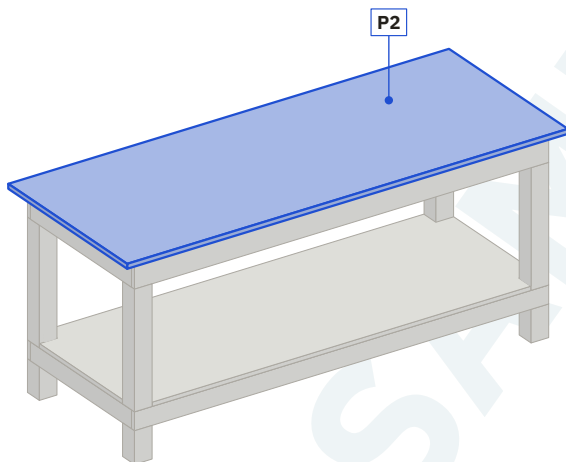
- 8× Wood screw (securing the half lap) 6 × 100 mm

How to

1. Lay worktop supports A1, A2 from above into the notches of the upper long rails, top edge flush with the rails (860 mm above the floor).
 2. Left face of the supports at 673 / 1287 mm from the left edge.
 3. Stopped half laps: spread wood glue on the notches and blades, lay A1, A2 from above into the notches of L2, L4 (top faces flush) and secure each end from above with 2 screws 6 × 100 – 12 mm from the end of the part, 13 / 27 mm from the left face of the part.
- Glue: spread a thin layer on the joint faces, screw together, wipe off squeeze-out right away.

- Tools: Tape measure or folding ruler, Try square, Mallet, Chisel, Wood glue and glue brush, Clamps, Cordless drill/driver with matching bits, Wood drill bit Ø 3.5 mm

6.7 Step 7: Fit the worktop (core layers)

**Parts**

- 1× P2 – Worktop – layer 2 of 2

Fasteners and bought items

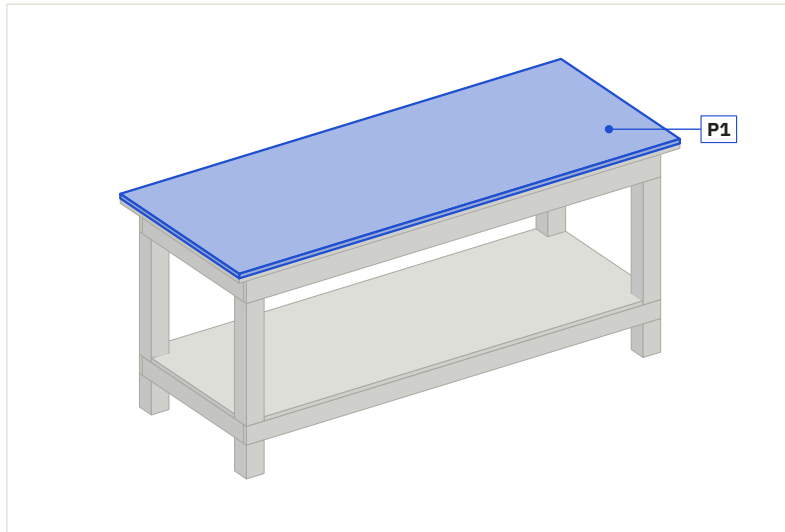
- 16× Worktop bracket (steel angle, 40 mm legs, at least 2 mm thick)
- 32× Wood screw 4 × 20 mm
- 32× Wood screw 4 × 30 mm

How to

1. Screw 16 worktop brackets to the inner faces of the upper rails L2, L4, Q2, Q4: flush at the top, approx. 400 mm apart, screws 4 × 30.
 2. Lift core board P2 on with a helper and align it: overhang left 60 mm, right 60 mm, front 40 mm, back 40 mm.
 3. Screw the brackets from below with screws 4 × 20 into the bottom layer P2 only – never into a replaceable layer.
- Tools: Cordless drill/driver with matching bits, Wood drill bit Ø 2.5 mm, Clamps, A second person to hold and lift

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6.8 Step 8: Fasten the wear layer

**Parts**

- 1× P1 – Wear layer (layer 1, replaceable)

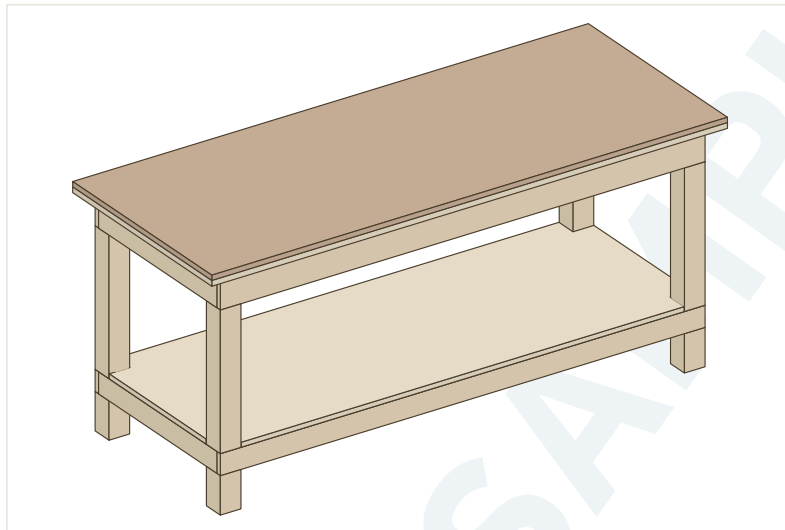
Fasteners and bought items

- 19× Wood screw 4 × 30 mm

How to

1. Lay on wear layer P1, align it flush with the core board and clamp it – do not glue, it must stay replaceable.
 2. From below, screw through P2 into P1 with 19 screws 4 × 30 – at the pre-drilled positions between the rails; sink the screw heads 1 mm deep.
 3. To replace the layer later, only undo these screws.
- Tools: Cordless drill/driver with matching bits, Wood drill bit Ø 2.5 mm, Clamps

6.9 Step 9: Final check

**How to**

1. Check the frame: diagonals equal, legs plumb, work surface level.
 2. Retighten all screws.
 3. Choose and fasten parts that are not fully determined (brackets) only as specified by the manufacturer.
 4. The plan only checks the implemented rules. Load capacity and safety are not guaranteed.
- Tools: Spirit level, Tape measure or folding ruler, Cordless drill/driver with matching bits

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7 Joints

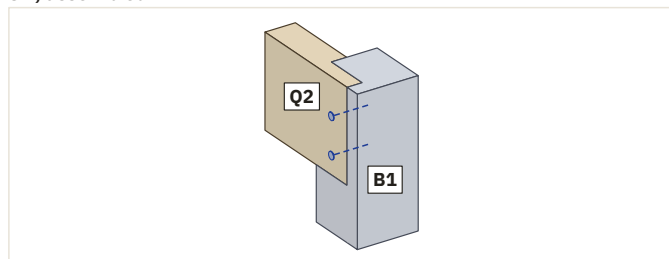
For every joint type used, a detail drawing shows one example from your bench. The dimensions per rail group are in the table below; the position of every single joint is listed in the detail plan.

Detail view of the area around the joint (cut out of the longer parts). Dashed: hidden machining. Blue: screws, bolts and hanger bolts; the short cross line marks the screw head, i.e. the side you drive the screw from. Dimensions in mm, measured from the rail end or the top edge of the joined part. 3D sketches: left assembled (dashed blue: fasteners inside the wood), right pulled apart – the dashed arrows show how the parts go together.

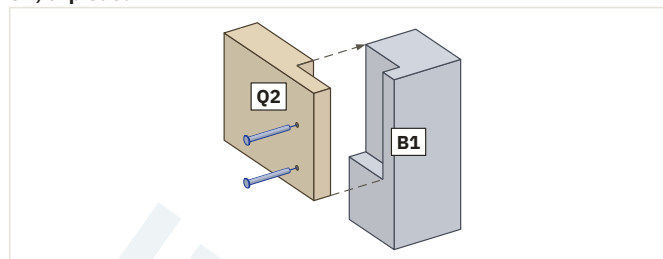
7.1 Half lap – Lap on leg (16×)

Example J10: B1 (Leg front, leg pair 1) and Q2 (Upper cross rail, leg pair 1)

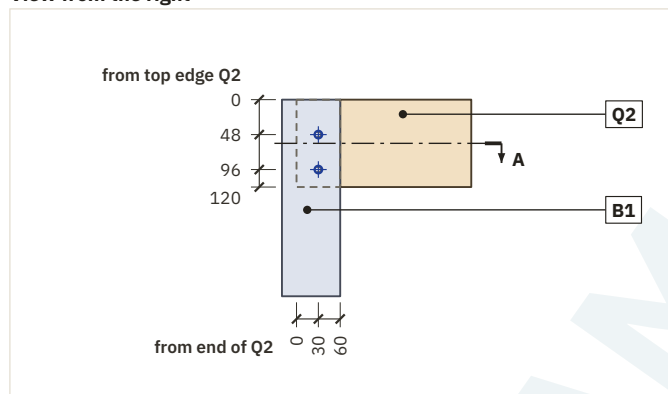
3D, assembled



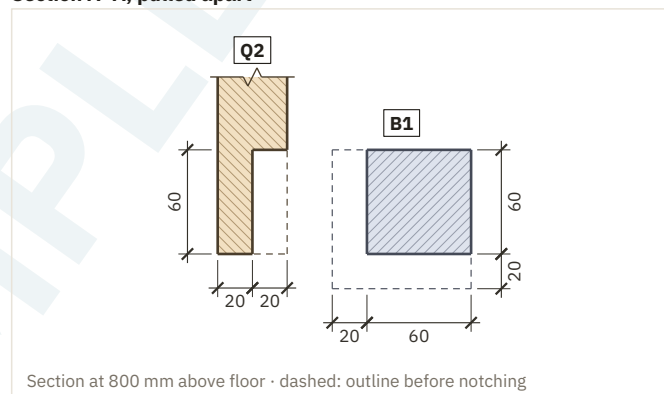
3D, exploded



View from the right



Section A–A, pulled apart



Item	Upper cross rails	Upper long rails	Lower cross rails	Lower long rails
Variant	Lap on leg	Lap on leg	Lap on leg	Lap on leg
Lap depth	20 mm	20 mm	20 mm	20 mm
Notch in leg	20 mm	20 mm	20 mm	20 mm
Notch in rail	20 mm	20 mm	20 mm	20 mm
Lap width	60 mm	80 mm	60 mm	80 mm
Lap height	120 mm	120 mm	80 mm	80 mm
Screw diameter	5 mm	5 mm	5 mm	5 mm
Number of screws	2	2	2	2
Screw length	50 mm	50 mm	50 mm	50 mm
Screw from top edge	96 mm	72 mm	64 mm	48 mm
Second screw from top edge	48 mm	24 mm	32 mm	16 mm
Screw from the front rail end	30 mm	–	30 mm	–
Screw from the back rail end	30 mm	–	30 mm	–
Screw from the left rail end	–	40 mm	–	40 mm
Screw from the right rail end	–	40 mm	–	40 mm
Driving the screws	from the left / from the right, through Q2, Q4	from the front / from the back, through L2, L4	from the left / from the right, through Q1, Q3	from the front / from the back, through L1, L3

- These joints are glued.

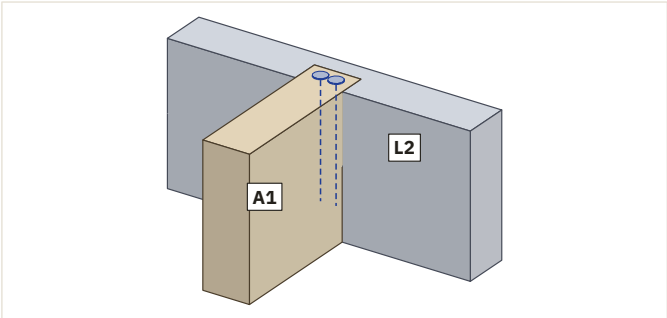
Fasteners in total: 32× Wood screw (securing the half lap) 5 × 50 mm

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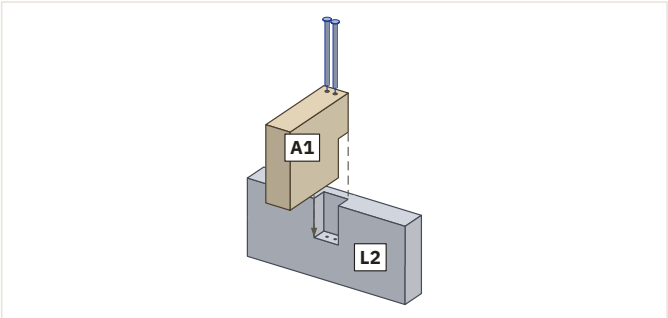
7.2 Half lap – Stopped T half lap from above (4×)

Example J26: L2 (Upper long rail front, bay 1) and A1 (Worktop support, bay 1, no. 1)

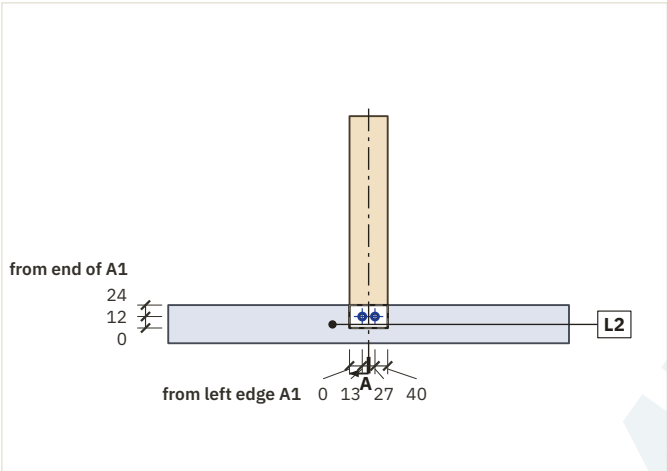
3D, assembled



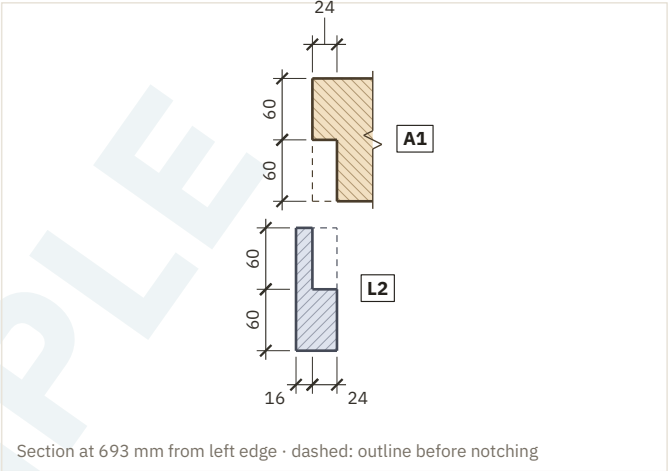
3D, exploded



View from above



Section A–A, pulled apart



Item	Worktop supports
Variant	Stopped T half lap from above
Lap depth	60 mm
Let into the receiving part (horizontal)	24 mm
Lap width	40 mm
Wood left behind the notch	16 mm
Screw diameter	6 mm
Number of screws	2
Screw length	100 mm
Screw from side edge	13 mm
Second screw from side edge	27 mm
Screw from the front rail end	12 mm
Screw from the back rail end	12 mm
Driving the screws	from above, through A1, A2

- These joints are glued.
- Stopped half lap: the member end rests with its upper blade from above in a notch on the inner face of the receiving part, top faces flush. The outer face of the receiving part stays closed.

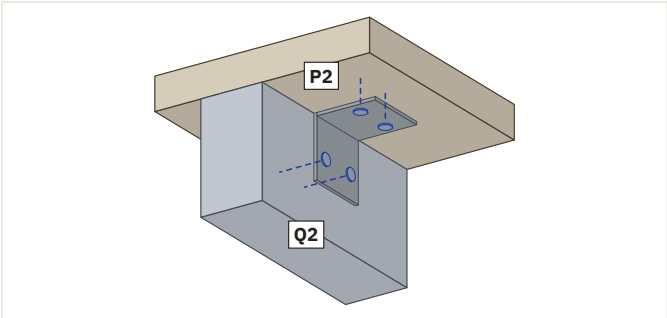
Fasteners in total: 8× Wood screw (securing the half lap) 6 × 100 mm

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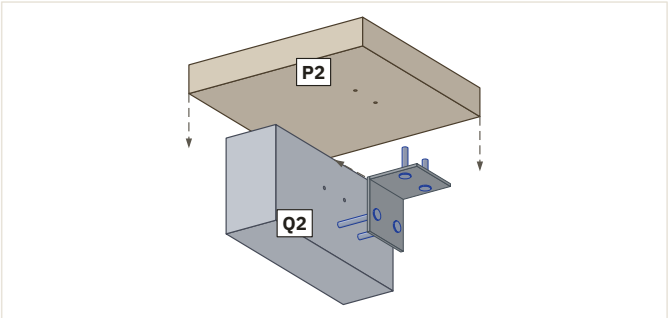
7.3 Worktop bracket (4×)

Example J5: Q2 (Upper cross rail, leg pair 1) and P2 (Worktop – layer 2 of 2)

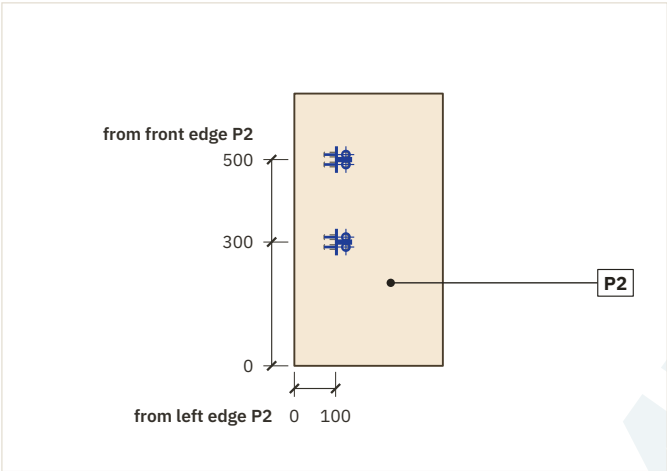
3D, assembled



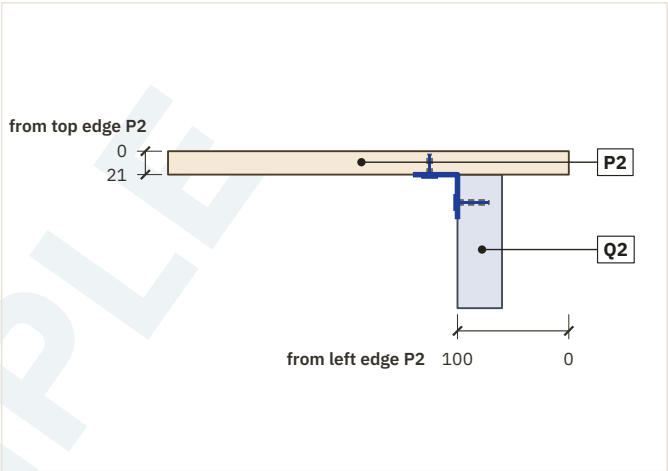
3D, exploded



View from above



View from the back



Item	Upper cross rail	Upper long rail
Number of brackets	2	6
Max. bracket spacing	400 mm	400 mm
Flange length	40 mm	40 mm
Screw into the worktop layer	4 × 20	4 × 20

- Not fully determined: choose load capacity, hole pattern and screws according to the manufacturer.
- Generic angle bracket: load capacity and hole pattern per manufacturer. Screws into the bottom worktop layer only.

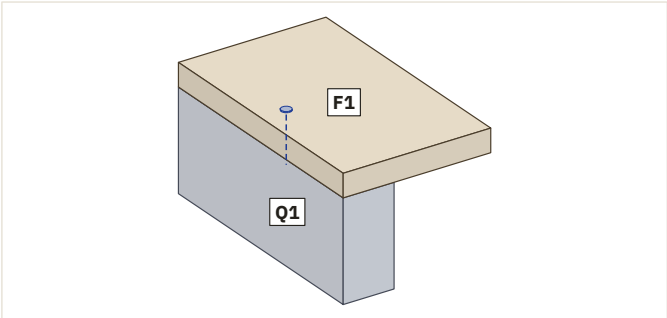
Fasteners in total: 16× Worktop bracket (steel angle, 40 mm legs, at least 2 mm thick) · 32× Wood screw 4 × 20 mm · 32× Wood screw 4 × 30 mm

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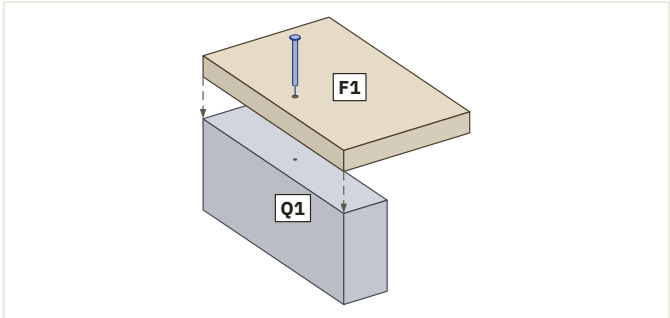
7.4 Panel screws (5×)

Example J1: Q1 (Lower cross rail, leg pair 1) and F1 (Shelf)

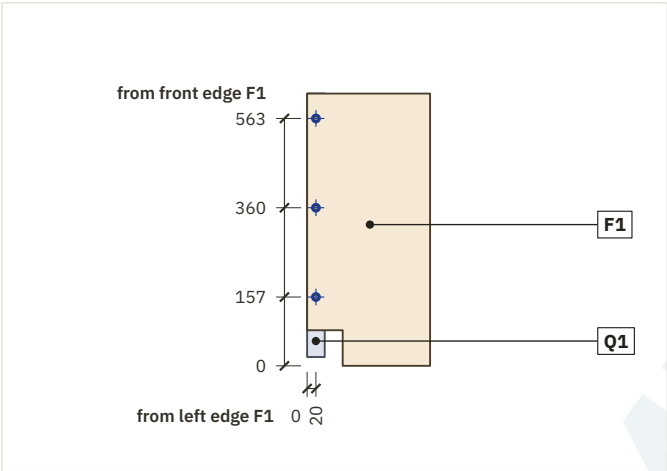
3D, assembled



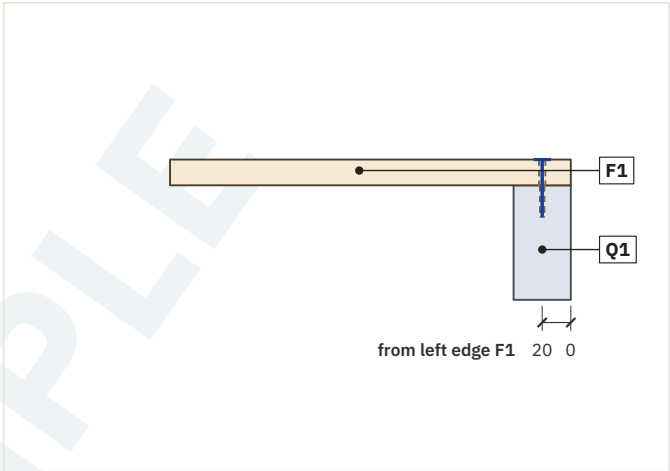
3D, exploded



View from above



View from the back



Item	Shelf	Worktop
Number of screws	3 / 6	19
Screw diameter	4 mm	4 mm
Screw length	40 mm	30 mm
Screwed from below	–	Yes
Wear layer	–	Yes
Head countersunk by	–	1 mm
Driving the screws	from above, through F1	from below, through P2

- J9: Wear layer screwed from below only, not glued. Loosen the screws from below to replace it.

Fasteners in total: 18× Wood screw 4 × 40 mm · 19× Wood screw 4 × 30 mm

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8 From the detail plan: part drawings

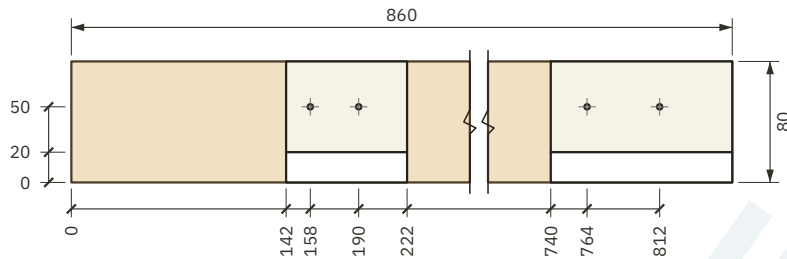
Two examples from the detail plan – a leg and a rail of the sample project. The complete detail plan has such a drawing for every position of the parts list, plus the position list with where each part goes. How to read the drawing: dimensions in mm from the left end or the lower edge of the drawing, dashed = hidden machining; the table below lists every machining step with face, size, depth and position – that is what you mark out from.

8.1 Pos. 2: Leg · B1, B4

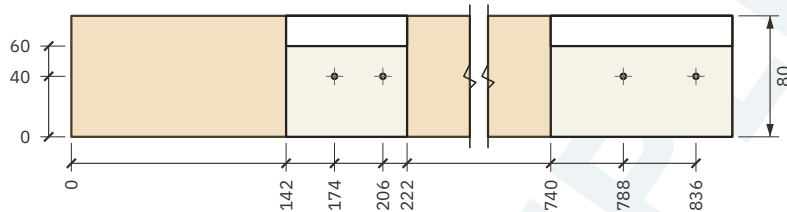
2 pieces · Spruce · finished size 860 × 80 × 80 mm

Left end of the drawing = bottom when installed. Scale 1:5. Long sections without machining are shortened (break lines); the dimensions are true.

View A: face left; lower edge of the drawing = front



View B: face front; lower edge of the drawing = right



Machining	Face	View	Size	Depth	Qty	from left end	from lower edge	Mating part
Half lap	left	A	120 × 60	20 mm	1	740	20	Q2
Half lap	front	B	120 × 80	20 mm	1	740	0	L2
Half lap	left	A	80 × 60	20 mm	1	142	20	Q1
Half lap	front	B	80 × 80	20 mm	1	142	0	L1
Hole	left	A	Ø 3	30 mm	4	158, 190, 764, 812	50	Q2, Q1
Hole	front	B	Ø 3	30 mm	4	174, 206, 788, 836	40	L2, L1

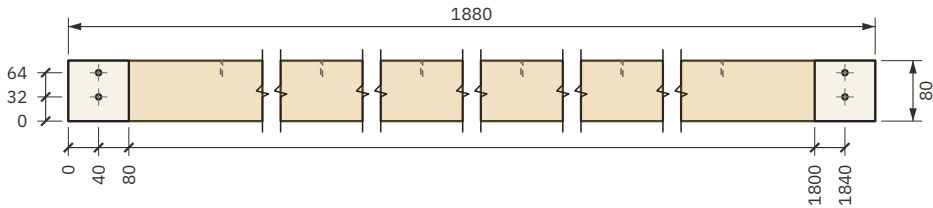
Applies equally to B1, B4. The drawing shows B1; parts with the same machining may be installed rotated or mirrored – see the position list for the installed position.

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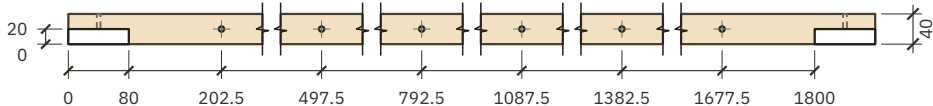
8.2 Pos. 4: Lower long rail · L1, L3

2 pieces · Spruce · finished size 1880 × 80 × 40 mm
Left end of the drawing = right when installed. Scale 1:10. Long sections without machining are shortened (break lines); the dimensions are true.

View A: face back; lower edge of the drawing = bottom



View B: face top; lower edge of the drawing = back



Machining	Face	View	Size	Depth	Qty	from left end	from lower edge	Mating part
Hole	top	B	Ø 2.5	22 mm	6	202.5 to 1677.5, pitch 295	20	F1
Half lap	back	A	80 × 80	20 mm	2	0, 1800	0	B1, B3
Hole	front	A	Ø 5	20 mm	4	40, 1840	32, 64	B1, B3

Applies equally to L1, L3. The drawing shows L1; parts with the same machining may be installed rotated or mirrored – see the position list for the installed position.

9 Check notes and open points

Check result: 0 errors · 0 warnings · 2 notes

Error: cannot be built as planned. Warning: possible but risky or unverified. Note: for information. Technical details are in the detail plan.

- Note: Worktop bracket: choose hole pattern and screws per manufacturer**
Parts: L2, L4, P2, Q2, Q4
What to do: These connections are not fully determined: the program knows neither load capacity nor hole pattern. What to buy is listed under “Technical details” – check the manufacturer data when buying; if hole pattern or screws do not match, use the screws the manufacturer specifies.
- Note: Load class “Medium” is a planning assumption**
What to do: The load class controls the automatic profiles and the simplified deflection estimate. It is not a verified load capacity.
Setting: Load

9.1 Important note

This plan is a planning aid. It is not a structural calculation and no proof of load capacity or safety. Load classes and deflections are simplified planning assumptions.

A check result without errors only means that the built-in checks found no such problems. It is no guarantee that the workbench can be built like this, is safe or carries a certain load.

Measure material, fittings and machines before cutting. Manufacturer data (e.g. brackets, casters, slides) takes precedence over the values in this plan.