Codes and Regulatory Agencies

Introduction

The University of Michigan is a State of Michigan constitutional corporation, governed by a Board of Regents elected by the People of the State of Michigan and has a great deal of regulatory autonomy (refer to Michigan Legislature Article VIII section 5). It is exempt from local building and zoning ordinances and subject to State of Michigan laws and regulations that are clearly intended to apply to universities. In lieu of local building ordinances and State of Michigan laws and regulations that do not apply at the University, the University chooses to require that new construction adhere to a number of well-established building codes and standards, as listed in this Section.

Regardless of origin or enforcing agency, all of the applicable building codes and standards listed and codes and standards referenced within the codes listed below are to be followed. Note, for instance, that compliance with the State of Michigan Bureau of Fire Safety rules for schools and/or dormitories does not eliminate the need to also comply with the Michigan Building Code, and that compliance with the 2010 Americans with Disabilities Act does not eliminate the need to comply with the barrier free provisions of the Michigan Building Code. Additional codes may apply for particular situations, such as for Medical Center construction; these are to be considered on the case-to-case basis. Many times adherence to narrow scope codes and/or standards is required by the general codes listed below.

New editions of building codes are published from time to time. For each project, the edition of building codes cited in this section form which the University of Michigan is listed as the “Enforcing Agency” is to be as follows:

> The edition of building codes is to be as listed in this section as of the beginning of the design development phase of a project unless construction documents are submitted to the University for final review more than a year after adoption of the new version of the code. If more than one year has transpired between adoption of the new code and submission of construction documents to the University for final review, the edition of the building codes listed in this section as of submission of construction documents applies.

The University employs building inspectors, who are the authority having jurisdiction on all University property. Refer to each code diction for authority having jurisdiction contact information.

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Building Codes for University of Michigan

Michigan Building Code 2021

The Michigan Building Code 2021 (adopted April 9, 2025) promulgated by the State of Michigan Department of Licensing and Regulatory Affairs Bureau of Construction Codes. Including rule 408.30401 Rule 401 as printed on the interior cover of the Michigan Building Code.
By local rule, the following exceptions/modifications are applied to the Michigan Building Code:

- Section 509 Incidental Uses Article 509.1 General Add the Following Exception 2:
Exception 2: Incidental use for non-hazardous storage between 100 and 250 square feet in fully suppressed existing ambulatory care facilities and existing 1-2 occupancies, converted to non-hazardous storage rooms: with partitions capable of resisting the passage of smoke with a solid door which self-closes, and automatic sprinkler system.

- Section 717 Ducts and Air Transfer Openings Article 717.5.3 Shaft Enclosures Add Exception Number 6:
Exception 6. In other than I or H occupancies or Michigan Medicine owned and/or occupied facilities, when equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1, smoke dampers are not required at shaft enclosures unless specifically required by other sections of the code. Instead, provide smoke dampers at locations and to function as prescribed in the 2012 edition of NFPA 90A - 'Standard for the Installation of Air-Conditioning and Ventilating Systems'.

- Section 907 Fire Alarm and Detection Systems Article 907 Occupant Notification Sub Article:

907.5.2.3 Visual Alarms:

Add Exception 6. In all occupancies visual alarms are not required in the following:

a) Offices less than 200 square feet.
b) Closets and coat rooms.
c) Electrical closets.
d) Mechanical pipe chases.
e) Crawl Spaces.
f) Small restrooms with access inside classrooms.
g) Custodial closets.
h) Storage rooms less than 200 square feet.
i) Unoccupied spaces.

907.5.2.3.3 Group R-2:

Reference the following interpretation of the use of the word "capability" in the sentence "all dwelling units and sleeping units shall be provided with the capability to support visible alarm notification appliances…" Capability of the fire alarm system shall be addressed by the spare capacity already required in all U-M design guideline fire alarm circuits and fire alarm panels. This spare capacity in the circuits (raceways, and installed conduit), shall be available immediately after the fire alarm system is commissioned. The spare capacity at the panel, may be in the form of power supplies sized for the expansion, and/or in the form of sufficient (spare) mounting space in the panel for the additionally needed power supplies. Refer to U-M Design Guideline and master specifications for spare capacity requirements.

- Section 1010 Doors, Gates, and Turnstiles Article 1010.2.7 Stairway Doors Add the Following:

Exception 6. In existing buildings, doors on stair enclosures shall be permitted to be equipped with hardware that prevents reentry into the interior of the building, provided that egress is maintained and the doors are in compliance with the requirements of NFPA 101 - 2012, article 7.2.1.5.8.

-Chapter 10 Section 1009 Article 1009.8 Exceptions remove exception 1. This exception is not to be used.

- Chapter 11 Section 1105 Accessible Entrances Article 1105.1. Add the Following:
Accessible Public Exterior Entrances. All public exterior entrances provided in accordance with code must have at least one entrance door complying with Section 404.3 (Automatic and Power-Assisted Doors and Gates) of the ABAAS. Where an accessible public entrance has a vestibule with exterior and interior entrance doors, at least one exterior door and one interior door must comply with Section 404.3 of the ABAAS. Regardless of occupancy type or quantity referenced in 1105.1.1.

- Chapter 11 Section 1110 Other Features and Facilities Article:

1110.2.1.2 Exception Add the Following Item 4 to the List of Permitted Items:
(Adopted June 1, 2024 modified with 2021 adoption) Exception: The following additional plumbing fixtures shall be permitted in the family or assisted-use toilet room:

4. An adult changing station even if used for bathing.

1110.3A Between Section 1110.3 and 1110.4 and Corresponding Articles up to 1110.3A.4.4. (Adopted June 1, 2024)

1110.3A Adult Changing Stations:
Where provided, adult changing stations shall be accessible. Where required, adult changing stations shall be accessible and shall comply with Sections 1112.4.1 through 1110.3A.1 Where Required.
Not fewer than one adult changing station shall be provided in the following locations:

1. In Assembly and mercantile occupancies, where family or assisted- use toilet or bathing rooms are required to comply with Section 1109.2.1.
2. In Group B occupancies providing educational facilities for students above the 12th grade, where an aggregate of 12 or more water closets are required to serve the classrooms and lecture halls.
3. In Group E occupancies, where a room or space used for assembly purposes requires and aggregate of six or more water closets for the room or space.
4. In highway rest stops and highway service plazas.

1110.3A.2
Adult changing stations shall be located in toilet rooms that include only one water closet and only one lavatory. Fixtures located in such rooms shall be included in determining the number of fixtures provided in an occupancy. The occupants shall have access to the required adult changing station at all times that the associated occupancy is occupied.
Exception: Adult changing stations shall be permitted to be located in family or assisted toilet rooms required in Section 1109.2.1

1110.3A.3 Prohibited Location
The accessible route from the separate-sex toilet or bathing rooms to an accessible adult

changing station shall not require travel through security checkpoints.

1110.3A.4 Travel Distance
The adult changing station shall be located on an accessible route such that a person is not more than two stories above or below the story with the adult changing station and the path of travel to such facility shall not exceed 2000 feet (609.6 m).

1110.3A.5
Adult changing table surround walls and partitions within 2 feet (610 mm) measured horizontally from each end of the adult changing table and to a height of not less than 72 inches (1829 mm) above the floor shall have a smooth, hard, nonabsorbent surface, and except for structural elements, the materials used in such walls shall be of a type that is not adversely affected by moisture.

1110.3A.5
Adult changing table installations shall comply with ICC A117.1 -2017 Supplement 1 Standard for Accessible and Useable Buildings.

- Chapter 13 Energy Efficiency - Michigan Energy Code Part 10a rules incorporating the 2021 International Commercial Energy and ASHRAE 90.1 2019 – Effective April 22, 2025

- Chapter 32 Encroachments into the Public Right of Way:
Within the public right of way adhere also to City of Ann Arbor standards and specifications refer to the following web site for requirements:

Right of Way and Lane Closure Permits

Michigan Residential Code 2015

The Michigan Residential Code 2015 (adopted February 2016) promulgated by the State of Michigan Department of Licensing and Regulatory Affairs Bureau of Construction Codes. Including rule 408.30500 Rule 500 as printed on the interior cover of the Michigan Building Code which includes ASHRAE 2013.

Enforcing Agency —
University of Michigan Environment, Health & Safety Department (EHS) and Architecture, Engineering and Construction (AEC)

By local rule, the following exceptions/modifications are applied to the Michigan Residential Code Chapter 44:

Chapter 44 Referenced Standards ICC Standard Reference Number ICC/ANSI A117.1 – 2017 Standard for Accessible and Usable Buildings and Facilities – Effective March 1, 2020, adopted 2017 version in lieu of 2009.

ADA Standards for Accessible Design 2010

The ADA Standards for Accessible Design 2010 (adopted March 9, 2011) as required to comply with Section 504 of US Rehabilitation Act of 1973 Title II of Americans with Disabilities Act of 1990 and updated September 15, 2010. Also note that the University maintains a space-by-space database of non-compliance. Contact Architecture, Engineering and Construction for database information.

Notice of corrections are to be reported to Architecture, Engineering and Construction for the purpose of updating the database.

State and local government facilities must follow the requirements of the 2010 Standards, including both the Title II regulations at 28 CFR 35.151; and the 2004 ADAAG at 36 CFR part 1191, appendices B and D. In the few places where requirements between the two differ, the requirements of 28 CFR 35.151 prevail.

Enforcing Agency —
All federal agencies (on complaint basis) for U.S. Rehabilitation Act of 1973, U.S. Department of Justice and Architectural and Transportation Barriers Compliance Board (on complaint basis) for Americans with Disabilities Act.

2010 Americans with Disabilities Act

State of Michigan Health Care Safety Rules, Bureau of Fire Services (BFS)

The State of Michigan Health Care Safety Rules, Bureau of Fire Services (BFS) ((filed December 23, 2014) effective February 3, 2015) promulgated by the State of Michigan Bureau of Fire Services (incorporating by reference NFPA 101 – Life Safety Code 2012) and all other codes and standards currently enforced therein. Note this requires by reference compliance with NFPA 99 Health Care Facilities Code 2012.

For assistance in determining which projects are subject to plan review and inspection, and BFS fire alarm and fire suppression shop drawing review and inspection, MM FPD has developed a flowchart available at Bureau of Fire Services Flowchart. This flowchart has been reviewed by BFS, however it is not intended to replace professional judgment. Jurisdiction should be verified with BFS directly when it is not clear. Affirm decisions with MM Design Manager.

Enforcing Agency —
State of Michigan Department of Licensing and Regulatory Affairs
Bureau of Fire Services, Fire Safety Plan Review Division
525 W Allegan 4th Floor Lansing, MI. 48913-0001
(517) 241-8847

Administrative Rules

State of Michigan Dormitory Fire Safety Rules for Schools, Colleges and Universities

The State of Michigan Dormitory Fire Safety Rules for Schools, Colleges and Universities (effective January 5, 2017) promulgated by the State of Michigan Bureau of Fire Services (incorporating by reference NFPA 101 – Life Safety Code 2012). Note that this standard applies only to fire compartments of buildings which contain dormitories. A listing of Ann Arbor campus buildings that contain dormitory space is included at the end of this section.

Enforcing Agency —
State of Michigan Department of Licensing and Regulatory Affairs
Bureau of Fire Services, Fire Safety Plan Review Division
525 W Allegan 4th Floor Lansing, MI. 48913-0001
(517) 241-8847

Administrative Rules

State of Michigan Fire Safety Rules for Schools, Colleges and Universities

The State of Michigan Fire Safety Rules for Schools, Colleges and Universities ((filed May 19, 2016)

effective June 20, 2016) promulgated by the State of Michigan Bureau of Fire Services (incorporating by reference NFPA 101 – Life Safety Code 2012). Note that this standard applies only to fire compartments of buildings which contain instructional space (classrooms and/or instructional laboratories). A listing of Ann Arbor campus buildings that contain instructional space is included at the end of this section.

Enforcing Agency —
State of Michigan Department of Licensing and Regulatory Affairs Bureau of Fire Services, Fire Safety Plan Review Division
525 W Allegan 4th Floor Lansing, MI. 48913-0001
(517) 241-8847

Administrative Rules

State of Michigan Human Services for Child Care in a Child Care Center

The State of Michigan Human Services for Child Care in a Child Care Center promulgated by the State of Michigan Human Services. Note that this standard applies only to fire compartments of buildings which contain childcare centers. A listing of Ann Arbor campus buildings that contain Child Care Centers is included at the end of this section.

Enforcing Agency —
State of Michigan Department of Human Services
PO Box 30759 Lansing, MI. 48909-8150
(517) 241-2488

Administrative Rules

State of Michigan Department of Licensing and Regulatory Affairs
Bureau of Fire Services, Child Care Section
PO Box 30700 Lansing, MI. 48909

Application Form for Child Care Plan Review

Michigan Rehabilitation Code for Existing Buildings 2021

The Michigan Rehabilitation Code for Existing Buildings 2021 (adopted April 9, 2025) promulgated by the State of Michigan Department of Licensing and Regulatory Affairs Bureau of Construction Codes. Including Rule R408.30551 Rule 551 and R408.30552 Rule 552 as printed on the interior cover of the Michigan Rehabilitation Code for Existing Buildings. By local rule, the following exceptions/modifications are applied to the Michigan Rehabilitation Code:

Section 202 General Definitions -Technically Infeasible:
Add the following to the definition: Use of this definition as an exception to making something accessible must be approved by the University of Michigan project team and University of Michigan Building Code Committee. As required to use accessibility exception for egress must be approved by the University project team and the University Building Code Committee. Coordinate use of this exemption with the project design manager prior to use.

Section 306 Accessibility for Existing Buildings Section 306.7 Exception 2:
Accessible means of egress required by Chapter 10 of the Michigan Building Code are not required to be provided in existing buildings. (Buildings built prior to 2010 per US Access board are considered existing) Use of this exception must be approved by the University project team and University Building

Code Committee. As required to use accessibility exception for structural infeasibility must be approved by the University project team and the University Building Code Committee. Coordinate use of this exemption with the project design manager prior to use. (Adopted June 1, 2024)

Section 306 Accessibility for Existing Buildings Section 306.7.2:
Accessible means of egress code provision can only be used if approved by the Use of this exception must be approved by the University project team and University Building Code Committee. As required to use accessibility exception for structural infeasibility must be approved by the University project team and the University Building Code Committee. Coordinate use of this exemption with the project design manager prior to use. (Adopted June 1, 2024)

Section 306 Accessibility for Existing Buildings 306.7.13:
Add the requirement for Adult Changing Stations in the single occupant restroom as follows:
Where additional toilet facilities are being added, in occupancies where adult changing stations are required by 1109.3A of the Michigan Building Code, not fewer than one accessible family or assisted toilet room with an adult changing station shall be provided in accordance with Section 1109.3A of the Michigan Building Code. The adult changing station shall be permitted to be located in a single use family or assisted-use toilet room or bathing room complying with Ansi A117.1 requirements for the Adult Changing Table.

Chapter 7 Section 704 Means of Egress Article 704.4:
Add the following:
704.4 When exterior accessible entrances are altered by level 1 or higher alterations/renovations, where not already existing, provide at that public entrance at least one entrance door complying with Section 404.3 (Automatic and Power-Assisted Doors and Gates) of the ABAAS. Where an accessible public entrance has a vestibule with exterior and interior entrance doors, at least one exterior door and one interior vestibule door must comply with Section 404.3 of the ABAAS

Enforcing Agency —
University of Michigan Environment, Health & Safety Department (EHS) and Architecture, Engineering and Construction (AEC)

International Fire Code 2021

The International Fire Code 2021 (adopted April 9, 2025) promulgated by the International Code Council including appendix B-I. By local rule, the following exceptions/modifications are applied to the International Fire Code (adopted March 25, 2026):

Section 105.5.53:
105.5.53: Lithium Batteries. An operational permit is required for an accumulation of more than 15 cubic feet (0.42 m) of lithium-ion and lithium metal batteries, where required by Section 322.2 and for any operations conducting research, testing, manufacturing, or recycling of lithium-ion or lithium metal battery components, as required by Section 324.3.

Section 403.10.6:
403.10.6 Lithium-ion and lithium metal batteries:
An approved fire safety and evacuation plan to accordance with Section 404 shall be prepared and maintained for occupancies that involve activities for the research and development, testing, manufacturing, handling or storage of lithium-ion batteries or lithium metal batteries, or the repair or

servicing of vehicles powered by lithium-ion batteries or lithium metal batteries.
Exceptions: A fire safety and evacuation plan is not required for the storage or merchandising of the following:

1. New or refurbished batteries installed in the equipment, devices for vehicles they are designed to power.
2. New or refurbished batteries packed for use with the equipment or vehicles they are designed to power for merchandising purposes.
3. New or refurbished lithium-ion batteries rated at not more than 300 watt-hours and lithium metal batteries containing not more than 25 grams of lithium metal in their original packaging.

403.10.6.1 Mitigation planning:
The approved fire safety and evacuation plan shall include thermal runway event mitigation measures. These measures include activities undertaken to prevent thermal runaway, early detection or thermal runaway event and mitigation measures to be undertaken to limit the size and impact of the event on occupant and the facility.

Section 322 Lithium-Ion and Lithium Metal Battery Storage:
322.1 General:
The storage of lithium-ion and lithium metal batteries shall comply with 322. Exceptions:

1. New or refurbished batteries installed in the equipment, devices or vehicles they are designed to power.
2. New or refurbished batteries packed for use with the equipment, devices or vehicles they are designed to power.
3. Batteries in original retail packaging that are rated at not more than 300 watt-hours for lithium-ion batteries or contain not more than 25 grams of lithium metal for lithium metal batteries.
4. Temporary storage of batteries or battery components during the battery manufacturing process prior to completion of final quality control checks.
5. Temporary storage of batteries during the vehicle manufacturing or repair process.

322.2 Permits:
Permits shall be required for an accumulation of more than 15 cubic feet (0.42 m3) of lithium-ion and lithium metal batteries, other than batteries listed in the exceptions to Section 322.1, as set forth in Section 105.5.53.

322.3 Fire Safety Plan:
A fire safety plan shall be provided in accordance with Section 404. In addition, the fire safety plan shall include emergency response actions to be taken upon detection of a fire or possible fire involving lithium-ion or lithium metal battery storage.

322.4 Storage Requirements:
Lithium-ion and lithium metal batteries shall be stored in accordance with Section 322.4.1, 322.4.2 or 322.4.3, as applicable.

322.4.1 Limited Indoor Storage in Containers:
Not more than 15 cubic feet (0.42 m3) of lithium-ion or lithium metal batteries shall be permitted to be stored in containers in accordance with all of the following:

1. Containers shall be open top and constructed of noncombustible materials or shall be approved for battery collection.
2. Individual containers and groups of containers shall not exceed a capacity of 7.5 cubic feet (0.21 m3).
3. A second container or group of containers shall be separated by not less than 3 feet (914 mm) of open space or 10 feet (3048 mm) of space that contains combustible materials.
4. Containers shall be located not less than 5 feet (1524 mm) from exits or exit access doors.

322.4.2 Indoor Storage Areas:

Indoor storage areas for lithium-ion and lithium metal batteries, other than those complying with Section 322.4.1, shall comply with Sections 322.4.2.1 through 322.4.2.6.

322.4.2.1 Technical Opinion and Report:

A technical opinion and report complying with Section 104.8.2 shall be prepared to evaluate the fire and explosion risks associated with the indoor storage area and to make recommendations for fire and explosion protection. The report shall be submitted to the fire code official and shall require the fire code official's approval prior to issuance of a permit. In addition to the requirements of Section 104.8.2, the technical opinion and report shall specifically evaluate the following:

1. The potential for deflagration of flammable gases released during a thermal runaway event.
2. The basis of design for an automatic sprinkler system or other approved fire suppression system. Such design basis shall reference relevant full-scale fire testing or another approved method of demonstrating sufficiency of the recommended design.

322.4.2.2 Construction Requirements:

Where indoor storage areas for lithium-ion and lithium metal batteries are located in a building with other uses, battery storage areas shall be separated from the remainder of the building by 2-hour rated fire barriers or horizontal assemblies. Fire barriers shall be constructed in accordance with Section 707 of the International Building Code, and horizontal assemblies shall be constructed in accordance with Section 711 of the International Building Code. Exceptions:

1. Where battery storage is contained in one or more approved prefabricated portable structures providing a complete 2-hour fire-resistance-rated enclosure, fire barriers and horizontal assemblies are not required.
2. Where battery storage is limited to new batteries in packaging that has been demonstrated to and approved by the fire code official as sufficient to isolate a fire in packaging to the package interior, fire barriers and horizontal assemblies are not required.

322.4.2.3 Fire Protection Systems:

Indoor storage areas for lithium-ion and lithium metal batteries shall be protected by an automatic sprinkler system complying with Section 903.3.1.1 or an approved alternative fire suppression system. The system design shall be based on recommendations in the approved technical opinion and report required by Section 322.4.2.1.

322.4.2.4 Fire Alarm Systems:
Indoor storage areas for lithium-ion and lithium metal batteries shall be provided with an approved automatic fire detection and alarm system complying with Section 907. The fire detection system shall use air-aspirating smoke detection, radiant energy-sensing fire detection or both.

322.4.2.5 Explosion Control:
Where the approved technical opinion and report required by Section recommends explosion control, explosion control complying with Section 911 shall be provided.

322.4.2.6 Reduced Requirements for Storage of Partially Charged Batteries:
Indoor storage areas for lithium-ion and lithium metal batteries with a demonstrated state of charge not exceeding 30 percent shall not be required to comply with Sections 322.4.2.1, 322.4.2.2 and 322.4.2.5, provided that procedures for limiting and verifying that the state of charge will not exceed 30 percent have been approved.

322.4.3 Outdoor Storage:
Outdoor storage of lithium-ion or lithium metal batteries shall comply with Sections 322.4.3.1 through 322.4.3.3.

322.4.3.1 Distance from Storage to Exposures:
Outdoor storage of lithium-ion or lithium metal batteries, including storage beneath weather protection in accordance with Section 414.6.1 of the International Building Code, shall comply with one of the following:

1. Battery storage shall be located not less than 20 feet (6096 mm) from any building, lot line, public street, public alley, public way or means of egress.
2. Battery storage shall be located not less than 3 feet (914 mm) from any building, lot line, public street, public alley, public way or means of egress, where the battery storage is separated by a 2-hour fire-resistance-rated assembly without openings or penetrations and extending 5 feet (1524 mm) above and to the sides of the battery storage area.
3. Battery storage shall be located not less than 3 feet (914 mm) from any building, lot line, public street, public alley, public way or means of egress, where batteries are contained in approved, prefabricated portable structures providing a complete 2-hour fire-resistance-rated enclosure.

322.4.3.2 Storage Area Size Limits and Separation:
Outdoor storage areas for lithium-ion or lithium metal batteries, including storage beneath weather protection in accordance with Section 414.6.1 of the International Building Code, shall not exceed 900 square feet (83.6 m2). The height of battery storage in such areas shall not exceed 10 feet (3048 mm). Multiple battery storage areas shall be separated from each other by not less than 10 feet (3048 mm) of open space.

322.4.3.3 Fire Detection:
Outdoor storage areas for lithium-ion or lithium metal batteries, regardless of whether such areas are open, under weather protection or in a prefabricated portable structure, shall be provided with an approved automatic fire detection and alarm system complying with Section 907. The fire detection system shall use radiant energy-sensing fire detection.

Section 324 Lithium-Ion and Lithium Metal Battery Research, Testing, Manufacturing, or Recycling:

324.1 General:

The research, testing, manufacturing, or recycling of lithium-ion and lithium metal batteries shall comply with this Section.

324.2 Scope:

Any occupancy where one or more of the following operations involving lithium-ion or lithium metal battery components are conducted shall comply with Sections 324.3 through 324.11.

1. Where batteries or cells are tested, modified, or subjected to load testing, cycling, thermal tests, short circuit, impact, penetration, crushing, overcharge, shock, vibration, or similar conditions.
2. Where battery components are researched, tested, or developed.
3. Where batteries are manufactured.
4. Where batteries are recycled, dismantled, repaired, or refurbished.
    - 324.2.1 Collection and Collating Facilities:
      Facilities where batteries are only collected and collated for offsite recycling processing or disposal are not regulated by this section. Such facilities shall comply with Section 322.

324.3 Permits:

An operational permit in accordance with Section 105.5.53 shall be required.

324.4 Fire Safety Plan:

A fire safety plan shall be provided in accordance with Section 403.10.6.

324.5 Technical Opinion and Report:

A technical opinion and report complying with Section 104.8.2 shall be prepared to evaluate the fire and explosion risks associated with research, testing, manufacturing, and recycling and to make recommendations including the necessary mitigation measures for all identified risks and for the fire and explosion protection design basis. The report shall be submitted to the fire code official for approval. The technical opinion and report shall specifically evaluate the following:

1. Compliance with Section 322.
2. Hazardous materials storage, use, and handling, including Group H Occupancy requirements, where applicable.
3. Combustible dust hazards, including cathode and anode powders; notching and cutting equipment; and other processes that involve or generate combustible dusts or powders, as applicable.
4. Storage, distribution, and dispensing of flammable liquids or gases, including electrolytes as applicable.
5. Protection of areas and equipment where formation, aging, and testing of batteries or cells occurs, including fire suppression, fire or gas detection, thermal runaway prevention, ventilation, and emergency response to runaway cells.
6. Storage of batteries or cells, including high piled storage requirements where storage exceeds 6 feet (1.82 m) in height.
7. Firefighting access and water supply.
8. Hazards involving flying debris during fire incidents igniting adjacent storage areas, buildings, or

other exposure hazards.

9. The basis of design for an automatic sprinkler system or other approved fire suppression system. Such design basis shall reference relevant full-scale fire testing or another approved method of demonstrating sufficiency of the recommended design.
10. An evaluation of the suitability of the equipment used.
11. Handling, storage, and monitoring of damaged, defective, recalled, and out-of-specification batteries and cells.
12. Other items as required by the fire code official.

324.6 Storage:

Lithium metal and lithium-ion batteries shall be stored in accordance with Section 322.

324.7 Equipment:

Equipment used in research, testing, recycling, and manufacturing of lithium-ion and lithium metal batteries shall be designed for the intended use and evaluated in the technical report.

324.8 Fire protection:

An approved automatic sprinkler system complying with Section 903 shall be provided in buildings where lithium ion or lithium metal batteries are researched, tested, manufactured, or recycled.

324.9 Fire detection:

An approved automatic fire detection and alarm system complying with Section 907 shall be provided in buildings where lithium ion or lithium metal batteries are researched, tested, manufactured, or recycled.

324.10 Fire resistant separation:

Indoor rooms or areas where any of the following operations are conducted shall be separated from other portions of the building by 2-hour fire-resistance-rated fire barriers and horizontal assemblies. Fire barriers shall be constructed in accordance with Section 707 of the 2021 International Building Code, and horizontal assemblies shall be constructed in accordance with Section 711 of the 2021 International Building Code.

1. Research or manufacturing areas where more than 2kWh of lithium ion or lithium metal batteries are charged, tested, or undergo processes such as formation and aging.
2. Where any quantity of batteries or cells undergo destructive testing such as thermal, short circuit, impact, nail penetration, crushing, overcharge, or similar testing that can reasonably be expected to result in failure of the battery or cell.
3. Where any quantity of lithium ion or lithium metal batteries undergo recycling processes including dismantling, repair, refurbishing, incineration, or similar processes.

324.11 Materials:

Hazardous materials stored, used, handled, and generated in lithium ion and lithium metal battery manufacturing, research, testing, or recycling shall be in accordance with Chapters 50 through 67, and the 2021 International Building Code.

Enforcing Agency —
University of Michigan EHS Fire Marshal.
1239 Kipke Dr. Ann Arbor, MI. 48109-1010
(734) 615-2718

State of Michigan Occupational Safety and Health Standards (MIOSHA)

The State of Michigan Occupational Safety and Health Standards (MIOSHA) (filed many different dates) Contact U-M Department of Environment, Health, and Safety for projects involving toxic and/or hazardous materials. Contact UM Department of Environment, Health, and Safety (EHS) for projects affecting worker safety issues, such as work conditions resulting in exposure conditions to air contaminants, noise, ergonomic hazards, blood borne pathogens, ionizing, or nonionizing radiation, and potential for exposure to worker falls, electrical hazards, excavations. Additional information is available on the Environment, Health & Safety (EHS) Plans & Guidelines page.

Enforcing Agency —
Michigan Department of Licensing and Regulatory Affairs Michigan Occupational Safety & Health Administration (MIOSHA) 530 W. Allegan Street
P.O. Box 30643 Lansing, MI 48909-8143
(800) 866-4674

Michigan Occupational Safety and Health Administration (MIOSHA) Bureaus & Agencies

Transmitting or Broadcasting Antenna

The Transmitting or Broadcasting Antenna installations operating on any frequency between 300 kHz to 100 GHz must meet FCC radiofrequency (RF) occupational and general public emission limits. 47 CFR 1.1301 - 1.1320. The emission limits are specified in 47 CFR 1.1310. FCC licensees must be prepared to demonstrate compliance with those emission limits or will be required to submit environmental assessments for review and approval by the FCC. In addition, MIOSHA regulates worker exposure to RF radiation both with a specific standard and under its general duty clause. Michigan Administrative Code R325.60701 et seq and MCL 408.1011 of the Michigan Occupational Safety and Health Act 154 of 197.

Federal Communication Commission (FCC) Policy on Human Exposure

State of Michigan Elevator Code

The State of Michigan Elevator Code (2016 and 2017 Editions) (effective June 27, 2023) incorporating by reference the Michigan rules and exceptions for the adoption of ASME A17.1 2016 Safety Code for Elevators and Escalators, the ASME A17.2 2017 Guide for Inspection of Elevators, Escalators, and Moving walks, the ASME 17.3-2017 safety code for existing elevators and escalators, the ASME A17.6-2017 Standard for Elevator Suspension, Compensation and Governor Systems, the ASME A18.1-2017 Safety Code Standard for Platform Lifts, and Stairway Chairlifts, ASME A90.1-2009 Safety Standard for Belt Manlifts, and ANSI A10.4-2016 safety requirements for personnel hoist and employee elevators for construction and demolition and operations.

Enforcing Agency —
State of Michigan Department of Licensing and Regulatory Affairs Bureau of Construction Codes Elevator Safety Division PO Box 30254
Lansing, MI. 48909
(517) 241-9337

Refer to Design Guidelines for additional requirements on Elevators.

State of Michigan Elevator Section

State of Michigan Mechanical Code 2021 Part 9a Mechanical Code Rules

The State of Michigan Mechanical Code 2021 Part 9a Mechanical Code Rules (adopted March 12, 2024) (incorporating International Mechanical Code 2021 and Michigan Amendments) promulgated by State of Michigan Department of Licensing and Regulatory Affairs, Bureau of Construction Codes.

Add to Table 403.3.11 Minimum Ventilation Rates: Occupancy classification- Room with adult changing station. Exhaust Airflow Rate CFM/square foot a - 50/70 e.

1. Table 403.3.1.1 Footnote a: Based on net occupiable floor area
2. Table 403.3.1.1 Footnote e: Rates are per water closet, urinal or adult changing station. The higher rate shall be provided where the exhaust system is designed to operate intermittently. The lower rate shall be permitted only where the exhaust system is designed to operate continuously while occupied.

   Enforcing Agency —
   University of Michigan Environment, Health & Safety Department (EHS) and Architecture, Engineering and Construction (AEC)

MI Administrative Code-Code 9a

State of Michigan Plumbing Code 2021 Part 7 Plumbing Code Rules

The State of Michigan Plumbing Code 2021 Part 7 Plumbing Code Rules (adopted March 12, 2024) (incorporating International Plumbing Code 2021 and Michigan Amendments) promulgated by State of Michigan Department of Licensing and Regulatory Affairs, Bureau of Construction Codes.
By local rule the following modifications are applied to the Michigan Plumbing Code articles:

403.1.2 Single-user toilet and bathing room fixtures:
The plumbing fixtures located in single-user toilet and bathing rooms, including family or assisted-use toilet and bathing rooms that are required by Section 1109.2.1 of the Michigan Building Code, shall contribute toward the total number of required plumbing fixtures for a building or tenant space. Single-user toilet and bathing rooms, and family or assisted-use toilet rooms and bathing rooms shall be identified as being available for use by all persons regardless of their sex. The total number of fixtures shall be permitted to be based on the required number of separate facilities or based on the aggregate of any combination of single-user or separate facilities.

403.2 Separate facilities:
Where plumbing fixtures are required, separate facilities shall be provided for each sex. Exceptions:

1. Separate facilities shall not be required for dwelling units and sleeping units.
2. Separate facilities shall not be required in structures or tenant spaces with a total occupant load, including both employees and customers, of 15 or fewer.
3. Separate facilities shall not be required in mercantile occupancies in which the maximum occupant load is 100 or fewer.
4. Separate facilities shall not be required in business occupancies in which the maximum occupant load is 25 or fewer.
5. Separate facilities shall not be required to be designated by sex where single-user toilet rooms are provided in accordance with Section 403.1.2. If more than one are required by plumbing calculations provide distribution of men, women and gender inclusive so restrooms are available within 500 feet of travel and traversing no more than one floor.

6. Separate facilities shall not be required where rooms having both water closets and lavatory fixtures are designed for the use by both sexes and privacy for water closets is provided in accordance with Section 405.3.4. Urinals shall be located in an area visually separated from the remainder of the facility or each urinal that is provided is located in a stall. Provide distribution of men, women, and gender inclusive so separate restrooms are available within 500 feet of travel and traversing no more than one floor.

607.1 (2) (h):
A 1070 mixing valve is permitted to control up to 5 accessible plumbing fixtures within the same room, The 1070 mixing valve shall be certified for a minimum flow rate of 1/2 GPM or less.

312.2 Drainage and vent water test:
A water test shall be applied to the drainage system either in its entirety or in sections. If applied to the entire system, all openings in the piping shall be tightly closed, except the highest opening, and the system shall be filled with water to the point of overflow. If the system is tested in sections, each opening shall be tightly plugged except the highest openings of the section under test, and each section shall be filled with water, but no section shall be tested with less than a 10-foot (3048 mm) head of water. In testing successive sections, at least the upper 10 feet (3048 mm) of the next preceding section shall be tested so that no joint or pipe in the building, except the uppermost 10 feet (3048 mm) of the system, shall have been submitted to a test of less than a 10-foot (3048 mm) head of water. This pressure shall be held for not less than 15 minutes. The system shall then be tight at all points "

Enforcing Agency —
University of Michigan Environment, Health & Safety Department (EHS) and Architecture, Engineering and Construction (AEC)

MI Administrative Code-Code 7

NFPA 13 –Sprinkler Systems 2019 Edition

The NFPA 13 –Sprinkler Systems 2019 Edition (adopted April 9, 2025) 2010 edition of NFPA 13 is incorporated by reference in the edition of NFPA 101 incorporated by the current State of Michigan Bureau of Fire Services rules for Schools, Colleges, Hospitals, and Universities. The Bureau of Construction Codes and Fire Safety permits use of more current versions of NFPA 13 with some limitations. Contact the Bureau of Fire Services for specifics.

Enforcing Agency —
Project jurisdiction NFPA 101:
State of Michigan Department of Licensing and Regulatory Affairs Bureau of Fire Services, Plan Review/Fire Safety
300 N. Washington Square Lansing, MI. 48913
(517) 241-8847

Project jurisdiction MBC: University of Michigan Environment, Health & Safety Department (EHS) and Architecture, Engineering and Construction (AEC)

State of Michigan Electrical Code 2023 Part 8 Electrical Code Rules

The State of Michigan Electrical Code 2023 Part 8 Electrical Code Rules (adopted March 12, 2024) (incorporating NFPA 70 – National Electrical Code (2023 Edition) and Michigan Amendments)

promulgated by State of Michigan Department of Licensing and Regulatory Affairs, Bureau of Construction Codes.

By local rule the following exceptions/modifications are applied to the Michigan Electrical Code:

Michigan Electrical Code Article 80:
Article 80 of the Michigan Electrical Code applies with the following exceptions/modifications:

80.15 Electrical Board:
Modify "electrical board" to "UM Building Code Committee."

80.25 Connection to Electrical Supply:
Modify language to read as follows: "80.25. Connection to electricity supply. Connections to the electric supply shall conform to the following: It is unlawful for any person, firm, or corporation to make connection to a supply of electricity or to supply electricity to any electrical equipment installation for which permission from UM Electrical Utilities Engineering Group is required or that has been disconnected or ordered to be disconnected."

NEC 2023 Sections 700.32 and 701.32:
The University may deviate from full selectivity (overcurrent protective device coordination within the emergency generator distribution system) in order to lower arc-flash energy levels for worker safety. All such deviations from full selectivity will be designed by, and reviewed by, registered professional engineers. Deviation shall be presented to the U-M project team and may require approval from U-M AHJ.

Enforcing Agency —
University of Michigan Environment, Health & Safety Department (EHS) and Architecture, Engineering and Construction (AEC)

MI Administrative Code-Code 8

NFPA 72 – National Fire Alarm Code 2019 Edition

The NFPA 72 – National Fire Alarm Code 2019 Edition (adopted April 9, 2025) 2010 edition of NFPA 72 is incorporated by reference in the edition of NFPA 101 incorporated by the current State of Michigan Bureau of Fire Services Administrative Rules for New and Existing School, College, and University Fire Safety and Dormitory Fire Safety. The Bureau of Fire Services allows the use of new versions of NFPA 72 with some limitations. Contact the Bureau of Fire Services for specifics

Enforcing Agency —
Project jurisdiction NFPA 101:
State of Michigan Department of Licensing and Regulatory Affairs
Bureau of Fire Services, Plan Review/Fire Safety
300 N. Washington Square Lansing, MI. 48913
(517) 241-8847

By local rule, smoke and heat detectors are not required above suspended ceilings.

Enforcing Agency —
Project jurisdiction MBC: University of Michigan Architecture, Engineering and Construction

Guide for the Care and Use of Laboratory Animals 8th Edition 2011

The Guide for the Care and Use of Laboratory Animals 8th Edition 2011 (effective January 1, 2012)

promulgated by United States Department of Health and Human Services. Regulations of the Federal Animal Welfare Act 9, CFR Parts 1, 2 and 3.

Enforcing Agency —
University of Michigan Unit for Laboratory Animal Medicine. University of Michigan Environment, Health & Safety.

Guide for the Care and Use of Laboratory Animals 8th edition 2011

Animal Welfare Act 9 Code of Federal Regulations (CFR) Parts 1, 2, and 3

Refer to "Animal Facilities Design Criteria and Special Requirements" contained in The University of Michigan Design Guidelines.

State of Michigan Rules for Soil Erosion & Sedimentation Control

The State of Michigan Rules for Soil Erosion & Sedimentation Control promulgated by the State of Michigan Department of Environment, Great Lakes, and Energy (EGLE) Soil Erosion and Sedimentation Control Part 91 of Public Acts 451 of 1994 as amended. The University of Michigan Environment, Health, and Safety (EHS) department is approved by the EGLE as an 'Authorized Public Agency' to enforce the soil erosion and sedimentation control on University of Michigan property. Refer to University of Michigan Design Guidelines Section 31 - Soil Erosion and Sedimentation Control for additional requirements.

Enforcing Agency —
University of Michigan EHS Environmental Protection and Permitting Program (EP3)
1239 Kipke Dr. Ann Arbor, MI. 48109-1010
(734) 647-1143

Corresponding web site—
Soil Erosion and Sedimentation Control

State of Michigan Working in and around Regulated Waters, such as Floodways and Floodplains, Streams, Rivers, Ponds, and Wetlands

The State of Michigan Department of Environment, Great Lakes, and Energy (EGLE) have rules that require permitting where the land and water interface. Please see the link below for Parts of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended and Rules that are administered by the EGLE Water Resource Division and permitted through obtaining an approved EGLE/USACE Joint Permit Application.

Coordinating Agency—University of Michigan EHS
Environmental Protection and Permitting Program (EP3) 1239 Kipke Dr.
Ann Arbor, MI. 48109-1010 (734) 647-1143

Enforcing Agency—
Federal Emergency Management Agency (FEMA) and/or
Michigan's Department of Environment, Great Lakes, and Energy (EGLE) Water Resources Division
301 E. Louis Glick Highway Jackson, MI 49201-1556

Corresponding Guideline —

Applicable Regulations

State of Michigan Issued NPDES Permit

In compliance with the provisions of the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et seq; the "Federal Act"), Michigan Act 451, Public Acts of 1994, as amended (the "Michigan Act"), Parts 31 and 41, and Michigan Executive Orders 1991-31, 1995-4 and 1995-18, The University of Michigan (U-M) is authorized to discharge storm water from the municipal separate storm sewer system (MS4) operated by the U-M in various locations in Michigan, and is designated as an MS4 in accordance with the conditions set forth in U-M's National Pollutant Discharge Elimination System (NPDES) permit with the State of Michigan's, Department of Environment, Great Lakes, and Energy (EGLE). Per the NPDES permit, projects that disturb greater than one acre of land must meet certain post-construction storm water management requirements. Contact EHS EP3 as soon as possible, at the beginning of a project, to discuss this requirement. Please note that the City of Ann Arbor may also require post-construction storm water management, above what is required by the U-M's NPDES permit, including areas disturbing less than 1 acre. This will be between the City and the Project, with input and coordination from EHS and the U-M Planner.

Coordinating Agency—University of Michigan EHS
Environmental Protection and Permitting Program (EP3)
1239 Kipke Dr. Ann Arbor, MI. 48109-1010
(734) 647-1143

Corresponding Guideline —
Stormwater Management – Post Construction Requirements

Enforcing Agency—
Michigan Department of Environment, Great Lakes, and Energy (EGLE) Jackson State Office Building
301 E. Louis Glick Highway 4th Floor, Jackson, MI 49201 517-780-7929

EGLE Municipal Stormwater Program

State of Michigan Contaminated Soil and Groundwater

In compliance with Michigan Public Act 451, Part 201 (Environmental Remediation) owners/operators of properties where soil or groundwater is present above Part 201 Generic Residential Criteria have due care requirements. Due Care requirements include undertaking measures, as necessary, to prevent exacerbation of existing contamination, undertaking response activities to mitigate unacceptable exposures to contamination, taking reasonable precautions against the reasonably foreseeable acts or omissions of a third party, complying with any land use or resource use restrictions, and not impeding with the effectiveness or integrity of such restrictions. Contact EHS EP3 as soon as possible, at the beginning of a project, to discuss any known contamination, recommended assessments, scheduling, compliance requirements, and budget development to evaluate possible contamination or manage known contamination.

Coordinating Agency—University of Michigan EHS
Environmental Protection and Permitting Program (EP3)
1239 Kipke Dr. Ann Arbor, MI. 48109-1010
(734) 647-1143

Enforcing Agency—
Michigan Department of Environment, Great Lakes, and Energy Remediation and Redevelopment Division
P.O. Box 30426 Lansing, MI 48909-7926
(517) 335-6843

Environment, Great Lakes, and Energy (EGLE) Remediation and Redevelopment Division

State of Michigan Leaking Underground Storage Tanks

In compliance with Michigan Public Act 451, Part 213 (Leaking Underground Storage Tanks) owners/operators of underground storage tanks have requirements during the removal of underground storage tank systems to evaluate if a release to the environment has occurred. Tank removal contractors are typically obtained and managed by U-M EHS.
Contact EHS EP3 as soon as possible at the beginning of a project to discuss any tank removals, recommended assessments, scheduling, compliance requirements, and budget development.

Coordinating Agency—University of Michigan EHS
Environmental Protection and Permitting Program (EP3) 1239 Kipke Dr.
Ann Arbor, MI. 48109-1010 (734) 647-1143

Enforcing Agency—
Michigan Department of Environment, Great Lakes, and Energy Remediation and Redevelopment Division
P.O. Box 30033
Lansing, MI 48909
(517) 332-1428

Environment, Great Lakes, and Energy (EGLE) Leaking Underground Storage Tanks Program

State of Michigan Underground Storage Tanks (UST)

(Permitting only, commissioning by AEC) In compliance with Michigan Public Act 451, Part 211 (Underground Storage Tank Rules), Michigan Underground Storage Tank Rules, and/or Storage and Handling of Flammable and Combustible Liquids Rules the owners/operators of underground storage tanks have requirements for the design, construction, installation, maintenance, and removal of tank systems. Contact EHS EP3 as soon as possible at the beginning of a project to discuss tank plans, scheduling, compliance requirements, and budget development.

Coordinating Agency—University of Michigan EHS
Environmental Protection and Permitting Program (EP3)
1239 Kipke Dr. Ann Arbor, MI. 48109-1010
(734) 647-1143

Enforcing Agency—
Michigan Department of Licensing and Regulatory Affairs Bureau of Fire Services
Storage Tank Division
P.O. Box 30033 Lansing, MI 48909
(517) 332-1428

Licensing and Regulatory Affairs (LARA) Underground Storage Tanks

State of Michigan Aboveground Storage Tanks (AST)

(Permitting only, commissioning by AEC) In compliance with Michigan Public Act 207, Parts 2 through 5 of the rules the Aboveground Storage Tank (AST) Program regulates the following:

- Storage and handling of flammable and combustible liquids with flash point less than 200 degrees Fahrenheit.
- Storage and handling of liquefied petroleum gases
- compressed natural gas vehicular systems

The regulatory authority is from the Fire Prevention Code, 1941 PA 207, as amended.
Contact EHS EP3 as soon as possible at the beginning of a project to discuss tank plans, scheduling, compliance requirements, and budget development.

Coordinating Agency—University of Michigan EHS
Environmental Protection and Permitting Program (EP3)
1239 Kipke Dr. Ann Arbor, MI. 48109-1010
(734) 647-1143

Enforcing Agency—
Michigan Department of Licensing and Regulatory Affairs Bureau of Fire Services
Storage Tank Division
P.O. Box 30033 Lansing, MI 48909
(517) 332-1428

Licensing and Regulatory Affairs (LARA) Aboveground Storage Tanks

Emergency Generators

(Permitting only, commissioning by AEC) Pending on size, fuel usage, status, reciprocating internal combustion engines are regulated per the Environmental Protection Agency and EGLE. There are design requirements, potential permit requirements, maintenance/ recordkeeping requirements and initial notification that need to be met and submitted within 120 days of startup.
Contact EHS EP3 as soon as possible at the beginning of a project to discuss plans, scheduling, compliance requirements, and budget development.

Coordinating Agency—University of Michigan EHS
Environmental Protection and Permitting Program (EP3)
1239 Kipke Dr. Ann Arbor, MI. 48109-1010
(734) 647-1143

Enforcing Agencies—
Michigan Department of Environment, Great Lakes, and Energy
525 West Allegan Street Lansing, MI 48909
Environmental Protection Agency Air and Radiation Division Chicago, IL

Environment, Great Lakes, and Energy (EGLE) Facility and Compliance Resources

Boilers

(Air permitting only, commissioned by AEC) Pending on size, fuel usage, status, boilers are regulated per the Environmental Protection Agency and EGLE. There are design requirements, potential permit requirements, maintenance/ recordkeeping requirements and initial notifications that need to be met

and submitted within 15 days of startup. Contact EHS EP3 as soon as possible at the beginning of the project to discuss plans, schedules, and compliance requirements.

Coordinating Agency—University of Michigan EHS
Environmental Protection and Permitting Program (EP3)
1239 Kipke Dr. Ann Arbor, MI. 48109-1010
(734) 647-1143

Enforcing Agencies—
Michigan Department of Environment, Great Lakes, and Energy Air Quality Division
525 West Allegan Street Lansing, MI 48909

Environment, Great Lakes, and Energy (EGLE) Boiler National Emission Standards for Hazardous Air Pollutants (NESHAP) Navigation Tool

Environmental Protection Agency Air and Radiation Division Chicago, ILEPA Boiler Q & A

Chemical Storage

Per the MI Part 5 Rules, Spillage of Oil and Polluting Materials, 1994 PA 451, R 324.2001 to R 324.2009, requires secondary containment and Pollution Incident Prevention Plan if bulk salt, chemical, or oil storage exceeds the threshold management quantity. Contact EHS EP3 as soon as possible at the beginning of a project to discuss plans, scheduling, compliance requirements, and budget development.

Coordinating Agency—University of Michigan EHS
Environmental Protection and Permitting Program (EP3)
1239 Kipke Dr. Ann Arbor, MI. 48109-1010
(734) 647-1143

Enforcing Agencies—
Michigan Department of Environment, Great Lakes, and Energy Water Bureau
Jackson District Office
301 E. Louis Glick Highway Jackson, MI 49201

Environment, Great Lakes, and Energy (EGLE) Pollution Incident Prevention Plan (PIPP) and Part 5 Rules

Installation of Non-Potable Wells (including geothermal wells)

The installation of non-potable wells (including geothermal wells) within Washtenaw County requires the submittal of an Application for Non-Potable Well Project with the Washtenaw County Health Department - Environmental Health Division. The application is typically prepared by the driller or consultant, but is reviewed by the University of Michigan – Environmental Health & Safety Department prior to submittal. The application and list of required components can be here at the website referenced below: The U-M EHS Department can provide information regarding known wells and sources of environmental contamination at a site for inclusion in the application.
Installation of any wells within Washtenaw County shall follow the Washtenaw County Rules & Regulations For The Protection Of Groundwater, 2004, as amended.

Coordinating Agency—University of Michigan EHS
Environmental Protection and Permitting Program (EP3)
1239 Kipke Dr. Ann Arbor, MI. 48109-1010

(734) 647-1143

Enforcing Agencies—
Washtenaw County Health Department Environmental Health Division
705 Zeeb Road Ann Arbor, Mi. 48103

Corresponding web sites:
Installing a Well in Washtenaw County

Washtenaw County Rules & Regulations for the Protection of Ground Water

Application for Non-Potable Well Project

Building Standards for University of Michigan Construction that are Required for Subsequent Licensing of the Facility

State of Michigan Department of Licensing and Regulatory Affairs, Division of Heath Facilities and Services

The Health Facilities Engineering Section (HFES) Facility Guidelines Institute (FGI) 2018 edition of Guidelines for Design & Construction of Hospitals; Outpatient Facilities; and Residential Health Care and Support Facilities in Michigan. Including all the included referenced codes and standards as listed within these rules, including but not limited to NFPA 99, NFPA 101, and other NFPA and ASHRAE standards.

State of Michigan Health Facilities Engineering Section (HFES)

All areas used by inpatients, and all areas within state jurisdiction, are to be designed to comply with HFES regulations. In general, all areas used by outpatients that fall outside HFES jurisdiction are to be designed to comply with HFES regulations. Any areas of noncompliance should be reviewed and approved by the Michigan Medicine (MM) Design Manager.

HFES is the AHJ over all Inpatient Health Care Occupancies (defined as “Health Care Facilities” by NFPA and “I-2” by MBC. Further they are the AHJ over some “Ambulatory Health Care” Occupancies, including Outpatient Surgery and Outpatient Dialysis. The occupancy classification of “Ambulatory Health Care” needs to be carefully reviewed with the MM Design Manager. Not all AHC occupancies are subject to state and federal regulatory authorities.

For assistance in determining which projects are subject to HFES plan review and inspection, MM has developed a series of spreadsheets available on the MM FPD website at MBFS HFES Pan Review Guideline. This has been reviewed by HFES, however it is not intended to replace professional judgment. Jurisdiction should be verified with HFES directly when it is not clear. Affirm decisions with the MM Design Manager.

Enforcing Agency—
Michigan Department of Licensing and Regulatory Affairs Health Facilities Division, Health Facilities Engineering Section Ottawa Building – 1st Floor
611 W. Ottawa Street Lansing, MI 48933
(517) 241-3408

State of Michigan Health Facilities Engineering Section (HFES)

Biosafety in Microbiological and Biomedical Laboratories (BMBL)

An advisory document recommending best practices for the safe conduct of work in biomedical and clinical laboratories from a biosafety perspective. It is used for building design standards, grant, and contract requirements for laboratories that handle infectious microorganisms and hazardous biological materials or animals. Each biosafety laboratory must, at a minimum, meet the requirements for laboratory facilities as stated in the BMBL.

Coordinating Agency—University of Michigan EHS Biosafety
1239 Kipke Dr.
Ann Arbor, MI 48109-1010 (734) 647-3133

Coordinating Agency—
Center for Disease Control and Prevention 1600 Clifton Road
Atlanta, GA 30329-4027
(800)232-4636

Biosafety in Microbiological and Biomedical Laboratories (BMBL)

Center for Medicare and Medicaid Services (CMS)

As defined at Centers for Medicare and Medicaid Services. Compliance with NFPA 101, Life Safety Code, currently enforced version (2012 as of July 5, 2016) is required.

CMS is a federal agency that administers Medicare, works with states on Medicaid. It surveys and certifies Health Care facilities and labs for reimbursement, including Outpatient Surgery and Outpatient Dialysis. CMS also issues Survey and Certification memos and clarifications, including “Categorical Waivers” that the facility may choose to adopt. CMS requires facilities built before 2016 to comply with “Existing Health Care” and “Existing Ambulatory Health Care” chapters of NFPA 101. Facilities built after 2016 and all renovations are to comply with “New Health Care” and “New Ambulatory Health Care.”

The Joint Commission Requirements for Accreditation of Health Care Facilities

As defined at Joint Commission. The Joint Commission (TJC) is the largest and most recognized accreditation organization that the state and CMS recognize for licensure and reimbursement. TJC surveys to the codes adopted by CMS and has established requirements based on CMS standards. MM Accreditation staff may participate in design reviews of MM clinical projects to ensure compliance with TJC and CMS requirements.

State of Michigan, MIOSHA--Radiation Safety Section / United States Nuclear Regulatory Commission

All projects which include ionizing radiation-producing equipment or devices used for clinical or research use. All electronic equipment producing ionizing radiation must be registered with the MIOSHA through EHS/Radiation Safety Service prior to initial use. Irradiators or other similar devices using or producing radioactive materials for clinical or research use will require licensing by the U.S. Nuclear Regulatory Commission in advance. Approvals for registration or licensing may also require submitting shielding construction plans for prior approval by MIOSHA--Radiation Safety Section or the U.S. Nuclear Regulatory Commission depending on the type of equipment used and nature of the

facility. Contact UM EHS / Radiation Safety Service for assessment.

Enforcing Agency—Radiation Safety Section
Michigan Occupational Safety and Health Administration (MIOSHA)
525 W. Allegan Street P.O. Box 30643 Lansing, Michigan 48933
(517) 284-7820
Labor and Economic Opportunity (LEO) Radiation Safety

University of Michigan Leased Health Care Facilities

MM leases many facilities which are subject to local municipal jurisdiction, in addition to MM Design Guidelines and Preferred Manufacturer's List (PML). For more information on ownership status and physical addresses for all buildings, please consult with the MM Design Manager.

U-M Health Facilities Planning & Operations

Toxic and/or Hazardous Materials at University of Michigan Health Care Facilities

Contact MM Safety Management Services for projects involving toxic and / or hazardous materials.

Coordinating Agency — Michigan House
2301 Commonwealth Blvd Floor 2 SPC 2945 Ann Arbor, MI 48105
(734) 764-4427
Email: safetymgmt-safety@med.umich.edu

Aviation, Pharmacy, Psychology, and Pathology, etc.

Consult corresponding clinical department for information on additional regulatory agencies including but not limited to the list above.

State of Michigan Rules for Construction or Renovation of Food Service Facilities

Promulgated by the State of Michigan Department of Agriculture and Rural Development (Food and Dairy Division). Act 92, Food Law which incorporates by reference chapters 1 through 8 of the 2009 Michigan Modified Food and Drug Administration Food Code. Visit the University of Michigan Department of Environment, Health & Safety Food Service Facilities for instruction sheet information and a copy of the Plan Review Packet and Worksheet that must be completed prior to starting a project. The University of Michigan Environment, Health & Safety (EHS) Department is the enforcing agency with authorization provided by the Washtenaw County Environmental Health Department.

Enforcing Agency—University of Michigan EHS Operational Health and Safety
1239 Kipke Dr. Ann Arbor, MI. 48109-1010
(734) 647-1142

State of Michigan Rules for Construction or Renovation of Swimming Pools

Promulgated by the State of Michigan Department of Environmental, Great Lakes and Energy. Michigan's Public Health Code, Public Act 368 of 1978, Part 125 which is supplemented with the Administrate rules for Public Swimming Pools. Contact University of Michigan Department of Environment, Health & Safety for information. The University of Michigan Environment, Health & Safety (EHS) Department is the enforcing agency with authorization provided by the Washtenaw County Environmental Health Department.

Enforcing Agency—University of Michigan EHS Operational Health and Safety
1239 Kipke Dr. Ann Arbor, MI. 48109-1010

(734) 647-1142

Also see 15010 “Basic Mechanical Requirements” for additional codes and standards applicable to mechanical work on University projects.

State of Michigan Department of Environment, Great Lakes, and Energy (EGLE) (Filed many different dates)

Contact U-M Department of Environment, Health & Safety for information on environmental regulatory requirements. All project specific communication with the enforcing agency must be through or coordinated with the U-M Environment, Health & Safety Department.

Coordinating Agency—
University of Michigan EHS
Environmental Protection and Permitting Program (EP3)
1239 Kipke Dr. Ann Arbor, MI 48109-1010
(734) 647-1143
Environment, Health & Safety (EHS)

- Environmental Protection: Environmental Considerations
- Air permitting (generators, boilers, refrigeration units)
- Power Washing and discharge to ground
- Remediation
- Storage Tanks
- Threatened and Endangered Species
- Wetlands

Enforcing Agency—
Michigan Department of Environment, Great Lakes, and Energy
525 West Allegan Street P.O. Box 30473 Lansing, MI 48909-7973
(800) 662-9278
Environment, Great Lakes, and Energy (EGLE)

United States Environmental Protection Agency (USEPA)

(Filed many different dates), which is Title 40 of the Code Federal Regulations. Contact U-M Department of Environment, Health & Safety for information on environmental regulatory requirements. All project specific communication with the enforcing agency must be through or coordinated with the U-M Environment, Health & Safety department.

Coordinating Agency—University of Michigan EHS
Environmental Protection and Permitting (EP)
1239 Kipke Dr. Ann Arbor, MI 48109-1010
(734) 647-1143
Environment, Health & Safety (EHS)

Enforcing Agency—
United States Environmental Protection Agency Region 5 (IL, IN, MI, MN, OH, WI)
77 West Jackson Boulevard Chicago, IL 60604-3507
(312) 353-2000
United States Environmental Protection Agency (USEPA)

Federal Aviation Administration (FAA)

Any construction or alteration projects must provide notice to FAA if they meet certain criteria. All projects that meet the criteria noted in FAA Title 14: Aeronautics and Space, Part 77- Safe, Efficient Use, and Preservation of the Navigable Airspace must file notice with FAA at least 45 days prior to start date of proposed construction or alteration.

Enforcing Agency—
U.S. Department of Transportation Federal Aviation Administration
800 Independence Avenue, SW Washington, DC 20591
(866) 835-5322
Federal Aviation Administration (FAA)
Obstruction Evaluation/Airport Airspace Analysis Filing

University of Michigan Buildings That Contain Instructional Space

(Based on M-Pathways GQL database for rooms with type code 110 or 210)

( ) Indicates compartment of jurisdiction. Note egress from compartment; fire alarm & fire suppression for entire bldg are BFS.*

Bldg No	Building Name	Bldg No	Building Name
5179	202 South Thayer	1017	DB Field House And Wellness Center
0333	400 North Ingalls Building	1065	Dearborn Mardigian Library
0879	555 South Forest Building	1078	DB Professional Education Center
0188	1100 North University Building	1079	Dearborn Sci Bldg-Computing Wing
5037	A. A. Taubman Biomedical Science Research Building (Auditorium)*	1009	DB Science, Classroom & Admin.
0421	Aero Eng - Wind Tunnel Lab (Fa/Fs Only)	1077	Dearborn Social Sciences Building
0425	Aero Eng - Plasma Research (Fa/Fs Only)	0162	Dental And W K Kellogg Institute*
0422	Aero Eng - Propulsion Lab (Fa/Fs Only)	0447	Dow, Herbert H Building
0423	Aero Eng – Pumping Station (Fa/Fs Only)	0396	Duderstadt James And Anne Center (2 & 3)*
0168	Animal Research Facility	0166	East Hall
0206	Angell Hall Addition-Auditoriums	0054	East Quadrangle
0175	Angell Hall Addition-Haven Hall	0221	Education, School Of
0197	Angell Hall Addition-Mason Hall	0448	Electrical Eng & Computer Sci Bldg
0152	Angell James B Hall & Tisch Hall	0435	Engineering Res Bldg I (Fa Only)*
0831	Argus Ii	0436	Engineering Research Building Ii
0432	Art & Architecture Building	0414	Environmental & Water Res Eng Bl
0395	Bagnoud, Francois-Xavier Building	0733	Fisher Ray Baseball Stadium (1100, 1120, 1140, & 1142) *
5092	Bester, Bob & Betty Building	1651	Flint Harrison Parking Ramp*
5169	Biological Science Building*	1650	Flint David French Hall
4016	Biological St Blanchard	1649	Flint Frances Willson Thompson Library
4010	Biological St Cort Laboratory	5017	Flint Northbank Center
4018	Biological St Creaser Laboratory	1664	Flint Univ Pavilion Annex
4005	Biological St Forest Laboratory	1630	Flint Wm R Murchie Science Bldg
4011	Biological St Houghton Lab	1694	Flint William S White Building
4013	Biological St Hungerford Lab	5418	Ford Motor Company Robotics Building
4037	Biological St Lecture Hall	0234	Francis, Thomas Jr Public Health
4019	Biological St Newcombe Lab	0437	Gerstacker, Carl A Bldg (Fa Only)*
4015	Biological St Pettingill Lab	0424	Gorguze Family Laboratory
4017	Biological St Reighard Lab	0897	Health Management Research
4039	Biological St Sparrow Laboratory	0179	Hutchins Hall (All Areas Except Aikens Commons & Café Room 150)*
4096	Biological St Stockard Laboratory	0429	Industrial & Operations Engin Bldg
4012	Biological St Welch Laboratory	5235	Jeffries Hall
4171	Biological St Residence Hall	0324	Kellogg, W K Eye Center
5370	Blau, Jeff T. Hall (B, 1, 2, 3, & 5 Floors)*	0851	Kinesiology Building (Stair S01, Rooms 1100, 2100, & 3100)*
0407	Brown, G G Laboratory	0211	Kraus, Edward Henry Building
0210	Buhl Res Cen For Human Genetics	0137	Kresge Business Admin Library (B, 1, & 2 Floors)*
0155	Burton Memorial Tower	0400	Lay, Walter E Automotive Lab
5451	Central Campus Classroom Building	5504	Leinweber Computer Science & Information
0226	Central Campus Rec Bld&Bell Pool	0150	Literature Science And The Arts (3rd & 4th Flrs)*
0158	Chemistry & Dow W H Lab	0188	Little, Clarence Cook Science Bld
0443	Chrysler Cntr Cont Engineer Ed	0059	Lloyd, Alice C Hall
0441	Climate And Space Research Building	0154	Lorch Hall
0403	Cooley, Mortimer E Memorial	8049	Lp Business Admin 15041 Commerce
0189	Dana, Samuel Trask Building	0406	Lurie, Ann And Robert H Biomedical Eng
5439	Dance Building	0982	Matthaei Bot Gdns Research-Admin
0198	Detroit Observatory Addition*	0190	Medical Science Unit I (A & B Wings)*
1012	DB Admin & Student Activities Bldg	0200	Medical Science Unit Ii
1020	Dearborn Casl Annex & Fairlane Apt	0207	Modern Languages Building
1080	Dearborn Col Arts Science & Letters	0440	Moore, Earl V Bldg
8049	Dearborn Commerce Park	0061	Mosher-Jordan Hall*
1011	Dearborn Computer & Infor Science	0151	Museum Of Art (Auditorium & Stair S5)*
1013	Dearborn Engineering Lab Bldg	0415	Naval Arch & Marine Engineering
1076	DB Environmental Interpret Ctr	5517	Neal Homer Laboratory
5459	DB Fairlane Center – North	5266	North Campus Research Complex Bldg 32 (Auditorium & Lobby)*

Bldg No	Building Name	Bldg No	Building Name
5128	Dearborn Fairlane Center - South	5347	School Of Nursing New Building
5177	North Quad Complex (Level 1 Throughout & Level 2 North Tower)*	5224	Stamps Auditorium
5047	Palmer Drive Commons (Sw End Of 2nd Floor)*	0445	Stearns, Frederick Building
0890	Perry Building (G300)*	0216	Tappan Hall
0442	Pierpont Commons (Partial Basement Level)*	0209	Taubman, A A. Health Sciences Library
0180	Power Center For Performing Arts	5413	Trotter William Monroe Multicultural Center*
0897	Public Policy Annex	5046	Undergraduate Science Bldg
0208	Randall, Harrison M Laboratory	0204	Vaughan, H F Public Hlth Bl(1, 2& Part Of 3 Floors)*
0416	Radiation Sciences Lab 1 (Fa/Fs Only)	5059	Walgreen, Charles Rj Drama Center
0417	Radiation Sciences Lab 2 (Fa/Fs Only)	5101	Weill Hall, Joan & Sanford (1st & 2nd Flrs)*
5188	Ross School Of Business (B, 1, 2, & 3 Flrs)*	0167	West Hall
5120	Ross, Stephen M Academic Center (Rm 2150)*	0135	Wyly, Sam Hall
0193	Ruthven, Alexander G Museums Bldg (Fa/Fs Only)	0165	Weiser Hall
0219	School Of Social Work Building		

University of Michigan Buildings that Contain Instructional Space and are Rental Properties

Bldg No	Building Name
5403	Flint Beecher Neff Center
5343	Flint Riverfront Center
5360	Flint Urban Alternatives House
5382	Woodward Gardens

University of Michigan Buildings That Contain Dormitory Space

(Based M-Pathways GQL database for rooms with type code 910, 919, 920, and 935)

( ) Indicates compartment of jurisdiction. Note egress from compartment; fire alarm & fire suppression for entire bldg are BFS.*

Bldg No	Building Name	Bldg No	Building Name
0510	Baits, Vera I Eaton House	0055	Fletcher Hall
0511	Baits, Vera I Lee House	0057	Henderson, Mary B House
0512	Baits, Vera I Parker House	0108	Lawyers Club*
0513	Baits, Vera I Smith House	0059	Lloyd Alice C Hall
0514	Baits, Vera I Stanley House	0060	Markley, Mary B Hall
0515	Baits, Vera Ii Coman House	0061	Mosher-Jordan Hall*
0516	Baits, Vera Ii Conger House	0062	Newberry Residence
0517	Baits, Vera Ii Cross House	5177	North Quad Complex (North Tower Levels 3 - 10)*
0518	Baits, Vera Ii Thieme House	0040	Oh Goddard Hall
0519	Baits, Vera Ii Ziwet House	0042	Oh Adelia Cheever Residence
0051	Barbour, Betsy House	0043	Oh Geddes Residence
4171	Biological St Residence Hall	0044	Oh Julia E Emanuel Residence
0555	Bursley Hall	0046	Oh L H Seeley Hall
0120	Cambridge House (Compartment W/In Michigan Union)*	0045	Oh Pamela Noble Residence
0109	Cook, John P Law Quadrangle	0041	Oh Vandenberg Hall
0052	Cook, Martha Residence	0063	South Quadrangle
0053	Couzens Hall	0064	Stockwell Hall
0054	East Quadrangle	0066	West Quadrangle

University of Michigan Buildings That Contain Child Care Space

(Based M-Pathways GQL database for rooms with type code 640, and 645)

Bldg No	Building Name
5244	Dearborn Child Development Center
1047	Dearborn Kindergarten Module
5018	NCRC (N Campus Research Complex) B075 Children's Center
0600	Northwood Community Center
5240	Towsley Children's House
0390	University Hospitals Child Care Center

University of Michigan Buildings That Contain Inpatient Health Care Facilities

Bldg No	Building Name
5109	Samuel And Jean Frankel Cardiovascular Center (Cvc)*
0313	Connector Between Uh And Mott Adjacent To Towsley*
0312	University Hospital South Unit 2 (Old Mott)*
0314	University Hospital South Unit 3 (Old Holden)*
0318	University Hospital South Unit 4 (Old Mchc)*
5173	C.S. Mott Children's And Von Voigtlander Women's Hospital *
0316	University Hospital (Uh) *

For more detailed boundaries for inpatient facilities and firewall keyplans in all buildings, please consult with MM Design Manager or Michigan Medicine building website.

University of Michigan Buildings That Contain Hospital Outpatient Surgery Departments

Bldg No	Building Name
5102	Brehm Tower (Brm) (Eye Center Expansion) (Fourth Floor)*
5038	East Ann Arbor Ambulatory Surgery Center
5239	Brighton Center For Specialty Center

University of Michigan Buildings That Contain Outpatient Dialysis

( ) Indicates compartment of jurisdiction. Note egress from compartment; fire alarm & fire suppression for entire bldg are under BFS.*

Bldg No	Building Name
8072	Eisenhower Park West