



City of Pontiac

Division of Building Safety

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http://www.pontiac.mi.us/departments/community_development/building_and_safety.php

Energy Plan Review Checklist – For Industrial, Commercial, and Multi-Family Buildings

Residential Energy Plan Reviews are based on the Michigan Energy Code. Complete signed and sealed (as required by applicable laws) plans and specifications as indicated below:

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

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