

building a deck

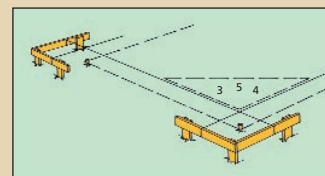
easy step by step

It is recommended that you check with your local Planning Office before starting any project as to whether you require planning permission

STEP 1

1 Preparation and Groundwork

- Check there are no drainage problems in the area where you plan to build your deck. The deck design must maximise airflow through and around the construction to ensure good ventilation.
- Carefully mark out the site with builders lines and ensure that it is square. To help create a square deck and determine its overall size, mark out the proposed area using batterboards, pegs and string line. The easiest way to obtain a right angle is to make a 3'- 4'- 5' triangle giving a 90° angle at the corner. Simply mark a piece of string at 3', 4' and 5' 'unit' intervals with a felt tipped pen. The units can either be in feet or metres.



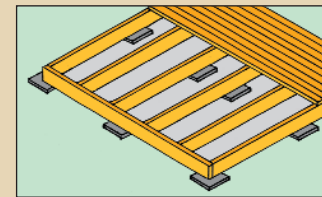
2 Prepare the site

- Do not lay the deck directly onto grass.
- Remove all turf. Cover the ground with permeable membrane or polythene and then gravel to prevent weeds from growing.
- If polythene is used, pierce a series of holes in it to allow drainage of any surface water.
- If attached to a house, the finished deck must be at least 2 brick courses below the damp course level. If this is not practical, a gap must be left between the house and the deck to aid drainage.

3 Ground Level decks

This deck is simply a platform on the ground, laid onto a level surface.

- If you are laying your deck on an existing level concrete area, the framing can be placed directly onto this surface.
- If you are laying your deck on a non-concrete surface, it is important that it is either well compacted ground or virgin soil.
- Lay the framing on patio slabs for extra stability.



- The frame is constructed using 150 x 47mm (2"x6") joist timbers, fixed using galvanised nails.
- Joists should be fixed at 400mm centres for maximum support. Fix using either joist hangers, galvanised nails, or 100mm landscape screws.

4 Raised/Elevated Decks

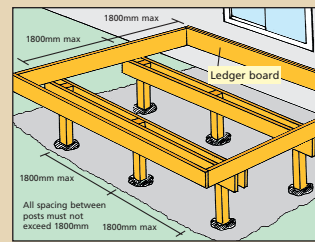
Timeless Timber® decking systems are suitable for ground level and elevated installations, up to 600mm above the ground.

Balustrades have been independently Tested by BM TRADA Certification Limited for conformity to the Building Regulations.

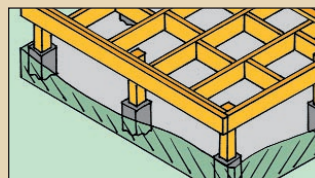
For projects over 600mm a qualified decking professional should be contacted.

Elevated decks can be free standing or attached to a wall or side of a house

- 100x100x1200mm structural posts should be used, positioned no more than 1800mm apart.



- At least half the length of the post should be sunk into the ground and fixed either with concrete or with concrete feet and dry cement.
- Use a joist and spirit level to mark the ledger height at the wall.
- Joists are attached to the ledger or double beam with galvanised joist hangers.
- Joists should be spaced at 400mm centres.
- Place a scrap piece of joist material in the joist hanger to set the width of the joist hanger.
- Nail or screw the joist hanger on the inside of each double beam every 400mm.
- Place the joist inside the hanger, and nail or screw through the hanger into the joist.
- Noggins are used to keep the joists from twisting or buckling. Measure and square cut noggins to fit snugly between the joists. Attach these in a staggered manner as shown below at 1200mm centres.



STEP 2

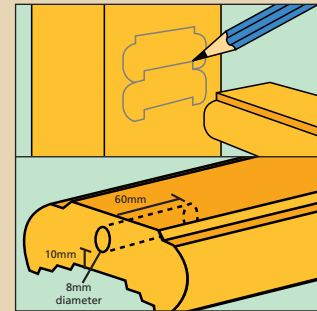
Fitting Balustrading

Points to Remember

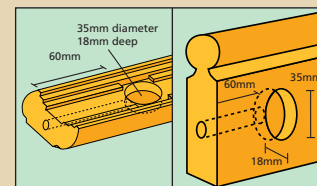
- Timeless Timber® balustrading should be assembled and fixed to joists before installing deck boards.
- Balustrading can finish off ground level decks and must be used on elevated decks for safety.
- The maximum recommended length of rails between posts is 2400mm.
- Additional newel posts must be used for longer railing.
- The space between spindles must always be 99mm or less.

1 Fixing Colonial Rails

- The colonial system uses three rails, a handrail, a concealing handrail (for the top of the structure) and a base rail for the bottom of the structure.
- It is easier to assemble the spindles to the handrails before fixing the completed unit between the newel posts.
- The recommended height for the concealing rail from the deck surface is 900mm.
- The bottom rail should be 75mm from the deck surface.
- Decide where you want the top handrail to be in relation to the newel post.
- Draw around the handrail profile onto the face of the newel, once for the handrail and once for the concealing rail.



- Drill the end section of the handrail using an 8mm diameter wood bit, to a depth of 60mm at a distance of 10mm from the groove in the rail.
- Turn the rail over and drill a 35mm diameter hole to a depth of 18mm in the groove, 60mm in from the end of the rail. This can be done using a hinge drill/forstner bit or similar and it creates an access hole for fitting the balustrading bolt. If you chisel a rebate in the smallest groove of this rail, it can make drilling easier.

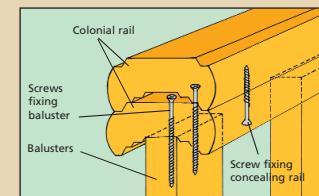


- On the face of the previously marked newel post, measure up from the groove of the lower pencil drawn handrail section a distance of 10mm.

- Drill the newel post at this point using a 9.5mm diameter drill bit to a depth of 25mm. Screw the threaded insert of the balustrading bolt into the newel post using a 6mm allen key.
- Mark and drill the remaining newel posts in exactly the same way and fix inserts into position.
- Measure a distance of 900mm down the face of the newel, from the top of the handrail and draw a line, which will represent the finished deck board level.
- From this line, measure up 75mm and draw the profile of the rail to be level with the line at 75mm above the deck board.
- When using colonial rails as a base rail - ensure that the grooved side of the rail is facing downwards.
- Mark and drill all newel posts and rails as previously described.
- Screw the threaded bolts into the inserts in the newel posts and position rails onto threaded bolts.
- Tighten all rails to newel posts with the combined pressure plate and nuts of the balustrading bolt.
- Ensure that all access holes are treated with End Seal.

2 Fixing Newel Posts

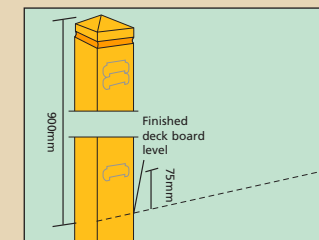
- Fix spindles to rails using 40mm galvanised screws, screwing down (top) and up (base).
- Spindles should be spaced at approximately 120mm centres (the gap between spindles should be no more than 99mm).
- Offer up the whole unit including the posts and make sure that the base rail is approximately 75mm above the deck level.
- To hide the screws on the top rail, place an additional rail on top and fix by screwing through the underside of the lower rail using a 40mm galvanised screw.



3 Fixing American Rails

The American system uses two rails, one for the top handrail and one for the baserail.

- Decide where you want the top handrail to be in relation to the newel post.
- Draw around the handrail profile onto the face of the newel.
- The American rail is drilled in the centre of the rail using an 8mm wood bit to a depth of 60mm and a 35mm access hole is drilled on the side face of the rail.
- Drill the other end of the handrail in exactly the same way.
- On the face of the previous marked newel post, measure up 60mm from the bottom line of the pencil drawn handrail section.
- Drill the newel post at this point using a 9.5mm diameter drill bit to a depth of 25mm.
- Screw the threaded insert of the balustrading bolt into the newel post using a 6mm allen key.
- Mark and drill the remaining newel posts in exactly the same way and fix inserts into position.
- Measure 900mm down the face of the newel from the top of the handrail and draw a line. This will represent the finished deck board level.



- Measure 75mm above the deck board from this line.
- Mark and drill all newel posts and rails as previously described.
- Screw the threaded bolts into the inserts in the newel posts and position rails onto threaded bolts.
- Tighten all rails to newel posts with the combined pressure plate and nuts of the balustrading bolt.
- Use a Timeless Timber® Cover cap to hide the access hole.
- Ensure that all access holes are treated with End Seal.

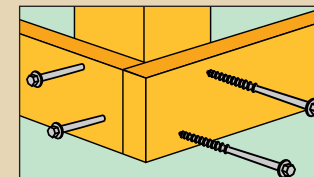


4 Fixing American Spindles

- American Spindles can be cut square, or left at an angle.
- If you cut them, ensure that the exposed surface is treated with End Seal.
- Space the spindles at 125mm centres.
- Drill, countersink and fix to the side of the top and bottom rails using 40mm galvanised screws.

5 Fixing Newel Posts

- These are fixed to joists using Timeless Timber® 100mm landscape screws.
- If possible, fix newels so that two faces can be secured through two joists at 90° to each other.



STEP 3

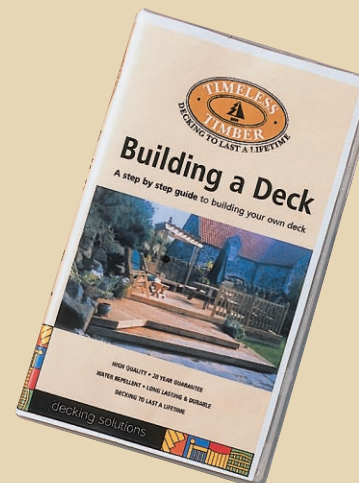
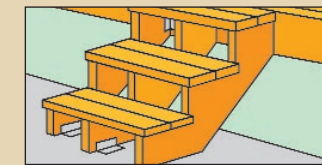
Fixing Deck Boards

- Deck boards should be pre-drilled before screwing to avoid splitting.
- Boards should be spaced leaving a minimum of 6mm - 9mm to ensure that there is adequate ventilation and to allow the boards to naturally swell when wet and shrink when dry.
- Deck boards should be fixed at right angles to the joists.
- They can overhang the edge of the joists at the end or can be trimmed flush with the joists.
- A fascia board can be added for a more decorative neat finish.
- All cut ends, notches and drill holes must be brushed with an End Coat preservative to maintain the integrity of the pressure treatment and to reseal the deck.

STEP 4

Fitting Steps

- The stair strings should be positioned at right angles to the deck.
- The base of the string may need to be cut at an angle to allow it to sit firmly on the ground, preferably on a solid area.
- The strings should be set at a maximum distance of 400mm centres.
- Fix these using galvanised brackets or joist hangers.
- The treads should then be fixed through the top face of the deck board using 63mm screws.
- Treads are made by cutting deck boards to length.
- Allow 30mm to overhang each string.
- Any cut ends should be treated with End Seal.



Timeless Timber's®

"Building a Deck" video gives you easy to follow, step by step instructions on how to build a deck.

Contact your local stockist for a copy.

