



CERTIFICATION



Approved. Sealed. Code Compliant.

Technical Evaluation Report

TER 1507-01

**Stora Enso S-LVL™ Laminated Veneer
Lumber (LVL)**

**Stora Enso Wood Products Oy
Ltd**

Product:

**Stora Enso S-LVL™ Laminated
Veneer Lumber (LVL)**

Issue Date:

February 7, 2017

Revision Date:

April 13, 2021

Subject to Renewal:

April 1, 2022



COMPANY
INFORMATION:

Stora Enso Wood Products Oy Ltd

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PO Box 309
FI-00101 Helsinki
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storaenso.com

DIVISION: 06 00 00 - WOOD, PLASTICS AND COMPOSITES

SECTION: 06 17 00 - Shop-Fabricated Structural Wood

SECTION: 06 17 13 - Laminated Veneer Lumber

1 PRODUCT EVALUATED¹

1.1 Stora Enso S-LVL™ Laminated Veneer Lumber (LVL)

2 APPLICABLE CODES AND STANDARDS^{2,3}

2.1 Codes

- 2.1.1 *IBC—12, 15, 18: International Building Code®*
- 2.1.2 *IRC—12, 15, 18: International Residential Code®*
- 2.1.3 *FBC-B—17, 20: Florida Building Code – Building (FL 29268)⁴*
- 2.1.4 *FBC-R—17, 20: Florida Building Code – Residential (FL 29268)⁴*
- 2.1.5 *NBC—10, 15: National Building Code of Canada*

2.2 Standards and Referenced Documents

- 2.2.1 *ANSI/AWC NDS: National Design Specification (NDS) for Wood Construction*
- 2.2.2 *ASTM D2559: Standard Specification for Adhesives for Bonded Structural Wood Products for Use Under Exterior Exposure Conditions*
- 2.2.3 *ASTM D5055: Standard Specification for Establishing and Monitoring Structural Capacities of Prefabricated Wood I-Joists*
- 2.2.4 *ASTM D5456: Standard Specification for Evaluation of Structural Composite Lumber Products*
- 2.2.5 *ASTM D7247: Standard Test Method for Evaluating the Shear Strength of Adhesive Bonds in Laminated Wood Products at Elevated Temperatures*
- 2.2.6 *CSA O86: Engineering Design in Wood*

¹ For more information, visit drjcertification.org or call us at 608-310-6748.

² Unless otherwise noted, all references in this TER are from the 2018 version of the codes and the standards referenced therein. This material, design, or method of construction also complies with the 2000-2015 versions of the referenced codes and the standards referenced therein.

³ All terms defined in the applicable building codes are italicized.

⁴ All references to the *FBC-B* and *FBC-R* are the same as the 2018 *IBC* and *IRC* unless otherwise noted in the Florida Supplement.

3 PERFORMANCE EVALUATION

- 3.1 Stora Enso S-LVL™ was evaluated to determine its resistance properties which are used to develop reference design values for allowable stress design (ASD) and load resistance factor design (LRFD). Additionally, specified strengths are developed for limit states design (LSD). This TER examines Stora Enso S-LVL™ for the following:
- 3.1.1 Compliance with the requirements noted in IBC Section 2302.1⁵ and IBC Section 2303.1.10⁶ for ASD.
 - 3.1.2 Compliance with the requirements noted in IBC Section 2302.1⁵ and IBC Section 2303.1.10⁶ for LRFD.
 - 3.1.3 Compliance with IBC Section 2304 and Section 2308 and IRC Chapter 5, Chapter 6, and Chapter 8 for conventional light frame construction applications.
 - 3.1.4 When used in an application that exceeds the limits of IRC Section R301, an engineered design shall be submitted in accordance with Section R301.1.3 and this TER.
 - 3.1.5 Structural capacities in accordance with IBC Section 2303.1.10:

2303.1.10 Structural composite lumber. Structural capacities for structural composite lumber shall be established and monitored in accordance with ASTM D5456.
 - 3.1.6 Structural design in accordance with *NBC* Division B Part 4 and Part 9 and *CSA O86* as follows:
 - 3.1.6.1 Division A, Clause 1.2.1.1.(1)(a), using the following acceptable solution from Division B: Sentence 4.3.1.1.(1), Design Basis for Wood.
 - 3.1.6.2 Division A, Clause 1.2.1.1.(1)(b), as an alternative solution that achieves at least the minimum level of performance required by Division B as defined by the objectives and functional statements attributed to the applicable solutions in Sentence 9.23.4.2.(3) Spans for Joists, Rafters and Beams.
 - 3.1.6.3 *CSA O86* specifies that the capacity of structural composite lumber is determined from test data by calculations specified in *ASTM D5456*.
 - 3.2 Fire-resistance properties of Stora Enso S-LVL™ are outside the scope of this TER.
 - 3.3 Any code compliance issues not specifically addressed in this section are outside the scope of this TER.
 - 3.4 Any engineering evaluation conducted for this TER was performed within DrJ's ANAB "accredited ICS code scope" and/or the defined professional engineering scope of work on the dates provided herein.

4 PRODUCT DESCRIPTION AND MATERIALS

- 4.1 Stora Enso S-LVL™ is manufactured by Stora Enso Wood Products Oy Ltd. (Stora Enso) at its facility in Varkaus, Finland.
- 4.2 The product is manufactured by laminating wood veneers with an exterior type adhesive (complying with *ASTM D2559*) in a continuous process with the grain of the wood oriented parallel to the length of the member in accordance with an ISO 9001 quality certification system.
- 4.3 The wood veneer properties and species, adhesive, manufacturing parameters, and finished product dimensions and tolerances are specified in the approved quality documentation and Stora Enso's in-plant manufacturing standard.

⁵ 2015 IBC Section 2301.2

⁶ 2012 IBC Section 2303.1.9

4.4 Material Availability

4.4.1 Thickness:

4.4.1.1 1⁵/₁₆" (33 mm)

4.4.1.2 1¹/₂" (38 mm)

4.4.1.3 1³/₄" (45 mm)

4.4.2 Nominal depths: 3¹/₂" to 24" (89 to 610 mm)

4.4.3 Lengths: up to 64' (19.5 m)

5 APPLICATIONS

5.1 Stora Enso S-LVL™ is an alternative to sawn lumber for floor, roof, and wall structural members.

5.2 Structural applications include use as beams, columns, headers, joists, rafters, chords and webs of trusses, I joist flanges, rim boards, and wall studs.

5.3 Design

5.3.1 Design of Stora Enso S-LVL™ is governed by the applicable code and the provisions for structural composite lumber (SCL) in *NDS* Part 8 and *CSA O86* Section 16.3.⁷

5.3.2 Unless otherwise noted, adjustment of the design stresses for duration of load shall be in accordance with the applicable code.

5.3.2.1 The design provisions for wood construction noted in *IBC* Section 2302.1⁸ and *IRC* Section R301.1.3 apply to Stora Enso S-LVL™ for allowable stress design (ASD) unless otherwise noted in this report. Allowable unit stresses for Stora Enso S-LVL™ for dry conditions of use are specified in Table 1.

⁷ 2009 CSA O86 Section 13.3

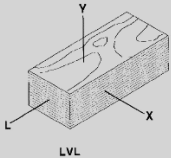
⁸ 2015 IBC Section 2301.2

TABLE 1: REFERENCE DESIGN VALUES FOR STORA ENSO S-LVL™ (ALLOWABLE STRESS DESIGN)^{1, 2, 3}

Bending, F _b (psi)		Tension, F _t (psi)	Compression, F _c (psi)			Horizontal Shear, F _v (psi)		Beam Modulus of Elasticity, E (psi)		Plank Modulus of Elasticity, E (psi)		Modulus of Elasticity for Beam & Column Stability, E _{min} (psi)
Beam ^{5,6,7}	Plank	Parallel-to-Grain ^{7,8}	Parallel to-Grain		Beam	Plank	True ⁴	Apparent ⁴	True ⁴	Apparent ⁴		
			Beam	Plank								
3,000	3,300	2,300	2,750	900	550	350	100	2.0 x 10 ⁶	1.9 x 10 ⁶	2.0 x 10 ⁶	1.9 x 10 ⁶	1.1 x 10 ⁶

SI: 1 psi = 0.00689 MPa

- The reference design values in this table are applicable for the product used in dry, well-ventilated interior applications, in which the equivalent moisture content of sawn lumber is less than 16%. See Section 9.4 of this report.
- The reference design values in this table are for normal load duration. Loads of longer or shorter duration shall be adjusted in accordance with the applicable code. Duration of load adjustments shall not be applied to F_{c1} and E.
- Orientation nomenclature for S-LVL™:



- The Apparent E for both beams and planks can be used directly in traditional beam deflection formulas. The True E values (i.e., shear-free) are for both beams and planks. Using True E, deflection is calculated as follows for uniformly loaded simple span beams.

$$\Delta = [5WL^4/(32Ebh^3)] + [12WL^2/(5Ebh)]$$

where: Δ = deflection in inches (mm)
W = uniform load in lbs/in (N/mm)
L = span in inches (mm)
E = modulus of elasticity in psi (MPa)
b = width of beam in inches (mm)
h = depth of beam in inches (mm)
- The design value for bending members used in a beam orientation is based on a referenced depth of 12" (305 mm).
 - For depths greater than or equal to 3¹⁵/₁₆", the bending values shall be adjusted by a size factor adjustment of (12/d)^{0.117} where d is measured in inches with a minimum depth of 3¹⁵/₁₆" (100 mm).
 - For depths greater than or equal to 3¹/₂" and less than 3¹⁵/₁₆", the bending values shall be adjusted by a size factor adjustment of 1.139.
- When structural members qualify as repetitive members in accordance with the applicable code, a 4% increase is permitted.
- Thicknesses greater than 5¹/₄" (134 mm) shall not be used in design.
- Design value multiplied by (4.43/L)^{0.129} for length effect factors, with L measured in feet. Value limited to members 18" (457 mm) deep and less.

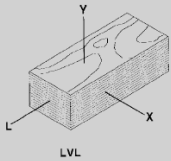
5.3.2.2 The design provisions for wood construction noted in *IBC Section 2302.1⁹* and *IRC Section R301.1.3* apply to Stora Enso S-LVL™ for LRFD unless otherwise noted in this report. For compliance with the *NBC*, LSD shall be in accordance with *CSA O86*. Ultimate stresses for Stora Enso S-LVL™ for dry conditions of use are specified in Table 2.

TABLE 2: SPECIFIED STRENGTHS FOR STORA ENSO S-LVL™ (LIMIT STATES DESIGN)^{1,2,3}

Bending, F _b (psi)		Tension, F _t (psi)	Compression, F _c (psi)		Horizontal Shear, F _v (psi)		Beam Modulus of Elasticity, E (psi)		Plank Modulus of Elasticity, E (psi)		Modulus of Elasticity for Beam & Column Stability, E ₀₅ (psi)	
Beam ^{5,6,7}	Plank	Parallel to Grain ^{7,8}	Parallel to Grain	Perpendicular to Grain		Beam	Plank	True ⁴	Apparent ⁴	True ⁴		Apparent ⁴
				Beam	Plank							
5,500	6,100	4,250	4,400	1,600	600	650	150	2.0 x 10 ⁶	1.9 x 10 ⁶	2.0 x 10 ⁶	1.9 x 10 ⁶	1.6 x 10 ⁶

1 psi = 0.00689 MPa

- The specified strength values in this table are applicable for the product used in dry, well-ventilated interior applications, in which the equivalent moisture content of sawn lumber is less than 16%. See Section 9.4 of this report.
- The specified strength values in this table are for normal load duration. Loads of longer or shorter duration shall be adjusted in accordance with the applicable code. Duration of load adjustments shall not be applied to F_{c1} and E.
- Orientation nomenclature for S-LVL™:



- The Apparent E for both beams and planks can be used directly in traditional beam deflection formulas. The True E values (i.e., shear-free) are for both beams and planks. Using True E, deflection is calculated as follows for uniformly loaded simple span beams.

$$\Delta = [5WL^4/(32Ebh^3)] + [12WL^2/(5Ebh)]$$

where: Δ = deflection in inches (mm)

W = uniform load in lbs/in (N/mm)

L = span in inches (mm)

E = modulus of elasticity in psi (MPa)

b = width of beam in inches (mm)

h = depth of beam in inches (mm)

- The design value for bending members used in a beam orientation is based on a referenced depth of 12" (305 mm).
 - For depths greater than or equal to 3¹⁵/₁₆", the bending values shall be adjusted by a size factor adjustment of (12/d)^{0.117} where d is measured in inches with a minimum depth of 3¹⁵/₁₆" (100 mm).
 - For depths greater than or equal to 3¹/₂" and less than 3¹⁵/₁₆", the bending values shall be adjusted by a size factor adjustment of 1.139.
- When structural members are used in a load-sharing system in accordance with the applicable code, a system factor of K₄ = 1.04 is permitted.
- Thicknesses greater than 5¹/₄" (134 mm) shall not be used in design.
- Specified strength value multiplied by (4.43/L)^{0.129} for length effect factors, with L measured in feet. Value limited to members 18" (457 mm) deep and less.

5.3.3 Connections:

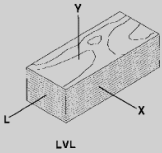
5.3.3.1 Lateral loads for nails, screws, and bolts and withdrawal loads for nails and screws installed in Stora Enso S-LVL™ shall be in accordance with the *NDS* and *CSA O86* for sawn lumber having a minimum specific gravity equal to that shown in Table 3.

⁹ 2015 IBC Section 2301.2

TABLE 3: EQUIVALENT SPECIFIC GRAVITIES AND MINIMUM FASTENER SPACING FOR DESIGN OF MECHANICAL CONNECTIONS^{2,3}

Product	Fastener	Fastener Axis Orientation ¹	Load Direction	Equivalent Specific Gravity for Design Purposes	Minimum Spacing
S-LVL™	Nails	Y axis	Withdrawal	0.40	Footnote 4 Footnote 5 Footnote 6
		X axis	Withdrawal	0.34	
	Nails	Y axis	L and X axes	0.50	
		X axis	L and Y axes	0.35	
	Bolts	Y axis	L axis	0.41	Per applicable code
			X axis	0.45	

1. Orientation nomenclature for S-LVL™:



2. Adjustment of the fastener values for duration of load shall be in accordance with *NDS* or *CSA O86* as applicable.
3. Lateral resistance and withdrawal values are as provided in *NDS* and *CSA O86* for sawn lumber having equivalent specific gravities as shown.
4. Nails Installed Perpendicular to the Glue Lines of the S-LVL™:
 - a. Spacing, edge distance, and end distance of nails installed perpendicular to the glue lines of the S-LVL™ are the same as those permitted in the applicable code for sawn lumber.
5. Nails Installed Parallel to the Glue Lines of the S-LVL™:
 - a. Spacing of nails must be at minimum:
 - i. 3" (76 mm) for 8d (0.131" x 2½") (3.3 mm x 63 mm) common nails
 - ii. 4" (102 mm) for 10d (0.148" x 3") (3.8 mm x 76 mm) common nails
 - iii. 4" (102 mm) for 12d (0.148" x 3¼") (3.8 mm x 83 mm) common nails
 - iv. For S-LVL™ that is at least 1¼" thick x 5½" wide (44mm x 133 mm), 8" (204 mm) for 16d (0.162" x 3½") (4.1 mm x 89 mm) common nails
 - b. End distances of nails must be at minimum:
 - i. 2" (51 mm) for 8d (0.131" x 2½") (3.3 mm x 63 mm) common nails
 - ii. 3" (76 mm) for 10d (0.148" x 3") (3.8 mm x 76 mm) common nails
 - iii. 3" (76 mm) for 12d (0.148" x 3¼") (3.8 mm x 83 mm) common nails
 - iv. For S-LVL™ that is at least 1¼" thick x 5½" wide (44mm x 133 mm), 3" (76 mm) for 16d (0.162" x 3½") (4.1 mm x 89 mm) common nails
6. Minimum edge distance must be sufficient to prevent splitting of the S-LVL™. In addition, maximum nail penetration into the S-LVL™ must be limited as to prevent splitting.

- 5.3.3.2 Fastener spacing shall be as prescribed in the applicable code (for sawn lumber) unless specifically indicated in Table 3 or Table 4 or as prescribed in *NDS* Part 12.
- 5.3.3.3 Other nail spacing for specific applications, such as prefabricated steel components or hangers, may be used. Nail spacing for these applications should follow what is specified and detailed in the proprietary catalogues for the specific gravities as defined in Table 3.
- 5.3.3.4 Allowable lateral loads for machine bolts installed perpendicular to the wide face of Stora Enso S-LVL™ (perpendicular to the glue lines), with loads applied parallel or perpendicular to the grain of the wood veneers, shall be as prescribed in the applicable code or in accordance with *NDS* for sawn lumber with the minimum specific gravity at least equivalent to that defined in Table 3.

5.3.3.5 Connection requirements for multiple member side-loaded beams are defined in the following assembly details and have the maximum uniformly distributed load carrying capacity as defined in Table 4.

TABLE 4: MAXIMUM UNIFORMLY DISTRIBUTED LOAD THAT CAN BE APPLIED TO EITHER SIDE OF MULTIPLE MEMBER SIDE-LOADED BEAMS^{1, 2, 3, 4, 5, 6}

Assembly Detail	Uniformly Distributed Load, ASD and [Limit States Design] (plf)				
	2 Rows of 16d (0.162" x 3 1/2") (4.1 mm x 89 mm) Nails	3 Rows of 16d (0.162" x 3 1/2") (4.1 mm x 89 mm) Nails	2 Rows of 12d (0.148" x 3 1/4") (3.8 mm x 83 mm) Nails	3 Rows of 12d (0.148" x 3 1/4") (3.8 mm x 83 mm) Nails	2 Rows of 1/2" (12.7 mm) Bolts ^{7, 8}
Figure 1	565 [885]	845 [1330]	470 [750]	700 [1130]	870 [1405]
Figure 2 ⁹	425 [665]	635 [995]	350 [565]	525 [845]	650 [1315]
Figure 3	--	--	--	--	580 [1170]

SI: 1 plf = 1.488 kg/m

- Table values assume 12" o.c. (305 mm) fastener spacing. For other fastener spacing, multiply the appropriate table value by:
 - 1.5 for nails or bolts spaced at 8" o.c. (203 mm) per row
 - 2 for nails or bolts spaced at 6" o.c. (152 mm) per row
 - 3 for nails or bolts spaced at 4" o.c. (102 mm) per row
 - 0.5 for bolts spaced at 24" o.c. (610 mm) per row
- Determine the appropriate beam size required to support the load before determining the connection requirements.
- Screws can be used in place of bolts, provided additional fasteners are used such that the sum of the screw capacities is equal to or greater than that of the 1/2"-diameter bolts (12.7mm). Refer to the screw manufacturer's literature.
- Tabulated values assume adequate end distance, edge distance, and spacing per *NDS* and *CSA O86*, as applicable.
- Tabulated values are for normal load duration. Adjustment of the design stresses for duration of load shall be in accordance with the applicable code, *NDS* or *CSA O86*, as applicable.
- For beams greater than 4-ply wide, consult a registered design professional for the attachment requirements.
- A standard cut steel washer of minimum 0.109" thickness (2.8 mm), with a minimum outside dimension of 1 3/8" (35 mm), is required on each side of the beam between the wood and bolt head and nut.
- Bolted connections assume full diameter bolts with bending yield strength (F_y) of 45,000 psi.
- Nailing is required from both sides for 3-ply beams.

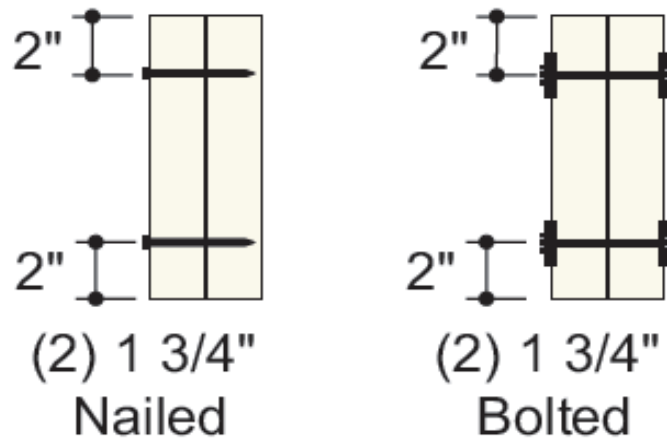


FIGURE 1. ASSEMBLY A (2-PLY BEAM)

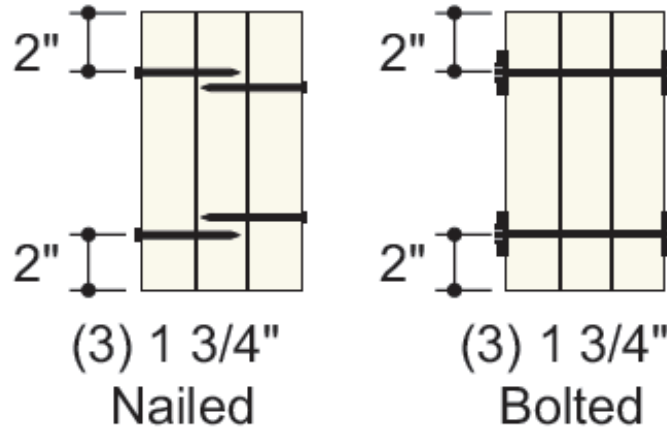


FIGURE 2. ASSEMBLY B (3-PLY BEAM)

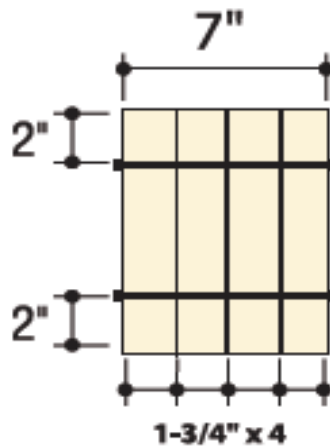


FIGURE 3. ASSEMBLY C (4-PLY BEAM)

6 INSTALLATION

6.1 Stora Enso S-LVL™ shall be installed in accordance with the applicable code, the approved construction documents, this TER, and the manufacturer’s installation instructions.

6.1.1 In the event of a conflict between the manufacturer’s installation instructions and this TER, the more restrictive shall govern.

7 SUBSTANTIATING DATA

7.1 Testing has been performed under the supervision of a professional engineer and/or under the requirements of ISO/IEC 17025 as follows:

7.1.1 Mechanical properties testing in accordance with *ASTM D5456*

7.2 Information contained herein is the result of testing and/or data analysis by sources which conform to IBC Section 1703 and/or professional engineering regulations. DrJ relies upon accurate data to perform its ISO/IEC 17065 evaluations.



- 7.3 Where appropriate, DrJ's analysis is based on provisions that have been codified into law through state or local adoption of codes and standards. The providers of the codes and standards are legally responsible for their content. DrJ analysis may use code-adopted provisions as a control sample. A control sample versus a test sample establishes a product as being equivalent to that prescribed in this code in quality, strength, effectiveness, fire resistance, durability, and safety. Where the accuracy of the provisions provided herein is reliant upon the published properties of materials, DrJ relies upon the grade mark, grade stamp, mill certificate, and/or test data provided by material suppliers to be minimum properties. DrJ analysis relies upon these properties to be accurate.

8 FINDINGS

- 8.1 When used in accordance with the manufacturer's installation instructions and this TER, Stora Enso S-LVL™ complies with or is a suitable alternative to the requirements of IBC Chapter 23; IRC Chapter 5, Chapter 6 and Chapter 8; and NBC Section 1.2, Subsection 4.3.11, and Section 9.23.
- 8.2 This product has been evaluated in the context of the codes listed in Section 2 and is compliant with all known state and local building codes. Where there are known variations in state or local codes applicable to this TER, they are listed here.
- 8.2.1 No known variations
- 8.3 Building codes require data from valid research reports be obtained from approved sources (i.e., licensed registered design professionals [RDPs]).
- 8.3.1 Building official approval of a licensed RDP is performed by verifying the RDP and/or their business entity is listed by the licensing board of the relevant jurisdiction.
- 8.4 Agencies who are accredited through ISO/IEC 17065 have met the code requirements for approval by the building official. DrJ is an ISO/IEC 17065 ANAB-Accredited Product Certification Body – Accreditation #1131 and employs RDPs.
- 8.5 Through ANAB accreditation and the IAF MLA, DrJ certification can be used to obtain product approval in any jurisdiction or country that has IAF MLA Members & Signatories to meet the Purpose of the MLA – “certified once, accepted everywhere.”
- 8.6 IBC Section 104.11 (IRC Section R104.11 and IFC Section 104.9 are similar) states:

104.11 Alternative materials, design and methods of construction and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code...Where the alternative material, design or method of construction is not *approved*, the *building official* shall respond in writing, stating the reasons the alternative was not *approved*.

9 CONDITIONS OF USE

- 9.1 The manufacturer's published installation instructions shall be available at the jobsite at all times during installation.
- 9.2 Design calculations and details shall be furnished to the code official verifying that the material is used in compliance with this TER. 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.
- 9.3 The design values shall not exceed those set forth in this report as modified by all applicable table notes.
- 9.4 The service conditions for Stora Enso S-LVL™ are dry conditions of use, for which the equilibrium moisture content must be less than 16%. Uses in applications exceeding 16% moisture content are outside the scope of this TER.
- 9.5 The service conditions for Stora Enso S-LVL™ with fire-retardant or preservative chemical treatments are outside the scope of this report.
- 9.6 Fastener design values shall be as specified in Table 3 of this report.



- 9.7 Cutting and notching of Stora Enso S-LVL™ is prohibited, except where specifically permitted by the manufacturer's recommendations or where the effects of such alterations are specifically considered in the design of the member by a registered design professional.
- 9.8 Increases for duration of load shall be in accordance with the limitations of the applicable building code.
- 9.9 Where use of Stora Enso S-LVL™ qualifies as repetitive members as defined in *NDS*, an increase of 4% is permitted in allowable bending stresses.
- 9.10 Stora Enso S-LVL™ may be cut to the specified length and width as appropriate for the application, provided the depth is no less than 3½" (89 mm) wide. The thickness may not be cut.
- 9.11 Minimum bearing length and anchorage of Stora Enso S-LVL™ shall meet the requirements of *IBC Chapter 23* or *NBC Division B Section 9.23* for sawn lumber.
- 9.12 Stora Enso S-LVL™ shall be fabricated in the Stora Enso Wood Products Oy facilities located in Varkaus, Finland with quality control inspections by an approved third-party quality control inspection agency.
- 9.13 Where required by the *building official*, also known as the authority having jurisdiction (AHJ) in which the project is to be constructed, this TER and the installation instructions shall be submitted at the time of *permit* application.
- 9.14 Any generally accepted engineering calculations needed to show compliance with this TER shall be submitted to the AHJ for review and approval.
- 9.15 *Design loads* shall be determined in accordance with the building code adopted by the *jurisdiction* in which the project is to be constructed and/or by the building designer (e.g., *owner* or RDP).
- 9.16 At a minimum, this product shall be installed per Section 6 of this TER.
- 9.17 This product has an internal quality control program and a third-party quality assurance program in accordance with *IBC Section 104.4* and *Section 110.4* and *IRC Section R104.4* and *Section R109.2*.
- 9.18 The actual design, suitability, and use of this TER, for any particular building, is the responsibility of the *owner* or the owner's authorized agent.
- 9.19 This TER shall be reviewed for code compliance by the AHJ in concert with *IBC Section 104*.
- 9.20 The implementation of this TER for this product is dependent on the design, quality control, third-party quality assurance, proper implementation of installation instructions, inspections required by *IBC Section 110.3*, and any other code or regulatory requirements that may apply.

10 IDENTIFICATION

- 10.1 The product(s) listed in Section 1.1 are identified by a label on the board or packaging material bearing the manufacturer's name, product name, TER number, and other information to confirm code compliance.
- 10.2 Additional technical information can be found at storaenso.com.

11 REVIEW SCHEDULE

- 11.1 This TER is subject to periodic review and revision. For the most recent version, visit drjcertification.org.
- 11.2 For information on the current status of this TER, contact DrJ Certification.

Issue Date: January 7, 2021
Subject to Renewal: April 1, 2022

FBC Supplement to TER 1507-01

REPORT HOLDER: Stora Enso Wood Products Oy Ltd

1 EVALUATION SUBJECT

1.1 Stora Enso S-LVL™ Laminated Veneer Lumber (LVL)

2 PURPOSE AND SCOPE

2.1 Purpose

2.1.1 The purpose of this Technical Evaluation Report (TER) supplement is to show Stora Enso S-LVL™ Laminated Veneer Lumber (LVL), recognized in TER 1507-01, has also been evaluated for compliance with the codes listed below as adopted by the Florida Building Commission.

2.2 Applicable Code Editions

2.2.1 *FBC-B—17, 20: Florida Building Code – Building (FL 29268)*

2.2.2 *FBC-R—17, 20: Florida Building Code – Residential (FL 29268)*

3 CONCLUSIONS

3.1 Stora Enso S-LVL™ Laminated Veneer Lumber (LVL), described in TER 1507-01, complies with the *FBC-B* and *FBC-R* and is subject to the conditions of use described in this supplement.

3.2 Where there are variations between the *IBC* and *IRC* and the *FBC-B* and *FBC-R* applicable to this TER, they are listed here.

3.2.1 *FBC-B* Section 104.4, Section 110.4, and Section 2308 are reserved.

3.2.2 *FBC-R* Section R104 and Section R109 are reserved.

3.2.3 *FBC-B* Section 2301.2 replaces *IBC* Section 2302.1.

4 CONDITIONS OF USE

4.1 Stora Enso S-LVL™ Laminated Veneer Lumber (LVL), described in TER 1507-01, must comply with all of the following conditions:

4.1.1 All applicable sections in TER 1507-01

4.1.2 The design, installation, and inspections are in accordance with additional requirements of *FBC-B* Chapter 16 and Chapter 17, as applicable.