

LSC Adjustable Stair-Stringer Connector

The LSC adjustable stair-stringer connector offers a versatile, concealed connection between the stair stringer and the carrying header or rim joist while replacing costly framing. Field slopeable to all common stair-stringer pitches, the LSC connector is suitable for either solid or notched stringers.

- Replaces additional framing and toenailing.
- Suitable for most installations on 45 x 250mm or 45 x 300mm header/rim joist.
- May be installed flush with the top of the carrying member or lower on the face.
- Interchangeable for left or right applications.
- LSCZ features a ZMAX® coating for additional corrosion protection. Suitable for interior and some exterior applications.

Material: 1.3mm thick.

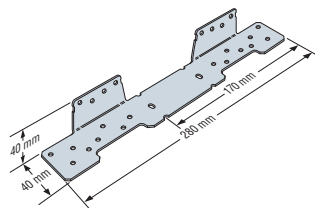
Finish: LSCZ—ZMAX coating; LSCSS—stainless steel. See Corrosion Information.

Installation

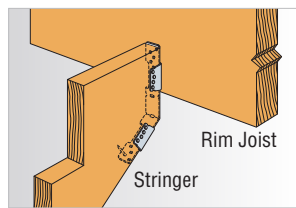
- Use all specified fasteners. See General Notes.
- Before fastening, position the stair stringer with the LSC on the carrying member to verify where the bend should be located.
- Tabs on the LSC must be positioned to the inside of the stairs.
- The fastener that is installed into the bottom edge of the stringer must go into the second-to-last hole.



Typical Installation



LSC



Typical LSC installation



LSCZ

LSC Technical Data

Model No.	Rim Joist Installation	Fasteners (Nails: No. - Length x Dia., Screws: No. - Dia. x Length, mm)			Country	Design Download Capacity (kN)	
		Rim Joist ⁶	Stringer Wide Face	Stringer Narrow Face			
LSCZ LSCSS ⁵	Supported ⁸	8 – 40 x 3.75	8 – 40 x 3.75	1 – 40 x 3.75	AU	k ₁ = 0.69 3.47	
					NZ	k ₁ = 0.80 3.26	
		8 – SD#9 x 38	8 – SD#9 x 38	—	AU	k ₁ = 0.69 2.33	
					NZ	k ₁ = 0.80 1.92	
		Standard	8 – 40 x 3.75	8 – 40 x 3.75	1 – 40 x 3.75	AU	k ₁ = 0.69 4.14
						NZ	k ₁ = 0.80 3.89
	8 – SD#9 x 38		8 – SD#9 x 38	1 – SD#9 x 38	AU	k ₁ = 0.69 4.14	
					NZ	k ₁ = 0.80 3.41	
	Cantilever		8 – 40 x 3.75	8 – 40 x 3.75	1 – 40 x 3.75	AU	k ₁ = 0.69 2.24
						NZ	k ₁ = 0.80 2.11
		8 – SD#9 x 38	8 – SD#9 x 38	—	AU	k ₁ = 0.69 3.07	
					NZ	k ₁ = 0.80 2.53	

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 load and 0.70 for other fasteners.
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. Simpson Strong-Tie stainless-steel connectors require stainless-steel fasteners
6. When cross-grain bending or cross-grain tension cannot be avoided in the members, mechanical reinforcement to resist such forces may be considered.
7. A minimum distance of 19mm measured from the lowest rim-joist fastener to edge of rim joist is required.
8. Simpson Strong-Tie SD#9 x 38 Strong-Drive SD Connector screws may be substituted for 40 x 3.75 nails to achieve published nail values if the extra screw is installed in the narrow face of stringer.