

CHAPTER 7

ALTERATIONS—LEVEL 2

SECTION 701 GENERAL

701.1 Scope. Level 2 *alterations* as described in Section 404 shall comply with the requirements of this chapter.

Exception: Buildings in which the reconfiguration is exclusively the result of compliance with the accessibility requirements of Section 605 shall be permitted to comply with Chapter 6.

701.2 Alteration Level 1 compliance. In addition to the requirements of this chapter, all work shall comply with the requirements of Chapter 6.

701.3 Compliance. All new construction elements, components, systems, and spaces shall comply with the requirements of the *Florida Building Code, Building*.

Exceptions:

1. Windows may be added without requiring compliance with the light and ventilation requirements of the *Florida Building Code, Building*.
2. Newly installed electrical equipment shall comply with the requirements of Section 708.
3. The length of dead-end corridors in newly constructed spaces shall only be required to comply with the provisions of Section 705.6.
4. The minimum ceiling height of the newly created habitable and occupiable spaces and corridors shall be 7 feet (2134 mm).

SECTION 702 SPECIAL USE AND OCCUPANCY RESERVED

SECTION 703 BUILDING ELEMENTS AND MATERIALS

703.1 Scope. The requirements of this section are limited to work areas in which Level 2 *alterations* are being performed, and shall apply beyond the *work area* where specified.

703.2 Vertical openings. Existing vertical openings shall comply with the provisions of Sections 703.2.1, 703.2.2, and 703.2.3.

703.2.1 Existing vertical openings. All existing interior vertical openings connecting two or more floors shall comply with the appropriate sections of the *Florida Fire Prevention Code*.

Exceptions:

1. One- and two-family dwellings.

2. Group S occupancies where vertical opening protection is not required for open parking garages and ramps.

703.2.2 Supplemental shaft and floor opening enclosure requirements. Where the *work area* on any floor exceeds 50 percent of that floor area, the enclosure requirements of Section 703.2 shall apply to vertical openings other than stairways throughout the floor.

Exception: Vertical openings located in tenant spaces that are entirely outside the *work area*.

703.2.3 Supplemental stairway enclosure requirements. Where the *work area* on any floor exceeds 50 percent of that floor area, stairways that are part of the means of egress serving the *work area* shall, at a minimum, be enclosed with smoke-tight construction on the highest *work area* floor and all floors below.

Exception: Where stairway enclosure is not required by the *Florida Building Code* or the *Florida Fire Prevention Code*.

703.3 Smoke barriers. Smoke barriers in Group I-2 occupancies shall be installed where required by Sections 703.3.1 and 703.3.2.

703.3.1 Compartmentation. See Section 407 of the *Florida Building Code, Building*.

703.3.2 Fire-resistance rating. The smoke barriers shall be constructed in accordance with the *Florida Building Code, Building* or the *Florida Fire Prevention Code*.

703.4 Interior finish. The interior finish of walls and ceilings in exits and corridors in any *work area* shall comply with the requirements of the *Florida Building Code, Building*.

Exception: Existing interior finish materials that do not comply with the interior finish requirements of the *Florida Building Code, Building* shall be permitted to be treated with an approved fire-retardant coating in accordance with the manufacturer's instructions to achieve the required rating.

703.4.1 Supplemental interior finish requirements. Where the *work area* on any floor exceeds 50 percent of the floor area, Section 703.4 shall also apply to the interior finish in exits and corridors serving the *work area* throughout the floor.

Exception: Interior finish within tenant spaces that are entirely outside the *work area*.

703.5 Guards. The requirements of Sections 703.5.1 and 703.5.2 shall apply in all *work areas*.

703.5.1 Minimum requirement. Every portion of a floor, such as a balcony or a loading dock, that is more than 30 inches (762 mm) above the floor or grade below and is not provided with guards, or those in which the existing guards

are judged to be in danger of collapsing, shall be provided with guards.

Exception: Guards are not required for the following locations:

1. On the loading side of loading docks or piers.
2. On the audience side of stages and raised platforms, including steps leading up to the stage and raised platforms.
3. On raised stage and platform floor areas, such as runways, ramps and side stages used for entertainment or presentations.
4. At vertical openings in the performance area of stages and platforms.
5. At elevated walking surfaces appurtenant to stages and platforms for access to and utilization of special lighting or equipment.
6. Along vehicle service pits not accessible to the public.
7. In assembly seating where guards in accordance with Section 1028.14 are permitted and provided.

703.5.2 Design. Where there are no guards or where existing guards must be replaced, the guards shall be designed and installed in accordance with the *Florida Building Code, Building*.

Exception: Where existing guards are replaced, the design may match the existing design.

SECTION 704 FIRE PROTECTION

704.1 Scope. The requirements of this section shall be limited to work areas in which Level 2 alterations are being performed, and where specified they shall apply throughout the floor on which the work areas are located or otherwise beyond the *work area*.

704.1.1 Corridor ratings. Where an approved automatic sprinkler system is installed throughout the story, the required fire-resistance rating for any corridor located on the story shall be permitted to be reduced in accordance with the *Florida Building Code, Building*. In order to be considered for a corridor rating reduction, such system shall provide coverage for the stairwell landings serving the floor and the intermediate landings immediately below.

704.2 Automatic sprinkler systems. Automatic sprinkler systems shall be provided in accordance with the requirements of Sections 704.2.1 through 704.2.5. Installation requirements shall be in accordance with the *Florida Building Code, Building*.

704.2.1 High-rise buildings. See Section 403 of the *Florida Building Code, Building*.

704.2.1.1 Supplemental automatic sprinkler system requirements. Reserved.

704.2.2 Groups A, B, E, F-1, H, I, M, R-1, R-2, R-4, S-1 and S-2. Reserved.

704.2.2.1 Mixed uses. Reserved.

704.2.3 Windowless stories. Work located in a windowless story, as determined in accordance with the *Florida Building Code, Building*, shall be sprinklered where the work area is required to be sprinklered under the provisions of the *Florida Building Code, Building* as a newly constructed building.

704.2.4 Other required suppression systems. In buildings and areas listed in Table 903.2.11.6 of the *Florida Building Code, Building* or the *Florida Fire Prevention Code*, work areas that include exits or corridors shared by more than one tenant or serving an occupant load greater than 30 shall be provided with sprinkler protection under the following condition:

The work area is required to be provided with automatic sprinkler protection in accordance with the *Florida Building Code, Building*, applicable to new construction.

704.2.5 Supervision. Fire sprinkler systems required by this section shall be supervised by one of the following methods:

1. Approved central station system in accordance with NFPA 72;
2. Approved proprietary system in accordance with NFPA 72;
3. Approved remote station system of the jurisdiction in accordance with NFPA 72.

Exception: Supervision is not required for the following:

1. Underground gate valve with roadway boxes.
2. Halogenated extinguishing systems.
3. Carbon dioxide extinguishing systems.
4. Dry and wet chemical extinguishing systems.
5. Automatic sprinkler systems installed in accordance with NFPA 13R where a common supply main is used to supply both domestic and automatic sprinkler systems and a separate shutoff valve for the automatic sprinkler system is not provided.

704.3 Standpipes. Where the *work area* includes exits or corridors shared by more than one tenant and is located more than 50 feet (15 240 mm) above or below the lowest level of fire department access, a standpipe system shall be provided. Standpipes shall have an approved fire department connection with hose connections at each floor level above or below the lowest level of fire department access. Standpipe systems shall be installed in accordance with the *Florida Building Code, Building*.

Exceptions:

1. No pump shall be required provided that the standpipes are capable of accepting delivery by fire department apparatus of a minimum of 250 gallons per minute (gpm) at 65 pounds per square inch (psi) (946 L/m at 448KPa) to the topmost floor in buildings equipped throughout with an automatic sprinkler sys-

tem or a minimum of 500 gpm at 65 psi (1892 L/m at 448KPa) to the topmost floor in all other buildings. Where the standpipe terminates below the topmost floor, the standpipe shall be designed to meet (gpm/psi) (L/m/KPa) requirements of this exception for possible future extension of the standpipe.

- The interconnection of multiple standpipe risers shall not be required.

704.4 Fire alarm and detection. An approved fire alarm system shall comply with the appropriate sections of the *Florida Fire Prevention Code* for existing buildings.

704.4.1 Occupancy requirements. Reserved.

704.4.1.1 Group E. Reserved.

704.4.1.2 Group I-1. Reserved.

704.4.1.3 Group I-2. Reserved.

704.4.1.4 Group I-3. Reserved.

704.4.1.5 Group R-1. Reserved.

704.4.1.6 Group R-2. Reserved.

704.4.1.7 Group R-4. Reserved.

704.4.2 Supplemental fire alarm system requirements. Reserved.

704.4.3 Smoke alarms. Individual sleeping units and individual dwelling units in any *work area* in Group R-1, R-2, R-3, R-4, and I-1 occupancies shall be provided with smoke alarms in accordance with the *Florida Fire Prevention Code*.

Exception: Interconnection of smoke alarms outside of the rehabilitation *work area* shall not be required.

SECTION 705 MEANS OF EGRESS

705.1 Scope. The requirements of this section shall be limited to work areas that include exits or corridors shared by more than one tenant within the *work area* in which Level 2 alterations are being performed, and where specified they shall apply throughout the floor on which the work areas are located or otherwise beyond the *work area*.

705.2 General. The means of egress shall comply with the requirements of this section.

Exceptions:

- Where the *work area* and the means of egress serving it complies with the *Florida Fire Prevention Code*.
- Means of egress conforming to the requirements of the *Florida Building Code, Building* and the *Florida Fire Prevention Code* under which the building was constructed shall be considered compliant means of egress if, in the opinion of the code official, they do not constitute a distinct hazard to life.

705.3 Number of exits. The number of exits shall be in accordance with the appropriate sections of the *Florida Fire Prevention Code*.

Exception: Building of Group R-3 occupancies shall comply with the *Florida Building Code, Building*.

705.3.1 Minimum number. Reserved.

705.3.1.1 Single-exit buildings. Reserved.

705.3.1.2 Fire escapes required. Fire escapes shall comply with the appropriate sections of the *Florida Fire Prevention Code*.

705.3.1.2.1 Fire escape access and details. Reserved.

705.3.1.2.2 Construction. Reserved.

705.3.1.2.3 Dimensions. Reserved.

705.3.2 Mezzanines. Travel distance for mezzanines shall comply with Chapter 10 of the *Florida Building Code, Building*.

705.3.3 Main entrance—Group A. All buildings of Group A with an occupant load of 300 or more shall be provided with a main entrance capable of serving as the main exit with an egress capacity of at least one half of the total occupant load. The remaining exits shall be capable of providing one half of the total required exit capacity.

Exception: Where there is no well-defined main exit or where multiple main exits are provided, exits shall be permitted to be distributed around the perimeter of the building provided that the total width of egress is not less than 100 percent of the required width.

705.4 Egress doorways. Egress doorways in any *work area* shall comply with Sections 705.4.1 through 705.4.5.

705.4.1 Two egress doorways required. Work areas shall be provided with two egress doorways in accordance with the requirements of Sections 705.4.1.1 and 705.4.1.2.

705.4.1.1 Occupant load and travel distance. In any *work area*, all rooms and spaces having an occupant load greater than 50 or in which the travel distance to an exit exceeds 75 feet (22 860 mm) shall have a minimum of two egress doorways.

Exception: Storage rooms in Group S1 and S2 occupancies having a maximum occupant load of 10.

705.4.1.2 Group I-2. In buildings of Group I-2 occupancy, any patient sleeping room or suite of patient rooms greater than 1,000 square feet (93 m²) within the *work area* shall have a minimum of two egress doorways.

705.4.2 Door swing. In the *work area* and in the egress path from any *work area* to the exit discharge, all egress doors serving an occupant load greater than 50 shall swing in the direction of exit travel.

705.4.2.1 Supplemental requirements for door swing. Where the *work area* exceeds 50 percent of the floor

area, door swing shall comply with Section 705.4.2 throughout the floor.

Exception: Means of egress within or serving only a tenant space that is entirely outside the *work area*.

705.4.3 Door closing. In any work area, all doors opening onto an exit passageway at grade or an exit stair shall be self-closing or automatically closing by listed closing devices.

Exceptions:

1. Where exit enclosure is not required by the *Florida Building Code, Building*.
2. Means of egress within or serving only a tenant space that is entirely outside the *work area*.

705.4.3.1 Supplemental requirements for door closing. Where the *work area* exceeds 50 percent of the floor area, doors shall comply with Section 705.4.3 throughout the exit stair from the *work area* to, and including, the level of exit discharge.

705.4.4 Panic hardware. In any *work area*, and in the egress path from any *work area* to the exit discharge, in buildings or portions thereof of Group A assembly occupancies with an occupant load greater than 100, all required exit doors equipped with latching devices shall be equipped with approved panic hardware.

705.4.4.1 Supplemental requirements for panic hardware. Where the *work area* exceeds 50 percent of the floor area, panic hardware shall comply with Section 705.4.4 throughout the floor.

Exception: Means of egress within a tenant space that is entirely outside the *work area*.

705.4.5 Emergency power source in Group I-3. *Work areas* in buildings of Group I-3 occupancy having remote power unlocking capability for more than 10 locks shall be provided with an emergency power source for such locks. Power shall be arranged to operate automatically upon failure of normal power within 10 seconds and for a duration of not less than 1½ hours.

705.5 Openings in corridor walls. Openings in corridor walls in any *work area* shall comply with Sections 705.5.1 through 705.5.4.

Exception: Openings in corridors where such corridors are not required to be rated in accordance with the *Florida Building Code, Building*.

705.5.1 Corridor doors.

705.5.1.1 Corridor doors in the work area shall not be constructed of hollow core wood and shall not contain louvers.

705.5.1.2 All replacement doors shall be 1¾-inch (45 mm) solid bonded wood core or approved equivalent, unless the existing frame will accommodate only a 1⅜-inch (35 mm) door.

705.5.1.3 All dwelling unit, guestroom or rooming unit corridor doors in work areas in buildings of Groups R-1,

R-2, and I-1 shall be at least 1⅜-inch (35 mm) solid core wood or approved equivalent and shall not have any glass panels other than approved wired glass or other approved glazing material in metal frames. All dwelling unit or sleeping unit corridor doors in work areas in buildings of Groups R-1, R-2, and I-1 shall be equipped with approved door closers.

Exceptions:

1. Corridor doors within a dwelling unit or guestroom.
2. Existing doors meeting the requirements of *HUD Guideline on Fire Ratings of Archaic Materials and Assemblies* (FEBC Appendix C) for a rating of 15 minutes or more shall be accepted as meeting the provisions of this requirement.
3. Existing doors in buildings protected throughout with an approved automatic sprinkler system shall be required only to resist smoke, be reasonably tight fitting and shall be equipped with approved door closers, and shall not contain louvers.
4. In group homes with a maximum of 15 occupants and that are protected with an approved automatic detection system, closing devices may be omitted.
5. Door assemblies having a fire-resistance rating of at least 20 minutes.

705.5.2 Transoms. In all buildings of Group I-1, R-1, and R-2 occupancy, all transoms in corridor walls in work areas shall either be glazed with ¼-inch (6.4 mm) wired glass set in metal frames or other glazing assemblies having a fire-protection rating as required for the door and permanently secured in the closed position or sealed with materials consistent with the corridor construction.

705.5.3 Other corridor openings. In any *work area*, any other sash, grille, or opening in a corridor and any window in a corridor not opening to the outside air shall be sealed with materials consistent with the corridor construction.

705.5.3.1 Supplemental requirements for other corridor opening. Reserved.

705.5.4 Supplemental requirements for corridor openings. Where the *work area* on any floor exceeds 50 percent of the floor area, the requirements of Sections 705.5.1 through 705.5.3 shall apply throughout the floor. This section shall be applicable to all corridor windows, grilles, sash and other openings on the floor.

705.6 Dead-end corridors. Dead-end corridors in any *work area* shall comply with the requirements of Section 1018.4 of the *Florida Building Code, Building*.

705.7 Means-of-egress lighting. Means-of-egress lighting shall be in accordance with this section, as applicable.

705.7.1 Artificial lighting required. Means of egress in all work areas shall be provided with artificial lighting in accor-

dance with the requirements of the *Florida Building Code, Building*.

705.7.2 Supplemental requirements for means-of-egress lighting. Where the *work area* on any floor exceeds 50 percent of that floor area, means of egress lighting throughout the floor shall comply with Section 705.7.1.

Exception: Means of egress within or serving only a tenant space that is entirely outside the *work area*.

705.8 Exit signs. Exit signs shall be in accordance with this section, as applicable.

705.8.1 Work areas. Means of egress in all work areas shall be provided with exit signs in accordance with the requirements of the *Florida Building Code, Building*.

705.8.2 Supplemental requirements for exit signs. Where the *work area* on any floor exceeds 50 percent of that floor area, means of egress existing signs throughout the floor shall comply with Section 705.8.1.

Exception: Means of egress within or serving only a tenant space that is entirely outside the *work area*.

705.9 Handrails. The requirements of Sections 705.9.1 and 705.9.2 shall apply to handrails from the *work area* floor to, and including, the level of exit discharge.

705.9.1 Minimum requirement. Every required exit stairway that is part of the means of egress for any *work area* and that has three or more risers and is not provided with at least one handrail, or in which the existing handrails are judged to be in danger of collapsing, shall be provided with handrails for the full length of the run of steps on at least one side. All exit stairways with a required egress width of more than 66 inches (1676 mm) shall have handrails on both sides.

705.9.2 Design. Handrails required in accordance with Section 705.9.1 shall be designed and installed in accordance with the provisions of the *Florida Building Code, Building*.

Exception: Handrails being replaced in part may match the existing design.

705.10 Guards. The requirements of Sections 705.10.1 and 705.10.2 shall apply to guards from the *work area* floor to, and including, the level of exit discharge but shall be confined to the egress path of any *work area*.

705.10.1 Minimum requirement. Every open portion of a stair, landing, or balcony that is more than 30 inches (762 mm) above the floor or grade below and is not provided with guards, or those portions in which existing guards are judged to be in danger of collapsing, shall be provided with guards.

705.10.2 Design. Guards required in accordance with Section 705.10.1 shall be designed and installed in accordance with the provisions of the *Florida Building Code, Accessibility*.

Exception: Guards being replaced in part may match the existing design.

SECTION 706 ACCESSIBILITY

706.1 General. A building, facility, or element that is altered shall comply with the provisions of the *Florida Building Code, Accessibility*.

706.2 Stairs and escalators in existing buildings. Reserved.

706.3 Accessible dwelling units and sleeping units. Reserved.

706.4 Type A dwelling or sleeping units. Reserved.

706.5 Type B dwelling or sleeping units. Reserved.

SECTION 707 STRUCTURAL

707.1 General. Structural elements and systems within buildings undergoing Level 2 alterations shall comply with this section.

707.2 New structural elements. New structural elements in alterations, including connections and anchorage, shall comply with the *Florida Building Code, Building*.

707.3 Minimum design loads. The minimum design loads on existing elements of a structure that do not support additional loads as a result of an *alteration* shall be the loads applicable at the time the building was constructed.

707.4 Existing structural elements carrying gravity loads. Alterations shall not reduce the capacity of existing gravity load-carrying structural elements unless it is demonstrated that the elements have the capacity to carry the applicable design gravity loads required by the *Florida Building Code, Building*. Existing structural elements supporting any additional gravity loads as a result of the alterations, shall comply with the *Florida Building Code, Building*.

Exceptions:

1. Structural elements whose stress is not increased by more than 5 percent.
2. Buildings of Group R occupancy with not more than five dwelling or sleeping units used solely for residential purposes where the *existing building* and its *alteration* comply with the conventional light-frame construction methods of the *Florida Building Code, Building* or the provisions of the *Florida Building Code, Residential*.

707.5 Existing structural elements resisting lateral loads. Any existing lateral load-resisting structural element whose demand-capacity ratio with the *alteration* considered is more than 10 percent greater than its demand-capacity ratio with the *alteration* ignored shall comply with the structural requirements specified in Section 807.4. For purposes of calculating demand-capacity ratios, the demand shall consider applicable load combinations with design lateral loads or forces in accordance with Section 1609 of the *Florida Building Code, Building*. For purposes of this section, comparisons of demand-capacity ratios and calculation of design lateral loads, forces and capacities shall account for the cumulative effects of additions and alterations since original construction.

707.6 Voluntary lateral force-resisting system alterations. Alterations of existing structural elements and *additions* of new structural elements that are initiated for the purpose of increasing the lateral-force-resisting strength or stiffness of an existing structure and that are not required by other sections of this code shall not be required to be designed for forces conforming to the *Florida Building Code, Building*, provided that an engineering analysis is submitted to show that:

1. The capacity of existing structural elements required to resist forces is not reduced;
2. The lateral loading to existing structural elements is not increased either beyond their capacity or more than 10 percent;
3. New structural elements are detailed and connected to the existing structural elements as required by the *Florida Building Code, Building*;
4. New or relocated nonstructural elements are detailed and connected to existing or new structural elements as required by the *Florida Building Code, Building*; and
5. A *dangerous* condition as defined in this code is not created. Voluntary alterations to lateral-force-resisting systems conducted in accordance with the referenced standards of this code shall be permitted.

SECTION 708 ELECTRICAL

708.1 New installations. All newly installed electrical equipment and wiring relating to work done in any *work area* shall comply with the materials and methods requirements of Chapter 27 of the *Florida Building Code, Building*.

708.2 Existing installations. Existing wiring in all work areas in Group A-1, A-2, A-5, H, and I occupancies shall be upgraded to meet the requirements of Chapter 27 of the *Florida Building Code, Building*.

708.3 Residential occupancies. In Group R-2, R-3, and R-4 occupancies and buildings regulated by the *Florida Building Code, Residential*, the requirements of Sections 708.3.1 through 708.3.7 shall be applicable only to work areas located within a dwelling unit.

708.3.1 Enclosed areas. All enclosed areas, other than closets, kitchens, basements, garages, hallways, laundry areas, utility areas, storage areas, and bathrooms shall have a minimum of two duplex receptacle outlets or one duplex receptacle outlet and one ceiling or wall-type lighting outlet.

708.3.2 Kitchens. Kitchen areas shall have a minimum of two duplex receptacle outlets.

708.3.3 Laundry areas. Laundry areas shall have a minimum of one duplex receptacle outlet located near the laundry equipment.

708.3.4 Ground fault circuit interruption. Reserved.

708.3.5 Minimum lighting outlets. At least one lighting outlet shall be provided in every bathroom, hallway, stairway, attached garage, and detached garage with electric power, and to illuminate outdoor entrances and exits.

708.3.6 Utility rooms and basements. At least one lighting outlet shall be provided in utility rooms and basements where such spaces are used for storage or contain equipment requiring service.

708.3.7 Residential R3 Occupancies.

708.3.7.1 Existing electrical wiring. Existing electrical wiring and equipment undergoing repair or replacement shall be permitted to be repaired or replaced with like material.

708.3.7.2 Replacement receptacles. For replacement of nongrounding-type receptacles with grounding-type receptacles and for branch circuits that do not have an equipment grounding conductor in the branch circuitry, the grounding conductor of a grounding-type receptacle outlet shall be permitted to be grounded to any accessible point on the grounding electrode system, or to any accessible point on the grounding electrode conductor, in accordance with Article 250.130(c) of Chapter 27 of the *Florida Building Code, Building*.

708.3.7.3 Appliances. Frames of electric ranges, wall-mounted ovens, counter-mounted cooking units, clothes dryers, and outlet or junction boxes that are part of the existing branch circuit for these appliances shall be permitted to be grounded to the grounded circuit conductor in accordance with Article 250.140 of Chapter 27 of the *Florida Building Code, Building*.

SECTION 709 MECHANICAL

709.1 Reconfigured or converted spaces. All reconfigured spaces intended for occupancy and all spaces converted to habitable or occupiable space in any *work area* shall be provided with natural or mechanical ventilation or exhaust in accordance with the *Florida Building Code, Mechanical*.

709.2 Existing mechanical systems. Existing mechanical systems undergoing repair shall comply with Section 301.11 of the *Florida Building Code, Mechanical*.

709.3 Local exhaust. Reserved.

SECTION 710 PLUMBING

710.1 Minimum fixtures. Where the occupant load of the story is increased by more than 20 percent, plumbing fixtures for the story shall be provided in quantities specified in the *Florida Building Code, Plumbing* based on the increased occupant load.

710.2 Materials. The following plumbing materials and supplies shall not be used:

1. Sheet and tubular copper and brass trap and tailpiece fittings less than the minimum wall thickness of 0.027 inch (0.69 mm).
2. Solder having more than 0.2-percent lead in the repair of potable water systems.

3. Water closets having a concealed trap seal or an unventilated space or having walls that are not thoroughly washed at each discharge in accordance with ASME A112.19.2M.
4. The following types of joints shall be prohibited:
 - 4.1. Mastic or hot-pour bituminous joints.
 - 4.2. Joints made with fittings not approved for the specific installation.
 - 4.3. Joints between different diameter pipes made with elastomeric rolling O-rings.
 - 4.4. Solvent-cement joints between different types of plastic pipe.
 - 4.5. Saddle-type fittings.
5. The following types of trap are prohibited:
 - 5.1. Traps that depend on moving parts to maintain the seal.
 - 5.2. Bell traps.
 - 5.3. Crown-vented traps.
 - 5.4. Traps not integral with a fixture and that depend on interior partitions for the seal, except those traps constructed of an approved material that is resistant to corrosion and degradation.

710.3 Replacement fixtures. Replacement fixtures shall be installed in accordance with the *Florida Building Code, Plumbing*.

SECTION 711 ENERGY CONSERVATION

711.1 Minimum requirements. Alterations subject to this chapter shall comply with the requirements of the *Florida Building Code, Energy Conservation*.

