

Energy Efficiency Standards for Commercial Gas Boilers

The purpose of this regulation is to improve the energy efficiency of manufactured commercial gas boilers for all new and existing buildings. These products are a key component of a building's mechanical system, and improved energy efficiency can reduce energy costs for homeowners and businesses and reduce greenhouse gas emissions.

This circular includes updates to the Energy Efficiency Standards Regulation (EESR) for commercial boilers that were approved Feb 16, 2021. Note that products manufactured for export from B.C. are exempt from these regulations.

For further information on Energy Efficiency Standards, including detailed guidance on specific products, visit: [British Columbia | Energy Efficiency Standards](#)

Regulated Product

“Commercial gas hot water boiler” means a boiler that is fired by propane or natural gas, is intended for application in a hot water (hydronic) space heating system and may service also a potable water system. It has an input rate of 88 kW (300,000 Btu/h) or greater, but not more than 2,931 kW (10,000,000 Btu/hr).

A “small commercial gas hot water boiler” has an input rate of 88 kW (300,000 Btu/h) or greater, but not more than 733 kW (2,500,000 Btu/hr).

A “large commercial gas hot water boiler” has an input rate of 733 kW (2,500,000 Btu/h) or greater, but not more than 2,931 kW (10,000,000 Btu/hr).

Updated¹ Energy Performance Standard

Small commercial gas hot water boilers must have a thermal efficiency (E_T) equal to or greater than 90%.

Large commercial gas hot water boilers must have a combustion efficiency (E_C) equal to or greater than 90%.

Effective Date

This new performance standard applies to products manufactured and sold after **January 1, 2023**.

¹ The B.C. Energy Efficiency Standards Regulation previously required commercial boilers to have a combustion efficiency equal to or greater than 80%. Products were permitted to be tested with the ANSI Z21.13-2004/CSA 4.9-2004 or the GAMA BTS-2000 test procedure.

Verification and Labelling

There are three compliance pathways for product verification and reporting requirements. Products may either be:

- i. Certified and labelled with an energy efficiency verification mark showing the trademark of a Standards Council of Canada Certification Body;
- ii. Demonstrate compliance with the federal Energy Efficiency Act; or
- iii. Demonstrate compliance with energy performance information listed on either the AHRI Directory of Certified Product Performance, or the registered on the United States Department of Energy Compliance Certification Database.

Test Standard

Products must be tested using the ANSI/AHRI Standard 1500-2015 Standard for Performance Rating of Commercial Space Heating Boilers.