



Minimum Requirements for Residential Building Permit Plans Submittal

- The Application for Building/Land Use Permit form shall be completely filled out by the applicant and approved by the Zoning Department. The owners estimated value must be written on the front of the application and include the original signature and email address of the person applying for the permit. The back of the Building permit application (Page 2) shall be completely filled out, signed and notarized, when the estimated value of the project exceeds \$2,500.00. The signature of the homeowner, Florida licensed contractor and notary must be original. This form can be found on our website at: www.ocfl.net/PermitsLicenses/PermittingAndConstructionForms.aspx
- A site plan approved by the Zoning department is required. The site plans and building plans shall correspond and must include the septic tank and air conditioner pad locations as applicable. (FBC 107)
- Two sets of all construction documents are required when physically presenting documents for review. One set of construction documents are required when electronically transmitting documents through the Orange County FastTrack system. (FBC 107)
- Construction plans prepared by a Florida licensed Engineer or registered Architect are required. Construction plans must be designed in accordance with the 2017 Florida Building Code 6th Edition Residential and include the applicable wind criteria (Ultimate design wind speed (Vult) and 3-second gust/nominal wind speed (Vasd) both in miles per hour, wind exposure and risk category) (FBC-Residential 301). All documents shall be properly signed, dated and sealed as required for the method of submittal. (FBC 107)
- The orientation of the proposed structure, as it appears on the site plan, must be the same on all plan pages. Flipped or mirror imaged plans are not acceptable. (FBC 107)
- Document live loads for the following: a) Uninhabitable attic without storage: 10psf, b) Uninhabitable attic with limited storage: 20psf, c) Habitable attics and attics served with fixed stairs: 30psf, d) Balconies (exterior) and decks: 40psf, e) Guards and handrails: 200psf, f) Guard in-fill components: 50psf, g) Passenger vehicle garages: 50psf, h) Rooms other than sleeping room: 40psf, i) Sleeping rooms: 30psf, j) Stairs: 40psf. (FBC-Residential R301, Table R301.5)
- The Engineer or Architect of record shall identify on the floor plan or elevation plan, design pressures for all exterior openings. (FBC-Residential Tables R301.2(2) and R301.2(4))
- When trusses are used, signed and sealed truss engineering by a Florida Licensed Engineer is required to be submitted as part of the plan review. For physically submitted plans, each individual truss engineering page or a table of contents page/coversheet, listing each truss, must have the original signature of the design professional, be dated and sealed. If the truss engineering is being submitted electronically, they must be digitally signed and sealed as required. (FBC 107)
- Energy Calculations, ACCA manuals J, S, D and Energy Performance Level (EPL) display card are required. (FBC-Energy Conservation R401.3, R402, R405)
- A mechanical duct layout is required. (FBC 107)

- ❑ Florida Product Approval OR Miami Dade Notice of Acceptance (NOA) Internet Screen Shots are required for each of the following products: Panel walls, Exterior Doors, Roofing Products, Skylights, Windows, Shutters, Structural components and Impact Protective Systems as applicable to the project. (FBC-Residential R301.2.1; F.S. 553.842, F.A.C 61G20-3).

 - Provide the Internet Screen Shot for each product as follows:
 - Florida Product Approval screen shots must include the current code version, Florida Product Approval number (FL#), and must include an application status of Approved. Internet screen shots can be taken at www.floridabuilding.org/pr/pr_aap_srch.aspx
 - Miami Dade NOA's must include the NOA number and must not be expired. Internet screen shots can be taken at www.miamidade.gov/building/pc-search_app.aspx
 - Provide a completed Orange County Product Approval Cover Sheet. This form can be found on our website at www.ocfl.net/PermitsLicenses/PermittingAndConstructionForms.aspx
 - Note: Florida Product Approval OR Miami Dade NOA approved product manufacturer's installation details and instructions are not required to be submitted for review but must be available on site during the applicable inspections.
- ❑ Where some or all of the existing window and glazed door units are replaced with new, the replacement windows and glazed doors shall have a U-Factor maximum of 0.40 and an SHGC maximum of 0.25. Compliance can be shown by providing the manufacturers documentation for the product or a site specific letter from the contractor of record on company letterhead, signed by the license holder. (FBC-Residential R503.1.1.1, Table R402.1.2, FBC 107)
- ❑ Custom (one of a kind) exterior door assemblies shall be tested by an approved testing laboratory or be designed and engineered in accordance with accepted engineering practices by a Florida registered design professional. Signed and sealed copies of the rational analysis and calculations shall be provided upon permit application and submitted to the Building Official for review. This process may take 5 business days. (FBC A104.11, FBC-Residential R609.2.1)
- ❑ A lot Grading/Drainage Plan and finished floor elevation approved by the Development Engineering Division is required. (FBC 107)
- ❑ A Ranger Drainage District review and possible permit is required prior to a building permit being issued by the Orange County Division of Building Safety for the following subdivisions: Cape Orlando Estates, Rocket City and Wedgefield. Ranger Drainage District offices are located at 19950 Nugent St. Orlando, FL 32833. Phone 407-568-5502. Ranger Drainage permitting information can be found on their website at www.RangerDrainageDistrict.com (FBC 107, F.S Chapter 298)
- ❑ Water and sewer connection fees must be paid prior to the issuance of the building permit. Payment can be made through Utilities Customer Service located at 201 S. Rosalind Ave, first floor, Orlando, FL 32802. If you have questions concerning water and sewer connection fees, please can contact Utilities customer service by phone at 407-836-5503 or by email at DevelopTeam@ocfl.net. If the property utilizes a potable well and/or septic system, approval from the Orange County Health Department is required and can be obtained at 1001 Executive Center Drive, Orlando, FL 32803. Phone 407-858-1497 for additional information.
- ❑ One extra site plan and floor plan is required to be submitted to the Orange County Division of Building Safety and will be provided to the Orange County Property Appraisers office. These extra copies are not required to be signed and sealed. (FBC 107)
- ❑ A Florida licensed contractor may be required in order to obtain a building permit. In order for a homeowner to qualify as an Owner Builder, the owner must occupy the home and must personally appear and sign the building permit application. By law, Owner Builders are not allowed to give a Power of Attorney to an agent to act on their behalf. (F.S. 489.103)
- ❑ An Owner Builder Disclosure Statement is required to be completed when a homeowner is acting as an Owner Builder. This form can be found on our website at www.ocfl.net/PermitsLicenses/PermittingAndConstructionForms.aspx (F.S. 489.103). In order for a homeowner to qualify as an Owner Builder, the owner must occupy the home and must personally appear and sign the building permit application. By law, Owner Builders are not allowed to give a Power of Attorney to an agent to act on their behalf. (F.S. 489.103)

- ❑ A Florida licensed contractor must register with Orange County Contractor Licensing and keep current licensing and insurance information in order to obtain a building permit. Contact Contractor Licensing for additional information at 407-836-5522 or by email at www.ContractorLicensing@ocfl.net. Only a Florida licensed contractor is authorized to provide agents with a power of attorney to obtain permits on their behalf. The power of attorney must be original, site specific and notarized (FBC 107). Standardized power of attorney forms can be found on our website at www.ocfl.net/PermitsLicenses/PermittingAndConstructionForms.aspx
- ❑ Any project over \$2,500 will require a recorded Notice of Commencement. The first inspection cannot be scheduled without this document being on file with the Division of Building Safety. This form can be found on our website at www.ocfl.net/PermitsLicenses/PermittingAndConstructionForms.aspx (FBC 107)
- ❑ When resubmitting corrected plans, pages must be inserted into the previously reviewed plan sets and incorrect pages removed. Corrected plan pages that had been previously stamped in red by the Zoning department, such as the floor plans and elevations, must be reviewed again by Zoning and restamped prior to being submitted for review by the Division of Building Safety. Changes are to be clouded on revised sheets. (FBC 107)
- ❑ If expired permits exist on the proposed project address, we may be unable to issue the building permit that you are applying for until the expired permits are resolved. In most cases, a replacement permit must be issued for each expired permit. You may visit www.fastrack.ocfl.net to search property records by address by selecting "Search For: Property (Address/Parcel)" from the left hand side. For any questions or assistance with expired permits, please submit an email with your property address in the subject field to permittingservices@ocfl.net

General Permitting Requirements

- Drawings shall be dimensioned and to scale. (FBC 107)
- Plans and plan notes must be legible. (FBC 107)
- A square footage tabulation shall be included on the plan. (FBC 107)
- Notes and details shall be specific to the individual project. Under no circumstances shall plan notes or details cite the code section only or include phrases such as "or equal" or "as per (local) code". (FBC 107)
- Notes and legends must be keyed to the plan pages and details (FBC 107)
- Prior to resubmitting corrected plans for review, corrected pages must be inserted into the previously reviewed plan sets and incorrect pages removed. Corrected plan pages that had been previously stamped in red by the Zoning department, such as the floor plans and elevations, must be reviewed again by Zoning and restamped prior to being submitted for review by the Division of Building Safety. Changes are to be clouded on revised sheets. (FBC 107)
- Once a permit has been issued, changes submitted for review are considered Revisions. For ALL revisions, the original jobsite set of plans, stamped and approved by the Division of Building Safety, are required for the review. Failure to provide the approved set of plans will only delay the approval of your revision. Archived plan sets can be requested but may take up to 3 business days to obtain. (FBC 107)

Dwelling Unit Separation

- Construction, projections, openings and penetrations of exterior walls of dwellings and accessory buildings shall comply with FBC-Residential R302, Table R302.1(1), Table R302.1(2).
- Provide a typical wall section of all fire rated assemblies. Section views shall show construction of wall(s) from floor to termination point. (FBC-Residential R302.1)
- Provide details and specifications for penetration firestop systems. The penetration shall be an approved system that has been tested in accordance with ASTM E814 or UL 1479. Penetrations shall have an F rating not less than the required fire-resistance rating of the wall or floor-ceiling assembly penetrated. (FBC-Residential R302.4.1.2)
- Electrical outlets or boxes located on opposite sides of rated walls or partitions shall be separated by a horizontal distance of not less than 24 inches. (FBC-Residential R302.4.2)
- Exterior walls on a lot line shall comply with FBC-Residential R302. The Division of Building Safety accepts the following publications:
 - o FM Specification Tested Products Guide
 - o GA Fire Resistance Design Manual
 - o ESI Evaluation Report Listing
 - o UL Fire Resistance Directory
 - o Warnock Hershey
 - o ICC Evaluation Reports
 - o Florida Product Approval
 - o Miami Dade Notice of Acceptance (NOA)

Foundation Plan

- Document the thickness and compressive strength of concrete for driveways, walkways and slabs. Soil treatment used for subterranean termite prevention shall be applied under all exterior concrete or grade within 1 foot of the primary structure sidewalls. (FBC-Residential R506, R402.2, Table R402.2, R318.1.6)
- A foundation plan prepared by the design professional of record is required. (FBC 107)
- On the foundation plan, identify the size and type of footing. For example, interior and exterior monolithic footers, stem wall footer, column pads. (FBC-Residential R403)
- All exterior footing shall be a minimum of 12 inches below grade. (FBC-Residential R403.1.4)
- For isolated column pads, document size, depth and reinforcing steel. (FBC-Residential R403, R407)
- Document the required lap splice of reinforcing steel. (FBC-Residential R404.1.3.3.7.5, Table R608.5.4(1))
- Document the minimum required slab thickness and reinforcement. (FBC-Residential R506)

Foundation Plan (Cont.)

- ❑ Show the specific locations of all down pours on the foundation plan. (FBC-Residential 606.1, 608.6, FBC 107. 3.5)
- ❑ Placement of vertical reinforcement at wall openings must be documented on the foundation plan. (FBC-Residential R608.8, FBC 107. 3.5)
- ❑ Document protection against termites. (FBC-Residential R318)
- ❑ A minimum 6-mil polyethylene or approved vapor retarder is required to be documented on the plans. (FBC-Residential R506.2.3)
- ❑ Compressive strength of concrete shall be documented on the plan. (FBC-Residential R402.2, Table R402.2)
- ❑ Foundation anchorage for wood sill plates shall be documented on the plans. (FBC-Residential R403.1.6)
- ❑ In the crawl space (Under-floor space), document the required ventilation and access. (FBC-Residential R408)
- ❑ In the crawl space (Under-floor space), document the required distance between the bottom of the wood structural floor to the exposed ground. (FBC-Residential R317)
- ❑ Document ledgers and sills for deck construction. (FBC-Residential R507)
- ❑ A protective sleeve around piping penetrating concrete slab-on-grade floors is required. Pipes penetrating foundation walls shall be provided with a relieving arch, or pipe sleeve shall be built into the foundation wall. Provide a detail documenting compliance with the code. (FBC-Residential P2603)
- ❑ 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. (FBC R318.1.4)

Wood Frame Wall Sections

- ❑ Protection of wood and wood based products against decay is required when wood framing members rest on concrete or masonry exterior foundation walls and are less than 8 inches from the exposed ground. (FBC-Residential R317)
- ❑ Protection of wood and wood based products against decay is required when wood siding, sheathing and wall framing on the exterior of a building has a clearance of less than 6 inches from the ground. (FBC-Residential R317)
- ❑ Protection of wood and wood based products against decay is required when wood siding, sheathing and wall framing on the exterior of a building has a clearance of less than 2 inches measured vertically from driveways, concrete steps, porch/patio slabs and similar horizontal surfaces exposed to the weather. (FBC-Residential R317)
- ❑ For exterior wood walls, denote size, grade and species of all structural lumber. (FBC-Residential R602)
- ❑ Show exterior stud size and spacing. Specify top and bottom connection for bearing walls. (FBC-Residential R602)
- ❑ Exterior wood stud walls shall be capped with a double top plate. Show double top plate. (FBC-Residential 602.3.2)
- ❑ Show headers and the connectors for all exterior wall openings. (FBC-Residential R602.7, Tables R602.7(1), R602.7(2) and R602.7(3))
- ❑ Document a continuous load path from the roof to foundation. Specify the type and spacing of all anchors, straps, connectors and clips. (FBC-Residential R301)
- ❑ For truss system or conventionally framed roof structure, specify connection to walls. (FBC-Residential R301, R602, R802)
- ❑ Wall sheathing type, size, thickness, and nailing schedule is required to be documented on the plans. (FBC-Residential R703, R602)

Wood Frame Wall Sections (Cont.)

- ❑ One layer of No. 15 asphalt felt, complying with ASTM D226 for Type 1 felt, or other approved water-resistive barriers shall be applied over studs or sheathing for all exterior walls. (FBC-Residential R703.2)
 1. Application of stucco (Exterior plaster) shall be documented on the plans. (FBC-Residential 703)
 2. Two water-resistive barriers shall be installed as required by R703.2. The individual layers shall be installed independently such that each layer provides a separate continuous plane and any flashing intended to drain to the water-resistive barrier is directed between the layers. (FBC-Residential R703.2 one layer and R703.7.3 Stucco)
 3. Lath and lath attachment. (R703.1)
 4. Stucco (Exterior plaster) thickness over concrete and wood frame. (R703.7.2, ASTM C926)
 5. Weep screed for frame transitions and terminations. (R703.7.2.1)
- ❑ Two story wood frame wall sections shall include, within the load path, the type of floor system. The detail must include connections from the first floor to the floor system and from the floor system to the second floor. Document perimeter strapping on this section. (FBC 107)
- ❑ Flashing at exterior window and door openings shall be installed in accordance with one of the following methods: 1) The fenestration manufacturer's written flashing instructions. 2) The flashing manufacturer's written instructions. 3) In accordance with the flashing method of a registered design professional. 4) In accordance with approved FMA/AAMA installation methods as specified in the code. (FBC-Residential R703.4)
- ❑ All wood in contact with the ground and that supports permanent structures intended for human occupancy shall be approved preservative treated (PT) wood. (FBC-Residential R317.1.2)
- ❑ Posts, poles and columns supporting permanent structures shall be wood that is preservative treated (PT) unless exceptions apply. (FBC-Residential R317.1.4)
- ❑ Sills and sleepers on a concrete or masonry slab that is in direct contact with the ground must be preservative-treated (PT) or wood that is naturally durable, unless separated from such slab by an impervious moisture barrier. (FBC-Residential R317.1 (3)).
- ❑ Anchored stone and masonry veneer shall comply with the requirements. (FBC-Residential R703.8)
- ❑ Provide a wall section from the foundation to the roof system. The wall section must include all footings minimum 12 inches below grade, all steel reinforcement, minimum lap of vertical and horizontal steel and roof anchoring. (FBC 107)

Concrete Block Wall Sections

- ❑ Include in a wall section, wall openings to show lintels, precast, cast-in-place, steel lintels. (FBC 107)
- ❑ All lintels regardless of type and/or manufacturer must be specified at every opening on the plans and keyed to a legend along with the approved manufacturer's installation instructions, load tables, and detail structural sections. Florida Product Approval or Miami Dade NOA may be submitted in lieu of load tables and may be included as part of the product approval submittals. (FBC-Residential R606.10, FBC 107)

Insulation Type and R-Value

- ❑ The required insulation type and R-value must be specified on the plans. (FBC-Energy R402, Table R402.1.2)

General Wall Sections

- ❑ For brick veneer, show additional footing width, tie schedule and flashing section. (FBC-Residential R404.1.5.1, R404.1.5.2 and R703).
- ❑ Include a continuous tie beam or top plate around the building or show alternate reinforcing on a wall section. (FBC-Residential R602.3.2, R606)
- ❑ For two story block or frame wall sections, include the floor structure. Specify the construction type of the floor system and the connections to the walls above and below the floor system including spacing. (FBC-Residential R301)

General Wall Sections (Cont.)

- For interior bearing walls, detail the size and type of foundation and specify all connections from the wall or column to the foundation. Show the continuous tie from the wall section to the roof structure or floor system. (FBC-Residential FBC R403, R502, R602)
- For gable ends, document the materials, sheathing, bracing and nailing schedules for sheathing and diaphragms and specify connections to wall below. (FBC-Residential R602, R606)
- For the use of bearing columns, show size and type. Detail the specific connection to the foundation and roof structure or floor system above. (FBC-Residential FBC R403, R502, R602)
- Provide chimney construction specifications and for connecting to the roof structure below. (FBC-Residential Chapter 10, Termination R1003.9)
- All fireplaces must comply with FBC-Residential Chapter 10, Termination R1003.9
- Manufacturer specifications for factory-built fireplaces with flue are required to be submitted. Prefabricated fireplaces shall be tested in accordance with UL 127. (FBC-Residential R1004, R1005, FBC 107)
- Document wood frame to block wall connection for bearing walls. (FBC-Residential R301.1, R608.9)

Roof Framing Plan

- A roof framing plan or layout is required to be included in the plan set and must be prepared by the design professional of record. (FBC 107)
- For conventional roof framing, denote size, grade and species of all structural lumber. (FBC-Residential R802 and R902)
- Document the spacing of roof framing members. (FBC 107)
- Specify each roof member connectors, anchors and hangers. (FBC-Residential R301 and R802)
- Provide a continuous load path from the ridge beam to walls (ridge beam to rafters, rafters to collar ties or ceiling joists and down to the top plate or tie-beam) and specify all connectors, anchors, clips and straps. (FBC-Residential R802)
- Ridge boards shall be not less than 1 inch nominal thickness and not less in depth than the cut end of the rafter. (FBC-Residential R802.3)
- Where ceiling joists are not connected to the rafters at the top wall plate, rafter/collar ties shall be installed to provide a continuous tie and should be spaced no more than 48 inches on center. Collar ties or ridge straps to resist wind uplift shall be connected in the upper third of the attic space in accordance with the table. (FBC-Residential R802.3.1, Table R602.3(1))
- For field built trusses, the design professional of record shall specify size, grade and species of framing members. Provide the geometry of all components (profiles) and include detailed specifications and fasteners based on calculated uplifts of the roof framing plan. Provide all loads (live load, dead load and uplift) for the top chord, bottom chord, and overhang for each truss. (FBC-Residential R802, Florida Statutes 471, 481)
- When trusses are used, signed and sealed truss engineering by a Florida Licensed Engineer is required to be submitted as part of the plan review. For physically submitted plans, each individual truss engineering page or a table of contents page/coversheet, listing each truss, must have the original signature of a Florida licensed design professional, be dated and sealed. If the truss engineering is being submitted electronically, they must be digitally signed and sealed as required. (FBC 107)
- Document grade and thickness of roof sheathing materials. (FBC-Residential R803)
- Provide a roof sheathing nailing schedule. (FBC-Residential R803.2.3.1)
- Document the specific type of roof underlayment's on the plans. (FBC-Residential R905, Table R905.1.1. For Concrete and Clay Tile R905.3)
- Dormer framing details are required. (FBC 107)
- Provide a conventionally framed valley detail. (FBC-Residential R301.2.1.1 and R802)

Second Story Floor Framing Plan

- ❑ A floor framing plan is required to be included in the plan set. (FBC 107)
- ❑ Engineering and specifications for truss floor systems are required and must include the direction, span, and spacing. (FBC-Residential R502, R502.2)
- ❑ Conventionally framed floor layouts must include the size, grade and species of lumber and include the direction, span, and spacing of floor structure. (FBC-Residential FBC R502)

Beams and Columns

- ❑ Show and detail the size and type (conventional or engineered) of all beams. Specify their connectors, anchors and hangers. For field build beams, detail the members and assembly method and specify fasteners and nailing pattern. (FBC-Residential R301.2.1.1, R502, R602 and R606)
- ❑ Show and detail the size and type (conventional or engineered) of all columns. Specify the anchoring method to foundations and fastening to beam above. For field build columns, detail the members and assembly method. (FBC-Residential R301.2.1, R602)

Floor Plans

- ❑ Provide a detailed floor plan dimensioned and to scale. Include wall openings and label all room uses. (FBC 107)
- ❑ Provide both an existing and proposed floor plan along with a scope of work for this project. (FBC 107)
- ❑ An existing floor plan, identifying the adjacent rooms, is required when enclosed additions are made. (FBC-Residential R311)
- ❑ Hallways shall be documented on the plans to be not less than 3 feet wide. (FBC-Residential R311.6)
- ❑ A minimum of one emergency escape and rescue opening is required in every sleeping room. The opening must be labeled as "Egress" on the floor plan. Emergency egress openings shall have a net clear height opening not less than 24 inches and the net clear width shall be not less than 20 inches. Note: A net clear opening of not less than 5.7 square feet is required. Grade floor or below grade openings shall have a net clear opening of not less than 5 square feet. (FBC-Residential R310.2)
- ❑ Bars, grilles, covers, screens or similar devices are permitted to be placed over emergency escape and rescue openings. Such devices shall be releasable or removable from the inside without the use of a key, tool, special knowledge or force greater than that required for the 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 and egress doors during the threat of a storm. Such devices shall not be required to comply with the operational constraints of Section R310.1.1 or R312.2. 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. (FBC-Residential R310.4)
- ❑ Document the size of the required egress doors on the plans. Not less than one egress door shall be provided for each dwelling unit. Egress doors shall be side hinged, and shall provide a clear width of not less than 32 inches where measured between the face of the door and the stop, with the door open 90 degrees. The clear height shall be not less than 78 inches in height measured from the top of the threshold to the bottom of the stop. (FBC-Residential R311.2)
- ❑ No designated egress or emergency egress may exit through a garage. (FBC-Residential R311.1)
- ❑ There shall be a landing or floor on each side of each exterior door. The width of each landing shall be not less than the door served. Every landing shall have a dimension of not less than 36 inches measured in the direction of travel. The slope at the exterior landings shall not exceed 2 percent. (FBC-Residential R311.3)

Floor Plans (Cont.)

- ❑ Guards shall be located along open-sided walking surfaces, including stairs, ramps and landings that are located more than 30 inches measured vertically to the floor or grade below at any point within 36 inches horizontally to the edge of the open side. Guards shall be not less than 36 inches in height and not have openings from the walking surface to the required guard height which would allow passage of a sphere 4 inches in diameter. (FBC-Residential R312)
- ❑ An attic access is required to be documented on the plan. The rough-framed opening shall not be less than 22 inches by 30 inches and shall be located in a hallway or other readily accessible location. See FBC-Residential M1305.1.3 for access requirements where mechanical equipment is located in attics. (FBC-Residential R807)
- ❑ Openings between the garage and residence shall be equipped with solid wood doors of not less than 1-3/8 inches in thickness, solid or honeycomb core steel doors not less than 1-3/8 inches thick, or 20-minute rated doors. (FBC-Residential R302.5)
- ❑ 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 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. (FBC-Residential 302.5.2)
- ❑ Garages shall be separated from the residence and attics with not less than 1/2 inch gypsum board or equivalent applied to the garage side. Structures supporting floor/ceiling assemblies used for separation shall be separated by not less than 1/2 inch gypsum board or equivalent. (FBC-Residential Table R302.6)
- ❑ Habitable rooms above the garage shall be separated by not less than 5/8 inch type X gypsum board or equivalent. (FBC-Residential Table R302.6)
- ❑ Enclosed accessible spaces under stairs shall have walls, under-stair surface and any soffits protected on the enclosed side with 1/2 inch gypsum board. (FBC-Residential R302.7)
- ❑ All new single-family houses and duplexes 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 clear opening. However, if only a toilet room is provided at grade level, such toilet rooms shall have a door with a clear opening of not less than 29 inches. (FBC-Residential R320.1.1)
- ❑ Plumbing fixtures shall be properly spaced and documented on the plan. (FBC-Residential R307, figure R307.1)
- ❑ Glass in hazardous locations must be identified on the plans. Document the type of safety glazing to be installed. (FBC-Residential R308).
- ❑ Bathrooms, water closet compartments and other similar rooms shall be provided with aggregate glazing area in windows of not less than 3 square feet, one-half of which must be openable. Glazed areas shall not be required where artificial light and a local exhaust system are provided. (FBC-Residential R303.3 and M1507).
- ❑ Habitable rooms shall have a floor area of not less than 70 square feet and shall not be less than 7 feet in any horizontal dimension with the exception of kitchens. (FBC-Residential R304)
- ❑ Habitable spaces in one and two family dwellings must comply with ceiling height requirements of the code. (FBC-Residential R305)

Two Story Buildings

- ❑ Provide a complete stair section from starting point to termination of stair to include thrust block at base of stairs and connection to floor system above. (FBC 107)
- ❑ Other than straight run stairs, provide the framing and connections for the landings within stair runs and termination at the upper story. (FBC 107)
- ❑ Winder and circular stairways shall have a tread depth of not less than 10 inches measured between the vertical planes of the foremost projection of adjacent treads at the intersections with the walkline and have a tread depth of not less than 6 inches at any point within the clear width of the stair. (FBC-Residential R311.7.5.2.1)
- ❑ Spiral stairways shall comply with FBC-Residential R311.7.10.1477

Two Story Buildings (Cont.)

- ❑ Stairways shall be not less than 36 inches in clear width at all points above the permitted handrail height and below the required headroom height. (FBC-Residential R311.7.1)
- ❑ The headroom in stairways shall be not less than 6 feet 8 inches and noted on the plan. (FBC-Residential R311.7.2)
- ❑ The riser height shall be not more than 7-3/4 inches in height. The tread depth shall be not less than 10 inches. A nosing projection not less than 3/4 inch and not more than 1-1/4 inches shall be provided on stairways with solid risers. A nosing projection is not required where the tread depth is not less than 11 inches. (FBC-Residential R311.7.5)
- ❑ A handrail shall be provided on not less than one side of each continuous run of treads with four or more riser. The handrail height shall be not less than 34 inches and not more than 38 inches and must be continuous for the full length of the flight. Handrails adjacent to walls shall have a space of not less than 1-1/2 inches between the wall and the handrails. (FBC-Residential R311.7.8)
- ❑ Required handrails shall have a type I or II grip-size. A handrail detail documenting compliance is required. (FBC-Residential 311.7.8.3)
- ❑ Guards shall be located along open-sided walking surfaces, including stairs, ramps and landings that are located more than 30 inches measured vertically to the floor or grade below at any point within 24 inches horizontally to the edge of the open side. Guards shall be not less than 36 inches in height. Insect screening shall not be considered as a guard. (FBC-Residential R312)
- ❑ Guards (handrails) on the open sides of stairs shall have a height not less than 34 inches measured vertically from a line connecting the leading edges of the treads. Where the top of the guard serves as a handrail on the open sides of stairs, the top of the guard shall be not less than 34 inches and not more than 38 inches as measured vertically from a line connecting the leading edges of the treads. (FBC-Residential R312.1.2)
- ❑ Required guards shall not have openings from the walking surface to the required guard height which would allow passage of a sphere 4 inches in diameter. Guards (handrail) on the open side of stairs shall not have openings that allow passage of a sphere 4 3/8 inches in diameter. Triangular openings formed by the riser, tread and bottom rail shall not allow passage of a sphere 6 inches. (FBC-Residential R312.1.3)
- ❑ Details for the installation of horizontal cable and rope handrails, when used as part of the guardrail system, are required and must include the cable spacing, cable diameter, intermediate supports, anchoring method and live load. (FBC-Residential R312, Table R301.5)
- ❑ Manufacturer's specifications and details for the installation of tempered glass or Plexiglas, when used as part of the guardrail system, are required. Provide details showing compliance with the code. (FBC-Residential R308, R308.4.4, R308.4.6, R308.4.7, Table R301.5)
- ❑ Exterior wood framed landings, decks, balconies, stairs and similar facilities shall be positively anchored to the primary structure to resist both vertical and lateral forces or shall be designed to be self-supporting. Document anchors and attachment. (FBC-Residential R301, R311.5, R507)
- ❑ Flashing shall be installed at wall and roof intersections, wherever there is a change in roof slope or direction and around roof openings. (FBC-Residential R903.2.1, Table R903.2.1)

Basements

- ❑ For basements, include calculations verifying whether it qualifies as a story or a basement. Also, reference the definitions of "story above grade plane" and "grade plane". (FBC-Residential R202)

Elevations

- ❑ Elevations shall show roof pitch, eave height, overhang lengths, finish floor elevations, ceiling height, exterior wall finish, chimney's, guardrails at porches, and handrails at stairs. (FBC-Residential R312.2.1, FBC 107)
- ❑ Document window sill heights on the elevations where the opening of an operable window is located more than 72 inches above the finished grade or surface below. The lowest part of the clear opening of the window shall be a minimum of 24 inches above the finished floor of the room in which the window is located or be equipped with a window opening control device or approved window fall prevention device in compliance with ASTM F 2090. (FBC-Residential R312.2.1)

Roof Ventilation

- ❑ Document the required roof ventilation on plans. (FBC-Residential R806.1)
- ❑ Provide roof vent calculations. The minimum net free ventilating area shall be 1/150 of the area of the vented space. (FBC-Residential 806.2)

Spray Foam Insulation

- ❑ When using spray foam insulation, the following information will be required from the design professional of record (FBC-Residential 806.5, FBC 107)
 - The manufacturer's installation details.
 - The ICC Evaluation Report for the product being proposed. The Report must active and not be expired.
 - Plan details showing solid soffits and no roof and attic ventilation.
 - Energy Calculations indicating this product method and states unvented.

Electrical Layout

- ❑ An electrical layout is required and must include the location of all interior and exterior electrical devices such as receptacles, switches, lights, ceiling fans, bath exhaust fans, attic light, stairway lighting, smoke alarms and carbon monoxide alarms, etc. An electrical riser diagram including grounding electrode is required to be included on the plans for all new one and two family dwellings. (FBC 107, FBC-Residential chapters 34 through 40, R314, R315)

Mechanical

- ❑ Provide complete duct design with sizes, balanced return, and R-value complying with the ACCA Manual J heating and cooling load calculations, Manual S based on the load calculations in accordance with the manufactures equipment selection, Manual D duct design layout of system sizing supply, balance returns and outside air ducts as required. (FBC-Energy Conservation R403)
- ❑ Energy Gauge version 5.1 of the energy calculations is required for performance method or calculations can be in accordance with the prescriptive method (Form R402-2017) and EPL Display Card (form RD) (FBC-Energy Conservation R401.3) (Forms can be found in appendix RD of the 2017 FBC 6th Edition Energy Conservation)
- ❑ The energy calculations must indicate Yes or No for worst case and must be site specific. (FBC 107)
- ❑ The conditioned floor area in the energy calculations shall closely match that listed on the plans. (FBC 107)
- ❑ SEER shall be 14 minimum. (FBC-Energy Conservation Form R402 - 2017, Table C403.2.3(1-11))
- ❑ HSPF shall be 8.2 minimum. (FBC-Energy Conservation Form R402 - 2017, Table C403.2.3(1-11))
- ❑ The energy calculations shall say PASS on the bottom. (FBC 107)
- ❑ The energy calculations shall be signed and dated by the preparer. (FBC 107)
- ❑ For new SFRS, the specifications (U and SHGC, values, low E, etc.) of windows, shall comply with those values utilized to pass the Energy Calculations.(FBC Energy Conservation, Table R402.1.1)

Mechanical (Cont.)

- ❑ Up to 15 square feet of glazed fenestration (window and doors) per dwelling unit shall be permitted to be exempt from U-factor and SHGC requirements. (FBC-Energy Conservation R402.3.3).
- ❑ Where some or all of the existing window and glazed door units are replaced with new, the replacement window and glazed doors shall have a U-Factor maximum of 0.40 and an SHGC maximum of 0.25. Compliance can be shown by providing the manufacturers documentation for the product or a site specific letter from the contractor of record on company letterhead, signed by the license holder. (FBC-Energy Conservation R503.1.1.1, Table R402.1.2)
- ❑ Category IV and V sunrooms are required to have energy calculations as they are conditioned. (FBC-Residential R301.2.1.1.1)
- ❑ Attics containing air handling units (AHU's) shall have an opening and passageway large enough to allow removal of the largest appliance, but not less than 30 inch high and 22 inches wide and no more than 20 feet away from the opening. The passageway shall have a continuous solid floor not less than 24 inches wide. A level service space not less than 30 inches square shall be present along all sides of the appliance where access is required. A luminaire controlled by a switch located at the passageway opening and a receptacle outlet shall be installed at or near the appliance. Exceptions may apply. Truss Engineering shall reflect all imposed loads from equipment or other components, which are not part of the truss design. (FBC-Residential M1305.1.3, M1305.1.3.1, R301.1)
- ❑ Additions and alterations utilizing the Prescriptive Method are not allowed to locate air handling units (AHU's) in attics. (FBC-Energy Conservation R403.3.6) Supply ducts in attics shall be insulated to a minimum of R-8. (FBC-Energy Conservation R403.3.1)

Plumbing

- ❑ Gas hot water heaters must be elevated and bollard installed R1307.2

General

- ❑ Glass block installation details are required and shall comply with resistance to wind pressure. (FBC-Residential R301.1 and R607)
- ❑ Provide details for all decorative architectural embellishments to the roof or exterior perimeter walls of the house. Attachment and anchoring must be included. (FBC 107)
- ❑ Size of steel members, material grade, weld grade and connection details shall be shown. (FBC-Residential R301.1.1(2), AISI S230-07/S3-12. Standard for Cold Formed Steel Framing- Prescriptive Method For One and Two Family Dwellings)
- ❑ Unless roofs are sloped to drain over roof edges, roof drains, overflow drains and scuppers are required and must be documented on the plans. (FBC-Residential R903.4)
- ❑ Provide a profile of the dock from beginning to end to include the normal high water elevation (NHWE). Landward of the NHWE, provide a minimum 36 inch guardrail where the distance from the top of the deck to top of grade exceeds 30 inches. A guardrail is required. (FBC 107, FBC-Residential R312)

Existing Building Code

- ❑ Repairs, alteration and additions to existing structures shall comply with FBC-Existing Building 2017.

Mobile / Manufactured Homes

- ❑ Mobile/manufactured home set-up (tie-down), repair and remodeling shall comply with the Mobile/Manufactured Home Installation Standards. (F.A.C. 15C-1, 15C-2)
- ❑ No person may perform manufactured/mobile home installations unless licensed by the Bureau of Mobile Home and Recreational Vehicle Construction of the Department of Highway Safety and Motor Vehicles pursuant to section 320.8249, F.S., regardless of whether that person holds a local installer's license or any other local or state license. The owner of the mobile home may apply for and obtain a building permit to set-up and tie-down the structure as long as the license holder installs and certifies the installation. (F.A.C. 15C-1, 15C-2)
- ❑ The mobile home permitting package must include a site plan, floor plan and Permit Worksheet pages 1 and 2. The Permit Worksheet must be completely filled out. (FBC 107)
- ❑ Additions to a mobile/manufactured home of any kind shall be free standing and self-supporting with only the flashing attached to the mobile home (fourth wall construction). Fourth wall construction must be detail in a wall section and shown on both the foundation plan and floor plan. In lieu of fourth wall construction, the design professional for the addition must provide a site specific statement that certifies the size and type of the structure to be added will not lessen the integrity of the mobile home. This may be included in a signed and sealed site specific letter or on the engineered plans. (F.A.C. 15C-1, 15C-2, FBC 107)
- ❑ Repair or remodeling of a mobile/manufactured home shall require the use of material and design equivalent to the original construction. (F.A.C 15C-1, 15C-2)

Aluminum Structures

- ❑ All extruded aluminum members shall be not less than 0.040 inch (gauge) and must be documented on the plans. (FBC 2002.3)
- ❑ The minimum thickness for formed sheet aluminum structural wall panels shall be not less than 0.024 inch and must be documented on the plans. (FBC 2002.5)
- ❑ Provide Florida Product Approval or Miami Dade NOA for composite wall panels. (FBC 107)
- ❑ Aluminum sheet used for roof decking (pan roof or panel roof) or siding shall be not less than 0.032 inch in thickness. Document this on the plan or provide Florida product approval or Miami Dade NOA for the product used. (FBC 2003.8.2, FBC 107)
- ❑ Provide Florida Product Approval or Miami Dade NOA for composite roof panels (FBC 107)
- ❑ Vinyl, tempered glass, 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 75mph". Decals shall be placed such that the decal is visible when the panel is installed. Document this requirement on the plans. (FBC 2002.3.3)
- ❑ Show the connections and fasteners for all aluminum members. (FBC 107)
- ❑ Show cable bracing, knee bracing and structural gutters on the plans. (FBC 107)
- ❑ Document the applicable sunroom category on the plans. (FBC 2002.6.2)

Pools, Spas and Water Features

- ❑ Provide a completed original, site specific Swimming Pool Safety Affirmation identifying required barriers signed by the contractor and homeowner. (FBC-Residential R4501.17). This form can be found on our website at www.ocfl.net/PermitsLicenses/PermittingAndConstructionForms.aspx
- ❑ With the use of a mesh safety barrier (baby fence), provide the manufacturers installation details. (FBC-Residential R4501.17, FBC 107). The mesh safety barrier used, must be an approved Orange County product. A list of approved mesh safety barrier manufacturers can be found on our website at www.ocfl.net/PermitsLicenses/PermittingAndConstructionForms.aspx
- ❑ For floating pool alarms, Provide a report from an accredited testing laboratory. Test must be in accordance with ASTM Standard F2208.

Pools, Spas and Water Features (Cont.)

- ❑ Provide a specific layout of the proposed pool, spa, deck area and play features. The layout must show the pool perimeter in relation to any existing house, accessory structures and lanai foundations. The layout must also show sun shelf, location of swim-outs, diving board and include pool depths from entry steps to deepest point. (FBC 107)
- ❑ Provide site specific angle of repose engineering. Identify the affected area on the pool layout. (FBC-Residential 403.1.7)
- ❑ Provide manufacturers product data and photo of main drain covers and skimmers. (FBC-Residential R4501.6.6, R4501.21.2)
- ❑ Provide completed site specific worksheets complying with ANSI/APSP 7 (Total Dynamic Head (TDH) Calculation) and ANSI/APSP 15 (Energy Efficiency Compliance Information for Residential Swimming Pools) (FBC-Residential R4501, FBC 107)
- ❑ Provide site specific engineering for all water features, sheer decent, slides, stairs, grottos, bridges and rock formations, lazy rivers, etc. For disappearing or infinity edge pool features, provide site specific engineering including the pool wall down to and including the collection basin. (FBC 107)
- ❑ Provide site specific engineering for rain curtains added to the home, accessory structures, trellis, etc. A Florida licensed contractor is required to obtain the necessary permits for these features as they cannot be included with the pool permit. (FBC 107)
- ❑ Provide manufactures installation instructions to include pool size, shape, depth and removable ladder. Minimum pool wall height is 48 inches or provide a completed Swimming Pool Safety Affirmation identifying required safety barriers (FBC 107)
- ❑ Provide manufactures installation instructions and product information for the spa and spa cover to include spa size, depth and electrical connection requirement (hardwired or plug-in). (FBC 107)
- ❑ Fountains with a basin deeper than 24 inches will require a completed Swimming Pool Safety Affirmation (FBC-Residential R4501.17, See pool definition R4501)

Signs

- ❑ For wall and fascia signs, provide signed and sealed engineering to include fastening method, anchoring hardware and spacing. (FBC Appendix H)
- ❑ For pylon, pole, ground and billboard signs, provide signed and sealed engineering from the foundation to the top of the sign. (FBC Appendix H)

Retaining Walls

- ❑ Retaining walls must be reviewed and approved by EPD, Engineering and Zoning departments.
- ❑ Signed and sealed engineering is required for retaining walls. (FBC-Residential R404.4)

Florida Statutes

- ❑ When physically presenting plans, specifications, reports and/or other documents prepared by a Florida licensed engineer for public record shall be signed, sealed and dated in accordance to Florida Statutes (Chapter 471). The signature shall be handwritten (not stamped) and the seal on all required document shall be digitally created, inking stamp or embossing sealed. Electronically signed and sealed plans can only be submitted electronically through Orange County FastTrack system.
- ❑ When physically presenting plans, specifications, reports and/or other documents prepared by a Florida registered architect for public record shall be signed, sealed and dated in accordance to Florida Statutes (Chapter 481). The signature shall be handwritten (not stamped) and the seal on all required document shall be digitally created, inking stamp or embossing sealed. Electronically signed and sealed plans can only be submitted electronically through Orange County FastTrack system.

Florida Statutes (Cont.)

- ❑ Corrections and revisions to sealed documents prepared by a Florida licensed engineer or registered architect shall only be made by the engineer or architect who prepared the original documents. Corrections and revisions shall be properly signed and sealed in accordance to Florida Statutes. (Chapter 471 and 481).
- ❑ Electrical documents on a residential system, which exceeds 600 amps, shall be signed, sealed and dated by an Electrical Engineer registered on the State of Florida. (F.S. Chapter 471.003)
- ❑ Heating, ventilation, and air conditioning document for any new building or addition, which requires more than a 15-ton-per-system capacity which is designed to accommodate 100 or more persons or for which the system costs more than \$125,000, shall be signed, sealed, and dated by a Professional Engineer registered on the State of Florida. (FBC-Residential R101.2.1, Florida Statutes Chapter 471, Chapter 553, Part VI, Florida Statutes.)

Note:

These requirements are not all inclusive of the code requirements for the proposed building construction. The Division of Building Safety may require additional drawings, specifications, calculations. (FBC 107)

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