



Declaration of Performance



DoP Number: **DoP-h13/0009**

Issue: 4.0

- 1 **Unique Identification Code:** FIRK (U, G &S)
- 2 **Intended Use:** For use in load bearing timber structures
- 3 **Manufacture:** Simpson Strong-Tie Int. Ltd.
For local branch addresses refer to www.strongtie.eu
- 4 **Authorised Representative:** N/A
- 5 **System of Assessment:** 3

6 Harmonized Standard or European Assessment Document

hEN Number	Notified Body Number	ITTR Number
EN 14592:2008+A1:2012	1235 & 1015 & 0402	ITTR-13/0009

7 **Declared Performance:** (see also pages 2 and/or 3) NPD = No Performance Determined

Durability

Version:	Material (5) / Corrosion Protection	Service Class
U / BL	Bright or electro galvanized - 5µm	Service Class 1
G / VFZ	Hot Dip Galvanization - 50µm	Service Class 3
S / A4	1.4401 Stainless Steel	Service Class 3

Notes:

- (1) EN14592 clause 6.1.4.1 - 6.1.4.2; Tested to EN 409
- (2) EN14592 clause 6.1.4.3; Tested to EN1382, characteristic timber density 350 kg/m³
- (3) EN14592 clause 6.1.4.4; Calculated to EN1995, characteristic timber density 350 kg/m³
- (4) EN14592 clause 6.1.4.4; Calculated to EN1995, characteristic timber density 350 kg/m³
- (5) EN14592 clause 6.1.5

8 **Appropriate Technical Documentation and/or Specific Technical Documentation** N/A

The performance of the product/s identified above are in conformity with the set of declared performance/s.

This declaration of performance is issued, in accordance with Regulation (EU) No. 305/2011, under the sole responsibility of the manufacturer identified above

Signed for on behalf of the manufacturer by:

Laurent Versluysen
European Managing Director

(Sainte Gemme La Plaine, Fr.)

20/03/2018



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Geometry (mm unless otherwise stated)

Size	Nominal Diameter - d	Length - L	Head Diameter - dh	Head Area - Ah - [mm ²]	Head thickness - ht	Point Length - lp
2.0x40	2.0	40	5.0	19.6	0.7	3.1
2.0x50	2.0	50	5.0	19.6	0.7	3.1
2.2x45	2.2	45	5.3	22.1	0.7	3.3
2.3x55	2.3	55	5.4	22.9	0.8	3.1
2.3x60	2.3	60	5.4	22.9	0.8	3.3
2.5x55	2.5	55	6.0	28.3	0.8	4.3
2.5x65	2.5	65	6.0	28.3	0.8	3.6
2.8x50	2.7	50	6.4	32.2	1.0	4.7
2.8x65	2.7	65	6.4	32.2	1.0	4.7
2.8x70	2.7	70	6.4	32.2	1.0	4.7
2.8x75	2.7	75	6.4	32.2	1.0	4.7
3.1x50	3.1	50	7.3	41.9	1.0	4.3
3.1x55	3.1	55	7.3	41.9	1.0	4.3
3.1x60	3.1	60	7.3	41.9	1.0	4.3
3.1x75	3.1	75	7.3	41.9	1.0	4.3
3.1x80	3.1	80	7.3	41.9	1.0	4.3
3.1x100	3.1	100	7.3	41.9	1.0	4.3
3.4x60	3.3	60	7.8	47.8	1.0	4.8
3.4x70	3.3	70	7.8	47.8	1.0	4.8
3.4x75	3.3	75	7.8	47.8	1.0	4.8
3.4x90	3.3	90	7.8	47.8	1.0	4.8
3.4x95	3.3	95	7.8	47.8	1.0	4.8
3.4x100	3.3	100	7.8	47.8	1.0	4.8
3.7x100	3.7	100	9.0	63.6	1.1	5.3
3.8x100	3.8	100	9.0	63.6	1.1	5.8
4.0x125	4.0	125	9.7	73.9	1.1	5.4
4.0x150	4.0	150	9.7	73.9	1.1	5.4
4.3x125	4.3	125	10.2	81.7	1.2	5.2
4.6x130	4.6	130	11.0	95.0	1.4	6.6
5.1x140	5.1	140	12.2	116.9	1.5	6.0
5.1x150	5.1	150	12.2	116.9	1.5	6.0
5.1x160	5.1	160	12.2	116.9	1.5	6.0
5.5x160	5.5	160	13.2	136.8	1.7	9.3
5.5x175	5.5	175	13.2	136.8	1.7	9.3
5.5x180	5.5	180	13.2	136.8	1.7	9.3
5.5x210	5.5	210	13.2	136.8	1.7	9.3
5.5x230	5.5	230	13.2	136.8	1.7	9.3
6.0x180	6.0	180	14.5	165.1	1.7	8.2
6.0x190	6.0	190	14.5	165.1	1.7	8.2
6.0x200	6.0	200	14.5	165.1	1.7	8.2
7.0x210	7.0	210	17.0	227.0	1.7	9.8
7.0x225	7.0	225	17.0	227.0	1.7	9.8
7.0x250	7.0	250	17.0	227.0	1.7	9.8
7.0x260	7.0	260	17.0	227.0	1.7	9.8
7.0x275	7.0	275	17.0	227.0	1.7	9.8
8.0x300	8.0	300	19.5	298.6	2.0	9.7
8.0x330	8.0	330	19.5	298.6	2.0	9.7



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Mechanical Strength & Stiffness

Version:

U / BL / G / VFZ

Size	Yield Moment My,k [Nmm] (1)	Withdrawal Parameter fax,k [N/mm ²] (2)	Head Pull Through Parameter - fhead,k [N/mm ²] (3)	Characteristic Tensile Capacity - ftens,k [kN] (4)
2.0x40	1289	2.45	8.6	NPD
2.0x50				
2.2x45				
2.3x55	1721			
2.3x60				
2.5x55	2214			
2.5x65				
2.8x50	4257			
2.8x65				
2.8x70				
2.8x75				
3.1x50	4902			
3.1x55				
3.1x60				
3.1x75				
3.1x80				
3.1x100				
3.4x60	6989			
3.4x70				
3.4x75				
3.4x90				
3.4x95				
3.4x100				
3.7x100	8138			
3.8x100	11163			
4.0x125	9271			
4.0x150				
4.3x125	11514			
4.6x130	17195			
5.1x140	19890			
5.1x150				
5.1x160				
5.5x160	24876			
5.5x175				
5.5x180				
5.5x210				
5.5x230				
6.0x180	32070			
6.0x190				
6.0x200				
7.0x210	43697			
7.0x225				
7.0x250				
7.0x260				
7.0x275				
8.0x300	67041			
8.0x330				



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Mechanical Strength & Stiffness

Version: S / A4

Size	Yield Moment - $M_y, k [Nmm]$ (1)	Withdrawal Parameter - $f_{ax}, k [N/mm^2]$ (2)	Head Pull Through Parameter - $f_{head}, k [N/mm^2]$ (3)	Characteristic Tensile Capacity - $f_{tens}, k [kN]$ (4)
2.3x60	2566	2.45	8.6	NPD
2.8x75	4144			
3.4x100	8305			