

# International Residential Code

## 2012 to 2018 Significant Changes

### 1.) R301.2 Wind Design Criteria and Wind Speed Maps

Ultimate design wind speed values replace basic wind speed values for 3-sec gust wind speeds in Section 301.2.1. A wind speed conversion table has been added for conversion from ultimate design to nominal design wind speeds.

TABLE R301.2.1.3  
WIND SPEED CONVERSIONS\*

$V_{ult}$	110	115	120	130	140	150	160	170	180	190	200
$V_{nom}$	85	89	93	101	108	116	124	132	139	147	155

For SI: 1 mile per hour = 0.447 m/s.

a. Linear interpolation is permitted.

### 2.) Modification to Table R301.2(1) Climatic and Geographic Design Criteria

To assist the system designer, jurisdictions will now have to include variables for Manual J assessments with other climatic and geographic design criteria available from the building department.

### 3.) R301.2.1.1.1 Sunrooms

The 2015 IRC requires sunrooms to comply with AAMA/NPEA/NSA 2100-12. The standard contains requirements for habitable and nonhabitable sunrooms. Sunrooms should be identified as one of the five categories in the construction documents and designed accordingly.

### 4.) Mechanical ventilation IS NOT mandatory for all new home construction in Georgia as the following section of the IRC was amended in Georgia

**R303.4 Mechanical ventilation.** Where the air infiltration rate of a *dwelling unit* is  $\leq 3$  air changes per hour or less where tested with a blower door at a pressure of 0.2 inch w.c (50 Pa) in accordance with Section N1102.4.1.2, the *dwelling unit* shall be provided with whole-house mechanical ventilation in accordance with Section M1505.4.

### 5.) R304.1 Minimum Habitable Room Area

Currently a 2018 Georgia Amendment addressing the issue, the requirement for one habitable room with a minimum floor area of 120 square feet has been changed to require habitable room floor areas of not less than 70 square feet.

### 6.) R305 Ceiling Height

The minimum ceiling height for bathrooms, toilet rooms, and laundry rooms has been reduced from 7 feet to 6 feet, 8 inches.

### 7.) R325.6, R202 Habitable Attics

The definition and technical requirements of habitable attic have been revised and clarified, that a habitable attic, even if unfinished, is a habitable space.

### 8.) R404.4 Retaining Walls

Retaining walls that are not laterally supported at the top and that retain in excess of 48 inches of unbalanced fill, or retaining walls exceeding 24 inches in height that resist lateral loads in addition to soil, **shall be designed by accepted engineering practice** to ensure stability against overturning.

### 9.) R408.3 Unvented crawl space

Ventilation of the under-floor space is not required when an appropriately-sized dehumidifier is provided in combination with the Class 1 vapor retarder requirements.

## 10.) Tables R502.3.1(1), R502.3.1(2) Floor Joist Spans for Common Lumber Species

The allowable spans for some grades of Southern Yellow Pine have been reduced. Many of these changes are reflected in the current Georgia Amendments to the IRC. For example, SP #2, 2x10's at 16" o.c with a dead load of 10 psf could span 18'-0" in 2012 and have now been reduced to an allowable span of 15'-8".

The same will be true for other span tables in the code.

## 11.) Prescriptive Deck Details Design Document was not brought forward with the 2018 IRC Georgia Amendments. The 2018 IRC reorganized R507 Decks which incorporated the many of the more useful illustrations and provisions to simplify the prescriptive construction of a deck. R507 is now much clearer in regards to deck materials, deck footing, joist spacing and spans, and fastener requirements.



## 12.) R507.4 Deck Posts and R507.4.1 Deck post to deck footing connection

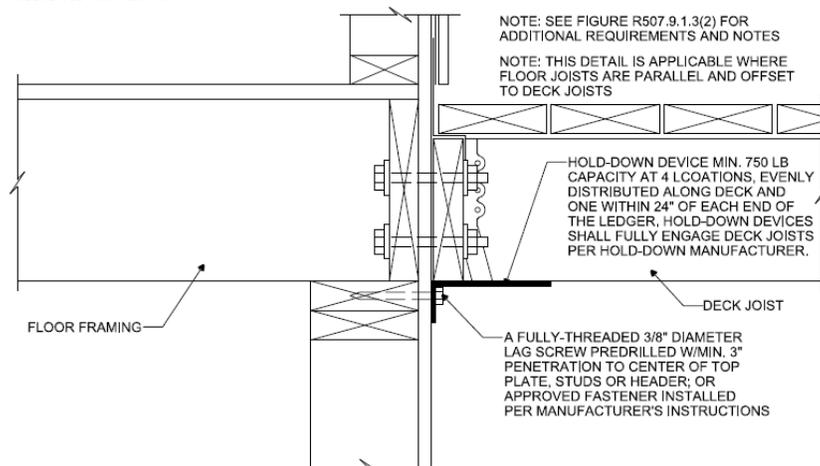
Minimum sizes of wood posts supporting decks have been established as well as requirements for connections of the deck posts to the footings.

## 13.) There are some Georgia Amendments that provide even more clarity and allow the use of other approved fasteners in ledger to band joist connections as opposed to thru-bolting.

**R507.9.1.3 Ledger to band joist details.** Fasteners used in deck ledger connections in accordance with Table R507.9.1.3(1) shall be hot-dipped galvanized,  $\sigma$  stainless steel, or other approved fasteners and shall be installed in accordance with Table R507.9.1.3(2) and Figures R507.9.1.3(1) and R507.9.1.3(2)

## 14.) R507.9.2 Lateral Connection

Four smaller hold-down tension devices with 750 lb. capacity can now be utilized as an alternative to the larger 1,500 lb. capacity tension devices.



**15.) Modification to Table R602.7.5 Support for Headers**

The full height stud table has been significantly altered. The table increases the number of king studs in higher wind regions and requires only one or two king studs at each end of a header in regions with 115 mph wind speeds.

**16.) Georgia is bringing back a requirement that was previously an amendment to the 2006 IRC, which will now require attics containing appliances to be accessible by pull down stairs or other permanent stairs.**

**R807.1.1 Attic service access.** Attics containing appliances or mechanical equipment service shall be accessible by pull down stairs or other permanent steps and at a minimum be sized to allow the removal of the largest appliance.

**17.) M1502.4.4 Dryer exhaust duct power ventilators**

The use of duct-power ventilators for dryer exhaust has been added into the code which can allow the maximum allowable exhaust length to exceed 35 feet when installed.

**18.) Modification to M1503.6 Makeup Air for Kitchen Exhaust Systems**

Makeup air for domestic cooking exhaust systems is no longer required if all fuel-burning appliances in the dwelling unit have a direct vent or mechanical draft vent system.

**19.) Modification to G2406.2**

A gas-fired clothes dryer is now allowed to be installed in a bathroom or toilet room where a permanent opening communicates with other permitted spaces.

**20.) Appendix Q was added to the 2018 IRC and covers the provisions for tiny houses, with a maximum floor area of 400 square feet. A similar Appendix for Tiny Houses was already adopted in Georgia and our version will be brought forward as an amendment.**