



NAFS Labeling Guidelines for Canada

Best practices for NAFS-08 labeling of fenestration products in Canada for jurisdictions that have adopted the 2010 National Building Code of Canada (NBCC) or a provincial building code based on the 2010 NBCC.

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This guideline document describes best practices for NAFS-08 labeling of fenestration products in Canada for jurisdictions that have adopted the 2010 National Building Code of Canada (NBCC) or a provincial building code based on the 2010 NBCC. It is issued by Fenestration Canada for the benefit of participants in the fenestration industry and for building officials. This guide will be presented to the Fenestration Association of BC, the Association de Vitrierie et Fenestration du Québec (AVFQ), and Fenestration Manitoba for their endorsement and publication as well.

Definitions

This document uses the commonly used names/acronyms on the left to refer to the standards on the right:

NAFS, NAFS-08	AAMA/WDMA/CSA 101/I.S.2/A440-08, NAFS—North American Fenestration Standard/Specification for windows, doors and skylights
Canadian Supplement	A440S1-09, Canadian Supplement to AAMA/WDMA/CSA 101/I.S.2/A440-08, NAFS—North American Fenestration Standard/Specification for windows, doors and skylights

Introduction and use of this document

The 2010 National Building Code of Canada (NBCC) is the first Canadian model building code to reference the 2008 edition of the harmonized fenestration standard commonly known as NAFS. While most provinces and territories eventually adopt the NBCC, the NAFS provisions of this code are also incorporated into provincial building codes such as the 2012 British Columbia Building Code and the 2012 Ontario Building Code. The 2011 edition of NAFS is not recognized for code compliance in Canada.

In this document, the term Building Code refers to the 2010 NBCC or to a provincial building code based on the 2010 NBCC. All of these codes specifically reference the 2008 version of NAFS and the 2009 version of the Canadian Supplement CSA A440S1-09.

The Building Code requires fenestration products within the scope of the NAFS standard to also comply with the Canadian Supplement. In addition to several performance and material requirements, the Canadian Supplement contains specific requirements for the labeling of fenestration products. Section 6.4 describes the mandatory labeling requirements (Canadian Supplement, p. 14):

6.4 Markings

6.4.1 Product manufacturer

All fenestration products shall bear a permanent marking indicating the fenestration product manufacturer's identity in a location that is visible when the product is installed.

6.4.2 Performance rating

Performance ratings shall be indicated on a label using primary and secondary designators in accordance with Clauses 4.4.2 and 4.4.3 of AAMA/WDMA/CSA 101/I.S.2/A440 and shall include

- (a) positive design pressure, where applicable;
- (b) negative design pressure, where applicable;
- (c) water penetration test pressure; and
- (d) the Canadian air infiltration and exfiltration level.

Note: *Performance rating labels may be non-permanent.*

The requirements of Section 6.4.1, Product manufacturer are commonly met in a variety of ways, including:

- An etching or marking on the product frame, hardware or glass
- A label that is not intended for removal without destroying or defacing the label and commonly referred to as a “permanent label”

The requirements of Section 6.4.2, Performance rating are commonly met in a variety of ways, including:

- A "temporary" label that is intended for removal after final code inspection
- A "permanent" label that is not intended for removal, but is intended to remain on the product

To comply with the Building Code, products must be labeled according to both 6.4.1 and 6.4.2.

This document focuses on the requirements of Section 6.4.2, Performance rating which can be provided by the manufacturer either on a removable temporary label or a permanent label that is not intended for removal. It summarizes the Canadian fenestration industry recommended best practices for performance rating labels, and provides example labels to guide industry participants.

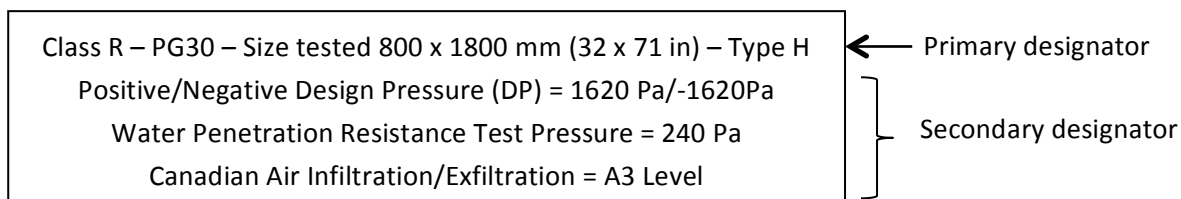
Guideline 1 is mandatory as it merely re-states requirements of the Canadian Supplement and NAFS-08. Guideline 2 is mandatory as the Building Code is specific about the versions of the standards to which conformance is required. The remaining guidelines are recommendations, and it is hoped that over time industry will adopt them. Many manufacturers have begun NAFS product labeling programs prior to this document being issued, and labels that comply with Guidelines 1 and 2 but lack features in guidelines 3 – 10 are no less valid for Canadian code compliance.

Guidelines for performance rating labels

The following guidelines are intended to ensure that all parties responsible for labeling fenestration products for Canadian code compliance provide the appropriate information in a consistent format that complies with both NAFS-08 and the Canadian Supplement, can be easily recognized by code officials, and contains sufficient information for code officials or other inspecting entities to contact the responsible manufacturer in order to verify or validate the information on the label when necessary.

Guideline 1. Performance rating labels shall include both primary and secondary designators, and shall follow NAFS-08 rules for the use of secondary designators

Canadian Supplement 6.4.2, Performance rating requires labels to display both the primary designator and the full secondary designator. An example of the primary and secondary designator format is shown below:



Section 4.4.3.1 of NAFS-08 has specific requirements for the secondary designator (NAFS-08, p. 41):

The use of a secondary designator, or any portion thereof, shall only be permitted in conjunction with the primary designator and shall be preceded by the primary designator. All written presentations of any secondary designator, or any portion thereof, in any manner, shall have a text size not larger than that of the primary designator.

...

The secondary designator consists of up to four lines of text that indicate

- (a) positive design pressure (DP);
- (b) negative design pressure (DP);
- (c) water penetration resistance test pressure; and
- (d) Canadian air infiltration/exfiltration level.

... Any of Items (a) to (d) that are used shall be presented in the order shown above. If any of the lines of text are excluded, then the subsequent lines of text shall be permitted to be moved up accordingly.

While NAFS-08 permits any of items (a) to (d) to be included or excluded from the secondary designator, the Canadian Supplement requires all four terms of the secondary designator to be used on Canadian performance rating labels.

Guideline 2. Performance rating labels shall identify the standards that the Building Code requires products to conform to

As the Building Code requires fenestration products within the scope of NAFS-08 to conform to both the 2008 version of NAFS and the 2009 version of the Canadian Supplement A440S1-09, performance rating labels must specifically identify these standards using their proper designations and year of issue:

AAMA/WDMA/CSA 101/I.S.2/A440-08 and A440S1-09. The label should not substitute these

designations with alternate terms such as "NAFS", "NAFS-08", "Supplement", or "Canadian Supplement" as these alternate terms are not used in the Building Code.

Existing labels using terms such as "NAFS", "NAFS-08", "Supplement", or "Canadian Supplement", or "Tested to" in conjunction with AAMA/WDMA/CSA 101/I.S.2/A440-08 and A440S1-09 shall be acceptable.

Guideline 3. Performance rating labels should state that products "conform to" NAFS-08 and the Canadian Supplement

The Canadian performance rating label does not just report a product's tested air-water-structural performance as determined by testing to NAFS-08. The building code requires fenestration products "to conform" to both NAFS and the Canadian Supplement. This is understood to mean full compliance with all applicable NAFS tests, specifications and referenced standards, as well as to the additional testing and material requirements in the Canadian Supplement.

Manufacturers whose products do conform in this way to NAFS-08 and the Canadian Supplement are encouraged to state that the product "conforms to" both standards using their proper designations: AAMA/WDMA/CSA 101/I.S.2/A440-08 and A440S1-09.

Performance rating labels bearing the mark of a recognized certification agency may omit the words "conform to" as the certifier's mark implies conformance.

Guideline 4. Performance rating labels should include the manufacturer's identification by name or traceable certification number, product line/series information, and may at the manufacturer's discretion include operator type

There are several sound reasons for requiring this information to appear on the performance rating label:

- Reduces risk of mislabelling by the manufacturer
- Facilitates investigation/verification of performance claims
- Increases manufacturer's accountability for label contents and accuracy

The manufacturer's name may be that of the fabricator or the name of the entity permitted to sell the product under a recognized private labeling program.

Guideline 5. The performance rating information should be enclosed within a single lined boundary border to separate and distinguish it from other ratings or labels on the fenestration product in order to make the labels more visible to code officials

The boundary border should enclose the information in items Guidelines 1 – 3 above. The information within the boundary border may be further subdivided with lines. When the Canadian performance rating information appears on a label that also shows conformance to other standards or other versions of NAFS, the manufacturer's name is permitted to appear outside the boundary border.

Guideline 6. The secondary designator should report pressure values in metric units (Pascals) and may also include pressure values in IP units

Design pressure and water penetration resistance test pressure values determined using the Canadian Supplement are reported in Pascals. The secondary designator needs to report these values in Pascals for Canadian code compliance. Performance rating labels may also report the pressure values in IP units in addition to the metric units for jurisdictions where IP values are recognized.

Guideline 7. Performance rating labels are encouraged to use the IP performance grade designations

While NAFS allows metric or IP performance grade (PG) ratings to be used, manufacturers are encouraged to use the IP performance grade ratings in the primary designator.

Guideline 8. Performance rating labels may use abbreviated primary designators as permitted in the United States

All the examples of primary designators in NAFS-08 use the long form of the designator in order to educate users of the standard about the intent of the label. It has been customary however for US certifiers to allow the use of abbreviated primary designators in which the words "Class" and "size tested" are omitted. Abbreviated primary designators shall be permitted, as long as each of the terms in the primary designator is in the correct order, as shown in the following examples

Original NAFS examples for a hung window	Permitted abbreviations
Class R – PG30 – Size tested 800 x 1800 mm (32 x 71 in) – H	R-PG30-800x1880 (32x71)-H
Class R – PG30 – Size tested 31.5 x 70.9 in	R-PG30-31.5x70.9 in
Class R – PG1440 (metric) – Size tested 800 x 1800 mm	R-PG30-800x1880
Class R – PG30 – Size tested 800 x 1800 mm (32 x 71 in) – Hung	R-PG30-800x1880 (32x71)-Hung
Class R – PG30 – Size tested 800 x 1800 mm (32 x 71 in) – Type H	R-PG30-800x1880 (32x71)-Type H

Guideline 9. Performance rating labels should include a "premature removal" caution

In new construction labels must remain on products until final inspection by a code official. In renovations homeowners often need to retain labels for purposes such as energy incentive programs or warranty claim purposes. Manufacturers are encouraged to add text similar to the following to non-permanent performance rating labels:

Remove only after final inspection – Retain label for your records

Guideline 10. Performance rating labels may be permanent or non-permanent

Canadian Supplement section 6.4.2 allows performance rating labels to be of a permanent or non-permanent type. Manufacturers who wish to display performance ratings on a permanent label must follow guidelines 1 and 2, and are encouraged to follow the remaining guidelines of this document.

In the US, the NAFS primary designator alone is sufficient to declare a product's performance rating and may be displayed on a permanent or non-permanent label. US-made products that display the primary designator on a permanent label must bear a second performance rating label complying with guidelines 1 and 2 of this document at a minimum, and are encouraged to follow the remaining guidelines as well.

It is not permissible to combine a US permanent label with a separate label that contains the secondary designator alone. NAFS-08 permits the secondary designator to be used only together with, and immediately following the primary designator.

Examples

The following label examples illustrate the application of these guidelines. Note that NAFS-08 has examples of both shorter and longer versions of the primary and secondary designators.

1 Example labels for product rated to more than one standard

Competent Windows Builder Line 4000 Hung Window	[Other label content]	
Conforms to AAMA/WDMA/CSA 101/I.S.2/A440-08 and A440S1-09 R-PG30-800 x 1800 mm (32 x 71 in)-H DP: +1680 Pa / -1440 Pa Water Test Pressure: 260 Pa Canadian Air Infiltration/Exfiltration: A3	[Certification agency name and/or logo]	[Certification agency's manufacturer code, and product identification if applicable]
	AAMA/WDMA/CSA 101/I.S.2/A440-08	R-PG30-800 x 1800 mm (32 x 71 in)
	A440S1-09	DP: + 1680 Pa / -1440 Pa Water Resistance: 260 Pa
	A440S1-09	Air In/Ex A3
CSA A440-00 A3 B2 C2 S1 F10	[Other standards]	[Other ratings]
[Other standards/ratings]		

2. Example labels where manufacturer's name or identity is indicated elsewhere on the performance rating label

Conforms to AAMA/WDMA/CSA 101/I.S.2/A440-08 and A440S1-09	R-PG30-800 x 1800 mm (32 x 71 in)-H DP: +1680 / -1440 Pa (+35 / -30 psf) Water Test Pressure: 260 Pa (5.25 psf) Canadian Air Infiltration/Exfiltration: A3
AAMA/WDMA/CSA 101/I.S.2/A440-08 A440S1-09	R-PG30-800 x 1800 mm (32 x 71 in) DP: +1680 / -1440 Pa Water Test Pressure: 260 Pa Canadian Air Infiltration/Exfiltration: A3

3. Example labels for single products rated to NAFS-08 only

Competent Windows Builder Line 4000

Class R – PG30 – Size tested 800 x 1800 mm (32 x 71 in) – Type H
 Positive Design Pressure (DP) = 1680 Pa (35 psf)
 Negative Design Pressure (DP) = 1440 Pa (30 psf)
 Water Penetration Resistance Test Pressure = 260 Pa (5.25 psf)
 Canadian Air Infiltration/Exfiltration = A3 Level

Conforms to
 AAMA/WDMA/CSA 101/I.S.2/A440-08 and A440S1-09

Competent Windows Builder Line 4000

Class R – PG30 – Size tested 31.5 x 70.9 in
 Positive Design Pressure (DP) = 1680 Pa
 Negative Design Pressure (DP) = 1440 Pa
 Water Penetration Resistance Test Pressure = 260 Pa
 Canadian Air Infiltration/Exfiltration = A3 Level

Conforms to
 AAMA/WDMA/CSA 101/I.S.2/A440-08 and A440S1-09

Competent Windows Builder Line 4000

Class R – PG30 – Size tested 800 x 1800 mm (32 x 71 in) - Hung
 Design Pressure +1680 / -1440 Pa
 Water Test Pressure: 260 Pa
 Canadian Air Infiltration/Exfiltration: A3

Conforms to AAMA/WDMA/CSA 101/I.S.2/A440-08 and A440S1-09

Competent Windows Builder Line 4000 Hung Window
 Class R – PG30 – Size tested 800 x 1800 mm (32 x 71 in)
 DP: +1680 / -1440 Pa (+35 / -30 psf)
 Water Test Pressure: 260 Pa (5.25 psf)
 Canadian Air Infiltration/Exfiltration: A3

Conforms to
 AAMA/WDMA/CSA 101/I.S.2/A440-08 and A440S1-09

Competent Windows Builder Line 4000 **Class R – PG30 – Size tested 800 x 1800 mm - H**

Design Pressure: +1680 / -1440 Pa
 Water Test Pressure: 260 Pa
 Canadian Air Infiltration/Exfiltration: A3

Conforms to AAMA/WDMA/CSA 101/I.S.2/A440-08 and A440S1-09

Competent Windows Builder Line 4000

R-PG30-800x1800(32x71)-H
 DP: +1680 / -1440 Pa (+35 / -30 psf)
 Water Test Pressure: 260 Pa (5.25 psf)
 Canadian Air Infiltration/Exfiltration: A3
Conforms to AAMA/WDMA/CSA 101/I.S.2/A440-08 and A440S1-09

Conforms to AAMA/WDMA/CSA 101/I.S.2/A440-08 and A440S1-09

Class R – PG30 – Size tested 800 x 1800 mm (32 x 71 in) - Hung
 Design Pressure +1680 / -1440 Pa
 Water Test Pressure: 260 Pa
 Canadian Air Infiltration/Exfiltration: A3

Competent Windows Builder Line 4000 **Hung Window**

Conforms to AAMA/WDMA/CSA 101/I.S.2/A440-08 and A440S1-09
R-PG30-800x1800(32x71)
 DP: +1680/-1440 Pa
 Water Test Pressure: 260 Pa (5.25 psf)
 Canadian Air Infiltration/Exfiltration: A3
Competent Windows Builder Line 4000