

DEPT. OF INDUSTRY, LABOR & HUMAN RELATIONS 173  
Structural ILHR 53

(c) The welding machine operator shall be tested and qualified in accordance with AWS D 1.1, section 5, part D [s. ILHR 51.27 (6)].

(7) **OPERATOR CERTIFICATION.** The department will issue to the welder or welding machine operator who has successfully passed the prescribed qualification tests, a certificate bearing his name, social security number, identifying mark, the process, the procedure specification number and other pertinent information from his qualification test. This certificate will remain in effect for 3 years provided the operator is continuously engaged in welding operations without an interruption of more than 3 consecutive months. If the interruption exceeds 3 consecutive months, the certificate shall automatically become void.

(a) Each manual welder and tacker or welding machine operator shall be retested every 3 years in accordance with s. ILHR 53.53 (6).

(b) Each manual welder and tacker or welding machine operator certificate which has become void due to welding operation interruption exceeding 3 consecutive months or having exceeded the 3-year certificate time limit can be renewed only by retesting at an approved testing laboratory.

(8) **WELD IDENTIFICATION.** Each structurally significant member shall have its welding identified by a distinguishing mark stamped on the member by the certified welders involved.

(9) **CRITERION OF FINAL ACCEPTANCE.** All structural welding is subject to examination by approved inspectors and such inspection shall be the final criterion for conformance and acceptability for the intended use.

(10) **STRUCTURAL WELDING DONE OUTSIDE THIS STATE.** All welding shall conform with the requirements of s. ILHR 53.53 except the requirements of sub. (7). In lieu of operator certification, manufacturers and suppliers of structural steel shall, prior to commencing any welded construction, submit evidence of procedure qualification, if not prequalified, and welder certification that has been approved by an independent testing laboratory which is acceptable to the department. Manufacturers and suppliers are required to keep the welder certification current.

Note: The welder certification requirement may be submitted and kept current by having the approved testing laboratory submit a list of certified welders to the department. The submittal may be a part of the materials approval information submitted for s. ILHR 50.19 or may be submitted separately for the manufacturers not having a materials approval.

History: Cr. Register, July, 1974, No. 223, eff. 1-1-75; am. (10), Register, December, 1977, No. 264, eff. 1-1-78; am (5) and (6)(a), (b) and (c), Register, January, 1980, No. 289, eff. 2-1-80.

**ILHR 53.54 Aluminum framing requirements.** The design, fabrication and erection of aluminum structural framing members shall conform to "Specifications for Aluminum Structures" [s. ILHR 51.27 (1)], published by The Aluminum Association.

History: Cr. Register, July, 1974, No. 223, eff. 1-1-75.

**ILHR 53.55 Stainless steel requirements.** The design, fabrication and erection of light gage stainless steel framing members shall conform to

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AISI [s. ILHR 51.27 (4)], "Stainless Steel Cold-Formed Structural Design Manual."

History: Cr. Register, July, 1974, No. 223, eff. 1-1-75; am. Register, January, 1980, No. 289, eff. 2-1-80.

**ILHR 53.56 Steel cable requirements.** The design, fabrication and erection of steel cables for buildings shall conform to AISI [s. ILHR 51.27 (4)], "Manual for Structural Applications of Steel Cables for Buildings."

History: Cr. Register, January, 1980, No. 289, eff. 2-1-80.

**ILHR 53.57 Other metals.** The design, fabrication and erection of other metals or metal alloys not specifically listed in this section shall be in accordance with the provisions of s. ILHR 50.19.

History: Cr. Register, July, 1974, No. 223, eff. 1-1-75; am. Register, December, 1976, No. 252, eff. 1-1-77; renum. from Ind 53.56 and am., Register, January, 1980, No. 289, eff. 2-1-80.

## PART VI

### WOOD AND WOOD FIBER PRODUCTS

**ILHR 53.60 General.** (1) **SCOPE.** The requirements of ss. ILHR 53.60 to 53.63, inclusive, shall apply to the materials, design, and construction procedures used in all wood and wood fiber products construction work under this code.

(2) **DEFINITION.** Wood and wood fiber products include those structural elements derived from solid wood, structural glued-laminated timber, plywood, fiberboard, hardboard and other wood-fiber-based materials.

History: Cr. Register, July 1974, No. 223, eff. 1-1-75.

**ILHR 53.61 Materials and design of structural elements.** (1) **SAWN LUMBER.** The material characteristics and the design provisions of load-bearing structural sawn lumber shall be in accordance with the following adopted standard and listed exceptions:

(a) "National Design Specification for Wood Construction" [s. ILHR 51.27 (8)] and its supplement.

1. **Exceptions:** a. Section 4.1.7. The provisions of this section shall also apply to reused lumber. Reused lumber shall be considered to have a duration of load factor of 0.90.

b. Section 4.2.2. In addition to requiring grading in conformance with ASTM D 245 [s. ILHR 51.25 (43)], lumber (including reused lumber) of species and grades not listed in the supplement to the NDS [s. ILHR 51.27 (8)] shall be identified by the grade mark of, or certificate of inspection issued by, a lumber grading or inspection bureau or agency recognized as being competent.

c. Section 2.2.5.3. The cumulative effects of short-time loads, such as snow, shall be considered in determining duration of load. For snow load, no greater duration of load factor than 1.05 shall be used.

(2) **STRUCTURAL GLUED-LAMINATED TIMBER.** Structural glued-laminated timber is an engineered, stress-rated product of a timber laminating plant comprising assemblies of specially selected and prepared wood

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