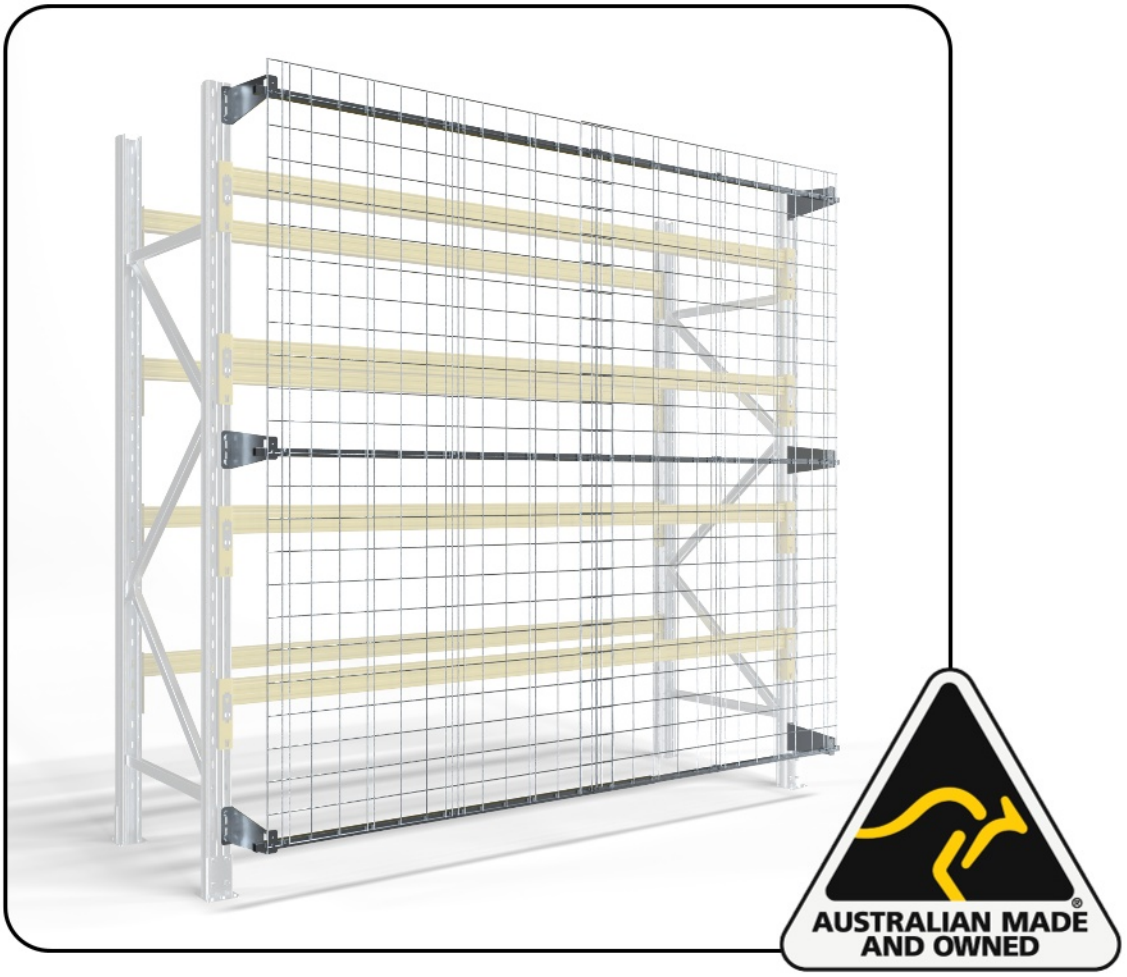
MESHSPAN

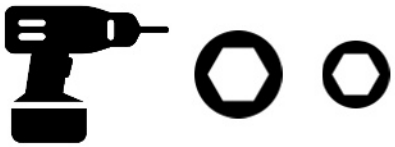
MESH BACKING SYSTEM FOR PALLET RACKING

Installation Manual



AS4084-2034 Compliant | **Simple Installation** | **Protect People & Equipment**

What you'll need:



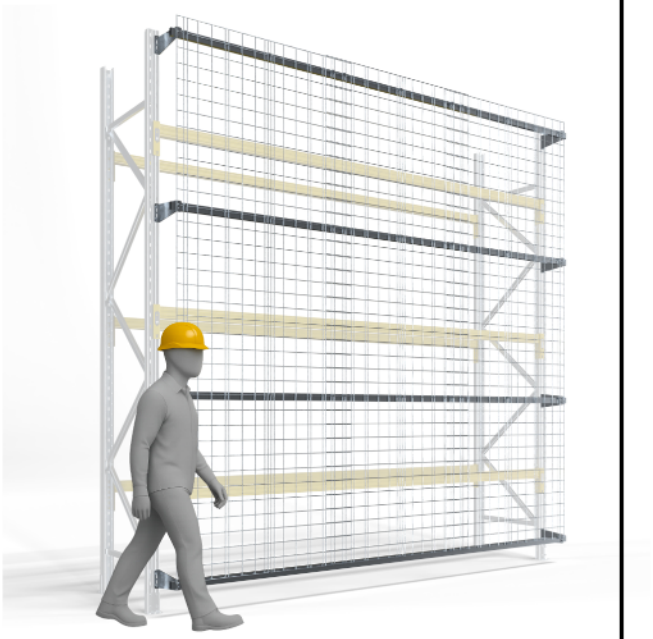
- Cordless Impact Driver
- 13mm Impact Driver Bit
- 8mm Hex Head Driver Bit

Introduction

Meshspan is a purpose-built pallet racking mesh backing that is designed and engineered in Australia to meet Australian Standard AS4084-2023. Developed to prevent stock from falling into pedestrian areas, it helps ensure your storage space is safety compliant. With a focus on protecting people and equipment, Meshspan combines reliable performance with innovative features to meet project specifications and compliance requirements with confidence.

This Installation Manual will provide you with an overview of Meshspan components, and the recommended way to assemble and install the system.

If you require further assistance please don't hesitate to contact our Australian based team on 1300 851 377 or sales@meshspan.au



PLEASE NOTE: Meshspan is NOT a load-bearing structure.

While it is designed to help prevent stock (up to 200kg) from falling, it is not intended to support the weight of stock for extended periods.

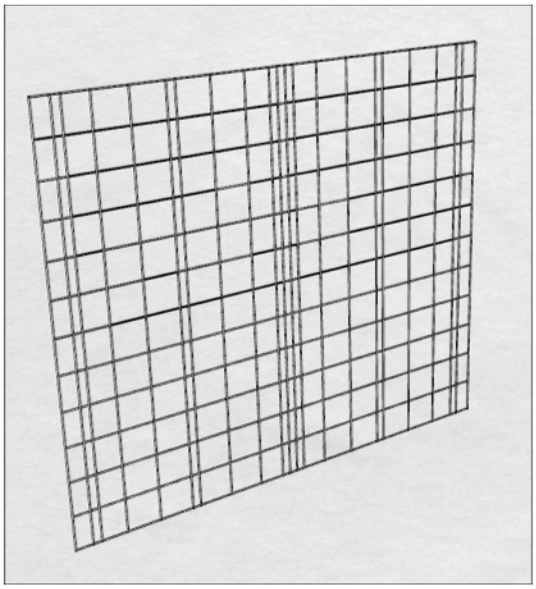
Meshspan is NOT a pallet buffer and is not built to withstand repeated or significant impacts.

Disclaimer

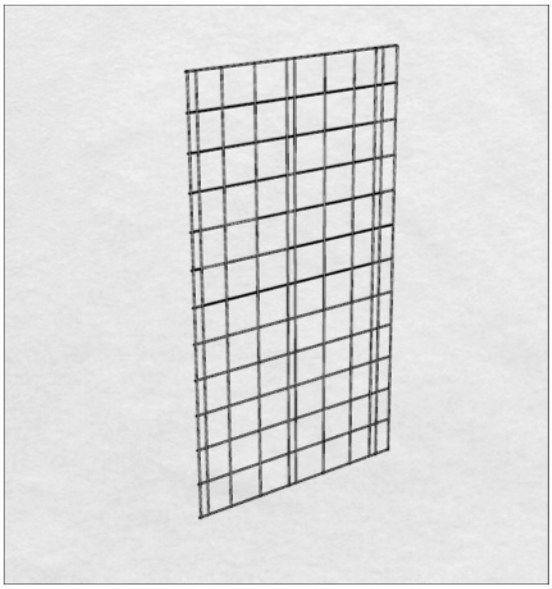
Meshspan is designed and manufactured as a mesh backing system for use on compliant pallet racking structures. It is the responsibility of the purchaser, installer, or end user to ensure that Meshspan is installed correctly, in accordance with relevant Australian Standards (including AS4084-2023), applicable workplace safety regulations, and the specifications provided by a qualified racking engineer or system designer.

Incorrect installation, modification, or use of Meshspan in a manner inconsistent with its intended purpose may result in system failure, personal injury, or property damage. The manufacturer and distributor of Meshspan accept no liability for any loss, damage, or injury resulting from improper installation, misuse, or failure to comply with relevant standards and installation guidelines.

Installation must only be carried out by suitably trained personnel with appropriate industry qualifications. It is the sole responsibility of the purchaser or installer to verify that the pallet racking system on which Meshspan is applied is structurally sound and fit for purpose.

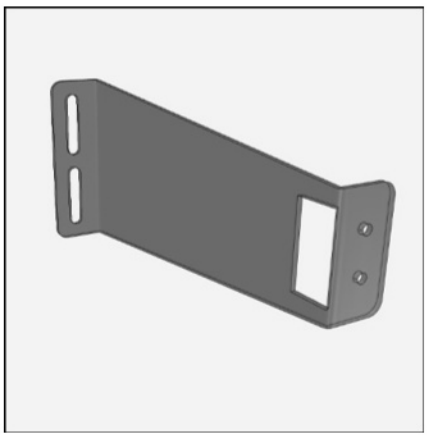


MESH FULL PANEL



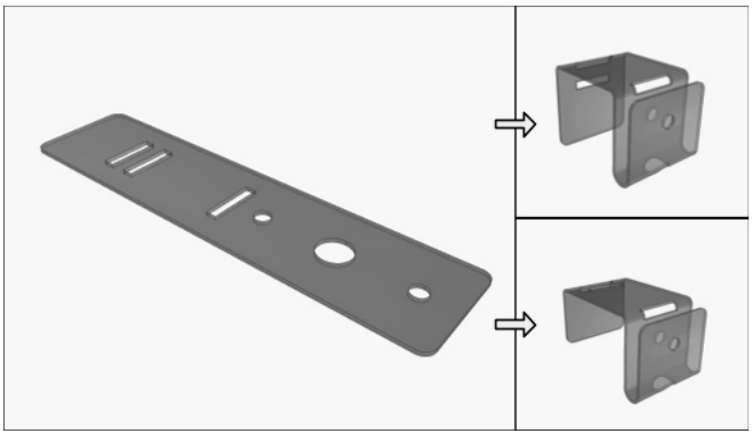
MESH HALF PANEL

Mesh Panels come in two sizes: a Full Panel and a Half Panel. Meshspan Kits will come with multiples of these depending on your bay width.



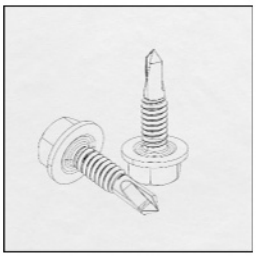
MOUNTING BRACKET

Mounting Brackets are used to secure the Horizontal Tubes to the Pallet Racking.

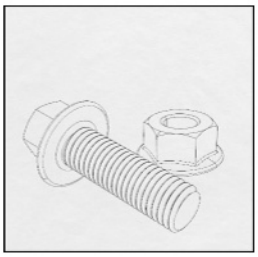


MESH CLIP

Mesh Clips are used to secure the Mesh Panels to the Horizontal Tubes. They are provided as pictured on the left and can be folded in two different configurations depending on Horizontal Beams.

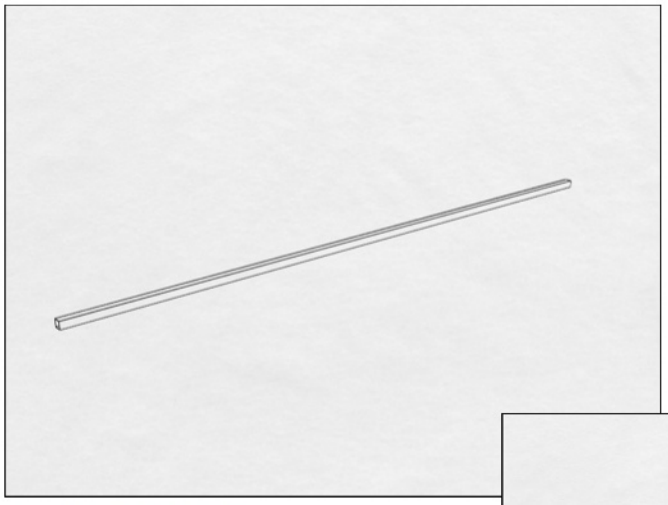


TEK SCREWS 16MM

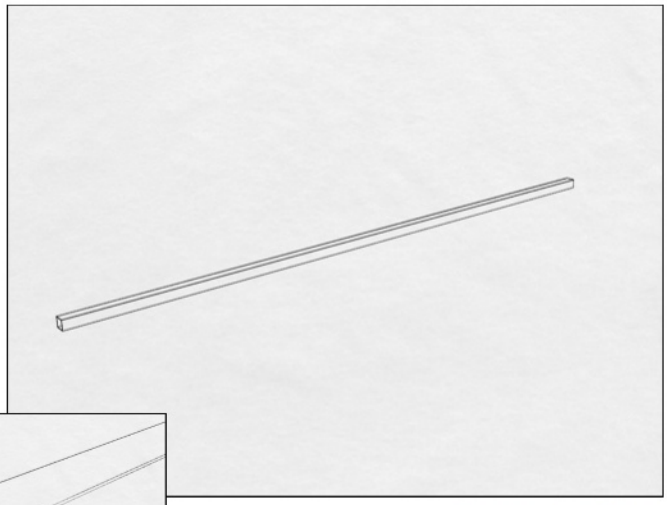


M8 SERRATED BOLTS & NUTS

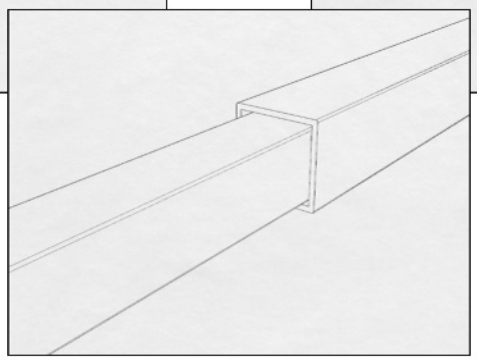
Tek Screws are provided for securing the Mesh Clips and Mesh Panels to the Horizontal Beams and securing the Telescopic Horizontal Tubes once in place. The M8 Serrated Bolts and Nuts are used to secure the Mounting Bracket to the Pallet Racking upright.



20MM PROFILE HORIZONTAL TUBE



25MM PROFILE HORIZONTAL TUBE

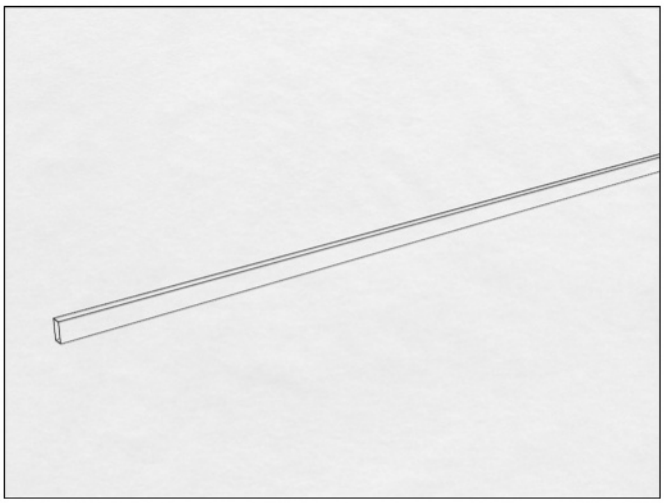


TELESCOPIC HORIZONTAL TUBE

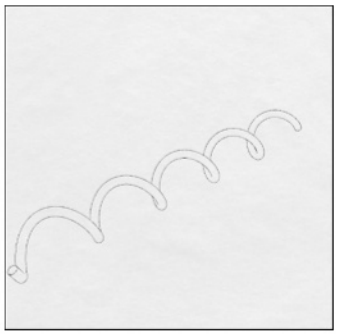
Depending on the bay width of your Pallet Racking you will either receive:

- 20mm profile Horizontal Tubes
- 50mm profile Horizontal Tubes
- Or 20mm and 25mm Horizontal Tubes to be used together as a Telescopic Horizontal Tube.

Refer to Preparation - Mesh Configurations on Page 6 for bay width configuration guides.



50MM PROFILE HORIZONTAL TUBE



SPIRAL JOINER

Spiral Joiners are used to connect Mesh Panels in situations where there is no Horizontal Tube coinciding with the adjacent Mesh Panels.


HARD HAT


SAFETY BOOTS


SAFETY GLASSES


HI VIS


EAR MUFFS

Preparation - Safety Guidelines

Before commencing installation of Meshspan, it is critical to ensure that the work area, personnel, and equipment are properly prepared. The following safety measures must be implemented:

1.1 Working at Heights

- Use only suitable elevated work platforms (EWP) or fall protection systems rated for the height of the racking system.
- All personnel performing work at heights must hold current, nationally recognised Working at Heights certification and be trained and competent in the use of fall protection equipment.
- Inspect all height access equipment (e.g., scissor lifts, harnesses, anchor points) prior to use.

1.2 Work Area Clearance

- Establish a minimum 10-metre diameter exclusion zone around the installation area.
- Use physical barriers, cones, and signage to restrict access to authorised personnel only.
- Ensure the area is free of slip, trip, and fall hazards, and remove any loose items or debris from around the racking.

1.3 Personal Protective Equipment (PPE)

The following PPE must be worn at all times during the installation process:

- Hard hat (compliant with AS/NZS 1801)
- Safety boots (steel cap, slip-resistant sole)
- Safety glasses (impact rated)
- Hearing protection (earplugs or earmuffs, depending on equipment used)
- High-visibility clothing
- Protective gloves (suitable for handling steel mesh and fixings)

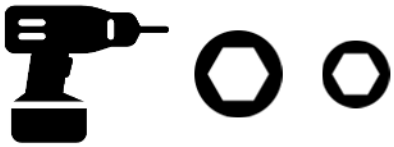
1.4 General Safety Requirements

Ensure a site-specific risk assessment and Safe Work Method Statement (SWMS) are completed before starting work.

- Confirm all tools and equipment are in good working condition and suitable for the task.
- Assign a spotter or safety observer where high-risk activity is being performed.
- Ensure emergency procedures are known and accessible to all personnel on site.

Failure to comply with these safety guidelines may result in serious injury, damage to equipment, or invalidation of product warranties.

Preparation - Tools Required



You will require the following tools and equipment in order to assemble and install Meshspan Kits.

- Cordless Impact Driver
- 13mm Impact Driver Bit
- 8mm Hex Head Driver Bit

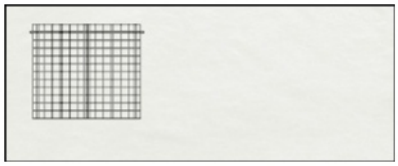
Preparation - Mesh Configurations

Each bay width consists of multiples of Full and Half Mesh Panels as well as Horizontal Tubes. Use the guide below as to the configuration of your Mesh Panels across the width of your Pallet Racking bay. The Panels will overlap for some configurations. If you have a custom bay width please consult with a Meshspan representative regarding Mesh Panel configuration.

NOTE: Mesh Panels staggered for illustration purposes only.

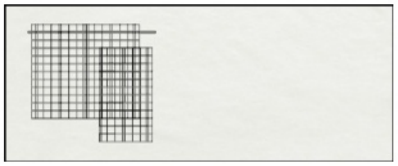
1372MM WIDE BAY

1 x Full Mesh Panel
20mm Profile Horizontal Tube/s



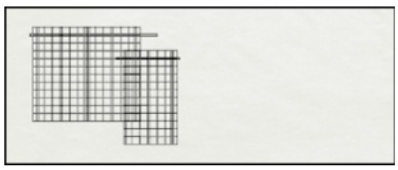
1524MM WIDE BAY

1 x Full Mesh Panel, 1 x Half Mesh Panel
20mm Profile Horizontal Tube/s



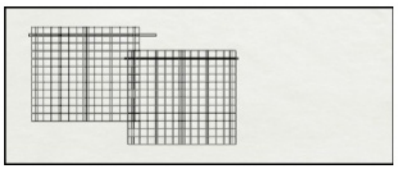
1829MM WIDE BAY

1 x Full Mesh Panel, 1 x Half Mesh Panel
20mm + 25mm - Telescopic Horizontal Tube/s



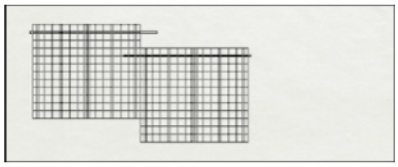
2591MM WIDE BAY

2 x Full Mesh Panel
20mm + 25mm - Telescopic Horizontal Tube/s



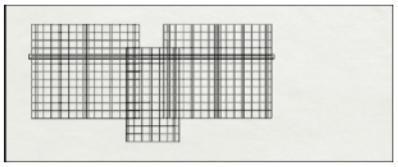
2743MM WIDE BAY

2 x Full Mesh Panel
20mm + 25mm - Telescopic Horizontal Tube/s



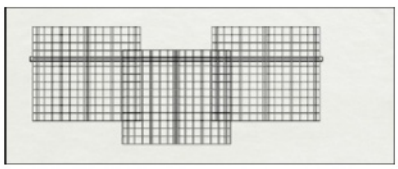
3048MM WIDE BAY

2 x Full Mesh Panel, 1 x Half Mesh Panel
50mm Profile Horizontal Tube/s



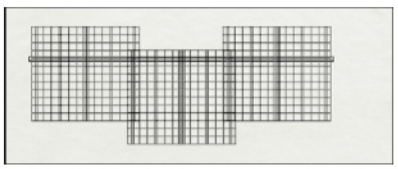
3658MM WIDE BAY

3 x Full Mesh Panel
50mm Profile Horizontal Tube/s



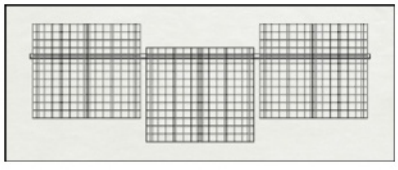
3810MM WIDE BAY

3 x Full Mesh Panel
50mm Profile Horizontal Tube/s



4267MM WIDE BAY

3 x Full Mesh Panel
50mm Profile Horizontal Tube/s

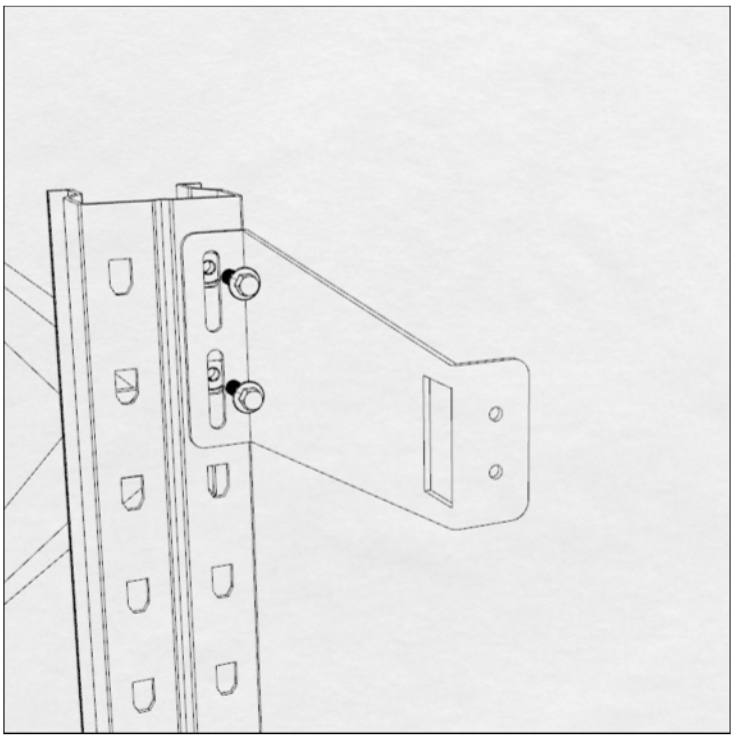


Overview

Throughout the development of Meshspan, we have thoroughly tested and refined the safest and most efficient installation method. Please review the following important information before continuing:

- Review Preparation documentation and make sure all safety protocol is followed, and all tools and equipment are ready prior to commencing installation
- The easiest method of installation is to work on one Pallet Racking bay at a time - working from the top down.
- You must have at least 1 Horizontal Tube per Mesh Panel row and a maximum distance between Horizontal Tubes of 1500mm.
- The steps outlined below cover the main installation instructions and steps will need to be repeated for multiple Mesh Panels and Pallet Racking bays.

1. Fix topmost Mounting Brackets



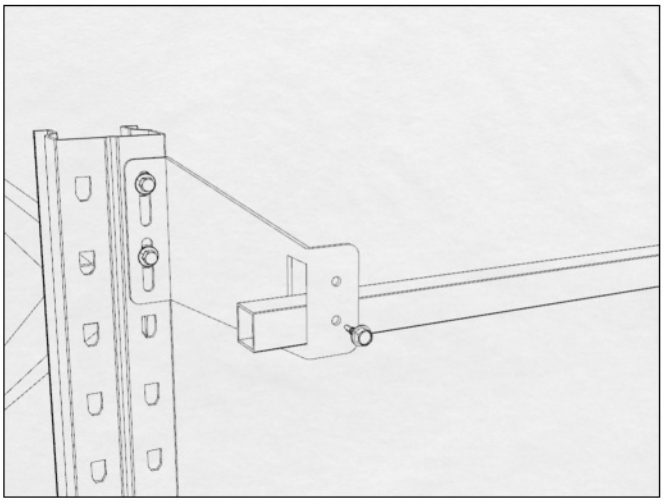
1.1 - Using the Serrated Flange Bolt and Nuts, fix the the topmost Meshspan Upright Brackets on either side of the bay. Ensure the bracket extension is aligned with the bay side of the frame post and that the bracket is facing inwards, as shown above.

1.2 - Two Serrated Flange Bolts and Nuts are to be used for each Meshspan Upright Bracket and inserted at two separate bracket fixing slots and two separate frame post perforations.

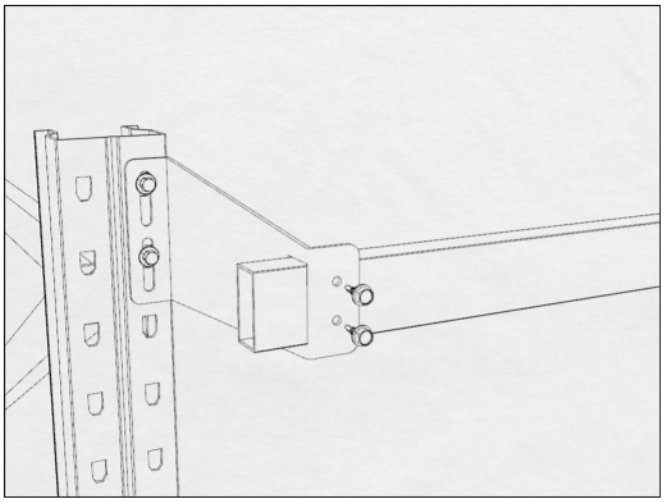
1.3 - Tighten the bolt and nut to a minimum of 22Nm and maximum of 28Nm of torque.

1.4 - Fit and fix the Horizontal Tube and top most row of Mesh Panels before installing any other Mounting Brackets below.

2. Fix Horizontal Tube

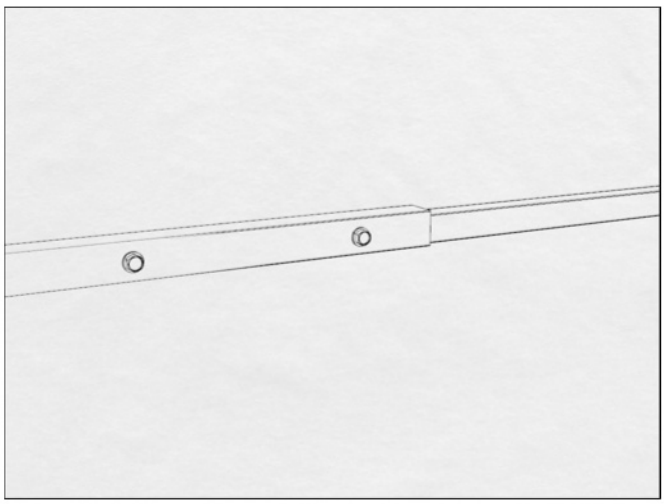


20MM PROFILE HORIZONTAL TUBE



50MM PROFILE HORIZONTAL TUBE

2.1 - Insert the Horizontal Tube into the brackets, centre and fix to the bracket with one Tek Screw for 20/25mm and two for 50mm on each Mounting Bracket.



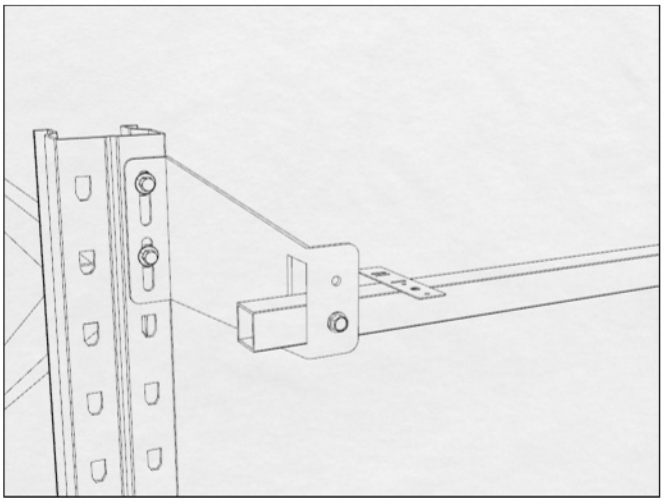
20/25MM TELESCOPIC HORIZONTAL TUBE

2.2 - For the bay widths using Telescopic Horizontal Tube arrangement - fit the 20x20 tube inside the 25x25mm tube and arrange in the Mounting Brackets so that the tube protrudes 40mm past the Mounting Bracket on each side.

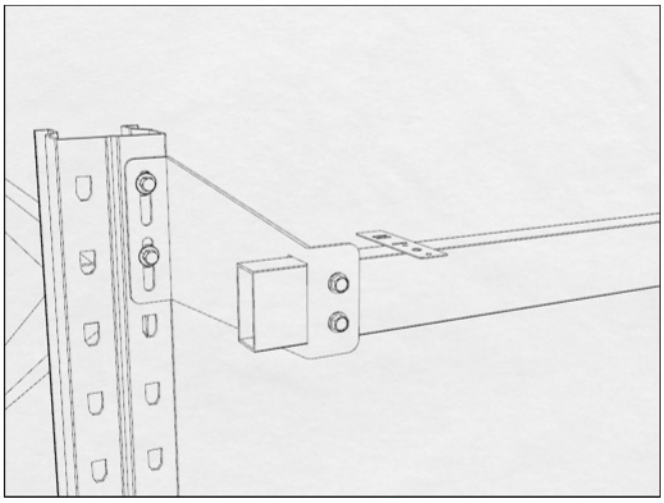
2.3 - Secure to the Mounting Bracket with one Tek Screw per bracket.

2.4 - Fix the tube at this length using the Tek Screws at approximately 30mm and 80mm in from the middle end of the 25x25mm tube to fix the internal Horizontal Tube's position.

3. Fit and Fix Mesh Clips

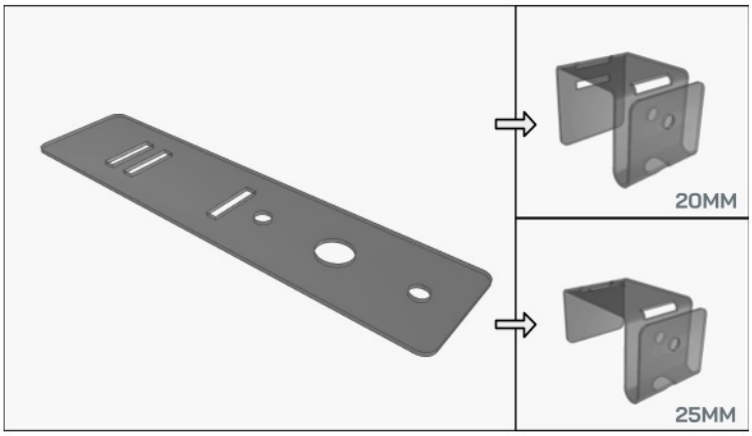


20/25MM PROFILE HORIZONTAL TUBE

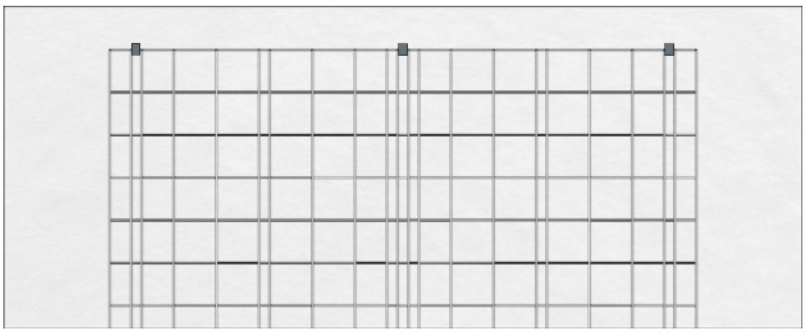


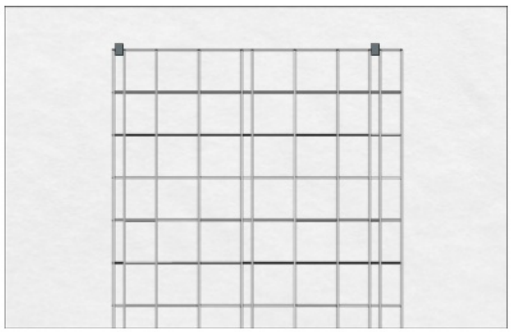
50MM PROFILE HORIZONTAL TUBE

3.1 - Position the Mesh Clip on the top of the Horizontal Tube and bend over the tube, by hand, at the bend points for either the 20mm deep or 25mm deep Horizontal Tube. Bend at front bend point firstly and then the rear bend point that aligns with the back of the tube.



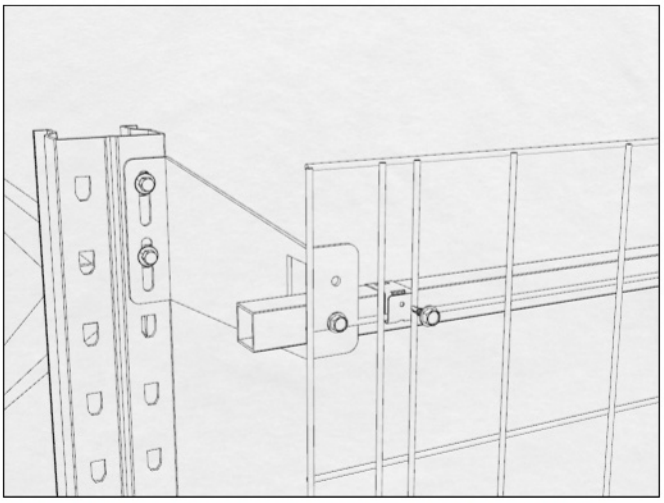
3.2 - Whilst holding the Mesh Clip firm on top of the tube, bend the front section of the Mesh Clip upwards to create the hanging saddle for the Mesh Panels.



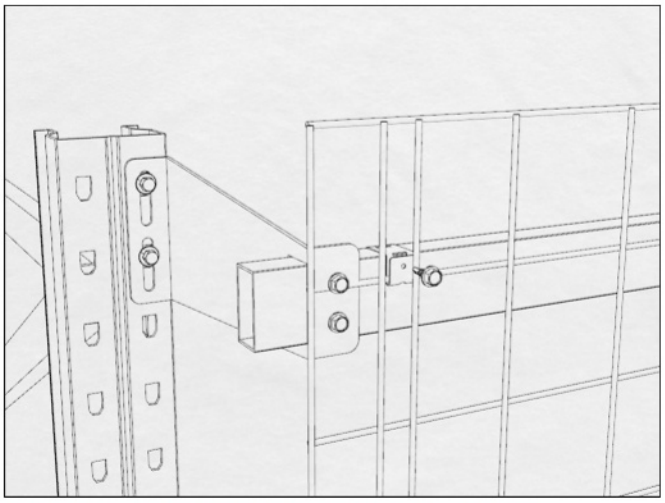


3.3 - Position the Mesh Clips at the hanging points of the Mesh Panels, as shown. The Full Mesh Panels require 3 x Mesh Clips at the top and the Half Panels require 2 x Mesh Clips. They MUST be positioned at the specified hanging points for each Mesh Panel, including where Mesh Panels are overlapping, to meet engineering specifications.

4. Fit and Fix Mesh Panels



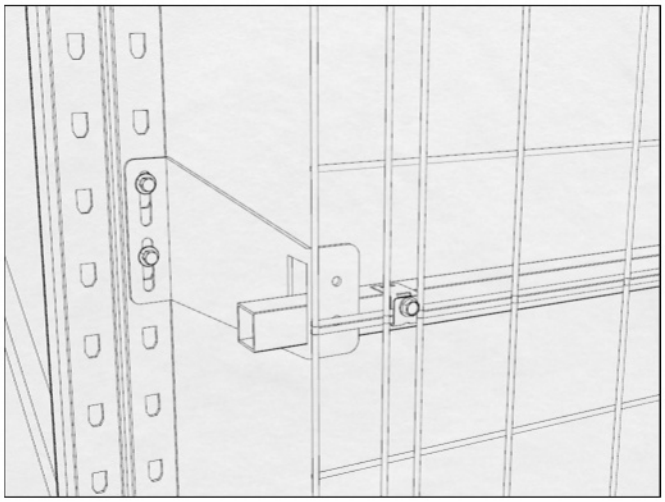
20/25MM PROFILE HORIZONTAL TUBE



50MM PROFILE HORIZONTAL TUBE

4.1 - Temporarily hang the Mesh Panel on the Mesh Clips at the mesh fixing points. Permanently fix the Mesh Panel with the Tek Screws through the guide holes in the Mesh Clips.

5. Repeat Steps Downward



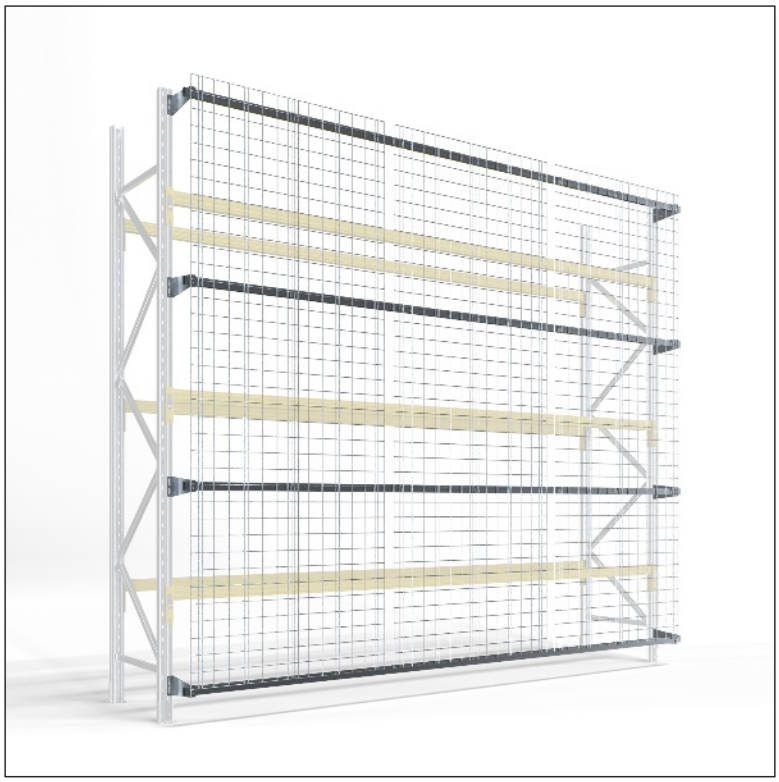
5.1 - Once the top most row of Mesh Panels has been installed. Continue to repeat steps 1 - 4 moving downward. Fit the Mounting Brackets, Horizontal Tube and Mesh Clips at the bottom of the first Mesh Panel row.

5.2 - Hang the next row of Mesh Panels in these lower Mesh Clips and secure the horizontal wire of both the upper and lower Mesh Panels within the one Mesh Clip, as shown.

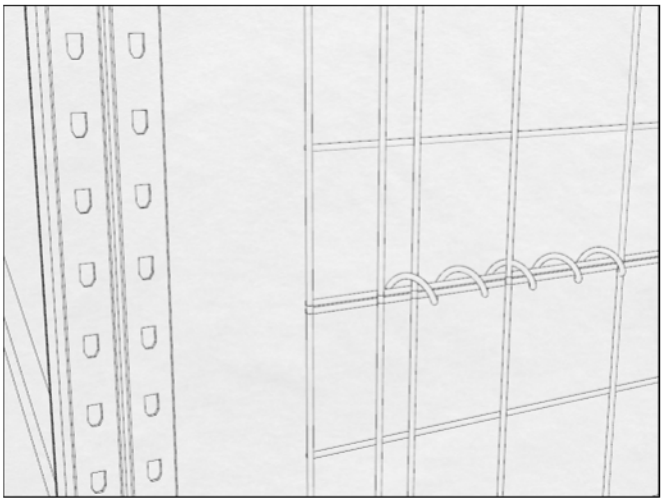
5.3 - It is important that Full Mesh Panels have 3 Mesh Clips at the top and 3 at the bottom and Half Mesh Panels have 2 Mesh Clips at the top and 2 at the bottom.

5.4 - The bottommost row of Mesh Panels can be overlapped with the Mesh Panel above to attain the desired finish height.

5.5 - Proceed with installing Meshspan on adjacent bays until complete.



When Meshspan Arrangement is Interrupted by Pallet Racking Beams



When the Horizontal Tube placement is interrupted by pallet racking beam configuration, Spiral Joiners can be used.

Horizontal Tubes can be positioned above or below the Pallet Racking beam provided the below specification is met.

Spiral Joiners are wound on to the horizontal wires of the Mesh Panels at the hanging points where the Mesh Clips would have otherwise been positioned. Full Mesh Panels require three and Half Mesh Panels require two Spiral Joiners.

IMPORTANT NOTE: Position Mounting Brackets as required in between Pallet Racking beams, however the following rule MUST be adhered to:

You MUST install at least THREE Horizontal Tubes per TWO Mesh Panel rows and a maximum vertical distance between Horizontal Tubes of 1500mm.

If you require more components to be compliant please don't hesitate to contact us.

Maintenance and Inspection

To ensure ongoing compliance with AS 4084:2023 and to maintain a safe warehouse environment, Meshspan recommends that all mesh backing systems are inspected regularly and after any incident that may compromise their integrity.

Inspection Frequency

- Scheduled Inspections - Conduct inspections as part of your facility's regular racking maintenance program, and no less than once every 12 months. These inspections should be carried out by a competent person familiar with pallet racking and mesh backing systems.
- Post-Incident Inspections - Perform an immediate inspection following any event that may result in impact or damage to the mesh backing, including forklift contact, falling stock, or structural collisions.

Inspection Scope

Inspections should, at minimum, include the following checks:

Mounting Brackets

- Confirm all Mounting Brackets are securely fastened to the racking uprights. Tighten bolts and nuts to a torque of 22-28 Nm as per Meshspan installation specifications.
- Verify the bracket slots align correctly with the Horizontal Tubes and Mesh Panels, ensuring the assembly is square and seated properly.
- Inspect for bends, cracks, corrosion, or any permanent deformation. Replace damaged components immediately.

Horizontal Tubes

- Ensure Horizontal Tubes are firmly fixed to Mounting Brackets and show no signs of bending or deflection.
- Confirm all fastening points remain secure and free from wear.

Mesh Panels

- Confirm no load is bearing directly on the Mesh Panels. Meshspan panels are designed to prevent items from falling through the racking, not to support weight.
- Check panels for straightness, signs of impact, corrosion, or permanent deformation.
- Verify that panel tension remains firm with no looseness.

Mesh Clips

- Ensure all Mesh Clips are present and fastened securely.
- Replace any missing, damaged, or loose clips immediately.

If any component – including Mesh Panels, Mounting Brackets, Horizontal Tubes, or Mesh Clips – is damaged, permanently deformed, or missing, it must be replaced before the racking system is returned to service. Only genuine Meshspan replacement parts should be used to maintain compliance and safety.

HELP & SUPPORT

For more information about Meshspan or if you have any questions about installation please don't hesitate to contact our Australian based team:

Phone: 1300 851 377 Email: sales@meshspan.au