



COMMERCIAL IECC MANDATORY SUBMITTAL REQUIREMENTS

There are two paths to show energy conservation compliance for Commercial submittals:

ASHRAE Standard 90.1-2013 2015 IECC

Customers must choose one or the other above paths.

If ASHRAE 90.1-2013 is Chosen, there is a **Prescriptive Path (Sections 5 through 10)** and an **Energy Cost Budget Method (Section 11)**. Customers must choose one or another.

Mandatory provisions of the **Energy Cost Budget Method (Section 11)** are:

- A. Section 5.4 Thermal Envelope Mandatory Provisions: Insulation, Fenestration, and Air Leakage
- B. Section 6.4 HVAC Mandatory Provisions: Minimum Efficiencies, Equipment Sizing, HVAC Controls, HVAC construction and Insulation, Walk-in Coolers and Freezers
- C. Section 7.4 Service Water Heating Equipment: Load Calculations, Equipment Efficiencies, Insulation, and Controls
- D. Section 8.4 Electrical Mandatory Provisions: Maximum voltage drop, Receptacle Control, Energy Monitoring; Low Voltage Dry Type Distribution Transformers
- E. Section 9.4 Lighting Mandatory Provisions: Lighting Controls (Interior and Exterior), Functional Testing
- F. Section 10.4 Other Mandatory Provisions: Electric Motors, Service Water Pressure Booster Systems, Elevators, Escalators and Moving Walkways, Whole Building Energy Monitoring
- G. Energy Cost Budget less than or equal to the Design Energy Cost (Software for Energy Cost Budget – DOE-2, BLAST, other software that complies with Section 11.4.1.1)

Mandatory Provisions of the **ASHRAE 90.1-2013 Prescriptive Path** are:

- A. Section 5 Building Envelope; Sections 5.1, 5.2, 5.3, 5.4, 5.7, 5.8 and either
 - a. Section 5.5 OR
 - b. Section 5.6
- B. Section 6 HVAC; Sections 6.1, 6.2, 6.7, and either
 - a. Section 6.3 OR
 - b. Section 6.4 and 6.5
- C. Section 7 Service Water Heating; All of Section 7
- D. Section 8 Electrical Power; All of Section 8
- E. Section 9 Lighting; Sections 9.1, 9.2, 9.4, 9.7, and either
 - a. Section 9.5 OR
 - b. Section 9.6.

Software for compliance with ASHRAE 90.1-2013 is COMcheck version 4.0.0 or later

If the 2015 IECC path is Chosen, there is a **Prescriptive Path (Sections C402 through C406)** and a **Total Building Performance Path (Section C407)**. Customers must choose one or another.

Mandatory provisions of the **Total Building Performance Path (Section C407)** are:

- A. Section C402.5 Air Leakage
- B. Section 403.2 HVAC; Minimum Efficiencies, Equipment Sizing, HVAC Controls, Energy Recovery Ventilators, HVAC construction and Insulation, Fan Horsepower and Efficiencies, Walk-in Coolers and Freezers
- C. Section C404 Service Water Heating
- D. Section C405 Electrical Power and Lighting
- E. Section C407 Total Building Performance; Building Energy Costs shall be equal to or less than 85% of the standard reference building design
- F. Section C408 System Commissioning

Mandatory Provisions of the **2015 IEC Prescriptive Path** are:

- A. All of Sections C402 through C405; Building Envelope, HVAC, Service Water Heating, Power and Lighting
- B. Commercial Buildings must comply with C406 Additional Efficiency Package (Chose one of 6 options)
- C. Tenant Spaces must comply with C406.1.1 (either one of the following)
 - a. Where the shell building is not in compliance, tenant spaces must comply with one of the following additional energy efficiency packages:
 - i. C406.2 or
 - ii. C406.3 or
 - iii. C406.4 or
 - iv. C406.6 or
 - v. C406.7
 - b. Where the shell building is in compliance, comply with C406.5 On-Site Renewable Energy

As a part of the submittal package to obtain a commercial building permit, a report showing compliance to the 2015 IECC or ASHRAE 90.1-2013 must be submitted, based on the method of compliance chosen.

The submittal package must include one of the following:

1. COMcheck published by the US Department of Energy (DOE) based on the 2013 ASHRAE Standard 90.1 (COMcheck Windows Version 4.0.0 - Build 4.0.0.3 - Downloadable – not available as the Web version yet)
2. COMcheck based on the 2015 IECC (Scheduled for publication at the end of September 2015)
3. Other software based on the 2015 IECC
4. Other software based on the 2013 ASHRAE Standard 90.1

Although other US Department of Energy (DOE) approved software reports are acceptable, historically all customers have submitted a version of COMcheck. Since the DOE is not expected to publish COMcheck based on the 2015 IECC until late September, 2015, the Development Services will accept the following COMcheck versions:

Prior to July 15, use the version of COMcheck based on either the 2009 IECC or ASHRAE 90.1-2010

After July 15 until the end of December 2015, use the version of COMcheck based on the 2012 IECC or ASHRAE 90.1-2013. After the DOE publication of the 2015 IECC version of COMcheck (probably end of

September) DSD will also accept the 2015 IECC version of COMcheck. However DSD will still accept the 2012 IECC version since projects will have already been in design.

After January 1, 2016, Development Services will accept the version of COMcheck for ASHRAE 90.1-2013 or for the 2015 IECC. The department will no longer accept the 2012 IECC version of COMcheck