

IUC Concealed Flange Hanger

The IUC is a face-mounted concealed flange hanger for both I-joists and solid timber sections. Ideal for end of ledger/header or post conditions, the IUC also provides cleaner lines for exposed conditions such as overhead decks.

- The IUC has optional triangular nail holes for additional uplift.
- Properly attached web stiffeners will be required for enhanced uplift.
- Inward facing flanges increase positioning flexibility.
- Stronger than toenailing joists.

Material: 1.2mm thick.

Finish: Galvanised. See Corrosion Information.

Installation

- Use all specified fasteners. See General Notes.
- Verify that the header can take the fasteners specified in the table.
- Web stiffeners are not required with I-joists when the top flange is laterally supported by both sides of the hanger.

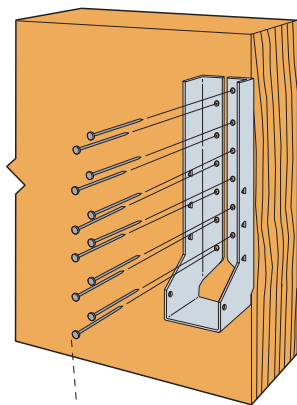
Note

- These hangers cannot be skewed.

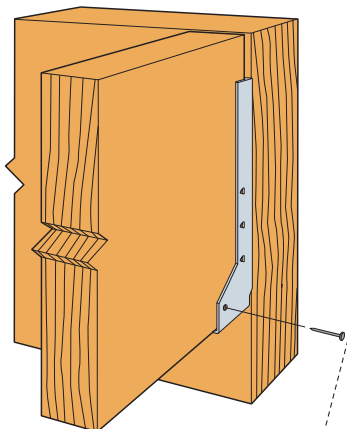
Typical Installation

STEP 1: Locate the IUC and install specified fasteners into the carrying member.

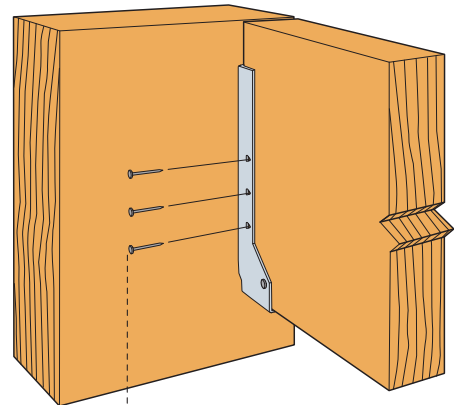
STEP 2: Place the joist in the IUC and install specified fasteners into the joist.



(See table)

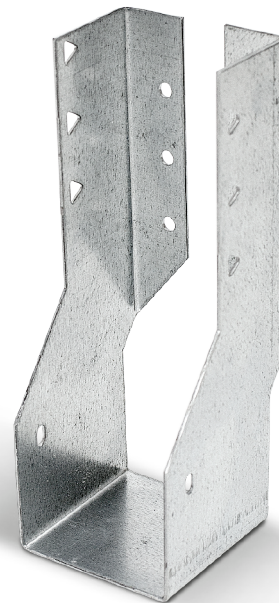


(See table)

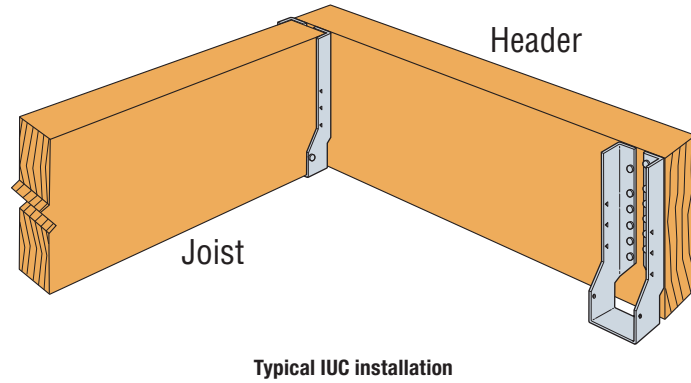
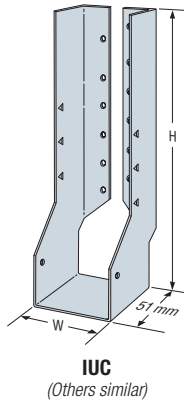


(See table)

OPTIONAL NAILING: The IUC has optional triangular holes for additional uplift. Properly attached web stiffeners will be required for enhanced uplift in I-joists.



IUC



IUC Technical Data

Joist size (mm)		Model No.	Dimensions (mm)			Fasteners (No. – Length x Dia., mm)		Country	Design Capacity (kN)	
Width	Height		H	W	B	Face ⁵	Joist		Download	
								Floor	Roof	
45	145	IUC142/47	142	47	51	6 – 40 x 3.75	2 – 40 x 3.75	AU	$k_1 = 0.69$ 4.23	$k_1 = 0.77$ 4.23
								NZ	$k_1 = 0.80$ 3.98	$k_1 = 0.80$ 3.98
	195–200	IUC192/47	192	47	51	10 – 40 x 3.75	2 – 40 x 3.75	AU	$k_1 = 0.69$ 5.32	$k_1 = 0.77$ 5.32
								NZ	$k_1 = 0.80$ 5.32	$k_1 = 0.80$ 5.32
50	195–200	IUC192/50	192	50	51	10 – 40 x 3.75	2 – 40 x 3.75	AU	$k_1 = 0.69$ 5.32	$k_1 = 0.77$ 5.32
								NZ	$k_1 = 0.80$ 5.32	$k_1 = 0.80$ 5.32
	220–245	IUC217/50	217	50	51	12 – 40 x 3.75	2 – 40 x 3.75	AU	$k_1 = 0.69$ 5.96	$k_1 = 0.77$ 5.96
								NZ	$k_1 = 0.80$ 5.96	$k_1 = 0.80$ 5.96

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.