



Outdoor Living Space

A timber deck is a great way to add to your living space. That's why the trend today is towards generously proportioned decks that are as much an extra outside room as a deck. A well designed deck can link your home to the garden, and provide extra shady seating beneath the trees. It can transform an ordinary backyard into an informal entertainment area and add a practical focal point to your landscape design.



Choose your Style

You can change levels, build extra wide stairs or even build seating around a feature tree through the deck. The versatility of timber allows you to design a deck that is tailored to your home and your lifestyle. Make sure your deck is large enough, for example - your deck will need to be at least 3 metres wide to comfortably accommodate most sets of outdoor tables and chairs. A building consent is required where there is a possibility that a person could fall at least a metre from your deck, or your deck area exceeds 10 square metres. Contact your local authority about their regulations.

This deck creates an entirely new expansive outdoor room for entertaining or just relaxing.



The newly laid deck of the "5:30 with Jude" house in Auckland extends the room way beyond the doors and into the great outdoors.



Choosing the Right Pinex Timber

Pinex outdoor timber is a plantation grown, renewable resource that is specially treated for outdoor use. Decking timber, bearers and joists not in contact with the ground should have a treatment level of H3 and posts in contact with the ground should have a minimum of H4 treatment (H5 may be required by the local authority). We recommend bearers and joists within 300mm of the ground should be H4. Use Pinex No1 framing grade for bearers, joists, posts and handrails. Pinex 125x125mm sawn housepiles may also be used for the support posts. Your merchant can help you with your Pinex timber selection.

The Finishing Touch

To add the finishing touch you may prefer to stain your Pinex timber or leave it to weather to give the natural look. Timber is a natural product which shrinks as it dries, so shallow cracks will develop in timber exposed to the elements. Paints and stains will reduce this weathering and there are also a number of products which you can use to maintain the good looks of natural pine. Thompson's Wood Protector, for example, can be applied on an annual basis to retard mildew growth and surface checking.

Ongoing Maintenance

To retain the original look and to avoid the build-up of slippery mildew, periodic cleaning is recommended. Low pressure waterblasting with chemical cleaners is effective. Highpressure waterblasting is not recommended as it tends to fur the timber surface attracting more dirt and mildew build-up. Products like Thompson's Deck Scrub can be used to restore old decks to a near new look. Periodically remove any dirt or potting mix from board gaps especially over joists. Remove any developing flakes or splinters where these will be a nuisance.



Storage tip

During the building stage, stack your timber level and clear of the ground. Keep it covered or in the shade.

Sketch your deck layout here.
(Use these dimensions to help your merchant calculate your Pinex timber requirements).




Pinex

How to Build

A Timber Deck



Pinex

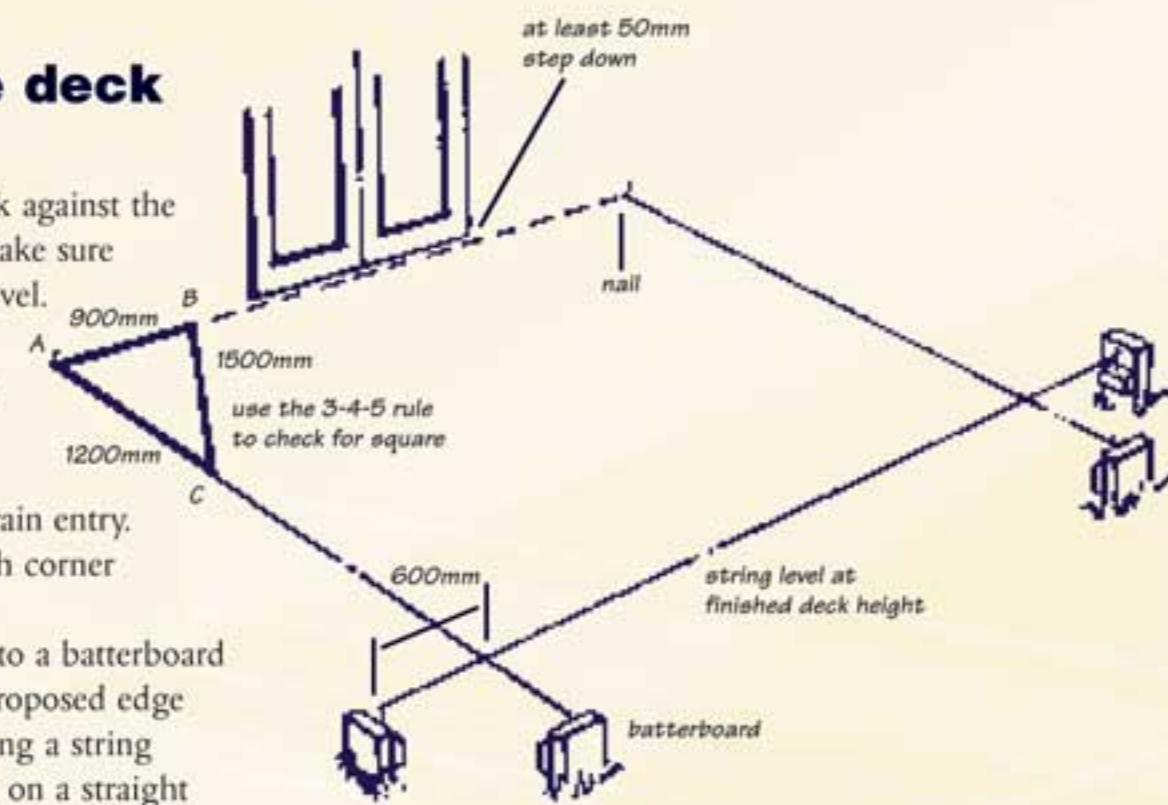
Timber with the  factor

Timber with the  factor

The Construction

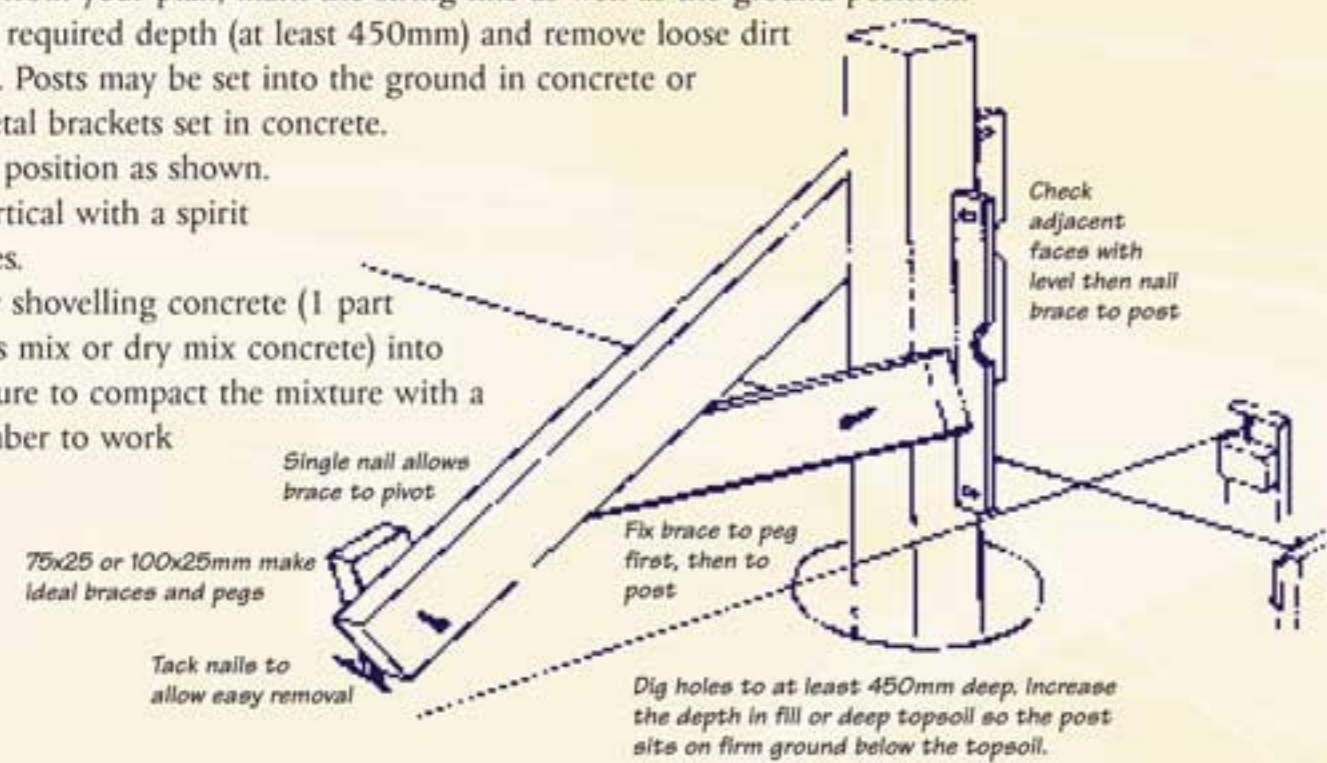
Step 1 - Lay out the deck

- The first step is to position your deck against the house. Use string lines and pegs. Make sure that the string lines are square and level.
- Determine the position of the deck against the house and the floor level of the finished deck. The step down from the doors to the deck should be at least 50mm to prevent rain entry.
- Drive nails into the house where each corner of the deck will be at floor level.
- Attach a string line to each nail and to a batterboard approximately 600mm beyond the proposed edge of the deck - make sure it is level using a string line spirit level or a larger spirit level on a straight length of decking.
- Check that your string lines are square with the house. To do this mark the house 900mm from the corner and mark the string 1200mm from the corner. Adjust the string line until the distance between the two marks is 1500mm (A, B and C as shown). This will ensure a right angle. Repeat the process for the other corner.
- Run a third stringline between two pegs at the desired deck width from the house to mark the line of the posts.



Step 2 - Position the Posts

- Locate the post positions from your plan, mark the string line as well as the ground position.
- Dig the post holes to the required depth (at least 450mm) and remove loose dirt from the base of the hole. Posts may be set into the ground in concrete or attached to galvanised metal brackets set in concrete.
- Brace the corner posts in position as shown.
- Check that the post is vertical with a spirit level on two adjacent faces.
- Fill the holes by carefully shovelling concrete (1 part cement to 6 parts builders mix or dry mix concrete) into the hole. As you fill be sure to compact the mixture with a length of 50 x 50mm timber to work out any air pockets.



Step 3 - Fasten the Ledger to the House Wall

Timber weatherboard houses can have the 'ledger' fixed directly to the wall. Brick veneer, plaster clad or fibre cement weatherboard homes may require the deck to be butted up using piles and a bearer adjacent to the exterior wall.

- Where the ledger is fixed to the house 150 x 50mm is usually adequate.
- Firstly determine the height of the top of the ledger. Assuming you intend to use joist hangers, measure down from the string line the actual decking thickness.
- Use galvanised coach screws or bolts to fix the ledger to the floor joists or bearer of a weatherboard house.

We recommend the use of a packing block between the house and the ledger to assist rainwater drainage. This ledger now acts as a bearer.



Step 4 - Fixing Bearers to Posts

There are two ways to fix the bearers to the posts.

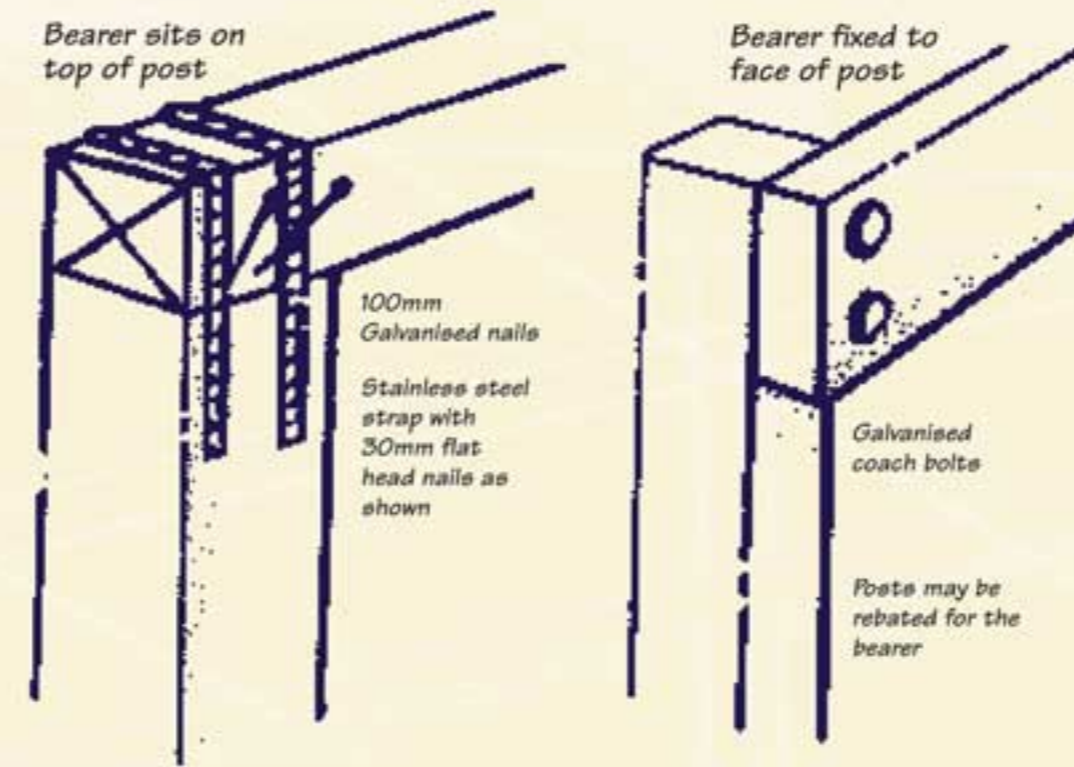
Method A

Sit the bearers on top of the posts and strap the bearer to the post.

Method B

Bolt the bearers to the face of the post.

The method you choose will usually be determined by your deck design. If your posts rise above your decking level and act as support posts for your railings, you will obviously need to bolt your bearers to the face of the post. If your posts do not extend above the deck, trim them to the correct height. Take care to cut the posts square if the bearer is to sit on top of the post.



Step 5 - Fixing Joists to Bearers

Your plan will also determine how you fix your joists to your bearers.

Method A

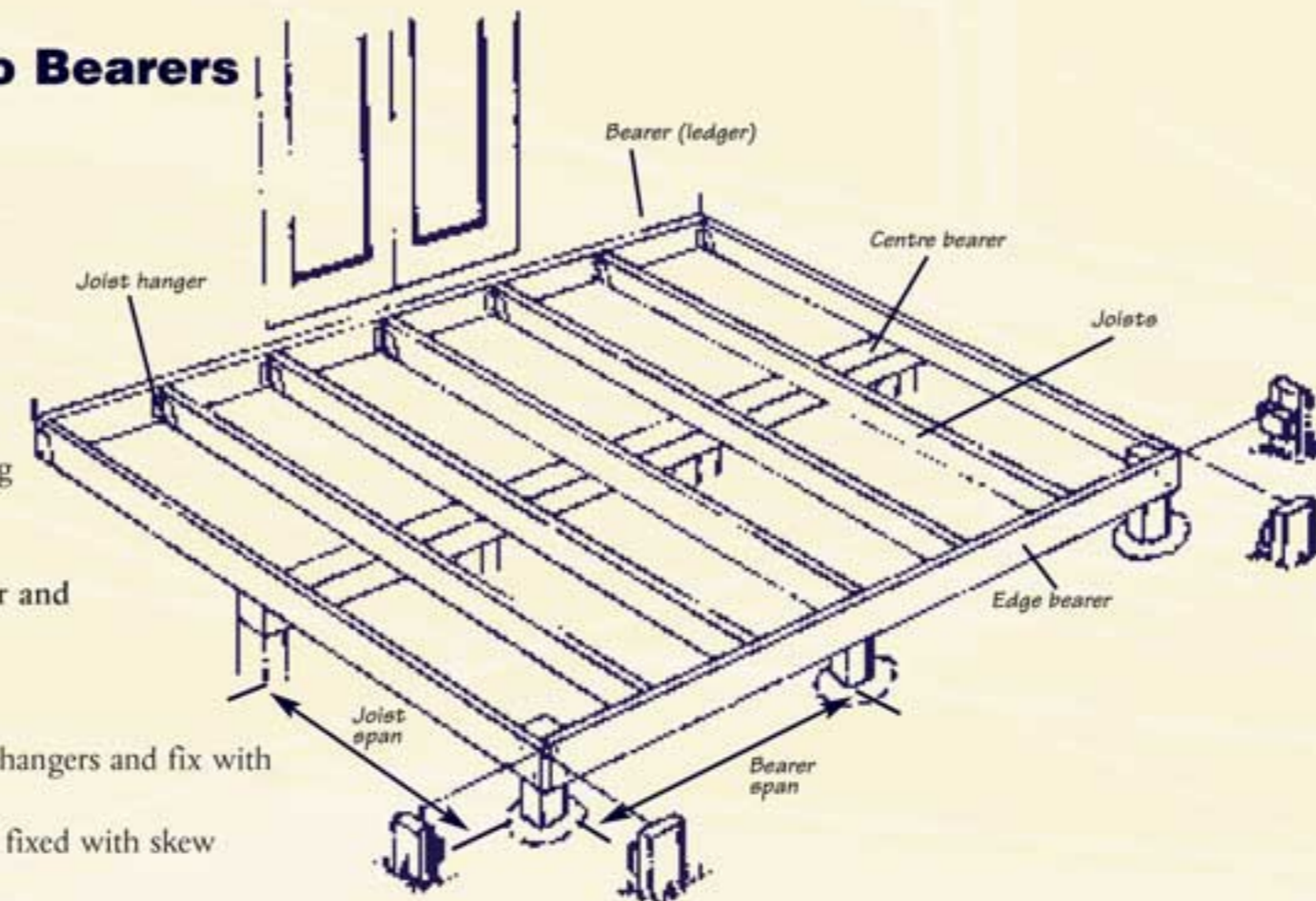
Joists sit on top of bearer

Method B

Joists are fixed to the face of the bearer using a joist hanger.

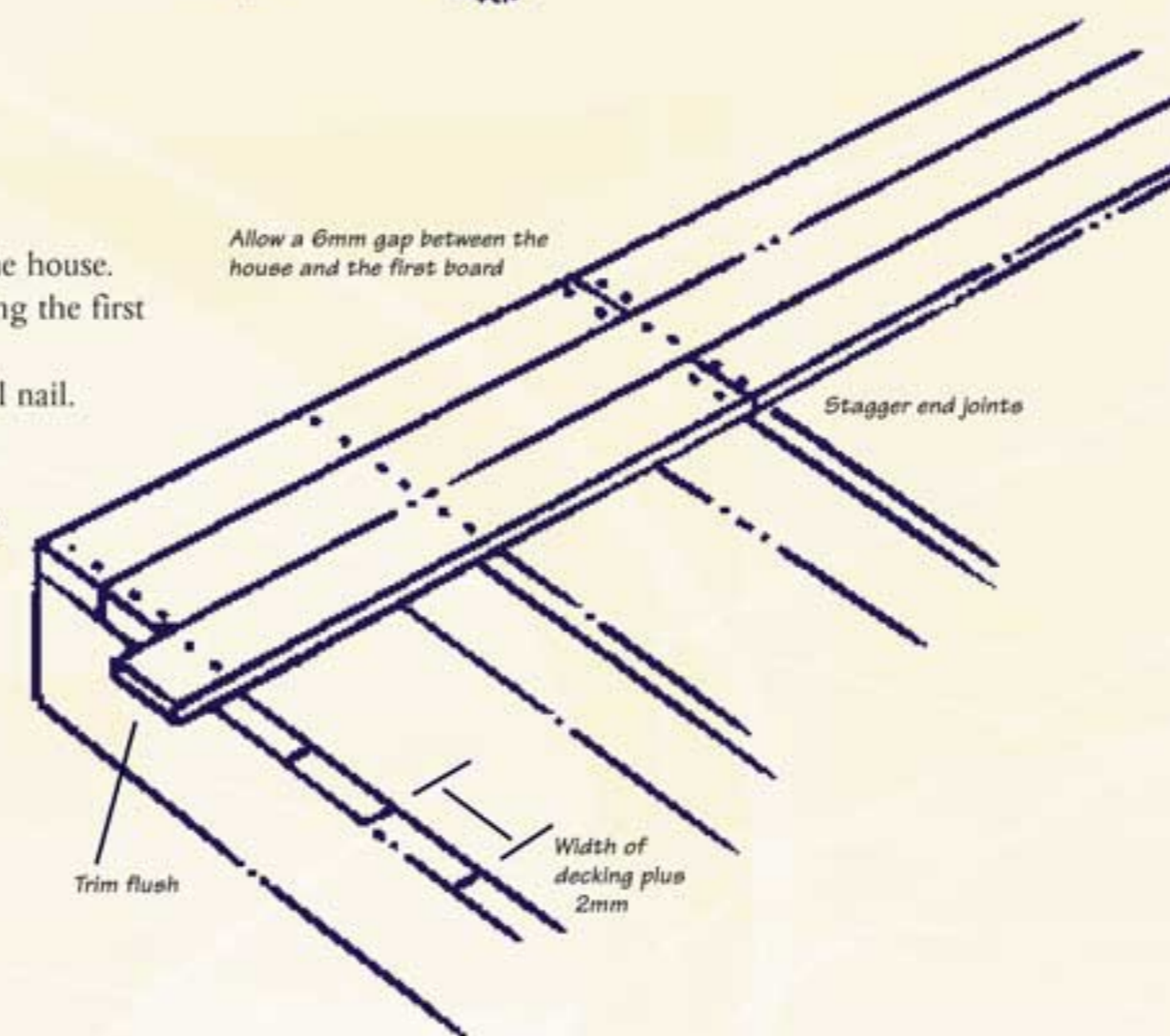
Mark the position of the joists on the bearer and fix joist hangers if they are being used.

- Measure and cut joists with a square end.
- If you are using hangers sit the joists in the hangers and fix with nails through the nail holes in the hangers.
- Joists which sit on top of the bearers can be fixed with skew nailing or stainless steel metal straps.



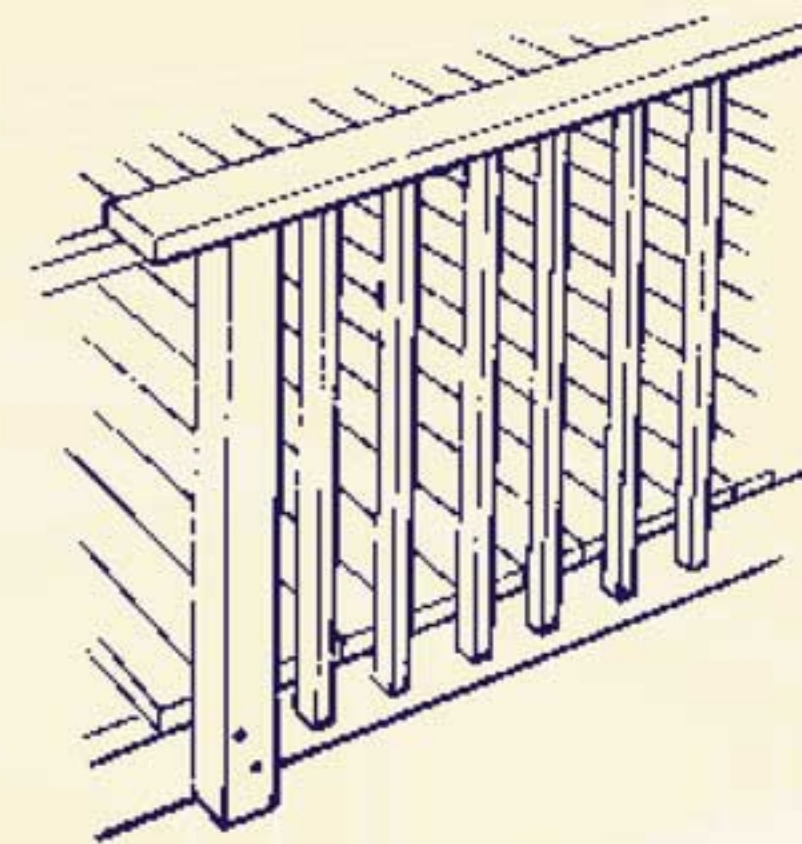
Step 6 - Laying the Decking

- Begin fixing the decking at the end of the deck next to the house.
- Allow 6mm between the first board and the house, ensuring the first board is parallel to the house.
- Space the boards 2mm apart using a spacer such as a small nail. Note that the decking will typically shrink as it dries out so the gap between the boards will increase.
- Mark the joists every metre or so to check that the boards are laid square.
- All joints must be over joists. Drill for the nails at the ends of the boards to avoid splitting.
- Use galvanised or stainless steel nails to fix the decking. Annular grooved nails provide superior nail holding.



Step 7 - Fixing Handrails

- If your deck is over 1 metre above ground level you should build a handrail at least 1 metre high.
- If the deck support posts do not extend above the deck, additional posts should be bolted in place using two 12mm diameter galvanised bolts.
- The gap between the handrail and decking should be filled with unclimbable childproof banisters. The gap between these should not exceed 100mm.



Deck Framing Sizes and Spans

Bearer Size*

Span of Bearer	Edge Bearers				Centre Bearers		
	Span of Joists (m)				Span of Joists (m)		
	1.5m	2.0m	3.0m	3.5m	1.5m	2.0m	3.0m
1.3m	100x50	100x50	150x50	150x50	100x75	100x100	2/150x50
1.7m	150x50	150x50	150x50	200x50	2/150x50	2/150x50	2/150x50
2.0m	200x50	200x50	200x50		2/150x50	2/150x50	2/200x50

* Note: Double member bearers, eg 2/150x50, are 2 lengths of 150x50 nailed together, or 150x50 bolted either side of post.

Joist sizes and spans (mm x mm)

Maximum Joist Span*	Joist Spacing (mm)	
	400 or 450	600
1.5m	100x50	150x50
2.0m	150x50	150x50
2.4m	150x50	200x50
3.0m	200x50	200x50
3.5m	200x50	250x50

* Increase by 10% if joists are continuous over 2 or more spans.

Decking size

Actual Size (mm)	Maximum Joist Spacing (mm)	Decking Nails†
88x21	450	60x3.15
88x32	600	75x3.15

† Nails should be galvanised annular grooved with countersunk heads. In locations where chlorinated or salt water are present, stainless steel nails are recommended.

Profile and Grades

Pinex decking is specially selected to perform in this demanding end use.

Available in two grades:

- Regular deck allows a certain number of knots and other characteristics
- Ultradeck allows fewer knots

Pinex decking is available in 21mm and 32mm thicknesses; 32mm allows joists to be spaced further apart. Pinex decking has a reversible profile and can be laid either smooth side or 'griptread' face up. The smooth side up has the advantage of being easier to keep clean.

