

# IBC Scope/IECC Commercial 2018 IECC [CE] ASHRAE 90.1-2016

### Buildings other than:

One- and two-family dwellings and townhouses and

Groups R-2, R-3, and R-4 three stories or less

**ASHRAE 90.1-2016** 

2018 IECC [CE]
All sections designated as "mandatory"

one of the following options

### **ENERGY CODE COMPLIANCE PATHS**

### Prescriptive

Building Envelope (C402)
Building Mechanical Systems (C403)
Service Water Heating (C404)
Electric Power and Lighting Systems (C405)
Additional Efficiency Package Options (C406)
Commissioning (C408)

### Prescriptive with Envelope Tradeoffs

Same as above + envelope tradeoffs in COMcheck
All systems documented in COMcheck

### **Performance**

Compliance for all systems using energy modeling per C407 Total Building Performance

### **Above Code Programs**

ENERGY STAR certification (residential occupancies only)

### **Prescriptive**

Building Envelope (Section 5.1-**5.5**, 5.7-5.9)
HVAC (Section 6)
Service Water Heating (Section 7)
Power (Section 8)
Lighting (Section 9)
Other Equipment (Section 10)

### Prescriptive + Envelope Tradeoff

Building Envelope (Section 5.1-5.4, **5.6**-5.9) Env. simulation in COMcheck, Energyplus, DOE-2, etc. Other systems same as above

### **Performance**

Compliance for all systems using oftware modeling: Section 11: Energy Cost Budget Method or

Appendix G: Performance Rating Method



## IBC Scope/IECC Residential 2018 IECC [RE]

One- and two-family dwellings and townhouses four or more stories and Groups R-2, R-3, and R-4 three stories or less

### 2018 IECC [RE]

All sections designated as mandatory (below)



one option to the right

### Mandatory requirements:

Certificate (R401.3)

Air leakage (R402.4 with Local Amendments)

Controls (R403.1)

Duct sealing (R403.3.2)

Duct testing (R403.3.3)

Building cavities (R403.3.5)

Mechanical system pipe insulation (R403.4)

Heated water circulation and temperature maintenance systems (R403.5.1)

Mechanical ventilation (R403.6)

Equipment sizing and efficiency rating (R403.7)

Systems serving multiple dwelling units (R403.8)

Snow melt and ice system controls (R403.9)

Pools and permanent spas (R403.10)

Portable spas (R403.11)

Lighting equipment (R404.1)

### **Prescriptive**

Building Thermal Envelope (R402) Systems (R403) Electric Power & Lighting (R404)

### **Prescriptive with Envelope Tradeoffs**

Same as above +
Envelope tradeoffs in **REScheck** 

### Performance

Simulated Performance Alternative (R405) Software modeling in REM/Rate or Ekotrope

### **Energy Rating Index**

HERS Index ≤ 62 Software modeling in REM/Rate or Ekotrope

### Above code programs

**ENERGY STAR certified** 

or

PECO New Home Rebates approved

C 003 INF (Rev 6.2022)



## IRC Scope Buildings 2018 IECC [RE]

One- and two-family dwellings, townhouses three stories or less

## 2018 IECC [RE]

All sections designated as mandatory (below)



one option to the right

### Mandatory requirements:

Certificate (R401.3)

Air leakage (R402.4)

Controls (R403.1)

Duct sealing (R403.3.2)

Duct testing (R403.3.3)

Mechanical system pipe insulation (R403.4)

Heated water circulation and temperature maintenance systems (R403.5.1)

Mechanical ventilation (R403.6)

Equipment sizing and efficiency rating (R403.7)

Systems serving multiple dwelling units (R403.8)

Snow melt and ice system controls (R403.9)

Pools and permanent spas (R403.10)

Portable spas (R403.11)

Lighting equipment (R404.1)

### Prescriptive

Building Thermal Envelope (R402) Systems (R403) Electric Power & Lighting (R404)

### **Prescriptive with Envelope Tradeoffs**

Same as above +
Envelope tradeoffs in **REScheck** 

### **Performance**

Simulated Performance Alternative (R405) Software modeling in REM/Rate or Ekotrope

### **Energy Rating Index**

HERS Index ≤ 62 Software modeling in REM/Rate or Ekotrope

### Above code programs

**ENERGY STAR certified** 

or

PECO New Home Rebates approved

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