Draft 2007 Florida Specific Requirements Supplement
Florida Building Code, Residential Volume

PREFACE. ***Change to read as shown:***

The base codes for the 2007 edition of the Florida Building Code include: the *International Building Code, 2006 edition;* the *International Plumbing Code, 2006 edition;* the *International Mechanical Code, 2006 edition;* the *International Fuel Gas Code, 2006 edition,* the *International Residential Code, 2006 edition;* the *International Existing Building Code, 2006 edition;* the *National Electrical Code, 2005 edition;* the U.S. Department of Housing and Urban Development's *Fair Housing Guidelines* and; substantive criteria from the American Society of Heating, Refrigerating and Air-conditioning Engineers' *(ASHRAE) Standard 90.1-2001.* State and local codes adopted and incorporated in the Code include the *Florida Energy Efficiency Code for Building Construction,* the *Florida Accessibility Code for Building Construction* and special hurricane protection standards for the High Velocity Hurricane Zone.

Add to read as shown.

Note: throughout the document, change International Building Code to Florida Building Code, Building; change the ICC Electrical Code to Chapter 27 of the Florida Building Code, Building; change the International Energy Conservation Code to Chapter 13 of the Florida Building Code, Building; change the International Existing Building Code to Florida Building Code, Existing Building; change the International Fire code to Florida Fire Prevention Code; change International Fuel Gas Code to Florida Building Code, Fuel Gas; change the International Mechanical Code to Florida Building Code, Mechanical; change the International Plumbing Code to Florida Building Code, Plumbing; change the International Residential Code to Florida Building Code, Residential.

CHAPTER 1: ADMINISTRATION

R101.1 Change to read as shown:

R101.1 Title. These provisions shall be known as the *Florida Building Code, Residential,* and shall be cited as such and will be referred to herein as "this code."

R101.2 Change to read as shown:

R101.2 Scope. The provisions of the *Florida Building Code, Residential*, shall apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, removal and demolition of detached one– and two–family dwellings and multiple single–family dwellings (townhouses) not more than three stories above grade in height with a separate means of egress and their accessory structures.

Exception: Existing buildings undergoing repair, alteration or additions, and change of occupancy shall comply with the *Florida Existing Building Code.*

R101.2.1 The provisions of Chapter 1, *Florida Building Code, Building,* shall govern the administration and enforcement of the *Florida Building Code, Residential.*

R101.3 Purpose. Change to read as shown.

R101.3 Purpose. Reserved.

R102 through R114 Change to read as shown:

Sections R102 through R114 Reserved.

CHAPTER 2: DEFINITIONS

R201.1 Change to read as shown:

R201.1 Scope. Unless otherwise expressly stated, the following words and terms shall, for the purposes of this code, have the meanings indicated in this chapter.

HIGH-VELOCITY HURRICANE ZONE (HVHZ). This zone consists of Broward and Dade counties.

R201.3 Change to read as shown:

R201.3 Terms defined in other codes. Where terms are not defined in this code such terms shall have meanings ascribed to them as in other code publications of the Florida Building Commission.

R201.4 Change to read as shown:

R201.4 Terms not defined. Where terms are not defined through the methods authorized by this section, such terms shall have the meanings as defined in Webster's *Third New International Dictionary of the English Language Unabridged*.

R202 Definitions. Change the following definitions to read as follows:

ACCESSIBLE. Having access to but which first may require the removal of a panel, door or similar covering of the item described (see Readily Accessible)

APPLICABLE GOVERNING BODY. A city, county, state, state agency or other political government subdivision or entity authorized to administer and enforce the provisions of this code, as adopted or amended. Also applies to administrative authority.

ARCHITECT. A Florida-registered architect.

AWNING: Any rigid or movable (retractable) roof-like structure, cantilevered, or otherwise entirely supported from a building. An awning is comprised of a lightweight rigid or removable skeleton structure over which an approved cover is attached.

BASIC WIND SPEED. Three-second gust speed at 33 feet (10,058 MM) above the ground as given in Figure R301.2(4)**.**

BRACED WALL LINE. A series of braced wall panels in a single story constructed in accordance with Section R602.2.10 for wood framing or Section R603.7 for cold-formed steel framing to resist racking from wind forces.

BRACED WALL PANEL. A section of a braced wall line constructed in accordance with Section R602.2.10 for wood framing or Section R603.7 or R301.1.1 for cold-formed steel framing, which extend the full height of the wall.

CANOPY: Any fixed roof-like structure, not movable like an awning, and which is cantilevered in whole or in part self-supporting, but having no side walls or curtains other than valances not more than 18 inches (457 mm) deep. Lean-to canopies, fixed umbrellas and similar structures are included in this classification. Structures having side walls or valances more than 18 inches (457 mm) deep shall be classified as a tent as set forth herein.

CIRCULAR STAIRS. A stairway with steps that result in a sweeping circular or curved pattern, but not spiral stairs.

COMMISSION. Means the Florida Building Commission created by this part.

DECORATIVE CEMENTITIOUS COATING. A skim coat, as defined in ASTM C 926, of Portland cement-based plaster applied to concrete or masonry surfaces intended for cosmetic purposes.

EMERGENCY ESCAPE AND RESCUE OPENING. An operable window, door or similar device that provides for a means of escape and access for rescue in the event of an emergency.

ENGINEER. A Florida-registered engineer.

ENFORCEMENT AGENCY.

Local enforcement agency. Means an agency of local government with authority to make inspections of buildings and to enforce the codes which establish standards for design, construction, erection, alteration, repair, modification or demolition of public or private buildings, structures or facilities.

State enforcement agency. Means the agency of state government with authority to make inspections of buildings and to enforce the codes, as required by this part, which establish standards for design, construction, erection, alteration, repair, modification or demolition of public or private buildings, structures or facilities.

FABRIC COVERED FRAMEWORK (FCF): A non-pressurized structure which is composed of a rigid framework to support tensioned membrane or fabric which provides the weather barrier.

FIRE SEPARATION DISTANCE. Reserved.

FOAM PLASTIC INTERIOR TRIM. Foam plastic used as picture molds, chair rails, baseboards, handrails, ceiling beams, door trim and window trim and meeting the requirements of Section R314.6.

FRAMEWORK. A skeletal or structural frame; an openwork frame structure.

HABITABLE SPACE. A space in a structure for living, sleeping, eating or cooking. Bathrooms, toilet compartments, closets, halls, screen enclosures, storage or utility space, and similar areas are not considered habitable space.

HEATING. See Chapter 28 of the *Florida Building Code, Building* and the *Florida Building Code, Mechanical*.

HIGH VELOCITY HURRICANE ZONE. This zone consists of Broward and Dade counties.

INSULATING CONCRETE FORM (ICF). A concrete forming system using stay-in-place forms of rigid foam plastic insulation, a hybrid of cement and foam insulation, a hybrid of cement and wood chips, or other insulating material for constructing cast-in-place concrete walls.

LANDSCAPE ARCHITECT. A Florida registered Landscape Architect.

LIVE LOADS. Those loads produced by the use and occupancy of the building or other structure and do not include construction or environmental loads such as wind load, rain load, flood load or dead load.

MANUFACTURED HOME (Mobile Home). Any residential unit, constructed to standards promulgated by the United States Department of Housing and Urban Development (HUD), away from the installation site, and which bears the HUD label.

MODULAR HOME. Any residential unit, constructed to standards promulgated by the Florida Building Commission, away from the installation site, and which bears a Department of Community Affairs Insignia.

MATERIAL CODE VIOLATION. A material code violation is a violation that exists within a completed building, structure or facility which may reasonably result, or has resulted, in physical harm to a person or significant damage to the performance of a building or its systems.

MATERIAL VIOLATION. As defined in Florida Statutes.

MEANS OF ESCAPE. A way out of a building or structure that does not conform to the strict definition of means of egress but does provide an alternate way out. A means of escape consists of a door, stairway, passage or hall providing a way of unobstructed travel to the outside at street or ground level that is independent of and remotely located from the means of egress. It may also consist of a passage through an adjacent nonlockable space, independent of and remotely located from the means of egress, to any approved exit.

NATURALLY DURABLE WOOD. The heartwood of the following species with the exception that an occasional piece with corner sapwood is permitted if 90 percent or more of the width of each side on which it occurs is heartwood:

1. Decay resistant – Redwood, cedar, black locust and black walnut.
2. Termite resistant – Redwood and Eastern red cedar.

OPENINGS. Apertures or holes in the building envelope which allow air to flow through the building envelope and which are designed as "open" during design winds as defined by these provision.

PLANS. All construction drawings and specifications for any structure necessary for the building official to review in order to determine whether a proposed structure, addition or renovation will meet the requirements of this code and other applicable codes.

REGISTERED TERMITICIDE. Product listed as registered for use as a preventative treatment for termites for new construction by the Florida Department of Agriculture and Consumer Services under authority of Chapter 487, *Florida Statutes*.

RESIDENT SLEEPING UNIT. A single unit providing sleeping facilities for one or more persons. Resident sleeping units can also include permanent provisions for living, eating and sanitation, but do not include kitchen facilities.

RETAINING WALL, SEGMENTAL. A retaining wall formed of modular block units stacked dry without mortar.

SCREEN ENCLOSURE. A building or part thereof, in whole or in part self-supporting, and having walls of insect screening with or without removable vinyl or acrylic wind break panels and a roof of insect screening, plastic, aluminum or similar lightweight material.

SEISMIC DESIGN CATEGORY. Reserved.

SEPARATE ATMOSPHERE. The atmosphere that exists between rooms, spaces or areas that are separated by an approved smoke barrier.

SHEAR WALL. A general term for walls that are designed and constructed to resist racking from wind by use of masonry, concrete, cold-formed steel or wood framing in accordance with Chapter 6 of this code and the associated limitations in Section R301.2 of this code.

SPIRAL STAIRS. A stairway with steps that have a central connecting point, and the travel path is a corkscrew or spiral.

STREET. Any public thoroughfare, street, avenue, boulevard or space more than 20 ft (6096 mm) wide which has been dedicated or deeded for vehicular use by the public and which can be used for access by fire department vehicles.

SUNROOM.

1. A room with roof panels that include sloped glazing that is a one-story structure added to an existing dwelling with an open or glazed area in excess of 40 percent of the gross area of the sunroom structure's exterior walls and roof.
2. A one-story structure added to a dwelling with structural roof panels without sloped glazing. The sunroom walls may have any configuration, provided the open area of the longer wall and one additional wall is equal to at least 65 percent of the area below 6 foot 8 inches of each wall, measured from the floor. For the purposes of this code term sunroom as used herein shall include conservatories, sunspaces, solariums, and porch or patio covers or enclosures.

TOWNHOUSE. A single-family dwelling unit constructed in a group of three or more attached units with property lines separating each unit in which each unit extends from foundation to roof and with open space on at least two sides.

UNUSUALLY TIGHT CONSTRUCTION. Construction meeting the following requirements:

1. Walls comprising the building thermal envelope have a continuous water vapor retarder with a rating of 1 perm [57.4 ng/(s · m2 · Pa)] or less with openings therein gasketed or sealed.
2. Doors and openable windows meet the air leakage requirements of Chapter 13, Section 606 of the *Florida Building Code, Building*; and
3. Caulking or sealants are applied to areas such as joints around window and door frames between sole plates and floors, between wall-ceiling joints, between wall panels, at penetrations for plumbing, electrical and gas lines, and at other openings.

VALUE. The estimated current replacement cost of the building in kind.

WIND-BORNE DEBRIS REGION.

1. Areas within one mile (1.6 km) of the coastal mean high water line where the basic wind speed is 110 mph (49 m/s) or greater.
2. Areas where the basic wind speed is 120 mph (53 m/s) or greater except from the eastern border of Franklin County to the Florida-Alabama line where the region includes areas where design to 130 mph or higher wind speeds is required, and areas within 1500 feet of coastal mean high water line.

CHAPTER 3 BUILDING PLANNING

R301.1 Change to read as shown:

R301.1 Application. Buildings and structures, and all parts thereof, shall be constructed to safely support all loads, including dead loads, live loads, roof loads, flood loads, and wind loads as prescribed by this code. The construction of buildings and structures in accordance with the provisions of this code shall result in a system that provides a complete load path that meets all requirements for the transfer of all loads from their point of origin through the load-resisting elements to the foundation. Buildings and structures constructed as prescribed by this code are deemed to comply with the requirements of this section.

EXCEPTION: Buildings and structures located within the High Velocity Hurricane Zone shall comply only with Sections R302 to R325, inclusive and the provisions of Chapter R44.

R301.2 Change to read as shown:

R301.2 Climatic and geographic design criteria. Buildings shall be constructed in accordance with the provisions of this code as limited by the provisions of this section. Additional criteria shall be as set forth in Table R301.2(1).

R301.2.1 Change to read as shown:

R301.2.1 Wind limitations. Buildings and portions thereof shall be limited by wind speed, as defined in Table R301.2(1) and construction methods in accordance with this code. Basic wind speeds shall be determined from Figure R301.2(4). Where different construction methods and structural materials are used for various portions of a building, the applicable requirements of this section for each portion shall apply. Where loads for wall coverings, curtain walls, roof coverings, exterior windows, skylights and exterior doors (other than garage doors) are not otherwise specified, the loads listed in Table R301.2(2) adjusted for height and exposure using Table R301.2(3) shall be used to determine design load performance requirements for wall coverings, curtain walls, roof coverings, exterior windows, skylights, and exterior doors(other than garage doors). Where loads for garage doors are not otherwise specified, the loads listed in Table R301.2(4) adjusted for height and exposure per Table R301.2(3), shall be used to determine design load performance requirements. Asphalt shingles shall be designed for wind speeds in accordance with Section R905.2.6.

Table R301.2(1) Climatic and Geographic Design Criteria. Change to read as shown.

TABLE R301.2(1)
CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA

GROUND SNOW LOAD	WIND SPEED[e] (mph)	SEISMIC DESIGN CATEGORY[g]	SUBJECT TO DAMAGE FROM				WINTER DESIGN TEMP[f]	ICE SHIELD UNDER-LAYMENT REQUIREDi	FLOOD HAZARDS[h]	AIR FREEZING INDEX[j]	MEAN ANNUAL TEMP[k]
			Weathering[a]	Frost line depth~~b~~	Termite[c]	~~Decay~~					
NA	See Fig. R301.2(4)	NA	Negligible	NA	Very heavy	~~Moderate to severe~~		NA	See R323	NA	NA

For SI: 1 pound per square foot = 0.0479 kN/m^2, 1 mile per hour =1.609 km/h.

a. a. Weathering is "negligible" for concrete as determined from the Weathering Probability Map [Figure R301.2(3)]. The grade of masonry units shall be determined from ASTM C 34, C 55, C 62, C 73, C 90, C 129, C 145, C 216 or C 652.
b. Reserved.
c. Termite infestation per Figure R301.2(6) is "very heavy.".
d. Wind speed shall be from the basic wind speed map [Figure R301.2(4). Wind exposure category shall be determined on a site-specific basis in accordance with Section R301.2.1.4.
e. The outdoor design dry-bulb temperature shall be selected from the columns of 97 1/2-percent values for winter from Appendix D of the *Florida Building Code, Plumbing*. Deviations from the Appendix D temperatures shall be permitted to reflect local climates or local weather experience as determined by the building official.
f. Reserved.
g. Reserved.
h. Reserved.
i. Reserved.
j. Reserved.

Table R301.2(4) Garage Door Loads for a Building with a Mean Roof Height of 30 Feet Located in Exposure B. Add to read as shown.

Table R301.2(4) Garage Door Loads for a Building with a Mean Roof Height of 30 Feet Located in Exposure B.

	Basic Wind Speed (mph – 3 second gust)						
	90	**100**	**110**	**120**	**130**	**140**	**150**
Roof Angle > 10 degrees Effective Area: Width (ft) Height (ft)							
9 7	12.8 -14.5	15.8 -17.9	19.1 -21.6	22.8 -25.8	26.7 -30.2	31.0 -35.1	35.6 -40.2
16 7	12.3 -13.7	15.2 -16.9	18.3 -20.4	21.8 -24.3	25.6 -28.5	29.7 -33.1	34.1 -38.0

For SI: 1 foot = 304.8 mm, 1 square foot = 0.0929 sq m, 1 mile per hour = 1.609 km/h

1. For effective areas or wind speeds between those given above the load may be interpolated, otherwise use the load associated with the lower effective area.
2. Table values shall be adjusted for height and exposure by multiplying by the adjustment coefficient in Table R301.2(3).
3. Plus and minus signs signify pressures acting toward and away from the building surfaces.
4. Negative pressures assume door has 2 feet of width in building's end zone.

R301.2.1.1 Change to read as shown:

R301.2.1.1 Design criteria. Construction in regions where the basic wind speeds from Figure R301.2(4) equal or exceed 100 miles per hour (160.9 km/h) shall be permitted to be designed in accordance with one of the following:

1. American Forest and Paper Association (AF&PA) *Wood Frame Construction Manual for One- and Two-Family Dwellings* (WFCM);
2. Minimum Design Loads for Buildings and Other Structures (ASCE-7);
3. American Iron and Steel Institute (AISI), *Standard for Cold-Formed Steel Framing—Prescriptive Method for One- and Two-family Dwellings* (COFS/PM) *with Supplement to Standard for Cold-Formed Steel Framing—Prescriptive Method For One- and Two-Family Dwellings*.
4. Concrete and concrete masonry construction shall be designed in accordance with the provisions of this code or in accordance with the applicable documents adopted in Section R301.2.1.1.
5. IBHS *Guideline for Hurricane Resistant Residential Construction* 2005 shall be permitted for buildings for a basic wind speed of 140 mph (63 m/s) or less in Exposure B in accordance with Figure R301.2(4). Provisions for design wind speeds of 140 mph (63 m/s) in the Guideline shall also be permitted for buildings for a basic wind speed of 120 mph (53 m/s) or less in Exposure C in accordance with Figure R301.2(4) and provisions for design wind speeds of 120 MPH (54 m/s) in the Guideline shall be permitted for buildings for a basic wind speed of 100 mph (45 m/s) or less in Exposure C in accordance with Figure R301.2(4).
6. The FC&PA *Guide to Concrete Masonry Residential Construction in High Wind Areas* shall be permitted for applicable concrete masonry buildings for a basic wind speed of 130 mph (58 m/s) or less in Exposure B and 110 mph (49 m/s) or less in Exposure C in accordance with Figure R301.2(4);
7. The WPPC *Guide to Wood Construction in High Wind Areas* shall be permitted for applicable wood-frame buildings for a basic wind speed of 130 mph (58 m/s) or less in Exposure B and 110 mph (49 m/s) or less in Exposure C in accordance with Figure R301.2(4); or.
8. The *Florida Building Code, Building*.

R301.2.1.1.1 Add to read as follows:

R301.2.1.1.1 Design. The following design guide shall be accepted as conforming to accepted engineering practices: *AAF Guide to Aluminum Construction in High-Wind Areas*. Vinyl and acrylic panels shall be removable. Removable panels shall be identified as removable by a decal. The identification decal shall essentially state: "Removable panel SHALL be removed when wind speeds exceed 75 mph (34 m/s)." Decals shall be placed such that the decal is visible when the panel is installed.

R301.2.1.1.2 Add to read as shown:

301.2.1.1.2 Sunrooms. Sunrooms shall comply with AAMA/NPEA/NSA 2100 with the structural requirements and testing provisions of Chapter 5 modified to incorporate ASCE 7.

R301.2.1.2 Revise to read as shown:

R301.2.1.2 Protection of openings. Windows in buildings located in wind-borne debris regions shall have glazed openings protected from wind-borne debris. Glazed opening protection for wind-borne debris shall meet the requirements of the Large Missile Test of an approved impact resisting standard or ASTM E 1996 and ASTM E 1886, SSTD 12, ANSI/DASMA 115 (for garage doors) or TAS 201, 202 and 203 or AAMA 506 referenced therein.

(1) Opening in sunrooms, balconies or enclosed porches constructed under existing roofs or decks are not required to be protected provided the spaces are separated from the building interior by a wall and all openings in the separating wall are protected in accordance with this section. Such space shall be permitted to be designed as either partially enclosed or enclosed structures.
(2) Storage sheds that are not designed for human habitation and that have a floor area of 720 square feet (67 m2) or less are not required to comply with the mandatory wind-borne debris impact standard of this code.

Impact resistant coverings shall be tested at 1.5 times the design pressure (positive or negative) expressed in pounds per square feet as determined by the Florida Building Code, Residential Section R301 for which the specimen is to be tested.

Exception: Wood structural panels with a minimum thickness of 7/16 inch (11.1 mm) and a maximum span of 8 feet (2438 mm) shall be permitted for opening protection in one- and two-story buildings. Panels shall be precut so that they shall be attached to the framing surrounding the opening containing the product with the glazed openings. Panels shall be predrilled as required for the anchorage method and all required hardware shall be provided. Permanent corrosion resistant attachment hard ware with anchors permanently installed on the building shall be provided and designed to resist the components and cladding loads determined in accordance with the provisions of the *Florida Building Code, Building.* Attachment in accordance with Table R301.2.1.2 with permanent corrosion resistant attachment hardware provided and anchors permanently installed on the building is permitted for buildings with a mean roof height of 45 feet (10 058 mm) or less where wind speeds do not exceed 140 miles per hour (58 m/s).

Table R301.2.1.2 Change to read as shown:

TABLE R301.2.1.2

WIND-BORNE DEBRIS PROTECTION FASTENING SCHEDULE FOR WOOD STRUCTURAL PANELS

FASTENER TYPE	FASTENER SPACING (in.)[1,2]			
	Panel span ≤ 2 ft	2 foot < panel span ≤ 4 foot	4 foot < panel span ≤ 6 foot	6 foot < panel span ≤ 8 foot
#8 Wood Screw based anchor with 2-inch embedment length[3]	16	16	10	8
2-1/2 #8 Wood Screws[3] #10 Wood Screw based anchor with 2-inch embedment length	16	16	12	9
¼ Lag screw based anchor with 2-inch embedment length[3]	16	16	16	16

SI: 1 inch = 25.4 mm, 1 foot = 305 mm.

1. This table is based on a maximum wind speed of 140 mph (58 m/s) and mean roof height of 45 feet (10 m) or less.
[Check metric conversions]
2. Fasteners shall be installed at opposing ends of the wood structural panel.
3. Where screws are attached to masonry or masonry/stucco, they shall be attached using vibration-resistant anchors having a minimum withdrawal capacity of 1500 lb
(2180 kN).

R301.2.1.4 Change to read as shown:

R301.2.1.4 Exposure category. For each wind direction considered, an exposure category that adequately reflects the characteristics of ground surface irregularities shall be determined for the site at which the building or structure is to be constructed. For a site located in the transition zone between categories, the category resulting in the largest wind forces shall apply. Account shall be taken of variations in ground surface roughness that arise from natural topography and vegetation as well as from constructed features. For any given wind direction, the exposure in which a specific building or other structure is sited shall be assessed as being one of the following categories:

1.Exposure A. This exposure category is no longer used in ASCE 7

2.Exposure B. Urban and suburban areas, wooded areas, or other terrain with numerous closely spaced obstructions having the size of single-family dwellings or larger. Exposure B shall be assumed unless the site meets the definition of another type exposure.

3. Exposure C. Open terrain with scattered obstructions, including surface undulations or other irregularities, having heights generally less than 30 feet (9144 mm) extending more than 1,500 feet (457.2 m) from the building site in any quadrant. This exposure shall also apply to any building located within Exposure B-type terrain where the building is directly adjacent to open areas of Exposure C-type terrain in any quadrant for a distance of more than 600 feet (182.9 m). Short term (less than two year) changes in the pre-existing terrain exposure, for the purposes of development, shall not be considered open fields. Where development build out will occur within 3 years and the resultant condition will meet the definition of Exposure B, Exposure B shall be regulating for the purpose of permitting. This category includes flat open country, grasslands and ocean or gulf shorelines. This category does not include inland bodies of water that present a fetch of 1 mile (1.61 km) or more or inland waterways or rivers with a width of 1 mile (1.61 km) or more. (See Exposure D.)

4. Exposure D. Flat, unobstructed areas exposed to wind flowing over open water (excluding shorelines in hurricane prone regions) for a distance of at least 1 mile (1.61 km). Shorelines in Exposure D include inland waterways, the Great Lakes and coastal areas of California, Oregon, Washington and Alaska. This exposure shall apply only to those buildings and other structures exposed to the wind coming from over the water. Exposure D extends inland from the shoreline

a distance of 1,500 feet (457 m) or 10 times the height of the building or structure, whichever is greater.

Figure R301.2.4: Revise to Florida specific figure.

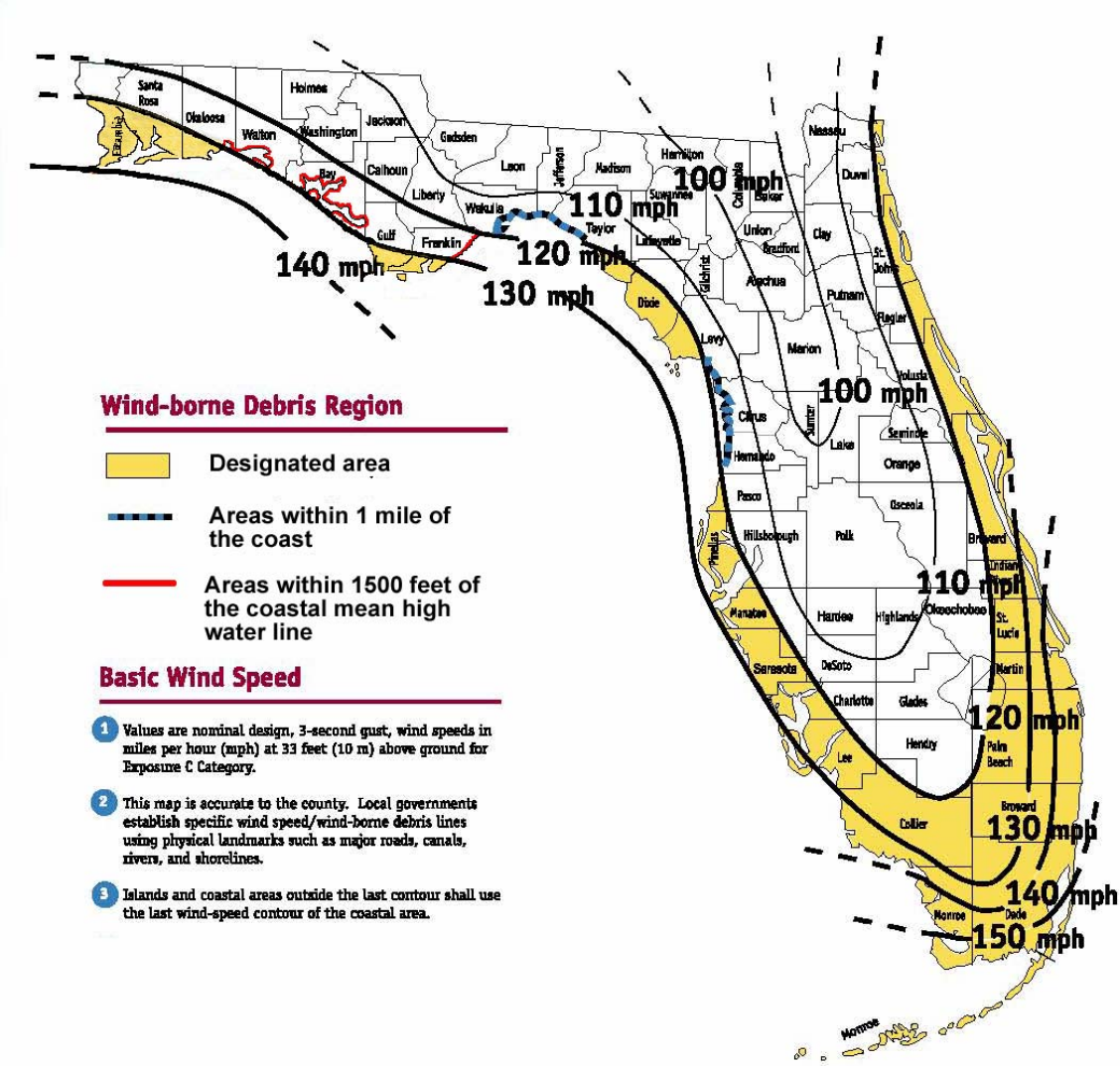


Figure R301.2(4)
BASIC WIND DESIGN SPEEDS

Basic Wind Speed

1. Values are nominal design, 3-second gust, wind speeds in mules per hour (mph) at 33 feet (10 m) above ground for Exposure C Category.

2. This map is accurate to the county. Local governments establish specific wind speed/wind-borne debris lines using physical landmarks such as major roads, canals, rivers, and shorelines.

3. Islands and coastal areas outside the last contour shall use the last wind-speed contour of the coastal area.

R301.2.1.5 Add to read as shown:

R301.2.1.5 Basic wind speed. The basic wind speed in miles per hour, for the development of windloads, shall be determined from Figure R301.2(4). The exact location of wind speed lines shall be established by local ordinance using recognized physical landmarks such as major roads, canals, rivers and lake shores whenever possible.

Change the following sections to read as follows:

R301.2.2 Seismic provisions. Reserved.
Figure R301.2(2) Reserved.
R301.2.3 Snow loads. Reserved.
Figure R301.2(5) Reserved.

R301.2.4 Change to read as follows:

R301.2.4 Floodplain construction. This code specifically defers to the authority granted to local government by Title 44 CFR, Sections 59 and 60. This code is not intended to supplant or supercede local ordinances adopted pursuant to that authority, nor are local floodplain management ordinances to be deemed amendments to the code.

R301.2.5 Add to read as follows:

R301.2.5 Structures seaward of a coastal construction line. Structures located seaward of the coastal construction line shall be designed to resist the predicted forces of a 100-year storm event in accordance with Section 3109 of the *Florida Building Code, Building*.

R301.3 Change to read as follows:

R301.3 Story height. Buildings constructed in accordance with these provisions shall be limited to story heights of not more than the following:

1. For conventional light-frame wood construction, the laterally unsupported bearing wall stud height permitted by Table R602.2(5) plus a height of floor framing not to exceed sixteen inches. For purposes of determining uplift, gravity loads, and lateral bracing requirements, an attic shall be considered an additional story when the roof slope is 6 in 12 or greater. (See Figure R301.3).

   Exception: For wood framed wall buildings with bracing in accordance with Table R602.2.10.1, the wall stud clear height used to determine the maximum permitted story height may be increased to 12 feet (3658 mm) without requiring an engineered design for the building wind force resisting systems provided that the length of bracing required by Table R602.2.10.1 is increased by multiplying by a factor of 1.20. Wall studs are still subject to the requirements of this section.

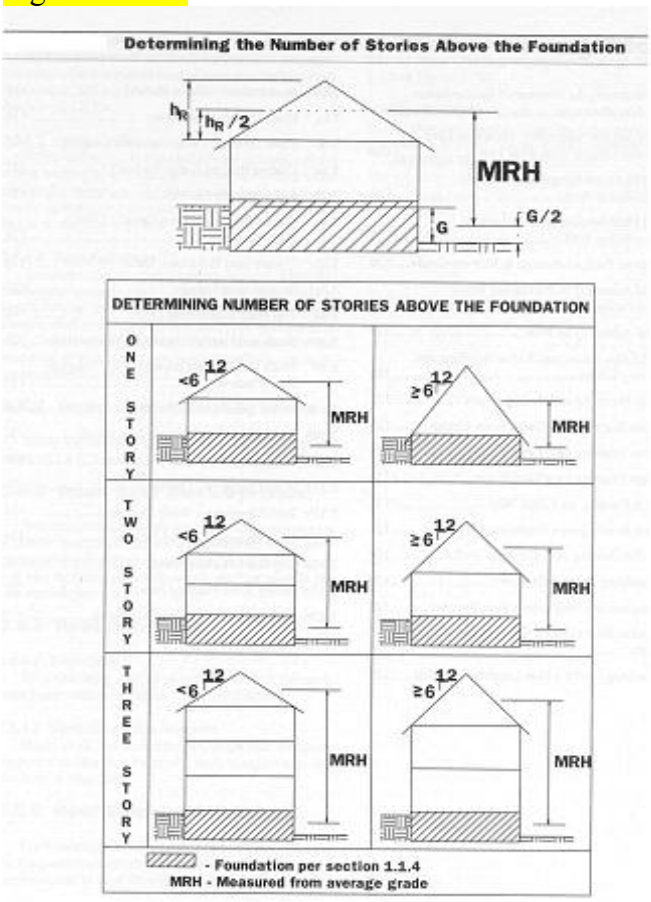
2. For steel wall framing, a stud height of 10 feet (3048 mm), plus a height of floor framing not to exceed 16 inches (406 mm).
3. For masonry walls, a maximum bearing wall clear height of 12 feet (3658 mm) plus a height of floor framing not to exceed 16 inches (406 mm).

Exception: An additional 8 feet (2438 mm) is permitted for gable end walls.
4. For insulating concrete form walls, the maximum bearing wall height per story as permitted by Section 611 tables plus a height of floor framing not to exceed 16 inches (406 mm).

Individual walls or walls studs shall be permitted to exceed these limits as permitted by Chapter 6 provisions for buildings where the wind speed is less than 100 mph (160.9 km/h), provided story heights are not exceeded. An engineered design shall be provided for the wall or wall framing members when they exceed the limits of Chapter 6. Where the story height limits are exceeded, an engineered design shall be provided in accordance with the Florida Building Code, Building for the overall wind force resisting systems.

Add Figure R301.3 as shown below:

Figure R301.3



R301.6 Change to read as shown:

R301.6 Roof load. Roof shall be designed for the live load indicated in Table R301.6.

R302.1 Change to read as shown:

R302.1 Exterior walls. Exterior walls separated by less than 6 feet (1828 mm) shall have not less than a one-hour fire-resistive rating with exposure from both sides. Projections shall not extend to a point closer than 4 feet (1220 mm) from an adjacent projection or wall.

> **Exception:** Detached garages accessory to a dwelling located within 2 feet (610 mm) of a lot line shall be permitted to have roof eave projections not exceeding 4 inches (102 mm)**.**

Projections extending into the 6-foot (1829 mm) separation distance shall have not less than 1-hour fire-resistive construction on the underside. The above provisions shall not apply to walls which are perpendicular to a line extending from the point from which the separation distance has been measured running and parallel to the property line.
Exception: Tool and storage sheds, playhouses and similar structures are not required to provide wall protection based on location on the lot.

R302.2 Openings. Change to read as shown.

R302.2 Openings. Openings shall not be permitted in the exterior wall of a dwelling or accessory building that is separated from an adjacent building by a distance of less than 6 feet (1828 mm). This distance shall be measured perpendicular to the line used to determine the separation distance.
Exceptions:
1. Openings shall be permitted in walls that are perpendicular to a line extending from the point from which the separation distance has been measured running and parallel to the property line.
2. Foundation vents installed in compliance with this code are permitted.

R302.3 Penetrations. Change to read as shown.

R302.3 Penetrations. Penetrations located in the exterior wall of a dwelling separated by less than 6 feet (1828 mm) shall be protected in accordance with Section R317.3.
Exception: Penetrations shall be permitted in walls that are perpendicular to a line extending from the point which the separation distance has been measured running and parallel to the property line.

R308.1 Change to read as shown:

R308.1 Identification. Each pane shall bear the manufacturer's label designating the type and thickness of glass or glazing material. Except as indicated in Section R308.1.1, each pane of glazing installed in hazardous locations as defined in Section R308.4 shall be provided with a manufacturer's or installer's label, designating the type and thickness of glass and the safety glazing standard with which it complies, which is visible in the final installation. The safety glazing label shall be acid etched, sandblasted, ceramic-fired, embossed mark, or shall be of a type which once applied cannot be removed without being destroyed.

Exceptions:

1. For other than tempered glass, labels may be omitted provided the building official approves the use of a certificate, affidavit or other evidence furnished by the glazing

contractor certifying that each light is glazed in accordance with approved construction documents that comply with the provisions of this chapter confirming compliance with this code.

2. Tempered spandrel glass may be identified by the manufacturer with a removable paper label.

R308.6.9 Change to read as follows:

R308.6.9 Testing and labeling. Unit skylights shall be tested by an approved independent testing laboratory, and bear a label identifying manufacturer, performance characteristics, and approved evaluation entity to indicate compliance with the requirements of AAMA/WDMA/CSA 101/I.S.2/A440 or TAS 202 (HVHZ shall comply with TAS 202).

R309.1.1 Change to read as follows:

R309.1.1 Duct penetration. Ducts in the garage and ducts penetrating the walls or ceilings separating the dwelling from the garage shall be constructed of a minimum No. 26 gage (0.48 mm) sheet steel, 1 inch minimum rigid nonmetallic Class 0 or Class 1 duct board, or other approved material and shall have no openings into the garage.

R309.5 Change to read as follows:

R309.5 Flood hazard areas. Reserved.

R310.1 Change to read as follows:

R310.1 Emergency escape and rescue required. Basements and every sleeping room shall have at least one operable emergency and rescue opening. Such opening shall open directly into a public street, public alley, yard or court. Where basements contain one or more sleeping rooms, emergency egress and rescue openings shall be required in each sleeping room, but shall not be required in adjoining areas of the basement. Where emergency escape and rescue openings are provided they shall have a sill height of not more than 44 inches (1118 mm) above the floor. Where a door opening having a threshold below the adjacent ground elevation serves as an emergency escape and rescue opening and is provided with a bulkhead enclosure, the bulkhead enclosure shall comply with Section R310.3. The net clear opening dimensions required by this section shall be obtained by the normal operation of the emergency escape and rescue opening from the inside. Emergency escape and rescue openings with a finished sill height below the adjacent ground elevation shall be provided with a window well in accordance with Section R310.2. Emergency escape and rescue openings shall open directly into a public way, or to a yard or court that opens to a public way.

Exceptions:

1. Basements used only to house mechanical equipment and not exceeding total floor area of 200 square feet (18.58 m^2).

2. The emergency escape and rescue opening shall be permitted to open into a screen enclosure, open to the atmosphere, where a screen door is provided leading away from the residence.

R310.4 Change to read as follows:

R310.4 Bars, grills, covers and screens. Bars, grills, covers, screens or similar devices are permitted to be placed over emergency escape and rescue openings, bulkhead enclosures, or window wells that serve such openings, provided the minimum net clear opening size complies with Sections R310.1.1 to R310.1.3, and such devices shall be releasable or removable from the inside without the use of a key, tool, special knowledge or force greater than that which is required for normal operation of the escape and rescue opening. The temporary installation or closure of storm shutters, panels, and other approved hurricane protection devices shall be permitted on emergency escape and rescue openings during the threat of a storm. Such devices shall not be required to comply with the operational constraints of Section R310.1.4. While such protection is provided, at least one means of escape from the dwelling or dwelling unit shall be provided. The means of escape shall be within the first floor of the dwelling or dwelling unit and shall not be located within a garage without a side-hinged door leading directly to the exterior. Occupants in any part of the dwelling or dwelling unit shall be able to access the means of escape without passing through a lockable door not under their control.

R311.4.3 Change to read as follows:

R311.4.3 Landings at doors. There shall be a floor or landing on each side of each exterior door.

Exception:

1. Where a stairway of two or fewer risers is located on the exterior side of a door, other than the required exit door, a landing is not required for the exterior side of the door

The floor or landing at exterior doors required by Section R311.4.1 shall not be required to comply with this requirement but shall have a rise no greater than that permitted in Section R311.5.3.

Exception: The landing at an exterior doorway shall not be more than 7¾ inches (196 mm) below the top of the threshold, provided the door, other than an exterior storm or screen door does not swing over the landing.

The width of each landing shall not be less than the door served. Every landing shall have a minimum dimension of 36 inches (914 mm) measured in the direction of travel.

R311.5.3.2 Change to read as follows:

R311.5.3.2 Tread depth. The minimum tread depth, exclusive of nosing, shall be not less than 9 inches (229 mm). Treads and risers of stairs shall be permitted to be so proportioned that the sum of two risers and a tread, exclusive of projection of nosing, is not less than 24 inches (610 mm) nor more than 25 inches (635 mm). The tread depth shall be measured horizontally between the vertical planes of the foremost projection of adjacent treads and at a right angle to the tread's leading edge. The greatest tread depth within any flight of stairs shall not exceed the smallest by more than 3/8 inch (9.5 mm). Winder treads shall have a minimum tread depth of 10 inches (254

mm) measured as above at a point 12 inches (305) mm from the side where the treads are narrower. Winder treads shall have a minimum tread depth of 6 inches (152 mm) at any point. Within any flight of stairs, the greatest winder tread depth at the 12 inch (305 mm) walk line shall not exceed the smallest by more than 3/8 inch (9.5 mm).

R311.5.3.3 Change to read as follows:

R311.5.3.3 Profile. The radius of curvature at the leading edge of the tread shall be no greater than 9/16 inch (14.3 mm). Every tread less than 10 inches (254 mm) wide shall have a nosing or effective projection of approximately 1 inch (25 mm) over the level immediately below that tread. Beveling of nosing shall not exceed ½ inch (12.7 mm). Risers shall be vertical or sloped from the underside of the leading edge of the tread above at an angle not more than 30 (0.51 rad) degrees from the vertical. Open risers are permitted, provided that the opening between treads does not permit the passage of a 4-inch diameter (102 mm) sphere.

Exceptions:

1. A nosing is not required where the tread depth is a minimum of 11 inches (279 mm).
2. The opening between adjacent treads is not limited on stairs with a total rise of 30 inches (762 mm) or less.

R311.5.4 Change to read as follows:

R311.5.4 Landings for stairways. There shall be a floor or landing at the top and bottom of each stairway.

Exception: A door at the top of a stair shall be permitted to open directly at a stair, provided the door does not swing over the stair.

A flight of stairs shall not have a vertical rise greater than 12 feet (3658 mm) between floor levels or landings.

The width of each landing shall not be less than the stairway served. Every landing shall have a minimum dimension of 36 inches (914 mm) measured in the direction of travel.

R311.5.6 Change to read as follows:

R311.5.6.1 Height. Handrail height, measured vertically from the sloped plane adjoining the tread nosing, or finish surface of ramp slope, shall be not less than 34 inches (864 mm) and not more than 38 inches (965 mm).

Exception: When fittings are used to provide transition between flights, transition from handrail to guardrail, or used at the start of a stair, the handrail height at the fitting. shall be permitted to exceed the maximum height.

R311.5.6.2 Continuity. Handrails for stairways shall be continuous for the full length of the flight, from a point directly above the top nosing edge of the flight to a point directly above the lowest nosing edge of the flight. Handrail ends shall be returned or shall terminate in newel posts or safety terminals. Handrails adjacent to a wall shall have a space of no less than 1-1/2 inch (38 mm) between the wall and the handrails.

Exceptions:

1. Handrails shall be permitted to be interrupted by a newel post at the turn and at the top of the flight.
2. The use of a volute, turnout, starting easing or newel shall be allowed over the lowest tread.

R311.5.8.1 Change to read as follows.

R311.5.8.1 Spiral stairways. Spiral stairways are permitted, provided the minimum width shall be 26 inches (660 mm) with each tread having a 7½-inches (190 mm) minimum tread depth at 12 inches from the narrower edge. All treads shall be identical, and the rise shall be no more than 9½ inches (241 mm). A minimum headroom of 6 feet 6 inches (1982 mm) shall be provided. Handrails shall be provided on one side.

R311.5.8.3 Add to read as follows:

R311.5.8.3 Circular stairways. Circular stairs may have a minimum tread depth of 9 inches (229 mm) with 1 inch (25.4 mm) of nosing, and the smaller radius may be less than twice the width of the stairway.

R314.1 Change to read as follows:

R314.1 General. The provisions of this section shall govern ~~the requirements and uses~~ materials, design, application, construction and installation of foam plastic materials.

R314.3 Change to read as follows:

R314.3 Surface burning characteristics. Unless otherwise allowed in Section R314.5 or Section R314.6, all foam plastic or foam plastic cores in manufactured assemblies used as a component in manufactured assemblies used in building construction shall have a flame-spread index of not more than 75 and shall have a smoke-developed index of not more than 450 when tested in the maximum thickness of 4 inches (102 mm), provided the end use is approved in accordance with Section R314.6 using eht thickness and density intended for use intended for use in accordance with ASTM E 84. Loose-fill type foam plastic insulation shall be tested as board stock for the flame spread index and smoke-developed index.

Exception: Foam plastic insulation greater than 4 inches in thickness shall have a maximum flame spread index of 75 and a smoke-developed index of 450 where tested at a minimum thickness of 4 inches, provided the end use is approved in accordance with Section R314.8 using the thickness and density intended for use.

R314.4 Change to read as follows:

R314.4 Thermal barrier. Unless otherwise allowed in Section R314.5 or Section R314.6, foam plastic shall be separated from the interior of a building by an approved thermal barrier of minimum 0.5 inch (12.7 mm) gypsum wallboard or an approved finish material equivalent to a thermal barrier material that will limit the average temperature rise of the unexposed surface to no more than 250°F (139°C) after 15 minutes of fire exposure complying with the ASTM E 119 standard time temperature curve. The thermal barrier shall be installed in such a manner that it

will remain in place for 15 minutes based on NFPA 286 with the acceptance criteria of Section R315.4, FM 4880, UL 1040 or UL 1715.

R314.5 Change to read as follows:

R314.5 Specific requirements. The following requirements shall apply to all uses of foam plastic unless specifically approved in accordance with Section R314.6 or by other sections of the code or the requirements of Sections R314.2 through R314.4 have been met.

R314.5.1 Masonry or concrete construction. The thermal barrier specified in Section R314.4 is not required in a masonry or concrete wall, floor or roof when the foam plastic insulation is protected on each face by a minimum 1-inch (25.4 mm) thickness of masonry or concrete.

R314.5.2 Roofing. The thermal barrier specified in Section R314.4 is not required when the foam plastic in a roof assembly or under a roof covering is installed in accordance with the code and the manufacturer's installation instructions and is separated from the interior of the building by tongue and groove wood planks or wood structural panel sheathing in accordance with Section R803, not less than 15/32 inch (11.9 mm) in thickness bonded with exterior glue and identified as Exposure 1, with edges supported by blocking or tongue-and-groove joints or an equivalent material. The smoke developed index for roof applications shall not be limited.

R314.5.3 Attics. Where attic access is required by Section R807.1 and where entry is made only for service of utilities, foam plastics shall be protected against ignition by 1.5-inch-thick (38 mm) mineral fiber insulation, 1/4-inch-thick (6.4 mm) wood structural panels, 3/8-inch (9.5 mm) particleboard, 1/4-inch (6.4 mm) hardboard, 3/8-inch (9.5 mm) gypsum board, or corrosion-resistant steel having a base metal thickness of 0.016 inch (0.406 mm) and the thermal barrier specified in Section R314.4 is not required. The ignition barrier is not required where the foam plastic insulation has been tested in accordance with Section R314.6.

R314.5.4 Crawl spaces. Where crawlspace access is required by Section R408.3 and where entry is made only for service of utilities, foam plastics shall be protected against ignition by 1.5-inch-thick (38 mm) mineral fiber insulation, 1/4-inch-thick (6.4 mm) wood structural panels, 3/8-inch (9.5 mm) particleboard, 1/4-inch (6.4 mm) hardboard, 3/8-inch (9.5 mm) gypsum board, or corrosion-resistant steel having a base metal thickness of 0.016 inch (0.406 mm) and the thermal barrier specified in Section 314.4 is not required. The ignition barrier is not required where the foam plastic insulation n has been tested in accordance with Section R314.6.

R314.5.5 Foam-filled exterior doors. Foam-filled exterior doors are exempt from the requirements of Sections R314.3 and R314.4.

R314.5.6 Foam-filled garage doors. Foam-filled garage doors are exempt from the requirements of Section R314.3 and R314.4.

R314.5.7 Siding backer board. Foam plastic insulation with a maximum thickness of 0.5 inch (12.7 mm) and a potential heat of not more than 2000 BTU per square foot (22 720 kJ/m2) when tested in accordance with NFPA 259 shall be permitted as siding backer board without the thermal barrier specified in Section R314.4 provided the foam plastic insulation is separated from interior spaces by not less than 2 inches (51 mm) of mineral fiber insulation or 1/2-inch (12.7 mm) gypsum wallboard or installed over existing exterior wall finish in conjunction with re-siding.

R314.5.8 Interior trim. Exposed foam plastic trim defined as picture molds, chair rails, baseboards, handrails, ceiling beams, door trim and window trim shall be permitted, provided

1. The minimum density is 20 pounds per cubic foot (3.14 kg/m3).
2. The maximum thickness of the trim is 0.5 inch (12.7 mm) and the maximum width is ~~8~~ 4 inches (102 mm).
3. The trim constitutes no more than 10 percent of the area of any wall or ceiling.
4. The flame-spread index does not exceed 75 when tested per ASTM E 84. The smoke-developed index is not limited.

R314.5.11 Sheathing. Foam plastic insulation used as sheathing, as referenced in Table R703.4, shall comply with Sections R314.3 and Section R314.4. Where the foam plastic sheathing is used at a gable and is exposed to the attic space, the provisions of Section R314.5.3 shall apply.

R314.6 Change to read as follows:

R314.6 Specific approval. Plastic foam not meeting the requirements of Sections R314.3 through R314.5 shall be specifically approved on the basis of one of the following approved tests: FM4880, UL 1040, NFPA 286, or UL 1715, or fire tests related to actual end-use configurations. The specific approval shall be based on the actual end use configuration and shall be performed on the finished foam plastic assembly in the maximum thickness intended for use. Assemblies tested shall include seams, joints and other typical details used in the installation of the assembly and shall be tested in the manner intended for use.

R316.2 Change to read as follows:

R316.2 Loose-fill insulation. Loose-fill insulation materials that cannot be mounted in the ASTM E 84 apparatus without a screen or artificial supports shall comply with the flame-spread and smoke developed limits of Sections R316.1 and R316.4 when tested in accordance with CAN/ ULC-S102.2.

Exception: Cellulose loose-fill insulation shall not be required to comply with the flame spread index requirement of CAN/ULC S102.2, provided such insulation complies with the requirements of Section R316.3.

R316.4 Change to read as follows:

R316.4 Exposed attic insulation. All exposed insulation materials installed on attic floors shall have a critical radiant flux not less than 0.12 watt per square centimeter. Exposed foam plastic insulation materials exposed on the underside of the roof deck or on the attic walls shall comply with R314.

R317.2.2 Change to read as follows:

R317.2.2 Parapets. Parapets constructed in accordance with Section R317.2.3 shall be provided for townhouses as an extension of exterior walls or common walls in accordance with the following:

1. Where roof surfaces adjacent to the wall or walls are at the same elevation, the parapet shall extend not less than 18 inches (457.2 mm) above the roof surfaces.
2. Where roof surfaces adjacent to the wall or walls are at different elevations and the higher roof is not more than 18 inches (457.2 mm) above the lower roof, the parapet shall extend not less than 18 inches (762 mm) above the lower roof surface.

   Exception: A parapet is not required in the two cases above when the roof is covered with a minimum class C roof covering, and the roof decking or sheathing is of noncombustible materials or approved fire-retardant-treated wood for a distance of 4 feet (1219 mm) on each side of the wall or walls, or one layer of 5/8-inch (15.9 mm) Type X gypsum board is installed directly beneath the roof decking or sheathing, supported by a minimum of nominal 2-inch (51 mm) ledgers attached to the sides of the roof framing members, for a minimum distance of 4 feet (1220 mm) on each side of the wall or walls.
3. A parapet is not required where roof surfaces adjacent to the wall or walls are at different elevations and the higher roof is more than 18 inches (457.2 mm) above the lower roof. The common wall construction from the lower roof to the underside of the higher roof deck shall not have less than a 1-hour fire-resistive rating. The wall shall be rated for exposure from both sides.

R317.2.3 Change to read as follows:

R317.2.3 Parapet construction. Parapets shall have the same fire-resistance rating as that required for the supporting wall or walls. On any side adjacent to a roof surface, the parapet shall have noncombustible faces for the uppermost 18 inches (457 mm), to include counterflashing and coping materials. Where the roof slopes toward a parapet at slopes greater than two units vertical in 12 units horizontal (16.7-percent slope), the parapet shall extend to the same height as any portion of the roof within a distance of 3 feet (914 mm), but in no case shall the height be less than 18 inches (762 mm).

R317.3.2 Change to read as follows:

Section R317.3.2 Membrane penetrations. Membrane penetrations shall comply with Section R317.3.1. Where walls are required to have a minimum fire-resistance rating, recessed fixtures shall be so installed such that the required fire resistance will not be reduced.

Exceptions:

1. Membrane penetrations of maximum 2-hour fire-resistance-rated walls and partitions by steel electrical boxes that do not exceed 16 square inches (0.0103 m 2) in area provided the aggregate area of the openings through the membrane does not exceed 100 square inches (0.0645 m2) in any 100 square feet (9.29 m2) of wall area. The annular space between the wall membrane and the box shall not exceed 1/8 inch (3.1 mm). Such boxes on opposite sides of the wall shall be separated as follows:

1.1. By a horizontal distance of not less than 24 inches (610 mm) except at walls or partitions constructed using parallel rows of studs or staggered studs;
1.2. By a horizontal distance of not less than the depth of the wall cavity when the wall cavity is filled with cellulose loose-fill, rockwool or slag mineral wool insulation;
1.3. By solid fire blocking in accordance with Section R602.2.1.1;
1.4. By protecting both boxes with listed putty pads; or
1.5. By other listed materials and methods.
2. Membrane
2. Membrane penetrations by listed electrical boxes of any materials provided the boxes have been tested for use in fire-resistance-rated assemblies and are installed in accordance with the instructions included in the listing. The annular space between the wall membrane and the box shall not exceed 1/8 inch (3.1 mm) unless listed otherwise.
Such boxes on opposite sides of the wall shall be separated as follows:
2.1. By a horizontal distance of not less than 24 inches (610 mm) except at walls or partitions constructed using parallel rows of studs or staggered studs;
2.2. By solid fire blocking in accordance with Section R602.1.2;
2.3. By protecting both boxes with listed putty pads; or
2.4. By other listed materials and methods.
3. The annular space created by the penetration of a fire sprinkler provided it is covered by a metal escutcheon plate.

R319 Change to read as follows:

R319.1.3 Geographical areas. Approved naturally durable or pressure-preservative-treated wood shall be used for those portions of wood members that form the structural supports of buildings, balconies, porches or similar permanent building appurtenances when those members are exposed to the weather without adequate protection from a roof, eave, overhang or other covering that would prevent moisture or water accumulation on the surface or at joints between members. Depending on local experience, such members may include:
1. Horizontal members such as girders, joists and decking.
2. Vertical members such as posts, poles and columns.
3. Both horizontal and vertical members.

R320 Change to read as follows:

SECTION R320 PROTECTION AGAINST TERMITES
R320.1 Termite Protection. Termite protection shall be provided by registered termiticides, including soil applied pesticides, baiting systems, and pesticides applied to wood, or other approved methods of termite protection labeled for use as a preventative treatment to new construction. See §202, REGISTERED TERMITICIDE. Upon completion of the application of the termite protective treatment, a Certificate of Compliance shall be issued to the building department by the licensed pest control company that contains the following statement: "The building has received a complete treatment for the prevention of subterranean termites. Treatment is in accordance with rules and laws established by the Florida Department of Agriculture and Consumer Services."

R320.1.1 If soil treatment used for subterranean termite prevention, the initial chemical soil treatment inside the foundation perimeter shall be done after all excavation, backfilling and compaction is complete.

R320.1.2 If soil treatment is used for subterranean termite prevention, soil area disturbed after initial chemical soil treatment shall be retreated with a chemical soil treatment, including spaces boxed or formed.

R320.1.3 If soil treatment is used for subterranean termite prevention, space in concrete floors boxed out or formed for the subsequent installation of plumbing traps, drains or any other purpose shall be created by using plastic or metal permanently placed forms of sufficient depth to eliminate any planned soil disturbance after initial chemical soil treatment.

R320.1.4 If soil treatment is used for subterranean termite prevention, chemically treated soil shall be protected with a minimum 6 mil vapor retarder to protect against rainfall dilution. If rainfall occurs before vapor retarder placement, retreatment is required. Any work, including placement of reinforcing steel, done after chemical treatment until the concrete floor is poured, shall be done in such manner as to avoid penetrating or disturbing treated soil.

R320.1.5 If soil treatment is used for subterranean termite prevention, concrete overpour or mortar accumulated along the exterior foundation perimeter shall be removed prior to exterior chemical soil treatment, to enhance vertical penetration of the chemicals.

R320.1.6 If soil treatment is used for subterranean termite prevention, chemical soil treatments shall also be applied under all exterior concrete or grade within 1 foot (305 mm) of the primary structure sidewalls. Also, a vertical chemical barrier shall be applied promptly after construction is completed, including initial landscaping and irrigation/sprinkler installation. Any soil disturbed after the chemical vertical barrier is applied shall be promptly retreated.

R320.1.7 If a registered termiticide formulated and registered as a bait system is used for subterranean termite prevention, §1816.1.1 through §1816.1.6 do not apply; however, a signed contract assuring the installation, maintenance and monitoring of the baiting system for a minimum of five years from the issue of the Certificate of Occupancy shall be provided to the building official prior to the pouring of the slab, and the system must be installed prior to final building approval.

If the baiting system directions for use require a monitoring phase prior to installation of the pesticide active ingredient, the installation of the monitoring phase components shall be deemed to constitute installation of the system.

R320.1.8 If a registered termiticide formulated and registered as a wood treatment is used for subterranean termite prevention, Sections R320.1.1 through R320.1.6 do not apply.

Application of the wood treatment termiticide shall be as required by label directions for use, and must be completed prior to final building approval.

R320.2 Penetration. Protective sleeves around metallic piping penetrating concrete slab-on-grade floors shall not be of cellulose-containing materials and, if soil treatment is used for subterranean termite protection, shall receive application of a termiticide in annular space between sleeve and pipe.

R320.3 Cleaning. Cells and cavities in masonry units and air gaps between brick, stone or masonry veneers and the structure shall be cleaned of all non-preservative treated or non-naturally durable wood, or other cellulose-containing material prior to concrete placement.

Exception: Inorganic material manufactured for closing cells in foundation concrete masonry unit construction or clean earth fill placed in concrete masonry unit voids below slab level before termite treatment is performed.

R320.4 Concrete bearing ledge. Brick, stone or other veneer shall be supported by a concrete bearing ledge of such thickness as required in Chapter 14, which is poured integrally with the concrete foundation. No supplemental concrete foundation pours which will create a hidden cold joint shall be used without supplemental treatment in the foundation unless there is an approved physical barrier. An approved physical barrier shall also be installed from below the wall sill plate or first block course horizontally to embed in a mortar joint. If masonry veneer extends below grade, a termite protective treatment must be applied to the cavity created between the veneer and the foundation, in lieu of a physical barrier.

Exception: Veneer supported by a structural member secured to the foundation sidewall as provided in 1403, provided at least a 6 inch (152 mm) clear inspection space of the foundation sidewall exterior exist between the veneer and the top of any soil, sod, mulch or other organic landscaping component, deck, apron, porch, walk or any other work immediately adjacent to or adjoining the structure.

R320.5 Pressure preservatively treated and naturally resistant wood. [No change to IRC '06 text]

R320.6 Foam plastic protection. Extruded and expanded polystyrene, polyisocyanurate and other foam plastics shall not be installed on the exterior face or under interior or exterior foundation walls or slab foundations located below grade. The clearance between foam plastics installed above grade and exposed earth shall be at least 6 inches (152 mm).

Exceptions:

1. Buildings where the structural members of walls, floors, ceilings and roofs are entirely of noncombustible materials or pressure-preservative-treated wood.
2. When in addition to the requirements of Section R320.1, an approved method of protecting the foam plastic and structure from subterranean termite damage is used.
3. On the interior side of basement walls.

R320.7 Protection against decay and termites. Condensate lines and roof downspouts shall discharge at least 1 foot (305 mm) away from the structure sidewall, whether by underground piping, tail extensions or splash blocks. Gutters with downspouts are required on all buildings with eaves of less than 6 inches (152 mm) horizontal projection except for gable end rakes or on a roof above another roof.

R320.8 Preparation of building site and removal of debris.

R320.8.1 All building sites shall be graded to provide drainage under all portions of the building not occupied by basements.

R320.8.2 The foundation and the area encompassed within 1 foot (305 mm) therein shall have all vegetation, stumps, dead roots, cardboard, trash and foreign material removed and the fill material shall be free of vegetation and foreign material. The fill shall be compacted to assure adequate support of the foundation.

R320.8.3 After all work is completed, loose wood and debris shall be completely removed from under the building and within 1 foot (305 mm) thereof. All wood forms and supports shall be completely removed. This includes, but is not limited to: wooden grade stakes, forms, contraction spacers, tub trap boxes, plumbing supports, bracing, shoring, forms or other cellulose-containing material placed in any location where such materials are not clearly visible and readily removable prior to completion of the work. Wood shall not be stored in contact with the ground under any building.

R322.1.1 Change to read as shown:

SECTION R322 ACCESSIBILITY

R322.1 Scope. Shall be in accordance with the provisions of Chapter 11 of the *Florida Building Code, Building*.

R322.1.1 All new single-family houses, duplexes, triplexes, condominiums and townhouses shall provide at least one bathroom, located with maximum possible privacy, where bathrooms are provided on habitable grade levels, with a door that has a 29-inch (737 mm) clear opening. However, if only a toilet room is provided at grade level, such toilet rooms shall have a clear opening of not less than 29 inches (737 mm).

R323 Change to read as shown:

SECTION R323 FLOOD RESISTANT CONSTRUCTION

R323.1 Floodplain construction. This code specifically defers to the authority granted to local government by Title 44 CFR, Sections 59 and 60. This code is not intended to supplant or supercede local ordinances adopted pursuant to that authority, nor any local floodplain management ordinances to be deemed amendments to the code.

R323.2 Structures seaward of a coastal construction line. Structures located seaward of the coastal construction line shall be designed to resist the predicted forces of a 100-year storm event in accordance with Section 3109 of the *Florida Building Code, Building*.

R323.3 Reserved.

R324.1 Change to read as shown:

R324.1 Sprinkler system requirements for buildings three stories or more in height. NFPA 101 as adopted by the Florida Fire Prevention Code, as regarding the requirements for fire protection sprinklers, is applicable to all multiple-family residential buildings, whether designated as townhouses, condominiums, apartment houses, tenements, garden apartments or by any other name. The attorney general has determined that for the purpose of the fire protection sprinkler requirements in Section 553.895(2), Florida Statutes, townhouses that are three or more stories tall and consist of three or more units together are multiple-family dwellings. Therefore, these types of townhouses are not exempt from being considered for the requirements to provide fire protection sprinklers (even if there are any other definitions that define townhouse as single-family residences). When determining whether townhouses require fire protection sprinkler systems, the building official must consider in parallel: (a) the attorney general's opinion defining the statutory language for townhouses; (b) the building code requirements, including all life-safety chapters, that provide additional determining criteria, such as construction types, fire-resistance, fire protection systems and egress; and (c) the NFPA 101 as adopted by the Florida

Fire Prevention Code egress and protection determining criteria. The more restrictive criteria are then applied.

R325 Add new section to read as shown:

SECTION R325 AIRPORT NOISE
R325.1 Airport noise study guidelines. The Aviation Safety and Noise Abatement Act of 1979, 14 CFR Part 150 (U.S. Department of Transportation), including revisions through January, 2005, are hereby adopted as a guideline for establishing airport noise control.

CHAPTER 4: FOUNDATIONS

R401.1 Change to read as shown:

R401.1 Application. The provisions of this chapter shall control the design and construction of the foundation and foundation spaces for all buildings. In addition to the provisions of this chapter, the design and construction of foundations in areas prone to flooding as established by Table R301.2(1) shall meet the provisions of Section R324. Wood foundations shall be designed and installed in accordance with AF&PA Report No. 7 (see Section R301.2.1.1).

Exceptions:

1. The provisions of this chapter shall be permitted to be used for wood foundations subject to the following:
   1.1. Buildings shall have no more than two floors and a roof.
   1.2. Interior basement and foundation walls shall be provided at intervals not exceeding 50 feet.
   1.3 When the foundation uplift loads determined from Table R401.1 exceed 0 or when such uplift loads cannot be determined from Table R401.1, an engineered design shall be required.
2. In addition to the provisions of this chapter, the design and construction of foundations in areas prone to flooding shall meet the provisions of Section R323.
3. Buildings and structures located within the High-Velocity Hurricane Zone shall comply with the provisions of Chapter 44.

Add Tables R401.1 to read as shown (see the 2004 Florida Building Code):

TABLE R401.1
FOUNDATION UPLIFT LIGHT STEEL & WOOD FRAME BUILDINGS IN EXPOSURE B (PLF)

TABLE R401.1

FOUNDATION UPLIFT LIGHT STEEL & WOOD FRAME BUILDINGS IN EXPOSURE B (plf)[5, 6]

Roof Angle	Bldg Width	Minimum Building	WIND VELOCITY / VELOCITY PRESSURE					
			100	110	120	130	140	150

			Length	15	18	22	26	30	34
45	3 Stories[3]	20	12	173	276	389	512	644	787
		25	14	73	165	265	374	492	618
		30	19	0	81	174	275	384	502
		35	25	17	48	104	200	305	417
		40	35	33	69	109	152	240	349
	2 Stories[2]	20	12	64	126	195	270	350	437
		25	15	17	66	129	198	272	352
		30	22	38	62	90	146	217	294
		35	35	56	86	118	154	192	252
		40	40	74	108	146	186	230	277
	1 Story[1]	20	12	33	46	61	94	132	173
		25	22	57	75	96	118	142	167
		30	18	79	103	129	157	187	219
		35	16	100	128	159	192	229	267
		40	16	120	152	188	226	268	312
30	3 Stories[3]	20	12	92	177	271	373	483	601
		25	17	0	63	143	230	324	425
		30	25	0	23	52	125	209	300
		35	35	13	44	78	115	154	206
		40	40	28	64	102	145	190	239
	2 Stories[2]	20	13	1	50	103	162	224	292
		25	23	16	35	57	84	139	199
		30	30	36	60	87	116	148	181
		35	35	54	83	115	150	187	227
		40	36	71	104	141	181	224	270
	1 Story[1]	20	20	32	46	60	76	93	112
		25	15	56	74	95	117	140	166
		30	13	78	102	127	155	185	217
		35	14	99	127	157	190	226	264
		40	16	118	150	185	223	264	308

TABLE R401.1 (continued)

FOUNDATION UPLIFT LIGHT STEEL & WOOD FRAME BUILDINGS IN EXPOSURE B (plf)[5, 6]

Roof Angle		Bldg Width	Minimum Building Length[4]	WIND VELOCITY / VELOCITY PRESSURE					
				100	110	120	130	140	150
				15	18	22	26	30	34
20	nes[3]	20	12	113	203	301	408	523	647

		25	14	45	130	222	322	431	547
		30	17	4	85	177	277	385	501
		35	19	20	58	154	257	369	489
		40	21	35	72	141	249	367	493
	2 Stories[2]	20	12	43	100	163	231	304	384
		25	13	22	79	143	214	289	371
		30	15	42	72	141	217	298	386
		35	15	61	92	150	232	321	417
		40	16	78	114	164	254	352	457
	1 Story[1]	20	12	38	57	94	135	179	226
		25	12	62	82	122	171	223	280
		30	12	85	110	154	212	275	342
		35	14	107	136	190	257	330	409
		40	16	126	160	227	304	388	478

TABLE R401.1
FOUNDATION UPLIFT LIGHT STEEL & WOOD FRAME BUILDINGS IN EXPOSURE C (plf)

TABLE R401.1(continued)

FOUNDATION UPLIFT LIGHT STEEL & WOOD FRAME BUILDINGS IN EXPOSURE C (plf)[5, 6]

Rf Angle		Bldg Width	Minimum Building Length[4]	WIND VELOCITY / VELOCITY PRESSURE					
				100	110	120	130	140	150
				21	26	31	36	42	48
45	3 Stories[3]	20	12	370	515	673	845	1031	1231
		25	13	249	377	518	670	836	1013
		30	17	159	278	408	550	703	867
		35	21	89	203	328	463	610	767
		40	26	102	153	262	394	537	691
	2 Stories[2]	20	12	184	271	368	472	585	706
		25	13	119	200	288	385	489	601
		30	18	85	147	233	326	426	533
		35	24	113	155	200	284	383	489
		40	36	139	187	240	297	358	457
	1 Story[1]	20	12	58	95	140	189	243	300
		25	16	92	118	147	178	224	281
		30	19	124	157	193	233	275	321
		35	17	154	193	236	283	334	388

		40	16	182	227	277	331	389	452
30	3 Stories[3]	20	12	256	376	507	650	804	970
		25	15	130	232	344	466	598	740
		30	21	47	127	228	337	455	582
		35	31	72	116	163	241	351	469
		40	40	96	146	200	259	323	392
	2 Stories[2]	20	12	95	163	238	320	408	502
		25	18	53	85	151	223	301	385
		30	30	83	117	154	195	239	304
		35	35	110	150	195	244	296	353
		40	37	135	182	233	289	350	415
	1 Story[1]	20	20	58	76	97	119	143	169
		25	16	91	117	145	176	210	245
		30	13	123	156	191	230	272	317
		35	14	152	191	234	280	330	384
		40	16	179	224	273	327	384	446

TABLE R401.1(continued)

FOUNDATION UPLIFT LIGHT STEEL & WOOD FRAME BUILDINGS IN EXPOSURE C (plf)

Rf Angle		Bldg Width	Minimum Building Length[4]	WIND VELOCITY / VELOCITY PRESSURE					
				100 21	110 26	120 31	130 36	140 42	150 48
20	3 Stories[3]	20	12	285	411	549	698	860	1034
		25	13	207	325	455	595	748	911
		30	15	162	280	409	549	701	863
		35	17	138	260	393	538	695	863
		40	18	124	252	392	545	709	886
	2 Stories[2]	20	12	152	233	320	416	519	630
		25	12	133	215	306	404	511	625
		30	13	130	219	316	422	536	658
		35	14	138	235	341	456	581	715
		40	16	150	257	373	500	636	783
	1 Story[1]	20	12	88	136	188	245	307	373
		25	12	114	172	235	303	377	457
		30	12	146	214	288	370	457	552
		35	14	180	259	346	441	543	653
		40	16	215	306	406	515	632	758

Notes:

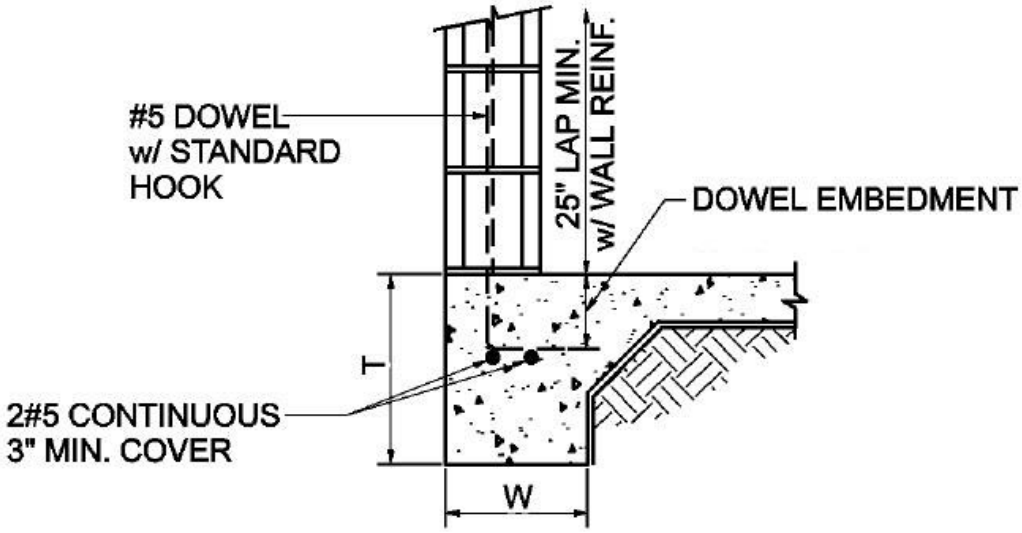
1. Based on 1st floor height = 10 ft. or 11 ft. floor to floor in multi-story.

2. Based on 2nd floor height = 8 ft. or 9 ft. floor to floor in multi-story.
3. Based on 3rd floot height = 8 ft.
4. Building length shall be equal to or greater than that shown in tables.
5. Roof and floor framing shall span in the same direction.
6. Includes provision for 2 foot roof overhang

[Note: this table is in the 2004 Florida Building Code.]

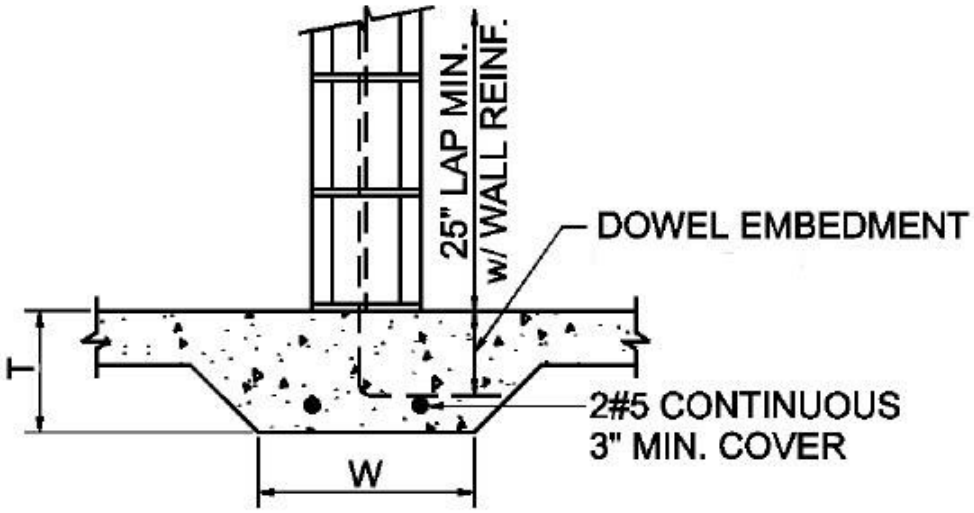
Change Figures to Florida-specific figures (see the 2004 Florida Building Code):

Figure 403.1(1) Concrete and Masonry Foundation Details.



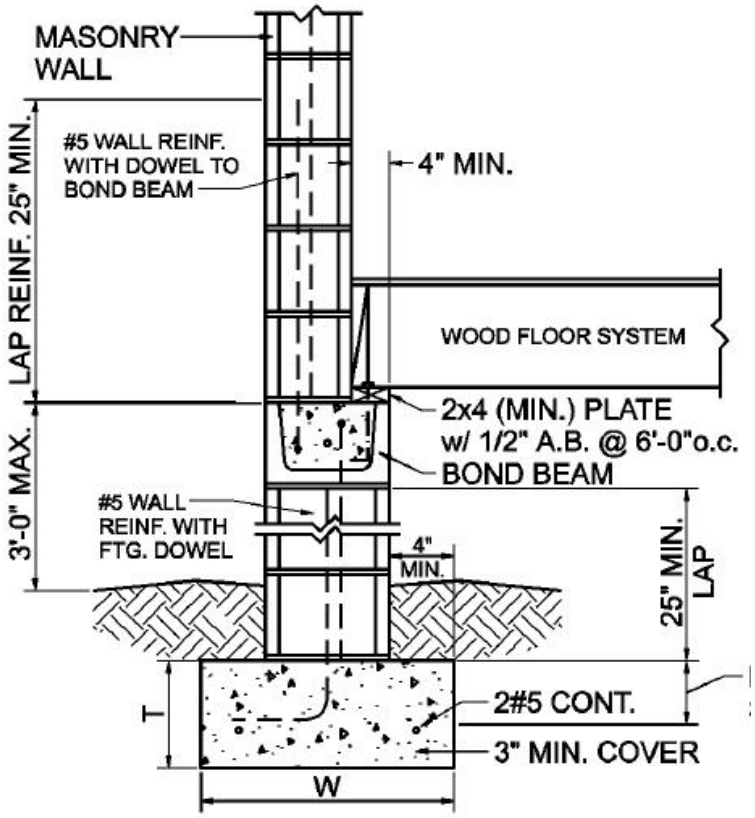
FOOTING A

MONOLITHIC SLAB ON GRADE EXTERIOR WALL



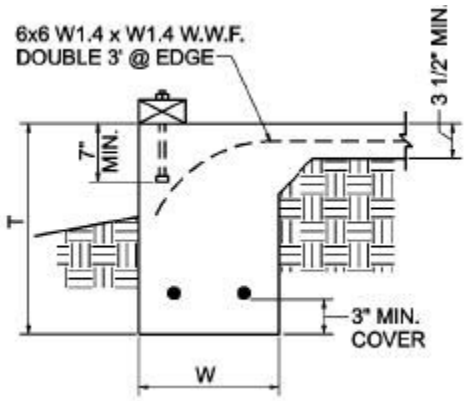
FOOTING B

MONOLITHIC SLAB ON GRADE INTERIOR WALL

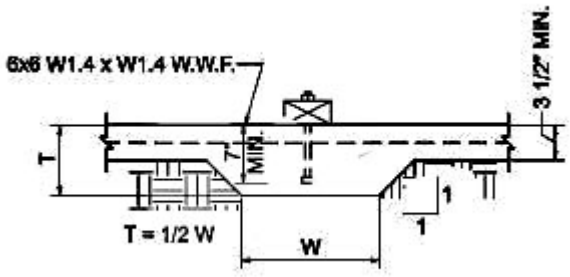


FOOTING C

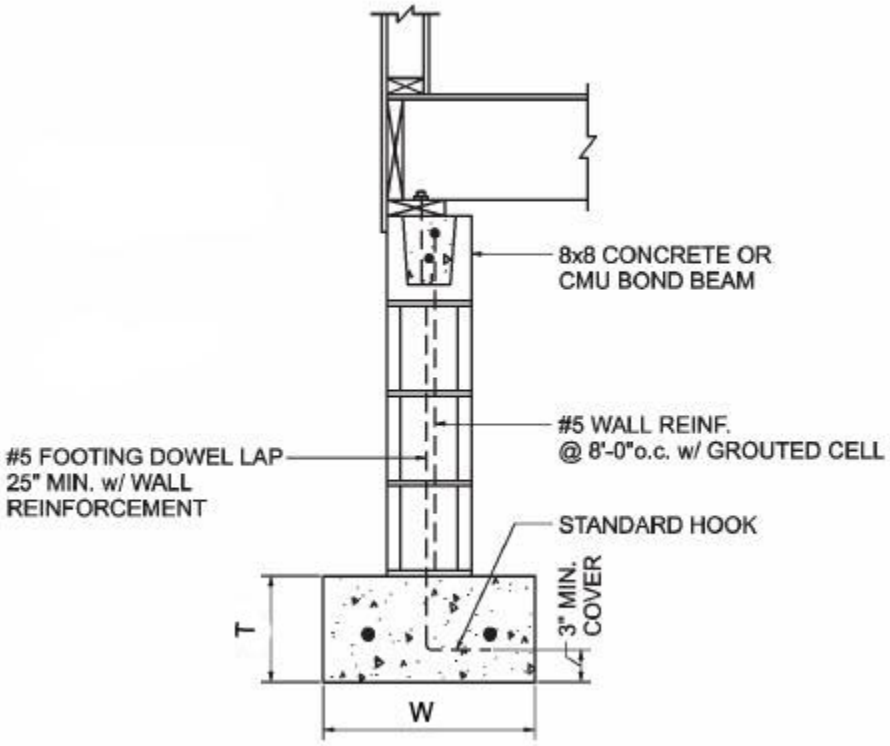
STEM WALL WOOD JOIST FLOOR



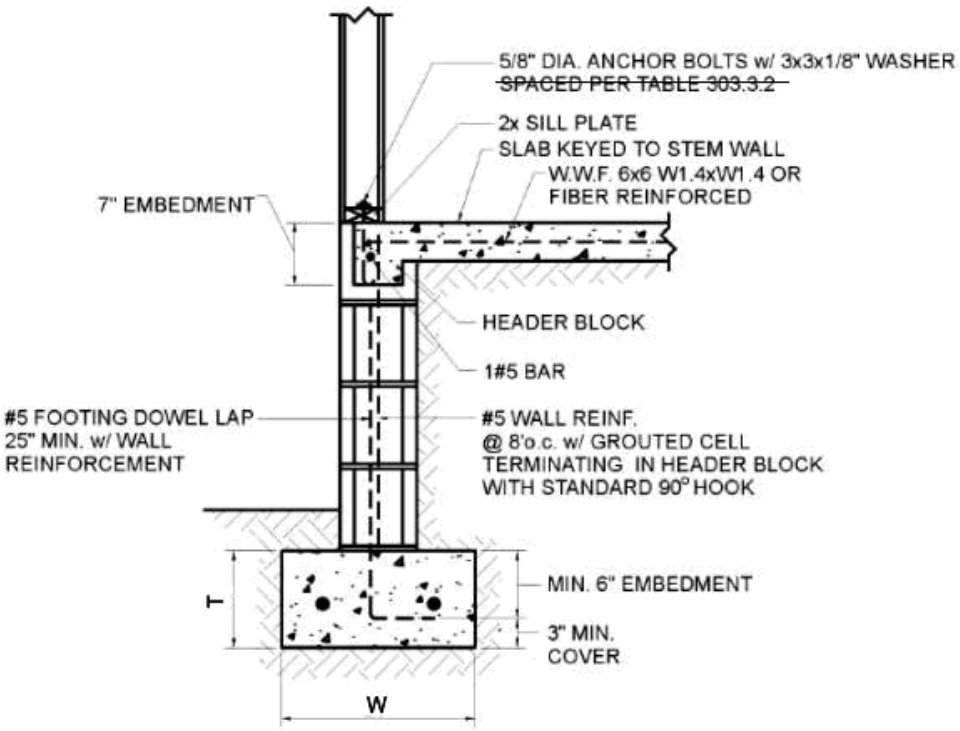
Footing D
Monolithic Exterior Footing



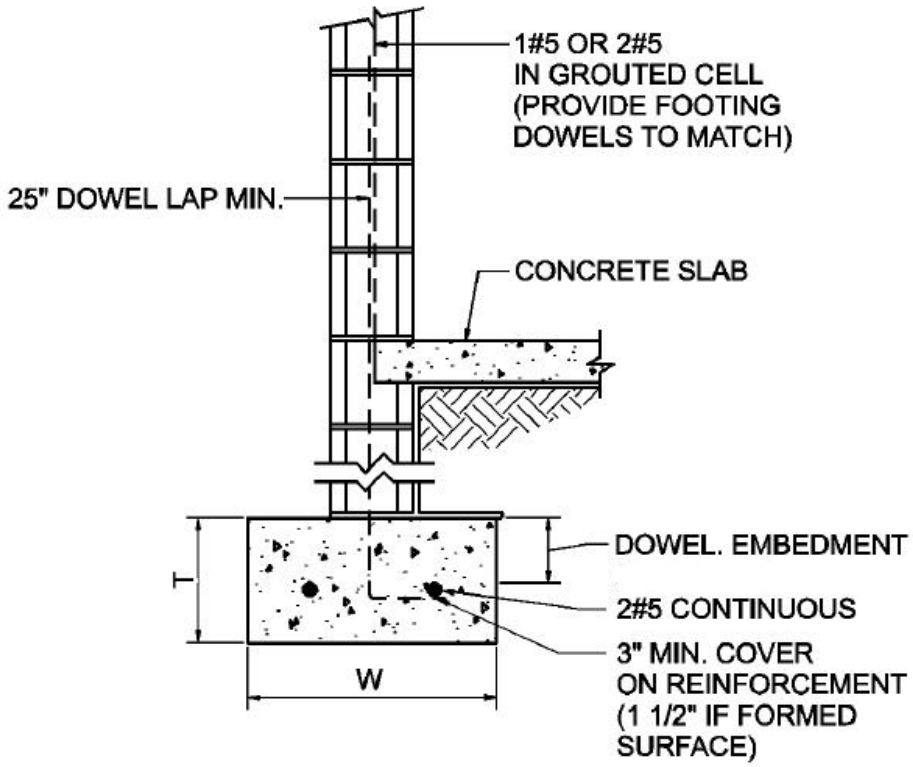
Footing E
Monolithic Interior Footing



Footing F
Wood Floor to Concrete or Masonry Stemwall



Footing G
Stemwall Foundation with Slab-on-Grade



FOOTING H

R401.2 Change to read as shown:

R401.2 Requirements. Foundations shall be capable of resisting all loads from roof uplift and building overturn. Foundation uplift for light-frame wood or steel buildings shall be calculated or determined from Table R401.1. Masonry buildings within the dimensional scope of Table R401.1 shall be assumed to be of adequate weight so as not to require uplift resistance greater than that provided by the structure and any normal foundation. Foundation construction shall also be capable of accommodating all gravity loads according to Section R301 and of transmitting the resulting loads to the supporting soil. Fill soils that support footings and foundations shall be designed, installed and tested in accordance with accepted engineering practice. Gravel fill used as footings for wood and precast concrete foundations shall comply with Section R403.

R403.1.1 Change to read as shown:

R403.1.1 Minimum size. Minimum sizes for concrete and masonry footings shall be as set forth in Table R403.1 and Figure R403.1(1). Minimum sizes for concrete and masonry footings shall also be as required to provide adequate resistance to uplift and overturn of the building as determined from Table 401.1 or as calculated using engineered design in accordance with the Florida Building Code, Building. The footing width, W, shall be based on the load-bearing value of the soil in accordance with Table R401.4.1. Spread footings shall be at least ~~6~~ 8 inches (152 mm) in thickness. Footing projections, P, shall be at least 2 inches (51 mm) and shall not exceed the thickness of the footing. The size of footings supporting piers and columns shall be based on the tributary load and allowable soil pressure in accordance with Table R401.4.1. Footings for wood foundations shall be in accordance with the details set forth in Section R403.2, and Figures R403.1(2) and R403.1(3).

[Note: See the 2004 Florida Building Code.]

TABLE R403.1.1
FOUNDATION UPLIFT DESIGN DETAILS

FOOTING	TYPE	T	W	SLAB/WALL[1]	RESISTANCE	NOTES
A	Mono	20	12	6	502	3
	Mono	20	16	6	285	3
B	Mono Interior	20	12	13	796	3
	Mono Interior	20	16	13	879	3
C	12” Stem/Joist	10	20	228	436	1,2,3
D	Mono	20	12	6	502	--
	Mono	20	16	6	585	--
E	Mono Interior	20	12	13	796	--
	Mono Interior	20	16	13	879	--
F	Stem/Joist	10	20	--	208	2,3
G	Stem/Slab	10	20	6	460	3

H	Stem/Slab	10	12	6	377	3
	Stem/Slab	10	20	6	460	3

Note 1. Tributory width of 3½" slab or weight of stemwall and bond beam
Note 2. 1st floor dead load multiplied by 0.6 may also be included.
Note 3. All footing dowel bars shall be same size as wall steel, shall have a standard 90-degree hook, and shall be embedded a minimum of 6 inches. Dowel bars shall lap vertical wall reinforcement a minimum of 25 inches.

R403.1.2 Add to read as shown:

R403.1.2 Resistance to uplift. Uplift resistance of common foundations are given in Table R403.1.1. Uplift resistance of these foundations may be increased by increasing the size of the concrete footing. When determining the modified uplift resistance the added weight shall be reduced by multiplying by a factor of 0.6. Other foundation systems shall be engineered in accordance with the *Florida Building Code, Building*.

R403.1.3 Change to read as shown:

R403.1.3 Reserved.

R403.1.4 Change to read as shown:

R403.1.4 Minimum depth. All exterior footings shall be placed at least 12 inches (305 mm) below the undisturbed ground surface.
R403.1.4.1 Reserved.
R403.1.4.2 Reserved.
R403.1.6 Foundation anchorage. Reserved.
R403.1.6.1 Reserved.

Change R403.3 as shown:

R403.3 Reserved

Figures R403.3(1) through R403.3(4) Reserved.

Table 403.3 Reserved.

R403.3.1 Reserved.

R403.3.1.1 Reserved.

R403.3.1.2 Reserved.

R403.3.2 Reserved.

R403.3.3 Reserved.

R403.3.4 Reserved.

R404.1 Concrete and masonry foundation walls.

R404.1.1 Change to read as follows

R404.1.1 Masonry foundation walls. Concrete masonry and clay masonry foundation walls shall be constructed as set forth in Tables R404.1.1(2), R404.1.1(3) and R404.1.1(4) and shall also comply with the provisions of this section and the applicable provisions of Sections R606, R607 and R608. Rubble stone masonry foundation walls shall be constructed in accordance with Section~~s~~ R404.1.8. The use of rubble stone masonry foundation walls and plain masonry shall be limited to regions where the basic wind speed is 100 mph or less unless an engineered design is provided.

R404.1.1.1 Bond beams, footing dowels and foundation wall reinforcing, wood or steel light-framed first story walls. Where first story walls are of wood or steel light-frame, a minimum 8 inch x 8 inch (203 mm x 203 mm) nominal grouted masonry or concrete bond beam shall be provided at the top course of the foundation wall. The bond beam shall be reinforced with not less than one No. 5 bar, continuous around corners and intersections.

R404.1.1.2 Where first story walls are of wood or steel light-frame, footing dowel bars and foundation vertical reinforcing shall be not less than No. 4 bars at 8 ft (2438 mm) on center, placed in fully grouted cells. Dowels shall extend into the cast concrete footing and terminate with a standard hook at three inches clear of the footing bottom. Vertical wall reinforcing shall be lap spliced with the dowel, extend into the bond beam at the wall top, and terminate with a standard hook at 1-1/2 inches (38 mm) clear of the top of the bond beam. Alternately, stem wall vertical reinforcing shall be permitted to extend into the footing and be terminated with a standard hook at 3 inches (76 mm) clear of the bottom of the footing. In addition grouted, reinforced vertical cells shall be provided at hold down post anchorages and at uplift anchorages that use straps embedded into concrete or masonry.

R404.1.2 Change to read as follows.

R404.1.2 Concrete foundation walls. Concrete foundation walls shall be constructed as set forth in Tables R404.1.1(1), R404.1.1(2), R404.1.1(3) and R404.1.1(4), and shall also comply with the provisions of this section and the applicable provisions of Section R402.2.

R404.1.4 Change to read as follows:

R404.1.4 Anchorage of wood and steel light-frame wall systems. Anchorage of wood or steel light framed first story walls shall be in accordance with the following:

R404.1.4.1 For wood light-frame walls, sill plate anchorage, wall stud to foundation uplift anchorage and hold down post anchorage shall be in accordance with AF&PA WFCM

R404.1.4.2 For steel light-frame walls, wall bottom and braced wall chord stud anchorage shall be in accordance with AISI COFS/PM.

R404.1.5 Change to read as follows:

R404.1.5.1 Pier and curtain wall foundations. In regions where the basic wind speed is 100 mph or less pier and curtain wall foundations shall be permitted to be used to support light-frame construction not more than two stories in height, provided the following requirements are met:

1-2 No change.

3. Piers shall be constructed in accordance with Section R606.5, and shall be bonded into the load-bearing masonry wall in accordance with Section R608.1.1 or Section R608.1.1.2.

4 – 6 No change.

7. Reserved.

R404.1.8 Change to read as follows:

R404.1.8 Rubble stone masonry. Rubble stone masonry foundation walls shall have a minimum thickness of 16 inches (406 mm), shall not support an unbalanced backfill exceeding 8 feet (2438 mm) in height, and shall not support a soil pressure greater than 30 psf (481 kg/m2).

R404.2.6 Change reference to read as follows:

R404.2.6 Fastening. Wood structural panel foundation wall sheathing shall be attached to framing in accordance with Table R602.2(1) and Section R402.1.1.

R404.4.1 Change to read as follows:

R404.4.1 Applicability limits. The provisions of this section shall apply to the construction of insulating concrete form foundation walls for buildings not greater than 60 feet (18 288 mm) in plan dimensions, and floors not greater than 32 feet (9754 mm) or roofs not greater than 40 feet (12 192 mm) in clear span. Buildings shall not exceed two stories in height above-grade with each story not greater than 10 feet (3048 mm) high. Insulating concrete form foundation walls supporting above-grade concrete walls shall be reinforced as required for the above-grade wall immediately above or the requirements in Tables R404.4(1), R404.4(2), R404.4(3), R404.4(4) or R404.4(5), whichever is greater.

R404.4.7.2 Change to read as follows.

R404.4.7.2 Termite hazards. Foam plastic insulation shall be permitted below grade on foundation walls in accordance with one of the following conditions:

1. When in addition to the requirements in Section R320.1, an approved method of protecting the foam plastic and structure from subterranean termite damage is provided.
2. The structural members of walls, floors, ceilings and roofs are entirely of noncombustible materials or pressure preservatively treated wood.
3. On the interior side of basement walls.

CHAPTER 5 FLOORS

R501.1 Change to read as follows:

R501.1 Application. The provisions of this chapter shall control the design and construction of the floors for all buildings including the floors of attic spaces used to house mechanical and/or plumbing fixtures and equipment (see Section R301.2.1.1).

Exception: Buildings and structures located within the High-Velocity Hurricane Zone shall comply with the provisions of Chapter 44.

R502.1 Add section R502.1 as follows and renumber following sections as shown:

R502.1 General Requirements. Floor framing of light-frame wood construction shall be in accordance with the provisions of this Section.

R502.1.1 Identification. [IRC R502.1] Load-bearing dimension lumber for joists, beams and girders shall be identified by a grade mark of a lumber grading or inspection agency that has been approved by an accreditation body that complies with DOCPS 20. In lieu of a grade mark, a certificate of inspection issued by a lumber grading or inspection agency meeting the requirements of this section shall be accepted.

R502.1.1.1 Preservatively treated lumber. [IRC R502.1.1] Preservative treated dimension lumber shall also be identified as required by Section R319.1.

R502.1.1.2 Blocking and subflooring. [IRC R502.1.2] Blocking shall be a minimum of utility grade lumber. Subflooring may be a minimum of utility grade lumber or No. 4 common grade boards.

R502.1.1.3 End-jointed lumber. [IRC R502.1.3] Approved end-jointed lumber identified by a grade mark conforming to Section R502.1 may be used interchangeably with solid-sawn members of the same species and grade.

R502.1.1.4 Prefabricated wood I-joists. [IRC R502.1.4] Structural capacities and design provisions for prefabricated wood I-joists shall be established and monitored in accordance with ASTM D 5055.

R502.1.1.5 Structural glued laminated timbers. [IRC R502.1.5]
Glued laminated timbers shall be manufactured and identified as required in AITC A190.1 and ASTM D 3737.

R502.1.1.6 Structural log members [IRC R502.1.6]. Stress grading of structural log members of nonrectangular shape, as typically used in log buildings, shall be in accordance with ASTM D 3957. Such structural log members shall be identified by the grade mark of an approved lumber grading or inspection agency. In lieu of a grade mark on the material, a certificate of inspection as to species and grade issued by a lumber-grading or inspection agency meeting the requirements of this section shall be permitted to be accepted.

R502.1.2 Draftstopping required[IRC R502.12]. Blocking shall be a minimum of utility grade lumber. Subflooring may be a minimum of utility grade lumber or No. 4 common grade boards.

R502.1.2.1 Materials[IRC R502.12.1]. Draftstopping materials shall not be less than 1/2-inch (12.7 mm) gypsum board, 3/8-inch (9.5 mm) wood structural panels, 3/8-inch (9.5 mm) Type 2-M-W particleboard or other approved materials adequately supported. Draftstopping shall be

installed parallel to the floor framing members unless otherwise approved by the building official. The integrity of all draftstops shall be maintained.

R502.1.2.2 Fireblocking required[IRC R502.13]. Fireblocking shall be provided in accordance with Section R602.1.2.

R502.1.3 Wood trusses[IRC R502.11].

R502.1.3.1 Design[IRC R502.11.1]. Wood trusses shall be designed in accordance with approved engineering practice. The design and manufacture of metal plate connected wood trusses shall comply with ANSI/TPI 1. The truss design drawings shall be prepared by a registered professional where required by the statutes of the jurisdiction in which the project is to be constructed in accordance with Section R106.1.

R502.1.3.2 Bracing[IRC R502.11.2]. Trusses shall be braced to prevent rotation and provide lateral stability in accordance with the requirements specified in the construction documents for the building and on the individual truss design drawings. In the absence of specific bracing requirements, trusses shall be braced in accordance with the Building Component Safety Information (BCSI 1-03) Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

R502.1.3.3 Alterations to trusses[IRC R502.11.3]. Truss members and components shall not be cut, notched, spliced or otherwise altered in anyway without the approval of a registered design professional. Alterations resulting in the addition of load (e.g., HVAC equipment, water heater, etc.), that exceed the design load for the truss, shall not be permitted without verification that the truss is capable of supporting the additional loading.

R502.1.3.4 Truss design drawings[IRC R502.11.4]. Truss design drawings, prepared in compliance with Section R502.1.3.1, shall be provided to the building official and approved prior to installation. Truss design drawing shall be provided with the shipment of trusses delivered to the job site. Truss design drawings shall include, at a minimum, the information specified below:

1. Slope or depth, span and spacing.
2. Location of all joints.
3. Required bearing widths.
4. Design loads as applicable:
4.1. Top chord live load;
4.2. Top chord dead load;
4.3. Bottom chord live load;
4.4. Bottom chord dead load;
4.5. Concentrated loads and their points of application; and
4.6. Controlling wind loads.
5. Adjustments to lumber and joint connector design values for conditions of use.
6. Each reaction force and direction.

7. Joint connector type and description, e.g., size, thickness or gauge, and the dimensioned location of each joint connector except where symmetrically located relative to the joint interface.
8. Lumber size, species and grade for each member.
9. Connection requirements for:
9.1. Truss-to-girder-truss;
9.2. Truss ply-to-ply; and
9.3. Field splices.
10. Calculated deflection ratio and/or maximum description for live and total load.
11. Maximum axial compression forces in the truss members to enable the building designer to design the size, connections and anchorage of the permanent continuous lateral bracing. Forces shall be shown on the truss drawing or on supplemental documents.
12. Required permanent truss member bracing location.

R502.2 Change to read as follows:

R502.2 Design and construction where wind speed is less than 100 mph. Floors shall be designed and constructed in accordance with the provisions of this Section and Figure R502.2 and Sections R319 and R320 or in accordance with AF&PA's NDS.

R502.2.1 Framing at braced wall lines. A load path for lateral forces shall be provided between floor framing and braced wall panels located above or below a floor, as specified in Section R602.10.8.

R502.2.2 Decks. Where supported by attachment to an exterior wall, decks shall be positively anchored to the primary structure and designed for both vertical and lateral loads as applicable. Such attachment shall not be accomplished by the use of toenails or nails subject to withdrawal. Where positive connection to the primary building structure cannot be verified during inspection, decks shall be self supporting. For decks with cantilevered framing members, connections to exterior walls or other framing members, shall be designed and constructed to resist uplift resulting from the full live load specified in Table R301.5 acting on the cantilevered portion of the deck.

R502.2.3 Allowable joist spans. Spans for floor joists shall be in accordance with Tables R502.2.2(1) and R502.2.2 (2). For other grades and species and for other loading conditions, refer to the AF&PA Span Tables for Joists and Rafters. **[IRC R502.3]**

R502.2.2 1 Sleeping areas and attic joists. Table R502.2.2 (1) shall be used to determine the maximum allowable span of floor joists that support sleeping areas and attics that are accessed by means of a fixed stairway in accordance with Section R311.5 provided that the design live load does not exceed 30 psf (1.44 kPa) and the design dead load does not exceed 20 psf (0.96 kPa). The allowable span of ceiling joists that support attics used for limited storage or no storage shall be determined in accordance with Section R802.2.2. **[IRC R502.3.1]**

TABLE R502.2.2(1) [IRC R502.3.1(1)]
Floor Joist Spans for Common Lumber Species

(Residential sleeping areas, live load=30psf, L/ =360)

JOIST SPACING (inches)	SPECIES AND GRADE		DEAD LOAD = 10 psf				DEAD LOAD = 20 psf			
			2×6	2×8	2×10	2×12	2×6	2×8	2×10	2×12
			Maximum floor joist spans							
			(ft - in.)	(ft - in.)	(ft - in.)	(ft - in.)	(ft - in.)	(ft - in.)	(ft - in.)	(ft - in.)
12	Douglas fir-larch Douglas fir-larch Douglas fir-larch Douglas fir-larch Hem-fir Hem-fir Hem-fir Hem-fir Southern pine Southern pine Southern pine Spruce-pine-fir Spruce-pine-fir Spruce-pine-fir Spruce-pine-fir	SS #1 #2 #3 SS #1 #2 #3 SS #1 #2 #3 SS #1 #2 #3	12- 6 12- 0 11-10 9- 8 11-10 11- 7 11- 0 9- 8 12- 3 12- 0 11-10 10- 5 11- 7 11- 3 11- 3 9- 8	16- 6 15-10 15- 7 12- 4 15- 7 15- 3 14- 6 12- 4 16- 2 15-10 15- 7 13- 3 15- 3 14-11 14-11 12- 4	21- 0 20- 3 19-10 15- 0 19-10 19- 5 18- 6 15- 0 20- 8 20- 3 19-10 15- 8 19- 5 19- 0 19- 0 15- 0	25- 7 24- 8 23- 0 17- 5 24- 2 23- 7 22- 6 17- 5 25- 1 24- 8 24- 2 18- 8 23- 7 23- 0 23- 0 17- 5	12- 6 12- 0 11- 6 8- 8 11-10 11- 7 11- 0 8- 8 12- 3 12- 0 11-10 9- 4 11- 7 11- 3 11- 3 8- 8	16- 6 15- 7 14- 7 11- 0 15- 7 15- 2 14- 4 11- 0 16- 2 15-10 15- 7 11-11 15- 3 14- 7 14- 7 11- 0	21- 0 19- 0 17- 9 13- 5 19-10 18- 6 17- 6 13- 5 20- 8 20- 3 18- 7 14- 0 19- 5 17- 9 17- 9 13- 5	25- 7 22- 0 20- 7 15- 7 24- 2 21- 6 20- 4 15- 7 25- 1 24- 8 21- 9 16- 8 23- 7 20- 7 20- 7 15- 7
16	Douglas fir-larch Douglas fir-larch Douglas fir-larch Douglas fir-larch Hem-fir Hem-fir Hem-fir Hem-fir Southern pine Southern pine Southern pine Spruce-pine-fir Spruce-pine-fir Spruce-pine-fir Spruce-pine-fir	SS #1 #2 #3 SS #1 #2 #3 SS #1 #2 #3 SS #1 #2 #3	11- 4 10-11 10- 9 8- 5 10- 9 10- 6 10- 0 8- 5 11- 2 10-11 10- 9 9- 0 10- 6 10- 3 10- 3 8- 5	15- 0 14- 5 14- 1 10- 8 14- 2 13-10 13- 2 10- 8 14- 8 14- 5 14- 2 11- 6 13-10 13- 6 13- 6 10- 8	19- 1 18- 5 17- 2 13- 0 18- 0 17- 8 16-10 13- 0 18- 9 18- 5 18- 0 13- 7 17- 8 17- 2 17- 2 13- 0	23- 3 21- 4 19-11 15- 1 21-11 20- 9 19- 8 15- 1 22-10 22- 5 21- 1 16- 2 21- 6 19-11 19-11 15- 1	11- 4 10- 8 9-11 7- 6 10- 9 10- 4 9-10 7- 6 11- 2 10-11 10- 5 8- 1 10- 6 9-11 9-11 7- 6	15- 0 13- 6 12- 7 9- 6 14- 2 13- 1 12- 5 9- 6 14- 8 14- 5 13- 6 10- 3 13-10 12- 7 12- 7 9- 6	19- 1 16- 5 15- 5 11- 8 18- 0 16- 0 15- 2 11- 8 18- 9 17-11 16- 1 12- 2 17- 8 15- 5 15- 5 11- 8	23- 0 19- 1 17-10 13- 6 21-11 18- 7 17- 7 13- 6 22-10 21- 4 18-10 14- 6 21- 4 17-10 17-10 13- 6
19.2	Douglas fir-larch Douglas fir-larch Douglas fir-larch Douglas fir-larch Hem-fir Hem-fir Hem-fir Hem-fir Southern pine Southern pine Southern pine Spruce-pine-fir Spruce-pine-fir Spruce-pine-fir Spruce-pine-fir	SS #1 #2 #3 SS #1 #2 #3 SS #1 #2 #3 SS #1 #2 #3	10- 8 10- 4 10-1 7- 8 10- 1 9-10 9- 5 7- 8 10- 6 10- 4 10- 1 8- 3 9- 10 9- 8 9- 8 7- 8	14- 1 13- 7 12-10 9- 9 13- 4 13- 0 12- 5 9- 9 13-10 13- 7 13- 4 10- 6 13- 0 12- 9 12- 9 9- 9	18- 0 16- 9 15- 8 11-10 17- 0 16- 4 15- 6 11- 10 17- 8 17- 4 16- 5 12- 5 16- 7 15- 8 15- 8 11-10	21-10 19- 6 18- 3 13- 9 20- 8 19- 0 17-1 13- 9 21- 6 21- 1 19- 3 14- 9 20- 2 18- 3 18- 3 13- 9	10- 8 9- 8 9- 1 6-10 10- 1 9- 6 8-11 6-10 10- 6 10- 4 9- 6 7- 4 9-10 9- 1 9- 1 6-10	14- 1 12- 4 11- 6 8- 8 13- 4 12- 0 11- 4 8- 8 13-10 13- 7 12- 4 9- 5 13- 0 11- 6 11- 6 8- 8	18- 0 15- 0 14- 1 10- 7 17- 0 14- 8 13-10 10- 7 17- 8 16- 4 14- 8 11- 1 16- 7 14- 1 14- 1 10- 7	21- 0 17- 5 16- 3 12- 4 20- 7 17- 0 16- 1 12- 4 21- 6 19- 6 17- 2 13- 2 19- 6 16- 3 16- 3 12- 4
	Douglas fir-larch Douglas fir-larch Douglas fir-larch Douglas fir-larch Hem-fir Hem-fir Hem-fir	SS #1 #2 #3 SS #1 #2	9-11 9- 7 9- 1 6-10 9- 4 9- 2 8- 9	13- 1 12- 4 11- 6 8- 8 12- 4 12- 0 11- 4	16- 8 15- 0 14- 1 10- 7 15- 9 14- 8 13-10	20- 3 17- 5 16- 3 12- 4 19- 2 17- 0 16- 1	9-11 8- 8 8- 1 6- 2 9- 4 8- 6 8- 0	13- 1 11- 0 10- 3 7- 9 12- 4 10- 9 10- 2	16- 2 13- 5 12- 7 9- 6 15- 9 13- 1 12- 5	18- 9 15- 7 14- 7 11- 0 18- 5 15- 2 14- 4

24	Hem-fir Southern pine Southern pine Southern pine Southern pine Spruce-pine-fir Spruce-pine-fir Spruce-pine-fir Spruce-pine-fir	#3 SS #1 #2 #3 SS #1 #2 #3	6-10 9- 9 9- 7 9- 4 7- 4 9- 2 8-11 8- 11 6-10	8- 8 12-10 12- 7 12- 4 9- 5 12- 1 11- 6 11- 6 8- 8	10- 7 16- 5 16- 1 14- 8 11- 1 15- 5 14- 1 14- 1 10- 7	12- 4 19-11 19- 6 17- 2 13- 2 18- 9 16- 3 16- 3 12- 4	6- 2 9- 9 9- 7 8- 6 6- 7 9- 2 8- 1 8- 1 6- 2	7- 9 12-10 12- 4 11- 0 8- 5 12- 1 10- 3 10- 3 7- 9	9- 6 16- 5 14- 7 13- 1 9-11 15- 0 12- 7 12- 7 9- 6	11- 0 19-11 17- 5 15- 5 11-10 17- 5 14- 7 14- 7 11- 0

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 pound per square foot = 0.0479 kPa.
NOTE: Check sources for availability of lumber in lengths greater than 20 feet.
a. Dead load limits for townhouses in Seismic Design Category C and all structures in Seismic Design Categories D_0, D_1 and D_2 shall be determined in accordance
with Section R301.2.2.2.1.

TABLE R502.2.2(2) [IRC R502.3.1(2)]
Floor Joist Spans for Common Lumber Species
(Residential sleeping areas, live load=40psf, L/ =360)

JOIST SPACING (inches)	SPECIES AND GRADE		DEAD LOAD = 10 psf				DEAD LOAD = 20 psf			
			2×6	2×8	2×10	2×12	2×6	2×8	2×10	2×12
			Maximum floor joist spans							
			(ft - in.)	(ft - in.)	(ft - in.)	(ft - in.)	(ft - in.)	(ft - in.)	(ft - in.)	(ft - in.)
12	Douglas fir-larch Douglas fir-larch Douglas fir-larch Douglas fir-larch Hem-fir Hem-fir Hem-fir Hem-fir Southern pine Southern pine Southern pine Southern pine Spruce-pine-fir Spruce-pine-fir Spruce-pine-fir Spruce-pine-fir	SS #1 #2 #3 SS #1 #2 #3 SS #1 #2 #3 SS #1 #2 #3	11- 4 10-11 10- 9 8- 8 10- 9 10- 6 10- 0 8- 8 11- 2 10-11 10- 9 9- 4 10- 6 10- 3 10- 3 8- 8	15- 0 14- 5 14- 2 11- 0 14- 2 13-10 13- 2 11- 0 14- 8 14- 5 14- 2 11-11 13-10 13- 6 13- 6 11- 0	19- 1 18- 5 17- 9 13- 5 18- 0 17- 8 16-10 13- 5 18- 9 18- 5 18- 0 14- 0 17- 8 17- 3 17- 3 13- 5	23- 3 22- 0 20- 7 15- 7 21-11 21- 6 20- 4 15- 7 22-10 22- 5 21- 9 16- 8 21- 6 20- 7 20- 7 15- 7	11- 4 10-11 10- 6 7-11 10- 9 10- 6 10- 0 7-11 11- 2 10-11 10- 9 8- 6 10- 6 10- 3 10- 3 7-11	15- 0 14- 2 13- 3 10- 0 14- 2 13-10 13- 1 10- 0 14- 8 14- 5 14- 2 10-10 13-10 13- 3 13- 3 10- 0	19- 1 17- 4 16- 3 12- 3 18- 0 16-11 16- 0 12- 3 18- 9 18- 5 16-11 12-10 17- 8 16- 3 16- 3 12- 3	23- 3 20- 1 18-10 14- 3 21-11 19- 7 18- 6 14- 3 22-10 22- 5 19-10 15- 3 21- 6 18-10 18-10 14- 3
16	Douglas fir-larch Douglas fir-larch Douglas fir-larch Douglas fir-larch Hem-fir Hem-fir Hem-fir Hem-fir Southern pine Southern pine Southern pine Southern pine Spruce-pine-fir Spruce-pine-fir Spruce-pine-fir Spruce-pine-fir	SS #1 #2 #3 SS #1 #2 #3 SS #1 #2 #3 SS #1 #2 #3	10- 4 9-11 9- 9 7- 6 9- 9 9- 6 9- 1 7- 6 10- 2 9-11 9- 9 8- 1 9- 6 9- 4 9- 4 7- 6	13- 7 13- 1 12- 7 9- 6 12-10 12- 7 12- 0 9- 6 13- 4 13- 1 12-10 10- 3 12- 7 12- 3 12- 3 9- 6	17- 4 16- 5 15- 5 11- 8 16- 5 16- 0 15- 2 11- 8 17- 0 16- 9 16- 1 12- 2 16- 0 15- 5 15- 5 11- 8	21- 1 19- 1 17-10 13- 6 19-11 18- 7 17- 7 13- 6 20- 9 20- 4 18-10 14- 6 19- 6 17-10 17-10 13- 6	10- 4 9- 8 9- 1 6-10 9- 9 9- 6 8-11 6-10 10- 2 9-11 9- 6 7- 4 9- 6 9- 1 9- 1 6-10	13- 7 12- 4 11- 6 8- 8 12-10 12- 0 11- 4 8- 8 13- 4 13- 1 12- 4 9- 5 12- 7 11- 6 11- 6 8- 8	17- 4 15- 0 14- 1 10- 7 16- 5 14- 8 13-10 10- 7 17- 0 16- 4 14- 8 11- 1 16- 0 14- 1 14- 1 10- 7	21- 0 17- 5 16- 3 12- 4 19-11 17- 0 16- 1 12- 4 20- 9 19- 6 17- 2 13- 2 19- 6 16- 3 16- 3 12- 4

19.2	Douglas fir-larch Douglas fir-larch Douglas fir-larch Douglas fir-larch Hem-fir Hem-fir Hem-fir Hem-fir Southern pine Southern pine Southern pine Southern pine Spruce-pine-fir Spruce-pine-fir Spruce-pine-fir Spruce-pine-fir	SS #1 #2 #3 SS #1 #2 #3 SS #1 #2 #3 SS # #2 #3	9- 8 9- 4 9- 1 6-10 9- 2 9- 0 8- 7 6-10 9- 6 9- 4 9- 2 7- 4 9- 0 8- 9 8- 9 6-10	12-10 12- 4 11- 6 8- 8 12- 1 11-10 11- 3 8- 8 12- 7 12- 4 12- 1 9- 5 11-10 11- 6 11- 6 8- 8	16- 4 15- 0 14- 1 10- 7 15- 5 14- 8 13-10 10- 7 16- 0 15- 9 14- 8 11- 1 15- 1 14- 1 14- 1 10- 7	19-10 17- 5 16- 3 12- 4 18- 9 17- 0 16- 1 12- 4 19- 6 19- 2 17- 2 13- 2 18- 4 16- 3 16- 3 12- 4	9- 8 8-10 8- 3 6- 3 9- 2 8- 8 8- 2 6- 3 9- 6 9- 4 8- 8 6- 9 9- 0 8- 3 8- 3 6- 3	12-10 11- 3 10- 6 7-11 12- 1 10-11 10- 4 7-11 12- 7 12- 4 11- 3 8- 7 11-10 10- 6 10- 6 7-11	16- 4 13- 8 12-10 9- 8 15- 5 13- 4 12- 8 9- 8 16- 0 14-11 13- 5 10- 1 15- 1 12-10 12-10 9- 8	19- 2 15-11 14-10 11- 3 18- 9 15- 6 14- 8 11- 3 19- 6 17- 9 15- 8 12- 1 17- 9 14-10 14-10 11- 3
24	Douglas fir-larch Douglas fir-larch Douglas fir-larch Douglas fir-larch Hem-fir Hem-fir Hem-fir Hem-fir Southern pine Southern pine Southern pine Southern pine Spruce-pine-fir Spruce-pine-fir Spruce-pine-fir Spruce-pine-fir	SS #1 #2 #3 SS #1 #2 #3 SS #1 #2 #3 SS #1 #2 #3	9- 0 8- 8 8- 1 6- 2 8- 6 8- 4 7-11 6- 2 8-10 8- 8 8- 6 6- 7 8- 4 8- 1 8- 1 6- 2	11-11 11- 0 10- 3 7- 9 11- 3 10- 9 10- 2 7- 9 11- 8 11- 5 11- 0 8- 5 11- 0 10- 3 10- 3 7- 9	15- 2 13- 5 12- 7 9- 6 14- 4 13- 1 12- 5 9- 6 14-11 14- 7 13- 1 9-11 14- 0 12- 7 12- 7 9- 6	18- 5 15- 7 14- 7 11- 0 17- 5 15- 2 14- 4 11- 0 18- 1 17- 5 15- 5 11-10 17- 0 14- 7 14- 7 11- 0	9- 0 7-11 7- 5 5- 7 8- 6 7- 9 7- 4 5- 7 8-10 8- 8 7- 9 6- 0 8- 4 7- 5 7- 5 5- 7	11-11 10- 0 9- 5 7- 1 11- 3 9- 9 9- 3 7- 1 11- 8 11- 3 10- 0 7- 8 11- 0 9- 5 9- 5 7- 1	14- 9 12- 3 11- 6 8- 8 14- 4 11-11 11- 4 8- 8 14-11 13- 4 12- 0 9- 1 13- 8 11- 6 11- 6 8- 8	17- 1 14- 3 13- 4 10- 1 16-10[a] 13-10 13- 1 10- 1 18- 1 15-11 14- 0 10- 9 15-11 13- 4 13- 4 10- 1

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 pound per square foot = 0.0479 kPa.
NOTE: Check sources for availability of lumber in lengths greater than 20 feet.
a. End bearing length shall be increased to 2 inches.
b. Dead load limits for townhouses in Seismic Design Category C and all structures in Seismic Design Categories D_0, D_1, and D_2 shall be determined in accordance with Section R301.2.2.2.1.

R502.2.2.2 Other floor joists. Table R502.2.2 (2) shall be used to determine the maximum allowable span of floor joists that support all other areas of the building, other than sleeping rooms and attics, provided that the design live load does not exceed 40 psf (1.92 kPa) and the design dead load does not exceed 20 psf (0.96 kPa). **[IRC R502.3.2]**

R502.2.2.3 Floor cantilevers. Floor cantilever spans shall not exceed the nominal depth of the wood floor joist. Floor cantilevers constructed in accordance with Table R502.2.2 3.(1) shall be -*permitted when supporting a light-frame bearing wall and roof only. Floor cantilevers supporting an exterior balcony are permitted to be constructed in accordance with Table R502.2.2.3.(2). **[IRC R502.3.3]**

TABLE R502.2.2.3(1) [IRC R502.3.3(1)]
CANTILEVER SPANS FOR FLOOR JOISTS SUPPORTING LIGHT-FRAME EXTERIOR BEARING WALL AND ROOF ONLY [a, b, c, f, g, h]
(Floor Live Load ≤ 40 psf, Roof Live Load ≤ 20 psf)

Member & Spacing	Maximum Cantilever Span (Uplift Force at Backspan Support in Lbs.)[d, e]			
	Ground Snow Load			
	20 psf	30 psf	50 psf	70 psf

	Roof Width			Roof Width			Roof Width			Roof Width		
	24 ft	32 ft	40 ft	24 ft	32 ft	40 ft	24 ft	32 ft	40 ft	24 ft	32 ft	40 ft
2 × 8 @ 12″	20″ (177)	15″ (227)	—	18″ (209)	—	—	—	—	—	—	—	—
2 × 10 @ 16″	29″ (228)	21″ (297)	16″ (364)	26″ (271)	18″ (354)	—	20″ (375)	—	—	—	—	—
2 × 10 @ 12″	36″ (166)	26″ (219)	20″ (270)	34″ (198)	22″ (263)	16″ (324)	26″ (277)	—	—	19″ (356)	—	—
2 × 12 @ 16″	—	32″ (287)	25″ (356)	36″ (263)	29″ (345)	21″ (428)	29″ (367)	20″ (484)	—	23″ (471)	—	—
2 × 12 @ 12″	—	42″ (209)	31″ (263)	—	37″ (253)	27″ (317)	36″ (271)	27″ (358)	17″ (447)	31″ (348)	19″ (462)	—
2 × 12 @ 8″	—	48″ (136)	45″ (169)	—	48″ (164)	38″ (206)	—	40″ (233)	26″ (294)	36″ (230)	29″ (304)	18″ (379)

For SI: 1 inch = 25.4 mm, 1 pound per square foot = 0.0479kPa.
a. Tabulated values are for clear-span roof supported solely by exterior bearing walls.
b. Spans are based on No. 2 Grade lumber of Douglas fir-larch, hem-fir, southern pine, and spruce-pine-fir for repetitive (3 or more) members.
c. Ratio of backspan to cantilever span shall be at least 3:1.
d. Connections capable of resisting the indicated uplift force shall be provided at the backspan support.
e. Uplift force is for a backspan to cantilever span ratio of 3:1. Tabulated uplift values are permitted to be reduced by multiplying by a factor equal to 3 divided by the
actual backspan ratio provided (3/backspan ratio).
f. See Section R301.2.2.2.2, Item 1, for additional limitations on cantilevered floor joists for detached one- and two-family dwellings in Seismic Design Category
D_0, D_1, or D_2 and townhouses in Seismic Design Category C, D_0, D_1, or D_2.
g. A full-depth rim joist shall be provided at the cantilevered end of the joists. Solid blocking shall be provided at the cantilever support.
h. Linear interpolation shall be permitted for building widths and ground snow loads other than shown.

TABLE R502.2.2.3(2) [IRC R502.3.3(2)] CANTILEVER SPANS FOR FLOOR JOISTS SUPPORTING EXTERIOR BALCONY [a, b, e, f]

Member Size	Spacing	Maximum Cantilever Span (Uplift Force at Backspan Support in lb)[c, d] Ground Snow Load		
		30 psf	50 psf	70 psf
2 × 8	12″	42″ (139)	39″ (156)	34″ (165)
2 × 8	16″	36″ (151)	34″ (171)	29″ (180)
2 × 10	12″	61″ (164)	57″ (189)	49″ (201)
2 × 10	16″	53″ (180)	49″ (208)	42″ (220)
2 × 10	24″	43″ (212)	40″ (241)	34″ (255)
2 × 12	16″	72″ (228)	67″ (260)	57″ (268)
2 × 12	24″	58″ (279)	54″ (319)	47″ (330)

For SI: 1 inch = 25.4 mm, 1 pound per square foot = 0.0479kPa.
a. Spans are based on No. 2 Grade lumber of Douglas fir-larch, hem-fir, southern pine, and spruce-pine-fir for repetitive (3 or more) members.
b. Ratio of backspan to cantilever span shall be at least 2:1.
c. Connections capable of resisting the indicated uplift force shall be provided at the backspan support.
d. Uplift force is for a backspan to cantilever span ratio of 2:1. Tabulated uplift values are permitted to be reduced by multiplying by a factor equal to 2 divided by the actual backspan ratio provided (2/backspan ratio).
e. A full-depth rim joist shall be provided at the cantilevered end of the joists. Solid blocking shall be provided at the cantilevered support.

f. Linear interpolation shall be permitted for ground snow loads other than shown.

R502.2.3 Joists under bearing partitions[IRC R502.4]. Joists under parallel bearing partitions shall be of adequate size to support the load. Double joists, sized to adequately support the load, that are separated to permit the installation of piping or vents shall be full depth solid blocked with lumber not less than 2 inches (51 mm) in nominal thickness spaced not more than 4 feet (1219 mm) on center. Bearing partitions perpendicular to joists shall not be offset from supporting girders, walls or partitions more than the joist depth unless such joists are of sufficient size to carry the additional load.

R502.2.4 Allowable girder spans[IRC R502.5]. The allowable spans of girders fabricated of dimension lumber shall not exceed the values set forth in Tables R502.2.4 (1) and R502.2.4 (2).

TABLE R502.2.4(1) [IRC R502.5(1)] GIRDER SPANS AND HEADER SPANS FOR EXTERIOR BEARING WALLS *[IRC added increased snow load pressures to table; use FL specific]*

GIRDERS AND HEADERS SUPPORTING	SIZE	GROUND SNOW LOAD (psf)e																	
		30						50						70					
		Building widthc (feet)																	
		20		28		36		20		28		36		20		28		36	
		Span	NJd	Span	NJd	Span	NJd	Span	NJd	Span	NJd	Span	NJd	Span	NJd	Span	NJd	Span	NJd
Roof and ceiling	2-2×4	3-6	1	3-2	1	2-10	1	3-2	1	2-9	1	2-6	1	2-10	1	2-6	1	2-3	1
	2-2×6	5-5	1	4-8	1	4-2	1	4-8	1	4-1	1	3-8	2	4-2	1	3-8	2	3-3	2
	2-2×8	6-10	1	5-11	2	5-4	2	5-11	2	5-2	2	4-7	2	5-4	2	4-7	2	4-1	2
	2-2×10	8-5	2	7-3	2	6-6	2	7-3	2	6-3	2	5-7	2	6-6	2	5-7	2	5-0	2
	2-2×12	9-9	2	8-5	2	7-6	2	8-5	2	7-3	2	6-6	2	7-6	2	6-6	2	5-10	3
	3-2×8	8-4	1	7-5	1	6-8	1	7-5	1	6-5	2	5-9	2	6-8	1	5-9	2	5-2	2
	3-2×10	10-6	1	9-1	2	8-2	2	9-1	2	7-10	2	7-0	2	8-2	2	7-0	2	6-4	2
	3-2×12	12-2	2	10-7	2	9-5	2	10-7	2	9-2	2	8-2	2	9-5	2	8-2	2	7-4	2
	4-2×8	9-2	1	8-4	1	7-8	1	8-4	1	7-5	1	6-8	1	7-8	1	6-8	1	5-11	2
	4-2×10	11-8	1	10-6	1	9-5	2	10-6	1	9-1	2	8-2	2	9-5	2	8-2	2	7-3	2
	4-2×12	14-1	1	12-2	2	10-11	2	12-2	2	10-7	2	9-5	2	10-11	2	9-5	2	8-5	2
Roof, ceiling and one center-bearing floor	2-2×4	3-1	1	2-9	1	2-5	1	2-9	1	2-5	1	2-2	1	2-7	1	2-3	1	2-0	1
	2-2×6	4-6	1	4-0	1	3-7	2	4-1	1	3-7	2	3-3	2	3-9	2	3-3	2	2-11	2
	2-2×8	5-9	2	5-0	2	4-6	2	5-2	2	4-6	2	4-1	2	4-9	2	4-2	2	3-9	2
	2-2×10	7-0	2	6-2	2	5-6	2	6-4	2	5-6	2	5-0	2	5-9	2	5-1	2	4-7	3
	2-2×12	8-1	2	7-1	2	6-5	2	7-4	2	6-5	2	5-9	3	6-8	2	5-10	3	5-3	3
	3-2×8	7-2	1	6-3	2	5-8	2	6-5	2	5-8	2	5-1	2	5-11	2	5-2	2	4-8	2
	3-2×10	8-9	2	7-8	2	6-11	2	7-11	2	6-11	2	6-3	2	7-3	2	6-4	2	5-8	2
	3-2×12	10-2	2	8-11	2	8-0	2	9-2	2	8-0	2	7-3	2	8-5	2	7-4	2	6-7	2
	4-2×8	8-1	1	7-3	1	6-7	1	7-5	1	6-6	1	5-11	2	6-10	1	6-0	2	5-5	2
	4-	10-1	1	8-10	2	8-0	2	9-1	2	8-0	2	7-2	2	8-4	2	7-4	2	6-7	2

	2×10																		
	4-2×12	11-9	2	10-3	2	9-3	2	10-7	2	9-3	2	8-4	2	9-8	2	8-6	2	7-7	2
Roof, ceiling and one clear span floor	2-2×4	2-8	1	2-4	1	2-1	1	2-7	1	2-3	1	2-0	1	2-5	1	2-1	1	1-10	1
	2-2×6	3-11	1	3-5	2	3-0	2	3-10	2	3-4	2	3-0	2	3-6	2	3-1	2	2-9	2
	2-2×8	5-0	2	4-4	2	3-10	2	4-10	2	4-2	2	3-9	2	4-6	2	3-11	2	3-6	2
	2-2×10	6-1	2	5-3	2	4-8	2	5-11	2	5-1	2	4-7	3	5-6	2	4-9	2	4-3	3
	2-2×12	7-1	2	6-1	3	5-5	3	6-10	2	5-11	3	5-4	3	6-4	2	5-6	3	5-0	3
	3-2×8	6-3	2	5-5	2	4-10	2	6-1	2	5-3	2	4-8	2	5-7	2	4-11	2	4-5	2
	3-2×10	7-7	2	6-7	2	5-11	2	7-5	2	6-5	2	5-9	2	6-10	2	6-0	2	5-4	2
	3-2×12	8-10	2	7-8	2	6-10	2	8-7	2	7-5	2	6-8	2	7-11	2	6-11	2	6-3	2
	4-2×8	7-2	1	6-3	2	5-7	2	7-0	1	6-1	2	5-5	2	6-6	1	5-8	2	5-1	2
	4-2×10	8-9	2	7-7	2	6-10	2	8-7	2	7-5	2	6-7	2	7-11	2	6-11	2	6-2	2
	4-2×12	10-2	2	8-10	2	7-11	2	9-11	2	8-7	2	7-8	2	9-2	2	8-0	2	7-2	2
Roof, ceiling and two center-bearing floors	2-2×4	2-7	1	2-3	1	2-0	1	2-6	1	2-2	1	1-11	1	2-4	1	2-0	1	1-9	1
	2-2×6	3-9	2	3-3	2	2-11	2	3-8	2	3-2	2	2-10	2	3-5	2	3-0	2	2-8	2
	2-2×8	4-9	2	4-2	2	3-9	2	4-7	2	4-0	2	3-8	2	4-4	2	3-9	2	3-5	2
	2-2×10	5-9	2	5-1	2	4-7	3	5-8	2	4-11	2	4-5	3	5-3	2	4-7	3	4-2	3
	2-2×12	6-8	2	5-10	3	5-3	3	6-6	2	5-9	3	5-2	3	6-1	3	5-4	3	4-10	3
	3-2×8	5-11	2	5-2	2	4-8	2	5-9	2	5-1	2	4-7	2	5-5	2	4-9	2	4-3	2
	3-2×10	7-3	2	6-4	2	5-8	2	7-1	2	6-2	2	5-7	2	6-7	2	5-9	2	5-3	2
	3-2×12	8-5	2	7-4	2	6-7	2	8-2	2	7-2	2	6-5	3	7-8	2	6-9	2	6-1	3
	4-2×8	6-10	1	6-0	2	5-5	2	6-8	1	5-10	2	5-3	2	6-3	2	5-6	2	4-11	2
	4-2×10	8-4	2	7-4	2	6-7	2	8-2	2	7-2	2	6-5	2	7-7	2	6-8	2	6-0	2
	4-2×12	9-8	2	8-6	2	7-8	2	9-5	2	8-3	2	7-5	2	8-10	2	7-9	2	7-0	2

(continued)

GIRDERS AND HEADERS SUPPORTING	SIZE	GROUND SNOW LOAD (psf)[e]																	
		30						50						70					
		Building width[c] (feet)																	
		20		28		36		20		28		36		20		28		36	
		Span	NJ[d]	Span	NJ[d]	Span	NJ[d]	Span	NJ[d]	Span	NJ[d]	Span	NJ[d]	Span	NJ[d]	Span	NJ[d]	Span	NJ[d]
Roof, ceiling, and two clear span floors	2-2×4	2-1	1	1-8	1	1-6	2	2-0	1	1-8	1	1-5	2	2-0	1	1-8	1	1-5	2
	2-2×6	3-1	2	2-8	2	2-4	2	3-0	2	2-7	2	2-3	2	2-11	2	2-7	2	2-3	2
	2-2×8	3-10	2	3-4	2	3-0	3	3-10	2	3-4	2	2-11	3	3-9	2	3-3	2	2-11	3
	2-2×10	4-9	2	4-1	3	3-8	3	4-8	2	4-0	3	3-7	3	4-7	3	4-0	3	3-6	3
	2-2×12	5-6	3	4-9	3	4-3	3	5-5	3	4-8	3	4-2	3	5-4	3	4-7	3	4-1	4
	3-2×8	4-10	2	4-2	2	3-9	2	4-9	2	4-1	2	3-8	2	4-8	2	4-1	2	3-8	2
	3-2×10	5-11	2	5-1	2	4-7	3	5-10	2	5-0	2	4-6	3	5-9	2	4-11	2	4-5	3
	3-2×12	6-10	2	5-11	3	5-4	3	6-9	2	5-10	3	5-3	3	6-8	2	5-9	3	5-2	3

	4-2×8	5-7	2	4-10	2	4-4	2	5-6	2	4-9	2	4-3	2	5-5	2	4-8	2	4-2	2
	4-2×10	6-10	2	5-11	2	5-3	2	6-9	2	5-10	2	5-2	2	6-7	2	5-9	2	5-1	2
	4-2×12	7-11	2	6-10	2	6-2	3	7-9	2	6-9	2	6-0	3	7-8	2	6-8	2	5-11	3

For SI: 1 inch = 25.4 mm, 1 pound per square foot = 0.0479kPa.
a. Spans are given in feet and inches.
b. Tabulated values assume #2 grade lumber.
c. Building width is measured perpendicular to the ridge. For widths between those shown, spans are permitted to be interpolated.
d. NJ - Number of jack studs required to support each end. Where the number of required jack studs equals one, the header is permitted to be supported by an approved framing anchor attached to the full-height wall stud and to the header.
e. Use 30 psf ground snow load for cases in which ground snow load is less than 30 psf and the roof live load is equal to or less than 20 psf.

TABLE R502.2.4(2) [IRC R502.5(2)]
GIRDER SPANS AND HEADER SPANS FOR INTERIOR BEARING WALLS

HEADERS AND GIRDERS SUPPORTING	SIZE	BUILDING WIDTH[c] (feet)					
		20		28		36	
		Span	NJ[d]	Span	NJ[d]	Span	NJ[d]
One floor only	2-2×4	3-1	1	2-8	1	2-5	1
	2-2×6	4-6	1	3-11	1	3-6	1
	2-2×8	5-9	1	5-0	2	4-5	2
	2-2×10	7-0	2	6-1	2	5-5	2
	2-2×12	8-1	2	7-0	2	6-3	2
	3-2×8	7-2	1	6-3	1	5-7	2
	3-2×10	8-9	1	7-7	2	6-9	2
	3-2×12	10-2	2	8-10	2	7-10	2
	4-2×8	9-0	1	7-8	1	6-9	1
	4-2×10	10-1	1	8-9	1	7-10	2
	4-2×12	11-9	1	10-2	2	9-1	2
Two floors	2-2×4	2-2	1	1-10	1	1-7	1
	2-2×6	3-2	2	2-9	2	2-5	2
	2-2×8	4-1	2	3-6	2	3-2	2
	2-2×10	4-11	2	4-3	2	3-10	3
	2-2×12	5-9	2	5-0	3	4-5	3
	3-2×8	5-1	2	4-5	2	3-11	2
	3-2×10	6-2	2	5-4	2	4-10	2
	3-2×12	7-2	2	6-3	2	5-7	3
	4-2×8	6-1	1	5-3	2	4-8	2
	4-2×10	7-2	2	6-2	2	5-6	2
	4-2×12	8-4	2	7-2	2	6-5	2

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm.
a. Spans are given in feet and inches.
b. Tabulated values assume #2 grade lumber.
c. Building width is measured perpendicular to the ridge. For widths between those shown, spans are permitted to be interpolated.
d. NJ - Number of jack studs required to support each end. Where the number of required jack studs equals one, the header is permitted to be supported by an approved framing anchor attached to the full-height wall stud and to the header.

R502.2.5 Bearing[IRC R502.6]. The ends of each joist, beam or girder shall have not less than 1.5 inches (38 mm) of bearing on wood or metal and not less than 3 inches (76 mm) on masonry or concrete except where supported on a 1-inch-by-4-inch (25.4 mm by 102 mm) ribbon strip and nailed to the adjacent stud or by the use of approved joist hangers.

R502.2.5.1 Floor systems[IRC R502.6.1]. Joists framing from opposite sides over a bearing support shall lap a minimum of 3 inches (76 mm) and shall be nailed together with a minimum three 10d face nails. A wood or metal splice with strength equal to or greater than that provided by the nailed lap is permitted.

R502.2.5.2 Joist framing[IRC R502.6.2]. Joists framing into the side of a wood girder shall be supported by approved framing anchors or on ledger strips not less than nominal 2 inches by 2 inches (51 mm by 51 mm).

R502.2.6 Lateral restraint at supports[IRC R502.7]. Joists shall be supported laterally at the ends by full-depth solid blocking not less than 2 inches (51 mm) nominal in thickness; or by attachment to a full-depth header, band, or rim joist, or to an adjoining stud; or shall be otherwise provided with lateral support to prevent rotation.

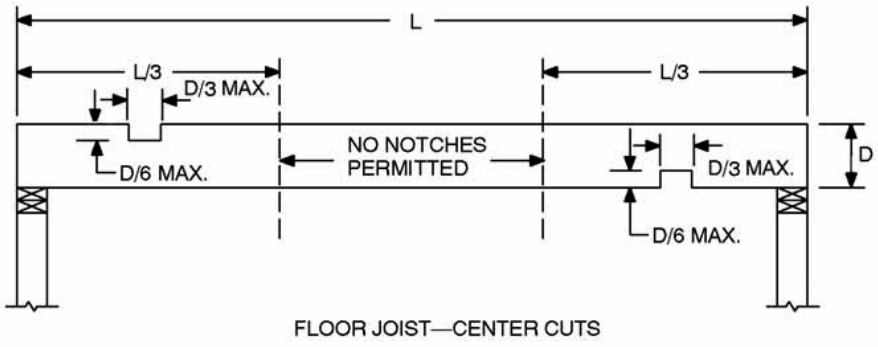
Exception: Reserved.

R502.2.6.1 Bridging[IRC R502.7.1]. Joists exceeding a nominal 2 inches by 12 inches (51 mm by 305 mm) shall be supported laterally by solid blocking, diagonal bridging (wood or metal), or a continuous 1-inch-by-3-inch (25.4 mm by 76 mm) strip nailed across the bottom of joists perpendicular to joists at intervals not exceeding 8 feet (2438 mm).

R502.2.7 Drilling and notching[IRC R502.8]. Structural floor members shall not be cut, bored or notched in excess of the limitations specified in this section. See Figure R502.2.7.

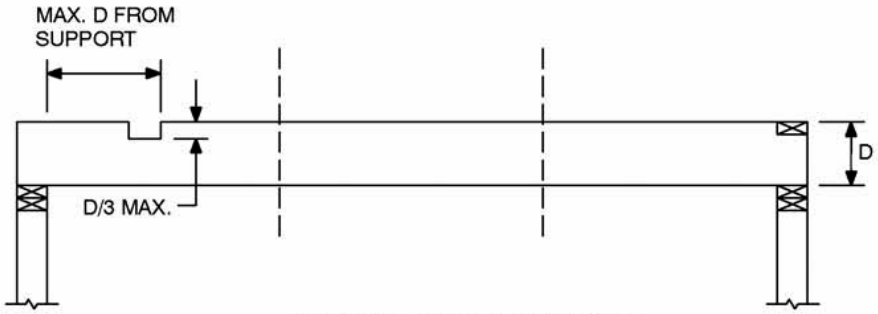
R502.2.7.1 Sawn lumber[IRC R502.8.1]. Notches in solid lumber joists, rafters and beams shall not exceed one-sixth of the depth of the member, shall not be longer than one-third of the depth of the member and shall not be located in the middle one-third of the span. Notches at the ends of the member shall not exceed one-fourth the depth of the member. The tension side of members 4 inches (102 mm) or greater in nominal thickness shall not be notched except at the ends of the members. The diameter of holes bored or cut into members shall not exceed one-third the depth of the member. Holes shall not be closer than 2 inches (51 mm) to the top or bottom of the member, or to any other hole located in the member. Where the member is also notched, the hole shall not be closer than 2 inches (51 mm) to the notch.

R502.2.7 2 Engineered wood products[IRC R502.8.2]. Cuts, notches and holes bored in trusses, structural composite lumber, structural glue-laminated members or I-joists are prohibited except where permitted by the manufacturer's recommendations or where the effects of such alterations are specifically considered in the design of the member by a registered design professional.



FLOOR JOIST—CENTER CUTS

FLOOR JOIST—END CUTS



RAFTER/CEILING JOISTS (R802.7.1)

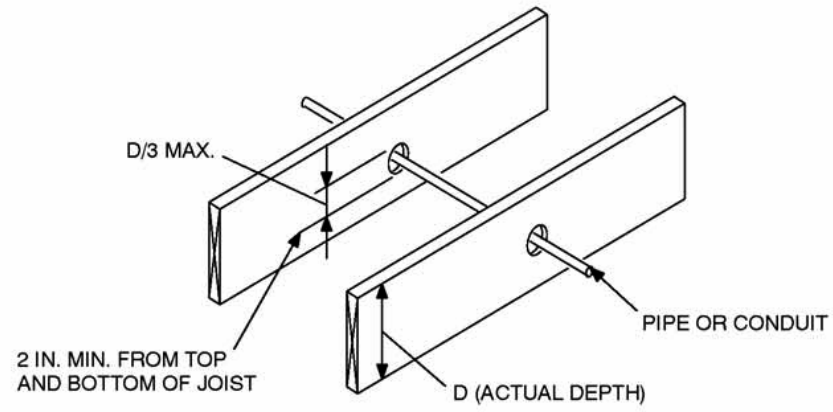


FIGURE R 502.2.7 [IRC R502.8]
CUTTING, NOTCHING AND DRILLING

R502.2.8 Fastening[IRC R502.9]. Floor framing shall be nailed in accordance with Table R602.2(1) Where posts and beam or girder construction is used to support floor framing, positive connections shall be provided to ensure against uplift and lateral displacement.

R502.2.9 Framing of openings[IRC R502.10]. Openings in floor framing shall be framed with a header and trimmer joists. When the header joist span does not exceed 4 feet (1219 mm), the header joist may be a single member the same size as the floor joist. Single trimmer joists may be used to carry a single header joist that is located within 3 feet (914 mm) of the trimmer joist bearing.
When the header joist span exceeds 4 feet (1219 mm), the trimmer joists and the header joist shall be doubled and of sufficient cross section to support the floor joists framing into the header. Approved hangers shall be used for the header joist to trimmer joist connections when the header joist span exceeds 6 feet (1829 mm). Tail joists over 12 feet (3658 mm) long shall be supported at the header by framing anchors or on ledger strips not less than 2 inches by 2 inches (51 mm by 51 mm).

R502.3 Add to read as shown:

R502.3 Design and construction where wind speed is 100 mph or greater. Floor framing of light-frame wood construction shall be designed and constructed in accordance with the provisions of Section R301.2.1.1, Section R502.1.

R503.2.3 Installation. Wood structural panels used as subfloor or combination subfloor underlayment shall be attached to wood framing in accordance with Table R602.2(1) and shall be attached to cold-formed steel framing in accordance with Table R505.3.1(2).

R503.3.3 Installation. Particleboard underlayment shall be installed in accordance with the recommendations of the manufacturer and attached to framing in accordance with Table R602.2(1).

Table R505.3.1(1) Change to read as follows [use table as per the 2004 FBC]:

Table R505.3.1(1)
FLOOR TO FOUNDATION OR BEARING WALL CONNECTION REQUIREMENTS

R506.2.5 Add to read as shown:

R506.2.5 Joints. Concrete slabs on ground shall be provided with joints in accordance with ACI 224.3R or other approved methods. Joints shall be designed by an architect or engineer.
Exception: Joints are not required in unreinforced plain concrete slabs on ground or in slabs for one- and two-family dwellings complying with one of the following:

1. Concrete slabs on ground containing synthetic fiber reinforcement. Fiber lengths and dosage amounts shall comply with one of the following

(1) Fiber lengths shall be ½ inch to 2 inches (13 to 51 mm) in length. Dosage amounts shall be from 0.75 to 1.5 pounds per cubic yard (0.45 to 0.89 kg/m3) in accordance with the manufacturer's recommendations. Synthetic fibers shall comply with ASTM C 1116. The manufacturer or supplier shall provide certification of compliance with ASTM C 1116 when requested by the building official; or,

(2) Fiber length shall be from ½ inch to 2 inches (13 mm to 51 mm) in length, monofilament or fibrillated. Dosage amounts shall be from 0.5 to 1.5 pounds per cubic yard (0.30 to 0.89 kg/m3) to achieve minimum 40 percent reduction of plastic shrinkage cracking of concrete versus a control mix in accordance with ICBO AC32. Independent test results using minimum six (6) test specimens shall be provided to the building official showing compliance with ICBO A32. Synthetic fiber shall comply with ASTM C1116, Paragraph 4.1.3, Type III. The manufacturer or supplier shall provide certification of compliance with ASTM C1116 when requested by building official.

2. Concrete slabs on ground containing 6x6 W1.4 × W1.4 welded wire reinforcement fabric located in the middle to the upper one-third of the slab. Welded wire reinforcement fabric shall be supported with approved materials or supports at spacings not to exceed 3 feet (914 mm) or in accordance with the manufacturer's specifications. Welded plain wire reinforcement fabric for concrete shall conform to ASTM A 185, Standard Specification for Steel Welded Wire Reinforcement Fabric, Plain, for Concrete Reinforcement.

CHAPTER 6 WALL CONSTRUCTION

IRC Changes to FL FBC-Residential code 2007

Change Section R602.1.2 to read as follows:

R602.1.2 Fireblocking required. Fireblocking shall be provided to cut off all concealed draft openings (both vertical and horizontal) and to form an effective fire barrier between stories, and between a top story and the roof space. Fireblocking shall be provided inwood-frame construction in the following locations.

1. In concealed spaces of stud walls and partitions, including furred spaces and parallel rows of studs or staggered studs; as follows:
1.1. Vertically at the ceiling and floor levels.
1.2. Horizontally at intervals not exceeding 10 feet (3048 mm).
2. At all interconnections between concealed vertical and horizontal spaces such as occur at soffits, drop ceilings and cove ceilings.
3. In concealed spaces between stair stringers at the top and bottom of the run. Enclosed spaces under stairs shall comply with Section R311.2.2.
4. At openings around vents, pipes, ducts, cables and wires at ceiling and floor level, with an approved material to resist the free passage of flame and products of combustion.
5. For the fireblocking of chimneys and fireplaces, see Section R1003.19.
6. Fireblocking of cornices of a two-family dwelling is required at the line of dwelling unit separation.

Add Section R602.1.3 to read as follows:

R602.1.1.3 Structural log members. Stress grading of structural log members of nonrectangular shape, as typically used in log buildings, shall be in accordance with ASTM D 3957. Such structural log members shall be identified by the grade mark of an approved lumber grading or inspection agency. In lieu of a grade mark on the material, a certificate of inspection as to species and grade issued by a lumber- grading or inspection agency meeting the requirements of this section shall be permitted to be accepted.

Change R602.2.3 as follows:

R602.2.3 Top plate. Wood stud walls shall be capped with a double top plate installed to provide overlapping at corners and intersections with bearing partitions. End joints in top plates shall be offset at least 24 inches (610 mm). Joints in plates need not occur over studs. Plates shall be not less than 2-inches (51 mm) nominal thickness and have a width at least equal to the width of the studs.

Exception: [Text not changed]

Replace Table R602.2(1), Fastener Schedule for Structural Members, with Table R602.3(1) IRC '06 *to insert the diameter and length of each nail into the table and add a new entry for collar tie to rafter (eliminates framing or blocking at roof-plane perimeters expressly for nailing purposes.* ***Maintain the FL Table number.***

Replace Table R602.2(2), Alternate Attachments, with Table R602.3(2) IRS '06 *to increase the length and decrease the spacing of some fasteners used as alternative attachments.* ***Maintain FL Table number.***

Change the title of Table R602.2(3) to "Wood Structural Panel Wall Sheathing".

Change Section R602.2.7 to read as follows:
R602.2.7 Drilling and notching–studs. Drilling and notching of studs shall be in accordance with the following:

1. Notching. Any stud in an exterior wall or bearing partition may be cut or notched to a depth not exceeding 25 percent of its width. Studs in nonbearing partitions may be notched to a depth not to exceed 40 percent of a single stud width.
2. Drilling. Any stud may be bored or drilled, provided that the diameter of the resulting hole is no more than 60 percent of the stud width, the edge of the hole is no more than 5/8 inch (16 mm) to the edge of the stud, and the hole is not located in the same section as a cut or notch. Studs located in exterior walls or bearing partitions drilled over 40 percent and up to 60 percent shall also be doubled with no more than two successive doubled studs bored. See Figures R602.2.7(1) and R602.2.7(2).

Exception: Use of approved stud shoes is permitted when they are installed in accordance with the manufacturer's recommendations.

R602.2.7.1 Drilling and notching of top plate. When piping or ductwork is placed in or partly in an exterior wall or interior load-bearing wall, necessitating cutting, drilling or notching of the top plate by more than 50 percent of its width, a galvanized metal tie of not less than 0.054 inches thick (1.37mm) (16ga) and 1 1/2 inches (38mm) wide shall be fastened across and to the

~~to each~~ plate ~~across~~ at ~~and to~~ each side of the opening with not less than eight 16d nails at each side or equivalent. See Figure R602.2.7.(1)~~]~~.

Exception: When the entire side of the wall with the notch or cut is covered by wood structural panel sheathing.

Change R602.2.10.1 as follows:

R602.2.10.1 Braced wall lines. Braced wall lines shall consist…not more than 8 feet (2438 mm).

~~A designed collector shall be provided if the bracing begins more than 12 feet (3658 mm) from each end of a braced wall line.~~

Change Table R602.2.10.1 as follows:

Table R602.2.10.1 WALL BRACING. *[No change to table except footnote c]*

c. Methods of bracing shall be as described in Section R602.2.10.3. The alternate braced wall panels described in Section R602.2.10.6.1 or Section R602.2.10.6.2 shall also be permitted.

Change R602.2.10.3 as follows:

R602.2.10.3 Braced wall panel construction methods. The construction of braced wall panels shall be in accordance with one of the following methods: [No change to 1 – 8]

Exception: Alternate braced wall panels constructed in accordance with Section R602.2.10.6.1 or R602.2.10.6.2 shall be permitted to replace any of the above methods of braced wall panels.

Change R602.2.10.4 as follows:

R602.2.10.4 Length of braced panels. *[No change to text through R602.2.10.4, 1.]*

2. Lengths of alternate braced wall panels shall be in accordance with Section R602.2.10.6.1 or Section R602.2.10.6.2.

Change Table R602.2.10.5 as follows:

TABLE R602.2.10.5 LENGTH REQUIREMENTS FOR BRACED WALL PANELS IN A CONTINUOUSLY SHEATHED WALL *[No change to table except add footnote]*

c. Walls on either or both sides of openings in garages attached to fully sheathed dwellings shall be permitted to be built in accordance with Section R602.2.10.6.2 and Figure R602.2.10.6.2 except that a single bottom plate shall be permitted and two anchor bolts shall be placed at 1/3 points. In addition, tie-down devices shall not be required and the vertical wall segment shall have a maximum 6:1 height-to-width ratio (with height being measured from top of header to the bottom of the sill plate).

Make changes to Figure R602.2.10.5 as per IRC 06.

Change R602.2.10.6 as follows:

R602.2.10.6 Alternate braced wall panel construction methods. Alternate braced wall panels shall be constructed in accordance with Sections R602.2.10.6.1 and R602.2.10.2.

R602.2.10.6.1 Alternate braced wall panels. Alternate braced wall lines constructed in accordance with one of the following provisions shall be permitted to replace each 4 feet (1219 mm) of braced wall panel as required by Section R602.2.10.4. The maximum height and minimum width of each panel shall be in accordance with Table R602.2.10.6:

1. In one-story buildings, each panel shall have a length of not less than 2 feet, 8 inches (813 mm) and a height of not more than 10 feet (3048 mm). Each panel shall be sheathed on one face with 3 / 8-inch minimum- thickness (9.5 mm) wood structural panel sheathing nailed with 8d common or galvanized box nails in accordance with Table R602.2(1) and blocked at all wood structural panel sheathing edges. Two anchor bolts installed in accordance with Figure R403.1(1) shall be provided in each panel. Anchor bolts shall be placed at panel quarter points. Each panel end stud shall have a tie-down device fastened to the foundation, capable of providing an uplift capacity in accordance with Table R602.2.10.6 ~~of at least 1,800 pounds (816.5 kg)~~. The tie-down device shall be installed in accordance with the manufacturer's recommendations. The panels shall be supported directly on a foundation or on floor framing supported directly on a foundation which is continuous across the entire length of the braced wall line. This foundation shall be reinforced with not less than one No. 4 bar top and bottom. When the continuous foundation is required to have a depth greater than 12 inches (305 mm), a minimum 12-inch-by-12-inch (305 mm by 305 mm) continuous footing or turned down slab edge is permitted at door openings in the braced wall line. This continuous footing or turned down slab edge shall be reinforced with not less than one No. 4 bar top and bottom. This reinforcement shall be lapped 15 inches (381 mm) with the reinforcement required in the continuous foundation located directly under the braced wall line.

2. In the first story of two-story buildings, each braced wall panel shall be in accordance with Item 1 above, except that the wood structural panel sheathing shall be provided on both faces, sheathing edge nailing spacing shall not exceed four inches (102 mm) on center, at least three anchor bolts shall be placed at one-fifth points~~, and tie-down device uplift capacity shall not be less than 3,000 pounds (1360.8 kg)~~.

R602.2.10.6.2 Alternate braced wall panel adjacent to a door or window opening. Alternate braced wall panels constructed in accordance with one of the following provisions are also permitted to replace each 4 feet (1219 mm) of braced wall panel as required by Section R602.2.10.4 for use adjacent to a window or door opening with a full-length header:

1. In one-story buildings, each panel shall have a length of not less than 16 inches (406 mm) and a height of not more than 10 feet (3048 mm). Each panel shall be sheathed on one face with a single layer of 3/8-inch-minimum-thickness (10 mm) wood structural panel sheathing nailed with 8d common or galvanized box nails in accordance with Figure R602.2.10.6.2. The wood structural panel sheathing shall extend up over the solid sawn or glued-laminated header and shall be nailed in accordance with Figure R602.2.10.6.2. Use of a built-up header consisting of at least two 2 x 12s and fastened in accordance with Table R602.2(1) shall be permitted. A spacer, if used, shall be placed on the side of the built-up beam opposite the wood structural panel sheathing. The header shall extend between the inside faces of the first full-length outer studs of each panel. The clear span of the header between the inner studs of each panel shall be not less than 6 feet (1829 mm)

and not more than 18 feet (5486 mm) in length. A strap with an uplift capacity of not less than 1000 pounds (4448 N) shall fasten the header to the side of the inner studs opposite the sheathing. One anchor bolt not less than 5/8-inch-diameter (16 mm) and installed in accordance with Section R403.1.6 shall be installed in the center of each sill plate. The studs at each end of the panel shall have a tie-down device fastened to the foundation with an uplift capacity of not less than 4,200 pounds (18 683 N).

Where a panel is located on one side of the opening, the header shall extend between the inside face of the first full-length stud of the panel and the bearing studs at the other end of the opening. A strap with an uplift capacity of not less than 1000 pounds (4448 N) shall fasten the header to the bearing studs. The bearing studs shall also have a tie-down device fastened to the foundation with an uplift capacity of not less than 1000 pounds (4448 N).

The tie-down devices shall be an embedded strap type, installed in accordance with the manufacturer's recommendations. The panels shall be supported directly on a foundation which is continuous across the entire length of the braced wall line. The foundation shall be reinforced with not less than one No. 4 bar top and bottom.

Where the continuous foundation is required to have a depth greater than 12 inches (305 mm), a minimum 12-inch-by-12-inch (305 mm by 305 mm) continuous footing or turned down slab edge is permitted at door openings in the braced wall line. This continuous footing or turned down slab edge shall be reinforced with not less than one No. 4 bar top and bottom. This reinforcement shall be lapped not less than 15 inches (381 mm) with the reinforcement required in the continuous foundation located directly under the braced wall line.

2. In the first story of two-story buildings, each wall panel shall be braced in accordance with Item 1 above, except that each panel shall have a length of not less than 24 inches (610 mm).

Add TABLE R602.2.10.6 from IRC '06 TABLE R602.10.6. *[Mo: Check table for FL specific criteria]*

TABLE R602.10.6
MINIMUM WIDTHS AND TIE-DOWN FORCES OF ALTERNATE BRACED WALL PANELS

		HEIGHT OF BRACED WALL PANEL				
		Sheathed Width				
WINDSPEED	TIE-DOWN FORCE (lb)	8 ft. 2 - 4	9 ft. 2 - 8	10 ft. 2 - 8	11 ft. 3 - 2	12 ft. 3 - 6
Windspeed < 100 mph	R602.10.6.1, Item 1	1800	1800	1800	2000	2200
	R602.10.6.1, Item 2	3000	3000	3000	3300	3600

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm.
a. Not permitted because maximum height is 10 feet.

Add Figure R602.2.10.6.2 from IRC '06 FIGURE R602.10.6.2.

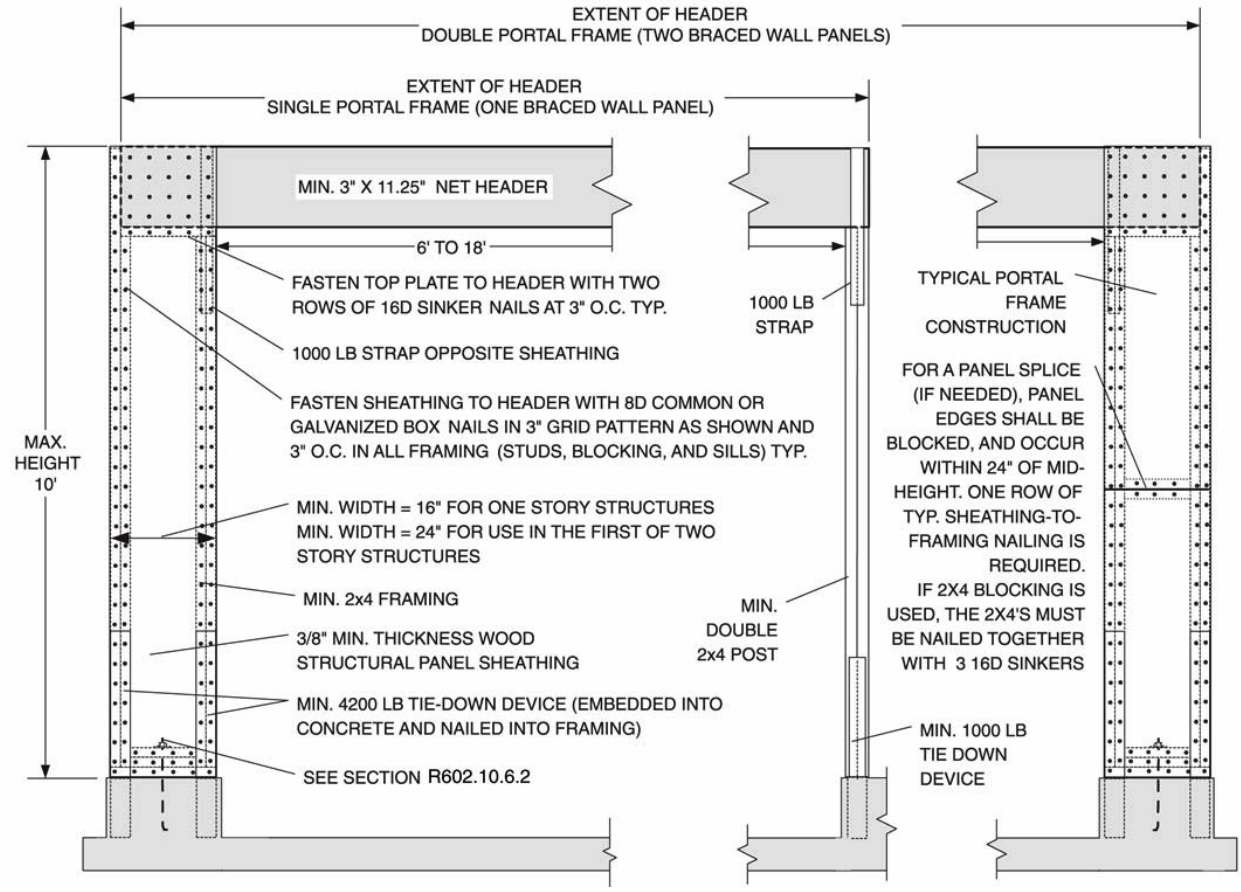


FIGURE R602.10.6.2
ALTERNATE BRACED WALL PANEL ADJACENT TO A DOOR OR WINDOW OPENING

Change R602.2.10.7 as follows:

R602.2.10.7 Panel joints. All vertical joints of panel sheathing shall occur over, and be fastened to, common studs. Horizontal joints in braced wall panels shall occur over blocking of a minimum of 1 1/2 inch (38 mm) thickness.

Exception: [No change]

Change R602.2.10.8 as follows:

R602.2.10.8 Connections. Braced wall line ~~panel~~ sole plates shall be fastened to the floor framing and top plates shall be connected to the framing above in accordance with Table R602.2(1). Sills shall be fastened to the foundation or slab in accordance with Sections R403.1.6. Where joists are perpendicular to the braced wall lines above, blocking shall be provided under and in line with the braced wall panels. Where joists are perpendicular to braced wall lines below, blocking shall be provided over and in line with the braced wall panels. Where joists are

parallel to braced wall lines above or below, a rim joist or other parallel framing member shall be provided at the wall to permit fastening per Table R602.3(1).

Change R603.1.1 as follows:

R603.1.1 Applicability limits. The provisions of this section shall control the construction of exterior steel wall framing and interior load-bearing steel wall framing for buildings not greater than 60 feet (18 288 mm) long ~~in length~~ perpendicular to the joist or truss span, not more ~~greater~~ than 40 ~~36~~ feet (12 192 ~~10 973~~ mm) wide ~~in width~~ parallel to the joist ~~span~~ or truss span, and not more ~~greater~~ than two stories in height ~~with each story not greater than 10 feet (3048 mm) high~~. All exterior walls installed in accordance with the provisions of this section shall be considered as load-bearing walls. Steel walls constructed in accordance with the provisions of this section shall be limited to sites subjected to a design wind speed of less than 100 miles per hour located in Exposure ~~A,~~ B or C.

Change R603.2 as follows:

R603.2 Structural framing. Load-bearing steel wall framing members shall comply with Figure R603.2(1) and with the dimensional and minimum thickness requirements specified in Tables R603.2(1) and R603.2(2). Tracks shall comply with Figure R603.2(2) and shall have a minimum flange width of 1 ¼ inches (32 mm). The maximum inside bend radius for members shall be the greater of 3/32 inch (2.4 mm) or twice the uncoated steel thickness. Holes in wall studs and other structural members shall ~~not exceed 1.5 inches (38 mm) in width or 4 inches (102 mm) in length as shown in Figure R603.2(3). Holes shall be permitted only along the centerline of the web of the framing member. Holes shall not be less than 24 inches (610 mm) center to center and shall not be located less than 10 inches (254 mm) from edge of hole to end of~~ comply with all of the following conditions:

1. Holes shall conform to Figure R603.2(3);
2. Holes shall be permitted only along the centerline of the web of the framing member;
3. Holes shall have a center-to-center spacing of not less than 24 inches (610 mm);
4. Holes shall have a width not greater than 0.5 times the member depth, or 11/2 inches (38.1 mm);
5. Holes shall have a length not exceeding 4 1/2 inches (114 mm); and
6. Holes shall have a minimum distance between the edge of the bearing surface and the edge of the hole of not less than 10 inches (254 mm).

Framing members with web holes violating the above requirements shall be patched in accordance with Section R603.3.5 or designed in accordance with accepted engineering practices.

Change R603.2.1 as follows:

R603.2.1 Material. *[No change to text except to 4 as shown]*

4. ~~Steels that comply with ASTM A 653, except for tensile and elongation, shall be permitted, provided the ratio of tensile strength to yield point is at least 1.08 and the total elongation is at least 10 percent for a 2-inch (51 mm) gage length or 7 percent for an 8-inch (203 mm) gage length.~~ ASTM A 1003: Grades 33, 37, 40 and 50.

Change Figure R603.2(3) as per R603.2(3) of the IRC '06

Change R603.3.2 as shown:

R603.3.2 Load-bearing walls. Steel studs shall comply with Tables R603.3.2(2) through R603.3.2(21) ~~(7) for steels with minimum yield strength of 33 ksi (227.7 MPa) and Tables R603.3(8) through R603.3.2(13) for steels with minimum yield strength of 50 ksi (345 MPa).~~.The tabulated stud thickness for structural walls shall be used when the attic load is 10 psf (0.48 kPa) or less. When an attic storage load is greater than 10 psf (0.48 kPa) but less than or equal to 20 psf (0.96 kPa), the next higher snowload column value from Tables R603.3.2(2) through R603.3.2(21) shall be used to select the stud size. The tabulated stud thickness for structural walls supporting one floor, roof and ceiling shall be used when the second floor live load is 30 psf (1.44 kPa). When the second floor live load is greater than 30 psf (1.44 kPa) but less than or equal to 40 psf (1.92 kPa) the design value in the next higher snow load column from Tables R603.2(12) through R603.3.2(21) shall be used to select the stud size.

Fastening requirements …not less than 33 mils (0.84 mm). *[No change to text]*

R603.3.3 Stud bracing. The flanges of steel studs shall be laterally braced in accordance with one of the following:
1. Gypsum board installed with minimum No. 6 screws in accordance with Section R702 or structural sheathing installed in accordance with Table R603.3.2(1).
2. Horizontal steel strapping installed in accordance with Figure R603.3 at mid-height for 8-foot (2438 mm) walls, and one-third points for 9-foot and 10-foot (2743mm and 3048 mm) walls. Steel straps shall be at least 1.5 inches in width and 33 mils in thickness (38 mm by 0.84 mm). Straps shall be attached to the flanges of studs with at least one No. 8 screw. In-line blocking shall be installed between studs at the termination of all straps. Straps shall be fastened to the blocking with at least two No. 8 screws.
3. Sheathing on one side and strapping on the other side. Sheathing shall be installed in accordance with Method #1 above. Steel straps shall be installed in accordance with Method #2 above.

Replace Tables R603.3.2(2) through R603.3.2(13) with Tables R603.3.2(2) through R603.3.2(21).

Change R603.3.5 as shown:

R603.3.5 Hole patching. Web holes violating the requirements in Section R603.2 shall be designed in accordance with one of the following:

1. Framing members shall be replaced or designed in accordance with accepted engineering practices when web holes exceed the following size limits:
    1.1. The depth of the hole, measured across the web, exceeds 70 percent of the flat width of the web; or
    1.2. The length of the hole measured along the web exceeds 10 inches (254 mm) or the depth of the web, whichever is greater.

2. Web holes not exceeding the dimensional requirements in R603.3.5(1) shall be patched with a solid steel plate, stud section, or track section in accordance with Figure R603.3.5. The steel patch shall be as a minimum the same thickness as the receiving member and shall extend at least 1 inch (25 mm) beyond all edges of the hole. The steel patch shall be fastened to the web of the receiving member with No. 8 screws spaced no more than 1 inch (25 mm) center-to-center along the edges of the patch with a minimum edge distance of 1/2 inch (13 mm).

~~Stud web holes with dimensions conforming to Section R603.2 that are closer than 10 inches (254 mm)from the edge of the hole to the end of the member shall be patched with a solid steel plate, C-section or track section in accordance with Figure R603.3.5. The patch shall be of a minimum thickness as the stud member and shall extend at least 1 inch (25.4 mm) beyond all edges of the hole. The patch shall be fastened to the web with No. 8 screws (minimum) spaced not greater than 1 inch (25.4 mm) center to center along the edges of the patch, with a minimum edge distance of 1/2 inch (12.7 mm).~~

Change R603.6 as follows:

R603.6 Headers. Headers shall be installed above wall openings in all exterior walls and interior load-bearing walls in accordance with Figure R603.6 and Table R603.6(1) through R603.6(8) ~~Table R603.6(2), and Table R603.6(3)~~, or shall be designed ~~and installed~~ in accordance with the AISI Standard for Cold-formed Steel Framing-Header Design (COFS/Header Design).

R603.6.1 Jack and king studs. The number of jack and king studs shall comply with Table R603.6(9) ~~R603.6(4)~~. King and jack studs shall be of the same dimension and thickness as the adjacent wall studs. Headers constructed of C-shape framing members shall be connected to king studs in accordance with Table R603.6(10) ~~R603.6(5)~~. One-half of the total number of screws shall be applied to the header and one-half to the king stud by use of a minimum 2-inch by 2-inch (51 mm by 51 mm) clip angle or 4-inch (102 mm) wide steel plate. The clip angle or plate shall extend the depth of the header minus ½ inch (12.7 mm) and shall have a minimum thickness of the header members or the wall studs, whichever is thicker.

Head track spans shall comply with Table R603.6(11) and shall be in accordance with Figures R603.3 and R603.6. Increasing the head track tabular value shall not be prohibited when in accordance with one of the following:

1. For openings less than 4 feet (1219 mm) in height that have a top and bottom head track, multiply the tabular value by 1.75; or
2. For openings less than 6 feet (1829 mm) in height that have a top and bottom head track, multiply the tabular value by 1.50.

R603.7 Structural sheathing. In areas where the basic wind speed is less than 110 miles per hour (49 m/s), wood structural panel sheathing shall be installed on all exterior walls of buildings in accordance with this section. Wood structural panel sheathing shall consist of minimum 7/16-inch-thick (11 mm) oriented-strand board or 15/32-inch-thick (12 mm) plywood and shall be installed on all exterior wall surfaces in accordance with Section R603.7.1 and Figure R603.3. The minimum length of full height sheathing on exterior walls shall be determined in accordance with Table R603.7, but shall not be less than 20 percent of the braced wall length in any case. The minimum percentage of full height sheathing in Table R603.7 shall include only those

sheathed wall sections, uninterrupted by openings, which are a minimum of 48 inches (1120 mm) wide. The minimum percentage of full-height structural sheathing shall be multiplied by 1.10 for 9-foot-high (2743 mm) walls and multiplied by 1.20 for 10-foot-high (3048 mm) walls. In addition, structural sheathing shall:
1. Be installed with the long dimension parallel to the stud framing and shall cover the full vertical height of studs, from the bottom of the bottom track to the top of the top track of each story.
2. Be applied to each end (corners) of each of the exterior walls with a minimum 48-inch-wide (1219 mm) panel.

R603.7.1 Structural sheathing fastening. All edges and interior areas of wood structural panel sheathing shall be fastened to a framing member and tracks in accordance with Table R603.3.2(1).

Change Tables R603.6(1) through R603.6(5) per Tables R603.6(1) through R603.6(11) of the IRC '06

Change Figure R603.6 to agree with the IRC '06, HEADER DETAIL.

Change R606.3 as follows:

R606.3 Corbeled masonry. Solid masonry units shall be used for corbeling. The maximum corbeled projection beyond the face of the wall shall not be more than one-half of the wall thickness or one-half the wythe thickness for hollow walls; the maximum projection of one unit shall not exceed one-half the height of the unit or one-third the thickness at right angles to the wall. ~~The top course of corbels shall be a header course w~~When ~~the~~ corbeled masonry is used to support floor or roof-framing members, the top course of the corbel shall be a header course or the top course bed joint shall have ties to the vertical wall ~~projection~~. The hollow space behind the corbeled masonry shall be filled with mortar or grout.

Change R606.4 as follows:

R606.4 ~~R606.3.1~~ Support conditions. Bearing and support conditions shall be in accordance with Sections R606.4.1 and R606.4.2.

R606.4.1 Bearing on support. Each masonry wythe shall be supported by at least two-thirds of the wythe thickness.

R606.4.2 Support at foundation. Cavity wall or masonry veneer construction may be supported on an 8-inch (203 mm) foundation wall, provided the 8-inch (203 mm) wall is corbeled with solid masonry to the width of the wall system above. The total horizontal projection of the corbel shall not exceed 2 inches (51 mm) with individual corbels projecting not more than one-third the thickness of the unit or one-half the height of the unit. ~~The top course of all corbels shall be a header course.~~

Change Table R606.9.10.1 as follows:

TABLE R606.9.10.1 MINIMUM CORROSION PROTECTION

[No change except to the following line]

Sheet metal ties or anchors completely Embedded in mortar or grout	ASTM A 653 ~~525~~, Coating Designation ~~Class~~ G60

TABLE R611.2
REQUIREMENTS FOR ICF WALLS[b]

WALL TYPE AND NOMINAL SIZE	MAXIMUM WALL WEIGHT (psf)[c]	MINIMUM WIDTH OF VERTICAL CORE (inches)[a]	MINIMUM THICKNESS OF VERTICAL CORE (inches)[a]	MAXIMUM SPACING OF VERTICAL CORES (inches)	MAXIMUM SPACING OF HORIZONTAL CORES (inches)	MINIMUM WEB THICKNESS (inches)
3.5″ Flat[d]	44[d]	N/A	N/A	N/A	N/A	N/A
5.5″ Flat	69	N/A	N/A	N/A	N/A	N/A
7.5″ Flat	94	N/A	N/A	N/A	N/A	N/A
9.5″ Flat	119	N/A	N/A	N/A	N/A	N/A
6″ Waffle-Grid	56	6.25	5	12	16	2
8″ Waffle-Grid	76	7	7	12	16	2
6″ Screen-Grid	53	5.5	5.5	12	12	N/A

For SI: 1 inch = 25.4 mm; 1 pound per cubic foot = 16.018 kg/m3; 1 pound per square foot = 0.0479 kPa.
a. For width "W", thickness "T", spacing, and web thickness, refer to Figures R611.4 and R611.5.
b. N/A indicates not applicable.
c. Wall weight is based on a unit weight of concrete of 150 pcf. The tabulated values do not include any allowance for interior and exterior finishes.
d. For all buildings in Seismic Design Category A or B, and detached one- and two-family dwellings in Seismic Design Category C the actual wall thickness is permitted to be up to 1 inch thicker than shown and the maximum wall weight to be 56 psf. Construction requirements and other limitations within Section R611 for 3.5-inch flat ICF walls shall apply. Interpolation between provisions for 3.5-inch and 5.5-inch flat ICF walls is not permitted.

Change R611.4 and R611.5 as follows:

R611.4 Waffle-grid insulating concrete form wall systems. Waffle-grid wall systems shall comply with Figure R611.4 and shall have reinforcement in accordance with Tables R611.3(1) and R611.4(1) and Section R611.7. The minimum core dimensions shall comply with Table R611.2 ~~4(2)~~.

R611.5 Screen-grid insulating concrete form wall systems. Screen-grid ICF wall systems shall comply with Figure R611.5 and shall have reinforcement in accordance with Tables R611.3(1) and R611.5 and Section R611.7. The minimum core dimensions shall comply with Table R611.2 ~~4(2)~~.

Delete Table R611.4(2)

Change R611.7.1.2 as follows:

R611.7.1.2 Vertical steel. Above-grade concrete walls shall have reinforcement in accordance with Sections R611.3, R611.4, or R611.5 and R611.7.2. All vertical reinforcement in the top-most ICF story shall terminate with a 90-degree (1.57 rad) standard hook in accordance with Section R611.7.1.5. The free end of the hook shall be within 4 inches (102mm)of the top of the ICF wall and shall be oriented parallel to the horizontal steel in the top of the wall. ~~bend or~~

~~standard hook and be provided with a minimum lap splice of 24 inches (610 mm) with the top horizontal reinforcement.~~

Above-grade ICF walls …greater amount of reinforcement. *[No change to paragraph]*

Vertical reinforcement shall be …shall have a standard hook. *[No change to paragraph]*

Change Table R611.7(4) as follows *[No change to table except to footnote g]*

g. For actual wall lintel width, refer to Table R611.2 ~~R611.4(2)~~.

Change Table R611.7(5) as follows *[No change to table except to footnote g]*

g. For actual wall lintel width, refer to Table R611.2 ~~R611.4(2)~~.

Change Table R611.7(6) as follows *[No change to table except to footnote h]*

h. For actual wall lintel width, refer to Table R611.2 ~~R611.4(2)~~.

Change Table R611.7(7) as follows *[No change to table except to footnote h]*

h. For actual wall lintel width, refer to Table R611.2 ~~R611.4(2)~~.

Change Table R611.7(9) as follows *[No change to table except to footnote g]*

g. Actual thickness is shown for flat lintels; nominal thickness is given for waffle-grid and screen-grid lintels. Lintel thickness corresponds to the nominal waffle-grid and screen-grid ICF wall thickness. For actual wall lintel width, refer to Table R611.2 ~~R611.4(2)~~.

Change R611.8.2 as follows:

R611.8.2 Ledger bearing. Wood ledger boards supporting bearing ends of joists or trusses shall be anchored to flat ICF walls with minimum thickness of 5.5 inches (140 mm) and to waffle- or screen-grid ICF walls with minimum nominal thickness of 6 inches (152 mm) in accordance with Figure R611.8(2), R611.8(3), R611.8(4) or R611.8(5) and Table R611.8(1).Wood ledger boards supporting bearing ends of joists or trusses shall be anchored to flat ICF walls with minimum thickness of 3.5 inches (140 mm) in accordance with Figure ~~R611.8(4) or~~ R611.8(5) and Table R611.8(1). The ledger shall be a minimum 2 by 8, No. 2 Southern Pine or No. 2 Douglas Fir. Ledgers anchored to nonload-bearing walls to support floor or roof sheathing shall be attached with 1/2 inch (12.7 mm) diameter or headed anchor bolts spaced a maximum of 6 feet (1829 mm) on center. Anchor bolts shall be embedded a minimum of 4 inches (102 mm) into the concrete~~.~~ measured from the inside face of the insulating form. For insulating forms with a face shell thickness of 1.5 inches (38 mm) or less, the hole in the form shall be a minimum of 4 inches (102 mm) in diameter. For insulating forms with a face shell thicker than 1.5 inches (38 mm), the diameter of the hole in the form shall be increased by 1 inch (25 mm) for each 1/2 inch (13 mm)

of additional insulating form face shell thickness. The ledger board shall be in direct contact with the concrete at each bolt location.

Change R611.8.3 as follows:

R611.8.3 Floor and roof diaphragm construction. Floor and roof diaphragms shall be constructed of wood structural ~~wood sheathing~~ panels~~-~~ sheathing attached to wood framing in accordance with Table R602.3(1) or Table R602.3(2) or to cold-formed steel floor framing in accordance with Table R505.3.1(2) or to cold-formed steel roof framing in accordance with Table R804.3.

Change R613.1 as follows:

R613.1 General. This section prescribes performance and construction requirements for exterior window systems installed in wall systems. Windows shall be installed and flashed in accordance with the manufacturer's written installation instructions. Written installation instructions shall be provided by the manufacturer for each window. ~~Waterproofing, sealing and flashing systems are not included in the scope of this section.~~

Add new Section R613.2 as shown:

R613.2Window sills. In dwelling units, where the opening of an operable window is located more than 72 inches (1829 mm) above the finished grade or surface below, the lowest part of the clear opening of the window shall be a minimum of 24 inches (610 mm) above the finished floor of the room in which the window is located. Glazing between the floor and 24 inches (610 mm) shall be fixed or have openings through which a 4-inch-diameter (102 mm) sphere cannot pass.

Exceptions:

1. Windows whose openings will not allow a 4-inch-diameter (102 mm) sphere to pass through the opening when the opening is in its largest opened position.
2. Openings that are provided with window guards that comply with ASTM F 2006 or F 2090.

R613.2 Performance. Exterior windows and doors shall be designed to resist the design wind loads specified in Table R301.2(2) adjusted for height and exposure per Table R301.2(3).

R613.3 Exterior windows, sliding and patio glass doors.

R613.3.1 Testing and Labeling. Exterior windows and sliding ~~glass~~ doors shall be tested by an approved independent testing laboratory, and shall be labeled with an approved label identifying the manufacturer, performance characteristics and approved product certification agency, testing laboratory, evaluation entity or Miami-Dade notice of acceptance to indicate compliance with the requirements of one of the following specifications or comply with Section R613.6:
ANSI/AAMA/NWWDA101/I.S.2 or 101/I.S.2/NAFS
or AAMA/WDMA/CSA 101/I.S.2/A440 or TAS 202
(HVHZ shall comply with TAS 202 utilizing ASTM E 1300-98 or ASTM E 1300-02).

Exceptions:

1. Door assemblies installed in nonhabitable areas where the door assembly and area are designed to accept water infiltration need not be tested for water infiltration.

2. Door assemblies installed where the overhang (OH) ratio is equal to or more than 1 need not be tested for water infiltration. The overhang ratio shall be calculated by the following equation:

OH ratio = OH Length/OH Height

Where:

OH Length = The horizontal measure of how far an overhang over a door projects out from door's surface.

OH Height = The vertical measure of the distance from the door's sill to the bottom of the overhang over a door.

3. Pass-through windows for serving from a single-family kitchen, where protected by a roof overhang of 5 feet (1.5 m) or more shall be exempted from the requirements of the water infiltration test.

4. Decorative glazed openings.

Glass Strength: Products tested and labeled as conforming to the requirements of Section R613.3.1 shall not be subject to the requirements of the *Florida Building Code, Building*. Determination of load resistance of glass for specified loads of products not tested and certified in accordance with Section R613.3.1 shall be designed and labeled to comply with ASTM E 1300. The label shall designate the type and thickness of glass or glazing material.

R613.3.2 Comparative analysis. Structural wind load design pressures for window and door units smaller than the size tested in accordance with Section R613.3.1 shall be permitted to be higher than the design value of the tested unit provided such higher pressures are determined by accepted engineering analysis. All components of the small unit shall be the same as those of the tested unit. Where such calculated design pressures are used, they shall be validated by an additional test of the window or door unit having the highest allowable design pressure.

R613.3.2 Supplemental label. A supplemental temporary label conforming to AAMA 203, Procedural Guide for the Window Inspection and Notification System, shall be acceptable for establishing calculated allowable design pressures higher than indicated on the label required by R613.3.1 for window sizes smaller than that required by the ANSI/AAMA/NWWDA 101/I.S.2 or 101/I.S.2/NAFS or AAMA/WDMA/CSA 101/I.S.2/A440 test requirements. This supplemental label shall remain on the window until final approval by the building official.

R613.4 Exterior door assemblies. Exterior door assemblies not covered by Sections R613.3 or R613.4.3 shall comply with Sections R613.4.1 or R613.4.2.

R613.4.1 Exterior door assemblies shall be tested for structural integrity in accordance with ASTME 330 Procedure A at a load of 1.5 times the required design pressure load. The load shall be sustained for 10 seconds with no permanent deformation of any main frame or panel member in excess of 0.4 percent of its span after the load is removed. HVHZ shall comply with TAS 202. After each specified loading, there shall be no glass breakage, permanent damage to fasteners, hardware parts, or any other damage which causes the door to be inoperable. The minimum test sizes and minimum design pressures shall be as indicated in Table R613.4 The unit size tested shall qualify all units smaller in width and/or height of the same operation type and be limited to cases where frame, panels and structural members maintain the same profile as tested.

R613.4.2 Sectional garage doors shall be tested for determination of structural performance under uniform static air pressure difference in accordance with ANSI/DASMA 108 or TAS 202 (HVHZ shall comply with TAS 202).

R613.4.3 Custom doors. Custom (one of a kind) exterior door assemblies shall be tested by an approved testing laboratory or be engineered in accordance with accepted engineering practices.

R613.4.4 Door components evaluated by an approved product evaluation entity, certification agency, testing laboratory or engineer may be interchangeable in exterior door assemblies provided that the door component(s) provide equal or greater structural performance as demonstrated by accepted engineering practices.

R613.4.4.1 Optional exterior door component testing. With the exception of HVHZ, exterior side-hinged door assemblies not covered by Section R613.3 shall have the option to have the components of the assembly tested and rated for structural integrity in accordance with the following specification:

SDI A250.13

Following the structural testing of exterior door components, there shall be no permanent deformation of any perimeter frame or panel member in excess of 0.4 percent of its span after the load is removed. After each specified loading, there shall be no glass breakage, permanent damage to fasteners, hardware parts, or any other damage that causes the door to be inoperable, as applicable.

R613.5 Vehicular access doors. Vehicular access doors shall be tested in accordance with either ASTM E 330 or ANSI/DASMA 108, and shall meet the acceptance criteria of ANSI/DASMA 108.

R613.6 Other exterior window and door assemblies. Exterior windows and door assemblies not included within the scope of Section R613.4 or Section R613.5 shall be tested in accordance with ASTM E 330. Glass in assemblies covered by this exception shall comply with Section R308.5.

R613.5 Windborne debris protection. Protection of exterior windows , glass doors and other glazed areas shall be in accordance with Section R 301.2.1.2.

R613.5.1 Fenestration testing and labeling. Fenestration shall be tested by an approved independent laboratory, listed by an approved entity, and bear a label identifying manufacturer, performance characteristics, and approved inspection agency to indicate compliance with the requirements of the following specification:

1. ASTM E 1886 and ASTM E 1996; or
2. AAMA 506.

R613.6 Anchorage methods.

R613.6.1 Anchoring requirements. Window and door assembly anchoring systems shall be tested to achieve the design pressure specified. Substitute anchoring systems shall provide equal or greater anchoring performance as demonstrated by accepted engineering practice. When provided, the manufacturer's published installation instructions for as tested or substitute anchoring systems can be used. In no case shall the anchorage exceed the spacing for the tested rated performance.

R613.6.1.1 Masonry, concrete or other structural substrate. Where the wood shim or buck thickness is less than 1 1/2 inches (38 mm), window and door assemblies shall be anchored through the main frame or by jamb clip or subframe system, in accordance with the manufacturers published installation instructions. Anchors shall be securely fastened directly into the masonry, concrete or other structural substrate material. Unless otherwise tested, bucks shall extend beyond the interior face of the window or door frame such that full support of the frame is provided. Shims shall be made from materials capable of sustaining applicable loads, located and applied in a thickness capable of sustaining applicable loads. Anchors shall be provided to transfer load from the window or door frame to the rough opening substrate.

Where the wood buck thickness is 11/2 inches (38 mm) or greater, the buck shall be securely fastened to transfer load to the masonry, concrete or other structural substrate and the buck shall extend beyond the interior face of the window or door frame. Window and door assemblies shall be anchored through the main frame or by jamb clip or subframe system or through the flange to the secured wood buck in accordance with the manufacturers published installation instructions. Unless otherwise tested, bucks shall extend beyond the interior face of the window or door frame such that full support of the frame is provided. Shims shall be made from materials capable of sustaining applicable loads, located and applied in a thickness capable of sustaining applicable loads. Anchors shall be provided to transfer load from the window or door frame assembly to the secured wood buck.

R613.6.1.2 Wood or other approved framing material. Where the framing material is wood or other approved framing material, window and glass door assemblies shall be anchored through the main frame or by jamb clip or subframe system or through the flange in accordance with the manufacturer's published installation instructions. Shims shall be made from materials capable of sustaining applicable loads, located and applied in a thickness capable of sustaining applicable loads. Anchors shall be provided to transfer load from the window or door frame to the rough opening substrate.

R613.7 Mullions occurring between individual window and glass door assemblies.

R613.7.1 Mullions. Mullions, other than mullions which are an integral part of a window or glass door assembly tested and labeled in accordance with Section R613.3.1, shall be tested by an approved testing laboratory in accordance withAAMA450 or be engineered in accordance with accepted engineering practice.

R613.7.1.1 Engineered mullions. Mullions qualified by accepted engineering practice shall comply with the performance criteria in Sections R613.7.2, R613.7.3, and R613.7.4.

R613.7.1.2 Mullions tested as stand alone units. Mullions tested as stand alone units in accordance with AAMA 450 shall comply with the performance criteria in Sections R613.7.2, R613.7.3, and R613.7.4.

R613.7.1.3 Mullions tested in an assembly. Mullions qualified by a test of an entire assembly in accordance with AAMA 450 shall comply with Sections R613.7.2 and R613.7.4.

CHAPTER 7 WALL COVERING

Add exception to R701.1 as follows:

R701.1 Application. The provisions of this chapter shall control the design and construction of the interior and exterior wall covering for all buildings.

Exception: Buildings and structures located within the High-Velocity Hurricane Zone shall comply with the provisions of Chapter 44.

R702.3.4 Insulating concrete form walls. Change to read as shown.

R702.3.4 Insulating concrete form walls. Foam plastics for insulating concrete form walls constructed in accordance with Sections R404.4 and R611 on the interior of habitable spaces shall be covered in accordance with Section R314.1.2. Adhesives are permitted to be used in conjunction with mechanical fasteners. Adhesives used for interior and exterior finishes shall be compatible with the insulating form materials.

***Change referenced table in R702.3.5 as shown*:**

R702.3.5 Application. Maximum spacing of supports and the size and spacing of fasteners used to attach gypsum board shall comply with Table R702.3.5. Gypsum sheathing shall be attached to exterior walls in accordance with Table R602.2(1). *[rest of section unchanged]*

Change Section R703.1 as shown:

R703.1 General. Exterior walls shall provide the building with a weather-resistant exterior wall envelope. The exterior wall envelope shall include flashing as described in Section R703.8. The exterior wall envelope shall be designed and constructed in such a manner as to prevent the accumulation of water within the wall assembly by providing a water-resistive barrier behind the exterior veneer as required by Section R703.2. All exterior finishes shall be applied in accordance with the manufacturer's specifications or installation instructions.

Exceptions:
1. A weather-resistant exterior wall envelope shall not be required over concrete or masonry walls designed in accordance with Chapter 6 and flashed according to Section R703.7 or R703.8.
2. Compliance with the requirements for a means of drainage, and the requirements of Section R703.2 and Section R703.8, shall not be required for an exterior wall envelope that has been demonstrated to resist wind-driven rain through testing of the exterior wall envelope, including joints, penetrations and intersections with dissimilar materials, in accordance with ASTM E 331 under the following conditions:
2.1. Exterior wall envelope test assemblies shall include at least one opening, one control joint, one wall/eave interface and one wall sill. All tested openings and penetrations shall be representative of the intended end-use configuration.
2.2. Exterior wall envelope test assemblies shall be at least 4 feet (1219 mm) by 8 feet (2438 mm) in size.
2.3. Exterior wall assemblies shall be tested at a minimum differential pressure of 6.24 pounds per square foot (299 Pa).
2.4. Exterior wall envelope assemblies shall be subjected to a minimum test exposure duration of 2 hours.

The exterior wall envelope design shall be considered to resist wind-driven rain where the results of testing indicate that water did not penetrate: control joints in the exterior wall envelope; joints at the perimeter of openings penetration; or intersections of terminations with dissimilar materials.

Add subsection to R703.1 as shown:

R703.1.1 Load resistance. All exterior walls, wall coverings and soffits shall be capable of resisting the design pressures specified in Table R301.2(2) for walls.

Delete Exception 3 to R703.2 as shown:

R703.2 Weather-resistant sheathing paper. *[Title and exceptions only FL specific]*

Exceptions:

1 – 2. *[No change]*

~~3. Under paperbacked stucco lath when the paper backing is an approved weather-resistive sheathing paper.~~

Add subsections to R703.3 as shown:

R703.3.3 Attachment. Wood, hardboard and wood structural panel siding shall be attached in accordance wit h Tables R703.3.3(1) and R703.3.3(2). Specific gravities, G for solid sawn lumber are specified in Table 703.3.3(3).

R703.3.4 Minimum thickness. Wood, hardboard and wood structural panel siding shall be of the minimum thickness specified in Tables R 703.3.4(1) and R703.3.4(2).

Add Tables to Section R703.3.3 as shown [see 2004 FBC, R]:

TABLE R703.3.3(1) WOOD, HARDBOARD, AND WOOD STRUCTURAL PANEL SIDING ATTACHMENT EXPOSURE CATEGORY B

TABLE R703.3.3(2) WOOD, HARDBOARD, AND WOOD STRUCTURAL PANEL SIDING ATTACHMENT EXPOSURE CATEGORY C

TABLE R703.3.3(3) SPECIFIC GRAVITIES OF SOLID SAWN LUMBER

Add Tables to Section R703.3.4 as shown[see 2004 FBC, R]:

TABLE R703.3.4(1) WOOD, HARDBOARD, AND WOOD STRUCTURAL PANEL SIDING MINIMUM THICKNESS, EXPOSURE CATEGORY B

TABLE R703.3.4(2) WOOD, HARDBOARD, AND WOOD STRUCTURAL PANEL SIDING MINIMUM THICKNESS, EXPOSURE CATEGORY C

Use FL specific section R703.4 as shown:

R703.4 Attachments. Unless specified otherwise, all wall coverings shall be secured with approved aluminum, stainless steel, zinc-coated or other approved corrosion-resistive fasteners in accordance with the approved manufacturer's installation instructions. Where wind pressures determined in accordance with Table R301.2(2) do not exceed 30 psf, wall coverings are permitted to be installed in accordance with Table R703.4.

Use FL specific Table R703.4

TABLE R703.4
WEATHER-RESISTANT SIDING ATTACHMENT AND MINIMUM THICKNESS

TABLE R703.4
WEATHER–RESISTANT SIDING ATTACHMENT AND MINIMUM THICKNESS

Siding Material		Nominal Thicknessa (inches)	Joint Treatment	Water-Resistive Barrier Required	Type of Supports for the Siding Material and Fastenersb,d					
					Wood or Wood Structural Panel Sheathing	Fiberboard Sheathing into Stud	Gypsum Sheathing into Stud	Foam Plastic Sheathing into Stud	Direct to Studs	Number or Spacing of Fasterners
Horizontal Aluminumc	Without Insulation	0.019f 0.024	Lap	Yes	0.120 nail 1 ½" long	0.120 nail 2" long	0.120 nail 2" long	0.120 naily	Not allowed	Same as stud spacing
			Lap	Yes	0.120 nail 1 ½" long	0.120 nail 2" long	0.120 nail 2" long	0.120 naily	Not allowed	
	With Insulation	0.019	Lap	Yes	0.120 nail 1 ½" long	0.120 nail 2 1/2" long	0.120 nail 2 1/2" long	0.120 naily	0.120 nail 1 ½" long	
Brick veneerz Concrete masonry veneerz		2 2	Section R703	Yes (Note 1)	See Section R703 and Figure R703.7c					
Hardboardk Panel siding-vertical		See Section R703.3.4	–	Yes	See Section R703.3.4					
Hardboardk Lap-siding-horizontal		See Section R703.3.4	Note q	Yes	See Section R703.3.4					
Steelh		29 ga.	Lap	Yes	0.113 nail 1 ¾" Staple-1 ¾"	0.113 nail 2 ¾" Staple-2 1/2 "	0.113 nail 2 1/2" Staple-2 1/4"	0.113 naily Stapley	Not allowed	Same as stud spacing
Stone veneer		2	Section R703	Yes (Note 1)	See Section R703 and Figure R703.7c					
Particleboard panels		3/8-1/2	–	Yes	6d box nail (2" x 0.099")	6d box nail (2" x 0.099")	6d box nail (2" x 0.099")	box nail	6d box nail (2" x 0.099") 3/8 not allowed	6" panel edges 12" inter. Sup.o
		5/8	–	Yes	6d box nail (2" x 0.099")	8d box nail (2 1/2" x 0.113")	8d box nail (2 1/2" x 0.113")	box nail	6d box nail (2" x 0.099")	
Plywood paneli (exterior grade)		3/8	–	Yes	0.099 nail-2"	0.113 nail-2 1/2"	0.099 nail-2"	0.113 nail-2 1/2"	0.099 nail-2"	6" panel edges 12" inter. Sup.
Vinyl sidingm		0.035	Lap	Yes	See Section R703.3.4					

Woodj rustic, drop	3/8 Min	Lap	Yes	Fastener penetration into stud-1”				0.113 nail -2 1/2” Staple-2”	Face nailing up to 6” widths, 1 nail per bearing; 8” widths and over, 2 nails per bearing
Shiplap	19/32 Average	Lap	Yes						
Bevel	7/16								
Butt tip	3/16	Lap	Yes						
Fiber cement panel sidingr	5/16	Note s	Yes Note x	6d corrosion-resistant nailt	6d corrosion-resistant nailt	6d corrosion-resistant nailt	6d corrosion-resistant nailt,y	4d corrosion-resistant nailu	6” o.c. on edges 12” o.c. on intermed. studs
Fiber cement lap sidingr	5/16	Note v	Yes Note x	6d corrosion-resistant nailt	6d corrosion-resistant nailt	6d corrosion-resistant nailt	6d corrosion-resistant nailt,y	6d corrosion-resistant nailw	Note w

For SI: 1 inch = 25.4 mm.
a. Based on stud spacing of 16 inches on center where studs are spaced 24 inches, siding shall be applied to sheathing approved for that spacing.
b. Nail is a general description and shall be T-head, modified round head, or round head with smooth or deformed shanks.
c. Reserved.
d. Nails or staples shall be aluminum, galvanized, or rust-preventative coated and shall be driven into the studs for fiberboard or gypsum backing.
e. Aluminum nails shall be used to attach aluminum siding.
f. Aluminum (0.019 inch) shall be unbacked only when the maximum panel width is 10 inches and the maximum flat area is 8 inches. The tolerance for aluminum siding shall be +0.002 inch of the nominal dimension.
g. All attachments shall be coated with a corrosion-resistant coating.
h. Shall be of approved type.
i. Three-eighths-inch plywood shall not be applied directly to studs spaced more than 16 inches on center when long dimension is parallel to studs. Plywood 1/2-inch or thinner shall not be applied directly to studs spaced more than 24 inches on center. The stud spacing shall not exceed the panel span rating provided by the manufacturer unless the panels are installed with the face grain perpendicular to the studs or over sheathing approved for that stud spacing.
j. Wood board sidings applied vertically shall be nailed to horizontal nailing strips or blocking set 24 inches on center. Nails shall penetrate 1 1/2 inches into studs, studs and wood sheathing combined, or blocking. A weather-resistive membrane shall be installed weatherboard fashion under the vertical siding unless the siding boards are lapped or battens are used.
k. Hardboard siding shall comply with AHA A135.6.
l. For masonry veneer, a weather-resistive sheathing paper is not required over a sheathing that performs as a weather-resistive barrier when a 1-inch air space is provided between the veneer and the sheathing. When the 1-inch space is filled with mortar, a weather-resistive sheathing paper is required over studs or sheathing.
m. Vinyl siding shall comply with ASTM D 3679.
n. Reserved.
o. When used to resist shear forces, the spacing must be 4 inches at panel edges and 8 inches on interior supports.
p. Reserved.
q. Vertical end joints shall occur at studs and shall be covered with a joint cover or shall be caulked.
r. Fiber cement siding shall comply with the requirements of ASTM C 1186.
s. See Section R703.10.1.
t. Minimum 0.102″ smooth shank, 0.255″ round head.
u. Minimum 0.099″ smooth shank, 0.250″ round head.
v. See Section R703.10.2.
w. Face nailing: 2 nails at each stud. Concealed nailing: one 11 gage 1 1/2 galv. roofing nail (0.371″ head diameter, 0.120″ shank) or 6d galv. box nail at each stud.
x. See Section R703.2 exceptions.
y. Minimum nail length must accommodate sheathing and penetrate framing 1 1/2 inches.
z. Adhered masonry veneer shall comply with the requirements in Sections 6.1 and 6.3 of ACI 530/ASCE 5/TMS-402.

Change R703.5.3 as shown:

R703.5.3 Attachment. Wood shakes and shingles, and attachment and supports shall be capable of resisting the wind pressures determined in accordance with Table R310.2(2). Where wind pressures determined in accordance with Table R301.2(2) do not exceed 30 psf, each shake or

shingle shall be held in place by two hot-dipped zinc-coated, stainless steel, or aluminum nails. The fasteners shall be long enough to penetrate the sheathing or furring strips by a minimum of 1/2 inch (12.7 mm) and shall not be overdriven. Where pressures determined in accordance with Table R301.2(2) exceed 30 psf, the attachment shall be designed to resist the prescribed wind pressures.

R703.5.3.1 Staple attachment. Reserved.

R703.6 Exterior plaster. ~~Installation of these materials shall be in compliance with ASTMC926 and ASTMC1063 and the provisions of this code.~~

R703.6.1 ~~Lath~~. Exterior use of Portland cement plaster shall comply with the application requirements of ASTM C 926. **.** ~~All lath and lath attachments shall be of corrosion-resistant materials. Expanded metal or woven wire lath shall be attached with 11/2-inch-long (38 mm), 11-gage nails having a 7/16-inch (11.1 mm) head, or 7/8-inch-long (22.2 mm), 16-gage staples, spaced at no more than 6 inches (152 mm), or as otherwise approved.~~

R703.6.2 Installation of exterior lathing and framing shall comply with the application requirements of ASTM C 1063. ~~**Plaster.** Plastering with portland cement plaster shall be not less than three coats when applied over metal lath or wire lath and shall be not less than two coats when applied over masonry, concrete, pressure-preservative-treated wood or decay-resistant wood as specified in Section R319.1 or gypsum backing. If the plaster surface is completely covered by veneer or other facing material or is completely concealed, plaster application need be only two coats, provided the total thickness is as set forth in Table R702.1(1).~~

~~On wood-frame construction with an on-grade floor slab system, eexteior plaster shall be applied in such a manner as to cover, but not extend below, lath, paper and screed.~~

~~The proportion of aggregate to cementitious materials shall be as set forth in Table R702.1(3)~~

Move Section R703.2.1 to R703.6.3 as shown:

R703.6.3 Where cement plaster (stucco) is to be applied to lath over frame construction, measures shall be taken to prevent bonding between the cement plaster and the water-resistive barrier. A bond break shall be provided between the water-resistive barrier and the cement plaster (stucco) consisting of one of the following:

1. Two layers of an approved water-resistant barrier material; or
2. One layer of an approved water-resistant barrier over an approved plastic house wrap; or
3. Other approved methods or materials applied in accordance with the manufacturer's installation instructions.

Renumber Section R703.6.3 as shown:

R703.6.4 Pneumatically placed portland cement plaster.

R703.6.4.1 Pneumatically placed portland cement plaster shall be a mixture of portland cement and aggregate conveyed by air through a pipe or flexible tube, and deposited by air pressure in its final position.

R703.6.4.2 Rebound material may be screened and reused as aggregate in an amount not greater than 25 percent of the total sand in any batch.

R703.6.4.3 Pneumatically placed portland cement plaster shall consist of a mixture of one part cement to not more than five parts of aggregate. Plasticity agents may be used as specified elsewhere in this chapter. Except when applied to concrete or masonry, such plaster shall be applied in not less than two coats to a minimum total thickness of 7/8 inch (22.2 mm)

Change R703.7 as shown:

R703.7 Stone and masonry veneer, general. All stone and masonry veneer shall be installed in accordance with this chapter, Table R703.4 and Figure R703.7. The provisions of this section are limited to areas where the wind speed is equal or less than 130 mph.

Exceptions: For detached one- and two- family dwellings, exterior masonry veneer with a backing of wood or cold-formed steel framing shall not exceed 30 feet (9144 mm) in height above the noncombustible foundation, with an additional 8 feet (2348 mm) permitted for gabled ends.

[Note: Do not use IRC'06 Exceptions 1 and 2 nor Tables R703.7(1) and R703.7(2) nor Figure R703.7(1)(a) and (b)]

Change R703.7.2 as shown:

R703.7.2 Exterior veneer support. ~~Except in Seismic Design Categories D0, D1 and D2,~~ Exterior masonry veneers having an installed weight of 40 pounds per square foot….*[rest same as IRC]*

Change the exception in R703.7.4.1 to read as shown:

R703.7.4.1 Size and spacing. *[No change to IRC text]*

Exception: Where the wind speed determined in accordance with Figure R301.2(4) exceeds 110 mph (176.99 km/h) or is less than or equal to 130 mph (208 km/h), each tie shall support not more than 1.8 square feet (0.167 m^2) of wall area and anchors shall be spaced at a maximum 18 inches (457 mm) horizontally and vertically.

Add an exception in R703.7.4.2 to read as shown:

R703.7.4.2 Air space. *[No change to IRC text]*

Exception: Where the wind pressure determined in accordance with Table R301.2(2) exceeds 30 pounds per square foot pressure (1.44 kN/m^2), the air space shall not exceed 2 inches (51 mm).

Change R703.9 as shown:

R703.9 Exterior insulation finish systems, general. All Exterior Insulation Finish Systems (EIFS) shall be designed or tested to meet the wind pressures specified in Table R301.2(2) and installed in accordance with the manufacturer's approved installation instructions and the

requirements of this section. Decorative trim shall not be face nailed through the EIFS. The EIFS shall terminate not less than 6 inches (152 mm) above the finished ground level.

[No FL specific changes to R703.9.1 or R703.9.2]

Change R703.10 as shown:

R703.10 Fiber cement siding. Fiber-cement siding complying with ASTM C1186, Type A, minimum Grade II, shall be permitted on exterior walls in accordance with the approved manufacturer's installation instructions.

R703.10.1 Fastening. Fiber-cement siding shall be securely fastened with aluminum, copper, zinc, zinc-coated or other approved corrosion-resistant fasteners in accordance with the manufacturer's approved installation instructions. Attachment and supports shall be capable of resisting the wind pressure determined in accordance with Table R301.2(2). Where the wind pressure determined in accordance with Table R301.2(2) does not exceed 30 pounds per square foot pressure (1.44kN/m2), fiber-cement siding is permitted to be attached in accordance with Table R703.4.

R703.10.2 Panel Siding. Panels shall be installed with the long dimension either parallel or perpendicular to framing. Vertical and horizontal joints shall occur over framing members and shall be sealed with caulking or covered with battens. Panel siding shall be installed with fasteners according to Table R703.4 or approved manufacturer's installation instructions.

R703.10.3 Lap siding. Lap siding having a maximum width of 12 inches shall be lapped a minimum of 1¼ inches (32 mm) and shall have the ends sealed with caulking, covered with an H-section joint cover, or located over a strip of flashing. Lap siding courses may be installed with the fastener heads exposed or concealed, according to Table R703.4 or approved manufacturer's installation instructions.

Change R703.11 as shown:

R703.11 Vinyl Siding. Vinyl siding shall comply with ASTM D 3679 and is permitted to be used on exterior walls in accordance with the manufacturer's approved installation instructions.

R703.11.1 Labeling. Vinyl Siding shall be labeled as conforming to the requirements of ASTM D 3679

Add new text R703.12 as shown:

R703.12 Metal veneers. Veneers of metal shall be fabricated from approved corrosion-resistant materials or shall be protected front and back with porcelain enamel, or otherwise be treated to render the metal resistant to corrosion. Such veneers shall not be less than specified in Table R703.13 mounted on wood or metal furring strips or approved sheathing on the wood construction.

R703.12.1 Attachment. Exterior metal veneer shall be securely attached to the supporting masonry or framing members with corrosion-resistant fastenings, metal ties or by other approved devices or methods capable of resisting the wind pressures specified in Table R301.2(2)., but in no case less than 20 psf (0.958 kg/m2). Where the wind pressure determined in accordance with Table R301.2(2) do not exceed 30 pounds per square foot

pressure (1.44 kN/m2), metal veneers are permitted to be attached in accordance with Table R703.4.

R703.12.2 Weather protection. Metal supports for exterior metal veneer shall be protected by painting, galvanizing or by other equivalent coating or treatment. Wood studs, furring strips or other wood supports for exterior metal veneer shall be approved pressure-treated wood or protected as required in Section 1403.2 of the *Florida Building Code, Building*. Joints and edges exposed to the weather shall be caulked with approved durable waterproofing material or by other approved means to prevent penetration of moisture.

R703.12.3 Aluminum Siding. Aluminum siding shall conform to the requirements of AAMA 1402.

R703.13 Weather protection. Exterior walls shall provide weather protection for the building. The materials of the minimum nominal thickness specified in Table R703.13 shall be acceptable as approved weather coverings.

TABLE R703.13
MINIMUM THICKNESS OF WEATHER COVERINGS

COVERING TYPE	MINIMUM THICKNESS (inches)
Adhered masonry veneer	0.25
Anchored masonry veneer	2.625
Aluminum siding	0.019
Asbestos-cement boards	0.125
Asbestos shingles	0.156
Cold-rolled copperd	0.0216 nominal
Copper shinglesd	0.0162 nominal
Exterior plywood (with sheathing)	0.313
Exterior plywood (without sheathing)	See Section 2304.6
Fiberboard siding	0.5
Fiber cement lap siding	0.25c
Fiber cement panel siding	0.25c
Glass-fiber reinforced concrete panels	0.375
Hardboard sidingc	0.25
High-yield copperd	0.0162 nominal
Lead-coated copperd	0.0216 nominal
Lead-coated high-yield copper	0.0162 nominal
Marble slabs	1
Particleboard (with sheathing)	See Section 2304.6
Particleboard (without sheathing)	See Section 2304.6
Precast stone facing	0.625
Steel (approved corrosion resistant)	0.0149
Stone (cast artificial)	1.5
Stone (natural)	2
Structural glass	0.344
Stucco or exterior Portland cement plaster	

Three-coat work over:	
Metal plaster base	0.875b nominal
Unit masonry	0.625b nominal
Cast-in-place or precast concrete	0.625b nominal
Two-coat work over:	
Unit masonry	0.5b nominal
Cast-in-place or precast concrete	0.375b nominal
Terra cotta (anchored)	1
Terra cotta (adhered)	0.25
Vinyl siding	0.035
Wood shingles	0.375
Wood siding (without sheathing)a	0.5

For SI: 1 inch = 25.4 mm.
a. Wood siding of thicknesses less than 0.5 inch shall be placed over sheathing that conforms to Section 2304.6.
b. Exclusive of texture.
c. As measured at the bottom of decorative grooves.
d. 16 ounces per square foot for cold-rolled copper and lead-coated copper, 12 ounces per square foot for copper shingles, high-yield copper and ounces per square foot for copper shingles, high-yield copper and lead-coated high-yield copper.

Add Section R703.14 as shown:

R703.14 Drained assembly wall over mass assembly wall. Where wood frame or other types of drained wall assemblies are constructed above mass wall assemblies, flashing or other approved drainage system shall be installed as required by R703.8.

Add Section R704 as shown:

SECTION 704
INSPECTION FOR TERMITES

In order to provide for inspection for termite infestation, clearance between exterior wall coverings and final earth grade on the exterior of a building shall not be less than 6 inches (152 mm).

Exceptions:

1. Paint or decorative cementitious finish less than 5/8 inch (17.1 mm) thick adhered directly to the masonry foundation sidewall.
2. Access or vehicle ramps which rise to the interior finish floor elevation for the width of such ramps only.
3. A 4-inch (102 mm) inspection space above patio and garage slabs and entry areas.
4. If the patio has been soil treated for termites, the finish elevation may match the building interior finish floor elevations on masonry construction only.
5. Masonry veneers.

CHAPTER 8
CHIMNEYS AND VENTS

Add an exception to R801.1 as shown:

R801.1 Application. The provisions of this chapter shall control the design and construction of the roof-ceiling system for all buildings (see Section R301.2.1.1).

Exception: Buildings and structures located within the High-Velocity Hurricane Zone shall comply with the provisions of Chapter 44.

Add general requirements to R802.1 and renumber rest as follows:

R802.1 General Requirements. Roof and ceiling framing of wood construction shall be designed and constructed in accordance with the provisions of this Section.

R802.1.1 Identification. *[No change to text]*

R802.1.2 Blocking. *[No change to text]*

R802.1.3 End-jointed lumber. Approved end-jointed lumber identified by a grade mark conforming to Section R802.1.1 may be used interchangeably with solid-sawn members of the same species and grade.

R802.1.4 Fire-retardant-treated wood. *[No change to text]*

R802.1.4.1 Labeling. Fire-retardant-treated lumber and wood structural panels shall be labeled. The label shall contain:

1 – 6 *[No change from IRC]*.

7. Conformance with appropriate standards in accordance with Sections R802.1.4.2 through R802.1.4.5.

8. *[No change from IRC.]*

R802.1.4.2 Strength adjustments. *[No other change to IRCtext]*

R802.1.4.2.1 Wood structural panels. *[No other change to IRCtext]*

R802.1.4.2.2 Lumber. *[No other change to IRCtext]*

R802.1.4.3 Exposure to weather. *[No other change to IRCtext]*

R802.1.4.4 Interior applications. Interior fire retardant- treated wood … in accordance with Section R802.1.4.2.1 or R802.1.4.2.2...of this section.

R802.1.4.5 Moisture content. Fire-retardant-treated wood shall be dried … in Section R802.1.4.2.1 for plywood and R802.1.4.2.2 for lumber.

802.1.5 Structural glued laminated timbers. *[No other change from IRC.]*

R802.1.6 Wood trusses.

R802.1.6.1 Truss design drawings. Truss design drawings, prepared in conformance with Section R802.1.6.1, shall be provided to the building official and approved prior to installation. Truss design drawings shall include, at a minimum, the information specified below. Truss design drawing shall be provided with the shipment of trusses delivered to the jobsite.

1. Design wind speed and exposure category.
2. Slope or depth, span and spacing.
3. Location of all joints.

4. Required bearing widths.
5. Design loads as applicable.
   5.1 Top chord live load (as determined from Section R301.6).
   5.2 Top chord dead load.
   5.3 Bottom chord live load.
   5.4 Bottom chord dead load.
   5.5 Concentrated loads and their points of application.
   5.6 Controlling wind and earthquake loads.
6. Adjustments to lumber and joint connector design values for conditions of use.
7. Each reaction force and direction.
8. Joint connector type and description (e.g., size, thickness or gauge) and the dimensioned location of each joint connector except where symmetrically located relative to the joint interface.
9. Lumber size, species and grade for each member.
10. Connection requirements for:
   10.1 Truss to truss girder.
   10.2 Truss ply to ply.
   10.3 Field splices.
11. Calculated deflection ratio and/or maximum description for live and total load.
12. Maximum axial compression forces in the truss members to enable the building designer to design the size, connections and anchorage of the permanent continuous lateral bracing. Forces shall be shown on the truss design drawing or on supplemental documents.
13. Required permanent truss member bracing location.

R802.1.6.2 Design. *[No other change to IRC text]*

R802.1.6.3 Bracing. Trusses shall be braced to prevent rotation and provide lateral stability in accordance with the requirements specified in the construction documents for the building and on the individual truss design drawings. In the absence of specific bracing requirements, trusses shall be braced in accordance with TPI/WTCA BCSI 1.

R802.1.6.4 Alterations to trusses. *[No other change to IRCtext]*

R802.1.6.5 Truss to wall connection. Trusses shall be connected to wall plates by the use of approved connectors having a resistance to design uplift, lateral and shear forces. Trusses shall be installed in accordance with the manufacturer's design and specifications. For roof assemblies subject to wind uplift pressures of 20 pounds per square foot (0.958 kN/m2) or greater, as established in Table R301.2(2), adjusted for height and exposure per Table R301.2(3), see Section R802.2.9.

Change R802.2 as shown:

R802.2 Design and construction where wind speed is less than 100 mph. The framing details required in Section R802 apply to roofs having a minimum slope of three units vertical in 12 units horizontal (25-percent slope) or greater. Roof-ceilings of conventional light-frame wood construction shall be designed and constructed in accordance with the provisions of this Section. Alternately, roof-ceilings may be designed and constructed in accordance with AF&PA's NDS or AF&PA's WFCM. Components of roof-ceilings shall be fastened in accordance with Table R602.2(1).

R802.2.1 Framing details. *[No other change to IRC text, R802.3]*

R802.2.1.1 Ceiling joist and rafter connections. Ceiling joists and rafters shall be nailed to each other in accordance with Tables R602.2(1) and R802.2.3(9) and the assembly shall be nailed to the top wall plate in accordance with Table R602.2(1). Ceiling joists shall be continuous or securely joined where they meet over interior partitions and nailed to adjacent rafters to provide a continuous tie across the building when such joists are parallel to the rafters.

Where ceiling joists are not connected to the rafters at the top wall plate, joists connected higher in the attic shall be installed as rafter ties, or rafter ties shall be installed to provide a continuous tie. Where ceiling joists are not parallel to rafters, rafter ties shall be installed. Rafter ties shall be a minimum of 2-inch by 4-inch (51 mm by 102 mm) (nominal), installed in accordance with the connection requirements in Table R802.5.1(9), or connections of equivalent capacities shall be provided. Where ceiling joists or rafter ties are not provided, the ridge formed by these rafters shall be supported by a wall or girder designed in accordance with accepted engineering practice.

Collar ties or ridge straps to resist wind uplift shall be connected in the upper third of the attic space in accordance with Table R602.2(1).

Collar ties shall be a minimum of 1-inch by 4-inch (25 mm by 102 mm) (nominal), spaced not more than 4 feet (1219 mm) on center.

R802.2.1.2 Ceiling joists lapped. Ends of ceiling joists shall be lapped a minimum of 3 inches (76 mm) or butted over bearing partitions or beams and toe nailed to the bearing member. When ceiling joists are used to provide resistance to rafter thrust, lapped joists shall be nailed together in accordance with Table R602.2(1) and butted joists shall be tied together in a manner to resist such thrust.

R802.2.2 Allowable ceiling joist spans. Spans for ceiling joists shall be in accordance with Tables R802.2(1) and R802.2(2). For other grades and species and for other loading conditions, refer to the AF&PA Span Tables for Joists and Rafters.

Table R802.2(1) *[Use IRC'06 Table R802.4(1); only change is number]*

Table R802.2(2) *[Use IRC'06 Table R802.4(2); only change is number]*

R802.2.3 Allowable rafter spans. *[IRC 802.5]* Spans for rafters shall be in accordance with Tables R802.2.3(1) through R802.2.3(8). For other grades and species and for other loading conditions, refer to the AF&PA Span Tables for Joists and Rafters. The span of each rafter shall be measured along the horizontal projection of the rafter.

R802.2.3.1 Purlins. Purlins are permitted to be installed to reduce the span of rafters as shown in Figure R802.2.3.1. Purlins shall be sized … braces shall not exceed 8 feet (2438 mm).

Table R802.2.3(1) *[Use IRC'06 Table R802.5.1(1); only change is number]*
Table R802.2.3(2) *[Use IRC'06 Table R802.5.1(2); only change is number]*

Table R802.5.1(3) Reserved.
Table R802.5.1(4) Reserved.
Table R802.5.1(5) Reserved.
Table R802.5.1(6) Reserved.
Table R802.5.1(7) Reserved.
Table R802.5.1(8) Reserved.
Table R802.2.3(9) *[Use IRC'06 Table R802.5.1(9); only change is number]*

R802.2.4 Bearing. *[Use IRC'06 R802.6; only change is number]*
R802.2.5 Finished ceiling material. *[Use IRC'06; only change is number]*
R802.2.6 Cutting and notching. *[Use IRC'06, R802.7; only change is number]*

R802.2.6.1 Sawn lumber. *[Use IRC'06; only change is number]*

802.2.6.2 Engineered wood products. Cuts, notches and holes bored in trusses, structural composite lumber, structural glue-laminated members or I-joists are prohibited except where permitted by the manufacturer's recommendations or where the effects of such alterations are specifically considered in the design of the member by a registered design professional.

R802.2.7 Lateral support. *[Use IRC'06 R802.8; only change is number]*

R802.2.7.1 Bridging. *[Use IRC06 R802.8.1 only change is number]*
R802.2.8 Framing of openings. *[Use IRC'06 R802.9; only change is number]*
R802.2.9 Roof tie-down. *[Use IRC'06 R802.11]*

R802.2.9.1 Uplift resistance. Roof assemblies which are subject to wind uplift pressures of 20 pounds per square foot (0.958 kN/m2) or greater shall have roof rafters or trusses attached to their supporting wall assemblies by connections capable of providing the resistance required in Table R802.2.9.1. Wind uplift pressures shall be determined using an effective wind area of 100 square feet (9.3m2) and Zone 1 in Table R301.2(2), as adjusted for height and exposure per Table R301.2(3).

A continuous load path shall be provided to transmit the uplift forces from the rafter or truss ties to the foundation. For rafter construction, straps and/or clips shall extend such that the top nail is within 1 inch of the top of the rafter, or shall be wrapped around the top of the rafter with one or more nails installed on the opposite side of the rafter.

R802.2.10 Blocking. *[Use IRC'06 R802.1.1]*
Table R802.2.9.1 WIND UPLIFE FORCES EXPOSURE B, EXPOSURE C *[Replace Table R802.11; Use FL specific tables in their entirety]*

R802.3 Design and construction where wind speed is 100 mph or greater. Roof-ceilings of light-frame wood construction shall be designed and constructed in accordance with the provisions of Section R301.2.1.1 and Section R802.1.

Change R803.2.3 as shown:

R803.2.3 Installation. Wood structural panels used as roof sheathing shall be installed with joints staggered in accordance with Section R803.2.3.1 for wood roof framing or with Table

R804.3 for steel roof framing in accordance with the applicability limits established in Section R804.1.1.

R803.2.3.1 Sheathing fastenings. Wood structural panel sheathing shall be fastened to roof framing with 8d ring-shank nails at 6 inches on center at edges and 6 inches on center at intermediate framing. Ring-shank nails shall have the following minimum dimensions:

1. 0.113 inch nominal shank diameter
2. Ring diameter of 0.012 over shank diameter
3. 16 to 20 rings per inch
4. 0.280 inch full round head diameter
5. 2 inch nail length

Where roof framing with a specific gravity, $0.42 \leq G < 0.49$ is used, spacing of ring-shank fasteners shall be 4 inches on center in nailing zone 3 for 130 mph or greater design wind speeds in accordance with Figure R803.2.3.1.

Exceptions:

1. Where roof framing with a specific gravity, $0.42 \leq G < 0.49$ is used, spacing of ring-shank fasteners shall be permitted at 12 inches on center at intermediate framing in nailing zone 1 for any design wind speed and in nailing zone 2 for 110 mph or lower design wind speeds in accordance with Figure R803.2.3.1.
2. Where roof framing with a specific gravity, $G \geq 0.49$ is used, spacing of ring-shank fasteners shall be permitted at 12 inches on center at intermediate framing in nailing zone 1 for any design wind speed and in nailing zone 2 for 120 mph or lower design wind speeds in accordance with Figure R803.2.3.1.
3. Where roof framing with a specific gravity, $G \geq 0.49$ is used, 8d common or 8d hot dipped galvanized box nails at 6 inches on center at edges and 6 inches on center at intermediate framing shall be permitted for 100 mph or lower design wind speeds in accordance with Figure R803.2.3.1.
4. Where roof diaphragm requirements necessitate a closer fastener spacing.

FIGURE R803.2.3.1 ROOF SHEATHING NAILING ZONES

[Use FL specific figure]

Change R804 as shown:

R804.1.1 Applicability limits. The provisions of this section shall control the construction of steel roof framing for buildings not greater than 60 feet (18 288 mm) in length perpendicular to the joist, rafter or truss span, not greater than 36 feet (10 973 mm) in width parallel to the joist span or truss, not greater than two stories in height with each story not greater than 10 feet (3048 mm) high, and roof slopes not smaller than 3:12 (25-percent slope) or greater than 12:12 (100-percent slope). Steel roof framing constructed in accordance with the provisions of this section shall be limited to sites subjected to a maximum design wind speed of less than 100 miles per hour (209 km/h) Exposure ~~A,~~ B or C.

R804.3.3 Allowable rafter spans. The horizontal projection of the rafter span, as shown in Figure R804.3, shall not exceed the limits set forth in Table R804.3.3(1) and the basic wind speed and roof slope conversion Table R804.3.3(2). When required a rafter brace…at each end.

R804.4 Roof tie-down. Roof assemblies…with Table R802.2.9.1.

Change R806.4 as shown:

R806.4 Conditioned attic assemblies. Unvented conditioned attic assemblies (spaces between the ceiling joists of the top story and the roof rafters) are permitted under the following conditions:

1. No interior vapor retarders are installed on the ceiling side (attic floor) of the unvented attic assembly.
2. An air-impermeable insulation is applied in direct contact to the underside/interior of the structural roof deck. "Air-impermeable" shall be defined by ASTM E 283. *[Delete exception]*
3. Shingles shall be installed as shown:
   a. For asphalt roofing shingles: A 1-perm (57.4 mg/s · m2 · Pa) or less vapor retarder (determined using Procedure B of ASTM E 96) is placed to the exterior of the structural roof deck; i.e. just above the roof structural sheathing.
   b. For wood shingles and shakes: A minimum continuous ¼-inch (6 mm) vented air space separates the shingles/shakes and the roofing felt placed over the structural sheathing.

[Delete IRC #4]

Change R808.1 as shown:

R808.1 Combustible insulation. Combustible insulation shall be separated a minimum of 3 inches (76 mm) from recessed lighting fixtures, fan motors and other heat-producing devices.

Exception: When heat-producing devices are listed for lesser clearances, combustible insulation complying with the listing requirements shall be separated in accordance with the conditions stipulated in the listing.

Recessed lighting fixtures installed in the building thermal envelope shall meet the requirements of Section 13-606.1.ABC.1.2.4 in the *Florida Building Code, Building*.

CHAPTER 9
ROOF ASSEMBLIES

Add exception to R901.1 as shown:

R901.1 Scope. The provisions of this chapter shall govern the design, materials, construction and quality of roof assemblies.

Exception: Buildings and structures located within the High-Velocity Hurricane Zone shall comply with the provisions of Chapter 44.

Add exception to R902.1 as shown:

R902.1 Roofing covering materials. Roofs shall be covered with materials as set forth in Sections R904 and R905. Class A, B or C roofing shall be installed in areas designated by law as requiring their use or when the edge of the roof is less than 3 feet (914 mm) from a property

line. Classes A, B and C roofing required to be listed by this section shall be tested in accordance with UL 790 or ASTM E 108.

Exception: Brick, masonry, slate, clay or concrete roof tile; ferrous and copper shingles and shakes; and exposed concrete roof deck are considered to meet Class A roof covering provisions without testing. Metal sheets and shingles are considered to meet Class B roof covering provisions without testing.

Change R903 as shown:

R903.2.1 Locations. Flashings shall be installed at wall and roof intersections; wherever there is a change in roof slope or direction; this requirement does not apply to hip and ridge junctions, and around roof openings. Where flashing is of metal, the metal shall be corrosion resistant with a thickness not less than provided in Table R903.2.1.

TABLE R903.2.1 METAL FLASHING MATERIAL

MATERIAL	GAGE MINIMUM THICKNESS (INCHES)	GAGE	WEIGHT (lbs per sq ft)
Copper	0.024		1 (16 oz)
Aluminum	0.024		28
Stainless Steel		28	
Galvanized Steel	0.0179	26 (zinc coated G90)	26 (zinc coated G90)
Aluminum Zinc Coated Steel	0.0179	26 (AZ50 Alum Zinc)	26 (AZ50 Alum Zinc)
Zinc Alloy	0.027		
Lead			2.5 (40 oz)
Painted Terne			1.25 (20 oz)

R903.2.2 Membrane flashings. All membrane flashing shall be installed according to the roof assembly manufacturer's published literature.

R903.3 Coping. Parapet walls shall be properly coped or sealed with noncombustible, weatherproof materials of a width no less than the thickness of the parapet wall. Metal coping shall comply with ANSI/SPRI ES-1 or RAS 111.

R903.4.1 When other means of drainage of overflow water is not provided, overflow scuppers shall be placed in walls or parapets not less than 2 inches (51 mm) nor more than 4 inches (102 mm) above the finished roof covering and shall be located as close as practical to required vertical leaders or downspouts or wall and parapet scuppers. An overflow scupper shall be sized in accordance with the *Florida Building Code, Plumbing*.

Change R904 as shown:

R904.4. Fasteners.

R904.4.1. Nails. Nails shall be corrosion resistant nails conforming to ASTM F 1667. The corrosion resistance shall meet ASTM A 641, Class I or an equal corrosion resistance by coating, electro galvanization, mechanical galvanization, hot dipped galvanization, stainless steel, nonferrous metal and alloys or other suitable corrosion-resistant material.

R904.4.2. Screws. Wood screws shall be corrosion resistant screws conforming to ANSI/ASME B 18.6.1. The corrosion resistance shall meet ASTM A 641, Class 1 or an equal corrosion resistance by coating, electro galvanization, mechanical galvanization, stainless steel, nonferrous metal or other suitable corrosion resistant material.

R904.4.3. Clips. Clips shall be corrosion resistant clips. The corrosion resistance shall meet 1.50 oz per sq ft (0.458 kg/m²) according to ASTM A 153 or an equal corrosion resistance by coating, electro galvanization, mechanical galvanization, hot dipped galvanization, stainless steel, nonferrous metals and alloys or other suitable corrosion resistant material. Stainless steel clips shall conform to ASTM A 167, Type 304.

R904.5 Product identification. Roof covering materials shall be delivered in packages bearing the manufacturer's identifying marks and approved testing agency labels when required. Bulk shipments of materials shall be accompanied by the same information issued in the form of a certificate or on a bill of lading by the manufacturer.

Change R905.2.2 as shown:

R905.2.2 Slope. Asphalt shingles shall only be used on roof slopes of two units vertical in 12 units horizontal (2:12) or greater. For roof slopes from two units vertical in 12 units horizontal (2:12) up to four units vertical in 12 units horizontal (4:12), two layers of underlayment complying with ASTM D226, Type I or Type II, ASTM D 4869, Type I or Type II or ASTM D6757 is required in accordance with Section R905.2.7.

R905.2.3 Underlayment. Unless otherwise noted, required underlayment shall conform with ASTM D 226 Type I or Type II, or ASTM D 4869, Type I or Type II, or ASTM D6757.

Self-adhering polymer modified bitumen sheet shall comply with ASTM D 1970.

R905.2.5 Fasteners. Fasteners for asphalt shingles shall be galvanized steel, stainless steel, aluminum or copper roofing nails, minimum 12 gage [0.105 inch (2.67 mm)] shank with a minimum 3/8-inch (9.5 mm) diameter head, ASTM F 1667, of a length to penetrate through the roofing materials and a minimum of ¾ inch (19.1 mm) into the roof sheathing. Where the roof sheathing is less than ¾ inch (19.1 mm) thick, the fasteners shall penetrate through the sheathing. Fasteners shall comply with ASTM F 1667.

Exception: If the architectural appearance is to be preserved from below, an alternate method of attachment complying with the wind load requirements of Chapter 16 of the *Florida Building Code, Building* may be proposed unless otherwise addressed in Chapter 9. The alternative attachment shall be prepared, signed and sealed by a Florida-registered

architect or a Florida-registered engineer, which architect or engineer shall be proficient in structural design.

R905.2.5.1 The nail component of plastic cap nails shall meet ASTM A 641, Class I or an equal corrosion resistance by coating, electro galvanization, mechanical galvanization, hot dipped galvanization, stainless steel, nonferrous metal and alloys or other suitable corrosion-resistant material.

R905.2.6 Attachment. Asphalt shingles shall have the minimum number of fasteners required by the manufacturer, but not less than four fasteners per strip shingle or two fasteners per individual shingle. Where the roof slope, exceeds 21 units vertical in 12 units horizontal (21:12), shingles shall be installed as required by the manufacturer.

R905.2.6.1 Wind Resistance of Asphalt Shingles. Asphalt Shingles shall be classified in accordance with ASTM D3161, TAS 107 or ASTM D7158 to resist the basic wind speed per Figure R301.2 (4). Shingles classified as ASTM D 3161 Class D or classified as ASTM D 7158 Class G are acceptable for use in the 100-mph wind zone. Shingles classified as ASTM D3161 Class F, TAS107 or ASTM D 7158 Class H are acceptable for use in all wind zones. Asphalt shingle wrappers shall indicate compliance with one of the required classifications as shown in Table R905.2.6.1.

Table R905.2.6.1
Wind Resistance of Asphalt Shingles

Maximum Basic Wind Speed MPH (per Figure R301.2 (4)	Classification
100	ASTM D3161Class D or ASTM D 7158 Class G or TAS 107
110	ASTM D3161Class F or ASTM D 7158 Class G or TAS 107
120	ASTM D3161Class F or ASTM D 7158 Class G or TAS 107
130	ASTM D3161Class F or ASTM D 7158 Class H or TAS 107
140	ASTM D3161Class F or ASTM D 7158 Class H or TAS 107
150	ASTM D3161Class F or ASTM D 7158 Class H or TAS 107

R905.2.7 Underlayment application. For roof slopes from two units vertical in 12 units horizontal (17-percent slope), up to four units vertical in 12 units horizontal (33-percent slope), two layers of underlayment complying with ASTM D226 Type I or Type II, ASTM D 4869 Type I or Type II, or ASTM D6757 shall be applied in the following manner:

1. Apply a minimum 19-inch-wide (483 mm) strip of underlayment felt parallel with and starting at the eaves.
2. Starting at the eave, apply 36-inch-wide (914 mm) sheets of underlayment overlapping successive sheets 19 inches (483 mm). Distortions in the underlayment shall not interfere with the ability of the shingles to seal.
3. End laps shall be offset by 6 feet (1829 mm)
4. Corrosion resistant fasteners are to be applied along the overlap at a maximum spacing of 36 inches (914 mm) on center.

For roof slopes of four units vertical in 12 units horizontal (33-percent slope) or greater, one layer of underlayment complying with ASTM D226 Type I or Type II, ASTM D 4869 Type I or Type II, or ASTM D6757 shall be applied in the following manner:

1. Underlayment shall be applied shingle fashion, parallel to and starting from the eave and lapped 2 inches (51 mm).
2. End laps shall be offset by 6 feet (1829 mm)
3. Corrosion resistant fasteners are to be applied along the overlap at a maximum spacing of 36 inches (914 mm) on center.

R905.2.7.1 Ice protection. Reserved.

R905.2.7.2. Underlayment and high wind. Reserved.

R905.2.8.1 Base and counter flashing. Base and counter flashing shall be installed as follows:

1. In accordance with manufacturer's installation instructions, or

2. A continuous metal minimum 4 inch by 4 inch "L" flashing shall be set in approved flashing cement and set flush to base of wall and over the underlayment. Both horizontal and vertical metal flanges shall be fastened 6 inches (152 mm) on center with approved fasteners. All laps shall be a minimum of 4 inches (102 mm) fully sealed in approved flashing cement. Flashing shall start at the lower portion of roof to ensure water-shedding capabilities of all metal laps. The entire edge of the horizontal flange shall be sealed covering all nail penetrations with approved flashing cement and membrane. Shingles shall overlap the horizontal flange and shall be set in approved flashing cement.

Base flashing shall be of either corrosion-resistant metal provided in Section R905.2.8.1 or mineral surface roll roofing weighing a minimum of 77 pounds per 100 square feet (3.76 kg/m2). Counter flashing shall be corrosion-resistant metal with a minimum thickness provided in Table R903.1.

R905.2.8.2 Valleys. Valley linings shall be installed in accordance with manufacturer's installation instructions before applying shingles. Valley linings of the following types shall be permitted:

1. For open valley lined with metal, the valley lining shall be at least 16 inches (406 mm) wide and of any of the corrosion-resistant metals in Table R903.1.
2. For open valleys, valley lining of two plies of mineral surface roll roofing, complying with ASTM D 6380 Class M or ASTM D 3909, shall be permitted. The bottom layer shall be 18 inches (457 mm) and the top layer a minimum of 36 inches (914 mm) wide.
3. For closed valleys, valley lining of one ply of smooth roll roofing complying with ASTM D 6380 Class S and at least 36 inches (914 mm) wide or valley lining as described in Items 1 or 2 above shall be permitted. Specialty underlayment complying with ASTM D 1970 may be used in lieu of the lining material.

R905.2.8.3 Crickets and saddles. Change to read as shown.

R905.2.8.3 Crickets and saddles. A cricket or saddle shall be installed on the ridge side of any chimney greater than 30 inches (762 mm) wide. Cricket or saddle coverings shall be sheet metal or of the same material as the roof covering.

TABLE 905.2.8.2 VALLEY LINING MATERIALS
Reserved.

R905.2.8.6 Drip edge. Provide drip edge at eaves and gables of shingle roofs. Overlap to be a minimum of 3 inches (76 mm). Eave drip edges shall extend ½ inch (13 mm) below sheathing and extend back on the roof a minimum of 2 inches (51 mm). Drip edge at eaves shall be permitted to be installed either over or under the underlayment. If installed over the underlayment, there shall be a minimum 4 ~~2~~ inch (51 mm) width of roof cement installed over the drip edge flange. Drip edge shall be mechanically fastened a maximum of 12 inches (305 mm) on center. Where the basic wind speed per Figure R301.2(4) is 110 mph (177 km/h) or greater or the mean roof height exceeds 33 feet (10 058 mm), drip edges shall be mechanically fastened a maximum of 4 inches (102 mm) on center.

Change R905.3 as shown:

R905.3 Clay and concrete tile. The installation of clay and concrete shall be in accordance with recommendations of FRSA/TRI 07320 Manual.

R905.3.1 Deck requirements. Concrete and clay tile shall be installed only over solid sheathing, except where the roof covering is specifically designed and tested in accordance with Chapter 16, Florida Building Code, Building to be applied over structural spaced structural sheathing boards.

R905.3.2 Deck slope. Clay and concrete roof tile shall be installed on roof slopes in accordance with the recommendations of FRSA/TRI 07320**.**

R905.3.3. Underlayment. Required underlayment shall conform with ASTM D 226, Type II; ASTM D 2626; ASTM D 1970 or ASTM D 6380 Class M mineral surfaced roll roofing and shall be installed in accordance with FRSA/TRI 07320 Manual.

R905.3.3.2. High slope roofs. For roof slopes of four units vertical in 12 units horizontal (4:12) or greater, underlayment shall be a minimum of one layer of underlayment felt applied shingle fashion, parallel to and starting from the eaves and lapped 2 inches (51 mm), fastened only as necessary to hold in place.

R905.3.4. Clay Tile. Clay roof tile shall comply with ASTM C 1167.

R905.3.7 Application. Tile shall be applied in accordance with this chapter and the manufacturer's installation instructions, or recommendations of the FRSA/TRI 07320 based on the following:

Attachment. Clay and concrete roof tiles shall be fastened in accordance with FRSA/TRI Installation Manual 07320.

TABLE R905.3.7 CLAY AND CONCRETE TILE ATTACHMENT
Reserved.

R905.3.7.1. Hip and ridge tiles. Hip and ridge tiles shall be installed in accordance with FRSA/TRI 07320 Manual.

R905.3.8 Flashing. At the juncture of roof vertical surfaces, flashing and counter flashing shall be provided in accordance with this chapter and the manufacturer's installation instructions or recommendations of the FRSA/TRI 07320 Manual.

Change R905.4 as shown:

R905.4.3. Underlayment. Underlayment shall comply with ASTM D 226, Type I or Type II or ASTM D 1970. Underlayment shall be installed in accordance with the manufacturer's installation instructions.

Exception: Detached accessory structures that contain no conditioned floor area.

R905.4.4 Material standards. Metal roof shingle roof coverings shall comply with Table R905.4.4. The materials used for metal roof shingle roof coverings shall be naturally corrosion resistant or be made corrosion resistant in accordance with the standards and minimum thicknesses listed in Table R905.10.3(2).

TABLE R905.10.3(1) METAL ROOF COVERINGS STANDARDS Reserved.

TABLE R905.4.4 METAL ROOF COVERINGS

ROOF COVERING TYPE	STANDARD	APPLICATION RATE/THICKNESS
Aluminum	ASTM B 209	0.024 inch minimum thickness for roll-formed panels 0.019 inch minimum thickness for press-formed shingles.
Aluminum-zinc coated steel	ASTM A 792	0.013 inch minimum thickness, AZ 50 (coated minimum application rate)
Copper	ASTM B 370	16 oz./sq. ft. for metal-sheet roof-covering systems; 12 oz./sq. ft. for preformed metal shingle systems,
Galvanized steel	ASTM A 653	G-90 zinc-coated, 0.013-inch-thick minimum
Lead-coated copper	ASTM B 101	
Hard lead		2 lbs./sq. ft.
Soft lead		3 lbs./sq. ft.
Prepainted steel	ASTM A 755	0.013 inch minimum thickness
Terne (tin) and terne-coated stainless		Terne coating of 40 lbs. per double base box, field painted where applicable in accordance with manufacturer's installation instructions.

For SI: 1 ounce per square foot = 0.0026 kg/m^2,
1 pound per square foot = 4.882 kg/m^2,
1 inch = 25.4 mm, 1 pound = 0.454 kg.

R905.4.6 Flashing. Roof valley flashing shall be of corrosion-resistant metal of the same material as the roof covering or shall comply with the standards in Table R905.4.4. The valley flashing shall extend at least 8 inches (203 mm) from the center line each way and shall have a splash diverter rib not less than ¾ inch (19.1 mm) high at the flow line formed as part of the flashing. Sections of flashing shall have an end lap of not less than 4 inches (102 mm). The metal valley flashing shall have a 36-inch-wide (914 mm) underlayment directly under it consisting of one layer of underlayment running the full length of the valley, in addition to underlayment required for metal roof shingles.

Change R905.5 as shown:

R905.5.3 Underlayment. Underlayment shall conform with ASTM D 226, Type I or Type II or ASTM D 1970.

R905.5.4. Material standards. Mineral-surfaced roll roofing shall conform to ASTM D 3909 or ASTM D 6380 Class M or Class WS.

Change R905.6 as shown:

R905.6.3 Underlayment. Underlayment shall comply with ASTM D 226, Type II. Underlayment shall be installed in accordance with the manufacturer's installation instructions.

TABLE R905.6.5
SLATE SHINGLE HEADLAP

SLOPE	HEADLAP (inches)
4:12 ≤ slope < 8:12	4
8:12 ≤ slope < 20:12	3
Slope ≥ 20:12	2

R905.6.6 Flashing. Flashing and counter flashing shall be made with sheet metal. Valley flashing shall be a minimum of 16 inches (406 mm) wide. Valley and flashing metal shall be a minimum thickness as provided in Table R903.1 nonferrous metal or stainless steel.

Change R905.7 as shown:

R905.7.1.1 Solid sheathing required. Reserved.

R905.7.5 Attachment. Attachment in accordance with Table R905.7.5 shall be used for roofs with a mean roof height of 40 feet or less and in regions with a basic wind speed of 100 mph or less.

TABLE R905.7.5
WOOD SHINGLE AND SHAKE INSTALLATION

ROOF ITEM	WOOD SHINGLES	WOOD SHAKES

1. Deck Requirements	Shingles shall be applied to roofs with solid or spaced sheathing. Where spaced sheathing is used, sheathing boards shall not be 4 less than 1" × 4" nominal dimensions and shall be spaced on center equal to the weather exposure to coincide with the placement of fasteners.	Shakes shall be applied to roofs with solid or spaced sheathing. Where spaced sheathing is used, sheathing boards shall not be less than 1" × 4" nominal dimensions and shall be spaced on center equal to the weather exposure to coincide with the placement of fasteners. When 1" × 4" spaced sheathing is installed at 10 inches, boards must be installed between the sheathing boards.
2. Interlayment	No requirements.	Interlayment shall comply with ASTM D 226, Type 1.
3. Underlayment	Underlayment shall comply with ASTM D 226, Type 1.	No requirements.
4. Application	—	—
Attachment	Fasteners for wood shingles shall be corrosion resistant with a minimum penetration of ¾ inch into the sheathing. For sheathing less than ½ inch thick, the fasteners shall extend through the sheathing a minimum of ⅜ inch.	Fasteners for wood shakes shall be corrosion resistant with a minimum penetration of ¾ inch into the sheathing. For sheathing less than ½ inch thick, the fasteners shall extend through the sheathing a minimum of ⅜ inch.
No. of fasteners	Wood shingles shall be attached to the roof with two fasteners per shingle, positioned no more than 3/4 inch (19.1 mm) from each edge and no more than 1 ½ inch (38.1 mm) above the exposure line.	Wood shakes shall be attached to the roof with two fasteners per shake, positioned no more than 1 inch (25.4 mm) from each edge and no more than 1 ½ inches (38.1 mm) above the exposure line.

For SI: 1 inch = 25.4 mm

R905.7.6 Attachment for wind speed greater than 100 mph. Wood shingles installed in accordance with Table R905.7.5 and the requirements of R905.7.6 has an allowable uplift resistance of 45 psf. The installation of wood shingles shall be limited to roofs where the allowable uplift resistance is equal to or greater than the design uplift pressure for the roof listed in Table R301.2(2).

R905.7.6.1 Fasteners.

R905.7.6.1.1 Nails. Nails to attach the wood shakes shall be 3d stainless steel ring shank nails. The nails shall have sufficient length to penetrate through the wood shakes and shall penetrate through the sheathing.

R905.7.6.1.2 Screws. Screws to attach the battens to the framing shall be No. 8 by 2-½ inches (64 mm) long corrosion resistant wood screws. Wood screws shall be corrosion resistant screws conforming to ANSI/ASME B 18.6.1. The corrosion resistance shall meet ASTM A 641, Class 1 or an equal corrosion resistance by coating, electro

galvanization, mechanical galvanization, stainless steel, nonferrous metal or other suitable corrosion resistant material.

R905.7.6.1.3 Wood battens. 1 x 4 wood battens shall be attached to the wood joists with 2 screws per joist. The first batten shall be located 6 inches (152 mm) from the outer edge of the wood joist. Second batten shall be spaced 1-¼ inches (32 mm) from the first batten. The remaining battens shall be spaced a maximum 2 inches (51 mm) apart, except the last one which shall be spaced no greater than ¾ inches (19 mm) from the previous batten.

R905.7.6.1.4 Shingles. Shingles shall be attached to the battens with 2 nails for each shingle placed 1 1/2 inch (38 mm) above the exposure line. The nails shall be ¾ to 1 inch (19 to 25 mm) from the shingle edges.

R905.7.7 Application. Wood shingles shall be installed according to this chapter and the manufacturer's installation instructions.-Weather exposure for wood shingles shall not exceed those set in Table R905.7.7.

R905.7.8 Flashing. At the juncture of the roof and vertical surfaces, flashing and counter flashing shall be provided in accordance with the manufacturer's installation instructions, and where of metal, shall not be less than 0.019-inch (0.48 mm) (No. 26 galvanized sheet gage) corrosion-resistant metal

R905.7.8.1 Valley flashing. Roof flashing shall be not less than No. 26 gage [0.019 inches (0.48 mm)] corrosion-resistant sheet metal and shall extend 10 inches (254 mm) from the centerline each way for roofs having slopes less than 12 units vertical in 12 units horizontal (100-percent slope), and 7 inches (178 mm) from the centerline each way for slopes of 12 units vertical in 12 units horizontal and greater. Sections of flashing shall have an end lap of not less than 4 inches (102 mm).

R905.7.8.1.1 Label required. Each bundle of shingles shall be identified by a label of an approved grading or inspection bureau or agency.

Change R905.8 as shown:

R905.8.1.1 Solid sheathing required. Reserved.

R905.8.2 Deck slope. Wood shakes shall only be used on slopes of four (4) units vertical in twelve (12) units horizontal (33-percent slope) or greater.

R905.8.3 Underlayment. Reserved

R905.8.4 Attachment. Attachment in accordance with Table R905.7.5 shall be used for roofs with a mean roof height of 40 feet or less and in regions with a basic wind speed of 100 mph or less.

R905.8.6 Application. Reserved.

R905.8.7 Attachment for wind speed greater than 100 mph.
Wood shakes installed in accordance with Table R905.7.5 and the requirements of R905.8.7 have an allowable uplift resistance of 90 psf. The installation of wood shakes shall be limited to

roofs where the allowable uplift resistance is equal to or greater than the design uplift pressure for the roof listed in Table R301.2(2)

R905.8.7.1 Fasteners.

R905.8.7.1.1 Nails. Nails to attach the wood shakes shall be 6d stainless steel ring shank nails. The nails shall have sufficient length to penetrate through the wood shakes and shall penetrate through the sheathing.

R905.8.7.1.2 Screws. Screws to attach the battens to the framing shall be No. 8 by 2-½ inches long corrosion resistant wood screws. Wood screws shall be corrosion resistant screws conforming to ANSI/ASME B 18.6.1. The corrosion resistance shall meet ASTM A 641, Class 1 or an equal corrosion resistance by coating, electro galvanization, mechanical galvanization, stainless steel, nonferrous metal or other suitable corrosion resistant material.

R905.8.7.1.3 Wood battens. 1 x 6 wood battens shall be attached to the wood joists with 2 screws per joist. The first batten was located 6 inches from the outer edge of the wood joist. Second batten shall be spaced 1-¼ inches from the first batten. The remaining battens shall be spaced a maximum 2 inches apart, except the last one which shall be spaced no greater than ¾ inches from the previous batten.

R905.8.7.1.4 Shakes. Shakes shall be attached to the battens with 2 nails for each shake placed 1½ inch above the exposure line. The nails shall be ¾ to 1 inch from the shake edges.

R905.8.8 Application. Wood shakes shall be installed according to this chapter and the manufacturer's installation instructions. Wood shakes shall be laid with a side lap not less than 1½ inch (38 mm) between joints in adjacent courses. Spacing between shakes in the same course shall be 1/8 inch to 5/8 inch (3.2 mm to 15.9 mm) for shakes and taper sawn shakes of naturally durable wood and shall be ¼ inch to 3/8 inch (6.4 mm to 9.5 mm) for preservative taper sawn shakes. Weather exposure for wood shakes shall not exceed those set forth in Table R905.8.8

TABLE R905.8.8
WOOD SHAKE WEATHER EXPOSURE AND ROOF SLOPE

ROOFING MATERIAL	LENGTH (inches)	GRADE	EXPOSURE (inches) 4:12 pitch or steeper
Shakes of naturally durable wood	18	No. 1	7 1/2
	24	No. 1	10[a]
Preservative-treated taper sawn shakes of Southern Yellow Pine	18	No. 1	7 1/2
	24	No. 1	10
	18	No. 2	5 1/2
	24	No. 2	7 1/2
Taper-sawn shakes of naturally durable wood	18	No. 1	7 1/2
	24	No. 1	10
	18	No. 2	5 1/2
	24	No. 2	7 1/2

For SI: 1 inch = 25.4 mm.
a. For 24-inch by 3/8-inch handsplit shakes, the maximum exposure is 7 1/2 inches.

R905.8.10 Flashing At the juncture of the roof and vertical surfaces, flashing and counter flashing shall be provided in accordance with the manufacturer's installation instructions, and where of metal, shall not be less than 0.019-inch (0.48 mm) (No. 26 galvanized sheet gage) corrosion-resistant metal.

R905.8.10.1 Valley flashing. Valley flashing shall extend at least 11 inches (279 mm) from the centerline each way and have a splash diverter rib not less than 1 inch (25 mm) high at the flow line formed as part of the flashing. Sections of flashing shall have an end lap of not less than 4 inches (102 mm). For roof slopes of four (4) units vertical in twelve (12) units horizontal (33-percent slope) and over, the valley flashing shall have a 36-inch-wide (914 mm) underlayment of one layer of ASTM D 226 Type I underlayment running the full length of the valley, in addition to other required underlayment per Table 903.1 Valley flashing and flashing metal shall be a minimum thickness as provided in Table R903.1 for nonferrous metal or stainless steel.

Change R905.9 as shown:

R905.9.2.1 Red rosin paper shall be used when the membrane is applied directly to a wood deck or cementitious fiber decks.

Change R905.10 as shown:

R905.10.2.1 Underlayment shall be installed as per manufacturer's installation guidelines.

R905.10.3 Material standards. Metal-sheet roof covering systems that incorporate supporting structural members shall be designed in accordance with the *Florida Building Code, Building*. Metal-sheet roof coverings installed over structural decking shall comply with Table R905.4.4

TABLE R905.10.3 METAL ROOF COVERINGS STANDARDS. Reserved..

R905.10.4 Attachment. Metal roofing shall be installed in accordance with this chapter and the manufacturer's installation instructions. Metal roofing fastened directly to steel framing shall be attached by approved fasteners. In the absence of the manufacturer's installation instructions, the following fasteners shall be used:

1. Galvanized fasteners shall be used for galvanized roofs.
2. Hard copper or copper alloy or 300 series stainless steel fasteners shall be used for copper roofs.
3. Aluminum-zinc coated fasteners are acceptable for aluminum-zinc coated roofs.
4. Stainless steel fasteners are acceptable for metal roofs.

R905.10.5 Application. Metal roof panels shall be installed in accordance with this chapter and the manufacturer's installation instructions. The installations instruction shall state the allowable uplift resistance for the attachment system. The installation of metal roof panels shall be limited to roofs where the allowable uplift resistance is equal to or greater than the design uplift pressure for the roof listed in Table R301.2(2).

R905.10.6 Underlayment. Underlayment shall be installed as per manufacturer's installation guidelines.

Change R905.11 as shown:

R905.11.3 Application. Modified bitumen roof shall be installed according to this chapter and the manufacturer's installation instructions. The approved allowable uplift resistance for the modified bitumen roof shall be equal to or greater than the uplift resistance for the roof based on Table R301.2(2).

Change R905.12 as shown:

R905.12.3 Application. Thermoset single-ply roof shall be installed according to this chapter and the manufacturer's installation instructions. The approved allowable uplift resistance for the thermoset single-ply membrane roof shall be equal to or greater than the uplift resistance for the roof based on Table R301.2(2).

Change R905.13 as shown:

R905.13.3 Application. Thermoplastic single-ply roof shall be installed according to this chapter and the manufacturer's installation instructions. The approved allowable uplift resistance for the thermoplastic single-ply roof shall be equal to or greater than the uplift resistance for the roof based on Table R301.2(2).

Change R905.14 as shown:

R905.14.3 Application. Foamed in place roof insulation shall be installed in accordance with this chapter and the manufacturer's installation instructions. A liquid-applied protective coating that complies with Section R905.15 shall be applied no less than 2 hours nor more than 72 hours following the application of the foam. The approved allowable uplift resistance for the sprayed polyurethane foam roofing shall be equal to or greater than the uplift resistance for the roof based on Table R301.2(2).

Change R905.15 as shown:

R905.15.3 Application. Liquid-applied roof coatings shall be installed according to this chapter and the manufacturer's installation instructions. The approved allowable uplift resistance for the liquid-applied coatings shall be equal to or greater than the uplift resistance for the roof based on Table R301.2(2).

Change Section R907.1 as shown:

R907.1 General. Reroofing shall be done in accordance with the *Florida Existing Building Code*.

Delete IRC R907.2 – R907.6

CHAPTER 10
CHIMNEYS AND FIREPLACES

Change Section R1001.3 and R1001.4 as shown:

R1001.3 Seismic reinforcing. Reserved.
R1001.3.1 Vertical reinforcing. Reserved,
R1001.3.2 Horizontal reinforcing. Reserved.
R1001.4 Seismic anchorage. Reserved.
R1001.4.1 Anchorage. Reserved.

Change Table R1001.1 as shown:

TABLE R1001.1
SUMMARY OF REQUIREMENTS FOR MASONRY FIREPLACES AND CHIMNEYS

ITEM	LETTER[a]	REQUIREMENTS
Hearth slab thickness	A	4″
Hearth extension (each side of opening)	B	8″ fireplace opening < 6 square foot. 12″ fireplace opening ≥ 6 square foot.
Hearth extension (front of opening)	C	16″ fireplace opening < 6 square foot. 20″ fireplace opening ≥ 6 square foot.
Hearth slab reinforcing	D	Reinforced to carry its own weight and all imposed loads.
Thickness of wall of firebox	E	10″ solid brick or 8″ where a firebrick lining is used. Joints in firebrick 1/4 ″ maximum.
Distance from top of opening to throat	F	8″
Smoke chamber wall thickness Unlined walls	G	6″ 8″
Horizontal reinforcing	J	1/4 ″ ties at 18″ and two ties at each bend in vertical steel.
Bond beams	K	No specified requirements.
Fireplace lintel	L	Noncombustible material.
Chimney walls with flue lining	M	Solid masonry units or hollow masonry units grouted solid with at least 4 inch nominal thickness.
Distances between adjacent flues	—	See Section R1003.13.
Effective flue area (based on area of fireplace opening)	P	See Section R1003.15.
Clearances: Combustible material Mantel and trim Above roof	R	See Sections R1001.11 and R1003.18. See Section R1001.11, Exception 4. 3′ at roofline and 2′ at 10′.
Footing Thickness Width	T	12″ min. 6″ each side of fireplace wall.

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 square foot = 0.0929m2.
NOTE: This table provides a summary of major requirements for the construction of masonry chimneys and fireplaces. Letter references are to Figure R1001.1, which shows examples of typical construction. This table does not cover all requirements, nor does it cover all aspects of the indicated requirements. For the actual mandatory requirements of the code, see the indicated section of text.

a. The letters refer to Figure R1001.1.
b. Reserved.

Change Figure R1001.1 as shown:

FIGURE R1001.1
FIREPLACE AND CHIMNEY DETAILS

Brick Firebox and Chimney – Sectional Side View on Wood Floor
[Delete H, Vertical reinforcing and J, Horizontal reinforcing ties.]

Change R1001.12 as shown:

R1001.12 Fireplace fireblocking. Fireplace fireblocking shall comply with the provisions of Section R602.1.2.

Change R1002.4 as shown:

R1002.4 Seismic reinforcing. Reserved.

Change R1003.3 as shown:

R1003.3 Seismic reinforcing. Reserved.
R1003.3.1 Vertical reinforcing. Reserved.
R1003.3.2 Horizontal reinforcing. Reserved.

Change R1003.4 as shown:

R1003.4 Seismic anchorage. Reserved.
R1003.4.1 Anchorage. Reserved.

CHAPTER 11
ENERGY EFFICIENCY

N1101 Energy efficiency. The provisions of Chapter 13, *Florida Building Code, Building*, shall govern the energy efficiency of residential construction.

Section N1102 through N1104 Reserved.

Part V - Mechanical

Chapter 12, Mechanical Administration

Section M1202 Existing Mechanical Systems

M1202.1 Additions, alterations or repairs. Change to read as shown:

M1202.1 Additions, alterations or repairs. See The *Florida Building Code, Existing Building*.

M1202.2 Existing installations. Change to read as shown.

M1202.2 Existing installations. Reserved.

M1202.3 Maintenance. Change to read as shown.

M1202.3 Maintenance. Reserved.

Chapter 13, General Mechanical System Requirements

Section M1301 General

M1301.1 Scope. Change to read as shown.

M1301.1 Scope. The provisions of this chapter shall govern the installation of mechanical systems not specifically covered in other chapters applicable to mechanical systems. Installations of mechanical appliances, equipment and systems not addressed by this code shall comply with the applicable provisions of the *Florida Building Code, Mechanical* and the *Florida Building Code, Fuel Gas.*

M1301.1.1 Floor resistant installation. Change to read as shown.

M1301.1.1 Floor resistant installation. Reserved.

Section M1305 Appliance Access

M1305.1.3 Appliances in attics. Change to read as shown.

M1305.1.3 Appliances in attics. Attics containing appliances requiring access shall be provided with an opening and unobstructed passageway large enough to allow removal of the largest appliance. The passageway shall not be less than 30 inches (762 mm) high and 22 inches (559 mm) wide and not more than 6 feet (1829 mm) in length measured along the centerline of the passageway from the attic access opening to the appliance's service panel. The passageway shall have continuous solid flooring not less than 24 inches (610 mm) wide. A level service space not less than 30 inches (762 mm) deep and 30 inches (762 mm) wide shall be present at the front or service side of the appliance. The clear access opening dimensions shall be a minimum of 20 inches by 30 inches (508 mm by 762 mm), where such dimensions are large enough to allow removal of the largest appliance.
Exception: The passageway and level service space are not required where the appliance is capable of being serviced and removed through the required opening.

M1305.1.3.1 Electrical requirements. Change to read as shown.

M1305.1.3.1 Electrical requirements. A luminaire controlled by a switch located at the required passageway opening and a receptacle outlet shall be installed at or near the appliance location in accordance with Chapter 33.

M1305.1.3.2 Air-handling units. Add to read as shown.

M1305.1.3.2 Air-handling units. Air-handling units shall be allowed in attics if the following conditions are met:

1. The service panel of the equipment is located within 6 feet (1829 mm) of an attic access.
2. A device is installed to alert the owner or shut the unit down when the condensation drain is not working properly.
3. The attic access opening is of sufficient size to replace the air handler.
4. A notice is posted on the electric service panel indicating to the homeowner that the air handler is located in the attic. Said notice shall be in all capitals, in 16 point type, with the title and first paragraph in bold:

NOTICE TO HOMEOWNER

A PART OF YOUR AIR CONDITIONING SYSTEM, THE AIR HANDLER, IS LOCATED IN THE ATTIC. FOR PROPER, EFFICIENT, AND ECONOMIC OPERATION OF THE AIR CONDITIONING SYSTEM, YOU MUST ENSURE THAT REGULAR MAINTENANCE IS PERFORMED. YOUR AIR CONDITIONING SYSTEM IS EQUIPPED WITH ONE OR BOTH OF THE FOLLOWING:
1) A DEVICE THAT WILL ALERT YOU WHEN THE CONDENSATION DRAIN IS NOT WORKING PROPERLY OR
2) A DEVICE THAT WILL SHUT THE SYSTEM DOWN WHEN THE CONDENSATION DRAIN IS NOT WORKING. TO LIMIT POTENTIAL DAMAGE TO YOUR HOME, AND TO AVOID DISRUPTION OF SERVICE, IT IS RECOMMENDED THAT YOU ENSURE PROPER WORKING ORDER OF THESE DEVICES BEFORE EACH SEASON OF PEAK OPERATION.

M1305.1.4.1 Clearances from grade. Change to read as shown.

M1305.1.4.1 Clearances from grade. Equipment and appliances installed at grade level shall be supported on a level minimum 3½-inch (89 mm) concrete slab or other approved material extending a minimum of 2 inches (51 mm) above adjoining finished grade. Suspended equipment and appliances shall be installed a minimum of 6 inches (152 mm) above adjoining grade to provide support and protection from contact with soil or water.

Exception: On changeouts or new installations of existing buildings where equipment is replaced that has a support platform approved under a previous code.

Section M1307 Appliance Installation

M1307.2 Anchorage of appliances. Change to read as shown.

M1307.2 Anchorage of appliances. Appliances designed to be fixed in position shall be fastened or anchored in an approved manner. Strapping shall be at points within the upper one-third and lower one-third of the appliance's vertical dimensions. At the lower point, the strapping shall maintain a minimum distance of 4 inches (102 mm) above the controls.

M1307.3 Wind resistance. Change to read as shown.

M1307.3 Wind resistance. Mechanical equipment, appliances and supports that are exposed to wind shall be designed and installed to resist the wind pressures on the equipment and the supports as determined in accordance with the *Florida Building Code, Building*. This may be accomplished by design or by application of Section M1307.3.1.

M1307.3.1 Ground-mounted units. Change to read as shown.

M1307.3.1 Ground-mounted units. Ground-mounted units for Group R3 residential applications may be anchored with #14 screws with gasketed washers according to the following.

1. For units with sides less than 12 inches (305 mm), one screw shall be used at each side of the unit
2. For units between 12 and 24 inches (305 and 610 mm), two screws shall be used per side.
3. For units between 24 and 36 inches (610 and 9144 mm), three screws shall be used per side.
4. For units greater than 36 inches or 5 tons (9144 mm and 18 kW), anchorage shall be designed in accordance with Section M1307.3.

Notes:
1. Corrosion protection. Buildings located within 3,000 feet (914 400 mm) of the ocean should utilize nonferrous metal, stainless steel or steel with minimum G-90 hot-dip galvanized coating for equipment stands and anchors and stainless steel screws.
2. Strapping. Job-site strengthening of fan cowlings and vent hoods is recommended. Two or four stainless steel cables are recommended, depending on design wind conditions. Alternatively, additional, heavy straps can be screwed to the cowling and curb.

M1307.5 Electrical appliances. Change to read as shown.

M1307.5 Electrical appliances. Electrical appliances shall be installed in accordance with Chapter 33 of this code.

Section M1308 Mechanical Systems Installation

M1308.1 Drilling and notching. Change to read as shown.

M1308.1 Drilling and notching. Wood-framed structural members shall be drilled, notched or altered in accordance with the provisions of Sections R502.2.7, R602.2.7, R602.2.7.1 and R802.2.6. Holes in cold-formed, steel-framed, load-bearing members shall only be permitted in accordance with Sections R505.2, R603.2 and R804.2. In accordance with the provisions of

Sections R505.3.5, R603.3.4 and R804.3.5, cutting and notching of flanges and lips of cold-formed, steel-framed, load-bearing members shall not be permitted.

Chapter 14, Heating and Cooling Equipment

Section M1401 General

M1401.5 Floodplain management construction standards. Change to read as shown.

M1401.5 Floodplain management construction standards. This code specifically defers to the authority granted to local government by Title 44 CFR, Sections 59 and 60. This code is not intended to supplant or supercede local ordinances adopted pursuant to that authority, nor are local floodplain management ordinances to be deemed amendments to the code.

Section M1405 Baseboard Convectors

M1405.1 General. Change to read as shown.

M1405.1 General. Electric baseboard convectors shall be installed in accordance with the manufacturer's installation instructions and Chapter 33 of this code.

Section M1406 Radiant Heating Systems

M1406.1 General. Change to read as shown.

M1406.1 General. Electric radiant heating systems shall be installed in accordance with the manufacturer's installation instructions and Chapters 33 of this code.

M1406.2 Clearances. Change to read as shown.

M1406.2 Clearances. Clearances for radiant heating panels or elements to any wiring, outlet boxes and junction boxes used for installing electrical devices or mounting luminaires shall comply with Chapters 33 of this code.

Section M1407 Duct Heaters

M1407.1 General. Change to read as shown.

M1407.1 General. Electric duct heaters shall be installed in accordance with the manufacturer's installation instructions and Chapters 33 of this code. Electric furnaces shall be tested in accordance with UL 1995.

Chapter 15, Exhaust systems (No change.)

Chapter 16, Duct Systems

Section M1601 Duct Construction.

Table M1601.1(1) Classification of Factory-Made Air Ducts. Change to read as shown.

Table M1601.1(1) Classification of Factory-Made Air Ducts. Reserved.

M1601.1.1 Above-ground duct systems. Change to read as shown.

M1601.1.1 Above-ground duct systems. Reserved

M1601.2 Factory-made ducts. Change to read as shown.

M1601.2 Factory-made ducts. Reserved

M1601.3 General. Change to read as shown.

M1601.3 General. An air distribution system shall be designed and installed to supply the required distribution of air. The installation of an air distribution system shall not affect the fire protection requirements specified in the building code. Ducts shall be constructed, braced, reinforced and installed to provide structural strength and durability. All transverse joints, longitudinal seams and fitting connections shall be securely fastened and sealed in accordance with the applicable standards of this section.
All enclosures which form the primary air containment passageways for air distribution systems shall be considered ducts or plenum chambers and shall be constructed and sealed in accordance with the applicable criteria of this section.

M1601.3.1 Mechanical fastening. Change to read as shown.

M1601.3.1 Mechanical fastening. All joints between sections of air ducts and plenums, between intermediate and terminal fittings and other components of air distribution systems, and between subsections of these components shall be mechanically fastened to secure the sections independently of the closure system(s).

M1601.3.2 Sealing. Change to read as shown.

M1601.3.2 Sealing. Air distribution system components shall be sealed with approved closure systems.

M1601.3.3 Space provided. Change to read as shown.

M1601.3.3 Space provided. Sufficient space shall be provided adjacent to all mechanical components located in or forming a part of the air distribution system to assure adequate access for (1) construction and sealing in accordance with the requirements of Section M1601.3 of this

code; (2) inspection; and (3) cleaning and maintenance. A minimum of 4 inches (102 mm) is considered sufficient space around air handling units.
Exception: Retrofit or replacement units not part of a renovation are exempt from the minimum clearance requirement.

M1601.3.4 Product application. Change to read as shown.

M1601.3.4 Product application. Closure products shall be applied to the air barriers of air distribution system components being joined in order to form a continuous barrier or they may be applied in accordance with the manufacturer's instructions or appropriate industry installation standard where more restrictive.

M1601.3.5 Surface preparation. Change to read as shown.

M1601.3.5 Surface preparation. The surfaces upon which closure products are to be applied shall be clean and dry in accordance with the manufacturer's installation instructions.

M1601.3.6 Approved mechanical attachments. Change to read as shown.

M1601.3.6 Approved mechanical attachments. Approved mechanical attachments for air distribution system components include screws, rivets, welds, interlocking joints crimped and rolled, staples, twist in (screw attachment), and compression systems created by bend tabs or screw tabs and flanges or by clinching straps. Mechanical attachments shall be selected to be appropriate to the duct system type.

M1601.3.7 Approved closure systems. Change to read as shown.

M1601.3.7 Approved closure systems. Closure system materials, including adhesives when used, shall have a flame spread rating not over 25 without evidence of continued progressive combustion and a smoke developed rating not over 50 when tested in accordance with the ASTM E 84. The following closure systems and materials are approved for air distribution construction and sealing for the applications and pressure classes prescribed in Sections M1601.4 through Sections M1601.11:

1. Metal closures.
   a. Welds applied continuously along metal seams or joints through which air could leak.
   b. Snaplock seams, and grooved, standing, double-corner, and Pittsburgh-lock seams as defined by SMACNA, as well as all other rolled mechanical seams. All seams shall be rolled or crimped.
2. Gasketing, which achieves a 25/50 flame spread, smoke density development rating under ASTM E 84 or UL 723, provided that it is used only between mated surfaces which are mechanically fastened with sufficient force to compress the gasket and to fill all voids and cracks through which air leakage would otherwise occur.
3. Mastic closures. Mastic shall be placed over the entire joint between mated surfaces. Mastics shall not be diluted. Approved mastics include the following:
   a. Mastic or mastic plus embedded fabric systems applied to fibrous glass ductboard that are listed and labeled in accordance with UL 181A, Part III.

b. Mastic or mastic plus embedded fabric systems applied to nonmetal flexible duct that are listed and labeled in accordance with the 181B, Part II.

c. Mastic ribbons, which achieve a 25/50 flame spread, smoke density development rating under ASTM E 84 or UL 723, provided that they may be used only in flange-joints and lap-joints, such that the mastic resides between two parallel surfaces of the air barrier and that those surfaces are mechanically fastened.

4. Tapes. Tapes shall be applied such that they extend not less than 1 inch (25 mm) onto each of the mated surfaces and shall totally cover the joint. When used on rectangular ducts, tapes shall be used only on joints between parallel rigid surfaces and on right angle joints. Approved tapes include the following:

a. Pressure-sensitive tapes.

1) Pressure-sensitive tapes applied to fibrous glass ductboard that are listed and labeled in accordance with UL 181A, Part I.

2) Pressure-sensitive tapes applied to nonmetal flexible duct that are listed and labeled in accordance with UL 181B, Part I.

b. Heat-activated tapes applied to fibrous glass ductboard that are listed and labeled in accordance with UL 181A, Part II.

5. Aerosol sealant. Such sealants shall be installed by manufacturer-certified installers following manufacturer instructions and shall achieve 25/50 flame spread/smoke density development ratings under ASTM E 84 or UL 723.

M1601.3.8 Flood hazard areas. Change to read as shown.

M1601.3.8 Flood hazard areas. See Section R323.

M1601.4 Duct classification. Change to read as shown.

M1601.4 Duct classification. Ducts shall be classified based on the maximum operating pressure of the duct at pressures of positive or negative 0.5, 1.0, 2.0, 3.0, 4.0, 6.0 or 10.0 inches of water column. The pressure classifications of ducts shall equal or exceed the design pressure of the air distribution in which the ducts are utilized.

M1601.5 Metallic ducts, rigid and flexible. Add to read as shown.

M1601.5 Metallic ducts, rigid and flexible. All ducts shall be constructed of iron, steel, aluminum or other approved material. Ducts shall be constructed as specified in the SMACNA HVAC Duct Construction Standards—Metal and Flexible.

Exception: Ducts installed within single dwelling units shall have a minimum thickness as specified in Table M1601.5.

All transverse joints, longitudinal seams and duct wall penetration of ducts and joints with other air distribution systems components shall be mechanically attached and sealed using approved closure systems for that pressure class specified in Section M1601.5.1 or M1601.5.2.

M1601.5.1 Pressure less than 1-inch water gage, approved closure systems. Add to read as shown.

M1601.5.1 Pressure less than 1-inch water gage, approved closure systems. The following closure systems are approved for rigid metal duct designed to be operated at pressures less than 1 inch water gage when they conform to the approved closure and mechanical attachment requirements of Section M1601.3:

1. Continuous welds.
2. Snaplock seams and grooved, standing, double-corner, single-corner and Pittsburgh-lock seams and all other rolled mechanical seams.
3. Mastic, mastic-plus-embedded fabric, or mastic ribbons.
4. Gaskets.
5. Pressure-sensitive tape.
6. Aerosol sealant.

M1601.5.2 Pressure 1-inch water gage or greater, approved closure systems. Add to read as shown.

M1601.5.2 Pressure 1-inch water gage or greater, approved closure systems. The following closure systems are approved for rigid metal duct designed to be operated at pressures 1-inch water gage or greater and flexible duct when they conform to the approved closure and mechanical attachment requirements of Section M1601.3:

1.Continuous welds.
2.Mastic, mastic-plus-embedded fabric or mastic ribbons.
3.Gaskets.

M1601.5.3 High pressure duct systems. Add to read as shown.

M1601.5.3 High pressure duct systems. High pressure duct systems designed to operate at pressures greater than 3 inches water gauge (4 inches water gauge pressure class), shall be tested in accordance with the SMACNA HVAC Air Duct Leakage Test Manual. The tested duct leakage class, at a test pressure equal to the design duct pressure class rating, shall be equal to or less than Leakage Class 6. Leakage testing may be limited to representative sections of the duct system but in no case shall such tested sections include less than 25 percent of the total installed duct area for the designated pressure class.

Table M1601.5 Gages of Metal Ducts and Plenums Used for Heating or Cooling. Add to read as shown.

TABLE M1601.5
GAGES OF METAL DUCTS AND PLENUMS USED FOR HEATING OR COOLING

TYPE OF DUCT	SIZE (inches)	MINIMUM THICKNESS (inch)	EQUIVALENT GALVANIZED SHEET GAGE	APPROXIMATE ALUMINUM B & S GAGE
Round ducts and enclosed rectangular ducts	14 or less over 14	0.013 0.016	30 28	26 24
Exposed rectangular ducts	14 or less over 14	0.016 0.019	28 26	24 22

For SI: 1 inch = 25.4 mm.

M1601.6 Nonmetallic ducts. Add to read as shown.

M1601.6 Nonmetallic ducts. Nonmetallic ducts shall be constructed with Class 0 or Class 1 duct material in accordance with UL 181. Fibrous duct construction shall conform to the SMACNA Fibrous Glass Duct Construction Standards or NAIMA Fibrous Glass Duct Construction Standards. The maximum air temperature with nonmetallic ducts shall not exceed 250°F (121°C).

M1601.6.1 Gypsum. Add to read as shown.

M1601.6.1 Gypsum. Gypsum boards that form air shafts (ducts) shall be limited to return air systems where the air temperatures do not exceed 125°F (52°C) and the gypsum board surface temperature is maintained above the airstream dew-point temperature. Gypsum return air ducts shall not be incorporated in air-handling systems utilizing evaporative coolers.

M1601.6.2 Flexible air ducts and flexible air connectors. Add to read as shown.

M1601.6.2 Flexible air ducts and flexible air connectors. Flexible air ducts, both metallic and nonmetallic, shall comply with Sections M1601.6.2.1, M1601.6.2.2, M1601.6.2.5, and M1601.6.2.7. Flexible air connectors, both metallic and nonmetallic, shall comply with Sections M1601.6.2.3 through M1606.6.2.7.

M1601.6.2.1 Flexible air ducts. Add to read as shown.

M1601.6.2.1 Flexible air ducts. Flexible air ducts, both metallic and nonmetallic, shall be tested in accordance with UL 181. Such ducts shall be listed and labeled as Class 0 or Class 1 flexible air ducts and shall be installed in accordance with Section M1307.

M1601.6.2.2 Duct length. Add to read as shown.

M1601.6.2.2 Duct length. Flexible air ducts shall not be limited in length.

M1601.6.2.3 Flexible air connectors. Add to read as shown.

M1601.6.2.3 Flexible air connectors. Flexible air connectors, both metallic and nonmetallic, shall be tested in accordance with UL181. Such connectors shall be listed and labeled as Class 0 or Class 1 flexible air connectors and shall be installed in accordance with Section M1307.

M1601.6.2.4 Connector length. Add to read as shown.

M1601.6.2.4 Connector length. Flexible air connectors shall be limited in length to 14 feet (4267 mm).

M1601.6.2.5 Air temperature.

M1601.6.2.5 Air temperature. The design temperature of air to be conveyed in flexible air ducts and flexible air connectors shall be less than 250°F (121°C).

M1601.6.2.6 Flexible air duct and air connector clearance. Add to read as shown.

M1601.6.2.6 Flexible air duct and air connector clearance. Flexible air ducts and air connectors shall be installed with a minimum clearance to an appliance as specified in the appliance manufacturer's installation instructions.

M1601.6.2.7 Penetrations prohibited. Add to read as shown.

M1601.6.2.7 Penetrations prohibited. Flexible air ducts and flexible air connectors shall not pass through any fire-resistance-rated assembly. Flexible air connectors shall not pass through any wall, floor or ceiling.

M1601.6.3 Fibrous glass duct, rigid. Add to read as shown.

M1601.6.3 Fibrous glass duct, rigid. All joints, seams and duct wall penetrations including, but not limited to, the joints between sections of duct and the joints between duct and other distribution system components shall be mechanically attached and sealed using approved closure systems as specified in Section M1601.3.

M1601.6.3.1 Approved closure systems. Add to read as shown.

M1601.6.3.1 Approved closure systems. The following closure systems are approved for rigid fibrous glass ducts when they conform to the approved closure and mechanical attachment requirements of Section M1601.3:

1. Heat-activated tapes.
2. Pressure-sensitive tapes.
3. Mastics or mastic-plus-embedded fabric systems.

M1601.6.3.2 Mechanical fastening. Add to read as shown.

M1601.6.3.2 Mechanical fastening. Attachments of ductwork to air handling equipment shall be by mechanical fasteners. Where access is limited, two fasteners on one side shall be acceptable when installed in accordance with Section M1601.3.6.

M1601.6.4 Flexible air duct systems, nonmetal. Add to read as shown.

M1601.6.4 Flexible air duct systems, nonmetal. Flexible nonmetal ducts shall be joined to all other air distribution system components by either terminal or intermediate fittings. All duct collar fittings shall have a minimum 5/8 inch (16 mm) integral flange for sealing to other components and a minimum 3-inch (76 mm) shaft for insertion into the inner duct core.

Flexible ducts having porous inner cores shall not be used.

Exception: Ducts having a nonporous liner between the porous inner core and the outer jacket. Fastening and sealing requirements shall be applied to such intermediate liners.

All joints of flexible ducts to fittings and fittings to other air distribution system components shall be mechanically attached and sealed as specified in Sections M1601.6.4.1 through M1601.6.4.6.

M1601.6.4.1 Duct core to duct fitting, mechanical attachment. Add to read as shown.

M1601.6.4.1 Duct core to duct fitting, mechanical attachment. The reinforced core shall be mechanically attached to the duct fitting by a drawband installed directly over the wire-reinforced core and the duct fitting. The duct fitting shall extend a minimum of 2 inches (51 mm) into each section of duct core. When the flexible duct is larger than 12 inches (305 mm) in diameter or the design pressure exceeds 1 inch water gauge, the drawband shall be secured by a raised bead or indented groove on the fitting.

M1601.6.4.2 Duct core to duct fitting, approved closure systems. Add to read as shown.

M1601.6.4.2 Duct core to duct fitting, approved closure systems. The reinforced lining shall be sealed to the duct fitting using one of the following sealing materials which conforms to the approved closure and mechanical attachment requirements of Section M1601.3:

1. Gasketing.
2. Mastic, mastic-plus-embedded fabric or mastic ribbons.
3. Pressure-sensitive tape.
4. Aerosol sealants, provided that their use is consistent with UL 181.

M1601.6.4.3 Duct outer jacket to duct collar fitting. **Add to read as shown.**

M1601.6.4.3 Duct outer jacket to duct collar fitting. The outer jacket of a flexible duct section shall be secured at the juncture of the air distribution system component and intermediate or terminal fitting in such a way as to prevent excess condensation. The outer jacket of a flexible duct section shall not be interposed between the flange of the duct fitting and the flexible duct, rigid fibrous glass duct board, or sheet metal to which it is mated.

M1601.6.4.4 Duct collar fitting to rigid duct, mechanical attachment. Add to read as shown.

M1601.6.4.4 Duct collar fitting to rigid duct, mechanical attachment. The duct collar fitting shall be mechanically attached to the rigid duct board or sheet metal by appropriate mechanical fasteners, either screws, spin-in flanges, or dovetail flanges.

M1601.6.4.5 Duct collar fitting to rigid duct, approved closure systems. Add to read as shown.

M1601.6.4.5 Duct collar fitting to rigid duct, approved closure systems. The duct collar fitting's integral flange shall be sealed to the rigid duct board or sheet metal using one of the

following closure systems/materials which conforms to the approved closure and mechanical attachment standards of Section M1601.3:

1.Gasketing.
2.Mastic or mastic-plus-embedded fabric.
3.Mastic ribbons when used to attach a duct collar to sheet metal.
4.Pressure-sensitive tape.
5.Aerosol sealants, provided that their use is consistent with UL 181.

M1601.6.4.6 Flexible duct installation and support. Add to read as shown.

M1601.6.4.6 Flexible duct installation and support. Flexible ducts shall be configured and supported so as to prevent the use of excess duct material, prevent duct dislocation or damage, and prevent constriction of the duct below the rated duct diameter in accordance with the following requirements:

1. Ducts shall be installed fully extended. The total extended length of duct material shall not exceed 5 percent of the minimum required length for that run.
2. Bends shall maintain a center line radius of not less than one duct diameter.
3. Terminal devices shall be supported independently of the flexible duct.
4. Horizontal duct shall be supported at intervals not greater than 5 feet (1524 mm). Duct sag between supports shall not exceed 1/2 inch (12.7 mm) per foot of length. Supports shall be provided within 1½ feet (457 mm) of intermediate fittings and between intermediate fittings and bends. Ceiling joists and rigid duct or equipment may be considered to be supports.
5. Vertical duct shall be stabilized with support straps at intervals not greater than 6 feet (1829 mm).
6. Hangers, saddles and other supports shall meet the duct manufacturer's recommendations and shall be of sufficient width to prevent restriction of the internal duct diameter. In no case shall the material supporting flexible duct that is in direct contact with it be less than 1½ inches (38 mm) wide.

M1601.7 Terminal and intermediate fittings. Add to read as shown.

M1601.7 Terminal and intermediate fittings. All seams and joints in terminal and intermediate fittings, between fitting subsections and between fittings and other air distribution system components or building components shall be mechanically attached and sealed as specified in Section M1601.7.1 or Section M1601.7.2.

M1601.7.1 Fittings and joints between dissimilar duct types, approved closure systems. Add to read as shown.

M1601.7.1 Fittings and joints between dissimilar duct types, approved closure systems. Approved closure systems shall be as designated by air distribution system component material type in Section M1601.3.

Exception: When the components of a joint are fibrous glass duct board and metal duct, including collar fittings and metal equipment housings, the closure systems approved for fibrous glass duct shall be used.

M1601.7.2 Terminal fittings and air ducts to building envelope components, approved closure systems. Add to read as shown.

M1601.7.2 Terminal fittings and air ducts to building envelope components, approved closure systems. Terminal fittings and air ducts which penetrate the building envelope shall be mechanically attached to the structure and sealed to the envelope component penetrated and shall use one of the following closure systems/materials which conform to the approved closure and mechanical application requirements of Section M1601.3:

1. Mastics or mastic-plus-embedded fabrics.
2. Gaskets used in terminal fitting/grille assemblies which compress the gasket material between the fitting and the wall, ceiling or floor sheathing.

M1601.8 Air-handling units. Add to read as shown.

M1601.8 Air-handling units. All air-handling units shall be mechanically attached to other air distribution system components. Air-handling units located outside the conditioned space shall be sealed using approved closure systems conforming to the approved closure and M1601.5.1 and the mechanical application requirements of Section M1601.3. See Section M1305.1.3.

M1601.8.1 Approved closure systems. Add to read as shown.

M1601.8.1 Approved closure systems. Systems conforming to the product and application standards of Section M1601.3 may be used when sealing air-handling units.

M1601.9 Cavities of the building structure. Add to read as shown.

M1601.9 Cavities of the building structure. Cavities in framed spaces, such as dropped soffits and walls, shall not be used to deliver air from or return air to the conditioning system unless they contain an air duct insert which is insulated in accordance with Table 13-610.1.ABC.2.1 of Chapter 13 of the *Florida Building Code, Building* and constructed and sealed in accordance with the requirements of Section M1601.3 appropriate for the duct materials used.

Exception: Return air plenums.

Cavities designed for air transport such as mechanical closets, chases, air shafts, etc., shall be lined with an air barrier and sealed in accordance with Section M1601.10 and shall be insulated in accordance with Table 13-610.1.ABC.2.1 of Chapter 13 of the *Florida Building Code, Building.*

Building cavities which will be used as return air plenums shall be lined with a continuous air barrier made of durable nonporous materials. All penetrations to the air barrier shall be sealed with a suitable long-life mastic material.

Exception: Surfaces between the plenum and conditioned spaces from which the return/mixed air is drawn.

Building cavities beneath a roof deck that will be used as return air plenums shall have an insulated roof with the insulation having an R-value of at least R-19.

M1601.10 Mechanical closets. Add to read as shown.

M1601.10 Mechanical closets. The interior surfaces of mechanical closets shall be sheathed with a continuous air barrier as specified in Section M1601.10.1 and shall be sealed with approved closure systems as specified in Section M1601.10.2. All joints shall be sealed between air barrier segments and between the air barriers of walls and those of the ceiling, floor and door framing. All penetrations of the air barrier including, but not limited to, those by air ducts, plenums, pipes, service lines, refrigerant lines, electrical wiring, and condensate drain lines shall be sealed to the air barrier and approved closure systems.

Exception: Air passageways into the closet from conditioned space that are specifically designed for return air flow.

Through-wall, through-floor and through-ceiling air passageways into the closet shall be framed and sealed to form an airtight passageway using approved air duct materials and approved closure systems.

Duct penetrations through any part of the ceiling, walls or floor of a mechanical closet shall have sufficient space between surrounding ceiling, walls or floor and any duct or plenum penetration to allow for sealing of the penetration and inspection of the seal.

Clothes washers, clothes dryers, combustion water heaters and atmospheric combustion furnaces shall not be located in mechanical closets used as return air plenums.

M1601.10.1 Approved air barriers. Add to read as shown.

M1601.10.1 Approved air barriers. The following air barriers are approved for use in mechanical closets:

1. One-half inch (12.7 mm) thick or greater gypsum wallboard, taped and sealed.
2. Other panelized materials having inward facing surfaces with an air porosity no greater than that of a duct product meeting Section 22 of UL 181 which are sealed on all interior surfaces to create a continuous air barrier.

M1601.10.2 Approved closure systems. Add to read as shown.

M1601.10.2 Approved closure systems. The following closure systems are approved for use in mechanical closets:

1. Gypsum wallboard joint compound over taped joints between gypsum wallboard panels.
2. Sealants complying with the product and application standards of Sec. M1601.6.3.1 for fibrous glass ductboard;
3. A suitable long-life caulk or mastic compliant with the locally adopted mechanical code for all applications.

M1601.11 Enclosed support platforms. Add to read as shown.

M1601.11 Enclosed support platforms. Enclosed support platforms located between the return air inlet(s) from conditioned space and the inlet of the air handling unit or furnace, shall contain a duct section constructed entirely of rigid metal, rigid fibrous glass duct board, or flexible duct which is constructed and sealed according to the respective requirements of Section M1601.3 and insulated according to the requirements of Section 13-610 of Chapter 13 of the Florida Building Code, Building.

The duct section shall be designed and constructed so that no portion of the building structure, including adjoining walls, floors and ceilings, shall be in contact with the return air stream or function as a component of this duct section.

The duct section shall not be penetrated by a refrigerant line chase, refrigerant line, wiring, pipe or any object other than a component of the air distribution system.

Through-wall, through-floor and through-ceiling penetrations into the duct section shall contain a branch duct which is fabricated of rigid fibrous glass duct board or rigid metal and which extends to and is sealed to both the duct section and the grille side wall surface. The branch duct shall be fabricated and attached to the duct insert in accordance with Section M1601.5 or Section M1601.6.3, respective to the duct type used.

M1601.12 Condensation. Add to read as shown.

M1601.12 Condensation. Provisions shall be made to prevent the formation of condensation on the exterior of any duct.

M1601.13 Location. Add to read as shown.

M1601.13 Location. Ducts shall not be installed in or within 4 inches (102 mm) of the earth, except where such ducts comply with Section M1601.17.

M1601.14 Mechanical protection. Add to read as shown.

M1601.14 Mechanical protection. Ducts installed in locations where they are exposed to mechanical damage by vehicles or from other causes shall be protected by approved barriers.

M1601.15 Weather protection. Add to read as shown.

M1601.15 Weather protection. All ducts including linings, coverings and vibration isolation connectors installed on the exterior of the building shall be adequately protected against the elements.

M1601.16 Registers, grilles and diffusers. Add to read as shown.

M1601.16 Registers, grilles and diffusers. Duct registers, grilles and diffusers shall be installed in accordance with the manufacturer's installation instructions, and shall have a flame spread rating not over 25 without evidence of continued progressive combustion and a smoke-developed rating not over 50 when tested in accordance with ASTM E 84. Balancing dampers or other means of supply air adjustment shall be provided in the branch ducts or at each individual duct register, grille or diffuser.

M1601.17 Underground ducts. Add to read as shown.

M1601.17 Underground ducts. Ducts shall be approved for underground installation. Metallic ducts not having an approved protective coating shall be completely encased in a minimum of 2 inches (51 mm) of concrete.

M1601.17.1 Slope. Add to read as shown.

M1601.17.1 Slope. Ducts shall slope to allow drainage to a point provided with access.

M1601.17.2 Sealing. Add to read as shown.

M1601.17.2 Sealing. Ducts shall be sealed and secured prior to pouring the concrete encasement.

M1601.17.3 Plastic ducts and fittings. Add to read as shown.

M1601.17.3 Plastic ducts and fittings. Plastic ducts shall be constructed of PVC having a minimum pipe stiffness of 8 psi (55 kPa) at 5-percent deflection when tested in accordance with ASTM D 2412. Plastic duct fittings shall be constructed of either PVC or high-density polyethylene. Plastic duct and fittings shall be utilized in underground installations only. The maximum design temperature for systems utilizing plastic duct and fittings shall be 150°F (66°C).

M1602.4 Balanced return air. Add to read as shown.

M1602.4 Balanced return air. Restricted return air occurs in buildings when returns are located in central zones and closed interior doors impede air flow to the return grill or when ceiling spaces are used as return plenums and fire walls restrict air movement from one portion of the return plenum to another. Provisions shall be made in residential buildings to avoid unbalanced air flows and pressure differentials caused by restricted return air. Pressure differentials across closed doors where returns are centrally located shall be limited to 0.01 inch WC (2.5 pascals) or less. Pressure differentials across fire walls in ceiling space plenums shall be limited to 0.01 inch WC (2.5 pascals) by providing air duct pathways or air transfer pathways from the high pressure zone to the low zone.

Exceptions:

1. Transfer ducts may achieve this by increasing the return transfer one and one half times the cross sectional area (square inches) of the supply duct entering the room or space it's serving and the door having at least an unrestricted 1 inch (25 mm) undercut to achieve proper return air balance.
2. Transfer grilles shall use 50 square inches (4.6 mm) (of grille area) to 100 cfm (0.05 m3/s) (of supply air) for sizing through-the-wall transfer grilles and using an unrestricted 1-inch (25 mm) undercutting of doors to achieve proper return air balance
3. Habitable rooms only shall be required to meet these requirements for proper balanced return air excluding bathrooms, closets, storage rooms and laundry rooms, except that all supply air into the master suite shall be included.

Chapter 17, Combustion Air

Section M1701 General

M1701.6 Opening location. Change to read as shown.

M1701.6 Opening location. ~~Reserved.~~ See Section R323.

Chapter 18, Chimneys and Vents. [No change.]

Section M1801 General

Add M1801.9 to read as shown.

M1801.9 Fireblocking. Vent and chimney installations shall be fireblocked in accordance with Section R602.8.

Chapter 19, Special Fuel-Burning Equipment. [No change.]

Chapter 20, Boilers and Water Heaters

Section M2001 Boilers

M2001.4 Flood-resistant installation. Change to read as shown.

M2001.4 Flood-resistant installation. See Section R323.

Section M2005 Water Heaters

M2005.3 Electric water heaters. Change to read as shown.

M2005.3 Electric water heaters. Electric water heaters shall also be installed in accordance with the applicable provisions of Chapter 33.

Section M2006 Pool Heaters

M2006.1 General. Change to read as shown.

M2006.1 General. Pool and spa heaters shall be installed in accordance with the manufacturer's installation instructions. Oil-fired pool heaters shall be tested in accordance with UL 726. Electric pool and spa heaters shall be tested in accordance UL 1261. See Section 13-612.1.ABC.2.3.2 of the *Florida Building Code, Building.*

Chapter 21, Hydronic Piping

Section M2101 Hydronic Piping Systems Installation

M2101.6 Drilling and notching. **Change to read as shown.**

M2101.6 Drilling and notching. Wood-framed structural members shall be drilled, notched or altered in accordance with the provisions of Sections R502.2.5, R602.2.7, R602.2.7.1 and R802.2.4. Holes in cold-formed, steel-framed, load-bearing members shall only be permitted in accordance with Sections R506.2, R603.2 and R804.2. In accordance with the provisions of Sections R505.3.5, R603.3.4 and R804.3.5, cutting and notching of flanges and lips of cold-formed, steel-framed, load-bearing members shall not be permitted.

Chapter 22, Special Piping and Storage Systems

Section M2201 Oil Tanks

M2201.6 Flood-resistant installation. Change to read as shown.

M2201.6 Flood-resistant installation. See Section R323.

Section M2203 Installation

M2203.5 Vent termination. Change to read as shown.

M2203.5 Vent termination. Vent piping shall terminate outside of buildings at a point not less than 2 feet (610 mm), measured vertically or horizontally, from any building opening. Outer ends of vent piping shall terminate in a weather-proof cap or fitting having an unobstructed area at least equal to the cross-sectional area of the vent pipe, and shall be located sufficiently above the ground to avoid being obstructed.

Chapter 23, Solar Systems [No change.]

Part VI – Fuel Gas

Chapter 24, Fuel Gas

Change to read as shown.

The text of this chapter is excerpted from the 2003 edition of the *Florida Building Code, Fuel Gas* and has been modified where necessary to make such text conform to the scope of application of the Florida Residential Code for One- and Two-Family Dwellings. The section numbers appearing in parentheses after each section number represent the location of the corresponding text in the *Florida Building Code, Fuel Gas*.

Section G2403 General Definitions

G2403 Definitions. Change to read as shown.

DESIGN FLOOD ELEVATION. See Section R323.

FLOOD HAZARD AREA. See Section R323.

REGULATOR. A device for controlling and maintaining a uniform gas supply pressure, either pounds to pounds, pounds-to-inches water column or inches-to-inches water column (appliance regulator).

Section G2404 (301) General

G2404.2 (301.1.1) Change to read as shown.

G2404.2 (301.1.1) This code shall apply to the installation of fuel gas piping systems, fuel gas utilization equipment, and related accessories as follows:

1. Coverage of piping systems shall extend from the point of delivery to the connections with gas utilization equipment (see "Point of delivery").
2. Systems with an operating pressure of 125 psig (862 kPa gauge) or less.
   Piping systems for gas-air mixtures within the flammable range with an operating pressure of 10 psig (69 kPa gauge).
   LP-gas piping systems with an operating pressure of 20 psig (140 kPa) or less.
3. Piping systems requirements shall include design, materials, components, fabrication, assembly, installation, testing, inspection, operation and maintenance.
4. Requirements for gas utilization equipment and related accessories shall include installation, combustion and ventilation air and venting.

This code shall not apply to the following:

1. Portable LP-gas equipment of all types that are not connected to a fixed fuel piping system.
2. Installation of farm equipment such as brooders, dehydrators, dryers and irrigation equipment.
3. Raw material (feedstock) applications except for piping to special atmosphere generators.
4. Oxygen-fuel gas cutting and welding systems.
5. Industrial gas applications using gases such as acetylene and acetylenic compounds, hydrogen, ammonia, carbon monoxide, oxygen and nitrogen.
6. Petroleum refineries, pipeline compressor or pumping stations, loading terminals, compounding plants, refinery tank farms and natural gas processing plants.
7. Integrated chemical plants or portions of such plants where flammable or combustible liquids or gases are produced by chemical reactions or used in chemical reactions.
8. LP-gas installations at utility gas plants.
9. Liquefied natural gas (LNG) installations.
10. Fuel gas piping in power and atomic energy plants.
11. Proprietary items of equipment, apparatus, or instruments such as gas generating sets, compressors and calorimeters.
12. LP-gas equipment for vaporization, gas mixing and gas manufacturing.

13. Temporary LP-gas piping for buildings under construction or renovation that is not to become part of the permanent piping system.
14. Installation of LP-gas systems for railroad switch heating.
15. Installation of LP-gas and compressed natural gas (CNG) systems on vehicles.
16. Gas piping, meters, gas pressure regulators, and other appurtenances used by the serving gas supplier in the distribution of gas, other than undiluted LP-gas.
17. Building design and construction, except as specified herein.

G2404.7 (301.11) Flood hazard. Change to read as shown.

G2404.7 (301.11) Flood hazard. See Section R323.

G2404.8 (301.12) Seismic resistance. Change to read as shown.

G2404.8 (301.12) Seismic resistance. Reserved.

G2404.11 (301.7) Fuel types. Add to read as shown.

G2404.11 (301.7) Fuel types. Fuel-fired appliances shall be designed for use with the type of fuel gas to which they will be connected and the altitude at which they are installed. Appliances that comprise parts of the installation shall not be converted for the usage of a different fuel, except where approved and converted in accordance with the manufacturer's instructions or the serving gas supplier. The fuel gas input rate shall not be increased or decreased beyond the limit rating for the altitude at which the appliance is installed.

Section G2408 (305) Installation

G2408.2 (305.3) Water heaters installed in garages. Change to read as shown.

G2408.2 (305.3) Water heaters installed in garages. Water heaters shall be installed in accordance with the manufacturer's instructions which shall be available on the job site at the time of inspection.

Section G2410 Electrical

G2410.1 (309.1) Grounding. Change to read as shown.

G2410.1 (309.1) Grounding. Each above-ground portion of a gas piping system upstream from the equipment shutoff valve shall be electrically continuous and bonded to any grounding electrode as defined by the Chapter 33 of this code.

Section G2412 General

G2412.2 (401.2) Liquefied petroleum gas storage. Change to read as shown.

G2412.2 (401.2) Liquefied petroleum gas storage. The storage system (container, regulators, piping and all components upstream to the point of delivery) for liquefied petroleum gas shall be designed and installed in accordance with the *Florida Fire Prevention Code* and NFPA 58.

G2412.5 (401.5) Identification. Change to read as shown.

G2412.5 (401.5) Identification. For other than black steel pipe, exposed piping shall be identified by a yellow label marked "Gas" in black letters. The marking shall be spaced at intervals not exceeding 5 feet (1524 mm). The marking shall not be required on pipe located in the same room as the equipment served.
Exception: This section shall only apply where other similar piping or tubing in the same general area as the gas lines, containing a different medium, could be confused with the gas lines.

Section G2415 Piping System Installation

G2415.14.3 (404.14.3) Change to read as shown.

G2415.14.3 (404.14.3) An insulated copper tracer wire or other approved conductor shall be installed adjacent to underground nonmetallic gas piping. Access shall be provided to the tracer wire or the tracer wire shall terminate above ground at each end of the nonmetallic gas piping. The tracer wire size shall not be less than 18 AWG and the insulation type shall be suitable for direct burial.

Section G2417 (406) Inspection, Testing and Purging

G2417.3.4 (406.3.4) Valve isolation. Change to read as shown.

G2417.3.4 (406.3.4) Valve isolation. Where the piping system is connected to equipment or components designed for operating pressures of less than the test pressure, such equipment or components shall be isolated from the piping system by disconnecting them and plugging or capping the outlet(s).

G2417.7.4 (406.7.4) Placing equipment in operation. Change to read as shown.

G2417.7.4 (406.7.4) Placing equipment in operation. After the piping has been placed in operation, all equipment shall be placed in operation per its listing and the manufacturer's instructions.

Section G2422 (411) Appliance Connections

G2422.1.4 (411.1.4) Outdoor appliance connectors. Add to read as shown.

G2422.1.4 (411.1.4) Outdoor appliance connectors. Outdoor gas hose connectors are permitted to connect portable outdoor gas-fired equipment. An equipment shutoff valve, a listed quick-disconnect device, or a listed gas convenience outlet shall be installed where the connector is

attached to the supply piping and in such a manner as to prevent the accumulation of foreign matter. Lengths shall not exceed 12 feet (3658 mm) and the connection shall only be made in the outdoor area where the equipment is to be used.

Part VII - Plumbing

Chapter 25, Plumbing Administration

Section P2502 Existing Plumbing Systems

P2502.1 Existing building sewers and drains. Change to read as shown.

P2502.1 Existing building sewers and drains. See Florida Existing Building Code.

Section P2503 Inspection and Tests

P2503.4 Gravity sewer test. Change to read as shown.

P2503.4 Gravity sewer test. Gravity sewer tests shall consist of plugging the end of the building sewer at the point of connection with the public sewer, completely filling the building sewer with water from the lowest to the highest point thereof, and maintaining such pressure for 15 minutes. The building sewer shall be water tight at all points.

P2503.5.1 Drainage and vent water test. Change to read as shown.

P2503.5.1 Drainage and vent water test. A water test shall be applied to the drainage system either in its entirety or in sections. If applied to the entire system, all openings in the piping shall be tightly closed, except the highest opening, and the system shall be filled with water to point of overflow. If the system is tested in sections, each opening shall be tightly plugged except the highest openings of the section under test, and each section shall be filled with water, but no section shall be tested with less than a 5-foot (1524 mm) head of water. In testing successive sections, at least the upper 5 feet (1524 mm) of the next preceding section shall be tested so that no joint or pipe in the building, except the uppermost 5 feet (1524 mm) of the system, shall have been submitted to a test of less than a 5-foot (1524 mm) head of water. The water shall be kept in the system, or in the portion under test, for at least 15 minutes before inspection starts. The system shall then be tight at all points.

P2503.7.2 Testing. Change to read as shown.

P2503.7.2 Testing. Reduced pressure principle backflow preventers, double check valve assemblies, double-detector check valve assemblies and pressure vacuum breaker assemblies shall be tested at the time of installation, immediately after repairs or relocation.

Chapter 26, General Plumbing Requirements

Section P2601 General

P2601.3 Floodplain management construction standards. Change to read as shown.

P2601.3 Floodplain management construction standards. This code specifically defers to the authority granted to local government by Title 44 CFR, sections 59 and 60. This code is not intended to supplant or supercede local ordinances adopted pursuant to that authority, nor are local floodplain management ordinances to be deemed amendments to the code.

Section P2603 Structural and Piping Protection

P2603.2 Drilling and notching. **Change to read as shown.**

P2603.2 Drilling and notching. Wood-framed structural members shall not be drilled, notched or altered in any manner except as provided in Sections R502.2.5, R602.1.3.1, R602.2.7, R802.2.6 and R802.2.6.1. Holes in cold-formed steel-framed load-bearing members shall only be permitted in accordance with Sections R506.2, R603.2 and R804.2. In accordance with the provisions of Sections R603.3.4 and R804.3.5 cutting and notching of flanges and lips of cold-formed steel-framed load-bearing members shall not be permitted.

P2603.6 Freezing. Change to read as shown.

P2603.6 Freezing. Where the design temperature is less than 32°F (0°C), a water, soil or waste pipe shall not be installed outside of a building, in attics or crawl spaces, or be concealed in outside walls in any location subjected to freezing temperatures, unless adequate provision is made to protect them from freezing by insulation or heat or both. A water service pipe shall be installed not less than 12 inches (305 mm) deep or less than 6 inches (152 mm) below the frost line.

Chapter 27, Plumbing Fixtures

Section P2709 Shower Receptors

P2709.2 Lining required. Change to read as shown.

P2709.2 Lining required. The adjoining walls and floor framing, enclosing on-site built-up shower receptors shall be lined with sheet lead, copper or a plastic liner material that complies with ASTM D 4068 or ASTM D 4551. The lining material shall extend not less than 3 inches (76 mm) beyond or around the rough jambs and not less than 3 inches (76 mm) above finished thresholds. Hot mopping shall be permitted in accordance with Section P2709.2.3.

Exception:

1. Floor surfaces under showerheads provided for rinsing laid directly on the ground.

2. Shower compartments where the finished shower drain is depressed a minimum of 2 inches (51 mm) below the surrounding finished floor on the first floor level and the shower recess is poured integrally with the adjoining floor.

Chapter 28, Water Heaters

Section P2801 General

P2801.5 Required pan. Change to read as shown.

P2801.5 Required pan. Where water heaters or hot water storage tanks are installed above the ground floor space, or in attics or ceiling areas, or within the habitable space, the tank or water heater shall be installed in a galvanized steel or other metal pan of equal corrosion resistance having a minimum thickness of 24 gage, 0.0276 inch (0.70 mm). Electric water heaters shall be installed in a metal pan as herein required or in a high-impact plastic pan of at least 0.0625 inch (1.59 mm) thickness.

P2801.6 Water heaters installed in garages. Change to read as shown.

P2801.6 Water heaters installed in garages. Water heaters shall be installed in accordance with the manufacturer's installation instructions which shall be available on the job site at the time of inspection.

Section P2803 Relief Valves

P2803.6.1 Requirements for discharge pipe. Change to read as shown.

P2803.6.1 Relief outlet waste. The outlet of a pressure, temperature or other relief valve shall not be directly connected to the drainage system.

P2803.6.1.1 Discharge. The relief valve shall discharge full size to a safe place of disposal such as the floor, water heater pan, outside the building or an indirect waste receptor. The discharge pipe shall not have any trapped sections and shall have a visible air gap or air gap fitting located in the same room as the water heater. The discharge shall be installed in a manner that does not cause personal injury to occupants in the immediate area or structural damage to the building.

Chapter 29, Water Supply and Distribution

Section P2903 Water-supply System

P2903.1 Water supply system design criteria. Change to read as shown.

P2903.1 Water supply system design criteria. The water service and water distribution systems shall be designed and pipe sizes shall be selected such that under conditions of peak demand, the

capacities at the point of outlet discharge shall not be less than shown in Table P2903.1. Table P2903.2b shall be permitted to be used to size the water service or water distribution system.

Table P2903.2b Minimum Water Service Size. Add to read as shown.

TABLE P2903.2b MINIMUM WATER SERVICE SIZE

NO. OF FIXTURE UNITS FLUSH TANK WCb	DIAMETER OF WATER PIPEc	RECOMMENDED METER SIZE (inches) d	APPROX. PRESSURE LOSS METER + 100' PIPE (psi)e	NO. OF FIXTURE UNITS FLUSH VALVE WCb
18	¾	5/8	30	—
19-55 —	1 1	1 1	30 30	— 9
56-58 —	1¼ 1¼	1 1	30 30	— 10-20
86-225 —	1½ 1½	1½ 1½	30 30	— 21-77
226-350 —	2 2	1½ 1½	30 30	— 78-175
351-550 —	2 2	2 2	30 30	— 176-315
551-640 —	2½ 2½	2 2	30 30	— 316-392
641-1340 —	3 3	3 3	22 22	— 393-940

a. Table is applicable for both copper and plastic water piping.
b. See Table 709.1 for fixture unit values.
c. Minimum water service shall be ¾" to control valve.
d. All secondary submeters and backflow assemblies shall be at least the same size as the line in which they are installed.
e. Table based on minimum water main pressure of 50 psi.

Chapter 30, Sanitary Drainage

P3001.2 Protection from freezing. Change to read as shown.

P3001.2 Protection from freezing. Where the design temperature is less than 32°F (0°C), a water, soil or waste pipe shall not be installed outside of a building, in attics or crawl spaces, or be concealed in outside walls in any location subjected to freezing temperatures, unless adequate provision is made to protect them from freezing by insulation or heat or both. Water service pipe shall be installed not less than 12 inches (305 mm) deep or less than 6 inches (152 mm) below the frost line.

P3001.3 Floodplain management construction standards. Change to read as shown.

P3001.3 Floodplain management construction standards. This code specifically defers to the authority granted to local government by Title 44 CFR, sections 59 and 60. This code is not intended to supplant or supercede local ordinances adopted pursuant to that authority, nor are local floodplain management ordinances to be deemed amendments to the code.

Section P3003 Joints and Connections

P3003.19 Floor and wall drainage connections. Change to read as shown.

P3003.19 Floor and wall drainage connections. Connections between the drain and the floor outlet plumbing fixtures shall be made with a floor flange. The flange shall be attached to the drain and anchored to the structure. Connections between the drain and wall-hung water closets shall be made with an approved extension nipple or horn adaptor. The water closet shall be bolted to the hanger with corrosion resistant bolts or screws. Joints shall be sealed with an approved elastometric gasket or setting compound conforming to FS TT-P-1536a.

P3003.19.1 Floor flanges. Add to read as shown.

> **P3003.19.1 Floor flanges.** Floor flanges for water closets or similar fixtures shall not be less than 1/8 inch (3.2 mm) thick for brass, ¼ inch (6.4 mm) thick for plastic and ¼ thick (6.4 mm) thick and not less than a 2-inch (51 mm) calking depth for cast-iron or galvanized malleable iron. Floor flanges of hard lead shall weigh not less than 1 pound 9 ounces (0.7 kg) and shall be composed of lead alloy with not less than 7.75 percent antimony by weight. Closet screws and bolts shall be of brass. Flanges shall be secured to the building structure with corrosion-resistant screws or bolts.

P3003.19.2 Securing floor and outlet fixtures. Add to read as shown.

> **P3003.19.2 Securing floor and outlet fixtures.** Floor outlet fixtures shall be secured to the floor or floor flanges by screws or bolts of corrosion-resistant material.

Chapter 31, Vents

Section P3101 Vent Systems

P3101.5 Floodplain management construction standards. Change to read as shown.

P3101.5 Floodplain management construction standards. This code specifically defers to the authority granted to local government by Title 44 CFR, Sections 59 and 60. This code is not intended to supplant or supercede local ordinances adopted pursuant to that authority, nor are local floodplain management ordinances to be deemed amendments to the code.

Section P3103 Vent Terminals

P3103.1 Roof extension. Change to read as shown.

P3103.1 Roof extension. All open vent pipes which extend through a roof shall be terminated at least 6 inches (152 mm) above the roof except that where a roof is to be used for any purpose other than weather protection, the vent extensions shall be run at least 7 feet (2134 mm) above the roof.

P3103.2 Freezing. Change to read as shown.

P3103.2 Freezing. Where the design temperature is less than 32° F (0°C), a water, soil or waste pipe shall not be installed outside of a building, in attics or crawl spaces, or be concealed in outside walls in any location subjected to freezing temperatures, unless adequate provision is made to protect them from freezing by insulation or heat or both. Water service pipe shall be installed not less than 12 inches (305 mm) deep or less than 6 inches (152 mm) below the frost line.

Chapter 32, Traps [No change.]

Part VIII Electrical

Chapter 33, General Requirements

Section E3301 General

E3301.1 Applicability. Change to read as shown.

E3301.1 Applicability. The provisions of NFPA 70A, National Electrical Code Requirements for One- and Two-Family Dwellings, except article 80, shall establish the general scope of the electrical system and equipment requirements of this code. NFPA 70A, National Electrical Code Requirements for One- and Two-Family Dwellings covers those wiring methods and materials most commonly encountered in the construction of one- and two-family dwellings and structures regulated by this code. Other wiring methods, materials and subject matter covered in the NFPA 70 are also allowed by this code.

Section E3302 Building Structure Protection

E3302 Bonding Metal Framing Members. Change to read as shown.

E3302 Bonding Metal Framing Members. Metal framing members. Metal framing members shall be bonded to the equipment grounding conductor for the circuit that may energize the framing and be sized in accordance with the National Electric Code Table 250.122. For the purpose of this section, a grounded metal outlet box attached to the framing shall be permitted.

Section E3303Cross references. Change to read as shown.

Section E3303 Cross references.

E33031. Add to read as shown.

E3303.1 See Table E3303, Cross References Defining Electrical Requirements of the Florida Building code.

Table E3303 Cross References Defining Electrical Requirements of the Florida Building Code. Add to read as shown. [See the 2004 FBC.]

Table E3303 Cross references Defining Electrical Requirements of the Florida Building Code.

Section E3304 General Equipment Requirements. Change to read as shown.

Section E3304 General Equipment Requirements. Reserved.

Section E3305 Equipment Location and Clearances. Change to read as shown.

Section E3305 Equipment Location and Clearances. Reserved.

Section E3306 Electrical Conductors and Connections. Change to read as shown.

Section E3306 Electrical Conductors and Connections. Reserved.

Section E3307 Conductor and Terminal Identification. Change to read as shown.

Section E3307 Conductor and Terminal Identification. Reserved.

Chapter 34 Electrical Definitions. **Change to read as shown.**

Chapter 34 Electrical Definitions. Reserved

Chapter 35 Services. **Change to read as shown.**

Chapter 35 Services. Reserved

Chapter 36 Branch Circuit and Feeder Requirements. **Change to read as shown.**

Chapter 36 Branch Circuit and Feeder Requirements. Reserved

Chapter 37 Wiring Methods. **Change to read as shown**

Chapter 37 Wiring Methods. Reserved

Chapter 38 Power And Lighting Distribution. **Change to read as shown**

Chapter 38 Power And Lighting Distribution. Reserved

Chapter 39 Devices and Luminaires. **Change to read as shown**

Chapter 39 Devices and Luminaires. Reserved

Chapter 40 Appliance Installation. **Change to read as shown**

Chapter 40 Appliance Installation. Reserved

Chapter 41 Swimming Pools. **Change to read as shown**

Chapter 41 Swimming Pools. Reserved.

Section E4101 General

Section R4101.1 Definitions. Change to read as shown.

Section R4101.1 Definitions - General

Section R4101.2 Definitions. Add to read as shown.

Section R4101.2 Definitions

Section R4101.3 Mechanical requirements. Add to read as shown.

Section R4101.3 Mechanical requirements

Section R4101.4 Approvals. Add to read as shown.

Section R4101.4 Approvals

Section R4101.5 Alternate materials and methods of construction. Add to read as shown.

Section R4101.5 Alternate materials and methods of construction

Section R4101.6 Engineering design. Add to read as shown.

Section R4101.6 Engineering design

Section R4101.7 Pumps. Add to read as shown.

Section R4101.7 Pumps

Section R4101.8 Valves. Add to read as shown.

Section R4101.8 Valves

Section R4101.9 Water supply. Add to read as shown.

Section R4101.9 Water supply

Section R4101.10 Waste water disposal. Add to read as shown.

Section R4101.10 Waste water disposal

Section R4101.11 Separation tank. Add to read as shown.

Section R4101.11 Separation tank

Section R4101.12 Tests. Add to read as shown.

Section R4101.12 Tests

Section R4101.13 Drain piping. Add to read as shown.

Section R4101.13 Drain piping

Section R4101.14 Water heating equipment. Add to read as shown.

Section R4101.14 Water heating equipment

Section R4101.15 Gas piping. Add to read as shown.

Section R4101.15 Gas piping

Section R4101.16 Electrical. Add to read as shown.

Section R4101.16 Electrical

Section R4101.17 Residential swimming barrier requirement. Add to read as shown.

Section R4101.17 Residential swimming barrier requirement

Section R4101.18 Ladders and steps. Add to read as shown.

Section R4101.18 Ladders and steps

Section R4101.19 Final inspection. Add to read as shown.

Section R4101.19 Final inspection

Section R4101.20 Filters. Add to read as shown.

Section R4101.20 Filters

Section R4101.21 Pool fittings. Add to read as shown.

Section R4101.21 Pool fittings

Section R4101.22 Equipment foundations and enclosures. Add to read as shown.

Section R4101.22 Equipment foundations and enclosures

Section R4101.23 Accessibility and clearances. Add to read as shown.

Section R4101.23 Accessibility and clearances

Section E4102 Wiring Methods for Pools, Spas, Hot Tubs and Hydromassage Bathtubs. Change to read as shown.

Section E4102 Wiring Methods for Pools, Spas, Hot Tubs and Hydromassage Bathtubs. Reserved.

Section E4103 Equipment Location and Clearances. Change to read as shown.

Section E4103 Equipment Location and Clearances. Reserved.

Section E4104 Bonding Change to read as shown.

Section E4104 Bonding Reserved.

Section E4105 Grounding Change to read as shown.

Section E4105 Grounding Reserved.

Section E4106 Equipment Installation Change to read as shown.

Section E4106 Equipment Installation Reserved.

Section E4107 Storable Swimming Pools Change to read as shown.

Section E4107 Storable Swimming Pools Reserved.

Section E4108 Spas and Hot Tubs Change to read as shown.

Section E4108 Spas and Hot Tubs Reserved.

Section E4109 Hydromassage Bathtubs Change to read as shown.

Section E4109 Hydromassage Bathtubs Reserved.

Chapter 42 Class 2 Remote-Control, signaling and Power-Limited Circuits.

Chapter 42 Class 2 Remote-Control, signaling and Power-Limited Circuits. Change to read as shown.

Chapter 42 Class 2 Remote-Control, signaling and Power-Limited Circuits. Reserved

Part IX – Referenced Standards

Chapter 43 Referenced Standards

AA Aluminum Association
900 19th Street N.W., Suite 300
Washington, DC 20006

Standard reference number	Title	Referenced in code section number
ADM 1—00	Aluminum Design Manual, Specifications for Aluminum Structures, Allowable Stress Design, Building Load and Resistance Factor Design, Commentary on Allowable Stress Design, Commentary on Building Load and Resistance Factor, Material Properties, Design Aids and Illustrative Examples of Design	R4406.1.2

AAF Aluminum Association of Florida, Inc
1650 South Dixie Highway, Suite 500
Boca Raton, Florida 33432

Standard reference number	Title	Referenced in code section number
AAF 03	AAF Guide to Aluminum Construction in High Wind Areas	R301.2.1.1

AAMA American Architectural Manufacturers Association
1827 Walden Office Square, Suite 550
Schaumburg, IL 60173

Standard	Referenced in code

reference number	Title	section number
101/I.S2—97	Voluntary Specifications for Aluminum, Vinyl (PVC) and Wood Windows and Glass Doors	R613.3.3.1, R613.3.3.2, R4410.2.3.2.1
101/I.S2/NAFS—02	Voluntary Performance Specification for Windows, Skylights and Glass Doors	R308.6.9, R613.3.1, 613.3.2, R4410.2.3.2.1, R4412.1.2
AAMA/WDMA/CSA 101/I.S. 2/A440-05	Specifications for Windows, Doors and Unit Skylights	R613.3.1, R613.3.2, R4410.2.3.2.1
203-98	Procedural Guide for the Window Inspection and Notification System	R4410.2.3.2.6
450-06	Voluntary Performance Rating Method for Mulled Fenestration Assemblies	R613.7.1, R613.7.1.2, R613.7.1.3
501—94	Methods of Test for Exterior Walls	R4410.2.3.2.1
506-06	Voluntary Specifications for Hurricane Impact and Cycle Testing of Fenestration Products	R301.2.1.2
1302-76	Voluntary Specifications for Forced-entry Resistant Aluminum Prime Windows	R4410.2.3.2.1
1402-86	Standard Specifications for Aluminum Siding, Soffit and Fascia	R703.12.3
1600/I.S. 7-00	Voluntary Specifications for Skylights	R4412.1.2
AAMA/NPEA/NSA 2100-02	Voluntary Specifications for Sunrooms	R301.2.1.1.2

ACI American Concrete Institute
38800 Country Club Drive
Farmington Hills, MI 48331

Standard reference number	Title	Referenced in code section number
117	Standard Tolerances for Concrete Construction and Materials	R4405.2.2
301	Specifications for Structural Concrete for Buildings	R4405.2.2
315	Manual of Standard Practice for Detailing Reinforced Concrete Structures	R4405.2.2
347	Recommended Practice for Concrete Formwork	R4405.2.2, R4405.7.1.1
506	Recommended Practice for Shotcreting	R4405.2.2
506.2	Building Code Requirements for Masonry Structures	R4405.2.2, R4405.11.1.2, R4405.11.8.1
530/530.1-05	Building Code Requirements for Masonry Structures and Specifications for Masonry Structures & Commentaries	R404.1, R606.1, R606.1.1, R4403.7.8, R4407.5.1

AFPA American Forest and Paper Association (American Wood Council Division)
111 19th Street, NW, #800
Washington, DC 20036

Standard reference number	Title	Referenced in code section number
NDS—05 2001 Supplement	National Design Specification (NDS) for Wood Construction with	R404.2.2, R502.2, Table R503.1, R602.2, R802.2, R4404.7.1.8.1, R4409.1.4.7, R4409.2.4.1, R4409.6.17.2.1.3, R4409.6.17.2.1.3, R4409.6.17.2.1.5
AFPA—01	Design Values for Wood Construction	R4409.1.4.7, R4409.6.17.2.2.1
AFPA—87	All-Weather Wood Foundation System, Design, Fabrication, Installation Manual	R4409.1.4.7
AFPA—92	Wood Structural Design Data	R4409.1.4.7
AFPA—93	Working stresses for Joists and Rafters	R4409.1.4.7
AFPA—93	Span Tables for Joists and Rafters	R502.2.2, R802.2.2, R802.2.3, R4409.1.4.7, R4409.4.1.1
T.R. No. 7—87	Basic Requirements for Permanent Wood Foundation System	R401.1, R4409.1.4.7
WCD 1—01	Wood Construction Data No. 1, Details for Conventional Wood Frame Construction	R4409.1.4.7
WCD 4—03	Wood Construction Data number 4, Plank and Beam Framing for Residential Building	4409.1.4.7
WCD 5—04	Wood Construction Data No. 5, Heavy Timber Construction Details	R4409.1.4.7
WCD 6—01	Wood Construction Data No.6, Design of Wood Frame structures for Permanence	R4409.1.4.7, R4409.13.2.11
WFCM—01	Wood Frame Construction Manual for One- and Two-family Dwellings	R301.2.1.1, 404.1.4,

AHA **American Hardboard Association**
1210 West Northwest Highway
Palatine, IL 60067

Standard reference number	Title	Referenced in code section number
A135.4—04	Basic Hardboard	Table R602.2(1), R4409.1.4.1
A135.5—04	Prefinished Hardboard Paneling	R702.5, R4409.1.4.1
A135.6—98	Hardboard Siding	Table R703.4, R4409.1.4.1
~~A194.1—85~~	~~Cellulosic Fiber Board~~	~~Table R602.2(1), R4409.1.4.1, R4409.2.1.4~~
IB Spec. No. 1	Recommended Product and Application Specification-Structural Insulating Roof Deck	R4409.1.4.1
IB Spec. No. 2	Recommended Product and Application Specification-½ inch Fiberboard Nail-Base Sheathing	R4409.1.4.1
IB Spec. No. 3	Recommended Product and Application Specification-½ inch Intermediate Fiberboard Sheathing	R4409.1.4.1

AISC **American Institute of Steel Construction**
One East Wacker Drive Suite 3100
Chicago, IL 60601-2001

Standard reference number	Title	Referenced in code section number
AISC	Detailing for Steel Construction	R4408.1.3
AISC	Engineering for Steel Construction	R4408.1.3
AISC	Iron and Steel Beams 1873 to 1952	R4408.1.3
AISC	Plastic Design in Steel	R4408.1.3
AISC	Plastic Design of Braced Multistory Steel Frames	R4408.1.3
AISC	Serviceability Design Considerations for Low Rise Buildings	R4408.1.3
AISC	Simple Shear Connection, ASD	R4408.1.3
AISC	Simple Shear Connection, LRFD	R4408.1.3
AISC	Torsional Analysis of Steel Members	R4408.1.3
AISC	Manual of Steel Construction, Allowable Stress Design	R4408.1.3
AISC	Manual of Steel Construction, Allowable Stress Design LRFD	R4408.1.3

AISI **American Iron and Steel Institute**
1140 Connecticut Ave, Suite 705
Washington, DC 20036

Standard reference number	Title	Referenced in code section number
AISI	Design Manual for Structural Tubing	R4408.1.3
AISI	Designing Fire Protection for Steel Trusses	R4408.1.3
AISI	Designing Fire Protection for Steel Columns	R4408.1.3
AISI	Fire Resistant Steel Frame Construction	R4408.1.3
AISI	Fire Safe Structural Steel A Design	R4408.1.3
AISI	Specifications for Design of Light Gage Cold Formed Stainless Structural Members	R4408.1.3
AISI	Specification for the Criteria for Structural Application of Steel Cables for Buildings	R4408.1.3
AISI/COFS/PM-2001	Standard for Cold formed Steel Framing-- Prescriptive Method for One- and Two- family dwellings	R301.1, R301.2.1.1, R301.2.2.4.1, R301.2.2.4.5, R404.1.4, R804.1.3
AISI/COFS/PM Supplement 2004		R404.1.4.2
SGO4-5	Standard for Cold formed Steel Framing Truss Design	R804.1.3
SGO4-6	Standard for Cold formed Steel Framing Header Design	R603.6
SGO3-3	Cold Formed Steel Design Manual	R4408.1.3
SG 971—96	Specification for the Design of Cold Form Steel Structures	R4408.1.3

AITC **American Institute of Timber Construction**
7012 S. Revere Parkway, Suite 140
Englewood, CO 80112

Standard reference number	Title	Referenced in code section number
AITC 104	Typical Construction Details	R4408.1.4.2
AITC 106	Code of Suggested Practices	R4409.1.4.2
AITC 108	Standard for Heavy Timber Construction	R4409.1.4.2
AITC 109	Standard for Preservative Treatment for Structural Glued Laminated Timber	R4409.1.4.2
AITC 110	Standard Appearance Grades for Structural Glued Laminate Timber	R4409.1.4.2
AITC 112	Standard for Torque and Groove Heavy Timber Roof Decking	R4409.1.4.2
AITC 113	Standard for Dimensions of Glued Laminated Structural Members	R4409.1.4.2
AITC 117	Standard Specification for Structural Glued Laminated Timber of Softwood Species	R4409.1.4.2
AITC 119	Standard Specifications for Hardwood Glued Laminated Timber	R4409.1.4.2
AITC A 190.1—02	Structural Glued Laminated Timber	R502.1.1.5, R602.1.1.2, R802.1.5, R4409.1.4.2,R4409.2.11
TR No. 7	Calculation of Fire Resistance of Glued Laminated Timber	R4409.1.4.2

ANSI **American National Standards Institute**
25 West 43rd Street, Fourth Floor
New York, NY 10036

Standard reference number	Title	Referenced in code section number
A41.1	Building Code Requirements for Masonry	R4407.2.1.1, R4407.4.2.8
A41.2	Building Code Requirements for Reinforced Masonry	R4407.2.1.1
A42.1	Standard Specification for Gypsum Plastering	R4411.2.1.1
A42.4	Standard Specification for Interior Lathing and Furring	R4411.1
A97.1	Specification for the Application and Finishing of Gypsum Wallboard	R4411.4.2
Z21.83—98	Fuel Cell Power Plants	M1903.1
Z97.1—84(R1994)	Safety Glazing Materials Used in Buildings—Safety Performance Specifications and Methods of Test (Reaffirmed 1994)	R308.3, R4403.7.3.6.3, R4410.2.1.4, R4410.2.1.6

APA **APA The Engineered Wood Association**
7011 South 19th
Tacoma, WA 98466

Standard reference number	Title	Referenced in code section number
V910	Plywood Folded Plate, Laboratory Report 21	R4409.1.4.3
L350	Design/Construction Guide Diaphragms	R4409.1.4.3
PRP108	Performance Standards and Policies for Structural Use Panels	R4409.1.4.3, R4409.2.1.2
B840	303 Siding Manufacturing Specifications	R4409.1.4.3
E30—03	Engineered Wood Construction Guide	R803.2.3, R4409.1.4.3
H815	Plywood Design Specification Design and Fabrication of All Plywood Beams	R4409.1.4.3
S811	Plywood Design Specification Design and Fabrication of Plywood Curved Panels	R4409.1.4.3
S812	Plywood Design Specification Design and Fabrication of Plywood Lumber Beams	R4409.1.4.3
U813	Plywood Design Specification Design and Fabrication of Plywood Stressed Skin Panels	R4409.1.4.3
U814	Plywood Design Specification Design and Fabrication of Plywood Sandwich Panels	R4409.1.4.3
Y510J	Plywood Design Specification	R4409.1.4.3

ASCE **American Society of Civil Engineers**
1801 Alexander Bell Drive
Reston, VA 20191-4400

Standard	Referenced in code

reference number	Title	section number
3—91	Specifications for the Design and Construction of Composite Slabs and Commentary on Specifications for the Design and Construction of Composite Slabs	R4405.2.3, R4408.1.3
5—05	Building Code Requirements for Masonry Structures	R404.1, R606.1, R606.1.1, R606.2.2, R606.11.1, R606.11.2.2.1, R606.11.2.2.2, R606.11.3.1, R4403.7.8
7—05	Minimum Design Loads for Buildings and Other Structures	Figure 301.2(4), R301.2.1.1, R301.2.1.1.2, R301.2.1.4, Table R611.3(1), Table R611.7.4, R4402.3.4, R4403.1.3, R4403.4.1, R4403.4.2, R4403.7.3.8, R4403.7.8, R4403.8, R4403.9, R4403.10, R4403.12, Table R4403.15.4, R4403.16.1
8—02	Specifications for the Design of Cold Formed Stainless Steel Structural members	R4408.1.3
11—99	Guidelines for Structural Condition Assessment of Existing Buildings	R4405.2.3, R4406.1.2, R4408.1.3
32—01	Design and Construction of Frost Protected Shallow Foundations	R403.1.4.1, R4406.1.2

ASHRAE **American Society of Heating, Refrigerating and Air Conditioning Engineers, Inc.**
1791 Tullie Circle, NE
Atlanta, GA 30329

Standard reference number	Title	Referenced in code section number
34—2004	Designation and Safety Classification of Refrigerants	M1411.1
ASHRAE—2004	ASHRAE Fundamentals Handbook—2001	P3001.2, P3002.3, P3101.4, P3103.2

ASME **American Society of Mechanical Engineers**
Three Park Avenue
New York, NY 10016-5990

Standard reference number	Title	Referenced in code section number
B16.3—1999 8	Malleable Iron Threaded Fittings Classes 150 and 300	Table P2904.6, Table R4413.2.7
B16.4—1998	Gray iron Threaded Fittings Classes 125 and 250	Table P2904.6, Table R4413.2.7
B16.9—2003	Factory made Wrought Steel Buttwelding Fittings	Table P2904.6, Table R4413.2.7
B16.11—2001	Forged Fittings, Socket welding and Threaded	Table P2904.6, Table R4413.2.7
B16.12—1998	Cast Iron Threaded Drainage Fittings	Table P2904.6, Table R4413.2.7
B16.15—1985(R1994)	Cast Bronze Threaded Fittings	Table P2904.6, Table R4413.2.7
B16.18—2001	Cast Copper Alloy Solder Joint Pressure Fittings	Table P2904.6, Table R4413.2.7
B16.22—2001	Wrought Copper and Copper Alloy Solder Joint Pressure Fittings	Table P2904.6, Table R4413.2.7
B16.23—2002	Cast Copper Alloy Solder Joint Drainage Fittings (DWV)	Table P2904.6, Table R4413.2.7
B16.26—1988	Cast Copper Alloy Fittings for Flared Copper Tubes	Table P2904.6, Table R4413.2.7
B16.28—1994	Wrought Steel Buttwelding Short Radius Elbows and Returns	Table P2904.6, Table R4413.2.7
B16.29—2001	Wrought Copper and Wrought Copper Alloy Solder Joint Drainage Fittings DWV	Table P2904.6, Table R4413.2.7
B16.32	Cast Copper Alloy Solder Joint Fittings for Solvent Drainage Systems	Table R4413.2.7

ASTM **ASTM International**
100 Barr Harbor Drive
West Conshohocken, PA 19428

Standard reference number	Title	Referenced in code section number
A 6/A6M—04a	Specification for General Requirements for Rolled Structural Steel Bars, Plates, Shapes and Sheet Piling	R4408.1.3
A 29/A29M	Specification for Steel bars, Carbon and Alloy, Hot Wrought, General Requirements	R4404.11.1
A 53/A53M—02	Specification for Pipe, Steel, Black and Hot dipped, Zinc coated Welded and Seamless	Table M2101.1, Table 2904.4.1 Table P2904.5, Table P3002.1, G2414.4.2, Table R4413.2.2
A 74—04	Specification for Cast Iron Soil Pipe and Fittings	Table P3002.1,Table P3002.2, Table R4413.2.2, Table R4413.2.3, Table R4413.2.4, Table R4413.2.5

A 82—02	Specification for Steel Wire, Plain for Concrete Reinforcement	R606.9.10
A 306	Carbon Steel Bars Subject to Mechanical Property Requirements	R4404.11.1
A 307—03	Specification for Carbon Steel Bolts and Studs 60,000 PSI Tensile Strength	Table R611.9
A 325—94	Specification for High Strength Bolts for Structural Steel Joints	R4408.1.3
A 361	Specification for Steel Sheet Zinc Coated (Withdrawn)	R4409.6.17.1.1
A 416 99	Specification for Steel Strand, Uncoated Seven Wire for Prestressed Concrete	R4405.4.4.2
A 421/A421M—98	Specification for Uncoated Stress Relieved Steel Wire for Prestressed Concrete	R4405.4.4.2
A 446	Specification for Steel Sheet, Zinc Coated (Galvanized) by the Hot Dip Process, Structural (Physical) Quality	R4405.12.4.4
A463/A463M-02a		
A 490—93	Specification for Heat Treated Steel Structural Bolts	R4408.1.3
A 525 87	Specification for Steel Sheet Zinc coated (Galvanized) Steel Wire	Table R606.9.10.1, R4405.12.4.4, R4408.1.3, R4411.4.2, R4411.4.5.1, R4411.4.5.4, M1601.1.1
A 611	Standard Specification for Structural Steel (SS), Sheet, Carbon, Coil Rolled	R4404.10.1.5.3, R4405.12.4.4
A 615/A 615M-04a	Specification for Deformed and Plain Billet Steel Bars for Concrete Reinforcement	R4405.2.2, R4405.2.4, R4405.4.4.6
A 617	Standard Specification for Axle Steel Reformed and Plain Bars for Concrete Reinforcement	R4405.4.4.6
A 653/A 653M-04	Specification for Steel Sheet, Zinc Coated (Galvanized) or Zinc Iron Alloy Coated (Galvanized) by the Hot Dip Process	R505.2.1, R505.2.3, R603.2.1, R603.2.3, R804.2.1, R804.2.3, Table 905.4.4, Table R905.10.3, R4409.6.17.2.2.7
A 706/A 706M-04a	Specification for Low Alloy Steel Deformed and Plain Bars for Concrete Reinforcement	R404.4.6.1, R611.6.2, R4405.4.4
A 722/A 722M-98	Specification for Uncoated High Strength Steel Bar for Prestressing Concrete	R4405.4.4.2
A 767/A 767M-00b	Specification for Zinc Coated (Galvanized) Steel Bars for Concrete Reinforcement	R4405.4.4.6, R4405.8.5.5
A 775/A 775M-01	Specification for Epoxy Coated Steel Reinforcing Bars	R4405.4.4.6
A 888-04	Specification for Hubless Cast Iron Soil Pipe and Fittings for Sanitary And Storm Drain, Waste, and Vent Piping Application	Table P3002.1, Table P3002.2, Table R4413.2.2, Table R4413.2.3, Table R4413.2.4, Table R4413.2.5, Table R4413.2.7
A 924/04	Standard Specification for General Requirements for Steel Sheet, Metallic Coated by the Hot Dip Process	R4409.6.17.2.2.7
B 43—98 (2004)	Specification for Seamless Red Brass Pipe, Standard Sizes	Table M2101.1, G2413.5.2, Table P3002.1, Table P2904.4.1Table P2904.5, Table R4413.2.2
B 75—03	Specification for Seamless Copper Tube	Table M2101.1, Table P2904.4.1, Table P2904.5, Table P3002.1, Table P3002.2, Table R4413.2.2, Table R4413.2.3, Table R4413.2.4
B 88—02	Specification for Seamless Copper Water Tube	Table M2101.1, G2414.5.2, Table P2904.4.1, Table P2904.5, Table P3002.1, Table P3002.2, Table R4413.2.2, Table R4413.2.3, Table R4413.2.4
B 227—04	Specification for Hard drawn Copper clad Steel Wire	R606.9.10
B 251—02e01	Specification for General Requirements for Wrought Seamless Copper and Copper alloy Tube	Table M2101.1, Table P2904.4.1, Table P2904.5, Table R4413.2.2, Table R4413.2.3, Table R4413.2.4
B 302—02	Specification for Threadless Copper Pipe, Standard Sizes	Table M2101.1, Table P2904.4.1, Table P2904.5, P2904.4, Table R4413.2.2
B 306—02	Specification for Copper Drainage Tube (DWV)	Table M2101.1, Table P3002.1, Table P3002.2, Table R4413.2.2, Table R4413.2.4
B 370—03	Specification for Copper Sheet and Strip for Building Construction	Table R905.4.4 Table R905.10.3, Table P2701.1
B695-00		
C 4—03	Specification for Clay Drain Tile and Perforated Clay Drain Tile	Table R4413.2.4, Table R4413.2.5
C5—03	Specification for Quicklime for Structural Purposes	R702.2, R4411.2.2.3
C 14—03	Specification for Concrete Sewer, Storm Drain, and Culvert Pipe	Table P3002.2, Table R4413.2.4
C 28/C28M-00e01	Specification for Gypsum Plasters	R702.2, R4411.2.2.2
C 31/C 31M-98	Practice for Making and Curing Concrete Test Specimens in the Field	R4405.5.2.2.3, R4405.5.2.3.2
C 33—01a	Specification for Concrete Aggregates	R4405.4.2, R4405.4.2.2
C 34-03	Specification for Structural Clay Load bearing Wall Tile	Table R301.2(1), R4407.2.8.3.1

C 35-95(2001) Specification for Inorganic Aggregates for Use in Gypsum Plaster R702.2, R4411.2.2.1.1
C 36/C 36M-03 Specification for Gypsum Wallboard R702.3.1, R4411.4.2
C 37/C 37M-01 Specification for Gypsum Lath R702.2, R4411.1.2
C 39—99ael Test Method for Compressive Strength of Cylindrical Concrete Specimens R4405.5.2.2.3
C 42/C 42M-99 Test Method for Obtaining and Testing Drilled Cores and Sawed Beams of Concrete R4405.5.2.4
C 52 Specification for Gypsum Partition Tile or Block R4407.2.9.3
C 55—03 Specification for Concrete Brick R202, Table R301.2(1), R4407.2.4.2.2, R4407.2.4.3.3
C 56-96 (2001) Specification for Structural Clay Nonload Bearing Tile R4407.2.8.3.3
C 57 Specification for Structural Clay Floor Tile R4407.2.8.3.2
C 59/C 59M-00 Specification for Gypsum Casting and Molding Plaster R702.2
C 61/C 61M-00 Specification for Gypsum Keene's Cement R702.2, R4411.1.2, R4411.2.2.4
C 62—04 Specification for Building Brick (Solid Masonry Units Made from Clay or Shale) R202, Table R301.2(1), R4407.2.4.3.1
C 67—03ae01 Test Methods of Sampling and Testing Brick and Structural Clay Tile R905.3.5, R4407.2.4.2
C 76—04a Specification for Reinforced Concrete Culver, storm Drain and Sewer Pipe Table R4413.2.4
C 90—03 Specification for Load Bearing Concrete Masonry Units Table R301.2(1), R606.4, R4407.2.7.2
C 91—01 Specification for Masonry Cement R4412.2.2.6
C 94 Specification for Ready Mixed Concrete R4405.6.2
C 144—03 Standard Specification for Aggregate for Masonry Mortar R4405.10.7.2, R4407.2.12.1.1
C 150—02ael Specification for Portland Cement R4405.4.1, R4412.2.2.5.1
C 172—99 Practice for Sampling Freshly Mixed Concrete R4405.2.2.2
C 199-84(2000) Test Method for Pier Test for Refractory Mortar R1001.9, R1003.5, R1003.8, R4405.4.1
C 206-84(1997) Specification for Finishing Hydrated Lime R4411.2.2.3
C 212—00 Specification for Structural Clay Facing Tile R4407.2.8.2
C 216—04a Specification for Facing Brick (Solid Masonry Units Made from Clay or Shale) R202, Table R301.2(1), R4407.2.4.3.1
C 270—04 Specification for Mortar for Unit Masonry R607.1, R4407.2.12.1
C 330—99 Specification for Lightweight Aggregates for Structural Concrete R4405.4.2
C 332—99 Standard Specification for Lightweight Aggregates for Insulation Concrete R4405.12.4.6
C 425-04 Specification for Compression Joints for Vitrified Clay Pipe and FittingsTable P3002.2, P3003.3.5
C 428-97(2002) Specification for Asbestos Cement Nonpressure Sewer pipe Table R4413.2.3, Table R4413.2.4
C 471M-01 Standard Test Methods for Chemical Analysis of Gypsum and Gypsum Products R4407.2.9.2, R4407.2.9.3
C 472—99 Specification for Standard Test Methods for Physical Testing of Gypsum, Gypsum Plasters and Gypsum Concrete R4407.2.9.2, R4407.2.9.3
C 473—00 Test Method for Physical Testing of Gypsum Panel Products R4407.2.9.2, R4407.2.9.3
C 475/C475M—02 Specification for JointCompound and Joint Tape for Finishing Gypsum Wallboard R702.3.1, R4411.4.2
C 494/C 494M-99 Standard Specification for Chemical Admixtures for Concrete R4405.12.4.4
C 495-99a Standard Test Method for Compressive Strength of Lightweight Insulating Concrete R4405.12.1.1, R4405.12.1.2, R4405.12.1.3
C 508—00 Specification for Asbestos Cement Underdrain Pipe Table R4413.2.5
C 595—01 Specification for Blended Hydraulic Cement R4405.4.1
C 618—99 Specification for Coal Fly Ash and Raw or Calcined Natural Pozzolar for Use as a Mineral Admixture in Concrete R4405.12.4.4
C 645—04 Specification for Nonstructural Steel Framing Members R702.3.3, R4409.6.17.1.3, R4411.4.2, R4411.4.5.1, R4411.4.5.4
C 652—04a Specification for Hollow Brick (Hollow Masonry Units Made from Clay or Shale) R202, Table R301.2(1), R4407.2.4.3.1
C 685/C 685M-98a Specification for Concrete Made by Volumetric Batching and Continuous Mixing R4405.6.2.2
C 700-02 Specification for Vitrified Clay Pipe, Extra Strength, Standard Strength, and Perforated Table P3002.2, R4409.6.17.1.3, Table R4413.2.4, Table R4413.2.5
C 794—01 Test Method for Adhesion in Peel of Elastometric Joint Sealants R4410.6.4
C 796—97 Standard Test Method for Foaming Agents for Use in Producing Cellular Concrete Using Performed Foam R4405.12.1.1, R4405.12.1.2, R4405.12.1.3, R4405.12.4.6

C 869	Specification for Foaming Agents Used in Making Performed Foam for Cellular Concrete	R4405.12.4.6
C 887-79(2001)	Specification for Packaged, Dry, Combined Materials for Surface Bonding Mortar	R406.1
C 920-02	Specification for Elastometric Joint Sealants	R4410.6.4
C 926-98a	Specification for Application of Portland Cement Based Plaster	R202, R703.6.2.1, R4411.3.1.1, R4411.3.1.4
C 1036-01	Specification for Flat Glass	R4410.2.1.2
C 1048-04	Specification for Heat Treated Flat Glass—Kind HS, Kind FT Coated 7 Uncoated Glass	R4410.2.1.5
C 1053-00	Specification for Borosilicate Glass Pipe and Fittings for Drain, waste and Vent (DWV) Applications	Table R4413.2.2
C 1077	Standard Practice for Laboratories Testing Concrete and Concrete Aggregates for Use in Construction and Criteria for Laboratory Evaluation	R4405.2.4, R4405.4.6
D 25-99	Standard Specification for Round Timber Piles	R4404.7.1
D 41-e01	Specification for Asphalt Primer Used in Roofing, Dampproofing, and Waterproofing	Table R905.9.2, Table R905.11.2, R4402.3.2.3.2, R4402.6.6.2.4, R4402.8.6, R4402.10.6, R4402.10.14.1
D 43-00	Specification for Coal Tar Primer Used in Roofing, Damproofing and Waterproofing	Table R905.9.2, R4402.6.6.2.4, R4402.8.6, R4402.10.6, R4402.10.14.2
D 92	Standard Test Method for Flash and Fire Points by Cleveland Open Cup	R4402.8.2.2
D 226-97a	Specification for Asphalt saturated (Organic Felt) Used in Roofing and Waterproofing	R703.2, R703.9.1, R905.2.2, R905.2.3, R905.2.7, R905.4.3, R905.5.3, R905.6.3, R905.8.4, R905.8.10.1, Table 905.9.2, R4402.7.4
D 256-03	Test Methods for Determining Izod Pendulum Impact Resistance of Plastics	R4412.1.2
D 312-00	Specification for Asphalt Used in Roofing	R905.9.2, R4402.8.4, R4402.10.14.1
D 412-98a(2002)el	Test Methods for Vulcanized Rubber and Thermoplastic Elastomers Tension	R4410.6.4
D 624-00el	Test Methods for Tear Strength of Conventional Vulcanized Rubber and Thermoplastic Elastomers	R4410.6.4
D 635-03	Test Methods for Rate of Burning and/or Extent & Time of Burning of Plastics in a Horizontal Position	R4412.1.2
D 1079-02	Standard Terminology Relating to Roofing, Waterproofing and Bituminous Materials	R4402.2.1
D 1143-81 (1994) e01	Test Method for Piles Under Static Axial Compressive Load	R4404.13.1.7
D 1167	Methods of Testing Asphalt Base Emulsions for Use as Protective Coatings for Built Up Roofs	R4402.12.6.5.2
D 1556	Standard Test Method for Density of Soil In Place by the Sandcone	R4404.4.3.2
D 1557-00	Test Method for Laboratory Compaction Characteristics of Soil Using Modified Effort [56,000 ft lb/ft3 (2700 kN m/m3)]	R4404.4.3.2
D 1586-99	Specification for Penetration Test and Split Barrel Sampling of Soils	R4404.18.3.3
D 1621	Standard Test Method for Compressive Properties of Rigid Cellular Plastics	4402.12.6.5.2.17.1
D 1622	Standard Test Method for Apparent Pensity of Rigid Cellular Plastics	R4402.12.6.5.2.17.2
D 1623	Standard Test Method for Tensile and Tensile Adhesion Properties of Rigid Cellular Plastics	R4402.12.6.5.2.17.3
D 1693-01	Test Method for Environmental Stress cracking of Ethylene Plastics	Table M2101.1
D 1760	Standard Specification for Pressure Treatment of Timber Products	Table R4404.7
D 1761-88(2000)el	Test Methods for Mechanical Fasteners in Wood	R4409.1.4.4
D 1861	Specification for Homogenous Bituminized Fiber Drain Sewer Pipe (Withdrawn 1992—Replacement)	P3002.2
D 1863-03	Specification for Mineral Aggregate Used in Built up Roofs	Table R905.9.2, Table R906.3.2, R4402.8.12.1
D 1929-96(2001)el	Test Method for Determining Ignition Temperatures of Plastics	R4412.1.2
D 2126	Standard Test Method for Response of Rigid Cellular Plastics to Thermal and Humid Aging	R4402.12.6.5.2.17.4
D 2240—03	Test Method for Rubber Property Durometer Hardness	R4410.6.4
D 2464—99	Specification for Threaded Poly (Vinly Chloride) (PVC) Plastic Pipe Fittings, Schedule 80	Table P2904.6, Table R4413.2.7
D 2466—02	Specification for Poly (Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 40	Table P2904.6, Table R4413.2.7
D 2467—04	Specification for Poly (Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 80	Table P2904.6,

		Table R4413.2.7
D 2468—96a	Specification for Acrylonitrile Butadiene Styrene (ABS) Plastic Pipe Fittings, Schedule 40	Table P2904.6, Table R4413.2.5, Table R4413.2.7
D 2565—99	Practice for Xeon Arc Exposure of Plastics Intended for Outdoor Applications	R4412.1.2
D 2609—02	Specification for Plastic Insert Fittings for Polyethylene (PE) Plastic Pipe	Table P2904.6, Table R4413.2.7
D 2626—04	Specification for Asphalt saturated and Coated Organic Felt Base Sheet Used in Roofing	R905.3.3, Table R905.9.2, R4402.7.4
D 2661—02	Specification for Acrylonitrile Butadiene Styrene (ABS) Schedule 40 Plastic Drain, Waste, and Vent Pipe and Fittings	Table P3002.1, Table P3002.2, Table R4413.2.2, Table R4413.2.3, Table R4413.2.4
D 2665—04ae01	Specification for Poly (Vinyl Chloride) (PVC) Plastic Drain, Waste, and Vent Pipe and Fittings	Table P3002.1, Table P3002.2, Table R4413.2.2, Table R4413.2.3, Table R4413.2.4
D 2677-71(1976)	Method of Test lightability of Barbecue Briquettes (withdrawn no replacement, 1985)	Table R4413.2.4.3
D 2729—96a	Specification for Poly (Vinly Cloride)(PVC) Sewer Pipe and Fittings	Table R4413.2.5
D 2751—96a	Specification for Acrylonitrile Butadiene Styrene (ABS) Sewer Pipe and Fittings	Table P3002.2, Table R4413.2.4
D 2797-85(1999)	Standard Practice for Preparing Coal Sampler for Microscopical Analysis by Reflected Light	Table R4413.2.4
D 2842	Standard Test Method for Water Absorption of Rigid Cellular Plastics	R4402.12.6.5.2.17.6
D 2843—99	Test Method for Density of Smoke from the Burning or Decomposition of Plastics	Table R4413.1.2
D 2856	Standard Test Method for Open Cell Content of Rigid Cellular Plastics by the Air Pycnometer	R4402.12.6.5.2.17.5
D 2898-94(1999)	Test Methods for Accelerated Weathering of Fire retardant treated Wood for Fire Testing	R802.1.4.1, R802.1.4.3, R902.2, R4409.1.4.4, R4409.14.4, R4409.16.1
D 2922	Standard Test Method for Density of Soil and Soil Aggregate In Place by Nuclear Methods (Shadow Depth)	R4404.4.3.2
D 2949—01a	Specification for 3.25 in. Outside Diameter Poly (Vinyl Chloride) (PVC) Plastic Drain, Waste, and Vent Pipe and Fittings	Table P3002.1, Table P3002.2, R4402.5.1, Table R4413.2.2, Table R4413.2.3
D 3018	Specification for Class A Asphalt Shingle Surfaced with Mineral Oravies	R4402.12.6.5.1
D 3034—04	Specification for Type PSM Poly (Vinyl Chloride) (PVC) Sewer Pipe and Fittings	Table P3002.2, R4413.2.4
D 3201-94(2003)	Test Method for Hygroscopic Properties of Fire retardant Wood and Wood base Products	R802.1.4.4, R4409.1.4.4, R4409.14.5
D 3441	Static Cone Soundings	R4404.18.3.3
D 3462-04	Specification for Asphalt Shingles Made From Glass Felt and Surfaced with Mineral Granules	R905.2.4, R4402.12.6.5.1
D 3498-03	Specification for Adhesives for Field Gluing Plywood to Lumber Framing for Floor Systems	R4409.1.4.4, R4409.9.1.5
D 3679-05	Specification for Rigid Poly (Vinyl Chloride) (PVC) Siding	Table R703.4, R703.11, R703.11.1
D 3746-85(1996)e1	Test Methods for Impact Resistance of Bitumanous Roofing Systems	R4402.4.2.4
D 3787-01	Test Method for Bursting Strength of Textiles Constant Rate of Traverse (CRT) Ball Burst Test	R4101.17.1.15
D 4272—99	Test Method for Total Energy Impact of Plastic Films by Dart Drop	R4402.4.2.4
D 4402	Viscosity Determinations of Unfilled Asphalt Using the Brookfield Thermostat Apparatus	4402.8.2.3
D 5034—95	Test Method for Breaking Strength and Elongation of Textile Fabrics (Grab Test) Specifications for Adhesives for Field Gluing Plywood to Lumber Framing for Floor Systems	R4101.17.1.15
D 6083—97a	Specification for Liquid Applied Acrylic Coating Used in Roofing	Table R905.9.2, Table R905.11.2, Table R905.15.2, R4402.12.6.2
D 6380—01e01	Specification for Asphalt Roll Roofing (Organic Felt)	R905.2.8.2, R905.3.3
D6757-05	Standard Specification for Underlayment Felt Containing Inorganic Fibers Used in Steep-Slope Roofing	R905.2.2, R905.2.3, R905.2.7
D7158-05	Standard Test Method for Wind Resistance of Sealed Asphalt Shingles (Uplift Force/Uplift Resistance Method)	R905.2.6.1, Table R905.2.6.1
E 84—04	Test Method for Surface Burning Characteristics of Building Materials	R202, R314.3, R314.5.8,

		R314.5.10, R315.3, R315.4, R316.1, R316.2, R802.1.4, R4409.1.4.4, R4409.14.1, R4412.1.2, R4412.1.3.1.1, R4412.1.3.1.4, R4412.1.3.2.4.5, M1601.16, M1601.3.7
E 96—00e01	Test Method for Water Vapor Transmission of Materials	M1411.4, M1601.3.4, R202, R804.4, R4402.12.6.5.2.17.7, R4409.13.3.2.5
E 108—04	Test Methods for Fire Tests of Roof Coverings	R902.1, R902.2, R4402.2.1, R4402.5.1, R4402.12.1.2, R4409.16.1
E 119-00a	Test Methods for Fire Tests of Building Construction and Materials	R314.1.2, R314.4, R317.1, R317.3.1 R4412.1.2, R4412.1.3.2
E 136—99e01	Test Method for Behavior of Materials in a Vertical Tube Furnace at 750 Degree C	R202
E 152—95	Methods of Fire Tests of Door Assemblies	R314.3, R4412.1.3.1.4
E 163	Methods of Fire Tests for Window Assemblies (Withdrawn)	R4407.4.2.12.8
E 283-04	Standard Test Method for Determining the Rate of Air Leakage through Exterior Windows, Curtain Walls and Doors Under Specified Pressure Differences	R806.4, R4409.13.3.2.5
E 330-02	Test Method for Structural Performance of Exterior Windows, Curtain Walls, and Doors by Uniform Static Air Pressure Difference	R613.3, R613.4.1, R4410.6.4, R4410.6.6.1
E 331—00	Test Method for Water Penetration of Exterior Windows, Skylights, Doors and Curtain Walls by Uniform Static Air Pressure Difference	R613.4, R4410.6.4
E 1300-02 or 98 (HVHZ)	Practice for Determining Load Resistance of Glass in Buildings	R613.3.1, R4410.2.2
E 1886—02 or 05	Test Method for Performance of Exterior Windows, Curtain Walls, Doors and Storm Shutters Impacted by Missiles and Exposed to Cyclic Pressure Differentials	R301.2.1.2
E 1996—02 or 05	Specification for Performance of Exterior Windows, Curtain Walls, Doors and Storm Shutters Impacted by Windborne Debris in Hurricanes	R301.2.1.2
F 405—97	Specifications for Corrugated Polyethylene (PE) Tubing and Fittings	Table R4413.2.5
F 409—02	Specification for Thermoplastic Accessible and Replaceable Plastic Tube and Tubular Fittings	Table P2701.1, P2702.3, Table R4413.2.7
F 437—99	Specification for Threaded Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe Fittings, Schedule 80	Table P2904.6, Table R4413.2.7
F 438—04	Specification for Socket type Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe Fittings, Schedule 40	Table P2904.6, Table R4413.2.7
F 439—02e01	Specification for Socket type Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe Fittings, Schedule 80	Table P2904.6, Table R4413.2.7
F 628—01	Specification for Acrylonitrile Butadiene Styrene (ABS) Schedule 40 Plastic Waste ……and Vent Pipe with a Cellular Core	Table P3002.1, Table P3002.2, Table R4413.2.2, Table R4413.2.3, Table R4413.2.4
F 891—00e01	Specification for Coextruded Poly (Vinyl Chloride) (PVC) Plastic Pipe with a Cellular Core	Table P3002.1, Table P3002.2, Table R4413.2.2, Table R4413.2.3, Table R4413.2.4, Table R4413.2.5
F 1346-91(1996)	Performance Specification for Safety Covers and Labeling Requirements for Swimming Pools, Spas and Hot Tubs	R202
F 1554—99	Standard Specifications for Anchor Bolts Steel 36, 55 and 105 ksi Yield Strength	Table R4413.2.5
G 26—77	Practice for Operating Light Exposure Apparatus (Xenon Arc Type) With and Without Water for Exposure of Nonmetallic Materials (Withdrawn)	R4412.1.2
G 53—96	Practice for Operating Light and Water Exposure Apparatus (Fluorescent UV condensation type) for Exposure of Nonmetallic Materials	R4401.17.1.15
G 60	Standard Practice for Conducting Cyclic Humidity Exposures	R4409.6.17.2.2.8
G 85	Standard Practice for Modified Salt Spray (Fog) Testing	R4402.6.5

AWPA **American Wood Preservers' Association**
801 Alabama Avenue 2nd Floor,
Selma, AL 36702-0388

Standard reference number	Title	Referenced in code section number
C2—01	Lumber, Timbers, Bridge Ties and Mine Ties — Preservative Treatment by Pressure Processes	R319.1, R323.1.7, Table R905.8.5, R4409.1.4.5
C3—99	Piles — Preservative Treatment by Pressure Processes	R319.1, R323.1.7, R4404.7.1.3, R4409.1.4.5
C4—99	Poles — Preservative Treatment by Pressure Processes	R319.1, R323.1.7, R4409.1.4.5
C5—03	Posts—Pressure Treatment by Pressure Processes	R4409.1.4.5

C6—99	Crossties and Switch Ties Preservative Treatment by Pressure Processes	R4409.1.4.5, R4409.21.9
C7—96	Western Red Cedar, Northern White Cedar & Alaska yellow Cedar Poles Preservative Treatment of Incised Pole Butts by the Thermal process (Withdrawn)	R4409.1.4.5
C8—96	Western Red & Alaska Yellow Cedar Poles Preservative Treatment by the Full Length Thermal process (Withdrawn)	R4409.1.4.5
C9—03	Plywood — Preservative Treatment by Pressure Processes	R319.1, R323.1.7, R4409.1.4.5
C10—96	Lodgepole Pine Poles Preservative Treatment by the Full Length Thermal Process	R4409.1.4.5
C11—01	Wood Blocks for Floors & Platforms Pressure Treatment by the Pressure Process	R4409.1.4.5
C14—03	Wood for Highway Construction Pressure Treatment by the Pressure Process	R4409.1.4.5
C16—03	Wood used on Farms Pressure Treatment	R4409.1.4.5
C18—99	Standard for Pressure Treated Material in Marine Construction	R319.1, R323.1.7, R4409.1.4.5
C20—99	Structural Lumber—Fire retardant Treatment by Pressure Processes	R4409.1.4.5
C22—96	Lumber and Plywood for Permanent Wood Foundations— Preservative Treatment by Pressure Processes	R319.1, R323.1.7, R402.1.2, R504.3, R4409.1.4.5
C23—03	Round Poles and Posts Used in Building Construction— Preservative Treatment by Pressure Processes	R319.1, 323.1.7, R4409.1.4.5
C25—03	Sawn Crossarms Pressure Treatment	R4409.1.4.5
C26—57	Crossarms Non Pressure Treatment	R4409.1.4.5
C28—99	Standard for Preservative Treatment by Pressure Process of Structural Glued Laminated Members and Laminations Before Gluing	R4409.1.4.5
C29—01	Lumber to be used for the Harvesting Storage and Transportation of Food Stuffs Preservative Treatment by Pressure Processes	R4409.1.4.5
M1—01	Standard for the Purchase of Treated Wood Products	R4404.7.1.4
M2—01	Standard for the Inspection of Wood Products Treated with Preservatives	R4404.7.1.4
M4—02	Standard for the Care of Preservative treated Wood Products	, R4404.7.1.4, R4409.1.4.5

AWS **American Welding Society**
550 NW Le Jeune Road
Miami, FL 33126

Standard reference number	Title	Referenced in code section number
B2.1	Standard Welding Procedure and Performance Qualification	R4408.1.3
C5.4	Recommended Welding Practice for Stud Welding	R4408.1.3
D1.1	Structural Welding Code Steel	R4408.1.3
D1.2	Structural Welding Code Aluminum	R4406.1.3
D1.3	Structural Welding Code Sheet Metal	R4408.1.3
D1.4	Structural Welding Code Reinforcing Steel	R4405.4.4, R4405.8.4.8, R4407.2.1.1, R4408.1.3
D9.1	Specification for Welding of Sheet Metal	R4408.1.3
D10.9	Standard for Qualification of Welding Procedures and Welders for Piping and Tubing	R4408.1.3

AWWA **American Water Works Association**
6666 West Quincy Avenue
Denver, CO 80235

Standard reference number	Title	Referenced in code section number
C110—98	Standard for Ductile iron and Gray iron Fittings, 3 Inches through 48 Inches, for Water	Table P2904.6, Table R4413.2.7
C511—00	Reduced Pressure Principle Backflow Prevention Assembly	Table P2902.2, P2902.2.5, P2902, P2902.4.1

CGSB **Canadian General Standards Board**
11 Laurier Street, Place du Portage III, 6B1
Gatineau, Quebec, Canada K1A 1G6

Standard reference number	Title	Referenced in code section number
37–GP—52M—(1984)	Roofing and Waterproofing Membrane, Sheet Applied, Elastomeric	R905.12.2, R4402.4.2.4

CISPI **Cast Iron Soil Pipe Institute**
Suite 419
5959 Shallowford Road
Chattanooga, TN 37421

Standard reference number	Title	Referenced in code section number
301—04	Specification for Hubless Cast Iron Soil Pipe and Fittings for Sanitary and Storm Drain, Waste and Vent Piping Applications	Table P3002.1, Table P3002.2, Table R4413.2.2, Table R4413.2.3, Table R4413.2.4, Table R4413.2.5

CPSC **Consumer Product Safety Commission**
4330 East West Highway
Bethesda, MD 20814 4408

Standard reference number	Title	Referenced in code section number
16 CFR Part 1201—(1977)	Safety Standard for Architectural Glazing	R308.1.1, R308.3, R4410.2.1.3, R4410.2.3.1.2, R4410.2.4.2

CSA **Canadian Standards Association**
8501 East Pleasant Valley Road
Cleveland, OH 44131 5575

Standard reference number	Title	Referenced in code section number
A257.1—03	Nonreinforced Circular Concrete Culvert, Storm Drain, Sewer Pipe and Fittings	Table R4413.2.4
A257.2—03	Reinforced Circular Concrete Culvert, Storm Drain, Sewer Pipe and Fittings	Table R4413.2.4
B125—01	Plumbing Fittings	Table P2902.2.2, P2902.3.1, P3003.3.5
B137.2—02	PVC Injection moulded Gasketed Fittings for Pressure Applications	Table P2904.6, Table R4413.2.7
B181.1—02	Plastic Drain and Sewer Pipe Fittings	Table R4413.2.2, Table R4413.2.3
B181.2—02	PVC Drain, Waste Vent Pipe Fittings	Table R4413.2.2, Table R4413.2.3
B181.3—02	Polyolefin Laboratory Drainage System	Table R4413.2.2, Table R4413.2.3
B182.2—02	PVC Sewer Pipe and Fittings (PSM Type)	Table R4413.2.4, Table R4413.2.5
B182.4—02	Profile PVC Sewer Pipe and Fittings	Table R4413.2.4, Table R4413.2.5

DASMA **Door and Access Systems Manufacturers Association International**
1300 Summer Avenue
Cleveland, OH 44115-2851

Standard reference number	Title	Referenced in code section number
108—02	Standard Method for Testing Garage Doors	R613.4.1, R613.4.2
ANSI/DASMA 115-05	Standard Method for Testing Garage Doors and Rolling Doors: Determination of Structural Performance Under Missile Impact and Cyclic Wind Pressure	R301.2.1.2

DHS/FEMA **Department of Homeland Security**
Federal Emergency Management Agency
Federal Center Plaza
500 C Street, SW
Washington, DC 20472

Standard	Referenced in code

reference number	Title	section number
CFR 44	Emergency Management and Assistance	
Part 59	59 Criteria for Land Management Use, General Provisions	
Part 60	60 Criteria for Land Management Use, Flood Plain Management Regulation	R301.2.4, M1401.5, P2601.3
FIA-TB-11-01		
TB–2—93	Flood–resistant Materials Requirements	R323.1.7

DOC/NIST **Department of Commerce**
National Institute of Standards and Technology
100 Bureau Drive Stop 3460
Gaithersburg, MD 20899

Standard reference number	Title	Referenced in code section number
CS 236	Mat Formed Particleboard	R4409.1.4.6, R4409.2.1.6
PS 1—95	Construction and Industrial Plywood	R404.2.1, Table R404.2.3, R503.2.1, R604.1, R803.2.1, R404.21, Table R404.2.3, R503.2.1, R604.1, R803.2.1, R4409.1.4.6, R4409.2.1.2
PS 2—92	Performance Standard for Wood–based Structural–use Panels	R404.2.1, Table R404.2.3, R503.2.1, R604.1, R803.2.1, R404.21, Table R404.2.3, R503.2.1, R604.1, R803.2.1, R4409.1.4.6, R4409.2.1.2
PS 56	Structural Glued Laminated Timber	R4409.1.4.6
PS 20—99	American Softwood Lumber Standard	R404.2.1, R502.1.1, R602.1.1, R802.1.1, Table R404.2.3, R503.2.1, R604.1, R803.2.1, R4409.1.4.6, R4409.2.1.8

DOL/OSHA **Department of Labor**
Occupational Safety and Health Administration
Frances Perkins Building
200 Constitution Avenue, NW
Washington, DC 20210

Standard reference number	Title	Referenced in code section number
29 CFR 1910	General Industry Occupational Health & Safety Standards	R4403.7.3
29 CFR 1926 650(P)	Excavation Safety Act	R4404.1.1

DOT **Department of Transportation**
400 Seventh St. S.W.
Washington, DC 20590

Standard reference number	Title	Referenced in code section number
14 CFR Part 150 (2005)	Airport Noise Compatibility Planning, Federal Aviation Administration	R325

FCPA **Florida Concrete & Products Association, Inc.**
3030 Dade Avenue
Orlando, Florida 32804

Standard reference number	Title	Referenced in code section number
FCPA—97	Guide to Concrete Masonry Residential Construction in High Wind Areas	R301.2.1.1

Florida Codes **Florida Building Commission**
c/o Florida Department of Community Affairs
Building Codes and Standards
2555 Shumard Oak Boulevard
Tallahassee, FL 32399-2100

RAS 111	Add:	R903.3
TAS 107……	Add:	……..R905.6.2.1, Table R905.6.2.1
TAS 202	Add:	R613.3.1, R613.4.2

FM **Factory Mutual Global Research**
Standards Laboratories Department
1151 Boston Providence Turnpike
Norwood, MA 02062

Standard reference number	Title	Referenced in code section number
4450—(1989)	Approval Standard for Class 1 Insulated Steel Deck Roofs—with Supplements through July 1992	R906.1, R4412.1.3.2.5.2
4470 (1992)	Approval Standard for Class 1 Roof Covers	R4402.2.1, R4402.4.1.1, R4402.4.2.4
4880—(2001)	American National Standard for Evaluating Insulated Wall or Wall and Roof/Ceiling Assemblies, Plastic Interior Finish Materials, Plastic Exterior Building Panels, Wall/Ceiling Coating Systems, Interior or Exterior Finish Systems	R314.4, R314.6, R4412.1.3.1.4

FRSA **Florida Roofing, Sheet Metal and Air-Conditioning Contractors Association, Inc.**
411 Metric Avenue
Winter Park, Florida 32793

FRSA/TRI 07320/8-05	Add:	R905.3, R905.3.3, R905.3.7.1

FS **Federal Specification**
941 Jefferson Davis Highway, Suite 104
Arlington, VA 22202

TT P 1536A (1975) Federal Specification for Plumbing Fixture Setting Compound	P3003.4.5
TTC 555B Test Specification for Wind Driven Rain Infiltration Resistance	R4402.12.6.3.1

FWC **Florida Wood Council**
P.O. Drawer 1076
Mount Dora, Florida 32757-1076

1997	Guide to Wood Construction in High Wind Areas	R301.2.1.1

GA **Gypsum Association**
810 First Street, Northeast, Suite 510
Washington, DC 20002-4268

GA 253-99	Change:	Table R602.2(1)

ICC **International Code Council**
900 Montclair Road
Birmingham, Alabama 35213-1206

Standard reference number	Title	Referenced in code section number
IBHS-2005	Guideline for Hurricane Resistant Residential Construction 2005 with errata for the first printing	R301.2.1.1

NAAMM **National Association of Architectural Metal Manufacturers**
8 South Michigan Avenue
Chicago, IL 60603

Standard reference number	Title	Referenced in code section number

ANSI/NAAMM MBG 5XX	Metal Grating Manual	R4408.1.3

NAIMA **North American Insulation Manufacturer's Association**
44 Canal Center Plaza, Suite 310
Alexandria, VA 22314

Standard reference number	Title	Referenced in code section number
AH 116 06—02	Fibrous Glass Duct Construction Standards	M1601.6, M1601.6.2.3

NFPA **National Fire Protection Association**
1 Batterymarch Park
Quincy, MA 02269

Standard reference number	Title	Referenced in code section number
70—05	National Electrical Code (NEC)	E3301.1
70A—05	National Electric Code (NEC) for One and Two Family Dwellings	E3301.1, G2402.3
101—03	Life Safety Code	R324.1
259—04	Standard Test Method for Potential Heat of Building Materials	R314.5.7, R4412.1.3.2.4.4
286—00	Standard Methods of Fire Tests for Evaluating Contribution of Wall and Ceiling Interior Finish to Room Fire Growth	R314.4, R314.6, R315.4, R4412.1.3.1.4
501—03	Standard on Manufactured Housing	R202

NRCA **National Roofing Contractors Association**
10255 W. Higgins Road, Suite 600
Rosemont, IL 60018

Standard reference number	Title	Referenced in code section number
P 0405	Roofing and Waterproofing Manual, 5th Edition	R4402.2.1

NSF **National Sanitation Foundation**
3475 Plymouth Road
Ann Arbor, MI 48105

NSPI **National Spa and Pool Institute**
2111 Eisenhower Avenue
Alexandria, VA 22314

Standard reference number	Title	Referenced in code section number
3—99	American National Standard for Permanently Installed Residential Spas	R4101.6.1
4—99	American National Standard for Aboveground/On ground Residential Swimming Pools	R4101.6.1
5—03	American National Standard for Residential In ground Swimming Pools	R4101.6.1
6—99	American National Standard for Residential Portable Spas	R4101.6.1

RMI/SMA **Rack Manufacturer's Institute/Storage Equipment Manufacturer's Association**
(A member of the Material Handling Industry of America)
8720 Red Oak Blvd., Suite 201
Charlotte, NC 28217

RP1—90	Minimum Requirements for Non Reinforced Black EPDM Rubber Sheets	R905.12.2
RP2—90	Minimum Requirements for Fabric Reinforced Black EPDM Rubber Sheets	R905.12.2
RP3—85	Minimum Requirements for Fabric Reinforced Black Polychloroprene Rubber Sheets	R905.12.2

RCSC **Research Council on Structural Connections**

c/o Stanley D. Lindsey & Associates Ltd.
224 Metro Center Blvd., Suite 208
Nashville, TN 37228-1320

RCSC Bolts, 1988	Load and Resistance Factor Design Specification for Structural Joints Using A325 and A490	R4408.1.3

SDI Steel Door Institute
P.O. Box 25
Fox River Grove, IL 60021

MOC1	SDI Manual of Construction with Steel Deck	R4408.1.3
DDP	Deck Damage and Penetrations	R4408.1.3
DDM02	Diaphragm Design Manual	R4408.1.3, R4408.9.4
SDI, LRFD	Design Manual for Composite Beams and Girders with Steel Deck	R4408.1.3
SPD2	Standard Practice Details	R4408.1.3
NO. 30	Steel Deck Institute Design Manual	R4408.1.3

SDI Steel Door Institute
c/o Wherry Associates
30200 Detroit Road
Cleveland, Ohio 44145 1967

ANSI A250.13—03	Testing and Rating of Severe Windstorm Resistant Components for Swinging Door Assemblies	R613.4.4.1

SJI Steel Joist Institute
3127 10th Avenue, North
Myrtle Beach, SC 29577-6760

SJI	Standard Specifications, Load Tables and Weight Tables for Steel Joists and Joist Girders	R4408.1.3
SJI	Structural Design of Steel Joist Roofs to Resist Ponding Loads, Technical Digest No. 3	R4408.1.3
SJI	Structural Design of Steel Joist Roofs to Resist Uplift Loads, Technical Digest No. 9	R4408.1.3
SJI	Vibration of Steel Joist Concrete Slab Floors, Technical Digest No. 5	R4408.1.3
SJI	Welding of Open Web Steel, Technical Digest No. 8	R4408.1.3
SJI	60 Year Steel Joist Manual	R4408.1.3

SMACNA Sheet Metal & Air Conditioning Contractors National Assoc., Inc.
4021 Lafayette Center Drive
Chantilly, VA 22021

Standard reference number	Title	Referenced in code section number
SMACNA—85	HVAC Air Duct Leakage Test Manual	M1601.5.3
SMACNA—95	HVAC Duct Construction Standards–Metal and Flexible	M1601.5

SSPC Society for Protective Coatings
40 24th Street, 6th Floor
Pittsburgh, PA 15222-4656

SSPC Paint 15	Steel Joist Shop Paint	R4408.1.3
SSPC/AISC	Guide to the Shop Painting of Structural Steel	R4408.1.3

SPRI Single-Ply Roofing Institute
77 Rumford Avenue, Suite 3-B
Waltham, MA 02453

Standard reference number	Title	Referenced in code section number
ES 1-98	Wind Design Standard for Edge Systems Used with Low Slope Roofing Systems	R903.3

STI **Steel Tube Institute of North America (Welded Steel Tube Institute, Inc.)**
2000 Ponce de Leon, Suite 600
Coral Gables, Florida 33134

WSTI/STI	Manual of Cold Formed Structural Steel Tube	R4408.1.3

TECO **Timber Company Inc.**
2402 Daniels Street
Madison, WI 53704

PRP 133	Performance Standards and Policies for Structural Use Panels	R4409.1.4.8, R4409.2.1.2

TPI **Truss Plate Institute**
218 N. Lee Street, Suite 312
Alexandria, VA 22314

Standard reference number	Title	Referenced in code section number
BCSI 1-03/ WTCA	Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses	R502.1.3.2, 802.1.6.3, R4409.1.4.9, R4409.6.17.2.4.1, R4409.6.17.2.4.3
TPI 1—02	National Design Standard for Metal plate connected Wood Truss Construction	R502.1.3.1, R502.1.3.2, R802.1.6.2, R802.2.9.1, R4409.1.4.9, R4409.6.17.2.1.1, R4409.6.17.2.2.8

UL **Underwriters Laboratories, Inc.**
333 Pfingsten Road
Northbrook, IL 60062

Standard reference number	Title	Referenced in code section number
9—00	Standard for Fire Tests of Window Assemblies	R4407.4.2.12.8
181A—98	Closure Systems for Use with Rigid Air Ducts and Air Connectors— with Revisions December 1998	M1601.2, M1601.3.1, M1601.6.2.3, M1601.6.4.2, M1601.6.4.5, M1601.10.1
536—97	Flexible Metallic Hose—with Revisions through October 2000	M2202.3
580—94	Test for Uplift Resistance of Roof Assemblies	R4408.1.3, R4408.9.4.6
723—03	Test for Surface Burning Characteristics of Building Materials	M1601.1.3.7
790—04	Tests for Fire Resistance of Roof Covering Materials— with Revisions through July 1998	R902.1, R4402.2.1, R4402.5.1, R4409.1.4.10, R4402.12.1.2
795—01	Commercial Industrial Gas Heating Equipment	G2442.1, G2452.1
834—04	Heating, Water Supply, and Power Electric—with Revisions through November 1998	M2001.1.1
1040—96	Fire Test of Insulated Wall Construction—with Revisions through June 2001	R314.4, R314.6, R4412.1.3.1.4
1482—98	Solid fuel Type Room Heaters—with Revisions through January 2000	M1410.1
1715—97	Fire Test of Interior Finish Material	R314.4, R314.6, R4412.1.3.1.4
1777—04	Chimney Liners—with Revisions through July 1998	R1001.8.1, R1001.15, M1801.3.4, G2425.12, G2425.15.4
2017—00	Standard for the General Purpose Signaling Devices and Systems	R4101.17.1.9
2158—97	Standard for Electric Clothes Dryer with Revisions through February 1999	M1501.1

WDMA **Window & Door Manufacturers Association**
1400 East Touhy Avenue, #470
Des Plaines, IL 60018

Standard reference number	Title	Referenced in code section number
101/I.S. 2—97	Voluntary Specifications for Aluminum, Vinyl (PVC) and Wood Windows and Glass Doors	R613.3

101/I.S.2/NAFS-02 Voluntary Performance Specification for Windows, Skylights and Glass Doors R308.6.9, R613.3, ~~N1101.3.2.2~~

101/IS2/A440-05

WPPC **Wood Products Promotional Council**
c/o Florida Wood Council
1300 Limit Avenue
Mount Dora, FL 32758

WQA **Water Quality Association**
4151 Naperville Road
Lisle, IL 60532

Chapter 44: High Velocity Hurricane Zone. Add to read as shown.

Chapter 44: High Velocity Hurricane Zone

Appendix D (IFGS): Recommended Procedure for Safety Inspection of An Existing Appliance Installation. Change to read as shown.

Appendix D (IFGS): Recommended Procedure for Safety Inspection of An Existing Appliance Installation. Reserved.

Appendix E: Chapter 9b-53, Standard for Mitigation of Radon in Existing Buildings. Change to read as shown. (See 2004 FBC)

Appendix E: Chapter 9b-53, Standard for Mitigation of Radon in Existing Buildings.

Appendix F: Chapter 9b-52, Florida Standard for Passive Radon-Resistant New Residential Building Construction. Change to read as shown. (See 2004 FBC)

Appendix F: Chapter 9b-52, Florida Standard for Passive Radon-Resistant New Residential Building Construction.

Appendix G Swimming Pools, Spas and Hot Tubs. Change to read as shown.

Appendix G Swimming Pools, Spas and Hot Tubs. Reserved.

Appendix H Patio Covers. Change to read as shown.

Appendix H Patio Covers. Reserved.

Appendix I Private Sewage Disposal. Change to read as shown.

Appendix I Private Sewage Disposal. Reserved.

Appendix J Existing Buildings and Structures. Change to read as shown.

Appendix J Existing Buildings and Structures. Reserved.

Appendix K Sound Transmission. Change to read as shown.

Appendix K Sound Transmission. Reserved.

Appendix L Permit Fees. Change to read as shown.

Appendix L Permit Fees. Reserved.

Appendix M Home Day Care – R-3 Occupancy. Change to read as shown.

Appendix M Home Day Care – R-3 Occupancy. Reserved.

Appendix N Venting Methods. Change to read as shown.

Appendix N Venting Methods. Reserved.

Appendix O Gray Water Recycling Systems. Change to read as shown.

Appendix O Gray Water Recycling Systems. Reserved.

Appendix P Sprinkling. Change to read as shown.

Appendix P Sprinkling. Reserved.

Appendix Q: ICC IRC Electrical Provisions/ National Electrical Code Cross-Reference. Change to read as shown.

Appendix Q: ICC IRC Electrical Provisions/ National Electrical Code Cross-Reference. Reserved.