

# Modular Stage Systems

## Assembly Guide



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# Assembly Guide

## Section 1 : Stage Modules

This guide is intended to assist in the assembly, dismantling and storage method for the staging supplied. The stage can be assembled or part assembled in many different layouts according to your requirements.



## Starting First Time Assembly

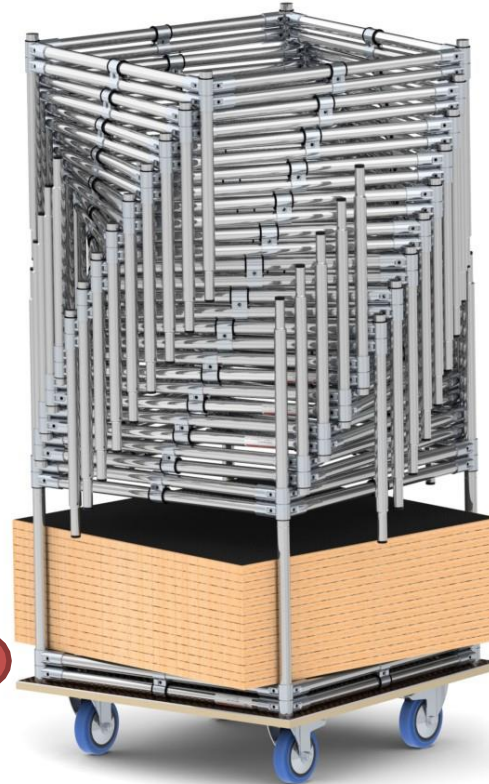
Items delivered stacked on a trolley show the best method to be replicated when re-stacking after disassembly. Deck boards are at the bottom of each trolley, as they are one of the last items to be assembled.

Stack second frame on top of the first frame.

3

Place first frame upside down in the holes of the Transformer Trolley.

1



4

Continue stacking frames in a spiral pattern with legs pointing downwards on top frames.

2

Load deck boards with corners close to frame legs.

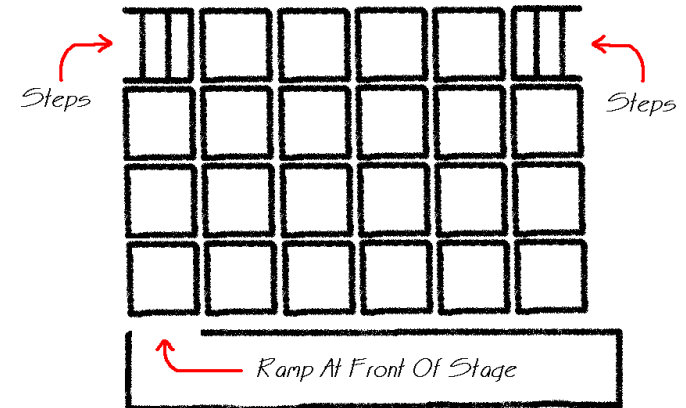


*Maximum 20 frames and 20 deck boards per trolley.*

If the stage system has been supplied with a Transformer Trolley for storing the equipment, the trolleys themselves are used as the last deck boards fitted. They are also the first items required when dismantling the stage for storage, so should be fitted in an accessible part of the stage such as the rear corners.

## Starting First Time Assembly

Make a sketch with the dimensions of the intended layout you require. Each module is 750mm square (board size).  
Note step unit positions, particularly to enable safe access to the stage and to fire escape routes.



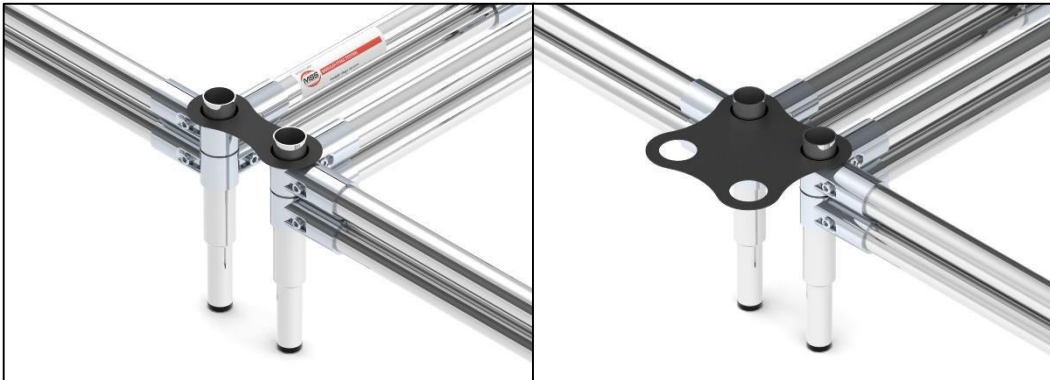
Units other than stage frames and boards (e.g. guard rails), are also able to be stored on trolleys. See trolley illustrations for stacking examples.

## Assembling Tiered Stages

### Laying out frames

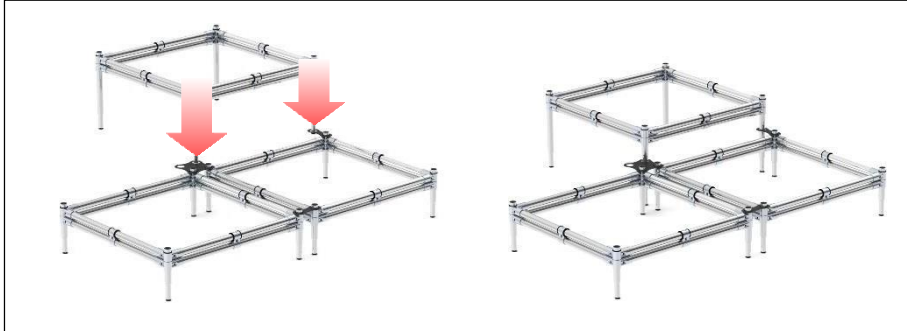
If assembling a tiered system with the lowest level at the front, start to lay out the lowest height frames first, which will form the front part of the stage. Measure from the rear wall to obtain an approximate starting position. This method makes tiering easier, due to taller units needing to link to lower units.

If the stage is to be assembled with just one frame height, start by laying out the frames from the rear wall. This method is easier for single level stages.

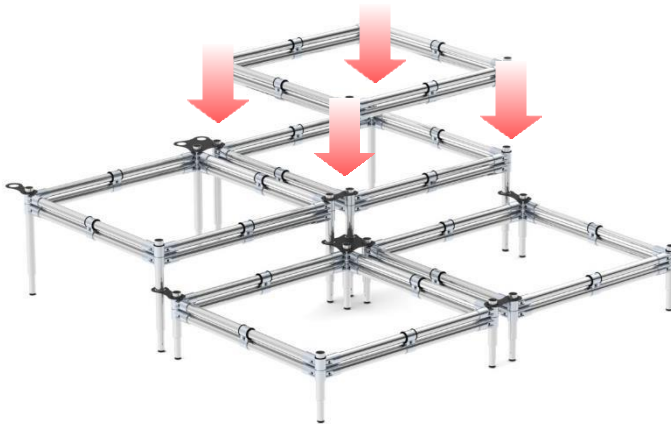


Join the frames with 2-hole and 4-hole link plates. 2-hole plates are mainly for the perimeter and 4-hole plates are for the central areas.

## Assembling Tiered Stages

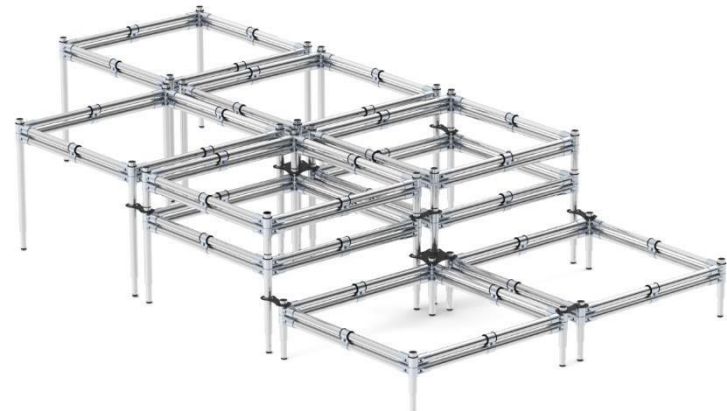


If there is a higher tier behind the front row, first place the link plates on the lower frames only. Then lower the legs of the higher frame through the link plate holes.



If there are double-stacked frames, add these on top of the units already laid out.

Add additional rows to complete the frame layout. These may consist of taller single frames or tiered units which make the same overall frame height.



## Assembling Tiered Stages



Add link plates to the top stage level, linking to all frames of the same height.

If the layout is large, build a smaller section of 12-20 frames and check that it is square by measuring that the main diagonals are similar dimensions (within 1 to 2 centimetres), and that the frames align as intended with the walls of the building.

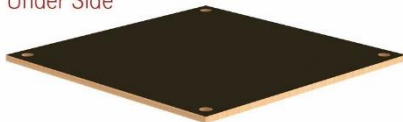


# Assembling Tiered Stages

Top Side



Under Side



## What's New?

Partially drilled holes in our new deck boards remove the need for frame caps speeding the assembly process and improving the visual appearance of the stage.

The new design update increases the aesthetic appeal of the stage and reduces the install time of the modular stage system.



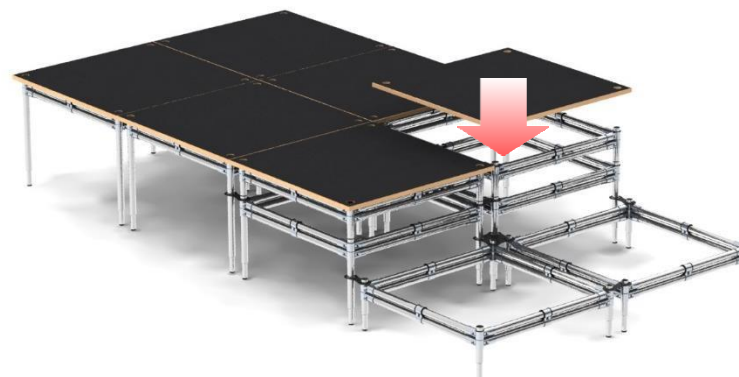
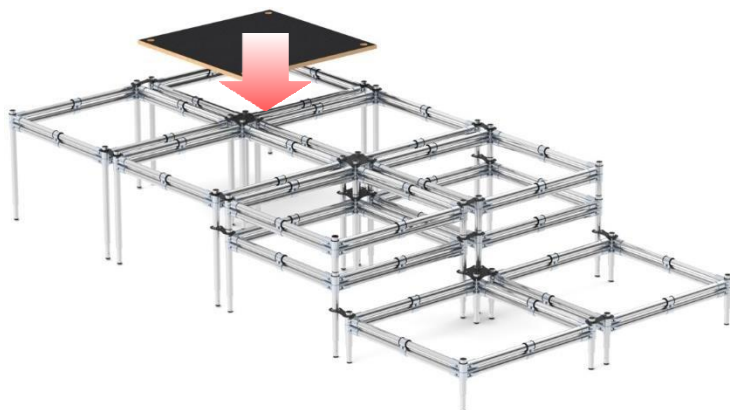
## Installing Guard Rails

Where guard rails are being installed, deck boards with 2 holes will now be provided. For corner guard rails, the Transformer Trolley will utilise 3 of the holes for installation, with the spare hole being covered with a cap.



## Assembling Tiered Stages

Now is the time to adjust the position of the frames if necessary, as once the deck boards have all been added, the stage becomes too heavy to move. Once all is square the deck boards can be added, generally working from the rear of the stage towards the front.



Note : If skirting or edge profiles are to be fitted, avoid fitting the final front and side rows of deck boards to allow access for this process (see Accessories, from page 10).



Add in the frame's plastic top caps to finish off, excluding locations where guard rails are to be fitted

## Step Units



Step Units connect to the frame legs using 2 x Multi Clamps.

Special guard rails can be supplied with step units if required.





## Assembling Single Level Stages

When building single level stages, it is best to lay out the back two rows of frames first. Then add the boards to the rear row only.

Do not fit the second row of deck boards yet. Step into an empty module to avoid excessive leaning over when handling boards. Then ask a second person to pass over the necessary link plates and deck boards to quicken assembly. Ensure all frames are linked together.

Add the third row of frames next, then add the second row of link plates and boards. Repeat until the stage is completed. This reduces the effort of carrying boards across many rows of frames to reach the rear row.

Due to the many varied layouts that can be built, no single method can be offered. However the principles are:

- Ensure the frames are laid out square to each other and overall, so that the boards fit easily.
- Avoid excessive lifting and carrying of parts by planning the layout, and build sequence that best suits.

## Dismantling

Dismantling of the stage modules should be carried out generally in the reverse method of assembly.

Follow drawings provided which show the correct stacking method for each type of module. If you don't follow the correct method it may result in not fitting them onto all the trolleys. The storage method is also designed to avoid excess weight or instability on any one trolley.

# Assembly Guide

## Section 2 : Accessories

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## Attaching The Stage Skirting

Customised skirting is designed specifically for each arrangement.

To fit skirting, first ensure that all frames are in position, and that the boards are removed from the frames receiving the skirting.



1

Place the first ties of the skirting between the two horizontal tubes just beyond the corner of where you want the skirting to start

2



Use the plastic clips provided and place the tie into the 'U-shape' of the clip

3

The clip then fixes onto the inside of the lower horizontal tube



4

This creates an angle from the top of the skirting leading to the corner where you want the skirting to start



## Attaching The Stage Skirting

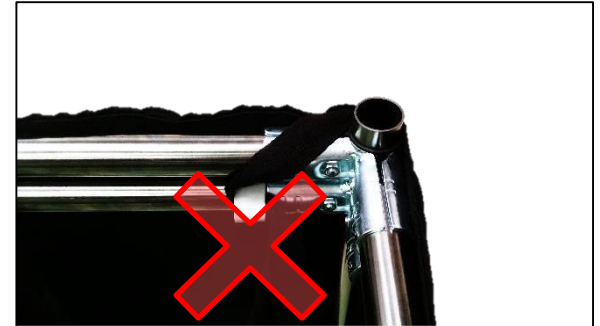


5

From then on, the ties can be placed over the top tubing instead of in-between

It is important that the ties only sit on the tubing and NOT on any of the frame's joints. This could result in deck board movement and is why the first tie goes between the two tubes (step 1)

6



7

With each clip placed on the tube, pull tight so that there is no slack from the previous clip. Continue this process using approximately 2 clips per frame side.

This is how the clip and tie should look on the frame side.

8

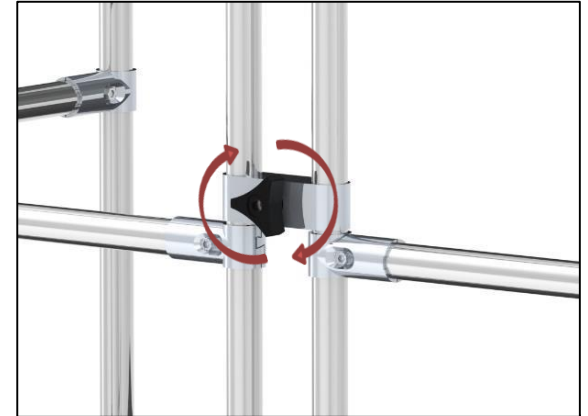
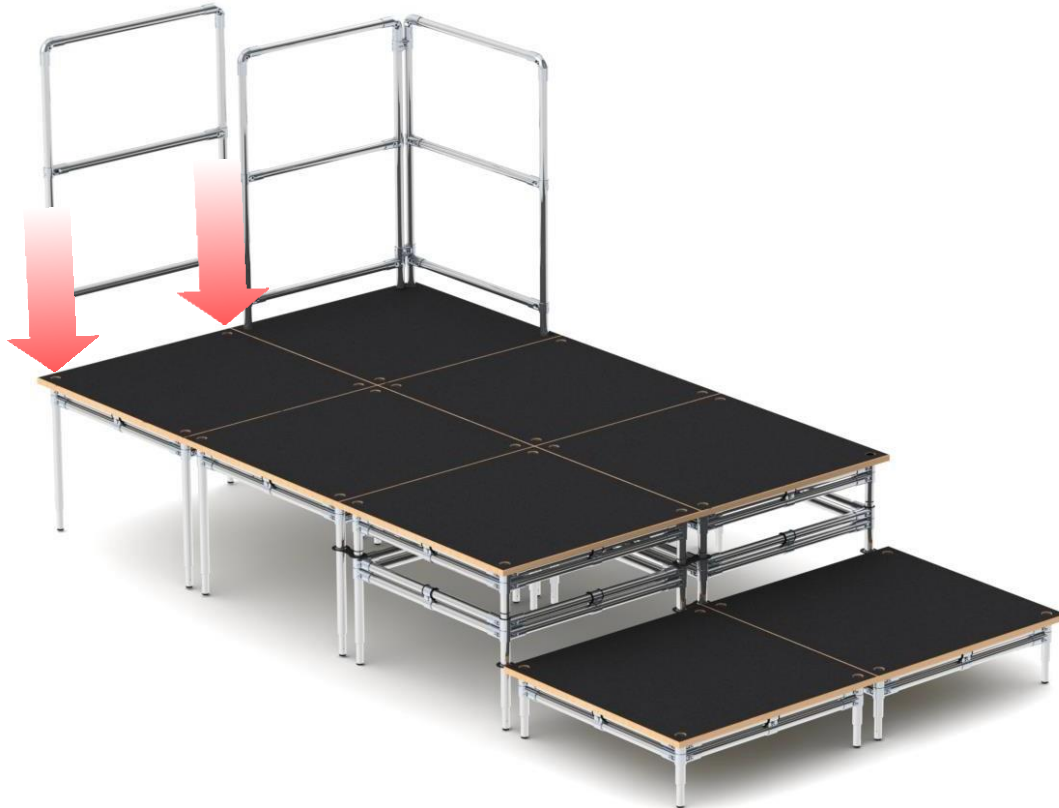
Once the deck boards are fitted to the frame, the end result will cover all of the framework with no gaps between the skirting and the boards



On a skirting that is provided in more than one piece, each piece should overlap round a corner position by about 50mm to ensure a neat finish. The overlap is secured with Velcro at the top end corner of the skirting.

Guard Rails slot into the staging frames through the holes in the deck boards. Single Guard Rails fit into two holes, with Corner Guard Rails occupying three holes. When using 900x750 stage modules, the Corner Guard Rails are supplied in left-hand and right-hand versions.

The guard rail legs have a tapered end, so must be held vertical and square to the stage when fitted, so that joint pieces slide evenly into the stage modules and step units. Push securely in but do not use hammers to fit.

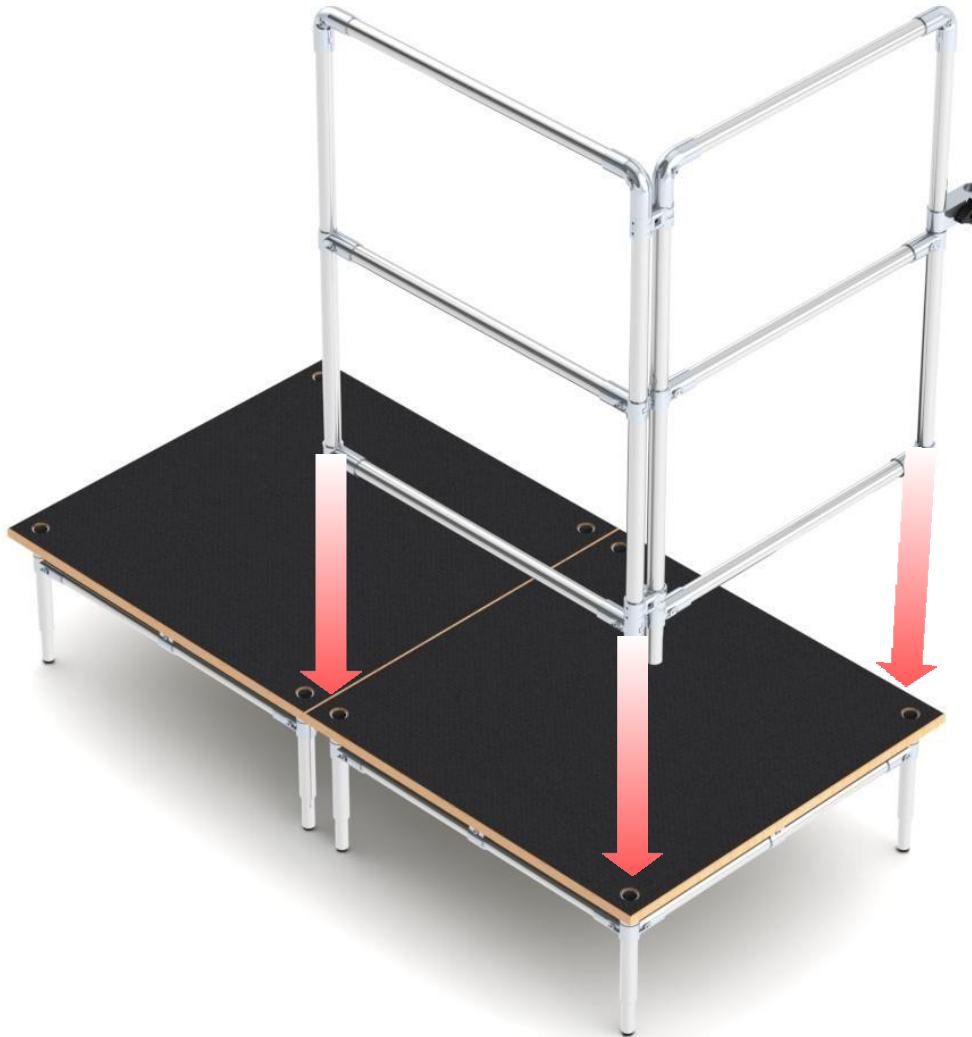


To keep the guard rails in good alignment, connect them with the Multi Clamps, and hand tighten the tri-star clamp on the outside face of the guard rail.



*N.B. Guardrails are not for leaning on. They are only to reduce the risk of falling from the stage edge. As the modules are not fixed to the floor, there is a risk of tipping when excessive force is applied to them.*

## Corner Guard Rail

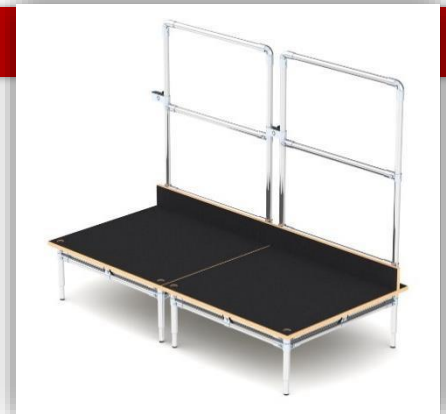
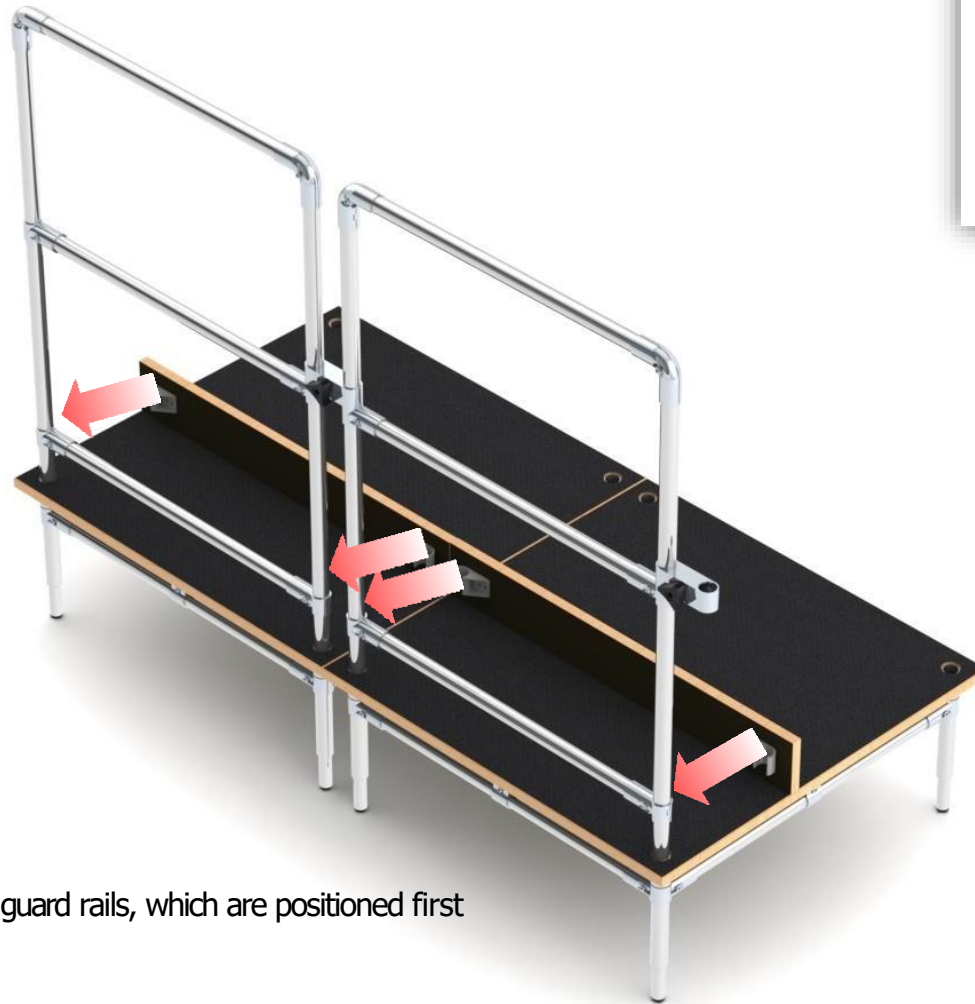


## Edge Profiles (750mm)



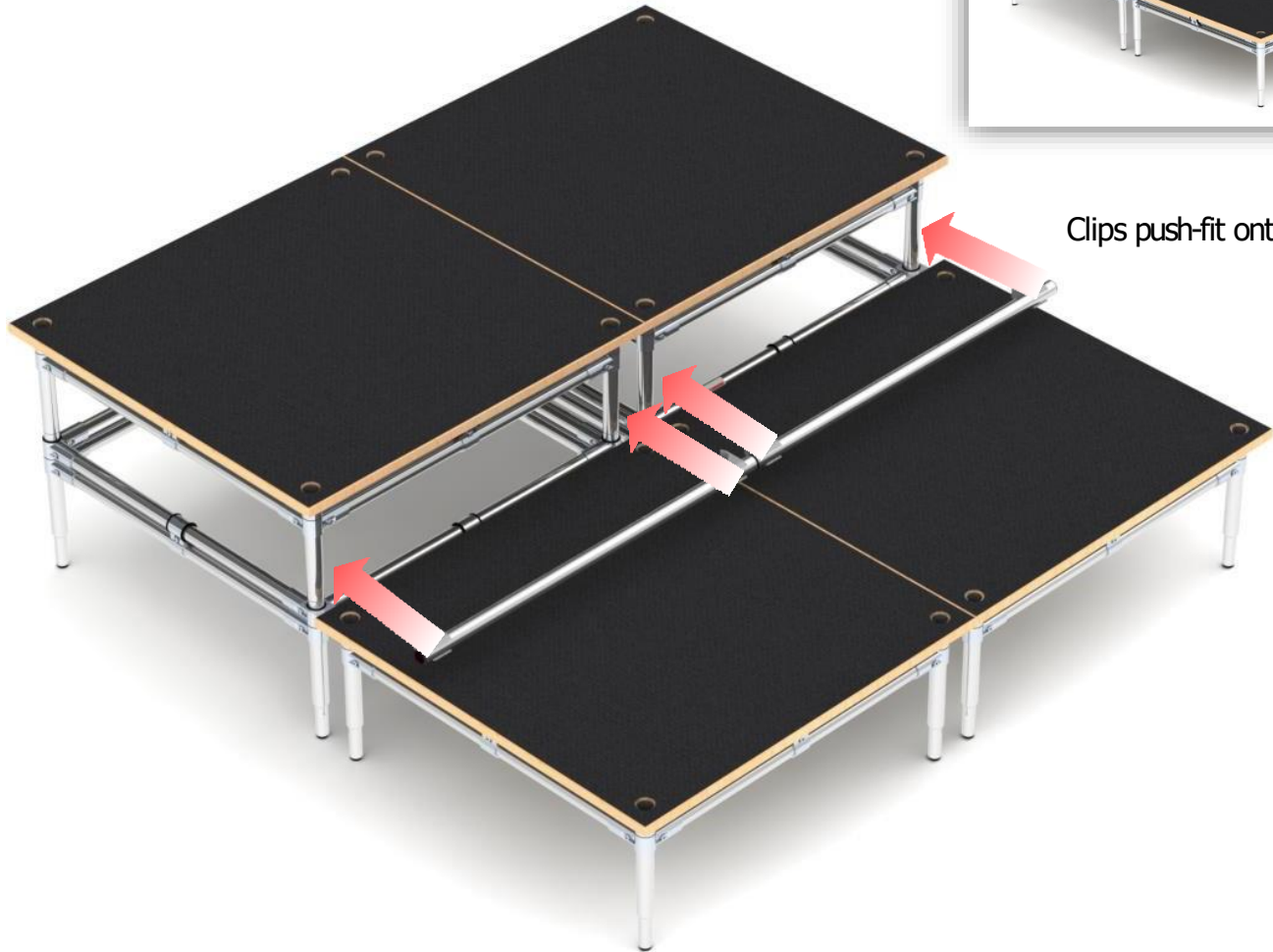
## Edge Profiles (1500mm)



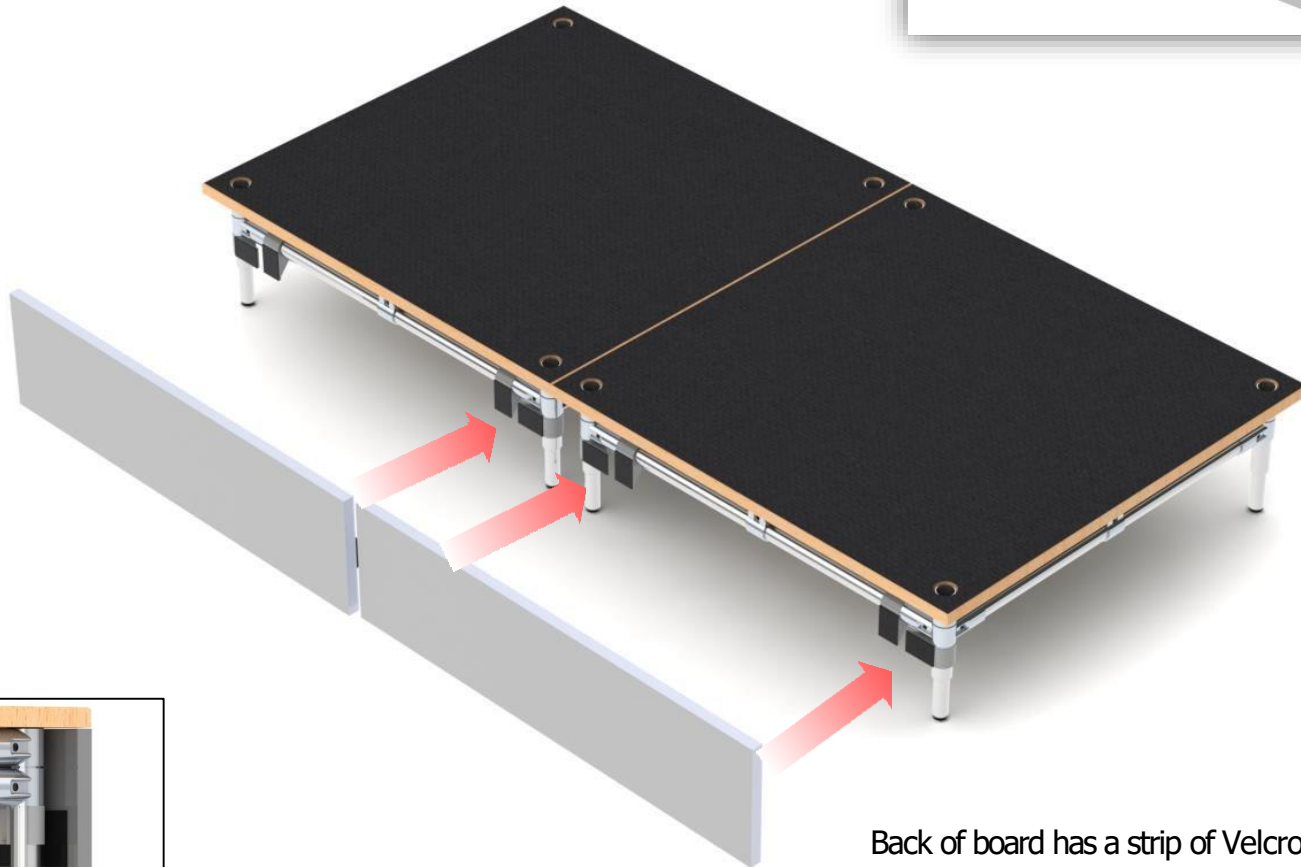
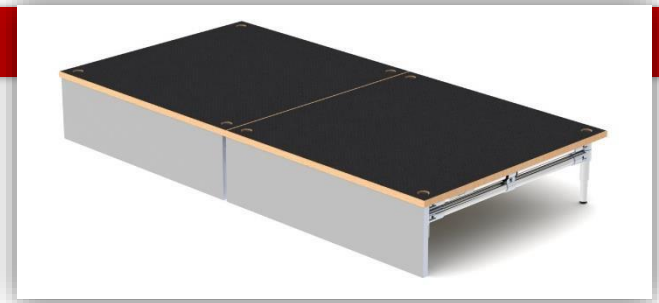


Kick plates clip onto the guard rails, which are positioned first

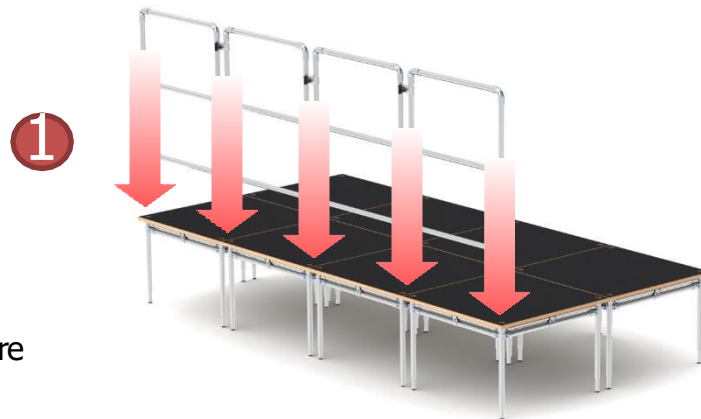
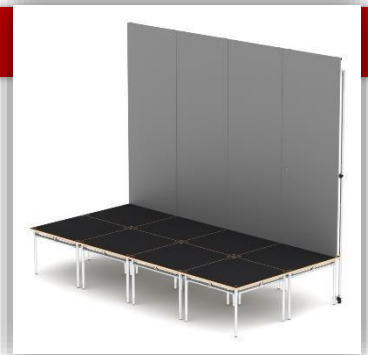
## Chair Stops



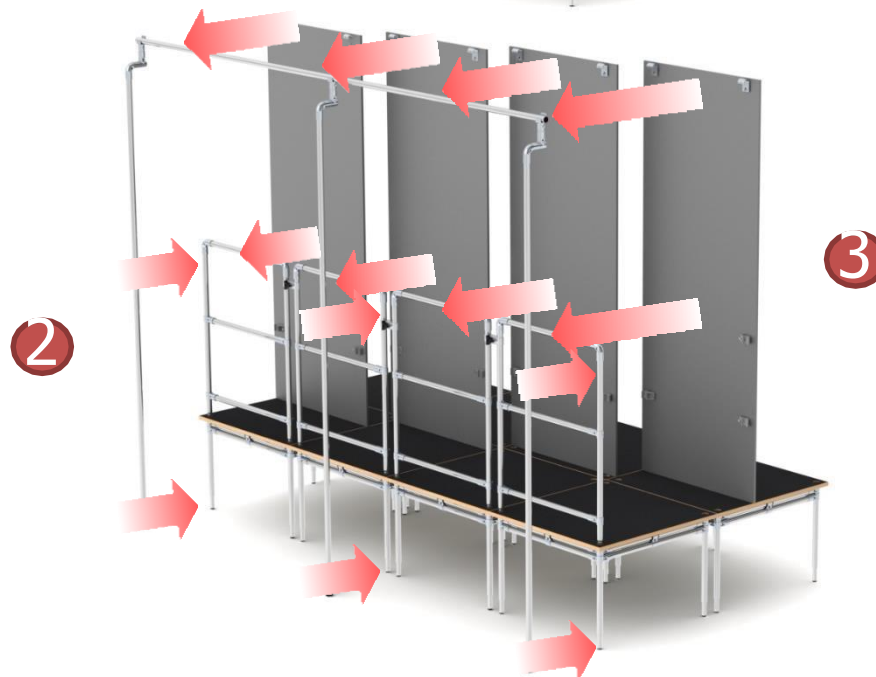
Clips push-fit onto frames

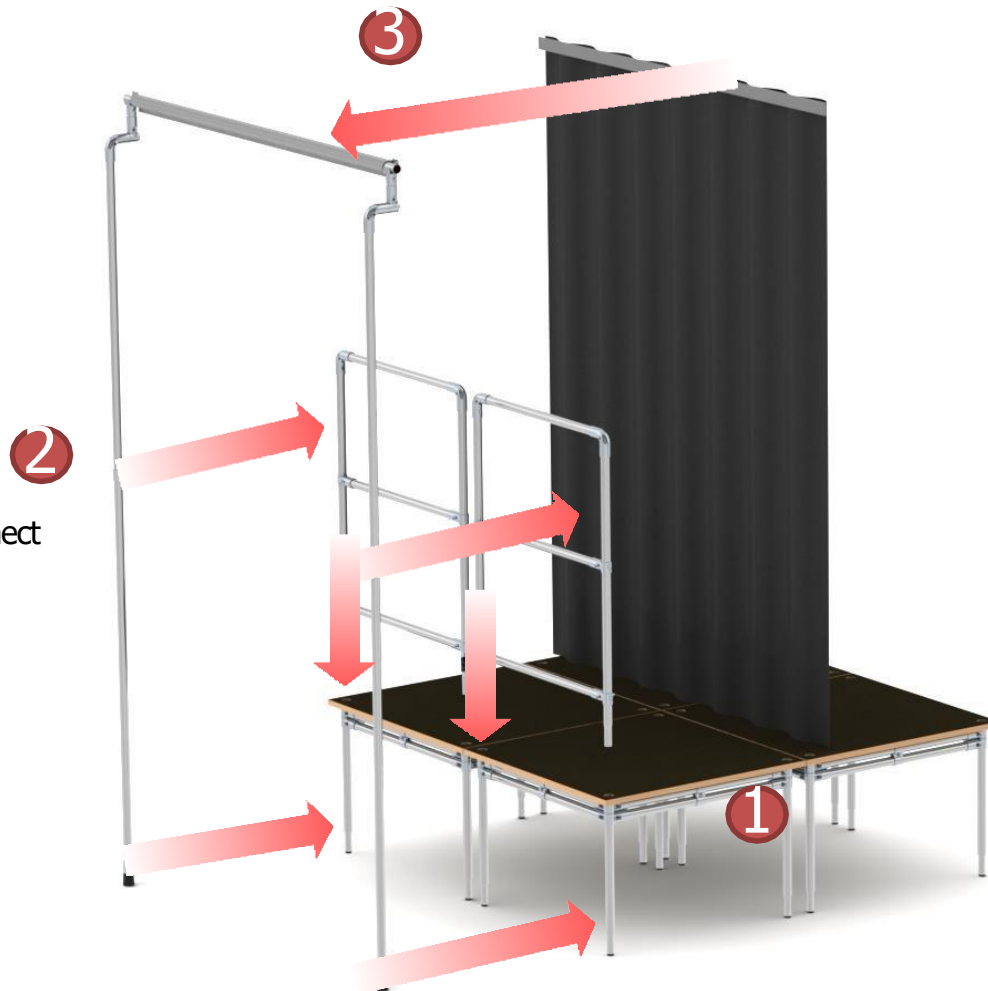


## Back Drop Flat



The frames for flat back drops connect to guard rails, which are positioned first





The frames for drapes connect to guard rails, which are positioned first





## Safety instructions & further information

The Modular Stage System has been tested to 750kg per square metre, equivalent to 420kg per 750mm module. Please note however, that standard uniformly distributed loading should be kept below 500kg per square metre, equivalent to 270kg per module. Avoid high point loads, especially at edges of the units to avoid overturning modules or dislodging the deck boards.

The deck boards are 18mm 13-ply Finnish Plywood which has good fire resistance by nature of their construction. Birch Plywood meets Class 3 Surface Spread of Flame to BS476 Part7: 1987. Phenolic faced Birch Plywood, as used in Transport & Vehicle industries meet fire resistance to Class FMVSS302, based on ISO3795 method, in accordance with SFS5337, FMVSS 302 and DIN 75200. Deck boards and frameworks should not be stored in wet conditions

Material for stage skirting and drapes is Durably & Inherently Flame Retardant to BS.5867: Part 2: 1980: Types A, B&C. It also conforms to BS 5867:Part2:1980: Type B as Non-Durable Flame Retardant to withstand approximately six water-free dry-cleaning cycles. If wetted it is essential to re-treat the fabric to meet flammability requirements.

Prior to assembly of the stage, inspect components for damage. Do not use bent, dented or otherwise damaged tubular framework components. Loose or missing fixings should be repaired or replaced before use. Joint fixing screws are tightened to 10nM. Do not use damaged floor panels.

Ensure step units are securely connected to the stage modules. Follow assembly guidelines for assembly and storage. Although capable of being assembled by one person, it is advised that as a minimum 2 persons should carry out assembly and storage and movement of heavy loaded trolleys (250kg).

When using the storage trolleys, ensure footbrakes are engaged when trolleys are stationary. Take especial care when manoeuvring trolleys on sloping floor surface due to risk of runaway.

Trolleys are not for riding on!

Guardrails are not for leaning on. They are to reduce risk of falling from the stage edge. As the modules themselves are not fixed to the floor, there is risk of overturning when excessive force is applied.

Read instructions and drawings before assembly & use. Ensure stages modules are assembled on a flat floor surface, capable of supporting the stage and its supported loads. Do not modify any of the components without written permission from Superior Storage Solutions.

Avoid standing on the edges of exposed panels as the boards are not permanently fixed down.

In case of any concerns, please contact Superior Storage Solutions.