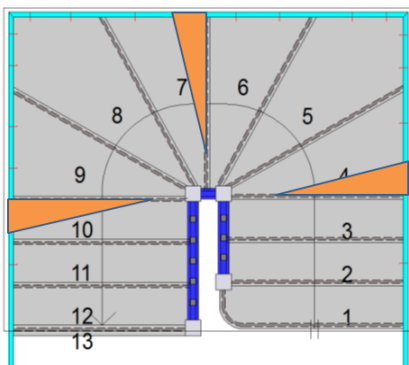
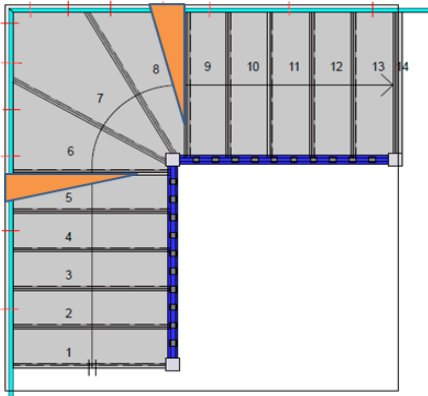


The Staircraft Winder Support Bracket - Technical Specifications and Installation Guide

Winder Support Brackets are steel 'gallows' brackets which are fitted at key locations beneath the stair under-carriage to remove the need for intermediate newel posts on single or double winder domestic stair flights.

Bracket Positioning and Installation in the Factory

The 725mm long brackets are bonded & screwed to the underside of selected stair treads and risers in Staircrafts' factory, and the bracket back-plate is bonded & screwed to the outer face of the adjacent wall string.



The brackets are factory fitted on each side of the winder box - radiating toward the winder centroid, in order to carry the loads that would be otherwise be supported by the intermediate newel post.

To enable rapid, reliable stair installation on site, the wall strings are also pre-drilled in Staircrafts' factory with 6mm dia holes indicating the position and number of fixings necessary to transfer the stair loads back to adjacent internal masonry or timber framed walls.

For site verification purposes, the drawing at the rear of this Guide gives the overall dimensions and material specifications for the bracket.

Bracket Scope of Application



Staircraft Winder Support Brackets are CE marked to EN1090-1:2011. Independent structural tests to BS585-2 have verified that the brackets can safely support single or double winder staircases without the need for newel posts, and NHBC accept their use in lieu of newel posts under the following conditions:

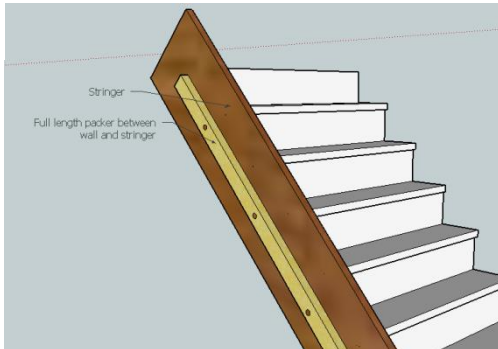
- The stairs are for private (domestic) use, with a minimum pitch of 38° and a maximum width between strings of 1m;
- The wall strings are fixed to adjacent internal walls through the pre-drilled fixing points provided using EITHER:
 - o 7.5mm x 100mm long self-drilling masonry screws into min. 2.8N/mm² AAC blockwork; OR:
 - o 5mm x 100mm long self-drilling timber screws into min 38x89mm timber studwork or noggings.
- Wall string gaps should not exceed 40mm

Note - Winder support brackets are not suitable for use on General Access stair flights or where adjacent internal walls are of light gauge steel construction.

Winder Stair Installation on Site

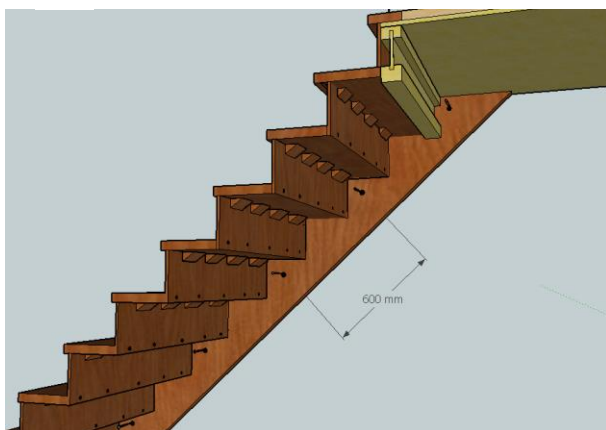
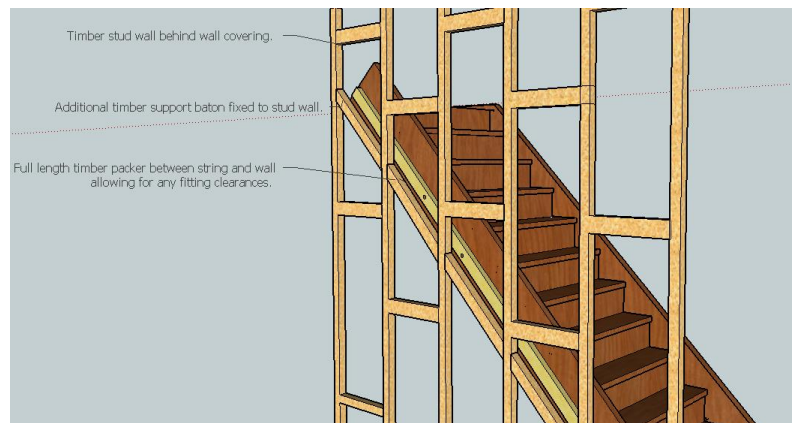
Winder stair installation on site should follow the guidelines published in the **BWF Stair Installation Guide**.

Wall string fixing should be carried out as follows:



Install a continuous timber packer (of sufficient width to avoid the possibility of splitting) directly to the adjacent walls, to fill the gap between the stair string and the timber/masonry wall.

To facilitate fixing into timber stud walls, timber noggings should be provided between the vertical timber studs which align with the pre-drilled fixing positions provided in the wall strings. These timber noggings should be a min 45mm wide x 72mm deep, and be fixed to the timber studs at each end using 2No. 75mm long screws



Install fixings through all pre-drilled holes in the wall strings using fixings with the following specifications:

For blockwork walls:

7.5mm self-drilling masonry screws (or equivalent) - penetrating at least 50mm into the blockwork

For timber frame walls:

5mm timber self-drilling screws (or equivalent) - penetrating at least 50mm into either 38mm or 45mm timber studs/noggings

Note: Winder stair bracket application is not recommended for use with light gauge steel frame walls.

If in doubt – Contact Staircraft Technical Support on 02476 324120