

MiTek
Posi-Joist
Details
Rev 5.4

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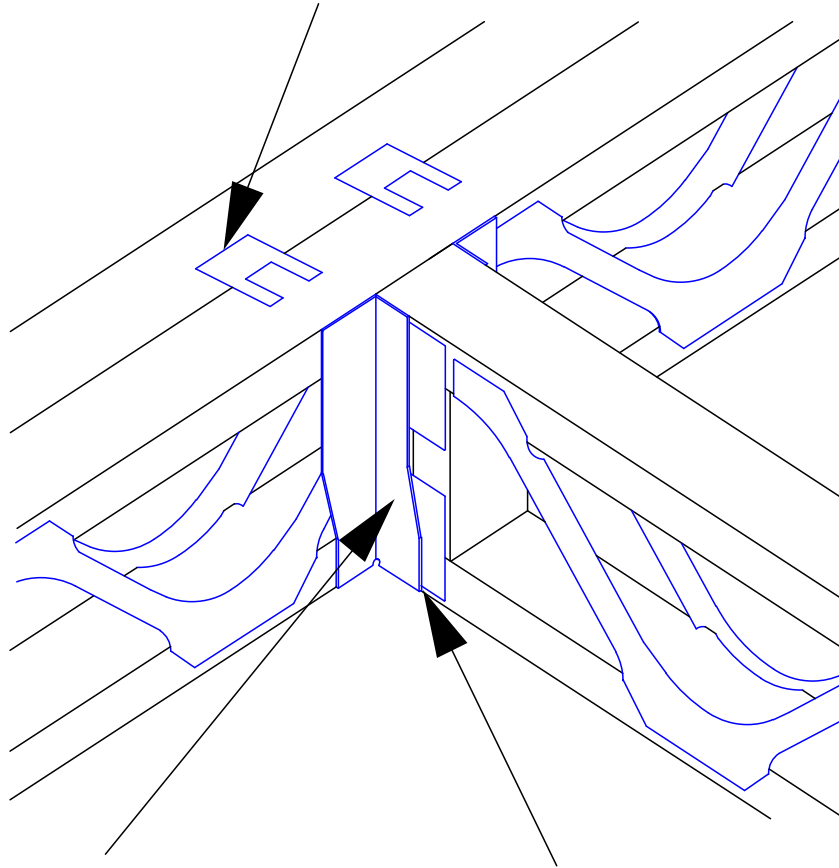
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Posi-Joists chords fixed together as specified by design using EWP clip or screw connectors, see approved list from MiTek Industries.



Posi-Joist
Hanger

Do not notch bottom
member of Posi-Joist
over bottom flange of
hanger.

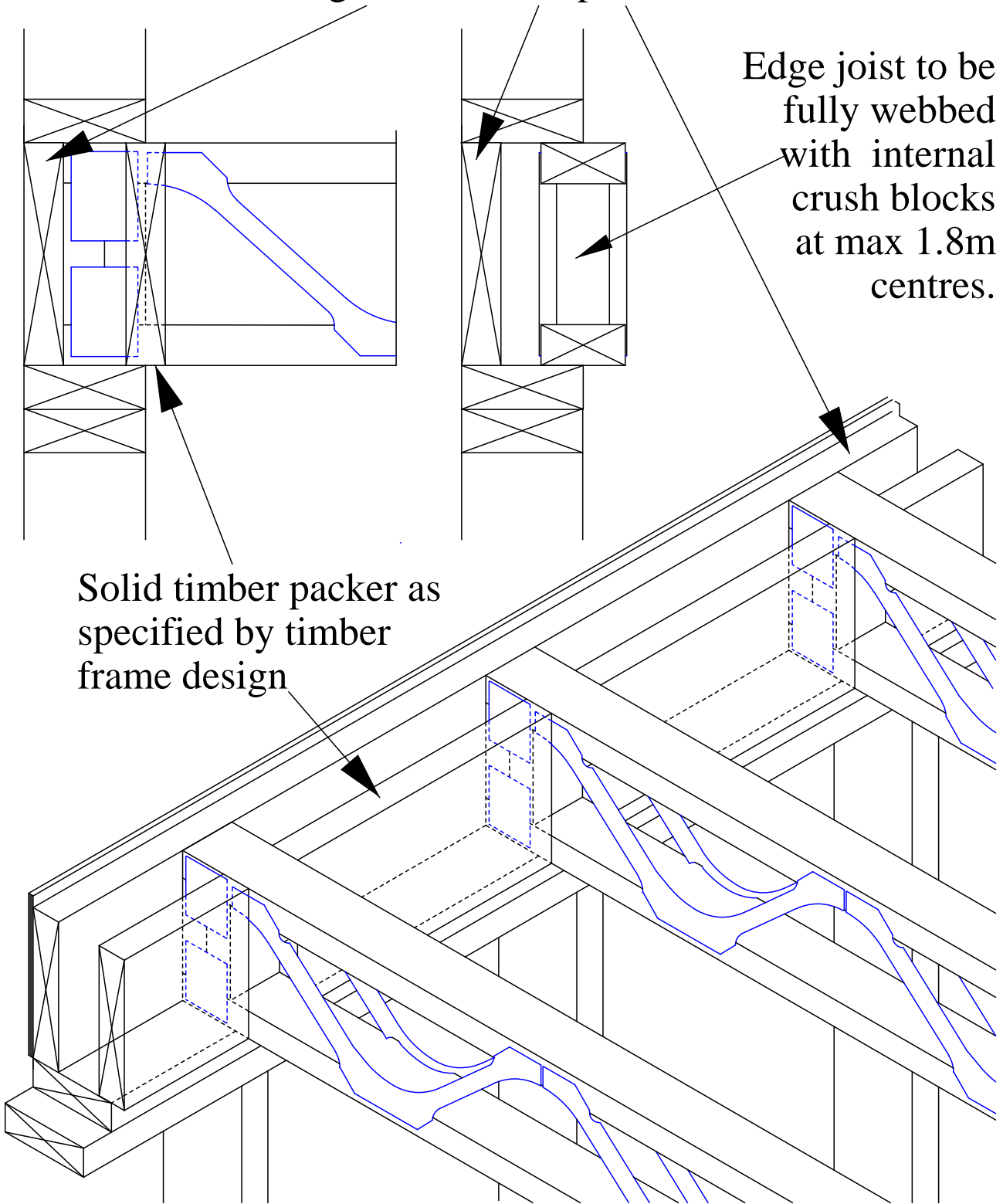
Note: Loaded face be clearly marked
on Posi-Joist girder

Posi-Joist To Girder Detail

Solid or engineered timber ring beam with depth to suit.

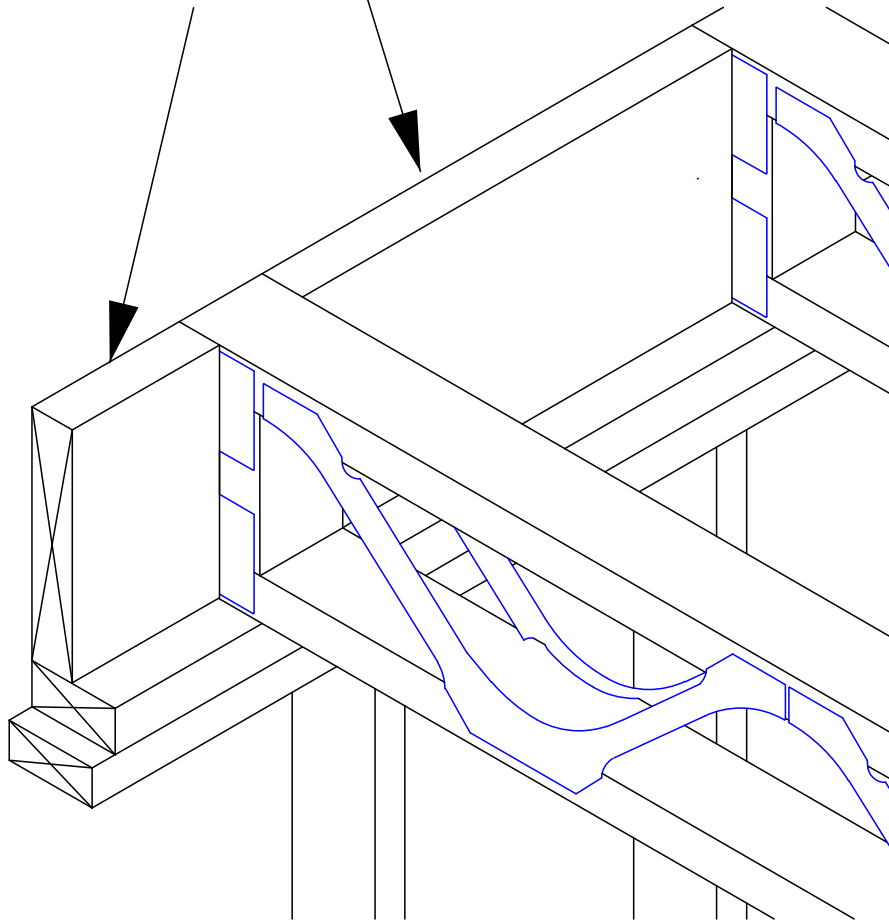
Edge joist to be fully webbed with internal crush blocks at max 1.8m centres.

Solid timber packer as specified by timber frame design



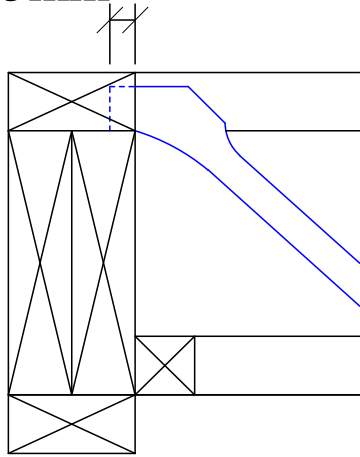
Bottom Chord Support Timber Frame External (With Ring Beam And Packer)

Full depth chord restraint
blocking fixed between
Posi-Joists



**Bottom Chord Support
Timber Frame Internal
(With Restraint Noggings)**

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

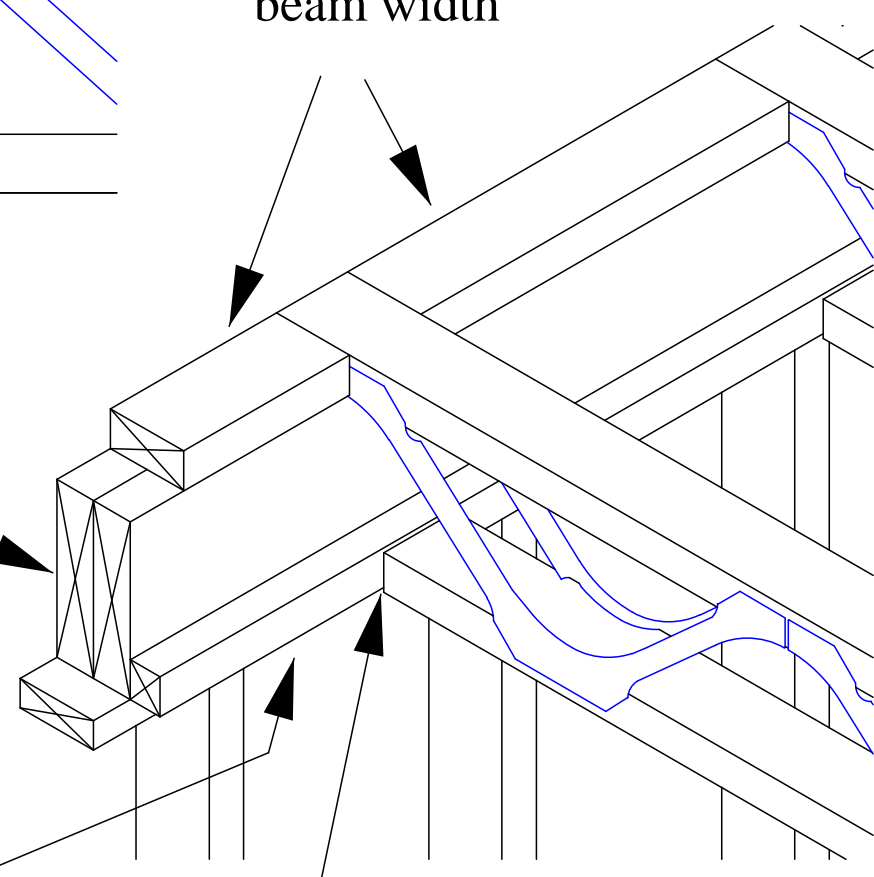


Packing piece to suite
Posi-Joist TC flange
depth and Ring
beam width

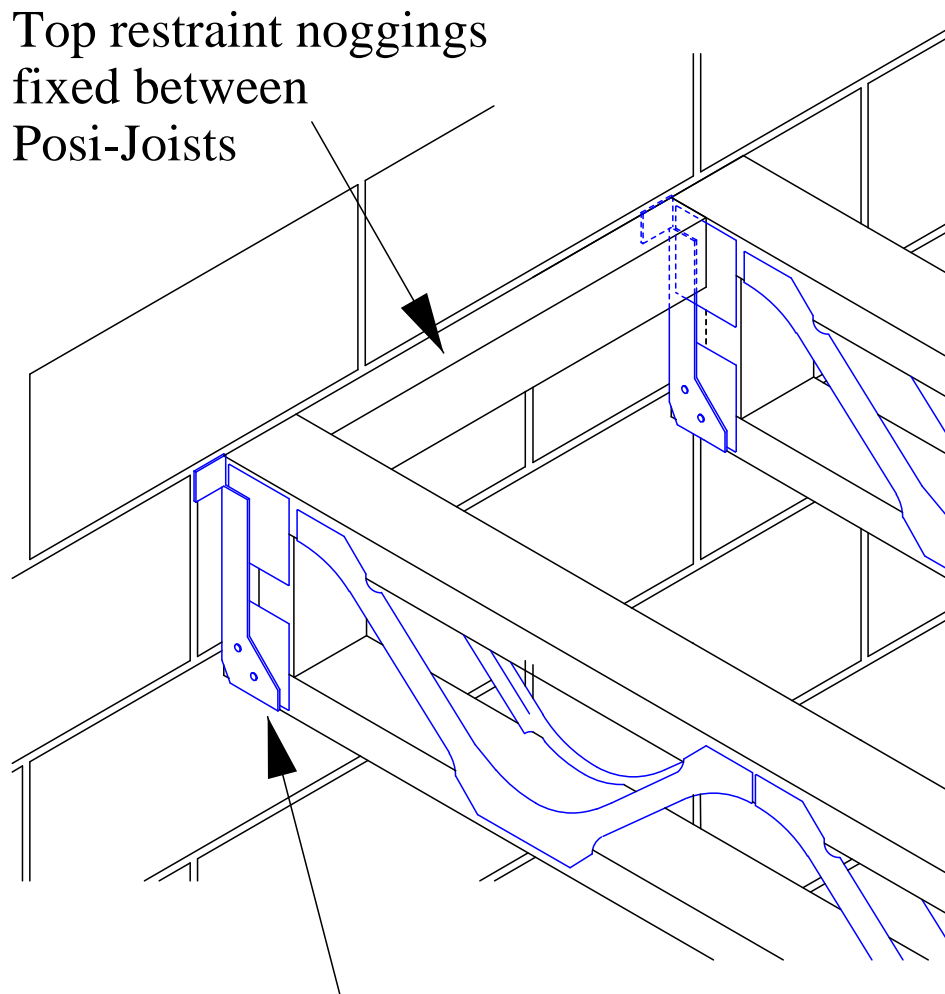
Ring beam
(Size to suit)

Continuous
plasterboard
runner

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



Top Chord Support Timber Frame Internal or External

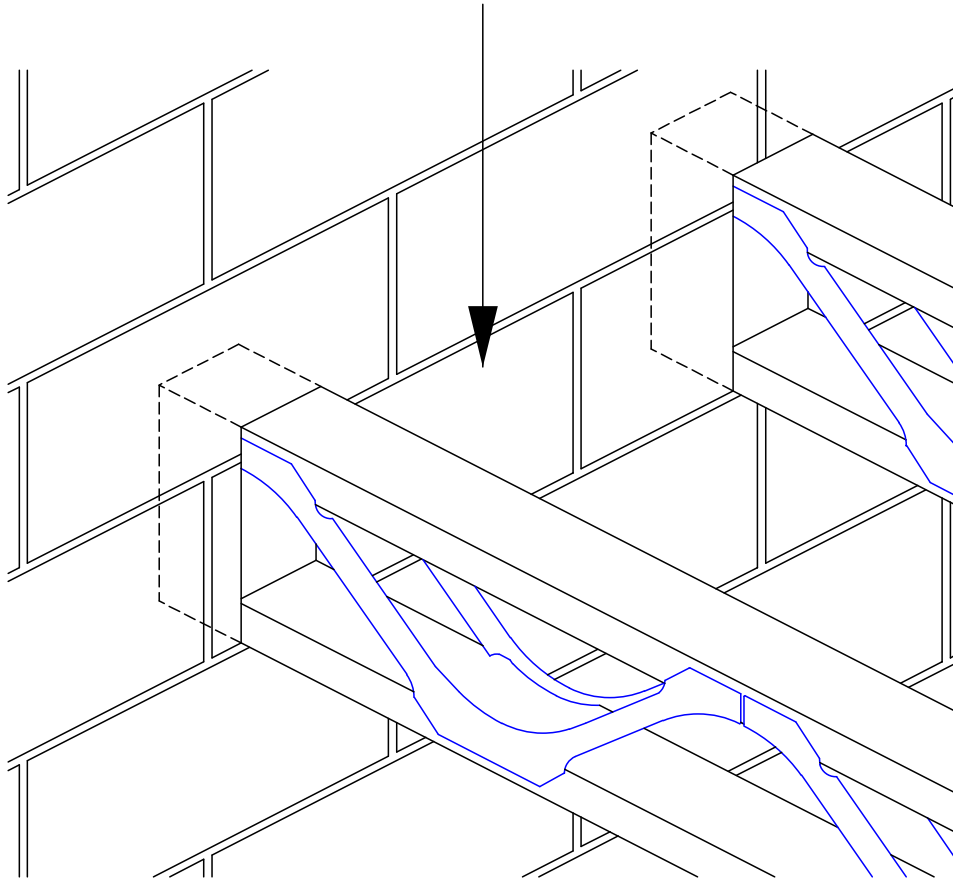


Do not notch bottom
member of Posi-Joist
over bottom flange of
hanger.

Minimum bearing determined by design
(Choose correct full depth hanger relative to coursework,
load, bearing width and desired bearing level)

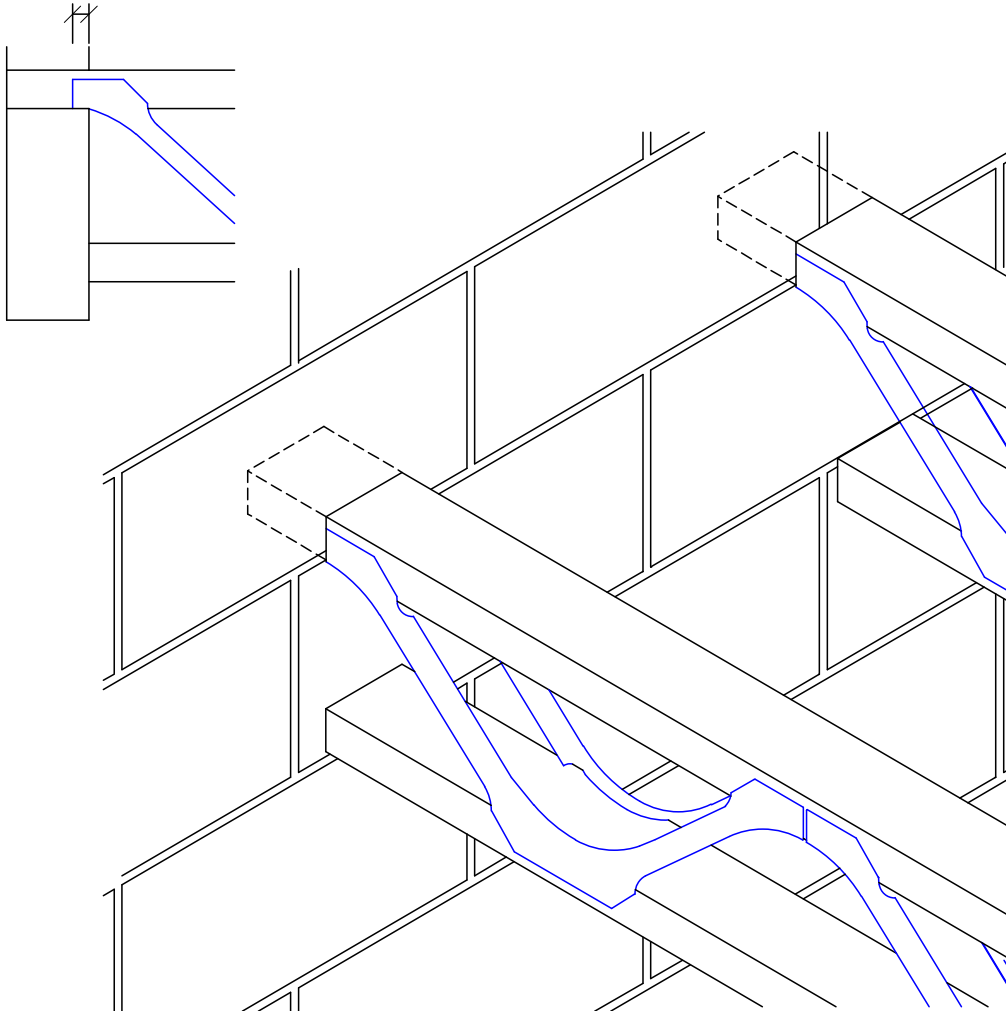
Bottom Chord Support Masonry On Hanger With Top Noggings Restraint

Blockwork to continue
between beams
to provide restraint



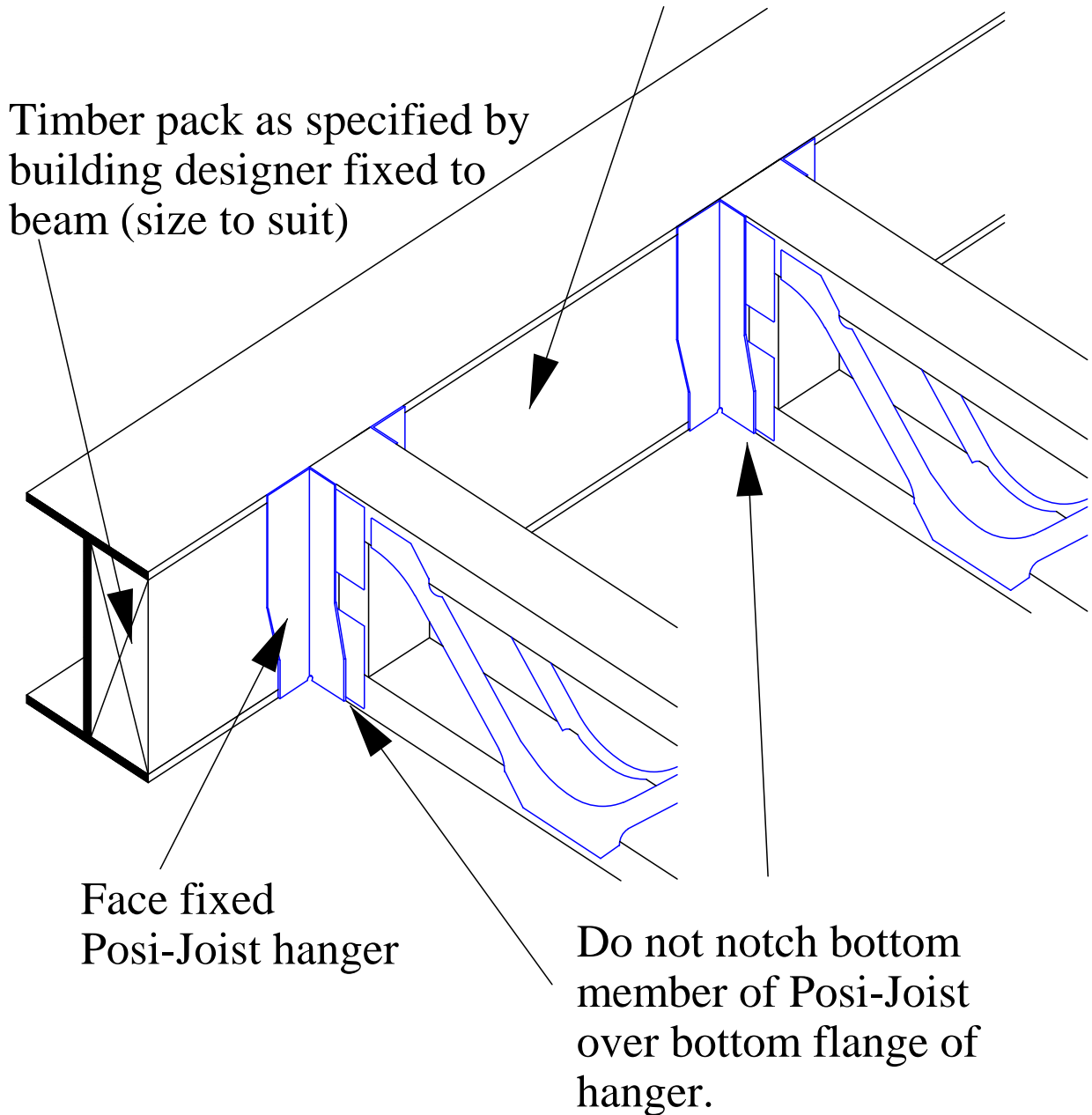
Bottom Chord Support Masonry Built In

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



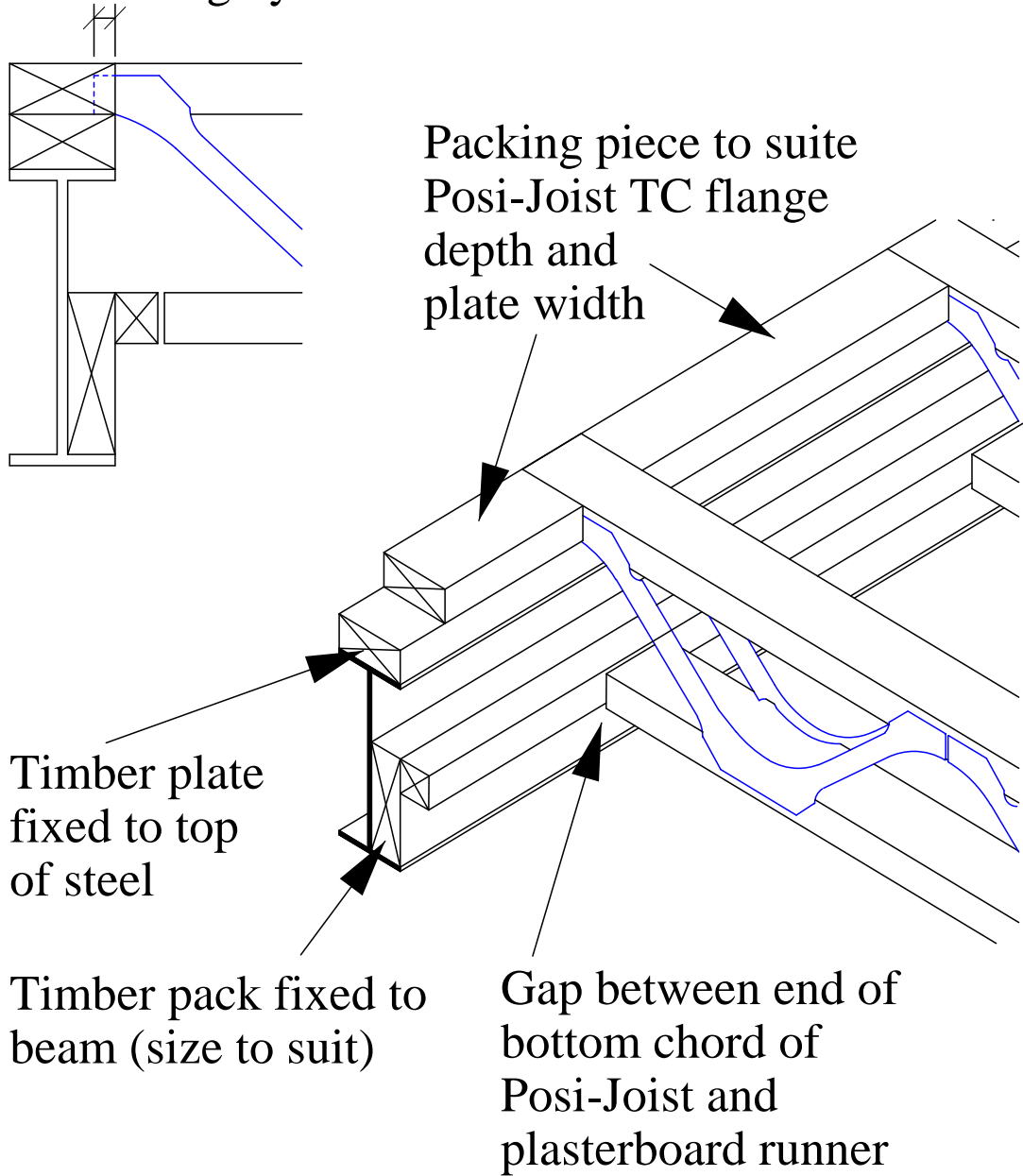
**Top Chord Support
Masonry Built In**

Note: Full depth blocking required between joists if top fixed or non full depth face fixed hangers used.



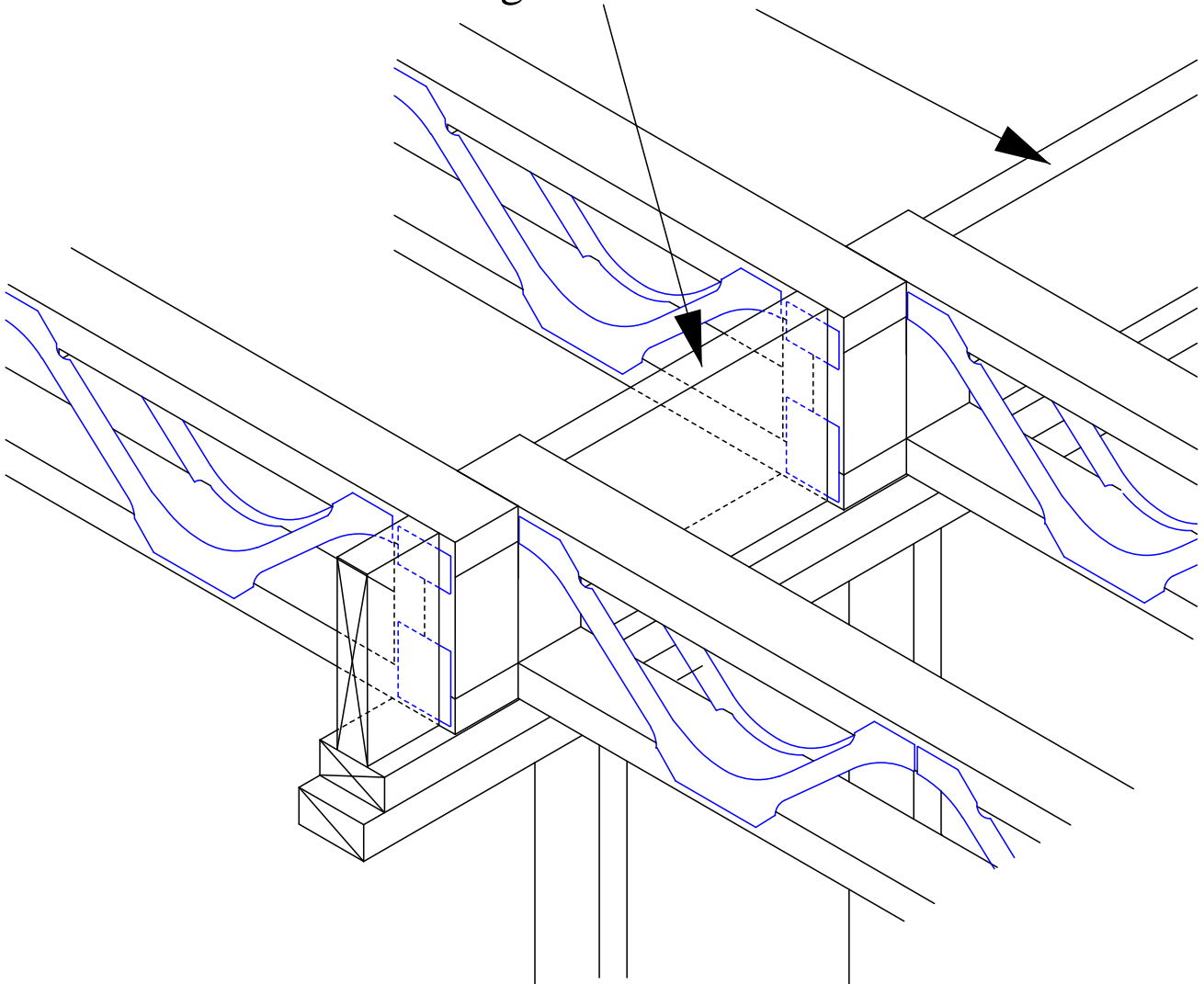
Bottom Chord Support Flush To Steel Beam

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



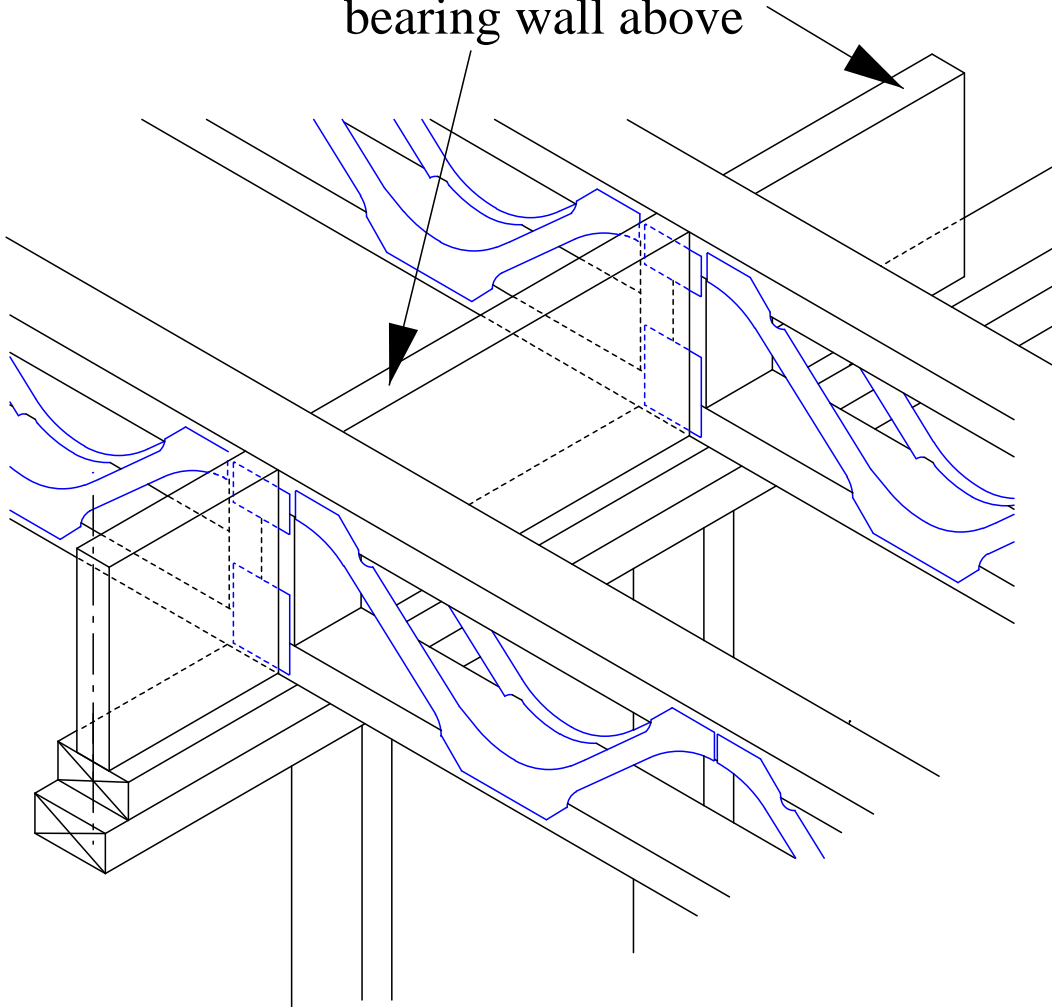
Top Chord Support To Downstand Steel Beam

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

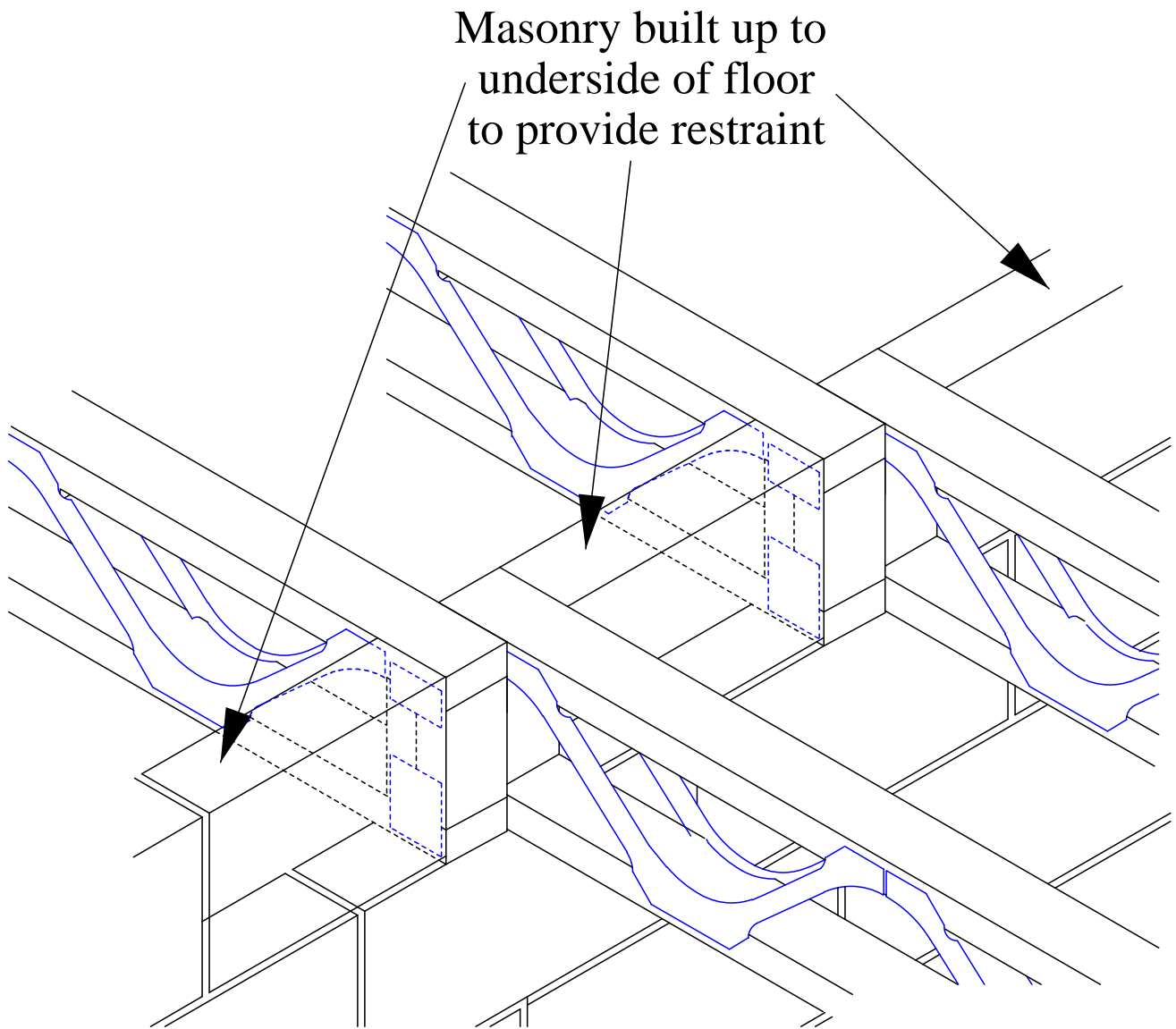


**Bottom Chord Support
Timber Frame Internal Lapped
(With Full Depth Strutting)**

Single or double full depth
blocking required between
Posi-Joists only if load
bearing wall above

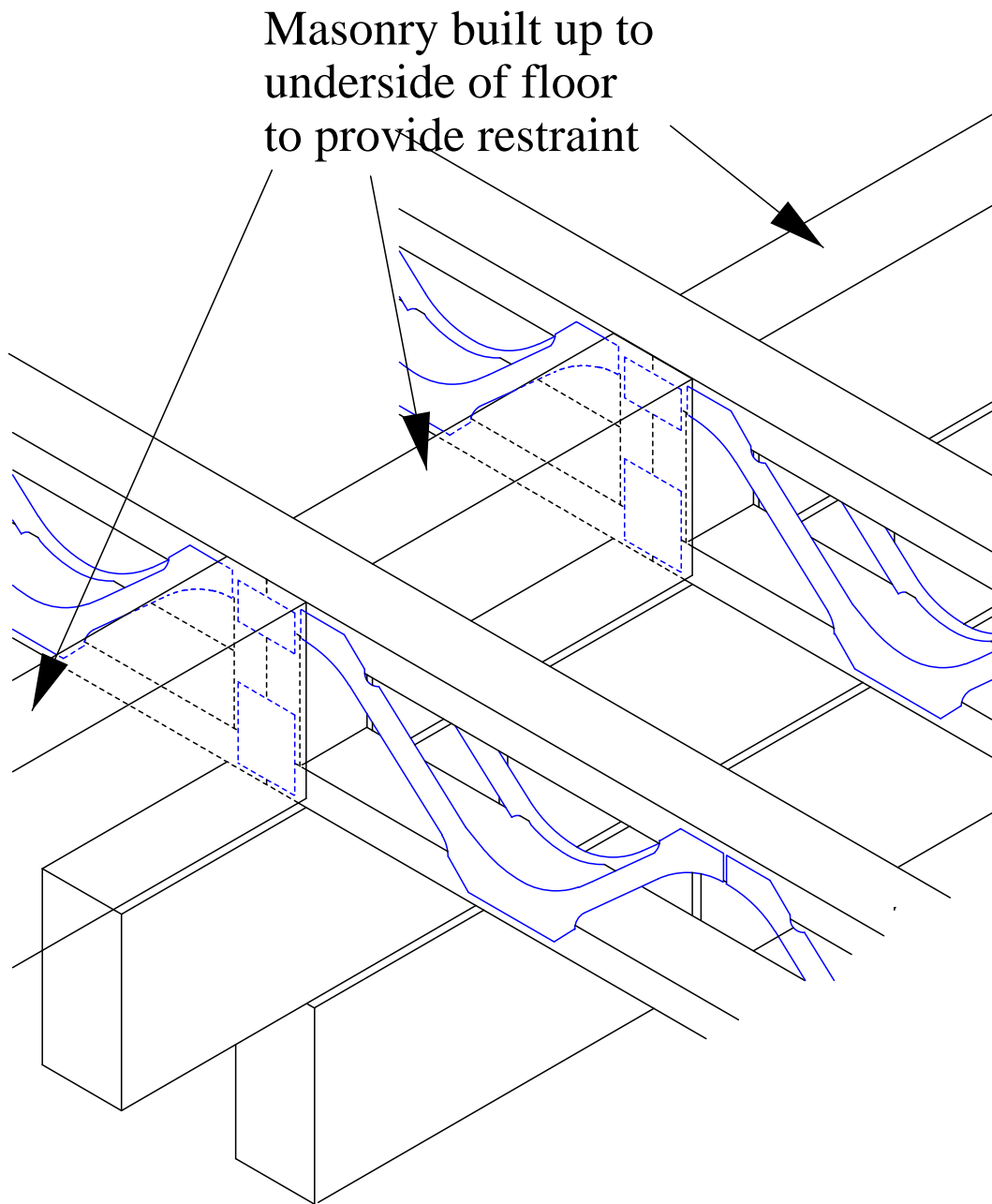


**Bottom Chord Support
Timber Frame Internal Continuous
(With Full Depth Strutting If Required)**



Note: This is not allowed on fire walls.

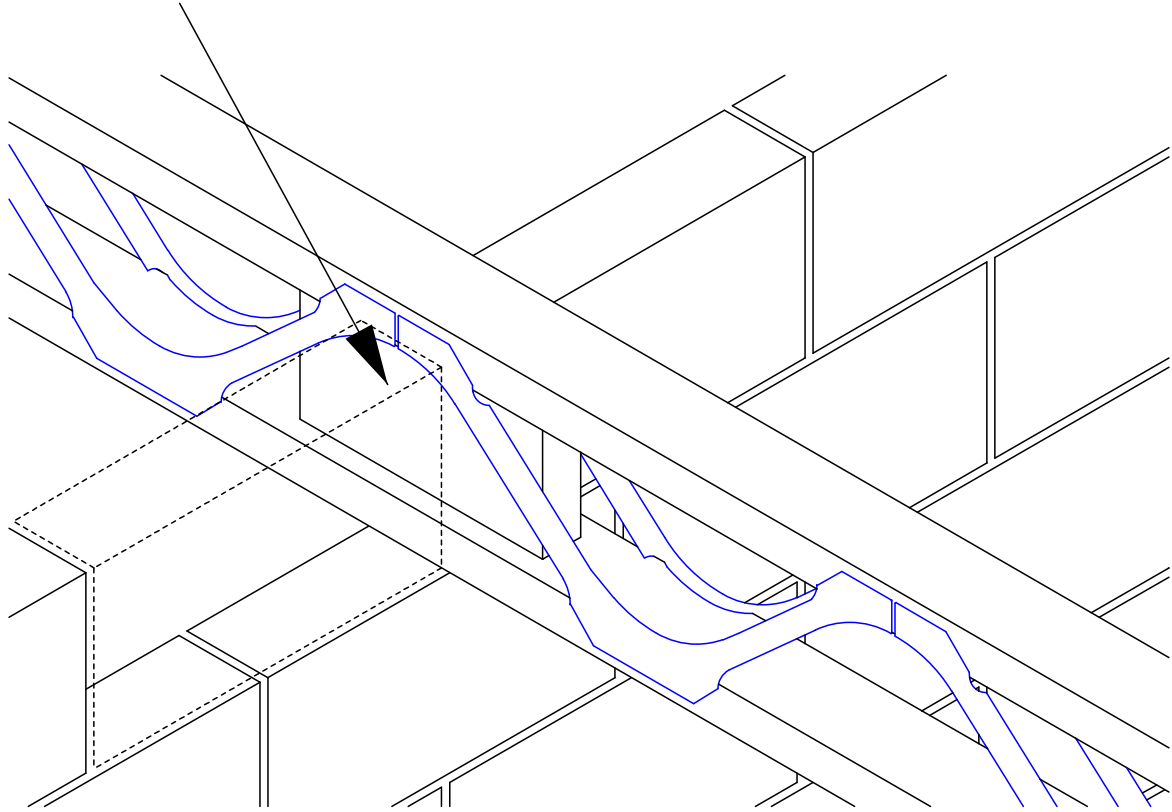
Bottom Chord Support Masonry Internal Lapped



Bottom Chord Support Masonry Internal Continuous Or Butting Ends

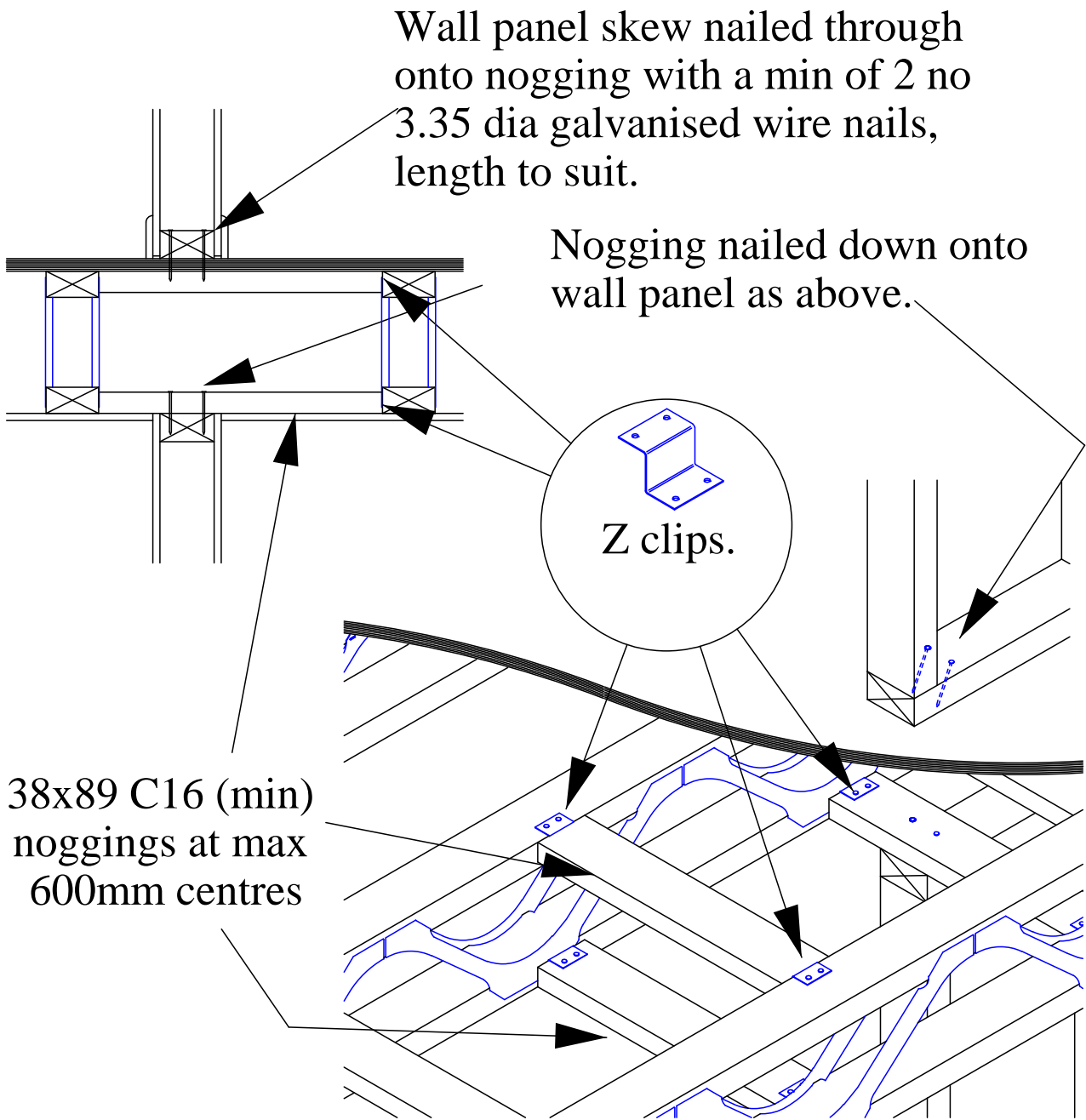
(Minimum 45mm Bearing Required If
Joist Split On Centre Line Of Wall)

Solid timber block with
grain parallel to span

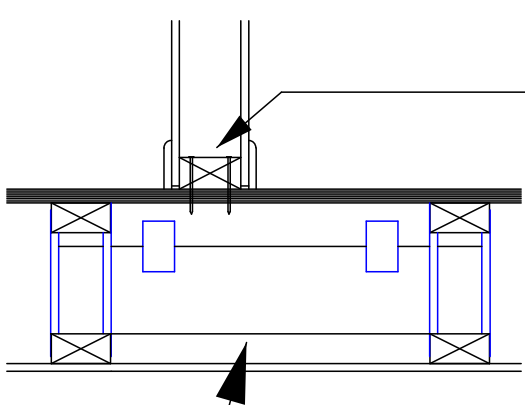


Note: Use on internal load bearing internal walls
(not fire walls). Full blockfill only required when
there is a load bearing wall above the floor level

Bottom Chord Support Masonry Internal Continuous With Solid Timber Block

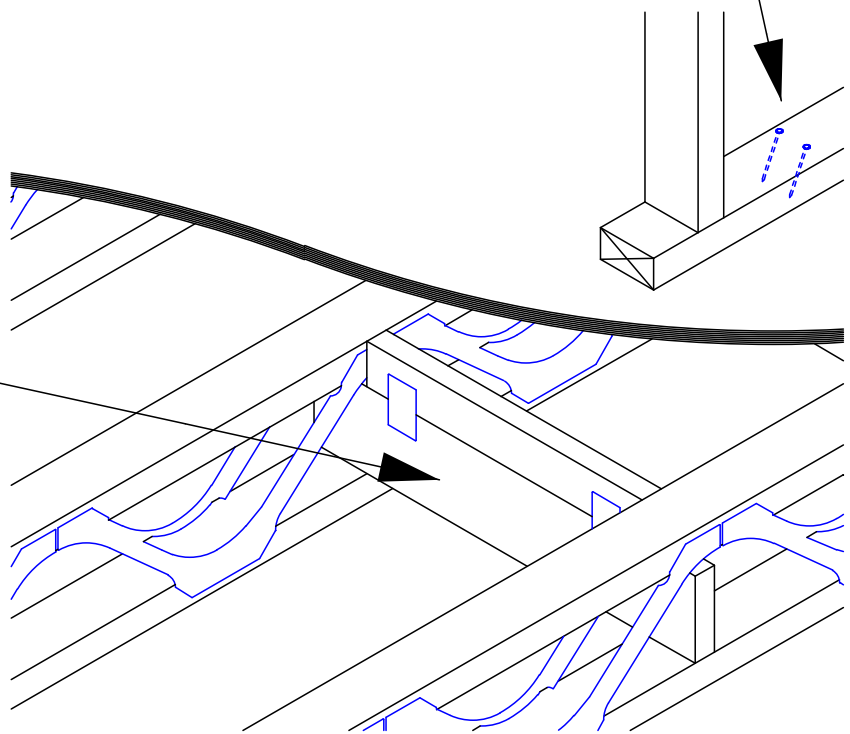


Non-Loadbearing Partitions Parallel To Posi-Joists.

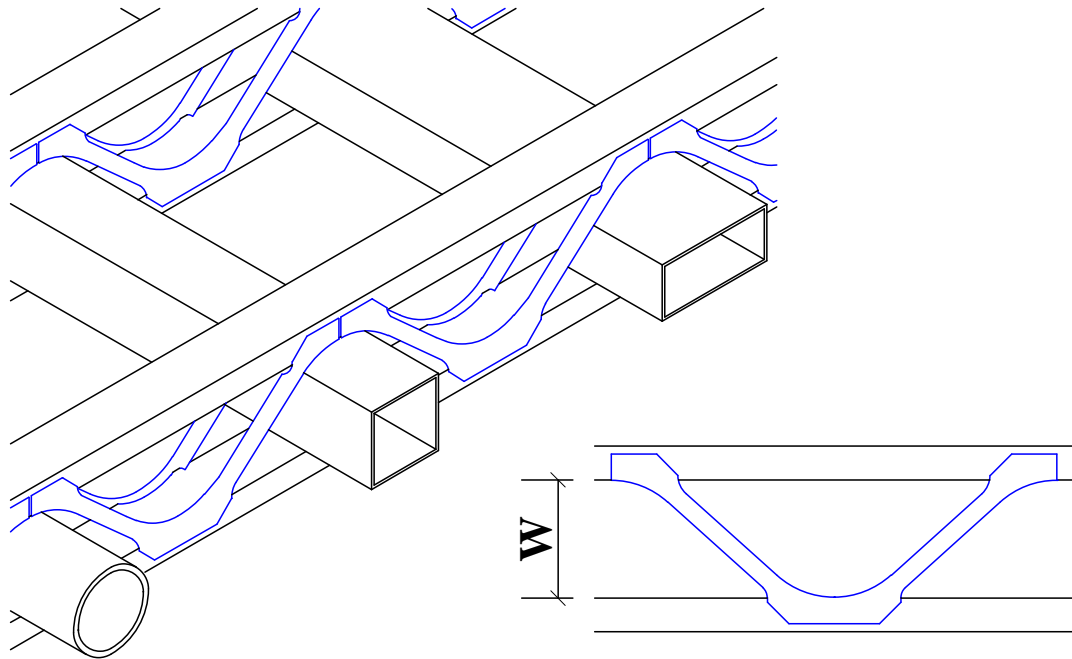


Wall panels skew nailed through onto noggings with a min of 2 no 3.35 dia galvanised wire nails, length to suit.

Plated stacked noggings supported on top face of bottom chord of Posi-Joists



**Non-Loadbearing Partitions
Parallel To Posi-Joists
(Alternative Nogging Support Detail)**

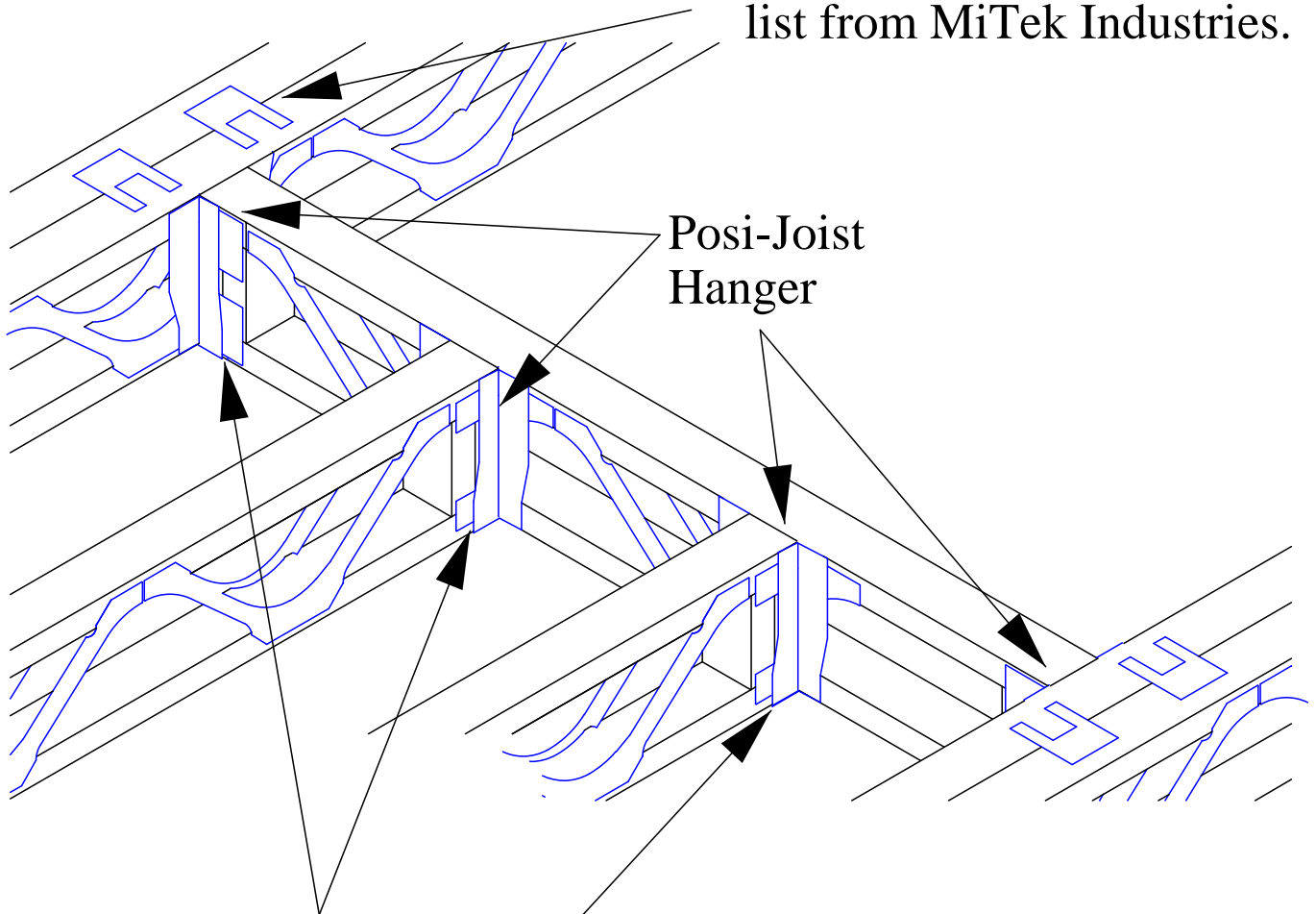


POSI JOIST SIZE	W	CIRCLE DIA	SQUARE	RECTANGLE DEPTH										
				50	75	100	125	150	175	200	225	250	275	300
				RECTANGLE WIDTH										
PS-8	108	105	95	270	180	90	-	-	-	-	-	-	-	-
PS-9	131	124	115	310	240	180	100	-	-	-	-	-	-	-
PS-10	159	150	135	320	270	210	160	80	-	-	-	-	-	-
PS-12	210	190	155	350	310	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

Posi-Joists chords fixed together as specified by design using EWP clip or screw connectors, see approved list from MiTek Industries.

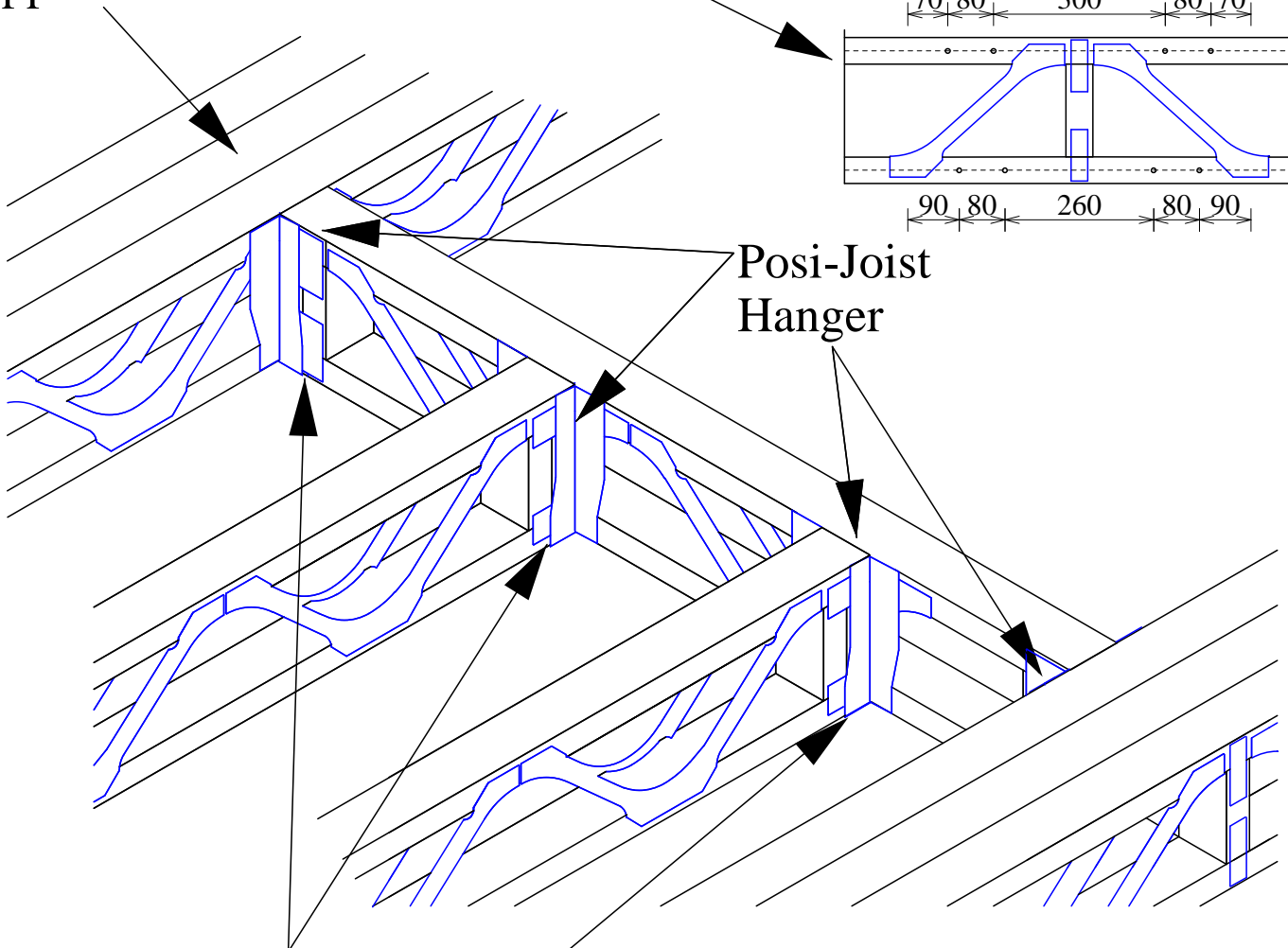
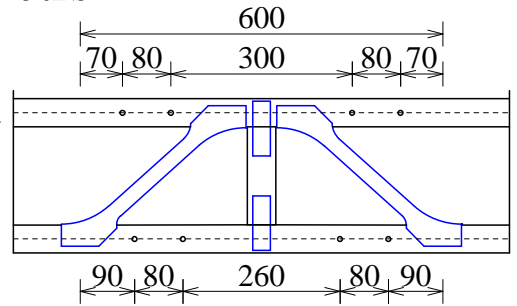


Posi-Joist
Hanger

Do not notch bottom
member of Posi-Joist
over bottom flange of
hanger.

Staircase Opening With 2 Ply Posi-Joist Trimming Girder and Posi-Joist Trimmer Beam

Chords fixed together at point of load using cluster of Heco Topix-CC screws as shown fixed from loaded face around verticle web with nominal 600 ctrs applied to remainder of Posi-Joist



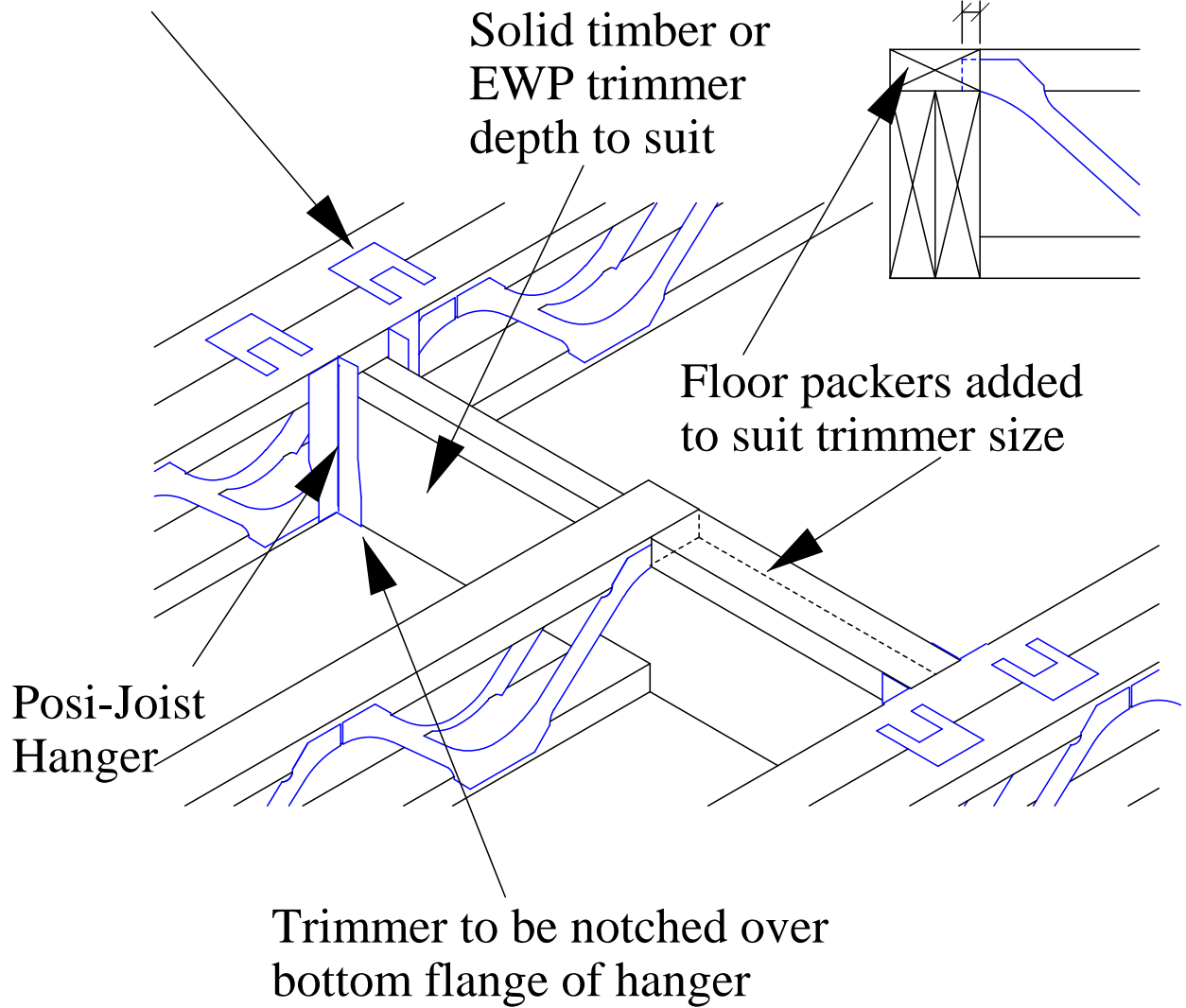
Posi-Joist Hanger

Do not notch bottom member of Posi-Joist over bottom flange of hanger.

Staircase Opening With 3 Ply Posi-Joist Trimming Girder and Posi-Joist Trimmer Beam

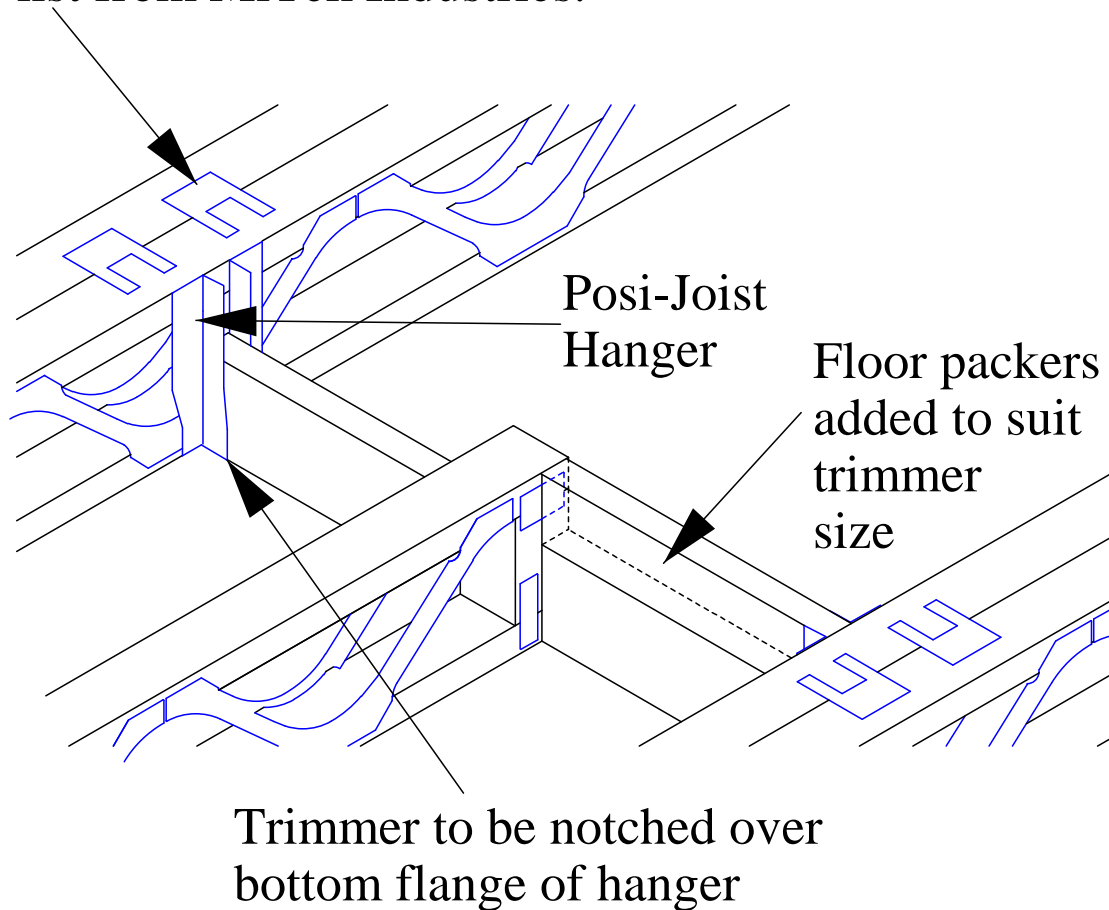
Posi-Joists chords fixed together as specified by design using EWP clip or screw connectors, see approved list from MiTek Industries.

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



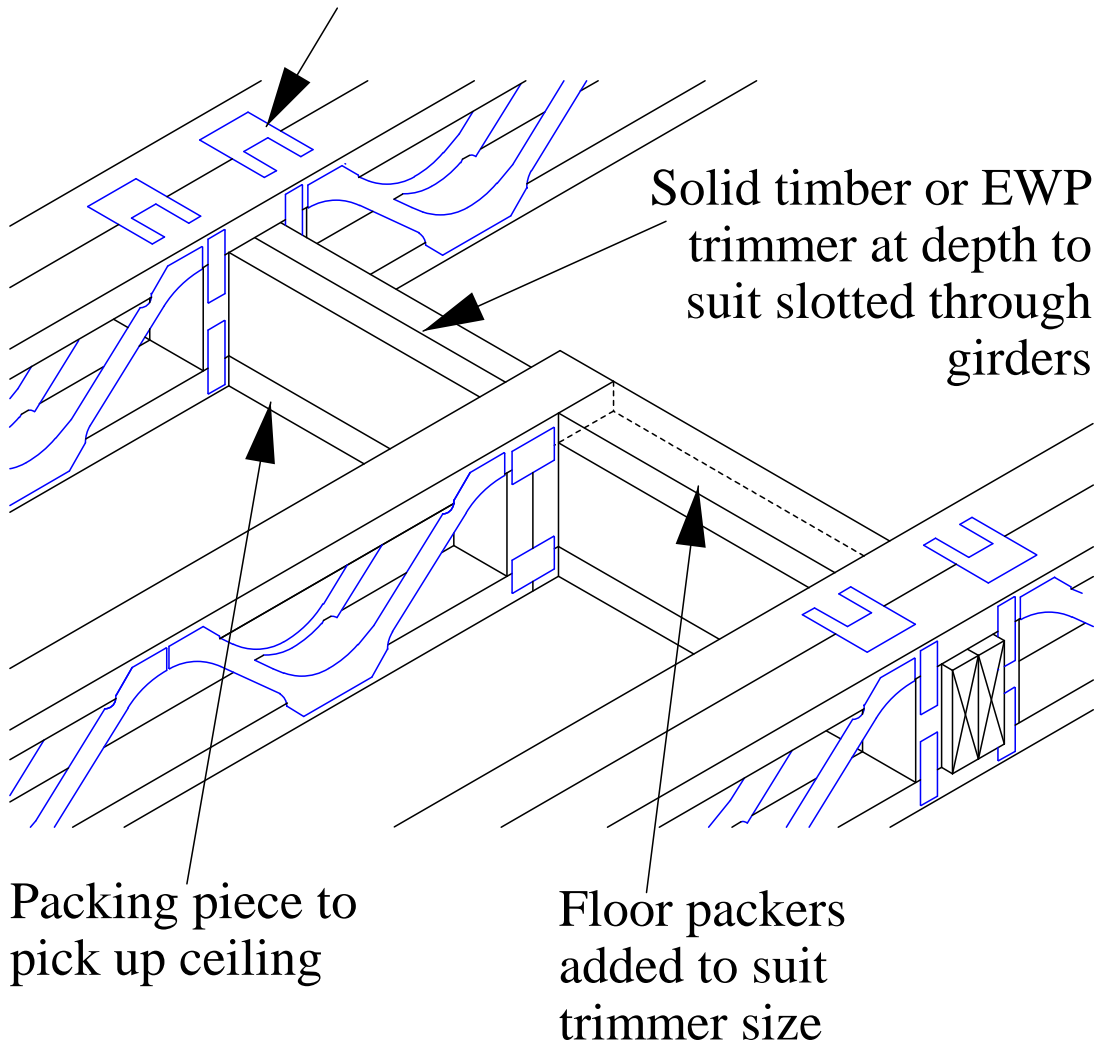
Staircase Opening With Posi-Joist Trimming Girder and EWP Trimmer Beam

Posi-Joists chords fixed together as specified by design using EWP clip or screw connectors, see approved list from MiTek Industries.



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

Posi-Joists chords fixed together as specified by design using EWP clip or screw connectors, see approved list from MiTek Industries.

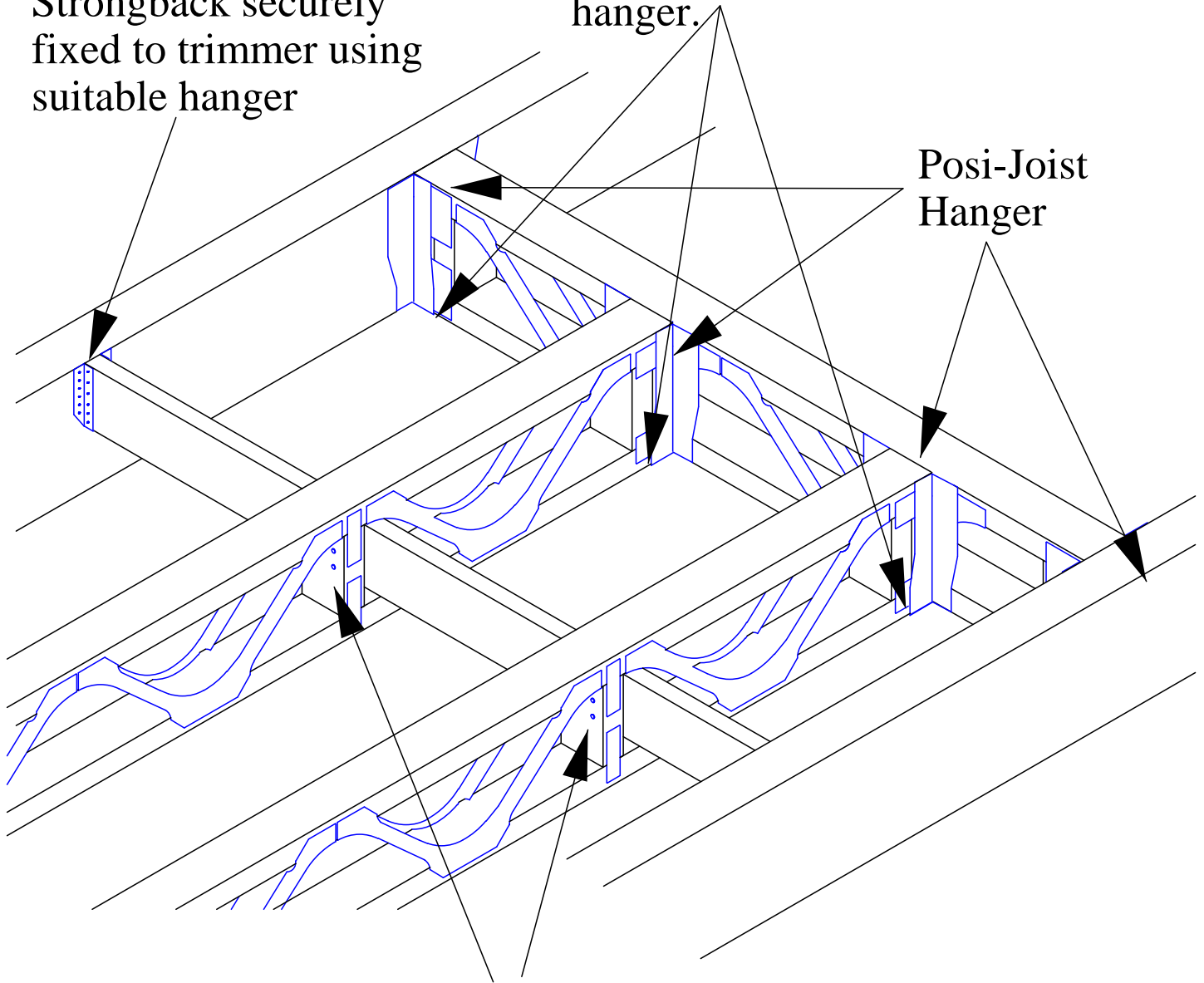


Staircase Opening With Solid Timber Or EWP Trimmer Beam Slotted Through Posi-Joist Trimming Girder

Do not notch bottom member of Posi-Joist over bottom flange of hanger.

Strongback securely fixed to trimmer using suitable hanger

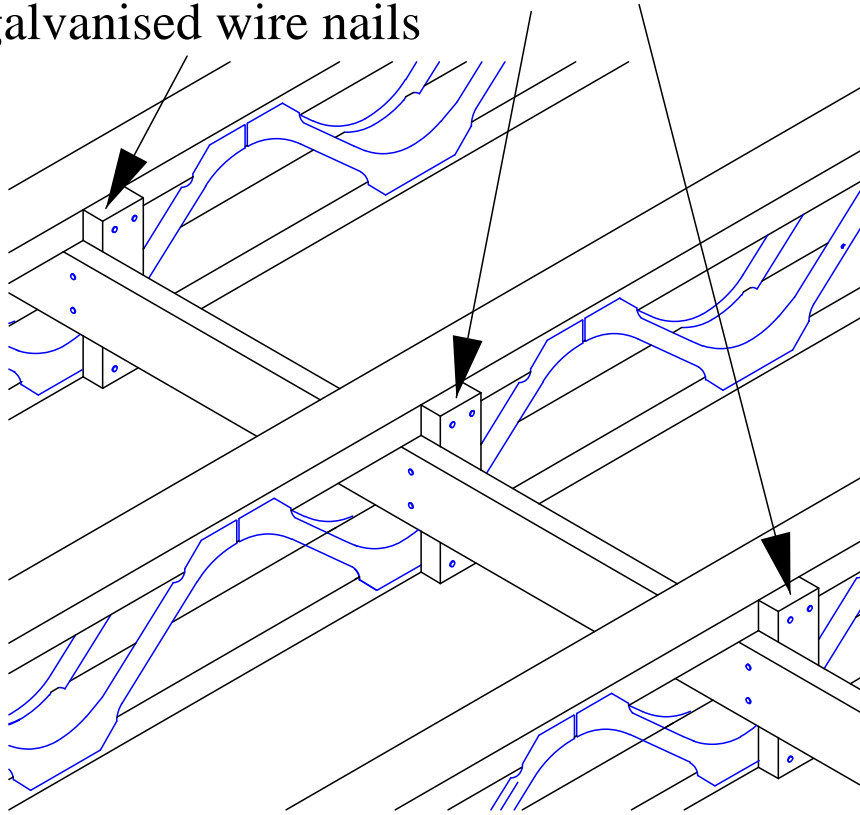
Posi-Joist Hanger



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

Staircase Opening With EWP Stair Trimmer and Posi-Joist Trimmer Beam

38x75 (min) blocks twice nailed to top and bottom members and twice nailed to brace using 3.1 x 75mm long galvanised wire nails



WEB SIZE	RECOMMENDED MIN STRONGBACK SECTION
PS-8, PS-9 & PS-10	50 x 100 TR26*
PS12, PS-14 & PS16	35 x 150 TR26*

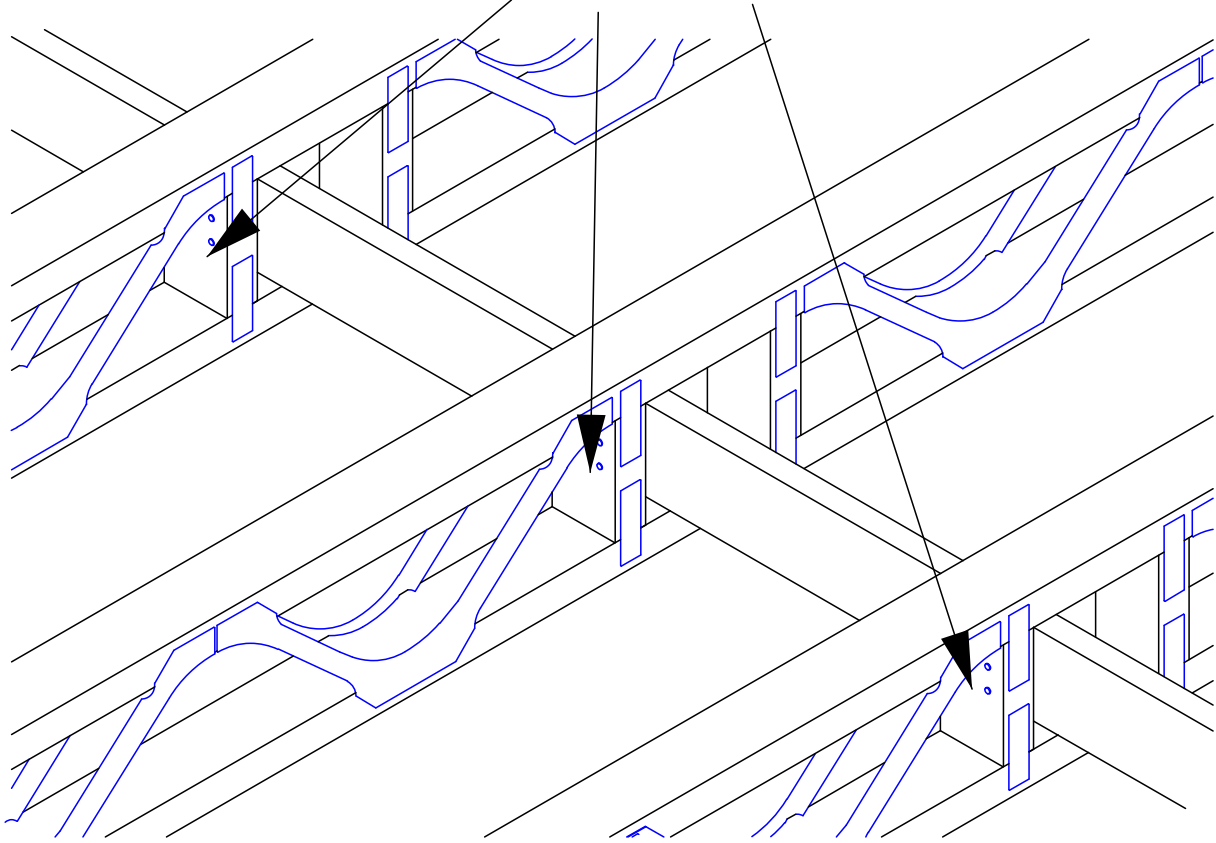
Minimum recommended strongback sizes are given above which may be different when floor is designed to EC5 vibration check, see Posi-Joist calculations etc. Position strongbacks tight to the underside of top chord.

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

Strongback Detail (Fixed To Site Added Blocks)

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

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



WEB SIZE	RECOMMENDED MIN STRONGBACK SECTION
PS-8, PS-9 & PS-10	50 x 100 TR26*
PS12, PS-14 & PS16	35 x 150 TR26*

Minimum recommended strongback sizes are given above which may be different when floor is designed to EC5 vibration check, see Posi-Joist calculations etc.

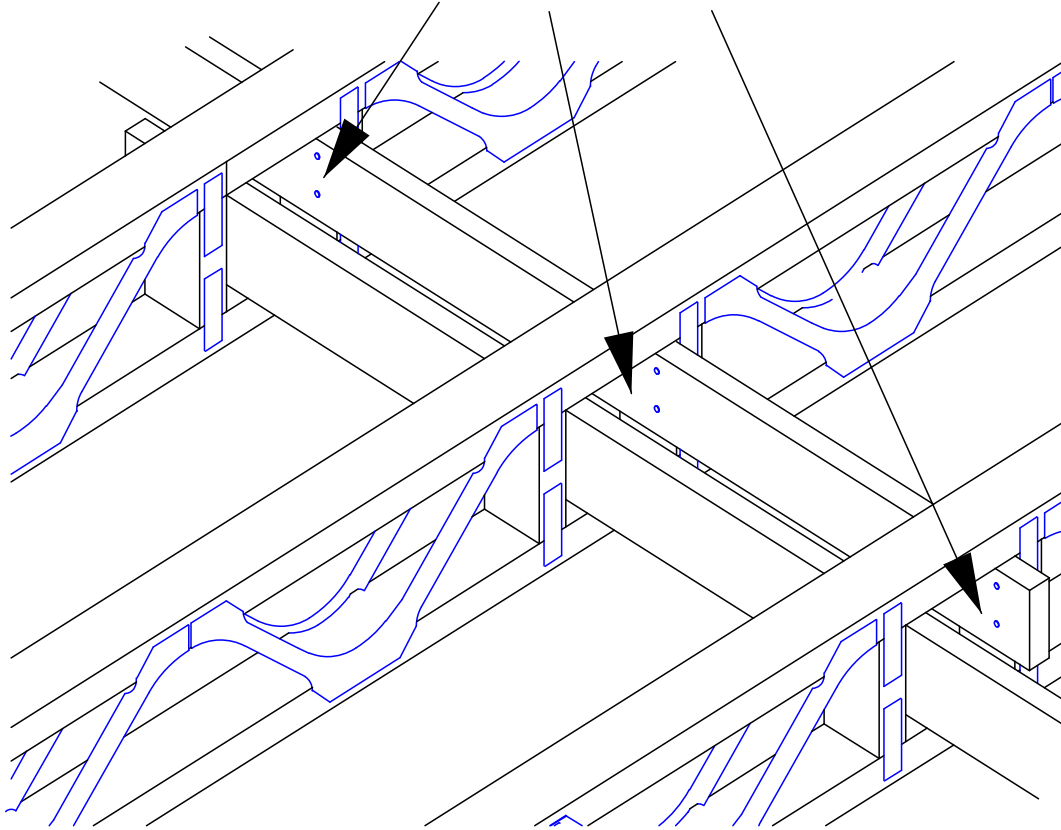
Position strongbacks tight to the underside of top chord

INSERT STRONGBACK THROUGH POSI - JOISTS BEFORE FIXING AS IT CANNOT BE INSTALLED AFTER 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)

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



WEB SIZE	RECOMMENDED MIN STRONGBACK SECTION
PS-8, PS-9 & PS-10	50 x 100 TR26*
PS12, PS-14 & PS16	35 x 150 TR26*

Minimum recommended strongback sizes are given above which may be different when floor is designed to EC5 vibration check, see Posi-Joist calculations etc.

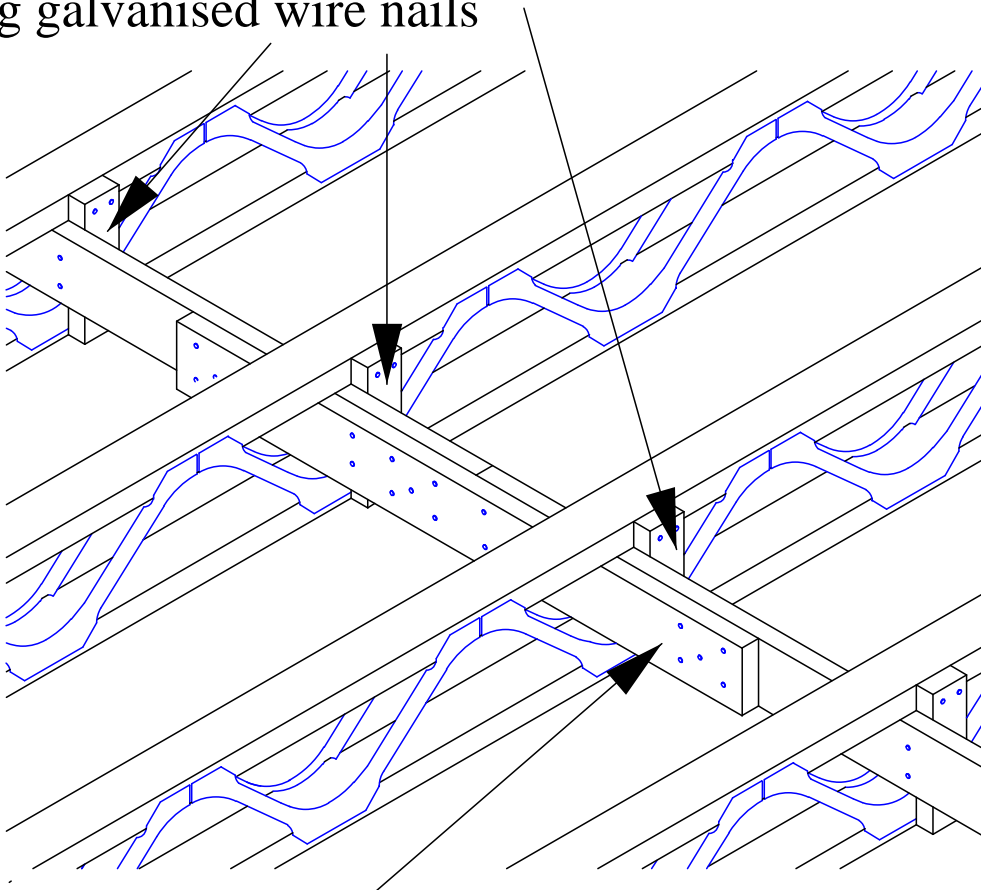
Position strongbacks tight to the underside of top chord

INSERT STRONGBACK THROUGH POSI - JOISTS BEFORE FIXING AS IT CANNOT BE INSTALLED AFTER 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)

38x75 (min) blocks twice nailed to top and bottom members and twice nailed to brace using 3.1 x 75mm long galvanised wire nails



1200mm long splice fixed with 10 no 3.1x 75mm galvanised wire nails each side of splice, nailed through and clenched over on far side

WEB SIZE	RECOMMENDED MIN STRONGBACK SECTION
PS-8, PS-9 & PS-10	50 x 100 TR26*
PS12, PS-14 & PS16	35 x 150 TR26*

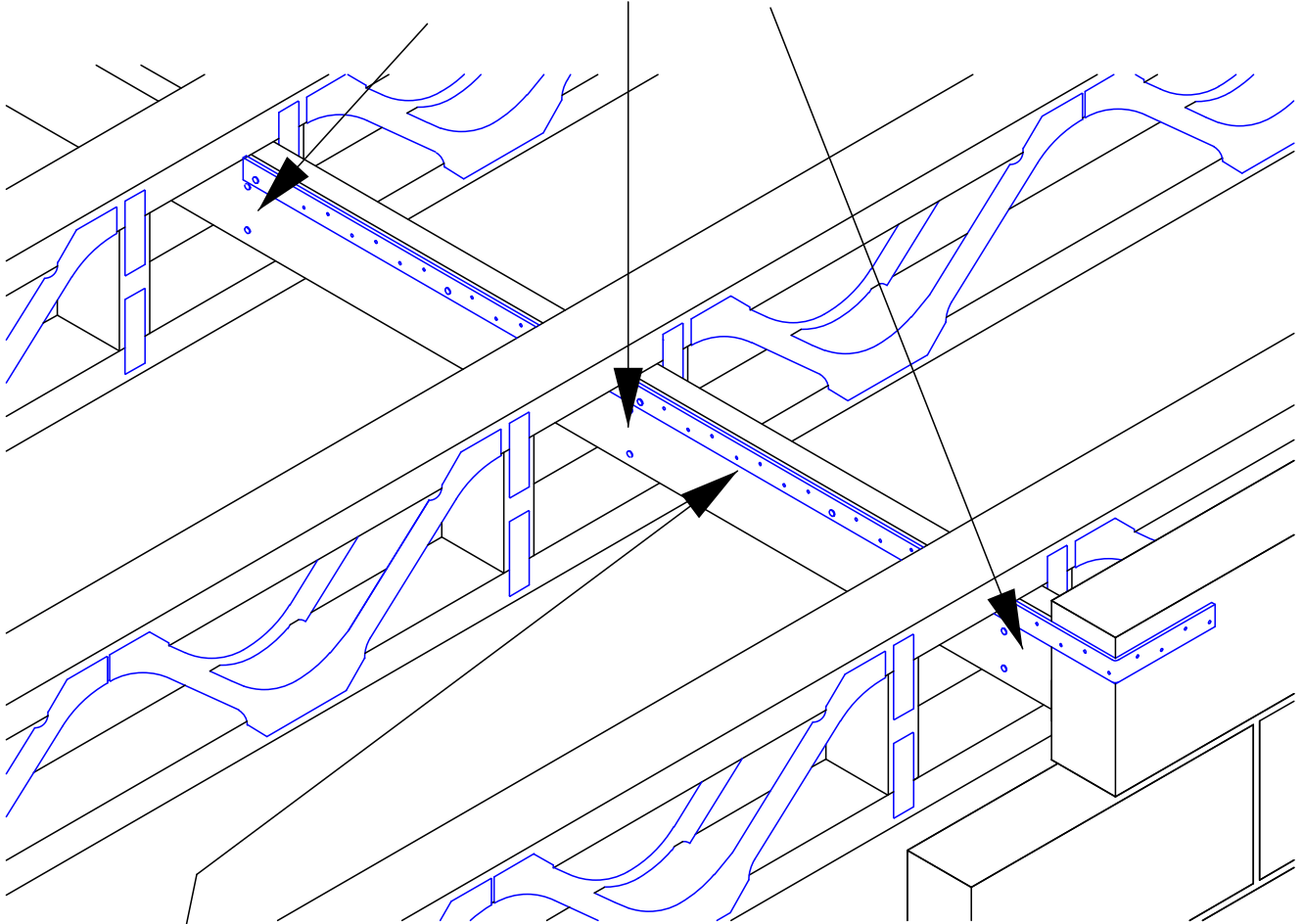
Minimum recommended strongback sizes are given above which may be different when floor is designed to EC5 vibration check, see Posi-Joist calculations etc.

Position strongbacks tight to the underside of top chord

Strongback Splice (Fixed To Site Added Blocks)

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

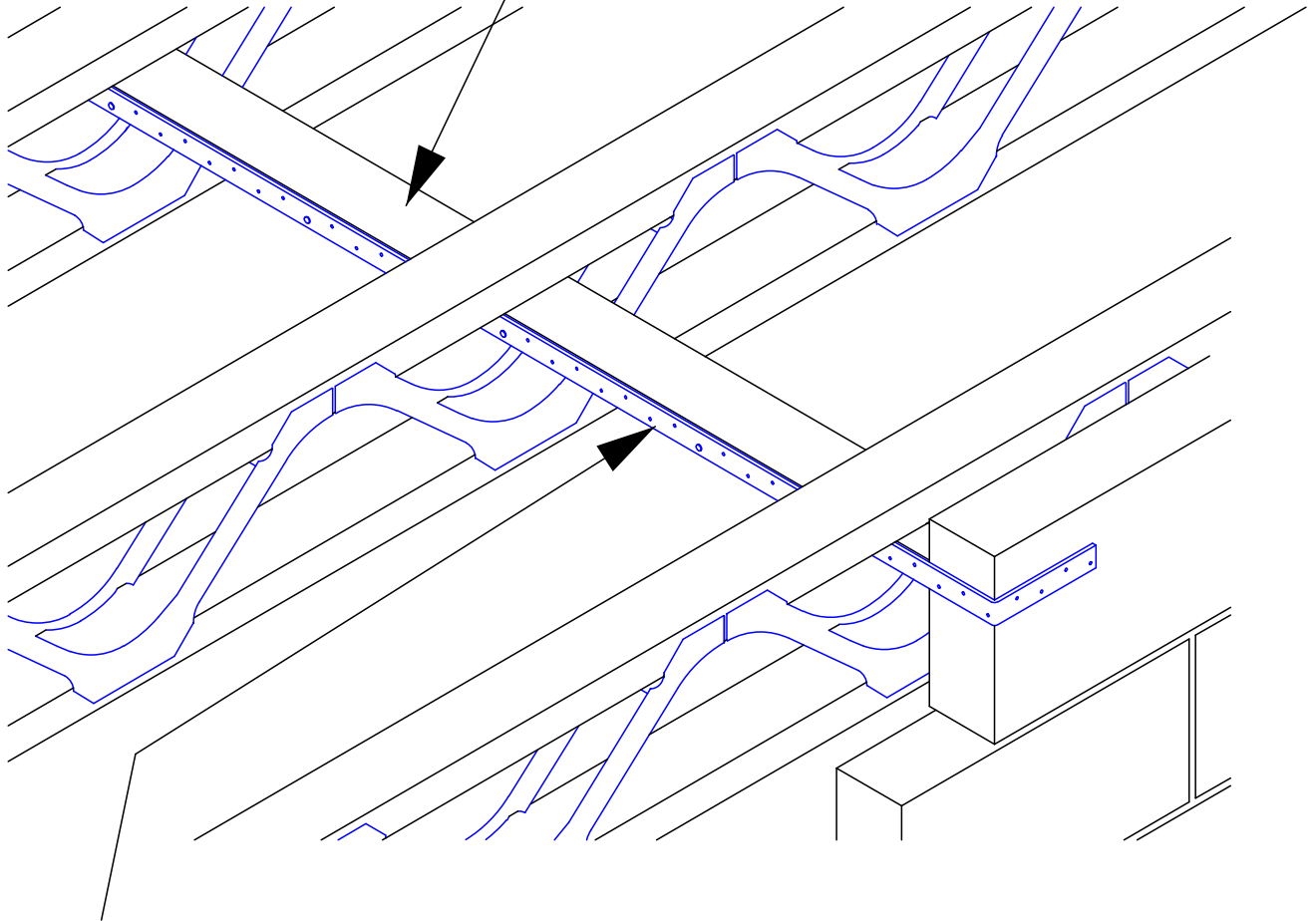
Strongback twice nailed to brace using min
3.1 x 75mm long galvanised wire nails



Strap fixed along top edge of strongback
with a minimum of four fixings of which at
least one is to be over the third joist.

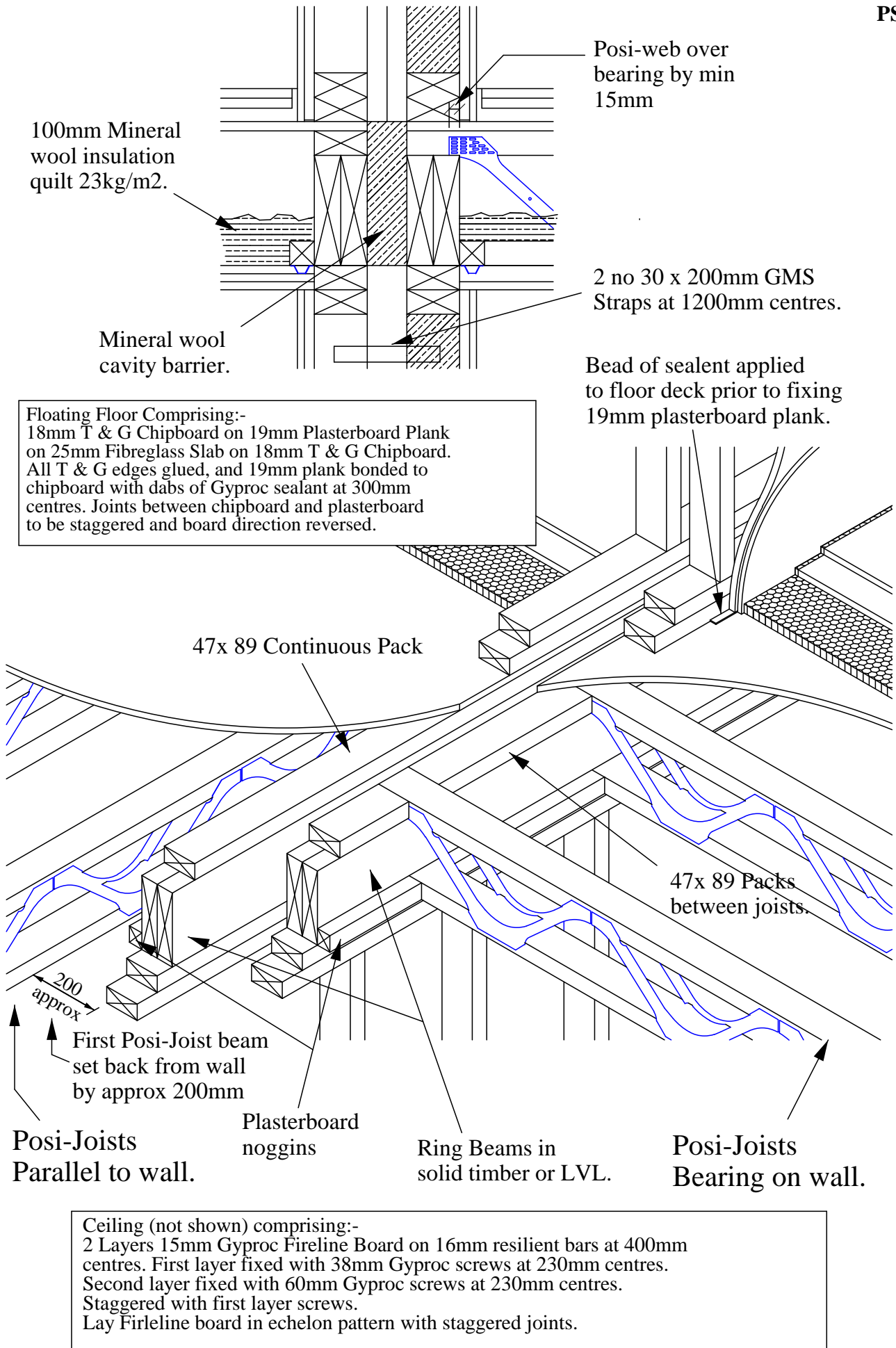
Horizontal Restraint Strap Fixed To Strongback

35 x 97 C16 nogging nailed to underside of top chord of Posi-Joists with 3.1 x 75mm long galvanised wire nails

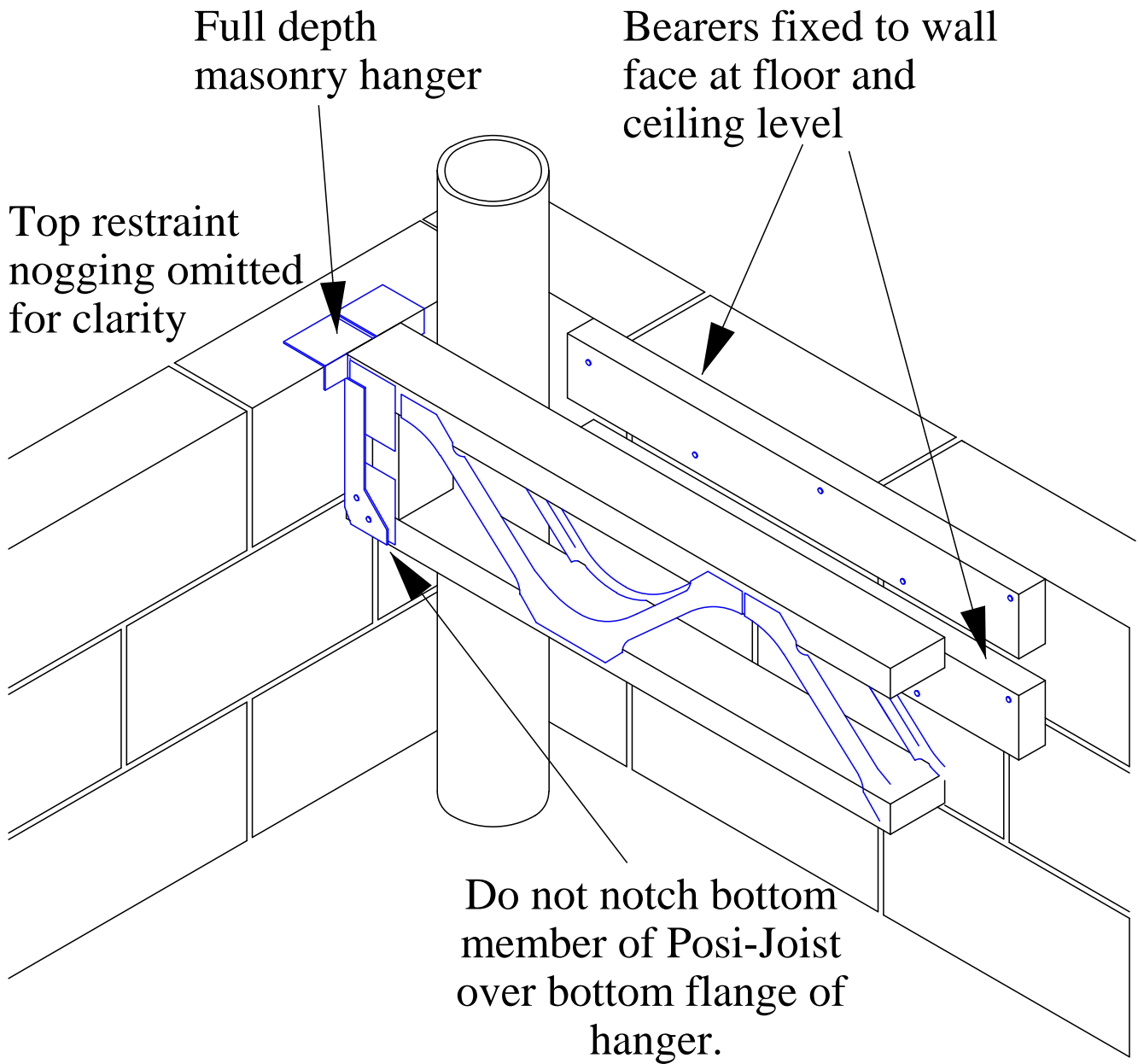


Strap fixed to nogging with a minimum of four fixings of which, at least one is to be over the third joist.

Horizontal Restraint Strap Fixed To Nogging

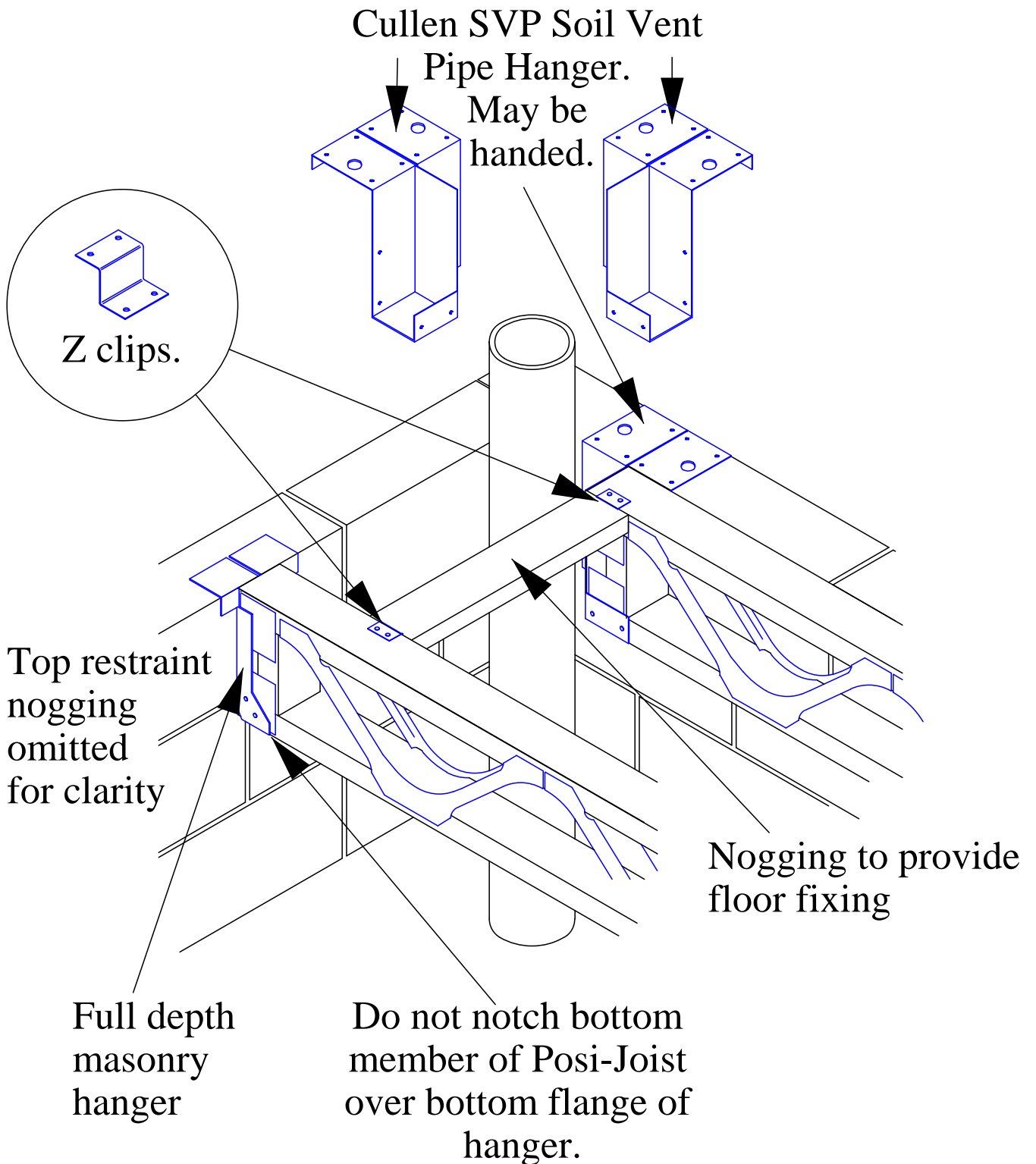


Typical Timber Frame Compartment Floor / Party Wall Detail



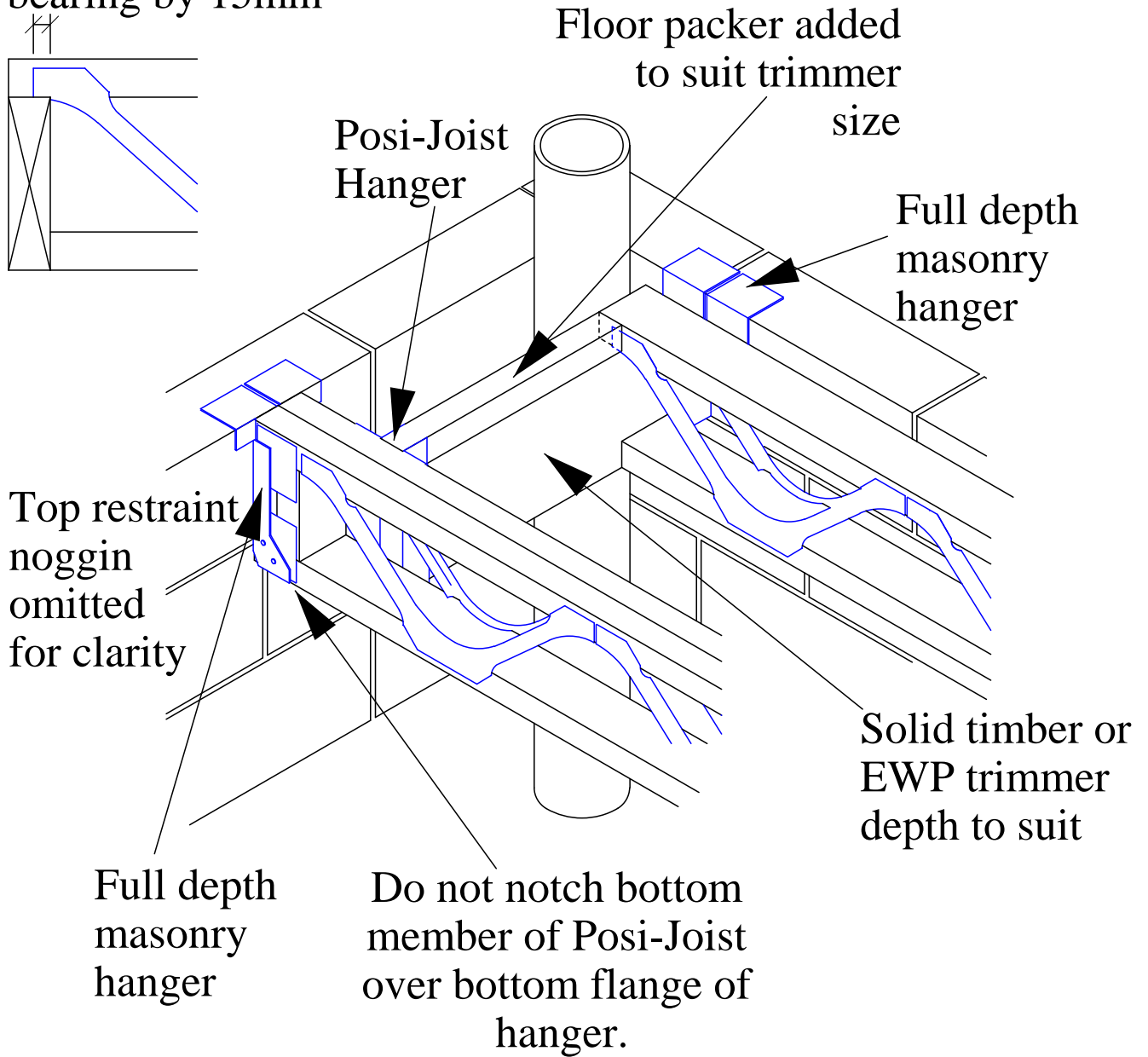
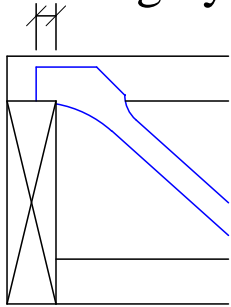
This may not perform well acoustically as sound will be transmitted directly from the floor to the bearer through the inner leaf of the wall.

Fixing Round SVP Using Bearer Plates



Fixing Round SVP Using SVP Hangers

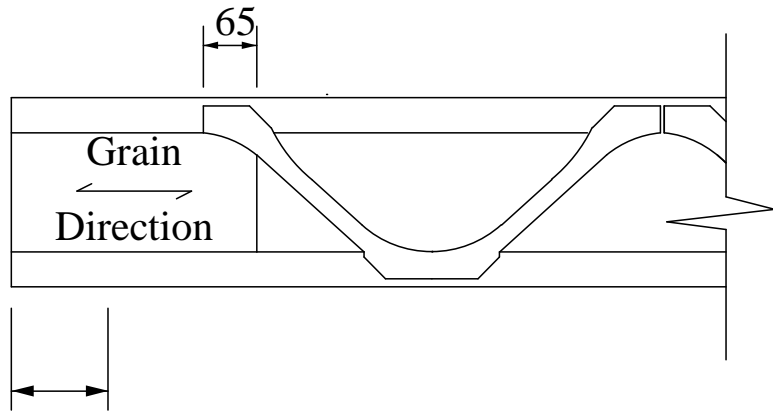
Unless proven by design the Posi-Strut should overhang the bearing by 15mm



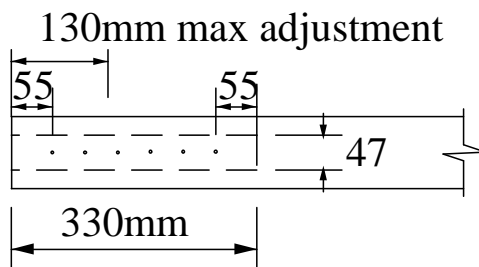
Fixing Round SVP Using Timber Trimmer

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

Max 130mm to be trimmed on site



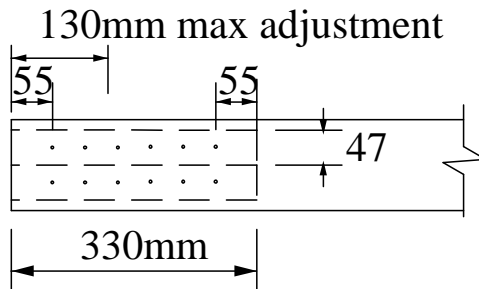
Side elevation



Block nailed to top and bottom chords using 6 No. 3.1mm diameter 90mm long power driven annular ring-shank nails at 44mm centres.

Plan view of Posi-Joist with one block

Two blocks required when chords are 122mm or 147mm

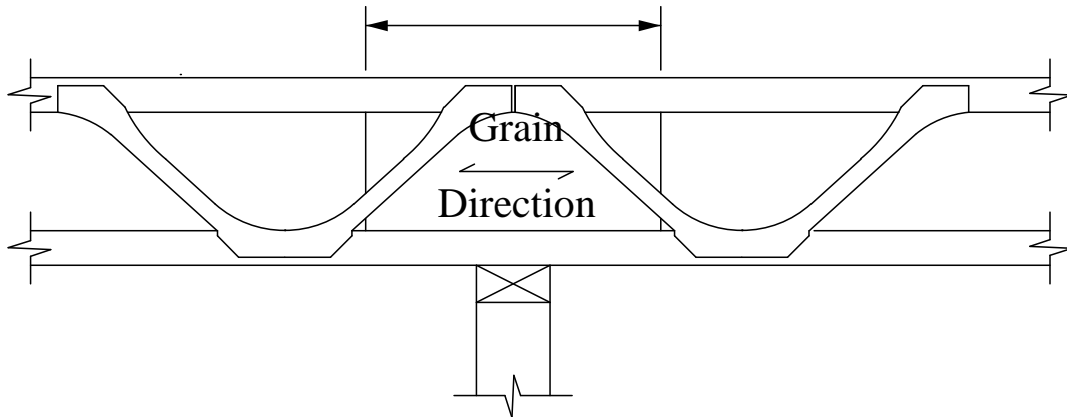


Block nailed to top and bottom chords using 6 No. 3.1mm diameter 90mm long power driven annular ring-shank nails at 44mm centres.

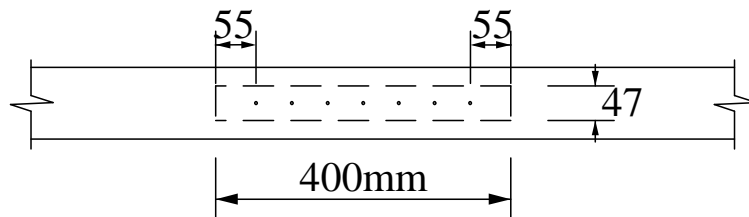
Plan view of Posi-Joist with two blocks

General Support Details Site Length Adjustment

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

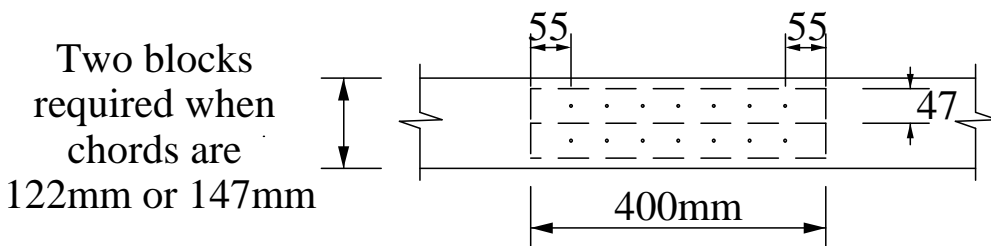


Side elevation



Block nailed to top and bottom chords using
7 No. 3.1mm diameter 90mm long power driven
annular ring-shank nails at 48mm centres.

Plan view of Posi-Joist with one block



Two blocks
required when
chords are
122mm or 147mm

Block nailed to top and bottom chords using
7 No. 3.1mm diameter 90mm long power driven
annular ring-shank nails at 48mm centres.

Plan view of Posi-Joist with two blocks

General Support Details Internal Blocked Bearing Detail