STRUCTURAL (CERTIFIED) GLUED LUMBER

IR 23-10

References:

2007 California Building Code, Section 2303.1.1

Dept. of Commerce PS 20-99

ALSC Glue Lumber Policy

Discipline: Structural

This Interpretation of Regulations (IR) is intended for use by the Division of the State Architect (DSA) staff, and as a resource for design professionals, to promote more uniform statewide criteria for plan review and construction inspection of projects within the jurisdiction of DSA, which include State of California public elementary and secondary schools (grades 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 reviewed on a regular basis and is subject to revision at any time. Please check the DSA web site for currently effective IR's. Only IR's listed in the document at http://www.dsa.dgs.ca.gov/Pubs/default.htm (click on "DSA Interpretation of Regulations Manual") at the time of plan submittal to DSA are considered applicable.

PURPOSE: This Interpretation of Regulations (IR) clarifies qualification and quality control/assurance requirements for acceptance of structural Certified Glued Lumber (CGL) for use in projects submitted to the Division of the State Architect (DSA) under the 2007 California Building Code (CBC).

This IR does not apply to "Certified End Joint" or "Stud Use Only" lumbers per Section 1.70, Western Wood Products Association (WWPA) Western Lumber Grading Rules, or Section 210.b and 210.c of West Coast Lumber Inspection Bureau (WCLIB) Standard Grading Rules No. 17 for "Certified End Joint" or "Stud Use Only" lumber.

BACKGROUND: Structural glued lumber does not qualify as structural glued-laminated timber (glulam) per Title 24, Part 2, CBC Section 2303.1.3. CGL is typically manufactured in the same facilities as glulam, and from laminations that are E-rated and/or visually graded which may not meet the requirements of ANSI/AITC A 190.1 for glulam. The strength design values for CGL are the same as those assigned to the lumber or timber grades but are typically lower than those of glulam. CGL is visually graded to the standard lumber grading rules while glulam is rated for the layup combination.

Structural CGL is intended as an alternative to solid sawn lumber or timber, 3 inch nominal or larger. CGL is considered as a solid piece of lumber or timber and is sized, grade stamped, and assigned the same values as solid sawn lumber or timber of the same species and visual grade in conformance with the Voluntary Product Standard PS 20-99 or current edition, American Softwood Lumber Standard and the American Lumber Standard Committee (ALSC) Glued Lumber Policy.

CGL is manufactured by face gluing laminations to produce a new piece of structural lumber or timber and is grade stamped as Light Framing, Structural Light Framing, Structural Joists and Planks, Beams and Stringers or Posts and Timbers, as described in the WCLIB Standard Grading Rules No. 17 or WWPA Western Lumber Grading Rules.

1. ACCEPTANCE CRITERIA: Structural glued lumber shall be designated "Certified Glued Lumber" (CGL) and grade stamped by an inspection agency accredited by the American Lumber Standard Committee (ALSC) to supervise glued lumber manufacturing.

- **1.1 Grading:** CGL shall be graded in conformance to ALSC Glued Lumber Policy (GLP) and Voluntary Product Standard PS 20-99 or current edition.
- **Qualification and Quality Control:** CGL shall be qualified by the inspection agency in accordance to ALSC GLP. The inspection agency may follow its own control or quality control procedure when the procedure is in general conformance with ALSC GLP and approved by ALSC.
- **1.3 Quality Assurance:** Inspection agency shall provide a minimum of twelve periodic inspections per year, at regular intervals or in accordance with ALSC GLP. Copies of the inspection reports shall be maintained and made available to DSA upon request.
- **1.4 Special Inspection:** Continuous independent inspection during fabrication is not required provided the manufacturer's QA program is in compliance with ALSC GLP.

2. CONDITIONS OF USE:

- **2.1** CGL shall only be used for dry conditions of use and must be protected from weather exposure during construction.
- **2.2** CGL shall be assigned the same design values as solid sawn lumber or timber of the same species and visual grade.