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Residential Plan Review Checklist

2015 IECC Commercial Provisions as amended by the 2016 Energy Code Supplement

Project #:_____ Date:_____ Name of Evaluator(s):_____

Building Contact: Name:_____ Phone:_____ Email:_____

Building Name & Address:_____

Subdivision:_____ Lot #:_____ Conditioned Floor Area:_____ ft^2

Climate Zone:_____ County:_____ Jurisdiction:_____

Compliance Approach: ☐ Prescriptive ☐ Trade-Off ☐ Performance ☐ Compliance Software ☐ Other

Compliance Software Used:_____ Green Building/Above-Code Program? ☐ Yes ☐ No

Building Type: 1- and 2-Family, Detached: ☐ Single Family ☐ Modular ☐ Townhouse

Multifamily: ☐ Apartment ☐ Condominium

Project Type: ☐ New Building ☐ Existing Building Addition ☐ Existing Building Renovation

Special Considerations: ☐ Historic Building ☐ Commercial Space

Provisions Highlighted in Blue are Mandatory, Regardless of Compliance Path

IECC Section #	Pre-Inspection/Plan Review	Code Value	Verified Value	Complies Y	Complies N	Complies N/A	Comments/Assumptions[1]
R103.2	Construction drawings and documentation available. Documentation sufficiently demonstrates energy code compliance.			☐	☐	☐	
Insulation materials and their R-values				☐	☐	☐	
Fenestration U-factors				☐	☐	☐	
Area-weighted U-factor				☐	☐	☐	
Mechanical system design criteria				☐	☐	☐	
Mechanical and service water heating system and equipment types, sizes and efficiencies				☐	☐	☐	
Equipment and systems controls				☐	☐	☐	
Duct sealing, duct and pipe insulation and location				☐	☐	☐	
Lighting fixture schedule with wattage				☐	☐	☐	
Air sealing				☐	☐	☐	
R403.7	HVAC loads calculations: Heating system size(s): Cooling system size(s):		kBtu: _____ kBtu: _____	☐	☐	☐	
Written Statement of Compliance from Design Professional				☐	☐	☐	

[1] Use Comments/Assumptions to document code requirements that pass due to exceptions, and specify the exception. Also use Comments/Assumptions to document multiple values observed for a given code requirement, such as multiple equipment efficiencies.

IECC Section #	Requirement	Code Value	Verified Value	Complies Y	Complies N	Complies N/A	Comments/Assumptions
R401.3	Certificate Posting	In furnace/ utility room or approved location	Identify location	☐	☐	☐	
Table R402.1.2	Slab edge insulation R-value.	Unheated: R-10 Heated: R-15	R-____ ☐ Unheated ☐ Heated	☐	☐	☐	
Table R402.1.2	Slab edge insulation depth/length.	2 ft. Z- 4 & 5 4 ft. Z-6	____ ft.	☐	☐	☐	
Table R402.1.2	Basement wall insulation R-value[i].	**Continuous:** R-10 Z-4 R-15 Z-5, Z-6 **Cavity:** R-13 Z-4 R-19 Z-5, Z-6	R-____ R-____	☐	☐	☐	
R402.2.9	Basement wall insulation depth.	10 ft. or to basement floor	____ ft.	☐	☐	☐	
Table R402.1.2 And R402.2.11	Crawl space wall insulation R-value. From floor to finished grade, plus 2' vertical or horizontal	**Continuous:** R-10 Z-4 R-15 Z-5, Z-6 **Cavity:** R-13 Z-4 R-19 Z-5, Z-6	R-____ R-____	☐	☐	☐	
R402.2.11	Crawl space continuous vapor retarder	Required Class I		☐	☐	☐	
R303.2.1	Exposed foundation insulation protection.	6" below grade		☐	☐	☐	
R403.9	Snow melt controls.	Automatic controls over 50°F		☐	☐	☐	
Table R402.1.2	Fenestration U-factor[ii]	Max: U-0.35 Z-4 U-0.32 Z5, Z-6	U-____	☐	☐	☐	
R402.5	Maximum Fenestration U-factor, Area weighted average (trade-offs)	Max: U-0.48 Z-4, Z-5 U-0.40 Z-6	U-____	☐	☐	☐	
Table R402.1.2	Glazed Fenestration SHGC	Max: 0.40 Z-4 NR Z-5, Z-6	SHGC-____	☐	☐	☐	
R402.4.3	Glazed fenestration air leakage.	0.3 cfm/ft^2 max	____ cfm/ ft^2	☐	☐	☐	
	Window Manufacturer						
R402.4.3	Sliding door air leakage.	0.3 cfm/ft^2 max	____ cfm/ ft^2	☐	☐	☐	
R402.4.3	Swinging door air leakage	0.5 cfm/ft^2 max	____ cfm/ ft^2	☐	☐	☐	
	Door Manufacturer						
Table R402.1.2	Floor insulation R-value.	Wood: R-19 Z-4 R-30 Z- 5 & 6[iii] Steel:[iv] See footnote	R-____ ☐ Wood ☐ Steel	☐	☐	☐	
Table R402.1.2	Wall insulation R-value	Wood: Z-4 and Z-5 = R-20 or R-13+5 Z-6 = R-20+5 or 13+10 Steel:[v] See footnote	R-____ ☐ Wood ☐ Steel	☐	☐	☐	

IECC Section #	Requirement	Code Value	Verified Value	Complies Y	Complies N	Complies N/A	Comments/Assumptions
Table R402.1.2	Ceiling insulation R-value	Wood: R-49 (All Zones) Steel Truss[vi] R-38+5	R-____ ☐ Wood ☐ Steel	☐	☐	☐	
R402.2.3	Eave Baffle	For air-permeable insulation		☐	☐	☐	
Table R402.1.2	Mass wall insulation R-value.	R-8/13 Z-4[vii] R-13/17 Z-5[vii] R-15/20 Z6[vii]	R-____	☐	☐	☐	
R402.2.13	Sunroom wall insulation (Enclosing conditioned space)	Per Table R402.1.2	R-____	☐	☐	☐	
R402.2.13	Sunroom wall insulation (Thermally isolated and conditioned)	R-13 All climate zones	R-____	☐	☐	☐	
R402.2.13	Sunroom ceiling insulation (Enclosing conditioned space)	Per Table R402.1.2	R-____	☐	☐	☐	
R402.2.13	Sunroom ceiling insulation (Thermally isolated and conditioned)	R-19 Z-4 R-24 Z-5, Z-6	R-____	☐	☐	☐	
R402.3.5	Sunroom glazing U-factor (Enclosing conditioned space)	Per Table R402.1.2	U-____	☐	☐	☐	
R402.3.5	Sunroom glazing U-factor (Thermally isolated and conditioned)	U-0.45 max. (All Zones)	U-____	☐	☐	☐	
R402.3.5	Sunroom skylight U-factor (Enclosing conditioned space)	Per Table R402.1.2	U-____	☐	☐	☐	
R402.3.5	Sunroom skylight U-factor (Thermally isolated and conditioned)	U-0.70 max. (All Zones)	U-____	☐	☐	☐	
	Skylight Manufacturer						
R402.2.4	Attic access hatch and door (insulation)	R-49 (All Zones)	R-____	☐	☐	☐	
R402.2.4	Attic access hatch and door (weather-stripping)	Wood frame or equivalent insul. retainer		☐	☐	☐	
R402.4.6	Tenant separation walls	R-10 w/ air seal	R-____	☐	☐	☐	
R402.4	Air Leakage (Building Thermal Envelope)	All building materials installed per Table R402.1.1		☐	☐	☐	
R402.4.1.2	Air Leakage Testing	3 air changes per hour (All zones) Blower door test	☐ Stated ☐ Stated	☐	☐	☐	
R402.4.5	IC-rated recessed lighting fixtures meet infiltration criteria.	≤ 2.0 cfm air leakage Sealed	☐ Stated ☐ Stated	☐	☐	☐	
R402.4.4	Rooms containing fuel burning appliances	Outside or enclosed in a room	☐ Meets exceptions	☐	☐	☐	
R402.1.1	Vapor Retarder (IRC R702.7)	Class I or II (Zones 5 and 6 only)		☐	☐	☐	
R403.1.1	Thermostat	Programmable		☐	☐	☐	

IECC Section #	Requirement	Code Value	Verified Value	Complies			Comments/Assumptions
				Y	N	N/A	
R403.3.1	Duct insulation.	Supply & Return in Attics: R-8 for ≥3" Dia. R-6 for <3" Dia. Other: R-6 for ≥3" Dia. R-4.2 for <3" Dia.	☐ Inside building thermal envelope exception	☐	☐	☐	
R403.3.2	Duct sealing complies with listed sealing methods.	All joints and seams	☐ Meets exception	☐	☐	☐	
R403.3.3	Duct Testing	0.1 inch w.g. pressure differential Rough-in test required Post construction test required	☐ Stated ☐ Stated ☐ Stated ☐ Exception	☐	☐	☐	
R403.3.5	Building cavities NOT used as ducts or plenums	Stated? Shown?		☐	☐	☐	
R403.4	HVAC piping insulation.	R-3 (>105°For <55°F)	R-_____	☐	☐	☐	
R403.5.1	Heated water circulation and temperature maintenance system	Per requirements of Section R403.5.1.1 or R403.5.1.2	☐ Circulation System ☐ Heat Trace System	☐	☐	☐	
R403.5.3	Hot water pipe insulation	R-3 per specified locations		☐	☐	☐	
R404.1	Lighting – Minimum 75% of lamps are high efficacy.			☐	☐	☐	
R402.4.2	Wood burning fireplace	Tight-fitting flue damper or doors		☐	☐	☐	
R403.10	Pool heaters, covers, and automatic or accessible manual controls.	Accessible on/off switch. Time Switch		☐	☐	☐	

[ii] One side-hinged door up to 24 ft^2 can be exempted from the prescriptive door U-factor requirements.
[iii] Or insulation sufficient to fill the cavity, R-19 minimum.
[iv] Floor steel frame equivalent: See Table R402.2.6
[v] Wall steel frame equivalent: See Table R402.2.6
[vi] Steel truss equivalent: See Table R402.2.6
[vii] The second R-value applies when more than half the insulation is on the interior of the mass wall.