

# Florida Building Code 2007, Residential

Significant Changes

Overview the most significant changes from the Florida Building Code *Residential* 2004 w/ 2006 supplements to the Florida Building Code *Residential* 2007 edition

## Objective Of This Class

This is not an update of the Florida Building Code 2004. This is a new Florida Building Code, *Residential* 2007 and is based in the International building code 2006 edition.

Vertical lines in the margins indicate a change from the base code. DO NOT necessary indicate a change from 2004 version.

## Update or New Code?

In order to refer the changes in each section, we have include an acronym at the beginning and the end of each section

## What the acronyms mean?

R	Residential
M	Mechanical
P	Plumbing
G	Fuel

Del	Deletion
Add	Addition
Mod	Modification
Clr	Clarification

Section **XXXX** (**XXX**)

Provisions of residential code is applicable to detached one and two family dwellings and multiple single-family dwellings (townhouses) not more than 3 stories **above grade** in height with separate mean of egress and their accessory structures.

## **Section R101.2 (Mod)**

**ACCESSORY STRUCTURE:** A structure not greater than 3000 sf in floor area, and not over two stories in height, the use of which is customarily accessory to and incidental to that of the dwelling and which is located on the same lot.

Definition has been reworded to establish size limitations for accessory structures.

## Section R202 (Mod)

## EXTERIOR WALLS:

2004

- An above grade wall enclosing conditioned space.

2007

- An above grade wall that defines the exterior boundaries of a building.

## Section R202 (Mod)

**FIRE SEPARATION DISTANCE:** The distance measured from the building to one of the following:

- Closest interior lot line; or
- Centerline of a street, an alley, easement or public way; or
- To an imaginary line between two buildings on the lot.

## **Section R202 (Add)**



# SUNROOMS: No habitable & unconditioned



## Category I

- Roof or covering of outdoor space
- Openings shall be permitted to be enclosed with insect screening or 20 mil max. thickness plastic



## Category II

- Roof or covering of outdoor space with enclosed walls
- Openings enclosed with translucent plastic or glass



## Category III

- Roof or covering of outdoor space with enclosed walls
- Openings enclosed with translucent plastic or glass
- Additional requirements for forced-entry, air-leakage and water penetration resistance.

# Section R301.2.1.1.2 (Mod)

# SUNROOMS: Habitable & conditioned



## Category IV

- Roof or covering of outdoor space with enclosed walls
- Design to be heated/cooled by separate system and is thermally isolated from primary structure.
- Additional requirements for forced-entry, air-leakage, water penetration resistance. And thermal performance.



## Category V

- Roof or covering of outdoor space with enclosed walls
- Design to be heated/cooled and is open to primary structure
- Additional requirements for forced-entry, air-leakage, water penetration resistance. And thermal performance.

# Section R301.2.1.1.2 (Mod)

## EXTERIOR WALLS, fire protection

2004

- Exterior walls, separated by less than 6 feet shall have not less than a one hour fire resistive rating with exposure from both sides.

2007

- Construction, projections, openings and penetrations of exterior walls of dwellings, and accessory buildings shall comply with table R302.1.

## Section R302.1 (Mod)

EXTERIOR WALL ELEMENT		MINIMUM FIRE-RESISTANCE RATING	MINIMUM FIRE SEPARATION DISTANCE
Walls	(Fire-resistance rated)	1 hour with exposure from both sides	0 feet
	(Not Fire- resistance rated)	0 hours	3 feet
Projections	(Fire-resistance rated)	1 hour on the underside	2 feet
	(Not Fire- resistance rated)	0 hours	3 feet
Openings	Not allowed	N/A	
	Unlimited	0 hours	3 feet
Penetrations	All	Comply w/ Section R317.3	< 3 feet
		None required	3 feet

**Table R302.1 (Add)**

Emergency escape windows under decks and porches are allowed provided the location of the deck allows the emergency escape window to be fully opened and provides a path not less than 36" high to a yard or court.



## Section R310.5 (Add)

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

Exception: 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.

## Section R311.4.3 (Clr)

# CARBON MONOXIDE PROTECTION

Every building for which a permit for new construction is issued having a fossil-fuel-burning heater or appliance, fireplace or attached garage shall have an operational carbon-monoxide alarm installed within 10 feet of each room used for sleeping purposes.

Combination smoke/carbon monoxide alarms shall be listed or labeled by a recognized testing laboratory.



## Section R313.4 (Add)

## Dwelling Unit Separation, two-family

- Separation to be 1 hour fire resistant
- Floor ceiling shall extend and be tight to exterior wall
- Wall assemblies shall extend to the underside of roof sheathing

Exception(New) #2: Wall assemblies need not to extend through attic when ceiling is protected by not less than 5/8" type X gypsum board and drafstopping is provided above and along the wall assembly separating the units. Structural frame supporting roof shall be protected by not less than 1/2" gypsum board or equivalent.

## Section R317.1 (Mod)



**Drainage:** Exception has been modified as follows

Where lot lines, walls, slopes or other physical barriers prohibit 6" of fall within 10 feet, **the final grade shall slope away from foundation at a minimum slope of 5% and** water shall be directed to drains or swales to ensure drainage away from the structure.

## **Section R401.3 (Mod)**

Retaining walls that are not laterally supported at the top and retain in excess of 24" of unbalanced fill shall be designed to ensure stability against overturning, sliding, excessive foundation pressure and water uplift.

Safety factor 1.5 against lateral sliding and overturning.



## Section R404.5 (Add)

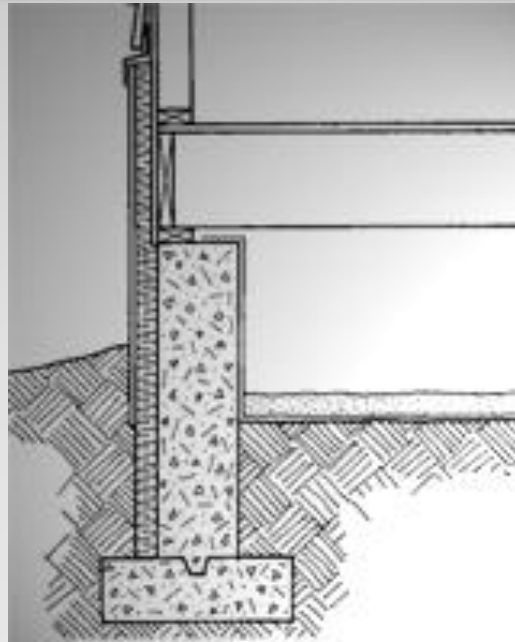
A new exception to the ventilation requirement between the bottom of the joist and the earth under any building has been included.

Exception (New): Crawl spaces designed by a Florida licensed engineer or registered architect to eliminate the venting.



## Section R408.1 (Mod)

Exceptions previously included in section R408.2 (Openings for under-floor ventilation) have been included in the new section “Unvented Crawl Space”



## Section R408.3 (Add)

## REINFORCEMENT SUPPORT

Where provided in slabs on ground, reinforcement shall be supported to remain in place from the center to upper one third of the slab for the duration of the concrete placement.



## Section R506.2.4 (Add)

# CORBELED MASONRY

## 2004

The top course of corbels shall be a header course when the corbeled masonry is used to support floor or roof-framing members.

## 2007

When corbeled masonry is used to support floor or roof-framing members, the top course shall:

- be a header course, or
- have ties to the vertical wall

## Section R606.3 (Mod)

**Support conditions** is now addressed in a new section R606.12 for compliance in general masonry construction. Previously this section was under *Corbeled Masonry*.

- **Bearing on support:** Each masonry wythe shall be supported by at least  $\frac{2}{3}$  of the wythe thickness.
- **Support at foundation:** Horizontal projection of the corbel shall not exceed 2" nor more than  $\frac{1}{3}$  the thickness of the unit or  $\frac{1}{2}$  the height of the unit.

**Section R606.3.1**  **R606.12**<sub>(Mod)</sub>

**LAP SPLICE LENGTHS**, lap length of bars #6 & #7 has been modified as follow:

<b>Bar size (No.)</b>	<b>Lap Length (In.)</b>
3	15
4	20
5	25
6	42 34
7	59 42

**Table R606.9.2 (Mod)**



## MASONRY OPENING TOLERANCE

Rough openings may vary between  $-1/4''$  to  $+1/2''$  from dimension specified on the approved plans. (Cross section or elevation)

For exterior windows and door installation see:

- Section R613.7 Mullions between individual window and glass door assemblies
- Section R613.8 Flashing, Sealants & weather-stripping

## Section R606.13 (Add)

# GROUT

2004

- Type M or S mortar with added water to produce pouring consistency.

2007

- Same, and
- Meet minimum strength of 2500 psi or greater as specified, and
- Slump test to each batch to meet 8" to 11" slump

## Section R609.1.1 (Mod)

## WINDOW SILLS

The minimum height of operating windows shall be 24" from finish floor to the clear opening when the distance between that opening and the grade below exceeds 72". Glazing between the floor and 24" shall be fixed or reject passage of 4" sphere.



## Section R613.2 (Add)

Exterior windows and sliding glass doors shall be tested and labeled with a permanent label, marking or etching providing traceability to the manufacturer and product.



## Section R613.3 (Mod)

Additionally, windows and glass doors shall have a permanent or temporary label including:

- Identify the manufacturer
- The product model/series number
- Design pressure rating
- Product maximum size
- Glazing thickness
- Impact resistant rating
- Florida product approval or Miami Dade number
- Applicable test standards
- Approved product certification agency, testing laboratory or Miami-Dade product approval.

**NOTE: SUPPLEMENTAL LABEL SHALL REMAIN ON THE WINDOW OR DOOR UNTIL FINAL APPROVAL BY THE BUILDING OFFICIAL**

## **Section R613.3 (Mod) Cont.**

## GARAGE DOOR LABELING

Garage doors shall be permanently labeled by manufacturer.

### What the label shall contain?

1. Identify manufacturer
2. Door model/series number
3. Positive and negative design pressure rating
4. Impact rating, if applicable
5. Installation instructions drawing reference number
6. For products w/ Florida Product approval number or NOA number, such numbers shall be included on the label.
7. Test standard used for compliance
8. Components as a checklist (optional)

## Section R613.4.5 (Add)

**IMPACT-RESISTANT COVERINGS** shall be tested at 1.5 times the design pressure and shall bear a permanent label.

### What the label shall contain?

1. Product approval holder name & address
2. All applicable method of approval
3. Test standard used for compliance
4. For products w/ Florida Product approval number or NOA number, such numbers shall be included on the label.

## Section R615 (Add)

# IMPACT-RESISTANT COVERINGS

## Where the label shall be located?

<b>Covering</b>	<b>Location of label</b>
Accordions	Bottom of locking bar or center mate facing outside
Rollup	Bottom of the hood for bottom slat facing outside
Bahama awning or Colonial hinged	On the bottom, placed on the back of the shutter
Panels	Metal & Plastic may be embossed or printed, at max. 36" o.c. facing outside
Framed Products	On the side or bottom facing outside
All others	Shall face the exterior

## Section R615.2.3 (Add)



## EXTERIOR COVERING

Exterior wall shall provide the building with a weather-resistant exterior wall envelope. This envelope shall provide a water-resistive barrier behind the exterior veneer and **a means of draining water that enters the assembly. Protection against condensation shall be per chapter 11.**

- Few exceptions to this requirements have been included,
- concrete or masonry walls under certain criteria
  - tested exterior wall that meet certain criteria

## Section R703.1 (Mod)

New provisions that provide guidelines for use of structural log members . Logs shall be in accordance with ASTM D3957.

Structural logs shall be identified by a grade mark .

As an alternative to the mark, a certificate of inspection as to species and grade issued by a lumber grading or inspection agency is acceptable.

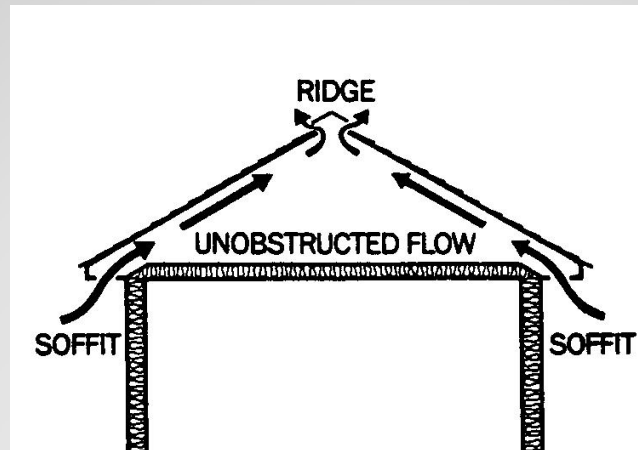


## Section R802.1.7(Add)

# ROOF VENTILATION REQUIRED

Enclosed attics shall have cross ventilation for each separate space.

EXCEPTION (NEW): Attic spaces, designed by a professional engineer or architect to eliminate attic venting are not required to have cross ventilation.



## Section R806.1 (Mod)

The net free cross-ventilation area may be reduced from 1/150 to 1/300 when a vapor barrier having a transmission rate not exceeding 1 perm is installed on the warm-**in-winter** side of the ceiling.



## Section R806.2 (Mod)

When gutters and leaders are placed on the outside of buildings, they shall be constructed of metal or approved plastic for outdoor exposure, and securely fastened to the building with a corrosion – resistant fastener or compatible material.



## **Section R903.4.2 (Add)**

**ROOF INSULATION** Above-deck thermal insulation board shall comply with table R906.2

Cellular glass board	ASTM C552
Composite boards	ASTM C 1289, type III, IV, V or VI
Expanded polystyrene	ASTM C 578
Extruded polystyrene board	ASTM C 578
Perlite board	ASTM C 728
Polyisocyanurate board	ASTM C 1289, type I or II
Wood fiberboard	ASTM C 208

**Section R906.2 (Add)**

Energy Efficiency has been included directly in the *Residential* code instead of referring to chapter 13 of the Florida Building Code, *Building*.

## Chapter 11 (Add)



# APPLIANCE ACCESS FOR INSPECTION SERVICE, REPAIR AND REPLACEMENT

A level working space at least 30" deep and 30" wide shall be provided in front the control side to service an appliance.



## Section M1305.1 (Mod)



Foundation and supports for outdoor mechanical systems shall be raised at least 3" above finish grade, and shall also conform to the manufacturer's installation instructions.

## **Section M1308.3 (Add)**

**OUTDOOR DISCHARGE** The air removed by every mechanical exhaust system shall be discharged to the outdoors. Air shall not be exhausted into attic, soffit, ridge vent or crawl space.

EXCEPTION: Whole-house ventilation-type attic fans that discharge into the private attic.

## **Section M1501.1 (Add)**

## CLOTHES DRYER EXHAUST

Exhaust ducts shall terminate not less than 3 feet in any direction from openings into buildings.



## Section M1502.2 (Add)

## **OIL TANKS ABANDONED OR REMOVED**

Exterior above-grade fill piping shall be removed when tanks are abandoned or removed. Tank abandonment and removal shall be in accordance with Florida Fire Prevention Code.

## **Section M2201.7 (Add)**

**FUEL GAS** Appliances regulated by this code shall be listed and labeled **for the application in which they are used** unless otherwise approved in accordance with section R104.11.

## **Section G2404.3 (Mod)**

## FUEL GAS VENTS

In concealed locations, where a vent is installed through holes or notches in studs, joist, etc less than 1.5" from the nearest edge, the vent shall be protected by shield plates.

## Section G2426.7 (Add)

# APPLIANCE CONNECTIONS

2004

- Rigid metallic pipe and fittings
- Listed and labeled (LL) connectors per manufacturer specs, in the same room as the appliance
- (LL) Quick disconnected devices used with appliance connectors
- (LL) Gas convenience outlet used with appliances connectors

2007

- Same
- Corrugated stainless steel tubing per manufacturer installation instructions
- (LL) Convenience outdoor connectors in accordance with manufacturer installation instructions

## Section G2422.1 (Mod)

## WATER SUPPLY TESTING

System shall be tested under water pressure not less than the working pressure or by an air test not less than 50 psi. **This pressure shall be held for not less than 15 minutes.** The water used for test shall be obtained from a potable water source.

## Section P2503.6 (Mod)



**SHOWERS** shall be minimum 900 sq.in. Shower compartments shall be not less than 30" in minimum dimension. **Hinged shower doors shall open outward.**

EXCEPTION (Add):  
Shower compartments having not less than 25" provided that shower has a minimum area of 1300 sq.in.



## **Section P2708.1 (Mod)**

## BATHTUB & WHIRLPOOL VALVES

The hot water supply shall be limited to a maximum temperature of 120°F by water-temperature-limiting device.



## Section 2713.3 (Add)

# VENTS STACKS & STACK VENTS

**2004**

Every building shall have a vent stack or stack vent. Such vent shall run undiminished in size and as directly as possible from the building drain through to the open air above the roof.

**2007**

The vent system serving each building drain shall have at least one vent pipe that extends to the outdoors.

## Section P3102 (Mod)

**POOL:** Final electrical and pool barrier inspection shall be completed prior to filling the pool with water. Exception: Vinyl & Fiberglass pools.



## Section R4101.19 (Mod)



**QUESTIONS?**