

## CHAPTER 11 ENERGY EFFICIENCY KEY DIFFERENCES IN THE PRESCRIPTIVE REQUIREMENTS BETWEEN THE IECC, RCO, AND OHBA ALTERNATIVE

2013 RESIDENTIAL CODE OF OHIO EFFECTIVE JANUARY 1, 2013.

Energy compliance can be achieved by using **one** of three methods:

2009 IECC

Sections 1101 thru 1104 (RCO Prescriptive)

OHBA's Alternative Energy Code Option

### KEY DIFFERENCES

Sections 1101 thru 1104 (RCO Prescriptive) Chapter 4 Prescriptive of the 2009 IECC	Section 1105 (OHBA Prescriptive)
Divides the state into two zones and prescribes one method of compliance for each zone.	Provides two compliance paths to choose from for the entire state (state is not separated into zones).
Calls for a minimum R-20 or R13+5 in walls and R-38 in ceilings, and maximum 0.35 U-Factor for fenestration (see R-Value Prescriptive Table Comparison Handout)	Calls for minimum R-15 or R13+3 (Path 1) or R-13 (Path 2) in walls and R-49 in ceilings, and maximum 0.32 U-Factor for fenestration (see R-Value Prescriptive Table Comparison Handout).
Ceiling insulation can be reduced from <b>R-38 to R-30</b> wherever the full height of the <b>uncompressed R-30</b> insulation extends over the wall top plate at the eaves.	Ceiling insulation can be reduced from <b>R-49 to R-38</b> wherever the full height of the <b>uncompressed R-38</b> insulation extends over the wall top plate at the eaves.
Exterior walls of conditioned basements must be insulated from top of wall down 10', or to the basement floor, whichever is less.	Exterior walls of conditioned basements must be insulated from top of wall down 10', or to the basement floor, whichever is less, unless as specified in Table 1105.2.1. (Table calls for a minimum 4 feet).
Building envelope tightness and insulation must be tested for compliance by <b>either</b> a blower door test with a result less than <b>7ACH @ 50 pascals</b> , <b>or</b> by a visual inspection based on the criteria listed in IECC Table 402.4.2. or RCO Table 1102.4.2.	Building envelope tightness and insulation must be tested for compliance by <b>only</b> a blower door test with a result less than <b>6ACH @ 50 pascals</b> . <b>This requirement does not go into effect until a year after code adoption. A sampling of buildings is allowed per 1105.2.3.2.1.1.</b>
Mechanical system piping must be insulated to a minimum R-3.	Mechanical system piping insulation does not have to be insulated.
All circulating service hot water piping must be insulated to a minimum R-2.	Only the first 5' of circulating service hot water piping has to be insulated to a minimum of R-2.
When any portion of the HVAC system is located outside of the building thermal envelope, the duct tightness must be tested for compliance using one of two methods described in Section 1103.2.3. Ducts must not be as tight as compared to the OHBA Paths. <b>Effective upon adoption of code (01/01/2013).</b>	When any portion of the HVAC system is located outside of the building thermal envelope, the duct tightness must be tested for compliance using one of two methods described in Table 1105.3.2.2(a) or 1105.3.2.2(b). Ducts must be tighter as compared to IECC or RCO. <b>Effective a year after code adoption (01/01/2014).</b>
A minimum of <b>50%</b> of the lamps in permanently installed lighting fixtures must be high-efficacy lamps.	A minimum of <b>75%</b> of the lamps in permanently installed lighting fixtures must be high-efficacy lamps.