Ontario Regulation 509/18, Energy Efficiency – Appliances and Products
Environmental Registry Amendment 25 Posting, Draft Technical Sheet

Disclaimer:
This draft technical sheet is intended only to facilitate dialogue concerning its contents. A proposal to amend Ontario Regulation 509/18 (Energy Efficiency – Appliances and Products) has been posted on the Environmental Registry (ER) for public review. The comments received during the posting period will be considered during the final preparation of any proposed amendments to that regulation. The content, structure, form and wording of this draft technical sheet are not intended to reflect the actual wording of any proposed amendments to that regulation, and are subject to change as a result of the consultation process.

Contents

Note:
Proposed additions are shown in yellow highlight, and proposed deletions are shown in ~~strikethrough~~ except for the correction of typos.
The current version of the Electricity Act, 1998 can be viewed and downloaded at:
https://www.ontario.ca/laws/statute/98e15

The current version of O. Reg. 509/18, Energy and Water Efficiency – Appliances and Products can be viewed and downloaded at: *https://www.ontario.ca/laws/regulation/180509*

Part A: Fuel-burning appliances

Water Heater, Oil-Fired, Storage, >30.5 kW (New Product)

The proposed amendment would set and harmonize scope, test method and efficiency requirements for commercial oil-fired storage water heaters with Natural Resources Canada (NRCan) requirements for this product, which were recently updated through SOR/2019-164 and coming into force on January 1, 2020, and with United States Department of Energy requirements currently in effect. It would create two separate product categories to distinguish "residential duty" commercial water heaters from other commercial water heaters.

The following provides more details on the Ministry's proposal:

For "residential-duty" commercial oil-fired water heaters:

- Proposed Compliance/Date of Manufacture: July 1, 2020 or later.
- Test Method: U.S. DOE 10 Code of Federal Regulations, Appendix E to Subpart B of Part 430, Uniform Test Method for Measuring the Energy Consumption of Water Heaters, as it read on the date the particular appliance or product is manufactured.
- Scope: a stationary oil-fired water heater, designed to supply hot water, that has an input rate of more than 30.5 kW (105,000 Btu/h) but not more than 40.99 kW (140,000 Btu/h), has a storage tank with nominal volume not more than 454 L (120 US gallons), uses single-phase power and limits water temperatures to less than 82°C (180°F).
- Energy Efficiency Requirements: uniform energy factor (UEF) ≥ 0.6740 - 0.00035 V_s, where V_s is the measured volume of the water heater's storage tank expressed in litres.

For all other commercial oil-fired water heaters:

- Proposed Compliance/Date of Manufacture: July 1, 2020 or later.
- Test Method: U.S. DOE 10 Code of Federal Regulations Part 431, Appendix A to Subpart G, §431.106 Uniform test method for the measurement of energy efficiency of commercial water heating equipment, as it read on the date the particular appliance or product is manufactured.
- Scope: a stationary oil-fired water heater, designed to supply hot water, that has an input rate of more than 30.5 kW (105,000 Btu/h) and meets one or more of the following conditions:
    A. has an input rate more than 40.99 kW (140,000 Btu/h),
    B. has a storage tank of nominal volume more than 454 L (120 US gallons),
    C. does not use single-phase power, or
    D. permits water temperatures of 82°C (180°F) or higher.
- Energy Efficiency Requirements: thermal efficiency ≥ 80% and standby loss in watts ≤ $Q/0.8 + 16.57(V_s)^{½}$, where Q is the nameplate input rate in kilowatts and V_s is the measured storage volume in litres (or, equivalently, standby loss in Btu/h ≤ Q/800 +

$110(V_s)^{½}$, where Q is the nameplate input rate in Btu/h and V_s is the measured storage volume in US gallons).

Water Heater, Gas-Fired, Tank-Type, >22 kW (Existing Product)

The proposed amendment would update and harmonize test method and efficiency requirements for commercial gas-fired storage water heaters with NRCan requirements for this product, which were recently updated through SOR/2019-164 and coming into force on July 1, 2023. It would create two separate product categories to distinguish "residential duty" gas-fired commercial water heaters from other commercial gas-fired water heaters.

The following provides more details on the Ministry's intent:

For residential-duty commercial gas-fired water heaters:

- Proposed Compliance/Date of Manufacture: July 1, 2023 or later.
- Test Method: U.S. DOE 10 Code of Federal Regulations Part 430, Appendix E to Subpart B, Uniform Test Method for Measuring the Energy Consumption of Water Heaters, as it read on the date the particular appliance or product is manufactured.
- Scope: a stationary gas-fired water heater with an input rate of greater than 22 kW (75,000 Btu/h) but not more than 30.5 kW (105,000 Btu/h), a nominal storage tank volume of at least 76 L (20 US gallons) but not more than 454 L (120 US gallons), that uses single-phase power and that limits water temperatures to less than 82°C (180°F).
- Energy Efficiency Requirements:
    A. Replacement units: uniform energy factor ≥ 0.6597 - 0.00024 V_s, where V_s is the measured storage volume of the water heater's storage tank, expressed in litres.
    B. Other than replacement units: uniform energy factor ≥ 0.8107 - 0.00021 V_s, where V_s is the measured storage volume of the water heater's storage tank, expressed in litres.

For all other commercial gas-fired water heaters:

- Proposed Compliance/Date of Manufacture: ~~January~~July 1, ~~2013~~2023 or later.
- Test Method: ANSI Z21.10.3-2017 / CSA 4.3-2017, Gas-fired water heaters, volume III, storage water heaters with input ratings above 75,000 Btu per hour, circulating and instantaneous, or U.S. DOE 10 Code of Federal Regulations Part 431, Appendix A to Subpart G, §431.106 Uniform test method for the measurement of energy efficiency of commercial water heating equipment, as it read on the date the particular appliance or product is manufactured.
- Scope: ~~the same scope as the testing standard, but limited to storage water heaters that are designed to supply domestic hot water and excluding units designed for combination space and water heating.~~ a stationary gas-fired water heater with an input

rate greater than 22 kW (75,000 Btu/h) and nominal storage tank volume of at least 76 L (20 US gallons), that meets one or more of the following conditions:

A. Input rating of more than 30.5 kW (105,000 Btu/h),
B. Nominal storage tank volume of more than 454 L (120 US gallons),
C. Does not use single-phase electric power, or
D. Permits water temperatures of 82°C (180°F) or higher.

- Energy Efficiency Requirements:
  A. Replacement units: thermal efficiency ≥ 80 per cent, and standby loss in watts ≤ $Q/0.8 + 16.57(V_s)^{½}$, where Q is the nameplate input rate in kilowatts and V_s is the measured storage volume in litres (or, equivalently, standby loss in Btu/h ≤ $Q/800 + 110\ (V_{~~s~~})^{½}$ in Btu/h, where Q is the nameplate input rate in Btu/h and $V_{~~s~~}$ is the ~~rated~~ measured storage volume in US gallons).
  B. Other than replacement units: thermal efficiency ≥ 90% and standby loss in watts ≤ $0.84(Q/0.8 + 16.57(V_s)^{½})$, where Q is the nameplate input rate in kilowatts and V_s is the measured storage volume in litres (or, equivalently, standby loss in Btu/h ≤ $0.84(Q/800 + 110(V_s)^{½})$, where Q is the nameplate input rate in Btu/h and V_s is the measured storage volume in litres.

Definitions:

2. In this Schedule,

"replacement unit" means a commercial gas-fired storage water heater that is marked for replacement installations only

Water Heater, Gas-Fired, Instantaneous, <73 kW (Existing Product)

The proposed amendment would fully align the input rating range for this product category with NRCan and DOE rating ranges for this product. It would also update and harmonize scope, test method and efficiency requirements for residential gas-fired instantaneous water heaters with NRCan requirements for this product, which were recently updated through SOR/2019-164 and are coming into force on January 1, 2020.

The following provides more details on the Ministry's intent:

- Proposed Compliance/Date of Manufacture: ~~January 1, 2016~~ July 1, 2020 or later.
- Test Method: ~~CAN/CSA P.7-10, Test method for measuring energy loss of gas-fired instantaneous water heaters.~~ CSA P.3-15, Testing method for measuring energy consumption and determining efficiencies of gas-fired and fuel oil-fired water heaters.
- Scope: ~~the same scope as the testing standard, but includes water heaters with an input rating from zero to less than 73 kW (250,000 Btu/h) and excludes units designed for combination space and water heating applications.~~ a gas-fired instantaneous water heater that has an input rating of 309 watts or more per litre (4,000 Btu/h or more per

US gallon) of stored water, with rated storage capacity up to and including 7.6 L (2 US gallons), having rated input up to and including 58.56 kW (200,000 Btu/h) and designed to provide outlet hot water at a controlled temperature up to and including 82°C.

- Energy Efficiency Requirements: ~~Energy factor ≥ 0.80.~~

  A. If maximum flow rate is <6.4 L/min. (1.7 gallons/min.): Uniform energy factor ≥ 0.86; and,
  B. If maximum flow rate is ≥ 6.4 L/min (1.7 gallons/min.): Uniform energy factor ≥ 0.87.

Water Heater, Gas-Fired, Instantaneous, ≥73 kW (Existing Product)

The proposed amendment would:

A. fully align the input rating range for this product category with NRCan and DOE ranges beginning in 2020 and revise the scope description to make it consistent with the language used for residential gas-fired instantaneous water heaters, and
B. update and harmonize scope, test method and efficiency requirements for commercial gas-fired instantaneous water heaters with NRCan requirements recently updated through SOR/2019-164 and coming into force on July 1, 2023.

The following provides more details on the Ministry's intent:

A. Scope alignment with DOE and NRCan (2020):

- Proposed Compliance/Date of Manufacture: ~~August 1, 2014 or later~~July 1, 2020 to June 30, 2023 inclusive.
- Test Method: **No change.** ANSI Z21.10.3-2017 / CSA 4.3-2017, Gas-fired water heaters, volume III, storage water heaters with input ratings above 75,000 Btu per hour, circulating and instantaneous, or U.S. DOE 10 Code of Federal Regulations Part 431, Subpart G, §431.106 Uniform test method for the measurement of energy efficiency of commercial water heaters and hot water supply boilers (other than commercial heat pump water heaters), as it read on January 1, 2014.
- Scope: a ~~stationary~~ gas-fired instantaneous water heater ~~designed to supply domestic hot water~~ that has an input rating of 309 watts or more per litre (4,000 Btu/h or more per US gallon) of stored water and an input of ~~73~~58.56 kW (~~250~~200,000 Btu/h) or more. ~~This includes combination space and water heating applications that meet this description.~~
- Energy Efficiency Requirements: U.S. DOE 10 Code of Federal Regulations Part 431, Subpart G, §431.110 Energy conservation standards and their effective dates, as it read on January 1, 2014.

B. Test method and efficiency requirement alignment (2023):

- Proposed Compliance/Date of Manufacture: July 1, 2023 or later.
- Test Method: ANSI Z21.10.3-2017 / CSA 4.3-2017, Gas-fired water heaters, volume III, storage water heaters with input ratings above 75,000 Btu per hour, circulating and instantaneous, or U.S. DOE 10 Code of Federal Regulations Part 431, Subpart G, §431.106 Uniform test method for the measurement of energy efficiency of commercial water heaters and hot water supply boilers (other than commercial heat pump water heaters), as it read on the date the particular appliance or product is manufactured.
- Scope: a gas-fired instantaneous water heater that has an input rating of 309 watts or more per litre (4,000 Btu/h or more per US gallon) of stored water, and meets one or more of the following conditions:
    A. Has an input rating of 58.56 kW (200,000 Btu/h) or more,
    B. Is designed to provide hot water at temperatures higher than 82°C,
    C. Has a tank volume >7.6 L (2 US gallons).
- Energy Efficiency Requirements:
    - If tank volume is not more than 37.85 L (10 US gallons): Thermal efficiency ≥ 94 per cent;
    - If tank volume is above 37.85 L (10 US gallons): U.S. DOE 10 Code of Federal Regulations Part 431, Subpart G, §431.110 Energy conservation standards and their effective dates, as it read on the date the particular appliance or product is manufactured.

Boiler, Gas-Fired, ≥88 kW (Existing Product)

The proposed amendment would update and harmonize scope, test method and efficiency requirements for two categories of commercial gas-fired boilers (88-732 kW and ≥732 kW) with NRCan requirements recently updated through SOR/2019-164 and coming into force on January 1, 2025.

The following provides more details on the Ministry's intent:

For gas-fired boilers ≥ 88 kW and < 732 kW:

- Proposed Compliance/Date of Manufacture: January 1, ~~2017~~2025 or later.
- Test Method: ~~HI BTS 2000, Rev.06.07 Method to Determine Efficiency of Commercial Space Heating Boilers, Second Edition.~~U.S. DOE 10 Code of Federal Regulations, Appendix A to Subpart E of Part 431 — Uniform Test Method for the Measurement of Thermal Efficiency and Combustion Efficiency of Commercial Packaged Boilers, as it read on the date the particular appliance or product is manufactured.
- Scope: a gas-fired boiler~~s with~~intended for application in a low pressure steam, or hot water, central heating system that has an input rate of at least 88 kW (300,000 Btu/h) but ~~less~~ not more than 732 kW (2,500,000 Btu/h~~) that are used for space heating~~. ~~However, units that are designed for combination space and water heating are excluded.~~
- Energy Efficiency Requirements: no standing pilot, and

A. for hot water:
   1. ~~for new building applications: no standing pilot, and~~ thermal efficiency ≥ 90 per cent, and
   2. ~~for all other applications: no standing pilot, and thermal efficiency ≥ 83 per cent,~~
B. for steam~~, natural draft~~: ~~no standing pilot and~~ thermal efficiency ≥ ~~78~~81 per cent~~,~~
~~C. for steam, not natural draft: no standing pilot, and thermal efficiency ≥ 80 per cent~~.

For gas-fired boilers ≥ 732 kW:

- Proposed Compliance/Date of Manufacture: January 1, ~~2017~~2025 or later.
- Test Method: ~~HI BTS 2000, Rev.06.07 Method to Determine Efficiency of Commercial Space Heating Boilers, Second Edition.~~U.S. DOE 10 Code of Federal Regulations, Appendix A to Subpart E of Part 431— Uniform Test Method for the Measurement of Thermal Efficiency and Combustion Efficiency of Commercial Packaged Boilers, as it read on the date the particular appliance or product is manufactured.
- Scope: a gas-fired boiler~~s~~ intended for application in a low pressure steam, or hot water, central heating system that has an input rate of ~~at least~~greater than 732 kW (2,500,000 Btu/h~~) that are used for space heating. However, units that are designed for combination space and water heating are excluded.~~
- Energy Efficiency Requirements: no standing pilot, and
  A. for hot water:
     1. ~~for new building applications: no standing pilot, and~~ combustion efficiency ≥ 90 per cent, and
     2. ~~for all other applications: no standing pilot, and combustion efficiency ≥ 83 per cent.~~
  B. for steam~~, natural draft~~: ~~no standing pilot, and~~ thermal efficiency ≥ ~~80~~82 per cent~~,~~
  ~~C. for steam, not natural draft: no standing pilot, and thermal efficiency ≥ 81 per cent~~.

Boiler, Gas-Fired, <88 kW (Existing Product)

The proposed amendment would update and harmonize efficiency requirements with NRCan requirements for this product, which were recently updated through SOR/2019-164 and coming into force on July 1, 2023. Note that requirements currently scheduled to take effect on January 15, 2021 will still take effect on that date.

The following provides more details on the Ministry's intent:

- Proposed Compliance/Date of Manufacture: ~~January 15, 2021~~July 1, 2023 or later.
- Test Method: **No change.** US DOE 10 Code of Federal Regulations, Part 430, Subpart B, §430.23 (n) Furnaces, as it read on the date the particular appliance or product is manufactured.

- Scope: a gas-heated boiler that uses propane or natural gas that is intended for application in a low pressure steam or hot water central heating system and that has an input rate of less than 88 kW (300,000 Btu/h). ~~However, units that are designed for combination space and water heating are excluded other than systems equipped with tankless domestic water heating coils.~~
- Energy Efficiency Requirements: no standing pilot, and,
    A. for hot water,
        1. AFUE ≥ ~~84~~90 per cent,
        2. ~~and~~ systems not equipped with tankless domestic water heating coils must be equipped with an "automatic water temperature adjustment device" and must not be operable without the device, and
        3. ~~. M~~maximum standby and off mode power consumption ~~less than or equal to~~ ≤ 9 watts~~; and~~
    B. for steam,
        1. AFUE ≥ 82 per cent, and
        2. ~~. M~~maximum standby and off mode power consumption ~~less than or equal to~~ ≤ 8 watts.

Boiler, Oil-Fired, >88 kW (Existing Product)

The proposed amendment would update and harmonize scope, test method and efficiency requirements for two categories of commercial oil-fired boilers (88-732 kW and >732 kW) with NRCan requirements recently updated through SOR/2019-164 and coming into force on January 1, 2025.

The following provides more details on the Ministry's intent:

For oil-fired boilers > 88 kW and ≤ 732 kW:

- Proposed Compliance/Date of Manufacture: ~~July 1, 2013~~January 1, 2025 or later.
- Test Method: ~~HI BTS 2000, Rev.06.07 Method to Determine Efficiency of Commercial Space Heating Boilers, Second Edition.~~U.S. DOE 10 Code of Federal Regulations, Appendix A to Subpart E of Part 431— Uniform Test Method for the Measurement of Thermal Efficiency and Combustion Efficiency of Commercial Packaged Boilers, as it read on the date the particular appliance or product is manufactured.
- Scope: ~~the same scope as the testing standard, but limited to~~ an oil-fired boiler~~s~~ that ~~are used for space heating~~ is intended for application in a low pressure steam, or hot water, central heating system with an input rate of ~~more than~~at least 88 kW (300,000 Btu/h) but not more than 732 kW (2,500,000 Btu/h). ~~However, units that are designed for combination space and water heating and that have an input rating of 4,000 Btu/h or more per US gallon of stored water are excluded.~~
- Energy Efficiency Requirements: for hot water, thermal efficiency ≥ ~~82~~87 per cent; and for steam, thermal efficiency ≥ ~~81~~84 per cent.

For oil-fired boilers > 732 kW:

- Proposed Compliance/Date of Manufacture: ~~July 1, 2013~~January 1, 2025 or later.
- Test Method: ~~HI BTS 2000, Rev.06.07 Method to Determine Efficiency of Commercial Space Heating Boilers, Second Edition.~~U.S. DOE 10 Code of Federal Regulations, Appendix A to Subpart E of Part 431— Uniform Test Method for the Measurement of Thermal Efficiency and Combustion Efficiency of Commercial Packaged Boilers, as it read on the date the particular appliance or product is manufactured.
- Scope: ~~the same scope as the testing standard, but limited to~~ an oil-fired boiler~~s~~ that is intended for application in a low pressure steam, or hot water, central heating system with an input rate of more than 732 kW (2,500,000 Btu/h). ~~However, units that are designed for combination space and water heating and that have an input rating of 4,000 Btu/h or more per US gallon of stored water are excluded.~~
- Energy Efficiency Requirements: for hot water, combustion efficiency ≥ ~~84~~88 per cent; and for steam, thermal efficiency ≥ ~~81~~85 per cent.

Furnace, Gas-Fired, <66 kW (Existing Product)

The proposed amendment would update and harmonize efficiency requirements for residential furnaces with requirements recently updated by NRCan through SOR/2019-164, and coming into force on December 12, 2019.

The following provides more details on the Ministry's intent:

A. 2020 changes:

- Proposed Compliance/Date of Manufacture: July 1, ~~2016 or later~~2020 to December 31, 2023 inclusive.
- Test Method:
  A. for ~~three-phase furnaces~~thermal efficiency: ANSI Z21.47-2016 / CSA 2.3-2016, Gas-Fired Central Furnaces,
  B. for ~~other furnaces~~AFUE: CSA P.2-13, Testing method for measuring the annual fuel utilization efficiency of residential gas-fired or oil-fired furnaces and boilers~~.~~, and
  C. for furnace fan energy rating (FER), subparagraph 35(ii) of this Schedule.
- Scope: **No change.** a gas-fired central furnace, with an input of less than 65.92 kW (225,000 Btu/h).
- Energy Efficiency Requirements:
  A. for three-phase furnaces: AFUE ≥ 78 per cent, or thermal efficiency ≥ 80 per cent,
  B. for single-phase furnaces: AFUE ≥ ~~90~~95 per cent and FER as specified in subparagraph 35(iv) of this Schedule, with the following exceptions:
     1. for ~~single-phase~~ furnaces in ~~mobile homes~~ park model trailers and recreational vehicles, gas furnaces for relocatable buildings, and replacement

non-condensing gas furnaces, AFUE ≥ 80 per cent and FER as specified in subparagraph 35(iv) of this Schedule,

2. for ~~single-phase~~ outdoor furnaces with an integrated cooling component, AFUE ≥ 81 per cent and FER as specified in subparagraph 35(iv) of this Schedule, and
3. for through-the-wall furnaces with an integrated cooling component, AFUE ≥ 90 per cent and no FER requirement.

…

In this Schedule,

…

"gas furnace for relocatable buildings" means a gas furnace that is intended for use in a temporary modular building that can be relocated from one site to another and is marked for use in relocatable buildings;

"manufactured home" means a factory-built, single- or multiple-section, one-storey dwelling that

1. is designed and constructed for year-round occupancy;
2. is designed to be transported to its installation site; and
3. is ready for occupancy when it is installed in accordance with the manufacturer's installation instructions;

"replacement non-condensing gas furnace" means a non-condensing gas furnace that is marked for use as a replacement for a non-condensing gas furnace in a manufactured home.

B. 2024 changes:

- Proposed Compliance/Date of Manufacture: January 1, 2024 or later.
- Test Method:
  A. for thermal efficiency: ANSI Z21.47-2016 / CSA 2.3-2016, Gas-Fired Central Furnaces,
  B. for AFUE: CSA P.2-13, Testing method for measuring the annual fuel utilization efficiency of residential gas-fired or oil-fired furnaces and boilers, and
  C. for furnace fan energy rating (FER), subparagraph 35(ii) of this Schedule.
- Scope: a gas-fired central furnace, with an input of less than 65.92 kW (225,000 Btu/h).
- Energy Efficiency Requirements:
  A. for three-phase furnaces: AFUE ≥ 78 per cent, or thermal efficiency ≥ 80 per cent,
  B. for single-phase furnaces: AFUE ≥ 95 per cent and FER as specified in subparagraph 35(iv) of this Schedule, with the following exceptions:
     1. for furnaces in park model trailers and recreational vehicles, gas furnaces for relocatable buildings, and replacement non-condensing gas furnaces, AFUE ≥ 80 per cent and FER as specified in subparagraph 35(iv) of this Schedule,
     2. for outdoor furnaces with an integrated cooling component, AFUE ≥ 81 per cent and FER as specified in subparagraph 35(iv) of this Schedule, and

3. for through-the-wall furnaces with an integrated cooling component, AFUE ≥ 90 per cent and FER as specified in subparagraph 35(iv) of this Schedule.

Vented Gas Fireplace (Existing Product)

The proposed amendment would update and harmonize efficiency requirements for vented gas fireplace heaters with requirements recently updated by NRCan through SOR/2019-164 and coming into force January 1, 2020.

The following provides more details on the Ministry's intent:

- Proposed Compliance/Date of Manufacture: January 1, 2021 or later.
- Test Method: CAN/CSA P.4.1-15, Testing Method for Measuring Annual Fireplace Efficiency.
- Scope: the same scope as the testing standard.
- Energy Efficiency Requirements: no standing pilot, and for a fireplace equipped with a thermostat or intended for use as a heater, fireplace efficiency ≥ 50 per cent.

Part B: Windows

Window, Low-Rise Residential (Existing Product)

The proposed amendment would update efficiency requirements for windows in small residential buildings to align with Ontario Building Code minimum standards and a current British Columbia proposal.

The following provides more details on the Ministry's intent:

- Proposed Compliance/Date of Manufacture: January 1, ~~2014~~2022 or later.
- Test Method: Either,
    A. CAN/CSA A440.2-14/A440.3-14, Fenestration energy performance, or
    B. either NFRC 100-2014 Procedure for Determining Fenestration Product U-Factors or, for the energy rating, NFRC 200-2014 Procedure for Determining Fenestration Product Solar Heat Gain Coefficient and Visible Transmittance at Normal Incidence.
- Scope: a window that separates heated space from unheated space or from the exterior air and that is to be installed in a building that is partially or entirely used for residential occupancy, has a building area not exceeding 600 square metres and has a building height of three storeys or less. However, the following windows are excluded:
    A. decorative windows that have stained glass panels, iron inserts or blinds contained in a sealed insulating glass unit,

B. heritage replacement windows intended to be installed in a heritage building,
C. glazing replacements in an existing sash or frame, if the U-factor of the replacement glazing is equal to or less than the U-factor of the original glazing,
D. decorative sidelights for doors,
E. windows that are designed for a specific building, and
F. windows that fall outside the scope of the certification programs of the designated organizations described in subsections 9 (2) and (3) of this Regulation.

- Energy Efficiency Requirements:
  A. double-glazed with a low-E coating for basement windows that incorporate a loadbearing structural frame, and
  B. in all other cases, U-factor ≤ ~~2.0~~1.61 W/(m²C) or an energy rating ≥ ~~17~~25.

Part C: Editorial Changes

Other Editorial Changes

The proposed amendment would make other editorial changes to the regulation, such as updating references to certain outdated testing standards and further clarifying product scope or requirements, where needed.

References to outdated standards that require updated references include:

1. Gas-fired furnace with an input of at least 65.92 kW (225,000 Btu/h) but not more than 117.23 kW (400,000 Btu/h): ANSI Z21.47-2012 / CSA 2.3-2012 to ANSI Z21.47-2016 / CSA 2.3-2016

In conjunction with the proposed changes for commercial oil-fired boilers, the following editorial change would also be made to the scope of residential oil-fired boilers (boiler, oil-fired, with an input of not more than 88 kW), effective January 15, 2025:

- Scope: a boiler that is intended for application in a low pressure steam, or hot water, central heating system, has an input rate of ~~no more~~ less than 88 kW (300,000 Btu/h) and that is either exclusively oil-fired, or capable of being fired, at the choice of the user, by either oil or another fuel. For greater certainty, this includes boilers equipped with tankless domestic water heating coils~~ but not other units designed for combination space and water heating applications~~.