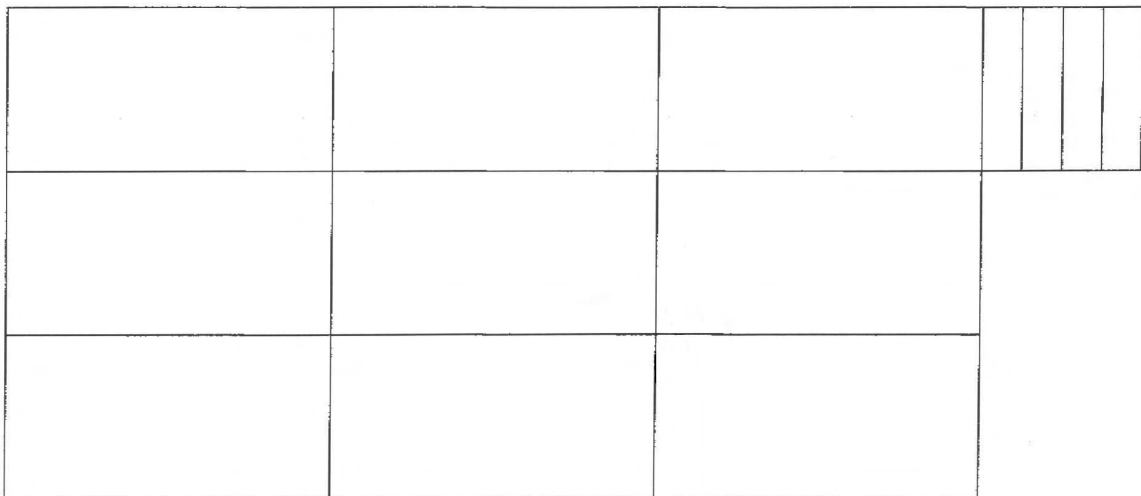
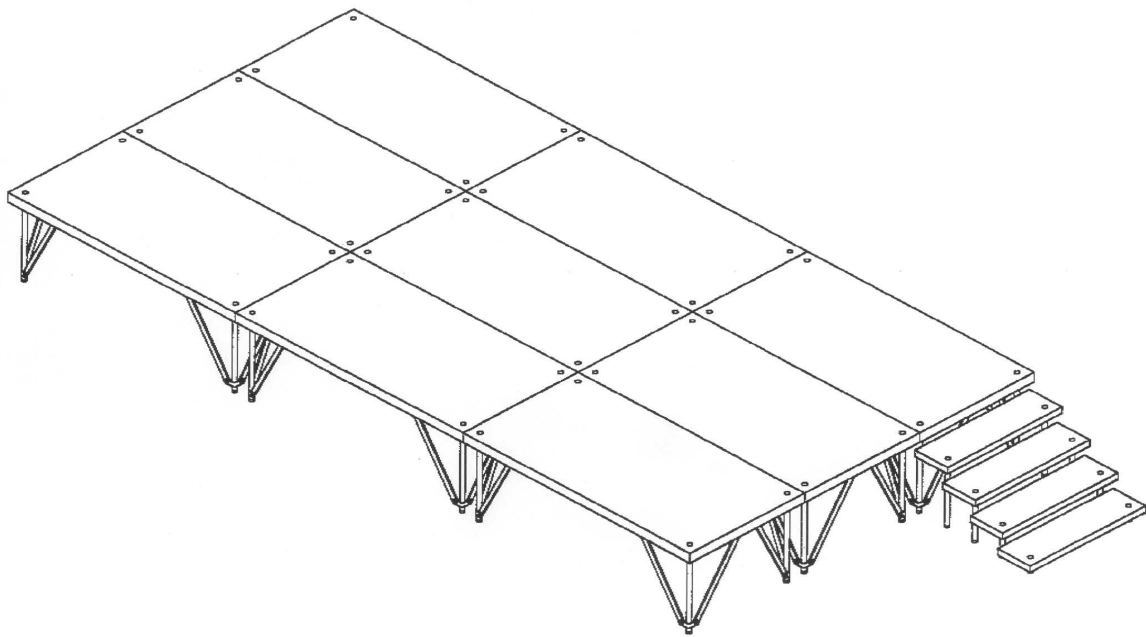


The Gradav Guide to Alistage

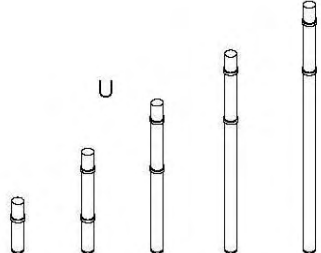
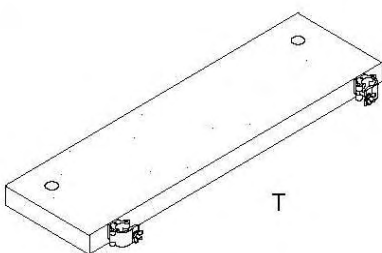
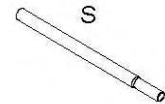
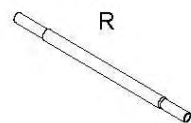
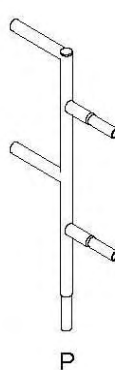
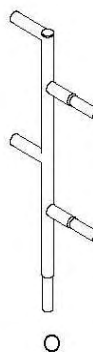
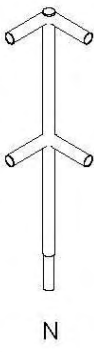
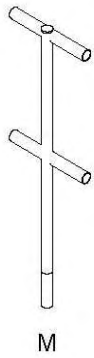
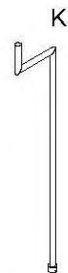
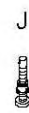
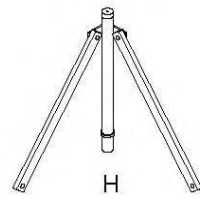
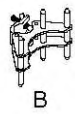
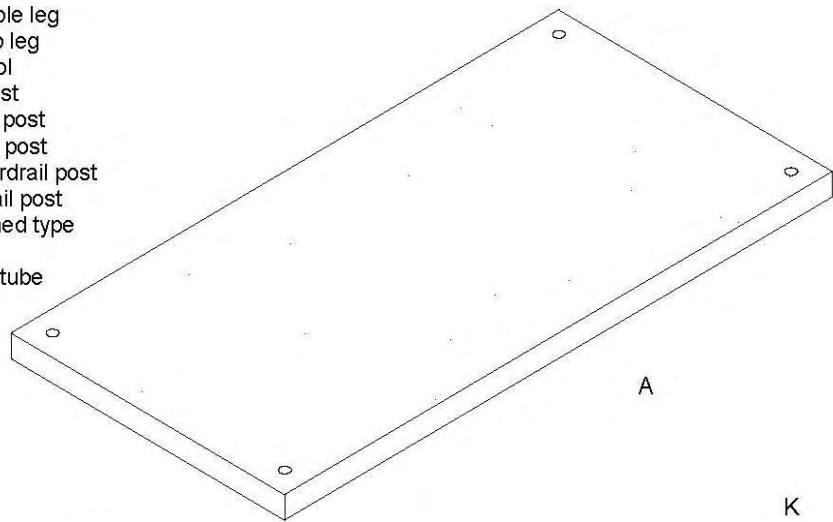
A Versatile Rostra & Staging System



Identification of components

For the sake of clarity not all components are drawn to the same scale.

- A Stage Deck
- B Adjacent unit coupler
- C Bar coupler
- D Double Spigot
- E Stage bung
- F Bung removal tool
- G Stage leg – without struts
- H Stage leg – with struts
- I Generic adjustable leg
- J Levelling / Ramp leg
- K Leg adjusting tool
- L End guardrail post
- M Middle guardrail post
- N Corner guardrail post
- O Step middle guardrail post
- P Step top guardrail post
- Q Step post - inclined type
- R Guardrail tube
- S Tiered guardrail tube
- T Straight step
- U Step legs



General Stage Instructions

The following general information on stage erection provides a guide on how the various components are used in stage construction.

Failure to follow the layout drawings and specific information may well result in an apparent shortfall of some components which will prevent the stage from being completed. This is especially important with respect to the fitting of the guardrails.

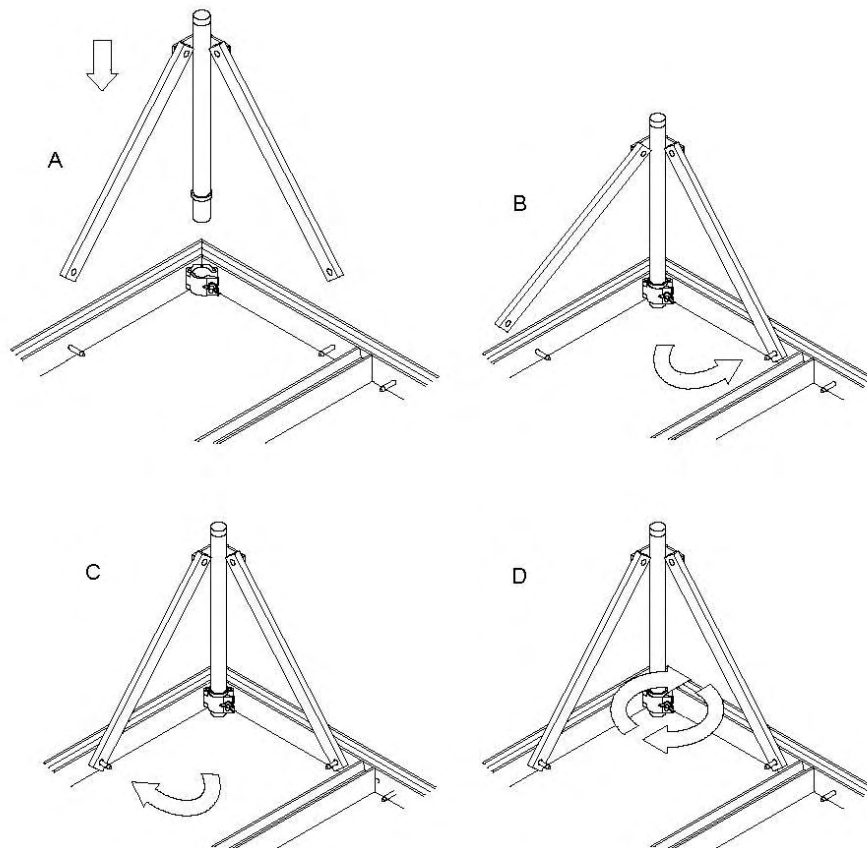
Fitting legs to stage decks

These are manufactured either with or without struts, with all legs of 500mm or less being without struts.

Stage legs of 600mm to 1200mm are normally fitted with struts which give increased lateral stability. However legs with struts can only be fitted to the 90° corners of stage decks with sides measuring at least 1.22m.

On stage heights of 600mm or more where the angle of the corner is other than 90° or the stage sides measure less than 1.22m stage legs without struts must be used. In such cases consideration should be given to providing additional lateral support for these legs.

When fitting stage legs, the stage deck should be placed face down on the floor. The stage legs should be located into the coupler fittings located in the corners of the stage deck. The ring on the stage leg should locate tight against the coupler on the deck.





The legs struts where fitted should now be located onto the pins on the inside edges on the stage deck frame. It is important to locate the strut onto the pin nearest the stage frame middle bearer first.

The wing nut on the coupler fitting can then be tightened by hand only (The use of tools to achieve greater leverage can result in damage to both the coupler and stage leg.).

Where stage levelling legs or generic adjustable stage legs are not being used ensure that a stage bung is fitted as a foot to the bottom of the leg.

NB When equipment is to be sited on soft ground (e.g. grass) 18mm thick plywood baseboards should be used under all stage legs to ensure that the loading is adequately spread.

Adjustable Legs

Three types of adjustable legs are available to level and adjust stage heights; stage levelling legs, ramp levelling legs and generic legs. All types are fitted into the bottom of the stage leg after removing the stage bung, which may be fitted to the bottom of the stage leg as a foot.

When fitting levelling legs the pin on the side of the levelling leg should be aligned with the punched slot at the bottom of the stage leg.

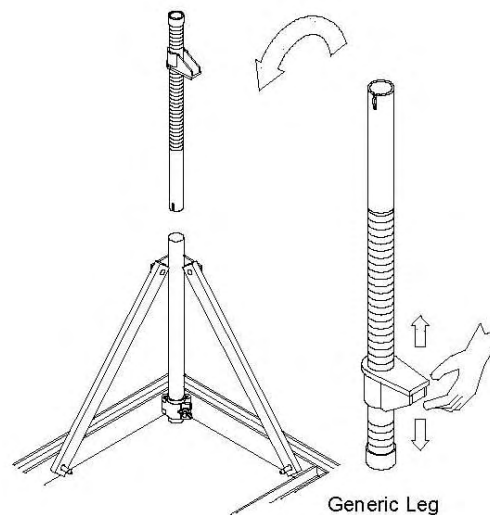
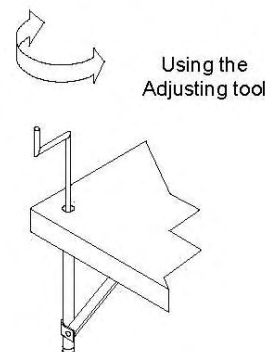
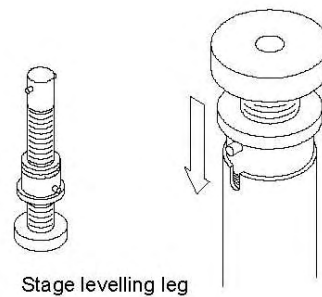
Stage levelling legs can be fitted to stage legs of 200mm (300mm where a stage guardrail post is also being used) or more. They do not initially add any height to the stage (being only 18mm deep when fully retracted, the same depth as the stage bung) and give up to 100mm of adjustment.

Adjustment is made after the deck has been positioned with an adjusting tool which is inserted through the hole in the plywood stage decking down the inside of the stage leg, locating onto the top of the levelling leg.

As they are adjusted from above the stage deck they are ideal on low level stages where access beneath the stage is restricted due to its height.

Generic adjustable legs initially add some 90mm to the overall height of the stage due to the depth of the adjusting casting. They will then give up to 350mm of adjustment. The adjustment is made from beneath the stage by operating the trigger in the adjustment casting and withdrawing or inserting the generic leg in or out of the stage leg.

Fine adjustment can be made by turning the adjustment casting.



Generic legs are suited to outdoor use to allow stages of 600mm height and above to cope with undulating and uneven ground.

Ramp levelling legs are similar to the stage levelling legs, but being slightly longer they can provide up to 200mm of adjustment. The plastic foot at the bottom of the leg articulates allowing it to be used where the stage deck is inclined (for example when it is being used as a ramp). Like the levelling legs they are adjusted from above stage deck level using the adjusting tool.

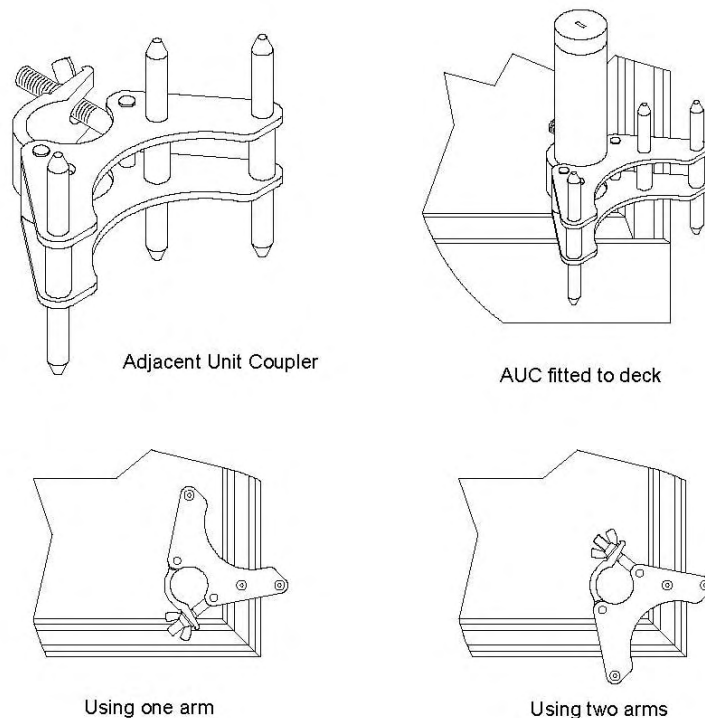
Connecting Stages

Rectangular and square stage decks at the same height are normally connected together using adjacent unit couplers (AUC).

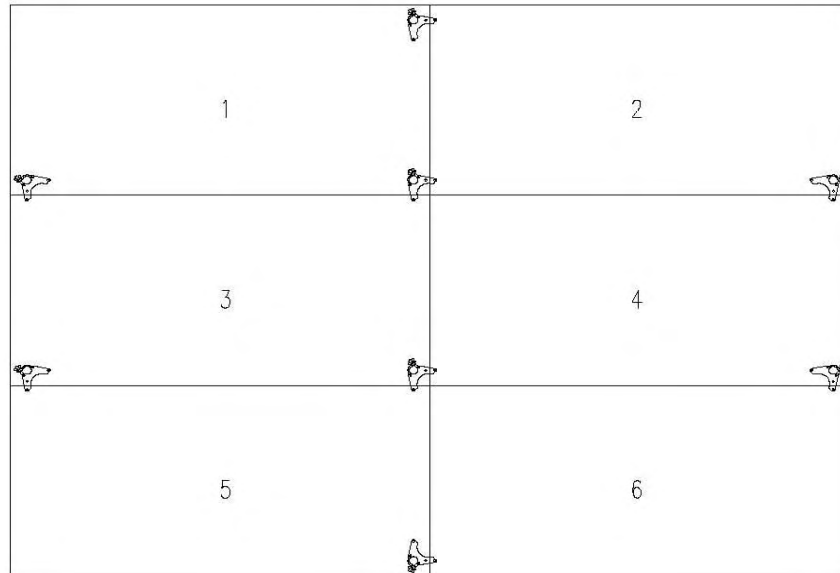
These couple onto the stage leg, fitting tight to the underside of the stage deck. The inboard pin on the AUC locates into a hole in the underside of the stage frame, which correctly aligns the fitting.

The wing nut on the coupler fitting should be tightened by hand only (The use of tools to achieve greater leverage can result in damage to both the coupler and stage leg.).

They can be orientated to allow either one or two arms of the fitting to extend beyond the edge of the stage deck.



Adjacent stages can be lifted into position, allowing the pin at the end of the AUC arm to locate into the hole in the underside of the stage deck frame.

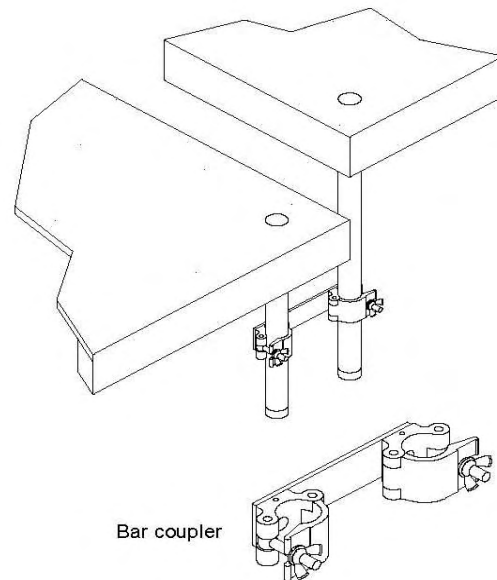


Typical layout of stages showing the position and orientation of the Adjacent Unit Couplers. (The numbers indicate the erection sequence).

Rectangular and square stages at dissimilar heights can be joined using bar couplers. These couple between the legs of adjacent stages.

Connections between triangular, circular and other shaped stage can be made using AUC's, (or bar couplers where the stages are at dissimilar heights) where the corners of adjacent stages are at 90°. Otherwise adjustable bar couplers should be used to connect between the legs of adjacent stages.

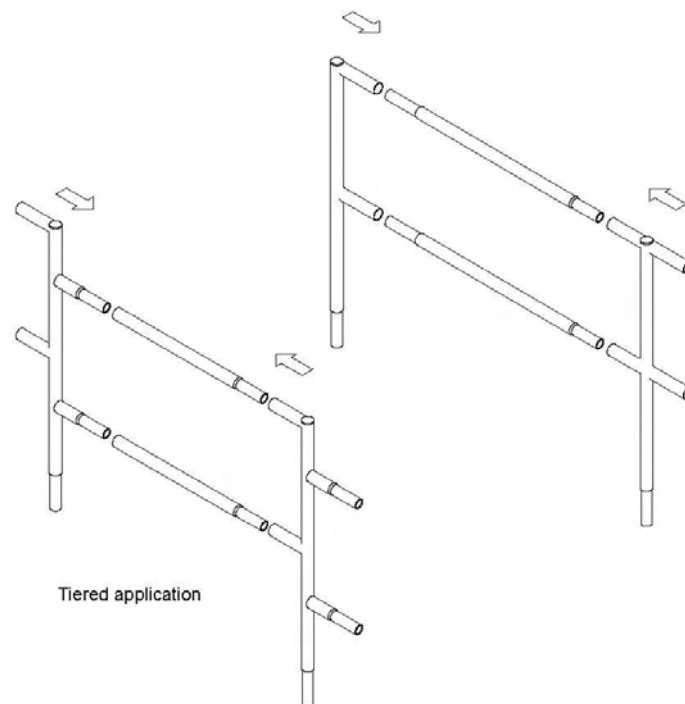
The wing nuts on the coupler fittings should be tightened by hand only (The use of tools to achieve greater leverage can result in damage to both the coupler and stage leg.).



Stage Guardrails

These are made up of horizontal rails and vertical posts. The horizontal rails have a swaged spigot at both ends, which locate into the vertical posts.

Once a run of guardrails have been assembled (rails to posts) the posts can then be fitted to the stage, with the swaged spigot at the bottom of the vertical post fitting through the holes in the plywood stage decking, locating into the top of the stage leg.



To allow for various configurations of guardrail to be constructed horizontal rails are available in a range of standard sizes, with a number of different styles of post also available.

It is possible to fit guardrails to the sides of tiered stages using step middle posts and tiered seating horizontal tubes, which are swaged at one end only.

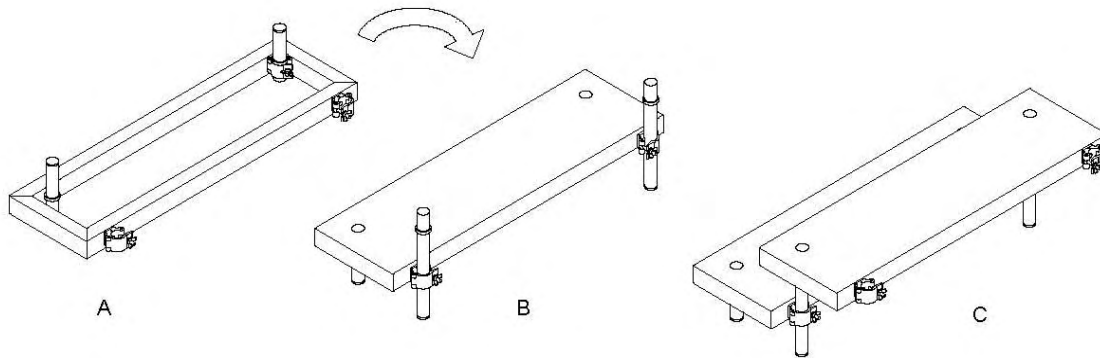
Steps

Flights of steps are built from individual step treads and step legs rather than being pre-engineered flights. The standard equipment forms a going of 300mm with a rise of 200mm.

Step legs of 200mm are fitted with one ring whilst longer legs are fitted with two rings.

Fit two 200mm step legs to the inboard couplers on the first tread ensuring that the rings on the legs locate tight against the couplers. Fit two 400mm legs to the outboard couplers on the same tread ensuring that the bottom rings on the legs fit tight to the underside of the coupler.

Locate the next step tread onto the top of the 400mm step legs with the legs fitting into the inboard couplers with the top rings fitting tight to the couplers (see illustrations overleaf).



The next size step legs can be fitted to the outboard couplers on the upper tread and the process of locating the next step is repeated until the final tread has been fitted.

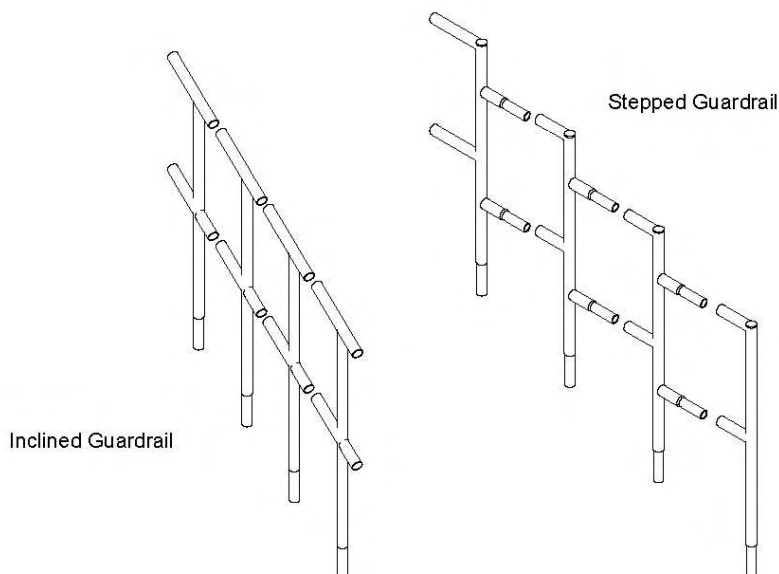
Once the final tread has been fitted, the completed step assembly can be located to the end of a 1.22m wide stage and the outboard couplers on the top tread attaching to the stage legs. The stage therefore serves as the “top step”.

The wing nuts on the coupler fittings should be tightened by hand only (The use of tools to achieve greater leverage can result in damage to both the coupler and stage leg.).

Step Guardrail

Guardrail can be fitted to either one or both sides of steps. Two types are currently available, “stepped” or “inclined”. In both cases the swaged spigot at the bottom of the vertical post locates into the top of the step leg passing through the holes in the plywood step decking.

The stepped guardrail requires three different types of post that spigot together prior to fitting to the steps. The bottom step uses a stage end post, the top step uses a step top post with the intermediate steps using middle posts.



The inclined guardrail only uses only one type of post throughout. Posts are joined together using expanding spigots, which are operated with a hexagonal (Allen) key. The posts should be assembled loosely, and then fitted to the steps prior to the expanding spigots being tightened.

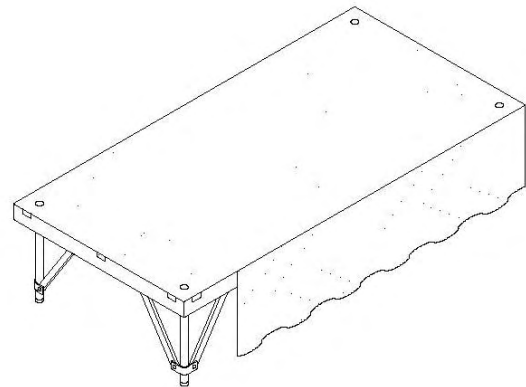
Where step guardrail is not being used the holes in the step are in-filled with 6mm bungs.

Valance

Small pads (25mm) of self adhesive hook “male” Velcro should be affixed to the top edge of the stages to where the valance is to be attached (approximately one pad every 300mm). The valance, which has loop “female” Velcro stitched to its top edge, can now be attached.

For outdoor use 25mm diameter tubes can be inserted into the pocket at the bottom edge of valance panels.

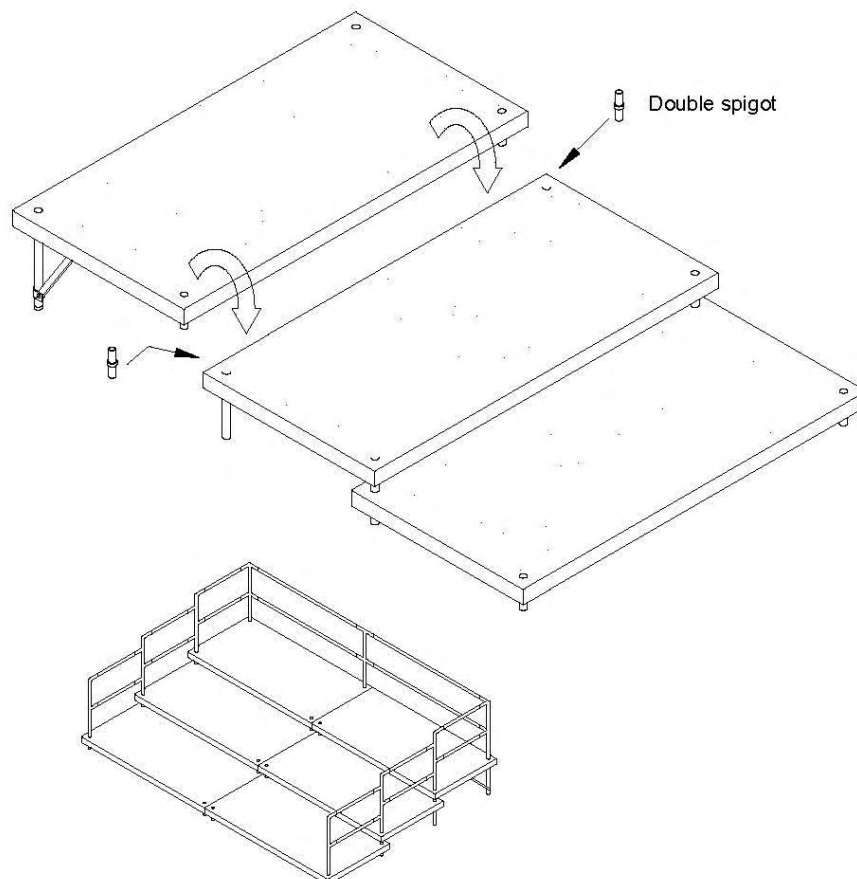
Valance is supplied in 7.3m (24ft) and 3.6m (12ft) lengths, any surplus material should be pinned or tucked under the stage. A charge will be made for any valance that is cut.

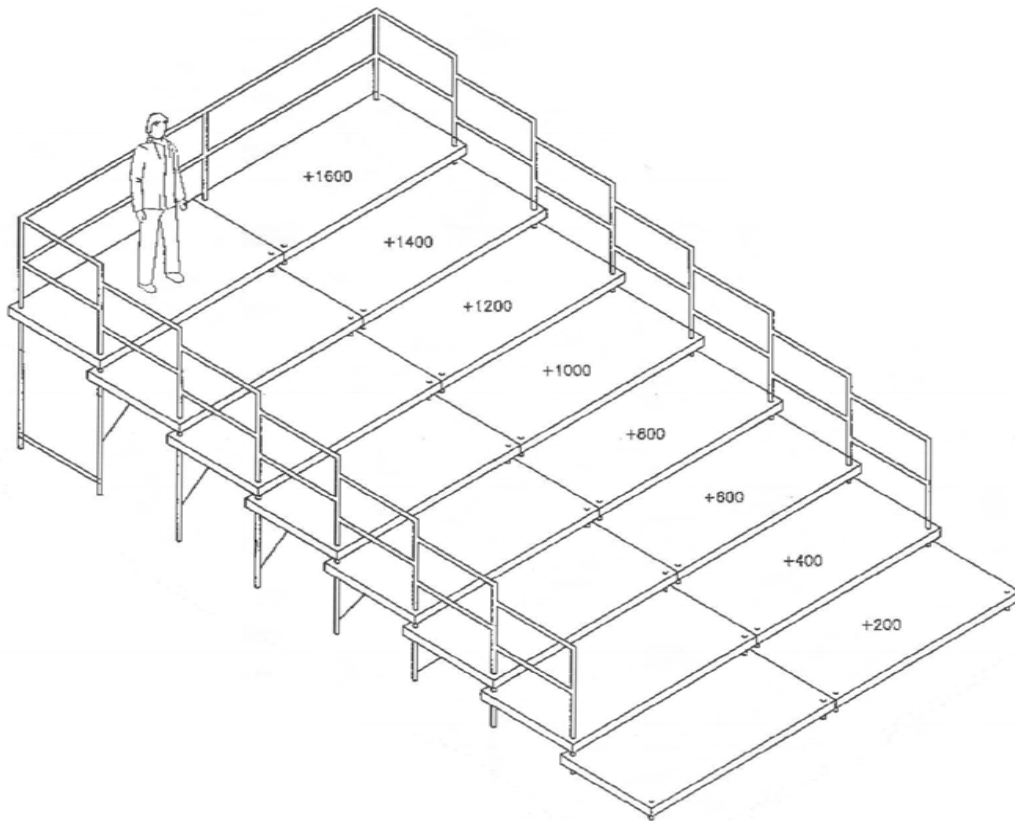


Tiered seating

Normally the legs of each stage sit at ground level. However for tiered seating configurations, double spigots can be used to allow the front legs of all upper tiers to “plug into” the back legs of the lower tiers.

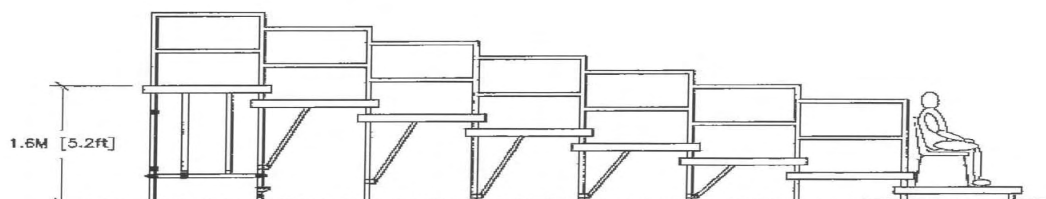
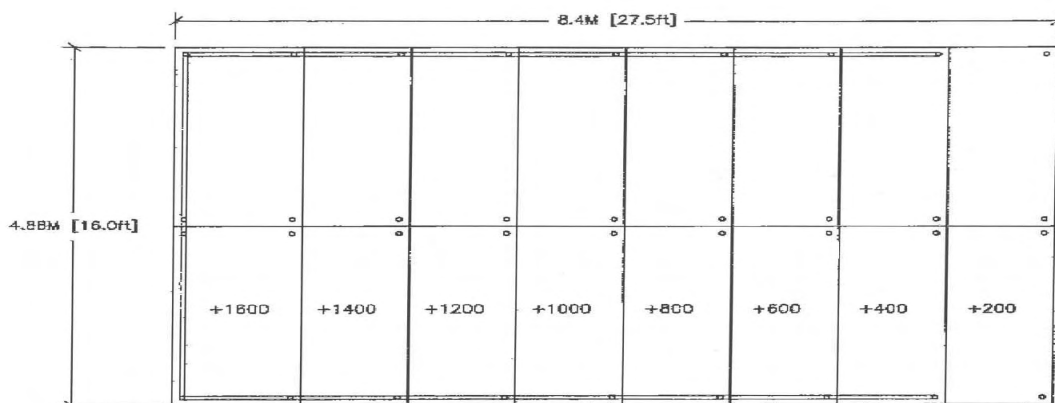
This foreshortens the going on all but the top tier from 1.22m to 1.026m. It also prevents the possibility of chair legs falling off the rear of the stage tier (the stage guardrail fitted to the rear of the system prevents this on the top tier).





Typical tiered seating arrangement, showing handrails and some construction details. We will be pleased to discuss your requirements with you. Quotations are free, and without obligation.

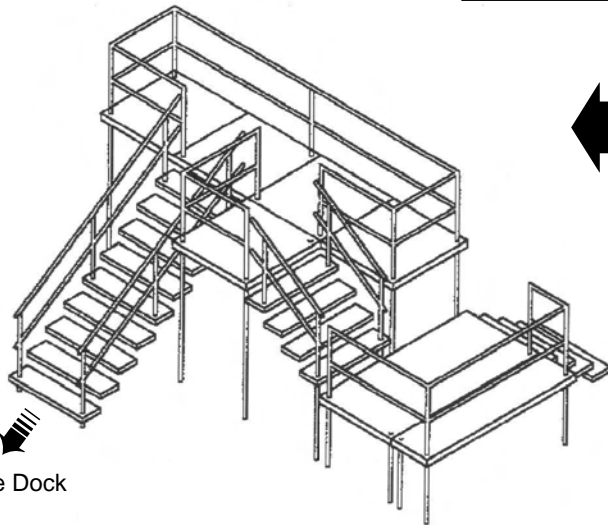
Dimensions for guidance only.





Set for 'Jesus Christ Superstar'

Performed by Finchley & Friern Barnet Operatic Society,
at The Millfield Theatre, London N18 in November 2004

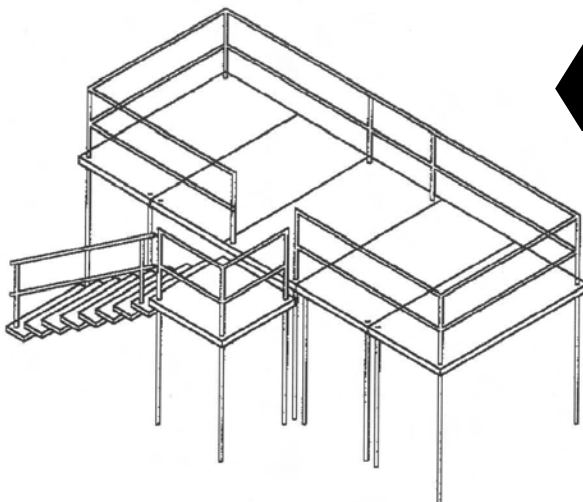


Scene Dock



Stage Right. Off stage stairs exit through scene dock archway.

View of Staging as built. Clad with painted hardboard. Notice rear view of Musical Director in bottom right corner, showing him at his rostrum.



View of staging as built. Black tab masks band



Stage Left. Deck height of 2 metres.
The Band were sited underneath, with the Musical Director just down stage.



All line drawings courtesy of **Alistage**.
Photographs by kind permission of Mike Hopkins.

✓ *We deliver*

✓ *We Collect*

✗ *We do NOT set-up or dismantle*

The standard Terms and Conditions of Hire apply to all hires. Copies are available upon request.

For purposes of clarification, we have reproduced items 26 to 30 from our Hire Terms and Conditions. Please read these carefully. If you feel that there are likely to be difficulties in conforming to these requirements, please discuss them with us.

26 Where a delivery or collection cannot be completed because of a lack of access at the venue the customer shall still be liable for all agreed charges and for any additional costs incurred completing the delivery

27 Where a delivery with staging has been arranged it is part of the Contract that there is at least 1 person capable of assisting the driver to carry decking panels for the purposes of unloading. Failure to provide this assistance may result in the non-delivery of the goods. The customer will remain liable for the full cost of the hire and carriage. Extra charges may be levied for a second delivery attempt and/or the cost of providing assistance to the driver.

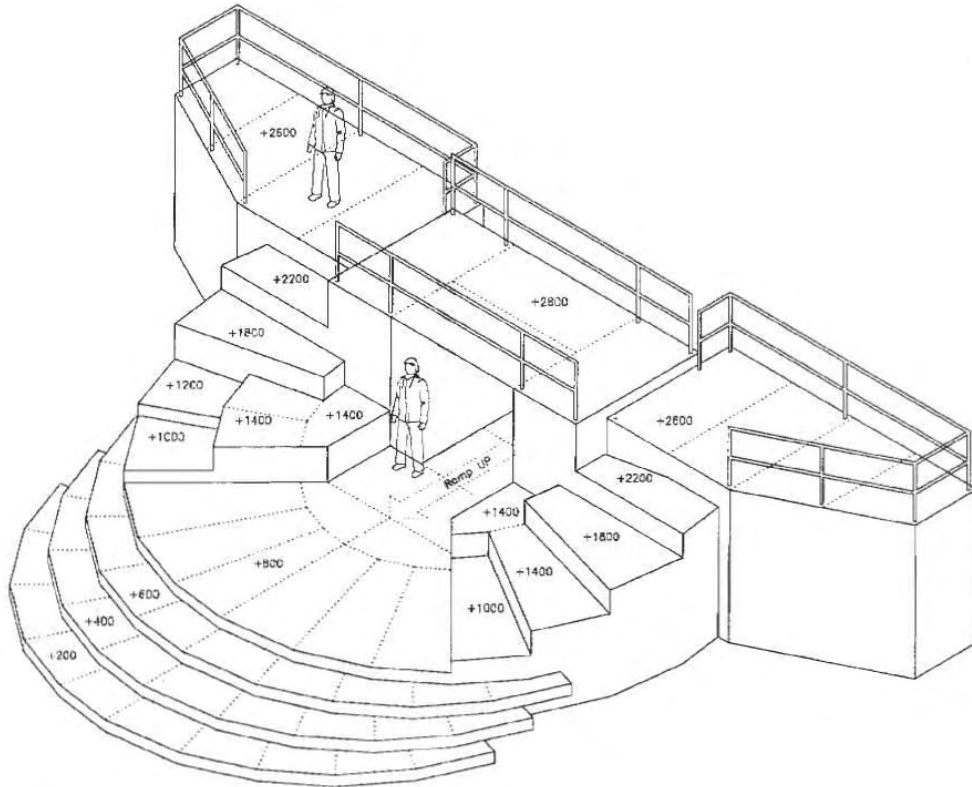
28 Where a collection with staging has been arranged it is part of the contract that there is at least 1 person capable of assisting the driver to carry decking panels for the purposes of loading. Failure to provide this assistance may result in the non-collection of the goods. Extra charges may be levied for other collection attempts and/or the cost of providing assistance for the driver and/or extending the hire period until the goods are returned to our stores.

29 Failure to dismantle equipment and have it packed ready for collection at the end of a hire will lead to extra charges which may include extending the hire period until dismantling and packing has taken place and the goods are returned to our stores.

30 Where we agree to provide assistance to our driver for the purposes of delivery or collection such agreements must be confirmed in writing by both parties before our transport leaves our stores.

If you are planning to arrange your own transport, we suggest you discuss the size of vehicle required with us. Decks are almost impossible to transport with any vehicle smaller than a 3.5 tonne van.

Allow a minimum of 2 persons to rig staging. It is not safe to rely on one person to rig anything except the smallest of deck panels, and then only with short height legs.



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