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

Buildings other than:
One- and two-family dwellings and townhouses
Groups R-2, R-3, and R-4 three stories or less

2018 IECC [CE]
All sections designated as “mandatory”

one of the following options

ASHRAE 90.1-2016

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 software modeling:
Section 11: Energy Cost Budget Method
or
Appendix G: Performance Rating Method
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)
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
One- and two-family dwellings, townhouses three stories or less

IRC Scope
Buildings
2015 IECC [RE]

2015 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
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Above code programs
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