

ICC PLAN REVIEW SERVICES

ENERGY PLAN REVIEW REQUIREMENTS

Residential Energy Plan Reviews are based on the specified edition of the ICC *International Energy Conservation Code*® (IECC®). Commercial Energy Plan Reviews are based on Chapter 5 of the IECC or the referenced edition of ASHRAE 90.1 unless otherwise directed. In order to perform a thorough Energy Plan Review, the following specifications, drawings and details should be submitted:

- 1.** Complete signed and sealed (as required by applicable laws) plans and specifications as indicated below.
- 2.** Envelope—Architectural plans and specifications to include:
 - a.** Description of uses and the proposed occupancy group(s) for all portions of the building.
 - b.** Thermal performance of envelope components.
 - c.** Fenestration performance details (U-factor, SC, SHGC, VLT, air leakage rates, etc.).
 - d.** Fully dimensioned drawings to determine gross and net areas of all envelope components.
 - e.** Details of vapor barrier and insulation installation, and air sealing methods.
 - f.** REScheck, COMcheck, or ENVSTD output (where applicable).
 - g.** Design conditions (interior and exterior) consistent with local climate.
- 3.** Electrical—Complete plans and specifications of all electrical power and lighting work including:
 - a.** Riser diagram(s) of the distribution system indicating:
 - 1.** Check metering provisions for individual dwelling units.
 - 2.** Subdivision of feeders by end use: 1) Lighting, 2) HVAC, 3) SWH and systems over 20 kW.
 - b.** Lighting fixture schedule(s) depicting location, fixture lamps, ballasts, ballast specifications, fixture input watts, fixture wiring methods, power factor, etc.
 - c.** Lighting plan(s) for building exteriors including total exterior Connected Lighting Power (CLP).
 - d.** Lighting and power floor plans for building interiors including total interior CLP.
 - e.** REScheck, COMcheck, or LTGSTD output (where applicable).
 - f.** Interior and exterior means of lighting control.
 - g.** Electric motor schedule including type, HP and efficiencies.
- 4.** Mechanical—Complete plans and specifications of all mechanical work including:
 - a.** Equipment type, capacity (Btuh) and efficiency (peak and part-load).
 - b.** System design air flow rates (cfm).
 - c.** Details of equipment/system sizing.
 - d.** System and/or zone control capabilities including terminal device schedule.
 - e.** Provisions for automatic setback/shutdown.
 - f.** Indicate intentions or plans for systems commissioning.

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ENERGY PLAN REVIEW REQUIREMENTS *(continued)*

- g.** Energy consumed by fans and pumps.
 - h.** Economizers (air or water) including provisions for integrated control.
 - i.** Duct construction and system static pressure(s), including provisions for sealing.
 - j.** Duct and/or hydronic-piping lining and insulation materials.
 - k.** Provisions for air and/or hydronic system balancing.
 - l.** Boiler and water heater equipment and piping details, safety controls and distribution piping layout.
- 5.** Service water heating (SWH)—Complete SWH specifications including:
- a.** SWH equipment data including type, capacity and efficiency.
 - b.** SWH pipe insulation, thickness, conductivity and vapor retarder (where appropriate).
 - c.** Water conservation requirements.
 - d.** Energy conservation measures for swimming pools (where applicable).