

VSM

Variable Skew Masonry Hanger



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

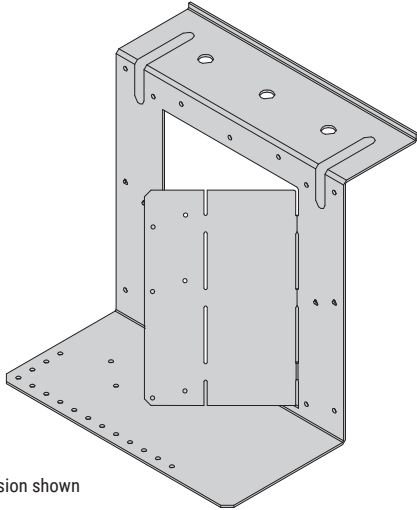
- Galvanised mild steel – Z600

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

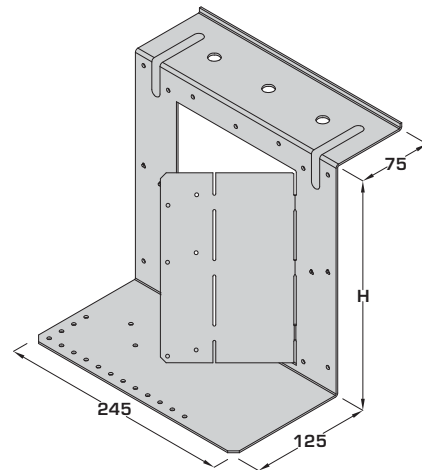


Right Hand version shown

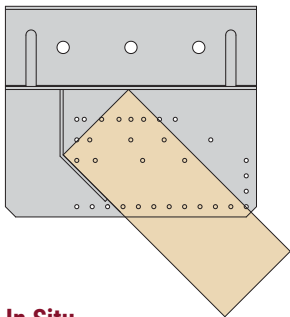
Available Sizes

| 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 18 – 20 | | | | |

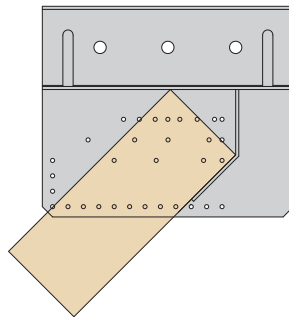
Dimensions (mm)



Left Hand



Right Hand

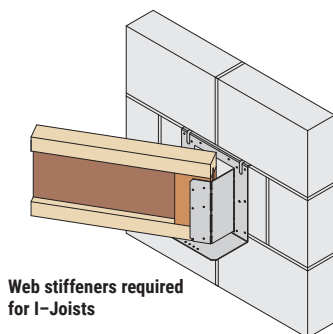


In Situ

- 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.

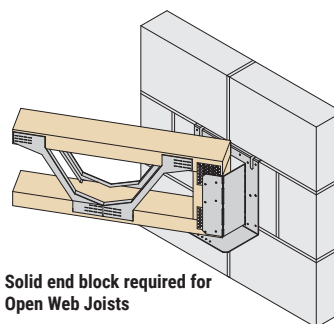


- A minimum of **3 courses (675mm)** of masonry above is required for hanger to achieve loads stated.
- The masonry above must be fully cured for **28 days** prior to loading the floor.

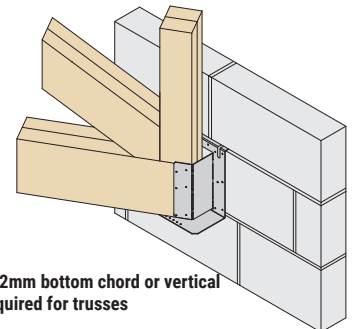


Web stiffeners required for I-Joists

Plates and additional block work have been omitted for clarity



Solid end block required for Open Web Joists



222mm bottom chord or vertical required for trusses

VSM

Load Data

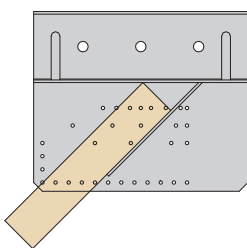
| Hanger Depth (mm) | Fixings (3.4 x 35mm) | Characteristic Capacity (kN) | | | |
|-------------------|-------------------------|------------------------------|---------------------------|----------------------|----------------------|
| | | Uplift | Masonry Crushing Strength | | |
| | | | 2.8N/mm ² | 3.5N/mm ² | 7.0N/mm ² |
| 225/240/300 | 6 | 2.40 | 8.32 | 10.40 | 10.40 |

Installation Instructions

Stage 1

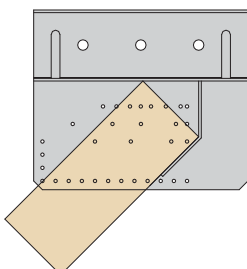
Adjust side plate to approximate angle between 30° and 90° using scale on base of hanger, bending only once. Refer to the angle table below to determine if one or two bends are required.

Single Bend



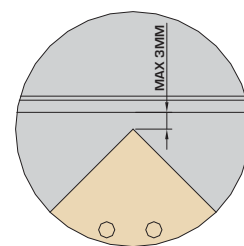
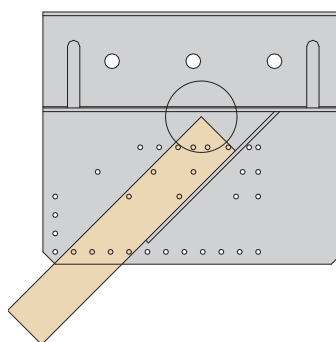
| Joist Width (mm) | Double bend | Single Bend |
|------------------|-------------|-------------|
| 35 | n/a | 30-90° |
| 38 | n/a | 30-90° |
| 44 | n/a | 30-90° |
| 45 | n/a | 30-90° |
| 47 | n/a | 30-90° |
| 51 | 30-32° | >32-90° |
| 53 | 30-32° | >32-90° |
| 58 | 30-34° | >34-90° |
| 59 | 30-34° | >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° |

Double Bend



Stage 3

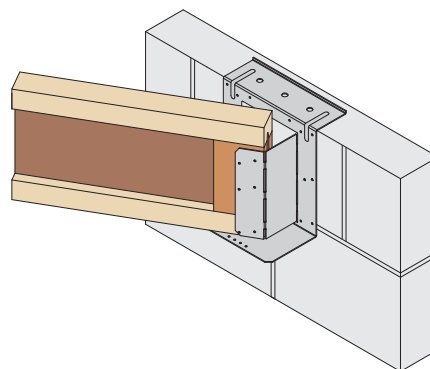
Locate incoming member and adjust side plate to correct angle, ensuring maximum gap between incoming joist and back plate is no greater than 3mm.



Max – 3mm gap at any given time

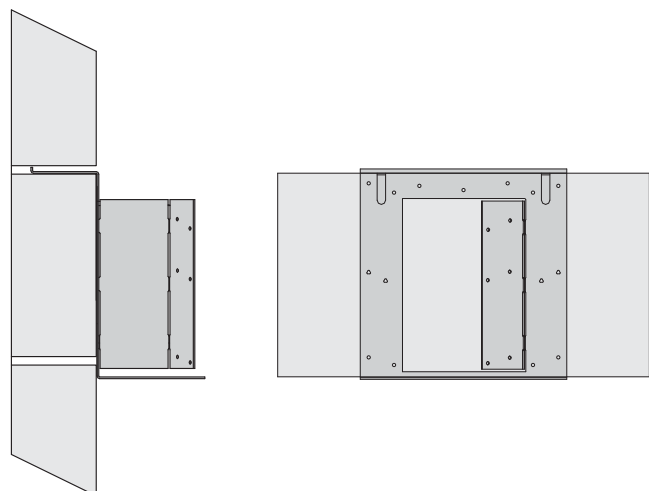
Stage 4

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.



Stage 2

Position VSM flush against masonry.



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.

