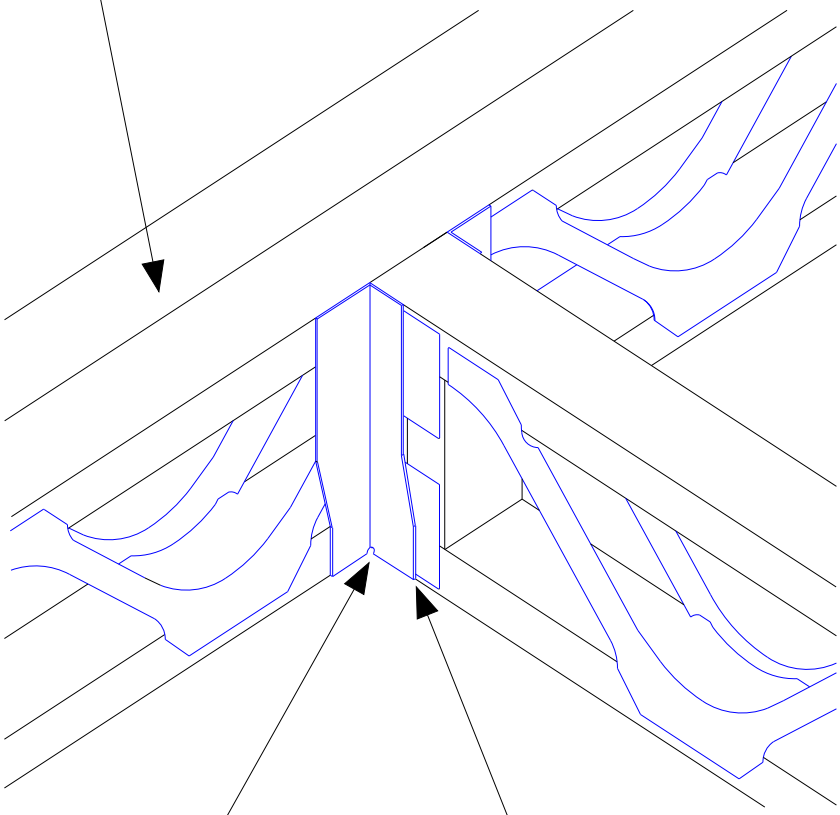
**SDPJ.01.01**

Posi-Joist girder chords fixed together as specified by design



Posi-Joist Hanger

Do not notch bottom chord of Posi-Joist over bottom flange of hanger

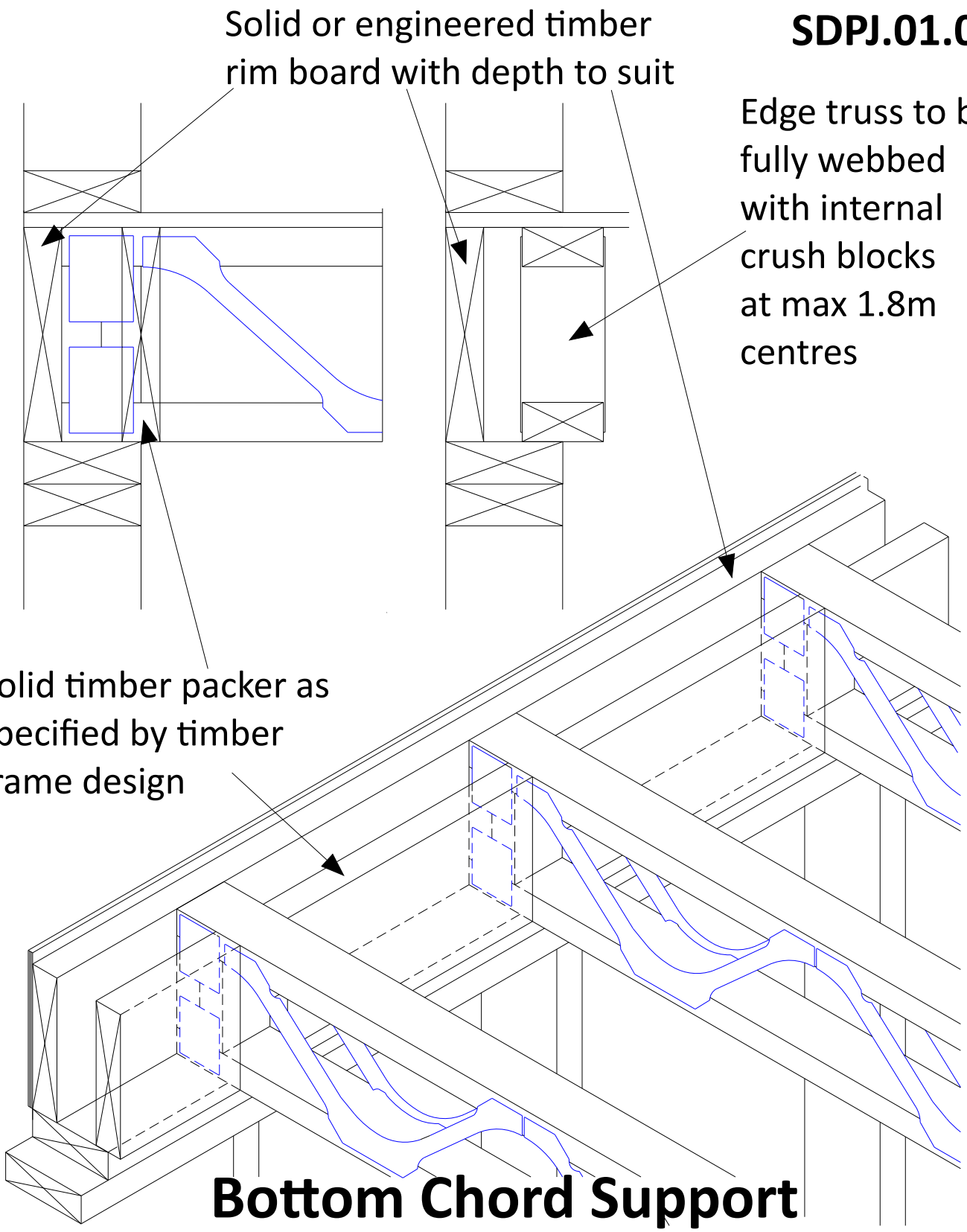
**Note: Loaded face be clearly marked on Posi-Joist girder**

# Posi-Joist To Girder Detail

MiTek®

**MiTek Standard Detail**

**SDPJ.01.02**



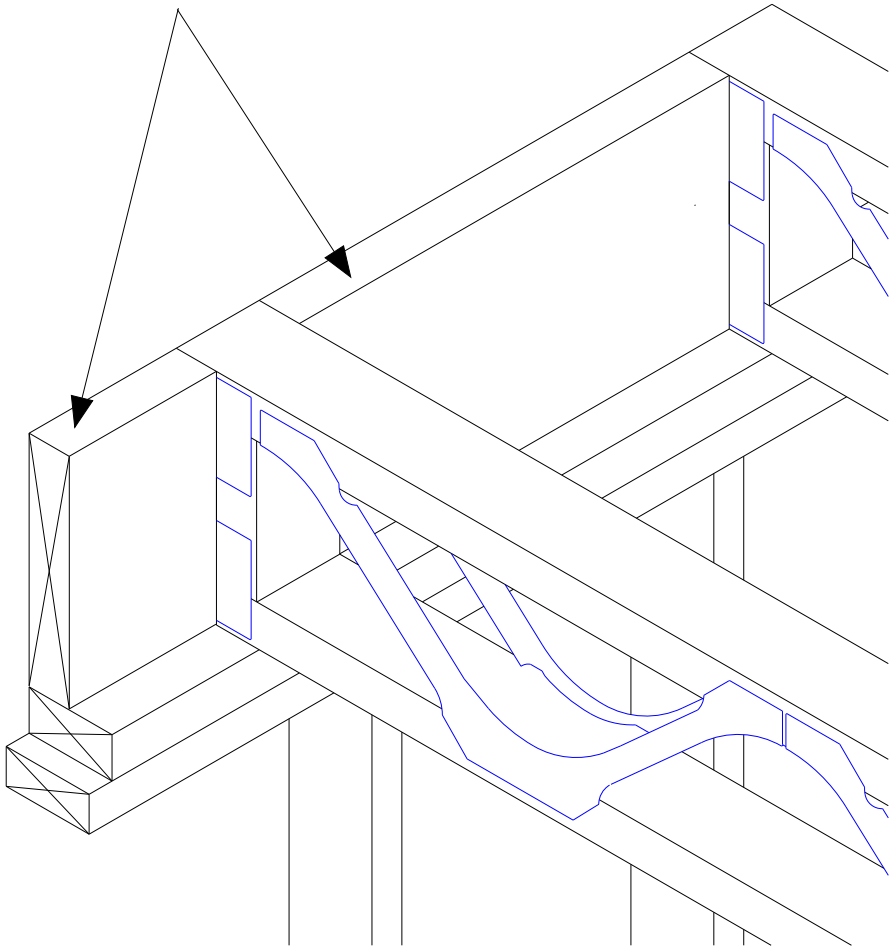

# Bottom Chord Support Timber Frame External (With Rim Board And Packer)

MiTek®

MiTek Standard Detail

SDPJ.01.03

Full depth chord restraint blocking fixed between Posi-Joists



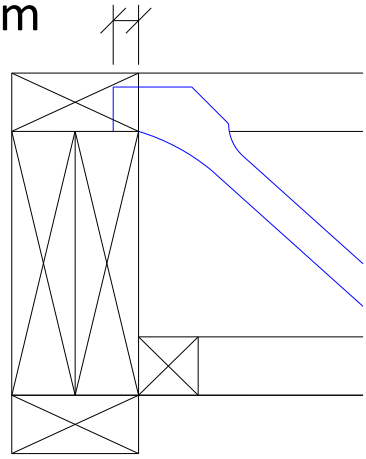
# Bottom Chord Support Timber Frame (With Restraint Blocking)

MiTek®

MiTek Standard Detail

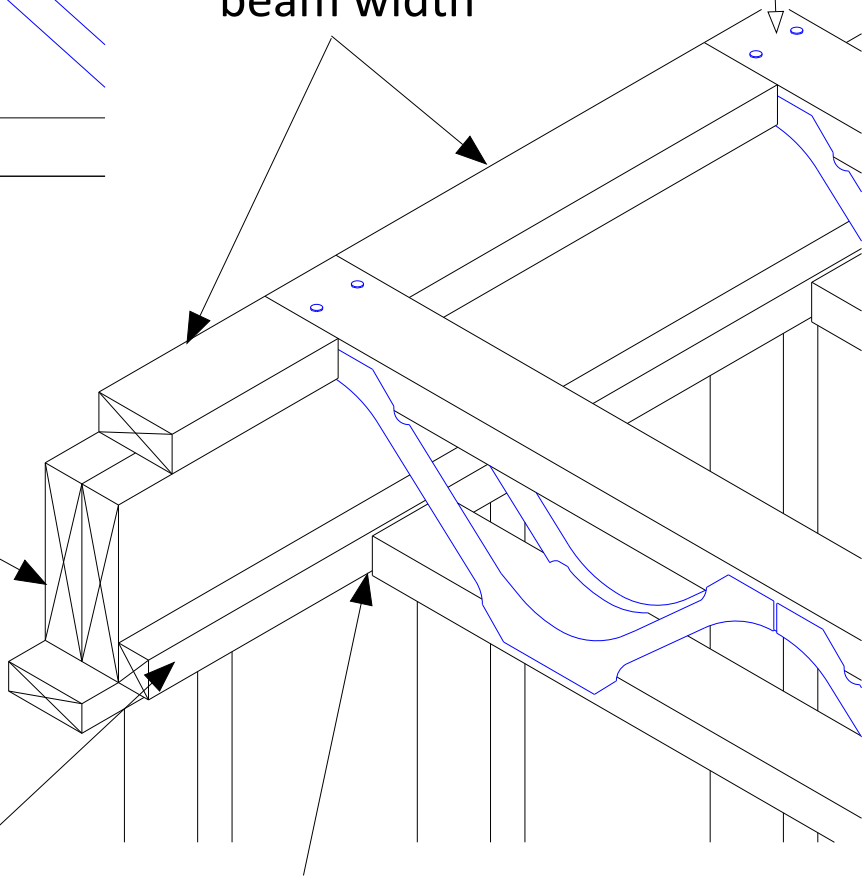
**SDPJ.01.04**

Unless proven by design the Posi-Strut should overhang the bearing by 15mm



2 no nails at each bearing

Packing piece to suit Posi-Joist Top Chord flange depth and ring beam width



Ring beam to suit Posi-Joist depth.

Continuous plasterboard runner

Gap between end of Bottom Chord of Posi-Joist and plasterboard runner

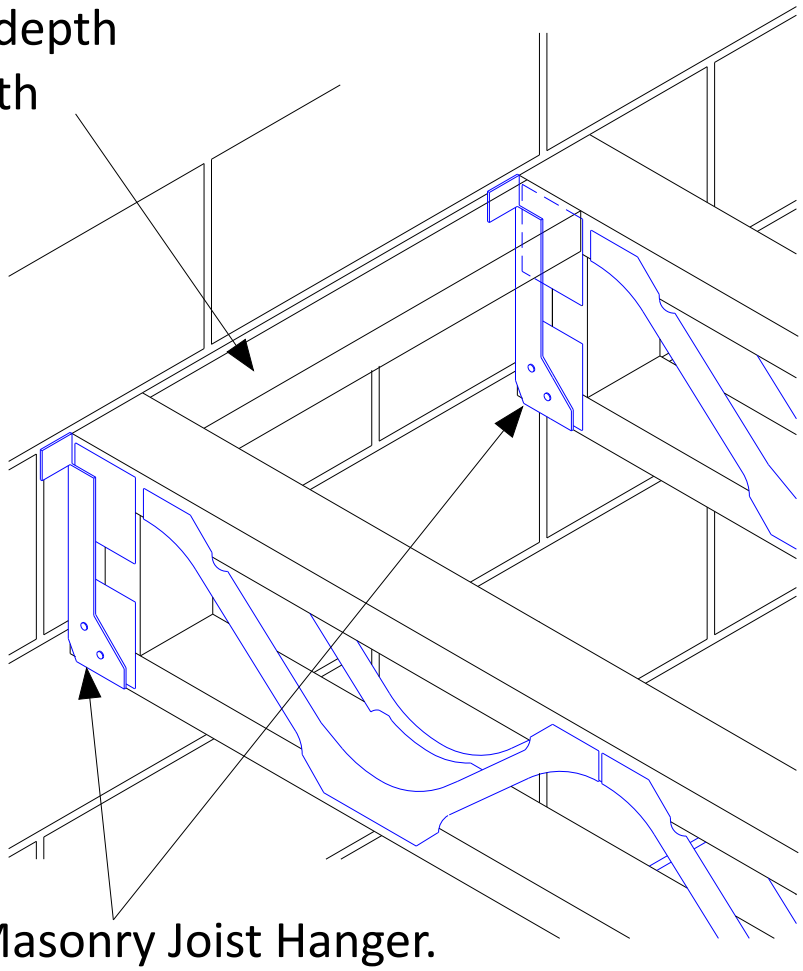
# Top Chord Support Timber Frame Internal or External

MiTek®

MiTek Standard Detail

**SDPJ.01.05**

Noggin between Posi-Joists for decking perimiter support or top top restraint if hanger depth is less than 0.75 x posi depth



Parallel Restraint Straps with non-restraint hanger: Ground, 1st and 2nd Floor at max 2.0m centres and 3rd Floor at max 1.25m centres. 2nd Floor in Scotland at 1.25m centres

Masonry Joist Hanger.
Do not notch bottom chord of Posi-Joist over bottom flange of hanger

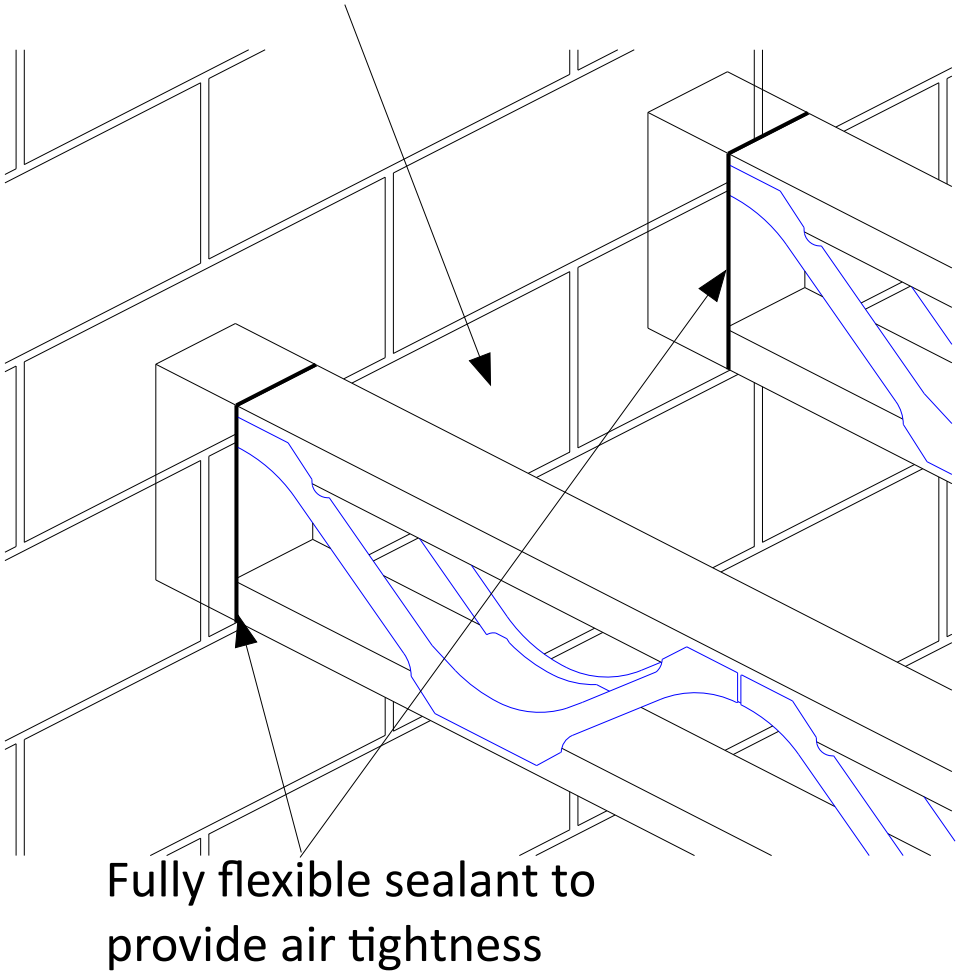
Minimum bearing determined by design.
Choose correct full depth hanger for coursework, load, bearing width and desired bearing level.

# Bottom Chord Support Masonry Hanger with Noggin Restraint

MiTek®

MiTek Standard Detail

SDPJ.01.06




**Note:**

**Plasterboard noggins omitted for clarity**

**This detail is not allowed on single skin external walls**

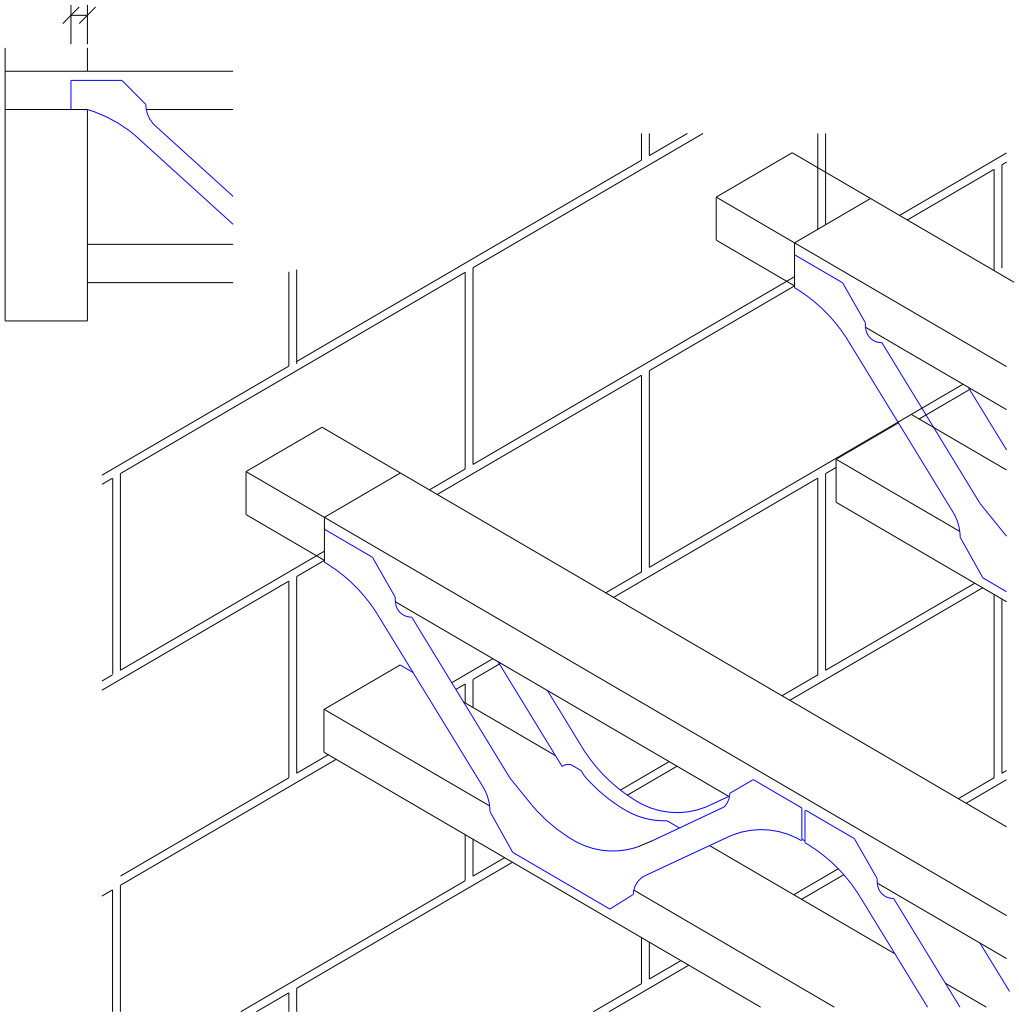
# Bottom Chord Support Built into Masonry

MiTek®

MiTek Standard Detail

SDPJ.01.07

Unless proven by design
the Posi-Strut should
overhang the bearing
by 15mm



**Note:**
**Plasterboard noggins omitted for clarity**

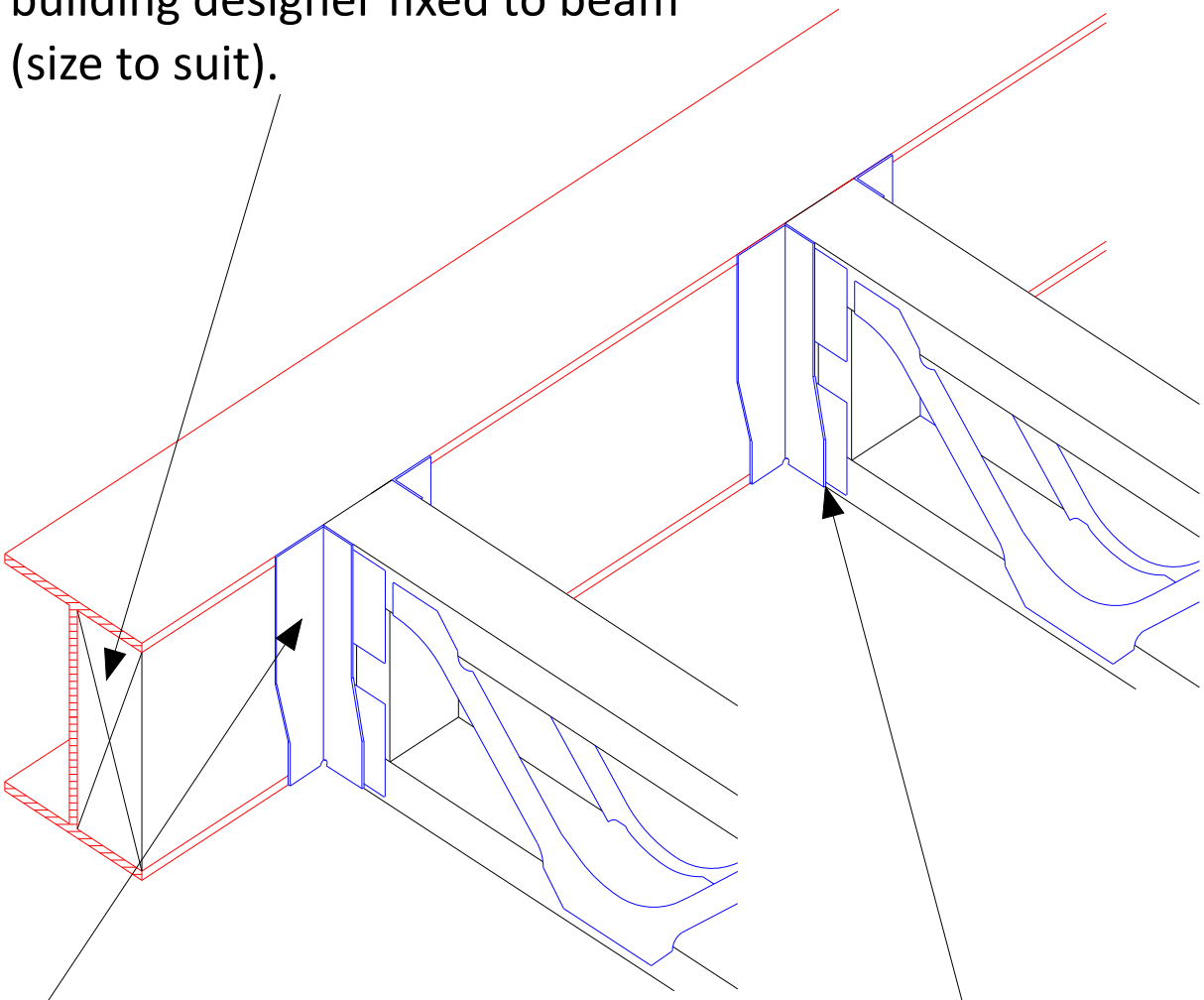
# Top Chord Support Built into Masonry

MiTek®

MiTek Standard Detail

SDPJ.01.08

Timber pack as specified by building designer fixed to beam (size to suit).



Face fix Posi-Joist hanger

Do not notch bottom chord of Posi-Joist over bottom flange of hanger

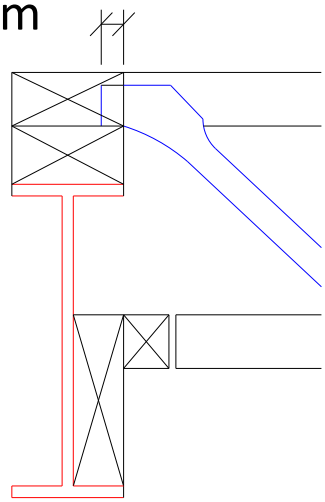
# Bottom Chord Support to Steel Beam

MiTek®

MiTek Standard Detail

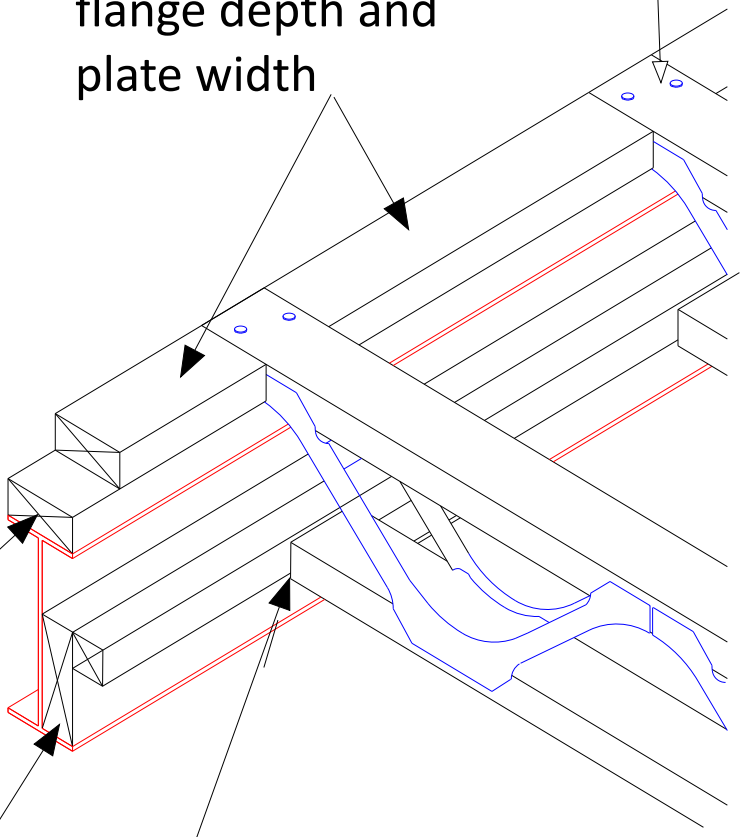
**SDPJ.01.09**

Unless proven by design the Posi-Strut should overhang the bearing by 15mm



2 no nails at each bearing

Packing piece to suit Posi-Joist Top Chord flange depth and plate width



Timber plate fixed to top of steel

Timber pack fixed to beam (size to suit)

Gap between end of Bottom Chord of Posi-Joist and plasterboard runner

# Top Chord Support Fixing To Downstand Steel Beam

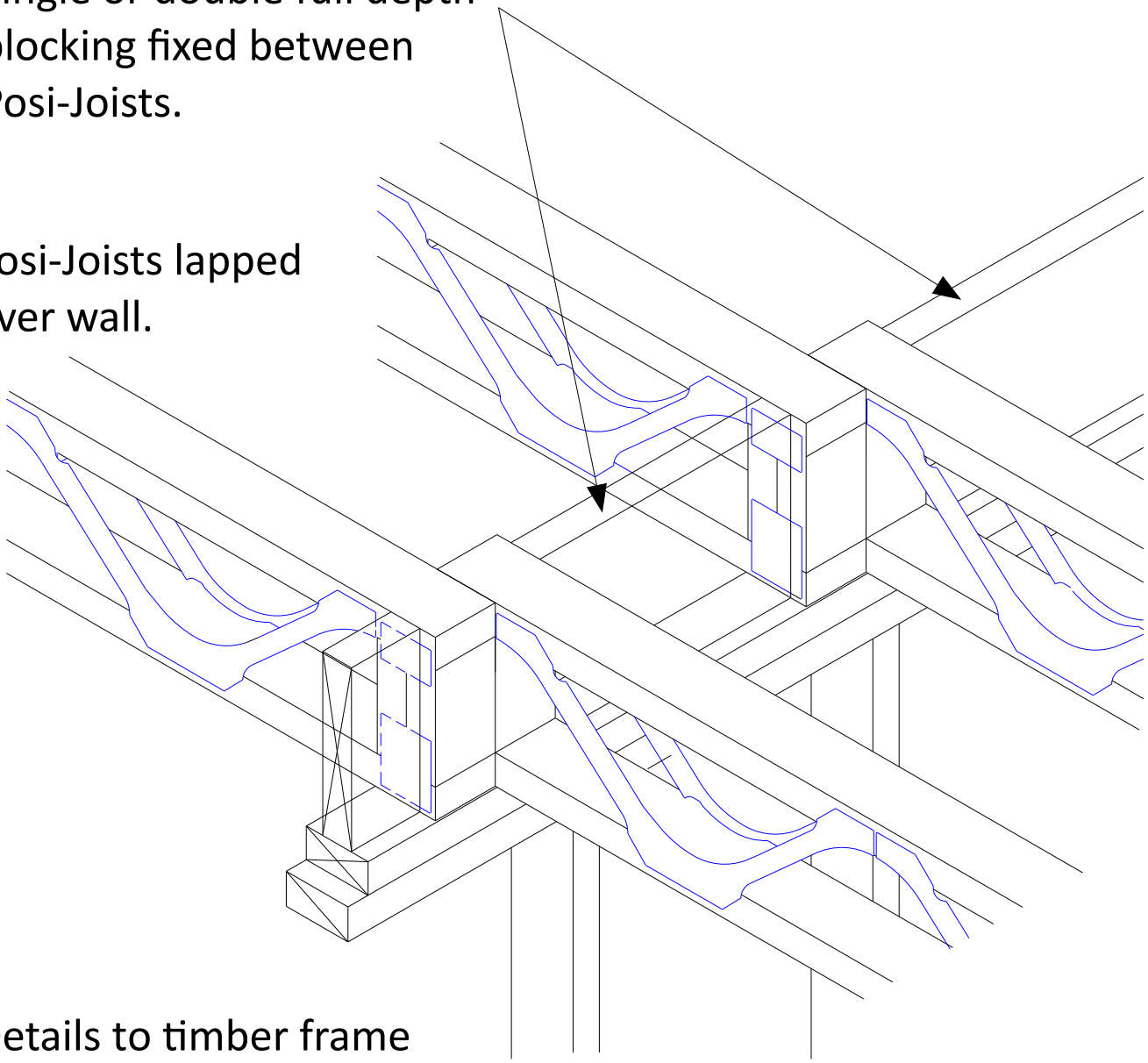
MiTek®

MiTek Standard Detail

SDPJ.02.01

Single or double full depth blocking fixed between Posi-Joists.

Posi-Joists lapped over wall.



Details to timber frame designers spec

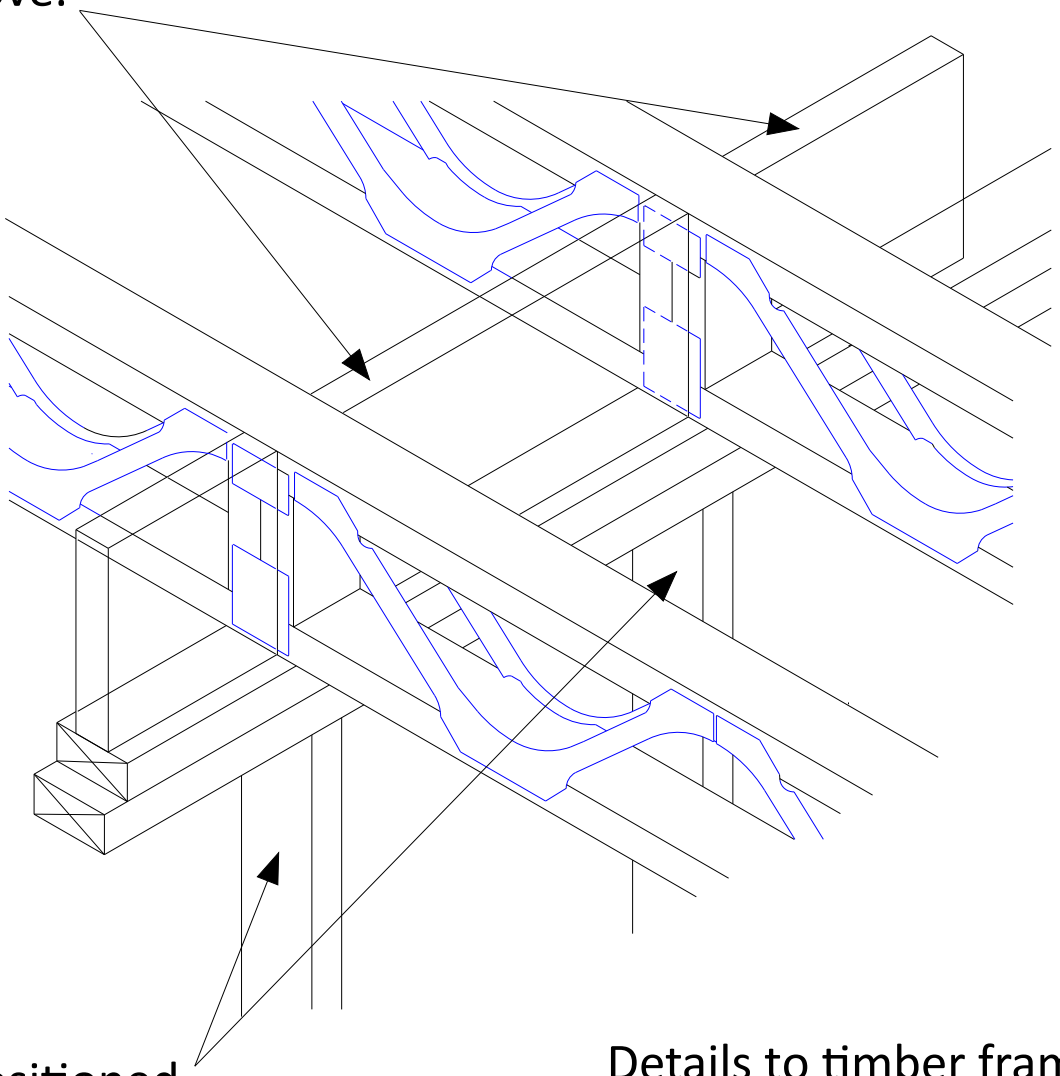
# Bottom Chord Support Timber Frame Internal Lapped (With Full Depth Strutting)

MiTek®

MiTek Standard Detail

SDPJ.02.02

Solid or EWP full depth blocking required between Posi-Joists only if there is a load bearing wall above.



Studs positioned beneath Posi-Joists.

Details to timber frame designers spec

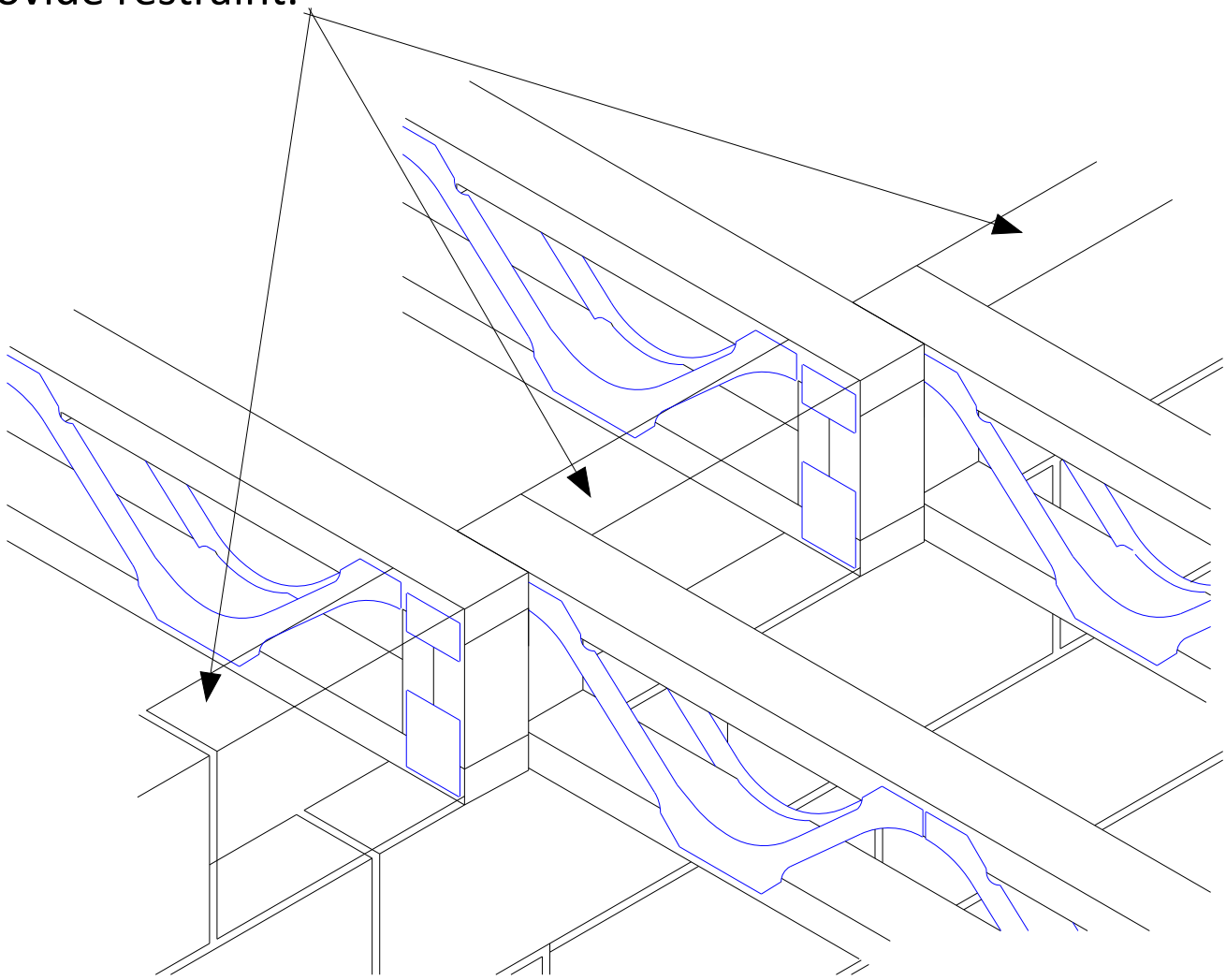
# Bottom Chord Support Timber Frame Internal Continuous (With Full Depth Strutting If Required)

MiTek®

MiTek Standard Detail

SDPJ.02.03

Masonry built up to underside of floor to provide restraint.



Posi-Joists lapped over wall.

**Note: Use on internal load bearing internal walls (not fire walls).**

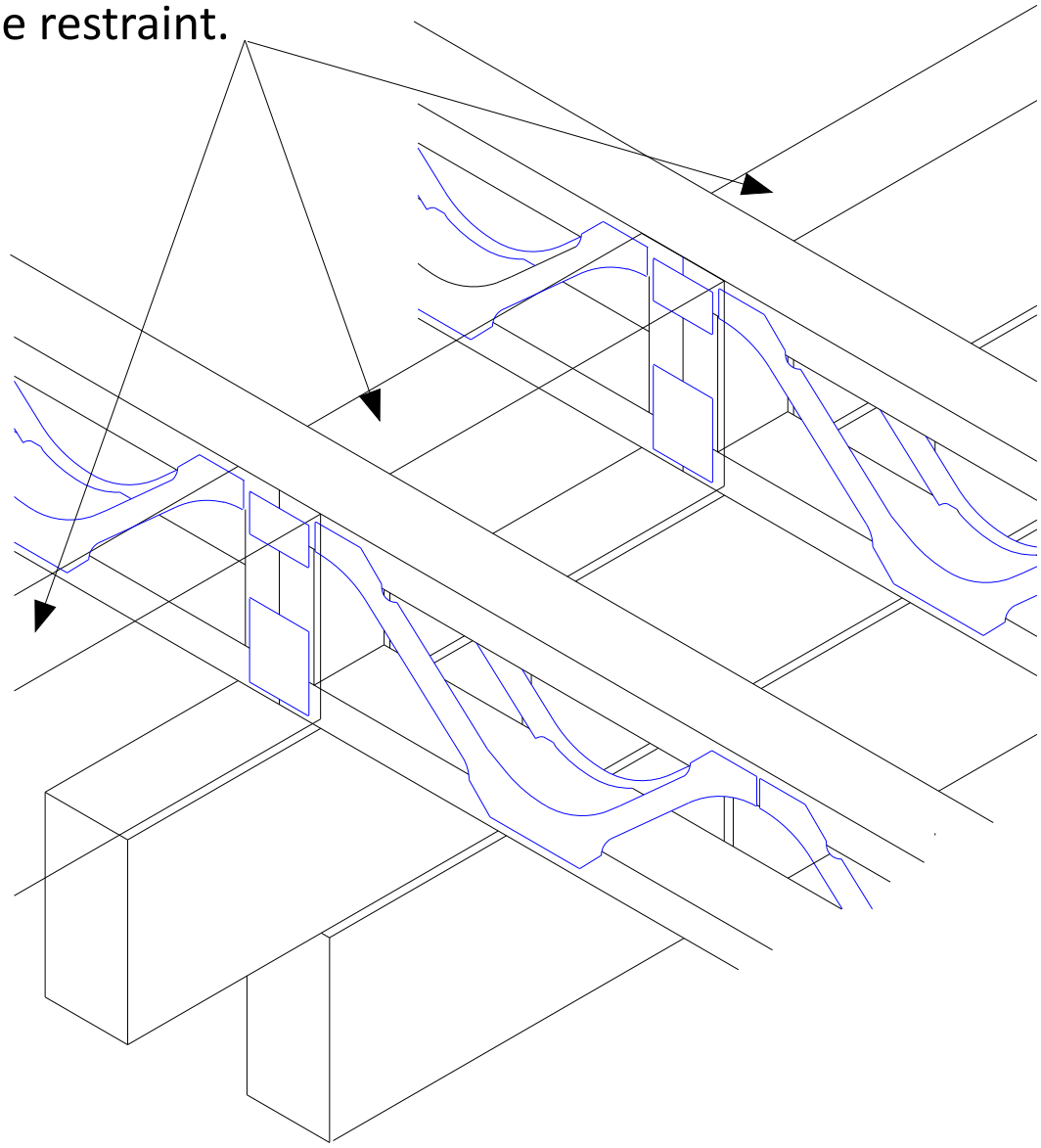
# Bottom Chord Support Internal Masonry Lapped

MiTek®

MiTek Standard Detail

SDPJ.02.04

Masonry built up to underside of floor to provide restraint.



**Note: Minimum 45mm Bearing Required If Posi-Joist split on centre of wall.**

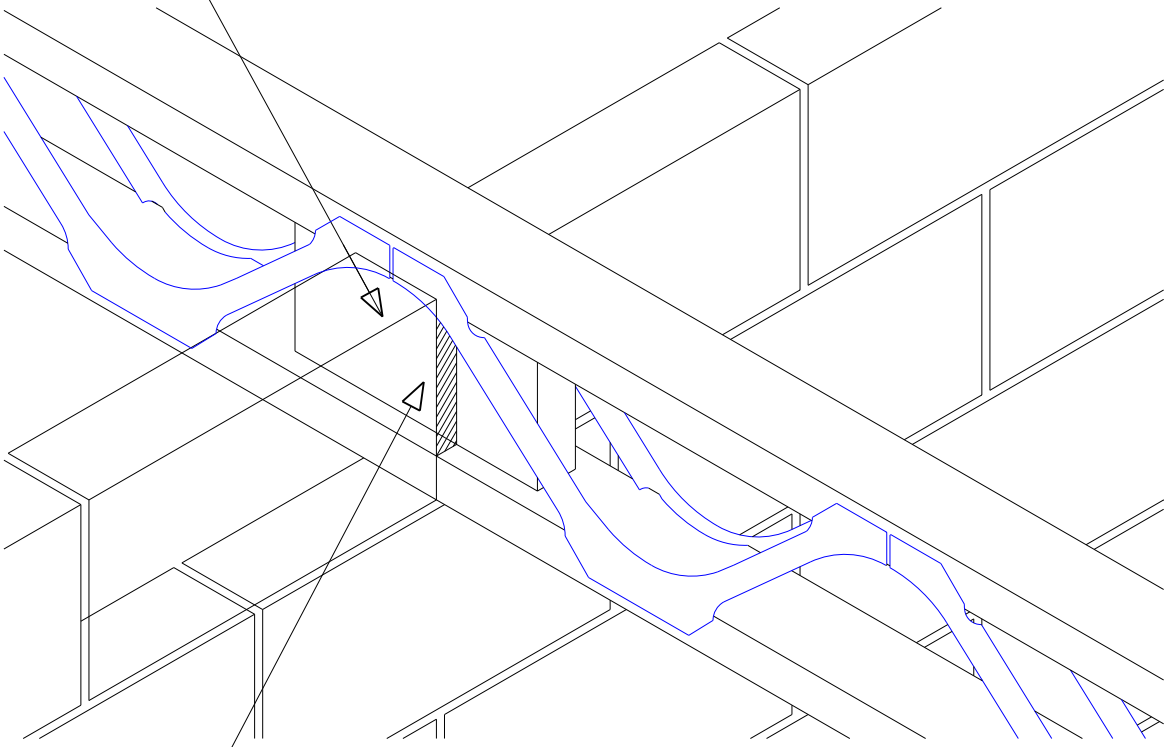
# Bottom Chord Support Internal Masonry Continuous or Butting Ends.

MiTek®

MiTek Standard Detail

SDPJ.02.05

Solid timber block over bearing with grain parallel to span.



Gap to be filled to provide air tightness.

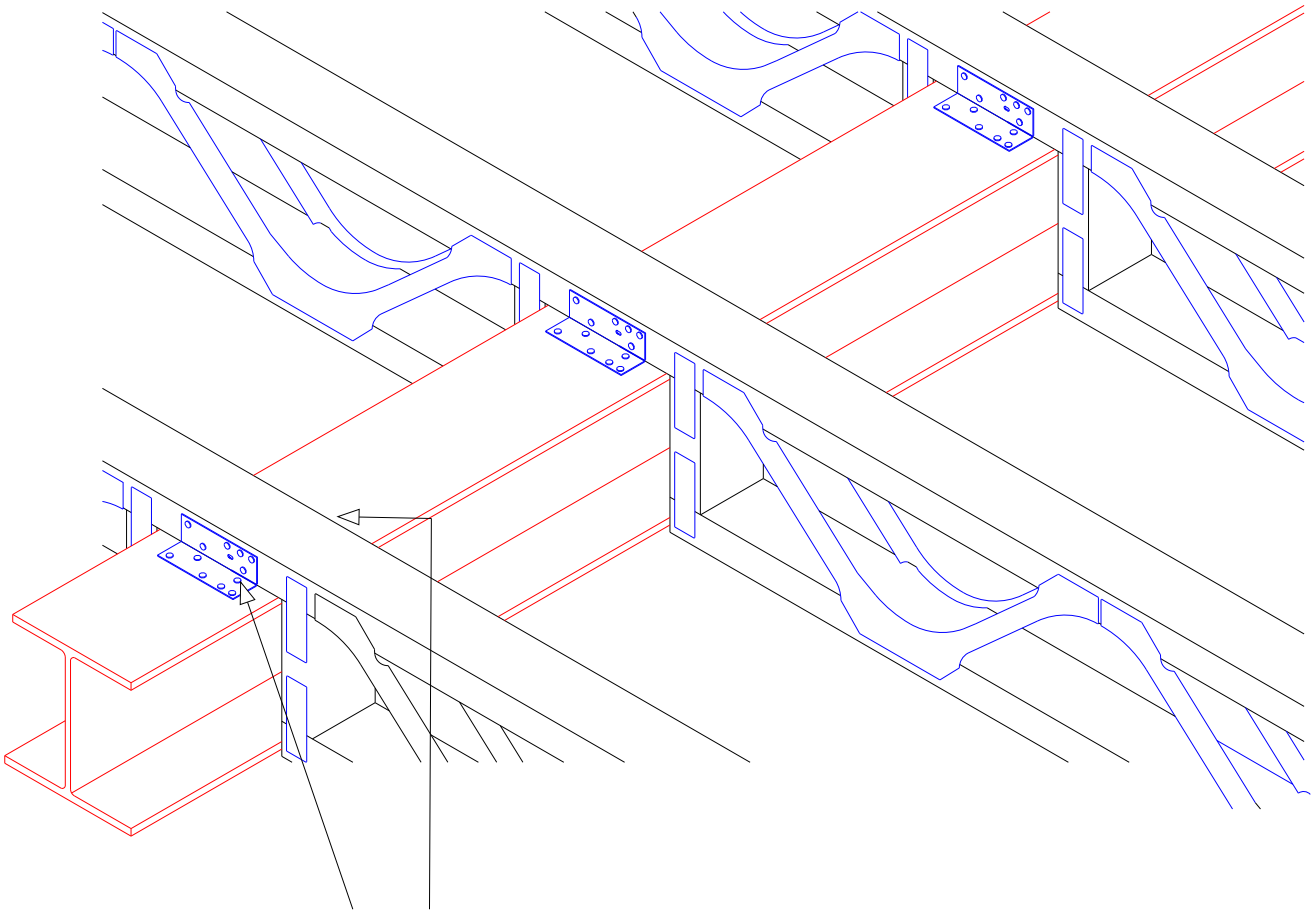
**Note: Use on internal load bearing internal walls (not fire walls).**

# Bottom Chord Support Internal Masonry Continuous Joist with solid timber block

MiTek®

MiTek Standard Detail

SDPJ.02.06



2 no Framing anchors
at each connection.
Fixed to beam by others.

# Posi Joist Straddled over Steel with pocket

Instalation and fixing of hanger to be in accordance with manufacturers details and recommendations

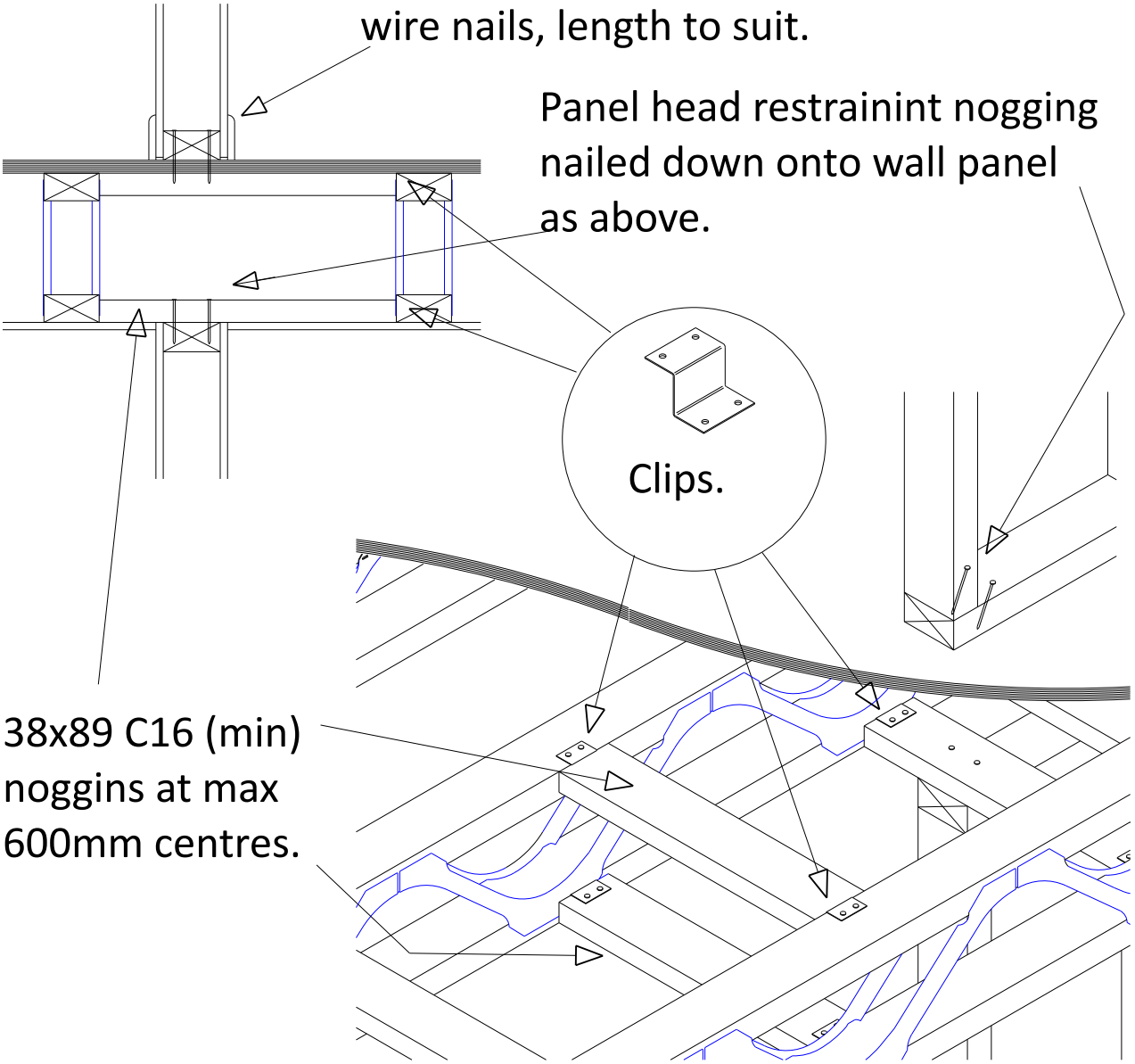
MiTek®

MiTek Standard Detail

**SDPJ.03.01**

Wall panel skew nailed through onto support noggin with a min of 2 no 3.35 dia galvanised wire nails, length to suit.

Panel head restrainint nogging nailed down onto wall panel as above.

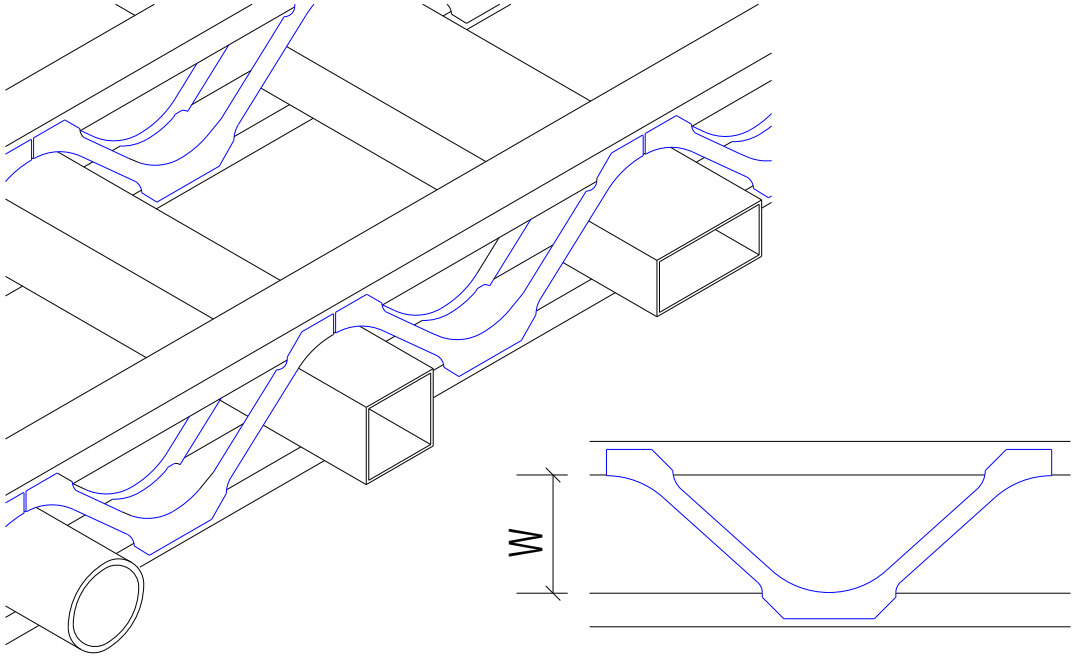



# Non-Loadbearing Wall Parallel with Posi-Joists.

MiTek®

MiTek Standard Detail

# SDPJ.04.01




| POSI JOIST SIZE | W | CIRCLE DIA | SQUARE | RECTANGLE DEPTH | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 50 | 75 | 100 | 125 | 150 | 175 | 200 | 225 | 250 | 275 | 300 |
| | | | | RECTANGLE WIDTH | | | | | | | | | | |
| PS-8 | 108 | 105 | 95 | 270 | 180 | 90 | - | - | - | - | - | - | - | - |
| PS-9 | 131 | 124 | 115 | 310 | 240 | 180 | 100 | - | - | - | - | - | - | - |
| PS-10 | 159 | 150 | 135 | 320 | 270 | 210 | 160 | 80 | - | - | - | - | - | - |
| PS-12 | 210 | 190 | 155 | 350 | 310 | 260 | 210 | 160 | 110 | 70 | - | - | - | - |
| PS-14 | 279 | 250 | 200 | 490 | 440 | 390 | 350 | 300 | 250 | 200 | 160 | 110 | 60 | - |
| PS-16 | 327 | 272 | 220 | 510 | 470 | 430 | 390 | 340 | 300 | 260 | 220 | 170 | 130 | 90 |

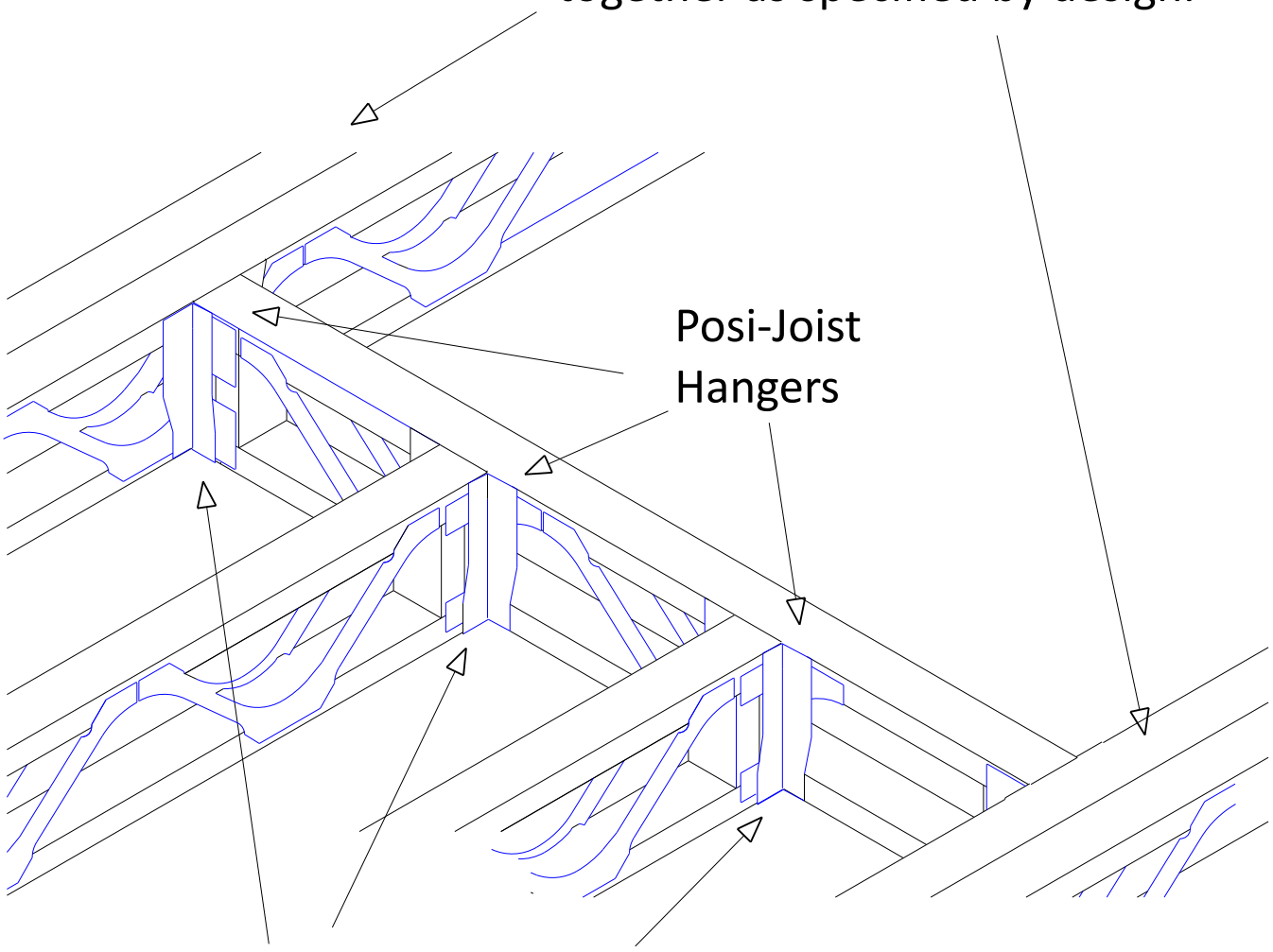
LARGE SERVICES MAY NEED TO BE OF FLEXIBLE MATERIAL TO BE ABLE TO BE FED THROUGH THE VOIDS IN THE POSI-JOISTS

# Maximum Duct Sizes

MiTek®

**MiTek Standard Detail**

**SDPJ.05.01**

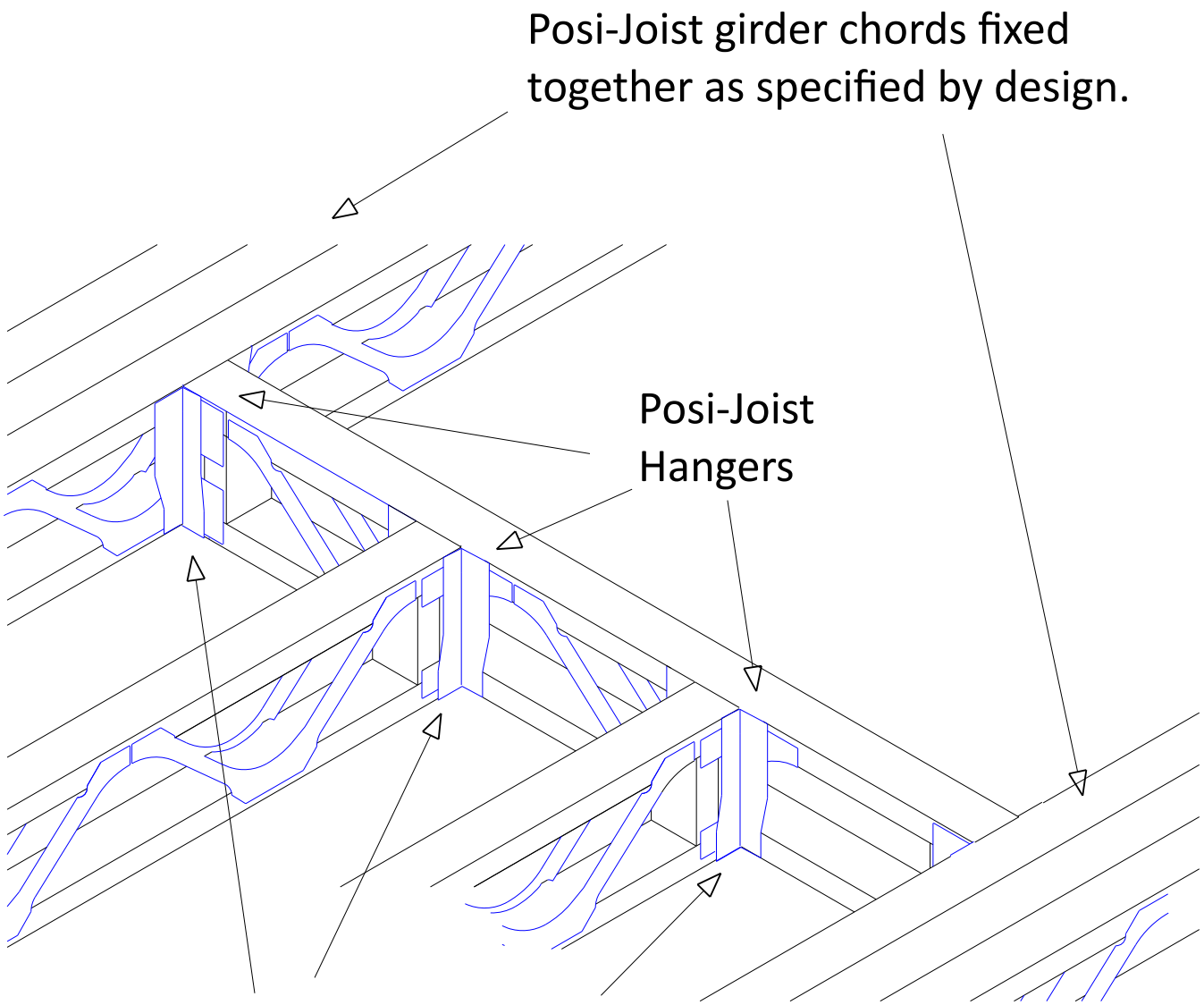



# Opening with 2-ply Posi-Joist Girder and Posi-Joist Trimmer Beam

MiTek®

**MiTek Standard Detail**

**SDPJ.05.02**



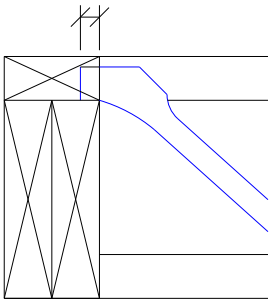

# Opening With 3 Ply Posi-Joist Girder and Posi-Joist Trimmer Beam

MiTek®

**MiTek Standard Detail**

**SDPJ.05.03**

Unless proven by design the Posi-Strut should overhang the bearing by 15mm.

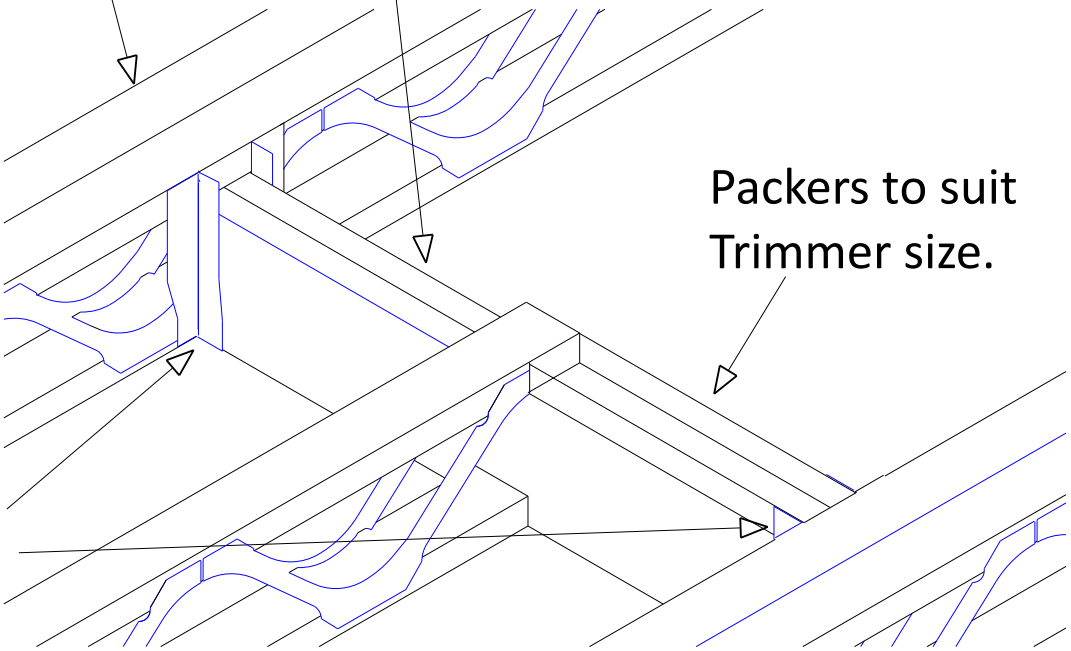


Posi-Joist girder chords fixed together as specified by design.

Solid or EWP trimmer (Depth to suit)

Packers to suit Trimmer size.

Posi-Joist Hangers

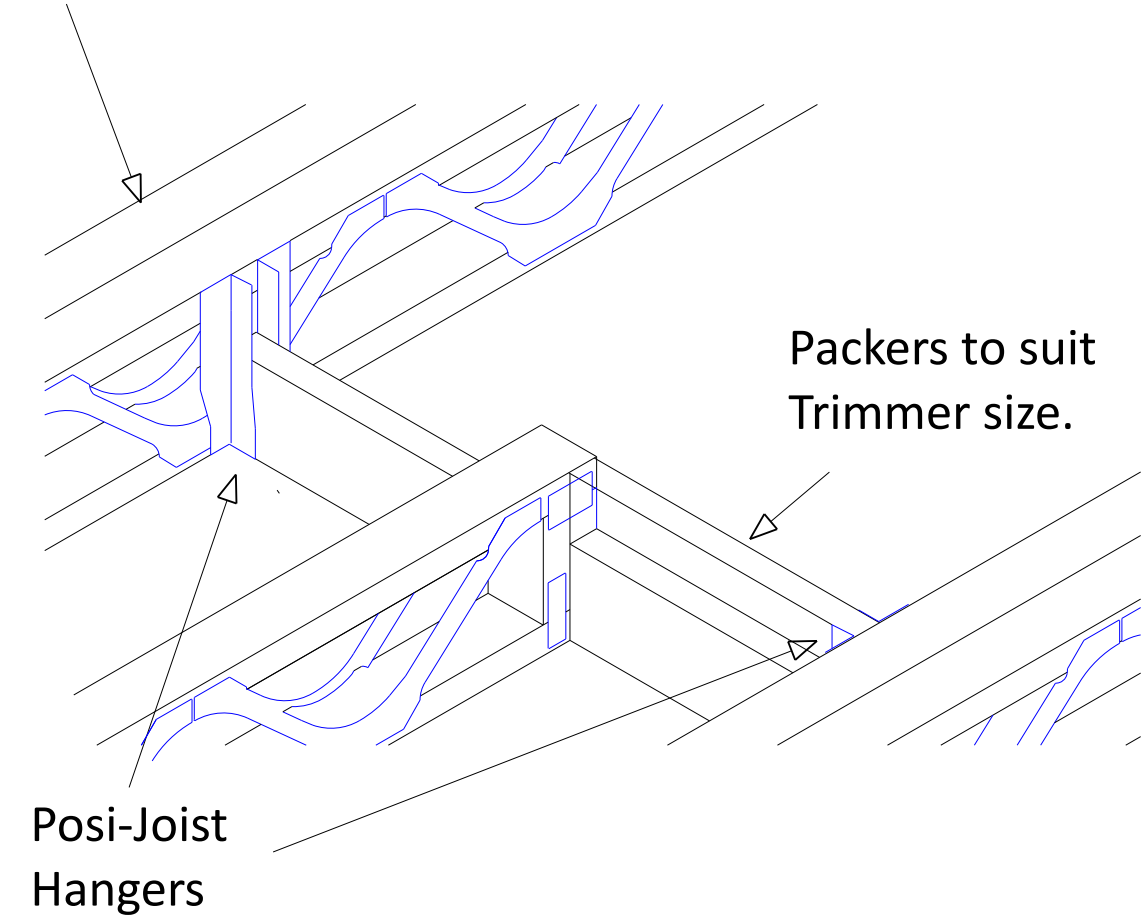


# Opening with Posi-Joist Girder and Solid or EWP Trimmer Beam.

MiTek®

**MiTek Standard Detail**

**SDPJ.05.04**

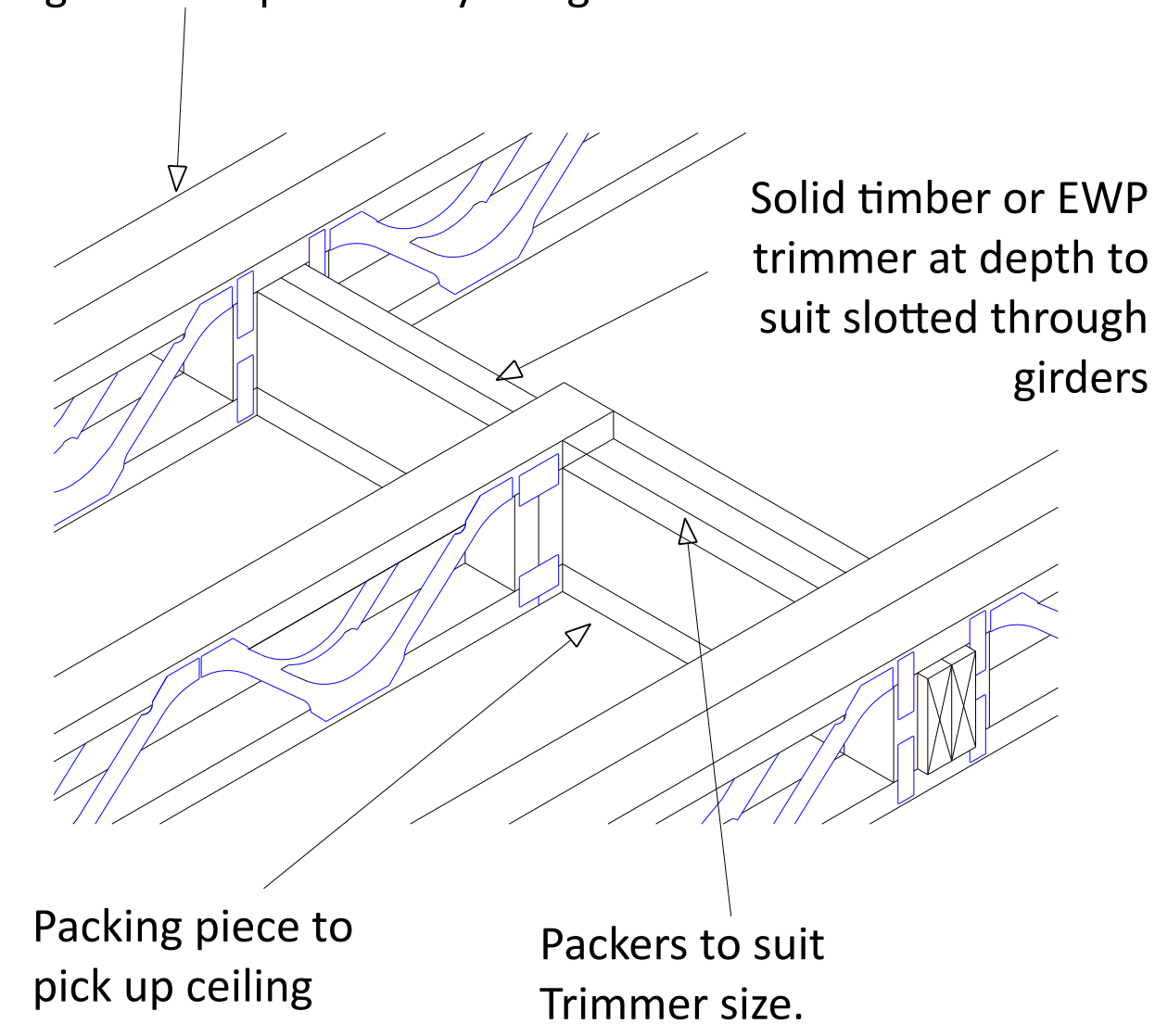



# Staircase Opening With Posi-Joist Girder and Solid Timber Trimmer Beam On Hangers

MiTek®

**MiTek Standard Detail**

SDPJ.05.05

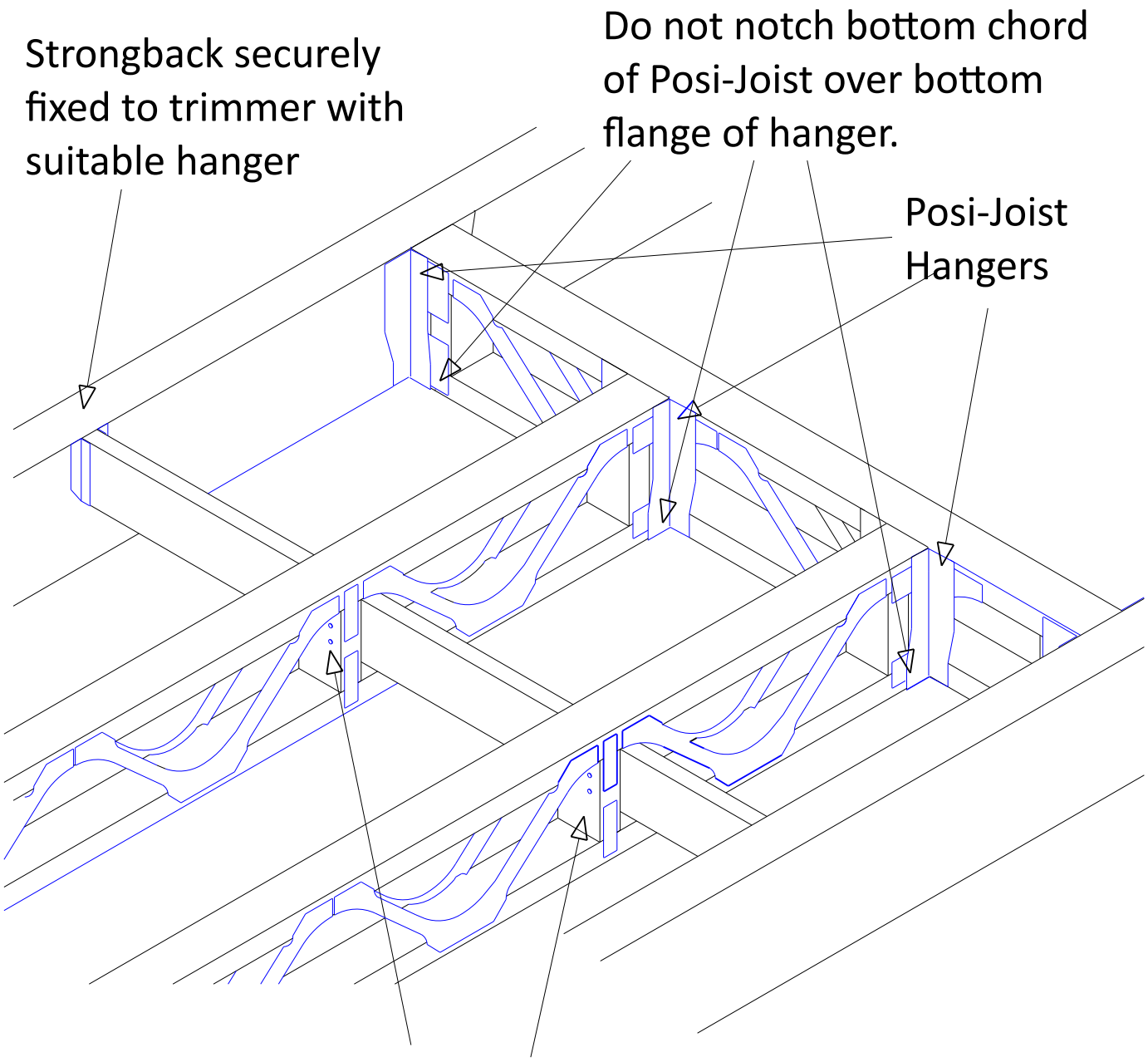



# Staircase Opening With Solid Timber Or EWP Trimmer Beam Slotted Through Posi-Joist Girder

MiTek®

MiTek Standard Detail

SDPJ.05.06

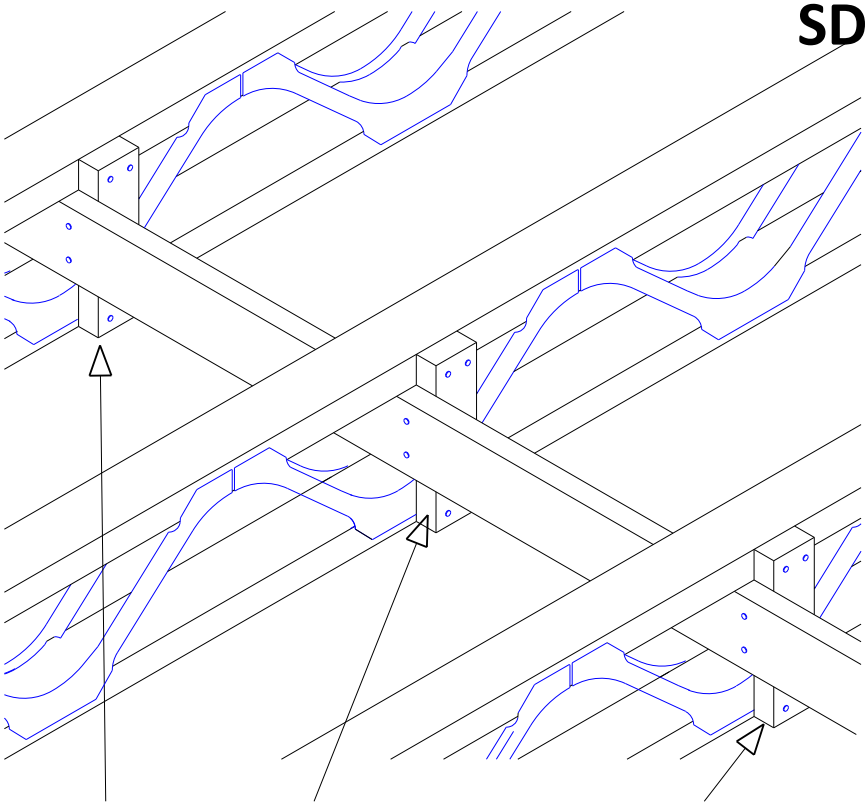



# Staircase Opening With EWP Stair Trimmer and Posi-Joist Trimmer beam

MiTek®

MiTek Standard Detail

SDPJ.06.01



38x75 (min) blocks twice nailed to top and bottom members and twice nailed to strongback using 3.1x75mm long galvanised ring shank nails.

| WEB SIZE | RECOMMENDED MIN STRONGBACK SECTION |
|---|---|
| PS-8, PS-9 & PS-10 | 47 x 97 TR26* |
| PS12, PS-14 & PS16 | 36 x 147 TR26* |

Minimum recommended strongbacksizes are given above. See Posi-Joist calculations for EC5 floor designed sizes. Note: Using smaller sizes than specified will invalidate the design. Position strongbacks tight to the underside of top chord.

**INSERT STRONGBACK THROUGH POSI - JOISTS BEFORE FIXING AS IT CANNOT BE INSTALLED AFTE THEY HAVE BEEN FIXED.**

# Strongback Detail

# Fixed to Site Added Blocks

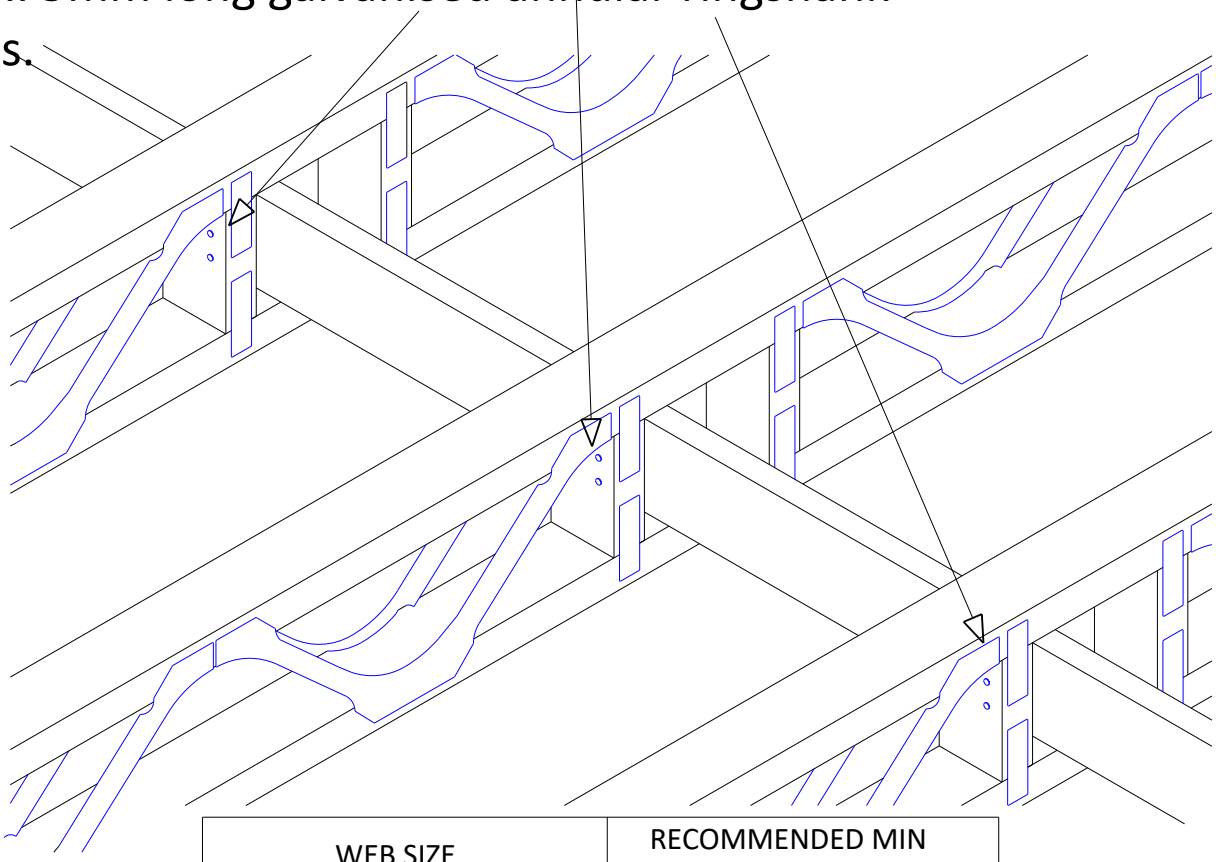
(Fix at a maximum of 4.0 metre centres and within effective zone)

MiTek®

MiTek Standard Detail

**SDPJ.06.02**

Strongback twice nailed to brace using min 3.1x75mm long galvanised annular ringshank nails.



| WEB SIZE | RECOMMENDED MIN STRONGBACK SECTION |
|---|---|
| PS-8, PS-9 & PS-10 | 47 x 97 TR26* |
| PS12, PS-14 & PS16 | 36 x 147 TR26* |

Minimum recommended strongbacksizes are given above. See Posi-Joist calculations for EC5 floor designed sizes. Note: Using smaller sizes than specified will invalidate the design. Position strongbacks tight to the underside of top chord.

**INSERT STRONGBACK THROUGH POSI - JOISTS BEFORE FIXING AS IT CANNOT BE INSTALLED AFTE THEY HAVE BEEN FIXED.**

# Strongback Detail

# Fixed To Built In Vertical Webs

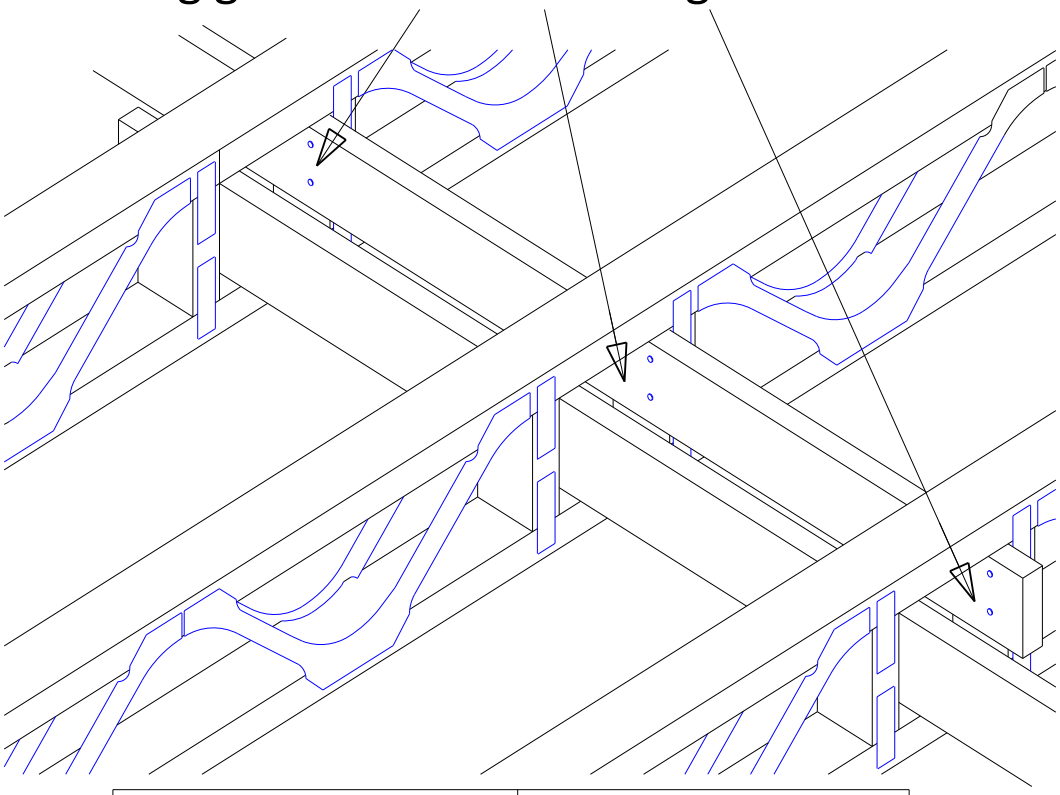
(Fix at a maximum of 4.0 metre centres and within effective zone)

MiTek®

**MiTek Standard Detail**

**SDPJ.06.03**

Strongback twice nailed to brace using min 3.1x75mm long galvanised annular ringshank nails.



| WEB SIZE | RECOMMENDED MIN STRONGBACK SECTION |
|---|---|
| PS-8, PS-9 & PS-10 | 47 x 97 TR26* |
| PS12, PS-14 & PS16 | 36 x 147 TR26* |

Minimum recommended strongbacksizes are given above. See Posi-Joist calculations for EC5 floor designed sizes. Note: Using smaller sizes than specified will invalidate the design. Position strongbacks tight to the underside of top chord.

**INSERT STRONGBACK THROUGH POSI - JOISTS BEFORE FIXING AS IT CANNOT BE INSTALLED AFTE THEY HAVE BEEN FIXED.**

# Strongback Bridging

# Fixed To Built In Vertical Webs

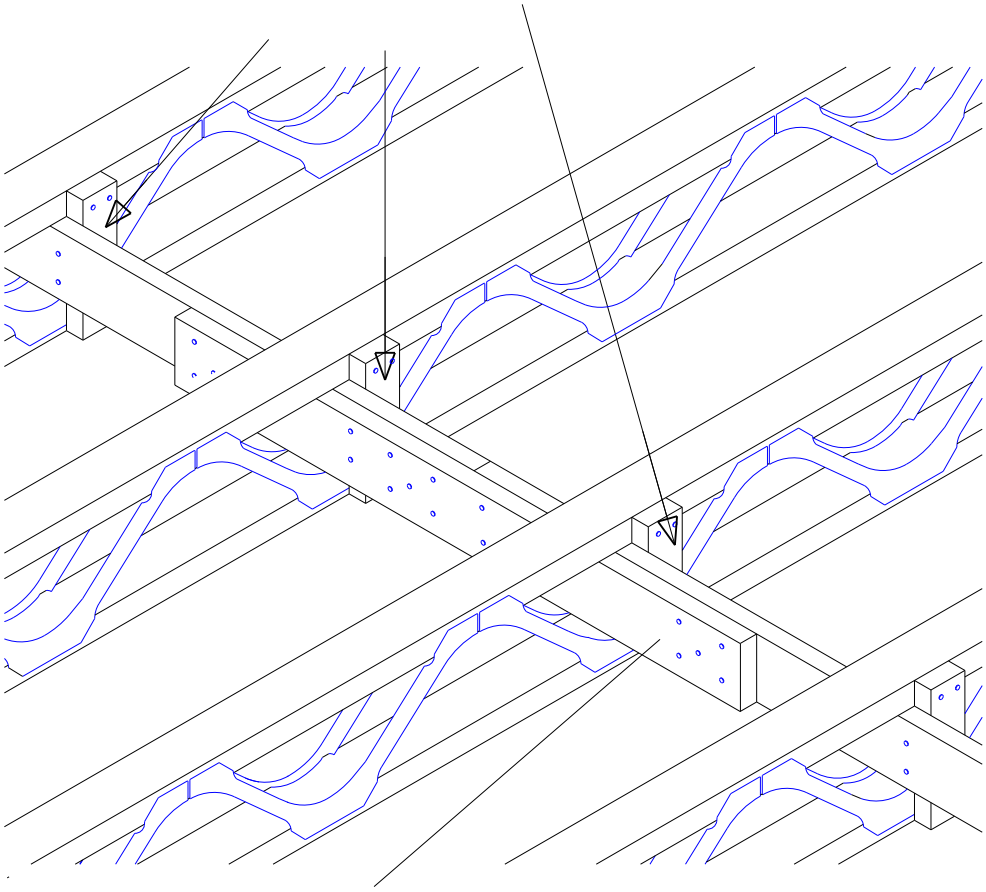
(Fix at a maximum of 4.0 metre centres and within effective zone)

MiTek®

**MiTek Standard Detail**

SDPJ.06.04

38x75 (min) blocks twice nailed to top and bottom members and twice nailed to strongback using 3.1x75mm long galvanised annular ringshank nails.



1200mm long splice fixed with 10no 3.1x90mm long galvanised annular ringshank nails each side of splice, nailed through and clenched over on far side.

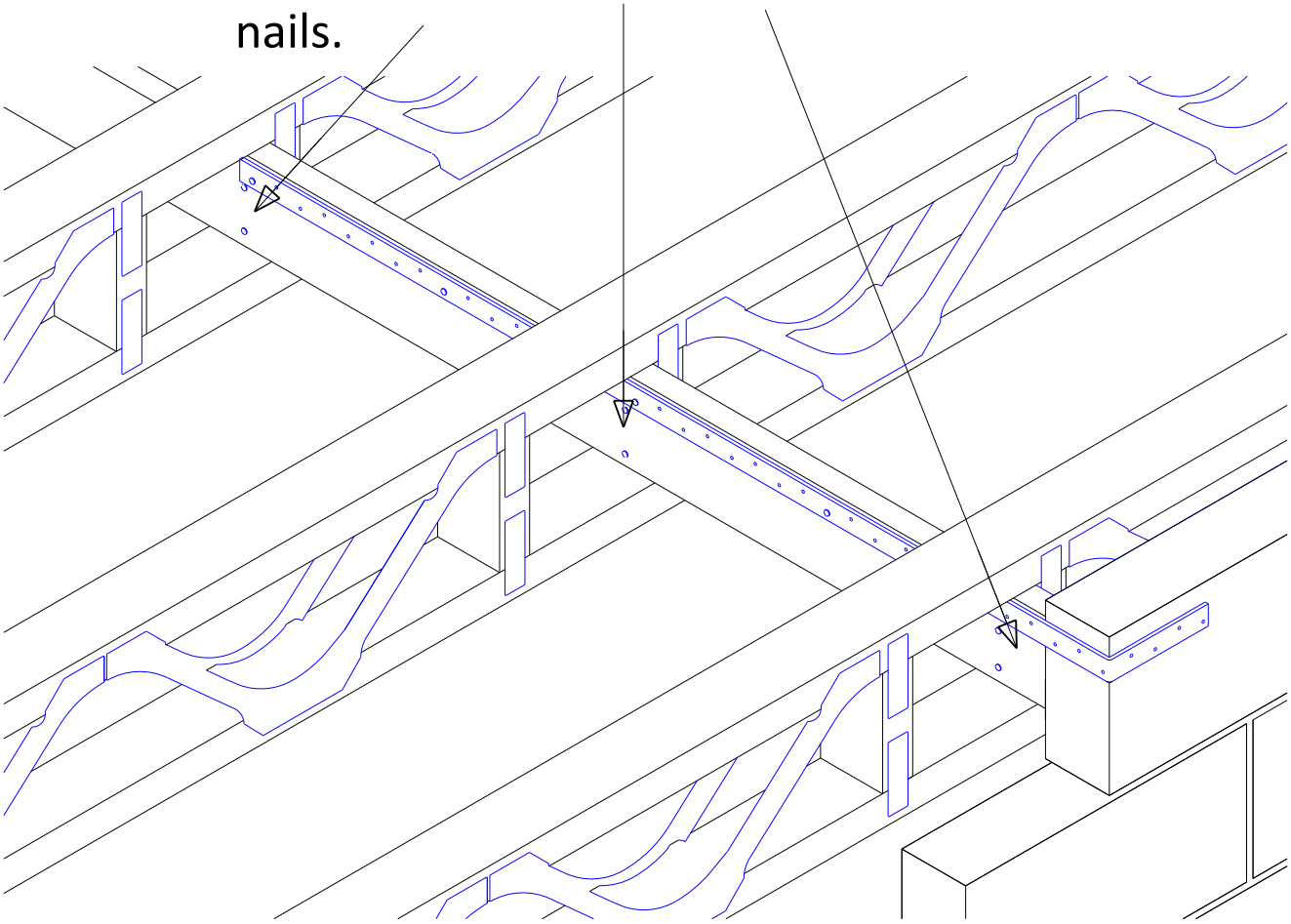
# Strongback Splice
# Fixed to Site Added Blocks

MiTek®

MiTek Standard Detail

**SDPJ.07.01**

Strongback twice nailed to brace using min 3.1x75mm long galvanised annular ringshank nails.



Strap fixed along top edge of strongback. Refer to strap manufacturers details for fixing method.

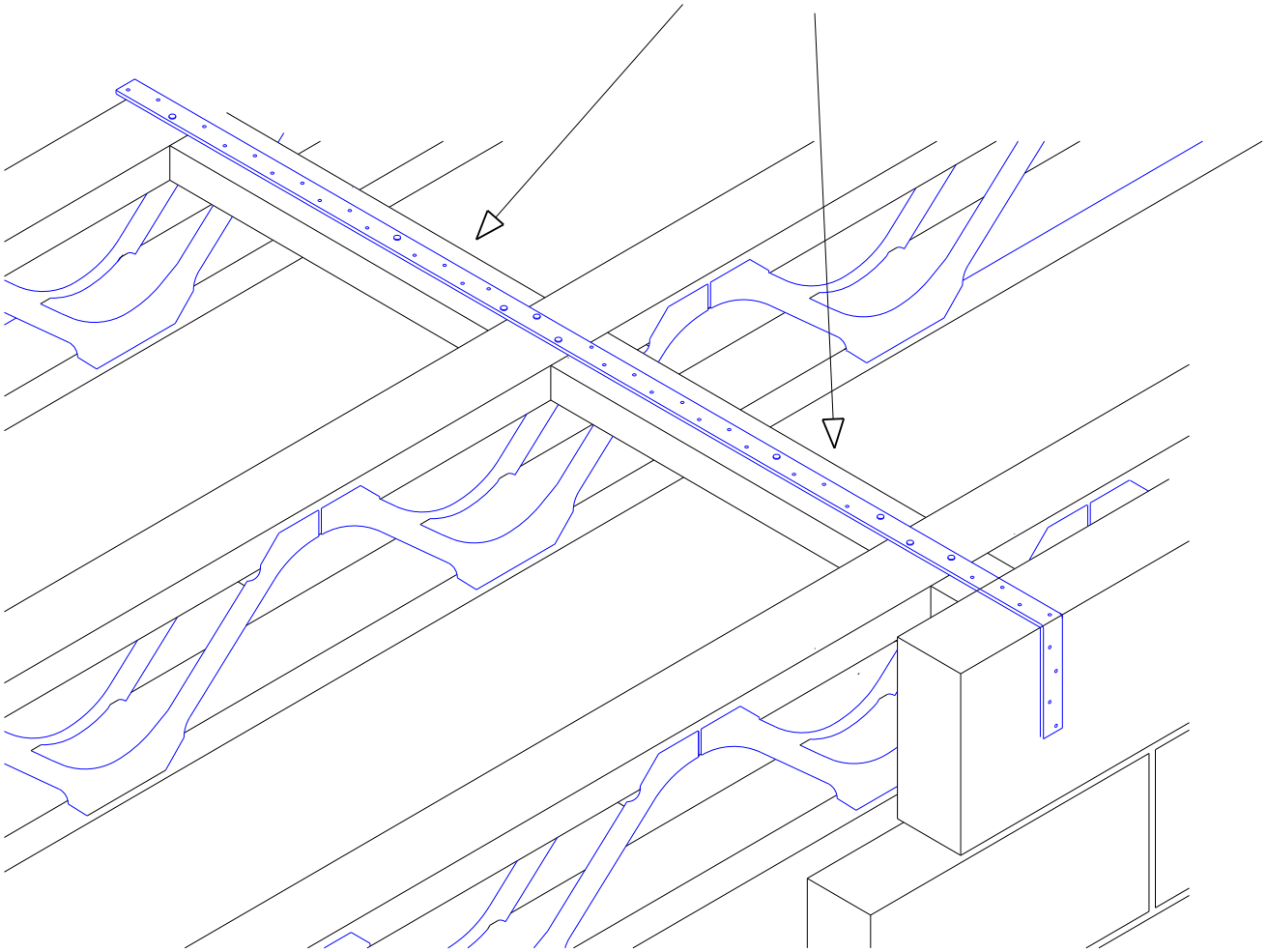
# Horizontal Restraint Strap Fixed to Strongback

MiTek®

**MiTek Standard Detail**

SDPJ.07.02

Min 35 x 72 C16 noggin fixed between joists.



Strap fixed to noggin. Refer to strap manufacturers details for fixing method.

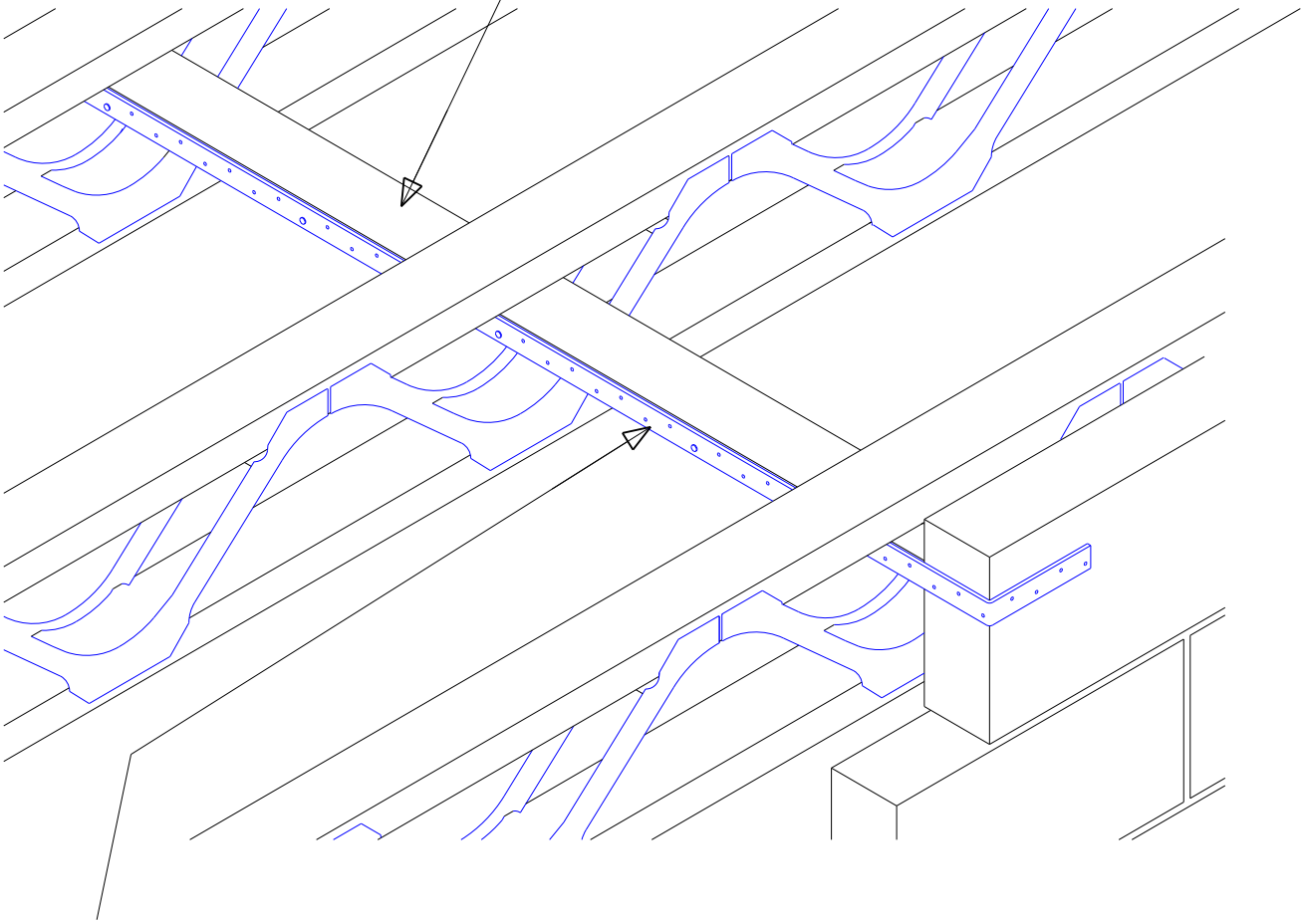
# Horizontal Restraint Strap Fixed To Noggins

MiTek®

MiTek Standard Detail

**SDPJ.07.03**

35x97 C16 Noggin nailed to underside of top chord of Posi-Joist using 3.1x75mm long galvanised annular ringshank nails.



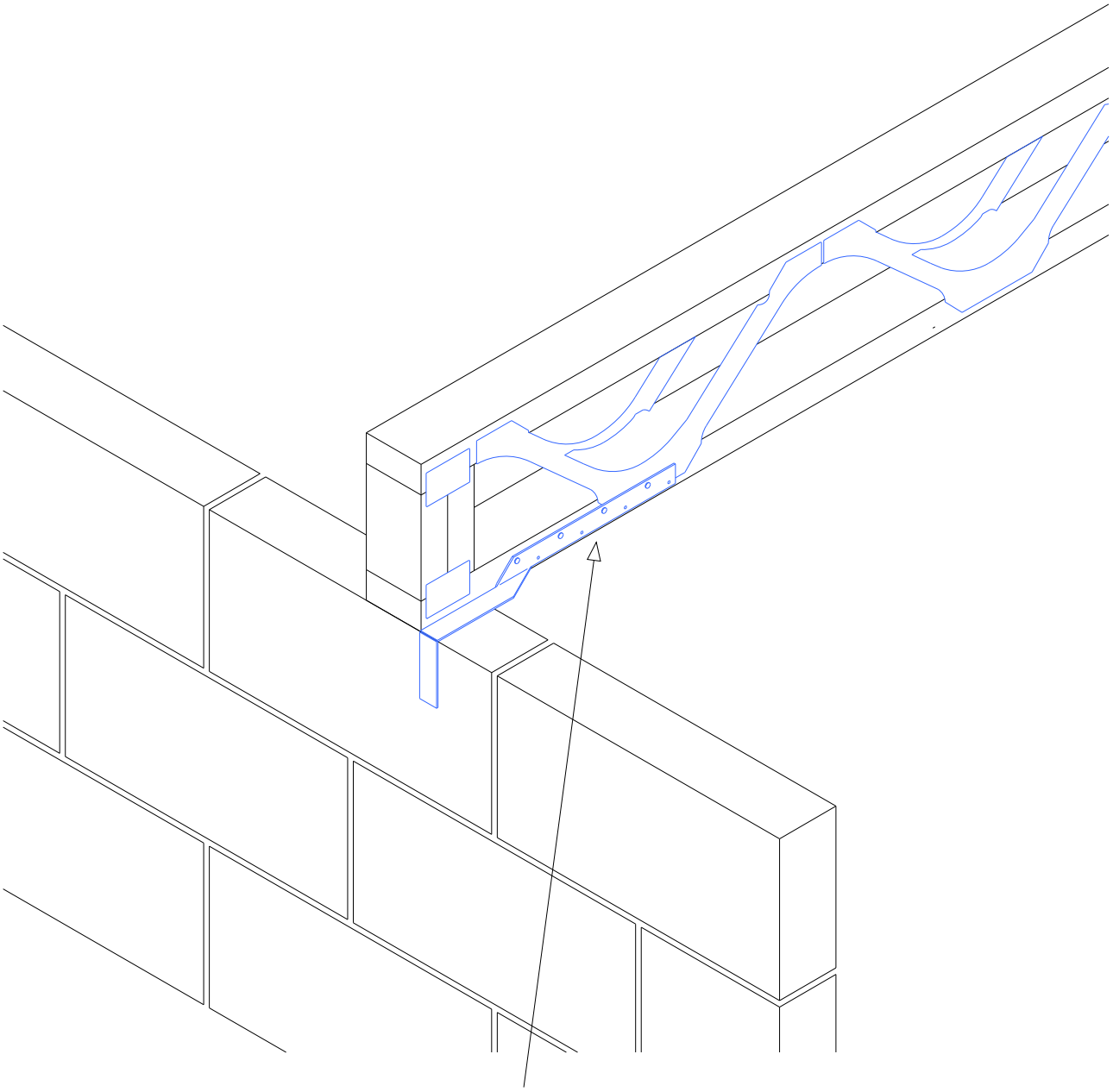
Strap fixed along top edge of strongback. Refer to strap manufacturers details for fixing method.

# Horizontal Restraint Strap Fixed to Continuous Noggin

MiTek®

**MiTek Standard Detail**

SDPJ.07.04



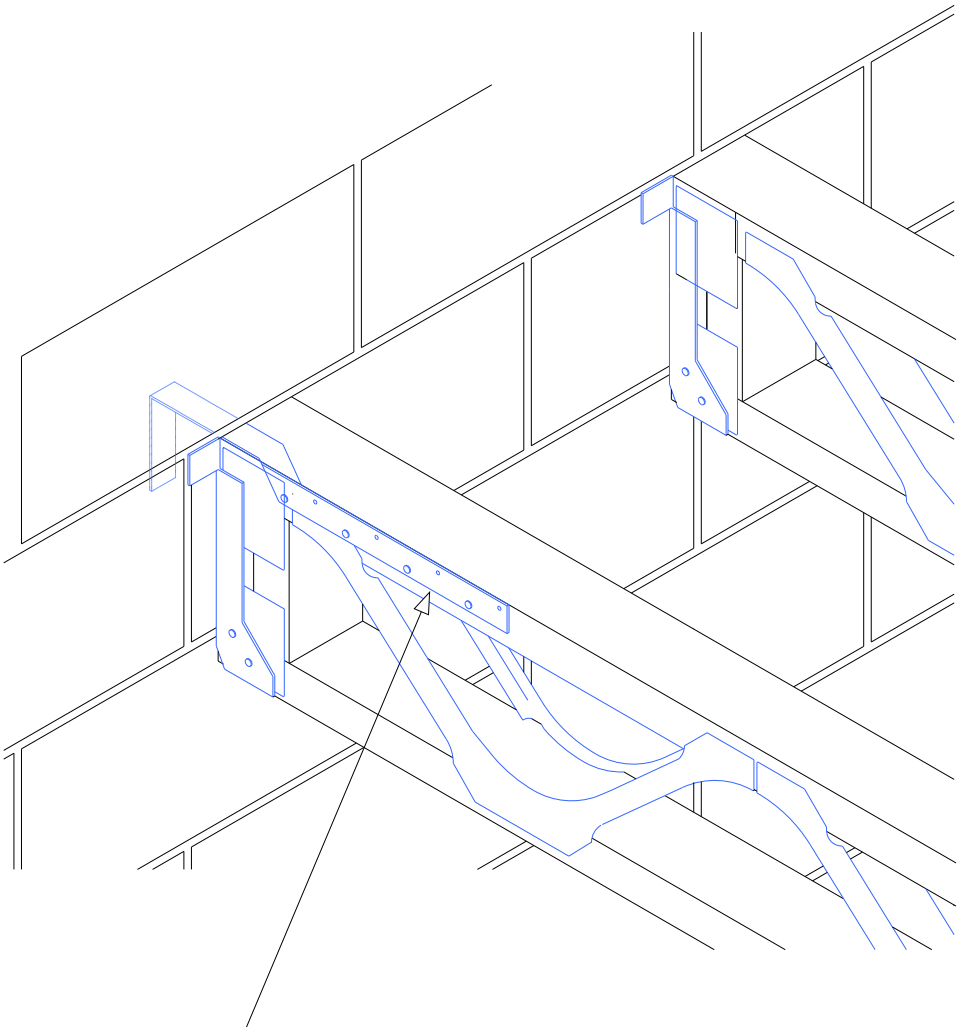
Twisted Restraint strap. Refer to strap manufacturers details for fixing method.

# Horizontal Restraint Strap With Perpendicular Joist Built In

MiTek®

MiTek Standard Detail

# SDPJ.07.05



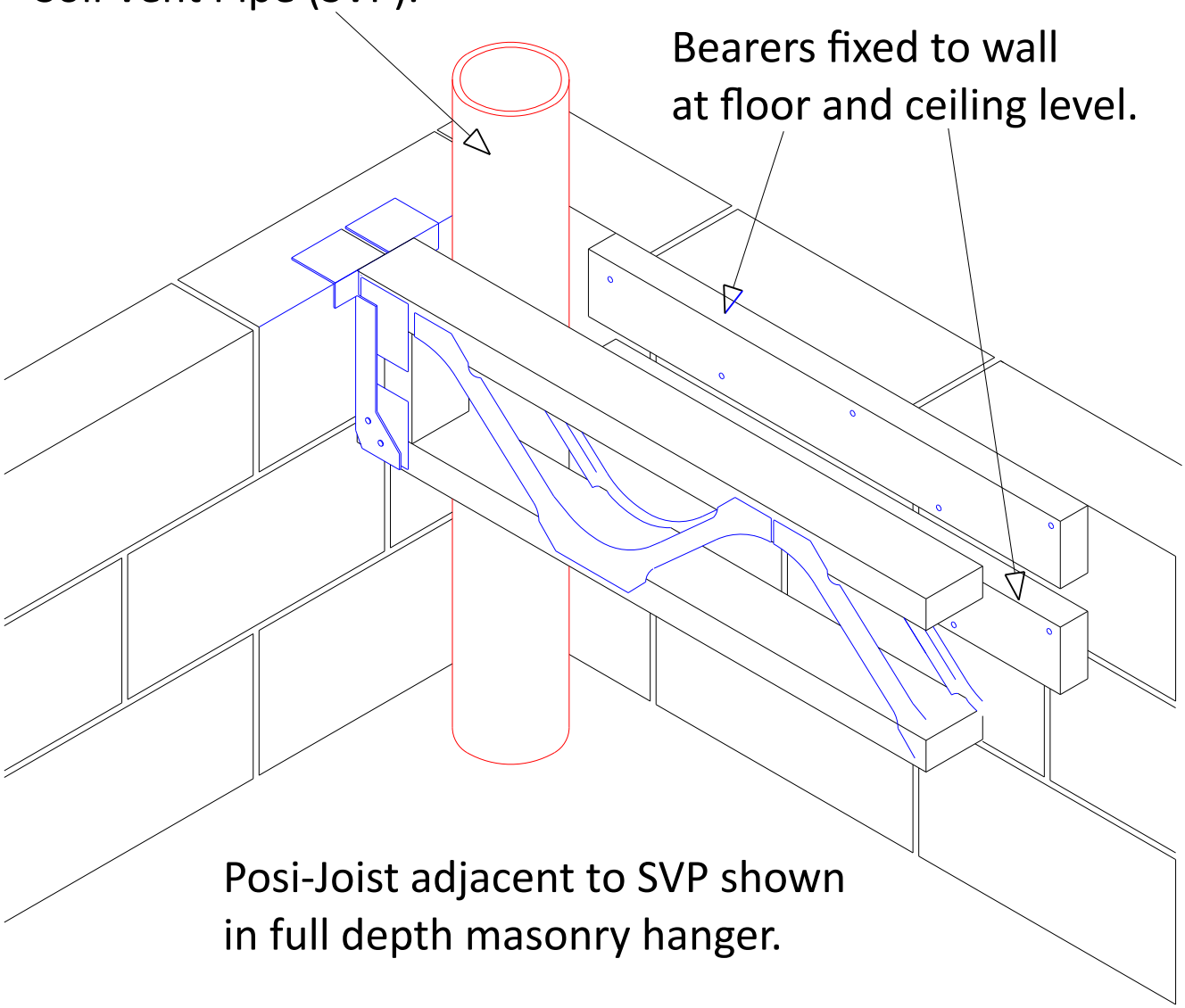
Twisted Restraint strap. Refer to strap manufacturers details for fixing method.

# Horizontal Restraint Strap With Perpendicular Joist Into Hanger

MiTek®

MiTek Standard Detail

**SDPJ.08.01**




Posi-Joist adjacent to SVP shown
in full depth masonry hanger.

Note: This may not perform well acoustically
as sound will be transmitted directly from the floor to
the bearer through the inner leaf of the wall.

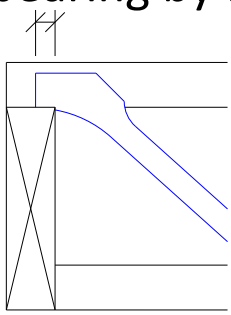
# Fixing Round SVP using Bearer Plates

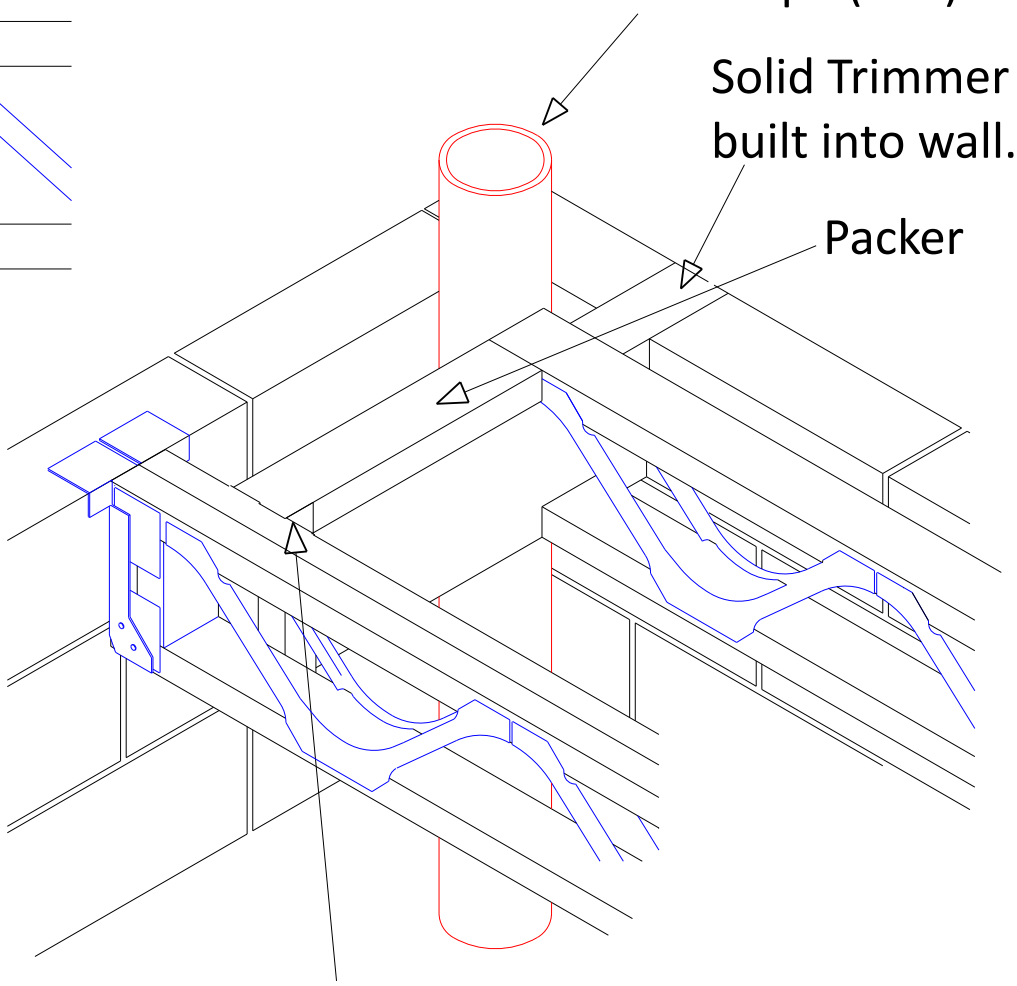
MiTek®

MiTek Standard Detail

**SDPJ.08.02**

Unless proven by design the Posi-Strut should overhang the bearing by 15mm



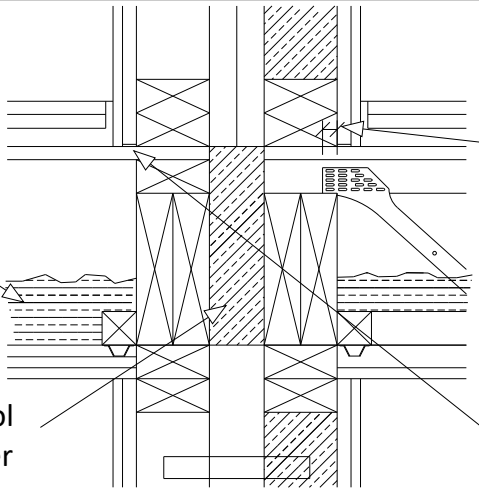



# Fixing Round SVP using Solid Trimmer.

MiTek®

MiTek Standard Detail

# SDPJ.09.01



100mm Mineral wool insulation quilt 23kb/m2

Posi-web over bearing by min 15mm

2 no 30 x 200mm GMS Straps at 1200mm centres

Mineral wool cavity barrier

Bead of sealent applied to floor deck proir to fixing 19mm plasterboard plank

Floating Floor Comprising:-
18mm T & G Chipboard on 19mm plasterboard plank on 25mm Fibreglass Slab on 18mm T & G Chipboard. All T & G edges glued, and 19mm plank bonded to chipboard with dabs of Gyproc sealant at 300mm centres. Joints between chipboard and plasterboard to be staggered and board direction reversed.

47x 89 Continuous Pack

47x 89 Packs between joists

200 approx

First Posi-Joist beam set back from wall by approx 200mm

Posi-Joists Parallel to wall

Plasterboard noggins

Ring Beams in solid timber or LVL

Posi-Joists bearing on wall

Ceiling (not shown) comprising:-
2 Layers 15mm Gyproc Fireline Board on 16mm resilient bars at 400mm centres. First layer fixed with 38mm Gyproc screws at 230mm centres. Second layer fixed with 60mm Gyproc screws at 230mm centres. Staggered with first layer screws. Lay Firleline board in echelon pattern with staggered joints.

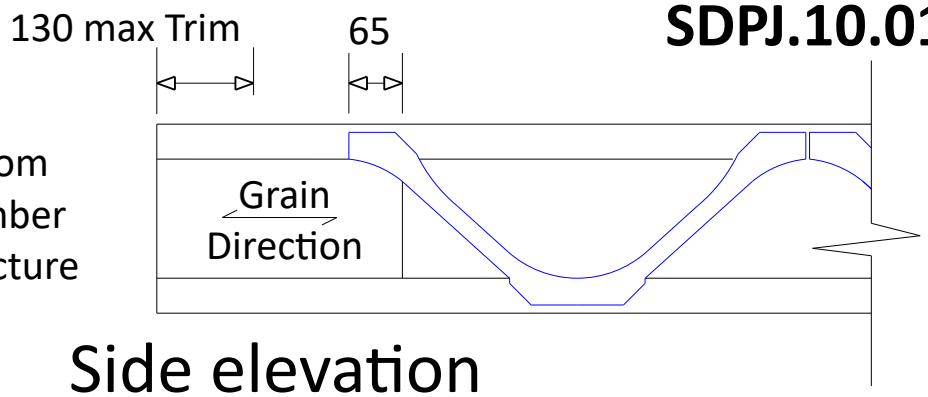
# Typical Timber Frame Compartment Floor/Party Wall Detail

MiTek®

**MiTek Standard Detail**

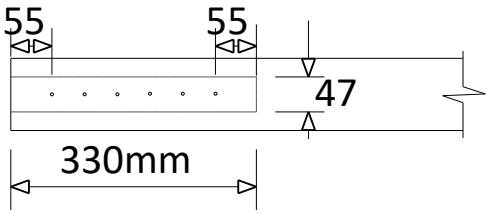
**SDPJ.10.01**

330mm solid block from dry well seasoned timber tight fixed at manufacture




## Side elevation

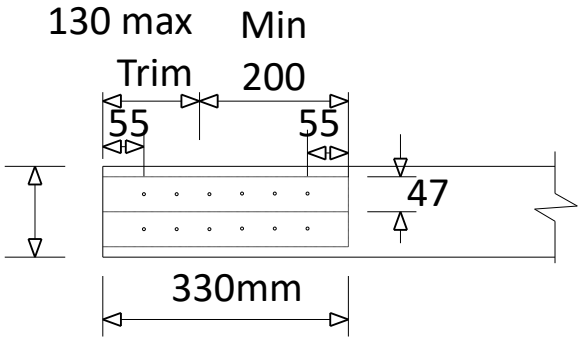
One block required when chords are 72mm or 97mm




For 72 or 97 wide Posi joists insert one trimmable block secured with 6 no. 3.1 x 90 long power driven annular ring-shank or 3.3 x 98 long power driven screw-shank nails into the top and 6 into the bottom at 44mm centres.

## Plan view of Posi-Joist with one block

Two blocks required when chords are 122mm or 147mm




For 122 and 147 wide Posi joists insert two trimmable blocks secured with 12 no. 3.1 x 90 long power driven annular ring-shank or helically twisted nails into the top and 12 into the bottom at 44mm centres.

## Plan view of Posi-Joist with two blocks

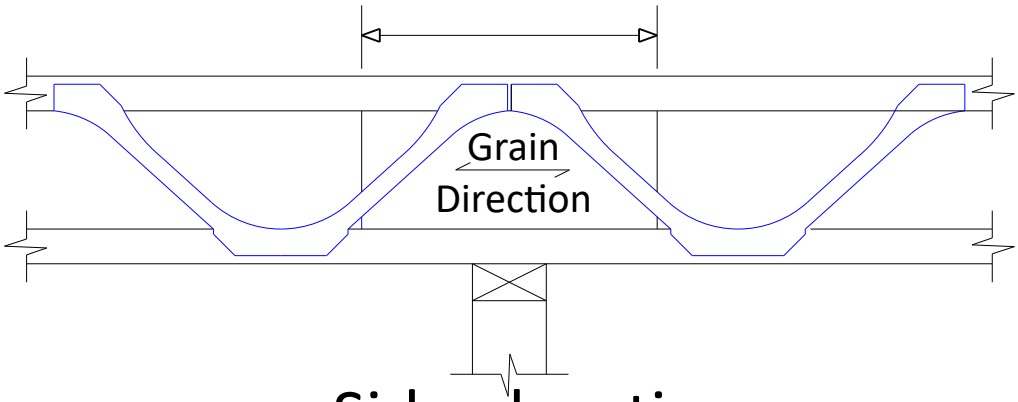
# Site Trimmable Block End Support Detail

MiTek®

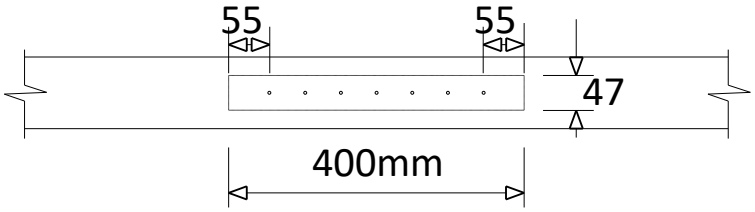
MiTek Standard Detail

# SDPJ.10.02

400mm solid block from dry well seasoned timber
tight fixed at manufacture



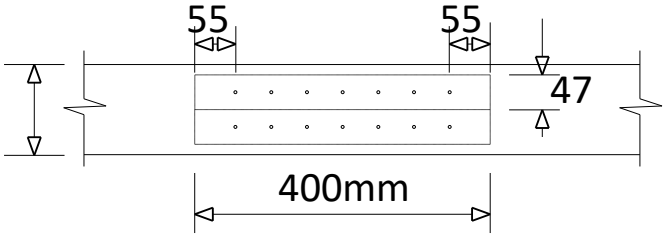

## Side elevation




For 72 or 97 wide Posi joists insert one block secured with
7 no. 3.1 x 90 long power driven annular ring-shank or 3.3 x 98 long power driven screw-shank nails into the top and 7 into the bottom at 48mm centres.

## Plan view of Posi-Joist with one block

Two blocks required when chords are 122mm or 147mm




For 122 or 147 wide Posi joists insert two blocks secured with
14 no. 3.1 x 90 long power driven annular ring-shank or 3.3 x 98 long power driven screw-shank nails into the top and 14 into the bottom at 48mm centres.

## Plan view of Posi-Joist with two blocks

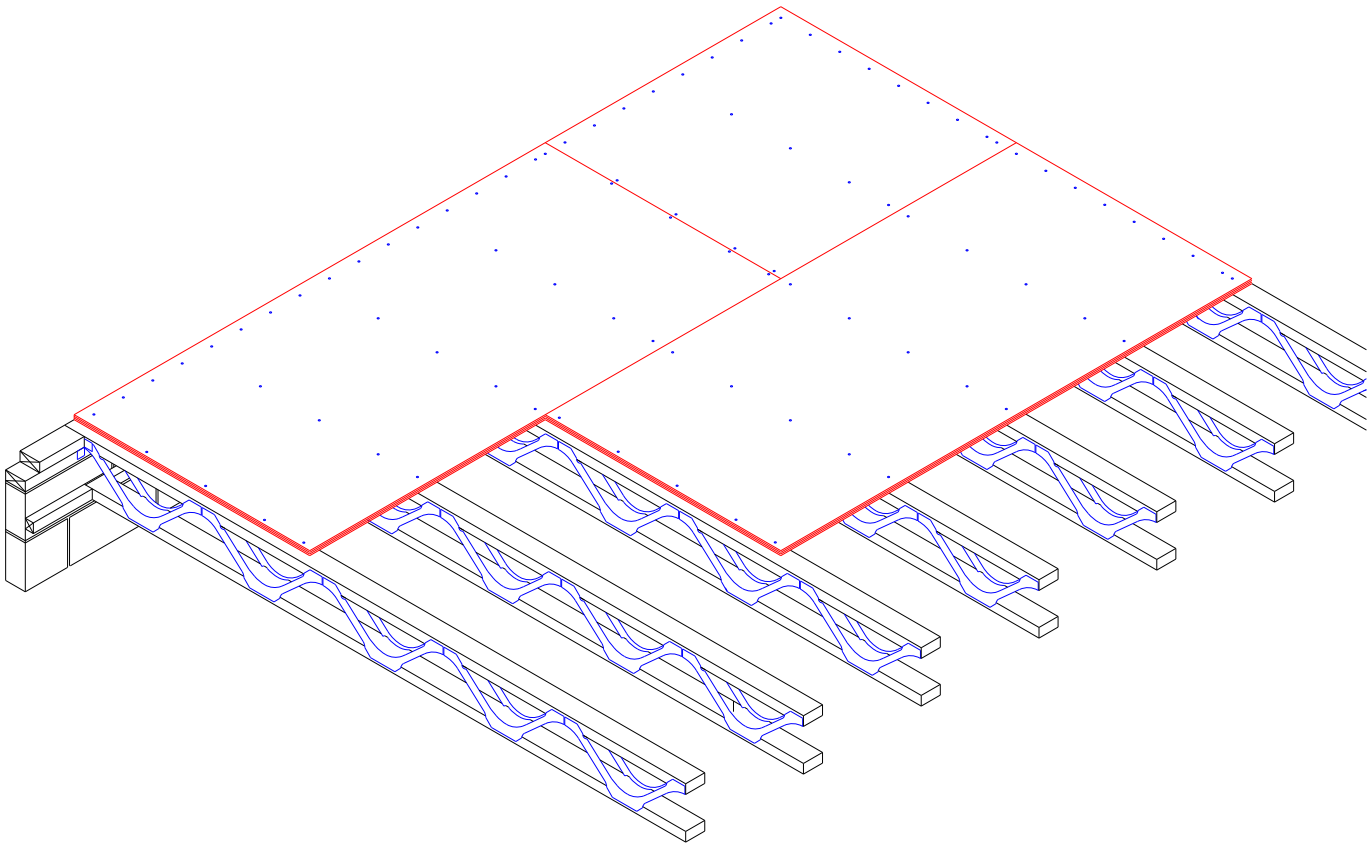
**Note: The Third Bearing / Internal Block Nailing assumes a min. 400mm long block. It is permissable to use a block minimum 330mm long and the nailing detail for the trimmable ends should be followed in that situation.**

# Internal Blocked Support Detail

MiTek®

**MiTek Standard Detail**

SDPJ.11.01



Boards should be laid with long edge at right angle to joists and all joints should be staggered.


Boards should be glued and Fixed down to the joists using suitable fixings and MiTek JOIST-IK glue or similar approved adhesive.

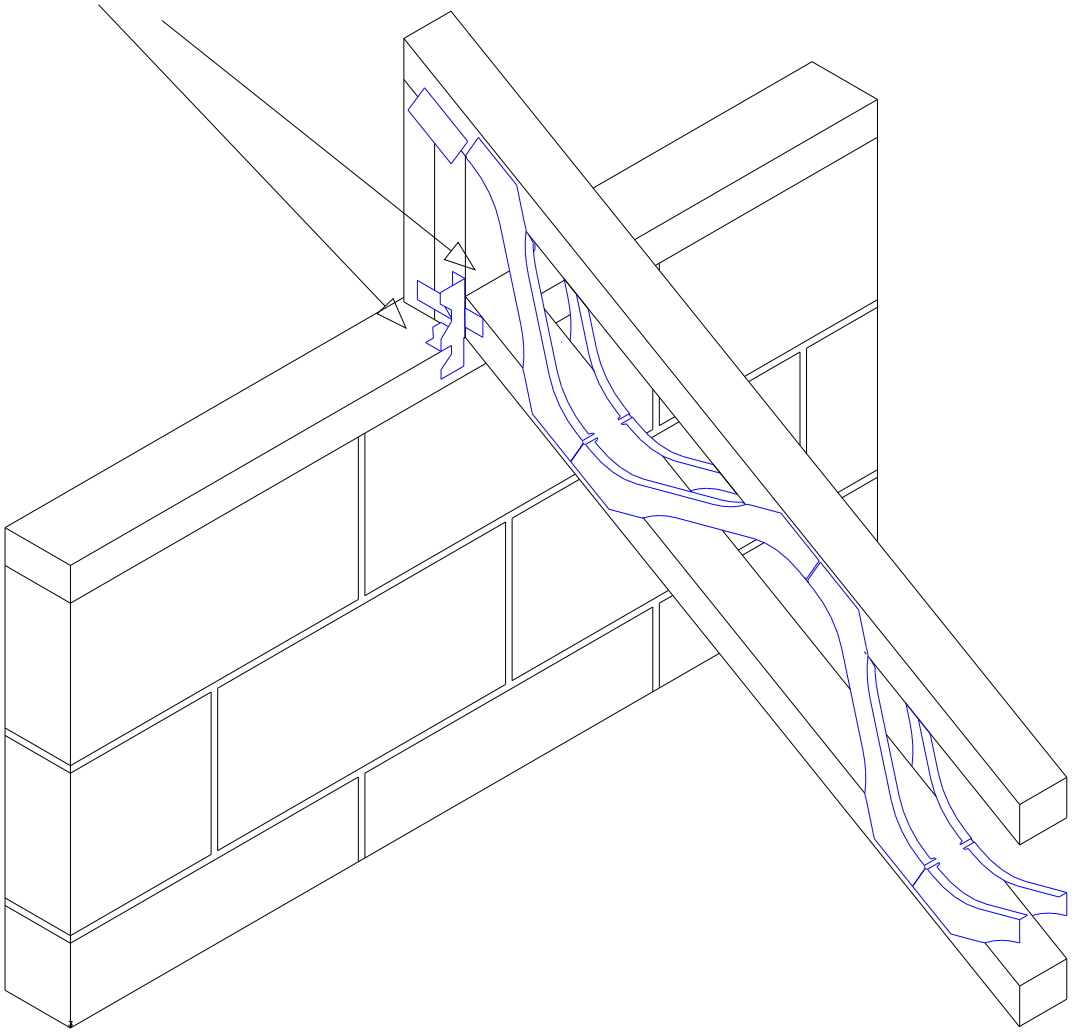
# Tongue and Groove Boards

MiTek®

MiTek Standard Detail

**SDPR.01.01**

Framing anchors,
2no per connection.



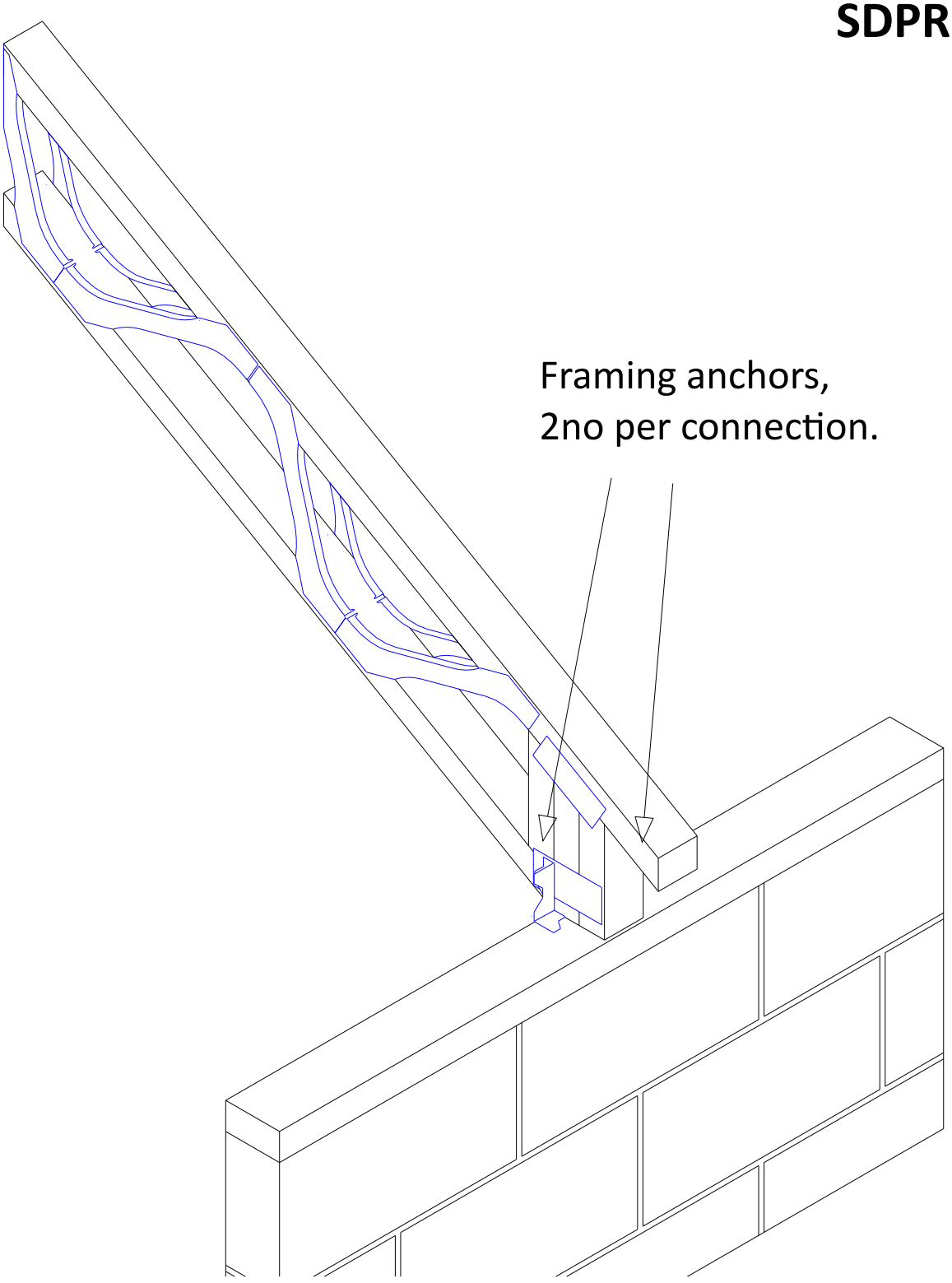
# Flatwise Posi-Rafters to Wallplate at Apex

Instalation and fixing of hanger to be in accordance with manufacturers details and recommendations

MiTek®

**MiTek Standard Detail**

SDPR.01.02




# Flatwise Posi-Rafters to Wallplate at Eaves

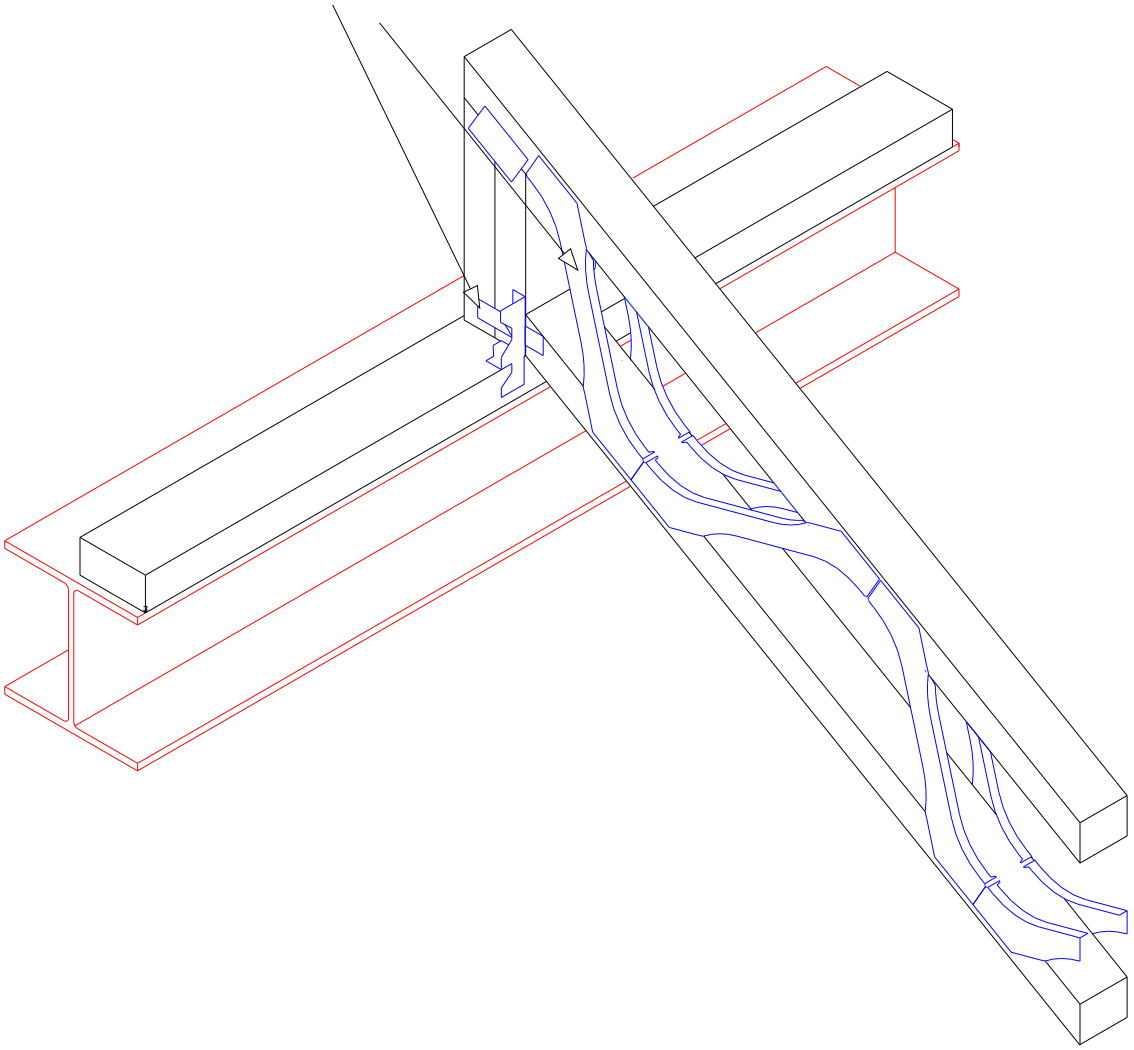
Instalation and fixing of hanger to be in accordance with manufacturers details and recommendations

MiTek®

MiTek Standard Detail

**SDPR.01.03**

Framing anchors,
2no per connection.



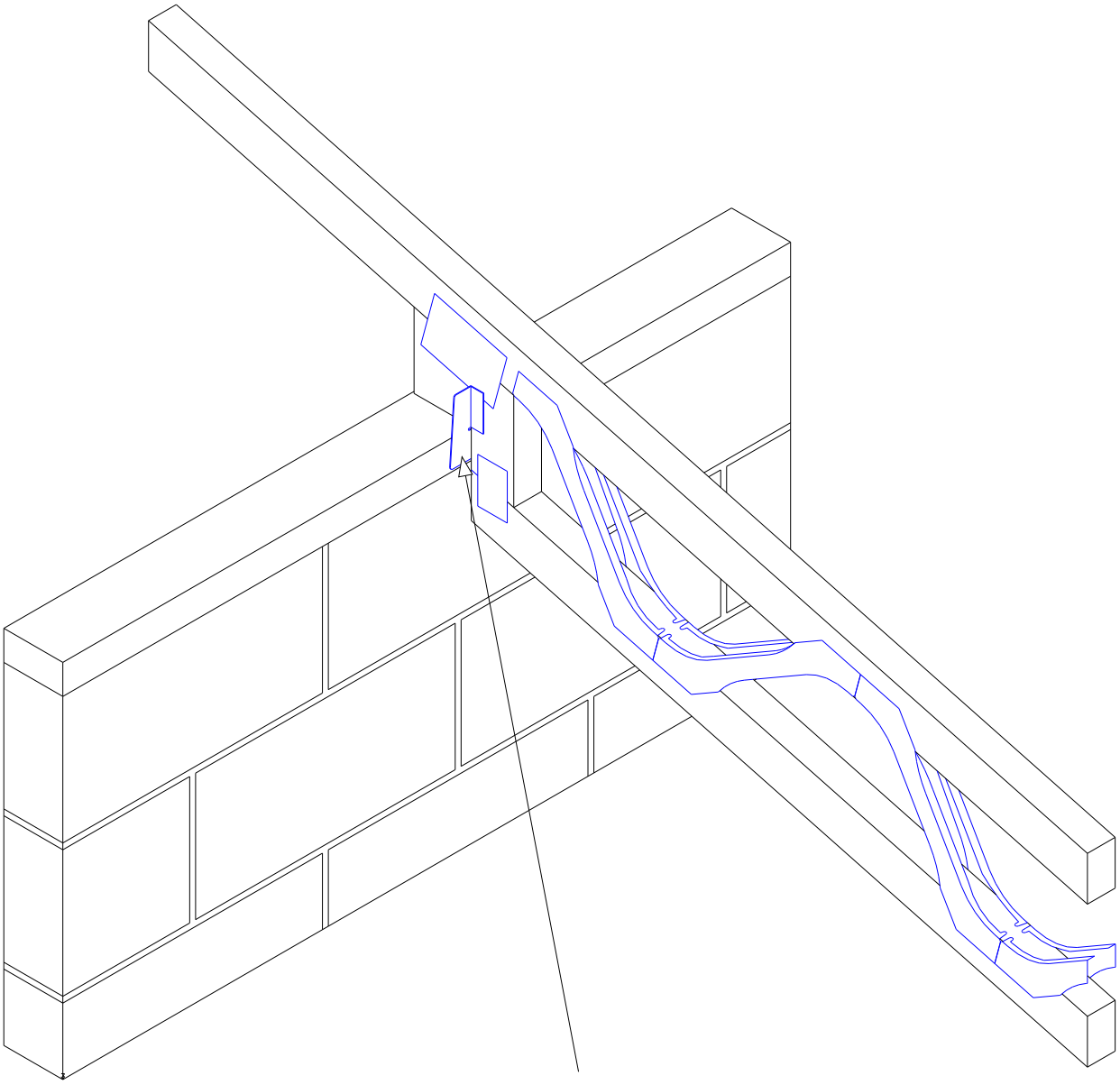
# Flatwise Posi-Rafters to Steel at Apex

Instalation and fixing of hanger to be in accordance with manufacturers details and recommendations

MiTek®

**MiTek Standard Detail**

SDPR.01.04



Truss clip.

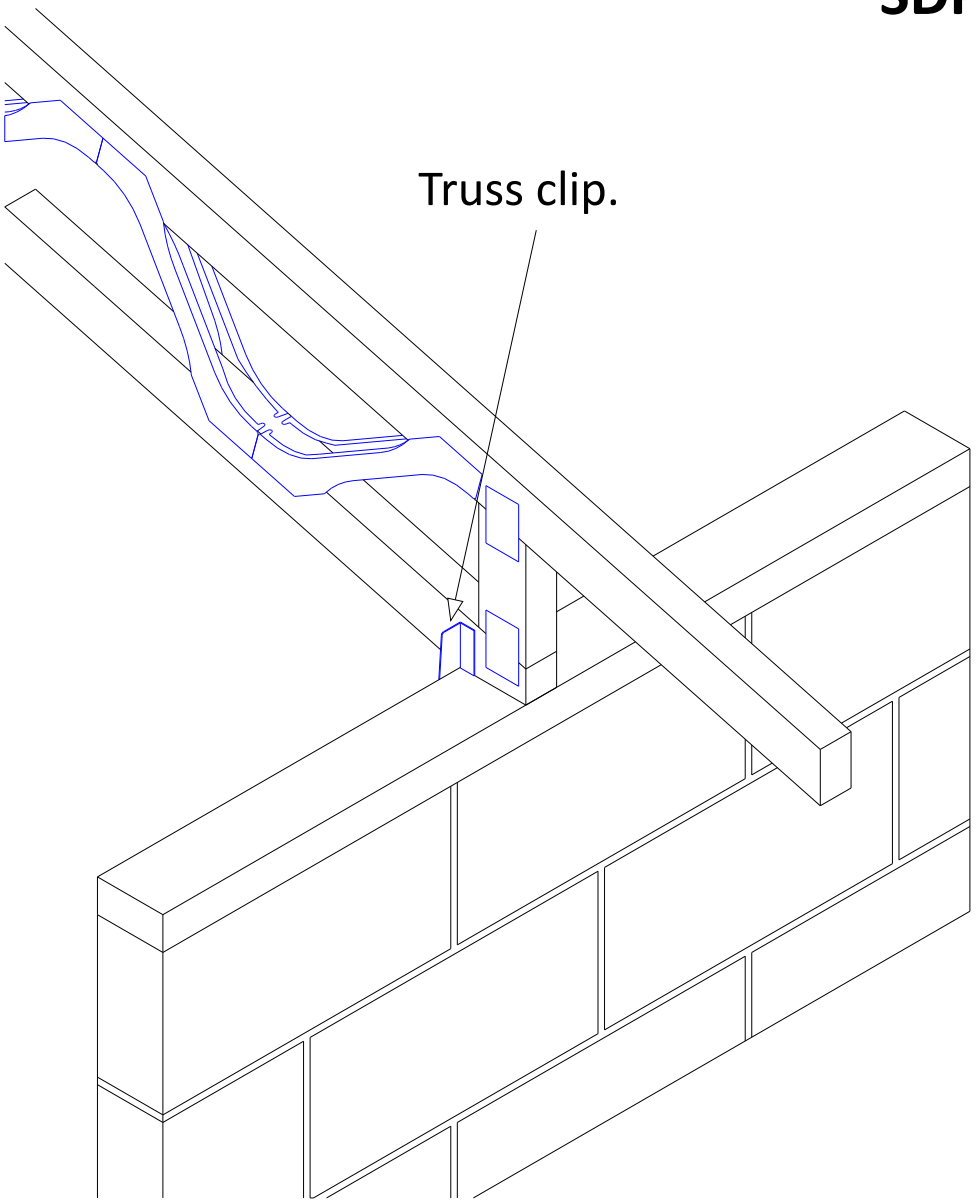
# Edgewise Posi-Rafters to Wallplate at Apex

Instalation and fixing of hanger to be in accordance with manufacturers details and recommendations

MiTek®

MiTek Standard Detail

SDPR.01.05



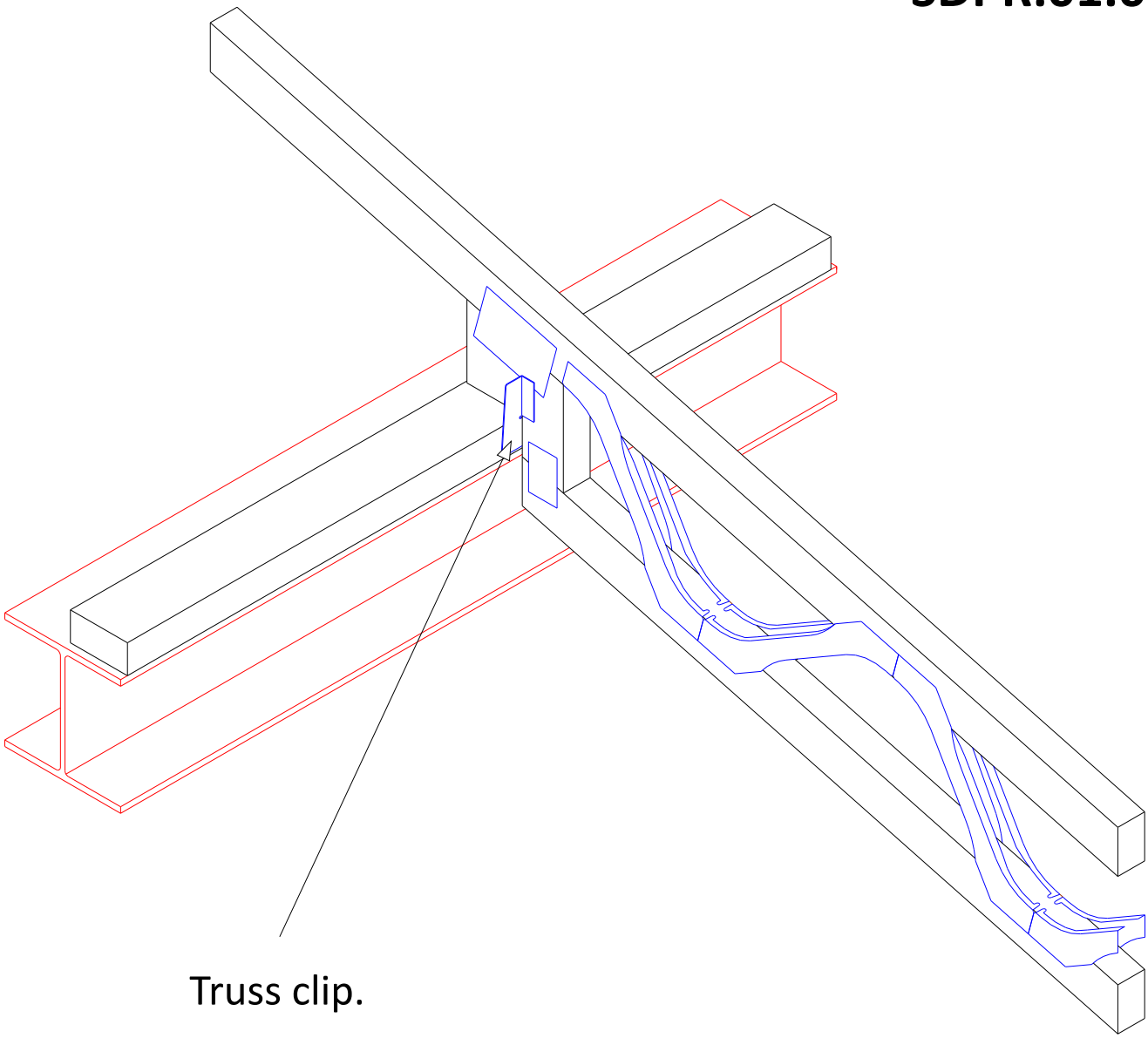

# Edgewise Posi-Rafters to Wallplate at Eaves

Instalation and fixing of hanger to be in accordance with manufacturers details and recommendations

MiTek®

MiTek Standard Detail

SDPR.01.06



Truss clip.

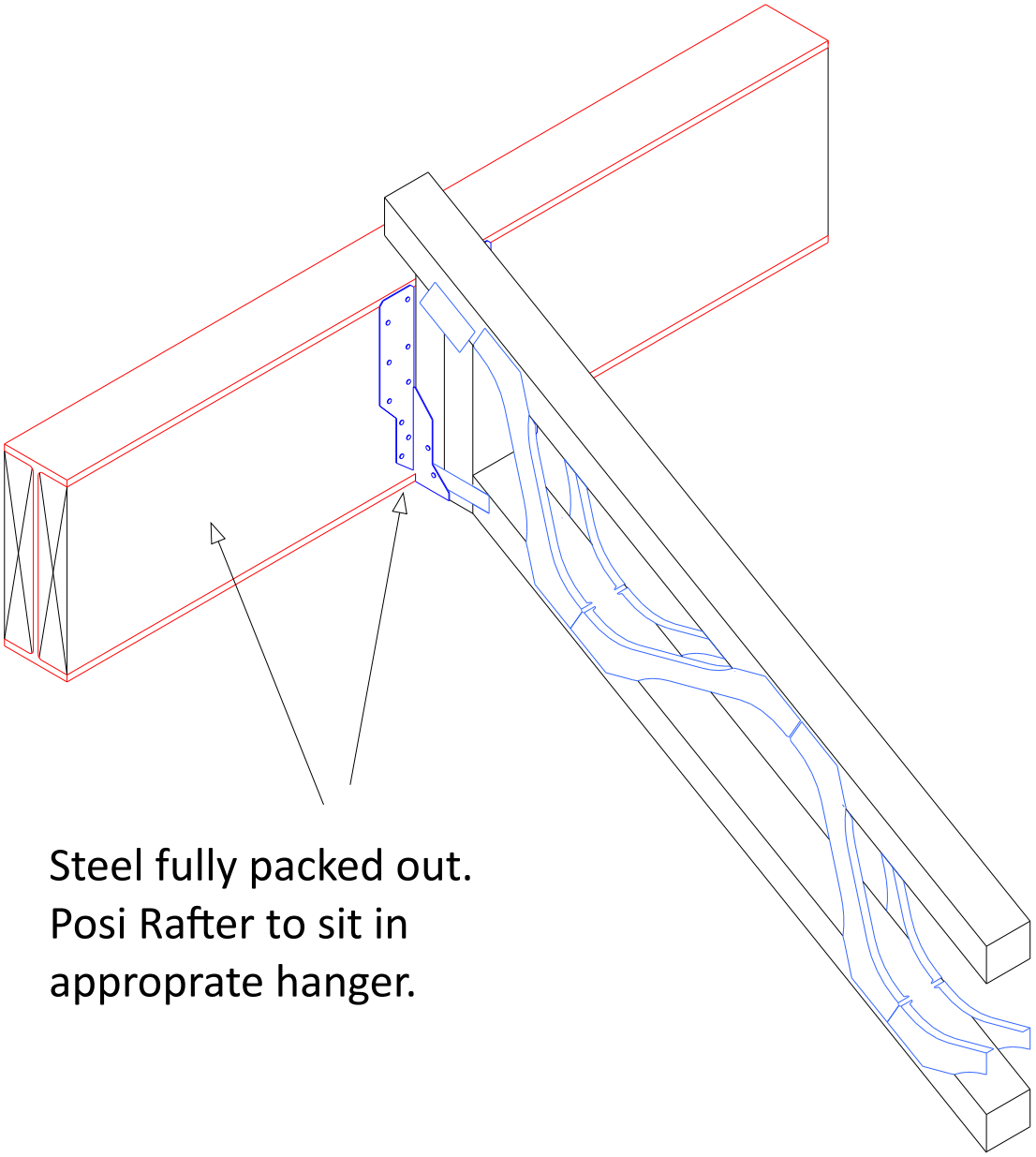
# Edgewise Posi-Rafters to Steel at Apex

Instalation and fixing of hanger to be in accordance with manufacturers details and recommendations

MiTek®

MiTek Standard Detail

SDPR.01.07



Steel fully packed out.
Posi Rafter to sit in
approprate hanger.

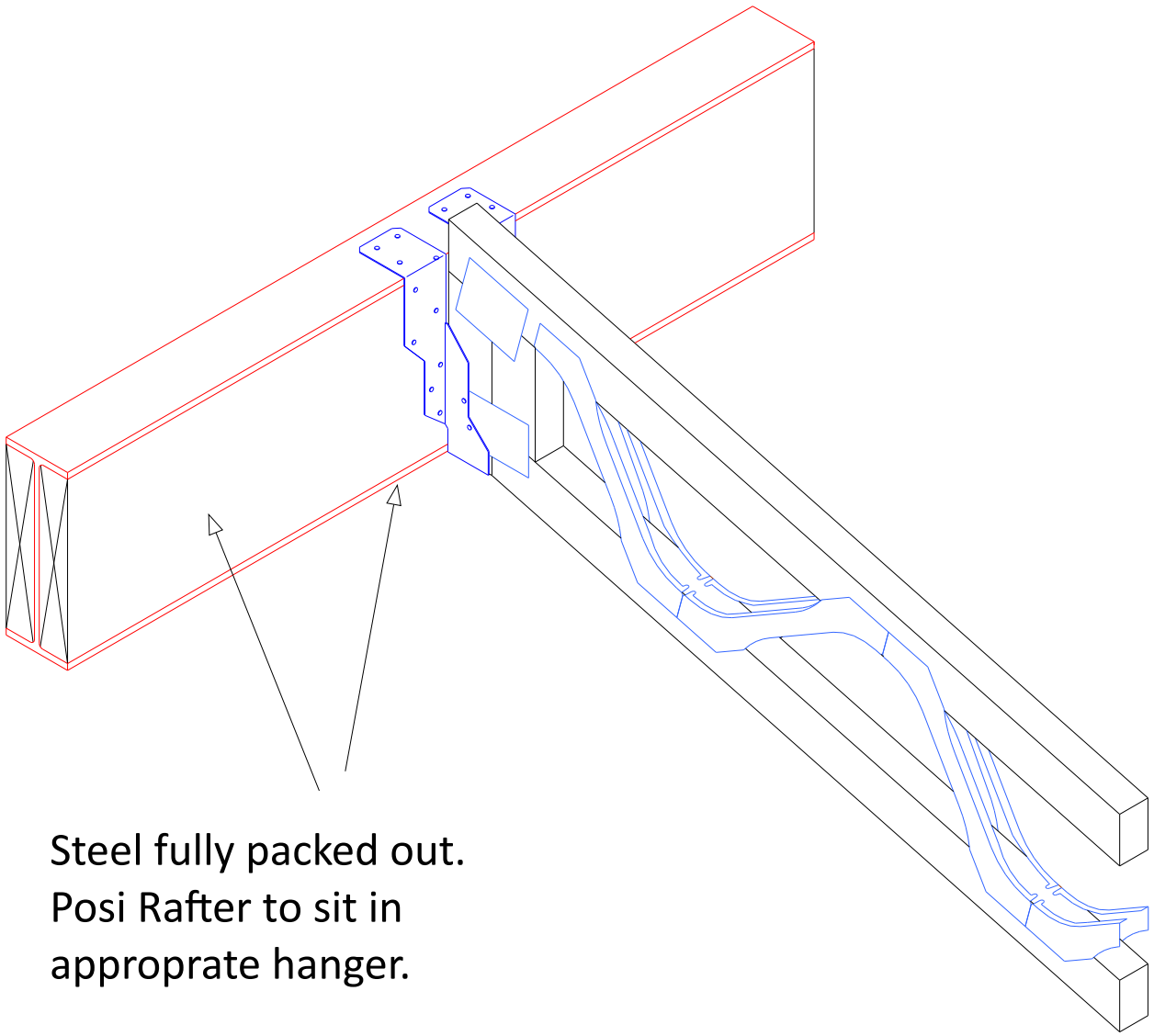
# Flatwise Posi-Rafters to Steel at Apex

Instalation and fixing of hanger to be in accordance with manufacturers details and recommendations

MiTek®

MiTek Standard Detail

SDPR.01.08



Steel fully packed out.
Posi Rafter to sit in
approprate hanger.

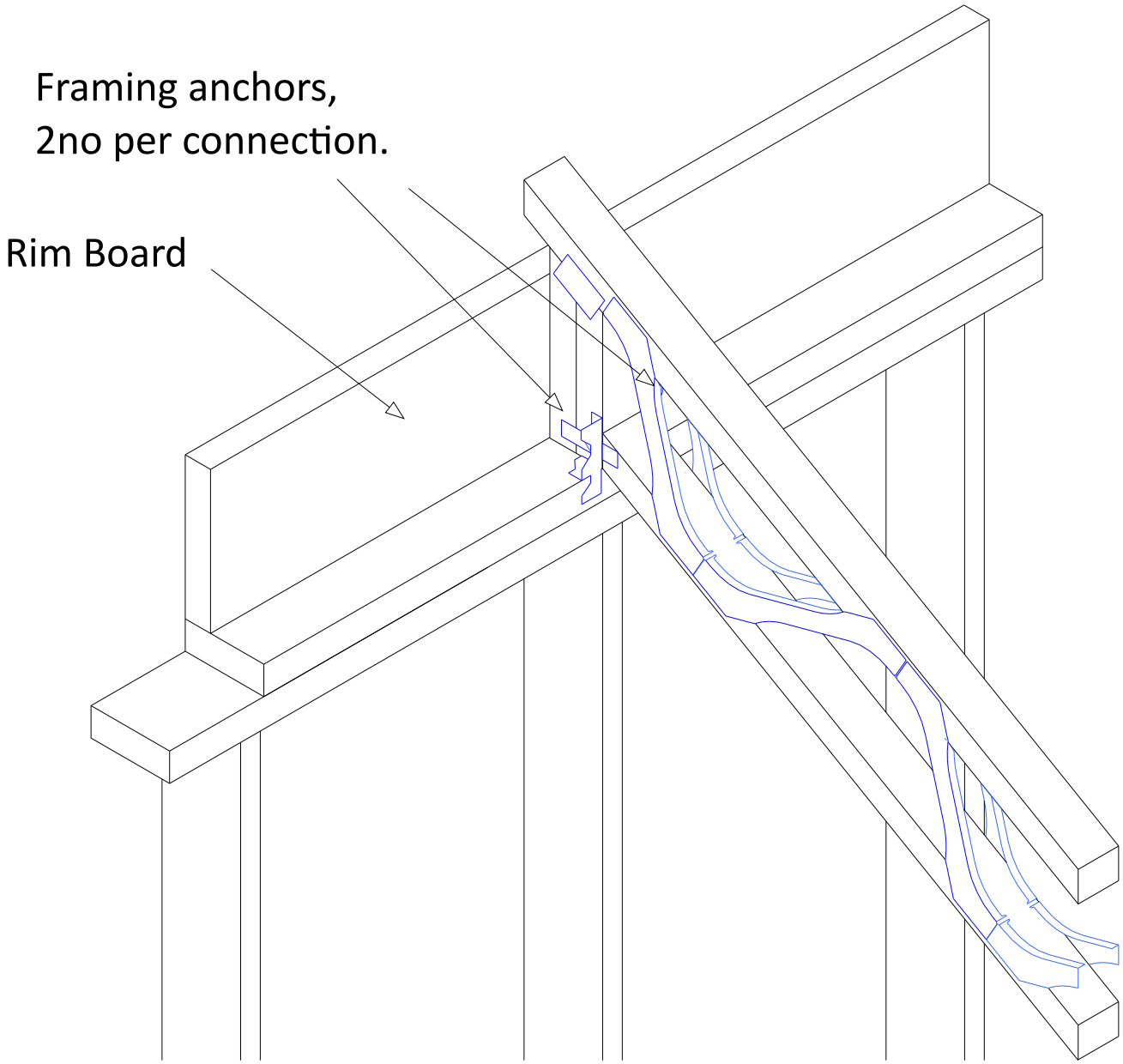
# Edgewise Posi-Rafters to Steel at Apex

Instalation and fixing of hanger to be in accordance with manufacturers details and recommendations

MiTek®

MiTek Standard Detail

SDPR.01.09



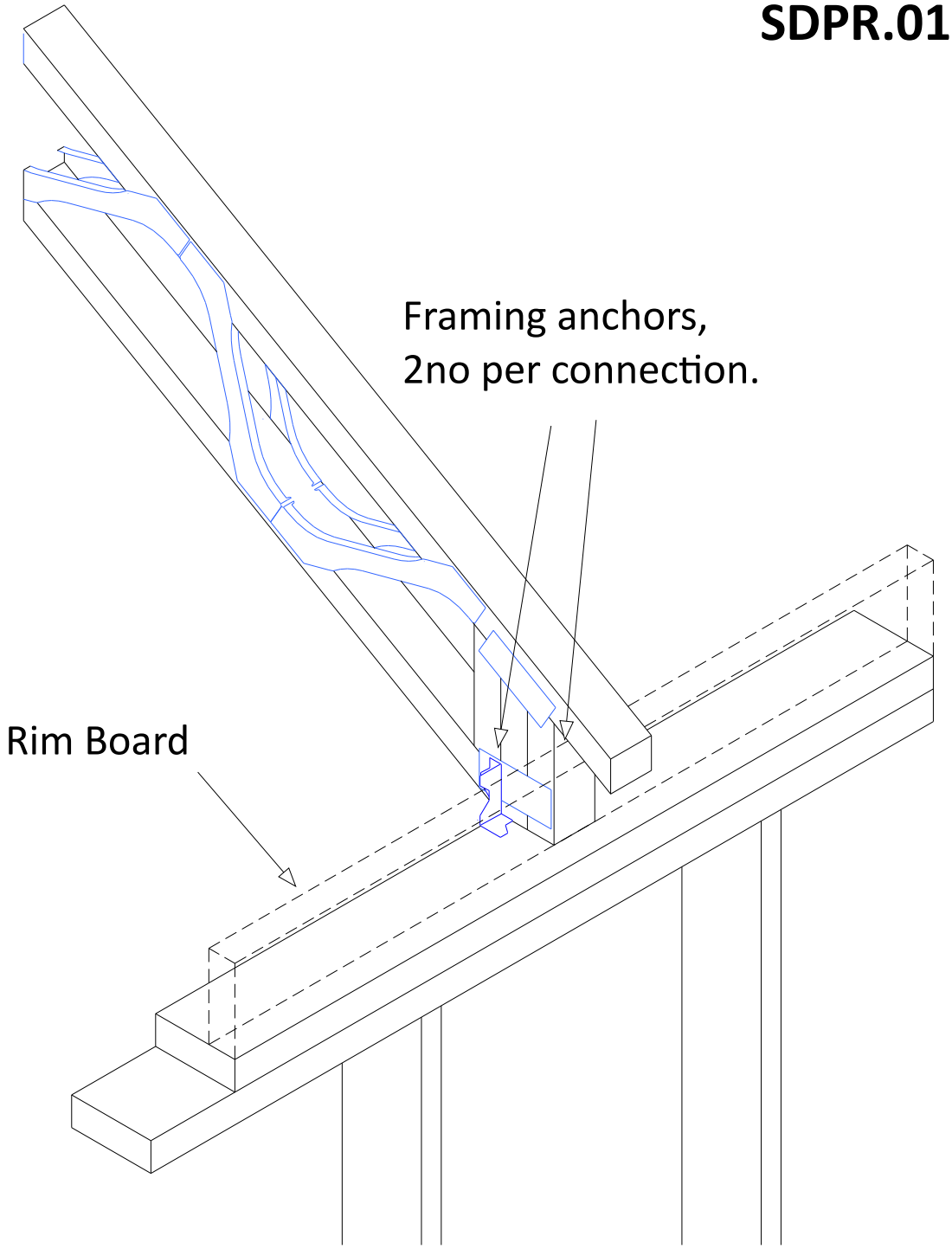

# Flatwise Posi-Rafters to Wallplate at Apex (Timber Frame)

Instalation and fixing of framing anchor to be in accordance with manufacturers details and recommendations

MiTek®

MiTek Standard Detail

SDPR.01.10



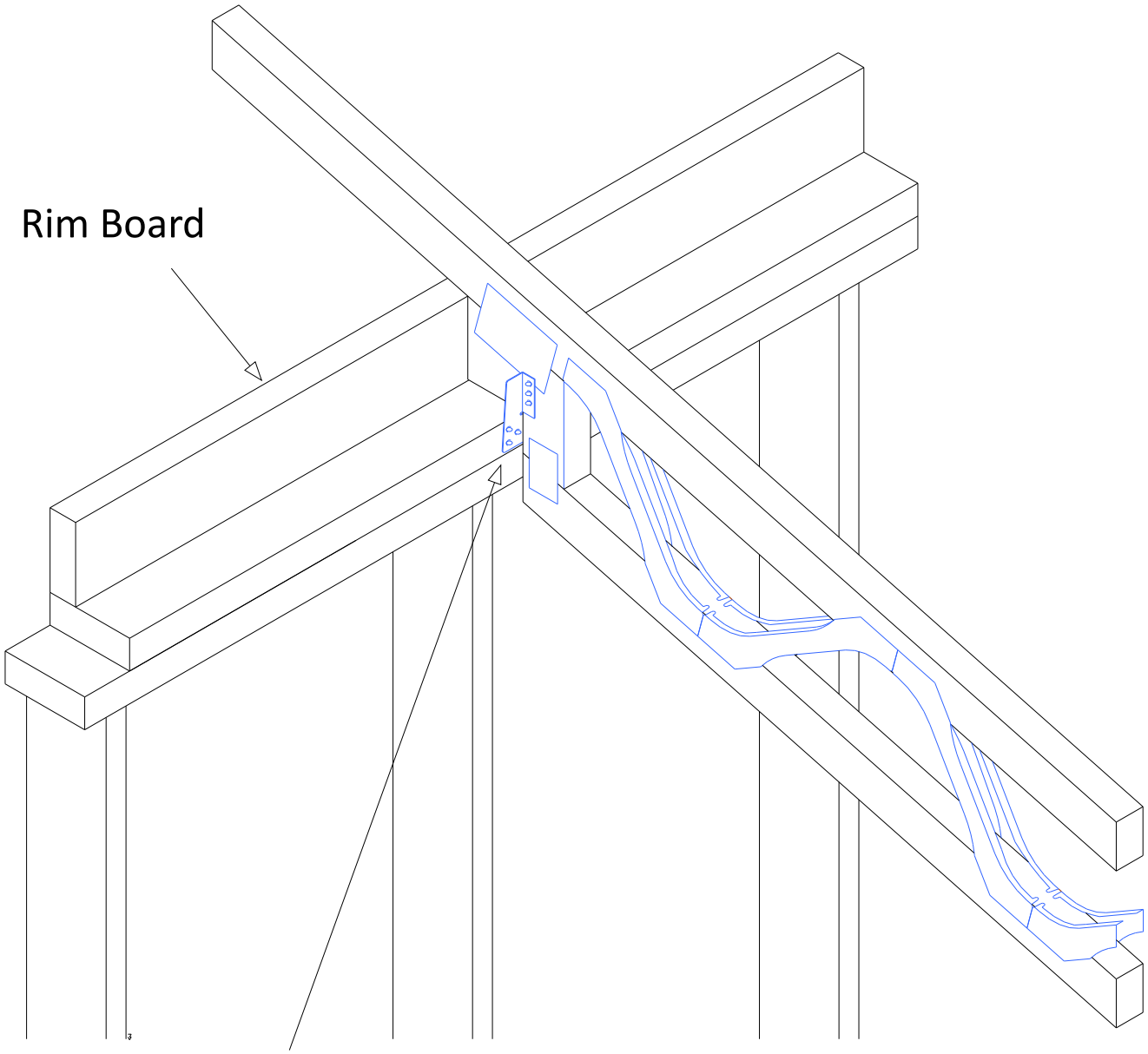

# Flatwise Posi-Rafters to Wallplate at Eaves (Timber Frame)

Instalation and fixing of framing anchor to be in accordance with manufacturers details and recommendations

MiTek®

MiTek Standard Detail

SDPR.01.11



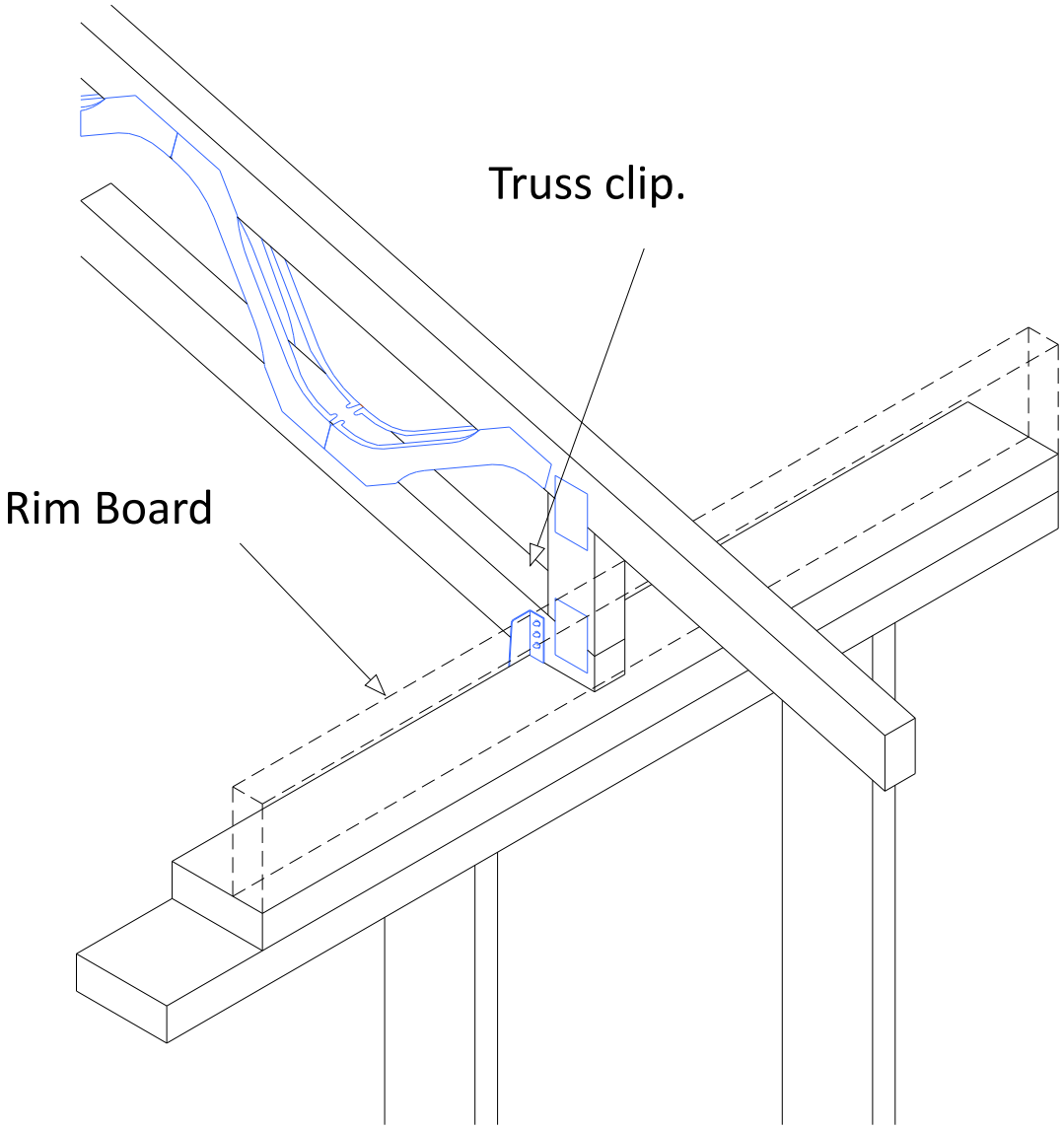

# Edgewise Posi-Rafters to Wallplate at Apex

Instalation and fixing of truss clip to be in accordance with manufacturers details and recommendations

MiTek®

MiTek Standard Detail

SDPR.01.12




# Edgewise Posi-Rafters to Wallplate at Eaves

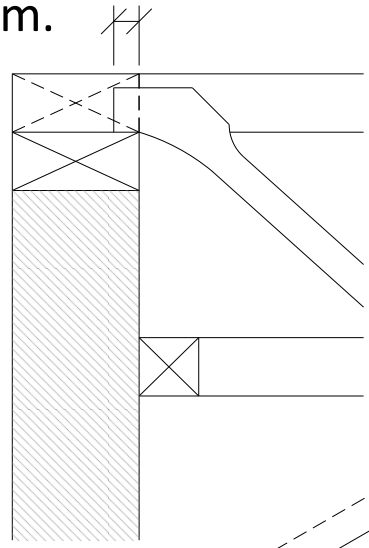
Instalation and fixing of truss clip to be in accordance with manufacturers details and recommendations

MiTek®

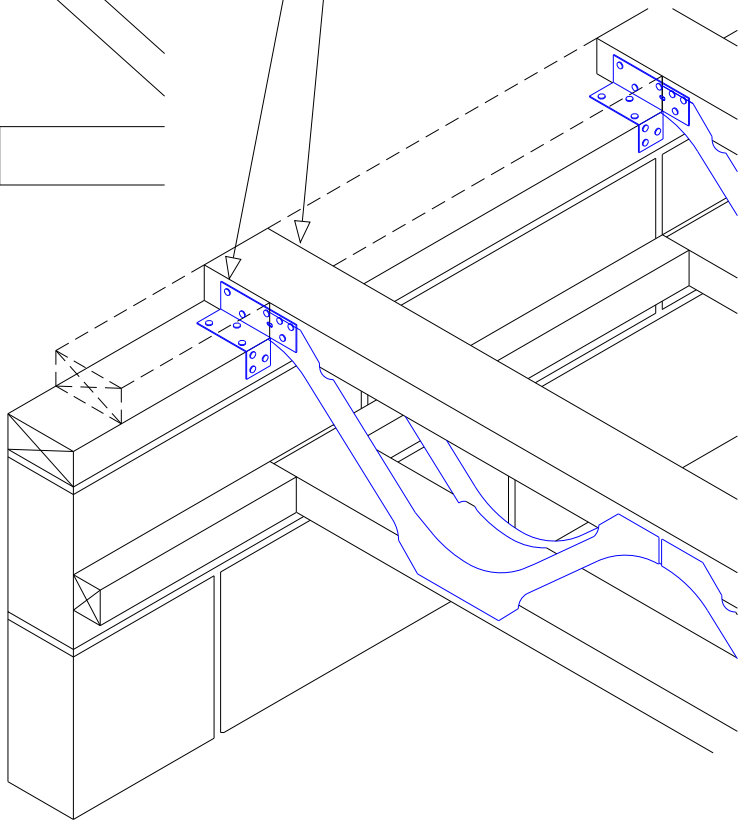
MiTek Standard Detail

**SDPR.01.13**

Unless proven by design the Posi-Strut should overhang the bearing by 15mm.



2 no Framing anchors at each connection.



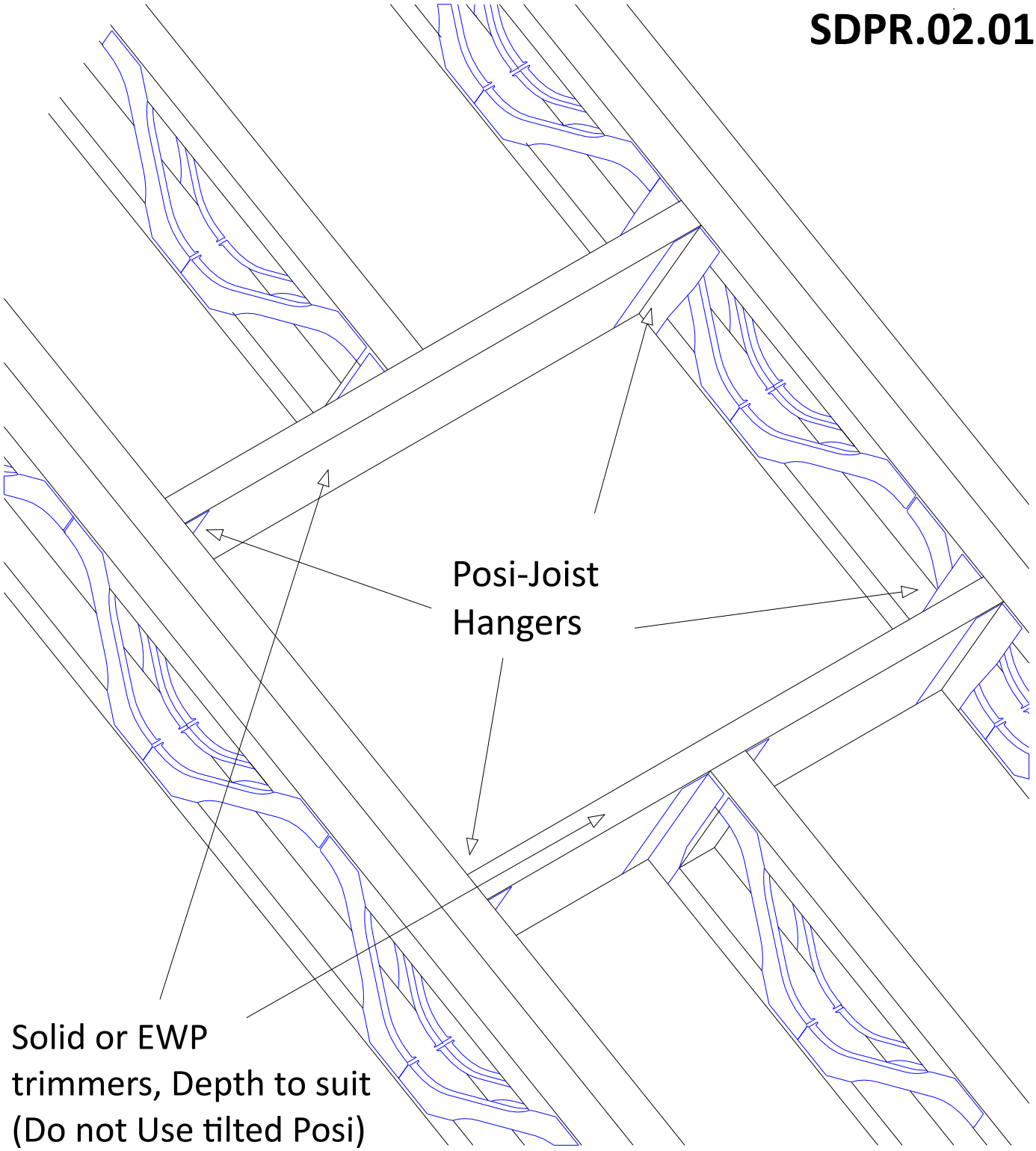
# Flat roof Joist
# Top Chord Support

Instalation and fixing of framing anchor to be in accordance with manufacturers details and recommendations

MiTek®

**MiTek Standard Detail**

SDPR.02.01



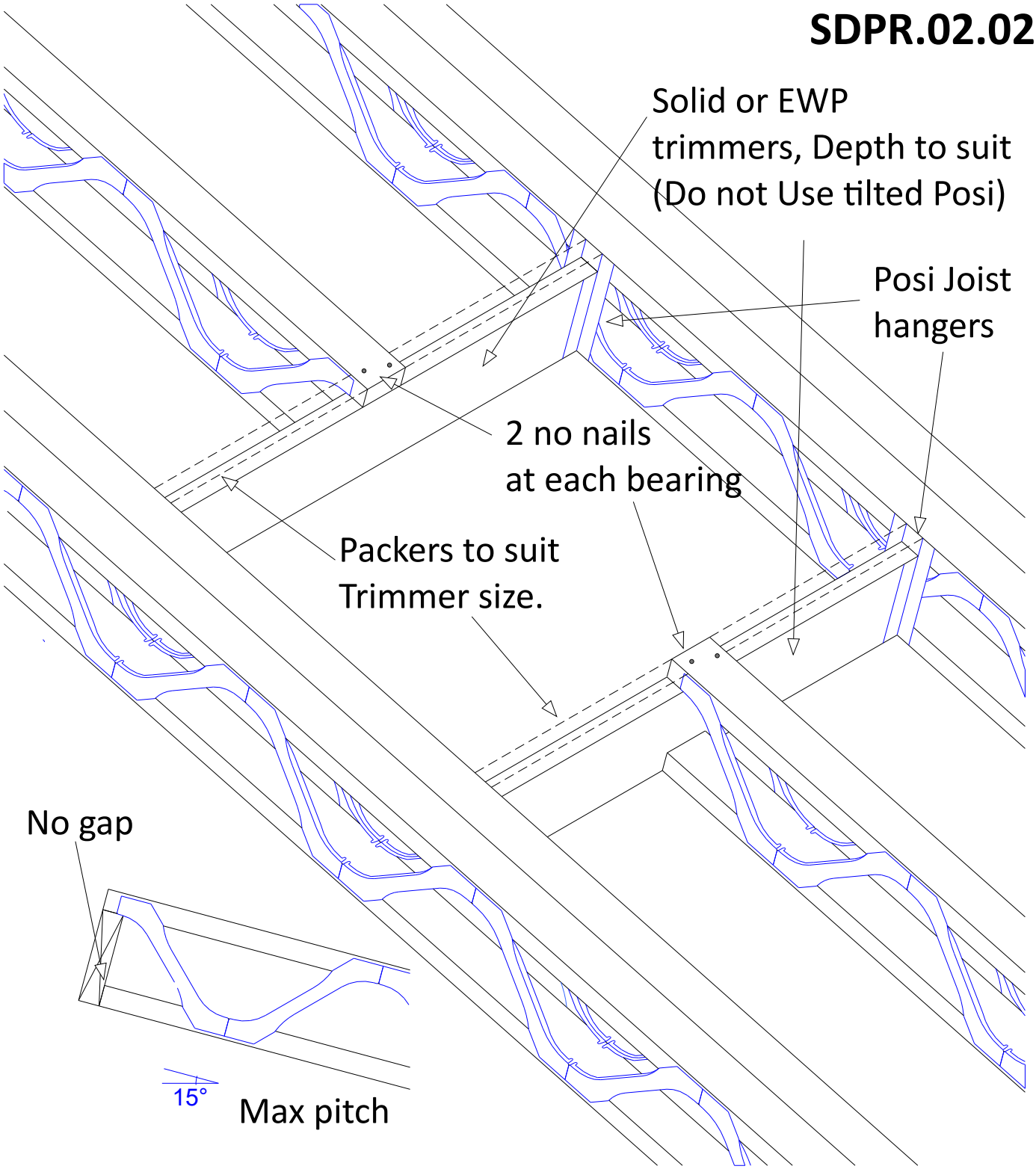

# Flatwise Posi-Rafters
# Trimmer detail (with hanger)

Instalation and fixing of hanger to be in accordance with manufacturers details and recommendations

MiTek®

MiTek Standard Detail

**SDPR.02.02**



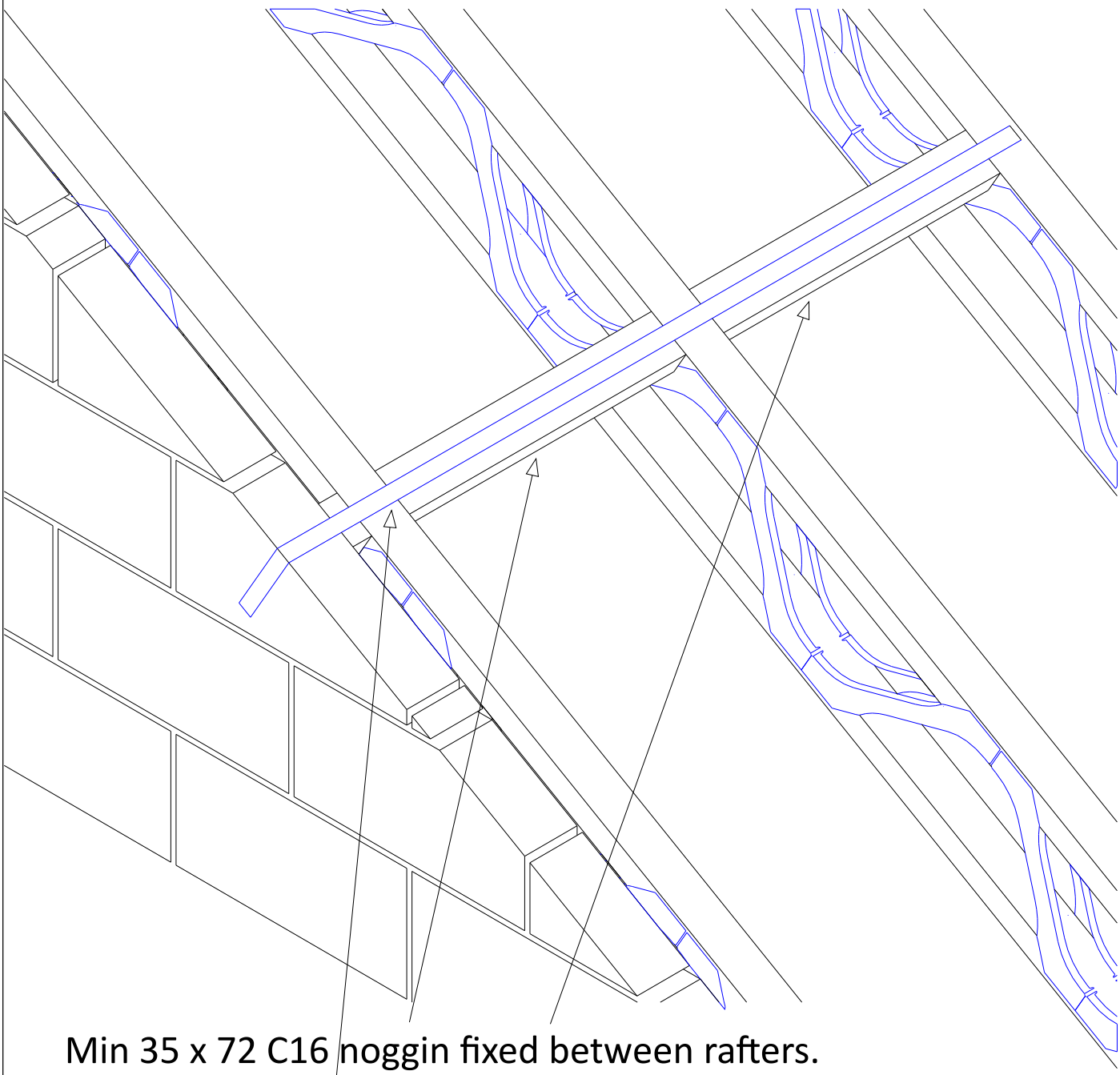

# Flatwise Posi-Rafters
# Trimmer detail (top chord fixing)

Instalation and fixing of hanger to be in accordance
with manufacturers details and recommendations

MiTek®

**MiTek Standard Detail**

SDPR.03.01



Min 35 x 72 C16 noggin fixed between rafters.

Strap fixed to noggin. Refer to strap manufacturers details for fixing method.

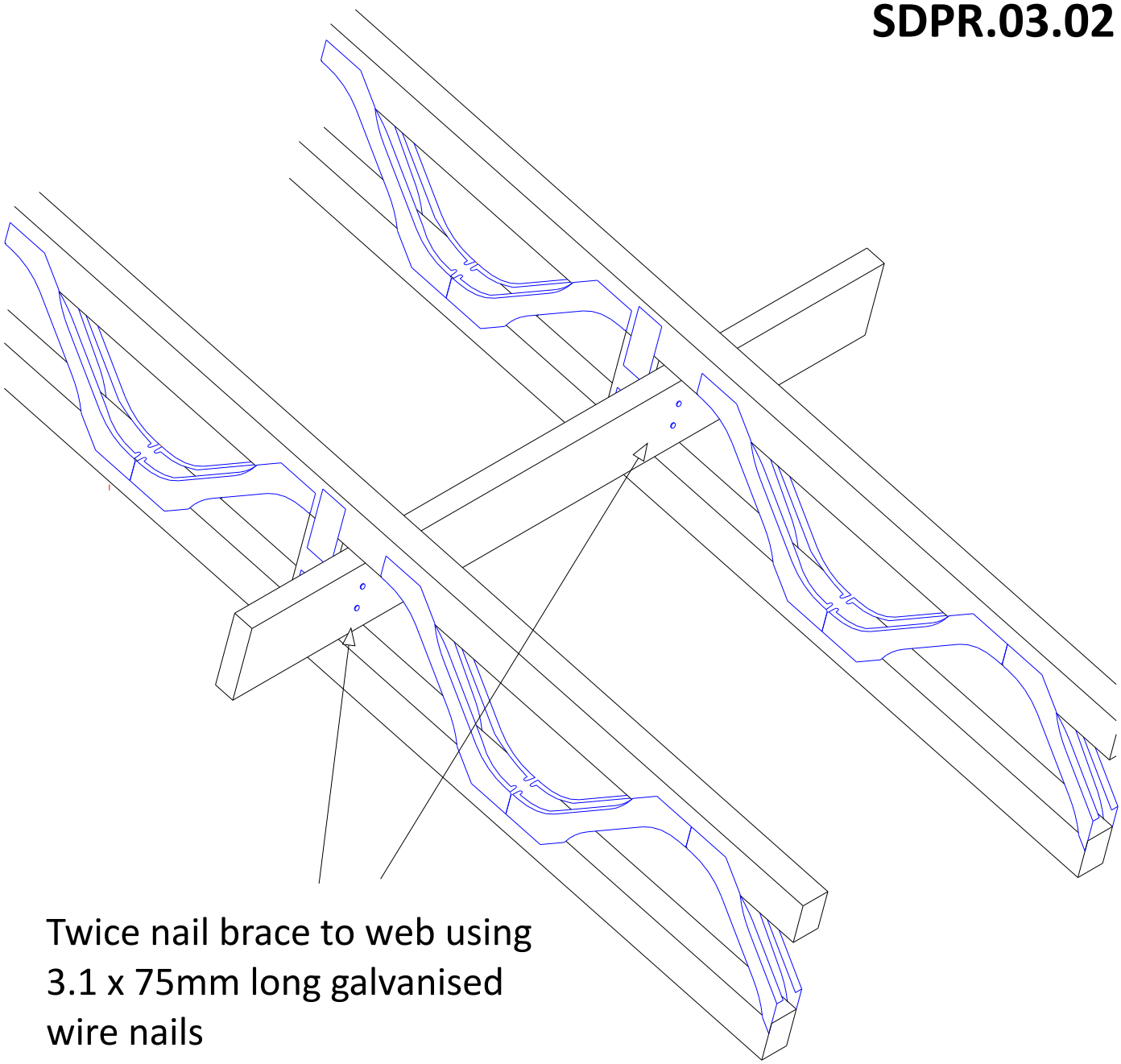
# Posi-Rafters

# Horizontal Restraint detail

MiTek®

MiTek Standard Detail

SDPR.03.02



Twice nail brace to web using
3.1 x 75mm long galvanised
wire nails

**INSERT STRONGBACK THROUGH POSI - JOISTS BEFORE FIXING AS IT CANNOT BE INSTALLED AFTER THEY HAVE BEEN FIXED.**

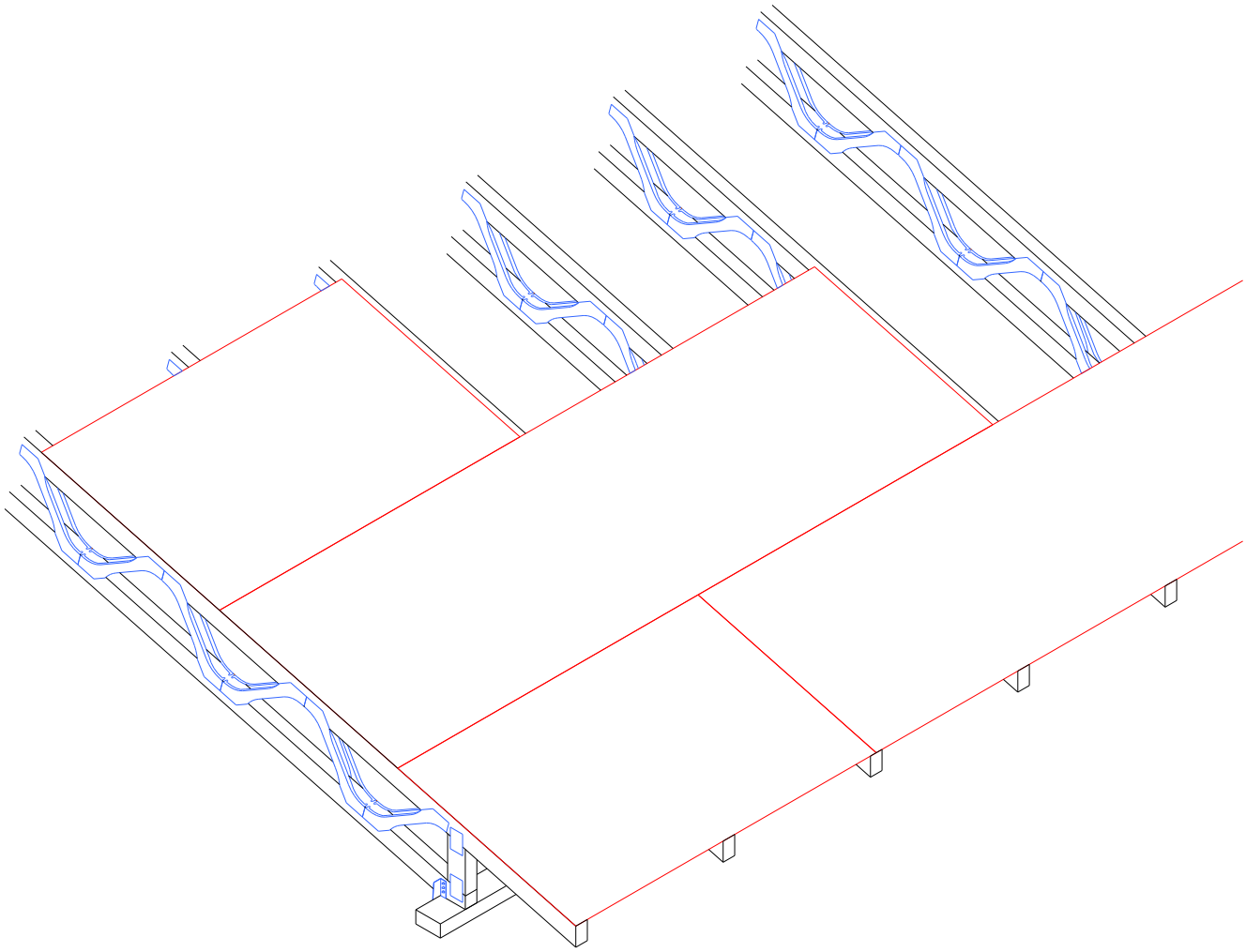
# Mid Span Longitudinal Brace Fixed To Built In Vertical Webs

(Fix at a maximum of 4.0 metre centres and within effective zone)

MiTek®

MiTek Standard Detail

SDPR.04.01



Start at bottom left with toungue facing up slope.
Stagger joints verticaly. Secury with fixing details
as recommended by the sheathing material supplier

# Posi Rafter Sarking

MiTek®

MiTek Standard Detail