

A HOW-TO GUIDE

Handling, preparing and setting the WINTEC® Winstep® treads & beams.

NOTE: IT IS IMPERATIVE THAT BEAMS ARE CARRIED AND STACKED IN THE UPRIGHT POSITION.

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STEP 1: HANDLING COMPONENTS

The stringer beams are provided with 51mm diameter holes to assist with on-site handling. Stout ropes or straps may be passed through these holes. Timber branding of appropriate section and strength may be passed through the holes to provide rigid handles for manipulation of the beams (Fig. 1).

STEP 2: PREPARING TOP AND BOTTOM FIXING DETAILS

The particular top and bottom conditions of each stairway will vary depending on whether the building is still under construction or the stairway is being retro-fitted into an existing structure.

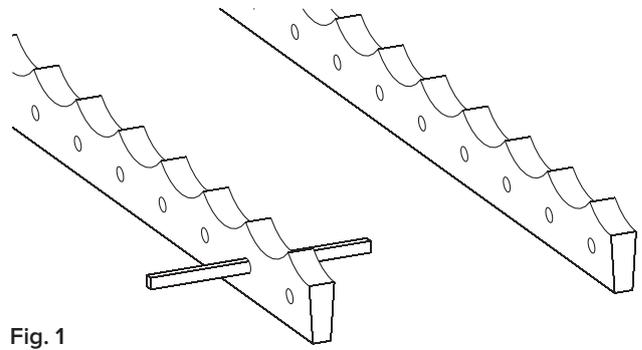


Fig. 1

STEP 3: TOP LANDING PREPARATION

In general the fixing at the top requires each beam to be filled into a slot provided in the landing (Fig. 2). This may be prepared by angle grinding or chiselling in the case of an existing landing or, in the case of a new building, by preparing slots in the shuttering by using polystyrene foam blocks before casting the concrete landing. In both cases the slots should be oversized to allow for adjustment. A scaffold board may be used to simulate the position of the stringer beam.

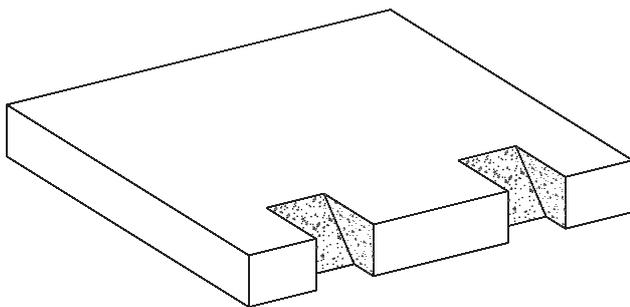


Fig. 2

STEP 4: BOTTOM LANDING PREPARATION

Fixing at the bottom landing may require chopping through an existing floor slab (Fig. 3). In this case the fill under the slab should be excavated and the recess well compacted to receive a thickened, in-situ concrete pad, poured around the ends of the accurately positioned stringer beams. For new work the slab must be designed to resist puncturing with slots shuttered in position to receive the stringer beams.

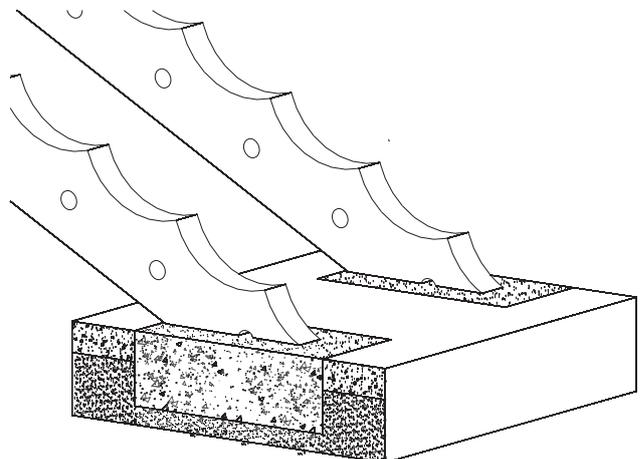


Fig. 3

STEP 5. SETTING BEAMS IN POSITION

Beams must be positioned so that the first and last riser dimensions are equal. This will ensure constant riser heights throughout the stair set. The thickness of the finishes to be applied to the landings and treads must be allowed for, in positioning the beams. If there are no applied finishes to the treads, then the lowest point of the arc of the top scallop must be 75mm below the top landing level (**Fig. 4**). Similarly the lowest point of the arc of the bottom scallop must be set above the floor by the total riser dimension less 75mm. If, for example, the total riser dimension was 200mm then this dimension would equal 125mm (200-75) (**Fig 5**). Each beam in the stairway-set should be placed forward or backward of another. Once the final positions of the beams have been determined, their projecting ends above the landing carcass should be marked with a pencil. The beams should be lifted up slightly and the waste trimmed off with an angle grinder before accurately re-positioning and caulking them in their final position with strong, dry caulking grout.

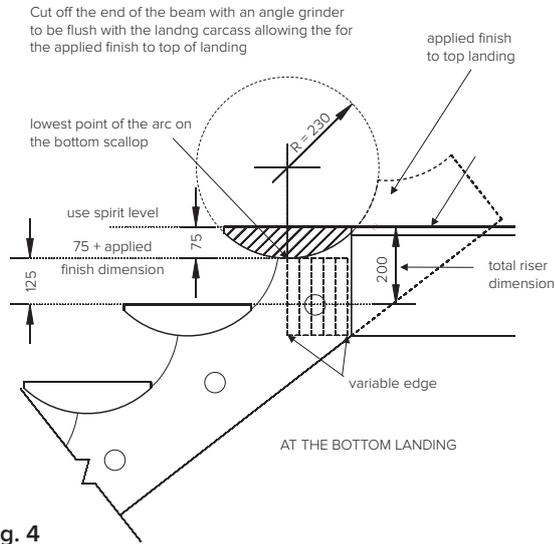


Fig. 4

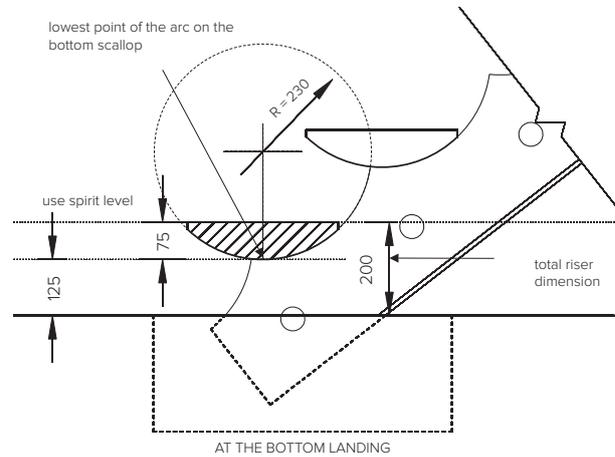


Fig. 5

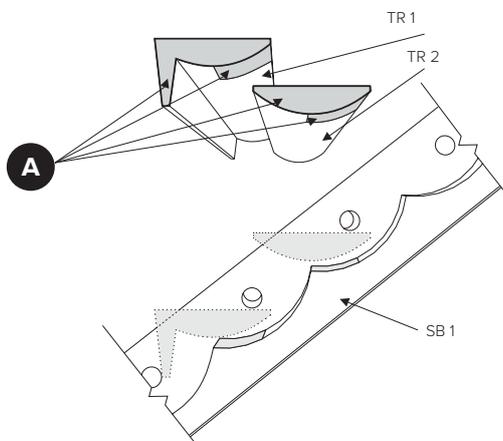
STEP 6: SETTING THE TREADS IN POSITION

Starting at the bottom, the treads should be laid in position making sure that they are level and aligned in plan. The contact area between the tread and the beam should be marked with a pencil on both the tread and the beam (**Fig. 1**). After removing the tread both contact surfaces should be scabbled to reveal the coarse aggregate followed by brushing to remove all loose material and dust.

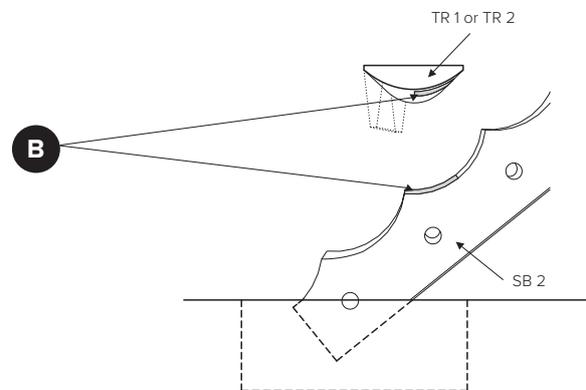
Apply adhesive to the contact area on the beam and carefully place the tread, working it into its final position by slightly rotating it in the scallop, allowing the adhesive to squash out on the edges. It may be necessary to prop each tread off the other if the stair is too steep.

In the case of the SB 1 beam where the treads (TR 1 or TR 2) are contained within the depth of the beam and the ends of the treads come into contact with the vertical face of the beam, adhesive should also be applied to the treads ends (**Fig. 2**).

Allow 24 hours before walking on the stair and 72 hours before applying heavy loads.



For SB 1 beams the same preparation should be made as for SB 2, but in addition, the ends of the tread (TR 1 or TR 2), which come into contact with the beams (**A**), should also be scabbled to reveal the coarse aggregate before removing all loose material and dust, applying adhesive and then working the tread into its final position in the beam scallop.



For SB 2 beams: using a pencil, mark the contact area on both beam and tread (**B**) and scabble the defined areas to reveal the coarse aggregate. Then remove all loose material and dust before applying adhesive and working the tread into its final position in the beam scallop.