



*City of Cortez  
Planning and Building Department  
123 Roger Smith Avenue  
Cortez, CO 81321*

## **ENERGY PLAN REVIEW REQUIREMENTS**

Commercial Energy Plan Reviews are based on Chapter 5 of the 2009 IECC or ASHRAE 90.1. The following specifications, drawings and details must 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.
  - 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).