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EPCOT BUILDING CODES
2018 Edition
Approved Code Changes
In Effect October 1, 2019

BUILDING

B18 - 001

Chapter 2 Definitions

Proponent: Scott Brooks, WDW Design & Engineering

Corridor. ~~Passageway, hall or hallway serving an occupant load of more than 10~~ An enclosed exit access component that defines and provides a path of egress travel.

B18 - 002

Proponent: Jonathan Cantwell, Fire Protection Engineer

~~**PUBLIC PLACE.** An unoccupied open space adjoining a building on the same property, permanently accessible and free of obstructions for use of the Fire Department and other public services.~~

PUBLIC SPACE. ~~For determining permitted floor areas and(or) arrangement of exits, means such o~~Open spaces dedicated for public use such as public parks, rights-of-way, waterways, public beach, and other permanently unobstructed yards or courts having access to a street as required in Chapter 5.

SUITE – A group of rooms occupied as a unit.

WATERWAY. Channel of water navigable by boats. When located within a special amusement building, the occupant load assigned to waterways shall not exceed the maximum load capacity of the ride vehicles. ~~For the purpose of determining allowable floor area but not exit arrangement, waterways shall be considered as streets.~~

B18 - 003

Proponent: Jonathan Cantwell, Fire Protection Engineer

301.1 Permits Required.

(b) Separate permits shall be required for plumbing, air conditioning, heating and ventilating systems, elevators, escalators and transporting assemblies, gas, sprinkler, roofing, electrical, fire alarm systems, security alarm systems, swimming pool, project management and show/ride installations.

B18 - 004

Proponent: Jonathan Cantwell, Fire Protection Engineer

503.11 Guardrails. All enclosed floor and roof openings; operable windows in exterior walls whose sill height is less than 30 inches above the floor below and more than 30 inches above grade; open and glazed sides of landings; and ramps, stairs, balconies or porches, which are more than 30 inches above grade, or a floor below shall be protected by a guardrail.

Guardrails shall form a vertical protective barrier not less than 42 inches high. Open guardrails shall have intermediate rails or ornamental pattern such that a 4-inch-diameter sphere cannot pass through any opening up to a height of 34 inches. From 34 inches to 42 inches above the adjacent walking surfaces, a sphere of 8 inches shall not pass through. A bottom rail or curb shall be provided that will reject the passage of a 2-inch-diameter sphere. Construction of guardrails shall be adequate in strength, durability and attachment for their purpose as described in Subsection 902.2(h). Glass used in guardrails shall comply with Subsection 1005.8.

B18 - 005

Proponent: Jonathan Cantwell, Fire Protection Engineer

602.1 Floors.

(b) Mezzanine floors shall be on noncombustible construction as approved for 1-hour fire resistive. ~~Mezzanine floors shall cover not more than 331/3 percent of a room area; there shall be not more than two mezzanine levels in a room. Clear height above or below a mezzanine floor shall be not less than 7 feet.~~

603.3 Floors. In buildings of Type III construction, floors may be of heavy timber, masonry, wood, steel or iron, and

shall be constructed as required in Chapters 7, 9 and 10. ~~Mezzanine floors shall comply with the requirements of Subsection 602.1(b).~~

Add new Section 713.1(d) – See B18 - 008

B18 - 006

Proponent: Jonathan Cantwell, Fire Protection Engineer

704.2 Fire-Resistive Protection of Openings.

(a) Where required, opening protectives shall comply with the requirements of EPCOT Standards 7-2 and 7-3.

Exception: Fire-resistance-rated glazing tested as part of a fire-resistance-rated wall assembly in accordance with ASTM E119 or UL 263 and labeled in accordance with Subsection 703.5, shall be permitted where used as a wall or floor/ceiling assembly. Fire-resistance-rated glazing shall be permitted in fire doors and fire window assemblies where tested and installed in accordance with their listings and where in compliance with the requirements of this Subsection.

704.8 Glazed Openings in Fire Windows. Three-fourths hour fire-resistive-rated windows may have an area not more than 84 square feet with neither width nor height exceeding 12 feet. Fire windows shall be either fixed or automatic closing.

704.8.1 Fire-Protection-Rated Glazing. Glazing in fire window assemblies shall be fire-protection—-rated in accordance with this Section and Table 7.2. Glazing in fire door assemblies shall comply with Subsection 704.7. Fire-protection-rated glazing shall be tested in accordance with, and shall meet the acceptance criteria of, NFPA 257 or UL 9. Fire-protection-rated glazing shall also comply with NFPA 80. Openings in non fire resistance-rated exterior wall assemblies that require protection in accordance with Subsection 707.3, shall have a fire-protection rating of not less than ¾ hour.

Exception: Wired glass in accordance with Subsection 704.7.

B18 - 007

Proponent: Jonathan Cantwell, Fire Protection Engineer

712.2 Area Increases Permitted. The floor areas specified in Subsection 712.1 may be increased under the conditions specified in this Subsection. Such increases shall not exceed 100 percent, except in buildings of more than two stories housing Group I occupancies and one-story buildings housing aircraft storage hangars, and as further limited in Section 511 for aircraft repair hangars.

For the purposes of determining an increase in allowable floor area, permanent open yards include a public street, fire lane, public way, or public space providing direct access to a public street, fire lane, or public way. For the purposes of this Subsection, waterways and service courts shall not be considered to be part of a permanent open yard.

(a) Separation on Two Sides. Where public space, streets or permanent open yards more than 20 feet wide extend along and adjoin….

B18 - 008

Proponent: Jonathan Cantwell, Fire Protection Engineer

Add new Section 713.1(d)

713.1(d) Mezzanines. There shall be not more than two mezzanine levels in a room. Clear height above or below a mezzanine floor shall be not less than 7 feet.

B18 - 009

Proponent: Jonathan Cantwell, Fire Protection Engineer

New Sections

SECTION 718
SPECIAL PROVISIONS—HIGH-RISE STRUCTURES

718.1 Application. These additional requirements shall apply to all buildings having a floor level used for human occupancy located more than 75 feet above the lowest level of fire department vehicle access.

718.2 Structural Integrity of Exit Enclosures and Elevator Hoistway Enclosures. For high-rise buildings that are Risk Category III, IV or more than 420 feet in

building height, exit enclosures and elevator hoistway enclosures shall comply with Subsections 718.2.1 through 718.2.4.

718.2.1 Wall Assembly. The wall assemblies making up the exit enclosures and elevator hoistway enclosures shall meet or exceed Soft Body Impact Classification Level 2 as measured by the test method described in ASTM C1629/C1629M.

718.2.2 Wall Assembly Materials. The face of the wall assemblies making up the exit enclosures and elevator hoistway enclosures that are not exposed to the interior of the exit enclosure or elevator hoistway enclosure shall be constructed in accordance with one of the following methods:

(a) The wall assembly shall incorporate not less than two layers of impact-resistant construction board each of which meets or exceeds Hard Body Impact Classification Level 2 as measured by the test method described in ASTM C1629/C1629M.

(b) The wall assembly shall incorporate not less than one layer of impact-resistant construction material that meets or exceeds Hard Body Impact Classification Level 3 as measured by the test method described in ASTM C1629/C1629M.

(c) The wall assembly incorporates multiple layers of any material, tested in tandem, that meet or exceed Hard Body Impact Classification Level 3 as measured by the test method described in ASTM C1629/C1629M.

718.2.3 Concrete and Masonry Walls. Concrete or masonry walls shall be deemed to satisfy the requirements of Subsections 718.2.1 and 718.2.2.

718.2.4 Other Wall Assemblies. Any other wall assembly that provides impact resistance equivalent to that required by Subsections 718.2.1 and 718.2.2 for Hard Body Impact Classification Level 3, as measured by the test method described in ASTM C1629/C1629M, shall be permitted.

718.3 Sprayed Fire-Resistant Materials (SFRM). The bond strength of the SFRM installed throughout the building shall be in accordance with Table 7.7.

TABLE 7.7
MINIMUM BOND STRENGTH

HEIGHT OF BUILDING[a]	SFRM MINIMUM BOND STRENGTH
Up to 420 feet	430 psf
Greater than 420 feet	1,000 psf

a. Above the lowest level of fire department vehicle access.

718.4 Number of Sprinkler Risers and System Design. Each sprinkler system zone in buildings that are more than 420 feet in building height shall be supplied by a minimum of two risers. Each riser shall supply sprinklers on alternate floors. If more than two risers are provided for a zone, sprinklers on adjacent floors shall not be supplied from the same riser.

718.4.1 Riser Location. Sprinkler risers shall be placed in exit enclosures that are a distance apart equal to not less than one-half of the length of the maximum overall diagonal dimension of the building measured in a straight line between exit doors or exit access doorways. Interlocking or scissor stairs shall be counted as one exit stairway.

718.5 Fire Pump Room. Fire pump units serving high-rise buildings shall be protected from surrounding occupancies by a minimum of 2-hour fire-rated construction or physically separated from the protected building by a minimum of 50 ~~ft~~feet.

718.6 Water Supply to Required Fire Pumps. Required fire pumps shall be supplied by connections to a minimum of two water mains located in different streets. Separate supply piping shall be provided between each connection to the water main and the pumps. Each connection and the supply piping between the connection and the pumps shall be sized to supply the flow and pressure required for the pumps to operate.

Exception: Two connections to the same main shall be permitted provided the main is valved such that an interruption can be isolated so that the water supply will continue without interruption through at least one of the connections.

718.7~~2~~ Smoke Detection Systems. …

718.8~~3~~ Alarm and Communication Systems. …

718.9~~4~~ Central Control Station. A central control station for fire department operations shall be provided in a location approved by the fire department. It shall contain:

(a) The voice alarm and public address system panels.
(b) The fire department communications panel.
(c) Fire detection and alarm system annunciator panels and firefighter smoke control panel.

(d) Status indicators showing location of elevators in the hoistways.
(e) Status indicators and controls for air-handling systems.
(f) Sprinkler valve and water-flow-detector display panels.
(g) Emergency power, light and emergency system controls and status indicators.
(h) A telephone for fire department use with controlled access to the public telephone system.
(i) Controls for simultaneously unlocking all locked stairway doors.
(j) Central Control Station shall be separated from the building by 1-hour fire resistance rated construction.

718.10~~5~~ Smoke Control. Mechanical ventilation for the removal of products of combustion shall be provided in every story and shall consist of one of the following:

(a) The mechanical air-handling equipment shall be designed to accomplish smoke removal. Under fire conditions, the return and exhaust air shall be moved directly to the outside without recirculation to other sections of the building. The supply fans shall provide 100 percent outside air. The area involved shall have a minimum of one air change every 10 minutes to meet this requirement.

(b) A zone-based active smoke control system shall be provided in accordance with Section 720.

(c) Any other approved design that will produce equivalent results and is acceptable to the Building Official.

718.~~6~~11 Fire Alarm Notification Zones. Each floor shall be zoned separately. If the floor area exceeds 2~~0~~,5~~0~~00 square feet, additional zoning shall be provided. The length of any zone shall not exceed 200 feet in any direction. Zoning indicator panels and controls shall be located as approved by the Fire Department. Annunciators shall lock in until the system is reset.

718.12 Standby Power. A standby power system complying with *EPCOT Electrical Code* shall be provided for standby power loads specified in Subsection 718.10.2.

718.12.1 Special Requirements for Standby Power Systems. If the standby system is a generator set inside a building, the system shall be located in a separate room enclosed with 2-hour fire barriers constructed in accordance with Section 707 or horizontal assemblies constructed in accordance with Section 705, or both. System supervision with manual start and transfer features shall be provided at the fire command center.

718.12.2 Standby Power Loads. The following are classified as standby power loads:

1. Power and lighting for the fire command center required by Subsection 718.8;
2. Standby power shall be provided for elevators in accordance with EPCOT Standard 5-1; and
3. Jockey pumps and compressors for dry pipe and preaction automatic sprinkler systems.

718.13 Emergency Power Systems. An emergency power system complying with *EPCOT Electrical Code* shall be provided for emergency power loads specified in Subsection 718.11.1.

718.13.1 Emergency Power Loads. The following are classified as emergency power loads:
1. Exit signs and means of egress illumination required by the *EPCOT Building Code*;
2. Elevator car lighting;
3. Ventilation and automatic fire detection equipment for smokeproof enclosures;
4. Smoke control systems;
5. Emergency voice/alarm communications systems;
6. Automatic fire detection systems;
7. Fire alarm systems; and
8. Electrically powered fire pumps.

718.14 Means of Egress and Evacuation. The means of egress in high-rise buildings shall comply with Subsections 718.14.1 through 718.14.5.

718.14.1 Remoteness of Exit Stairway Enclosures. The required exit stairway enclosures shall be separated by a distance not less than 30 feet or not less than one-fourth of the length of the maximum overall diagonal dimension of the building or area to be served, whichever is less. The distance shall be measured in a straight line between the nearest points of the exit stairway enclosures. In buildings with three or more exit stairway enclosures, at least two of the exit stairway enclosures shall comply with this Section. Interlocking or scissor stairs shall be counted as one exit stairway.

718.14.2 Additional Exit Stairway. For buildings other than Group R that are more than 420 feet in building height, one additional exit stairway meeting the requirements of Sections 806 and 809 shall be provided in addition to the minimum number of exits required by Subsection 803.1. The total width of any combination of remaining exit stairways with one exit stairway removed shall not be less than the total width required by

Subsection 803.2. Scissor stairs shall not be considered the additional exit stairway required by this Section.

718.14.3 Stairway Door Operation. Stairway doors other than the exit discharge doors shall be permitted to be locked from the stairway side. Stairway doors that are locked from the stairway side shall be capable of being unlocked simultaneously without unlatching upon a signal from the fire command center.

718.14.3.1 Stairway Communication System. A telephone or other two-way communications system connected to an approved constantly attended station shall be provided at not less than every fifth floor in each stairway where the doors to the stairway are locked.

718.14.4 Smokeproof Exit Enclosures. Every required level exit stairway serving floors more than 75 feet above the lowest level of fire department vehicle access shall comply with Subsection 720.20.

718.14.5 Luminous Egress Path Markings. Luminous egress path markings shall be installed in accordance with Subsection 718.14.5.1 through 718.14.5.11.

718.14.5.1 Exit Stair Treads. Exit stair treads shall incorporate a marking stripe that is applied as a paint/coating or be a material that is integral with the nosing of each step. The marking stripe shall be installed along the horizontal leading edge of the step and shall extend the full width of the step. The marking stripe shall also meet the following requirements:

1. The marking stripe shall be not more than ½ inch from the leading edge of each step and shall not overlap the leading edge of the step by more than ½ inch down the vertical face of the step.
2. The marking stripe shall have a minimum horizontal width of 1 inch and a maximum width of 2 inches.
3. The dimensions and placement of the marking stripe shall be uniform and consistent on each step throughout the exit enclosure.
4. Surface-applied marking stripes using adhesive-backed tapes shall not be used.

718.14.5.2 Exit Stair Landings. The leading edge of exit stair landings shall be marked with a solid and continuous marking stripe consistent with the dimensional requirements for stair treads and shall be the same length as, and consistent with, the stripes on the steps.

718.14.5.3 Exit Stair Handrails. All handrails and handrail extensions shall be marked with a solid and continuous marking stripe and meet the following requirements:

1. The marking stripe shall be applied to the upper surface of the handrail or be a material integral with the upper surface of the handrail for the entire length of the handrail, including extensions.
2. The marking stripe shall have a minimum horizontal width of 1 inch.
3. The dimensions and placement of the marking stripe shall be uniform and consistent on each handrail throughout the exit enclosure.

718.14.5.4 Perimeter Demarcation Marking. Stair landings, exit passageways, and other parts of the floor areas within the exit enclosure shall be provided with a solid and continuous perimeter demarcation marking stripe on the floor. The marking stripe shall also meet the following requirements:

1. The marking stripe shall have a minimum horizontal width of 1 inch and a maximum width of 2 inches, with interruptions not exceeding 4 inches.
2. The marking stripe shall be applied within 2 inches of the wall.
3. The marking stripe shall continue in front of all door openings swinging into the exit enclosure. However, the marking stripe shall not be applied in front of door openings discharging from the exit enclosure.
4. The dimensions and placement of the perimeter demarcation marking stripe shall be uniform and consistent throughout the exit enclosure.
5. Surface-applied marking stripes using adhesive-backed tapes shall not be used.

718.14.5.5 Obstacles. Obstacles that are in the exit enclosure at or below 6½ feet in height, and that project more than 4 inches into the egress path, shall be identified with markings not less than 1 inch in horizontal width comprised of a pattern of alternating equal bands of luminescent material and black; and with the alternating bands not more than 2 inches in horizontal width and angled at 45 degrees.

718.14.5.6 Doors Serving Exit Enclosure. All doors serving the exit enclosure that swing out from the enclosure in the direction of egress travel shall be provided with a marking stripe on the top and sides of the door(s) frame(s). The marking stripe shall also meet the following requirements:

1. The marking stripe shall have a minimum horizontal width of 1 inch and a maximum width of 2 inches.
2. Gaps shall be permitted in the continuity of door frame markings where a line is fitted into a corner or bend, but shall be as small as practicable, and in no case shall gaps be greater than 1 inch.
3. Where the door molding does not provide enough flat surface on which to locate the marking stripe, the marking stripe shall be located on the wall surrounding the frame.
4. The dimensions and placement of the marking stripe shall be uniform and consistent on all doors in the exit enclosure.

718.14.5.7 Door Hardware Marking. The door hardware for the doors serving the exit enclosure that swing out from the enclosure in the direction of egress travel shall be provided with a marking stripe.

The marking stripe shall also meet the following requirements:

1. The door hardware necessary to release the latch shall be outlined with a marking stripe having a minimum horizontal width of 1 inch.
2. Where panic hardware is installed, the following criteria shall be met:

   (a) The marking stripe shall have a minimum horizontal width of 1 inch and be applied to the entire length of the actuating bar or touch pad.
   (b) The placement of the marking stripe shall not interfere with viewing of any instructions on the actuating bar or touch pad.

718.14.5.8 Emergency Exit Symbol. An emergency exit symbol with a luminescent background shall be applied on all doors serving the exit enclosure that swing out from the enclosure in the direction of egress travel. The emergency exit symbol shall also meet the following requirements:

1. The emergency exit symbol shall meet the requirements of NFPA 170, *Standard for Fire Safety and Emergency Symbols.*
2. The emergency exit symbol applied on the door shall be not higher than 18 inches above the finished floor.

718.14.5.9 Uniformity. Placement and dimensions of the marking stripes shall be consistent and uniform throughout the same exit enclosure.

718.14.5.10 Materials. Exit stair path markings shall be made of any material, including paint, provided that an electrical charge is not required to maintain the required luminescence. Such materials shall include, but shall not be limited to, self-luminous materials and photo luminescent materials. Materials shall comply with one of the following:

1. ASTM E2073, Standard Test Method for Photopic Luminance of Photo luminescent (Phosphorescent) Markings, except that the charging source shall be 1 footcandle of fluorescent illumination for 60 minutes, and the minimum luminance shall be 5 milli-candelas per square meter after 90 minutes.
2. UL 1994, Standard for Luminous Egress Path Marking Systems.
3. An alternate standard deemed equivalent and approved by the Building Official.

718.14.5.11 Exit Stair Illumination. Exit enclosures where photo luminescent materials are installed shall be continuously illuminated for at least 60 minutes prior to periods when the building is occupied. Lighting control devices that automatically turn exit enclosure lighting on and off, based on occupancy, shall not be installed.

718.15 Elevators. Elevator installation and operation in high-rise buildings shall comply with EPCOT Standard 5-1 and Subsections 718.14.1 and 718.14.2.

718.15.1 Fire Service Access Elevator. In buildings with an occupied floor more than 120 feet above the lowest level of fire department vehicle access, a minimum of two fire service access elevator shall be provided in accordance with EPCOT Standard 5-1. Each fire service elevator shall have a capacity of not less than 3,500 pounds.

718.15.2 Occupant Evacuation Elevators. Reserved.

718.16 Acceptance Tests. Upon completion of a fire alarm system, the installation shall be subjected to a performance test to demonstrate its efficiency of operation.

B18 - 010

Proponent: Mike Rickabaugh, Deputy Manager, Building & Safety

720.11 Power Systems. The smoke control system shall be supplied with two sources of power. Primary power

shall be from the normal building power systems. Secondary power shall be from an approved emergency ~~standby~~ source complying with the EPCOT Electrical Code. The ~~standby power~~emergency source and its transfer switches shall be separate from the normal power transformers and switch gears and, when installed inside the building, ventilated directly to and from the exterior. When installed inside a building, the emergency ~~standby~~ power source and transfer switch shall be installed in a room enclosed with not less than 2~~1~~-hour fire-resistance-rated construction in accordance with Section 707 or horizontal assemblies constructed in accordance with Section 705, or both. The transfer to full emergency ~~standby~~ power shall be automatic and within 10 seconds of failure of the primary power system.

B18 - 011

Proponent: Jonathan Cantwell, Fire Protection Engineer

720.21 Elevator Hoistway Pressurization Alternative. Where elevator hoistway pressurization is provided in lieu of required enclosed elevator lobbies, the pressurization system shall comply with Subsections 720.21.1 through 720.21.11.

720.21.1 Pressurization Requirements.
Elevator hoistways shall be pressurized to maintain a minimum positive pressure of 0.10 inch of water and a maximum positive pressure of 0.25 inch of water with respect to adjacent occupied space on all floors. This pressure shall be measured at the midpoint of each hoistway door, with all elevator cars at the floor of recall and all hoistway doors on the floor of recall open and all other hoistway doors closed. The pressure differentials shall be measured between the hoistway and the adjacent elevator landing. The opening and closing of hoistway doors at each level must be demonstrated during this test. The supply air intake shall be from an outside, uncontaminated source located a minimum distance of 20 feet from any air exhaust system or outlet.

Exceptions:

1. On floors containing only Group R occupancies, the pressure differential is permitted to be measured between the hoistway and a dwelling unit or sleeping unit.
2. Where an elevator opens into a lobby enclosed in accordance with Subsection 5-1.401.2, the pressure differential is permitted to be measured between the hoistway and the space immediately outside the door(s) from the floor to the enclosed lobby.
3. The pressure differential is permitted to be measured relative to the outdoor atmosphere on floors other than the following:
   3.1. The fire floor.
   3.2. The two floors immediately below the fire floor.
   3.3. The floor immediately above the fire floor.
4. The minimum positive pressure of 0.10 inch of water and a maximum positive pressure of 0.25 inch of water with respect to occupied floors are not required at the floor of recall with the doors open.

720.21.1.1 Use of Ventilation Systems. Ventilation systems, other than hoistway supply air systems, are permitted to be used to exhaust air from adjacent spaces on the fire floor, two floors immediately below and one floor immediately above the fire floor to the building's exterior where necessary to maintain positive pressure relationships as required in Subsection 720.21.1 during operation of the elevator shaft pressurization system.

720.21.2 Rational Analysis. A rational analysis complying with Subsection 720.4 shall be submitted with the construction documents.

720.21.3 Ducts for System. Any duct system that is part of the pressurization system shall be protected with the same fire-resistance rating as required for the elevator shaft enclosure.

720.21.4 Fan System. The fan system provided for the pressurization system shall be as required by Subsections 720.21.4.1 through 720.21.4.4.

720.21.4.1 Fire Resistance. Where located within the building, the fan system that provides the pressurization shall be protected with the same fire-resistance rating required for the elevator shaft enclosure.

720.21.4.2 Smoke Detection. The Fan System Shall Be Equipped With A Smoke detector that will automatically shut down the fan system when smoke is detected within the system.

720.21.4.3 Separate Systems. A separate fan system shall be used for each elevator hoistway.

720.21.4.4 Fan Capacity. The supply fan shall be either adjustable with a capacity of not less than 1,000 cfm per door, or that specified by a registered design professional to meet the requirements of a designed pressurization system.

720.21.5 Standby Power. The pressurization system shall be provided with standby power in accordance with Section 2702.

720.21.6 Activation of Pressurization System. The elevator pressurization system shall be activated upon activation of either the building fire alarm system or the elevator lobby smoke detectors. Where both a building fire alarm system and elevator lobby smoke detectors are present, each shall be independently capable of activating the pressurization system.

720.21.7 Testing. Testing for performance shall be required in accordance with Subsection 720.18.8. System acceptance shall be in accordance with Subsection 720.19.

720.21.8 Marking and Identification. Detection and control systems shall be marked in accordance with Subsection 720.14.

720.21.9 Control Diagrams. Control diagrams shall be provided in accordance with Subsection 720.15.

720.21.10 Control Panel. A control panel complying with Subsection 720.16 shall be provided.

720.21.11 System Response Time. Hoistway pressurization systems shall comply with the requirements for smoke control system response time in Subsection 720.17.

B18 - 012

Proponent: Jonathan Cantwell, Fire Protection Engineer

Errata

803.1 (j) Except in Group R-3 occupancies, every boiler room, and every room containing an incinerator or liquefied petroleum gas or liquid fuel-fired equipment, shall have access to at least two means of egress, one of which maybe a ladder. (See Subsection 503.~~17~~18.)

B18 - 013

Proponent: Scott Brooks, WDW Design & Engineering

803.3 Arrangement of Exits and Exit Access Doorways.

(a) When only two exits or exit access doorways are required, they shall be placed a distance apart equal to not less than ~~one-fifth the perimeter of the area served~~ one-half of the length of the maximum overall diagonal dimension of the building or area to be served, measured in a straight line between the exits or exit access doorways from nearest edge to nearest edge.

Exception: Where a building is equipped throughout with an automatic sprinkler system in accordance with Section 715, the separation distance of the exits or exit access doorways shall not be less than one-third the length of the maximum overall diagonal dimension of the area served.

(b) Where three or more exits or exit access doorways are required, they shall be located so that at least two are placed a distance apart equal to ~~no less than one-fifth the perimeter of the area served, measured in a straight line between them~~ that required in Subsection 803.3(a). The others shall be placed a reasonable distance apart.

B18 - 014

Proponent: Mark Hinson, Chief Building Inspector

804.3 Hardware.

(a) Exit, exit access doors and gates required to serve as exit doors or exit access, shall be openable from the inside without the use of a key, tool or any special knowledge or effort. Manually operated flush bolts or surface bolts are prohibited. All hardware must be direct acting requiring no more than one operation. Double-cylinder dead bolts, requiring a key for operation on both sides, are prohibited on required means of egress doors unless the locking device is provided with a key that cannot be removed when the door is locked from the inside. A night latch, dead bolt or security device may be used on exit or exit access doors from a dwelling unit, hotel guest room or suite provided such devices are openable from the inside without the use of a key, tool, or any special knowledge or effort, and the device is mounted at a height not to exceed 48 inches above the finished floor. (See Section 814 for panic and fire exit hardware.)

Door handles, pulls, latches, locks and other operating devices on doors required to be accessible by the *EPCOT Accessibility Code* shall not require tight grasping, tight pinching or twisting of the wrist to operate.

Exception: A key-locking or twist/turn locking device may be used from the egress side on the main exterior exit door on Group A-3, A-4, A-5, B and I occupancies subject to all of the following:

1. There is a readily visible durable sign on or adjacent to the door stating "THIS EXIT TO REMAIN UNLOCKED WHEN THIS BUILDING IS OCCUPIED." The sign shall be in letters no less than 1 inch high on a contrasting background.
2. The locking device must be of a type that will be readily distinguishable as locked.
3. The main exit door is a single door or one pair of doors.
4. When unlocked, the door or both leaves of the pair must be free. The use of the key-locking device may be revoked by the Building Official for due cause.

(b) **Hardware Height.** Door handles, pulls, latches, locks and other operating devices shall be installed 34 inches minimum and 48 inches maximum above the finished floor in compliance with the *EPCOT Accessibility Code*.

Exception: Access doors or gates in barrier walls and fences protecting pools, spas and hot tubs shall be permitted to have operable parts of the release of latch on self-latching devices at 54 inches maximum above the finished floor or ground, provided the self-latching devices are not also self-locking devices operated by means of a key, electronic opener or integral combination lock.

~~(b)~~ (c) **Special Egress-Control Devices.** When approved by the Building Official, exit and exit access doors in A, E and H occupancies may be equipped with approved, listed special egress-control devices of the time-delay type, provided the building is protected throughout by an approved automatic sprinkler system and an approved automatic smoke detection system. Such devices shall conform to all of the following:

B18 – 015

Proponent: Scott Brooks, WDW Design & Engineering and Jonathan Cantwell, RCID FPE

Section 805

805.7 Construction.

(a) Corridor walls and ceilings shall be not less than 1-hour fire-resistive construction.

Exceptions:

1. Exterior Balcony Railings.
2. Corridors ~~having a tributary occupant load of 30 or less~~ in one story, single occupancy Group ~~B or~~ I.
3. Corridors formed by temporary partitions regulated by Subsection 709.2 that do not exceed ~~5~~ 6 feet, ~~9~~ 0 inches in height.
4. Corridor walls that are also exterior walls of a building.
5. Single tenant spaces or suites not exceeding 20,000 square feet limited to Group B office use only. Such spaces shall have either direct exits to the exterior or be served by a protected corridor with a fire resistance rating of not less than 1-hour, which provides direct access to exits. Each suite shall be separated from other parts of the building by walls constructed as tenant separations in accordance with Subsection 502.5(b), with a fire resistance rating of not less than 1-hour.

B18 - 016

Proponent: Jonathan Cantwell, Fire Protection Engineer

805.9 Use of Corridors. Storage, lockers, electronic equipment, panels, electronic panels or other obstructions shall not be permitted in corridors.

Exception: ~~Equipment, panels and other objects that do not obstruct the means of egress and~~Electrical boxes and fire alarm control panels that meet the requirements of the exception for Subsection 707.10.3.2~~(b)~~ and Section 307 of the *EPCOT Accessibility Code for Building Construction*.

B18 - 017

Proponent: Jonathan Cantwell, Fire Protection Engineer

906.2 Soil Investigation. Where the bearing capacity of the soil is not definitely known or is doubtful, or where the load imposed on the soil is unusual, the Building Official may require load tests or examination and evaluation of subsoil conditions by a Professional Engineer registered in the State of Florida. To determine the permitted safe bearing capacity, the soil may be tested by loading an area not less than 2 square feet to not less than twice the

maximum bearing capacity desired for use. Such load shall be sustained by the soil until no additional settlement takes place for a period of not less than 48 hours, so that such desired bearing capacity may be used. Examination of subsoil conditions may be required when believed to be necessary by the Building Official.

Exception: A soil investigation report is not required for temporary structures installed on compacted asphalt.

B18 - 018

Proponent: Jonathan Cantwell, Fire Protection Engineer

New Sections

1005.8 Glass in Handrails and Guards

(a) **Materials.** Glass used as a handrail assembly or a guard section shall be constructed of either single fully tempered glass, laminated fully tempered glass or laminated heat strengthened glass. Glazing in railing in-fill panels shall be of an approved safety glazing material that conforms to the provisions of Subsection 1005.3. For all glazing types, the minimum nominal thickness shall be 1/4 inch. Fully tempered glass and laminated glass shall comply with Category II of CPSC 16 CFR Part 1201 or Class A of ANSI Z97.1, listed in Chapter 35.

(b) **Loads.** The panels and their support system shall be designed to withstand the loads specified in Subsection 902.2(h). A safety factor of four shall be used.

(c) **Support.** Each handrail or guard section shall be supported by a minimum of three glass balusters or shall be otherwise supported to remain in place should one baluster panel fail. Glass balusters shall not be installed without an attached handrail or guard.

Exception: A top rail shall not be required where the glass balusters are laminated glass with two or more glass plies of equal thickness and the same glass type when approved by the Building Official. The panels shall be designed to withstand the loads specified in Section 902.

(d) **Parking Garages.** Glazing materials shall not be installed in handrails or guards in parking garages except for pedestrian areas not exposed to impact from vehicles.

(e) **Glass Supporting Top Rail.** When the top rail is supported by glass, the assembly shall be tested according to the impact requirements of ASTM E1996 and ASTM E1886. The top rail shall remain in place after impact.

1005.9 Glazing in Athletic Facilities. Reserved

1005.10 Glazing in Elevator Hoistways and Elevator Cars

(a) **Glass in Elevator Hoistway Enclosures.** Glass in elevator hoistway enclosures and hoistway doors shall be laminated glass conforming to ANSI Z97.1 or CPSC 16 CFR Part 1201.

(b) **Fire-Resistance-Rated Hoistways.** Glass installed in hoistways and hoistway doors where the hoistway is required to have a fire-resistance rating shall also comply with Section 703.

(c) **Glass Hoistway Doors.** The glass in glass hoistway doors shall be not less than 60 percent of the total visible door panel surface area as seen from the landing side.

(d) **Glass Vision Panels.** Glass in vision panels in elevator hoistway doors shall be permitted to be any transparent glazing material not less than 1/4 inches in thickness conforming to Class A in accordance with ANSI Z97.1 or Category II in accordance with CPSC 16 CFR Part 1201. The area of any single vision panel shall not be less than 24 square inches and the total area of one or more vision panels in any hoistway door shall be not more than 85 square inches.

(e) **Glass in Elevator Cars.** Glass in elevator car enclosures, glass elevator car doors and glass used for lining walls and ceilings of elevator cars shall be laminated glass conforming to Class A in accordance with ANSI Z97.1 or Category II in accordance with CPSC 16 CFR Part 1201.

Exception: Tempered glass shall be permitted to be used for lining walls and ceilings of elevator cars provided:

1. The glass is bonded to a nonpolymeric coating, sheeting or film backing having a physical integrity to hold the fragments when the glass breaks.
2. The glass is not subjected to further treatment such as sandblasting; etching; heat treatment or painting that could alter the original properties of the glass.

3. The glass is tested to the acceptance criteria for laminated glass as specified for Class A in accordance with ANSI Z97.I or Category II in accordance with CPSC 16 CFR Part 1201.

(f) **Surface Area.** The glass in glass elevator car doors shall be not less than 60 percent of the total visible door panel surface area as seen from the car side of the doors.

B18 - 019

Proponent: Jonathan Cantwell, Fire Protection Engineer & James Armagost, Principal fabrication Designer WDI

Rework Appendix D - Regulation of Signs and Outdoor Advertising Structures

SECTION D-101
ADMINISTRATIVE REQUIREMENTS

D-101.1 Scope. The requirements of this Appendix shall apply to outdoor signs and display structures as classified in Subsection D-101.2, hereafter constructed, erected, installed, altered, repaired or maintained.

D-101.2 Classification. Classification of signs and outdoor display structures shall be as follows:

(a) **Electric Sign.** A sign containing electrical wiring, but not including signs illuminated by an exterior light source.

~~1. Outdoor display structure controlled by externally operated electrical switches or breakers, with equipment and wiring suitable for conditions of outdoor installation.~~

~~2. An animated electric sign is an outdoor display structure with advertising message in motion, automatically controlled by externally operated switches, electrical circuit breakers, flashers and with incandescent or electric discharge lamps.~~

~~3.~~1. ~~An externally illuminated sign where message is in motion controlled by electric motors, usually with automatic controls.~~

(b) **Ground Sign.** Sign supported directly on the ground by braces, uprights or poles with live and dead loads transmitted to the ground.

(c) **Life Safety Sign.** Signs required for egress during an emergency in a building and other identification signs necessary for the safety of occupants.

(d) **Marquee Sign.** Sign attached to or hung from a marquee projecting from a building over public property.

(e) **Projecting Sign.** Sign affixed to building wall or structure projecting 12 inches or more beyond the building or structure, building line or property.

(f) **Roof Sign.** Sign constructed, erected or maintained on or above a roof or parapet wall of a building or structure.

(g) **Sign Structure**. Any structure which supports or is capable of supporting a sign as defined in this Code. A sign structure is permitted to be a single pole multiple poles, archway or independent structure and is not required to be an integral part of the building.

(h) **Temporary Sign.** Sign constructed of nonpermanent materials for which a permit has been issued for a period of not more than 90 days.

(i) **Wall Sign.** Sign attached to or erected against the wall of a building or structure with exposed face of the sign in a plane parallel to the plane of said wall and projecting less than 12 inches from the building or structure, building line or property line.

~~**D-101.3 Painted and Temporary Signs.** Signs painted directly on the exterior wall of a building or on other surface of a building or structure and temporary signs shall require a permit and approval of the Zoning Officer.~~

D-101.3 Reserved.

D-101.4 Criteria.

~~(a) Design and materials of construction of outdoor advertising signs and display structures shall be in accordance with the requirements of Chapters 9 and 10.~~

(a) Electrical signs shall be installed, operated and maintained in accordance with the requirements of the *EPCOT Electrical Code*, *UL 48 Standard for Electric Signs, UL 2161 Standard for Neon Transformers and Power Supplies* and this Appendix.

(b) Signs shall not be erected, constructed or maintained so as to obstruct any fire escape or any window or door or opening used as a means of egress or so as to prevent free passage from one part of a roof to any other part thereof. A sign shall not be attached in any form, shape or manner to a fire escape, nor be placed in such manner as to interfere with any opening required for ventilation.

~~Location, use and size of outdoor signs and advertising display structures shall be in accordance with the requirements of the Zoning Regulations.~~

~~(b)~~(c) A sign shall not be erected in a manner that would confuse or obstruct the view of or interfere with exit signs required by Chapter 8 or with official traffic signs, signals or devices. Signs and sign support structures, together with their supports, braces, guys and anchors, shall be kept in repair and in proper state of preservation.

D-101.5 Permits.

(a) ~~Outdoor advertising~~ Life safety signs require permitting.

(b) Other signs and display structures hereafter constructed, erected, installed, altered, repaired or maintained shall require a permit~~, application for which shall be filed with the Building Official in accordance with the requirements of Chapter 3.~~

Exception:

The following signs are exempt from the requirements to obtain a permit when not subject to wind loads. In no case shall the installation of a sign violate other provisions of this Code.

1. Painted non illuminated wall signs less than 40 square feet and do not exceed 35 lbs.
2. Projecting signs not exceeding 2.5 square feet.
3. Signs erected by transportation authorities.
4. Pole mounted signs that do not exceed 4 square feet and are located in non-accessible areas, protected by railing or landscape and do not project into an occupied area.

~~(a)~~(c) Application for a permit shall be filed in accordance with the requirements of Chapter 3 and ~~accomplished~~ accompanied by drawings, computations, stress diagrams and other information regarding location, construction, weight, materials and electrical equipment as required by the Building Official. If filed by other than the owner of the property, the application shall bear the owner's signature. Drawings and computations shall bear the signature of a Professional Engineer registered in the State of Florida.

~~(b)~~(d) Except for signs projecting over public property and roof signs, the Building Official may waive the requirement for drawings and computations when, in his opinion, public safety is not involved, and when the sign is less than 24 inches in either dimension.

D-201.2 Construction.

(b) Display surfaces of all types of signs may be of metal, glass or approved plastic when used in accordance with the requirements of this Code. Maximum areas of glass panels shall be as specified in Section 1005. Plastic used shall conform to the requirements of Section 1008 and individual panels of approved plastic shall not be more than 120 square feet in area. The dimensional limitation of 120 square feet shall not apply to sign facing sections made from flame-resistant-coated fabric (ordinarily known as "flexible sign face plastic") that weighs less than 20 ounces per square yard and that, when tested in accordance with NFPA 701, meets the fire propagation performance requirements of both Test 1 and Test 2 or that when tested in accordance with an approved test method, exhibits an average burn time of 2 seconds or less and a burning extent of 5.9 inches or less for 10 specimens.

D-201.3 Clearances and Location.

(e) Outdoor signs and advertising displays shall not project into an alley below a height of 165 feet above grade~~, nor more than 12 inches when the sign is located 16 feet above grade~~, but may project 36 inches when located more than 16 feet above grade.

SECTION D-301
REQUIREMENTS FOR SPECIAL TYPES OF SIGNS

D-301.1 Electric Signs.

(a) Electric sign structures~~s~~ shall be of noncombustible material~~, except that the Building Official may authorize the use of approved plastics as specified in Chapter 10~~. Wood or approved plastic may be used for surface decoration if located at least 2 inches from the nearest current-carrying part of the sign.

(b) Electric signs shall not display flashing red lights, nor use the words "Stop," "Go" or "Danger," nor shall an electric sign be an imitation of an official traffic signal or road sign.

~~(c) The enclosed shell of electric signs shall be water tight, except for service holes, which shall be fitted with tight covers.~~

~~(d)~~(c) The sign body and/or fabricated enclosure of an electric sign, intended for installation in a damp or wet location, shall be provided with drain openings in accordance with UL 48.

(d) Signs intended for installation in damp or wet locations need not comply with the drain opening requirements of (c) provided that they comply with either:

1. The requirements for a Type 3R or better enclosures as defined in the UL 50 *Standard for Enclosures for Electrical Equipment, Non-Environmental Considerations*,; or

2. The Rain Test described UL 879 *Standard for Electric Sign Components*, where there is no indication of water entering the units.

(e) Electric signs are required to be listed/marked to include the manufacturer's name, trade name, trademark or identifier and include electrical ratings and wiring methods.

(f) Each sign and outline lighting system, feeder circuit or branch circuit supplying a sign, outline lighting system, or skeleton tubing shall be controlled by an externally operable switch or circuit breaker that opens all ungrounded conductors and controls no other load.

D-301.2 Ground Signs.

(a) **Height restrictions.** The structural frame of ground signs shall not be erected of combustible materials to a height of more than 35 feet above the ground. Ground signs constructed entirely of noncombustible material shall not be erected to a height of greater than 100 feet above the ground. Greater heights are permitted where approved and located so as not to create a hazard or danger to the public.
~~Ground signs may be of any material meeting the requirements of this Code and Appendix D.~~

~~(a)~~(b) Ground signs shall be constructed of materials, resistant to deterioration from rot, termites and borers. Wood used below the ground shall be pressure impregnated as required in Section 1010. Steel used below grade shall be encased in concrete or all elements below grade are stainless steel. Aluminum used below grade or fastened to a concrete foundation shall have a barrier coating of epoxy or approved equal to prevent aluminum-concrete chemical reaction.~~.~~

~~(b) Ground signs shall be limited in size according to the Zoning Regulations.~~

(c) Ground signs shall be erected so that the face of the sign paralleled to or at an angle not more than 30 degrees with the lot line shall be not less than 3 feet from the line. The ends of a sign at an angle of 30 degrees or more with adjacent lot lines may be extended to the lot line.

(d) Lighting reflectors may project beyond the face of the sign.

(e) Ground signs shall not project over public property.

~~(f) The owner or lessee of a ground sign constructed on a vacant lot shall keep the lot clean and sanitary and free from unsightly conditions.~~

D-301.4 Projecting Signs.

(a) Signs projecting more than 12 inches from the building shall be constructed of noncombustible materials and shall be attached to the building or structure by metal bolts, anchors, supports, chains, guys or rods. Staples and nails shall not be used.

(b) Dead and wind loads shall be supported by chains, guys or rods not less than $^{3}/_{8}$ inch in diameter at an angle of 45 degrees with the horizontal to resist the dead load, and at an angle of 45 degrees or more with the face of the sign to resist the wind pressure. When the area of the face of the sign exceeds 30 square feet, two supports shall be provided on each side not more than 8 feet apart to resist the wind pressure.

Exception: Signs that have been engineered to consider resisting wind and dead loads.

~~(b)~~(c) Supports of projecting signs shall be secured to a bolt or expansion screw that will develop the strength of the supporting chains, guys or steel rods with a minimum $^{5}/_{8}$-inch bolt or lag screw. Turnbuckles shall be placed in chains, guys or steel rods that support projecting signs.

~~(c)~~(d) Chains, cables, guys or rods used to support live and dead loads of projecting signs may be fastened to solid masonry walls with expansion bolts or with machine screws in iron supports, but supports shall not be attached to a parapet wall. Where supports are fastened to walls of wood, anchor bolts shall pierce the wall and shall be secured on the inside.

~~(d)~~(e) Projecting signs shall not project above the roof or cornice wall above the roof level, except that signs installed at right angle to the wall and not over 18 inches in horizontal width may project 2 feet above the roof. A sign projecting from the corner of a building parallel to the vertical line or the corner shall be considered to be at a right angle to the building.

D-301.5 Roof Signs.

(a) Roof signs shall be designed in accordance with the requirements of Chapter 9. Loads shall be distributed to the structural frames and to the foundation without overstressing the structural members.

(b) Roof sign structure~~s~~ shall be constructed of noncombustible materials throughout, except as specified in Subsection D-201.2(b).

(c) Roof signs shall be constructed to leave a clear space of not less than 1 foot clearance between the roof level and the lowest part of the signs.

Exception: The bottom of the sign can be set at 2 inches above the roof line for removable signs that do not exceed 40 square feet and are mechanically fastened to the vertical supports that allow the sign body to be easily removed, leaving the vertical supports with a minimum of 12 inches clear above the roof line.

Signs larger than 40 square feet may have an escutcheon that is mechanically fastened to the sign structure, leaving not less than 2 inches between the bottom of the escutcheon and the roof line. The escutcheon is to be constructed to be easily removed for future roof repairs.

(d) No part of a roof sign or structure shall project beyond the exterior walls of the building.

(e) Roof signs more than 40 square feet in area shall be supported by steel, aluminum or concrete, fire protected when required for the type of construction.

D-301.6 Wall Signs.

(a) Wall signs shall extend not more than 12 inches from the building to which they are attached.

(b) Wall signs attached to exterior walls of solid masonry, concrete or stone shall be attached by metal anchors, bolts or expansion screws not less than 3/8-inch diameter embedded at least 5 inches.

Exception: Signs that have been engineered to consider resisting dead and wind loads.

(c) Wall signs shall not be supported by anchorage to an unbraced wall.

(d) Temporary wall signs of cloth in combustible frames shall be permitted for not more than 30 days and such temporary signs shall be not more than 100 square feet in area.

(e) Wall signs which have an area exceeding 40 square feet shall be constructed of metal or other approved noncombustible material, except for nailing rails and as provided for in Subsection D-201.2(b).

B18 - 020

Proponent: Jonathan Cantwell, Fire Protection Engineer

I-201.2 Covered Walkways. A covered walkway may be of any type of construction permitted by this Code when the walls and openings at the point of connection of the walkway to the building are protected in accordance with the requirements of Chapter 7 to prevent spread of fire from one building to another. (See Appendix K.) The covered walkway shall not contribute to the building area or the number of stories or height of connected buildings.

(a) Covered walkways shall be a minimum of 10 feet in length and 44 inches in width. The total width shall not exceed 30 feet.
(b) The length of exit access travel shall not exceed 300 feet.
(c) Covered walkways over a public way shall also comply with Section 402.
(d) See Section 401 for requirements for the protection of pedestrians during construction or demolition.

I-201.3 Enclosed Walkways. An enclosed walkway shall be of the type of construction required for the buildings connected by the walkway. Separation between the enclosed walkway and the building to which it is connected, except when used as a required exit, shall be of not less than 21-hour fire-resistive construction. Openings in the walls of the building to which the enclosed walkway is connected shall be protected by an approved opening protective having a 1½-hour fire-resistive rating. fixed or automatic self-closing protective having a 2-hour fire-resistive rating. The enclosed walkway shall not contribute to the building area or the number of stories or height of connected buildings.

(a) Enclosed walkways shall be a minimum of 10 feet in length and 44 inches in width. The total width shall not exceed 30 feet.
(b) The length of exit access travel shall not exceed 200 feet.
(c) Enclosed walkways shall be mechanically or naturally ventilated.
(d) Enclosed walkways over a public way shall also comply with Section 402.

I-201.4 Tunneled Walkways. A tunneled walkway shall be of a type of noncombustible construction or construction approved by the Building Official for location underground. Separation between the pedestrian walkway or tunneled walkway and the buildings to which it is connected shall be of not less than 2-hour fire-resistive construction. Openings in the walls shall be

protected by an approved opening protective having a 1½-hour fire-resistive rating.

B18 - 021

Proponent: Jonathan Cantwell, Fire Protection Engineer

New Section J-701 KIOSKS

(Add "Kiosk" to S-1 on Table 5.1, move shed to S-4 on Table 5.1, and add unoccupied manufactured building to S-4 on Table 5.1)

Table 5.1
Group S – Satellite Structures
S-1 Private garages, carports, greenhouses, ~~sheds,~~ cabanas, bath houses, agricultural buildings, shade structures, ~~and~~ guard shacks and kiosks.

S-4 Mobile homes, campers, ~~and~~ trailers, unoccupied manufactured buildings and sheds.

J-501.1 Scope. This Section shall apply to Group S-4 occupancies, including mobile homes, unoccupied manufactured buildings, recreational vehicles, ~~and~~ trailers and sheds.

J-601.1 Occupancy. Manufactured buildings shall have their occupancy classification based on the actual use of the structure.

(Note: Renumber rest of section)

J-701.1 Requirements. Kiosks and similar structures (temporary or permanent) shall meet the following requirements:

(a) Combustible kiosks or other structures shall not be located within buildings unless constructed of the following materials:
   1. Fire-retardant-treated wood complying with Section 1010.
   2. Foam plastics having a maximum heat-release rate not greater than 100 kilowatts when tested in accordance with the exhibit booth protocol in UL 1975.
   3. Aluminum composite material (ACM) having a flame spread index of not more than 25 and a smoke-developed index of not more than 450 when tested as an assembly in the maximum thickness intended for use in accordance with ASTM E84 or UL 723.

(b) Where located within a building and a roof or cover equal to or greater than 16 square feet is provided on the kiosk or similar structure, automatic fire suppression and detection must be installed within the kiosk. Standalone kiosks outdoors do not require automatic fire suppression.

(c) Kiosks installed outside of buildings shall be designed to meet the wind design criteria in accordance Section 904 for permanent or temporary structures respectively.

B18 - 022

Proponent: Jonathan Cantwell, Fire Protection Engineer

N-301.2 Location on Property. Permanent membrane structures and tents shall have a horizontal separation greater than 30 feet.

> **Exception:** Horizontal separations of 30 feet or less shall be permitted when an exterior wall is provided in accordance with Table 6.2 and the wall has a minimum fire resistance rating of 1 hour. The exterior wall shall extend from ground level to the height where the slope of the tangent to the membrane structure or tent exceeds 30 degrees from the vertical, but in no case is less than 8 feet above the first-floor level.

There shall be a 15-foot minimum clear distance between temporary tents and permanent structures.

Temporary tents having an aggregate area of 15,000 square feet or more shall be located not less than 25 feet from any other tent or 50 feet from any building or structure measured from the sidewall of the tent.

> **Exception:** ~~When approved by the Building Official,~~ Exterior covered walkways without sidewalls ~~passageways or corridors~~ may be used between tents or structures when not exceeding 15 feet in width and shall comply with all other separation requirements of this Section.

B18 - 023

Proponent: Jonathan Cantwell, Fire Protection Engineer

Note: New Section Pointer from 5-1.101.2 as a result of **B18 - 018**.

5-1.101.2 Criteria.

(e) Glass used in elevator hoistways and elevator cars shall comply with Subsection 1005.10.

B18 - 024

Proponent: Ella Hickey, Data Systems Manager & Office Supervisor

5-1.101.6 Permits.

(a) Application for a permit to install, relocate, alter or operate any device within the scope of this Standard shall be filed with the Building Official in accordance with the requirements of Chapter 3. When the device is approved by the Building Official, he shall issue a permit subject to the following conditions:

1. Servicing repairs and replacements for normal maintenance made with parts using equivalent design and materials, and having equivalent strength and safety to the parts replaced, shall not require a permit, but shall be inspected and approved by the Building Official.

~~2.~~ ~~Installation and alteration of several transporting devices by the same owner on the same property may be considered as one installation in calculating the permit fee.~~

~~3~~2. Material hoists for construction operations shall comply with the requirements of Appendix F and with the requirements of Florida Statute 442. Such hoists may be constructed without a permit, but shall be approved by the Building Official. Men shall not be permitted to ride on material hoists, except as provided in the regulations of Florida Statute 442.

~~4~~3. No requirement in this Section nor in the manufacturers' specifications shall be construed as exempting a device that is within the scope of this Standard from compliance with the safety requirements of the District.

B18 - 025

Proponent: Jonathan Cantwell, Fire Protection Engineer

5-1.401.1 (c) In buildings ~~of~~ housing all occupancies, elevator enclosures and machine rooms shall be of 2-hour fire resistive construction.

B18 - 026

Proponent: Jonathan Cantwell, Fire Protection Engineer

~~**5-1.401.2 Venting of Hoistways.**~~

~~**(a) Vents Required.** Hoistways of elevators serving more than two floors or 25 feet between top and bottom landings shall be provided with means for venting smoke and hot gases to the outer air in case of fire.~~

~~**(b) Locations of Vents.** Vents shall be located at the top of the hoistway and shall open either directly to the outer air or through noncombustible ducts to the outer air. Noncombustible ducts shall be permitted to pass through the elevator machine room, provided that portions of the ducts located outside the hoistway or machine room are enclosed by construction having not less than the fire-resistance rating required for the hoistway. Holes in the machine room floors for the passage of ropes, cables or other moving elevator equipment shall be limited as not to provide greater than 2 inches of clearance on all sides.~~

~~(c) **Area of Vents.** The area of the vents shall be not less than 31/2 percent of the area of the hoistway, nor less than 3 square feet, for each elevator car, whichever is greater. Of the total required vent area, not less than one-third shall be permanently open or automatically opened by a damper.~~

~~**Note:** A hinged damper, which will open under a small amount of pressure, is considered a permanently open vent.~~

~~**Exceptions:**~~

~~1. Where mechanical ventilation providing equivalent venting of the hoistway is provided, the required vent area may be reduced subject to the following:~~

~~1.1. The building is not a hotel, apartment house, hospital or similar building with overnight sleeping quarters.~~

~~1.2. The hoistway or machine room is so located that it has no outside exposure.~~

~~1.3. The hoistway does not extend to the top of the building.~~

~~1.4. The hoistway or machine room exhaust fan is automatically reactivated by thermostatic means.~~

~~2. The total required vent area shall not be required to be permanently open where all the vent openings automatically open on detection of smoke in the elevator lobbies or hoistway, on power failure and on activation of a manual override control. The manual override control shall be capable of opening and closing the vents and shall be located in an approved location.~~

5-1.401.2 Elevator Lobbies and Hoistway Protection.

(a) **Where Required.** Elevator hoistway openings and enclosed elevator lobbies shall be provided where an elevator hoistway connects more than three stories.

Exceptions:

1. Protection of elevator hoistway door openings is not required where the elevator serves only open parking garages in accordance with Subsection 508.5.
2. Protection of elevator hoistway door openings is not required at the level(s) of exit discharge.
3. Enclosed elevator lobbies and protection of elevator hoistway door openings are not required on levels where the elevator hoistway opens to the exterior.
4. Where an area of refuge is required and an enclosed elevator lobby is provided to serve as an area of refuge, the enclosed elevator lobby shall comply with the *EPCOT Accessibility Code*.
5. Where fire service access elevators are provided, enclosed elevator lobbies shall comply with Subsection 5-1.402.

(b) **Hoistway Opening Protection.** Where required protection of the elevator hoistway door opening, the protection shall be provided by one of the following:

1. An enclosed elevator lobby shall be provided at each floor to separate the elevator hoistway shaft enclosure doors from each floor by fire-resistance rated walls in accordance with Section 707. In addition, doors protecting openings in the elevator lobby enclosure walls shall comply with Section 704 as required for corridor walls. Penetrations of the enclosed elevator lobby by ducts and air transfer openings shall be protected as required for corridors in accordance with Section 707.
2. Additional doors shall be provided at each elevator hoistway door opening that are readily openable from the car side without a key, tool, special knowledge or effort. Such door shall comply with the smoke and draft control door assembly requirements in Section 704 when tested in accordance with UL 1784 without an artificial bottom seal.
3. The elevator hoistway shall be pressurized in accordance with Subsection 720.21.

(c) **Means of Egress.** Elevator lobbies shall be provided with at least one means of egress complying with Chapter 10 and other provisions in this Code. Egress through an elevator lobby shall be permitted. Access to not less than one of the required exits shall be provided without travel through the enclosed elevator lobbies. Where the path of exit access travel passes through an enclosed elevator lobby, the level of protection required for the enclosed elevator lobby is not required to be extended to the exit unless direct access to an exit is required by other sections of this Code.

B18 - 027

Proponent: Brian Neeley, Elevator Inspector

5-1.401.19 ~~Wheelchair~~ Platform Lifts. Platform lifts shall conform to the *EPCOT Accessibility Code for Building Construction*; Chapters 553 and 399 of the Florida Statutes; ~~ASME A17.1~~ ASME A18.1 and A17.5; and the ~~NEC~~*National Electrical Code*.

~~A lift shall be provided with a recessed folding seat and seat belt to accommodate a person not in a wheelchair.~~

A sign shall state ~~with the international symbol for physically challenged persons with letters not less than 1/4 inch high stating~~: "PHYSICALLY DISABLED PERSONS ONLY. NO FREIGHT"~~, NO STANDING, PASSENGER MUST BE SEATED BEFORE OPERATING LIFT~~ in letters not less than 0.25 inches high and shall include the international symbol of accessibility. The passenger restricting-sign shall be securely fastened in a conspicuous place ~~inside the lift~~ on the platform.

B18 - 028

Proponent: Brian Neeley, Elevator Inspector

~~**5-1.401.20 Hydraulic Elevator Brake Annual Test.** No load test shall be performed on the electrical and mechanical parts on a brake system. A written record and data tag indicating the dates of inspection must be maintained on each unit, available for review by the inspector.~~

(Note: Renumber remaining Section.)

B18 - 029

Proponent: Brian Neeley, Elevator Inspector

~~**5-1.401.21 Hydraulic Elevator Brake Five-Year Test.** A full load test shall be performed on the electrical and mechanical parts on the brake system. A written record and data tag indicating the inspection must be maintained on each unit, available for review by the inspector.~~

(Note: Renumber remaining Section.)

B18 - 030

Proponent: Brian Neeley, Elevator Inspector

~~**5-1.401.22 Hydraulic Elevator Brake Run-By.** Minimum bottom car run-by shall not be less than 1 inch for operating speed in down direction not exceeding 100 feet per minute and 3 inches for operating speed in the down direction exceeding 100 feet per minute in accordance with ASME A17.1 Rule 8.11.3.4.4.~~

(Note: Renumber remaining Section.)

B18 – 031

Proponent: Mike Rickabaugh – Deputy Manager

5-1.402 Fire Service Access Elevator. Elevators installed and operating in high rise buildings with an occupied floor more than 120 feet above the lowest fire department vehicle access shall have, at a minimum, ~~one~~ two fire service access provided in accordance with this Section. Every floor of the building shall be served by a fire service access elevator. Except as modified in this Section, the fire service access elevator shall be installed in accordance with this Chapter and ASME A17.1/CSA B44.

Accessibility

AC18 - 001

Errata

Advisory 404.2.9 Door and Gate Opening Force. The maximum force pertains to the continuous application of force necessary to fully open a door, not the initial force needed to overcome the inertia of the door. It does not apply to the force required to retract bolts or to disengage other devices used to keep the door in a closed position.

Florida law, Section 553.504(~~63~~), F.S., establishes requirements for exterior door opening force.

Electrical

E18 – 001

80.2 Definitions. The following words and phrases, when used in this Code, shall have the meaning as indicated in this Section:

(d) **National Electrical Code.** The *National Electrical Code*, ~~2011~~ 2014 Edition, as published by the National Fire Protection Association (NFPA) and further identified as ANSI/NFPA 70-~~2011~~ 2014 by the American National Standards Institute (ANSI).

Fire Prevention

FP18 – 001

Replace entire EPCOT Fire Prevent Code with the following:

SECTION A-101
ADMINISTRATION

A-101.1 Title. This document shall be known as the *EPCOT Fire Prevention Code* and will be referred to as this Code.

A-101.2 Legality. The *Florida Fire Prevention Code*, as adopted by Florida State Statute 633.20 is legally a part of this Code and their provisions shall be enforced by the Fire Official. Any reference to the *EPCOT Fire Prevention Code* shall be deemed a reference to the *Florida Fire Prevention Code*.

Fuel Gas

None

Mechanical

M18 – 001

Proponent: Scott Brooks, WDW Design & Engineering

Section 504

504.7 Minimum Velocity. Duct systems shall be designed and installed in a manner that provides an air

velocity within the duct system of not less than 1,500 feet per minute.

Exception: Net exhaust volumes for new and existing installations may be reduced to a minimum of 500 feet per minute during part-load cooking conditions, where engineered or listed, multispeed or variable-speed controls automatically operate the exhaust system to maintain capture and removal of cooking effluents as required by this Section. For new installations, the duct shall be insulated in its entirety to an R-value not less than R-10. Insulation materials shall be suitable for use with a grease duct system. Exhaust air velocity may not be reduced below the minimum specified in this section during part-load cooking conditions.

PLUMBING

P18 – 001

Proponent: Scott Brooks, WDW Design & Engineering

Section 802

802.3.3 Floor Sinks. Floor sinks shall be permitted as indirect waste receptors, provided they have a removable basket strainer or beehive strainer~~, and the flood level rim of the fixture is 1/4 inch above finished floor~~. Floor drains are not acceptable as indirect waste receptors.

Exception: Floor drains with strainers that are 3 inches may be used as an indirect waste receptor, provided a funnel is used as an integral part of the strainer.