

Seattle Fire Prevention Division

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Amendments to the 2015 Seattle Fire Code Amendments

Errata Legislation (2017)

The City of Seattle has adopted amendments to the 2015 Seattle Fire Code. The amendments, known as errata legislation, include the following changes: modifications to Seattle Fire Code to ensure alignment with 2015 Seattle Building Code; inclusion of pages that were inadvertently omitted from the published version of the 2015 Seattle Fire Code; and, corrections for other small inaccuracies and printing errors.

Replacement Pages and Inserts (2017)

The Seattle Fire Department is providing the following pages so that all users of the Seattle Fire Code may easily reference the changes to the published document that result from the errata legislation.

(Insert facing page vi)

Italicized Terms

Selected terms set forth in Chapter 2, Definitions, are italicized where they appear in code text. Where defined terms do not appear in italics, consider the context to judge applicability of the definition in Chapter 2.

Acknowledgement

The Seattle Fire Department thanks the members of the Fire Code Advisory Board for their dedication, knowledge, and experience they generously devoted to reviewing the 2015 Seattle Fire Code. The Seattle Fire Department would like to formally acknowledge the Chair of the Board, Allen Rainsberger, for his many years of service to the Fire Code Advisory Board. Al passed away on July 1, 2017, and his contributions to public safety will be missed.

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[A] 105.6.~~((41))~~**46** Repair garages (~~and motor fuel dispensing facilities~~). An operational permit is required for operation of repair garages(~~, and automotive, marine and fleet motor fuel dispensing facilities~~).

(Insert facing page 17)

[A] **109.2 Owner/occupant responsibility.** Correction and abatement of violations of this code shall be the responsibility of the *owner* or *owner's authorized agent*. If an occupant creates, or allows to be created, hazardous conditions in violation of this code, the occupant shall be held responsible for the abatement of such hazardous conditions.

[A] **109.3 Notice of violation.** When the *fire code official* finds a building, premises, vehicle, *vessel*, storage facility or outdoor area that is in violation of this code, the *fire code official* is authorized to ~~((prepare))~~ issue a written notice of violation describing the ~~((conditions deemed unsafe))~~ violation and, when immediate compliance is not ~~((immediate))~~ required, specifying a time for ~~((reinspection))~~ achieving compliance. Nothing in this subsection shall be deemed to limit or preclude any other enforcement action or proceeding, and nothing in this section shall be deemed to obligate or require the fire code official to issue a notice of violation prior to the imposition of civil or criminal penalties or remedies.

[A] **109.3.1 Service.** A notice of violation issued pursuant to this code shall be served upon the *owner*, the owner's authorized agent, operator, occupant or other person responsible for the condition or violation, either by personal service, mail or by delivering the same to, and leaving it with, some person of responsibility upon the premises. For unattended or abandoned locations, a copy of such notice of violation shall be posted on the premises in a conspicuous place at or near the entrance to such premises and the notice of violation ~~((shall))~~ may be mailed by certified mail with return receipt requested or a certificate of mailing, to the last known address of the *owner*, the owner's authorized agent, occupant or both.

[A] **109.3.2 Compliance with orders and notices.** A notice of violation issued or served as provided by this code shall be complied with by the *owner*, the owner's authorized agent, operator, occupant or other person responsible for the condition or violation to which the notice of violation pertains.

(Insert facing page 18)

! [A] **110.4 Abatement.** The *owner*, the owner's authorized agent, operator or occupant of a building or premises deemed unsafe by the *fire code official* shall abate or cause to be abated or corrected such unsafe conditions either by repair, rehabilitation, demolition or other *approved* corrective action.

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! [A] **111.2 Issuance.** A stop work or use order shall be in writing and shall be given to the *owner* of the property, or to the *owner's authorized* agent, or to the *person* doing the work or use. Upon issuance of a stop work or use order, the cited work or use shall immediately cease. The stop work or use order shall state the reason for the order, and the conditions under which the cited work or use is authorized to resume.

(Insert facing page 35)

HIGHLY TOXIC. A material which produces a lethal dose or lethal concentration which falls within any of the following categories:

1. A chemical that has a median lethal dose (LD₅₀) of 50 milligrams or less per kilogram of body weight when administered orally to albino rats weighing between 200 and 300 grams each.
2. A chemical that has a median lethal dose (LD₅₀) of 200 milligrams or less per kilogram of body weight when administered by continuous contact for 24 hours (or less if death occurs within 24 hours) with the bare skin of albino rabbits weighing between 2 and 3 kilograms each.
3. A chemical that has a median lethal concentration (LC₅₀) in air of 200 parts per million by volume or less of gas or vapor, or 2 milligrams per liter or less of mist, fume or dust, when administered by continuous inhalation for one hour (or less if death occurs within 1 hour) to albino rats weighing between 200 and 300 grams each.

Mixtures of these materials with ordinary materials, such as water, might not warrant classification as highly toxic. While this system is basically simple in application, any hazard evaluation that is required for the precise categorization of this type of material shall be performed by experienced, technically competent persons.

HIGHLY VOLATILE LIQUID. A liquefied *compressed gas* with a *boiling point* of less than 68°F (20°C).

HIGHWAY. A public street, public alley or public road.

[B] HISTORIC BUILDINGS. (~~Buildings that are listed in or eligible for listing in the National Register of Historic Places, or designated as historic under an appropriate state or local law.~~) See “Landmark.”

HOGGED MATERIALS. Wood waste materials produced from the lumber production process.

[M] HOOD. An air-intake device used to capture by entrapment, impingement, adhesion or similar means, grease and similar contaminants before they enter a duct system.

Type I. A kitchen hood for collecting and removing grease vapors and smoke.

Type II. A general kitchen hood for collecting and removing steam vapor, heat, odors and products of combustion.

[B] HORIZONTAL ASSEMBLY. A fire-resistance-rated floor or roof assembly of materials designed to restrict the spread of fire in which continuity is maintained.

[BE] HORIZONTAL EXIT. An *exit* component consisting of fire-resistance-rated construction and opening protective intended to compartmentalize portions of a building thereby creating refuge areas that afford safety from fire and smoke from the area of fire origin.

[W] HOSPICE CARE CENTERS. A building or portion thereof used on a 24-hour basis for the provision of hospice services to terminally ill inpatients.

[B] HOSPITALS AND PSYCHIATRIC HOSPITALS. Facilities that provide care or treatment for the medical, psychiatric, obstetrical, or surgical treatment of inpatient care recipients that are incapable of self-preservation.

HOT WORK. Operations (~~including~~) involving cutting, welding, burning, ((~~Thermit welding, brazing, soldering, grinding, thermal spraying, thawing pipe, installation of torch applied roof systems~~)) or ((~~any other~~)) similar ((~~activity~~)) operation that is capable of initiating fires or explosions.

HOT WORK AREA. The area exposed to sparks, hot slag, radiant heat, or convective heat as a result of the hot work.

HOT WORK EQUIPMENT. Electric or gas welding or cutting equipment used for hot work.

HOT WORK PERMITS. Permits issued by the responsible person at the facility under the hot work permit program permitting welding or other hot work to be done in locations referred to in Section 3503.3 and pre-permitted by the *fire code official*.

HOT WORK PROGRAM. A permitted program, carried out by *approved* facilities-designated personnel, allowing them to oversee and issue permits for hot work conducted by their personnel or at their facility. The intent is to have trained, on-site, responsible personnel ensure that required hot work safety measures are taken to prevent fires and fire spread.

HPM FACILITY. See “Semiconductor fabrication facility”.

HPM ROOM. A room used in conjunction with or serving a Group H-5 occupancy, where HPM is stored or used and which is classified as a Group H-2, H-3 or H-4 occupancy.

HYDROGEN FUEL GAS ROOM. A room or space that is intended exclusively to house a *gaseous hydrogen system*.

IMMEDIATELY DANGEROUS TO LIFE AND HEALTH (IDLH). The concentration of air-borne contaminants that poses a threat of death, immediate or delayed permanent adverse health effects, or effects that could prevent escape from such an environment. This contaminant concentration level is established by the National Institute of Occupational Safety and Health (NIOSH) based on both toxicity and flammability. It generally is expressed in parts per million by volume (ppm v/v) or milligrams per cubic meter (mg/m³). Where adequate data do not exist for precise establishment of IDLH concentrations, an independent certified industrial hygienist, industrial toxicologist, appropriate regulatory agency or other source *approved* by the *fire code official* shall make such determination.

IMMINENT HAZARD. An act or condition that is judged to present a danger to persons or property that is so urgent and severe that it requires immediate corrective or preventive action.

IMPAIRMENT COORDINATOR. The person responsible for the maintenance of a particular *fire protection system*.

[B] INCAPABLE OF SELF-PRESERVATION. Persons who because of age, physical limitations, mental limitations,

chemical dependency, or medical treatment cannot respond as an individual to an emergency situation.

INCOMPATIBLE MATERIALS. Materials that, when mixed, have the potential to react in a manner which generates heat, fumes, gases or byproducts which are hazardous to life or property.

INERT GAS. A gas that is capable of reacting with other materials only under abnormal conditions such as high temperatures, pressures and similar extrinsic physical forces. Within the context of the code, inert gases do not exhibit either *physical* or *health hazard* properties as defined (other than acting as a simple asphyxiant) or hazard properties other than those of a *compressed gas*. Some of the more common inert gases include argon, helium, krypton, neon, nitrogen and xenon.

INHABITED BUILDING. A building regularly occupied in whole or in part as a habitation for people, or any place of religious worship, schoolhouse, railroad station, store or other structure where people are accustomed to assemble, except any building or structure occupied in connection with the manufacture, transportation, storage or use of *explosive materials*.

INITIATING DEVICE. A system component that originates transmission of a change-of-state condition, such as in a smoke detector, manual fire alarm box, or supervisory switch.

INSECTICIDAL FOGGING. The utilization of insecticidal liquids passed through fog-generating units where, by means of pressure and turbulence, with or without the application of heat, such liquids are transformed and discharged in the form of fog or mist blown into an area to be treated.

(Insert facing page 39)

[W] Group E, day care facilities. This group includes buildings and structures or portions thereof occupied by more than five children older than 2 ½ years of age who receive educational, supervision or *personal care services* for less than 24 hours per day.

Within places of religious worship. Rooms and spaces within *places of religious worship* providing such care during religious functions shall be classified as part of the primary occupancy.

Five or fewer children. A facility having five or fewer children receiving such care shall be classified as part of the primary occupancy.

Five or fewer children in a dwelling unit. A facility such as the above within a *dwelling unit* and having five or fewer children receiving such day care shall be classified as a Group R-3 occupancy or shall comply with the *International Residential Code*.

Family ((child day care) home((s) child care.
Family ((child day care homes) home child care
licensed by Washington State for the care of twelve or fewer children shall be classified as Group R-3 or shall comply with the *International Residential Code*.

~~((Five or fewer children in a dwelling unit. A facility such as the above within a *dwelling unit* and having five or fewer children receiving such care shall be classified as a Group R-3 occupancy or shall comply with the *International Residential Code*.)~~

(Insert facing page 40)

[BG] Factory Industrial F-1 Moderate-hazard occupancy. Factory industrial uses that are not classified as Factory Industrial F-2 Low Hazard shall be classified as F-1 Moderate Hazard and shall include, but not be limited to, the following:

- Aircraft (manufacturing, not to include repair)
- Appliances
- Athletic equipment
- Automobiles and other motor vehicles
- Bakeries
- Beverages; over 16-percent alcohol content
- Bicycles
- Boats
- Brooms or brushes
- Business machines
- Cameras and photo equipment
- Canvas or similar fabric
- Carpets and rugs (includes cleaning)
- Clothing
- Construction and agricultural machinery
- Disinfectants
- Dry cleaning and dyeing
- Electric generation plants
- Electronics
- Engines (including rebuilding)
- Food processing and commercial kitchens not associated with restaurants, cafeterias and similar dining facilities more than 2,500 square feet (232 m²) in area.
- Furniture
- Hemp products
- Jute products
- Laundries
- Leather products
- Machinery
- Marijuana processing
- Metals
- Millwork (sash and door)
- Motion pictures and television filming (without spectators)
- Musical instruments
- Optical goods
- Paper mills or products
- Photographic film
- Plastic products
- Printing or publishing
- Refuse incineration
- Shoes
- Soaps and detergents
- Textiles
- Tobacco
- Trailers
- Upholstering
- Wood; distillation
- Woodworking (cabinet)

(Insert facing page 41)

[W] Institutional Group I-1. ~~((This))~~ Institutional Group I-1 occupancy shall include buildings, structures or parts thereof for more than 16 persons, ~~((who reside on a 24-hour basis, in a supervised environment and receive custodial care. The persons receiving care are capable of self-preservation-))~~ excluding staff, who reside on a 24-hour basis, ((who because of age, mental disability or other reasons, live)) in a supervised ((residential)) environment ((that provides personal care services)) and receive custodial care. ((The occupants are capable of responding to an emergency situation without physical assistance from staff.)) Buildings of Group I-1 shall be classified as one of the occupancy conditions indicated below. This group shall include, but not be limited to, the following:

- Alcohol and drug centers
- Assisted living facilities
- Congregate care facilities
- ~~((Convalescent facilities))~~
- Group homes
- Half-way houses
- Residential board and care facilities
- Social rehabilitation facilities

Condition 1. This occupancy condition shall include buildings in which all persons receiving custodial care who, without any assistance, are capable of responding to an emergency situation to complete building evacuation.

Condition 2. This occupancy condition shall include buildings in which there are any persons receiving custodial care who require limited verbal or physical assistance while responding to an emergency situation to complete building evacuation.

~~((State licensed))~~ **Licensed care facilities.** ~~((A facility such as the above providing licensed care to clients in one of the categories listed in the Seattle Building Code Section 310.1))~~ Assisted living facilities licensed under Chapter 388-78A WAC and residential treatment facilities licensed by Washington State under Chapter 246-337 WAC shall be classified as Group R-2.

Five or fewer persons receiving care. A facility ~~((such as the above))~~ with five or fewer persons receiving such care ~~((and adult family homes licensed by Washington State))~~ shall be classified as Group R-3 or shall comply with the *International Residential Code* ~~((-))~~ provided an automatic sprinkler system is installed in accordance with Section 903.3.1.3 or International Residential Code Section P2904.

Adult family homes. Adult family homes licensed by Washington State shall be classified as Group R-3 or shall comply with the *International Residential Code*.

~~((Six to sixteen persons receiving care. A facility such as above, housing at least six and not more than 16 persons receiving such care, shall be classified as Group R-4.))~~

[W][B] Institutional Group I-2. ~~((This))~~ Institutional Group I-2 occupancy shall include buildings and structures used for medical~~((, surgical, psychiatric, nursing, or custodial care for))~~ care on a 24-hour basis for more than five persons who are ((not)) incapable of self-preservation. This group shall include, but not be limited to, the following:

- ~~((Child))~~ Foster care facilities
- Detoxification facilities
- Hospice care centers
- Hospitals
- ~~((Mental hospitals))~~
- Nursing homes
- Psychiatric hospitals

Occupancy conditions. Buildings of Group I-2 shall be classified as one of the following occupancy conditions:

Condition 1. This occupancy condition shall include facilities that provide nursing and medical care but do not provide emergency care, surgery, obstetrics or in-patient stabilization units for psychiatric or detoxification, including but not limited to nursing homes and foster care facilities.

Condition 2. This occupancy condition shall include facilities that provide nursing and medical care and could provide emergency care, surgery, obstetrics or in-patient stabilization units for psychiatric or detoxification, including but not limited to hospitals.

Five or fewer persons receiving care. A facility with five or fewer persons receiving such care shall be classified as Group R-3 or shall comply with the *International Residential Code* provided an *automatic sprinkler system* is installed in accordance with Section 903.3.1.3 or Section P2904 of the *International Residential Code*.

~~((State licensed))~~ **Licensed care facilities.** ~~((A facility providing licensed care to clients in one of the categories listed in Seattle Building Code Section 310.1 licensed by Washington State))~~ Assisted living facilities licensed by Washington State under Chapter 388-78A WAC and residential treatment facilities licensed by Washington State under Chapter 246-337 WAC shall be classified as Group R-2.

~~((Five or fewer persons receiving care. A facility such as the above with five or fewer persons receiving such care shall be classified as Group R-3 or shall comply with the International Residential Code provided an automatic sprinkler system is installed in accordance with Section 903.3.1.3 or~~

~~Section P2904 of the International Residential Code.))~~

[BG] Institutional Group I-3. Institutional Group I-3 occupancy shall include buildings and structures which are inhabited by more than five persons who are under restraint or security. A Group I-3 facility is occupied by persons who are generally incapable of self-preservation due to security measures not under the occupants' control. This group shall include, but not be limited to, the following:

- Correctional centers
- Detention centers
- Jails
- Pre-release centers
- Prisons
- Reformatories

Buildings of Group I-3 shall be classified as one of the following occupancy conditions:

[BG] Condition 1. This occupancy condition shall include buildings in which free movement is allowed from sleeping areas and other spaces where access or occupancy is permitted to the exterior via *means of egress* without restraint. A Condition 1 facility is permitted to be constructed as Group R.

[BG] Condition 2. This occupancy condition shall include buildings in which free movement is allowed from sleeping areas and any other occupied smoke compartment to one or more other smoke compartments. Egress to the exterior is impeded by locked *exits*.

[BG] Condition 3. This occupancy condition shall include buildings in which free movement is allowed within individual smoke compartments, such as within a residential unit comprised of individual *sleeping units* and group activity spaces, where egress is impeded by remote-controlled release of *means of egress* from such smoke compartment to another smoke compartment.

[BG] Condition 4. This occupancy condition shall include buildings in which free movement is restricted from an occupied space. Remote-controlled release is provided to permit movement from *sleeping units*, activity spaces and other occupied areas within the smoke compartment to other smoke compartments.

[BG] Condition 5. This occupancy condition shall include buildings in which free movement is restricted from an occupied space. Staff-controlled manual release is provided to permit movement from *sleeping units*, activity spaces and other occupied areas within the smoke compartment to other smoke compartments.

[W] Institutional Group I-4, day care facilities. ~~((This group))~~ Institutional group I-4 occupancy shall include buildings and structures occupied by more than five persons of any age who receive custodial care for ~~((less))~~ fewer than 24 hours by persons ~~((individuals))~~

other than parents or guardians, relatives by blood, marriage, or adoption, and in a place other than the home of the person cared for. This group shall include, but not be limited to, the following:

Adult day care

Child day care

~~((**Adult care facility.** A facility that provides accommodations for less than 24 hours for more than five unrelated adults and provides supervision and personal care services shall be classified as Group I-4.~~

~~**Exception:** Where the occupants are capable of responding to an emergency situation without physical assistance from the staff, the facility shall be classified as Group R-3.))~~

Classification as Group E. A child day care facility that provides care for more than five but no more than 100 children 2 ½ years or less of age, where the rooms in which the children are cared for are located on a *level of exit discharge* serving such rooms and each of these child care rooms has an *exit* door directly to the exterior, shall be classified as Group E.

Within a place of religious worship. Rooms and spaces within places of religious worship providing such care during religious functions shall be classified as part of the primary occupancy.

[W] Five or fewer occupants receiving care. A facility having five or fewer persons receiving custodial care shall be classified as part of the primary occupancy.

~~((**[W] Child care facility.** Child care facilities that provide supervision and personal care on a less than 24-hour basis for more than five children 2 1/2 years of age or less shall be classified as Group I-4.~~

~~**Exceptions:**~~

- ~~1. A child day care facility that provides care for more than five but no more than 100 children 2 1/2 years or less of age, where the rooms in which the children are cared for are located on a *level of exit discharge* serving such rooms and each of these child care rooms has an *exit* door directly to the exterior, shall be classified as Group E.~~
- ~~2. Family child day care homes licensed by Washington state for the care of 12 or fewer children shall be classified as Group R-3.))~~

Five or fewer occupants receiving care in a dwelling unit. A facility such as the above within a *dwelling unit* and having five or fewer persons receiving custodial care shall be classified as a Group R-3 occupancy or shall comply with the *International Residential Code* in accordance with Section 101.2 of the *International Building Code*.

DEFINITIONS

Family home child care. Family home child care licensed by Washington State for the care of 12 or fewer children shall be classified as Group R-3 or shall comply with the *International Residential Code*.

[BG] Mercantile Group M. Mercantile Group M occupancy includes, among others, the use of a building or structure or a portion thereof, for the display and sale of merchandise, and involves stocks of goods, wares or merchandise incidental to such purposes and accessible to the public. Mercantile occupancies shall include, but not be limited to, the following:

- Department stores
- Drug stores
- Markets
- Motor fuel-dispensing facilities
- Retail or wholesale stores
- Sales rooms

Residential Group R. Residential Group R includes, among others, the use of a building or structure, or a portion thereof, for sleeping purposes when not classified as an Institutional Group I or when not regulated by the *International Residential Code* in accordance with Section 101.2 of the *International Building Code*. Residential occupancies shall include the following:

[W] Residential Group R-1. Residential occupancies containing sleeping units where the occupants are primarily transient in nature, including:

- Boarding houses (transient) with more than 10 occupants
- Congregate living facilities (transient) with more than 10 occupants
- Hotels (transient)
- Motels (transient)
- ~~((Congregate living facilities (transient) with 10 or fewer occupants are permitted to comply with the construction requirements for Group R-3.))~~

[W] Residential Group R-2. Residential occupancies containing *sleeping units* or more than two *dwelling units* where the occupants are primarily permanent in nature, including:

- Apartment houses
- ~~((Boarding homes))~~ Assisted living facilities licensed by Washington state under Chapter 388-78A WAC
- ~~Boarding houses (nontransient) ((with more than 16 occupants))~~
- Buildings that contain three or more live/work units
- Congregate living facilities (nontransient) with more than 16 occupants
- Convents
- Dormitories
- Fraternities and sororities
- Hotels (nontransient)

~~((Live/work units))~~

- Monasteries
- Motels (nontransient)

Residential treatment facilities as licensed by Washington state under Chapter 246-337 WAC

Vacation timeshare properties

[W] Residential Group R-3. Residential occupancies where the occupants are primarily permanent in nature and not classified as Group R-1, R-2, ~~((R-4))~~ or I, including:

~~((Adult care facilities that provide accommodations for five or fewer persons of any age for less than 24 hours.))~~

Boarding houses (nontransient) with 16 or fewer occupants

Boarding houses (transient) with 10 or fewer occupants

Buildings that do not contain more than two dwelling units

Buildings that do not contain more than two live/work units

Care ~~((Child care))~~ facilities that provide accommodations for five or fewer persons ~~((of any age for less than 24 hours))~~ receiving care

Congregate living facilities (nontransient) with 16 or fewer occupants

Congregate living facilities (transient) with 10 ~~((+6))~~ or fewer occupants~~((:-))~~

Lodging houses with five or fewer guest rooms

[W] Adult family homes, family home child ~~((day))~~ care ~~((homes)),~~ Adult ~~((care))~~ family homes and family home child care facilities that are within a single-family home~~((; adult family homes and family child day care homes))~~ are permitted to comply with the *International Residential Code*.

[W] Foster family care homes. Foster family care homes licensed by Washington State are permitted to comply with the *International Residential Code*, as an accessory use to a dwelling, for six or fewer children including those of the resident family.

Care facilities within a dwelling. Care facilities for five or fewer persons receiving care that are within a single-family dwelling are permitted to comply with the *International Residential Code* provided an *automatic sprinkler system* is installed in accordance with Section 903.3.1.3 or Section P2904 of the *International Residential Code*.

Lodging houses. Owner-occupied *lodging houses* with five or fewer *guest rooms* shall be permitted to be constructed in accordance with the *International Residential Code*.

~~**[W] ((Residential Group R-4.** Residential occupancies shall include buildings arranged for occupancy as~~

~~residential care/assisted living facilities including more than five but not more than 16 occupants, excluding staff. Group R-4 occupancies shall meet the requirements for construction as defined for Group R-3, except as otherwise provided for in this code or shall comply with the *International Residential Code*, provided the building is protected by an *automatic sprinkler system* installed in accordance with Section 903.2.8.~~

~~Alcohol and drug centers
Assisted living facilities
Congregate care facilities
Convalescent facilities
Group homes
Halfway houses
Residential board and *custodial care* facilities
Social rehabilitation facilities~~

~~Group R-4 occupancies shall meet the requirements for construction as defined for Group R-3, except as otherwise provided for in this code.))~~

[B] Storage Group S. Storage Group S occupancy includes, among others, the use of a building or structure, or a portion thereof, for storage that is not classified as a hazardous occupancy.

Accessory storage spaces. A room or space used for storage purposes that is less than 100 square feet (9.3 m²) in area and accessory to another occupancy shall be classified as part of that occupancy. The aggregate area of such rooms or spaces shall not exceed the allowable area limits of Section 508.2 of the *International Building Code*.

(Insert facing page 45)

[BG] Miscellaneous Group U. Buildings and structures of an accessory character and miscellaneous structures not classified in any specific occupancy shall be constructed, equipped and maintained to conform to the requirements of this code commensurate with the fire and life hazard incidental to their occupancy. Group U shall include, but not be limited to, the following:

Agricultural buildings

Aircraft hangar, accessory to a one- or two-family residence (see Section 412.5 of the *International Building Code*)

Barns

Carports

Fences more than 6 feet (1829 mm) high

Grain silos, accessory to a residential occupancy

Greenhouses and other structures used for cultivation, protection or maintenance of plants

Livestock shelters

Private garages that comply with Section 406.3 of the *Seattle Building Code*

Retaining walls

Sheds

Stables

Tanks

Towers

(Insert facing page 79)

508.1.6 Required features. The *fire command center* shall comply with NFPA 72 and shall contain the following features:

1. The emergency voice/alarm communication system control unit.
2. The fire department communications system.
3. Fire detection and alarm system annunciator.
4. Annunciator unit visually indicating the location of the elevators and whether they are operational.
5. Status indicators and controls for air distribution systems.
6. The fire-fighter's control panel required by Section 909.16 for smoke control systems installed in the building.
7. Controls for unlocking *interior exit* stairway doors simultaneously.
8. Sprinkler valve and water-flow detector display panels.
9. Emergency and standby power status indicators.
10. A telephone for fire department use with controlled access to the public telephone system.
11. Fire pump status indicators.
12. Schematic building plans indicating the typical floor plan and detailing the building core, *means of egress*, *fire protection systems*, fire-fighting equipment and fire department access, and the location of *fire walls*, *fire barriers*, *fire partitions*, *smoke barriers* and smoke partitions.
13. An *approved* Building Information Card that contains, but is not limited to, the following information:
 - 13.1 General building information that includes: property name, address, the number of floors in the building (above and below grade), use and occupancy classification (for mixed uses, identify the different types of occupancies on each floor), estimated building population (i.e., day, night, weekend);
 - 13.2 Building emergency contact information that includes: a list of the building's emergency contacts (e.g., building manager, building engineer, etc.) and their respective work phone number, cell phone number, and e-mail address;
 - 13.3 Building construction information that includes: the type of building construction (e.g., floors, walls, columns, and roof assembly);
 - 13.4 Exit stair information that includes: number of *exit stairs* in the building,

each *exit stair* designation and floors served, location where each *exit stair* discharges, *exit stairs* that are pressurized, *exit stairs* provided with emergency lighting, each *exit stair* that allows reentry, *exit stairs* providing roof access; elevator information that includes: number of elevator banks, elevator bank designation, elevator car numbers and respective floors that they serve, location of elevator machine rooms, location of sky lobby, location of freight elevator banks;

13.5 Building services and system information that includes: location of mechanical rooms, location of building management system, location and capacity of all fuel oil tanks, location of emergency generator, location of natural gas service;

13.6 *Fire protection system* information that includes: locations of standpipes, location of fire pump room, location of fire department connections, floors protected by *automatic sprinklers*, location of different types of *automatic sprinkler systems* installed (e.g., dry, wet, pre-action, etc.); and

13.7 Hazardous material information that includes: location of hazardous material, quantity of hazardous material.

14. Work table.
15. Generator supervision devices, manual start and (~~transfer~~) stop features.
16. Public address system, where specifically required by other sections of this code.
17. Elevator fire recall switch in accordance with ASME A17.1/CSA B44.
18. Elevator emergency or standby power selector switch(es), where emergency or *legally required standby power* is provided.
19. On-site fire protection water tank fill valve control switch, tank level indicators, tank low level alarm, and tank fill signal.

(Insert facing page 94)

607.1 Emergency operation. Existing elevators with a travel distance of 25 feet (7620 mm) or more shall comply with the requirements in Chapter 46. New elevators shall be provided with Phase I emergency recall operation and Phase II emergency in-car operation in accordance with ASME A17.1/CSA B44 and Seattle Building Code.

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(Insert facing page 121)

903.4 Sprinkler system supervision and alarms. All valves controlling the water supply for *automatic sprinkler systems*, pumps, tanks, water levels and temperatures, critical air pressures and water-flow switches on all sprinkler systems shall be electrically supervised by a *listed* fire alarm control unit.

Exceptions:

1. *Automatic sprinkler systems* protecting one- and two-family *dwelling*s and, if approved by the fire code official, townhouses.
2. Limited area sprinkler systems (~~(serving fewer than 20 sprinklers))~~ in accordance with Section 903.3.8.
3. *Automatic sprinkler systems* installed in accordance with NFPA 13R where a common supply main is used to supply both domestic water and the *automatic sprinkler system*, and a separate shutoff valve for the *automatic sprinkler system* is not provided.
4. Jockey pump control valves that are sealed or locked in the open position.
5. Control valves to commercial kitchen hoods, paint spray booths or dip tanks that are sealed or locked in the open position.
6. Valves controlling the fuel supply to fire pump engines that are sealed or locked in the open position.
7. Trim valves to pressure switches in dry, preaction and deluge sprinkler systems that are sealed or locked in the open position.

(Insert facing page 126)

905.2 Installation standard. Standpipe systems shall be installed in accordance with this section, ~~((and))~~ NFA 14, and Administrative Rule 9.03.14, *Automatic Sprinklers and Standpipes* and any future revisions of this rule adopted by the *fire code official*. Fire department connections for standpipe systems shall be in accordance with Section 912.

(Insert facing page 130)

**SECTION 907
FIRE ALARM AND DETECTION SYSTEMS**

907.1 General. This section covers the application, installation, performance and maintenance of fire alarm systems and their components in new and existing buildings and structures

The requirements of Section 907.2 are applicable to new buildings and structures. The requirements of Section ((907.3)) 907.9 are applicable to existing buildings and structures.

Buildings required by this section to be provided with a fire alarm system shall be provided with a single fire alarm system. For the purposes of this section, fire walls not located on a property line shall not constitute a separate building.

Exception: A single system is not required in existing buildings that are being increased in size and the existing fire alarm system is unable to expand into the new space. In those cases multiple systems shall be arranged as described below for nonrequired fire alarm systems.

Buildings not required by this section to be provided with a fire alarm system may be provided with multiple partial fire alarm systems if:

1. The systems are connected so that all systems simultaneously activate alarm notification appliances upon a signal from any of the fire alarm systems in the building, and
2. The location of each system's annunciator panel (or main panel) is also provided with annunciator panels with reset capability for every other system in the building.

(Insert facing page 145)

909.6.3 Pressurized stairways and elevator hoistways.

Where stairways or elevator hoistways are pressurized, such pressurization systems shall comply with Section 909 as smoke control systems, in addition to the requirements of Section ~~((909.21 of this code))~~ 909.20 and Section ~~((909.20))~~ 909.21 of the *International Building Code*.

(Insert facing page 156)

914.3.1.1.1 Riser location. Sprinkler risers shall be placed in interior *exit stairways* and ramps that are remotely located in accordance with Section ~~((4015-2))~~ 1007.

(Insert facing page 177)

[BE] 1010.1.5 Floor elevation. There shall be a floor or landing on each side of a door. Such floor or landing shall be at the same elevation on each side of the door. Landings shall be level except for exterior landings, which are permitted to have a slope not to exceed 0.25 unit vertical in 12 units horizontal (2-percent slope).

Exceptions:

1. Doors serving individual *dwelling units* in Groups R-2 and R-3 where the following apply:
 - 1.1. A door is permitted to open at the top step of a ~~(n interior)~~ *flight of stairs*, provided the door does not swing over the top step.
 - 1.2. Screen doors and storm doors are permitted to swing over *stairs* or landings.
2. Exterior doors as provided for in Section 1003.5, Exception 1, and Section 1022.2, which are not on an *accessible route*.
3. In Group R-3 occupancies not required to be Accessible units, Type A units or Type B units, the landing at an exterior doorway shall not be more than 7³/₄ inches (197 mm) below the top of the threshold, provided the door, other than an exterior storm or screen door, does not swing over the landing.
4. Variations in elevation due to differences in finish materials, but not more than 1/2 inch (12.7 mm).
5. Exterior decks, patios or balconies that are part of Type B *dwelling units*, have impervious surfaces and that are not more than 4 inches (102 mm) below the finished floor level of the adjacent interior space of the dwelling unit.
6. Doors serving equipment spaces not required to be accessible in accordance with Section 1103.2.9 of the *International Building Code* and serving an *occupant load* of five or less shall be permitted to have a landing on one side to be not more than 7 inches (178 mm) above or below the landing on the egress side of the door.

* * *

1010.1.7 Thresholds. Thresholds at doorways shall not exceed 3/4 inch (19.1 mm) in height above the finished floor or landing for sliding doors serving *dwelling units* or 1/2 inch (12.7 mm) above the finished floor or landing for other doors. Raised thresholds and floor level changes greater than 1/4 inch (6.4 mm) at doorways shall be beveled with a slope not greater than one unit vertical in two units horizontal (50-percent slope).

Exceptions:

1. In occupancy Group R-2 or R-3, threshold heights for sliding and side-hinged exterior doors shall be

permitted to be up to 7-3/4 inches (197 mm) in height if all of the following apply:

- 1.1. The door is not part of the required *means of egress*.
- 1.2. The door is not part of an *accessible route* as required by Chapter 11 of the *International Building Code*.
- 1.3. The door is not part of an *Accessible unit, Type A unit* or *Type B unit*.
2. In Type B units, where Exception 5 to Section 1010.1.5 permits a 4-inch (102 mm) elevation change at the door, the threshold height on the exterior side of the door shall not exceed 4-3/4 inches (120 mm) in height above the exterior deck, patio or balcony for sliding doors of 4-1/2 inches (114 mm) above the exterior deck, patio or balcony for other doors.

(Insert facing page 179)

[W] [BE] 1010.1.9.6 Controlled egress doors in Groups I-1 and I-2. Electric locking systems, including electro-mechanical locking systems and electro-magnetic locking systems, shall be permitted to be locked in the means of egress in Group I-1 or I-2 occupancies where the clinical needs of persons receiving care require their containment. Controlled egress doors shall be permitted in such occupancies where the building is equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1 or an approved automatic smoke or heat detection system installed in accordance with Section 907, provided that the doors are installed and operate in accordance with all of the following:

1. The door locks shall unlock upon actuation of the *automatic sprinkler system* or *automatic fire detection system*.
 2. The door locks shall unlock upon loss of power controlling the lock or lock mechanism.
 3. The door locking system shall be installed to have the capability of being unlocked by a switch located at the *fire command center*, a nursing station or other *approved* location. The switch shall directly break power to the lock.
 4. A building occupant shall not be required to pass through more than one door equipped with a controlled egress locking system before entering an *exit*.
 5. The procedures for unlocking the doors shall be described and *approved* as part of the emergency planning and preparedness required by Chapter 4 of the *International Fire Code*.
 6. There is a system, such as a keypad and code, in place that allows visitors, staff persons and appropriate residents to exit. Instructions for exiting shall be posted within six feet of the door.
- ~~((6. All clinical staff shall have the keys, codes or other means necessary to operate the locking devices.))~~
7. Emergency lighting shall be provided at the door.
 8. The door locking system units shall be *listed* in accordance with UL 294.

Exceptions:

1. Items 1 through 4 shall not apply to doors to areas where a *listed* egress control system is utilized to reduce the risk of child abduction from nursery and obstetric areas of a Group I-2 hospital.
2. Items 1 through 4 ~~((and 6))~~ shall not apply to doors to areas occupied by persons who, because of clinical needs, require restraint or containment as part of the function of a psychiatric treatment area provided that all clini-

cal staff shall have the keys, codes or other means necessary to operate the locking devices.

(Insert facing page 188)

[BE] **1013.6.3 Power source.** Exit signs shall be illuminated at all times. To ensure continued illumination for a duration of not less than 90 minutes in case of primary power loss, the sign illumination means shall be connected to an emergency power system provided from storage batteries, unit equipment or an on-site generator. The installation of the emergency power system shall be in accordance with Section 604.

Exceptions:

1. *Approved* exit sign illumination means that provide continuous illumination independent of external power sources for a duration of not less than 90 minutes, in case of primary power loss, are not required to be connected to an emergency electrical system.
2. Group I-2 Condition 2 exit sign illumination shall not be provided by unit equipment battery only.

(Insert facing page 193)

[BE] 1020.1 Construction. *Corridors* shall be fire-resistance rated in accordance with Table 1020.1. The *corridor* walls required to be fire-resistance rated shall comply with Section 708 of the *International Building Code* for fire partitions.

Exceptions:

1. A *fire-resistance rating* is not required for *corridors* in an occupancy in Group E where each room that is used for instruction has at least one door opening directly to the exterior and rooms for assembly purposes have at least one-half of the required *means of egress* doors opening directly to the exterior. Exterior doors specified in this exception are required to be at ground level.
2. A *fire-resistance rating* is not required for *corridors* contained within a dwelling or sleeping unit in an occupancy in Group I-1 and R.
3. A *fire-resistance rating* is not required for *corridors* in *open parking garages*.
4. A *fire-resistance rating* is not required for *corridors* in an occupancy in Group B which is a space requiring only a single *means of egress* complying with Section 1006.2.
5. *Corridors* adjacent to the *exterior walls* of buildings shall be permitted to have unprotected openings on unrated *exterior walls* where unrated walls are permitted by Table 602 of the *International Building Code* and unprotected openings are permitted by Table 705.8 of the *International Building Code*.
6. In office areas located in buildings of Types IA or IB construction, corridor walls need not be of fire-resistance-rated construction where the corridor side of the corridor walls is finished with materials having a maximum Class B rating as defined in Chapter 8. This exception does not apply to outpatient clinics and medical offices.
7. The occupant load of Group B conference rooms, lunch rooms without grease-producing cooking and other assembly rooms with an occupant load of less than 50 in each room need not be considered when determining whether corridor construction is required, provided such rooms are accessory to an office tenant located in a building of Type IA or IB construction. This provision is permitted to be used in other construction types when the floor on which the assembly room is located is equipped with an automatic sprinkler system.

(Insert facing page 214)

TABLE 1103.1
OCCUPANCY AND USE REQUIREMENTS^a—continued

SECTION	USE			OCCUPANCY CLASSIFICATION																		
	High-rise	Atrium or covered mall	Under-ground building	A	B	E	F	H-1	H-2	H-3	H-4	H-5	I-1	I-2	I-3	I-4	M	R-1	R-2	R-3	R-4	S
((1103.5.1))	—	—	—	((R _e))	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1103.5.1 1103.5.2 ^b ((1103.5.3 ^b))	—	—	—	—	—	—	—	—	—	—	—	—	—	R	—	—	—	—	—	—	—	—
1103.5.3				R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R		R	R
1103.5.4	—	—	—	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
1103.6.1	R	—	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	—	R	R
1103.6.2	R	—	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	—	R	R
1103.7.1	—	—	—	—	—	R	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1103.7.2	—	—	—	—	—	—	—	—	—	—	—	—	R	—	—	—	—	—	—	—	—	—
1103.7.3	—	—	—	—	—	—	—	—	—	—	—	—	—	R	—	—	—	—	—	—	—	—
1103.7.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	R	—	—	—	—	—	—	—
1103.7.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	R	—	—	—	—
1103.7.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	R	—	—	—
1103.7.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	R	—
1103.8	—	—	—	—	—	—	—	—	—	—	—	—	R	—	—	—	—	R	R	R	R	—
1103.9	R	—	—	—	—	—	—	—	—	—	—	—	R	R	—	R	—	R	R	R	R	—
1104	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
1105	—	—	—	—	—	—	—	—	—	—	—	—	—	R	—	—	—	—	—	—	—	—
1106	—	—	—	—	—	—	—	—	—	—	—	—	—	R	—	—	—	—	—	—	—	—

a. Existing buildings shall comply with the sections identified as “Required” (R) based on occupancy classification or use, or both, whichever is applicable.

b. Only applies to Group I-2 Condition 2 as established by the adopting ordinance.

((e. Only applies to Group A-2 occupancies.))

R = The building is required to comply.

(Insert facing page 217)

1103.5 Sprinkler systems. An *automatic sprinkler system* shall be provided in existing buildings in accordance with Sections 1103.5.1 ~~((and 1103.5.((2))3))~~ through 1103.5.4.

~~((1103.5.1 Group A-2. An *automatic sprinkler system* shall be installed in accordance with Section 903.3.1.1 throughout existing buildings or portions thereof used as Group A-2 occupancies with an occupant load of 300 or more.))~~

1103.5.((2))1 Group I-2. An *automatic sprinkler system* shall be provided throughout existing Group I-2 fire areas. The sprinkler system shall be provided throughout the floor where the Group I-2 occupancy is located, and in all floors between the Group I-2 occupancy and the *level of exit discharge*.

1103.5.((3))2 Group I-2 Condition 2. In addition to the requirements of Section 1103.5.((2))1, existing buildings of Group I-2 Condition 2 occupancy shall be equipped throughout with an *approved automatic sprinkler system* in accordance with Section 903.3.1.1. The *automatic sprinkler system* shall be installed as established by the adopting ordinance.

1103.5.((4))3 Pyroxylin plastics. An *automatic sprinkler system* shall be provided throughout existing buildings where cellulose nitrate film or pyroxylin plastics are manufactured, stored or handled in quantities exceeding 100 pounds (45 kg). Vaults located within buildings for the storage of raw pyroxylin shall be protected with an *approved automatic sprinkler system* capable of discharging 1.66 gallons per minute per square foot (68 L/min/m²) over the area of the vault.

[W] 1103.5.((5))4 Nightclub. An *automatic sprinkler system* shall be provided throughout *A-2 nightclubs* as defined in this code. No building shall be constructed for, used for, or converted to occupancy as a *nightclub* except in accordance with this section.

(Insert facing page 218)

1103.7 Fire alarm systems. An *approved* fire alarm system shall be installed in existing buildings and structures in accordance with Sections 1103.7.1 through 1103.7.~~6~~~~(7)~~ and provide occupant notification in accordance with Section 907.~~(6)~~~~5~~ unless other requirements are provided by other sections of this code.

Exception: Non-residential ((Θ)) occupancies with an existing, previously *approved* fire alarm system, and residential occupancies with a fire alarm system capable of achieving a minimum sound level in the sleeping rooms of 60 dBa or 15 dBa above ambient noise level, whichever is higher.

(Insert facing page 220)

[W] **1103.9 Carbon monoxide alarms.** Existing Group I (~~(I-1, I-2, I-4)~~) or R occupancies shall be equipped with single station carbon monoxide alarms in accordance with Section 915(4.3). (~~(except that the carbon monoxide alarms shall be allowed to be solely operated.)~~) An inspection will occur when alterations, repairs or additions requiring a permit occur, or when one or more sleeping rooms are added or created. The carbon monoxide alarms shall be *listed* as complying with UL 2034, and be installed and maintained in accordance with NFPA 720-2015 and the manufacturer's instructions.

Exceptions.

1. For other than R-2 occupancies, if the building does not contain a fuel-burning appliance, a fuel-burning fireplace, or an attached garage.
2. Work involving the exterior surfaces of dwellings, such as the replacement of roofing or siding, or the addition or replacement of windows or doors, or the addition of a porch or deck, or electrical permits.
3. Installation, alteration or repairs of noncombustible plumbing or mechanical systems.
4. *Sleeping units or dwelling units* in I and R-1 occupancies and R-2 college dormitories, hotel, DOC prisons and work releases and assisted living facilities and residential treatment facilities licensed by the state of Washington which do not themselves contain a fuel-burning appliance, a fuel-burning fireplace, or an attached garage, need not be provided with carbon monoxide alarms provided that:
 - 4.1 The *sleeping units or dwelling unit* is not adjacent to any room which contains a fuel-burning appliance, a fuel-burning fireplace, or an attached garage; and
 - 4.2 The *sleeping units or dwelling unit* is not connected by duct work or ventilation shafts with a supply or return register in the same room to any room containing a fuel-burning appliance, a fuel-burning fireplace, or to an attached garage; and
 - 4.3 The building is provided with a common area carbon monoxide detection system.
5. An open parking garage, as defined in the *International Building Code*, or enclosed parking garage ventilated in accordance with Section 404 of the *International Mechanical Code* is not considered an attached garage.

(Insert facing page 254)

2307.3 Attendants. Motor fuel-dispensing operations for LP-gas shall be conducted by qualified attendants or in accordance with Section 2307.~~(6)~~ by persons trained in the proper handling of LP-gas.

(Insert facing page 265)

2404.2 Location of spray-finishing operations. Spray finishing operations conducted in buildings used for Group A, E, I or R occupancies shall be located in a spray room protected with an *approved automatic sprinkler system* installed in accordance with Section 903.3.1.1 and separated vertically and horizontally from other areas in accordance with the *International Building Code*. In other occupancies, spray-finishing operations shall be conducted in a spray room, spray booth or spraying space *approved* for such use.

Exceptions:

1. Automobile undercoating spray operations and spray-on automotive lining operations conducted in areas with *approved* natural or mechanical ventilation shall be exempt from the provisions of Section ~~((1504))~~ 2404 when *approved* and where utilizing Class IIIA or IIIB *combustible liquids*.
2. In buildings other than Group A, E, I or R occupancies, *approved* limited spraying space in accordance with Section ~~((1504.9))~~ 2404.9.
3. Resin application areas used for manufacturing of reinforced plastics complying with Section ~~((1509))~~ 2409 shall not be required to be located in a spray room, spray booth or spraying space.

Spray-finishing operations are allowed in basements only if confined to either an *approved* spray booth or an *approved* spray room protected by an *approved* automatic fire sprinkler system and if such basement is protected throughout by an *approved* automatic sprinkler system in accordance with Chapter 9.

(Insert facing page 289)

2801.1 Scope. The storage, manufacturing and processing of solid biomass feedstock, timber, lumber, plywood, ~~((nonmetallic pallets,))~~ veneers and agro-industrial byproducts shall be in accordance with this chapter.

(Insert facing page 467)

6108.1 General. Fire protection shall be provided for installations having LP-gas storage containers with a water capacity of more than 4,000 gallons (15 140 L), as required by Section ~~((6.25))~~ 6.27 of NFPA 58.

REFERENCED STANDARDS

(Insert facing page 499)

NFPA

National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02169-7471

Standard reference number	Title	Referenced in code section number
33— (45) <u>11</u>	Standard for Spray Application Using Flammable or Combustible Materials	2404.3.2

* * *

(Insert facing page 500)

NFPA

National Fire Protection Association
 1 Batterymarch Park
 Quincy, MA 02169-7471

Standard reference number	Title	Referenced in code section number
* * *		
72—13	National Fire Alarm and Signaling Code.....	508.1.6, <u>510.1</u> , 604.2.4, Table 901.6.1, 903.4.1, 904.3.5, 907.2, 907.2.6, 907.2.9.3, 907.2.11, 907.2.13.2, 907.3, 907.3.3, 907.3.4, 907.5.2.1.2, 907.5.2.2, 907.5.2.2.5, 907.6, 907.6.1, 907.6.2, 907.6.6, 907.7, 907.7.1, 907.7.2, 907.8, 907.8.2, 907.8.5, 1103.3.2

REFERENCED STANDARDS

(Insert facing page 501)

NFPA

National Fire Protection Association
 1 Batterymarch Park
 Quincy, MA 02169-7471

Standard reference number	Title	Referenced in code section number
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750— (44) <u>15</u>	<p style="text-align: center;">* * *</p> Standard on Water Mist Fire Protection Systems202, Table 901.6.1, 904.11.1.1
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