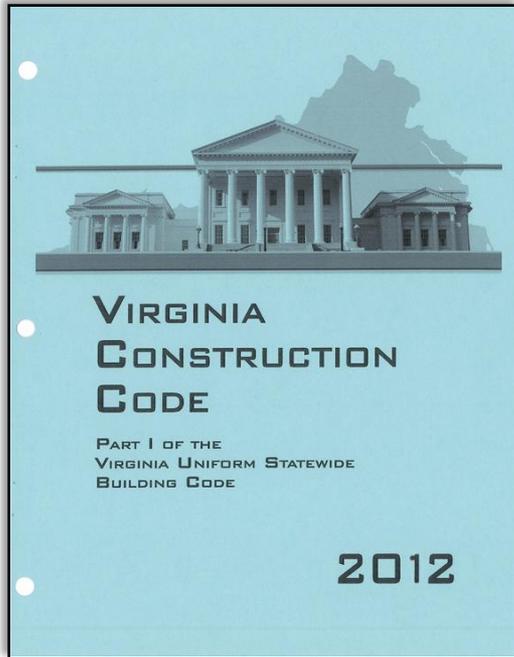




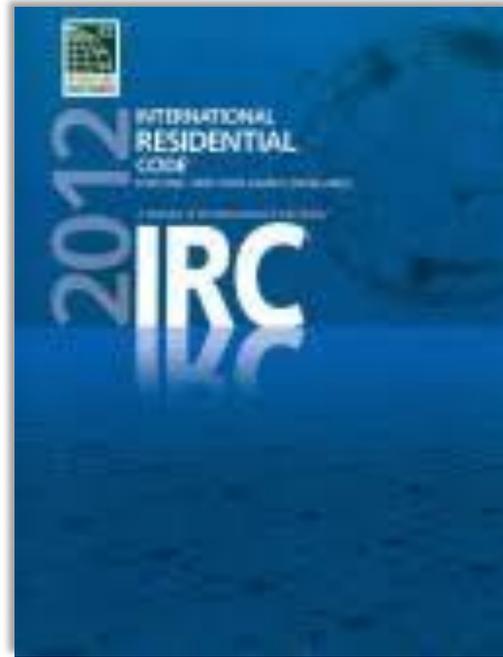
# 2012 CODE CHANGES ENERGY (PLUS)

# NAVIGATING THE CODES

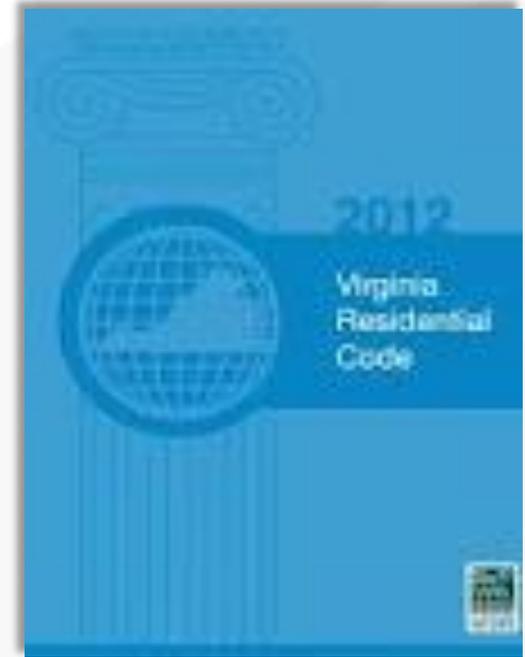
## 1 & 2 Family Dwellings



+



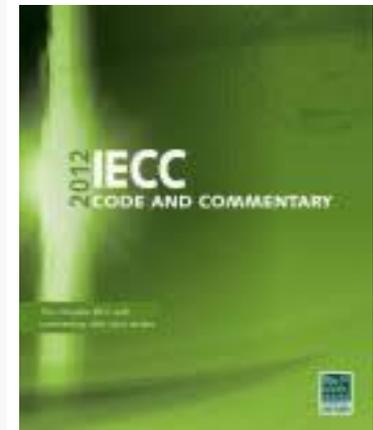
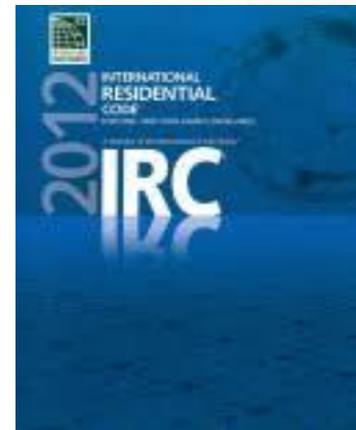
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# 2012 I.E.C.C. and 2012 IRC Chapter 11

New for 2012:

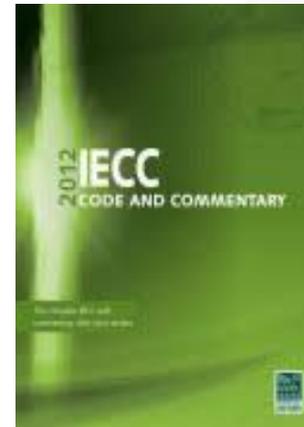
- Residential Energy provisions are located in IRC Chapter 11 and IECC Chapter 4 [RE]
- Sections in IRC Chapter 11 are subsequently numbered with the corresponding IECC section



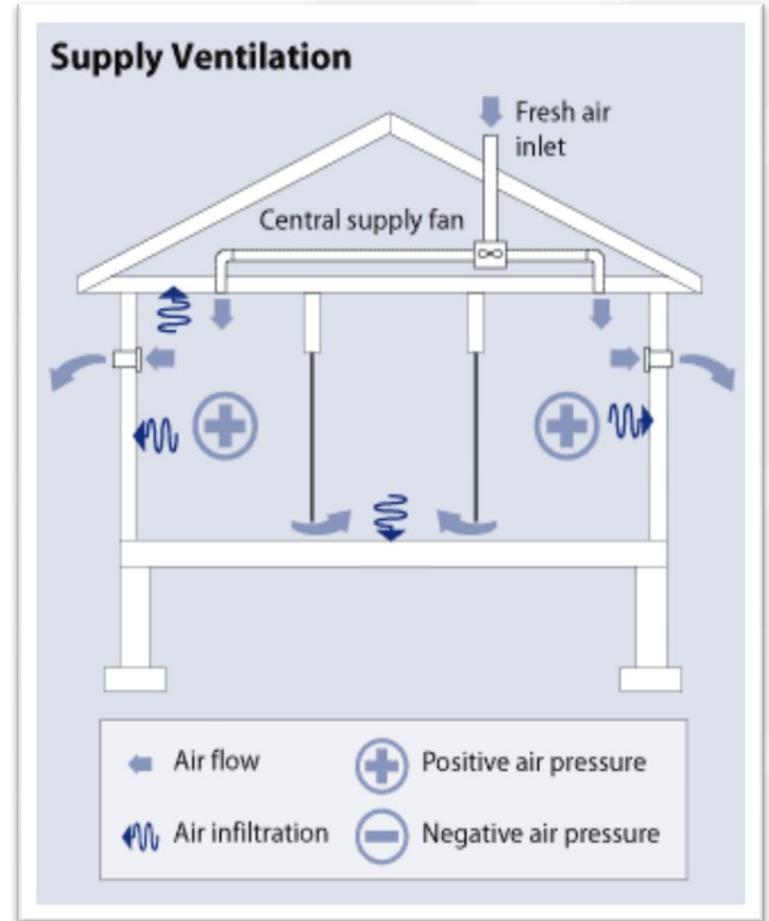
# IECC APPLICABILITY

International Energy Code has separate sections for Commercial and Residential.

Residential buildings are defined as one and two family dwellings, townhouses and multifamily three stories or less.



# WHOLE HOUSE VENTILATION SYSTEMS



# PROGRAMMABLE THERMOSTAT

- Amended by Virginia
- The thermostat controlling the primary heating and cooling system must meet the requirements of this section



# BAFFLES

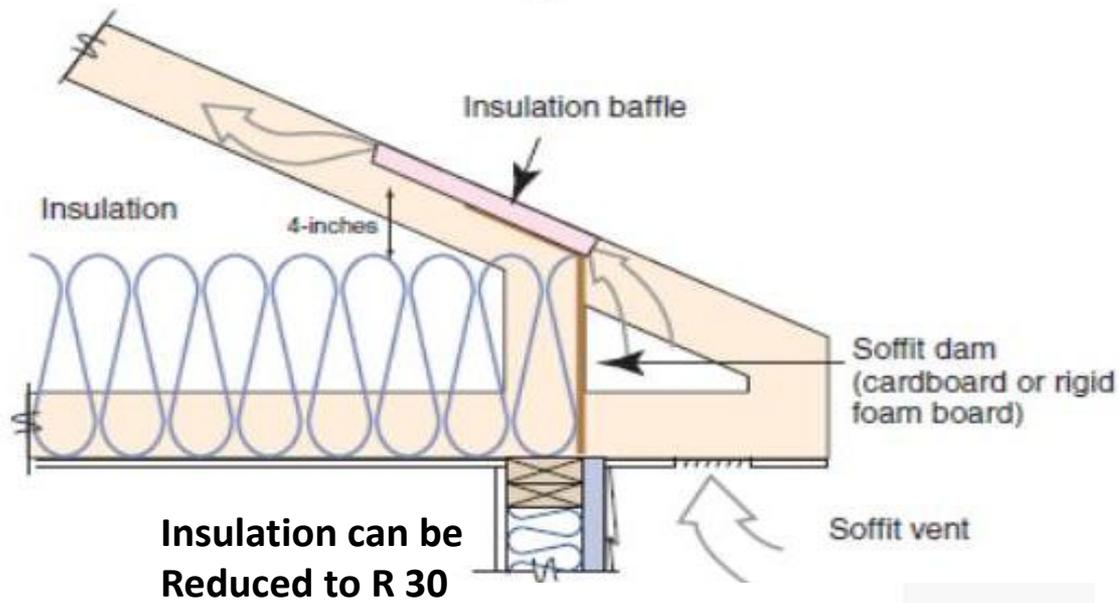
Eave Baffle – Required in attics when air-permeable insulation is used.



# INSULATION

## N1102.2.1 (R402.2.1)

This section allows for reduced R value of 30 where uncompressed R 30 extends over the top plate.



# WATER PIPING INSULATION

N1103.4.2 (R403.4.2) Piping for service water heating shall be insulated to R-3. Va. USBC Amendment where this applies.



# PROTECTION OF PIPING INSULATION

N1103.3.1 (R403.3.1) Piping insulation shall be protected from damage when exposed to weather.  
Tape cannot be used.



# INSULATION VALUES

New Homes will have to use:

R-15 (or R-13+1) in Exterior walls

R-38 in Ceilings

R- 19 in Floors



# LIGHTING

N1104.1 (R404.1) A minimum of 50% of the lamps in permanently installed lighting fixtures shall be high-efficacy.

Amended by Virginia to remain at 50% vs. 75%.



# STAIRS AND HATCHES

- Access hatches and doors – Virginia amended entire section. In addition to weatherstripping these must be insulated as follows:
  - Hinged vertical doors shall have overall R- 5
  - Hatches and scuttle covers shall be insulated to equivalent of surrounding area, i.e. attic, etc
  - Pull down stairs, 75% of panel must be insulated to minimum R-5 rigid insulation



# AIR LEAKAGE

N1102.4.1.3 (R402.4.1.3) Leakage Rate – The building or dwelling shall not have a leakage rate exceeding 5 Air Changes per hour (ACH)

Note: new section in IRC, R303.4 Mechanical Ventilation

Requires whole-house mechanical ventilation when less than 5 ACH is obtained as verified by Blower Door Testing

# AIR LEAKAGE TESTING

N1102.4.1.2.2 /R402.4.1.2.2 Testing – Virginia amended this section to keep Visual Option.

Envelope tightness acceptable when all items in Table N1102.4.1.1(R402.4.1.1) are field verified.



# AIR LEAKAGE

N1102.4 (R402.4) Air leakage – Virginia has amended the following criteria in Table N1102.1.1.1 (402.1.1.1)

- Walls-corners and headers shall be completely filled with R 3
- Shower/Tub on exterior wall-air barrier installed on interior side of wall
- Fireplace-gasketed doors or tight-fitting flue dampers required

# SMOKE DETECTORS

Wireless smoke alarms  
are now allowed



# CO ALARMS

A household CO detection system is now allowed.



# RESIDENTIAL FIRE EXTINGUISHERS



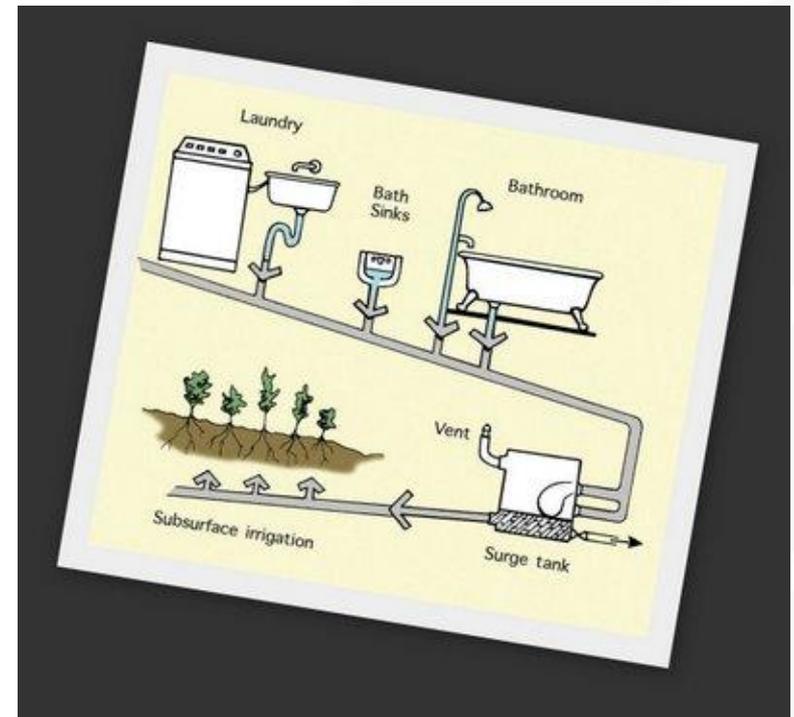
# WATER CONSERVATION

## Added provisions:

- Gray Water Nonpotable Water Systems
- Rainwater Nonpotable Water Systems
- Nonpotable Water Systems

## Added definitions:

- Rainwater
- Gray water
- Stormwater



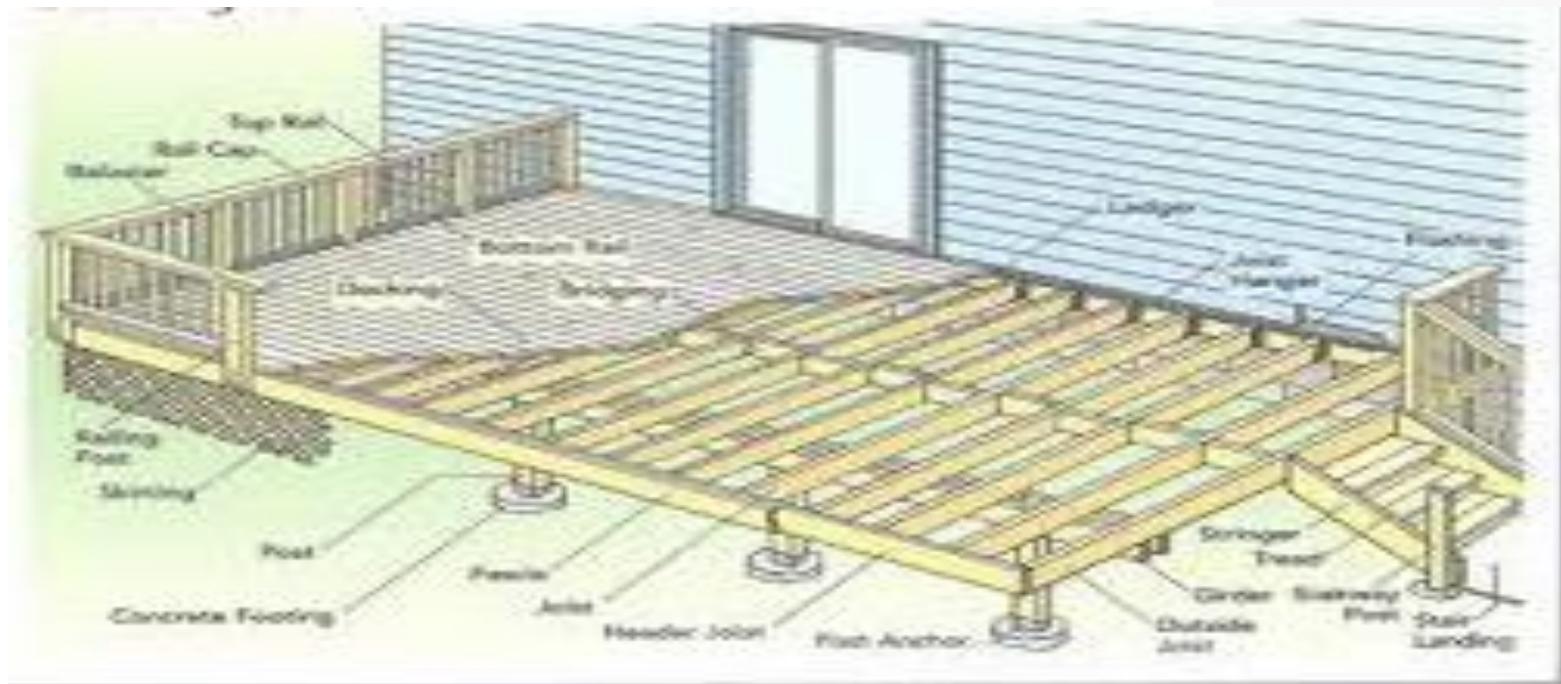
# SOUTHERN PINE SPAN TABLES

- Spans for southern pine have been reduced.



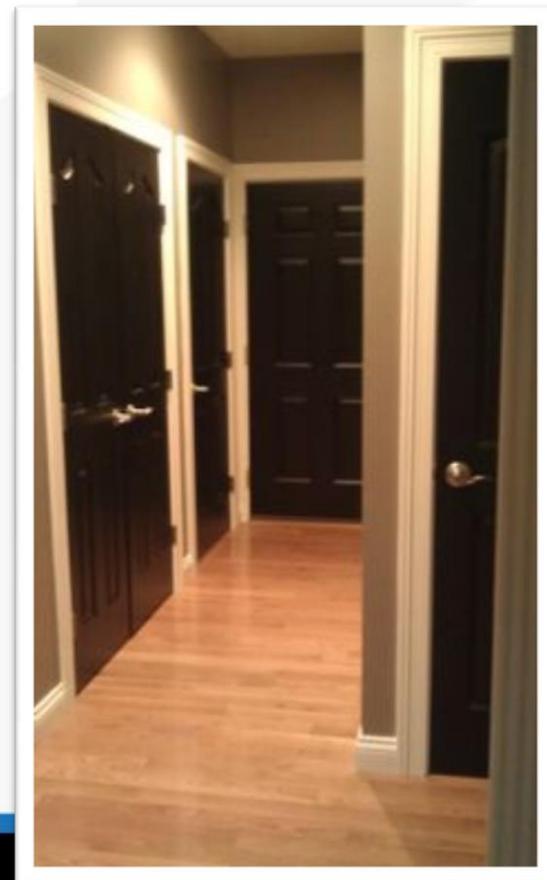
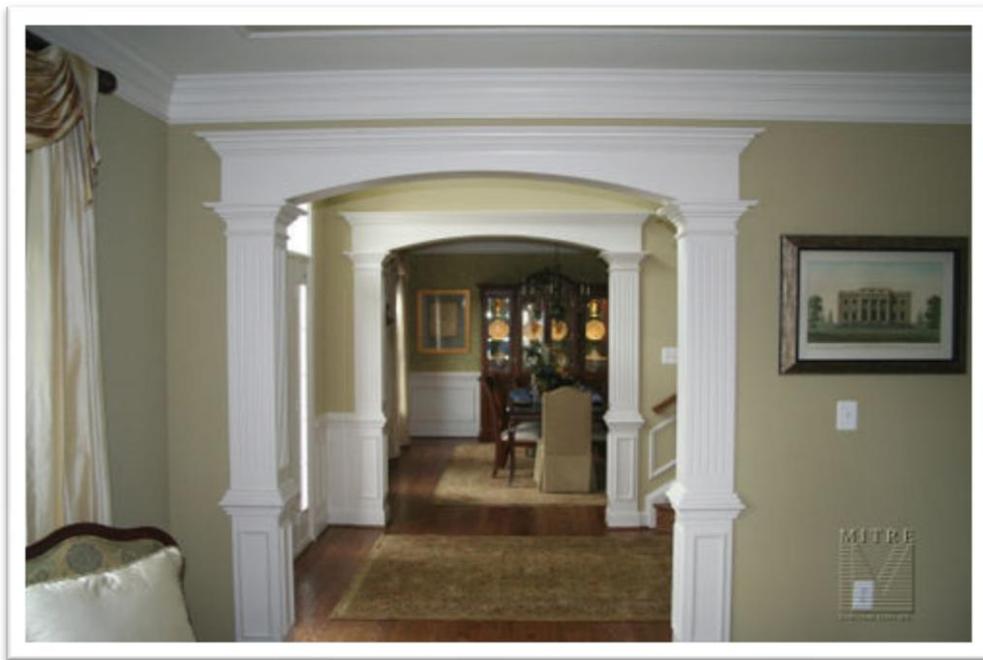
# DECKS (R507)

- Significant changes to the Decks section



# VISITABILITY

- Interior Passage Route requirement added
- Minimum 34" width for all doors and cased openings



# Questions?

