

CHANGE TYPE: Addition

CHANGE SUMMARY: Where general-use exit signs are required in Group R-1 occupancies, low-level exit signs must also be provided in the means of egress serving the guest rooms.

2014 CODE: **1011.2 Floor-Level Exit Signs in Group R-1.** Where exit signs are required in Group R-1 occupancies by Section 1011.1, additional low-level exit signs shall be provided in all areas serving guest rooms in Group R-1 occupancies and shall comply with Section 1011.5.

The bottom of the sign shall be not less than 10 inches (254 mm) nor more than 12 inches (305 mm) above the floor level. The sign shall be flush mounted to the door or wall. Where mounted on the wall, the edge of the sign shall be within 4 inches (102 mm) of the door frame on the latch side.

CHANGE SIGNIFICANCE: To help guide building occupants to the exits during emergency conditions, the potential for recognition of exit signs has been increased by requiring additional exit signs within the egress system serving the guest rooms of a Group R-1 occupancy. These additional signs are to be located very close to the floor level near or on the exit doors.

Limiting the application to only those egress systems serving guest rooms of Group R-1 occupancies recognizes that the occupants of such facilities are transient and not familiar with their surroundings. If a corridor or other egress component serving guest rooms were to fill with smoke, the general exit signs that are located higher in the space could quickly be obscured by the rising smoke. As the space fills with smoke the evacuees are forced to crawl on the floor to reach the nearest exit. They will be confronted with many doors, all looking the same and will not know which door is the exit. The installation of these low-level exit signs will assist these persons in safely exiting the building when exit signs at the higher levels are obscured as the smoke layer develops at the ceiling.

Low-level exit signs will also serve to increase firefighter safety while on the fire scene. In their efforts to evacuate the occupants the firefighters will be in the building after the smoke has developed. Although they rely on several other techniques, fire service personnel may also become dependent upon this low-level signage while trying to locate the doors to the stair tower and safely egress the fire floor.

It should be noted that by the reference to Section 1011.5, internally illuminated signs are mandated for these low-level locations. These signs must be listed in accordance with UL 924, and therefore, the graphics and power requirements of Section 1011.6 for externally illuminated signs are not applicable because the standard will address these issues.

1011.2

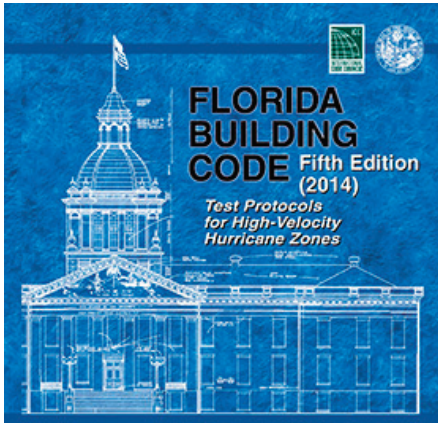
Floor-Level Exit Signs in Group R-1



Traditional and low-level exit signs at an interior exit stairway

Chapters 14 through 26

High-Velocity Hurricane Zones



CHANGE TYPE: Modification

CHANGE SUMMARY: Provisions for the High-Velocity Hurricane Zones (HVHZ) that do not apply to structural wind resistance design and those that are already covered by the base code have been deleted. The requirements of the non-HVHZ will now apply for such situations in the 5th Edition (2014) FBCB.

2014 CODE: 1401.1 Scope. The provisions of this chapter shall establish the minimum requirements for exterior walls, exterior wall coverings, exterior wall openings, exterior windows and doors, architectural trim, balconies and similar projections; and bay and oriel windows.

Exception: Buildings and structures located within the high-velocity hurricane zone shall comply with the provisions of Sections 1403.8 and 1410.

1801.1 Scope. The provisions of this chapter shall apply to building and foundation systems.

Exception: Buildings and structures located within the high-velocity hurricane zone shall comply with the provisions of Section 1805, Sections 1816 through 1834, and as applicable in flood hazard areas, Section 1612.

1901.1 Scope. The provisions of this chapter shall govern the materials, quality control, design and construction of concrete used in structures.

Exception: Buildings and structures located within the high-velocity hurricane zone shall comply with the provisions of Sections 1917 and 1919 through 1929.

2101.1 Scope. This chapter shall govern the materials, design, construction and quality of masonry.

Exception: Buildings and structures located within the high-velocity hurricane zone shall comply with the provisions of Sections 2103 through 2105, 2107, 2108, 2110, 2114 and Sections 2119 2148 through 2122.

2201.1 Scope. The provisions of this chapter govern the quality, design, fabrication and erection of steel used structurally in buildings or structures.

Exception: Buildings and structures located within the high-velocity hurricane zone shall comply with the provision of Sections 2204 through 2208 and 2214 through 2224.

2301.1 Scope. The provisions of this chapter shall govern the materials, design, construction and quality of wood members and their fasteners.

Exception: Buildings and structures located within the high-velocity hurricane zone shall comply with the provisions of Sections 2302, 2303.1 through 2303.1.4, 2303.1.8, 2303.2, 2304.11, 2304.13 and 2314 through 2330.

2401.1 Scope. The provisions of this chapter shall govern the materials, design, construction and quality of glass, light-transmitting ceramic and light-transmitting plastic panels for exterior and interior use in both vertical and sloped applications in buildings and structures.

Exception: Buildings and structures located within the high-velocity hurricane zone shall also comply with the provisions of Sections 2410 through 2415, excluding Section 2405.5.

2501.1.1 General. Provisions of this chapter shall govern the materials, design, construction and quality of gypsum board, lath, gypsum plaster and cement plaster.

~~**Exception:** Buildings and structures located within the high-velocity hurricane zone shall comply with the provisions of Sections 2514 through 2520.~~

2601.1 Scope. These provisions shall govern the materials, design, application, construction and installation of foam plastic, foam plastic insulation, plastic veneer, interior plastic finish and trim and light-transmitting plastics. See Chapter 14 for requirements for exterior wall finish and trim.

Exception: Buildings and structures located within the high-velocity hurricane zone shall also comply with the provisions of Sections 2614, 2603.8 and 2612.

CHANGE SIGNIFICANCE: The specific provisions for the High-Velocity Hurricane Zones have been reduced considerably in the 5th Edition (2014) FBCB. The High-Velocity Hurricane Zone is defined as Miami-Dade and Broward Counties in Chapter 2. These provisions originated from the structural criteria of the South Florida Building Code and were something of a compromise for the 1st Edition (2001) of the FBCB. The concept was to maintain the structural wind resistance design requirements of the South Florida Building Code for Miami-Dade and Broward Counties, which were using the South Florida Building Code prior to the Florida Building Code. However, the HVHZ provisions contained many of the same provisions that were already addressed in the non-HVHZ provisions of the code. Additionally, some of the content was not related to structural wind resistance. For the 5th Edition (2014) FBCB, much of the content of HVHZ has been refined and deleted based on the following criteria:

1. Provisions not related to structural wind resistance design; and
2. Provisions adequately covered by the base code/non-HVHZ criteria.

As a result, some chapters do not contain any HVHZ-specific criteria. Others have been reduced considerably relying on a combination of the non-HVHZ criteria and HVHZ criteria.

1507.2.8

Roof Covering Underlayment

CHANGE TYPE: Modification

CHANGE SUMMARY: Provisions for the installation and type of underlayment required for most roof coverings have been revised.



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Underlayment in high wind areas has additional attachment requirements.

2014 CODE: 1507.2.8 Underlayment application. Underlayment shall be installed using one of the following methods:

1. For roof slopes from two units vertical in 12 units horizontal (17-percent slope) and less than up to four units vertical in 12 units horizontal (33-percent slope), ~~Underlayment shall comply with ASTM D226, Type I or II or ASTM D 4869, Type II or IV or ASTM D 6757 and shall be two layers applied in the following manner. Apply a minimum 19-inch-wide (483 mm) strip of underlayment felt parallel with and starting at the eaves, fastened sufficiently to hold in place. Starting at the eave, apply 36-inch-wide (914 mm) sheets of underlayment overlapping successive sheets 19 inches (483 mm), and fastened with 1 inch (25 mm) round plastic cap, metal cap nails or nails and tin-tabs attached to a nailable deck with one row in the field of the sheet with a maximum fastener spacing of 12 inches on center (305 mm), and one row at the overlaps fastened 6 inches (152 mm) on center. Synthetic underlayment shall be fastened in accordance with this section and the manufacturer's recommendations, by fastened sufficiently to hold in place. Distortions in the underlayment shall not interfere with the ability of the shingles to seal.~~

2. For roof slopes of four units vertical in 12 units horizontal (33-percent slope) or greater, ~~Underlayment shall comply with ASTM D 226, Type II or ASTM D 4869, Type IV or ASTM D 6757 and shall be one layer applied in the following manner. Underlayment shall be applied shingle fashion, parallel to and starting from the eave and lapped 2 inches (51 mm), and fastened with 1 inch (25 mm) round plastic cap, metal cap nails or nails and tin-tabs attached to a nailable deck with two staggered rows in the field of the sheet with a maximum fastener spacing of 12 inches on center (305 mm), and one row at the overlaps fastened 6 inches (152 mm) on center. Synthetic underlayment shall be fastened in accordance with this section and the manufacturer's recommendations, fastened sufficiently to hold in place. Distortions in the underlayment shall not interfere with the ability of the shingles to seal. End laps shall be offset by 6 feet (1829 mm).~~
3. As an alternative, the entire roof deck shall be covered with an approved self-adhering polymer modified bitumen sheet meeting ASTM D 1970 or an approved self-adhering synthetic underlayment installed in accordance with the manufacturer's installation instructions.

1507.2.8.1 High wind attachment. ~~Reserved. Underlayment applied in areas subject to high winds (Vasd greater than 110 mph as determined in accordance with Section 1609.3.1) shall be applied with corrosion-resistant fasteners in accordance with the manufacturer's instructions. Fasteners are to be applied along the overlap at a maximum spacing of 36 inches (914 mm) on center.~~

Because this code change affects many roof coverings (asphalt shingles, metal roof panels, metal roof shingles, mineral-surfaced roll roofing, slate shingles, wood shingles, and wood shakes) and revised substantial portions of Section 1507, the entire code change text is too extensive to be included here.

CHANGE SIGNIFICANCE: The provisions for underlayment type and installation in the 5th Edition (2014) Florida Building Code, Building have been revised significantly and are similar to provisions in the 2010 Florida Building Code, Existing Building for reroofing of buildings that were built prior to the Florida Building Code. Much research has been conducted recently that further reinforces the importance of underlayment in preventing water intrusion in the event the primary roof covering is blown off due to high winds. Tests conducted at the IBHS (Institute for Business and Home Safety) Research Center have shown a significant reduction in water intrusion when underlayment systems stay in place after the primary roof covering has blown off. These new provisions are intended to improve the underlayment system's resistance to high winds.

The language shown is applicable to asphalt shingles. However, the underlayment systems for metal roof panels, metal roof shingles, mineral-surfaced roof roofing, slate shingles, wood shingles, and wood shakes have also been revised similarly but with some differences. For asphalt shingles, underlayment complying with ASTM D226 Type II, ASTM

D4869 Type IV, or ASTM D6757 (all are equivalent to a 30-pound underlayment) is required for roof slopes of 4:12 or greater. For other roof coverings, the code permits the use of a two-layer underlayment system complying with ASTM D226 Type I or II, ASTM D4869 Type II or IV, or ASTM D6757 or a single-layer underlayment system complying with ASTM D226 Type II, ASTM D4869 Type IV, or ASTM D6757.

The 2010 code required underlayment to be fastened 36 inches on center on the overlaps. The new language requires fasteners at 6 inches on center on the overlaps and one or two rows (depending on a one- or two-layer system) of fasteners in the field of the sheet with a spacing of 12 inches on center. In addition, the code requires fasteners to have 1 inch round caps (plastic or metal) or tabs to reduce the potential for tearing of the underlayment due to wind uplift. Synthetic underlayment complying with the manufacturer's installation instructions and self-adhering polymer modified bitumen sheets complying with ASTM D1970 are also permitted.

R302.1

Exterior Walls

CHANGE TYPE: Modification

CHANGE SUMMARY: The minimum clearances to lot lines have been increased from 3 feet to 5 feet for unrated walls unless the dwelling is protected with a fire sprinkler system. The code also now permits construction of unrated exterior walls on the lot line when all dwellings in the subdivision are protected with automatic fire sprinkler systems and the opposing lot maintains a minimum 6-foot clearance from the common lot line.

2014 CODE: R302.1 Exterior Walls. Construction, projections, openings and penetrations of exterior walls of dwellings and accessory buildings shall comply with Table R302.1(1); or dwellings equipped throughout with an automatic sprinkler system installed in accordance with Section P2904 shall comply with Table R302.1(2).

TABLE R302.1(1) Exterior Walls

Exterior Wall Element		Minimum Fire-Resistance Rating	Minimum Fire Separation Distance
Walls	Fire-resistance rated	1 hour—tested in accordance with ASTM E 119 or UL 263 with exposure from both sides	< 5 feet
	Not fire-resistance rated	0 hours	≥ 5 feet
Projections	Fire-resistance rated	1 hour on the underside	≥ 2 feet to < 5 feet
	Not fire-resistance rated	0 hours	≥ 5 feet
Openings in Walls	Not allowed	N/A	< 3 feet
	25% maximum of wall area	0 hours	3 feet
	Unlimited	0 hours	5 feet
Penetrations	All	Comply with Section R302.4	< 5 feet
		None required	5 feet

For SI: 1 foot = 304.8 mm.

N/A = Not Applicable.

TABLE R302.1(2) Exterior Walls—Dwellings with Fire Sprinklers

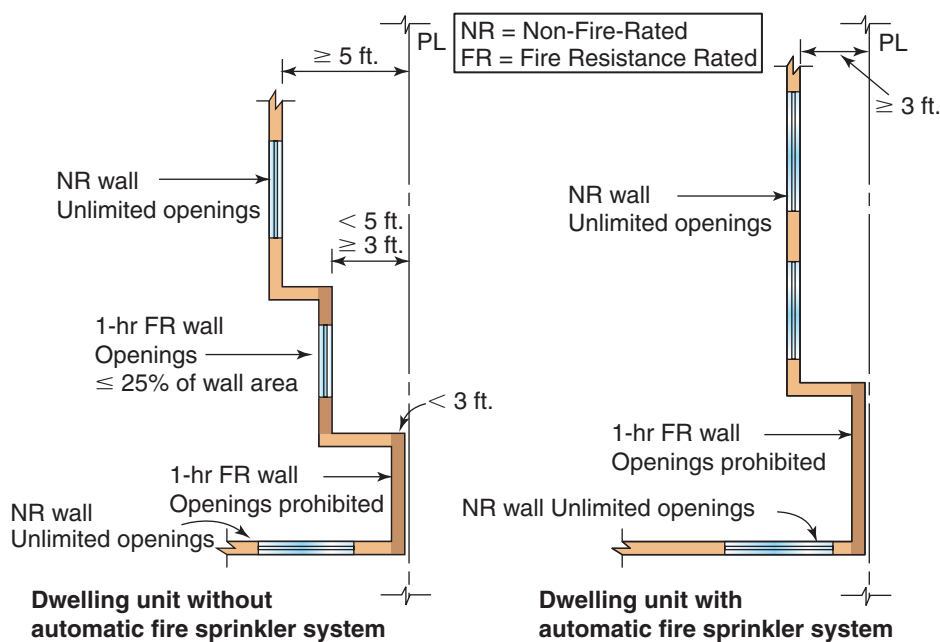
Exterior Wall Element		Minimum Fire-Resistance Rating	Minimum Fire Separation Distance
Walls	Fire-resistance rated	1 hour—tested in accordance with ASTM E 119 or UL 263 with exposure from the outside	0 feet
	Not fire-resistance rated	0 hours	3 feet ^a
Projections	Fire-resistance rated	1 hour on the underside	2 feet ^a
	Not fire-resistance rated	0 hours	3 feet
Openings in Walls	Not allowed	N/A	N/A < 3 feet
	Unlimited	0 hours	3 feet ^a
Penetrations	All	Comply with Section R302.4	< 3 feet
		None required	3 feet ^a

For SI: 1 foot = 304.8 mm.

N/A = Not Applicable.

a. For residential subdivisions where all dwellings are equipped throughout with an automatic sprinkler systems installed in accordance with Section P2904, the fire separation distance for nonrated exterior walls and rated projections shall be permitted to be reduced to 0 feet, and unlimited unprotected openings and penetrations shall be permitted, where the adjoining lot provides an open setback yard that is 6 feet or more in width on the opposite side of the property line.

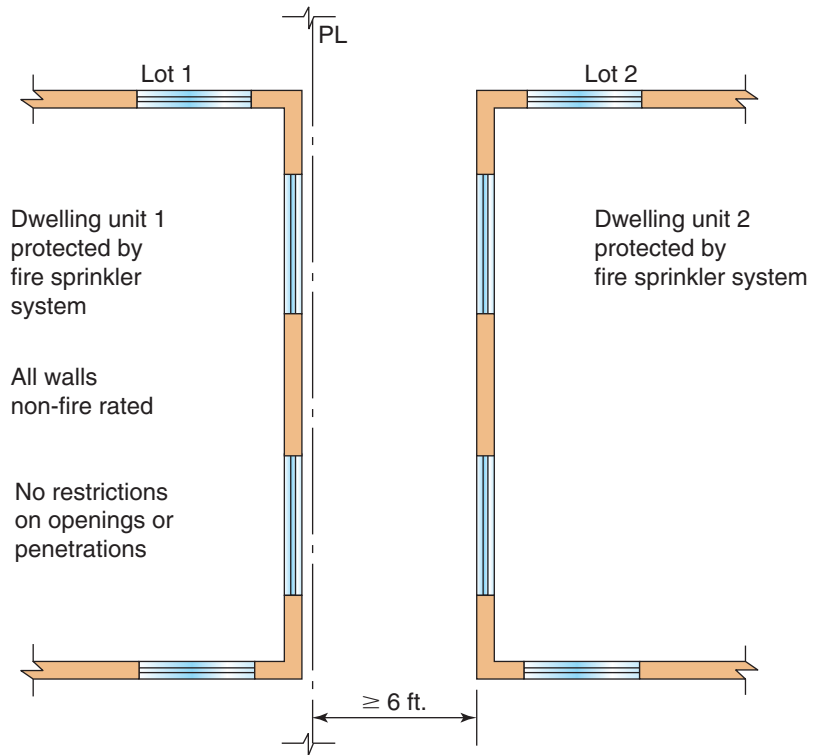
CHANGE SIGNIFICANCE: Provisions that regulate the construction of exterior walls in proximity to lot lines have long been recognized as effective in preventing the spread of fire from a building on one property to a building on another property. Unless the exterior wall is constructed to provide a fire-resistance rating of 1 hour with exposure from both sides in accordance with either ASTM E119 or UL 263, a minimum fire separation distance is required from the lot line. The minimum distance necessary to provide a sufficient buffer against the spread of fire has been increased from 3 feet to 5 feet to provide a higher level of safety and to correlate with the provisions for residential occupancies regulated by the FBCB. However, when a sprinkler system is installed, the 5th Edition (2014) FBCR permits non-rated walls that are not less than 3 feet from the lot line, a dimension previously prescribed in the 2010 code. This 3-foot dimension is the new threshold for exterior wall construction, projections, openings, and penetrations. For dwellings without sprinkler systems, the 5-foot separation distance applies.



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Exterior walls

The reduction in the minimum fire separation distance is intended to be an incentive for installing dwelling sprinkler systems. The reduced clearances provide design flexibility and reduce costs associated with fire-resistant construction, while maintaining a reasonable level of safety based on past performance of dwelling fire sprinkler systems. A dwelling automatic sprinkler system installed in accordance with Section P2904 or NFPA 13D aids in the detection and control of fires in residential occupancies regulated by the FBCR. The design criteria of these sprinkler systems are for life safety to buy time for occupants to escape a fire; dwelling fire sprinklers are not designed for property protection. However, the automatic sprinkler system is expected to prevent total fire involvement (flashover) in the room of fire origin if the room is sprinklered. In addition to increasing the likelihood of occupants escaping or being evacuated, dwelling sprinklers often provide some measure of property protection as well.



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Exterior walls in subdivisions where all dwelling units are protected by fire sprinkler systems

A footnote to Table R302.1(2) allows unrated exterior walls of dwellings equipped with sprinkler systems to be placed on the lot line if all dwellings in the subdivision are equipped with a sprinkler system and the adjacent lot maintains a 6-foot setback for buildings on the opposite side of the lot line. Under these conditions, openings and penetrations are unrestricted, but projections that are less than 2 feet from the lot line require 1-hour protection on the underside. This provision allows flexibility in placing buildings on the lot for maximum effective use of the buildable area while still maintaining a minimum 6 feet of clearance between buildings. Table 3-1 summarizes the new fire separation distance requirements for exterior walls that are not fire-resistance rated.

TABLE 3-1 Minimum Fire Separation Distance Comparison (Nonrated Construction)

Exterior Wall Element	Minimum Fire Separation Distance		
	Without Sprinkler System	With Sprinkler System	With Sprinkler System in All Dwellings of Subdivision and 6-Foot Setback for Building on Adjoining Lot
Non fire-resistance rated) Walls	5 feet	3 feet	0 feet
Projections	5 feet	3 feet	2 feet*
Unlimited opening in walls	5 feet	3 feet	0 feet
Penetration (no restrictions)	5 feet	3 feet	0 feet

*The distance is permitted to be reduced to zero feet for projections that have a 1-hour fire-resistance rating on the underside.