

LSSU Adjustable Light Slopeable/ Skewable U Hanger

The innovative design of the LSSU joist hanger allows it to adjust to any slope or skew up to 45°, eliminating the need for pre-skewed/sloped or custom-order hangers. Now one hanger can handle a wide range of framing applications.

- All models are slope and skew adjustable on site.
- Sizes for both solid sawn timber and engineered wood.

Material: LSSU410 – 1.6mm, all others 1.3mm.

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.
- Attach the sloped joist at both ends so that the horizontal force developed by the slope is fully supported by the supporting members.
- Watch an installation video; www.strongtie.com/videolibrary/con-lssui.html.

Typical Installation

STEP 1: Nail hanger to slope-cut carried member, installing seat nail first. No bevel necessary for skewed installation. Install joist nails at 45° angle.

STEP 2: Skew flange from 0-45°. Bend other flange back along centreline of slots until it meets the header. Bend one time only.







STEP 3: Attach hanger to the carrying member, acute angle side first (see footnote 5). Install nails at an angle.









LSSU Technical Data

Joist Size (mm)		Model No	Dimension (mm)		Fasteners (No. – Length x Dia., mm)		Country	Design Capacity (kN)		
Width	Height	model No.	w	B	Face	.loist	Country	Unlift	D	ownload
	noight				1 400	00131		opint	Floor	Roof
SLOPED ONLY HANGERS										
45	241–356	LSSUI25	45	90	10 – 75 x 3.75	7 – 40 x 3.75	AU	k ₁ = 1.14	$k_1 = 0.69$	$k_1 = 0.77$
								3.06	6.64	6.64
							NZ	$k_1 = 1.0$	$k_1 = 0.80$	$k_1 = 0.80$
								2.88	6.25	6.25
58	241–356	LSSUI2.06	52	90	10 – 75 x 3.75	7 – 40 x 3.75	AU	k ₁ = 1.14	$k_1 = 0.69$	$k_1 = 0.77$
								3.06	6.64	6.64
							NZ	$k_1 = 1.0$	$k_1 = 0.80$	$k_1 = 0.80$
								2.88	6.25	6.25
63	195–245	LSSU170/66	66	90	10 – 75 x 3.75	11 – 40 x 3.75	AU	K ₁ = 1.14	$K_1 = 0.69$	$K_1 = 0.77$
								3.06	7.38	7.38
							NZ	K ₁ = 1.0	$K_1 = 0.80$	$K_1 = 0.80$
								2.88	6.94	6.94
89	241–356	LSSU410	90	90	18 – 75 x 3.75	12 – 40 x 3.75	AU	$K_1 = 1.14$	$K_1 = 0.69$	$K_1 = 0.77$
								3.06	12.44	12.44
								$K_1 = 1.0$	$K_1 = 0.80$	$K_1 = 0.80$
								2.88	11.70	11.70
SLUPED AND SKEWED HANGERS										
45	241–356	LSSUI25	45	90	9 – 75 x 3.75	7 – 40 x 3.75	AU	K ₁ = 1.14	K ₁ = 0.09	$K_1 = 0.77$
								5.00 k = 10	4.90	4.90
							NZ	N1 = 1.0	K1 = 0.00	K1 = 0.00
								2.00 k = 1.14	4.07	4.07
58	241–356	LSSUI2.06	52	90	9 – 75 x 3.75	7 – 40 x 3.75	AU	3.06	5.8/	5.8/
							NZ	k 10	k 0.80	k 0.80
								2.88	5 50	5.50
63	195–245	LSSU170/66	66	90	9 – 75 x 3.75	11 – 40 x 3.75	AU	k. = 1 14	$k_1 = 0.69$	$k_1 = 0.77$
								3.06	5 51	5.51
							NZ	$k_1 = 1.0$	$k_1 = 0.80$	$k_1 = 0.80$
								2.88	5.18	5.18
89	241–356	LSSU410	90	90	14 – 75 x 3.75	12 – 40 x 3.75	AU	k₁ = 1.14	$k_1 = 0.69$	$k_1 = 0.77$
								3.06	6.76	6.76
							NZ	k ₁ = 1.0	$k_1 = 0.80$	$k_1 = 0.80$
								2.88	6.51	6.51

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. Duration of Load Factor (k_1) is as shown. Reduce Duration of Load Factor where applicable. Capacities may not be increased.

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. 4.

5. Some face nails are not fitted in the flange on the acute angle side for skewed installations. Fill all nail holes on the obtuse angle side.

6. Do not substitute 40mm x 3.75mm nails for face nails on slope and skew combinations or skewed only LSSU/LSSUI hangers.

7. 8. Attach the sloped joist at both ends so that the horizontal force developed by the slope is fully supported by the supporting members.

Web stiffeners required for I-joist applications