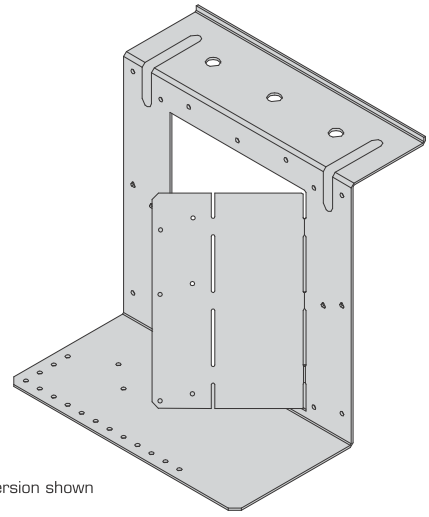
VSM

Variable Skew Masonry Hanger



Right Hand version shown

The VSM hanger is used to support joists and trusses up to 97mm wide from masonry walls in skewed applications between 30 - 90°.

Features & Benefits

- Unique hanger design provides a variable skew angle between 30 - 90°
- No need to mitre cut joists
- Angle scale on base to ease adjustment

Material Specification

- Galvanised mild steel - Z600

Fixings

Fixings required into incoming member only. No fixings required into masonry.

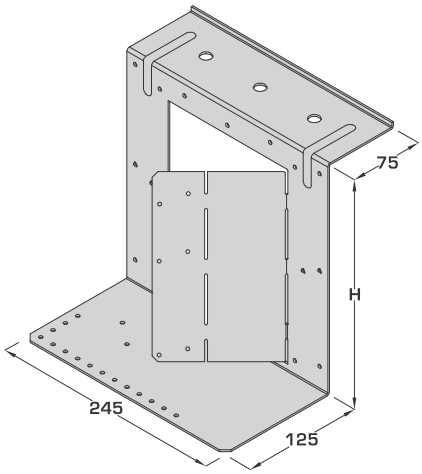
Code	Description	Box Qty
547389	3.4 x 35mm Square Twist Nails - LOOSE	500
141185	3.4 x 35mm Square Twist Nails - COLLATED*	2,500

*For use with Paslode PPN35Ci

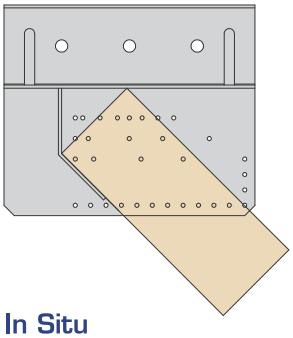
Available Sizes

Min Joist Width (mm)	Max Joist Width (mm)	Handing	Hanger Depth (H) (mm)			
			225	240	300	>300
38	97	Right	VSM-225-R	VSM-240-R	VSM-300-R	See FMHIS on pages 18 - 20
38	97	Left	VSM-225-L	VSM-240-L	VSM-300-L	
>97		See FMHIS on pages 20 - 22				

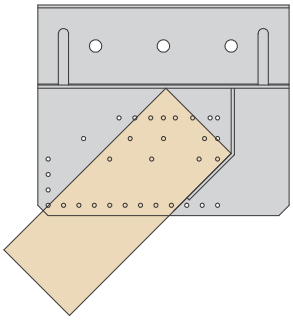
Dimensions (mm)



Left Hand



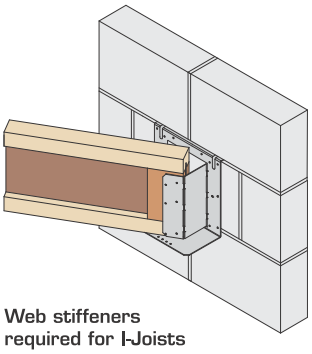
Right Hand



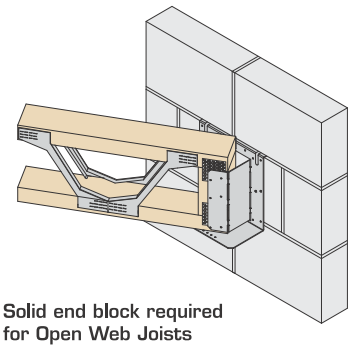
In Situ

- Suitable for use with Open Web Joists, I-Joists and trusses.
- Floor can be propped with acroprops and fully decked but must not be fully loaded until the masonry above has fully cured.

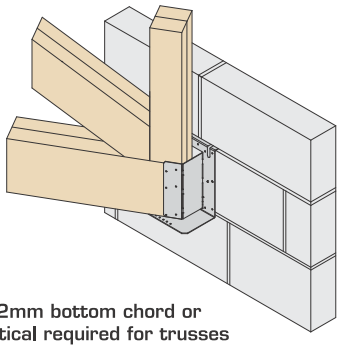
- A minimum of **3 courses (675mm)** of masonry above is required for hanger to achieve loads stated.
- The masonry above must be fully cured for **28 days** prior to loading the floor.



Web stiffeners required for I-Joists



Solid end block required for Open Web Joists



222mm bottom chord or vertical required for trusses

Plates and additional block work have been omitted for clarity

VSM

Variable Skew Masonry Hanger

Load Data

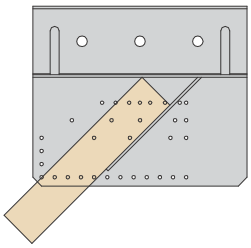
Hanger Depth (mm)	Fixings (3.4 x 35mm)	Characteristic Capacity (kN)			
		Uplift	Masonry Crushing Strength		
	Incoming		2.8N/mm²	3.5N/mm²	7.0N/mm²
225/240/300	6	2.40	8.32	10.40	10.40

Installation Instructions

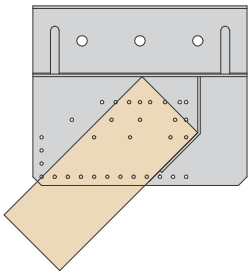
STAGE 1

Adjust side plate to approximate angle between 30° and 90° using scale on base of hanger, bending only once. Refer to the angle table below to determine if one or two bends are required.

Single Bend



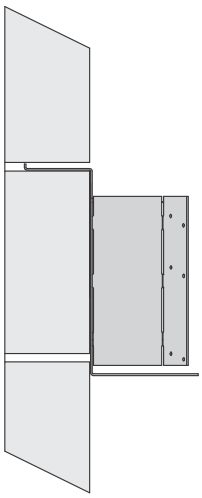
Double Bend

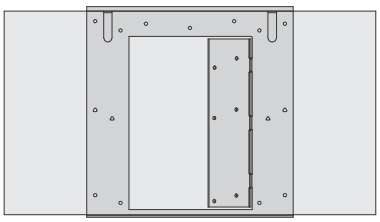


Joist Width (mm)	Double bend	Single Bend
35	n/a	30-90°
38	n/a	30-90°
44	n/a	30-90°
45	n/a	30-90°
47	n/a	30-90°
51	30-32°	>32-90°
53	30-32°	>32-90°
58	30-34°	>34-90°
59	30-34°	>34-90°
60	30-34°	>35-90°
63	30-37°	>37-90°
70	30-39°	>39-90°
72	30-40°	>40-90°
76	30-42°	>42-90°
88	30-46°	>46-90°
89	30-46°	>46-90°
90	30-46°	>46-90°
94	30-48°	>48-90°
97	30-49°	>49-90°

STAGE 2

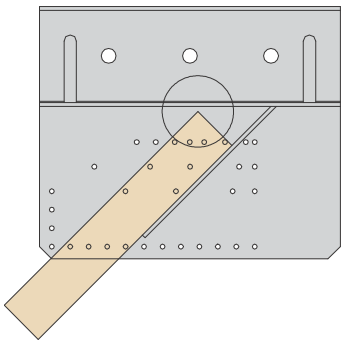
Position VSM flush against masonry.

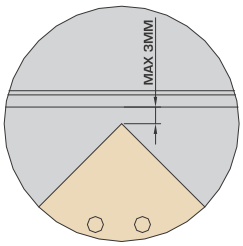




STAGE 3

Locate incoming member and adjust side plate to correct angle, ensuring maximum gap between incoming joist and back plate is no greater than 3mm.

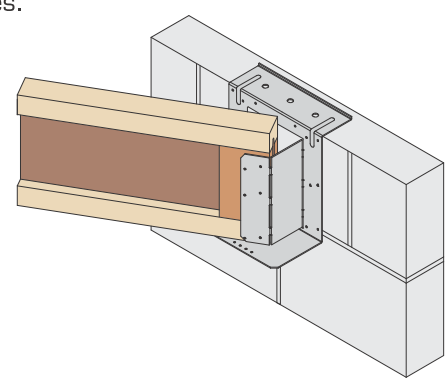




Max - 3mm gap at any given time

STAGE 4

Fix to incoming member using 6No 3.4 x 35mm square twist nails. Where incoming member is an I-joist, web stiffeners must be fixed as per I-joist manufacturer's guidelines.



Ensure that 1No inner nail hole (indicated in red) and 1No outer nail hole (indicated in red) are filled on the underside with a 3.4 x 35mm square twist nail.