# CODE ADOPTION BY THE BALDWIN COUNTY COMMISSION

International Building Code, 2012
International Gas Code, 2012
International Mechanical Code, 2012
International Plumbing Code, 2012
International Residential Code, 2012
International Energy Conservation Code, 2012
Baldwin County Supplemental Code for Residential Structures in addition to the IRC, 2012
National Electric Code, 2011 For Commercial Buildings and Residential Building containing more than two (2) dwelling units

Local Wind Load Code – 3 second gust winds: ***applicable to the 2012 IRC only***

130 mph – South of I-10
120 mph – I-10 North to I-65
110 mph – I-65 North to County line

**RESCIND**

International Building Code, 2006
International Gas Code, 2006
International Mechanical Code, 2006
International Plumbing Code, 2006
International Residential Code, 2006
Baldwin County Supplemental Code for Residential Structures in addition to the IRC, 2006
National Electric Code, 2005 For Commercial Buildings and Residential Building containing more than two (2) dwelling units

**ADOPTED:**

**January 17, 2012**

**ENFORCED:**

**January 17, 2012**

Revised 2/14/2014

**BALDWIN COUNTY SUPPLEMENTAL CODE IN ADDITION TO THE 2012 INTERNATIONAL RESIDENTIAL CODE**

The requirements specified in this Code Supplement apply to detached One and Two family dwellings not more than three stories above grade plane in height. The provisions of this supplement are intended to complement the locally adopted codes. The elements of design not addressed by the provisions of this supplement shall be in accordance with the locally adopted code. In the event a conflict between this document and the adopted code, the more stringent shall apply.

## STRUCTURAL

1. Unless balloon framed, gable ends over 4 foot high shall be braced with a minimum 2 x 6 horizontal strong back installed at midpoint of the vertical height of the gable end wall. Minimum 2 x 4 diagonal bracing not to exceed 45 degrees or 4 feet OC shall be installed on top of strong back and face nailed with 4-10d nails into side of gable wall framing studs. In addition, when ceiling joists run parallel to the gable end wall, a minimum 2 x 4 x 8 brace shall be installed at maximum 6 feet OC on top of ceiling joists and gable top plate nailed with 2-10d nails at each support. Metal 20 gauge straps shall be installed on top of 2 x 4 lateral brace and over gable top plate into stub below using 10-8d nails top and bottom. Install minimum 2 x 4 bracing under lateral braces adjacent to gable wall.
2. Wood structural panels with a minimum thickness of 7/16 inch (11 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 and attached to the framing surrounding the opening containing the product with the glazed opening. Panels shall be predrilled as required for the anchorage method and shall be secured with the attachment hardware provided. Attachments shall be designed to resist the component and cladding loads determined in accordance with either Table R301.2(2) (See International Residential Code 2012) or ASCE 7, with the permanent corrosion-resistant attachment hardware provided and anchors permanently installed on the building. Attachment in accordance with Table R301.2.1.2 is permitted for building with a mean roof height of 33 feet (10 058 mm) or less where in Wind Zones 1 and 2 in accordance with figure R301.2(4)C. ***(Plyox clips are not allowed)***

**TABLE R301.2.1.2**
**WINDBORNE DEBRIS PRETECTION FASTENING**
**SCHEDULE FOR WOOD STRUCTURAL PANELS a,b,c,d**

| FASTENER TYPE | Panel span ≤ 4 feet | 4 feet < panel span≤ 6 feet | 6 feet < panel span ≤ 8 feet |
|---|---|---|---|
| No. 8 wood screw based anchor with 2-inch embedment length | 16 | 10 | 8 |
| No. 10 wood screw based anchor with 2-inch embedment length | 16 | 12 | 9 |
| ¼ inch lag screw based anchor with 2-inch embedment length | 16 | 16 | 16 |
| | | | |

Sor SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 pound = 4.448N, 1 mile per hur = 0.447 m/s.

a. This table is based on 130 mph wind speeds and a 33 foot mean roof height.
b. Fasteners shall be installed at opposing ends of the wood structural panel. Fasteners shall be located a minimum of 1 inch from the edge of the panel.
c. Anchors shall penetrate through exterior wall covering with an embedment length of 2 inches minimum into the building frame. Fasteners shall be located a minimum of 2-1/2 inches from the edge of concrete block or concrete.
d. Where panels are attached to masonry or masonry/stucco, they shall be attached using vibration-resistant anchors having a minimum ultimate withdrawal capacity of 1500 pounds.

3. Garage doors shall be rated to or above the applicable wind design load.
4. Wood frame chimney chases shall be structurally connected to rafters and/or ceiling joists. The attachment must be detailed in the plans or must meet the following minimum requirements:

   Each corner of the chimney structure must have a tension strap fastened to the corner stud and continues downward to the roof and/or ceiling support members below. The tension strap must have a minimum tension capacity of 700 lbs. at each end.

Chimney framing shall be sheathed with minimum 7/16 inch structural panel on exterior four sides.

The base perimeters of chimney framing must be continuously supported by minimum 2 x 4 blocking fastened to roof framing members with joist hangers.

5. Exterior and Interior Shear walls and/or braced wall panel locations shall be indicated on the plans and shall be nailed in accordance with the engineered drawings but no less than 6 inches OC maximum intermediate and edge using 8d irregular shank (i.e., ring shank or spiral) nails with full round heads. All exterior walls and gable ends shall be fully sheathed with structural sheathing.

## ROOF COVERINGS

### ASPHALT SHINGLES – REQUIREMENTS

| Wind Speed | Shingle Testing Standard/Classification |
|---|---|
| 110 mph | ASTM D3161 (Class F) or<br>ASTM D7158 Class F, G or H |
| 120 mph | ASTM D7158 Class G or H |
| 130 mph | ASTM D7158 Class H |

1. Asphalt shingles shall be installed according to the manufacturer recommended listed installation instructions for High Wind areas with minimum 6 nails.
2. All Asphalt shingle roof covering underlayment shall be of a synthetic tear resistant Polypropylene, polyester or fiberglass fabric certified by an approved testing agency or ICC-ES report. The Building Official may approve an equal or higher performing product. Asphalt felt roofing underlayment shall not be installed as a roof covering underlayment.
    a. Roof underlayment shall be installed and fastened in accordance with the Manufacturer's installation instructions. NOTE – Most Manufacturers' do not allow staples as an approved fastener or staple button caps
3. **All Aluminum/Vinyl Soffit covering shall be attached to minimum 7/16 OSB or plywood or minimum 2 x 2 wood supports 8 inches OC maximum.**
4. **Roof deck sheathing seams shall be taped with minimum 4" Peel and Stick tape meeting ASTM D-1970, or sheathing seams and each side of roof support shall be sealed with closed cell foam meeting ASTM D-1622, other equal or greater methods may be approved by the Building Official.**
5. Metal roof covering shall be fastened to roof assembly with a maximum 2 foot OC spacing of fasteners in the length dimensions of the panels. Minimum Number of fasteners in width dimension of the panel shall be no less than 4.
6. 1x4 or 2 x 4 wood purlins for attachment of metal roof coverings shall be a maximum 2 feet OC. Wood purlins shall be nailed with a maximum two deformed (spiral, ring shank) #16D nails at maximum of 24 inches OC.

7. Roof decks shall be nailed in accordance with the engineered drawings but no less than 6 inches OC maximum intermediate and edge, with minimum 8d irregular shank (i.e., ring shank or spiral) nails with full round heads. Staples are not permitted for fastening of the roof decking.
8. Replacement of roof covering and underlayment of existing One and Two Family dwellings shall require a re-roofing permit from the Baldwin County Building Inspection Department. All roof coverings and underlayment shall be removed (exception #9 and 10) and any roof decking attached with staples or nailing pattern less than 6" O.C. edge and 6" O.C. intermediate shall be renailed with #8 ring shank nails to meet 6" O.C. edge and intermediate. Roof deck seams shall be taped with a minimum 4" Peel and Stick tape meeting ASTM D-1970 to achieve a sealed roof deck or closed cell foam meeting ASTM D-1622 may be applied underneath to each side of framing member and sheathing seams. A re-roofing permit fee will be $50.00.
9. Metal Gavalume Roof Cover shall be allowed over one layer of Shingles.
10. One layer of additional shingles will be allowed over one layer of existing 3 tab shingles.

**ENERGY**

1. Attic: minimum insulation R-38 Wall: minimum insulation R-13 floor: minimum insulation R-13
2. Batt insulation shall be cut neatly to fit around pipes and wires or be placed behind piping & wiring
    a) Staple insulation to face of stud
3. Air permeable insulation shall not be used as a sealing material
4. Space between windows & door jams to be sealed
5. Corners, headers & sill plates shall be sealed
6. Rim joists are to be insulated
7. A continuous air barrier shall be installed in the building envelope
8. Break or joints in the air barrier shall be sealed (taped)
9. Access openings to un-air-conditioned spaces shall be sealed (weather stripping)
10. Building cavities shall not be used as ducts or plenums
11. Programmable thermostat shall be used
12. A minimum of 75% of lights used shall be of high efficacy
13. Recessed light fixtures shall be sealed to be airtight.
14. U factor of .40 must be used and also SHGC of .25 for windows.
15. At the time of rough-in inspection Peel and Stick aluminum backed tape or other approved material shall be applied to all edges of all windows to prevent air exchange.
16. All holes interior and exterior wall top plates shall be sealed with caulking or expandable foam.

17. Space around plumbing pipes penetrating interior or exterior wall top plates shall be sealed with caulking or expandable foam.

**The Baldwin county Building Inspection Department may at any time inspect for compliance for items above.**

**PLUMBING**

1. Pex supply piping shall be inspected at working water pressure, minimum Pressure shall be 50 lbs.
2. Potable water supply at working pressure shall be connected to supply piping at time of inspection
3. Top out plumbing inspection shall be preformed with Electrical, HVAC and Framing inspection
4. The Contractor responsible for construction shall call in for all 4-way inspections.
5. All Bathtubs and showers shall be connected to the drain waste and vent system at the time of top out inspection. ***Exception: Whirlpool and Garden tubs may be installed after top out inspection. The trap servicing the whirlpool and garden tub shall be installed at the time of inspection.***

**HVAC**

1. Air Handler's return air filters shall have a minimum one square inch of filter for every 2 CFM of air the HVAC moves. This equals 400 CFM per ton of AC capacity. ***Example: A 3 ton system will require a minimum of 600 square inch of return air filter area.***
2. Contractor shall provide number of AC units and tonnage of each unit to this department before the rough in inspection.
3. The maximum length of flexible duct allowable in any application shall be limited to 12 feet. Any duct run longer that 12 feet shall be same size snap lock pipe or equal. ***Exception: Flexible duct may exceed the 12 feet maximum length provided a Manuel D and Manuel J depicting supply air CFM, duct size length and layout of system are provided to this Department before rough in inspection is scheduled.***
4. All 90 degree turns, elbows, tees or taps in rectangular duct construction with the exception of transfer duct shall have turn vanes or 2-piece 45 degree or 3-piece 90 degree elbow, 90 degree turns shall be of a long sweep design.
5. Each branch shall have a balancing damper with locking quadrant. Locations that are not accessible do not require a balancing damper.
6. All insulation shall have a continuous vapor barrier by means of same material "glass fabric tape".
7. All duct seams, joints and connections shall be sealed with sealer/mastic to prevent air leakage.
8. All duct board seams and joints shall be stapled a *maximum 2 inches OC* in addition to tape and sealer.
9. On all new construction rough ins, refrigerant tubing must be soldered closed to

an air tight seal.

10. Excess plenums above the Air Handler shall not be allowed, unless Manuel D documentation of compliance is provide to this Department.
11. Secondary plenums shall not be allowed, unless Manual D documentation of compliance is provided to this Department.
12. Primary contractors are responsible to insure the design of the house will accommodate compliance with the adopted codes

**MODULAR HOMES**

1. Submit AMHC (Alabama Manufactured Home Commission) stamped plans.
2. Modular Homes shall be certified by an Alabama Registered Engineer to meet adopted wind loads.
3. Submit foundation plans and anchorage to foundation plan. Shall equal or exceed local adopted codes.
4. And other on-site construction shall require a separate permit by the Building Inspection Department.
5. Modular Homes shall be required to have a Final Inspection after exterior of structure and any on-site construction are complete.
6. Modular Homes shall be installed as per the engineered installation instructions
7. Modular Homes shall be inspected for compliane with engineered instructions and any applicable current local adopted codes.
8. In factory construction and components are not the responsibility of the Baldwin County Building Inspection Department.
9. Existing houses that are moved from one site to another shall comply with Items 3, 4 & 5 and require a Final Inspection. Any new construction shall be incompliance with current adopted codes.

**FLOOD ZONES**

1. One and Two Single family dwelling construction in a designated AE or VE flood zone shall require stamped and sealed Engineer plans for structural components and applicable wind loads.