



2015

FIRE & BUILDING SAFETY CODE



Vermont Department of Public Safety

DIVISION OF FIRE SAFETY

firesafety.vermont.gov

EFFECTIVE DATE: October 10, 2016

Introduction

Since 1972 the State of Vermont has adopted nationally recognized safety standards to protect the public from fire and explosion hazards and establish standards for fire safety. Standards for boiler safety have been in place even longer. Vermont is able to benefit from the research and fire safety experience from experts across the nation in every area of expertise by using nationally recognized safety standards in this Code. The national standards are amended only when necessary to address conditions specific to Vermont, stay within the limits set by law or to clarify interpretations of certain sections.

The 2015 Vermont Fire & Building Safety Code establishes the process to obtain a construction or operating permit lists the codes and standards that are adopted and describes the process used to evaluate and grant a variance or exemption from the Code. The annexes to this Code are designed to help people understand the state laws related to fire, explosion, hazardous materials, structural safety and carbon monoxide, and enable people to understand and take advantage of the flexibility built into this Code for historic buildings.

This Code establishes separate minimum standards for new and existing buildings, and existing buildings that are used for a new purpose. This Code recognizes the need to protect the public when the use of a building changes putting more people at risk or introducing new hazards to a building. But, this Code is also written to facilitate the adaptive reuse of buildings recognizing certain limitations of existing buildings. This Code has less restrictive requirements for low risk occupancies and promotes the use of alternative solutions for safety.

The Life Safety Code (NFPA 101) is the most widely used standard adopted under this Code and applies to all buildings and premises regulated under this Code. The Life Safety Code regulates construction, fire protection and occupancy features necessary to minimize danger to life from fire and to allow escape from fire and non-fire emergencies.

The Fire Code (NFPA 1) applies to new and existing conditions including general fire safety provisions, fire protection including sprinkler systems, fire department access to buildings and special material and process fire hazards. The Fire Code functions as a guide to determine what other specialty codes and state amendments apply to a building, premise, or condition.

The International Building Code (IBC) applies to new construction and structural requirements. It is used to determine the allowable size of new construction, structural design features such as the snow load, and to ensure compliance with the performance requirements of other adopted standards.

The National Board Inspection Code (NBIC) is focused on the installation, maintenance and inspection of boilers and pressure vessels. The American Society of Mechanical Engineers (ASME) standards or European Committee for Standardization referenced in section 6 (c) regulates the design and manufacture of boilers and pressure vessels. Prior to the 2005 Vermont Fire & Building Safety Code there had been a separate set of rules for boilers and pressure vessels. By combining the boiler rules with the fire prevention rules there will be a simplified administrative process and better coordination for inspections regarding heating systems.

Information on how to contact the Division of Fire Safety and obtain copies of the adopted codes is in Annex VIII at the end of this Code.

Table of Contents

Section 1. Title, Intent and Authority...	page 3
Section 2. Adoption of Nationally Recognized Standards and Matrix...	page 3 & 4
Section 3. Life Safety Code, NFPA 101, amendments to the 2015 edition...	page 5
Section 4. Fire Code NFPA 1 amendments to the 2015 edition...	page 11
Section 5. International Building Code & International Existing Building Code, amendments to the 2015 ed...	page 20
Section 6. National Board Inspection Code, amendments to the 2015 edition...	page 23
Section 7. Application for Construction Permit...	page 26
Section 8. Variance, Exemption, and Reconsideration...	page 28
Section 9. Duty to Observe Rules...	page 29
Section 10. Municipal Enforcement and Coordination...	page 29
Section 11. Effective Dates and Severability...	page 29
Annex I – Excerpts from Vermont Law Pertaining to the Vermont Fire & Building Safety Code	
Definition of Public Building...	page 30
Definition of Historic Building...	page 30
Construction Permit Fee...	page 30
Proof of Inspection...	page 30
Variances...	30
Orders to Repair...	page 30
Cooperative Municipal Inspection Agreements...	page 30 & 32
Reports to the Fire Marshal...	page 30
Boilers & Pressure Vessels...	page 30
Penalties...	page 30
Fireworks...	page 31
Commercial Public Assembly...	page 31
Annex II – Excerpts from the Architects and Professional Engineers Licensing Laws...	page 33
Annex III – Smoke & Carbon Monoxide Detector Law for Single-Family Owner Occupied Dwellings...	page 33
Smoke Alarm Matrix...	page 34
Carbon Monoxide Alarm Matrix...	page 35
Annex IV – Information for Historic Buildings...	page 36
Annex V – School Egress (Evacuation) & Relocation Drill Schedule...	page 38
Annex VI – Index by Topic and Occupancy...	page 39 & 40
Annex VII – Ground Snow Loads for Vermont by City or Town...	page 41
Annex VIII – Contact Information...	page 42

Section 1 Title, Intent and Authority

(a) These rules are adopted under 20 V.S.A. Chapter 173, Subchapter 2 “Fire Safety Division”, Subchapter 3 “Fire Hazards and Dangerous Substances”, Subchapter 5 “Boilers and Pressure Vessels” and Chapter 177 “Explosives and Fireworks”, and shall be known and cited as the Vermont Fire & Building Safety Code - 2015. It is the intent of these rules to provide for the public safety as directed by these sections of the law. (see Annex I for Public Building definition)

(b) This Code shall be administered and enforced by the Commissioner of Public Safety and staff members of the Division of Fire Safety that are hereby designated to enforce this Code and utilize discretionary authority regarding the details of the application of this Code. Hereafter the Commissioner, or designated representative, or in the case of a cooperative municipal inspection agreement, the approved inspector(s), are designated as the Authority Having Jurisdiction (AHJ).

(c) The AHJ may establish priorities for enforcing these rules and standards based on the relative risk to people and property.

(d) These rules apply to "public buildings" as defined by 20 V.S.A Chapter 173.

(Note: See Annex 1 for the definition of "public buildings" from 20 V.S.A. Chapter 173. Note that most owner-occupied single family residences are exempt from the definition of public buildings and are thus not included in the scope of this code; see definition of "public buildings" for exceptions).

Section 2 Adoption of National Recognized Codes

The following nationally recognized safety standards, as amended herein, are adopted for the purpose of making rules regarding the safeguarding of people and property in case of fire, explosion, hazardous materials, dangerous structural conditions and the generation of carbon monoxide.

LIFE SAFETY CODE – NFPA 101 – 2015

FIRE CODE – NFPA 1 – 2015

INTERNATIONAL BUILDING CODE – IBC – 2015

INTERNATIONAL EXISTING BUILDING CODE – IEBC – 2015

NATIONAL BOARD OF INSPECTION CODE – NBIC – 2015

Part 2 – Inspection

Part 3 – Repair and Alteration

This Code has been designed to minimize any conflict or difference between adopted codes and standards. Where there is a conflict or difference between the codes the Life Safety Code (NFPA 101) or Fire Code (NFPA 1) shall apply. Where one code has a requirement and another code does not have a requirement the code with a requirement shall apply.

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

Matrix on next page shall be used to assist in designing construction projects.

Matrix of Vermont Fire and Building Codes by Project Type

New Construction	Major Rehabilitation, Modification, Reconstruction No Additions	Building Addition	Existing Building With Change of Use/Renovation
IBC & NFPA 1 & 101 apply. All IBC Chapters apply except Chapters; 8, 10, 11, 13, 27, 28, 29, & 33 NFPA 101 Chapter 1 thru 11 and New Occupancy chapter apply, and all chapters of NFPA 1 as applicable - Purpose of IBC is to safeguard public health, safety and general welfare - Purpose of NFPA 1 & 101 is to provide an environment reasonably safe from fire	IEBC applies to structural requirements only Refer to NFPA 101 Chapter 43 for Building rehabilitation, and appropriate occupancy chapter NFPA 1 applies Refer to NFPA 220 for type of construction (NFPA 101 page 404)	IBC applies to new construction. IEBC applies to existing structural requirements only Refer to NFPA 101 Chapter 43 for Building rehabilitation, and appropriate occupancy chapter NFPA 1 applies Refer to NFPA 220 for type of construction (NFPA 101 page 404)	IEBC applies to structural requirements only Refer to NFPA 101 Chapter 43 for Building rehabilitation, and appropriate occupancy chapter NFPA 1 applies NFPA 101 chapter applies to existing building section not being altered 1- Determine occupancy use 2- Refer to NFPA 220 for type of construction (page 404)

- 1- Always determine occupancy type first
- 2- Include a code analysis with plan submittal for all new or large renovation projects
- 3- Vermont Fire & Building Code Amendments apply to all categories above
- 4- Vermont Access Rules and 2012 ADA Standards for Accessible Design applies to all categories
- 5- Vermont Electrical, Plumbing and Elevator Rules applies to all categories
- 6- NFPA 1 applies to all categories, in addition to referenced standards in IBC, NFPA 1 & 101
- 7- When a conflict between codes is identified, NFPA governs for all categories, or where one code or standard has a requirement and another code or standard does not have a requirement the code or standard with a requirement shall apply.
- 8- Some communities have adopted rules and regulations that exceed State codes. Please contact them directly to learn what their requirements are and how they may affect your project. **See Annex I**

Section 3 NFPA 101, Life safety Code, 2015 Edition

-delete & replace in part- section 101:2.2 **National Electrical Code & Residential Electrical Safety Code**: Any reference to NFPA 70 and 73 in this Code shall be to the edition adopted by the Vermont Electricians Licensing Board.

-delete & replace in part- section 101:2.2 Reference Publications: Any reference to NFPA 5000, Building Construction and Safety Code, 2015 Edition, shall be to the **International Building Code**, 2015 edition, or International Existing Building Code, 2015 edition, as amended in this code.

-delete & replace in part- section 101:2.3.4 Safety Code for **Elevators**: Any reference to ASME 17.1 or 17.3 in this Code shall be to the edition adopted by Vermont Elevator Safety Review Board.

-delete & replace- section 101:3.3.190.7 Definition of **Health Care Occupancy**: An occupancy used for purposes of medical or other treatment or care of three or more persons where such occupants are mostly incapable of self-preservation due to age, physical or mental disability, or because of security measures not under the occupant's control.

-delete & replace- section 101:3.3.190.12 Definition of **Residential Board & Care Occupancy**: A building or portion thereof that is used for lodging or boarding of three or more residents, not related by blood or marriage to the owners or operators, for the purpose of providing personal care services.

-add- section 101:7.1.10.1.1 Clearance for **Inclined Lifts on Stairways**: Where a platform or chair lift is installed on an exit stair in an existing building the minimum clear width on the stair when the inclined lift is in the down position shall be

- 18" when the stair serves fewer than 10 people
- 22" where the stair serves fewer than 50 people

-as required by this Code when the stair serves 50 or more people

Where a platform or chair lift is installed on an exit stair in a new building the minimum clear width on the stair when the inclined lift is in the down position shall be as required by this Code.

-delete & replace- section 101:7.2.2.4.5.5 **Handrail Clearance**: New handrails shall be installed to provide a clearance of not less than 1 ½" nor more than 2 ¼" between the handrail and the wall to which it is fastened.

-delete & replace- section 101:7.2.2.6.5 **Outside Stairs, Accumulation of Snow, Ice or Water**: New outside stairs, ramps and landings, other than the primary entrance, shall be designed to minimize the accumulation of snow, ice and water by a roof or other approved means. [cross reference to 1:14.4.1.]

-add- section 101:7.12.3 **Boiler Room Exits**: Two means of egress shall be provided for boiler rooms exceeding 500 sq. ft. floor area and containing one or more boilers having an aggregate fuel input capacity of 1,000,000 BTU/HR or more. Each elevation shall be provided with at least two means of egress, each to be remotely located from the other. A platform at the top of a single boiler is not considered an elevation.

-delete & replace- section 101:9.1.2 **Electrical Systems**: All electrical wiring and equipment shall be installed and maintained in accordance with NFPA 70, National Electrical Code and NFPA 73, Residential Safety Code, as adopted by the Electricians' Licensing Board.

-add- section 101:9.2.3.1 **Isolated Cooking Operations**: The requirements for the hood, grease removal devices, duct and fixed fire extinguishing system may be modified by the AHJ for cooking operations in free standing tents, mobile units or other small buildings located greater than 30' from grandstands or other public buildings and occupied by employees only, when the clearance to combustibles, safety controls, portable fire extinguishers, staff training, fuel use, storage and shut-off of fuel, and electrical shut off for equipment are in compliance with this Code.

-add- section 101:9.6.1.6 **Fire Alarm Circuit Classification**: All newly installed fire alarm systems in healthcare, detention & correctional, residential board & care occupancies, assembly occupancies with more than 300 people, and all high rise buildings, shall be electrically wired as a Class A system.

-delete & replace- section 101:9.6.2.10.7 **Power for Smoke Alarms**: All smoke alarms shall be directly wired to a non-dedicated electrical branch circuit for the building and by battery, or by other methods approved by the AHJ.

-add- section 101:9.6.2.10.11 **Photoelectric Smoke Alarms**: All smoke alarms shall be the photoelectric-only-type.

-delete & replace- section 101:9.6.3.2.1: **Elevator:** Elevator lobby smoke detectors used solely for recall, shall not be required to activate the building evacuation alarm if detectors are monitored by the building fire alarm system, and if such detectors initiate a supervisory signal at a constantly attended location.

-add- section 101:9.6.3.2.1.1 **Shunt-trip:** Elevator shunt-trip is not permitted under Vermont Elevator Safety Rules, section 2.8.3.3.2.

-add- section 101:9.6.3.2.1.2 **Elevator Sprinkler:** Sprinkler head located at top of elevator shaft per NFPA 13:8.15.5.5 & 13:8.15.5.6 is deleted under Vermont Elevator Safety Rules (2.8.3.3.2)

-add- section 101:9.6.4.2.1 **Telecommunication Marking:** Where Emergency Force Notification is provided the fire alarm control panel and the demarcation point for all fire alarm systems shall be marked as to the method of emergency forces to assist in the periodic inspection of the fire alarm. The sticker/tag shall be adhered or tie rapped at the demarcation point, and shall include the following; Plain Old Telephone Service (POTS Numbers), Internet Protocol (IP), Radio/Master Box Number, Private Radio, Cellular Units or Managed Facilities Voice Network (MFVN).

-add- section 101:9.6.4.5 **Single Line DACT:** A Digital Alarm Communicator Transmitter (DACT) utilizing a single line, without a secondary transmission means as required by NFPA 72:26.6.3.2.1.4, shall be permitted where a fire alarm system is not required to provide emergency forces notification under this Code when no other means is available. A secondary transmission means, ONLY when available, to be provided by any means available 72:26.6.3.2.1.4(A).

[Commentary: Vermont amendments to NFPA 13, 13D, 13R and 25 are found in NFPA 1:13.3]

-delete & replace- section 101:9.9 **Portable Fire Extinguishers:** Portable fire extinguishers shall be located, installed, inspected and maintained in accordance with NFPA 1 section 13.6.

-add- section 101:9.12.1 **Power for Carbon Monoxide Alarms:** All newly installed carbon monoxide alarms (detectors) in multiple unit dwellings, lodging or rooming houses, hotels and dormitories, educational or other buildings in which people sleep, shall be directly wired to a non-dedicated electrical branch circuit for the building and by battery. Carbon monoxide detectors in one-two family dwellings that existed prior to October 22, 2005, shall be permitted to be electrically or battery powered by any approved source.

-add- section 101:9.12.2 **Carbon Monoxide Alarms for Through the Wall Vent Termination:** In buildings other than where people sleep, carbon monoxide alarms shall be installed in areas adjacent to, but not outside of the distance established in the manufacturer's instructions, for all fuel fired heating appliances vented through the wall and terminating less than 7 feet above ground level.

-add- section 101:9.12.3 **Carbon Monoxide/Fire Alarm Interconnection).** Where desired carbon monoxide alarms may be integrated into the fire alarm system control panel. Notification appliances installed as part of the fire alarm system may be used for CO alarm detection notification of the building occupants when the notification appliances have been installed in compliance with the appropriate sections of NFPA-72. Requirements do not apply to single-station or multi-station Carbon Monoxide Alarm devices.

-add- section 101:13.1.1.4.1 **Change of Ownership: A place of assembly that changes ownership,** or increases the occupant load, shall not be occupied or used until a permit for use and occupancy has been issued by the authority having jurisdiction.

-delete & replace- section 101:14.7.2.3(1) **Emergency Egress and Relocation Drills:** Emergency egress and relocation drills, in accordance with the school's emergency preparedness plan, shall be conducted in accordance with drill schedule listed in Annex V.

-delete & replace- section 101:15.2.1.2 **Student Occupied Space:** Rooms normally occupied by preschool, kindergarten or first grade students shall be located on a level of exit discharge, unless otherwise permitted by 15.2.1.4. Rooms with 4 or fewer students, where the ratio of students to teachers or aides does not exceed 2:1 at any time, are not considered normally occupied by students in regards to this section.

-delete & replace- section 101:15.7.2.3(1) **Emergency Egress and Relocation Drills:** Emergency egress and relocation drills, in accordance with the school's emergency preparedness plan, shall be conducted in accordance with drill schedule listed in Annex V.

-delete & replace- section 101:16.6.3.4.5 **Carbon Monoxide Detection in New Daycare:** Carbon Monoxide alarms (detectors) shall be installed in accordance with section 9.12.1 in the immediate vicinity of each separate sleeping area.

-add- section 101:17.6.3.4.5 **Carbon Monoxide Detection in Existing Daycare:** Carbon Monoxide alarms (detectors) shall be installed in accordance with section 9.12.1 in the immediate vicinity of each separate sleeping area.

-delete- sections 101:18.1.1.4.3.3 and 101:18.1.1.4.3.4 Alternative Provisions for Fire Sprinkler System during Rehabilitation Work in new Health Care Occupancies.

-add- section 101:18.3.4.6 **Carbon Monoxide Detection in New Health Care:** Carbon Monoxide alarms (detectors) shall be installed in accordance with section 9.12.1 in each nursing station.

-add- section 101:19.3.4.6 **Carbon Monoxide Detection in Existing Health Care:** Carbon Monoxide alarms (detectors) shall be installed in accordance with section 9.12.1 in each nursing station.

-delete & replace- sections 101:19.3.5.1 & 19.3.5.3 **Existing Health Care:** Existing health care facilities shall be protected throughout by an approved supervised automatic fire sprinkler system installed in accordance with section 9.7.

-add- section 101:22.3.4.5 **Carbon Monoxide Detection in New Detention and Correctional Facilities:** Carbon Monoxide alarms (detectors) shall be installed in accordance with section 9.12.1 in control rooms used by the facility.

-delete- section 101:22.4.4 Renovations for Existing Non-sprinklered Detention and Correctional Facilities

-delete & replace- section 101:22.4.5.1.1 **Capacity of New Lockups:** Lockups in occupancies, other than detention and correctional and health care occupancies, where the holding area has capacity for more than 3 detainees shall be classified as detention and correctional occupancies and shall comply with chapter 22.

-delete & replace- section 101:22.4.5.1.3 **Requirements for New Lockups:** Lockups in occupancies, other than detention and correctional and health care occupancies, where the holding area has capacity for not more than 3 detainees, and where no individual is detained for 24 hours or more, shall comply with 22.4.5.1.4 and 22.4.5.2.

-add- section 101:23.3.4.5 **Carbon Monoxide Detection in Existing Detention and Correctional Facilities:** Carbon Monoxide alarms (detectors) shall be installed in accordance with section 9.12.1 in control rooms used by the facility.

-delete & replace- section 101:23.3.5.2 **Existing Detention & Correctional:** Existing detention & correctional facilities classified as Use Condition II, III, IV or V shall be protected throughout by an approved supervised automatic fire sprinkler system installed in accordance with section 9.7.

-delete & replace- section 101:23.4.5.1.1 **Capacity of Existing Lockups:** Lockups in occupancies, other than detention and correctional and health care occupancies, where the holding area has capacity for more than 3 detainees shall be classified as detention and correctional occupancies and shall comply with chapter 23.

-delete & replace- section 101:23.4.5.1.3 **Requirements for Existing Lockups:** Lockups in occupancies, other than detention and correctional and health care occupancies, where the holding area has capacity for not more than 3 detainees, and where no individual is detained for 24 hours or more, shall comply with 23.4.5.1.4 and 23.4.5.2.

-add- section 101:24.1.1.1.1 **One or Two Family Dwellings used for Transient Lodging:** A dwelling unit that provides sleeping accommodations for a total of more than 8 people on a transient basis shall be classified in accordance with chapter 26, 28 or 29.

-delete & replace- section 101:24.1.1.2 **One & Two Family Dwellings** used for Transient Lodging: A building that provides sleeping accommodations for 8 or less people on a transient basis shall be classified as a one & two family dwelling under chapter 24.

-add- section 101:24.2.2.3.3.1 **Existing Means of Escape:** The clear opening of an existing means of escape (escape window) under 24.2.2.3.3 shall be:

1) Opening sash for a wood, vinyl, aluminum or fiberglass framed window shall be a minimum of 20" X 24" (3.3sq ft) with a total clear opening area of not less than 5 square feet.

2) Opening sash of a steel framed window shall be a minimum of 20" X 24" with at least one dimension exceeded to provide not less than 5.0 square feet of net free opening.

-add- section 101:24.2.5.7 **Stair riser heights and tread depths:** Maximum riser heights of 7 ¾ in. and minimum tread depths of 10 in. shall be permitted in new construction.

-delete & replace- section 101:24.3.4.1.3 **smoke alarms** must be hardwired into the building electrical system with exception of existing sleeping rooms. (see matrix page 42)

-delete & replace- section 101:24.3.4.2 **Carbon Monoxide Detection, One-Two Family Dwellings:** Carbon Monoxide alarms (detectors) shall be installed in accordance with section 9.12.1 outside of each separate sleeping area in the immediate vicinity of the bedrooms. An additional carbon monoxide alarm (detector) shall be installed in any sleeping room that contains a fuel-burning appliance.

-delete- section 101:24.3.5.1 Fire Sprinkler Protection for One and Two Family Dwellings.

-delete & replace- section 101:24.5.1.2 **Unvented Fuel-fired Heaters**: Unvented room heaters and unvented fireplaces shall not be used.

-add- section 101:24.6 **Subdivision of Building Spaces in One & Two Family Dwellings**: New one-two family dwellings shall be provided with a 1-hour fire resistance rating dwelling unit separation in accordance with 30.3.7.

-add- section 101:26.1.1.1.1 **Existing Occupancy-Lodging or Rooming Houses**: A building or portion thereof that does not qualify as a one and two family dwelling under NFPA 101, Chapter 24:1.1.2, **8 or fewer guests**, that provides sleeping accommodations for a total of **(9-16 occupants)** on a transient or permanent basis, without personal care services, with or without meals, without separate cooking facilities for individual occupants. Existing Lodging or Rooming houses are those which were in use prior to the effective date of the adoption of the 2015 Vermont Fire and Building Safety Code. Existing occupancies must comply with the requirements for existing buildings, Chapter 26.

-add- section 101:26.1.1.1.2 **Existing Structure New Occupancy Use - Lodging or Rooming Houses**: A building or portion thereof that does not qualify as a one and two family dwelling under Chapter 24.1.1.2, **8 or fewer guests**, that provides sleeping accommodations for a total of **(9-16 occupants)** on a transient or permanent basis, without personal care services, with or without meals, without separate cooking facilities for individual occupants. New Lodging or Rooming House Occupancy is a new use introduced after the effective date of the adoption of the 2015 Vermont Fire and Building Safety Code. New Occupancy Use must comply with NFPA 101, Chapter 26 and 43 of the Life Safety Code. A change of use permit and certificate of occupancy is required for a new occupancy in an existing building.

-add- section 101:26.1.1.1.3 **New Construction Lodging or Rooming House**: A building or portion thereof that does not qualify as a one and two family dwelling under Chapter 24.1.1.2, **8 or fewer guests**, that provides sleeping accommodations for a total of **(9-16 occupants)** on a transient or permanent basis, without personal care services, with or without meals, without separate cooking facilities for individual occupants. New Lodging or Rooming House Construction is a new structure constructed after the effective date of the adoption of the 2015 Vermont Fire and Building Safety Code. New occupancy construction must comply with NFPA 101, Chapter 26, for new Lodging or Rooming House construction and the International Building Code. A construction permit

application and plans are required to be submitted and a construction permit issued prior to construction.

-delete & replace- section 101:26.3.4.6 **Carbon Monoxide Detection, Lodging & Rooming**: Carbon Monoxide alarms (detectors) shall be installed in accordance with section 9.12.1 outside of each separate sleeping area in the immediate vicinity of the bedrooms. An additional carbon monoxide alarm (detector) shall be installed in any bedroom that contains a fuel-burning appliance.

-delete & replace- section 101:26.5.2.2 **Unvented Fuel-fired Heaters**: Unvented room heaters and unvented fireplaces shall not be used.

-delete & replace- section 101:28.3.4.6 **Carbon Monoxide Detection in New Hotels & Dormitories**: Carbon Monoxide alarms (detectors) shall be installed in accordance with section 9.12.1 in any section of corridor or common area that is in the immediate vicinity of sleeping rooms, or where there is no corridor, in each sleeping room. An additional carbon monoxide alarm (detector) shall be installed in any sleeping room that contains a fuel-burning appliance.

-add- section 101:29.3.4.4 **Detection for Existing Hotels & Dormitories**: A corridor smoke detection system in accordance with section 9.6 shall be installed in existing hotels & dormitories other than those protected throughout by an approved supervised automatic sprinkler system in accordance with section 9.7.

-add- section 101:29.3.4.6 **Carbon Monoxide Detection in Existing Hotels & Dormitories**: Carbon Monoxide alarms (detectors) shall be installed in accordance with section 9.12.1 in any section of corridor or common area that is in the immediate vicinity of sleeping rooms, or where there is no corridor, in each sleeping room. An additional carbon monoxide alarm (detector) shall be installed in any sleeping room that contains a fuel-burning appliance.

-delete & replace- section 101:30.3.4.6 **Carbon Monoxide Detection, New Apartment Buildings**: Carbon Monoxide alarms (detectors) shall be installed in accordance with section 9.12.1 outside of each separate sleeping area in the immediate vicinity of the bedrooms. An additional carbon monoxide alarm (detector) shall be installed in any bedroom that contains a fuel-burning appliance.

-delete & replace- section 101:30.3.5.1 **Sprinkler Protection New Apartment Buildings**: Sprinkler systems shall be required except where every dwelling unit provides one of the following: 1) Exit door opening directly to the street or yard at ground level; 2) Direct access to an interior stair serving only that unit and

separated from all other portions of the building by fire barriers having a 1-hour fire resistance rating with no openings therein.

-delete & replace- section 101:30.5.2.2 **Unvented Fuel-fired Heaters:** Unvented room heaters and unvented fireplaces shall not be used.

-delete & replace- section 101:31.3.4.5.2 **Smoke Alarms Existing Apartment or Residential Condo Buildings:** All electrically wired smoke alarms shall be required to be provided with secondary power supply source. Interconnection of smoke alarms shall apply only to new construction. 9.6.2.10.3

-delete & replace- section 101:31.3.4.5.3 **Smoke Alarms Existing Apartment or Residential Condo Buildings:** In buildings other than those equipped throughout with an existing, complete automatic smoke detection system, smoke alarms shall be installed in every sleeping room.

-delete & replace- section 101:31.3.4.5.4 **Smoke Alarms Existing Apartment or Residential Condo Buildings:** Smoke alarms are required in common areas and all levels of a building. Smoke alarms shall also be installed in all sleeping rooms. Sleeping rooms in buildings constructed prior to January 1994 may be equipped with lithium battery powered 10-year tamper-resistant photoelectric smoke alarms.

-add- section 101:31.3.4.6 **Carbon Monoxide Detection, Existing Apartment Buildings:** Carbon Monoxide alarms (detectors) shall be installed in accordance with section 9.12.1 outside of each separate sleeping area in the immediate vicinity of the bedrooms. An additional carbon monoxide alarm (detector) shall be installed in any bedroom that contains a fuel-burning appliance.

-delete & replace- section 101:31.5.2.2 **Unvented Fuel-fired Heaters:** Unvented room heaters and unvented fireplaces shall not be used.

-add- section 101:32.1.1.4 **Assisted Living Facilities:** In addition to the requirements of this chapter a facility licensed under the Department of Aging & Disabilities Rules for Assisted Living Residences shall comply with the following:

- (1) Smoke detection must be provided in addition to the complete automatic fire sprinkler protection.
- (2) The fire alarm system shall provide emergency forces notification.
- (3) All automatic fire sprinkler systems shall be electronically supervised.
- (4) Large assisted living facilities or assisted living residences located in apartment buildings shall

meet the minimum construction requirements for existing health care occupancies in section 19.1.6.

(5) Corridors for large facilities shall not be less than 48”.

(6) Subdivision of building spaces in accordance with 101:18.2.2.5 shall be provided in common areas of large facilities using the same criteria as used for limited care facilities (15 square feet per resident).

-add- section 101:32.1.1.4.1 **Carbon Monoxide Detection in New Residential Care:** Carbon Monoxide alarms (detectors) shall be installed in accordance with section 9.12.1 in any section of a corridor or common area that is in the immediate vicinity of sleeping rooms.

-delete & replace- section 101:32.2.3.5.1 **New Residential Board & Care:** All new residential board & care facilities with 3 or more residents shall be protected throughout by an approved supervised automatic fire sprinkler system installed in accordance with section 9.7.

-delete- section 101:32.2.3.5.2 Exception for Sprinkler Protection for New Small Board and Care Facilities.

-add- section 101:33.1.1.4.1 **Carbon Monoxide Detection in Existing Residential Care:** Carbon Monoxide alarms (detectors) shall be installed in accordance with section 9.12.1 in any section of corridor or common area that is in the immediate vicinity of sleeping rooms.

-delete & replace- section 101:33.2.3.4.3.1 **Smoke Alarms in Sleeping Rooms in Existing Residential Care:** Approved smoke alarms shall be provided in each sleeping room in accordance with 9.6.2.10.

-delete- section 101:33.2.3.4.3.6 Exception for Smoke Alarms in Residential Care with Sprinkler Protection.

-delete- section 101:33.2.3.4.3.7 Exception for Smoke Alarms in Residential Care with Sprinkler Protection – Battery Operated.

-add- section 101:38.2.4.7 **Single Exit for New Business:** A single exit shall be permitted to be unenclosed in two-story buildings when travel distance does not exceed 75’ and all areas opening to exit access stairs are provided with smoke alarms in accordance with 9.6.2.10.

-add- section 101:38.3.1.1(5) **Protection of Vertical Opening in New Business:** Unenclosed vertical openings shall be permitted to be unenclosed in two-story buildings when the travel distance does not exceed 75’ and all areas opening to the exit access

stairs are provided with smoke alarms in accordance with 9.6.2.10.

-add- section 101:39.2.4.8 **Single Exit for Existing Business:** A single exit shall be permitted to be unenclosed in two-story buildings when travel distance does not exceed 75' and all areas opening to exit access stairs are provided with smoke alarms in accordance with 9.6.2.10.

-add- section 101:39.3.1.1(6) **Protection of Vertical Opening in Existing Business:** Unenclosed vertical openings shall be permitted to be unenclosed in two-story buildings when the travel distance does not exceed 75' and all areas opening to exit access stairs are provided with smoke alarms in accordance with 9.6.2.10.

-add- section 101:43.1.2.6 An **Addition to any existing building or structure** shall be in accordance with the Life Safety Code, the Fire Code and the International Building Code for new construction, as indicated in the matrix on page 4. The existing building plus additions shall comply with the height and area provisions of chapter 5 of the International Building Code, and the structural requirements of the 2015 International Existing Building Code for existing building sections.

-add- section 101:43.10.1.1 **Existing Code Violations:** Historic buildings not otherwise undergoing rehabilitation work shall be permitted to use alternative solutions to correct existing code violations based on sections 43.10.4.3 through 43.10.4.11.

Section 4 NFPA 1, Fire Code, 2015 Edition

-delete- section 1:1.8 Duties and Powers of the Incident Commander

-delete & replace- section 1:1.10 **Appeals:** Requests for variances, exemptions and reconsideration of the interpretation of this Code, shall be made and processed in accordance with Section 8 of this Code.

-delete & replace- section 1:1.13.1 **Certificate of Fitness:** A certificate of fitness is required for all individuals performing activities related to fire or life safety based on the qualifications as follows:

- (1) Inspection, servicing or recharging of **Portable Fire Extinguishers** (Reserved)
- (2) Design, installation, inspection, servicing or recharging of **Fixed Fire Extinguishing Systems** – A current certificate from the National Institute for Certificate in Engineering Technologies (NICET) for fire suppression; or from the National Association of Fire Equipment Distributors (NAFED) for Pre-Engineered Kitchen Fire Extinguishing System or Industrial Pre-Engineered Fire Extinguishing System.
- (3) **Inspection, and testing of fire alarm** and detection systems and equipment – A current master electrician, journeyman electrician or type S journeyman commercial fire alarm license, issued in accordance with Title 26 V.S.A. chapter 15. Eight hours of related instruction is required for certificate renewal for master and journeyman electricians, and type S journeyman commercial fire alarm license. [72:10.5.2 is deleted and replace by this section]
- (4) **Installation, modification, or servicing of gas or oil burning heating systems.**
 - (a) **Delivery of Liquid Propane (LP):** successful completion of the LP Gas Certified Employee Training Program (CETP) Book 1 (Basic Principles and Practices of Propane); Book 2.1/2.4 (Propane Delivery Operations and Cylinder Delivery) and Book 2.2 (Bobtail Delivery Operations).
 - (b) **Plant Operations:** successful completion of CETP Book 1; 3.1 (Maintaining ASME Tanks); 3.2 (Maintaining DOT cylinders); 3.3 (Operating Dispensing Equipment to Fill Containers) and 3.4 Maintaining Bulk Equipment.
 - (c) (reserved)
 - (d) (reserved)
 - (e) (reserved)
 - (f) **Installation, Inspection and Service of LP Gas Appliances:** successful completion of CETP books 1.0; 4.1; 4.2; 4.3; and 4.4; or other approved course of instruction. Eight hours of related instruction is required for certificate

renewal every three years, including at least two hours regarding the prevention of CO leakage and the procedure for safety inspection of an existing appliance (see NFPA 54- Annex G). **Installation, Inspection and Service of both Natural Gas and LP Gas systems and equipment:** successful completion of the American Gas Association(AGA) course of study including "The Fundamentals of Combustion, Gas Appliance Venting, Electricity, Gas Controls, and Gas Appliances" and CETP Books 1.0, 4.1, 4.2. Eight hours of related instruction is required for certificate renewal every three years, including at least two hours regarding the prevention of CO leakage and the procedure for safety inspection of an existing appliance. (see NFPA 54- Annex G).

- (g) **Installation, Inspection and Service of Natural Gas systems and equipment:** successful completion of the AGA course of study including "Fundamentals of Combustion, Gas Appliance Venting, Electricity, Gas Controls, and Gas Appliances; or other approved course of study. Eight hours of related instruction is required for certificate renewal every three years, including at least two hours regarding the prevention of CO leakage and the procedure for safety inspection of an existing appliance. (see NFPA 54- Annex G).
- (h) **Installation, inspection and service of Oil Burning Equipment** – A Silver or Gold certificate from the National Oil heat Research Alliance (NORA). Eight hours of related instruction is required for certificate renewal including at least two hours regarding the prevention of CO leakage and the procedure for inspection, or a current NORA Silver or Gold certificate.
- (i) **LIMITED installation, inspection and service of Oil Burning Equipment** not including placing a new unit in service – A Bronze certificate from the National Oil heat Research Alliance (NORA). Eight hours of related instruction is required for certificate renewal including at least two hours regarding the prevention of CO leakage and the procedure for inspection, or a current bronze certificate from NORA.
- (j) **LIMITED Interior Certification:** Installation, Inspection and Service of Interior or Rooftop **LP Gas Equipment** by HVAC technicians (not including container installation or related exterior piping) - CETP Books 1; 4.2; 4.3; 4.4; and 4.5. Eight hours of related instruction is required for certificate renewal including at least two hours regarding the prevention of CO

leakage and the procedure for safety inspection of an existing appliance (See NFPA 54, Annex G). The entire gas installation shall be evaluated by a certified LP Gas technician having (4)(f) certification.

- (5) Cleaning, maintenance and evaluation of **Chimneys and Solid Fuel Burning Appliances** – A current certificate from the Chimney Safety Institute of America or Certified Chimney Professionals.
- (6) Installation, inspection or servicing of range hood systems - (Reserved)
- (7) Installation or servicing of private fire service mains and their appurtenances – (Reference 1:13.3.1.2.3)
- (8) Crowd management required by the code – (Reserved)
- (9) Utilization of pyrotechnics before a proximate audience – (Reserved)
- (10) Installation, modification, or maintenance of liquefied petroleum gas or liquefied natural gas tanks or systems – See number 4 above
- (11) Installation or modification of medical gas systems where a permit is required by Table 1.12.8(a) – (Reserved)
- (12) Installation, modification, or maintenance of standpipe systems – See number 13 below
- (13) Installation, modification, or maintenance of automatic sprinkler systems
 - (a) **Installation, maintenance, repair and testing for water based fire protection systems** including but not limited to fire sprinkler systems regulated under NFPA 13, 13D and 13R, multipurpose piping systems, standpipe systems, aboveground fire mains and fire pumps – Completion of an approved fire sprinkler apprentice program or four years of documented supervised installation, maintenance, repair and testing experience and meeting the testing requirements established by the AHJ. Fifteen hours of related instruction is required for certificate renewal.
 - (b) **Calculations and design**, for water based fire protection systems including but not limited to fire sprinkler systems regulated under NFPA 13, 13D and 13R, multipurpose piping systems, standpipe systems, aboveground fire mains and fire pumps - A current level III certificate, or higher, for automatic fire sprinkler systems from NICET or a fire protection engineer license issued in accordance with Title 26 V.S.A. chapter 20. A person with a certificate of fitness under this section shall also be permitted to install, maintain, repair and test fire sprinkler and standpipe systems under section 1.13.1.
 - (c) **LIMITED installation, maintenance, inspection and testing for domestic fire sprinkler systems** with not more than 6 sprinklers for any isolated hazard area in accordance with 101:9.7.1.2 or an automatic

fire sprinkler system in accordance with NFPA 13D, Standard for the Installation of Sprinkler Systems in One and Two Family Dwellings and Manufactured Homes, including multipurpose piping systems – Documented competency and experience acceptable to the AHJ. Eight hours of related instruction is required for certificate renewal. [Information on the periodic inspection & tests of fire protection systems is found in NFPA 1 amended section 4.5.8 7].

- (14) Installation, modification, or maintenance of **fire pumps** – See number 13 above
- (15) Installation, modification, or maintenance of tanks, wells, or drafting points used for fire protection water supplies – (Reserved)
- (16) Installation, maintenance, repair and testing for **emergency generators** – Documented competency and experience through training by the manufacturer or acceptable by the AHJ is required. Eight hours of related instruction is required for certificate renewal.

-delete & replace- section- 1:1.13.2 (1) Use of **Explosive materials** – A current explosive license issued in accordance with Title 20 V.S.A. 3072 by the Vermont State Police is required for the use of explosive materials in Vermont. [For license applications or additional information contact the Department of Public Safety at (802) 244-8718 or vsp.vermont.gov (2) Fireworks displays – (Reserved)

-add- section 1:1.13.4.1 **Experience & Training:** The AHJ may accept successful completion of appropriate examination or certification other than those listed in this section when the examination or certification demonstrates an equivalent level of experience and training.

-add- section 1:1.13.8.1 Documentation for **Renewal:** An application for renewal shall include:

- (1) Documentation of having completed the required hours of approved related instruction regarding this Code during the previous certificate period, or maintaining the required level of certification, and
- (2) A completed and signed tax certification form in accordance with Title 32 V.S.A. 3113, and
- (3) A completed and signed child support certification form in accordance with Title 15 V.S.A. section 795, and
- (4) A completed and signed unemployment compensation certification form in accordance with Title 21 V.S.A. 1378, and
- (5) A completed and signed fine or penalty certification form in accordance with Title 4 V.S.A. 1110.

-add- section 1:1.13.8.2 **Approval of Related Instruction:** An individual or organization providing related instruction, as required for renewal of a certificate of fitness, shall provide information on the training provided as requested by the AHJ prior to approval of the related instruction. Individuals providing the instruction shall demonstrate competency to the AHJ in the codes and standards for which the certificate of fitness is issued and shall attend such training as required by the AHJ.

-add- section 1:1.13.12.4 **Due Process:** A person who has a certificate of fitness revoked or suspended shall be given written notification and the opportunity for a hearing following due process.

-delete- section 1:1.16.4.2 Penalty Schedule

-add referenced standards- section 1:2.2 **Referenced Publications:** the following standards are added to section 2.2;

NFPA 53, Recommended Practice on Materials, Equipment, and Systems in Oxygen-Enriched Atmospheres, 2016 Edition.

NFPA 73, Residential Safety Code, as adopted by the Vermont Electrician's Licensing Board.

NFPA 92, Standard for Smoke Control Systems, 2015 edition.

NFPA 101A, Guide on Alternative Approaches to Life Safety, 2016 edition.

NFPA 291, Recommended Practice for Fire Flow Testing and Marking of Hydrants, 2016 Edition.

NFPA 820 Standard for Fire Protection in Wastewater Treatment and Collection Facilities, 2012 edition.

NFPA 1124, Code for the Manufacture, Transportation, Storage, and Retail Sales of Fireworks and Pyrotechnic Articles, 2012 edition.

-delete & replace in part- section 1:2.2 **Reference Publications:** Any reference to NFPA 5000, Building Construction and Safety Code, 2015 Edition, shall be to the International Building Code, 2015 edition, or International Existing Building Code, 2015 edition, as amended in this code.

-delete & replace- section 1:3.3.183.11 **Definition of Health Care Occupancy:** An occupancy used for purposes of medical or other treatment or care of three or more persons where such occupants are mostly incapable of self-preservation due to age, physical or mental disability, or because of security measures not under the occupant's control.

-delete & replace- section 1:3.3.183.25 **Definition of Residential Board & Care Occupancy:** A building or portion thereof that is used for lodging or boarding of three (3) or more residents, not related by blood or

marriage to the owners or operators, for the purpose of providing personal care services.

-add- section 1:4.5.7.3 Place of Assembly: **A place of assembly that changes ownership**, or increases the occupant load, shall not be occupied or used until a permit for use and occupancy has been issued by the authority having jurisdiction.

-delete & replace- section 1:4.5.8.7 **Periodic Inspection and Test of Fire Protection Systems:** Inspections and tests of fire sprinkler (other than multipurpose piping systems), suppression, emergency electrical generation, alarm, detection and any other fire protection systems, devices and equipment shall be conducted for the owner by a certified sprinkler technician/technically qualified person (TQP) who has obtained the required certificate of fitness according to section 1.13.

Inspections and tests shall be conducted at least annually or semi-annually for kitchen hood suppression systems as required by a specific standard. Annual testing by a technically qualified person does not prohibit owner from inspection and testing at more frequent intervals. A technically qualified person shall file a written inspection report with the AHJ within 14 days of completion of each inspection.

-add- section 1:4.5.8.8 **Identification of fire protection systems:** A fire protection system identification number, provided by the AHJ, shall be affixed to the control panel, control valve or riser of the fire protection system to provide a unique identification number for the fire protection system.

-add- section 1:4.5.8.9 **Proof of Inspection:** Proof of inspection, approved by the AHJ shall be affixed by a technically qualified person to the control panel, control valve or riser of the fire protection system after any required annual or semi-annual inspection has been completed as evidence of that inspection. Facilities with limited use may request kitchen hood inspection frequency to be annual, when reviewed and approved by the AHJ. Intent of this code is to provide one proof of inspection sticker annually to sprinkler or fire alarm systems and generators where applicable, regardless of inspection frequency.

-add- section 1:10.9.4.5 No Smoking label for small-size **Oxygen Cylinders:** All small-size oxygen cylinders shall be provided with a conspicuous no smoking precautionary label in the form of the international "no smoking" symbol, not less than 2" by 2" in size.

-delete & replace- Section 1:10.10.1 **Permits for Open Fires & Burning:** A permit is not required under these rules, but a permit shall be obtained from the Town Forest Fire Warden in accordance with Title 10 V.S.A. chapter 83; 2645.

-add- section 1:10.11.1.4 **Truss Construction**

Signage: All buildings containing light weight truss construction assemblies shall be provided with signage permanently affixed at a height 4 feet above the ground located at the left side of the main entrance door on the address side of the building, at the location of the remote fire alarm annunciation panel or at the fire department connection for the fire sprinkler system. The sign shall be triangular in shape measuring 12 inches horizontally and 6 inches vertically and of contrasting color to the background containing the letter "F" for the truss floor assemblies, the letter "R" for truss roof assemblies and "FR" for truss floor and roof assemblies. "Light-weight truss construction" means a type of floor or roof construction whose primary structural elements are formed by a regularly spaced system of pre-engineered trusses composed of standard dimensional lumber or light gauge steel framing members.

-add- section 1:10.11.1.5 **Appliance Vent**

Termination: All through the wall vents for fuel heating appliances, located less than 7 feet above ground level, shall be provided with signage permanently affixed at a height of 7 feet above ground level directly above the through the wall vent. The sign shall be a "V" shape, not less than 4 ½ inches in height, with the principal stroke of the letter "V" not less than ¾ inch in width, colored black on a white background. The sign shall contain the wording "Appliance Vent" using plainly legible letters.

-add- section 1:10.13.1.1.1 **Combustible Vegetation:** In other than Health Care, Detention and Correctional occupancies, combustible vegetation, including natural cut Christmas trees otherwise prohibited under table 10.13.1.1 shall be permitted when located in areas protected by an approved automatic fire sprinkler system.

-delete- section 1:10.14.11.1 Permits for Crop Mazes

-delete- section 1:10.16.1 Permits for Parade Floats

-delete & replace- section 1:11.1.2 **Electrical Systems:** All electrical wiring and equipment shall be installed and maintained in accordance with NFPA 70, National Electrical Code and NFPA 73, Residential Safety Code, as adopted by the Electricians' Licensing Board.

-add- section 1:11.1.2.3.4 **GFCI Existing Buildings:** Ground Fault Circuit Interrupter shall be provided per NFPA 70:210.8A, as required by Vermont Electrical Safety Rules.

-add- section 1:11.4.3 **Application of NFPA 54:** Coverage of piping systems shall extend from the point of delivery to the appliance connections. For other than undiluted liquefied petroleum gas systems, the point of delivery shall be considered to be the outlet of the service meter assembly or the outlet of the service

regulator or service shutoff valve where no meter is provided. For undiluted liquefied petroleum gas systems, the point of delivery shall be considered to be the outlet of the first stage pressure regulator.

-add- section 1:11.5.1.6.1 **Interruption or Discontinuance of Gas Service:** Whenever service to a customer is discontinued one of the following must be complied with:

- (1) The valve that is closed to prevent the flow of gas to the customer must be provided with a locking device or other means designated to prevent the opening of the valve by persons other than those authorized by the operator.
- (2) A mechanical device or fitting that will prevent the flow of gas must be installed in the service line or in the meter assembly.
- (3) The customer's piping must be physically disconnected from the gas supply and the open pipe ends sealed. [reference 54:4.2.1 & 4.2.2]

-add- section 1:11.5.1.6.2 **Change in LP Gas Delivery**

Service: The building owner, tenant, or responsible party shall obtain a safety inspection that meets or exceeds NFPA 54 annex G, for gas utilization equipment by person(s) certified in accordance with section 1.13, when new fuel delivery service is provided. [reference 54:8.1.]

-delete & replace- section 1:11.5.1.6.3 **Room Heater**

Installations: Unvented room heaters and unvented fireplaces shall not be used in any building or structure regulated under this code. [54:10.22.1 is deleted & replaced by this subsection. It is not the intent of this section to prohibit heaters defined under NFPA 54 section, 3.3.57.1, Industrial Air Heaters, Direct Gas-Fired Non-Recirculating, or 3.3.57.2, Industrial Air Heaters, Direct Gas-Fired Recirculating, used for large well ventilated areas.]

-add- section 1:11.5.1.7.1 **Periodic Inspection of**

Heating Appliances: All fuel fired heating appliances shall be cleaned and maintained in accordance with the manufacturer's instructions, and shall be inspected at least once during any 2-year period by person(s) certified in accordance with section 1.13. Inspections shall be in accordance with the standards and recommended procedures for inspection of existing appliances established under NFPA 31, 54 and 211, including the measurement of carbon monoxide in the flue gas. At the time of inspection, the appliance shall be marked with the date of the inspection and the name and certificate number of the person who performed the inspection. When the inspection determines the existing situation involves a distinct hazard to life or property and requires immediate action, the violation(s) shall be immediately corrected or the certified inspector conducting the inspection shall contact the AHJ and disconnect the heating appliance from operation.

-add- section 1:11.5.1.11.1.1 **Clothes Dryer Vents:** A vent-less clothes dryer shall be permitted when listed by an approved testing agency for an electric dryer only. The vent-less clothes dryer shall have a feature that removes and disposes moisture and condensate. Vent-less gas dryer is not allowed.

-delete- section 1:11.5.1.11.2 **Clothes Dryers in Dwelling Units:**

-add- section 1:11.5.4.1 **Carbon Monoxide Alarms for Through the Wall Vent Termination:** In buildings other than where people sleep, carbon monoxide alarms shall be installed in areas adjacent to, but not outside of the distance established in the manufacturer's instructions, for all fuel fired heating appliances vented through the wall and terminating less than 7 feet above ground level.

-add- section 1:11.5.5 **Ash Disposal:** Where wood-burning stoves or fireplaces are installed, a metal receptacle with lid for disposal of ashes shall be provided. Written instructions shall be provided to instruct occupants on the importance of proper disposal of fireplace or woodstove ashes.

-add- section 1:13.3.1.2.1 **Approval of NFPA 13D Sprinkler Systems:** For all sprinkler systems designed in accordance with 13D, the technically qualified person certified under section 1.13 shall perform all required acceptance tests as required for NFPA 13R sprinkler systems, perform a water flow test for the most remote area, complete the Contractor's Material and Test Certificate(s), and forward the certificate(s) to the AHJ prior to asking for approval of the installation. Where the AHJ desires to be present during the conducting of acceptance tests, the installer shall provide the AHJ 15 day notification of the time and date of the testing.

-add- section 1:13.3.1.2.2 **Arrangement of Fire Department Connections:** All new & existing fire department connections shall be arranged so that water from the fire department connection shall reach the sprinkler system regardless of any manually closed control valve. This section does not apply to remote electrically supervised zone / floor control valves on systems installed in accordance with NFPA 13. [NFPA 13:8.17.2.4.3 and 8.17.2.4.4 are amended by this section]

-add- section 1:13.3.1.2.3 **Underground Private Fire Service Mains supplying Automatic Fire Sprinkler Systems:** As defined in NFPA 24, standard for the Installation of Private Fire Service Mains and their Appurtenances, and in regards to this section, an underground private fire service main is the pipe and its appurtenances on private property between a source of water and the base of the system riser for a water based fire protection system. A contractor installing an underground private fire service main shall install, flush

and test the piping, including completion of the "Contractor's Material and Test Certificate for Underground Piping", in accordance with NFPA 24.

A licensed professional engineer, or a person exempted under 26 V.S.A. 1163, shall design an underground private fire service main in accordance with NFPA 24 and witness the acceptance flushing and testing. The person designing and/or installing a fire sprinkler system under 1:13.3.1(10) or (11) shall verify the testing and flushing of the underground private fire service main and obtain a copy of the "Contractor's Material and Test Certificate for Underground Piping" prior to connecting to the piping.

Working plans for an underground private fire service main including the items specified under NFPA 24:4 shall be submitted in accordance with section 4 of this code for a construction permit.

-add- section 1:13.3.1.2.4 **Backflow Prevention for New Fire Protection Systems:** A backflow prevention device, dedicated to a water based fire protection system, shall be sized, installed and tested by a TQP certified for design, installation and maintenance of water based fire protection systems. Annual testing shall be in accordance with NFPA 25 Section 13.6. On new installations a valved connection shall be provided to conduct the "forward Flow" test. Test forms can be found at www.nfpa.org, www.nfsa.org, and www.sprinklernet.org. Policy directive dated 1/25/2016 for testable check valve and backflow preventer can be found on the Division of Fire Safety web page.

-add- section 1:13.3.1.3.1 **Fire Department Connections for Existing Sprinkler Systems:** Where there is no fire department connection for an existing NFPA 13 or 13R sprinkler system, or the threads do not meet NFPA 13 section 6.8, it shall be listed as a deficiency under NFPA 25: 5.1.1 by the technically qualified person conducting the annual inspection and corrected by the owner or occupant in accordance with NFPA 25: 4.1.5.

-add- section 1:13.3.1.3.2 **Backflow Prevention for Existing Sprinkler Systems:** A backflow prevention device shall not be added to an existing fire sprinkler system that reduces the water supply or water pressure to a point lower than the minimum sprinkler system design. Sprinkler calculations verifying the modified sprinkler design shall be submitted to the AHJ.

-add- section 1:13.3.1.7.1 **Seismic Protection of Fire Protection Systems:** Earthquake protection of building systems shall be limited to those buildings or structures that are categorized as essential. For purposes of this paragraph IBC Table 1604.5 IV shall be limited to hospitals; fire, rescue, & police stations; emergency

vehicle garages, water storage & pumping structures and Emergency Operation Centers.

-delete- section 1:13.3.2.20.1 Fire Sprinkler Protection for One and Two Family Dwellings

-delete & replace- section 1:13.3.2.27.4 **Mini-storage Building:** An automatic sprinkler system shall be installed throughout all mini-storage buildings greater than 2,500 square feet. An automatic sprinkler system is not required when one of the following is provided:

- (1) Each storage unit is separated by 1-hour fire rated barrier
- (2) Fire areas not exceeding 2,500 square feet provided with 2-hour fire rated barrier
- (3) Provide a fire detection system with emergency force notification

-delete & replace- section 1:13.5.1 **Water Supply:** Water supply for fire suppression systems shall be evaluated by an individual certified under section 1:1.13.1 for proper supply and pressure prior to plan review submittal in accordance with NFPA 13 and 24.

-delete & replace- section 1:13.5.3 **Water Supply** Reference to NFPA 22 2013 Section 11.3 Tank Specification: Polyethylene water storage tanks or tanks meeting AWWA D120 shall be permitted for water supply of 13R sprinkler systems.

-add- section 1:13.5.3.1.1 **Backflow Testing:** The sprinkler system TQP (Technically Qualified Person) shall be certified to conduct annual forward flow test through the sprinkler system backflow device to ensure proper water flow rate.

-add- section 1:13.6.3.1.14 **Portable Fire Extinguishers:** Portable fire extinguishers inside individual apartment or condo units shall be permitted to be 2-1/2 pound dry chemical capacity. All other occupancy types or locations shall be provided with fire extinguishers in accordance with NFPA 1:13.6.

-add- section 1:13.7.1.4.4 **Fire Alarm Circuit Classification:** All newly installed fire alarm systems in healthcare, detention & correctional, residential board & care occupancies, assembly occupancies with more than 300 people, and all high rise buildings, shall be electrically wired as a Class A system.

-delete & replace- section 1:13.7.1.8.7 **Power for Smoke Alarms:** All smoke alarms shall be directly wired to a non-dedicated electrical branch circuit for the building and by battery, or by other methods as approved by the AHJ. .

-add- section 1:13.7.1.8.11 **Photoelectric Smoke Alarms:** All newly installed smoke alarms shall be the photoelectric-only-type.

-add- section 1:13.7.1.10.5 **Single Line DACT:** A digital alarm communicator transmitter (DACT) utilizing a single line, without a secondary transmission means as required by NFPA 72:26.6.3.2.1.4, shall be permitted where a fire alarm system is not required to provide emergency forces notification under this Code when no other means is available. A secondary transmission means, ONLY when available, shall be employed as listed in 72:26.6.3.2.1.4(A).

-add- section 1:13.7.1.14.1 **Carbon Monoxide/Fire Alarm Interconnection:** Where desired, carbon monoxide alarms may be integrated into the fire alarm system control panel. Notification appliances installed as part of the fire alarm system may be used for CO alarm detection notification of the building occupants when the notification appliances have been installed in compliance with the appropriate sections of NFPA 72. The above requirements do not apply to single-station or multi-station Carbon Monoxide Alarm devices.

[Commentary: Refer to page 35 in the index for carbon monoxide detector locations.]

-add- section 1:14.10.2.3 **Snow Removal:** All portions of the means of egress, including outside stairs and fire escapes, shall be kept clear of any accumulation of snow and ice at all times that the building is occupied. For multi-family dwellings with direct exit access to the outside and one and two family dwellings snow and ice shall be removed as soon as practicable.

-add- section 1:14.10.2.4 **Clearance for Inclined Lifts on Stairways:** Where a platform or chair lift is installed on an exit stair in an existing building the minimum clear width on the stair when the inclined lift is in the down position shall be:

- 18" when the stair serves fewer than 10 people
- 22" where the stair serves fewer than 50 people
- as required by this Code when the stair serves 50 or more people.

Where a platform or chair lift is installed on an exit stair in a new building the minimum clear width on the stair when the inclined lift is in the down position shall be as required by this Code.

-delete- section 1:16.6.1 Permits for Torch Applied Roofing Systems

-delete- section 1:16.7.1.2- Permits for the placement of Tar Kettles

-delete- section 1:16.8 Asbestos Removal: [The Vermont Department of Health regulates the removal of asbestos containing materials, as well as the training for persons who remove asbestos containing materials. For additional information, contact the Vermont Department of Health, Health Protection Division (1-800-439-8550)]

-delete- Chapter 17 Wildland Urban Interface

-delete & replace- section 1:18.3.1 **Water Supplies:** An approved water supply capable of supplying the required fire flow for fire protection shall be NFPA 1142: Standard on Water Supplies for Suburban and Rural Fire Fighting, 2012 Edition.

-delete- section 1:19.1.1 Commercial Rubbish-Handling Operations Permit

-delete & replace- section 1:20.2.4.2 **Emergency Egress and Relocation Drills:** Emergency egress and relocation drills, in accordance with the school's emergency preparedness plan, shall be conducted in accordance with drill schedule listed in Annex V.

-delete & replace- sections 1:20.9.2.2, 1:20.10.2 & 1:20.11.2 **Unvented Fuel-fired Heaters:** Unvented fuel-fired heaters shall not be used. [101: 30.5.2.2; 101:31.5.2.2; 101:26.5.2.2 and 101:24.5.1.2 are deleted and replaced by this section]

-delete- sections 1:20.11.4 through 1:20.11.4.6: Fire Protection of Floors

-delete- section 1:20.11.5: Manufactured Housing

-add- section 1:20.12.2.2.3 **Smoke Alarm & Carbon Monoxide Alarm** – Consumer Information: Information provided by the AHJ, on the type, placement and installation of smoke alarms and carbon monoxide alarms, shall be posted in the retail sales area where the alarms are sold.

-delete & replace- section 1:20.15.6 **Record Storage** refers to NFPA 232 6.10.2: 6 hour vault shall be permitted to provide a 4-hour door.

Section 1:20.17.2 delete only pertaining to NFPA 909 2013 edition Historical Buildings & Cultural Resources section 9.12: Prescriptive-Based Option.

-delete- section 1:22.2 Automobile Wrecking Yard Permit

-delete & replace- section 1:25.1.2 **Permits for Membrane Structures, Tents and Canopies:** Permits for an air-supported membrane structure, tent or canopy in excess of 1200 sq. ft. shall comply with 1:1.12.8.

Section 1:25.1.7 Detection, Alarm & Communications Systems: Deleted for tents only, when tent is erected for less than 180 days (NFPA 102 section 9.6).

-delete & replace- section 1:29.1.2 **Enclosed Parking Garage Ventilation/Carbon Monoxide Detection:** A

mechanical ventilation system in accordance with NFPA 88A in junction with carbon monoxide detection system shall be provided. Guidelines are provided on the Division web page. See memorandum dated 4/18/14 – Enclosed Parking Structures.

-add- section 1:29.1.4 **Ventilation for Occupied Spaces Adjacent or Accessory to Parking Structures:** In addition to ventilation requirements under 88A:6.3 for enclosed parking structures, all connecting spaces or contained spaces such as offices, waiting areas, ticket booths and similar areas shall be maintained at a positive pressure, or a method approved by the AHJ.

-delete- section 1:41.1.5 Permits for Welding, Cutting & other Hot Work

-delete & replace- section 1:42.3.3.2 **Aboveground Storage Tanks for Fuel Dispensing** All aboveground tanks storing Class I liquids shall be fire resistant tanks in accordance with Section 42.3.3.4. [30A:4.3.2 is deleted & replaced by this section]

-delete & replace- section 1:42.3.3.2.4 **Location of Aboveground Tanks for Fuel Dispensing:** Tanks involved with fuel dispensing storing Class I liquids shall be located in accordance with Table 42.3.3.2.4. Tanks containing other liquids regulated under this chapter shall be permitted to be located with minimum separation requirements $\frac{1}{2}$ of the distances in Table 42.3.3.2.4. [30A:4.3.2.4 is deleted & replaced by this section]

-delete & replace- section 1:42.7.5.6 **Fire Suppression Systems:** Approved automatic fire suppression systems shall be required at all **unattended self-service fuel dispensing facilities including card-lock, key-lock and fleet-refueling facilities** where non-employee third parties are allowed to dispense Class 1 flammable liquids.

Approved automatic fire suppression systems shall also be required where unique and special circumstances constituting a serious risk to public safety require the use of such systems in order to adequately protect users, as determined by the authority having jurisdiction.

Approved automatic fire suppression systems shall not be required at any full-service or self-service fuel dispensing facility where an employee is on duty during all hours of operation, and where such employee is able to view and supervise all fuel dispensing operations, in accordance with 42.7.4.

-add- section 1:42.7.5.7 **Fire Suppression Systems – Alternative Design:** Where otherwise exempted under this code a fire suppression system shall be permitted to be installed in accordance with the appropriate NFPA standard and the manufacturers' instructions that do not meet the listing requirements of UL 1254.

-add- section 1:42.7.5.8 **Existing Fire Suppression Systems:** Systems currently in use that were installed prior to May 31, 2002, shall be inspected and certified annually and shall continue to meet the standards for installation and operation incorporated into the Vermont Fire & Building Safety Code. A system installed prior to May 31, 2002, that is no longer operable shall be removed and:

- a) be replaced with a system that meets the listing requirement of UL 1254, or
- (b) be replaced by a previously listed system that does not meet the listing requirements of UL 1254, or.
- (c) be removed from service and not replaced after notification, inspection and approval from the AHJ.

-add- section 1:42.7.2.5.4 **Extinguishing Agent:** A copy of the Material Safety Data Sheet (MSDS) for the extinguishing agent shall be kept at all locations where automatic fire suppression systems are installed.

-add- section 1:42.7.4.3.2 **Training for Attendants:** All attendants for self-service fuel dispensing facilities shall receive initial and periodic training regarding the requirements of the Fire Code including preventing the dispensing of gasoline into unapproved portable containers, making sure that the portable container is on the ground while filling, controlling sources of ignition such as smoking and requiring the motor of the vehicle to be shut off, activating emergency controls and notifying the fire department of any fire, and handling accidental spills and fire extinguishers as needed. A poster listing the duties of this section and section 42.7.4.5, approved by the AHJ, shall be posted at the normal workstation of the attendant.

-add- section 1:42.7.4.5 **Power Disconnect:** An attendant for a self-service fuel dispensing facility shall disconnect the power to any pump when the attendant observes the dispensing of gasoline into an unapproved portable container, filling of a portable container that is not on the ground, the motor of the vehicle had not been stopped, smoking materials are being used within 20 ft. of the fuel dispensing, a person has blocked open the hose nozzle valve or a person has left the pump unattended, and the power shall not be restored until the violation is abated.

-add- section 1:50.2.1.10 **Isolated Cooking Operations:** The requirements for the hood, grease

removal devices, duct and fixed fire extinguishing system may be modified by the AHJ for cooking operations in free standing tents, mobile units or other small buildings located greater than 30' from grandstands or other public buildings and occupied by employees only, when the clearance to combustibles, safety controls, portable fire extinguishers, staff training, fuel use, storage and shut-off, and electrical shut off for equipment are in compliance with this Code.

-add- section 1:50.4.1.1 **Cooking Operations - Acceptance Testing of a Suppression System:** An acceptance test shall be conducted by person(s) holding Vermont TQP status to ensure the system functions as designed. This test shall include of a "puff test" discharging nitrogen or other approved inert gas through the system's agent distribution piping to allow verification of piping continuity including verification of gas discharge to each of the discharge nozzle(s). In addition, this test shall also include a demonstration of all critical functions of the system including but not limited to any required gas or electric shut down, any required make-up air shut down, any required building fire alarm connection, and visually provide confirmation of nozzle size and placement per the design plans when completed.

-add- section 1:50.1.1.1 Exhaust Fan Activation deleting 96:8.2.3.3

-delete & replace- section 1:51.1.2.1 **Permits for Industrial Ovens and Furnaces:** Permits for new installations, alterations or extensions to existing equipment shall comply with 1.12.

-delete & replace- section 1:53.1.2.1 **Permits for Mechanical Refrigeration:** A permit is not required for an existing facility that is in compliance with reporting requirements under the Vermont Community Right to Know Law, Title 20 V.S.A. Chapter 1.

-delete- Chapter 54 Ozone Gas-Generating Equipment

-add- section 1:60.1.2.3 **Permits for Hazardous Materials:** A permit is not required for an existing facility that is in compliance with reporting requirements under the Vermont Community Right to Know Law, Title 20 V.S.A. Chapter 1.

[Information regarding chapter 65, **Explosives and Fireworks-** A license is required to possess, purchase, store, use, transport, give, transfer or sell explosives. For license applications or additional information contact the Division of State Police at (802) 244-8718.

The Division of Fire Safety regulates the safekeeping, storage, use, manufacturing, sale, handling, and other disposition of explosive material under this Code.

The Division of Fire Safety also regulates the construction, manufacturing, storage, handling and use of fireworks for supervised public displays and pyrotechnic special effects under this Code.

It is unlawful for any person to offer for sale, sell at retail or wholesale, possess, use or explode any fireworks except as permitted for a supervised public display of fireworks.

A permit for a supervised public display of fireworks may be obtained from the Chief of the Fire Department, or in towns where there is no Fire Department from the board of selectman, where it is determined the display would not be hazardous to property or endanger the public. Application for a permit must be made at least 15 days in advance of the public fireworks display.

Sparklers less than 14 inches long with no more than 20 grams of pyrotechnic mixture and novelty sparkling items limited to snakes, party poppers, glow worms, smoke devices, string poppers, snappers, or drop pops with no more than 0.25 grains of explosive mixture, that are in compliance with United States Consumer Product Safety Commission regulations, are legal for sale and use in Vermont.]

-delete & replace- section 1:65.3.3 **Permits for Public Fireworks Displays:** A permit for a supervised public display of fireworks shall be obtained from the chief of the fire department, or in towns where there is no fire department the board of selectperson, after determining the display would not be hazardous to property or endanger the public.

-add- section 1:65.10 **Consumer Fireworks:** The sale, handling and storage of consumer fireworks, including sparklers permitted for sale in Vermont, in both new and existing buildings, structures and facilities shall comply with NFPA 1124, 2012 edition.

-add- section 1:65.10.1 **Exempt Amounts of Consumer Fireworks:** Consumer fireworks retail sales facilities or stores where the fireworks and sparklers are in packages in accordance with the U. S. Consumer Product Safety Commission and where the total quantity of consumer fireworks and sparklers in the building does not exceed 125 lb (net) of pyrotechnic composition shall be exempt from the following sections:

1124:7.3.2 Permits

1124:7.3.5 Construction

1124:7.3.6 Automatic Sprinkler System

1124:7.3.9 Fire Alarms

1124:7.3.10 Smoke Control

1124:7.3.12 Separation distances

-delete & replace- section 1:66.1.5 **Permits for Flammable & Combustible Liquids:** A permit is not required for an underground storage tank regulated by

the Agency of Natural Resources, Department of Environmental Conservation, according to NFPA 30.

All USTs are required to be registered with the Agency except for:

- (a) Tanks less than 1100 gallons containing fuel oil (#2-#6) which is used for on premises heating and domestic hot water, and
- (b) Farm and residential tanks less than 1100 gallons containing motor fuel which is used for noncommercial purposes.

-add- section 1:69.1.1.4 **Record of Installation for LP Gas Containers:** Installers shall maintain a record of all installations for which a permit is not required by section 69.1.1.3, but not including replacing of portable cylinders, available for inspection by the AHJ.

-add- section 1:69.3.6.1.7 All other **Underground Containers** shall be provided with a reflective marker or other readily visible marker acceptable to the authority having jurisdiction, at 4' in height to mark the location of the location of the housing cover. [58:6.6.6.1(C) is deleted & replaced by this subsection]

Section 5 ICC, International Building Code (IBC) 2015 Edition

The IBC is adopted to the extent necessary to ensure compliance with the performance requirements of this Code and the intent of this Code regarding safeguarding of people and property in case of fire, explosion, dangerous structural conditions and the generation of carbon monoxide.

-delete- IBC chapter 1 Administration except for section 107 (Submittal Documents) as appropriate and the following sections:

-delete & replace- IBC section 101.4 Referenced Codes: Where referenced under the IBC any reference to the:

***ICC Electrical Code**, shall be to the National Electrical Code, NFPA 70, as adopted by the Electricians Licensing Board,

***International Existing Building Code (IEBC)**: 2015 edition, structural requirements only,

***International Fuel Gas Code**, shall be to the National Fuel Gas Code, NFPA 54, 2015 edition, as adopted under this Code,

***International Mechanical Code**, shall be to the Fire Code, NFPA 1, 2015 edition, including NFPA 90A, as adopted under this Code,

***International Plumbing Code** shall be as adopted by the Plumbers Examining Board,

***International Property Maintenance Code**, shall be to the Fire Code, NFPA 1, 2015 edition and the Life Safety Code, NFPA 101, 2015 edition, as adopted under this Code,

***International Fire Code**, shall be to the NFPA 1 Fire Code, 2015 edition, as adopted under this Code,

***International Energy Conservation Code**, with Vermont Specific additions and revisions shall be to the Vermont Building Energy Standards, as published by the Vermont Department of Public Service (802-828-3183),

***International Residential Code**, or to R-3 Occupancy Classification for one & two family dwellings, shall be to the Life Safety Code, NFPA 101, 2015 edition as adopted under this Code.

-delete & replace- IBC section 105 **Construction Permits**: Permits shall be obtained in accordance with section 7 of the Vermont Fire & Building Safety Code.

-add- IBC section 117 **Structural Failure or Collapse**: A building owner shall immediately report any structural failure or collapse that involves personal injury to the AHJ. Where the structural failure or collapse does not involve personal injury the report shall be made within 48 hours. A registered design professional investigating an incident on behalf of the owner shall advise the owner of the requirement to report the incident.

[For AHJ emergency contact during normal business hours call 1-800-640-2106. Outside of normal business hours call The State Emergency Operations Center at 1-800-347-0488]

-delete & replace- IBC section 308.3 Group I-1, **Residential Board & Care Facilities**: Assisted Living Facilities and similar use: Residential care facilities, assisted living facilities and similar use in which three or more clients receive care shall be classified and regulated in accordance with the Life Safety Code, NFPA 101, and the IBC for structural design.

-delete & replace- IBC section 308.6 **Day Care Facilities**: Day care facilities in which four or more clients receive care shall be classified and regulated in accordance with the Life Safety Code, NFPA 101, and the IBC for structural design.

-delete & replace- IBC section 310.5 R-3 **Detached One & Two Family Dwellings**: Detached one & two family dwellings shall be classified and regulated in accordance with the Life Safety Code, NFPA 101.

-delete- IBC section 406.6.2 **Enclosed Parking Garage Ventilation**: See NFPA 1 section 29.1.2

-delete & replace- IBC section 415.12 **Protection of Semiconductor Fabrication Facilities**: In addition to requirements set elsewhere in this code semiconductor fabrication facilities shall be in accordance with NFPA 1, and NFPA 318.

-delete & replace- IBC section 506.3.1 **Open Space for Area Increase**: To qualify for an area factor increase based on frontage, a building shall have not less than 25 percent of its perimeter on a public way or open space. Such open space shall be either on the same lot or dedicated for public use, clear and unobstructed at all times, usable for fire department operations and accessed from a street or fire department access road in accordance with NFPA 1: chapter 18.

-delete & replace- IBC section 507.2 **Open Space for Unlimited Area Buildings**: Open space required under section 507 shall be either on the same lot or dedicated for public use, clear and unobstructed at all times, usable for fire department operations and accessed from a street or fire department access road in accordance with NFPA 1: chapter 18.

-delete & replace- IBC Section 706 **Fire Walls**: The design and construction of new Fire Walls and High Challenge Fire Walls shall be in accordance with NFPA 1 Section 12.3.1 and NFPA 221 and the following:

The minimum fire resistance rating for Fire Walls and High Challenge Fire Walls shall be three hours; for buildings with complete supervised automatic sprinkler systems on both sides of the fire wall, the minimum fire resistance rating shall be two hours.

High Challenge Fire Walls shall be utilized for buildings containing an occupancy in categories "III" or "IV" listed on Table 1604.5 IBC.

-delete & replace- IBC chapter 8 **Interior Finishes:** Interior finishes shall be in accordance with the Life Safety Code, NFPA 101, as adopted under this Code.

-delete- IBC 915 Carbon Monoxide Detection

-delete & replace- IBC chapter 10 **Means of Egress:** Means of Egress shall be in accordance with the Life Safety Code, NFPA 101, as adopted under this Code.

-delete & replace- IBC chapter 11 **Accessibility:** All new construction and alterations shall be in accordance with the "Vermont Access Rules" as adopted by the Vermont Access Board.

-delete- IBC chapter 12 Interior Environment except for section 1209.1 Crawl Spaces & 1209.2 Attic Spaces Access to Unoccupied Spaces.

-delete & replace- IBC chapter 13 **Energy Efficiency:** Certification, approved by the Department of Public Service, indicating compliance with the current Vermont Commercial Building Energy Standards (CBES), for the design and construction of any public building, other than one & two family dwellings and multi-family dwellings three stories or less in height, shall be affixed in a visible location inside the building, in the vicinity of the heating or cooling equipment or the electrical service panel, as a condition for a final occupancy permit.

[Note: The Department of Public Service provides technical assistance and expert advice regarding the energy standard requirements for new construction. This includes criteria that builders may use in lieu of computer or systems analysis of the building. For additional information contact the Vermont Department of Public Service at 1-888-373-2255.]

-delete & replace- IBC 1608.2 **Ground Snow Loads:** The map "Ground Snow Loads for Vermont by Town or City" from Annex VII of these rules shall be used in determining the minimum ground snow load. Ground snow loads above 2500 feet above sea level shall be approved by the AHJ, and shall be based on an extreme value statistical analysis of data available in the vicinity of the site using a value with a 2-percent annual probability of being exceeded (50-year mean recurrence interval), or other means acceptable to the AHJ.

-add- 1608.2.1 **IBC Minimum Roof Snow Load:** The total roof snow load, including additional loading effects due to drifting snow, sliding snow, unbalanced loading conditions and partial loading conditions, shall not be less than 40 psf for roofs with a slope less than or equal to 5 degrees, and shall not be less than the slope factor (Cs) times 40 psf for roofs with a slope greater than 5 degrees.

This minimum roof snow load shall not apply to the windward side for unbalanced loading conditions, or to the partially loaded spans for partial loading conditions.

Note: Additional guidance for adjusting ground snow loads to account for elevation at sites below 2500 feet above sea level can be found in the "Average Snowfall Map" in Annex VII of these rules.

-delete & replace- IBC section 1612.3 Establishment of **Flood Hazard Area:** Where established by a municipality by ordinance or zoning standard the flood hazard area shall be identified by one of the following:

- (1) Special flood hazard area designated by the Federal Emergency Management Agency (FEMA), or
- (2) Most recent flood insurance rate map (FIRM), or
- (3) Area subject to flooding during the design flood and shown on a municipal flood hazard map, or
- (4) Most recent maps and studies adopted by a municipality for a flood with less than a 1 % chance of being equaled or exceeded in any given year.

-delete & replace- IBC 1809.5 **Frost Protection.** Except where otherwise protected from frost, foundations and other permanent supports of buildings and structures shall be protected from frost by one or more of the following methods:

- (1) Extending below the frost line of the locality, but not less than 5'-0" below finished grade.
- (2) Constructing in accordance with ASCE 32.
- (3) Erecting on solid rock.

-delete & replace- IBC sections 2111 through 2113: **Masonry Fireplaces, Heaters and Chimneys:** Masonry fireplaces, heaters and chimneys shall be in accordance with the Standard for Chimneys, Fireplaces, Vents and Solid Fuel-Burning Appliances, NFPA 211, as adopted under this Code.

-delete & replace- IBC 2603.5.5 **Vertical and lateral fire propagation:** The exterior wall assembly shall have an evaluation report which provides details of the assemblies tested, in accordance with NFPA 285 and/or NFPA 285 test results extended via a third-party engineering analysis. Exception: One-story buildings complying with Section 2603.4.1.4.

The purpose and intent of IEBC adoption is for structural requirements only, no other requirements within the IEBC shall apply.

-delete & replace- IBC chapter 27 **Electrical**: Electrical components, equipment and systems shall be in accordance with the National Electrical Code, NFPA 70, as adopted by the Electricians' Licensing Board.

-delete & replace- IBC chapter 28 **Mechanical Systems**: Mechanical equipment and systems shall be installed in accordance with the Fire Code, NFPA 1, including NFPA 90A as adopted under this Code.

-delete & replace- IBC chapter 29 **Plumbing Systems**: Plumbing work is regulated under the Vermont Plumbing Rules as adopted by the Plumbers Examining Board.

-delete & replace- IBC section 3001 **Elevators and Conveying Systems**: Elevator and conveyance work is regulated under the Vermont Elevator Safety Rules as adopted by the Elevator Safety Review Board.

-delete & replace- IBC section 3002.4. **Required Locations**: An **elevator car** of such a size and arrangement to accommodate an ambulance stretcher (24" X 84") as specified in section 3002.4 shall be provided where a passenger elevator is newly installed in a building **three or more stories in height** above or below grade plane/grade level. This section shall not apply to the installation of a Limited-Use / Limited-Application elevator approved by the Vermont Access Board.

-delete & replace- IBC section 3004.4 **Personnel and Material Hoists**: Personnel and Material Hoist work is regulated under the rules of the Vermont Occupational and Safety Administration.

-delete & replace- IBC section 3005.5 **Shunt Trip**: Elevator shunt-trip is not permitted under Vermont Elevator Safety Rules, section 2.8.3.3.2.

-delete- IBC section 3108 Telecommunication and Broadcast Towers

-delete- IBC section 3109 Swimming Pool Enclosures and Safety Devices

-delete- IBC section 3110 Automatic Vehicular Gates

-delete- IBC chapter 32 Encroachments into the Public Right-of-Way

-delete & replace- IBC chapter 33 **Safeguards During Construction**: Safety during construction shall be in accordance with the Standard for Safeguarding Construction, Alteration and Demolition Operations, NFPA 241, as adopted under this Code.

Section 6 Boiler and Pressure Vessel Inspection

The following nationally recognized safety standards are adopted by reference and shall apply to all boilers and pressure vessels covered under these rules.

- (1) National Board of Boiler and Pressure Vessel Inspectors, National Board Inspection Code, (NBIC 2015 edition) Part 1 – Installation; Section 2.4.1, Part 2 – Inspection, Part 3 – Repair and Alteration.
- (2) ASME Standards – 2015 edition
 - (a) Section I – Power Boilers
 - (b) Section II – Material Specifications, Part A – Ferrous
 - (c) Section II – Material Specifications, Part B – Nonferrous
 - (d) Section II – Material Specifications, Part C – Welding Rods, Electrodes and filler Metals
 - (e) Section IV – Heating Boilers
 - (f) Section V – Nondestructive Examination
 - (g) Section VIII – Pressure Vessels, Division I
 - (h) Section VIII – Pressure Vessels, Division 2 – Alternative Rules
 - (i) Section IX – Welding and Brazing Qualifications
 - (j) Section X – Fiber-Reinforced Plastic Pressure Vessels
- (3) B31.1 Power Piping, ANSI 2012 Edition
- (4) CSD-1-2015 Controls and Safety Devices for Automatically Fired Boilers
 - (a) A boiler is defined as a closed vessel in which water is heated, steam is generated, steam is superheated, or any combination thereof, under pressure or vacuum by the direct application of heat from the combustion of fuel or from electricity. The term includes a fired unit for the heating or vaporizing of liquids other than water where the unit is separate from a processing system and is complete within itself. An unfired pressure vessel is defined as a container of pressure obtained from an external source that exceeds 15 psi. This section shall apply to all boilers, and pressure vessels identified in the National Board Inspection Code (NBIC) except:
 - i) A boiler or pressure vessel Located on a common carrier subject to regulations under the Surface Transportation Board, Department of Transportation, Federal Railroad Administration or Nuclear Regulatory Commission.
 - ii) Pressure containers that are integral parts or components of rotating or reciprocating mechanical devices such as pumps, compressors, turbines, generators, engines and hydraulic or pneumatic cylinders where the primary design consideration and /or stress is derived from the functional requirements of the device.
 - iii) **Hot-water heaters and potable water storage tanks** with a heat input of less than 200,000 BTU/HR, water temperature less than 210 degrees (F) and less than 120 gallons water capacity.
 - iv) Steam cleaners or coil type boilers without steam space where water flashes into steam when manually released through a nozzle for cleaning machinery, equipment, etc.; when the water capacity is less than 6 gallons and the water temperature less than 350 degrees
 - v) A system for heating a building or other processes using an open vessel (characterized by a continuously open vent or vents of adequate size designed so that the vessel will not operate above atmospheric pressure) are not regulated under the NBIC, but are subject to other requirements of this code and other rules and standards adopted by the Division, including obtaining all required permits and inspections.
- (b) Units exempted under this section shall be equipped with approved pressure/temperature safety relief devices in accordance with NBIC.
- (c) All boilers and pressure vessels shall be designed, manufactured, constructed and assembled in accordance with the relevant standards published by the:
 - i) American Society of Mechanical Engineers;
 - ii) Canadian Standards Association;
 - iii) European Committee for Standardization, for boilers with a maximum water jacket size of 60 gallons, a maximum input of 250,000 Btu, and a maximum relief valve setting of 30 pounds per square inch gauge; or
 - iv) European Committee for Standardization, for boilers or pressure vessels with an input of greater than 250,000 Btu or a water jacket size of greater than 60 gallons as approved by the commissioner.
- (d) All boilers shall be installed with controls and safety devices and pressure vessels shall be installed with over-pressure protection in accordance with the American Society of Mechanical Engineers (ASME) Boiler And Pressure Vessel Code Sections I, IV and VIII or by the European Committee for Standardization of Boilers.
- (e) The manufacturer's design information, instructions, data plates and warning labels for all boilers and pressure vessels shall be in English, and include the words inch/pounds.

- (f) The owner or person installing a boiler or pressure vessel shall report to the AHJ the location, type, capacity, age and date of installation of any boiler or pressure vessel.
- (g) Prior to being placed in service any boiler or pressure vessel shall be inspected by a commissioned inspector. When the boiler or pressure vessel is found to be in compliance with this Code the commissioned inspector shall attach an identification number, approved by the AHJ, and an **initial inspection certificate** in a format approved by the AHJ. The inspection certificate shall be posted at the site of operation. The identification number, initial inspection by a commissioned inspector and operating certificate shall not be required for boilers designed to heat individual dwelling units. Boiler(s) connected to a single system with a total aggregate heat output capacity of less than 199,000 BTU/hr serving apartments or residential condos are not required to have a commissioned inspection and operating certificate.
- (h) The **periodic inspection** of boilers and pressure vessels shall be performed by a Vermont commissioned inspector at intervals listed in this section. A commissioned inspector may require additional external (an inspection made when a boiler or pressure vessel is fully intact so all safety features can be inspected) or internal (an inspection made when a boiler or pressure vessel is shut down and hand-holes, manholes or other inspection openings are opened for inspection of the interior) inspections when unsafe conditions or operations are observed or suspected. The AHJ may order the owner or user to stop operation of a boiler or pressure vessel operating in violation of this Code.
 - i) Each high pressure power boiler in which steam is generated at a pressure of more than 15 pounds per square inch, and high temperature water boilers shall be inspected both internally and externally while not under pressure on an annual basis, and externally, while in operation and under pressure, approximately six months from the internal inspection.
 - ii) Each low-pressure hot water heating boiler installed to operate at pressures not to exceed 160 pounds per square inch and/or temperatures not exceeding 250 degrees (F), and each low-pressure **steam boiler** operating at a pressure not exceeding 15 pounds per square inch, shall be inspected externally every **two years**. A steam heating boiler operating at a pressure not exceeding 15 pounds per square inch, shall be inspected externally, and internally where construction permits, every **two years**. An inspection shall not be required for boilers designed to heat individual dwelling units.
- iii) **Cast iron boilers** shall be inspected externally every **two years**. Steel boilers shall be inspected every **two years**. When the type of construction of the boiler permits, such inspection shall be an internal inspection at least every **three years** for steam boilers and an internal inspection at least once every **five years** for hot water boilers, in addition to the **two-year** external inspection. A grace period beyond the periods specified above may be permitted between inspections, at the discretion of the commissioner.
- iv) New steam boiler installations shall provide at least one testable low water cutoff operating control and one testable high limit control with manual reset. This does not preclude having additional LWCO controls.
- v) All new low-pressure hot-water heating boilers and hot-water supply boilers shall provide at least one testable low-water cutoff with a manual reset.
- vi) Each pressure vessel greater than 5 cubic feet and operating with a relieving pressure greater than 125 pounds per square inch shall be inspected externally, and internally where construction permits, every three years. An internal inspection is not required for a rubber lined pressure vessel.
- (i) An employee of an insurance company, licensed to insure boilers and pressure vessels in Vermont, shall obtain a current Vermont commission to inspect boilers and pressure vessels prior to conducting any inspections. A current commission from the National Board of Boiler and Pressure Vessel Inspectors is required to obtain a Vermont commission. A Vermont commission may be revoked or suspended for violation or misrepresentation of responsibilities established under this Code. A person who has a Vermont commission revoked or suspended shall be given written notification and the opportunity for a hearing following due process.
- (j) An employee of an insurance company, licensed to insure boilers and pressure vessels in Vermont, who has obtained a Vermont commission, and/or the insurance company, licensed to insure boilers and pressure vessels in Vermont shall:
 - i) Inspect all boilers and pressure vessels insured by the insurance company in accordance with this Code and at time frames established under this Code.

- ii) Report the results of all inspections to the AHJ within 30 days of the inspection in a format approved by the AHJ.
 - iii) Notify the AHJ of new boilers or pressure vessels insured, insurance cancelled or not renewed or refused within 30 days.
 - iv) Participate in training as may be directed by the AHJ.
 - v) Not engage in the sale of, or have any interest in, any appliance or device related in any way to the construction, operation or maintenance of boilers and pressure vessels covered under this Code.
- (k) The owner, user or commissioned inspector shall immediately report any accident, incident or explosion involving a boiler or pressure vessel that involves personal injury to the AHJ at 1-800-347-0488 and secure the scene to prevent any change that would hamper the investigation of the incident. Where the accident, incident or explosion does not involve personal injury the report shall be made within 48 hours.
- (l) The insurance company of record shall pay a fee of \$30.00 to the Division of Fire Safety for each inspection certificate or periodic inspection sticker.

-delete & replace- section I-3724(a) **Low Water**

Cutoff: Each automatically fired low-pressure hot-water heating boiler shall have an automatic low-water fuel cutoff which has been designed for hot-water service, and it shall be so located as to automatically cut off the fuel supply when the surface of the water falls to the level established by the boiler manufacturer.

-add- NFPA 101 section 7.12.3 (page 5) **Boiler Room**

Exits: Two means of egress shall be provided for boiler rooms exceeding 500 sq. ft. floor area and containing one or more boilers having an aggregate fuel input capacity of 1,000,000 BTU/HR or more. Each elevation shall be provided with at least two means of egress, each to be remotely located from the other. A platform at the top of a single boiler is not considered an elevation.

Section 7 Application for a Construction Permit

- (1) The owner, or a designated representative, of a building or premises shall obtain a construction permit before beginning any construction, addition, alteration, rehabilitation, demolition or installation of fixed building equipment at the building site unless specifically waived by the AHJ.
- (2) To obtain a construction permit the applicant shall:
 - a. Complete a **Construction Permit Application** form and submit it along with the required construction permit fee to the Division of Fire Safety regional office.
 - b. Provide **construction documents** relating to the construction work and equipment under consideration unless specifically waived by the AHJ based on the size, use, occupancy or complexity of the work.
 - c. For buildings where the applicant is requesting special consideration for a **historic building, documentation** shall be included on the historic designation of the building, including identification and evaluation of historic adjacent structures and site elements such as sheds, walkways, and fencing; historic construction features such as sheathing, facade or roofing materials, chimneys, skylights, cornices or molding, windows or doors, wainscoting, cabinets and finishes; and historic spaces such as archways, lobbies or rooms which are important to the understanding and application of the building.
- (3) The **construction documents** shall be prepared by a registered designed professional, stamped and signed, where required by 26 V.S.A. chapters 3 & 20. [Excerpts from the Architects & Professional Engineering Licensing and Registration Statutes are included in Annex II of this code]
- (4) Plans required under this Code shall be drawn to scale, using customary inch-pound units and English language, and shall be sufficiently clear, comprehensive, detailed and legible when submitted to the AHJ so that, together with any accompanying specifications and data, the AHJ can readily determine whether or not the proposed building, addition, or alteration, and all proposed building equipment will conform to this Code.
- (5) The AHJ shall review the application for a construction permit and the construction documents where applicable and shall issue a permit, a conditional permit with specific terms and conditions, or deny the application. The AHJ may require additional information before issuing, or denying the application for a construction permit. Any conditions of the permit or reasons for denial of the permit shall be transmitted to the applicant in writing.
- (6) The AHJ may provide consultation or preliminary plan review for proposed construction to identify high priority code issues when deemed warranted by the significance or complexity of the project.
- (7) A **construction permit shall expire** if the work authorized under the permit is not commenced, or is suspended or abandoned, for a time period of **12 months**. When a project is resubmitted for review beyond the 12 months and where no extension was granted, and no major building design change has occurred a 50% plan review fee will be assessed.
- (8) **Construction permit fees** are established by the Vermont Legislature under Title 20 V.S.A. section 2731. The current construction permit fees are available on the Division's website or by contacting any office of the Division.
 - a. The Commissioner or designated representative may **rebate up to \$2,000** of the construction permit fee paid the department toward the cost of a qualified fire sprinkler system installed in an existing building in a designated downtown area.
 - b. In the case of **abandonment or discontinuance of a building project** involving a construction permit fee greater than \$150 the construction permit fee may be refunded, upon written request to the AHJ, prorated on construction work, services, reviews and inspections conducted prior to such abandonment. Such request shall be received within 12 months of the date that the construction permit was issued.
 - c. The AHJ may refuse to issue a construction or occupancy permit if the owner or a designated representative owes the Department fees or penalties.
- (9) The AHJ shall be authorized to require the owner to engage, and designate on the construction permit application, a registered design professional who shall act as the **design professional in responsible charge** in accordance IBC 107.1, who shall be responsible for reviewing and coordinating submittal documents prepared by others for compatibility with the approved design of the building.
- (10) The AHJ shall be authorized to order all, or part of, work regulated under this Code to stop when the work is unsafe or being performed contrary to the provisions of this Code.

PERMIT AND LICENSING REQUIREMENTS

When do you need a state permit or license?

	DFS State Construction Permit	DFS Electrical		DFS Plumbing		Notes
		State Permit	License	State Permit	License	
Projects within a Single Family Owner- Occupied home that includes: new construction, alterations, renovations or the installation of fixtures.	No	No	No	Yes	Yes	For plumbing only if connected to a public water or sewer system
Projects within a Rental Property or Apartment Buildings having more than two units that includes: new construction, alterations, renovations or the installation of fixtures.	Yes	Yes	Yes	Yes	Yes	
Projects within a Duplex or a Rental single family home that includes: new construction, alterations, renovations or the installation of fixtures.	Yes	Yes	No	Yes	Yes	
Maintenance projects with in a public building such as painting, replacement of broken fixtures with fixture that is an exact match.	No	No	Yes	No	Yes	
Public Building Renovations, Additions, Alterations, Modifications and New Building Projects. See Annex I for definition of Public Building	Yes	Yes	Yes	Yes	Yes	Includes Fire protection systems, Fire alarm system, Fire sprinkler, Kitchen hood & suppression, Elevators Etc.
The erection of temporary tents greater than 1,200 square feet in a public location	Yes	Yes	Yes	N/A	N/A	
Accessory Dwelling unit	No	Yes	No	Yes	Yes	For plumbing only if connected to a public water supply

To obtain a construction permit the applicant shall:

- (1) Complete a Construction Permit Application form and submit it to the DFS regional office.
- (2) Provide construction documents relating to the construction work and equipment under consideration unless specifically waived by the Commissioner or designated representative based on the size, use, occupancy or complexity of the work.
- (3) Submit the required construction permit fee.
- (4) Installation of fire or sprinkler system, kitchen hood system or elevator requires an electrical permit in addition to a construction permit.

[Updated October 10, 2016]

Section 8 Variance, Exemption and Reconsideration

- (1) The Commissioner may grant a variance approving a different solution to compliance that meets the intent of this code, or may exempt a portion of a building, or equipment including non-standard boilers and pressure vessels, from the requirements of this Code. It is the policy of the Commissioner that whenever possible the determination of a variance or exemption request be made by the Regional Managers.
- (2) In order for a variance or exemption request to be reviewed the owner or designated representative shall submit:
 - a. Evidence that the proposed or existing building or premises is not in compliance with this Code.
 - b. Evidence, letters, statements, test results, construction documents, computations, chemical and physical properties or other supporting information as prepared by licensed or certified professionals that is required to justify the request.
 - c. Evidence that strict compliance with the Code would entail practical difficulty, unnecessary hardship or otherwise found unwarranted.
 - d. Evidence that any such variance or exemption secures the public safety and health and that the methods, means or practices proposed provide equal protection of the public safety and health.
- (3) Review of the variance or exemption request shall consider evidence that the code or standard from which the variance or exemption is sought has not been promulgated as a rule or standard under the Vermont Occupational Safety and Health Act.
- (4) The determination on the variance or exemption request shall be made in writing to the applicant and shall advise the applicant of the reconsideration process as contained in Section (e).
- (5) The Director may reconsider an interpretation or decision made by a designated representative pursuant to this Section. To request reconsideration, the owner or designated representative shall submit a written request including:
 - a. Evidence the proposed or existing building or premises is not in compliance with this Code.
 - b. Evidence, letters, statements, test results, construction documents or other supporting information as required for justifying the request.
 - c. Evidence that the true intent of the Code has been incorrectly interpreted, or the provisions of the Code do not fully apply; or the decision is unreasonable or arbitrary as it applies to alternatives or new materials.
- (6) The request for reconsideration shall be submitted to the deputy director no later than 30 days after receiving the decision.
- (7) A request for a variance relating to access to a public building for people with disabilities shall be referred for decision to the Access Board established under Title 20 V.S.A. chapter 174.
- (8) A request for a variance from this Code for historical buildings that is not resolved under section 8(a) shall be determined by the Historic Variance Appeals Board as established by 20 V.S.A. 2732.

Section 9 Duty to Observe

A request for variance, exemption, or reconsideration, or request for an appeal pursuant to the rules for Administrative Citations and Penalties, or request for an appeal of orders issued pursuant to 20 V.S.A. 2733, or request for an appeal of any finding of violation of this Code shall not relieve a person from complying with this Code, permit or occupancy requirements, unless the Commissioner expressly authorizes an extension of compliance period pending review of the request.

Section 10 Municipal Enforcement and Coordination

- (1) Each municipality shall provide information regarding building permits issued by the municipality to the AHJ upon request.
- (2) The Commissioner may assign the responsibility for the enforcement of all or part of these rules to municipalities that meet the qualifications established in 20 V.S.A. sections 2736 and 2884.
- (3) Any fire, building or similar code standards adopted by any municipality shall be consistent with the standards adopted under this Code.

Section 11 Effective Dates and Severability

- (1) These rules shall take effect October 10, 2016 and shall be known as the Vermont Fire & Building Safety Code - 2015.
- (2) This Code shall not require changes in the construction documents or construction of a building or portions of a building for which a construction permit has been issued and construction has started within 180 days of the effective date of this Code, or as otherwise approved by the AHJ prior to submission of plans. Existing buildings or portions of shall meet or exceed requirements for the existing buildings under this Code to allow a 180 day grace period.
- (3) In the event any part or provision of these rules is held to be illegal, this shall not have the effect of making void or illegal any of the other parts or provisions of these rules. Under Sections 3-6 of this code certain Vermont amendments have been cross-referenced for clarity and ease of use. Failure to cross-reference an amendment does not affect the enforcement of that amendment.

Annex I - Excerpts from Vermont Law
Pertaining to the Vermont Fire & Building Safety Code

Title 20: Internal Security and Public Safety

Chapter 173: Prevention and Investigation of Fires

Subchapter 1: General Provisions

§ 2685. Record of fires

Subchapter 2: Fire Safety Division

§ 2729. General provisions

§ 2730. Definitions

§ 2731. Rules; inspections; variances

§ 2732. Historic variance appeals board; variances; exemptions

§ 2733. Orders to repair, rehabilitate, or remove structure

§ 2734. Penalties

§ 2736. Municipal enforcement

§ 2737. Building permits

Subchapter 3A: Fire Hazards And Dangerous Substances

§ 2799. Definitions

§ 2800. Rules and standards

§ 2801. Seizure of materials

§ 2802. Orders

Subchapter 4: Investigation of Fires

§ 2833. Reports to fire marshal

Subchapter 5: Boilers And Pressure Vessels

§ 2881. General provisions

§ 2882. Rules; installation standards

§ 2883. Boiler inspections

§ 2884. Qualifications of inspectors

§ 2885. Penalties

For full text please refer to; <http://legislature.vermont.gov/statutes/chapter/20/173>

Chapter 177: Explosives and Fireworks

Subchapter 3: Fireworks

§ 3131. Definitions

§ 3132. Prohibitions; permits

§ 3136. Construction

For full text please refer to; <http://legislature.vermont.gov/statutes/chapter/20/177>

Chapter 201: Public Assemblies

A commercial public assembly permit issued by the Vermont State Police is required for an outdoor gathering of two thousand or more people in a public place when payment is required for admission. A permanent stadium used for sporting events, or a fairground having permanent seats for patrons, does not require a commercial public assembly permit. An application for a commercial public assembly permit must be filed with Vermont State Police Headquarters, 45 State Drive, Waterbury, VT 05671, at least 30 days prior to the event.

For additional information contact (802) 241-5270, or online at <http://vsp.vermont.gov/>

For full text please refer to; <http://legislature.vermont.gov/statutes/chapter/20/201>

Current Cooperative Municipal Inspection Agreements Include

Barre - Responsibility for the enforcement of the Code for all existing public buildings except federally certified health care facilities, high-rise buildings, state owned buildings, and the testing and reporting of fire protection systems by technically qualified people. (802-476-0254)

Bennington - Responsibility for the enforcement of the Code for all new & existing public buildings except federally certified health care facilities, high-rise buildings, state owned buildings, and the testing and reporting of fire protection systems by technically qualified people. (802-442-1037)

Brattleboro - Responsibility for the enforcement of the Code for all existing public buildings except federally certified health care facilities, high-rise buildings, state owned buildings, and the testing and reporting of fire protection systems by technically qualified people. (802-254-4831)

Burlington - Responsibility for plan review, permitting, and enforcement of the Code for all new construction and alterations in new and existing buildings (802-863-9094) and responsibility for the plan review, permitting, and enforcement of the Code for fire protection systems in all new and existing public buildings except federally certified health care facilities, state owned buildings and the testing and reporting of the fire protection systems by technically qualified people (802-864-5577)

Hartford - Responsibility for the enforcement of the Code for all new and existing public buildings except day-care, health care, detention and correctional and residential board and care facilities, state owned buildings, high-rise buildings and the testing and reporting of fire protection systems by technically qualified people. (802-295-3232)

Montpelier - Responsibility for the enforcement of the Code for all new and existing public buildings except day-care, health care, detention and correctional and residential board and care facilities, state owned buildings, high-rise buildings and the testing and reporting of fire protection systems by technically qualified people. (802-262-6170)

Putney - Responsibility for the enforcement of the Code for all existing public buildings except federally certified health care facilities, state owned building, and the testing and reporting of fire protection systems by technically qualified people. (802-387-4372)

So. Burlington - Responsibility for the enforcement of the Code for all new and existing public buildings except federally certified health care facilities, state owned buildings, and the testing and reporting of fire protection systems by technically qualified people. (802-846-4110)

St. Albans - Responsibility for the enforcement of the Code for all existing public buildings except health care, and residential board and care facilities, state owned buildings, high-rise buildings and the testing and reporting of fire protection systems by technically qualified people. (802-524-2132)

Winooski - Responsibility for the enforcement of the Code for all existing public buildings except educational, day-care, health care, detention and correctional and residential board and care facilities, state owned buildings, high-rise buildings and the testing and reporting of fire protection systems by technically qualified people. (802-655-6410)

Some communities have adopted rules and regulations that exceed State codes. Please contact local code enforcement directly to learn what their requirements are and how they may affect your project.

Annex II - Excerpts from the Architects and Professional Engineering Licensing and Registration Laws

Title 26 Professions and Occupations

Chapter 3: ARCHITECTS

§ 121. Definitions

§ 124. Construction; exemptions

Subchapter 3: Licensure

§ 208. Seal

For full text please refer to; <http://legislature.vermont.gov/statutes/chapter/26/003>

Chapter 20: Professional Engineering

§ 1161. Definitions

§ 1163. Exemptions

Subchapter 3: Licensing and Specialty Certifications

§ 1188. Seal

For full text please refer to; <http://legislature.vermont.gov/statutes/chapter/26/020>

Annex III - Smoke & Carbon Monoxide Detection for Single-Family Owner Occupied Dwellings

Title 9: Commerce and Trade

Chapter 77: Smoke Detectors and Carbon Monoxide Detectors

§ 2881. Definitions

§ 2882. Installation

§ 2883. Requirements for transfer of dwelling

For full text please refer to; <http://legislature.vermont.gov/statutes/chapter/09/077>

Residential Single Station Smoke Alarm (Detector) Installation Guidelines

		Occupancy	Type	Required Power Supply	Required Locations	Reference	Notes
1	NEW Building	OWNER – OCCUPIED Single Free Standing Dwelling	Photoelectric only alarms required to be installed	Hardwired into the building electric system with battery backup.	In the immediate vicinity of sleeping rooms and on all floor levels including the basement.	VSA Title 9 Chapter 77	
		ALL OTHER DWELLING UNITS	Photoelectric only alarms required to be installed	Hardwired into the building electric system with battery backup.	In the immediate vicinity of sleeping rooms, inside each sleeping room and on all floor levels including the basement.	NFPA 101 Section 24.3.4.1 Section 30.3.4.5	All smoke alarms within the dwelling unit must be interconnected. See General Note # 1
2	EXISTING Building	OWNER – OCCUPIED Single Free Standing Dwelling	Photoelectric only alarms required to be installed at time of transfer by sale or exchange	Built before 01/01/1994: Hardwired into the building electric system <u>OR</u> by Battery. Built after 01/01/1994: Hardwired into the building electric system with battery backup.	In the immediate vicinity of sleeping rooms and on all floor levels including the basement.	VSA Title 9 Chapter 77	The seller of a single-family dwelling shall certify to the buyer that smoke and CO alarms are installed using the DFS form. See General Note # 2
		1 or 2 DWELLING UNITS IN THE SAME BUILDING	All alarms newly installed or replaced alarms are required to be Photoelectric	All Newly installed and Replacement smoke alarms must be Hardwired into the building electric system with battery backup, or 10 year lithium battery smoke alarms	In the immediate vicinity of sleeping rooms, inside each sleeping room, and on all floor levels including the basement.	NFPA 101 Section 24.3.4.1.1 Section 9.6.2 And VT Code Amendments Section 9.6.2.11 Section 9.6.2.9.2	See General Note # 2, 3 and 4
		3 OR MORE DWELLING UNITS IN THE SAME BUILDING	All alarms newly installed or replaced alarms are required to be Photoelectric	Hardwired into the building electric system with battery backup, or 10 year lithium battery smoke alarm	In the immediate vicinity of sleeping rooms,, inside each sleeping room and on all floor levels including the basement.	NFPA 101 Section 31.3.4 Section 31.3.4.5.3 NFPA 72 Section 11.5.4 Section 31.3.4.5.3	See General Note # 2, 3 and 4
3	General Smoke Alarm Notes:	1. "All Other Dwelling Units": includes any residential rental unit, residential condos, hotels & dormitories, rooming & lodging, residential care facility and apartments. 2. Smoke alarms shall not remain in service longer than 10 years from the date of manufacture.			3. All smoke alarms within the dwelling unit must be interconnected in new buildings or existing buildings undergoing reconstruction or extensive modification. 4. Sleeping rooms, smoke alarms are permitted to be lithium battery powered, 10 year tamper-resistant alarms.		

[Updated October 10, 2016]

CARBON MONOXIDE ALARM REQUIREMENTS

	Occupancy	Power Supply	Code Reference	Location	** Notes
1.	Existing 1 or 2 family dwellings	Battery, directly hardwired into the building's electrical circuit, or plug in type. No transition period to require upgrade to electric power	(VFBSC) Vermont Fire & Building Safety Code Page 9 – add section 24.3.4.4 to NFPA 101, 2012	Outside each sleeping area in the immediate vicinity of the bedrooms. An additional detector shall be installed in each sleeping room that contains a fuel- burning appliance. ** See Note	** Detectors required only on floor levels where sleeping rooms are provided. ** Have your heating appliance serviced by a certified fuel service technician.
2.	<u>New 1 or 2 Family Dwelling constructed after October 22, 2005</u>	Directly hardwired into the building's electrical circuit with battery backup. Plug in type not considered direct wired	(VFBSC) Page 9 – add section 24.3.4.4 to NFPA 101, 2012	Outside each sleeping area in the immediate vicinity of the bedrooms. An additional detector shall be installed in each sleeping room that contains a fuel- burning appliance. ** See Note	** Detectors required only on floor levels where sleeping rooms are provided. ** Have your heating appliance serviced by a certified fuel service technician.
3.	Existing Apartment Buildings/Condos (3 or more units)	Effective Oct. 22, 2005 - Battery, directly hardwired into the buildings' electrical circuit, or plug in type. ** See Note	(VFBSC) Page 10 –Add section 31.3.4.6 to NFPA 101, 2012	Outside each sleeping area in the immediate vicinity of the bedrooms. An additional detector shall be installed in each sleeping room that contains a fuel- burning appliance. ** See Note	** Effective October 1, 2007 the detectors are required to be directly hardwired with battery backup. ** Detectors required only on floor levels where sleeping rooms are provided.
4.	New Apartment Buildings/Condos (3 or more units)	Effective Oct. 22, 2005- Directly hardwired into the building's electrical circuit with battery backup.	(VFBSC) Page 10 –Add section 30.3.4.6 to NFPA 101, 2012	Outside each sleeping area in the immediate vicinity of the bedrooms. An additional detector shall be installed in each sleeping room that contains a fuel- burning appliance. ** See Note	** Detectors required only on floor levels where sleeping rooms are provided. ** Have your heating appliance serviced by a certified fuel service technician.
5.	Existing Hotels, Motels, Dormitories, and Rooming and Lodging	Effective Oct. 22, 2005 the power may originate from battery, direct wire, or plug in type. ** See Note	(VFBSC) Page 9–Add section 29.3.4.6 to NFPA 101, 2012	Outside the guest rooms in the corridor spaced in accordance with the manufacturer's installation instructions. Inside each bedroom where there is no corridor, and in each sleeping room provided with a fuel- burning appliance. ** See Note	** Detectors must be installed in accordance with the manufacturer's installation instructions. Effective October 1, 2007 battery detectors shall be up - graded to direct wire with battery backup.
6.	New Hotels, Motels, Dormitories, and Rooming and Lodging built after Oct. 22, 2005	Effective Oct. 22, 2005- Directly hardwired into the building's electrical circuit with battery backup. ** See Note	(VFBSC) Hotels & Dorms- Page 9 (28.3.4.6) Rooming & Lodging Page 9 (26.3.3.5.4)	Outside the guest rooms in the corridor spaced in accordance with the manufacturer. Inside each bedroom where there is no corridor, and in each sleeping room provided with a fuel - burning appliance. **See Note	** Detectors must be installed in accordance with the manufacturer's installation instructions.
7.	New Educational Facilities	Effective Oct. 1, 2016	(VFBSC) Section 14.3.4.4.1 NFPA 101, 2015	On ceilings of rooms containing permanently installed fuel- burning appliances. Occupiable spaces served by first supply air register from HVAC system.	** Detection equipment shall be installed in accordance with NFPA 720
8.	Single-family owner occupied home	Effective 7-01-05, new homes directly wired into the house electrical circuit. Existing homes battery, directly wired into house circuit, or plug-in.	9 VSA Chapter 77 VFBSC – page 39	Outside each sleeping area in the immediate vicinity of the bedrooms. An additional detector is recommended in any sleeping room that contains a fuel-burning appliance. **See Note	** Detectors required only on floor levels where sleeping rooms are provided. ** Have your heating appliance serviced by a certified fuel service technician.

“Install and maintain detectors in accordance with the manufacturer's installation instructions and NFPA 720”
[Updated October 10, 2016]

Annex IV Information for Historic Buildings

Vermont has an unusually high proportion of older buildings. These buildings contribute substantially to the sense of community and place that makes Vermont unique. At the same time, these buildings may be particularly challenging to adaptively reuse. Owners of older and historic buildings should seek the assistance of experienced designers specializing in the preservation of these structures. Division for Historic Preservation and Division of Fire Safety staff will assist in using the features of this Code to preserve and enhance historic buildings. Clear and comprehensive information on the significant historic features needs to be provided to the Division to facilitate review.

There are a number of codes that are part of this Code specifically written for existing and historic buildings;

- * IEBC, International Existing Building Code addresses structural requirements for existing buildings.
- * NFPA 1, Fire Prevention Code, primarily addresses maintenance and the operation of buildings with performance guidelines for historic buildings.
- * NFPA 73, Residential Electrical Code, addresses electrical code requirements in existing residential units.
- * NFPA 101, Life Safety Code, principally addresses life safety issues and has specific chapters for existing buildings.
- * NFPA 909, Protection of Cultural Resources including Museums, Libraries and places of worship, brings together the design and implementation of fire protection plans designed to protect both people and property.
- * NFPA 914, Code for Fire Protection of Historic Structures, addresses the identification of existing conditions, planning, and fire protection practices for historic buildings.

The regional offices of the Division of Fire Safety are staffed with safety professionals who have training and experience in developing solutions to meet both safety and historic preservation concerns.

If a solution to a problem has not been developed after plan review or inspection, the owner or designated representative should contact the regional manager for assistance. With more experience and resources to draw on the regional manager often will develop a solution without requesting a formal variance.

For many buildings there are alternatives for certain code requirements that will provide an equivalent level of safety for the people using the building. To facilitate the review process for historic buildings, a fire safety plan should be developed. Guidance for that plan is found in Section 10.3 of NFPA 914 and Section 5.1 of NFPA 909. Additional flexibility is provided for historic buildings having the option to use the Alternative Approaches to Life Safety contained in NFPA 101A.

Fire Alarm and Detection Systems

Fire alarm and detection systems provide early warning of a fire allowing for safe evacuation of the building and a prompt response of fire suppression activities. There are numerous types, styles and designs of fire alarm and detection equipment that provide options and flexibility for sympathetic installation in historic buildings.

(See NFPA 914, Annex F or NFPA 909, Annex C for a general discussion of fire alarm systems and NFPA 101 Section 9.6)

Fire Extinguishing Systems

Automatic fire sprinkler systems and other types of automatic fire extinguishing systems provide early warning of a fire allowing for safe evacuation of the building and provide prompt suppression of the fire using a minimal amount of water.

Each sprinkler head has to be heated to a certain temperature by a fire before water is released. Most fires are extinguished by the operation of just one or two sprinkler heads due to the prompt response by the sprinkler system. The amount of water applied to a fire is much less than what would need to be applied by a fire hose line.

(See NFPA 914, Annex D or NFPA 909 Annex C for a general discussion of fire extinguishing systems and NFPA 101 Section 9.7)

Automatic fire sprinkler systems have an excellent record of success in saving both people and property. Because of the excellent experience of automatic fire sprinkler systems the Codes have fewer requirements for buildings that have automatic fire sprinkler systems. For example, the Codes would drop or “trade off” certain requirements for historic buildings that have an automatic fire sprinkler system.

To promote the installation of fire sprinkler systems in existing buildings in designated downtown areas, a **rebate of up to \$2,000** of the construction permit fee is available to applicants where a complete fire sprinkler system is installed.

The process for receiving the rebate includes providing documentation from the City or Town Clerk that the building is in a designated downtown area; completion of the fire sprinkler system in accordance with appropriate codes and final acceptance testing and approval of the fire sprinkler system.

Vermont tax credits are also available for the installation of sprinkler systems and elevators in designated downtown or village center, contact the Division for Historic Preservation at 802-828-3047.

Maintenance and Testing of Fire Protection Systems

To help assure that fire protection systems will function properly when needed, all fire protection systems such as a fire alarm, sprinkler or kitchen hood exhaust systems are required to be tested periodically by a technically qualified person who is certified by the Division of Fire Safety. Upon completion of the test, the technically qualified person will affix an inspection sticker and notify the Division of Fire Safety of the results of the inspection.

Use of Archaic Building Materials

Building materials used within buildings are evaluated for “interior finish ratings” and “fire resistance ratings.”

1) Interior finish ratings include evaluations for flame spread, fuel contribution and smoke development. Interior finish ratings are classified as A, B or C. Common archaic finish material such as plaster, tile flooring, wood flooring and metal ceilings will normally meet the standards for interior finish.

Wood trim and incidental finish which is less than 10% of the aggregate wall and ceiling areas will also meet the standards for interior finish. Wood paneling which consists of more than 10% of the aggregate wall and ceiling areas will also meet the standards for interior finish in a number of historic buildings such as a bed and breakfast with 16 or fewer guests. However, in some buildings such as schools, the wood paneling would need to be treated with a fire retardant finish. The fire retardant finishes are available in both clear and solid color. The application of a fire retardant finish would not be required for wood paneling in a building provided with an automatic fire sprinkler system.

2) Fire resistance ratings evaluate building walls, ceilings or doors for the amount of time that it would resist the passage of fire. Construction assemblies can be evaluated by standard tests, rating guidelines published by nationally recognized authorities or by engineering analysis. Many common archaic construction assemblies have substantial resistance ratings while other assemblies may need to be enhanced to meet fire resistance requirements.

Fire resistance requirements are commonly found in the code for separation walls that separate a more hazardous area from the rest of the building, such as a boiler room or stairway walls which protect the means of egress from a building.

The requirements for construction or wall assemblies with fire resistance ratings in a building are reduced or totally eliminated for existing buildings with an automatic fire sprinkler system.

Field Guide for Historic Buildings

The Field Guide is designed to be used by those involved at all levels in the alteration process of historic and older buildings, including: trades persons, planners, architects, engineers, and property owners.

The purpose of the Field Guide is to illustrate and describe successful examples of code compliance that reconcile safety considerations with preservation goals. In addition to explaining the code requirements and listing sources for further referencing, this guide also encourages and outlines the early and continued cooperation between those directly involved in the project with local code and preservation officials.

For a downloadable copy go to: http://accd.vermont.gov/strong_communities/preservation/education/accessibility

Annex V – School Egress (Evacuation) & Relocation Drill Schedule

In order to adapt to the ever changing challenges faced by schools today, the Division of Fire Safety and the Vermont School Crisis Planning Team has developed this amended schedule for Emergency Egress and Lockdown Drills.

The inclusion of this new schedule into the Schools Emergency Plan will fulfill the Emergency Egress Drill requirements outlined in the NFPA Life Safety Code and Title 16 VSA, Section 1481.

This schedule must be followed in all schools whether private or public. Records must be kept of all such drills and be available upon request for review.

Month	Egress Drill	Lockdown Drill
September	X	X
October	X	
November		X
December	X	
January		X
February	X	
March		X
April	X	
May		X
June	X	

Egress (evacuation) drills shall result in complete evacuation of the school.

The first two egress drills shall result in the complete evacuation of the school.

The remaining four (4) egress drills may alternate between a Relocation Drill and an Egress Drill.

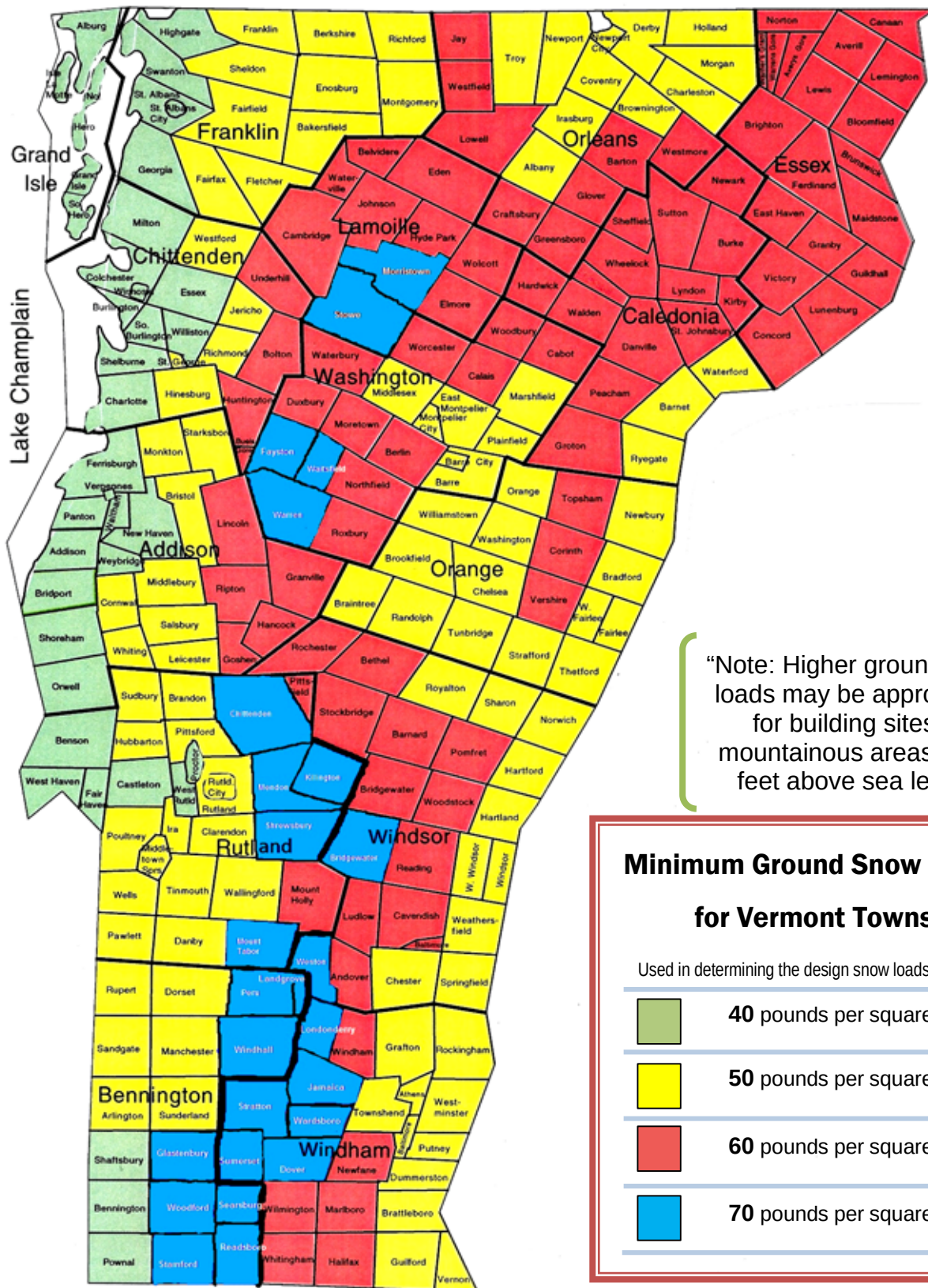
Date: 4/27/2016

Annex VI Index by Topic & Occupancy

- Access for People with Disabilities
 - Clearance for Stairway Lifts... page 5
- Adoption of National Standards... page 3
 - Fire Code (NFPA 1)... page 11
 - International Building Code (IBC)... page 20
 - Life Safety Code (NFPA 101)... page 5
 - National Board Inspection Code... page 23
 - Architecture, Practice of
 - Definition... page 33
 - Exemptions... page 33
 - Seal... page 33
- Assembly Occupancy
 - Change of Ownership... page 6 & 13
- Ash Disposal ... page 15
- Assisted Living Occupancy... page 9
- Authority for Code... page 3
- Authority Having Jurisdiction, definition... page 3
- Boiler & Pressure Vessel
 - ASME Standards... page 23
 - Boiler Room Exits... page 5 & 25
 - Inspection Certificate... page 24
 - Initial Inspection... page 24
 - Low Water Cutoff... page 25
 - Periodic Inspection... page 24
 - Report Incident or Explosion... page 25
- Building Code Matrix... page 4
- Business Occupancy
 - Small Business Exception... page 9 & 10
- Carbon Monoxide Alarms (Detectors)
 - Carbon Monoxide Matrix... page 35
 - CO/fire alarm Interconnection ... page 6
 - Location, Apartments... page 9
 - Location, Correctional Facilities... page 7
 - Location, Daycare... page 6
 - Location, Healthcare... page 7
 - Location, Hotels & Dormitories... page 8
 - Location, Lodging & Rooming... page 8
 - Location, Residential Care... page 9
 - Location, One & Two Family... page 7
 - Power Supply... page 6
 - Power Supply, Date for Existing Buildings... page 6
 - Single Family Owner Occupied Dwellings... page 33
 - Through wall vent termination ... page 6
- Certificate of Fitness
 - Approval Related Instruction... page 13
 - Both Natural & LP Gas Appliances...page 11 & 12
 - Delivery of LP Gas... page 11
 - Design of LP Gas System... page 12
 - Due Process... page 13
 - Emergency Generators... page 12
 - Fire alarm... page 11
 - Fixed Fire Extinguishing Systems... page 11
 - Installation of LP Gas Appliances... page 11
 - Natural Fuel Gas Systems... page 11
 - Oil Burning Equipment... page 11
 - Plant Operations for LP Gas... page 11
 - Renewal... page 12
 - Sprinkler Design... page 12
 - Sprinkler, Limited & Domestic... page 12
 - Sprinkler Installation... page 12
- Chimneys & Fireplaces ... page 12 & 21
- Clothes Dryer Vents... page 15
- Code Books, Ordering... page 42
- Combustible Vegetation, Christmas Trees... page 14
- Contact Information, Division of Fire Safety... page 42
- Cooking Operations
 - Acceptance Testing ... page 18
 - Exemptions... page 5
- Design Professional in Responsible Charge... page 26
- Detention & Correctional facilities ... page 7
- Digital Alarm Communicator Transmitter ... page 6 & 16
- Electrical
 - Electrical Codes Adopted... page 14 & 22
 - Ground Fault Circuit Interruption...page 14
 - IBC Cross Reference... page 5
- Elevator
 - Code ... page 5
 - Shunt Trip...page 6
 - Size of Elevator Car... page 22
 - Emergency Egress & Relocation Drills ... page 6,17 & 38
- Energy Efficiency... page 21
- Engineering, Professional Services
 - Definition... page 33
 - Exemptions... page 33
 - Seal... page 33
- Existing Building Code ... page 22
- Explosives & Fireworks
 - General Information... page 18
 - Permit for Public Fireworks Display... page 19
 - Sparkler Information... page 19
 - Sparkler, Sales and Storage... page 19
- Fire Department Connections
 - New Systems...page 5
- Fire Protection Systems
 - Identification Number... page 13
 - Periodic Inspection & Test... page 13
 - Proof of Inspection... page 13
- Fire Walls... page 20
- Frost Protection Foundations... page 21
- Fuel Dispensing
 - Fire Resistant Tanks... page 17
 - Frost Protection...page 23
- Gas, LP & Natural
 - Discontinuance, Interruption of Service... page 14
 - Record of Installation... page 19
- Health Care Occupancy
 - Definition... page 5 & 13
- Heating Appliance, Periodic Inspection... 14
- Historic Building
 - Archaic Building Materials... page 45
 - Definition... page 31
 - Documentation for Plans... page 26
 - Existing Violations ... page 10
 - Reference to NFPA 914... page 36
- International Code Council Standards... page 20
- International Existing Building Code... page 22
- Lodging & Rooming Occupancy
 - Classification... page 8
- Manufactured Housing Information... page 17
- Mini-Storage Building... page 16
- Municipal Enforcement... page 19, 30 & 32
- One & Two Family Occupancy
 - Subdivision of Building Spaces... page 8
 - IBC Cross Reference... page 20
 - Stair Riser & Tread... page 7
- Open Space for Area Increase... page 20
- Oxygen Cylinders... page 13
- Parking Garage ventilation... page 20
- Penalties... page 30
- Permits

Construction Permit... Page 20,26,27	Auto sprinkler exception ... page 8
Permit & Licensing Matrix... page 27	13R Water Supply... Page 16
Tents, Fire Alarm... page 17	Backflow Prevention... page 15
Tents, Membrane Structures... page 17	FD Connections, Existing Systems... page 15 & 16
Portable Fire Extinguishers ... page 16	Underground Service Mains... page 15
Residential Care Occupancy	Stairs
Definition... page 5	Outside ... page 5
Smoke Alarms in Sleeping Rooms... page 9	Stair, Riser & Tread, 1 & 2 Family... page 7
Sprinkler Protection... page 8	Structural Failure... page 20
Records Storage (vaults)... page 17	Student Occupied Space ... page 6
School Egress & Relocation Drill Schedule... page 6 & 38	Table of Contents... page 2
Self Service Fuel Dispensing Facilities ... page 17 & 18	Telecommunication marking ... page 6
Semiconductor Fabrication Facilities... page 20	Truss signage... page 14
Seismic for Fire Protection ... page 15	Underground Storage Tank Information... page 19
Smoke Alarms	Unvented Room Heaters... page 9 & 17
Photoelectric...Page 5 & 16	Variance, Exemption, Reconsideration... page 28
Power... page 16	Vent, through the wall... page 15
Smoke Alarm consumer info... page 17	Water supply – rural ... page 17
Smoke Detector Matrix... page 34	Water supply – suppression systems ... page 16
Snow Load... page 21 & 41	Water Heaters... page 23
Snow Removal... page 16	Window, Escape, Existing... page 7
Sprinkler Systems	

Annex VII Minimum Ground Snow Loads for Vermont by Town or City



“Note: Higher ground snow loads may be appropriate for building sites in mountainous areas 2500 feet above sea level.”

Minimum Ground Snow Loads for Vermont Towns

Used in determining the design snow loads for roofs

	40 pounds per square foot
	50 pounds per square foot
	60 pounds per square foot
	70 pounds per square foot

Annex VIII – Contact Information:

Division of Fire Safety Central Office

1311 US Route 302 – Suite 600 Barre, VT 05641
P:802.479.7561 F: 802.479.7562
Toll Free:800.640.2106

Barre Regional Office

1311 U. S. Route 302 – Suite 500 Barre, VT 05641
P:802.479.4434 F:802.479.4446
Toll free:888.870.7888

Rutland Regional Office

56 Howe Street Bldg A – Ste 200 Rutland, VT 05701
P:802.786.5867 F:802.786.5872
Toll free:888.370.4834

The Vermont Fire Academy

93 Davison Drive Pittsford, VT 05763
P:802.483.2755 F:802.483.2464
Toll Free:800.615.3473

Springfield Regional Office

100 Mineral Street – Suite 307 Springfield, VT 05156
P:802.885.8883 F:802.885.8885
Toll free: 866.404.8883

Williston Regional Office

380 Hurricane Lane – Suite 101 Williston, VT 05495
P:802.879.2300 F:802.879.2312
Toll free:800.366.8325

Codes and Standards Adopted and referenced under this Code can be obtained from:

National Fire Protection Association - www.nfpa.org

1 Batterymarch Park
Quincy Mass 02169-9101
Phone: 1-800-344-3555

International Code Council, Publications - www.iccsafe.org

4051 West Flossmoor Road, Country Club Hills
Illinois, 60478-5795
888-422-7233 800-786-4452

American Society for Testing and Materials - www.astm.org

100 Barr Harbor Drive
West Conshohocken PA 19428-2959
610-832-9585

American Society of Heating Refrigeration and Air Condition Engineers - www.ashrae.org

1791 Tullie Circle N.E.
Atlanta, GA 30329
404-636-8400

American Welding Society, Inc. - www.aws.com

550 N.W. Lejunne Road, P.O. Box 351040
Miami FL 33135
1-800-443-9353

Compressed Gas Association, Inc. - www.cganet.com

4221 Walney Road, 5th Floor
Chantilly, VA 20151-2923
703-788-2700

American Society of Mechanical Engineers - www.asme.org

22 Law Drive, Box 2900
Fairfield, NJ 07007
1-800-843-2763

National Board of Boiler & Pressure Vessel Inspectors - www.nationalboard.org

1055 Crupper Ave.
Columbus, Ohio 43229-1183
614-888-8320