

# LUS – Double Shear Joist Hanger

**Material:** Steel or Stainless Steel 1.2mm thick - LUS46  
Steel 2mm thick - HUS48Z

**Finish:**

ZMAX® Galvanised: LUS46Z; LUS48Z

316 Stainless Steel: LUS46SS



**Size:** See illustration on the right and table below

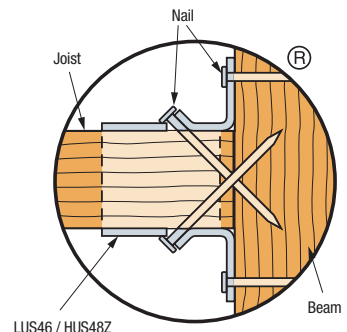
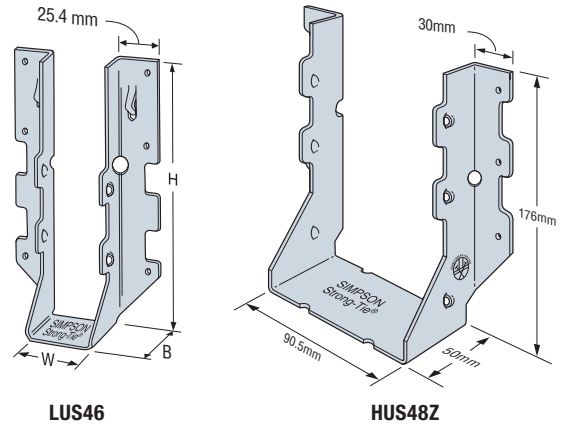
**Features & Benefits**

- Stamp of “Double-Shear Nailing” on the side
- Patented double-shear nailing design ensures a strong, durable connection (U.S. Patent 5,603,580)
- Slit width dome guides the nail into the joist at a 45° angle
- Speed Prongs help to temporarily position and secure the connector for easier and faster installation
- Angled joist nailing easier in tight spaces
- Designed for greater strength with fewer fasteners to install
- Do not bend or remove tabs
- 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
- Compatible with Strong-Drive® SD screws
- Available in 316 Stainless Steel for outdoor structures and more corrosive environments such as coastal areas

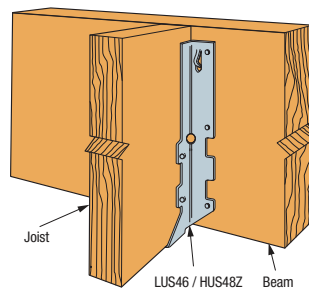
**Installation**

- Use all specified fasteners
- 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)

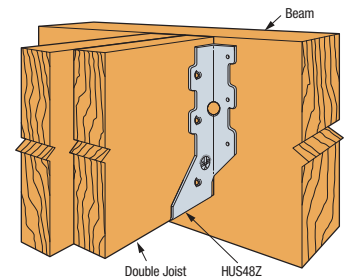
**Construction Details**



**LUS46 / HUS48Z Double Shear Nailing Installation**



**LUS46 / HUS48Z Installation**



**HUS48Z Double Joists Installation**

**LUS Technical Data**

Model No.	Joist Size (mm)		Dimensions (mm)			Fasteners (No. — Length x Dia., mm)		Design Capacity (kN)					
	Width	Height	W	H	B	Header <sup>6</sup>	Joist	Uplift k <sub>1</sub> = 1.0	Download				
									Floor k <sub>1</sub> = 0.80	Roof k <sub>1</sub> = 0.80			
LUS46/77Z LUS46/77SS	45	90 – 130	46	77	45	4 — 38 x 3.75	2 — 64 x 3.75	1.6	3.3	3.3			
LUS46/118Z LUS46/118SS		120 – 190		118		4 — 38 x 3.75	4 — 64 x 3.75				3.1	4.2	4.2
LUS46/166Z LUS46/166SS		175 – 280		166		6 — 38 x 3.75	4 — 64 x 3.75						
HUS48Z	90	180-260	90.5	176	50	6 — 75 x 3.75	6 — 75 x 3.75	5.28	4.22	4.22			

1. Design Capacity is the lesser of (1) the Characteristic Capacity multiplied by the NZ Strength Reduction Factor (ϕ), and applicable the k modification factors following 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. The Strength Reduction Factor (ϕ) is 0.80 for nails in lateral loading.
3. Duration of Load Factor (k<sub>1</sub>) 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 New Zealand Joint Group J5 per NZS 3603 Table 4.1.
5. Uplift loads have been increased for wind or earthquake loading with no further increase allowed. Reduce where other loads govern.
6. The LUS header nails may be 64 x 3.75mm nails.
7. The Design Capacities shall be multiplied by 1.10 when 75 x 3.75mm nails are used instead of the specified 64 x 3.75 mm nails.
8. Stainless steel connectors must use SCNR stainless steel ring shank nails.
9. Nails and Strong-Drive SD Connector screws may not be combined in a connection.