#### LUS Double Shear Joist Hanger

# Double-Shear Nailing, Double the Benefits!

SIMPSON Strong-Tie

The LUS joist hangers are value engineering at its finest. All hangers in the LUS series have Double-Shear Nailing. This innovation distributes the load through two points on each joist nail for greater strength. It also allows the use of fewer nails, faster installation and the use of standard nails for all connections.

To help with installation speed every galvanised LUS Joist Hanger incorporates the Simpson Strong-Tie Speed Prong feature which is designed to temporarily position and secure the connector for easier and faster installation.

### Material

1.2 mm thick

### Finish

Galvanised - ZMAX<sup>®</sup> coating; Stainless Steel - Type 316L. See Corrosion Information.

#### Installation

- Use all specified fasteners; see General Notes.
- Nails must be driven at a 45° angle through the joist or truss into the header to achieve the table loads.
- Not designed for welded applications.
- Use SCNR stainless steel nails with LUS stainless steel hangers.
- LUS hangers cannot be modified, (Do not bend or remove tabs.)



### Packaging

- Galvanised 50/box
- Stainless Steel 25/box

PLEASE NOTE: 35 mm LUS joist hangers are not available in New Zealand.





Speed Prong



**Double-Shear Nailing** 



**Dome Nailing** Guides the nail into the joist at a 45° angle. U.S. Patent 5.603.580



Compatible with Strong-Drive<sup>®</sup> SD Connector Screw



This product is preferable to similar connectors because of a) easier installation, b) higher loads, c) lower installed cost, or a combination of these features.

Zinc galvanised coating weight of 550g of zinc per square meter, total both sides. Hot dip galvanised per ASTM A-653. <u>7//M</u>AX 7550 These products require hot-dip galvanised fasteners (fasteners which meet the specifications of ASTM A153).



Connectors are manufactured from Type 316L stainless steel, and provide greater durability against corrosion. Stainless-steel nails are required with stainless-steel products, and are available from Simpson Strong-Tie.

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# LUS Technical Data

Joist Size (mm)		Model No. Stainless Steel	Dimensions (mm)			Fasteners (No. — Length x Dia., mm)		Design Capacity (kN)					
Width	Height	(add "SS") Galvanised (add "Z")	w		В	Header <sup>6</sup>	Joist	Australia			New Zealand		
				H				Uplift k <sub>1</sub> = 1.14	Floor $k_1 = 0.69$	$\begin{array}{c} \text{Roof} \\ \textbf{k}_1 = \textbf{0.77} \end{array}$	Uplift $k_1 = 1.0$	Floor $k_1 = 0.80$	$\begin{array}{c} \text{Roof} \\ k_1 = 0.80 \end{array}$
35	90 - 140	LUS36/82	36	82	45	4 — 38 x 3.75	2 — 64 x 3.75	2.3	3.8	4.2	1.6	3.3	3.3
	130 - 205	LUS36/123		123		4 — 38 x 3.75	4 — 64 x 3.75	4.6	4.8	5.3	3.1	4.2	4.2
	175 – 280	LUS36/171		171		6 — 38 x 3.75	4 — 64 x 3.75	4.6	6.2	6.9	3.1	5.5	5.5
45	90 - 130	LUS46/77	46	77		4 — 38 x 3.75	2 — 64 x 3.75	2.3	3.8	4.2	1.6	3.3	3.3
	120 - 190	LUS46/118		118		4 — 38 x 3.75	4 — 64 x 3.75	4.6	4.8	5.3	3.1	4.2	4.2
	175 – 280	LUS46/166		166		6 — 38 x 3.75	4 — 64 x 3.75	4.6	6.2	6.9	3.1	5.5	5.5

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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 3.2 mm joint slip. Design Capacity is the minimum of test data and structural joint calculation.

 Capacity is the minimum of test data and structural joint calculation.
 For Australia, the Capacity Factor (\$\phi\$) 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 (\$\phi\$) is 0.80 for nails in lateral loading.

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

## Install connectors even faster!

The CCN64 Collated Connector Nailer is the perfect companion for the LUS and other Simpson Strong Tie timber connectors to get the job done with ease and in less time.

- Drives 64 or 38 mm paper tape 33° collated nails
- Ideal for LUS double shear 64 mm nailing
- Precise and fast connector hole locating and nailing

## The Best Connector Nails for LUS Double Shear Hangers

<u> </u>	Collated Strong-Drive <sup>®</sup> SCNR RING-SHANK CONNECTOR Nail											
316	T9A150MCN		38 mm x 3.75 mm	Full round-smooth head, Annular-Ring Shank, Diamond point	316 Stainless Steel	1,500						
Stainless Steel	T9A250MCN	(≠)	64 mm x 3.75mm	33° – 22 nails per paper-collated strips		1,000						
Collated Strong-Drive <sup>®</sup> SCN SMOOTH-SHANK CONNECTOR Nail												
	N10HDGPT500		00 mm v 0 75 mm			500						
	N10HDGPT3000	10	36 mm x 3.75 mm	Full round-smooth head, Smooth Shank, Diamond point	Hot-dip	3,000						
	N10DHDGPT500		0.4	33° – 22 nails per paper-collated strips	Galvanised	500						
	N10DHDGPT2500		64 mm x 3.75 mm			2,500						
Loose Strong-Drive <sup>®</sup> SCNR RING-SHANK CONNECTOR Nail  «Box Qty												
	SSNA10D		29 mm v 2 75 mm		316 Stainless Steel	126						
316 Stainless Steel	SSNA10D5		30 1111 x 3.73 11111	Full round-smooth head, Annular-Ring Shank, Diamond point		630						
	SSA10DD		75 222 4 0 75 222	33° – 22 nails per paper-collated strips		66						
	SSA10D5		75 mm x 3.75mm			330						
Loose Strong-Drive <sup>®</sup> SCN SMOOTH-SHANK CONNECTOR Nail												
	N10DHDG-R		00 mm v 0 75 mm		Hot-dip Galvanised	120						
	N10D5HDG-R	10	36 mm x 3.75 mm	Full round-smooth head, Smooth Shank, Diamond point 33° – 22 nails per paper-collated strips		600						
	10D5HDG-R		75 mm x 3.75 mm			250						
Box Qty												
	SD9112R100	( <b>91</b> 5)	#9 x 38 mm	8.5 TPI, Sharp Point, 1/4" Hex Head,	Mechanically Galvanised	100						
	SD9212R100	(B)	#9 x 64 mm	Bit included with every box of screws								
These and v	e coated fasteners possess vith some preservative-treat	a level of content of timber. For	rrosion resistance that make or applications in higher-exp	es them suitable for use in some exterior and corrosive environments osure applications, consider Type-316 series stainless-steel for solection a factorer for a coocife application								

Simpson Strong-Tie<sup>®</sup> Australia Pty Ltd Call **1300 STRONGTIE** (1300 787664) www.strongtie.com.au Simpson Strong-Tie® (New Zealand) Ltd Call 09 477 4440 www.strongtie.co.nz This flyer is effective until April 30, 2020, and reflects information available as of April 1, 2018. This information is updated periodically and should not be relied upon after April 1, 2018; contact Simpson Strong-Tie for current information and limited warranty or see strongtie.com.

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 4.6
 6.2
 6.9
 3.1
 5.5

 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.

Uplift loads have been increased for wind or earthquake loading with no further increase allowed. Reduce where other loads govern.

The LUS header nails may be  $64 \times 3.75$  mm nails. The Design Capacities shall be multiplied by 1.10 when 75 x 3.75 mm

nails are used instead of the specified 64 x 3.75 mm nails. Stainless steel connectors must use SCNR stainless steel ring shank nails.

Nails and Strong-Drive SD Connector screws may not be combined in a connection.

25.4 mm

LUS Galvanised model shown

# SIMPSON Strong-Tie