

DEPARTMENT OF LICENSING AND REGULATORY AFFAIRS

DIRECTOR'S OFFICE

CONSTRUCTION SAFETY AND HEALTH STANDARD STANDARDS

Filed with the secretary of state on

These rules take effect immediately upon filing with the secretary of state unless adopted under section 33, 44, or 45a(6) of the administrative procedures act of 1969, 1969 PA 306, MCL 24.233, 24.244, or 24.245a. Rules adopted under these sections become effective 7 days after filing with the secretary of state.

(By authority conferred on the director of the department of licensing and regulatory affairs by sections 19 and 21 of **the Michigan occupational safety and health act**, 1974 PA 154, **MCL 408.1019 and 408.1021**, and Executive Reorganization Order Nos. 1996-2, 2003-1, 2008-4, and 2011-4, MCL 445.2001, 445.2011, 445.2025, and 445.2030)

R 408.41102a, R 408.41124, and R 408.41140 of the Michigan Administration Code are amended as follows:

**CONSTRUCTION SAFETY AND HEALTH STANDARD
PART 11. FIXED AND PORTABLE LADDERS**

R 408.41102a Adopted and referenced standards.

Rule 1102a. (1) The following American National Standard Institute (ANSI) standards are adopted by reference:

(a) ANSI standard A14.1 "Ladders – Wood Safety Requirements," 1990 edition. Cost: \$36.00.

(b) ANSI standard A14.2 "Ladders – Portable Metal – Safety Requirements," 1990 edition. Cost: \$41.00.

(c) ANSI standard A14.3 "Ladders – Fixed – Safety Requirements," 1984 edition. Cost: \$25.00.

(d) ANSI standard A14.5 "Ladders – Portable Reinforced Plastic – Safety Requirements," 1982 edition with 1985 supplement. Cost: \$42.00.

(2) The standards adopted in subrule (1) of this rule are available from Global Engineering Documents, 15 Inverness Way East, Englewood, Colorado 80112, telephone number 1-800-854-7179, website: www.global.ihs.com, at the cost listed above.

(3) The standards adopted in these rules are also available for inspection at the Department of Licensing and Regulatory Affairs, MIOSHA Regulatory Services Section, **530 West Allegan Street, 7150 Harris Drive**, Lansing, Michigan, 48909-8143.

(4) The standards adopted in these rules may be obtained from the publisher or may be obtained from the Department of Licensing and Regulatory Affairs, MIOSHA Regulatory Services Section, **530 West Allegan Street, 7150 Harris Drive**, P.O. Box 30643, Lansing, Michigan, 48909-8143, plus \$20.00 for shipping and handling.

February 5, 2019

(5) The following Michigan **Occupational Safety and Health Administration** ~~occupational safety and health~~ (MIOSHA) standards are referenced in these rules. Up to 5 copies of these standards may be obtained at no charge from the Department of Licensing and Regulatory Affairs, MIOSHA Regulatory Services Section, **530 West Allegan Street, 7150 Harris Drive**, P.O. Box 30643, Lansing, Michigan, 48909-8143 or via the internet at website: www.michigan.gov/mioshastandards. For quantities greater than 5, the cost, as of the time of adoption of these rules, is 4 cents per page.

(a) Construction Safety Standard Part 16 “Power Transmission and Distribution,” R 408.41601 to R 408.41658.

(b) Construction Safety Standard Part 22 “Signals, Signs, Tags, and Barricades,” R 408.42201 to R 408.42243.

(c) Construction Safety Standard Part 45 “Fall Protection,” R 408.44501 to R 408.44502.

(d) General Industry Safety **and Health** Standard Part 2 “**Walking-Working Surfaces,**” **R 408.10201 to R 408.10241.** ~~3 “Fixed Ladders,” R 408.10301 to R 408.10372.~~

R 408.41124 Portable ladders.

Rule 1124. (1) A portable ladder shall be used at such a pitch that the horizontal projected distance from the top support to the base is not more than 1/4 of the vertical distance between these points.

(2) A portable ladder in use shall be equipped with appropriate safety feet, unless the ladder is tied, blocked, or otherwise secured to prevent it from being displaced. Slip-resistant feet shall not be used as a substitute for care in placing, lashing, or holding a ladder that is used upon slippery surfaces, including flat metal or concrete surfaces that are constructed so that they cannot be prevented from becoming slippery.

(3) A portable ladder that is used at such a pitch that the horizontal projected distance from the top support to the base is less than 1/5 of the vertical distance between these points shall be secured at the top to prevent tipping backward.

(4) A portable ladder that is used at a pitch of 80 degrees or more shall be in compliance with the requirements of a fixed ladder as prescribed in General Industry Safety **and Health Standard Part 2 “Walking-Working Surfaces,”** ~~Standard Part 3 “Fixed Ladders,”~~ as referenced in R 408.41102a.

(5) When portable ladders are used for access to an upper landing surface, the ladder side rails shall extend not less than 3 feet (.9 m) above the upper landing surface to which the ladder is used to gain access; or, when such an extension is not possible because of the ladder’s length, then the ladder shall be secured at its top to rigid support that will not deflect and a grasping device, such as a **grab-rail,** ~~grabrail,~~ shall be provided to assist employees in mounting and dismounting the ladder. The side rails shall not extend in a manner that would permit ladder deflection under a load, by itself, to cause the ladder to slip off its support. The top of a non-self-supporting ladder shall be placed with the 2 rails supported equally, unless the ladder is equipped with a single support attachment.

(6) A manufactured portable metal ladder shall not be used for electrical work or where the ladder or an employee may contact electrical conductors.

A ladder shall have nonconductive **side-rails** ~~siderails~~ if the ladder is used where the employee or the ladder could contact exposed energized electrical equipment, except as provided in Construction Safety Standard Part 16 “Power Transmission and Distribution,” as referenced in R 408.41102a.

(7) A metal ladder shall not be used or moved unless a minimum of 20 feet is maintained between power transmission or distribution lines.

(8) A power transmission or distribution line or electrical apparatus shall be considered energized unless the property owner or utility indicates it is de-energized and the line or apparatus is visibly grounded. Where de-energizing is impractical, the minimum clearances set forth in table 1 shall be maintained between the ladder, employee, or material, whichever is closer.

(9) Table 1 reads as follows:

TABLE 1	
VOLTAGE	MINIMUM CLEARANCE
To 50 kV	10 feet
Over 50 kV	10 feet plus .4 inch per kV

(10) An employee who is using a portable ladder shall not stand on the top 2 rungs or within 3 feet of the top of the ladder.

(11) Two portable ladders shall not be spliced together to provide long sections unless such ladders are specifically designed for such use.

(12) A portable 2-section extension ladder shall be erected so that the top section rests on the base section. The top section shall be the section nearest to the climber.

(13) A non-self-supporting ladder shall be used at an angle such that the horizontal distance from the top support to the foot of the ladder is approximately 1/4 of the working length of the ladder that is the distance along the ladder between the foot and the top support.

(14) A fixed ladder shall be used at a pitch of not more than 90 degrees from the horizontal, as measured to the back side of the ladder.

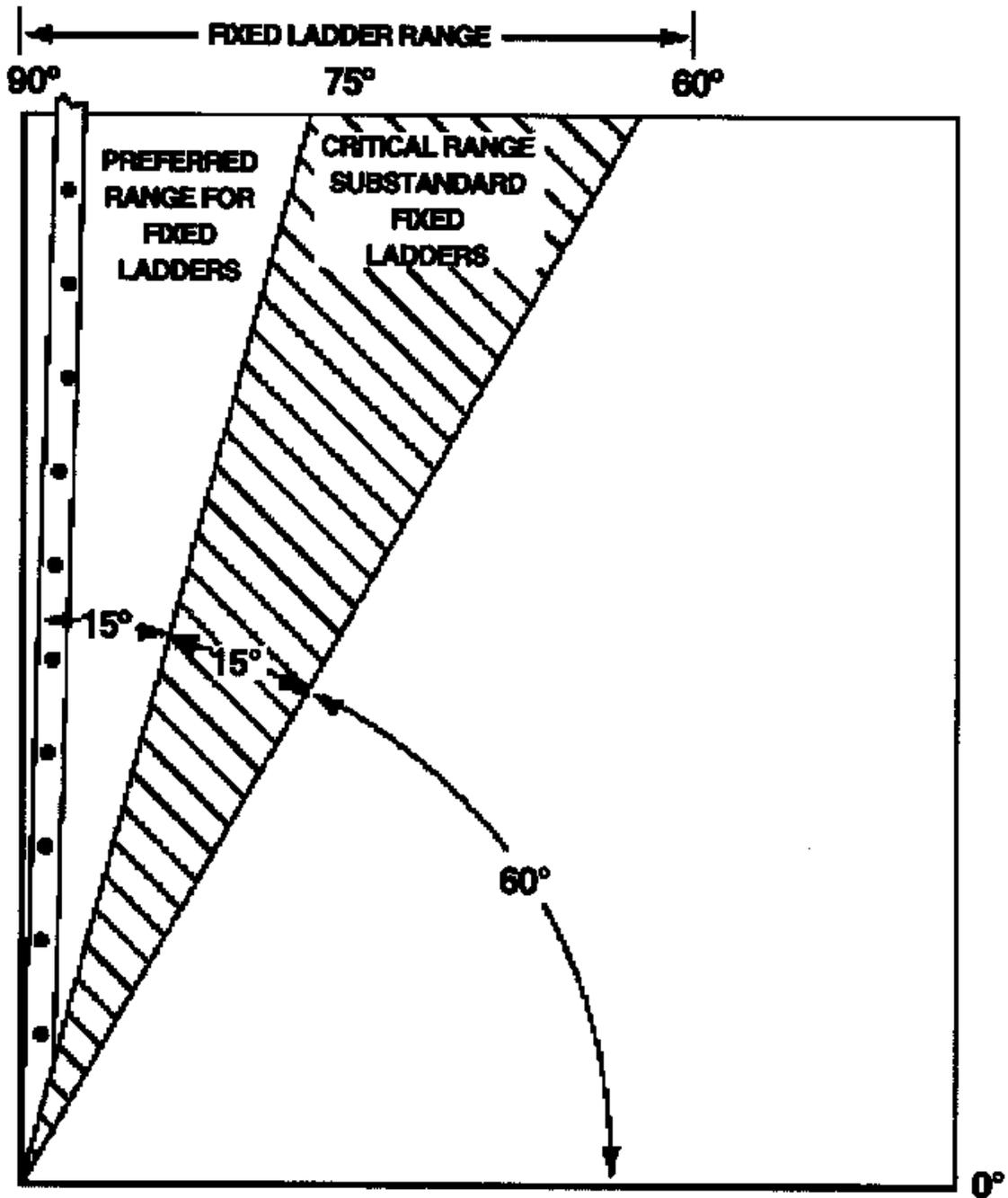
(15) An employer shall ensure that each self-supporting portable ladder shall comply with all of the following:

(a) At least 4 times the maximum intended load, except that each extra-heavy-duty type 1A metal or plastic ladder shall sustain at least 3.3 times the maximum intended load.

(b) The ability of a ladder to sustain the loads indicated in this rule shall be determined by applying or transmitting the requisite load to the ladder in a downward vertical direction.

(c) Ladders built and tested in conformance with the applicable provisions of R 408.41111, will be deemed to meet this requirement.

See figure 5.



R 408.41140 Fixed ladders.

Rule 1140. A fixed ladder shall be as prescribed in General Industry Safety and Health Standard Part 2 "Walking-Working Surfaces," Standard Part 3 "Fixed Ladders," as referenced in R 408.41102a.