DEPARTMENT OF LICENSING AND REGULATORY AFFAIRS

STATE FIRE SAFETY BOARD

PENAL FACILITIES FIRE SAFETY RULES

(By authority conferred on the bureau of fire services by section 3c(1)(e), MCL 29.3c(1)(e), of 1941 PA 207, and Executive Reorganization Order No. 1997-2, MCL 29.451) 29.451 of the Michigan Compiled Laws)

PART 1. GENERAL PROVISIONS

R 29.1701 Applicability.

Rule 1. These rules apply to penal facilities, described in section 62 of 1953 PA 232, MCL 791.262, as they pertain to the fire safety requirements for the construction, operation, or maintenance of all new penal facilities and all existing penal facilities.

History: 2001 AACS; 2017 AACS.

R 29.1702 Life safety code; adoption by reference.

- Rule 2. (1) The provisions of chapters 1 to 11, 22, 23 and 43 of the national fire protection association standard no. 101, 2012 edition, entitled "Life Safety Code," referred to in these rules as "code," are adopted by reference as part of these rules.
- (2) Copies of the adopted provisions in subrules (1) and (3) of this rule are available for inspection and distribution from the National Fire Protection Association, 1 Batterymarch Park, P.O. Box 9101, Quincy, Massachusetts 02269-9101, telephone: 800-344-3555 or as otherwise specified in subrule (3) of this rule. The cost of the adopted provisions of the code as of the time of adoption of these rules is 93.00 per copy. The cost of the adopted provisions in subrule (3) of this rule are as specified in subrule (3) of this rule. Copies of adopted standards are available for inspection at the offices of the Michigan Department of Licensing and Regulatory Affairs, Bureau of Fire Services, 3101 Technology Blvd, Ste. H, Lansing, Michigan 48910, or with other state agencies as specified in this rule. Copies of the adopted provisions may be purchased from the bureau of fire services at cost from any national source identified in chapter 2 of the code as amended in subrules (1) and (3) of this rule plus \$30.00 for shipping and handling as of the time of the adoption of these rules.
 - (3) Chapter 2 of the code is amended to read as follows:
 - 2.1 General.

The documents or portions of the documents listed in this chapter are referenced within this code and shall be considered part of the requirements of this document. The cost of each standard at the time of the adoption of these rules is indicated after the title.

2.2 NFPA Publications. <u>www.nfpa.org</u> National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471.

- NFPA 10, Standard for Portable Fire Extinguishers, 2010 edition. \$44.50/each
- NFPA 11, Standard for Low-, Medium-, and High-Expansion Foam, 2010 edition. \$44.50/each
- NFPA 12, Standard on Carbon Dioxide Extinguishing Systems, 2011 edition. \$44.50/each
- NFPA 12A, Standard on Halon 1301 Fire Extinguishing Systems, 2009 edition. \$44.50/each
- NFPA 13, Standard for the Installation of Sprinkler Systems, 2010 edition. \$85.50/each
- NFPA 13D, Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes, 2010 edition. \$44.50/each
- NFPA 13R, Standard for the Installation of Sprinkler Systems in Residential Occupancies Up to and Including Four Stories in Height, 2010 edition. \$40.50/each
- NFPA 14, Standard for the Installation of Standpipe and Hose Systems, 2010 edition. \$40.50/each
- NFPA 15, Standard for Water Spray Fixed Systems for Fire Protection, 2012 edition. \$44.50/each
- NFPA 16, Standard for the Installation of Foam-Water Sprinkler and Foam-Water Spray Systems, 2011 edition. \$40.50/each
- NFPA 17, Standard for Dry Chemical Extinguishing Systems, 2009 edition. \$40.50/each
- NFPA 17A, Standard for Wet Chemical Extinguishing Systems, 2009 edition. \$35.00/each
- NFPA 25, Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems, 2011 edition. \$52.50/each
- NFPA 30, Flammable and Combustible Liquids Code, 2012 edition. References to this standard mean R 29.5401 to R 29.5419. promulgated by the Michigan department of licensing and regulatory affairs, bureau of fire services.
- NFPA 30B, Code for the Manufacture and Storage of Aerosol Products, 2011 edition. \$44.50/each
- NFPA 31, Standard for the Installation of Oil-Burning Equipment, 2011 edition. \$44.50/each
- NFPA 40, Standard for the Storage and Handling of Cellulose Nitrate Film, 2011 edition. \$35.00/each
- NFPA 45, Standard on Fire Protection for Laboratories Using Chemicals, 2011 edition. \$40.50/each
 - NFPA 54, National Fuel Gas Code, 2012 edition. \$52.50/each
- NFPA 58, Liquefied Petroleum Gas Code, 2011 edition. References to this code mean R 29.6001 to R 29.6097 which pertain to the storage and handling of liquefied petroleum gases.
- NFPA 70, National Electrical Code®, 2011 edition. References to this code mean the Michigan electrical code, R 408.30801 to R 408.30880.
 - NFPA 72[®], National Fire Alarm Code[®], 2010 edition. \$85.50/each
 - NFPA 80, Standard for Fire Doors and Fire Windows, 2010 edition. \$44.50/each
- NFPA 82, Standard on Incinerators and Waste and Linen Handling Systems and Equipment, 2009 edition. \$40.50/each

NFPA 88A, Standard for Parking Structures, 2011 edition. \$35.00/each

NFPA 90A, Standard for the Installation of Air-Conditioning and Ventilating Systems, 2012 edition. \$40.50/each

NFPA 90B, Standard for the Installation of Warm Air Heating and Air-Conditioning Systems, 2012 edition. \$35.00/each

NFPA 91, Standard for Exhaust Systems for Air Conveying of Vapors, Gases, Mists, and Noncombustible Particulate Solids, 2010 edition. \$35.00/each

NFPA 92, Standard for Smoke Control Systems, 2012 edition. \$40.50/each

NFPA 96, Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations, 2011 edition. \$40.50/each

NFPA 99, Standard for Health Care Facilities, 2012 edition. \$64.00/each

NFPA 101A, Guide on Alternative Approaches to Life Safety, 2010 edition. \$44.50/each

NFPA 105, Standard for the Installation of Smoke Door Assemblies, 2010 edition. \$35.00/each

NFPA 110, Standard for Emergency and Standby Power Systems, 2010 edition. \$39.00/each

NFPA 111, Standard on Stored Electrical Energy Emergency and Standby Power Systems, 2010 edition. \$40.50/each

NFPA 160, Standard for the Use of Flame Effects Before an Audience, 2011 edition. \$40.50/each

NFPA 170, Standard for Fire Safety and Emergency Symbols, 2009 edition. \$44.50/each

NFPA 204, Standard for Smoke and Heat Venting, 2012 edition. \$44.50/each

NFPA 211, Standard for Chimneys, Fireplaces, Vents, and Solid Fuel-Burning Appliances, 2010 edition. \$44.50/each

NFPA 220, Standard on Types of Building Construction, 2012 edition. \$35.00/each NFPA 221, Standard for High Challenge Fire Walls, Fire Walls, and Fire Barrier Walls, 2010 edition. \$40.50/each

NFPA 241, Standard for Safeguarding Construction, Alteration, and Demolition Operations, 2009 edition. \$40.50/each

NFPA 251, Standard Methods of Tests of Fire Resistance of Building Construction and Materials, 2006 edition. \$40.50/each

NFPA 252, Standard Methods of Fire Tests of Door Assemblies, 2008 edition. \$35.00/each

NFPA 253, Standard Method of Test for Critical Radiant Flux of Floor Covering Systems Using a Radiant Heat Energy Source, 2011 edition. \$35.00/each

NFPA 257, Standard on Fire Test for Window and Glass Block Assemblies, 2007 edition. \$35.00/each

NFPA 259, Standard Test Method for Potential Heat of Building Materials, 2008 edition. \$35.00/each

NFPA 260, Standard Methods of Tests and Classification System for Cigarette Ignition Resistance of Components of Upholstered Furniture, 2009 edition. \$35.00/each

NFPA 261, Standard Method of Test for Determining Resistance of Mock-Up Upholstered Furniture Material Assemblies to Ignition by Smoldering Cigarettes, 2009 edition. \$35.00/each

NFPA 265, Standard Methods of Fire Tests for Evaluating Room Fire Growth Contribution of Textile Coverings on Full Height Panels and Walls, 2011 edition. \$40.50/each

NFPA 271, Standard Method of Test for Heat and Visible Smoke Release Rates for Materials and Products Using an Oxygen Consumption Calorimeter, 2009 edition. \$40.50/each

NFPA 286, Standard Methods of Fire Tests for Evaluating Contribution of Wall and Ceiling Interior Finish to Room Fire Growth, 2011 edition. \$40.50/each

NFPA 288, Standard Methods of Fire Tests of Floor Fire Door Assemblies Installed Horizontally in Fire Resistance–Rated Floor Systems, 2007 edition. \$35.00/each

NFPA 289, Standard Method of Fire Test for Individual Fuel Packages, 2009 edition. \$35.00/each

NFPA 415, Standard on Airport Terminal Buildings, Fueling Ramp Drainage, and Loading Walkways, 2008 edition. \$35.00/each

NFPA 418, Standard for Heliports, 2011 edition. \$35.00/each

NFPA 701, Standard Methods of Fire Tests for Flame Propagation of Textiles and Films, 2010 edition. \$35.00/each

NFPA 703, Standard for Fire Retardant–Treated Wood and Fire-Retardant Coatings for Building Materials, 2012 edition. \$35.00/each

NFPA 720, Standard for the Installation of Carbon Monoxide (CO) Detection and Warning Equipment, 2012 edition. \$44.50/each

NFPA 750, Standard on Water Mist Fire Protection Systems, 2010 edition. \$44.50/each

NFPA 914, Code for Fire Protection of Historic Structures, 2010 edition. \$64.00/each

NFPA 1124, Code for the Manufacture, Transportation, Storage, and Retail Sales of Fireworks and Pyrotechnic Articles, 2006 edition. \$44.50/each

NFPA 1126, Standard for the Use of Pyrotechnics Before a Proximate Audience, 2011 edition. \$35.00/each

NFPA 2001, Standard on Clean Agent Fire Extinguishing Systems, 2012 edition. \$52.50/each

2.3 Other Publications.

2.3.1 ACI Publication. www.concrete.org

American Concrete Institute, P.O. Box 9094, Farmington Hills, MI 48333.

ACI 216.1/TMS 0216.1, Standard Method for Determining Fire Resistance of Concrete and Masonry Construction Assemblies, 2008. \$54.50/each

2.3.2 ANSI Publications. <u>www.staging.techstreet.com</u> American National Standards Institute, Inc., 25 West 43rd Street, 4th floor, New York, NY 10036.

ANSI A14.3, Safety Requirements for Fixed Ladders, 1992. \$250.00/each

ICC/ANSI A117.1, American National Standard for Accessible and Usable Buildings and Facilities, 2009. \$63.95/each

ANSI/BHMA A156.3, Exit Devices, 2008. \$36.00/each

BHMA/ANSI A156.19, American National Standard for Power Assist and Low Energy Power Operated Doors, 2007. \$36.00/each

2.3.3 ASCE Publications. American Society of Civil Engineers, 1801 Alexander Bell Drive, Reston, VA 20191-4400. www.asce.org

- ASCE/SFPE 29, Standard Calculation Methods for Structural Fire Protection, 2008 \$69.00/each
- 2.3.4 ASME Publications. <u>www.asme.org</u> American Society of Mechanical Engineers, Three Park Avenue, New York, NY 10016-5990.
- 2.3.5 ASSE Publications. American Society of Safety Engineers, 1800 East Oakton Street, Des Plaines, IL 60018. www.asse.org

ANSI/ASSE A1264.1, Safety Requirements for Workplace Floor and Wall Openings, Stairs and Railing Systems, 2007. \$69.00/each

2.3.6 ASTM Publications. www.astm.org American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959.

ASTM C 1629/C 1629M, Standard Classification for Abuse-Resistant Nondecorated Interior Gypsum Pan Products and Fiber-Reinforced Cement Panels, 2006 \$49.20/each

ASTM D 1929, Standard Test Method for Determining Ignition Temperatures of Plastic, (2001e1). \$49.20/each

ASTM D 2859, Standard Test Method for Ignition Characteristics of Finished Textile Floor Covering Materials, 2006. \$43.20/each

ASTM D 2898, Standard Test Methods for Accelerated Weathering of Fire-Retardant-Treated Wood for Fire Testing, 2010. \$36.00/each

ASTM E 84, Standard Test Method for Surface Burning Characteristics of Building Materials, 2010. \$70.80/each

ASTM E 108, Standard Test Methods for Fire Tests of Roof Coverings, 2010a. \$56.40/each

ASTM E 119, Standard Test Methods for Fire Tests of Building Construction and Materials, 2010b. \$70.80/each

ASTM E 136, Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750°C, 2009b. \$56.40/each

ASTM E 648, Standard Test Method for Critical Radiant Flux of Floor Covering Systems Using a Radiant Heat Energy Source, 2010. \$56.40/each

ASTM E 814, Standard Test Method for Fire Tests of Through Penetration Fire Stops, 2010. \$56.40/each

ASTM E 1352, Standard Test Method for Cigarette Ignition Resistance of Mock-Up Upholstered Furniture Assemblies, 2008a. \$47.00/each

ASTM E 1353, Standard Test Methods for Cigarette Ignition Resistance of Components of Upholstered Furniture 2008a(e1). \$47.00/each

ASTM E 1354, Standard Test Method for Heat and Visible Smoke Release Rates for Materials and Products Using an Oxygen Consumption Calorimeter, 2009. \$56.40/each

ASTM E 1537, Standard Test Method for Fire Testing of Upholstered Furniture, 2007. \$70.80/each

ASTM E 1590, Standard Test Method for Fire Testing of Mattresses, 2007. \$70.80/each

ASTM E 1591, Standard Guide for Obtaining Data for Deterministic Fire Models, 2007. \$47.00/each

ASTM E 1966, Standard Test Method for Fire-Resistive Joint Systems, 2007. \$47.00/each

ASTM E 2072, Standard Specification for Photoluminescent (Phosphorescent) Safety Markings, 2010. \$36.00/each

ASTM E 2074, Standard Test Method for Fire Tests of Door Assemblies, Including Positive Pressure Testing of Side-Hinged and Pivoted Swinging Door Assemblies, 2000, revised 2004. 56.40/each

ASTM E 2307, Standard Test Method for Determining Fire Resistance of Perimeter Fire Barrier Systems Using Intermediate-Scale, Multi-Story Test Apparatus, 2010. \$47.00/each

ASTM E 2404, Standard Practice for Specimen Preparation and Mounting of Textile, Paper, or Vinyl Wall or Ceiling Coverings to Assess Surface Burning Characteristics, 2008. \$43.20/each

ASTM E 2573, Standard Practice for Specimen Preparation and Mounting of Site-Fabricated Stretch Systems to Assess Surface Burning Characteristics, 2007a. \$43.20/each

ASTM E 2599, Standard Practice for Specimen Preparation and Mounting of Reflective Insulation Materials and Radiant Barrier Materials for Building Applications to Assess Surface Burning Characteristics, 2009. \$43.20/each

ASTM E 2652, Standard Test Method for Behavior of Materials in a Tube Furnace with a Cone-Shaped Airflow Stabilizer, at 750 Degrees C, 2009a. \$56.40/each

ASTM F 851, Standard Test Method for Self-Rising Seat Mechanisms, 1987 (2005). \$36.00/each

ASTM F 1577, Standard Test Methods for Detention Locks for Swinging Doors, 2005. \$70.80/each

ASTM G 155, Standard Practice for Operating Xenon Arc Light Apparatus for Exposure of Non-Metallic Materials, 2005a. \$47.00/each

2.3.7 FMGR Publication.

FM Global Research, FM Global, 1301 Atwood Avenue, P.O. Box 7500, Johnston, RI 02919. www.fmglobal.com

ANSI/FM 4880, American National Standard for Evaluating Insulated Wall or Wall and Roof/Ceiling Assemblies, Plastic Interior Finish Materials, Plastic Exterior Building Panels, Wall/Ceiling Coating Systems, Interior or Exterior Finish Systems, 2007. Free

FM Approval Standard 6921, Containers for Combustible Waste, 2004. Free

UL 300, Standard for Fire Testing of Fire Extinguishing Systems for Protection of Commercial Cooking Equipment, 2005. \$502.00/each at www.comm-200.com

2.3.8 NEMA Publications. National Electrical Manufacturers Association, 1300 North 17th Street, Ste 1847, Rosslyn, VA 22209. www.nema.org

NEMA Sb 30, Fire Service Annunciator and Interface, 2005. \$69.00/each

2.3.9 UL Publications. <u>www.UL.com</u>; purchase UL standards at <u>www.comm-200.com</u> per UL website. (All revisions included in purchase of standard)

Underwriters Laboratories Inc., 333 Pfingsten Road, Northbrook, IL 60062.

ANSI/UL 9, Standard for Fire Tests of Window Assemblies, 2009. \$631.00/each

ANSI/UL 10B, Standard for Fire Tests of Door Assemblies, 2008, revised 2009. \$631.00/each

ANSI/UL 10C, Standard for Positive Pressure Fire Tests of Door Assemblies, 2009. \$631.00/each

ANSI/UL 263, Standard for Fire Tests of Building Construction and Materials, 2007. \$631.00/each

ANSI/UL 294, Standard for Access Control System Units, 1999, revised 2010. \$502.00/each

UL 300A, Extinguishing System Units for Residential Range Top Cooking Surfaces, 2006. \$275.00/each

ANSI/UL 305, Standard for Safety Panic Hardware, 1997. \$502.00/each

ANSI/UL 555, Standard for Fire Dampers, 2006, Revised 2010. \$998.00/each

ANSI/UL 555S, Standard for Smoke Dampers, 1999, Revised 2010. \$502.00/each

ANSI/UL 723, Standard for Test for Surface Burning Characteristics of Building Materials, 2009, revised 2010. \$631.00/each

ANSI/UL 790, Test Methods for Fire Tests of Roof Coverings, 2004, revised 2008. \$502.00/each

ANSI/UL 924, Standard for Emergency Lighting and Power Equipment, 2006, Revised 2009. \$998.00/each

ANSI/UL 1040, Standard for Fire Test of Insulated Wall Construction, 1996, revised 2007. \$502.00/each

ANSI/UL 1315, Standard for Safety for Metal Waste Paper Containers, 2007. \$502.00/each

ANSI/UL 1479, Standard for Fire Tests of Through-Penetration Firestops, 2003, revised 2010. \$502.00/each

ANSI/UL 1715, Standard for Fire Test of Interior Finish Material, 1997, revised 2008. \$897.00/each

ANSI/UL 1784, Standard for Air Leakage Tests for Door Assemblies, 2001, revised 2009. \$502.00/each

ANSI/UL 1975, Standard for Fire Tests for Foamed Plastics Used for Decorative Purposes, 2006. \$998.00/each

ANSI/UL 1994, Standard for Luminous Egress Path Marking Systems, 2004, revised 2010. \$998.00/each

ANSI/UL 2079, Standard for Tests for Fire Resistance of Building Joint Systems, 2004, revised 2008. \$502.00/each

2.3.10 U.S. Government Publication. www.gpoaccess.gov/CFR

U.S. Government Printing Office, Washington, DC 20402.

Title 16, Code of Federal Regulations, Part 1500 and Part 1507. Free

Title 16, Code of Federal Regulations, Part 1632, "Standard for the Flammability of Mattresses and Mattress Pads (FF-4-72)." Free

2.3.11 Other Publication.

Merriam-Webster's Collegiate Dictionary, 11th edition, Merriam-Webster, Inc., Springfield, MA, 2003. www.merriam-webster.com \$27.95/each

2.4 References for Extracts in Mandatory Sections.

NFPA 1, Uniform Fire Code™, 2012 edition. \$85.50/each

NFPA 72[®], National Fire Alarm Code[®], 2010 edition. \$85.50/each

NFPA 80, Standard for Fire Doors and Fire Windows, 2010 edition. \$40.50/each

NFPA 88A, Standard for Parking Structures, 2011 edition. \$35.00/each

NFPA 288, Standard Methods of Fire Tests of Floor Fire Door Assemblies Installed Horizontally in Fire Resistance–Rated Floor Systems, 2009 edition. \$35.00/each

NFPA 301, Code for Safety to Life from Fire on Merchant Vessels, 2008 edition. \$44.50/each

- NFPA 415, Standard on Airport Terminal Buildings, Fueling Ramp Drainage, and Loading Walkways, 2008 edition. \$35.00/each
- NFPA 914, Code for Fire Protection of Historic Structures, 2010 edition. \$64.00/each
- NFPA 921, Guide for Fire and Explosion Investigations, 2011 edition. \$85.50/each ASCE/SEI 7, Minimum Design Loads for Buildings and Other Structures, 2010 www.asce.org \$165.00
- (4) Rules promulgated by the Michigan department of licensing and regulatory affairs, bureau of fire services, are available from the Michigan government website, www.michigan.gov/orr and linking to "Michigan Administrative Code" and for inspection from the Michigan Department of Licensing and Regulatory Affairs, Bureau of Fire Services, 3101 Technology Blvd., Ste. H, Lansing, Michigan 48910 or by calling (517) 241-8847.
- (5) Rules pertaining to the Michigan elevator code, R 408.7001 to R 408.8695; the Michigan mechanical code, R 408.30901 to R 408.30998; the Michigan building code, R 408.30401 to R 408.30499; the Michigan electrical code, R 408.30801 to R 408.30880; and, the Michigan plumbing code, R 408.30701 to R 408.30796, are available for inspection at the office of the Michigan department of licensing and regulatory affairs, bureau of construction codes. Copies of these rules are available from the Michigan government website, www.michigan.gov/orr and linking to "Michigan Administrative Code" or by contacting the Michigan Department of Licensing and Regulatory Affairs, Bureau of Construction Codes, 611 West Ottawa St., First Floor, Lansing, MI 48909.

History: 2001 AACS; 2017 AACS.

R 29.1703 Definitions.

Rule 3. As used in these rules:

- (a) "Act" means 1941 PA 207, MCL 29.1 to 29.33.
- (b) "Authority having jurisdiction" means the director of the Michigan department of licensing and regulatory affairs, an employee of the department of licensing and regulatory affairs appointed by the director to implement the act, or an employee of a city, village, or township delegated to enforce the code under the provisions of section 2b, MCL 29.2b, of the act.
- (c) "Code" means national fire protection association standard no. 101, 2012 edition, entitled "Life Safety Code."
- (d) "Cosmetic remodeling" means surface changes made solely to the wall, floor, or ceiling that do not decrease the fire rating of the wall, floor, or ceiling, including the replacement of windows and doors.
- (e) "Existing" means a building constructed and occupied as a penal facility before the effective date of these rules.
- (f) "Maintenance" means repair that is required to keep the building and its component parts in an operative condition at all times. "Maintenance" includes the replacement of a building's components when, for any reason, they become undependable or inoperable. "Maintenance" does not include renovation.
- (g) "Penal facility" means a detention or correctional occupancy that provides sleeping facilities for 1 or more residents and that is occupied by persons who are

generally prevented from exiting an area because of security measures not under the occupants' control. Only the penal facilities as described in section 62 of 1953 PA 232, MCL 791.262, are considered a "penal facility".

History: 2001 AACS; 2017 AACS.

R 29.1704 Plans and specifications.

- Rule 4. (1) A penal facility or designated representative of that facility shall submit plans and specifications to the bureau of fire services for all projects that involve construction, remodeling, renovation, modification, reconstruction, or an addition.
- (2) A penal facility or designated representative of that facility need not submit plans and specifications to the bureau of fire services for routine maintenance functions; however, the penal facility or designated representative of that facility shall ensure that all work is in compliance with these rules.
- (3) Plans and specifications for work that involves the practice of architecture or engineering, as defined by the provisions of article 20 of the occupational code, 1980 PA 299, MCL 339.2001 to 339.2014, shall bear the seal of an architect or professional engineer who is licensed pursuant to the occupational code.
- (4) Plans and specifications shall contain all of the following information, as applicable:
 - (a) A complete floor plan and layout of the building drawn accurately to scale.
 - (b) The use of each room.
 - (c) The dimensions of each room.
- (d) The size, location, direction of swing, and fire rating of each door and frame assembly.
 - (e) The size and location of windows.
 - (f) The wall construction, including the fire-resistance rating.
- (g) The type of construction as identified by the provisions of the national fire protection association standard no. 220, entitled "Standard for Types of Building Construction," as adopted in R 29.1702.
 - (h) The number of stories, including basement and attic areas.
 - (i) The interior finish classification.
 - (i) The location of fuel-fired equipment.
 - (k) The type of furnace and water heater.
 - (1) Air-handling system specifications.
- (m) Fire detection and alarm system plans and specifications that are in compliance with the provisions of the act.
- (n) Sprinkler or other suppression system plans and specifications that are in compliance with the provisions of the act.
 - (o) The type, size, and location of fire extinguishers.
- (p) Other pertinent information that is required to determine compliance with these rules.
- (5) Plan approval that is given before the effective date of these rules shall terminate 6 months after the effective date of these rules if construction has not started. However, upon written request to the bureau of fire services, the bureau may grant an approval extension in a specific instance.

R 29.1705 Inspection during construction; approval for occupancy.

- Rule 5. (1) During construction, renovation, modification, reconstruction, addition, or remodeling, the architect, professional engineer, or penal facility's designated representative shall notify the bureau of fire services, in writing, when the building is ready for inspection under both of the following conditions:
- (a) When the building is framed and mechanical systems are substantially complete, but before concealment.
 - (b) Upon completion of construction.
- (2) A newly constructed facility or a facility that is being remodeled or added to shall not be occupied, in whole or in part, without the approval of the bureau of fire services.

History: 2001 AACS; 2017 AACS.

R 29.1706 Projects affecting outside configuration of building; site plan and specifications; bureau of fire services or local fire department specifications; fire safety measures during construction.

- Rule 6. (1) For a project that involves construction, addition, or remodeling that affects the outside configuration of a building, and is part of the building plans and specifications otherwise required by these rules, the penal facility or designated representative of that facility shall provide the bureau of fire services and the local fire department with a site plan and specifications that detail all of the following:
 - (a) The available water supply.
 - (b) Hydrant locations.
 - (c) Vehicle access routes.
 - (d) Fire lanes.
- (2) The authority having jurisdiction or local fire department may specify any of the following:
 - (a) The size of the water mains that supply the hydrants.
 - (b) The location of hydrants.
 - (c) The locations and dimensions of fire department vehicle access routes.
 - (d) The posting of fire lanes.
- (3) As soon as possible during construction, the penal facility or designated representative of that facility shall take appropriate fire safety measures, including providing fire extinguishers and fire suppression systems and establishing access routes to the building that can be traveled by fire department vehicles.

History: 2001 AACS; 2017 AACS.

R 29.1707 Electrical equipment; inspections; certificate.

- Rule 7. (1) The penal facility or a designated representative of that facility shall ensure that the electrical wiring and equipment, including an emergency supply if installed, complies with the applicable provisions of the Michigan electrical code, R 408.30801 to R 408.30880. Copies of the rules are available from the Michigan Department of licensing and regulatory affairs, Bureau of Construction Codes, 611 West Ottawa St., First Floor, Lansing, MI 48909.
- (2) The electrical inspection shall be made by an electrical inspection authority acceptable to the bureau of fire services. The electrical inspection authority shall issue a final certificate of compliance covering the installation and the penal institution or designated representative shall provide a copy of the certificate to the bureau of fire services.

History: 2001 AACS; 2017 AACS.

R 29.1708 Universal amendments.

Rule 8. Sections 4.6.10.1, 8.7.3.1, 9.1.1, 9.1.2, 9.4.2.1, 9.4.2.2, and 43.1.2.1 of the code adopted by reference in R 29.1702 are amended and sections 9.4.3.1, 9.4.3.2, and 43.6.4.3 are deleted, as follows:

- 4.6.10.1. A person may occupy a building or portion of a building during construction, repair, alterations, renovations, modification, reconstruction, or additions only if all means of egress and all fire protection features in the building and on-site are in place and continuously maintained for the part occupied and if the occupied portion is separated from the part under construction by a wall that has a 1-hour-fire-resistance rating. The temporary 1-hour-rated wall that is used for separation may be constructed of combustible material. Instead of having all means of egress and fire protection features in place, the penal facility or designated representative of that facility may take other measures that would provide equivalent safety if approved by the bureau of fire services. NFPA 241 standard for safeguarding construction, alteration, and demolition operations, may be consulted for further guidance.
- 8.7.3.1 The penal facility or designated representative shall store and handle flammable and combustible liquids in compliance with R 29.5101 to R 29.5516.
- 9.1.1. The penal facility or designated representative of that facility shall ensure that equipment that utilizes gas and related gas piping is installed in compliance with the provisions of NFPA 54, National Fuel Gas Code, and NFPA 58, liquefied petroleum gas code, as adopted under R 29.1702, or rules promulgated under the act.
- 9.1.2. Electrical wiring and equipment shall be in compliance with the Michigan electrical code, R 408.30801 to R 408.30880.
- 9.4.2.1. The penal facility or designated representative of that facility shall ensure that new elevators, escalators, dumbwaiters, and moving walks are installed in compliance with the Michigan elevator code, R 408.7001 to R 408.8699.
- 9.4.2.2. The penal facility or designated representative shall ensure that existing elevators, escalators, dumbwaiters, and moving walks are in compliance with the Michigan elevator-code, R 408.7001 to R 408.8699.
 - 9.4.3.1. Deleted
 - 9.4.3.2. Deleted

- 43.1.2.1. The portion or portions of a building undergoing repair, renovation, modification, or reconstruction shall comply with both of the following:
 - (1) Requirements of the applicable existing occupancy chapters.
 - (2) Requirements of the applicable section of this chapter.

43.6.4.3. Delete.

History: 2001 AACS; 2017 AACS.

R 29.1710 Fire reporting.

Rule 10. (1) Upon discovery of any unwanted fire, regardless of magnitude, the facility staff member shall immediately notify the penal facility control center.

- (2) Whenever an unwanted fire occurs, or upon discovery of an unwanted fire, even though it has been extinguished, the facility staff member shall immediately notify the facility control center of the existence of the fire, the circumstances of the fire, and the location of the fire. This requirement does not prohibit the penal facility from using all diligence necessary to extinguish the fire prior to the arrival of the fire department.
- (3) Whenever a fire requires the local fire department to respond, the penal facility or the designated representative shall notify the bureau of fire services of all details of the fire not later than the end of the next business day following the incident.

History: 2001 AACS; 2017 AACS.

R 29.1711 Rescission.

Rule 11. R 29.601 to R 29.622 of the Michigan Administrative Code are rescinded.

History: 2001 AACS.

PART 2. NEW PENAL FACILITIES

R 29.1721 Applicability.

Rule 21. This part applies to fire safety requirements for the construction, operation, or maintenance of all new penal facilities.

History: 2001 AACS; 2017 AACS.

R 29.1722 Rescinded.

History: 2001 AACS; 2017 AACS.

R 29.1723 Amendments to chapter 22 of the code.

Rule 23. Section 22.7.7 of the code is amended, as follows:

Section 22.7.7. Doors and door hardware not in proper operating condition shall be repaired or replaced without undue delay.

History: 2001 AACS; 2017 AACS.

PART 3. EXISTING PENAL FACILITIES

R 29.1731 Applicability.

Rule 31. This part applies to fire safety requirements for all existing penal facilities.

History: 2001 AACS; 2017 AACS.

R 29.1732 Rescinded.

History: 2001 AACS; 2017 AACS.

R 29.1733 Amendments to chapter 23 of the code.

Rule 33. Sections 23.1.6.1, 23.3.5.2, 23.3.8, and 23.7.7 of the code are amended, table 23.1.6.1 of the code is deleted and sections 23.1.6.3, 23.1.6.4, 23.2.3.2.1, 23.3.8.1, 23.4.3.1, and 23.7.5.1 are added to the code to read as follows:

23.1.6.1 Detention and correctional occupancies shall be limited to the following types of building construction, unless otherwise provided in Section 23.1.6.3 or Section 23.1.6.4:

| Type of | Below | 1st | 2nd | 3rd | 4th story |
|--------------|----------|--------|--------|--------|-------------|
| construction | 1st stor | y stor | y stor | y stor | y and above |
| | | | | | |
| I (443) | A.S. | A.S. | A.S. | A.S. | A.S. |
| I (332) | A.S. | A.S. | A.S. | A.S. | A.S. |
| II (222) | A.S. | A.S. | A.S. | A.S. | A.S. |
| II (111) | A.S. | A.S. | A.S. | N.P. | N.P. |
| III (211) | A.S. | A.S. | A.S. | N.P. | N.P. |
| IV (2HH) | A.S. | A.S. | A.S. | N.P. | N.P. |
| V (111) | A.S. | A.S. | A.S. | N.P. | N.P. |
| II (000) | A.S. | A.S. | A.S. | N.P. | N.P. |
| III (200) | A.S. | A.S. | A.S. | N.P. | N.P. |
| V (000) | A.S. | A.S. | A.S. | N.P. | N.P. |

A.S.: Permitted if the entire building is protected throughout by an approved automatic sprinkler system in accordance with section 9.7.1.1(1) of the code.

N.P.: Not permitted.

Table 23.1.6.1. Deleted.

- 23.1.6.3. Existing penal facilities built prior to November 17, 1982 shall be constructed of fire-resistive construction and not attached to a wooden building, except for penal facilities that house low security day-parole inmates, or for a multi-purpose room. A building of combustible construction may be attached to a jail if both of the following apply:
- (a) A 2-hour fire rated noncombustible separation is maintained between the buildings with a 90-minute fire rated door and no other openings allowed.
- (b) An automatic smoke detection system is installed in the combustible building that activates an alarm within a control center in case of fire.
- 23.1.6.4. Existing penal facilities that allow free egress, but have holding cells used for sleeping for a maximum of 3 occupants, shall be protected throughout by an approved, supervised automatic sprinkler system pursuant to Section 23.3.5. The penal facility or designated representative shall comply with this requirement within 5 years of the effective date of these rules.
- 23.2.3.2.1 For buildings that are not completely protected by an approved supervised automatic sprinkler system and built prior to November 17, 1982, corridors required for egress shall not be less than 60" in width.
- 23.3.5.2. Where required by section 23.1.6.1, facilities shall be protected throughout by an approved, supervised automatic sprinkler system in accordance with 23.3.5.3. 23.3.5.2.1. The requirement of section 23.3.5.2 does not apply to existing penal facilities built prior to November 17, 1982 and in compliance with Section 23.1.6.3.
- 23.3.8.1. The requirement of section 23.3.8 does not apply to existing penal facilities built prior to November 17, 1982 and in compliance with section 23.1.6.3.
- 23.4.3.1. The requirement of 23.4.3 does not apply to existing penal facilities built prior to November 17, 1982.
- 23.7.5.1. The requirement of 23.7.5 does not apply to existing penal facilities built prior to November 17, 1982.
- 23.7.7. Doors and door hardware not in proper operating condition shall be repaired or replaced without delay.

History: 2001 AACS; 2017 AACS.