# MITE ( POSI-JOIST INSTALLATION AND HANDLING GUIDE

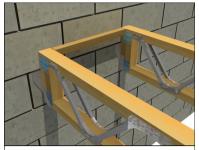
# \*\* Please ensure joists are the correct orientation \*\* Crer



### **Standard Details**

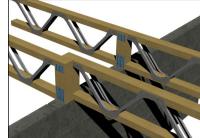


**Built Into Masonry** Block work to continue between Posi-Joists™ to provide restraint. Note: This is not allowed on single skin external walls



**Masonry Hanger Detail** 

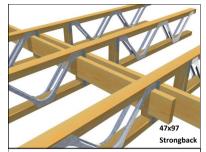
TC restraint fixed between Joists. Restraint may be required if building is 3 storey. Please refer to layout (Choose correct hanger for load bearing width & coursework level of hanger bearing flange.)



Shared internal bearing and continuous Posi-Joist.

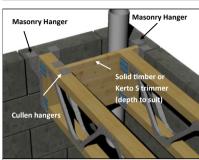


**Horizontal Restraint Strap Fixed to Nogging** Detail to be used in instances where there is no Stronaback to fit the strap to. 47x97 TR26 nogging nailed to underside of top chord of Posi-Joists with 3.1 x 75mm long galvanised

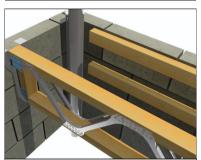


Strongback Detail—Posi-Joists™ with built in verticals

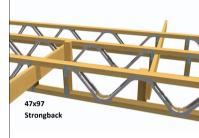
Posi-Joists™ can be designed with built in timber verticals for strongback fixing. The stronaback is twice nailed as above



Fixing Around Soil Vent Pipe Using Trimmer See Robust Detail E-FT-3 (11) for treatment of service void penetrating the separating floor.

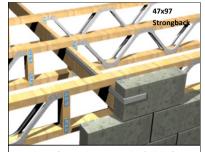


**Fixing Around Soil Vent Pipe Using Bearers** 47x97 bearers fixed directly to the wall to pick up both floor and ceiling.



### Strongback detail for Change of Span

38x75mm (min) blocks twice nailed to top and bottom members and twice nailed to brace using 3.1x75mm long galvanised wire nails.

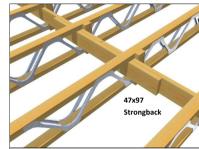


**Horizontal Restraint Straps Fixed Directly to** Strongback

Strap fixed with a minimum of four fixings of which at least one is to be over the third joist, using 3.1x75mm long galvanised wire nails.

Always position strongback tight to the under side of the top chord. As close as possible to centre of joist for maximum effect.

Insert strongback through Posi-Joists™ before fixing joists. It may not be possible after the joists have been fixed.

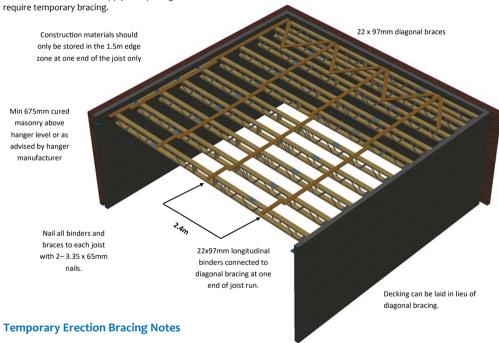


#### **Strongback Splice**

1200mm long splice fixed with 10 no 3.1x100mm long galvanised wire nails each side of splice, nailed through and clenched over on

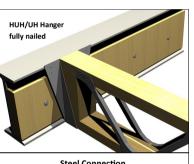
## **Site Installation of Floors**

This diagram indicates **temporary** erection bracing only. It is applicable to both masonry and timber frame construction. It does not apply to top hung Posi-Joists in timber frame construction which do not

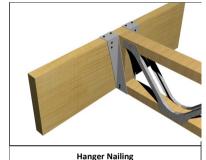


The builder is responsible for identifying and minimising the risks involved in erecting Posi-Joists to ensure that the health and safety of all workers is maintained. Builders should be aware of the health and safety responsibilities imposed on them by the Construction (Design and Management) Regulations 1994. Proper erection procedures and bracing are vital to the safe construction of Posi-Joist floors. The following notes may assist builders in preparing a safety assessment.

- Un-braced Posi-Joists may be unstable.
  - Do not allow anyone to walk on un-braced Posi-Joists. Do not store building materials on un-braced Posi-Joists
  - Posi-Joists should be erected straight and vertical. The maximum  $\,$ deviation from horizontal should not exceed 10mm and the maximum deviation from vertical should not exceed 2mm.
- Temporary bracing comprises diagonal bracing, longitudinal binders and permanent strong-backs. All longitudinal binders, diagonal braces, strong-backs and hangers
- should be completely installed and fully nailed as detailed. Lateral strength should be provided by a diagonally braced system across at least 3 Posi-Joists as shown in the Erection Bracing dia-
- gram. Additional braced and blocked systems should be added at 12m spacing in long joist runs.
- Construction materials may only be stored on joists when all bracing is in place and the material should be spread over at least 4 joists and not more than 1.5m from a support. Floor/ ceiling boards may be stacked up to 250mm high (150kg per ioist at 600mm centres, 100 kg per joist at 400mm centres) or
- Flooring should be fully fixed to the Posi-Joists before additional loads are placed on the floor.
- Temporary bracing may be progressively removed as decking 10.



**Steel Connection** Timber and bolt details by engineer (supplied by others).

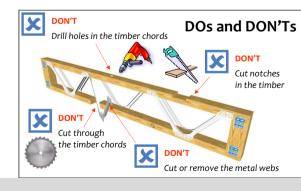


Nail all holes on hanger If in doubt, ask.

2 Ply Joists to be fixed in accordance with the

attached details.



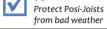




Use the open web feature for services



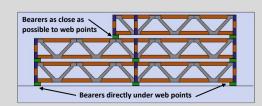




# **Site Handling & Storage**

Storage on site should be for a limited period of time prior to erection of the Posi-Joists™.

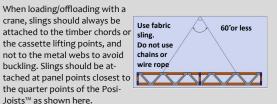
Posi-Joists™ should either be stored vertically or on the flat. If stored vertically there should be intermediate bearers at node points not within the bay of a joist, as shown below. If stored in a flat position, sufficient bearings should be provided to prevent excessive lateral bending.



It is recommend that completed Posi-Joists™ be strapped together and wrapped in a waterproof protective covering to protect them from short term exposure to inclement weather.

Special precautions should be taken when stacking top chord supported floor cassettes to prevent the stack lozenging in storage. Additional bracing to the ends of the stack should be fixed to stop lateral movement. Care should be taken when handling the Posi-Joists  $^{\!{\scriptscriptstyle\mathsf{TM}}}$  to avoid bending, twisting or dropping.

When loading/offloading with a crane, slings should always be attached to the timber chords or sling. the cassette lifting points, and not to the metal webs to avoid buckling. Slings should be atthe quarter points of the Posi-Joists<sup>™</sup> as shown here.



Posi-Joists  $^{\scriptscriptstyle\mathsf{TM}}$  are generally placed perpendicular to the load bearing supporting walls and should be located so that the distance between them does not exceed the design spacing always consult the Posi-Joist™ layout drawing and proceed with erection of the floors as follows:

- Plan the erection sequence and place the Posi-Joists™ close to where they are required, only distribute a sufficient number of joists around the building which an be erected in a reasonable period of time. Posi-Joists™ should be protected from inclement weather and stored as noted above
- **2-** Before lifting the Posi-Joists<sup>™</sup> to scaffold level do make sure the correct end of the joist is at the appropriate support as the end details may be different. Also be aware of any internal supports which are being used and that the special internal bearing detail for the joist is in the correct position.
- 3- If the Posi-Joists™ are supported over more than 2 supports make sure all the supports are the same level and when the joists are lifted into place they rest on all of the supports.
- 4- If the Posi-Joists™ are supported on masonry hangers, make sure they are the ones specified and are firmly anchored in place and that the masonry is cured in line with hanger requirements. Joists should have a full bearing with no more than a 5mm gap between the end of the joist and the face of the hanger. Masonry hangers with a cavity return and integral strap provide lateral restraint to wall heads.
- 5- Make sure the Posi-Joists™ are erected the correct way around, the joists will normally be marked "TOP" and the first metal web will normally start at the top of the Posi-Joists.  $^{\!\scriptscriptstyle\mathsf{TM}}$