

MINNESOTA STATE DEPARTMENT OF PUBLIC SAFETY



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HOTEL/MOTEL INFORMATION SHEET

SECTION 1 — INTRODUCTION

This fire safety information sheet is based on the 2007 Minnesota State Fire Code, here after referred to as MSFC (07). It contains a summary of the rules that apply to hotel/motel and similarly occupied buildings.

1.1 Inspection frequency

Pursuant to Minn. Stat. § 299F.46 and MN Statute § 157, the State Fire Marshal shall inspect every hotel with 6 or more guest rooms at least once every three years.

1.2 Definitions

A hotel is classified as a Group R-1 residential occupancy where the occupants are primarily transient in nature (less than 30 days). The following requirements apply to:

- Hotels/motels
- Boarding houses with 6 or more guest rooms
- Bed and breakfast houses with 6 or more guest rooms

Owner occupied rooms will not be considered to be a guest room for purposes of occupancy classification. Rooms occupied by caretakers or staff are considered guestrooms for determining size and occupancy classification. Additional definitions that will be used in evaluating hotels include:

Guest Room is a room or rooms used or intended to be used for sleeping purposes [MSFC (07) Section 202, as amended].

Assembly Spaces are used for the gathering together of persons for purposes such as civic, social or religious functions, recreation, food and drink consumption or awaiting transportation. A room or space used for assembly purposes by less than 50 persons and accessory to another occupancy shall be included as a part of that occupancy [MSFC (07) Section 202]. The requirements for these types of occupancies are not addressed directly in this information sheet. Contact the State Fire Marshal Division for additional information.

For requirements relating to resorts, see the State Fire Marshal Division information sheet titled Resort Information sheet. For requirements relating to bed and breakfast or boarding houses with 5 or fewer guest rooms, see the State Fire Marshal Division information sheet titled, *R-3 Residential Information Sheet*.



1.3 Applicable Requirements

Hotel buildings constructed before July 10, 2007 are considered existing buildings and are required to meet the minimum requirements specified in the MSFC (07) for existing buildings. Compliance with previous editions of the Minnesota Uniform Fire Code (MUFC) could be considered as an acceptable alternative. Buildings constructed on or after July 10, 2007 are considered new and are required to meet the MSFC (07) provisions for new buildings.

Hotels may be required to meet other provisions that are not listed here. This information sheet provides an overview of the major code requirements that apply to hotel operations and does not attempt to cover every situation.

More information is available from the Minnesota State Fire Marshal Division at (651) 201-7200. Email questions to firecode@state.mn.us or check our web page at www.fire.state.mn.us for the latest information on fire in Minnesota.

SECTION 2 — GENERAL FIRE SAFETY PROVISIONS

2.1 Combustible Waste Material – New and Existing Construction

Combustible waste material creating a fire hazard shall not be allowed to accumulate in buildings [MSFC (07) Section 304.1].

Dumpsters must be outside and at least 5 feet from combustible walls or openings. Dumpsters may be located within a sprinkled room designed for dumpster storage [MSFC (07) Section 304.3.3].

2.2 Occupancy Specific Inspection

Hotel buildings must meet the requirements of the code applicable to the occupancy types present. Buildings about which there is a question as to how to classify shall be included in the occupancy group that its use or character most closely resembles.

2.3 Fire Apparatus Access Road – New

For all newly constructed buildings, approved fire apparatus access roads must be provided when required by the local fire chief [MSFC (07) Section 503.2]. See the SFMD information sheet titled, *Fire Department Access Roads Information Sheet*.

2.4 Water Supply – New

For all newly constructed buildings, approved water supplies capable of providing the required water flow for fire protection must be provided when required by the local fire chief [MSFC (07) Section 508.1]. See the SFMD Policy INS-37 titled, *Fire Department Water Supplies*.

2.5 Kitchen Cooking Equipment – New and Existing

Commercial cooking equipment that produces grease-laden vapors shall be equipped with a ventilating hood and duct system meeting the requirements of the Mechanical Code [MSFC (07) Section 609.1]. See Section 8 of this fact sheet for information on fire extinguishers.

Commercial cooking equipment that produces grease-laden vapors shall be equipped with an approved fire-suppression system [MSFC (07) Section 904.2.1 (new) 904.2.1.1 (existing)].

2.6 Premises Identification – New and Existing

Approved numbers or addresses shall be placed on all new and existing buildings in such a position as to be plainly visible and legible from the street or road fronting the property. The premises identification numbers shall contrast with their background. In rural areas, the use of fire numbers or 911 address numbers is acceptable [MSFC (07) Section 505.1].

2.7 Storage of Combustible Materials – New and Existing

Storage shall be orderly [MSFC (07) Section 315.2]. Fueled equipment (motorcycles, lawnmowers, etc.) shall not be stored, operated or repaired within the hotel [MSFC (07) Section 313.1].

2.8 Storage under Stairways – New and Existing

Storage under stairways is not permitted unless the enclosed usable spaces are protected by 1-hur fire-resistive-rated constructions or the fire resistance rating of the stairway enclosure, which ever is greater.

Exception:

1. Spaces under stairways serving and contained within a single residential dwelling unit shall be permitted to be protected on enclosed side with 0.5 inch gypsum board. (New only. Existing not required.) [MSFC (07) Section 1009.5.3.]

2.9 Guardrails – New and Existing

Unguarded floor openings, open and glazed sides of stairways, landings and ramps and balconies or porches that are more than 30 inches above grade or the floor below shall be protected by guardrails [MSFC (07) Section 1013.1 new, 1027.6 existing]

2.10 Stairways – New and Existing

Stairways shall have a handrail on at least one side and the rise and run shall be in accordance with MSFC (07) Section 1012 new, 1027.13 existing.

2.11 Stairway Identification – New and Existing

Stairway identification signs are required in all enclosed stairways in buildings four or more stories in height [MSFC (07) Section 1020.1.6].

2.12 Means of Egress Illumination – New and Existing

The means of egress shall be illuminated at all times when the building space served by the means of egress is occupied [MSFC (07) Section 1006.1].

A back-up power supply also must be provided when the building is equipped with two or more means of egress [MSFC (07) Section 1006.3 new, 1027.5 existing].

2.13 Means of Egress Identification – New and Existing

Exit signs are required for identification of exits in both new and existing buildings. Exit signs shall be located as necessary to clearly indicate the direction of egress travel. An exit sign need not be visible from every point in a building, however, no point shall be more than 100 feet from the nearest visible sign [MSFC (07) 1011.1]. Exit signs are not necessary from rooms or spaces that only require one exit.

2.14 Staff Training – New and Existing

Fire drills shall be conducted quarterly for each shift. Fire drills shall be for staff members only [MSFC (07) Section 405]. For more information on staff fire drills, please review the attached *R-1 Employee Training and Procedures* information sheet.

2.15 Floor Plan Drawings – New and Existing

A diagram depicting two evacuation routes shall be posted on or immediately adjacent to every required exit door from a sleeping room [MSFC (07) Section 408.8.1].

2.16 Furniture Flammability – New and Existing

Seating furniture sold after January 1, 1992 and intended for use in public assembly areas of hotels containing more than ten articles of seating furniture shall meet applicable flammability requirements as set out by rules adopted under section Minn. Stat. § 299F.844.

SECTION 3 — NUMBER, TYPE AND ACCESS TO EXITS

3.1 Number and Type of Exits – New and Existing

Every room shall have access to at least one exit. This exit usually takes the form of the interior halls, stairs and doors found within the building. Additional exits are usually required as follows [MSFC (2007) Section 1019].

3.2 Emergency Escapes from Sleeping Rooms – New and Existing

In addition, for hotels constructed on or after April 11, 1983, every room used for sleeping below the fourth story shall have at least one approved emergency escape (second means of egress) that is separate from the main exit. Any one of the following five options will satisfy the requirement for an emergency escape from a sleeping room [MSFC (07) Section 1026.1]:

1. The space is provided with an escape window complying with MSFC (07) Section 1026.1, as amended or State Fire Marshal Policy INS-04. Because this is the most common type of emergency escape, additional information on escape windows is provided in the next section of this fact sheet.
2. An automatic sprinkler system is protecting the building.
3. The room has a door leading directly to the exterior of the building.
4. There is a second separate means of escape. The second means of escape may be through an adjacent non-lockable space, independent of and remote from the primary exit. The adjacent non-lockable space must be provided with a code complying exit or egress window. The second means of escape must also be sufficiently separated from the primary means of escape such that a single fire will not block both routes [MSFC (07) Section 1026.1, as amended]. See also the SFMD policy INS-04 titled *Escape Windows*.
5. Escape windows are not required in Group R hotels/motels constructed prior to April 11, 1983.

Sliding glass doors may be accepted as qualifying exit doors from guest rooms provided that the doors are maintained operational at all times [MSFC (07) Section 1008.1.2 Exception 4]. Sliding glass doors are only acceptable for spaces with an occupant load of 10 or less.

3.3 A second exit is required from residential areas with an occupant load of more than 10 – New and Existing

Hotel buildings will also require a second exit from floors containing residential areas with an occupant load of more than 10. Such a second exit is in addition to any requirements for emergency escapes and usually takes the form of a second door or stairway off the corridor.

Table 1: Minimum Egress Requirements

Occupancy	Minimum of two exits required when the number of occupants exceeds	Minimum of two exits required when the square footage exceeds	Occupant load factor (square feet per person)
Hotels and Apartments	10	2000 square feet	200

To decide if a second exit is required, it is first necessary to determine the occupant load of each floor. Two different ways are used to establish the occupant load, with the larger number being used:

1. Calculate the occupant load on each floor based on the occupant load in square feet of area per person from Table 1. To do this, determine the total area of each floor (gross square feet). Divide the gross square feet by the occupant load factor to arrive at the number of occupants on the floor. Round up to the next whole number (a calculated value of 5.4 equals an occupant load of 6 people). Thus, a hotel with a gross floor area of 2,000 square feet has an

- occupant load of 10 people.
2. Determine the actual number of persons on a floor. This is usually done based on the number of beds or bedrooms on each level. For example, a guestroom in a lodging house with a double bed is usually assumed to have an occupant load of 2. If there are 5 such bedrooms on a floor, the actual occupant load of the floor is 10. Caretakers and owners are included in the numbers of persons occupying a floor.

The larger of the two numbers determined above is the occupant load of the floor. If the occupant load for a floor is greater than 10 persons, a second exit is required [MSFC (07) Section 1015 and 1004]

3.4 Exiting from Nonresidential Areas

Assembly, business and mercantile occupancies require more detailed information to determine exiting. Consult with the State Fire Marshal Division for more information and assistance in evaluating egress requirements.

3.5 Access to Doors and Windows – New and Existing

Exit doors and windows shall be openable from the inside without the use of a key or any special knowledge or effort. Exit doors shall not be locked, chained, bolted, barred, latched or otherwise rendered unusable [MSFC (07) Section 1028.6].

All locking devices shall be of an approved type. Double keyed dead bolts must be replaced with locks that do not require a key to open from the inside [MSFC (07) Section 1008.1.8.3].

3.6 Dead Ends in Corridors – New and Existing

When two exits are required, the maximum length of dead end in a corridor is 20 feet for new, 50 feet for existing [MSFC (07) Section 1017.3 new, 1027.17.4 existing].

3.7 Travel Distance to Exits – New and Existing

Exits shall be so located that the maximum length of exit access travel, measured from the most remote point to the entrance to an exit along the natural and unobstructed path of egress travel, shall not exceed the distances given in MSFC (07) Table 1016.1 new, Table 1027.17.4 existing.

SECTION 4 — APPROVED ESCAPE WINDOWS

See Section 3.2 above for determining if an escape window is required from each sleeping room. When required, this section of the fact sheet covers the requirements for these windows.

4.1 Types of Approved Escape Windows

Approved egress/escape windows include the following [MSFC (07) Section 1026.1]:

- Double hung windows.
- Sliding windows.
- Casement windows.

Awning style windows do not meet this requirement.

4.2 Minimum Size

When used as an emergency escape, only a single window in each room need meet the minimum size requirements listed below. The window sash cannot be removed to meet the size requirements and windows must be measured with the window fully opened by the normal window opening mechanism.

For escape windows installed above or below the level of exit discharge on or after July 10, 2007:

- A minimum of 20 inches in width

- A minimum of 24 inches in height
- A minimum of 820 square inches (5.7 square feet) of clear opening
- A maximum of 44 inches from the floor to the sill opening

For grade floor egress/escape windows installed on or after July 10, 2007:

- A minimum of 20 inches in width
- A minimum of 24 inches in height
- A minimum of 720 square inches (5.0 square feet) of clear opening
- A maximum of 44 inches from the floor to the sill opening

For escape windows installed prior to July 10, 2007*: (State Fire Marshal Policy INS-04)

- A minimum of 20 inches in width
- A minimum of 20 inches in height
- A minimum of 648 square inches (4.5 square feet) of clear opening
- A maximum of 48 inches from the floor to the sill opening

**Note: The above is considered the absolute minimum regardless of existing or window replacement.*

Escape Windows are not required in guest rooms of hotels and motels constructed prior to April 11, 1983.

4.3 Special Situations

For unique situations, please see the State Fire Marshal Division policy INS-04 titled, *Escape Windows* for information on how to treat situations that do not fit the conditions outlined here. See this policy too for information on the use of window wells for egress windows below grade.

SECTION 5 — FIRE RESISTIVE CONSTRUCTION AND INTERIOR FINISH

5.1 Occupancy Separation – New

All occupancy separations shall be in accordance with the MSBC. In general, the occupancy separations between an R-1 and A, B, E, I, R-2, R-3, R-4, S-2 and M occupancies is two (2) hours. Between and R-1 and U occupancy is 1 hour [MSBC (07) Table 302.3.3].

Exception: Except for Group H and I-2 areas, where the building is equipped throughout with an approved automatic sprinkler system, the fire-resistance ratings in Table 302.3.3 shall be reduced by one-hour but to not less than 1 hour and to not less than that required for floor construction according to the type of construction.

Occupancy Separations - Existing

All occupancy separations in existing buildings shall be in accordance with MSFC (07) Section 705. In general, the occupancy separations between an R-1 and A, B, M, S and U occupancies is one (1) hour. All other occupancy separations shall be in accordance with the MSBC (07). There are numerous exceptions – read carefully in MSFC (07) Section 705.2.3.

Areas that are incidental to the main occupancy shall be separated in accordance with MSBC (03) Table 302.1.1.

Group R occupancies and the exits there from shall be separated from Group A, B, M, S, and U occupancies by at least one (1) hour fire-resistive construction [MSFC (07) Section 705.2.3]. Group R occupancies shall be separated from all other occupancies in accordance with the MSBC (07) Table 302.3.3.

Exceptions:

1. In buildings protected throughout by an approved automatic sprinkler system, one (1) hour occupancy separations need not be provided.

2. An occupancy separation need not be provided between Group A and Group R Occupancies if the building is provided with a fire alarm system having automatic smoke detection throughout the Group A occupancy.
3. Fire rated opening protection need not be provided between Group A and Group R Occupancies when such openings are designed to resist the passage of smoke and the openings are protected by an approved automatic sprinkler system.
4. Any occupancy separation need not be provided where two or more occupancies occur in the same building or structure and are so intermingled that separations are impracticable provided that the exit provisions and protection requirements for the more restrictive occupancy are provided.
5. Any occupancy separation need not be provided between a Group R-3 occupancy with sleeping accommodations for ten or fewer person and Group B or M Occupancies which are accessory if interconnected smoke detectors are provided. At least one smoke detector shall be located in the Group B or Group M occupancy and additional detectors may be needed in accordance with manufacturer's instructions. Smoke detectors in the sleeping areas shall be located as specified in Section 907.2.10 and shall be audible in all sleeping areas [MSFC (07) Section 705.2.3]

Incidental (hazardous)use areas, including but not limited to, shops, laboratories containing hazardous materials, storage rooms exceeding 100 square feet in size and rooms containing boilers or central heating plants in Group R-1 facilities shall be separated from the rest of the building by not less than a one-hour occupancy separation. When approved by the fire chief, existing wood lath and plaster in good conditions or ½ inch (12.7 mm) gypsum wallboard may be acceptable where one-hour occupancy separations are required.

Exception: A separation need not be provided in Group R occupancies if the hazardous area is protected with automatic sprinklers and the doors to such areas are solid-core wood doors or insulated steel doors. Doors shall be self-closing or automatic-closing by smoke detection [MSFC (07) Section 705.3.2.1].

When accessory uses are part of a larger major use, the following need not be separated [MSFC (07) Section 705.2.3]

- Assembly rooms having a floor area of not over 750 square feet. For further information, please review the State Fire Marshal Division Policy on *Breakfast and Meeting Rooms in R-1 Occupancies*.
- Administrative and clerical offices and similar rooms that do not exceed 25 percent of the floor area of the major use.
- Gift shops, administrative offices and similar rooms in R-1 occupancies not exceeding 10 percent of the floor area of the major use.
- The kitchen serving the dining area of which it is a part.

5.2 Fire-Resistive Corridor Construction

The requirements for fire-resistive corridor construction vary depending on the occupancy classification and date of construction.

5.2.1 Requirements for Group R-1 (Hotel/Motel) – New Construction

Corridors serving an occupant load of ten or more shall have protection for the walls, floor and ceiling meeting the requirements for one-hour fire resistive construction as specified in MSBC (07) and MSFC (07) Table 1017.1]. Doors opening into the corridor shall have 20-minute fire resistance and be self-closing or automatic-closing by detection of smoke.

5.2.2 Requirements for (Group R Division 1) Hotel Occupancies – Existing

Corridors serving an occupant load of ten or more shall have protection as follows:

Corridors serving an occupant load of 10 or more shall have walls and ceilings of not less than one-hour fire resistive construction as required by the MSBC. Existing walls surfaced with wood lath and plaster in good condition or 1/2 inch gypsum wallboard or openings with fixed wired glass set in steel frames when approved. Door openings into such corridors shall be protected by 20-minute fire assemblies or solid wood doors not less than 1 3/4 inches thick. Where the existing frame will not accommodate the 1 3/4 inch thick door, a 1 3/8 inch thick solid bonded wood core door or equivalent insulated steel door shall be permitted. Doors shall be self-closing or automatic-closing by smoke detection. Transoms and openings other than doors from corridors to rooms shall comply with the MSBC or shall be covered with a minimum of 3/4 inch plywood or 1/2 inch gypsum wallboard or equivalent material on the room side. Corridor protection is not required when the building is protected with an approved automatic sprinkler system throughout [MSFC (07) Section 1027.17.1].

5.3 Incidental Use Areas – New and Existing

Incidental use areas shall be separated from other uses as follows:

Shops, storage rooms exceeding 100 square feet in size, and rooms containing boilers or central heating plants shall be separated from the rest of the building by not less than a one-hour fire resistive occupancy separation [MSFC (07) Section 705.3]. When approved by the fire chief, existing wood lath and plaster in good condition or 1/2 inch gypsum wallboard may be acceptable where one-hour occupancy separations are required.

Exception:

A separation need not be provided if the hazardous area is protected with automatic sprinklers and the doors to such areas are solid-core wood doors or steel insulated doors. Doors shall be self-closing or automatic-closing by smoke detection.

Based on MSFC (07) Section 703.1, for storage rooms equal to or greater than 1,000 square feet, a full 1-hour occupancy separation is required in all buildings (even in buildings with sprinkler protection throughout).

5.4 Vertical Openings – New Construction:

Must comply with the requirements of the MSBC [MSFC (07) Section 701.1].

Vertical Openings – Existing:

Interior vertical shafts including but not limited to, stairways, elevator hoist ways, service and utility shafts, that connect two or more stories of a building shall be enclosed or protected as specified in MSFC (07) Table 704.1. Basically, 2 stories may be open, 3 to 5 stories must be one-hour fire separated or have sprinkler protection throughout and over 5 stories must have one-hour fire separation.

5.5 Maintenance of Fire-Resistive Construction – New and Existing

Other fire-resistive construction, including occupancy separations, area separation walls, exterior walls due to location on property, fire-resistive requirements based on type of construction, draft-stop partitions and roof coverings may be required in some occupancies. When required, they shall be maintained as specified in the MSFC (07) and shall be properly repaired, restored or replaced when damaged, altered, breached, penetrated, removed or improperly installed [MSFC (07) Section 703.1].

5.6 Interior Finish – New Construction:

Must meet the requirements of the MSBC [MSFC (07) Section 801.1.1]

Interior Finish – Existing:

Vertical exits and exit passageways in Group R-1 occupancies, in a fully sprinklered building are required to meet a Class B flame spread rating. Vertical exits in non-sprinklered buildings are required to meet a Class A flame spread rating in accordance with MSFC (07) Table 803.3. Interior

finish on walls and ceilings shall be Class A, B or C (I, II or III) in other spaces [MSFC (07) Section 803.1]. For complete details, see MSFC (07) Table 803.3.

SECTION 6— FIRE ALARM AND DETECTION SYSTEMS

6.1 Alarm Requirements for Hotel (Group R-1) Occupancies – New

A fire alarm system shall be installed as follows [MSFC (07) Section 907.2.8]:

Exceptions:

1. A fire alarm system is not required in buildings not over two stories in height where all individual rooms and contiguous attic and crawl spaces are separated from each other and public or common areas by at least one-hour fire partitions and each guest room has a direct exit to a public way, exit court or yard.
2. Buildings containing 5 or fewer guest rooms shall be allowed to be equipped with approved, multiple-station smoke detectors installed as required for Group R-3 Occupancies. Installation shall be in accordance with Section 907.2.10.

6.1.1 Initiation

Initiation of the fire alarm system shall be by automatic means. Approved fire detectors shall be provided in boiler and furnace rooms, shops, laundry rooms, mechanical and electrical rooms, trash-collection rooms, storage rooms, gift shops, locker rooms and similar areas. Automatic smoke detectors shall be provided in all common areas and interior corridors serving as required means of egress.

Exception:

System fire and smoke detectors are not required when an approved automatic fire-extinguishing system is installed throughout the building and manual activation is provided at a constantly attended location.

6.1.2 Notification

Activation of the fire alarm system or automatic sprinkler system shall initiate a general evacuation signal.

6.1.3 Guest Room Detectors

Guest room smoke detectors are required as listed in MSFC Section 907.2.10 but shall not be connected to a fire alarm system unless for annunciation only. Detectors shall receive their primary power from the building wiring and shall be equipped with battery backup unless connected to an emergency generator. Guest room detectors are required in the sleeping room and in rooms in the path of egress from the sleeping room. When two or more detectors are required, they shall be interconnected [MSFC (07) Section 907.2.10.3]

6.2 Alarm Requirements for Hotels (Group R-1) Occupancies – Existing

A fire alarm system shall be installed as follows [MSFC (07) Section 907.3.4]:

1. In R-1 occupancies 3 or more stories in height or with 20 or more guest rooms.

Exception:

A fire alarm system is not required in buildings that do not have interior corridors serving guest rooms and where each guest room has an exit opening directly to an exterior exit access that leads directly to the exits.

6.2.1 Initiation (Existing)

Initiation of the fire alarm system shall be by automatic means. Approved automatic fire detectors shall be provided in boiler and furnace rooms, shops, laundry rooms, mechanical and electrical rooms, trash-collection rooms, storage rooms, gift shops, locker rooms and similar areas. Automatic

smoke detectors shall be provided in all common areas and interior corridors serving as a required means of egress.

Exception:

System fire and smoke detectors are not required when an approved automatic fire extinguishing system is installed throughout the building and manual activation is provided at a constantly attended location.

6.2.2 Notification (Existing)

Activation of the fire alarm system or automatic sprinkler system shall initiate a general evacuation signal.

6.2.3 Guest Room Detectors (Existing)

Guest room smoke detectors are required as listed in MSFC (07) Section 907.2.10 but shall not be connected to a fire alarm system unless for annunciation only. Smoke alarms are allowed to be solely battery operated. Guest room detectors are required in the sleeping room and in rooms in the path of egress travel from the sleeping room [MSFC (07) Section 907.2.10.1.1].

6.3 General Installation Requirements for all Detectors

Detector location and spacing shall be as follows, in addition to the manufacturer's instructions

- a. Smoke detectors in rooms with ceiling slopes greater than 1-foot rise per 8 feet horizontally shall be located at the high side of the room.
- b. A smoke detector installed in a stairwell shall be so located as to ensure that smoke rising in the stairwell cannot be prevented from reaching the detector by an intervening door or obstruction.
- c. A smoke detector installed to detect a fire in the basement shall be located in close proximity to the stairway leading to the floor above.
- d. Smoke detectors shall be mounted on the ceiling at least 4 inches from a wall or on a wall with the top of the detector not less than 4 inches, or more than 12 inches, below the ceiling.
- e. Smoke detectors shall not be located within kitchens, garages, or in other spaces where temperatures can fall below 32 °F, or exceed 100 °F.
- f. Smoke detectors shall not be located within 3 feet of supply registers of a forced air heating or cooling system and doors to a kitchen or bathroom with tub or shower

UL or FM (Factory Mutual) listed and approved fire-alarm systems both hardwired and wireless are also acceptable. Detectors with a battery shall emit a signal when the battery is low.

6.4 Visual Signaling Devices

Guest rooms for persons with hearing impairments shall be provided with visible and audible alarm indicating appliances, activated by both the in-room smoke detector and the building fire alarm system

SECTION 7 – FIRE SPRINKLER AND STANDPIPE SYSTEMS.

7.1 Automatic Sprinkler Systems – New

An automatic sprinkler system is required in all buildings with an R-1 occupancy unless the building is under three stories in height and each guest room has a door opening directly to the outside [MSFC (07) Section 903.2.7].

7.2 Automatic Sprinkler Systems – Existing

1. An automatic sprinkler system is required in existing R-1 basements when used for guest rooms and the basement exceeds 2,500 square feet in size and there is not provided at least 20 square feet of opening entirely above the adjoining ground level in each 50 lineal feet of exterior wall on at least one side of the building. Openings shall have a minimum dimension of 30 inches. If any

portion of the basement is located more than 75 feet from a required opening, the basement shall be sprinklered throughout.

2. Existing rubbish and linen chutes shall be protected with automatic sprinkler protection.

7.3 Standpipe Systems – New

Class III standpipe systems shall be installed throughout buildings where the floor level of the highest story is located more than 30 feet above the lowest level of fire department vehicle access, or where the floor level of the lowest story is located more than 30 feet below the highest level of fire department vehicle access [MSFC (07) Section 905.3.1].

Exceptions:

1. *Class I standpipes are allowed in buildings equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2.*
2. *Class I manual standpipes are allowed in open parking garages where the highest floor is located not more than 150 feet above the lowest level of fire department vehicle access.*
3. *Class I manual dry standpipes are allowed in open parking garages that are subject to freezing temperatures, provided that the hose connections are located as required for Class II standpipes in accordance with Section 905.5.*
4. *Class I standpipes are allowed in basements equipped throughout with an automatic sprinkler system.*

See MSFC (07) Section 905 for required locations of standpipe hose connections.

Standpipe Systems – Existing

Standpipe systems complying with MSFC (07) Section 905 are required in existing buildings which have occupied floors located more than 50 feet above below the lowest level of fire department access. The standpipes shall have an approved fire department connection with hose connections at each floor level above or below the lowest level of fire department access [MSFC (07) Section 905.11].

SECTION 8 — FIRE EXTINGUISHERS

8.1 Extinguisher Size and Location – New and Existing

At least one portable fire extinguisher having a rating of 2A 10BC, or larger, shall be available within 75 feet of all occupied spaces. Travel to another floor to obtain the extinguisher is not acceptable. Thus a minimum of one fire extinguisher is required on each level [MSFC (07) Section 906.1].

In kitchens containing commercial cooking equipment that produces grease-laden vapors, portable fire extinguishers shall be provided within 30-foot travel distance of commercial type cooking equipment. Cooking equipment involving vegetable oil or animal oils and fats shall be protected by a Class K rated portable extinguisher [MSFC (07) Section 904.11.5]. A placard shall be conspicuously placed near the Class K extinguisher that states that the fire protection system shall be activated prior to using the fire extinguisher. If the commercial cooking equipment does not produce grease-laden vapors, at least one portable fire extinguisher having a rating of 2A 10BC, or larger, shall be provided [MSFC (07) Sections 906.1 and NFPA 10]

8.2 Installation and Maintenance – New and Existing

Extinguishers shall be installed, mounted, inspected, tested and maintained according to NFPA Standard 10 Chapter 4.

A quick check for all fire extinguishers is necessary on a monthly basis. Minimal knowledge is necessary to perform this inspection [NFPA Standard 10, Section 4-1.2].

Extinguishers shall receive maintenance at least yearly. Maintenance, servicing and recharging shall be performed by trained persons having available the appropriate servicing manuals, the proper type of tools, recharge materials, lubricants, and manufacturer's recommended replacement parts [NFPA Standard 10 Section 4-1.4].

SECTION 9 — HEATING AND ELECTRICAL EQUIPMENT

9.1 Heating Appliances – New and Existing

All heating equipment shall be listed by a nationally recognized testing agency [MSFC (07) Section 603.5].

Heating appliances shall be installed and maintained with proper clearance from combustibles [MSFC (07) Section 603.5.2].

Stoves and combustion heaters shall be so located as to not block escape in case of fire arising from malfunctioning of the stove or heater.

Unvented portable and fixed fuel-burning heaters (kerosene, LP, fuel oil, etc.) shall not be used in hotel buildings [MSFC (07) Section 603.4].

Furnaces, water heaters, and other heating equipment shall be installed in accordance with their listing, the MSBC (07), Mechanical Code and the Electrical Code. All heating appliances installed in garages shall be at least 18 inches above the floor.

Wood burning appliances shall only be connected to a chimney flue serving an appliance burning other fuels when listed for such use [MSFC (07) Section 603.6].

9.2 Emergency and Standby Power Systems – New and Existing

Emergency and standby power systems shall be provided for fire alarm systems per NFPA 72 smoke control systems, exit signs, means of egress illumination, accessible means of egress, elevators, horizontal sliding doors, high-rise buildings and others [MSFC (07) Section 604].

9.3 Electrical Services – New and Existing

Electrical hazards shall be corrected according to MSFC (07) Section 605.1 and the Electrical Code.

Multiplug adapters, such as multiplug extension cords, cube adapters, strip plugs and other devices shall comply with the MSFC (07) and the Electrical Code [MSFC (07) Section 605.4].

Receptacles and outlets serviced by extension cord-type wiring are prohibited [MSFC (07) Section 605.5].

Power taps are permitted when polarized or grounded and protected with listed overcurrent protection [MSFC (07) Section 605.4.1].

Extension cords shall not be used as a substitute for permanent wiring [MSFC (07) Section 605.5].

Provide physical protection for outlets and plugs located behind beds etc. [MSFC (07) Section 605.1].