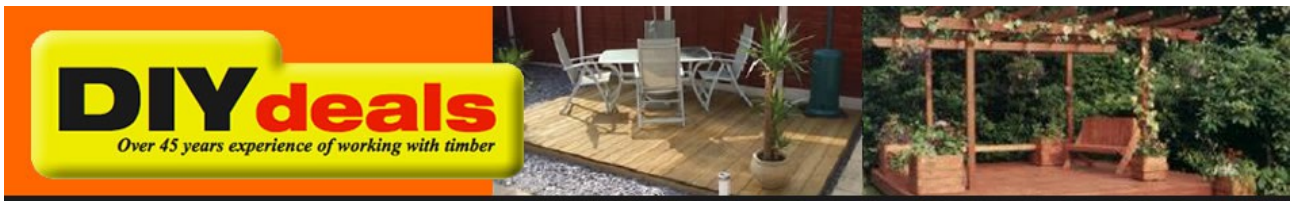


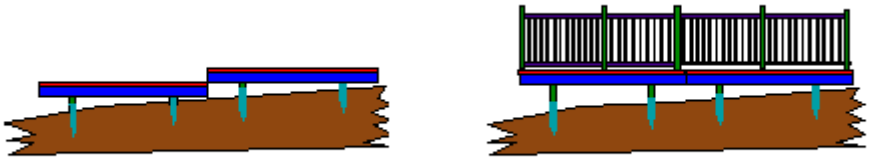
Balustrade assembly

Before fixing Balustrade, and/ or Deck Boards, concrete around post sockets if using raised decks.

If using Balustrade - ensure Newel Post are fitted before fixing Deck Boards

A. Choosing positioning of Newel Posts

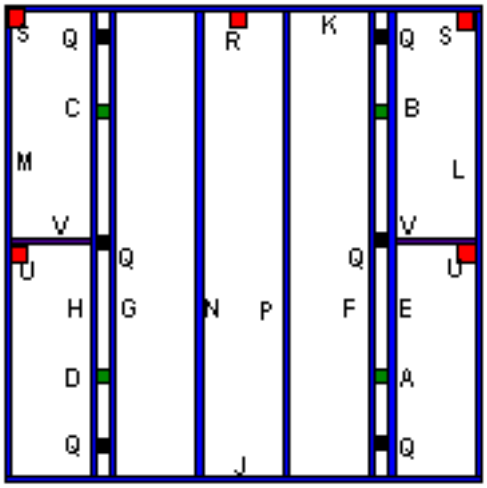
i. You may wish to apply balustrade only to the rear and half way along both sides or on 2or more full sides. Two or more decks can be joined to each other on a slope - they can be made level or they can be staggered. If a single or combined flat deck has a drop of greater than 300 mm safety balustrade should be used - this has a rail span no greater than 2.5m and Spindles positioned at Max. 110 mm centres. In a non safety situation 3.0m spans may be used.



Installing Newel Posts to the Rear and Side Joists

i. For Corner Newel Posts (S) - support the Side Joists so that they will not drop, remove corner brackets, position the Newel Post flush with the bottom of the joists and drill one hole 38 mm when using 145mm Joists and 25mm when using 95mm 4" Joists from the bottom **through the Rear or Front Joist** and the centre of the Newel Post. Insert bolt through the Rear Joist and through the Newel Post, using a washer and nut and tighten. Using a plumb line or level, check that the Newel Post is upright and drill a second hole 38 mm or 25mm from the top of and **again through the Rear or Front Joist**. Insert bolt as before, recheck upright and adjust before tightening bolts. Reposition Side Joist, check Newel Post is vertical and re-fix the corner brackets to the Side Joists and the Newel Post (S).

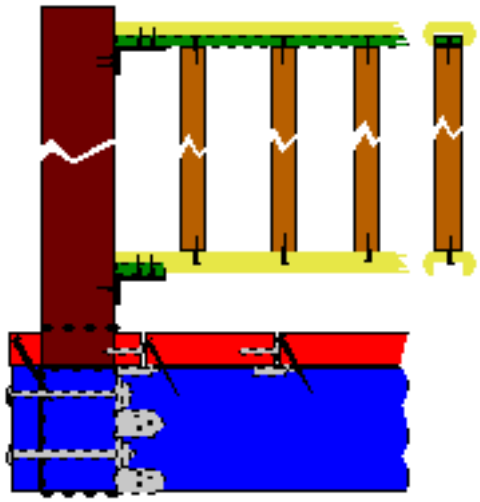
ii. With the centre newel R - position the Newel Post in the centre and flush with the bottom of the joists and drill 2 holes as above. Before fixing centre newels (U) - Cut, position at the base of the joists and fix with 4 deck screws the noggins (T) - fix Newels (U) as (R) then cut noggin (V), position at base and fix with 2 deck screws skewed into joists check (U) for uprightness and fix 2 screws through (V) into (U). Brush **Wood Preserver** onto the cut surfaces. **Fix deck boards in place before continuing with balustrade spindles**



Fixing Spindles to Bottom Rail and Top In-fill Rail

i . Ensuring all Newel Posts are upright, measure the length between the Newel Posts at deck level and cut a Bottom Rail, also cut a piece of 16 x 32 mm Top In-fill Rail to the same length. **Brush Preserver onto the cut surfaces**. In order to properly align the spindles, insert top in-fill rail into the groove of the bottom rail - hold in place with 'G' clamp, cellotape or 2 screws. Work out & mark where to drill the holes by allowing 100 mm from the Newel to the first Spindle at both ends then equally spacing with a max. 110 mm centres for the rest. Use a 3 mm drill bit.

ii. Separate the Top In-fill Rail from the Bottom Rail and fix the Spindles using the timber decking screws, ensuring that the longer square section of the spindle is at the bottom, **from the underside of the grooved rail**. **The bottom rail is positioned with the infill channel pointing downwards- please see drawing.** Keep the Spindles in the centre of the Rail while screwing. Fix the top In-fill Rail to the spindles by screwing through the holes in the top - keep the Spindles in the centre of the In-fill Rail while screwing.



Fixing Balustrade Spindles

i. Rest the assembled Spindles on the patio deck boards with the base by the Newel Posts. Cut 2 short pieces approx. 50 mm from the 16 x 32 mm Top In-fill Rail to act as a packer and position at both ends of the Bottom Rail inside the groove- Brush **Wood Preserver** onto the cut surfaces. Position an Angle Bracket at each end on the packing piece so that the shorter side will hang down and screw through the longer side of the bracket and the packing piece into the Bottom Rail - use 3 small screws at each end. Position and fix an Angle Bracket onto both ends of the top in-fill rail so that the shorter side will hang down using 3 small screws into each bracket - do not be concerned that the screws will push through the in-fill rail as they will be later unscrewed.

ii. Make a mark with a bradawl 50 mm up from the deck in the centre of both the Newel Posts and while the spindle assembly is still lying on the deck lift up the bottom rail, align the outer centre hole of the bottom bracket with the mark made by the brad awl and screw only through the centre hole so that the spindle assembly will pivot up. Lift up the Top In-fill Rail and fix the short side of the Angle Bracket into the centre of the Newel Post using 3 small screws through each bracket. Cut a piece of Top Rail to fit between the newels and over the In-fill Rail. Partly unscrew the screws protruding through the Top In-fill Rail until they are flush , position the Top Rail over the In-fill Rail and re-tighten the screws, being careful to ensure that they will not protrude through the top, of the Top rail. To hold the top Rail in place use 4 small screws spaced evenly and screw from under the In-fill rail into the Top rail.

Proceed to fixing deck boards

Finishing & Maintenance

i. As all timbers are pressure preserved further treatment is not necessary and the timber will fade to a natural grey colour. If preferred, the deck may be coated with **Decking Stain** to the colour of your choice. If there is any build of moss, after winter use a jet sprayer or an anti-fungicidal and hose down to remove. To restore the colour apply a further coat of **Decking Stain.**

ii. **Dispose of all waste timber in your dustbin - do not burn. Wash hands after handling timber - especially before eating. Always wear safety glasses when using power tools**.

Help Line -**For more information - contact Peter Dale on 01457855259** or email sales@diydeals.com

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