

DEPARTMENT OF LABOR & ECONOMIC GROWTH LICENSING AND REGULATORY AFFAIRS

DIRECTOR'S OFFICE

GENERAL INDUSTRY SAFETY STANDARDS

These rules become effective immediately upon filing with the Secretary of State unless adopted under section 33, 44, or 45a(6) of 1969 PA 306. 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** ~~labor and economic growth~~ by sections 16 and 21 of 1974 PA 154, and Executive Reorganization Order Nos. **1996-2, 2003-1, 2008-4, and 2011-4, MCL 445.2001, 445.2011, 445.2025, and 445.2030** ~~1996-2 and 2003-1, MCL 408.1016, 408.1021, 445.2001, and 445.2011~~)

R 408.10509, R 408.10541, R 408.10570, R 408.10579, R 408.10580, R 408.10582, and R 408.10590 of the Michigan Administrative Code, are amended as follows:

PART 5. SCAFFOLDING

GENERAL PROVISIONS

R 408.10509. Adoption of standards by reference; access to other MIOSHA rules.

Rule 509. (1) The standards specified in this rule, except for the standards specified in subrule (2) of this rule, are adopted in these rules by reference.

(a) The following standards are available from IHS/Global Engineering Documents, 15 Inverness Way East, Englewood, Colorado, 80112, USA, telephone number: 1-800-854-7179 or via the internet at web-site: <http://global.ihs.com>; at a cost as of the time of adoption of these rules, as stated in this subrule:

(i) American National Society Institute Standard ANSI A120.1 'Safety Requirement for Powered Platforms for Exterior Building Maintenance,' 1970 edition, also known as American Society of Mechanical Engineers Standard ASME A120.1 'Safety Requirements Powered Platforms and Traveling Ladders and Gantries for Building Maintenance,' 1970 edition. Cost \$20.00

(ii) American National Society Institute Standard ANSI A12.1 'Safety Requirements for Floor and Wall Openings, Railings and Toeboard,' 1967 edition. Cost \$20.00.

(b) **The federal occupational safety and health administration's 29 C.F.R. §1910.66 "Powered Platforms, Manlifts, and Vehicle-Mounted Work Platforms," Appendix D "Existing Installations (Mandatory)" promulgated by the United States department of labor, is adopted by reference in this rule and is available from the United States Department of Labor, Occupational Safety and Health Administration, 315 West Allegan, room 315, Lansing, Michigan, 48917, or via the internet at website www.osha.gov, at no charge as of the time of adoption of these rules. The Code of Federal Regulations, Title 29, Occupational Safety And Health Standard 1910.66 "Powered Platforms, Manlifts, And Vehicle-Mounted Work Platforms," Appendix D "Existing Installations (Mandatory)" is available from the U.S. Government Printing Office, Washington DC, 20402; telephone number (202) 512-1800 or through the GPO website <http://bookstore.gpo.gov>. Cost: \$11.00.**

(c) The standards adopted in subrule 1(a) and (b) of this rule are also available for inspection at the Department of ~~Labor and Economic Growth~~ **Licensing and Regulatory Affairs**, MIOSHA Standards Section, 7150 Harris Drive, P.O. Box 30643, Lansing, Michigan, 48909-8143.

(d) Copies of the standards adopted in subrule (1)(a) and (b) of this rule may be obtained from the publisher or may also be obtained from the Department of ~~Labor and Economic Growth~~ **Licensing and Regulatory Affairs**, MIOSHA Standards Section, 7150 Harris Drive, P.O. Box 30643, Lansing, Michigan, 48909-8143, at the cost charged in subrule (1)(a) and (b), of this rule, plus \$20 for shipping and handling.

(2) The following Michigan Occupational Safety and Health Standards are referenced in these rules. Up to 5 copies of these standards may be obtained at no charge from the Michigan Department of ~~Labor and Economic Growth~~ **Licensing and Regulatory Affairs**, MIOSHA Standards Section, 7150 Harris Drive, P.O. Box 30643, Lansing, Michigan, 48909-8143 or via the internet at web-site: 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) General Industry Safety Standard Part 2. Floor and Wall Openings, Stairways and Skylights, R 408.10201 to R 408.10241.

(b) General Industry Safety Standard Part 3. Fixed Ladders, R 408.10301 to R 408.10372.

(c) General Industry Safety Standard Part 4. Portable Ladders, R 408.10401 to R 408.10456.

(d) General Industry Safety Standard Part 7. Guards for Power Transmission, R 408.10701 to R 408.10765.

(e) General Industry Safety Standard Part 8. Portable Fire Extinguishers, R 408.10801 to R 408.10839.

- (f) General Industry Safety Standard Part 21. Powered Industrial Trucks, R 408.12101 to R 408.12193.
 (g) General Industry Safety Standard Part 33. Personal Protective Equipment, R 408.13301 to R 408.13398.
 (h) General Industry Safety Standard Part 39. Design Safety Standards for Electrical Systems, R 408.13901 to R 408.13902.
 (i) General Industry Safety Standard Part 58. Aerial Work Platforms, R 408.15801 to R 408.15842.

R 408.10541. **Scaffolding generally General.**

Rule 541. (1) Manufactured scaffolding shall be erected and used as specified by the manufacturer's instructions.

~~(2) Manufactured scaffolding shall be constructed, installed and maintained as prescribed in rules 511, 512 and 513.~~

~~(2)~~ (3) Manufactured scaffolding shall be erected by a competent and experienced employee.

~~(3)~~ (4) Stationary manufactured scaffolding shall be tied to and braced against a building at intervals not to exceed 30 feet horizontally and 26 feet vertically or otherwise guyed.

~~(4)~~ (5) Adjusting screws on stationary manufactured scaffolding shall have an adjustment of not more than 18 inches from baseplate to bottom of frame with a minimum of 6 inches retained within the frame.

~~(5)~~ (6) Before a metal scaffold is erected near an exposed powerline, the utility or property owner shall be consulted. A power line or electrical apparatus shall be considered energized unless the property owner or utility indicates it is deenergized and the line or apparatus is visibly grounded. Where deenergizing is impracticable, the following minimum clearances shall be maintained:

Voltage	Clearance
To 50 kV	10 feet
Over 50 kV	10 feet + .4 inch per kV

R 408.10570. Controls and interlocks.

Rule 570. ~~(1) Control devices for a powered platform shall be a constant pressure type and shall be designed to prevent accidental actuation.~~

~~(2) Control devices shall be permanently labeled as to their function.~~

~~(3)~~ Where a roof car is used, safety interlocks shall be provided to ~~insure~~ **ensure** that the working platform will not leave the stored position until the required positive position anchor is engaged and to ~~insure~~ **ensure** that the roof car cannot move when the working platform is not in the stored position.

R 408.10579. Inspection of related building supporting structures; equipment inspection and testing intervals; certification record; employer inspection of platforms.

Rule 579. (1) Related building supporting structures shall undergo periodic inspection by a competent person at intervals of not more than 12 months.

(2) All parts of the equipment, including control systems, shall be inspected and, where necessary, tested by a competent person at intervals specified by the manufacturer and supplier, but not more than 12 month intervals, to determine that equipment parts are in safe operating condition. Parts that are subject to wear, such as wire ropes, bearings, gears, and governors, shall be inspected or tested to determine that they have not worn to such an extent as to affect the safe operation of the installation.

(3) The owner shall keep a certification record of each inspection and test required. The record shall include all of the following information:

(a) The date of the inspection.

(b) The signature of the person who performed the inspection.

(c) The number, or other identifier, of the building support structure and equipment that was inspected.

This certification record shall be kept readily available for review by the director of the Michigan ~~department of consumer and industry services~~ **department of licensing and regulatory affairs** or his or her representative and by the employer.

(4) Working platforms and their components shall be inspected by the employer for visible defects before every use and after each occurrence that could affect the platform's structural integrity.

R 408.10580. Intervals of maintenance inspections and tests; certification record.

Rule 580. (1) A maintenance inspection and, where necessary, a test shall be made of each platform installation every 30 days. If the work cycle is less than 30 days, such inspection and test shall be made before each work cycle. This inspection and test shall follow the procedures recommended by the manufacturer and shall be made by a competent person.

(2) The building owner shall keep a certification record of each inspection and test performed. The record shall contain all of the following information:

(a) The date of the inspection and test.

(b) The signature of the person who performed the inspection or test.

(c) An identifier for the platform installation that was inspected.

The certification record shall be kept readily available for review by the director of the Michigan ~~department of consumer and industry services~~ **department of licensing and regulatory affairs** or his or her designated representative and by the employer.

R 408.10582. Wire rope; reinforcement; use of metal thimble, end fittings; requirements for use of wire clips; cutting preparation; lubrication; use of suspension wire rope to follow procedures recommended by manufacturer; inspection of suspension wire rope; certification record.

Rule 582. (1) Wire rope for a scaffold shall be replaced if any of the following conditions exists:

(a) In any length of 8 diameters, the total number of visible broken wires is more than 6 in 1 rope lay or 3 wires in 1 strand.

(b) The wire rope has been kinked, crushed, or bird-caged or has sustained any other damage that distorts the wire rope structure.

(c) The wire rope shows heat or corrosive damage.

(d) The wire rope contains a broken wire within 18 inches (460.8 mm) of the end attachment.

(2) Wire rope that is bent to form an eye over a bolt or rod which has a diameter that is less than 4 times the rope diameter shall be equipped with a metal thimble.

(3) End fittings should be swagged or zinc-poured sockets.

(4) Where wire clips are used, the provisions of table 8 shall be followed and the u-bolts shall be installed on the dead end or short end of the wire rope.

(5) Wire rope shall be stored in a manner to prevent damage or deterioration.

(6) Before cutting wire rope, a seizing shall be placed on each side of the cut on preformed wire rope, 2 seizings shall be placed on each side of 7/8 inch size or smaller nonpreformed wire rope, and 3 seizings shall be placed on each side of 1 inch or larger size nonpreformed wire rope.

(7) Wire rope shall be maintained in a lubricated condition over its entire length with the same type of lubricant that is used by the manufacturer.

(8) Suspension wire ropes shall be maintained and used in accordance with the procedures recommended by the wire rope manufacturer.

(9) Suspension wire rope shall be inspected by a competent person for visible defects and gross damage to the rope before every use and after each occurrence that might affect the wire rope's integrity.

(10) A thorough inspection of suspension wire ropes in service shall be made once a month. Suspension wire ropes that have been inactive for 30 days or more shall have a thorough inspection before they are placed into service. These thorough inspections of suspension wire ropes shall be performed by a competent person.

(11) The need for replacement of suspension wire rope shall be based on its condition. A wire rope shall be removed for any of the following conditions:

(a) Evidence of core failure. A lengthening of rope lay, protrusion of the rope core, and a reduction in rope diameter suggests core failure.

(b) Outer wire wear is more than 1/3 of the original outer wire diameter.

(c) Any other condition that the competent person determines has significantly affected the integrity of the rope.

(12) The owner shall keep a certification record of each monthly inspection of a suspension wire rope which shall be verified by the employer. The record shall include the date of the inspection and a number or other identifier of the wire rope that was inspected. The record of inspection shall be made available for review by the director of the Michigan ~~department of consumer and industry services~~ **department of licensing and regulatory affairs** or his or her designated representative and by the employer.

R 408.10590. Platform operator training.

Rule 590. (1) Working platforms shall be operated only by persons who are proficient in the operation, safe use, and inspection of the particular working platform to be operated.

(2) All employees who operate working platforms shall be trained in all of the following areas:

(a) Recognition of, and preventative measures for, the safety hazards that are associated with the employee's individual work tasks.

(b) General recognition and prevention of safety hazards that are associated with the use of working platforms.

(c) Emergency action plan procedures.

(d) Work procedures.

(e) Personal fall arrest system inspection, care, use, and system performance.

(3) The training of employees in the operation and inspection of working platforms shall be done by a competent person.

(4) Written work procedures for the operation, safe use, and inspection of working platforms shall be provided for employee training. Pictorial methods of instruction may be used in place of written work procedures if employee communication is improved through the use of this method. The operating manuals that are supplied by the manufacturers for platform system components can serve as the basis for these procedures.

(5) An employer shall certify that employees have been trained in the operation and inspection of a working platform by preparing a certification record that includes all of the following information:

- (a) The identity of the person trained.
- (b) The signature of the employer or the person who conducted the training.
- (c) The date that training was completed.

The certification record shall be prepared at the completion of the training and shall be maintained in a file for the duration of the employee's employment. The certification record shall be kept readily available for review by the director of the Michigan ~~department of consumer and industry services~~ **department of licensing and regulatory affairs** or his or her designated representative.