

Juliette Fitting Instructions

1600mm & 1800mm

The JULIETTE spiral is designed to be assembled to ascend either clockwise or anti-clockwise from the same kit. The rise and angular position of each tread is variable on assembly, giving considerable scope to make

- A. Please read instructions carefully before starting installation.
 B. To save time and effort it is advisable to apply any finish required to the woodwork before assembly. Two or three coats of polyurethane varnish such as Ronseal is recommended for both sides of the treads - this will prevent warping.

1. Tread Drilling and Assembly

- a) Note which is your direction of ascent, clockwise or anti-clockwise.
- b) Mark baluster hole positions at 30mm from front, rear and outer edges of treads, as shown in Fig. (1).
- c) Drill 10mm dia. hole at rear of tread for baluster base bolt.
- d) Drill 22mm dia. hole at front of tread for baluster. This hole must be sanded with a roll of coarse glass paper in its bore to make a smooth clearance fit on the painted baluster.
- e) Both holes should be drilled using a block of scrap wood on the underface to prevent splitting out.
- f) A 25mm clearance hole in the landing nosing and the bottom tread is also drilled at this point and similarly positioned as on the other treads.
- g) The tread bracket may now be centrally fixed to the underface of the tread, with the narrow end of the tread in contact with the central sleeve, as shown in Fig (1).
- h) Secure using 4 No.12 x 1" Pan Head screws. Do not fix landing tread bracket yet.

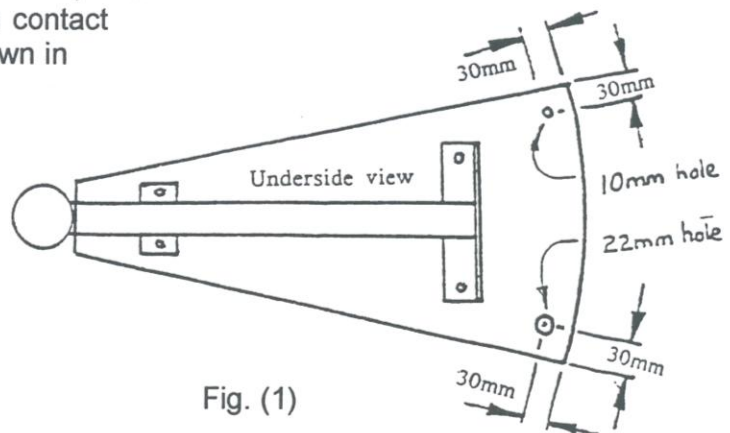
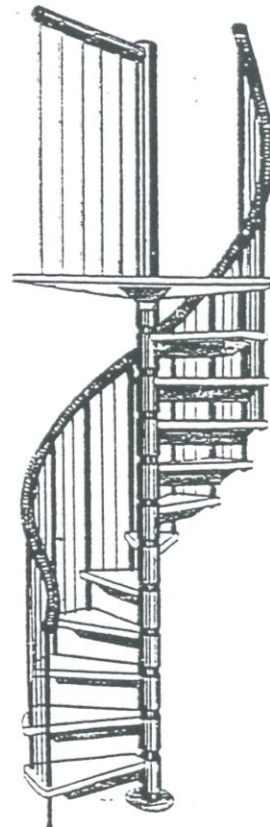


Fig. (1)

2. Stairwell Opening

- a) The stairwell finished opening size should match the relevant stair size.
J160 = 1600x1600mm square opening
J180 = 1800x1800mm square opening
- b) If finger clearance is required between adjacent walls and the handrail, then an extra 50mm may be allowed between the walls and the centre post i.e. 850mm or 950mm.

3. Centre Post Fixing

- a) Mark off post centre on floor using diagonals, etc. and checking wall distances.
- b) Fix base plate of post in position on floor using coach screws provided (4 off M8 x 60). The floor structure may need reinforcing in the locality of the post, as shown in Fig. (2).

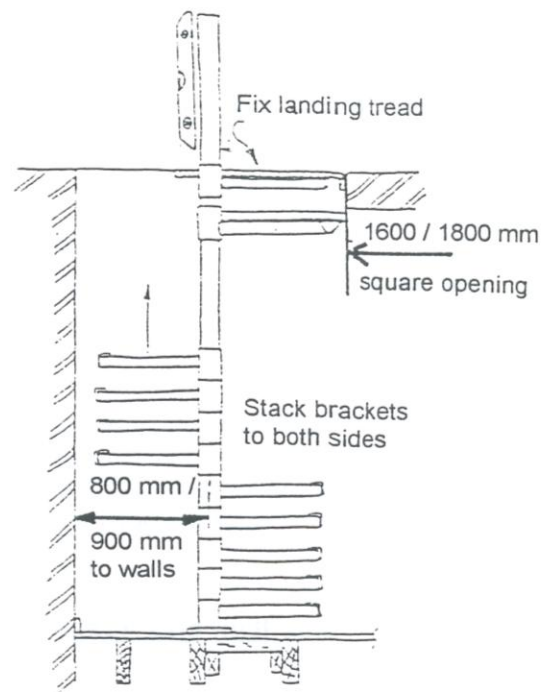


Fig. (2).

On a suspended floor, the baseplate must be fixed on a doubled joist or on a wide trimmer solidly fixed between adjacent joists.

4. Assembling treads to post

- a) To prevent damage to the powder coating on the post:-
 - i) Check that the bracket sleeves are clear from sharp edges inside.
 - ii) Insert a roll of paper in sleeve before sliding down post.
 - iii) If any damage to the paint work does occur, this can be simply repaired with the touch up paint provided.
- b) Restrain top of post whilst sliding all but one tread bracket down the post to the base. Take care to balance the weight of the brackets to both sides of the post to prevent strain on the base fixing.
- c) Slide the last bracket (for top landing) into position at the top of the post and temporarily locate using the grub screws.

5. Landing Tread

- a) Larger spirals, i.e. 1600 and 1800 mm diameter, are usually supplied without a landing tread, and this must be constructed on site. When constructing the landing, the following points should be taken into consideration:-
- b) When constructing the landing, the size should allow sufficient headroom when passing underneath and climbing the treads below. Also, increasing the thickness of the landing will mean that there is less headroom underneath.
- c) A special support bracket is provided - this is used to fix the landing to the central pole. Bearers are fixed under the landing, and bolted to the bracket. They are then fixed securely to the joists, as shown in Fig. (3). The landing tread secures the whole spiral structure and therefore this is especially important.
- d) The nosing of the landing should be constructed 30mm in front of line drawn between centre post and baluster. The rear edge of the landing should be tangential to post to enable space for any landing balustrade to join central newel post.
- e) Check that the landing tread is horizontal, and secure bracket with roll pins.
- f) A 25mm clearance hole will have been drilled to receive the top baluster. (See para 1. (f)). Fix the top baluster as shown in Fig. (4), so that it goes right down to the tread below.
- g) The top baluster may be replaced with a wooden newel if required. However, the alignment of the last tread to the landing must be equal to the other treads. The newel must also pick up on the last tread to stabilise the stair, as shown in Fig. (4).

Fig. (3)

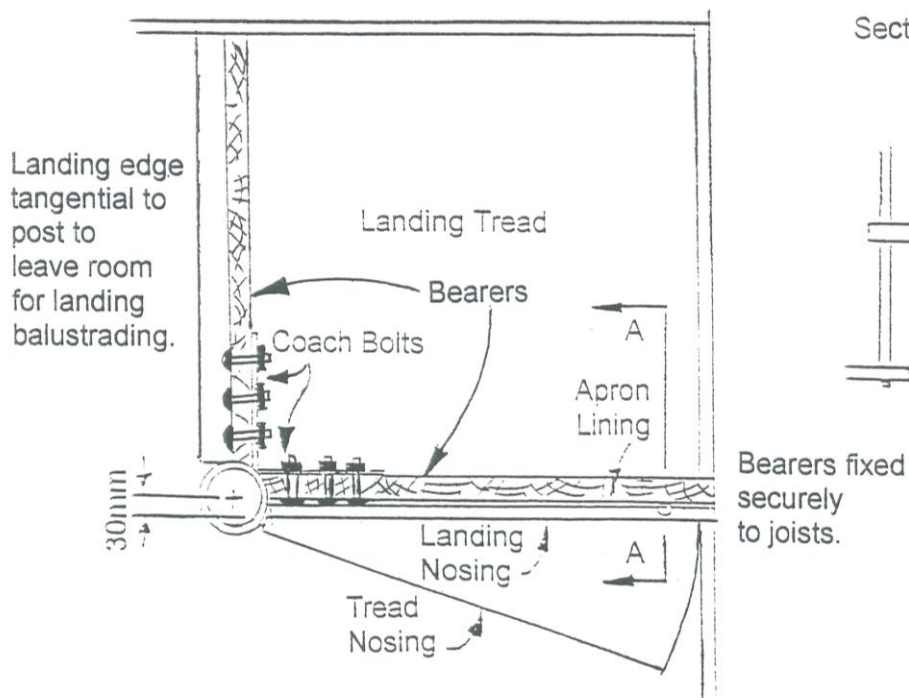
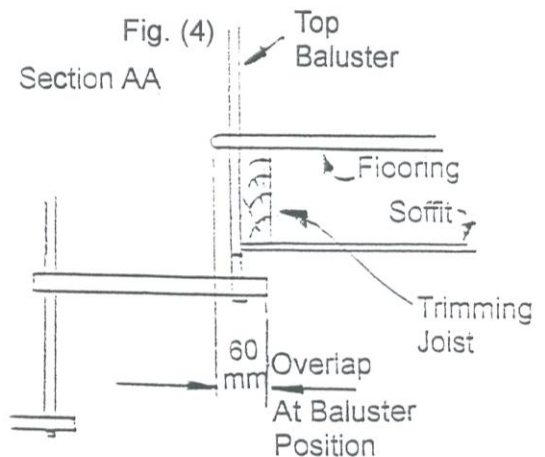


Fig. (4)



6. Fixing Treads into Position

- a) The assembly of the remainder of the stair is now continued from the top downwards.
- b) To avoid accumulated error it is vital that tread heights are measured from upper or lower floor, and not adjacent treads, as shown in Fig. (5). To aid measurement it is advisable to make a gauge rod using a batten of timber longer than the floor height, and marked off accurately with all the tread levels.

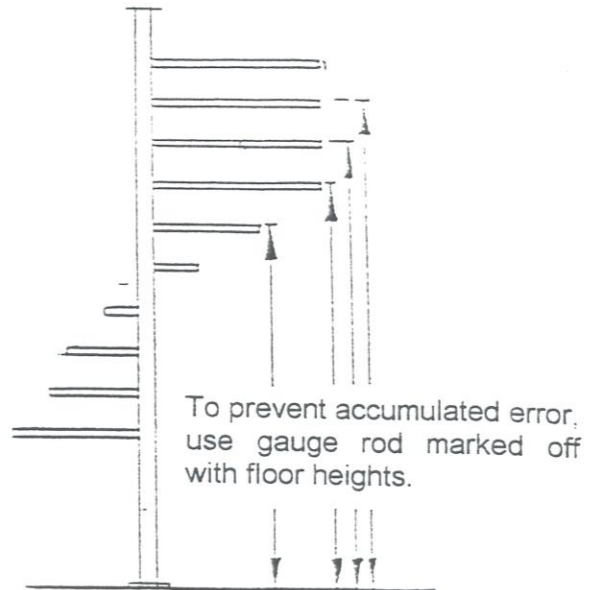


Fig. (5)

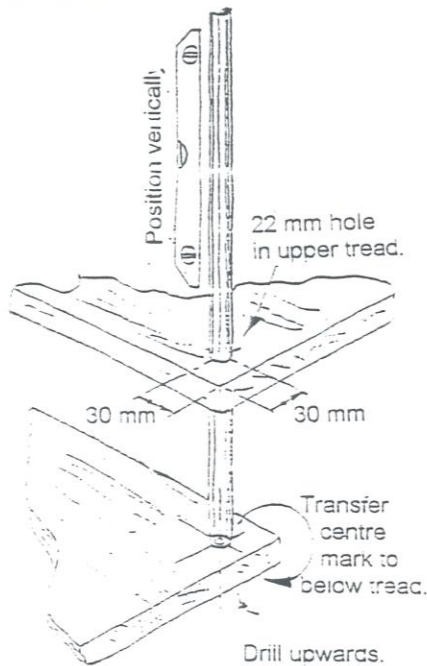


Fig. (6)

- c) Slide the next tread up into position, and lightly lock with the grub screws.
- d) Insert a baluster through the 22mm clearance hole so that its threaded base is over the 10mm hole in the tread below.
- e) From below, insert a M8 x 60mm bolt through the hole in the lower tread, and tighten into the base of the baluster, as shown in Fig. (6).

- f) Using the gauge rod, check that the tread is at the correct height. Ensure that the baluster is vertical. Tighten the grub screws fixing the bracket to the central post.
- g) Continue this process, working down, until the bottom tread is reached.
- h) The bottom baluster is 25mm dia. The 22mm hole must be enlarged using sandpaper and a dowel, until it is large enough to receive the baluster.
- i) The bottom baluster is secured to the floor using a M8 stud and woodscrew. Locate position with stud/screw assembled into baluster. Remove stud and screw into floor. Turn baluster onto stud, as shown in Fig. (7).

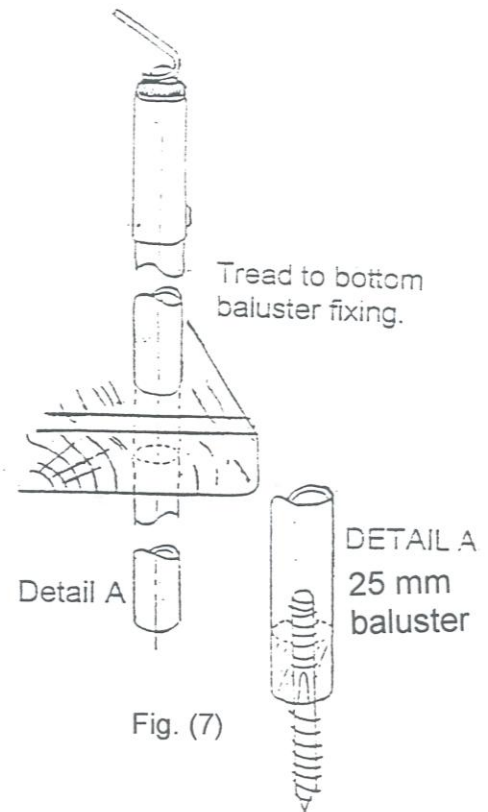


Fig. (7)

6. Fixing Treads into Position (cont.)

- j) To further secure the structure of the spiral, each baluster is fixed to its tread. Drill a 4mm pilot hole through the end of the tread and into the baluster, as shown in Fig.

(8). Secure the baluster using a No. 12 screw and large cup washer.

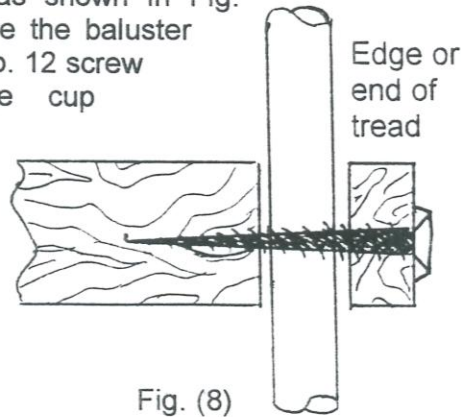


Fig. (8)

8. Attaching Handrail

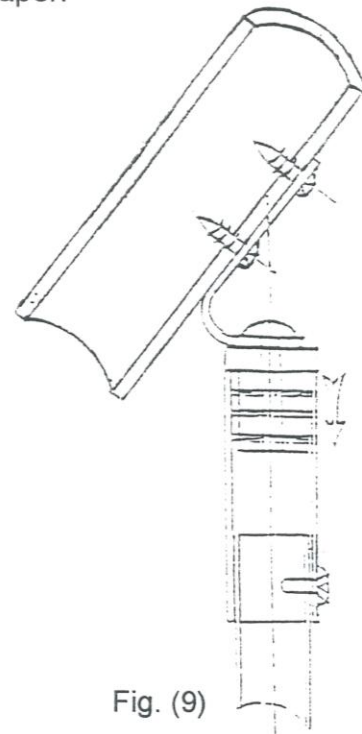
- Offer up handrail to brackets, and temporarily attach using sticky tape or nylon ties.
- Adjust position of handrail and brackets, by swivelling baluster tops, until neat and continuous alignment of handrail is achieved.
- Secure handrail using No. 6 Countersunk screws and cup washers, as shown in Fig. (9).
- Cut handrail to length at top and bottom of spiral.
- Place handrail caps in very hot water for 30 seconds, before pushing onto ends of handrail. This will ensure that the caps cannot be subsequently removed.

9. Infill Balusters (where required for 100mm rule)

- Drill base holes, 13mm dia. x 10mm deep, evenly spaced between the two main balusters on the outer edge of each tread.
- Ensure that radial distance from centre post matches other balusters.
- Cut infill baluster to length, insert into base hole, and screw into underside of handrail as above.

7. Fixing bracket sleeves

- The baluster sleeves and handrail brackets are pre-assembled.
- Assemble baluster sleeves onto all balusters, pushing them fully down, as shown in Fig. (8).
- Drill through pilot holes in sleeves and into baluster, using 4.5mm drill. Insert thread forming screw and washer, and tighten fully home.
- Adjust the angle of the brackets to ensure that they follow the line which the handrail will take. This can be done with pliers, protecting the bracket from damage by covering with cloth or paper.



10. Completing the assembly

- After checking all fixings, the 6mm pilot hole, which is predrilled in the rear of each support sleeve, is drilled right through the centre post. A 'Spirol' pin is driven in flush to secure the completed assembly.

JULIETTE SPIRAL INSTALLATION INSTRUCTIONS

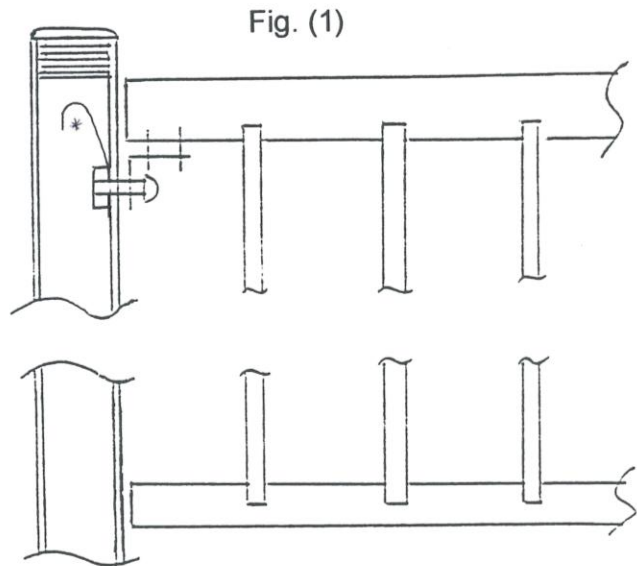
Additional Information

LANDING AND UPPER FLOOR BALUSTRADING

1. LANDING TREAD

Once height of top rail of landing balustrade has been established, position 'L' shaped bracket in place, as shown in Fig. (1). Mark and drill 6mm hole through wall of post. Secure bracket with M6 bolt and nut.

* N.B. M6 nut held by strip of aluminium.



2. UPPER BALUSTRADE NEWELS

- (i) To fix newels to upper floor handrail, first position handrail and newel in correct location.
- (ii) Drill 6mm dia. hole through newel into handrail.
- (iii) Enlarge hole in handrail to 8.5/9.0 mm (approx 11/32") by 30mm deep, for insert.
- (iv) Screw in insert.
- (v) Assemble newel and rail using M6 bolt.

N.B. Corner posts require 6mm holes to be offset one above the other, as shown in Fig. (2), to enable them to cross.

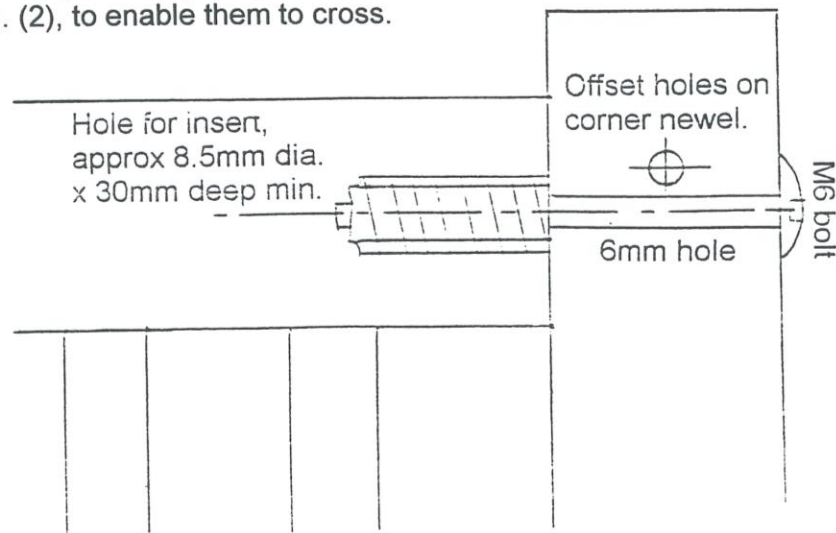


Fig. (2)