
STRUCTURAL GLUED LUMBER: 2022 CBC

Disciplines: Structural**History:** Revised 08/02/23 Under 2022 CBC
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Division of the State Architect (DSA) documents referenced within this publication are available on the [DSA Forms](#) or [DSA Publications](#) webpage.

PURPOSE

This Interpretation of Regulations (IR) clarifies the acceptance of structural glued lumber (SGL) for use on construction projects under DSA jurisdiction.

SCOPE

This IR is applicable to face-glued or edge-glued SGL certified in accordance with the Glued Lumber Policy (ALSC-GLP) published by the American Lumber Standard Committee (ALSC). This includes SGL bearing grade stamps of the Western Wood Products Association (WWPA) reading “CERTIFIED FACE GLUING” and “CERTIFIED EDGE GLUING” and grade stamps of the West Coast Lumber Inspection Bureau (WCLIB) reading “CERTIFIED GLUED LUMBER”.

This IR does not apply to SGL bearing grade stamps of the WWPA reading “CERT EXT JNTS” or “VERTICAL USE ONLY” in accordance with Section 1.70 of the WWPA Western Lumber Grading Rules (WWPA-WLGR), nor does it apply to SGL bearing grade stamps of the WCLIB reading “CERTIFIED END JOINT” or “STUD USE ONLY” in accordance with Sections 210-b and 210-c of the WCLIB Standard No. 17: Grading Rules for West Coast Lumber (WCLIB-Std17).

This IR does not apply to structural glued-laminated (glulam) timber complying with California Building Code (CBC) Section 2303.1.3 and the special inspection requirements of CBC Section 1705A.5.5. Refer to the BACKGROUND section below for additional discussion of the differences between SGL and glulam. Similarly, the IR does not apply to cross laminated timber complying with CBC Section 2303.1.4 and the special inspection requirements of CBC Sections 1705A.5.3 and 1705A.5.5.

BACKGROUND

SGL is typically manufactured from lumber that is E-rated or visually graded which might not meet the requirements of the American National Standards Institute/American Institute of Timber Construction (ANSI/AITC) A190.1 for glulam timber. The allowable stress design values for SGL are the same as those assigned to the grade of lumber from which they are fabricated but are typically lower than those of glulam members. SGL is graded to the standard lumber grading rules while glulam is rated for the layup combination.

SGL is intended as an alternative to solid sawn lumber, three-inch nominal or larger. SGL is considered as a solid piece of lumber and is sized, grade stamped, and assigned the same values as solid sawn lumber of the same species and grade.

SGL is manufactured by face or edge gluing solid sawn lumber to produce a new piece of structural lumber and is grade stamped as described in WCLIB-Std17 or WWPA-WLGR.

STRUCTURAL GLUED LUMBER: 2022 CBC**1. ACCEPTANCE CRITERIA**

SGL shall be certified and grade stamped by an agency accredited by ALSC in accordance with ALSC-GLP.

1.1 Grading

SGL shall be graded in conformance to ALSC-GLP and Voluntary Product Standard PS 20, American Softwood Lumber Standard. SGL shall comply with the standards of the certifying agency.

1.2 Qualification

SGL shall be qualified by the certifying agency in accordance with ALSC-GLP. The certifying agency may follow its own certification and quality control procedure when the procedure is in general conformance with ALSC-GLP and approved by ALSC.

1.2.1 Mill/plants certified by WWPA are subject to C/QC 101: Glued Products Procedures for Mill Certification and Quality Control.

1.2.2 Mill/plants certified by WCLIB are subject to Pacific Lumber Inspection Bureau Glued Lumber Certification and Quality Control Manual.

1.3 Mill/Plant Inspection

The certifying agency shall provide a minimum of twelve periodic inspections per year, at regular intervals and in accordance with ALSC-GLP. Copies of the inspection reports shall be maintained and made available to DSA upon request.

1.4 Special Inspection

Special inspection during fabrication is not required on a project-specific basis provided the mill/plant has a current and valid certification from the certifying agency in compliance with ALSC-GLP.

2. CONDITIONS OF USE

The use of SGL on construction projects under DSA jurisdiction shall comply with the following requirements.

2.1 Application

SGL shall only be used for dry conditions of use and must be protected from weather exposure during construction.

2.2 Design Criteria

SGL shall be assigned the same design values as solid sawn lumber or timber of the same species and grade.

2.3 Construction Documents

2.3.1 When SGL is intended for use on a project, either as the primary specification or as an alternate, it shall be explicitly stated in the construction documents in all locations where structural materials are specified (e.g., general notes of the construction drawings, specifications/project manual, etc.).

2.3.2 When SGL is specified on a project, the construction documents shall require the material supplier be certified in accordance with ALSC-GLP and the material be grade stamped as described in this IR. The construction documents shall require the material supplier to submit to the school district evidence of compliance with the certification requirement.

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2.3.3 When SGL is not specified on the construction documents but is proposed for use during the construction phase of a project, the substitution must be submitted to and approved by DSA as a construction change document. Refer to *IR A-6: Construction Change Document Submittal and Approval Process*. The CCD shall specify the same requirements stated in Section 2.3.2 above.

REFERENCES:

2022 California Code of Regulations (CCR) Title 24

Part 2: California Building Code (CBC), Sections 1705A.5.3, 1705A.5.5, 2303.1.3, and 2103.1.4.

This IR is intended for use by DSA staff and by design professionals to promote statewide consistency for review and approval of plans and specifications as well as construction oversight of projects within the jurisdiction of DSA, which includes State of California public schools (K–12), community colleges and state-owned or state-leased essential services buildings. This IR indicates an acceptable method for achieving compliance with applicable codes and regulations, although other methods proposed by design professionals may be considered by DSA.

This IR is subject to revision at any time. Please check DSA's website for currently effective IRs. Only IRs listed on the webpage at www.dgs.ca.gov/dsa/publications at the time of project application submittal to DSA are considered applicable.