

ESR-1866

Used for Florida State Wide Product
Approval #

FL11166

Products on this Report which are
approved:

SIMPSON

Strong-Tie

®

**SIMPSON STRONG-TIE COMPANY,
INC**

<u>Product</u>	<u>FL#</u>	<u>Product</u>	<u>FL#</u>	<u>Product</u>	<u>FL#</u>
B1.56/11.25	11166.1	B3.56/24	11166.6	B614	11166.11
B1.56/11.88	11166.1	B3.56/26	11166.6	B616	11166.11
B1.56/9.25	11166.1	B3.56/28	11166.6	B68	11166.11
B1.81/11.88	11166.2	B3.56/30	11166.6	B7.12/11.25	11166.12
B1.81/14	11166.2	B3.56/9.25	11166.6	B7.12/11.88	11166.12
B1.81/16	11166.2	B3.56/9.5	11166.6	B7.12/14	11166.12
B1.81/9.5	11166.2	B310	11166.7	B7.12/16	11166.12
B2.37/11.25	11166.3	B312	11166.7	B7.12/18	11166.12
B2.37/11.88	11166.3	B314	11166.7	B7.12/20	11166.12
B2.37/14	11166.3	B316	11166.7	B7.12/22	11166.12
B2.37/16	11166.3	B4.75/11.88	11166.8	B7.12/24	11166.12
B2.37/18	11166.3	B4.75/14	11166.8	B7.12/26	11166.12
B2.37/20	11166.3	B4.75/16	11166.8	B7.12/28	11166.12
B2.56/11.88	11166.4	B4.75/18	11166.8	B7.12/9.25	11166.12
B2.56/14	11166.4	B4.75/20	11166.8	B7.12/9.5	11166.12
B2.56/16	11166.4	B4.75/9.5	11166.8	BA1.81/11.88	11166.13
B2.56/18	11166.4	B410	11166.9	BA2.56/11.88	11166.13
B2.56/20	11166.4	B412	11166.9	BA2.56/14	11166.13
B2.56/22	11166.4	B414	11166.9	BA2.56/16	11166.13
B2.56/24	11166.4	B416	11166.9	BA3.56/11.88	11166.13
B2.56/26	11166.4	B48	11166.9	BA3.56/14	11166.13
B2.56/28	11166.4	B5.12/11.88	11166.10	BA3.56/16	11166.13
B2.56/30	11166.4	B5.12/14	11166.10	BA410	11166.13
B3.12/11.25	11166.5	B5.12/16	11166.10	BA412	11166.13
B3.12/11.88	11166.5	B5.12/18	11166.10	BA48	11166.13
B3.12/9.25	11166.5	B5.12/20	11166.10	HB1.81/11.25	11166.14
B3.56/11.25	11166.6	B5.12/22	11166.10	HB1.81/11.88	11166.14
B3.56/11.88	11166.6	B5.12/24	11166.10	HB1.81/14	11166.14
B3.56/12	11166.6	B5.12/26	11166.10	HB1.81/16	11166.14
B3.56/14	11166.6	B5.12/28	11166.10	HB1.81/18	11166.14
B3.56/16	11166.6	B5.12/30	11166.10	HB1.81/20	11166.14
B3.56/18	11166.6	B5.12/9.5	11166.10	HB2.56/22	11166.15
B3.56/20	11166.6	B610	11166.11	HB2.56/24	11166.15
B3.56/22	11166.6	B612	11166.11	HB2.56/26	11166.15

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Product	FL#	Product	FL#	Product	FL#
HB2.56/28	11166.15	HB5.12/30	11166.19	LBV1.81/11.88R45	11166.23
HB2.56/30	11166.15	HB5.50/11.25	11166.20	LBV1.81/14	11166.23
HB3.56/11.25	11166.16	HB5.50/11.88	11166.20	LBV1.81/16	11166.23
HB3.56/11.88	11166.16	HB5.50/12	11166.20	LBV1.81/7.25	11166.23
HB3.56/12	11166.16	HB5.50/14	11166.20	LBV1.81/9.25	11166.23
HB3.56/14	11166.16	HB5.50/16	11166.20	LBV1.81/9.5	11166.23
HB3.56/16	11166.16	HB5.50/18	11166.20	LBV1.81/9.5L45	11166.23
HB3.56/18	11166.16	HB5.50/20	11166.20	LBV1.81/9.5R45	11166.23
HB3.56/20	11166.16	HB5.50/9.25	11166.20	LBV2.06/11.88	11166.24
HB3.56/22	11166.16	HB5.50/9.5	11166.20	LBV2.06/14	11166.24
HB3.56/24	11166.16	HB7.12/11.25	11166.21	LBV2.06/16	11166.24
HB3.56/26	11166.16	HB7.12/11.88	11166.21	LBV2.06/9.5	11166.24
HB3.56/28	11166.16	HB7.12/14	11166.21	LBV2.1/11.88	11166.24
HB3.56/30	11166.16	HB7.12/16	11166.21	LBV2.1/14	11166.24
HB3.56/32	11166.16	HB7.12/18	11166.21	LBV2.1/16	11166.24
HB3.56/9.25	11166.16	HB7.12/20	11166.21	LBV2.1/9.5	11166.24
HB3.56/9.5	11166.16	HB7.12/22	11166.21	LBV2.37/11.25	11166.25
HB4.75/10	11166.17	HB7.12/24	11166.21	LBV2.37/11.88	11166.25
HB4.75/12	11166.17	HB7.12/26	11166.21	LBV2.37/14	11166.25
HB4.75/14	11166.17	HB7.12/28	11166.21	LBV2.37/16	11166.25
HB4.75/16	11166.17	HB7.12/9.25	11166.21	LBV2.37/18	11166.25
HB4.75/18	11166.17	HB7.12/9.5	11166.21	LBV2.37/20	11166.25
HB4.75/20	11166.17	LBV1.56/11.25	11166.22	LBV2.37/9.5	11166.25
HB412	11166.18	LBV1.56/11.88	11166.22	LBV2.56/11.25	11166.26
HB414	11166.18	LBV1.56/11.88L45	11166.22	LBV2.56/11.88	11166.26
HB416	11166.18	LBV1.56/11.88R45	11166.22	LBV2.56/13	11166.26
HB5.12/11.88	11166.19	LBV1.56/14	11166.22	LBV2.56/14	11166.26
HB5.12/14	11166.19	LBV1.56/16	11166.22	LBV2.56/16	11166.26
HB5.12/16	11166.19	LBV1.56/9.25	11166.22	LBV2.56/18	11166.26
HB5.12/18	11166.19	LBV1.56/9.5	11166.22	LBV2.56/20	11166.26
HB5.12/20	11166.19	LBV1.56/9.5L45	11166.22	LBV2.56/22	11166.26
HB5.12/22	11166.19	LBV1.56/9.5R45	11166.22	LBV2.56/24	11166.26
HB5.12/24	11166.19	LBV1.81/11.25	11166.23	LBV2.56/26	11166.26
HB5.12/26	11166.19	LBV1.81/11.88	11166.23	LBV2.56/28	11166.26
HB5.12/28	11166.19	LBV1.81/11.88L45	11166.23	LBV2.56/30	11166.26

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Product	FL#	Product	FL#	Product	FL#
LBV2.56/9.25	11166.26	LBV3.56/26	11166.28	LBV4.75/14	11166.31
LBV2.56/9.37	11166.26	LBV3.56/28	11166.28	LBV4.75/16	11166.31
LBV2.56/9.5	11166.26	LBV3.56/30	11166.28	LBV4.75/18	11166.31
LBV3.12/11.25	11166.27	LBV3.56/7.25	11166.28	LBV4.75/20	11166.31
LBV3.12/11.88	11166.27	LBV3.56/9.25	11166.28	LBV4.75/9.25	11166.31
LBV3.12/14	11166.27	LBV3.56/9.37	11166.28	LBV4.75/9.5	11166.31
LBV3.12/16	11166.27	LBV3.56/9.5	11166.28	LBV5.12/11.25	11166.32
LBV3.12/9.25	11166.27	LBV4.12/11.88	11166.29	LBV5.12/11.88	11166.32
LBV3.12/9.5	11166.27	LBV4.12/14	11166.29	LBV5.12/12	11166.32
LBV3.56/11.25	11166.28	LBV4.12/16	11166.29	LBV5.12/14	11166.32
LBV3.56/11.88	11166.28	LBV4.12/9.5	11166.29	LBV5.12/16	11166.32
LBV3.56/12	11166.28	LBV4.28/11.25	11166.30	LBV5.12/18	11166.32
LBV3.56/13	11166.28	LBV4.28/11.88	11166.30	LBV5.12/20	11166.32
LBV3.56/14	11166.28	LBV4.28/14	11166.30	LBV5.12/22	11166.32
LBV3.56/16	11166.28	LBV4.28/16	11166.30	LBV5.12/24	11166.32
LBV3.56/18	11166.28	LBV4.28/9.25	11166.30	LBV5.12/9.25	11166.32
LBV3.56/20	11166.28	LBV4.28/9.5	11166.30	LBV5.12/9.5	11166.32
LBV3.56/22	11166.28	LBV4.75/11.25	11166.31		
LBV3.56/24	11166.28	LBV4.75/11.88	11166.31		



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SIMPSON STRONG-TIE COMPANY, INC

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Section: 06090—Wood and Plastic Fastenings

REPORT HOLDER:

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EVALUATION SUBJECT:

LBV, B, HB AND BA SERIES JOIST HANGERS

1.0 EVALUATION SCOPE

Compliance with the following codes:

- 2006 *International Building Code*® (IBC)
- 2006 *International Residential Code*® (IRC)

Properties evaluated:

Structural

2.0 USES

The Simpson Strong-Tie LBV, B, HB, and BA series top-flange hangers described in this report are used as wood framing connectors in accordance with Section 2304.9.3 of the IBC. The products may also be used in structures regulated under the IRC when an engineered design is submitted in accordance with Section R301.1.3 of the IRC.

3.0 DESCRIPTION

3.1 General:

The hangers are formed from a single constant-width piece of steel, into a joist hanger with triangular-shaped sides that bend over the header with rectangular top flanges.

3.1.1 LBV Series Hangers: The LBV series joist hanger is designed to support single or double I-joists and common structural composite lumber that is 1.50 inches (38 mm) wide or wider. The joist hangers are formed from 14 gage galvanized steel, with a G90 coating, into seat-type hangers that are nailed to the top and side of the header and to the sides of the joists. Tables 1A and 1B have additional details.

3.1.2 B Series Hangers: The B series joist hanger is designed to support single or double I-joists and common structural composite lumber that is 1.75 inches (44 mm) wide and wider. The joist hangers are formed from 12 gage galvanized steel into seat-type hangers that are nailed to the top and side of the header and to the sides of the joists. Tables 1A and 1B have additional details.

3.1.3 HB Series Hangers: The HB series joist hanger is designed to support single or double I-joists and common structural composite lumber that is 1.75 inches (44 mm) wide and wider. The joist hangers are formed from 10 gage galvanized steel into seat-type hangers that are nailed to the top and side of the header and to the sides of the joists. Tables 1A and 1B have additional details.

3.1.4 BA Series Hangers: The BA series joist hanger is designed to support single or double I-joists and common structural composite lumber that is 1.50 inches (38 mm) wide and wider. The joist hangers are formed from 14 gage galvanized steel, with a G90 coating, into seat-type hangers that are nailed to the top and side of the header and to the sides of the joists. Tables 2A and 2B have additional details.

3.2 Materials:

3.2.1 Steel: The hangers described in this report are manufactured from galvanized steel complying with ASTM A 653, SS designation, Grade 33, with a minimum yield strength, *F_y*, of 33,000 psi (227 MPa) and a minimum tensile strength, *F_u*, of 45,000 psi (310 MPa). Minimum base-metal thicknesses for the hangers in this report are as follows:

NOMINAL THICKNESS (gage)	BASE-METAL THICKNESS (inch)
No. 10	0.1275
No. 12	0.0975
No. 14	0.0685

For SI: 1 inch = 25.4 mm.

The hangers have a minimum G90 zinc coating specification in accordance with ASTM A 653. Some models (designated with a model number ending with Z) are available with a G185 zinc coating specification in accordance with ASTM A 653. Some models (designated with a model number ending with HDG) are available with a hot-dip galvanization, also known as “batch” galvanization, in accordance with ASTM A 123, with a minimum specified coating weight of 2.0 ounces of zinc per square foot of surface area (600 g/m²), total for both sides. Model numbers in this report do not include the Z or HDG ending, but the information shown applies. The lumber treater or the holder of this report (Simpson Strong-Tie Company) should be contacted for recommendations on minimum corrosion resistance of steel connectors in contact with the specific proprietary preservative-treated or fire-retardant-treated lumber.

3.2.2 Wood: Wood members with which the connectors are used must be either sawn lumber or engineered lumber having a minimum specific gravity of 0.50 (minimum equivalent specific gravity of 0.50 for engineered lumber), and having a maximum moisture content of 19 percent (16 percent for engineered lumber) except as noted in Section 4.1. The thickness of the supporting wood member (header, beam, or ledger) must be equal to or greater than the length of the

fasteners specified in the tables in this report, or as required by wood member design, whichever is greater.

3.2.3 Fasteners: Nails used for hangers described in this report must comply with ASTM F 1667 and have the following minimum fastener dimensions and bending yield strengths (F_{yb}):

COMMON NAIL SIZE	SHANK DIAMETER (inch)	LENGTH (inches)	F_{yb} (psi)
10d × 1½	0.148	1½	90,000
10d	0.148	3	90,000
16d × 2½	0.162	2½	90,000
16d	0.162	3½	90,000

For SI: 1 inch = 25.4 mm, 1 psi = 6.895 kPa.

Fasteners used in contact with preservative-treated or fire-retardant-treated lumber must comply with IBC Section 2304.9.5 or IRC Section R319.3, as applicable. The lumber treater or the holder of this report (Simpson Strong-Tie Company) should be contacted for recommendations on minimum corrosion resistance of fasteners and connection capacities of fasteners used with the specific proprietary preservative-treated or fire-retardant-treated lumber.

4.0 DESIGN AND INSTALLATION

4.1 Design:

The tabulated allowable loads shown in this report are based on allowable stress design (ASD) and include the load duration factor, C_D , corresponding with the applicable loads in accordance with the NDS.

Tabulated allowable loads apply to products connected to wood used under dry conditions and where sustained temperatures are 100°F (37.8°C) or less. When products are installed to wood having a moisture content greater than 19 percent (16 percent for engineered wood products), or where wet service is expected, the allowable loads must be adjusted by the wet service factor, C_M , specified in the NDS. When connectors are installed in wood that will experience sustained exposure to temperatures exceeding 100°F (37.8°C), the allowable loads in this report must be adjusted by the temperature factor, C_t , specified in the NDS.

Connected wood members must be analyzed for load-carrying capacity at the connection in accordance with the NDS.

4.2 Installation:

Installation of the connectors must be in accordance with this evaluation report and the manufacturer's published installation instructions. In the event of a conflict between this report and the manufacturer's published installation instructions, this report governs.

5.0 CONDITIONS OF USE

The Simpson Strong-Tie® hangers described in this report comply with, or are suitable alternatives to what is specified in, those codes listed in Section 1.0 of this report, subject to the following conditions:

- 5.1 The connectors must be manufactured, identified and installed in accordance with this report and the manufacturer's published installation instructions. A copy of the instructions must be available at the jobsite at all times during installation.
- 5.2 Calculations showing compliance with this report must be submitted to the code official. The calculations must be prepared by a registered design professional where required by the statutes of the jurisdiction in which the project is to be constructed.
- 5.3 Adjustment factors noted in Section 4.1 and the applicable codes must be considered, where applicable.
- 5.4 Connected wood members and fasteners must comply, respectively, with Sections 3.2.2 and 3.2.3 of this report.
- 5.5 Use of connectors with preservative-treated or fire-retardant-treated lumber must be in accordance with Section 3.2.1 of this report. Use of fasteners with preservative-treated or fire-retardant-treated lumber must be in accordance with Section 3.2.3 of this report.

6.0 EVIDENCE SUBMITTED

Data in accordance with applicable portions of the ICC-ES Acceptance Criteria for Joist Hangers and Similar Devices (AC13), dated October 2006 (corrected March 2007).

7.0 IDENTIFICATION

The products described in this report are identified with a stamp or label indicating the name of the manufacturer (Simpson Strong-Tie), the model number, and the number of the index evaluation report ([ESR-2523](#)) that is used as an identifier for products such as those recognized in this report.

TABLE 1—APPLICABLE MODEL NUMBERS FOR LBV, B, HB, and BA SERIES JOIST HANGERS

MODEL	DIMENSIONS (inches)			MODEL	DIMENSIONS (inches)		
	W	H	B		W	H	B
LBV1.56/11.25	1 ⁹ / ₁₆	11 ¹ / ₄	3	LBV3.12/11.88	3 ¹ / ₈	11 ¹ / ₈	2 ¹ / ₂
LBV1.56/11.88	1 ⁹ / ₁₆	11 ¹ / ₈	3	LBV3.12/14	3 ¹ / ₈	14	2 ¹ / ₂
LBV1.56/11.88L45	1 ⁹ / ₁₆	11 ¹ / ₈	3	LBV3.12/16	3 ¹ / ₈	16	2 ¹ / ₂
LBV1.56/11.88R45	1 ⁹ / ₁₆	11 ¹ / ₈	3	LBV3.12/9.25	3 ¹ / ₈	9 ¹ / ₄	2 ¹ / ₂
LBV1.56/14	1 ⁹ / ₁₆	14	3	LBV3.12/9.5	3 ¹ / ₈	9 ¹ / ₂	2 ¹ / ₂
LBV1.56/16	1 ⁹ / ₁₆	16	3	LBV3.56/11.25	3 ⁹ / ₁₆	11 ¹ / ₄	2 ¹ / ₂
LBV1.56/9.25	1 ⁹ / ₁₆	9 ¹ / ₄	3	LBV3.56/11.88	3 ⁹ / ₁₆	11 ¹ / ₈	2 ¹ / ₂
LBV1.56/9.5	1 ⁹ / ₁₆	9 ¹ / ₂	3	LBV3.56/12	3 ⁹ / ₁₆	12	2 ¹ / ₂
LBV1.56/9.5L45	1 ⁹ / ₁₆	9 ¹ / ₂	3	LBV3.56/13	3 ⁹ / ₁₆	13	2 ¹ / ₂
LBV1.56/9.5R45	1 ⁹ / ₁₆	9 ¹ / ₂	3	LBV3.56/14	3 ⁹ / ₁₆	14	2 ¹ / ₂
LBV1.81/11.25	1 ¹³ / ₁₆	11 ¹ / ₄	3	LBV3.56/16	3 ⁹ / ₁₆	16	2 ¹ / ₂
LBV1.81/11.88	1 ¹³ / ₁₆	11 ¹ / ₈	3	LBV3.56/18	3 ⁹ / ₁₆	18	2 ¹ / ₂
LBV1.81/11.88L45	1 ¹³ / ₁₆	11 ¹ / ₈	3	LBV3.56/20	3 ⁹ / ₁₆	20	2 ¹ / ₂
LBV1.81/11.88R45	1 ¹³ / ₁₆	11 ¹ / ₈	3	LBV3.56/22	3 ⁹ / ₁₆	22	2 ¹ / ₂
LBV1.81/14	1 ¹³ / ₁₆	14	3	LBV3.56/24	3 ⁹ / ₁₆	24	2 ¹ / ₂
LBV1.81/16	1 ¹³ / ₁₆	16	3	LBV3.56/26	3 ⁹ / ₁₆	26	2 ¹ / ₂
LBV1.81/7.25	1 ¹³ / ₁₆	7 ¹ / ₄	3	LBV3.56/28	3 ⁹ / ₁₆	28	2 ¹ / ₂
LBV1.81/9.25	1 ¹³ / ₁₆	9 ¹ / ₄	3	LBV3.56/30	3 ⁹ / ₁₆	30	2 ¹ / ₂
LBV1.81/9.5	1 ¹³ / ₁₆	9 ¹ / ₂	3	LBV3.56/7.25	3 ⁹ / ₁₆	7 ¹ / ₄	2 ¹ / ₂
LBV1.81/9.5L45	1 ¹³ / ₁₆	9 ¹ / ₂	3	LBV3.56/9.25	3 ⁹ / ₁₆	9 ¹ / ₄	2 ¹ / ₂
LBV1.81/9.5R45	1 ¹³ / ₁₆	9 ¹ / ₂	3	LBV3.56/9.37	3 ⁹ / ₁₆	9 ³ / ₈	2 ¹ / ₂
LBV2.06/11.88	2 ¹ / ₁₆	11 ¹ / ₈	2 ¹ / ₂	LBV3.56/9.5	3 ⁹ / ₁₆	9 ¹ / ₂	2 ¹ / ₂
LBV2.06/14	2 ¹ / ₁₆	14	2 ¹ / ₂	LBV4.12/11.88	4 ¹ / ₈	11 ¹ / ₈	2 ¹ / ₂
LBV2.06/16	2 ¹ / ₁₆	16	2 ¹ / ₂	LBV4.12/14	4 ¹ / ₈	14	2 ¹ / ₂
LBV2.06/9.5	2 ¹ / ₁₆	9 ¹ / ₂	2 ¹ / ₂	LBV4.12/16	4 ¹ / ₈	16	2 ¹ / ₂
LBV2.1/11.88	2 ¹ / ₈	11 ¹ / ₈	2 ¹ / ₂	LBV4.12/9.5	4 ¹ / ₈	9 ¹ / ₂	2 ¹ / ₂
LBV2.1/14	2 ¹ / ₈	14	2 ¹ / ₂	LBV4.28/11.25	4 ⁹ / ₃₂	11 ¹ / ₄	2 ¹ / ₂
LBV2.1/16	2 ¹ / ₈	16	2 ¹ / ₂	LBV4.28/11.88	4 ⁹ / ₃₂	11 ¹ / ₈	2 ¹ / ₂
LBV2.1/9.5	2 ¹ / ₈	9 ¹ / ₂	2 ¹ / ₂	LBV4.28/14	4 ⁹ / ₃₂	14	2 ¹ / ₂
LBV2.37/11.25	2 ³ / ₈	11 ¹ / ₄	2 ¹ / ₂	LBV4.28/16	4 ⁹ / ₃₂	16	2 ¹ / ₂
LBV2.37/11.88	2 ³ / ₈	11 ¹ / ₈	2 ¹ / ₂	LBV4.28/9.25	4 ⁹ / ₃₂	9 ¹ / ₄	2 ¹ / ₂
LBV2.37/14	2 ³ / ₈	14	2 ¹ / ₂	LBV4.28/9.5	4 ⁹ / ₃₂	9 ¹ / ₂	2 ¹ / ₂
LBV2.37/16	2 ³ / ₈	16	2 ¹ / ₂	LBV4.75/11.25	4 ³ / ₄	11 ¹ / ₄	2 ¹ / ₂
LBV2.37/18	2 ³ / ₈	18	2 ¹ / ₂	LBV4.75/11.88	4 ³ / ₄	11 ¹ / ₈	2 ¹ / ₂
LBV2.37/20	2 ³ / ₈	20	2 ¹ / ₂	LBV4.75/14	4 ³ / ₄	14	2 ¹ / ₂
LBV2.37/9.5	2 ³ / ₈	9 ¹ / ₂	2 ¹ / ₂	LBV4.75/16	4 ³ / ₄	16	2 ¹ / ₂
LBV2.56/11.25	2 ⁹ / ₁₆	11 ¹ / ₄	2 ¹ / ₂	LBV4.75/18	4 ³ / ₄	18	2 ¹ / ₂
LBV2.56/11.88	2 ⁹ / ₁₆	11 ¹ / ₈	2 ¹ / ₂	LBV4.75/20	4 ³ / ₄	20	2 ¹ / ₂
LBV2.56/13	2 ⁹ / ₁₆	13	2 ¹ / ₂	LBV4.75/9.25	4 ³ / ₄	9 ¹ / ₄	2 ¹ / ₂
LBV2.56/14	2 ⁹ / ₁₆	14	2 ¹ / ₂	LBV4.75/9.5	4 ³ / ₄	9 ¹ / ₂	2 ¹ / ₂
LBV2.56/16	2 ⁹ / ₁₆	16	2 ¹ / ₂	LBV5.12/11.25	5 ¹ / ₈	11 ¹ / ₄	2 ¹ / ₂
LBV2.56/18	2 ⁹ / ₁₆	18	2 ¹ / ₂	LBV5.12/11.88	5 ¹ / ₈	11 ¹ / ₈	2 ¹ / ₂
LBV2.56/20	2 ⁹ / ₁₆	20	2 ¹ / ₂	LBV5.12/12	5 ¹ / ₈	12	2 ¹ / ₂
LBV2.56/22	2 ⁹ / ₁₆	22	2 ¹ / ₂	LBV5.12/14	5 ¹ / ₈	14	2 ¹ / ₂
LBV2.56/24	2 ⁹ / ₁₆	24	2 ¹ / ₂	LBV5.12/16	5 ¹ / ₈	16	2 ¹ / ₂
LBV2.56/26	2 ⁹ / ₁₆	26	2 ¹ / ₂	LBV5.12/18	5 ¹ / ₈	18	2 ¹ / ₂
LBV2.56/28	2 ⁹ / ₁₆	28	2 ¹ / ₂	LBV5.12/20	5 ¹ / ₈	20	2 ¹ / ₂
LBV2.56/30	2 ⁹ / ₁₆	30	2 ¹ / ₂	LBV5.12/22	5 ¹ / ₈	22	2 ¹ / ₂
LBV2.56/9.25	2 ⁹ / ₁₆	9 ¹ / ₄	2 ¹ / ₂	LBV5.12/24	5 ¹ / ₈	24	2 ¹ / ₂
LBV2.56/9.37	2 ⁹ / ₁₆	9 ³ / ₈	2 ¹ / ₂	LBV5.12/9.25	5 ¹ / ₈	9 ¹ / ₄	2 ¹ / ₂
LBV2.56/9.5	2 ⁹ / ₁₆	9 ¹ / ₂	2 ¹ / ₂	LBV5.12/9.5	5 ¹ / ₈	9 ¹ / ₂	2 ¹ / ₂
LBV3.12/11.25	3 ¹ / ₈	11 ¹ / ₄	2 ¹ / ₂				

TABLE 1—APPLICABLE MODEL NUMBERS FOR LBV, B, HB, and BA SERIES JOIST HANGERS (Continued)

MODEL	DIMENSIONS (inches)			MODEL	DIMENSIONS (inches)		
	W	H	B		W	H	B
B1.56/11.25	1 ⁹ / ₁₆	11 ¹ / ₄	3 ¹ / ₂	B414	3 ⁹ / ₁₆	13	2 ¹ / ₂
B1.56/11.88	1 ⁹ / ₁₆	11 ¹ / ₈	3 ¹ / ₂	B416	3 ⁹ / ₁₆	15	2 ¹ / ₂
B1.56/9.25	1 ⁹ / ₁₆	9 ¹ / ₄	3 ¹ / ₂	B48	3 ⁹ / ₁₆	7 ¹ / ₈	2 ¹ / ₂
B1.81/11.88	1 ¹³ / ₁₆	11 ¹ / ₈	3	B5.12/11.88	5 ¹ / ₈	11 ¹ / ₈	2 ¹ / ₂
B1.81/14	1 ¹³ / ₁₆	14	3	B5.12/14	5 ¹ / ₈	14	2 ¹ / ₂
B1.81/16	1 ¹³ / ₁₆	16	3	B5.12/16	5 ¹ / ₈	16	2 ¹ / ₂
B1.81/9.5	1 ¹³ / ₁₆	9 ¹ / ₂	3	B5.12/18	5 ¹ / ₈	18	2 ¹ / ₂
B2.37/11.25	2 ³ / ₈	11 ¹ / ₄	2 ¹ / ₂	B5.12/20	5 ¹ / ₈	20	2 ¹ / ₂
B2.37/11.88	2 ³ / ₈	11 ¹ / ₈	2 ¹ / ₂	B5.12/22	5 ¹ / ₈	22	2 ¹ / ₂
B2.37/14	2 ³ / ₈	14	2 ¹ / ₂	B5.12/24	5 ¹ / ₈	24	2 ¹ / ₂
B2.37/16	2 ³ / ₈	16	2 ¹ / ₂	B5.12/26	5 ¹ / ₈	26	2 ¹ / ₂
B2.37/18	2 ³ / ₈	18	2 ¹ / ₂	B5.12/28	5 ¹ / ₈	28	2 ¹ / ₂
B2.37/20	2 ³ / ₈	20	2 ¹ / ₂	B5.12/30	5 ¹ / ₈	30	2 ¹ / ₂
B2.56/11.88	2 ⁹ / ₁₆	11 ¹ / ₈	2 ¹ / ₂	B5.12/9.5	5 ¹ / ₈	9 ¹ / ₂	2 ¹ / ₂
B2.56/14	2 ⁹ / ₁₆	14	2 ¹ / ₂	B610	5 ¹ / ₂	9 ¹ / ₈	2 ¹ / ₂
B2.56/16	2 ⁹ / ₁₆	16	2 ¹ / ₂	B612	5 ¹ / ₂	11	2 ¹ / ₂
B2.56/18	2 ⁹ / ₁₆	18	2 ¹ / ₂	B614	5 ¹ / ₂	13	2 ¹ / ₂
B2.56/20	2 ⁹ / ₁₆	20	2 ¹ / ₂	B616	5 ¹ / ₂	15	2 ¹ / ₂
B2.56/22	2 ⁹ / ₁₆	22	2 ¹ / ₂	B68	5 ¹ / ₂	7 ¹ / ₈	2 ¹ / ₂
B2.56/24	2 ⁹ / ₁₆	24	2 ¹ / ₂	B7.12/11.25	7 ¹ / ₈	11 ¹ / ₄	2 ¹ / ₂
B2.56/26	2 ⁹ / ₁₆	26	2 ¹ / ₂	B7.12/11.88	7 ¹ / ₈	11 ¹ / ₈	2 ¹ / ₂
B2.56/28	2 ⁹ / ₁₆	28	2 ¹ / ₂	B7.12/14	7 ¹ / ₈	14	2 ¹ / ₂
B2.56/30	2 ⁹ / ₁₆	30	2 ¹ / ₂	B7.12/16	7 ¹ / ₈	16	2 ¹ / ₂
B3.12/11.25	3 ¹ / ₈	11 ¹ / ₄	2 ¹ / ₂	B7.12/18	7 ¹ / ₈	18	2 ¹ / ₂
B3.12/11.88	3 ¹ / ₈	11 ¹ / ₈	2 ¹ / ₂	B7.12/20	7 ¹ / ₈	20	2 ¹ / ₂
B3.12/9.25	3 ¹ / ₈	9 ¹ / ₄	2 ¹ / ₂	B7.12/22	7 ¹ / ₈	22	2 ¹ / ₂
B3.56/11.25	3 ⁹ / ₁₆	11 ¹ / ₄	2 ¹ / ₂	B7.12/24	7 ¹ / ₈	24	2 ¹ / ₂
B3.56/11.88	3 ⁹ / ₁₆	11 ¹ / ₈	2 ¹ / ₂	B7.12/26	7 ¹ / ₈	26	2 ¹ / ₂
B3.56/12	3 ⁹ / ₁₆	12	2 ¹ / ₂	B7.12/28	7 ¹ / ₈	28	2 ¹ / ₂
B3.56/14	3 ⁹ / ₁₆	14	2	B7.12/9.25	7 ¹ / ₈	9 ¹ / ₄	2 ¹ / ₂
B3.56/16	3 ⁹ / ₁₆	16	2	B7.12/9.5	7 ¹ / ₈	9 ¹ / ₂	2 ¹ / ₂
B3.56/18	3 ⁹ / ₁₆	18	2 ¹ / ₂	BA1.81/11.88	1 ¹³ / ₁₆	11 ¹ / ₈	3
B3.56/20	3 ⁹ / ₁₆	20	2 ¹ / ₂	BA2.56/11.88	2 ⁹ / ₁₆	11 ¹ / ₈	3
B3.56/22	3 ⁹ / ₁₆	22	2 ¹ / ₂	BA2.56/14	2 ⁹ / ₁₆	14	3
B3.56/24	3 ⁹ / ₁₆	24	2 ¹ / ₂	BA2.56/16	2 ⁹ / ₁₆	16	3
B3.56/26	3 ⁹ / ₁₆	26	2 ¹ / ₂	BA3.56/11.88	3 ⁹ / ₁₆	11 ¹ / ₈	3
B3.56/28	3 ⁹ / ₁₆	28	2 ¹ / ₂	BA3.56/14	3 ⁹ / ₁₆	14	3
B3.56/30	3 ⁹ / ₁₆	30	2 ¹ / ₂	BA3.56/16	3 ⁹ / ₁₆	16	3
B3.56/9.25	3 ⁹ / ₁₆	9 ¹ / ₄	2 ¹ / ₂	BA410	3 ⁹ / ₁₆	9 ¹ / ₈	3
B3.56/9.5	3 ⁹ / ₁₆	9 ¹ / ₂	2 ¹ / ₂	BA412	3 ⁹ / ₁₆	11	3
B310	2 ⁹ / ₁₆	9 ¹ / ₈	2 ¹ / ₂	BA48	3 ⁹ / ₁₆	7 ¹ / ₈	3
B312	2 ⁹ / ₁₆	11	2 ¹ / ₂	HB1.81/11.25	1 ¹³ / ₁₆	11 ¹ / ₄	4 ¹ / ₄
B314	2 ⁹ / ₁₆	13	2 ¹ / ₂	HB1.81/11.88	1 ¹³ / ₁₆	11 ¹ / ₈	4 ¹ / ₄
B316	2 ⁹ / ₁₆	15	2 ¹ / ₂	HB1.81/14	1 ¹³ / ₁₆	14	4 ¹ / ₄
B4.75/11.88	4 ³ / ₄	11 ¹ / ₈	2 ¹ / ₂	HB1.81/16	1 ¹³ / ₁₆	16	4 ¹ / ₄
B4.75/14	4 ³ / ₄	14	2 ¹ / ₂	HB1.81/18	1 ¹³ / ₁₆	18	4 ¹ / ₄
B4.75/16	4 ³ / ₄	16	2 ¹ / ₂	HB1.81/20	1 ¹³ / ₁₆	20	4 ¹ / ₄
B4.75/18	4 ³ / ₄	18	2 ¹ / ₂	HB2.56/22	2 ⁹ / ₁₆	22	3 ¹ / ₂
B4.75/20	4 ³ / ₄	20	2 ¹ / ₂	HB2.56/24	2 ⁹ / ₁₆	24	3 ¹ / ₂
B4.75/9.5	4 ³ / ₄	9 ¹ / ₂	2 ¹ / ₂	HB2.56/26	2 ⁹ / ₁₆	26	3 ¹ / ₂
B410	3 ⁹ / ₁₆	9 ¹ / ₈	2 ¹ / ₂	HB2.56/28	2 ⁹ / ₁₆	28	3 ¹ / ₂
B412	3 ⁹ / ₁₆	11	2 ¹ / ₂	HB2.56/30	2 ⁹ / ₁₆	30	3 ¹ / ₂

TABLE 1—APPLICABLE MODEL NUMBERS FOR LBV, B, HB, and BA SERIES JOIST HANGERS (Continued)

MODEL	DIMENSIONS (inches)			MODEL	DIMENSIONS (inches)		
	W	H	B		W	H	B
HB3.56/11.25	3 ⁹ / ₁₆	11 ¹ / ₄	3 ¹ / ₂	HB5.12/20	5 ¹ / ₈	20	3 ¹ / ₂
HB3.56/11.88	3 ⁹ / ₁₆	11 ¹ / ₈	3 ¹ / ₂	HB5.12/22	5 ¹ / ₈	22	3 ¹ / ₂
HB3.56/12	3 ⁹ / ₁₆	12	3 ¹ / ₂	HB5.12/24	5 ¹ / ₈	24	3 ¹ / ₂
HB3.56/14	3 ⁹ / ₁₆	14	3 ¹ / ₂	HB5.12/26	5 ¹ / ₈	26	3 ¹ / ₂
HB3.56/16	3 ⁹ / ₁₆	16	3 ¹ / ₂	HB5.12/28	5 ¹ / ₈	28	3 ¹ / ₂
HB3.56/18	3 ⁹ / ₁₆	18	3 ¹ / ₂	HB5.12/30	5 ¹ / ₈	30	3 ¹ / ₂
HB3.56/20	3 ⁹ / ₁₆	20	3 ¹ / ₂	HB5.50/11.25	5 ¹ / ₂	11 ¹ / ₄	3 ¹ / ₂
HB3.56/22	3 ⁹ / ₁₆	22	3 ¹ / ₂	HB5.50/11.88	5 ¹ / ₂	11 ¹ / ₈	3 ¹ / ₂
HB3.56/24	3 ⁹ / ₁₆	24	3 ¹ / ₂	HB5.50/12	5 ¹ / ₂	12	3 ¹ / ₂
HB3.56/26	3 ⁹ / ₁₆	26	3 ¹ / ₂	HB5.50/14	5 ¹ / ₂	14	3 ¹ / ₂
HB3.56/28	3 ⁹ / ₁₆	28	3 ¹ / ₂	HB5.50/16	5 ¹ / ₂	16	3 ¹ / ₂
HB3.56/30	3 ⁹ / ₁₆	30	3 ¹ / ₂	HB5.50/18	5 ¹ / ₂	18	3 ¹ / ₂
HB3.56/32	3 ⁹ / ₁₆	32	3 ¹ / ₂	HB5.50/20	5 ¹ / ₂	20	3 ¹ / ₂
HB3.56/9.25	3 ⁹ / ₁₆	9 ¹ / ₄	3 ¹ / ₂	HB5.50/9.25	5 ¹ / ₂	9 ¹ / ₄	3 ¹ / ₂
HB3.56/9.5	3 ⁹ / ₁₆	9 ¹ / ₂	3 ¹ / ₂	HB5.50/9.5	5 ¹ / ₂	9 ¹ / ₂	3 ¹ / ₂
HB4.75/10	4 ³ / ₄	10	3 ¹ / ₂	HB7.12/11.25	7 ¹ / ₈	11 ¹ / ₄	3 ¹ / ₂
HB4.75/12	4 ³ / ₄	12	3 ¹ / ₂	HB7.12/11.88	7 ¹ / ₈	11 ¹ / ₈	3 ¹ / ₂
HB4.75/14	4 ³ / ₄	14	3 ¹ / ₂	HB7.12/14	7 ¹ / ₈	14	3 ¹ / ₂
HB4.75/16	4 ³ / ₄	16	3 ¹ / ₂	HB7.12/16	7 ¹ / ₈	16	3 ¹ / ₂
HB4.75/18	4 ³ / ₄	18	3 ¹ / ₂	HB7.12/18	7 ¹ / ₈	18	3 ¹ / ₂
HB4.75/20	4 ³ / ₄	20	3 ¹ / ₂	HB7.12/20	7 ¹ / ₈	20	3 ¹ / ₂
HB412	3 ⁹ / ₁₆	11	3 ¹ / ₂	HB7.12/22	7 ¹ / ₈	22	3 ¹ / ₂
HB414	3 ⁹ / ₁₆	13	3 ¹ / ₂	HB7.12/24	7 ¹ / ₈	24	3 ¹ / ₂
HB416	3 ⁹ / ₁₆	15	3 ¹ / ₂	HB7.12/26	7 ¹ / ₈	26	3 ¹ / ₂
HB5.12/11.88	5 ¹ / ₈	11 ¹ / ₈	3 ¹ / ₂	HB7.12/28	7 ¹ / ₈	28	3 ¹ / ₂
HB5.12/14	5 ¹ / ₈	14	3 ¹ / ₂	HB7.12/9.25	7 ¹ / ₈	9 ¹ / ₄	3 ¹ / ₂
HB5.12/16	5 ¹ / ₈	16	3 ¹ / ₂	HB7.12/9.5	7 ¹ / ₈	9 ¹ / ₂	3 ¹ / ₂
HB5.12/18	5 ¹ / ₈	18	3 ¹ / ₂				

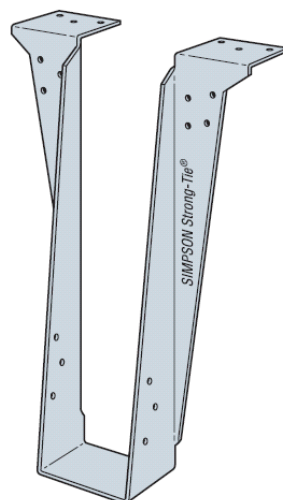


FIGURE 1—B SERIES HANGER

TABLE 1a—ALLOWABLE DOWNLOADS FOR LBV, B, AND HB SERIES JOIST HANGERS

MODEL SERIES	SEAT WIDTH RANGE	HEIGHT RANGE	FASTENERS			DOWNLOAD (lbs)		
			TOP	FACE	JOIST	100%	115%	125%
LBV	$1.56" \leq W < 2.56"$	7-30"	6-16d	4-16d	2-10d x 1 $\frac{1}{2}$ "	2590	2590	2590
LBV	$2.56" \leq W < 5.50"$	7-30"	6-16d	4-16d	2-10d x 1 $\frac{1}{2}$ "	2590	2590	2590
LBV	$W \geq 5.50"$	7-30"	6-16d	4-16d	2-10d x 1 $\frac{1}{2}$ "	2460	2460	2460
LBV	$1.56" \leq W < 2.56"$	7-30"	6-16d	4-16d	6-10d x 1 $\frac{1}{2}$ "	2590	2590	2590
LBV	$2.56" \leq W < 5.50"$	7-30"	6-16d	4-16d	6-10d x 1 $\frac{1}{2}$ "	2590	2590	2590
LBV	$W \geq 5.50"$	7-30"	6-16d	4-16d	6-10d x 1 $\frac{1}{2}$ "	2460	2460	2460
B	$1.81" \leq W < 2.56"$	7-30"	6-16d	8-16d	6-10d x 1 $\frac{1}{2}$ "	3640	3640	3640
B	$2.56" < W < 7.25"$	7-30"	6-16d	8-16d	6-16d x 2 $\frac{1}{2}$ "	3890	3890	3890
B	$W \geq 7.25"$	7-30"	6-16d	8-16d	6-16d x 2 $\frac{1}{2}$ "	3890	3890	3890
HB	$1.81" \leq W < 2.56"$	7-30"	6-16d	16-16d	10-10d x 1 $\frac{1}{2}$ "	5300	5300	5300
HB	$2.56" \leq W < 7.25"$	7-30"	6-16d	16-16d	10-16d x 2 $\frac{1}{2}$ "	5735	5735	5735
HB	$W \geq 7.25"$	7-30"	6-16d	16-16d	10-16d	5650	5650	5650

For SI: 1 inch = 25.4 mm, 1 lb = 4.45 N.

¹Tabulated allowable load capacities shall be selected based on duration of load as permitted by the applicable building code.

²The uplift loads have been increased for wind or earthquake loading with no further increase is allowed. Reduce loads when other load durations govern.

TABLE 1b—ALLOWABLE UPLIFT LOADS FOR LBV, B, AND HB SERIES JOIST HANGERS

MODEL SERIES	SEAT WIDTH RANGE	HEIGHT RANGE	FASTENERS			UPLIFT (lbs)	
			TOP	FACE	JOIST	133%	160%
LBV	$1.56" \leq W \leq 5.50"$	7-30"	6-16d	4-16d	2-10d x 1 $\frac{1}{2}$ "	265	265
LBV	$1.56" \leq W \leq 5.50"$	7-30"	6-16d	4-16d	6-10d x 1 $\frac{1}{2}$ "	770	895
B	$1.81" \leq W < 2.56"$	7-30"	6-16d	8-16d	6-10d x 1 $\frac{1}{2}$ "	825	990
B	$W \geq 2.56"$	7-30"	6-16d	8-16d	6-16d x 2 $\frac{1}{2}$ "	1010	1010
HB	$1.81" \leq W < 2.56"$	7-30"	6-16d	16-16d	10-10d x 1 $\frac{1}{2}$ "	1455	1745
HB	$2.56" \leq W < 3.56"$	7-30"	6-16d	16-16d	10-16d x 2 $\frac{1}{2}$ "	2175	2610
HB	$W \geq 3.56"$	7-30"	6-16d	16-16d	10-16d	2175	2610

For SI: 1 inch = 25.4 mm, 1 lb = 4.45 N.

¹Tabulated allowable load capacities shall be selected based on duration of load as permitted by the applicable building code.

²The uplift loads have been increased for wind or earthquake loading with no further increase is allowed. Reduce loads when other load durations govern.

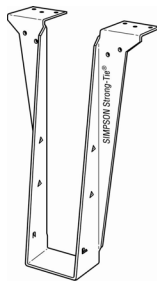


FIGURE 2a—LBV SERIES HANGER

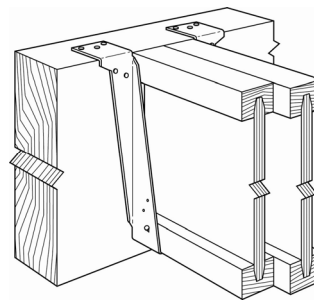


FIGURE 2b—TYPICAL LBV SERIES HANGER INSTALLATION

TABLE 2a—ALLOWABLE DOWNLOADS FOR BA SERIES JOIST HANGERS

MODEL SERIES	SEAT WIDTH RANGE	HT RNGE	FASTENERS			DOWNLOAD (lbs)		
			TOP	FACE	JOIST	100%	115%	125%
BA	1.56" ≤ W < 5.50"	7-26"	6-16d	10-16d	2-10d x 1 1/2"	3000	3000	3000
BA	W ≥ 5.50"	7-26"	6-16d	10-16d	2-10d x 1 1/2"	3435	3435	3435
BA	1.56" ≤ W < 5.50"	7-26"	6-16d	10-16d	8-10d x 1 1/2"	3605	3625	3625
BA	W ≥ 5.50"	7-26"	6-16d	10-16d	8-10d x 1 1/2"	3800	3800	3800

For SI: 1 inch = 25.4 mm, 1 lb = 4.45 N.

¹Tabulated allowable load capacities shall be selected based on duration of load as permitted by the applicable building code.

²The uplift loads have been increased for wind or earthquake loading with no further increase is allowed. Reduce loads when other load durations govern.

TABLE 2b—ALLOWABLE UPLIFT LOADS FOR BA SERIES JOIST HANGERS

MODEL SERIES	SEAT WIDTH RANGE	HEIGHT RANGE	FASTENERS			UPLFT (lbs)	
			TOP	FACE	JOIST	133%	160%
BA	1.56" ≤ W ≤ 5.50"	7-26"	6-16d	10-16d	2-10d x 1 1/2"	265	265
BA	1.56" ≤ W ≤ 5.50"	7-26"	6-16d	10-16d	8-10d x 1 1/2"	1055	1170

For SI: 1 inch = 25.4 mm, 1 lb = 4.45 N.

¹Tabulated allowable load capacities shall be selected based on duration of load as permitted by the applicable building code.

²The uplift loads have been increased for wind or earthquake loading with no further increase is allowed. Reduce loads when other load durations govern.

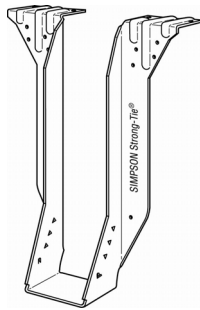


FIGURE 3a—BA SERIES HANGER

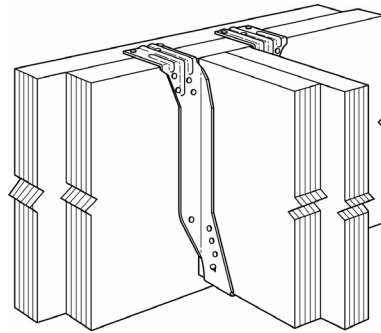


FIGURE 3b—TYPICAL BA SERIES HANGER INSTALLATION

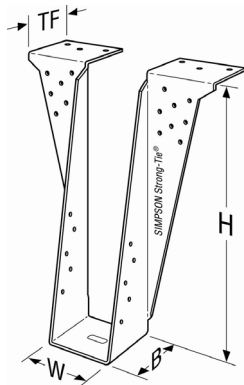


FIGURE 4—HB SERIES HANGER

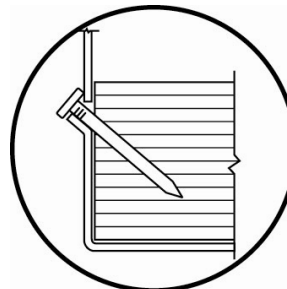


FIGURE 5—POSITIVE ANGLE NAILING (PAN) JOIST NAILING FOR LBV AND BA SERIES HANGERS