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History

<u>Revision</u>	<u>Authorizing Actions</u>	<u>Description</u>
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23-Nov-16	LU-17-501	Revised with Updated Model Code References
17-Feb-17	LU-17-504	Revised adding MPTN Supplement
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TITLE 2. BUILDING CODE

CHAPTER 1. GENERAL

§ 1. Purpose and Scope

a. The purpose of this code is to establish the minimum requirements necessary to safeguard public health, safety and general welfare.

b. The provisions of this code shall apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal and demolition of every building or structure or any appurtenances connected or attached to such buildings or structures in Mashantucket.

§ 2. Applicability

a. General

- (1) This Title, to be known as the Mashantucket Building Code, has been adopted by the Mashantucket Pequot Land Use Commission for regulating and governing the conditions and maintenance of all property, buildings and structures, by providing the standards for facilities, supplied utilities and other physical things and conditions essential to ensure that structures are safe, sanitary and fit for occupation and use, and the condemnation of buildings and structures unfit for human occupancy and use.
- (2) This Mashantucket Building Code shall apply to construction of new buildings, alterations or additions to existing buildings, changes in use, and demolition activities.
- (3) The provisions of this code shall not be deemed to nullify any provisions of tribal or federal law.
- (4) Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall be applicable. Where, in any specific case, different sections of this code specify different materials, methods of construction or other requirements, the most restrictive shall govern.
- (5) In the event that any part or provision of this code is held to be illegal or void, this shall not have the effect of making void or illegal any of the other parts or provisions.
- (6) The provisions of this code shall not be deemed in any way to waive the sovereign immunity of the Mashantucket Pequot Tribal Nation.

b. Existing structures

- (1) The legal occupancy of any structure, existing on the date of adoption of this code or existing on the date of adoption of subsequent model code revisions, shall be permitted to continue without change, except as is specifically covered in this Title or the Fire Prevention Code (3 L.U.R.), or as is deemed necessary by the Building Official, following inspection pursuant to 14 M.P.T.L. ch. 9, §1b(2), for the general safety and welfare of the occupants and the public.
- (2) Any deficiency discovered must be rendered no less conforming to the provisions of the Code that was enforced at the time the existing building or structure was originally constructed.

c. Unsafe Structures and Equipment

- (1) Structures or existing equipment that are or hereafter become unsafe, insanitary or deficient because of inadequate means of egress facilities, inadequate light and ventilation, or which constitute a fire hazard, or are otherwise dangerous to human life or the public welfare, or that involve illegal or improper occupancy or inadequate maintenance, shall be deemed an unsafe

condition. Unsafe structures shall be taken down and removed or made safe, as the Land Use Commission deems necessary and as provided for in this section. A vacant structure that is not secured against entry shall be deemed unsafe.

- (2) The Building Official shall cause a report to be filed with the Land Use Commission on an unsafe condition. The report shall state the occupancy of the structure and the nature of the unsafe condition.
- (3) If an unsafe condition is found, the Land Use Commission shall serve the owner, agent or person in control of the structure, a written notice that describes the condition deemed unsafe and specifies the required repairs or improvements to be made to abate the unsafe condition, or that requires the unsafe structure to be demolished within a stipulated time. Such notice shall require the person thus notified to declare immediately to the Building Official acceptance or rejection of the terms of the order.
- (4) The structure or equipment determined to be unsafe is permitted to be restored to a safe condition. To the extent that repairs, alterations or additions are made or a change of occupancy occurs during the restoration of the structure, such repairs, alterations, additions or change of occupancy shall comply with the requirements of this title.

d. Approved materials and equipment

- (1) Materials, equipment and devices approved by the Building Official shall be constructed and installed in accordance with such approval.
- (2) Used materials, equipment and devices shall not be reused unless approved by the Building Official.

e. Alternative materials, design and methods of construction and equipment.

- (1) The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been approved. An alternative material, design or method of construction shall be approved where the Building Official finds that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the purpose intended, at least the equivalent of that prescribed in this code in quality, strength, effectiveness, fire resistance, durability and safety.
- (2) Supporting data, where necessary to assist in the approval of materials or assemblies not specifically provided for in this code, shall consist of valid research reports and/or testing from approved sources.

f. Modifications

Pursuant to 14 M.P.T.L. Ch. 8, wherever there are practical difficulties involved in carrying out the provisions of this code, the MPTN Land Use Commission shall have the authority to grant modifications for individual cases, provided the Commission shall first find that special individual reason makes the strict letter of this code impractical and the modification is in compliance with the intent and purpose of this code and that such modification does not lessen health, accessibility, life and fire safety or structural requirements.

g. Permits Required

(1) Land Use Permit

Any person who requires a permit pursuant to this Title must first obtain a Permit from the MPTN Land Use Commission as provided within the MPTN Land Use Law (14 M.P.T.L.).

(2) Trade Permits

(a) Any owner or authorized agent who intends to construct, enlarge, alter, repair, move, or demolish a building or structure, or to erect, install, enlarge, alter, repair, remove, convert or replace any electrical, gas, mechanical or plumbing system, the installation of which is regulated by this code, or to cause any such work to be done, must be permitted to do so by the Building Official.

(b) The requirements specific to Trade Permits are detailed within Chapter 2 of this Title.

h. Inspections Required

All work must be inspected by Building Code Enforcement as specified within Chapter 3 of this Title.

§ 3. Administration

a. Building Code Enforcement (BCE)

(1) BCE is the government program, represented on the MPTN Land Use Commission, responsible, unless otherwise noted, for ensuring proper administration and enforcement of this code.

(2) Land Use Commission Administration shall keep official records of applications received, permits and certificates issued, fees collected, reports of inspections, and notices and orders issued. Such records shall be retained in the official records for the period specified by the MPTN record retention policy.

b. Building Official

(1) The Building Official shall be the person appointed, as specified within 1 L.U.R. ch. 1, §3a(4), to represent BCE on the Land Use Commission. .

(2) Unless otherwise specified within this title, the Building Official shall have the authority and responsibility to interpret and enforce the provisions of this Code as specified within MPTN Land Use Law (14 M.P.T.L.).

(3) Require Testing

(a) Whenever there is insufficient evidence of compliance with the provisions of this Code, or evidence that a material or method does not conform to the requirements of this Code, or in order to substantiate claims for alternative materials or methods, the Building Official shall have the authority to require tests as evidence of compliance to be made at the expense of the owner. Test methods shall be as specified in this Code or by other recognized test standards. In the absence of recognized and accepted test methods, the Building Official shall approve the testing procedures.

(b) Tests shall be performed by an approved agency. Reports of such tests shall be retained by the Building Official for the period specified by the MPTN record retention policy.

c. Building Inspectors

BCE, from time to time, may employ or contract other building inspectors, plan examiners or other technical contractors to assist the Building Official. Such individuals shall have powers as delegated by the Regulatory Affairs Officer.

d. Liability

The Building Official or any other Commissioner, inspector, or code official designated within this title, while acting in good faith and without malice in the discharge of the duties required by this Code or other pertinent law or ordinance, shall not thereby be rendered liable personally and is hereby relieved from personal liability for any damage occurring to persons or property as a

result of any act or by reason of an act or omission in the discharge of official duties. Any suit instituted against an officer or employee because of an act performed by that officer or employee in the lawful discharge of duties and under the provisions of this code shall be defended by legal representative of MPTN until the final termination of the proceedings.

CHAPTER 2. TRADE PERMITS

§ 1. Permits Required

a. It is the responsibility of the owner or agent granted a Land Use Permit to ensure that each contractor, prior to commencing work on his permitted activity, applies for and is issued a Trade Permit. Failure of a Permittee's contractors to obtain the applicable Trade Permits prior to commencing work may result in Enforcement Action against the Permittee by the MPTN Land Use Commission.

b. Commencement of work without a properly issued Trade Permit will result in the issuance of a Citation with penalty pursuant to 1 L.U.R. Ch 8, as authorized by 14 M.P.T.L. Ch. 9, §2a.

§ 2. Types of Permits

a. Building Permit

- (1) New structures
- (2) Additions - building expansion in any direction adding square footage to the exterior of the building or by adding a story.
- (3) Alterations - remodeling and/or demolition of existing space(s)
- (4) Change of use or occupancy

b. Civil Permit

- (1) Roadways and bridges
- (2) Retaining walls greater than three (3) feet in height
- (3) General site work: excavation, grading, utilities, septic system, drainage, storm water conveyance, or concrete not associated with a building

c. Demolition Permit

- (1) Removal of a building or structure, or portion thereof
- (2) Removal and capping of plumbing, mechanical, septic, or electrical appurtenances
- (3) Removal of structural components of a building

d. Electrical Permit

(1) Line Voltage

An electrical line voltage permit is required to erect, install, alter, repair, relocate, replace or add to an electrical system between 50 and 1,000 volts.

(2) Low Voltage

- (a) An electrical low voltage permit is required for all low voltage, limited energy (less than 50 volts), data, and communications wiring as outlined in in the NEC articles 720 thru 840.
- (b) Fire alarm system installations, NFPA 72.

e. Mechanical Permit

- (1) Heating Ventilation Air Conditioning (HVAC)
- (2) Process piping
- (3) Gas piping for human comfort
- (4) Low pressure steam and hydronic heating & cooling process piping

f. Plumbing Permit

- (1) Plumbing system work inside the building or within the property line for potable water supply and distribution piping
- (2) All fixtures and traps, all drainage and vent pipes and all building drains

g. Special Event

Any temporary event or gathering, including but not limited to trade shows, fairs, or other types of festivals or recreational events, occurring within a facility or upon grounds generally accessible to the public, and which involve one or more of the following activities: erection of a tent, stage, bandshell, trailer, portable building, grandstand, bleachers or placement of portable toilets.

h. Fire Suppression Systems

Any fire suppression system installations, above ground and underground storage tanks, special suppression systems such as kitchen hood suppressions systems (e.g. intergen. ansul, piranha, etc.)

§ 3. Activities not Requiring Trade Permits

a. Exemptions from trade permit requirements shall not be deemed to grant authorization for any work to be done in any manner in violation of this Code.

b. Building:

- (1) one-story detached accessory structures used as tool and storage sheds, playhouses and similar uses, provided the floor area does not exceed 200 square feet;
- (2) fences, other than swimming pool barriers, up to but not exceeding 7 feet height;
- (3) retaining walls that are not over three (3) feet in height measured from the bottom of the footing to the top of the wall, unless supporting a surcharge or impounding Class I, II or IIIA liquids;
- (4) refinishing of residential driveways;
- (5) painting, papering, tiling, carpeting and similar finish work;
- (6) temporary theater stage sets and scenery utilizing rated anchor points previously inspected by the Building Official;
- (7) prefabricated swimming pools accessory to a Group R-3 occupancy that are less than 24 inches deep, do not exceed 5,000 gallons and are installed entirely above ground;
- (8) swings and other playground equipment accessory to detached one- and two-family dwellings;
- (9) window awnings supported by an exterior wall that do not project more than 54 inches from the exterior wall and do not require additional support of Groups R-3 and U occupancies; and
- (10) nonfixed and movable fixtures, cases, racks, counters and partitions not over 5 feet 9 inches in height and not containing any electrical, plumbing or mechanical equipment.

c. Electrical

Minor repair work, including the replacement of lamps or the connection of approved portable electrical equipment to approved permanently installed receptacles.

- d. Gas
 - (1) portable heating appliance; and
 - (2) replacement of any minor part that does not alter approval of equipment or make such equipment unsafe.
- e. Mechanical:
 - (1) portable heating appliance;
 - (2) portable ventilation equipment;
 - (3) portable cooling unit;
 - (4) portable evaporative cooler; and
 - (5) self-contained refrigeration system containing ten (10) pounds or less of refrigerant and actuated by motors of one (1) horsepower or less.
- f. Plumbing
 - (1) The stopping of leaks in drains, water, soil, waste or vent pipe; provided, however, that if any concealed trap, drain pipe, water, soil, waste or vent pipe becomes defective and it becomes necessary to remove and replace the same with new material, such work shall be considered as new work and a permit shall be obtained and inspection made as provided in this code.
 - (2) The clearing of stoppages or the repairing of leaks in pipes, valves or fixtures and the removal and reinstallation of water closets, provided such repairs do not involve or require the replacement or rearrangement of valves, pipes or fixtures.
- g. Emergency Repairs

Where equipment replacements and repairs must be performed in an emergency situation, the permit application shall be submitted within the next working business day.
- h. General Repairs

Application or notice to the Building Official is not required for ordinary repairs. Such repairs shall not include the cutting away of any wall, partition or portion thereof, the removal or cutting of any structural beam or load-bearing support, or the removal or change of any required means of egress, or rearrangement of parts of a structure affecting the egress requirements; nor shall ordinary repairs include addition to, alteration of, replacement or relocation of any standpipe, water supply, sprinkler component, sewer, drainage, drain leader, gas, soil, waste, vent or similar piping, electric wiring or mechanical or other work affecting public health or general safety.
- i. Electrical Utilities

A permit shall not be required for the installation, alteration or repair of transmission, distribution or metering or other related equipment that is installed and will be under control of Public Electrical Utility. This exemption is specific to Trade Permits and does not extend to the need to obtain a permit from the Land Use Commission for new facilities.

§ 4. Trade Permit Application

- a. Work shall not commence until the tradesperson receives the approved Trade Permit; and
 - (1) posts a color copy of the permit in a conspicuous place at the work site; or
 - (2) if posting the permit is impossible, the tradesperson shall make the permit available at the worksite at all times.

- b. Applications for Trade Permits shall be submitted electronically utilizing the form provided to the Land Use Applicant at the time of approval. Applications must include, at minimum:
- (1) the type of Trade Permit (see § 2 of this Chapter);
 - (2) the Land Use Permit number and the exact project title as listed on the Land Use Permit;
 - (3) a complete description of the tasks;
 - (4) the scheduled start date and the date of anticipated completion;
 - (5) name, address and contact information for the tradesperson's company;
 - (6) contact information for at least one individual who will be on-site during all activities; and
 - (7) if applicable, the contact information and license information for the licensed tradesman.
 - (a) Tradesmen, who are typically required to be licensed by surrounding jurisdictions, must provide proof of such licensure.
 - (b) Acceptable Licensing jurisdictions are at the discretion of the Building Official.
- c. Incomplete Applications will be rejected.
- d. Applications involving ground disturbance shall not be issued without a "Call Before You Dig" number.
- e. Applications must be submitted two full business days prior to the scheduled start date of work.
- f. Fee – no fee will be charged for Applications submitted in conformance with these requirements.

§ 5. Suspension of Trade Permit (Stop Work Order)

- a. The Building Official may suspend a previously issued Trade Permit when work on any Land Use Activity is being prosecuted contrary to the provisions of this Code or in an unsafe and dangerous manner. Pursuant to chapter 1, §2c(2), all work authorized by the Trade Permit shall be immediately stopped upon notice that the permit has been suspended.
- b. The Building Official shall have the obligation to notify the affected tradesperson and applicable Land Use Permit holder of the reasons for suspension of the Trade Permit and shall state the conditions under which the permit will be reinstated.
- c. The Building Official may authorize work under a suspended permit provided that such work is directed to abate the violation or unsafe condition.
- d. Appeal. Any person identified upon the suspended Trade Permit Application, or listed as the Applicant or Site Contact on the applicable Land Use Permit, may request a hearing with the MPTN Land Use Commission by following the procedures specified within 14 M.P.T.L. Ch. 10.

CHAPTER 3. INSPECTIONS

§ 1. General

- a. Before commencing the construction, the owner or authorized agent shall contact the Building Official to schedule a meeting to discuss requirements, approved plans and related matters.
- (1) All key parties involved in the construction process may be required to attend this meeting.
 - (2) Failure to schedule a pre-construction meeting before commencing construction may result in fines pursuant to 1 L.U.R., ch. 8.

b. Certain types of construction work require Special Inspections in addition to those performed by the Building Official. These Special Inspections may be required to be periodic or continuous as deemed necessary by the Building Official and/or the Design Professional in Responsible Charge. The owner or authorized agent is required to provide specially qualified independent inspector(s) for such purpose during construction. Please refer to § 4 of this Chapter for further details regarding Special Inspections.

- (1) The owner or authorized agent is required to provide specially qualified independent inspector(s) to complete all required Special Inspections during construction.
 - (a) The independent special inspector shall be approved by and report directly to the Building Official.
 - (b) Unless the project is entirely funded by a tribal entity, the owner shall bear all costs associated with required Special Inspections.
- (2) If required, the Design Professional in Responsible Charge shall provide a Statement of Special Inspections prior to commencing any permitted work.

c. Work shall not be done beyond the point indicated in each successive inspection, as outlined within § 3 of this chapter, without first passing inspection by the Building Official. Upon notification the Building Official will inspect the work completed and either pass the work as satisfactory, or notify the permit holder of the code deficiencies noted. Any portion of the work that does not comply shall be corrected and not covered or concealed until the Building Official has issued a passing inspection.

§ 2. Inspection Requests

a. It shall be the duty of the Trade Permit holder or their agent to notify the Building Official that work is ready for inspection. The person requesting an inspection is required to provide access to and means for inspection of such work.

b. All inspections conducted by BCE require a minimum of 24 hours advance notice.

- (1) An Inspection Request form (IR) shall be submitted electronically (via email) utilizing the form provided with the approved Trade Permit.
- (2) Inspections shall not be accommodated when IRs are not received at least twenty-four (24) hours in advance of the requested inspection. Such requests will likely be delayed until the following business day.

c. Tradesperson failing to make timely requests for the appropriate inspections may be issued a Citation with penalty pursuant to 1 L.U.R. Ch. 8 (as authorized by 14 M.P.T.L. Ch. 9, §2a).

§ 3. Building Code Enforcement Inspection

a. Footings/Foundations

- (1) when excavation is complete and forms are erected. All reinforcing steel, where required, must be in place and anchored. This inspection must be made prior to placing concrete.
- (2) reinforcing steel inspections for wall placements exceeding four feet in height must be scheduled when at least one side of the wall is still open and visible for inspection.

b. Backfill Inspections

- (1) all required plumbing or electrical tests and inspections have passed and/or prior to placing any fill; and,
- (2) when damp proofing/waterproofing has been applied to foundation walls, foundation drains are in place and prior to any fill placement.

- c. Concrete Placement Inspection
 - (1) when all subgrade, reinforcing steel and formwork inspection have been completed and approved, and
 - (2) after the concrete supplier has been scheduled.
- d. Masonry
 - (1) when block is completed to the level established by high or low lift grouting techniques, and prior to grout placement:
 - (2) when piers are complete to the level of established grade and any brick or other veneer is also in place; and
 - (3) when all reinforcing, including lateral support of intersecting walls is complete and visible.
- e. Building
 - (1) Floor Joist Inspection
 - when load-bearing walls to the first floor sill height have been erected, beams and floor-joists have been installed, and grading within the perimeter walls has been completed. Sub-flooring shall not be installed before this inspection has been approved.
 - (2) Framing
 - when the roof, all framing, firestopping, blocking and bracing is in place, and the sub-flooring has been installed. Do not install insulation before the framing inspection is approved. The building should be "weathered in" including windows, doors, and roof shingles for this inspection.
 - (3) Insulation
 - when all required insulation has been installed after all rough-in and framing inspections have been approved. In the event that the contractor intends to use blown-in insulation in the ceilings, that portion of this inspection may be delayed until and during the final inspection.
 - (4) Breeching or Fireplace
 - (a) Combustible clearances
 - before the interior is insulated and wall enclosed, but may be after the fireplace is finished. This includes all types of fireplaces: masonry, prefabricated and gas ventless; and,
 - (b) Masonry fireplace construction
 - when the first flue past the fireplace throat is set. Approval is required prior to proceeding further.
- f. Plumbing
 - (1) Water and Sewer Service Connections
 - when all water and sewer lines are installed from the water and sewer mains (or wells and septic tanks) to the structure. Trench must be open and all lines accessible to the inspector. Water line testing shall also be conducted at this time (See 9 L.U.R. Ch. 2.2, §6).
 - (2) Rough-in Inspection
 - when all interior piping (water and sewer) has been installed and tested, and prior to concealment.
 - (3) Final Inspection
 - when all plumbing work is complete and all appliances involving water and/or sewer connections have been installed submit an IR for inspection.

- g. Mechanical
 - (1) Rough-in Inspection
 - when the installation of all equipment, duct work, gas lines, fuel storage tanks, etc. is complete, and prior to covering and concealment.
 - (2) Final Inspection
 - when all heating, ventilating and air conditioning installations have been completed and tested.
- h. Electrical
 - (1) Under-slab Inspection
 - after installation of conduit and conductors in trenches or in slab base material and prior to backfilling trench or covering with slab base material.
 - (2) Rough-in Inspection
 - (a) when all interior wiring and electrical equipment has been installed, but prior to covering or concealment and prior to installation of any insulation.
 - (b) all electrical contractors will have the option to have the electrical meter release inspection for one and two family residences performed on the same day as the electrical rough-in inspection. The following requirements must be in place at this release/rough-in electrical inspection:
 - (i) the grounds and neutrals in the electrical panel must be terminated;
 - (ii) the meter base must be mounted;
 - (iii) the service cable must be terminated;
 - (iv) the panel cover shall be installed with two screws only, and the screws shall be only finger tight; and
 - (c) If all of the above-listed items are not completed at the time of the electrical rough-in inspection, the rough-in may be approved but the meter will not be released until the electrical trim-out has been completed and inspected.
 - (3) Final Inspection
 - when all electrical work is complete and power is turned on.
- i. Gas
 - (1) Rough-in Inspection
 - when installation of all lines is completed, but before concealment of any lines and fittings. Gas line testing shall also be conducted at this time (See 9 L.U.R. Ch. 4, §5f.).
 - (2) Final inspection
 - when hookup of all gas appliances has been made. Gas service will not be released to the utility company for connection until these inspections are approved. If service is interrupted, new pressure tests and inspections may be required prior to release to the utility company.
- j. Fireproofing Inspection
 - when fireproofing of all structural members is complete and after the fireproofing has cured to the point that an adhesion/cohesion test can be conducted.

k. Firestop Inspection

when firestop installed, listed assemblies have been provided to BCE, and each firestop assembly has been properly labeled.

l. Final Inspection

- (1) when the building has been completed and ready for occupancy. This inspection will not be made until all required electrical, plumbing, and mechanical final inspections have been made and the work approved.
- (2) a Certificate of Completion (either a Certificate of Use or Occupancy) may only be issued after completion of this inspection. The structure may not be used or occupied in whole or part until issuance of a Certificate of Completion (either final or temporary).

§ 4. Special Inspection

a. In addition to the inspections required by §3 of this chapter, the Building Official may require the owner to employ a special inspector during construction of specific types of work as described in this code.

b. Statement of Special Inspection

- (1) In accordance with the Special Inspection and Structural Testing requirements of the Building Code, when required by the Building Official, a Statement of Special Inspection shall be submitted as a condition of the activity's Land Use Permit.
- (2) The Statement of Special Inspection shall include:
 - (a) a schedule of Special Inspections required;
 - (b) the name of the Special Inspection Coordinator; and,
 - (c) the approved inspector(s)/agencies to be retained for conducting the inspections and tests.
- (3) The Statement of Special Inspection must include the following disciplines:
 - (a) architectural;
 - (b) structural;
 - (c) mechanical/electrical/plumbing; and,
 - (d) any other as required.

c. Coordination of Records and Reporting

- (1) A Special Inspection Coordinator shall keep records of all inspections and shall furnish inspection reports to the Building Official and the Design Professional in Responsible Charge.
 - (a) Reports shall indicate that work inspected was or was not completed in conformance to approved construction documents.
 - (b) Discovered discrepancies shall be brought to the immediate attention of the Contractor for correction.
 - (c) If such discrepancies are not corrected, the discrepancies shall be brought to the attention of the Building Official and the Design Professional in Responsible Charge prior to the completion of that phase of the work.
 - (d) The Special Inspection program does not relieve the Contractor of his or her responsibilities.
- (2) Interim reports

The Special Inspection Coordinator shall submit interim reports to the Building Official and the Design Professional in Responsible Charge.

(3) Final Report

A final report documenting completion of all required Special Inspections, testing and correction of any discrepancies noted in the inspections shall be submitted prior to issuance of a Certificate of Completion.

§ 5. Additional Inspection

The following additional inspections shall be conducted, at owner's expense, by approved third party design professionals. Unless otherwise determined by the Building Official, these additional inspections are not required for buildings of Type V construction.

a. Sheeting and shoring

All sheeting and shoring shall be designed by a licensed structural engineer approved by the Building Official and submitted to the Structural Engineer of Record (SER) for review and comment. The Design Professional in Responsible Charge shall develop a comprehensive inspection list based on the specific needs of the project design, subject to approval by the SER. The inspection procedure shall be submitted to the Building Official prior to commencement of construction.

b. Underpinning

All underpinning shall be designed by a licensed structural engineer and be submitted to the SER for review and approval. The Design Professional in Responsible Charge shall develop a comprehensive inspection list based on the specific needs of the design, subject to approval by the SER. The inspection procedure shall be submitted to the Building Official prior to the commencement of construction.

c. Architectural Inspections

The Inspecting Architect shall:

- (1) provide inspections as needed to insure compliance with applicable code requirements such as:
 - (a) means of egress;
 - (b) construction type & fire-resistance rated construction;
 - (c) architectural close-in inspections and authorization of work to proceed;
 - (d) interior environments and energy conservation;
 - (e) interior finish;
 - (f) accessibility;
 - (g) sound transmission control; and
 - (h) other provisions of the code that will deem the building in conformance with this Building Code; and,
- (2) submit a signed and sealed inspection report to the Building Official within five working days after the completion of the inspection;
- (3) ensure that all required approvals are obtained prior to approval of inspected item(s) and continuation of construction; and
- (4) upon completion of the work, provide a professional opinion that to the best of their knowledge, information and belief, the work has been constructed in accordance with the approved contract documents and the Building Code.

d. Mechanical Inspections

- (1) The Mechanical Engineer of Record shall provide periodic inspections for compliance with the International Mechanical Code, applicable NFPA standards and conformity with the approved construction documents before the concealment of any mechanical components as described, but not limited to:
 - (a) testing, insulation, support and clean out location for grease duct systems;
 - (b) pressure testing of ductwork and various piping systems;
 - (c) piping and duct supports and insulation;
 - (d) fuel tank pressure testing and verification;
 - (e) inspection, testing and qualification for seismic resistance as per IBC § 1705.13 in Seismic Design Category C;
 - (f) appliance location, anchorage and supports;
 - (g) proper protection of penetrations of fire rated building components;
 - (h) appropriate protection of fire rated shaft penetrations;
 - (i) commercial and domestic dryer exhaust ducts and makeup air for dryer systems consistent with the manufacturers' installation instructions and the IMC;
 - (j) emergency Standby Generators shall be installed and inspected per the IBC and NFPA 110;
 - (k) hazardous exhaust systems shall be installed and inspected per the IMC; and
 - (l) compliance with the International Energy Conservation Code regarding mechanical systems efficiencies, insulation, economizers and controls.
- (2) Upon completion of the mechanical work within the building, the Mechanical Engineer of Record shall provide BCE a certified document stating that to the best of their knowledge and in their opinion mechanical systems have been completed in accordance with the approved contract documents and the Building Code.

e. Geotechnical Investigations

- (1) The Geotechnical Engineer of Record shall:
 - (a) prepare and issue geotechnical report of subsoil evaluation;
 - (b) prepare design criteria for foundations and foundation systems; and
 - (c) revise geotechnical recommendations if site soil or groundwater conditions materially differ from conditions indicated on the approved geotechnical report and coordinate changes with the Design Professional in Responsible Charge for the structural design of foundations, deep foundations or other types of foundation systems.
- (2) Upon completion of the geotechnical phase of the building, the Geotechnical Engineer of Record shall provide BCE a certified document stating that to the best of their knowledge and in their opinion the construction of the soils and/or foundation systems (as appropriate) has been completed in accordance with the approved contract documents and the Building Code.

CHAPTER 4. CODES ADOPTED BY REFERENCE

As authorized by 14 M.P.T.L. Ch. 4, the MPTN Land Use Commission has adopted the model codes specified within this chapter, by reference; except as may be amended, altered or deleted within Chapter 5 of this Title, the MPTN Supplement, or as may be superseded in the future by amendment to this Chapter.

§ 1. International Code Council

- a. 2021 International Building Code
- b. 2021 International Residential Code
- c. 2021 International Property Maintenance Code
- d. 2021 International Energy Conservation Code
- e. 2021 International Mechanical Code
- f. 2021 International Plumbing Code
- g. 2021 International Existing Building Code
- h. 2021 International Swimming Pool and Spa Code
- i. 2017 ANSI A117.1 Accessible and Usable Buildings and Facilities

§ 2. National Fire Protection Association

2020 National Electric Code, a.k.a. NFPA 70

§ 3. Equivalency

a. In general, provisions within the 2022 Connecticut State Building Codes, only to the extent that they add, amend or otherwise specify changes to the model code provisions adopted within this title, will be considered acceptable as an alternative or an equivalent method of compliance provided such alternatives are acceptable upon approval by the Building Official and Fire Marshal.

b. When considering whether or not to raise an objection, the Building Official and Fire Marshal shall ensure compliance with the intent of the following:

- (1) Section 14 of the Tribal-State Compact that requires tribal ordinances and regulations, governing health and safety standards applicable to gaming facilities, be no less rigorous than standards generally imposed by the laws and regulations of the State relating to public facilities with regard to building, sanitary, and health standards and fire safety; and,
- (2) Tribal Council Resolution TCT102704-02 of 03 that requires the Land Use Commission, with respect to home construction, to apply regulatory interpretation that is consistent with the interpretation of similar building code provisions in New London County, Connecticut.

CHAPTER 5. MPTN SUPPLEMENT**§ 1. General**

- a. Referenced Model Code Annotations - As used in this chapter, a referenced section or subsection preceded by bracketed annotations have the following meaning:
- (1) [Add] - indicates the addition to the adopted referenced standard.
 - (2) [Amd] - indicates the substitution in the adopted referenced standard.
 - (3) [Del] - indicates the deletion of this section or subsection from the adopted referenced standard.
- b. Referenced Code and Standards.
- (1) Any reference to a model code adopted within chapter 4, shall mean as amended by this chapter.
 - (2) The codes and standards referenced within the body of the model codes adopted shall be considered part of the code requirements to the prescribed extent of each such reference, except that:
 - (a) references to the International Fire Code shall be considered to be references to the current MPTN Fire Prevention Code (3 L.U.R.);
 - (b) references to the International Fuel Gas Code shall be considered references to requirements of NFPA 54, National Fuel Gas Code, NFPA 56, Standard for Fire and Explosion Prevention During Cleaning and Purging of Flammable Gas Piping Systems and NFPA 58, Liquefied Petroleum Gas Code;
 - (c) references to NFPA standards shall be considered references to those versions specified within the MPTN Fire Prevention Code (3 LUR, chapters 4 and 5) or if no such reference is provided therein then the referenced version in effect on January 1, 2022 shall govern.
 - (3) Applicability
 - (a) Chapter 4 identifies those model codes which have been adopted by reference as part of this Title. This chapter contains the MPTN Supplement to those adopted model codes. Where there is a conflict between a provision specified within the adopted code and this title, the provision as stated in this title shall govern.
 - (b) Where enforcement of a code provision would violate the conditions of the listing of the equipment or appliance, the conditions of the listing and manufacturer's instructions shall apply;
 - (c) Where differences occur between provisions of this code and referenced codes and standards, the provisions of this code shall apply; and,
 - (d) Where the extent of the reference to a referenced code or standard includes subject matter that is within the scope of the referencing code, the provisions of the referencing code, as applicable, shall take precedence over the provisions in the referenced code or standard.
 - (e) References to chapter or section numbers, or to provisions not specifically identified by number, shall be construed to refer to such chapter, section or provision of the adopted model code.
 - (f) Provisions in the appendices of the adopted model codes shall not apply unless specifically referenced in this Title.

§ 2. Amendments to the 2021 International Building Code

a. Scope and Administration

(1) [Del] Chapter 1: Scope and Administration

[Add] **Title.** The 2021 International Building Code, as amended by this section, shall be known as the International Building Code portion of the Mashantucket Building Code, hereinafter referred to as “the code” or “this code”.

[Add] **Appendices.** The following appendices of the 2021 International Building Code are hereby specifically adopted and included in this code.

Appendix C – Group U – Agricultural buildings

Appendix H - Signs

Appendix I - Patio covers

[Add] **Oil-burning equipment, piping and storage.** In addition to the requirements of this code, the installation of oil burners, equipment, and appliances used in conjunction therewith, including tanks, piping, pumps, control devices and accessories shall comply with NFPA 31, Standard for the Installation of Oil Burning Equipment.

b. Technical Provisions

(1) [Add] Table A - Mashantucket Specific Structural Design Parameters

Table A
Mashantucket Specific Structural Design Parameters

Ground Snow Load P_g (psf)	Frost Depth, inches	MCE Spectral Accelerations (g)		Wind Design Parameters						Hurricane-Prone Region
				Basic Design Wind Speeds, V (mph)			Allowable Stress Design Wind Speeds, V_{asd} (mph)			
		S_s	S_1	Risk Cat. I	Risk Cat. II	Risk Cat III-IV	Risk Cat. I	Risk Cat. II	Risk Cat III-IV	
30	42	0.19	0.053	120	130	140	93	101	108	Yes

Source: 2022 Connecticut State Building Code, Appendix P – Ledyard.

(2) Chapter 10 – Means of Egress

Section 1005 – Means of Egress Sizing

[Amd] **1005.3.1 Stairways.** The capacity, in inches, of means of egress stairways shall be calculated by multiplying the occupant load served by such stairways by a means of egress capacity factor of 0.3 inch (7.6 mm) per occupant. Where stairways serve more than one story, only the occupant load of each story considered individually shall be used in calculating the required capacity of the stairways serving that story.

Exceptions:

1. Facilities with smoke-protected assembly seating shall be permitted to use the capacity factors in Table 1030.6.2 indicated for level or ramped aisles for means of egress components other than stairways where the entire path

for means of egress from the seating to the exit discharge is provided with a smoke control system complying with Section 909.

2. Facilities with open-air assembly seating shall be permitted to the capacity factors in Section 1030.6.3 indicated for level or ramped aisles for means of egress components other than stairways where the entire path for means of egress from the seating to the exit discharge is open to the outdoors.

[Amd] **1005.3.2 Other egress components.** The capacity, in inches, of means of egress components other than stairways shall be calculated by multiplying the occupant load served by such component by a means of egress capacity factor of 0.2 inch (5.1 mm) per occupant.

Exceptions:

1. Facilities with smoke-protected assembly seating shall be permitted to use the capacity factors in Table 1030.6.2 indicated for level or ramped aisles for means of egress components other than stairways where the entire path for means of egress from the seating to the exit discharge is provided with a smoke control system complying with Section 909.
2. Facilities with open-air assembly seating shall be permitted to the capacity factors in Section 1030.6.3 indicated for level or ramped aisles for means of egress components other than stairways where the entire path for means of egress from the seating to the exit discharge is open to the outdoors.

(3) Chapter 16 – Structural Design

Section 1608 – Snow Loads

[Amd] **1608.1 General.** Design snow loads shall be determined in accordance with Chapter 7 of ASCE 7, but the design roof load shall not be less than that determined by Section 1607 and the calculated value for p_f shall not be less than value listed in Table A.

[Amd] **1608.2 Ground snow loads.** Ground snow loads to be utilized in determining the design snow loads for roofs shall be as listed in Table A.

Section 1609 – Wind Loads

[Amd] **1609.3 Basic design wind speed.** The basic design wind speed, V , in mph, for the determination of the wind loads shall be determined by Table A.

Section 1613 – Earthquake Loads

[Amd] **1613.2.1 Mapped acceleration parameters.** The parameters S_s and S_1 shall be determined from the 0.2 and 1-second spectral response accelerations shown in Table A.

(4) Chapter 17 – Special Inspections and Tests

Section 1704 – Special Inspections and Tests, Contractor Responsibility and Structural Observations

[Amd] **1704.2.4 Report requirements.** Refer to 2 L.U.R. Ch. 3, §4a.

[Amd] **1704.2.5.1 Fabricator approval.** Special inspections required by Section 1705 shall be permitted to be reduced or eliminated when approved by the Design Professional in Responsible Charge where the work is done on the premises of a fabricator registered and approved to perform such work without special inspection. Approval shall be based upon review of the fabricator's written procedural and quality control manuals and periodic auditing of fabrication practices by an approved special inspection agency. Approved fabricators shall include:

1. A fabricator of structural steel certified by the American Institute of Steel Construction Inc.'s Certification Program for Structural Steel Fabricators, Standard for Steel Building Structures.
2. A manufacturer of metal building systems accredited by the ICC International Accreditation Service (IAS) in accordance with accreditation criteria IAC-AC-472.
3. A manufacturer of K-, LH-, or DLH-Series Joist or Joist Girders who is a member of the Steel Joist Institute and has completed the Institute's examination of complete engineering design details and calculations of joists, bridging and accessories for which standards have been adopted; data obtained from physical tests of joists to verify conclusions from analysis of the applicant company's engineering design, details and calculations; an initial plant inspection and subsequent periodic inspections are required to ensure that the applicant/member company possesses the facilities, equipment and personnel required to properly fabricate joists.
4. A fabricator of precast concrete certified by the Precast/Prestressed Concrete Institute's Plant Certification Program, commercial category.
5. A fabricator of cold-formed steel trusses certified by the Truss Plate Institute's Quality Assurance Program.
6. A fabricator of wood trusses certified by the Truss Plate Institute's Quality Assurance Program.
7. A fabricator of structural timber components and assemblies certified by the American Institute of Timber Construction's AITC 115 – Standard for Fabricated Structural Glued Laminated Timber Components and Assemblies.

At the completion of fabrication, the approved fabricator shall submit a certificate of compliance to the building official stating that the work was performed in accordance with the approved construction documents.

Section 1705 – Required Special Inspections and Tests

[Amd] **1705.2.4. Cold-formed steel trusses.** Where a cold-formed steel truss clear span is 30 feet (9,144 mm) or greater, the *special inspector* shall verify that the permanent individual truss member restraint/bracing is installed in accordance with the *approved* truss submittal package. Where a cold-formed steel truss clear span is 60 feet (18,288 mm) or greater, the *special inspector* shall verify that the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing are installed in accordance with the *approved* truss submittal package.

[Add] **1705.2.5 Cold-formed steel Light-frame construction.** *Special inspections* of prefabricated cold-formed steel light-frame structural elements and assemblies shall be in accordance with Section 1704.2.5. *Special inspections* of site-built cold-formed steel light-frame structural elements and assemblies shall be in accordance with this section and Table 1705.2.5.

Exceptions: Special inspections, other than items 5(a) and 5(b) of table 1705.2.5, of site-built cold-formed steel light-frame structural elements and assemblies shall not be required in the following cases:

1. Buildings and structures in risk category I, per Table 1604.5.

2. Buildings and structures in risk category II per table 1604.5, which are in wind exposure categories B or C per 1609.4.3 and are not more than three stories high.

[Add] Table 1705.2.5

Table 1705.2.5

Required Special Inspections of Cold-Formed Steel Light-Frame Construction

TYPE	CONTINUOUS SPECIAL INSPECTION	PERIODIC SPECIAL INSPECTION	IBC REFERENCE
1. Inspect Material Grade and Thickness:		X	
2. Inspect Framing and Details			
a. Framing layout, member sizes and bearing lengths		X	
b. Blocking, bridging and web stiffeners		X	
c. Holes and notches ^a		X	
3. Inspect Connections			
a. Bolted and screwed connections, including diameter, length, spacing and edge distance		X	
b. Welded connections		X	
c. Proprietary hangers and framing anchors, including fastener sizes and quantities		X	
d. Tie-down anchors, including anchor rod sizes and fastener sizes and quantities		X	
4. Inspect Shear Walls and Diaphragms			
a. Panel grade and thickness ^b		X	
b. Steel strapping size, grade and thickness		X	
c. Fastener size, length and spacing		X	
d. Framing member sizes at panel edges		X	
e. Blocking at panel edges		X	
5. Inspect Cold-Formed Steel Trusses			
a. Temporary installation restraint/bracing for truss spanning 60' or more		X	1705.2.4
b. Permanent individual truss member restraint/bracing for trusses spanning 30' or more		X	1705.2.4

a. Inspections of holes to be performed after electrical, mechanical and plumbing rough-in inspections.

b. Includes wood structural panels, steel sheet panels and gypsum board panels.

Section 1705.5 – Wood construction

[Amd] **1705.5 Wood construction.** *Special inspections* of prefabricated wood structural elements and assemblies shall be in accordance with Section 1704.2.5. *Special inspections* of site-built wood structural elements and assemblies shall be in accordance with this section and Table 1705.5.

Exceptions: *Special inspections*, other than items 5(a) and 5(b) of table 1705.5, of site-built wood structural assemblies shall not be required in the following cases:

1. Buildings and structures in risk category I, per Table 1604.5
2. Buildings and structures in risk category II per table 1604.5, which are in wind exposure categories A or B per 1609.4.3 and are not more than three stories high.

[Amd] **1705.5.2. Metal-plate-connected wood trusses.** Where a truss clear span is 30 feet (9,144 mm) or greater, the *special inspector* shall verify that the permanent individual truss member restraint/bracing is installed in accordance with the *approved* truss submittal package. Where a truss clear span is 60 feet (18,288 mm) or greater, the *special inspector* shall verify that the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing are installed in accordance with the *approved* truss submittal package.

[Add] TABLE 1705.5

TABLE 1705.5

Required Special Inspections of Wood Construction

TYPE	CONTINUOUS SPECIAL INSPECTION	PERIODIC SPECIAL INSPECTION	IBC REFERENCE
1. Inspect Grading of Wood Materials:			
a. Sawn lumber framing		X	
b. Structural composite lumber		X	
c. Wood structural panels		X	
2. Inspect Framing and Details			
a. Framing layout, member sizes and bearing lengths		X	
b. Blocking and bridging		X	
c. Holes and notches ^a		X	
3. Inspect Connections			
a. Bolted and screwed connections, including diameter, length, spacing and edge distance		X	
b. Nailed connections, including diameter, length, type and spacing of nails		X	
c. Proprietary hangers and framing anchors, including fastener sizes and quantities		X	
4. Inspect Shear Walls and Diaphragms			
a. Panel grade and thickness ^b		X	

b.	Fastener size, length and spacing		X	
c.	Framing member sizes at panel edges		X	
d.	Blocking at panel edges		X	
e.	Field gluing	X		
f.	High-load diaphragms		X	1705.5.1
5.	Inspect Metal-Plate Connected Wood Trusses			
a.	Temporary installation restraint/bracing for truss spanning 60' or more		X	1705.5.2
b.	Permanent individual truss member restraint/bracing for trusses spanning 30' or more		X	1705.5.2
c.	Multi-ply truss connections		X	

- a. *Inspections of holes and notches to be performed after electrical, mechanical and plumbing rough-in inspections.*
- b. *Applies to wood structural panels and gypsum board panels.*

1705.18 Fire-resistant penetrations and joints

[Add] **1705.18.3 Installer certification.** Firestop installers shall be FM 4991 certified.

(5) Chapter 18 – Soils and foundations

1807.2 Retaining walls

[Add] **1807.2.1.1 Guards.** Retaining walls with a difference in height between the finished grade at the top of the wall and the finished grade at the bottom of the wall that is greater than 4 feet (1219 mm) shall be provided with guards complying with Sections 1015.3, 1015.4 and 1607.8 when there is a walking surface, parking lot or driveway on the high side located closer than 2 feet (610 mm) to the nearest side of the retaining wall. For the purpose of this section, grass, planting beds or landscaped areas shall not be considered a walking surface.

(6) Chapter 27 – Electrical

2702.2 Where required

[Add] **2702.2.20 Electric fire pumps.** Buildings provided with standby electrical power for the purpose of continuing operation or occupancy shall provide standby power in accordance with Article 701 of the National Electrical Code for any electric fire pump installed to provide an adequate water supply or minimum operating pressure to a required automatic sprinkler system.

[Amd] **2702.4 Maintenance. Emergency and standby power systems** shall be maintained and tested in accordance with NFPA 110, Type 60. The standby power system shall have a capacity and rating sufficient to supply all required equipment. Selective load pickup and load shedding shall be permitted in accordance with the National Electrical Code.

§ 3. Amendments to the 2021 International Residential Code Scope and Administration

a. Scope and Administration

(1) [Del] Chapter 1: Scope and Administration

[Add] **Title.** The 2021 International Residential Code, as amended by this section, shall be known as the International Residential Code portion of the Mashantucket Building Code, hereinafter referred to as “the code” or “this code”.

[Add] **Appendices.** The following appendices of the 2021 International Residential Code are hereby specifically adopted and included in this code:

Appendix AE – Manufactured housing used as dwellings

Appendix AF – Radon control methods

Appendix AH – Patio covers

Appendix AO – Automatic vehicular gates

Appendix AP – Sizing of water piping system

[Add] **Specifically approved alternative materials.**

[Add] **“Hempcrete,” or “hemp-lime,”** is an approved alternative material, per TRC090816-01 of 09, when used as an interstitial insulation between traditional wood frame construction. In the event that specific code provisions have not been developed at the time of proposed use, review and approval by the Building Official shall be based on specifications previously approved by other building departments that enforce codes generally as rigorous as this code, and code provisions that have been established for use of similar “earth-based” construction systems (e.g. 2015 ICC International Residential Code, Appendix R – Light Straw-Clay Construction).

b. Technical Provisions

(1) Chapter 3 – Building Planning

Section R301 – Design Criteria

[Amd] Table R301.2(1) – Climate and Geographic Design Criteria

Table R301.2(1) Climate and Geographic Design Criteria

Ground Snow Load	Wind Design			Seismic Design Category	Subject to Damage From			Winter Design Temp.	Ice Barrier Underlayment Required	Flood Hazards	Air Freezing Index	Mean Annual Temp.
	Ultimate Wind Speed, V _{ult}	Nominal Wind Speed, V _{asd}	Topographic Effects		Weathering ^b	Frost Line Depth	Termite					
30 psf	126	99 ^a	No	B ¹	Severe	42 Inches	Mod. to Heavy	7°F	Yes	Site Spec.	1,500 or less	50°F

^a Wind exposure category shall be determined on a site-specific basis in accordance with Section R301.2.1.4.

^b Weathering may require a higher strength concrete or grade of masonry than necessary to satisfy the structural requirements of this code.

¹ Site Soil Class A-E; If Site Class F is present, the Short Period Spectral Response Acceleration (SDS) shall be determined according to Section 1613.3 of the International Building Code, and the Seismic Design Category shall be determined in accordance with Table 301.2.2.1.1.

² See applicable Flood Insurance Rate Maps with effective date 18JUL11.

Manual J Design Criteria
ACC Manual J 8th Edition 2016

Elevation, Feet	Latitude, Degrees North	Heating, 99% Outdoor Dry Bulb	Cooling					Daily Range (DR)
			Outdoor Air		Design Grains			
			1% Dry Bulb	Coincident Wet Bulb	55% RH, Indoors	50% RH, Indoors	45% RH, Indoors	
197	41	7	86	73	30	37	44	M

Section R311 – Means of Egress

[Amd] **R311.3.1 Floor elevations** at the required egress doors. Landings or finished floors at the required egress door shall not be more than 1½ inches (38 mm) lower than the top of the threshold.

Exception: The landing or floor on the exterior side shall not be more than 8¼ inches (209.5 mm) below the top of the threshold provided the door does not swing over the landing or the floor.

Where exterior landings or floors serving the required egress door are not at grade, they shall be provided with access to grade by means of a ramp in accordance with Section R311.8 or a stairway in accordance with Section R311.7.

[Amd] **R311.3.2 Floor elevations** for other exterior doors. Doors other than the required egress door shall be provided with landings or floors not more than 8¼ inches (209.5 mm) below the top of the threshold.

Exception: A landing is not required where a stairway of three or fewer risers, including the top riser from the dwelling to the top tread, is located on the exterior side of the door, provided the door does not swing over the stairway.

[Amd] **R311.7.5.1 Risers.** The maximum riser height *shall* be 8¼ inches (209.5 mm). The riser *shall* be measured vertically between leading edges of adjacent treads. The greatest riser height within any *flight of stairs shall* not exceed the smallest by more than ⅜ inch (9.5 mm). Risers *shall* be vertical or sloped from the underside of the *nosing* of the tread above at an angle not more than 30 degrees (0.51 rad) from the vertical. Open risers are permitted provided that the opening between treads does not permit the passage of a 4-inch-*diameter* (102 mm) sphere.

Exceptions:

1. The opening between adjacent treads is not limited on stairs with a total rise of 30 inches (762 mm) or less.
2. The riser height of spiral stairways shall be in accordance with Section R311.7.10.1.

[Amd] **R311.7.5.2 Treads.** The minimum tread depth *shall* be 9 inches (229 mm). The tread depth *shall* be measured horizontally between the vertical planes of the foremost projection of adjacent treads and at a right angle to the tread's leading edge. The greatest tread depth within any *flight of stairs shall* not exceed the smallest by more than ⅜ inch (9.5 mm).

Exception: The tread depth at spiral stairways shall be in accordance with Section R311.7.10.1.

Section R312 – Guards and Window Fall Protection

[Add] **R312.1.1.1 Retaining wall guards.** Retaining walls with a difference in finished grade from the top of the wall to the bottom of the wall that is greater than 4 feet (1219 mm) *shall* be provided with *guards* complying with Section R312 when there is a walking surface, parking lot or driveway on the high side located closer than 2 feet (610 mm) to the retaining wall. For the purposes of this section, grass, planting beds or landscaped areas are not a walking surface.

Section R313 – Automatic Fire Sprinkler Systems

[Amd] **R313.1 Townhouse** automatic fire sprinkler systems. When an automatic residential fire sprinkler system is to be installed in *townhouses*, it *shall* be designed and installed in accordance with Section P2904 or NFPA 13D.

[Del] **R313.1.1 Design and installation.** Delete section.

[Amd] **R313.2** One- and two-family dwellings automatic fire systems. When an automatic fire sprinkler system is to be installed in one- and two-family dwellings, it shall be designed and installed in accordance with Section P2904 or NFPA 13D.

[Del] **R313.2.1 Design** and installation. Delete section.

(2) Chapter 4 – Foundations

Section R401 - General

[Add] **R401.3.1 Drainage nuisances.** Any surface or roof drainage which creates a structural or health hazard, or any other nuisance to the owners or occupants of adjacent premises, or to the public by reason of discharge into, onto or across any adjacent building, premises or public thoroughfare, shall be a violation. The building official shall require the drainage to be disposed of in an approved manner.

Section R404 – Foundation and Retaining Walls

[Add] **R404.4.1 Guards.** Retaining walls with a difference in finished grade from the top of the wall to the bottom of the wall that is greater than 4 feet (1219 mm) shall be provided with guards complying with Sections R312.1.2 and R312.1.3 when there is a walking surface, parking lot or driveway on the high side located closer than 2 feet (610 mm) to the retaining wall. For the purpose of this section, grass, planting beds or landscaped areas shall not be a walking surface.

Section R405 – Foundation Drainage

[Add] **R405.3 Above grade drainage.** Above grade drainage systems, including but not limited to, gutters and downspouts, roof drains, and yard drains, shall not be connected to the foundation drainage system.

(3) Chapter 11 – Energy Efficiency

Section N1102 (R402) Building Thermal Envelope

[Add] **N1102.1.6 Prescriptive alternative.** Compliance with the following criteria shall be considered in compliance with this code.

Ceiling insulation; $\geq R-60$

Wall cavity insulation; $\geq R-23$

Floors over unconditioned spaces; $\geq R-30$

Floors over outside air; $\geq R-30$

Slab-on-grade; $\geq R-10$, 4 ft. vertical

Glazing u-value; ≤ 0.26

Glazing SHGC; ≥ 0.27

Doors, < 50% glazing u-value; ≤ 0.16

Skylights; none

Glazing area; $\leq 14\%$ of fenestration area

Heating; $\geq 95\%$ efficacy

Air conditioning; ≥ 16 SEER

(4)

(5) Chapter 25 – Plumbing Administration**Section P2503 - Inspection and Tests**

[Amd] **P2503.5.1 Rough plumbing.** DWV systems shall be tested on completion of the rough piping installation by water or, for piping systems other than plastic, by air, without evidence of leakage. Either test shall be applied to the drainage system in its entirety or in sections after rough-in piping has been installed, as follows:

1. **Water test.** Each section shall be filled with water to a point not less than 10 feet (1524 mm) above the highest fitting connection in that section, or to the highest point in the completed system. Water shall be held in the section under test for a period of 15 minutes. The system shall prove leak free by visual inspection.
2. **Vacuum test.** The portion under test shall be evacuated of air by vacuum-type pump to achieve a uniform gauge pressure of -5 pounds per square inch (psi) or negative 10 inches of mercury column (-34 kPa). This pressure shall be held without the removal of additional air for a period of 15 minutes.

(6) Chapter 31 – Vents**Section P3103 – Vent Terminals**

[Amd] **P3103.1 Roof extension.** Open vent pipes that extend through a roof shall be terminated at least 12 inches (305 mm) above the roof, except that where a roof is to be used for any purpose other than weather protection, the vent extension shall be at least 7 feet (2134 mm) above the roof.

[Del] **P3103.2 Frost closure.** Delete without substitution.

§ 4. Amendments to the 2021 International Property Maintenance Code

a. Scope and Administration

[Del] Chapter 1 – Scope and Administration

[Add] **Title.** The 2021 International Property Maintenance Code, as amended by this section, shall be known as the International Property Maintenance Code portion of the Mashantucket Building Code, hereinafter referred to as “the code” or “this code.”

[Add] **Enforcement Official.** The Land Use Commissioner representing the Planning and Zoning discipline, as defined within 1 L.U.R. Ch. 1, §3a[6], shall be the code official responsible for enforcement of this code within residential portions of Mashantucket; for all other areas the Building Official shall be the responsible code official.

b. Technical Provisions

Chapter 3 – General Requirements

Section 302 – Exterior Property Areas

[Amd] **302.4 Weeds.** All premises and exterior property shall be maintained free from weeds or plant growth in excess of 8 inches. All noxious weeds shall be prohibited. Weeds shall be defined as all grasses, annual plants and vegetation, other than trees or shrubs provided; however, this term shall not include cultivated flowers and gardens.

Section 304 – Exterior Structure

[Amd] **304.14 Insect screens.** During the period from April 15th to October 15th, every door, window and other outside opening required for ventilation of habitable rooms, food preparation areas, food service areas or any areas where products to be included or utilized in food for human consumption are processed, manufactured, packaged or stored shall be supplied with approved tightly fitting screens of minimum 16 mesh per inch [16 mesh per 25 mm], and every screen door used for insect control shall have a self-closing device in good working condition.

Exception: Screens shall not be required where other approved means, such as air curtains or insect repellent fans, are employed.

§ 5. Amendments to the 2021 International Energy Conservation Code

a. Administrative Provisions

(1) ~~Chapter 1 [CE] - Scope and Administration~~

[Add] **Title.** The 2021 International Energy Conservation, as amended by this section, shall be known as the International Energy Conservation Code portion of the Mashantucket Building Code, hereinafter referred to as “the code” or “this code.”

(2) ~~Chapter 1 [RE] - Scope and Administration~~

b. Technical Provisions

(1) ~~Chapter 2 [RE] – Definitions~~(2) ~~Chapter 3 [RE] – General requirements~~(3) ~~Chapter 4 [RE] – Residential Energy Efficiency~~(4) ~~Chapter 5 [RE] – Existing buildings~~(5) ~~Chapter 6 [RE] – Referenced standards~~

§ 6. Amendments to the 2021 International Mechanical Code

a. Administrative Provisions

(1) [Del] Chapter 1: Scope and Administration

[Add] **Title.** The 2021 International Mechanical Code, as amended by this section, shall be known as the International Mechanical Code portion of the Mashantucket Building Code, hereinafter referred to as “the code” or “this code”.

[Add] **Appendices.** The following appendices of the 2021 International Mechanical Code are hereby specifically adopted and included in this code.

Appendix A – Chimney connector and pass-throughs

[Add] **Oil-burning equipment, piping and storage.** In addition to the requirements of this code, the installation of oil burners, equipment, and appliances used in conjunction therewith, including tanks, piping, pumps, control devices and accessories shall comply with NFPA 31.

b. Technical Provisions

(1) Chapter 5 – Exhaust Systems

Section 506 - Commercial Kitchen Hood Ventilation System Ducts and Exhaust Equipment.

[Amd] **506.3.2.5 Grease duct test.** Prior to the use or concealment of any portion of a grease duct system, a leakage test shall be performed. Ducts shall be considered to be concealed where installed in shafts or covered by coatings or wraps that prevent the ductwork from being visually inspected on all sides. The permit holder shall be responsible to provide the necessary equipment and perform the grease duct leakage test. The leakage test shall consist of one of the following tests, or an approved equivalent test:

Water test. The water test shall be performed by use of a pressure washer operating at a minimum of 1500 psi (10.34 kPa), simulating cleaning operations. The water shall be applied directly to all areas to be tested. No water applied to the duct interior shall be visible on any exterior surface in any volume during the test.

As an alternative to the water test, one of the following optional tests may be performed upon approval from the MPTN Building Official and MPTN Fire Marshal:

Positive pressure smoke test. The positive pressure smoke test shall be performed by sealing the entire duct system from the hood exhaust opening(s) to the duct termination. Visible smoke shall be introduced to the duct system. The sealed duct shall then be pressurized to a minimum pressure of 1.0 inch water column, but shall not exceed the positive pressure capability of the system and components under test. No smoke shall emit from any exterior surface of the duct.

Air test. The air test shall be performed by sealing the entire duct system from the hood exhaust opening(s) to the duct termination. The sealed duct system shall then be pressurized to a minimum pressure of 1.0 inch (249 Pa) water column and shall be required to hold the initial set pressure for a minimum of 20 minutes.

Light test. The light test shall be performed by passing a lamp having a power rating of not less than 100 watts through the entire section of

ductwork to be tested. The lamp shall be open so as to emit light equally in all directions perpendicular to the duct walls.

A test shall be performed for the entire duct system, including the hood-to-duct connection. All connections, seams and welds shall be visible during the test. The ductwork shall be permitted to be tested in sections, provided that every joint is tested. For listed factory-built grease ducts, this test shall be limited to duct joints assembled in the field and shall exclude factory welds.

(2) **Chapter 6 – Duct Systems**

Section 606 Plenums.

[Amd] **606.2** Where required. Smoke detectors shall be installed where indicated in Sections 606.2.1 to 606.2.3, inclusive.

Exception: Smoke detectors shall not be required where air distribution systems are incapable of spreading smoke beyond the enclosing walls, floors and ceilings of the room or space in which the smoke is generated, or where the sole purpose of the air distribution system is to remove air from the inside of the building to the outside of the building.

[Amd] **606.2.1** Return and supply air systems. Smoke detectors shall be installed in return and supply air systems with a design capacity greater than 2,000 cubic feet per minute in the supply air duct downstream of any filters and ahead of any branch connections.

[Amd] **606.2.3** Return air risers. Where return air risers serve two or more stories and serve any portion of a return air system having a design capacity greater than 15,000 cubic feet per minute, smoke detectors shall be installed at each story. Such smoke detectors shall be located upstream of the connection between the return air riser and any air ducts or plenums.

Exception: Smoke detectors are not required in the return air system where all portions of the building served by the air distribution system are protected by area smoke detectors connected to a fire alarm system. The area smoke detection system shall comply with Section 606.4.

§ 7. Amendments to the 2021 International Plumbing Code

a. Administrative Provisions

(1) [Del] Chapter 1: Scope and Administration

[Add] **Title.** The 2021 International Plumbing Code, as amended by this section, shall be known as the International Plumbing Code portion of the Mashantucket Building Code, hereinafter referred to as “the code” or “this code”.

[Add] **Appendices.** The following appendices of the 2021 International Plumbing Code are hereby specifically adopted and included in this code.

Appendix B – Rates of rainfall for various cities

Appendix C – Structural safety

Appendix D – Degree day and design temperatures

Appendix E – Sizing of water piping systems

b. Technical Provisions

(1) Chapter 3 – General Regulations

Section 305 Protection of Pipes and Plumbing System Components

[Del] 305.4.1 Sewer depth

Section 312 – Tests and Inspections

[Amd] **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 sections shall not be tested with less than a 10-foot (3048 mm) head of water. In testing successive sections, not less than 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.

Exception: A Vacuum test may be performed, in lieu of a water test, with the prior approval of the Building Official. The portion under test shall be evacuated of air by a vacuum-type pump to achieve a uniform gauge pressure of -5 pounds per square inch or a negative 10 inches of mercury column (-34 kPa). This pressure shall be held without the removal of additional air for a period of 15 minutes.

(2) Chapter 9 – Vents

Section 903 – Vent terminals

[Amd] **903.1 Roof extension.** Open vent pipes that extend through a roof shall be terminated not less than 12 inches above the roof, except where a roof is to be used for any purpose other than weather protection, the vent extensions shall terminate not less than 7 feet above the roof.

[Del] **903.2 Frost closure. Delete section.**

§ 8. Amendments to the 2021 International Existing Building Code

a. Administrative Provisions

(1) [Del] Chapter 1: Scope and Administration

[Amd] **Title.** The 2021 International Existing Building Code, as amended by this section, shall be known as the International Existing Building Code portion of the Mashantucket Building Code, hereinafter referred to as “the code” or “this code”.

[Add] **Applicability.** The provisions of the International Existing Building Code shall apply to matters governing the repair, alteration, change of occupancy, addition to and relocation of existing buildings.

b. Technical Provisions

(1) Chapter 8 – Alterations – Level 2

[Add] **804.1.1 Master Egress Plan Required.** Any alteration that effects Means of Egress shall require submission of an updated Master Egress Plan prior to issuance of a Land Use Permit.

Exceptions:

Under the following circumstances, when approved by the Building Official and Fire Marshal, submittal of the revised Master Egress Plan may be deferred; however, under no circumstance will the Commission issue a Certificate of Occupancy until received.

1. Alterations resulting in minor changes to Means of Egress, when it is obvious that Means of Egress capacity for all occupants will not be negatively impacted.
2. Alterations that will result in an increase to the Means of Egress capacity. Such changes may be submitted as mark-up revisions to the Master Egress Plan.

(2) Chapter 10 – Change of Occupancy

[Add] **1005.2 Master Egress Plan Required.** Any change of use or occupancy shall require submission of an updated Master Egress Plan prior to issuance of a Land Use Permit.

Exceptions:

Under the following circumstances, when approved by the Building Official and Fire Marshal, submittal of the revised Master Egress Plan may be deferred; however, under no circumstance will the Commission issue a Certificate of Occupancy until received.

1. Changes when the proposed occupant load increases by no more than 5-percent over the previous use and, it is obvious that Means of Egress capacity for all occupants can be accommodated.
2. Changes when the proposed occupant load will not increase. Such changes may be submitted as mark-up revisions to the Master Egress Plan.

§ 9. Amendments to the 2021 International Swimming Pool and Spa Code

a. Administrative Provisions

(1) [Del] Chapter 1: Scope and Administration

[Add] **Title.** The 2021 International Swimming Pool and Spa Code, as amended by this section, shall be known as the International Swimming Pool and Spa Code portion of the Mashantucket Building Code, hereinafter referred to as “the code” or “this code”.

b. Technical Provisions

Chapter 11 Reference Standards

[Add] **ASME A112.19.17(2010):** Manufactured Safety Vacuum Release Systems (SVRS) for Residential and Commercial Swimming Pool, Spa, Hot Tub, and Wading Pool Suction Systems

[Add] **ASTM F2376-117a (2017):** Standard Practice for Classification, Design, Manufacture, Construction and Operation of Water Slides Systems

[Add] **ASTM F2387-04 (2012):** Standard Specification for Manufactured Safety Vacuum Release Systems (SVRS) for Swimming Pools, Spas and Hot Tubs

[Add] **ASTM F2461-16e1(2016):** Standard Practice for Manufacture, Construction, Operation and Maintenance of Aquatic Play Equipment

§ 10. Amendments to the 2017 ANSI A117.1 Accessible and Usable Buildings and Facilities

a. Administrative Provisions

106 Referenced Documents

106.2 Documents

[Amd] **106.2.8 Safety Code for Elevators and Escalators:** ASME A17.1-2013 (American Society of Mechanical Engineers International, Two Park Avenue, New York, NY 10016-5990).

[Amd] **106.2.9 Safety Standard for Platform Lifts and Stairway Chairlifts:** ASME A18.1-2008 (American Society of Mechanical Engineers International, Two Park Avenue, New York, NY 10016-5990).

b. Technical Provisions

703 Signs

[Amd] **703.6.3.1 International Symbol of Accessibility.** References in this code to the International Symbol of Accessibility shall comply with Figure 703.6.3.1.



[Amd] FIG. 7.3.6.3.1