IUSE Face Mount I-Joist Hanger

The IUSE is a hybrid hanger that incorporates the advantages of a face mount and top mount hanger. Installation is fast with the Strong-Grip™ seat, easy-to-reach face nails and self-jigging locator tabs.

- This hanger incorporates the Strong-Grip™ seat which secures the I-joist without the need for any fasteners—where no uplift is required.
- Positive angle nailing (PAN) minimises splitting of the joist flanges.

Material: See table on next page.

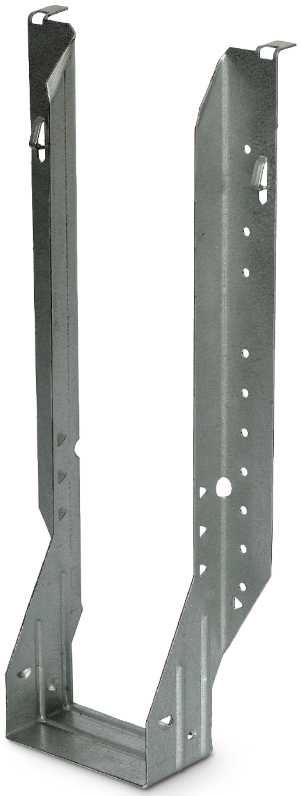
Finish: Galvanised. See Corrosion Information.

Uplift Loads

- Models have optional triangle joist nail holes for additional uplift. Properly attached web stiffeners are required.
- See the load tables for minimum required fasteners and design uplift capacity.

Installation

- Use all specified fasteners. See General Notes. Verify that the header can take the required fasteners specified in the table. See more installation information.
- For additional important installation information, see page 55.
- Position I-joist into hanger and snap into place. No joist nailing required. Some models have triangle and round header nail holes. To achieve Max. download, fill both round and triangle holes.
- Locator tabs are not structural. They may be bent back to adjust for hanger placement.
- For rimboard applications see T-RIMBDHGR.
- I-joists with web stiffeners or rectangular sections can be used with the installation of 2 – 40 x 3.75mm nails into the optional triangle joist nails.
- Web stiffeners are not required with I-joists when the top flange is laterally supported by the sides of the hanger unless the manufacturer's no-web-stiffener reaction is exceeded.
- Watch an installation video; www.strongtie.com/videolibrary/con-ius.html.



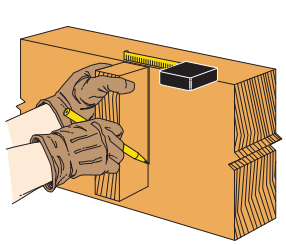
IUSE

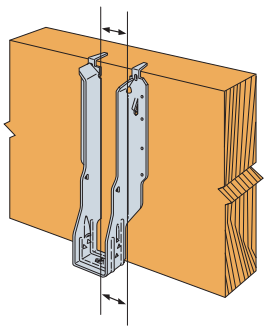
Note

- These hangers cannot be modified. However, these models will normally accommodate a skew of up to 5°. For sloped joists up to ¼:12 there is no reduction, between ¼:12 and up to ½:12, tests show a 10% reduction in ultimate hanger strength. Local crushing of the bottom flange or excessive deflection may be limiting; check with joist manufacturer for specific limitations on bearing of this type.

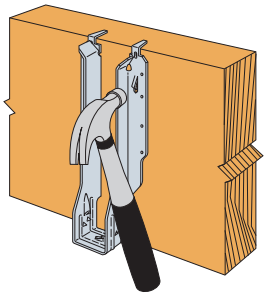
Typical Installation

STEP 1: Locate the hanger.

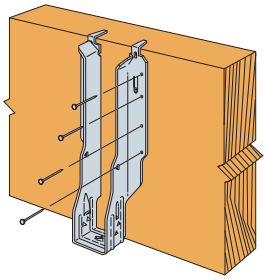




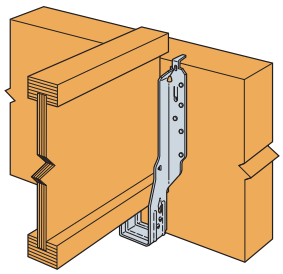
STEP 2: Temporarily fix using the speed prongs (IUSE).



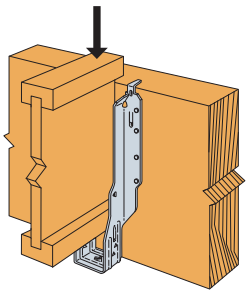
STEP 3: Install specified fasteners into the carrying member.



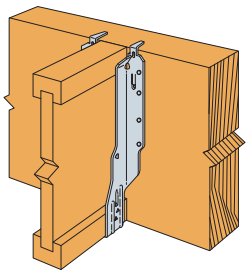
STEP 4: Slide the I-joist downward into the IUSE until it rests above the large teardrop.

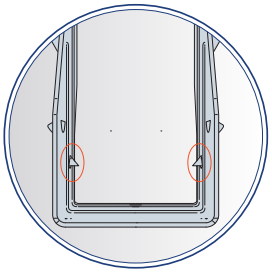


STEP 5: Firmly push or snap I-joist fully into the seat of the IUSE.

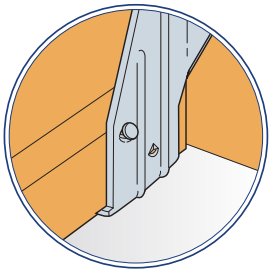


NO NAILS required in joist—where no uplift is required.



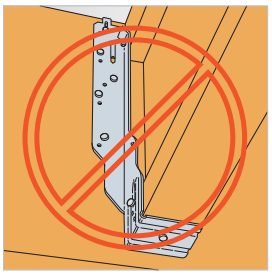


The Strong-Grip™ seat secures I-joists in position without joist nails.

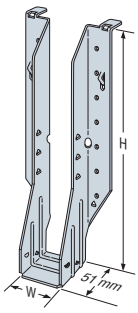


Use specified fastener installed as shown where uplift is required.

AVOID A MISINSTALLATION



Do not make your own holes. Do not nail the bottom flange.



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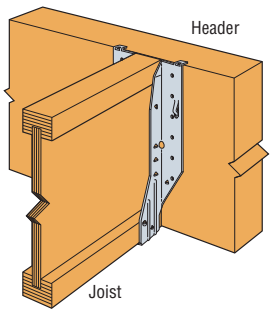

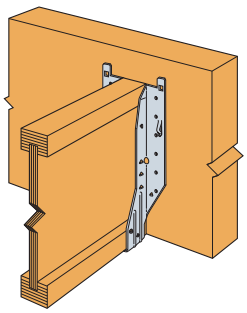

Typical IUSE installation

IUSE Technical Data

Joist Size (mm)		Model No.	Dimensions (mm)			Fasteners (No. – Length x Dia.,mm)		Country	Design Capacity (kN)	
									Download	
Width	Height		H	W	B	Face[5]	Joist		Floor	Roof
38	240	IUSE239/41	239	41	51	14 – 40 x 3.75	2 – 40 x 3.75	AU	k_1 = 0.69 5.83	k_1 = 0.77 5.83
								NZ	k_1 = 0.80 5.83	k_1 = 0.80 5.83
	300	IUSE299/41	299	41	51	16 – 40 x 3.75	2 – 40 x 3.75	AU	k_1 = 0.69 5.83	k_1 = 0.77 5.83
								NZ	k_1 = 0.80 5.83	k_1 = 0.80 5.83
45	200	IUSE199/48	199	48	51	10 – 40 x 3.75	2 – 40 x 3.75	AU	k_1 = 0.69 4.37	k_1 = 0.77 4.37
								NZ	k_1 = 0.80 4.37	k_1 = 0.80 4.37
	240	IUSE239/48	239	48	51	14 – 40 x 3.75	2 – 40 x 3.75	AU	k_1 = 0.69 5.83	k_1 = 0.77 5.83
								NZ	k_1 = 0.80 5.83	k_1 = 0.80 5.83
	300	IUSE299/48	299	48	51	16 – 40 x 3.75	2 – 40 x 3.75	AU	k_1 = 0.69 5.62	k_1 = 0.77 5.62
								NZ	k_1 = 0.80 5.29	k_1 = 0.80 5.29

IUSE Technical Data (cont.)

Joist Size (mm)		Model No.	Dimensions (mm)			Fasteners (No. – Length x Dia.,mm)		Country	Design Capacity (kN)	
									Download	
Width	Height		H	W	B	Face[5]	Joist		Floor	Roof
51	240	IUSE239/54	239	54	51	14 – 40 x 3.75	2 – 40 x 3.75	AU	$k_1 = 0.69$ 5.62	$k_1 = 0.77$ 5.62
								NZ	$k_1 = 0.80$ 5.29	$k_1 = 0.80$ 5.29
	300	IUSE299/54	299	54	51	16 – 40 x 3.75	2 – 40 x 3.75	AU	$k_1 = 0.69$ 5.62	$k_1 = 0.77$ 5.62
								NZ	$k_1 = 0.80$ 5.29	$k_1 = 0.80$ 5.29
58-59	360	IUSE359/61	359	61	51	20 – 40 x 3.75	2 – 40 x 3.75	AU	$k_1 = 0.69$ 7.29	$k_1 = 0.77$ 7.29
								NZ	$k_1 = 0.80$ 6.86	$k_1 = 0.80$ 6.86
60	200	IUSE199/63	199	63	51	10 – 40 x 3.75	2 – 40 x 3.75	AU	$k_1 = 0.69$ 4.33	$k_1 = 0.77$ 4.33
								NZ	$k_1 = 0.80$ 4.07	$k_1 = 0.80$ 4.07
63	240	IUSE239/66	239	66	51	14 – 40 x 3.75	2 – 40 x 3.75	AU	$k_1 = 0.69$ 5.22	$k_1 = 0.77$ 5.22
								NZ	$k_1 = 0.80$ 4.91	$k_1 = 0.80$ 4.91
	245	IUSE244/66	244	66	51	14 – 40 x 3.75	2 – 40 x 3.75	AU	$k_1 = 0.69$ 6.20	$k_1 = 0.77$ 6.20
								NZ	$k_1 = 0.80$ 5.83	$k_1 = 0.80$ 5.83
	300	IUSE299/66	299	66	51	16 – 40 x 3.75	2 – 40 x 3.75	AU	$k_1 = 0.69$ 5.62	$k_1 = 0.77$ 5.62
								NZ	$k_1 = 0.80$ 5.29	$k_1 = 0.80$ 5.29
	360	IUSE359/66	359	66	51	20 – 40 x 3.75	2 – 40 x 3.75	AU	$k_1 = 0.69$ 7.29	$k_1 = 0.77$ 7.29
								NZ	$k_1 = 0.80$ 6.86	$k_1 = 0.80$ 6.86
70	240	IUSE239/73	239	73	51	14 – 40 x 3.75	2 – 40 x 3.75	AU	$k_1 = 0.69$ 6.20	$k_1 = 0.77$ 6.20
								NZ	$k_1 = 0.80$ 5.83	$k_1 = 0.80$ 5.83
	300	IUSE299/73	299	73	51	16 – 40 x 3.75	2 – 40 x 3.75	AU	$k_1 = 0.69$ 5.62	$k_1 = 0.77$ 5.62
								NZ	$k_1 = 0.80$ 5.29	$k_1 = 0.80$ 5.29
90	200	IUSE199/92	199	92	51	10 – 40 x 3.75	2 – 40 x 3.75	AU	$k_1 = 0.69$ 4.29	$k_1 = 0.77$ 4.29
								NZ	$k_1 = 0.80$ 4.29	$k_1 = 0.80$ 4.29
	240	IUSE239/92	239	92	51	14 – 40 x 3.75	2 – 40 x 3.75	AU	$k_1 = 0.69$ 6.35	$k_1 = 0.77$ 6.35
								NZ	$k_1 = 0.80$ 5.98	$k_1 = 0.80$ 5.98
	300	IUSE299/92	299	92	51	16 – 40 x 3.75	2 – 40 x 3.75	AU	$k1 = 0.69$ 5.62	$k_1 = 0.77$ 5.62
								NZ	$k_1 = 0.80$ 5.29	$k_1 = 0.80$ 5.29
	360	IUSE359/92	359	92	51	20 – 40 x 3.75	2 – 40 x 3.75	AU	$k_1 = 0.69$ 7.29	$k_1 = 0.77$ 7.29
								NZ	$k_1 = 0.80$ 6.86	$k_1 = 0.80$ 6.86
	400	IUSE399/92	399	92	51	22 – 40 x 3.75	2 – 40 x 3.75	AU	$k_1 = 0.69$ 7.29	$k_1 = 0.77$ 7.29
								NZ	$k_1 = 0.80$ 6.86	$k_1 = 0.80$ 6.86

1. Design Capacity is the lesser of (1) the Characteristic Capacity multiplied by the Australian Capacity Factor, or the NZ Strength Reduction Factor (ϕ), and applicable the k modification factors following AS 1720.1 and NZS 3603 and (2) the Serviceability Capacity which is the load at 3.2mm joint slip. Design Capacity is the minimum of test data and structural joint calculation.
2. For Australia, the Capacity Factor (ϕ) is 0.85 for nails and screws for structural joints in a Category 1 application. Reduce tabulated values where other Category applications govern. For NZ, the Strength Reduction Factor (ϕ) is 0.80 for nails in lateral loading.
3. Duration of Load Factor (k_1) is as shown. Reduce Duration of Load Factor where applicable. Capacities may not be increased.
4. Timber species for joint design is seasoned Radiata Pine, which is Australia Joint Group JD4 per AS 1720.1 Table H2.4 and New Zealand Joint Group J5 per NZS 3603 Table 4.1.
5. The Design Capacities may be multiplied by 1.3 when 75mm x 3.75mm face nails are used.
6. The Design Uplift Capacity is 0.55kN for Australia and 0.52kN for New Zealand when two joist nails are installed.