

Residential Manual J Requirements

Required Documentation

Provide a minimum of 2 copies of the Manual J's, 2 copies of equipment performance data sheets, and 2 copies of duct distribution drawings.

Project information

- Property address
- Zone #: A unique designation of each separate HVAC system. A separate form is required for each zone.

Design Information

- Outdoor design temperatures: set at Winter 17° F, and Summer 95° F
- Indoor design temperature: set at Winter 70° F, and Summer 75° F
- Orientation (N, S, E, W): the direction in which the front door faces
- Manufacturer and model number of the specific equipment being proposed
- Calculations shall include all rooms within the building envelope for the specified zone
- Occupant load

Minimum Heating Equipment Data

- Efficiency
- Capacity: the total input and output capacity of furnace or boiler in BTU/H
- Actual air flow and air flow factor
- Actual fan CFM of the air handler shall be 0.5 external static pressure (ESP)
- If any ESP other than 0.5 is used submit documentation to justify the ESP selected.

Minimum Cooling Equipment Data

- Efficiency
- Sensible cooling, latent cooling, and total cooling in BTU/H
- Actual fan CFM of the air handler shall be 0.5 ESP
- If any ESP other than 0.5 is used submit documentation to justify the ESP selected.
- Load sensible heat ratio

HVAC Duct Distribution Drawings

- Equipment location
- Flue vent type and size, total length, and termination location for furnaces and boilers
- Combustion air size and location for furnaces and boilers
- Supply and return duct size and location
- Take-off piping size and location
- Outlet register, grill size and location
- Exhaust fan sizes and termination locations (bath, dryer, kitchen)
- Manufacturer's documentation for kitchen exhaust CFM
- Make-up air for kitchen exhaust over 400 CFM
- Outdoor intake air duct location and size connected to the whole-house ventilation system

Direct equipment replacement with no changes to existing trunk line or building envelope are exempt from manual J but may require a permit or drawings.



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