

Joist & Beam Connections

VS - Variable Skewed Hanger



Patent Pending

The VS hanger is another first from Cullen. The variable skewed hanger can be adjusted on-site between 30° and 90°, thus reducing inventory. No web stiffeners or **backer blocks** are necessary.

ADVANTAGES

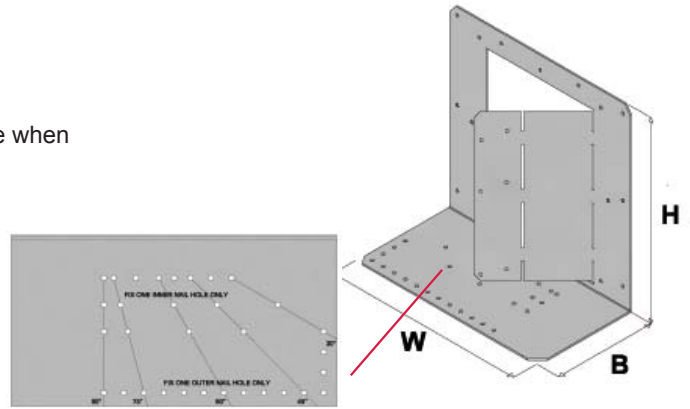
- Adjustable between 30° and 90°
- No need to mitre cut joist
- No backer blocks required BUT there is enhanced performance when backer blocks are fitted
- One size fits all widths up to 3½" wide
- Only one size of nail required

MATERIAL

- 14 ga. (0.078") galvanized mild steel - G90

FASTENER TYPE

- 10dx1½" nail



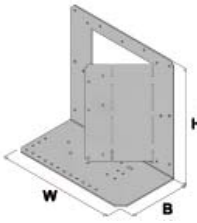
Angle scale on base to ease adjustment

VS - Single/Double Joists - Solid Timber

Joist/Beam Size	Product Code	Ga	Hanger Dimensions			Fasteners - 10dx1½"		Factored Resistance					
			W	H	B	Face	Joist	Uplift (Kd = 1.15)		SPF		DF	
								kN	lbs	kN	lbs	kN	lbs
1½ x 5½	VS5.5	14	9⅞	5½	4⅞	11	6	2.5	562	3.14	705	3.74	840
1½ x 7¼	VS7.25	14	9⅞	7¼	4⅞	11	6	2.5	562	3.14	705	3.74	840
3 x 5½	VS5.5	14	9⅞	5½	4⅞	11	6	2.5	562	4.55	1022	4.98	1119
3 x 7¼	VS7.25	14	9⅞	7¼	4⅞	11	6	2.5	562	4.55	1022	4.98	1119

VS - Single/Double Joist - EWP

I-Joist/Beam Size	Product Code	Ga	Hanger Dimensions			Fasteners - 10dx1½"		Factored Resistance									
			W	H	B	Face	Joist	Uplift (Kd = 1.15)		SPF - I-Joist		LVL		PSL		LSL	
								kN	lbs	kN	lbs	kN	lbs	kN	lbs	kN	lbs
1½ x 9½	VS9.5	14	9⅞	9½	4⅞	11	2	2.5	562	3	674	5	1124	5	1124	5	1124
1½ x 11¼	VS11.88	14	9⅞	11¼	4⅞	11	2	2.5	562	3	674	5	1124	5	1124	5	1124
1¾ x 9½	VS9.5	14	9⅞	9½	4⅞	11	2	2.5	562	3	674	5	1124	5	1124	5	1124
1¾ x 11¼	VS11.88	14	9⅞	11¼	4⅞	11	2	2.5	562	3	674	5	1124	5	1124	5	1124
2⅞ x 9½	VS9.5	14	9⅞	9½	4⅞	11	2	2.5	562	3	674	5	1124	5	1124	5	1124
2⅞ x 11¼	VS11.88	14	9⅞	11¼	4⅞	11	2	2.5	562	3	674	5	1124	5	1124	5	1124
2⅞ x 9½	VS9.5	14	9⅞	9½	4⅞	11	2	2.5	562	3	674	5	1124	5	1124	5	1124
2⅞ x 11¼	VS11.88	14	9⅞	11¼	4⅞	11	2	2.5	562	3	674	5	1124	5	1124	5	1124
3 x 9½	VS9.5	14	9⅞	9½	4⅞	11	2	2.5	562	3	674	5	1124	5	1124	5	1124
3 x 11¼	VS11.88	14	9⅞	11¼	4⅞	11	2	2.5	562	3	674	5	1124	5	1124	5	1124
3½ x 9½	VS9.5	14	9⅞	9½	4⅞	11	2	2.5	562	3	674	5	1124	5	1124	5	1124
3½ x 11¼	VS11.88	14	9⅞	11¼	4⅞	11	2	2.5	562	3	674	5	1124	5	1124	5	1124




Right hand model shown

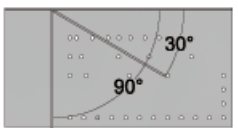
To order the VS
H dimension – Joist height e.g. 9½"

Example – Hanger required – VS9.5 (VS is not width dependant)

Specify Left or Right hand orientation



RIGHT HAND

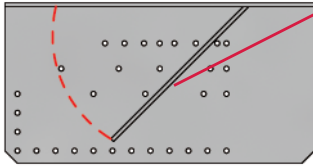


LEFT HAND

Joist & Beam Connections

VS - Variable Skewed Hanger Installation

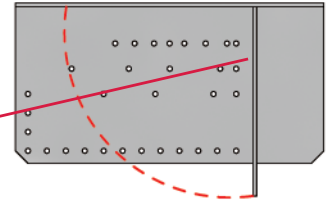
Stage 1



Adjust side plate to approximate angle between 30° and 90° using scale on base of hanger, bending only once.

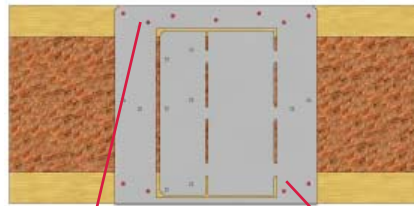
OR ALTERNATIVELY

Where incoming members widths are greater than 2½" wide, adjust bend to 90°, bending only once.



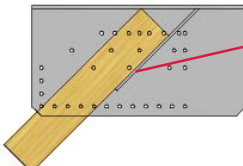
VS hanger can be adjusted to the desired angle ONCE only

Stage 2



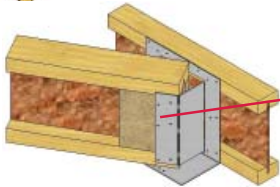
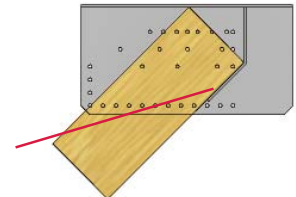
Position VS against face of I-Joist / LVL and fix using circular nail holes to top & bottom.
Face fix to I-Joist using 11 nails.

Stage 3

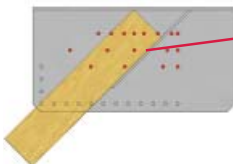


1. Locate incoming member and adjust side plate to correct angle.

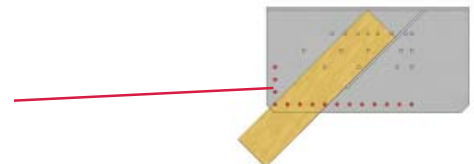
Where incoming members widths are greater than 2½" wide, the side plate has been bent to 90°. Now locate the incoming member and adjust second bend to suit.



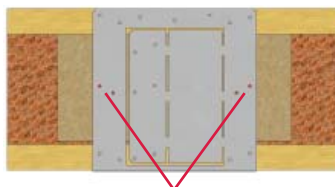
2. Fix to incoming member using 6 nails.
Where incoming member is an I-Joist, web stiffeners must be fixed as per I-Joist manufacturer's guidelines.



3. Please ensure that:
 - 1 inner nail hole (indicated in red)
 - &
 - 1 outer nail hole (indicated in red)
 are filled on the underside.



For Enhanced Uplift Resistance



For enhanced uplift resistance use backer blocks and fill the 4 triangular optional nail holes.