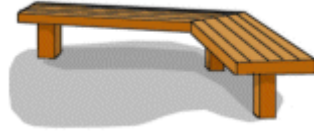


Bench seat

How to make and add a seat to an existing deck

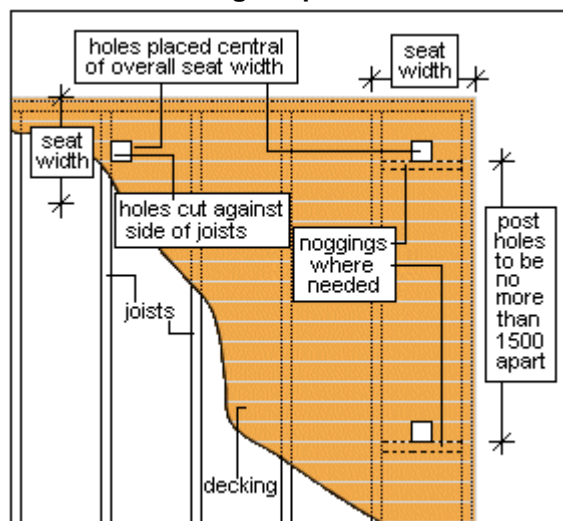


Use the same decking materials to construct a fixed deck seat, as used on the deck itself. In this example, 100x20 (finished or dressed size 90x18) kwila is used. If your deck is constructed out of some other material, such as 90x35 pine decking, then also use 90x35 pine to construct the seat but make any necessary measurement adjustments to compensate for any material size differences exemplified in the following plans.

STEP ONE. Marking and cutting the post holes in the deck

It will be necessary to cut square holes in the deck for the seat posts to slot into. The distances between seat posts will vary depending on the existing deck's joist spacings, but should never be more than 1500mm apart. Position the holes next to the joists (see drawing below), or in the case where that is not possible or where there are no joists, noggings need to be fitted.

FLAT PLAN cutting the post holes in the deck



Mark the holes central to the width of the seat, and ensure the holes do not span

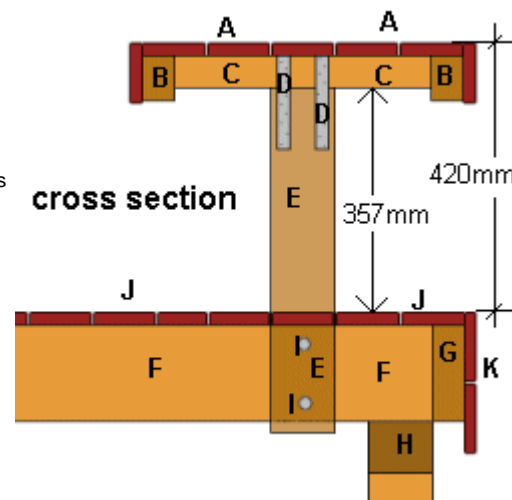
more than 1500mm. Use the end of a post as a marking template. Cut the holes out using a jig saw, drilling a 10mm hole in one corner first, to enable the jigsaw to get started.

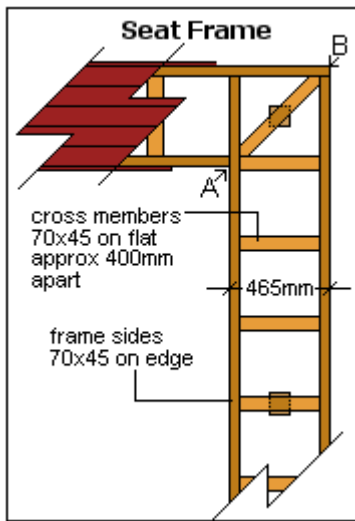
STEP TWO. The construction

putting in the seat posts

Cut all the seat posts (tanalised dressed or gauged pine 94x94) 500mm long. The number of posts will depend on the overall length of the seat.
Place the posts into the holes that have been cut in the decking (as explained above) so that the posts are 357mm above the top of the decking and 143mm below. Use clamps to hold the posts in place, check they are vertical, then drill and bolt the posts to the joists, as shown in the drawing below.
Use two m12 galv coach bolts per post.

- A Kwila decking. 90x18 (ex 100x20)
- B Seat frame sides. Tanalised 70x45 (ex 75x50) on edge
- C Seat frame cross members. Tanalised 70x45 (ex 75x50) on flat. Approx 400mm apart
- D Galvanised metal brace strap to fix the seat frame to the posts.
- E Seat post. Tanalised 94x94 (ex 100x100). Goes through the holes cut in the deck and bolted to the joists.
- F Existing joists
- G Existing deck boundary joist.
- H Existing bearer. Not necessarily in that position
- I Galvanised 12mm coach bolts to fix the seat posts to the joists
- J Existing decking.
- K Existing side decking. Decorative only, and not on all decks.





STEP TWO. Making the seat frame

The seat frame structure is similar to that of a ladder, with the cross members being the 'ladder rungs' and the seat frame sides being the 'ladder sides'. The over all frame width (in this case) is 465mm. That measurement is worked out by the number of decking boards to go on the seat top and the gaps between the boards.

Make the seat frame (ladder) up on the ground. The cross members should be approx 400mm apart, but when spacing them out, ensure there will be a cross member in line with each post. Make the seat frame longer than needed. It can be trimmed after being fixed in place.

Corner fitting: Sit the (over length) seat frames on top of the posts, temporary in position. The frames will overlap one another at the corners. It will then become obvious where to mark and cut where the seat frames overlap.

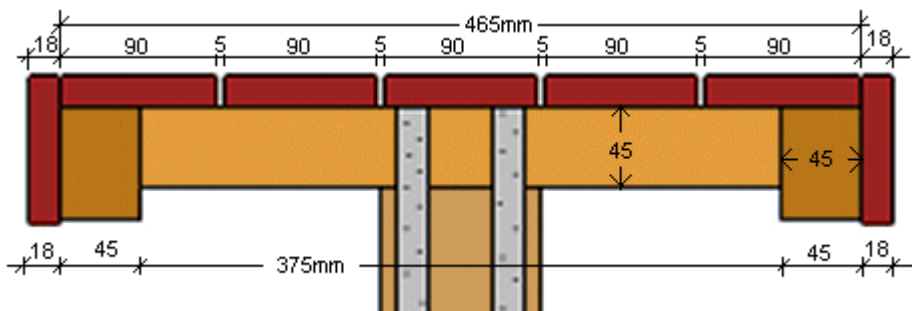
Fix the seat frame in place by nailing the cross members to the posts and then securing with two metal galvanised straps as in below drawing. This will stop any tilting movement. (Note: Some type of stainless steel straps or fittings should replace the galvanised straps, if the seat is close to the salt water).

Trim the ends of the seatframes to the required length ensuring there is a cross member or end frame piece at each end of the frame.

STEP THREE. Laying the decking on the seat frame.

Begin by fixing the two outside decking boards in place. Start from the corner of the seat, (A-B in above seat frame drawing), keep the decking boards flush with the sides of the seatframe and slightly overhang them at each end, to be trimmed off later.

If the corners of the seat are at right angles (square), then the angle cuts required on the decking boards, at that corner, will be 45degrees, but if the corners of the seat are anything other than right angles, then that angle will be the line from A to B as shown in the above seat frame drawing.



Next lay and fix the 3 intermediate decking boards in the same way as the two outside boards ensuring the gaps between them are even.

Trim the off the ends of the decking boards flush with the ends of the seat frame.

Finish by fixing a decking board, on edge, around the perimeter of the seat. Use only galvanised nails throughout the construction of the seat. 90mm or 100mm long jolt head nails for the frame and 60mm long jolthead for the decking board. The decking boards will need to be drilled before being nailed.

Material quantities

Because the length of the seat is unknown (depending on the length of the deck and personal preference etc) the material quantities are worked out in 1500mm lengths as that is the spacing of the posts.

Materials per 1500mm length:

Kwila decking 90x18	11 meters
70x45 h3 mg framing	5 metres
94x94 h4 mg post	0.5 metres
galv bolts and straps	2 of each
