

Building Codes Support Program

Required submittal documents to show compliance with ASHRAE 90.1-2016.

For all compliance paths construction plans shall indicate:

1. Systems that are required (many are required) to comply with Section 4.2.5.1:
 - a. The construction documents shall identify V&T (Verification and Testing Provider) providers.
 - b. V&T providers shall review the construction documents to verify that the relevant sensor locations, devices, and control sequences are properly specified, performance and testing criteria are included; and equipment to be tested is accessible for testing and maintenance.
 - c. FPT and verification processes and system performance requirements shall be incorporated into the construction documents.

Prescriptive Path Plan Requirements

Building Envelope plans shall indicate:

1. The type and rated R-value of insulation for each product
2. Opaque door schedule showing the U-factor for each opaque door product as determined in accordance with Section 5.8.2
3. Fenestration schedule showing the manufacturer, model number, orientation, area, U-factor, SHGC, and VT for each fenestration product as determined in accordance with Section 5.8.2
4. Air leakage details in accordance with Section 5.4.3
5. Labeling of space conditioning categories. Semi-heated or unconditioned spaces
6. Labeling of daylight areas to include the primary side lighted areas, secondary side lighted areas, daylight area under skylights, and daylight area under roof monitor.

Heating, Ventilating, and Air Conditioning plans shall include:

1. Mechanical system design criteria
2. Mechanical system and equipment types, sizes and efficiencies
3. Economizer description
4. Equipment and system controls
5. Fan motor hp and controls
6. Duct sealing, duct and pipe insulation, and location

Service water heating plans shall include:

1. Service water heating system and equipment types, sized and efficiencies
2. Piping insulation size and location
3. Service water heating controls

Power plans shall include:

1. Automatic receptacle control and locations
2. Electrical energy monitoring

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Lighting plans shall include:

1. Identify all luminaires for general lighting that are located within daylight areas under skylights, daylight areas under roof monitors, and primary side lighted area and secondary side lighted areas.
2. Installed lighting power for interior and exterior lighting
3. Interior and exterior lighting controls

Other equipment:

1. Electric motors
2. Service water pressure booster systems
3. Elevators
4. Escalators and moving walks
5. Air curtains
6. Whole building energy monitoring. Required with exceptions
7. Pumps

Performance Path Plan Requirements

Energy cost budget method:

All plans noted in the prescriptive path are required. In addition, the report from the simulation software must be provided. Refer to section 11.4.1 for the simulation software requirements. Please note that the details and construction descriptions used in the simulation software should match the construction plans.

Performance rating method (appendix G):

All plans noted in the prescriptive path are required. In addition, section G1.3 has an additional 16 documentation requirements. Refer to section G2 for the simulation software requirements. Please note that the details and construction descriptions used in the simulation software should match the construction plans.