FENESTRATION ASSOCIATION OF BC

NAFS QUICK REFERENCE GUIDE

February 2014

Covers **Windows, Doors, Tubular Daylight Devices and Skylights** in one Harmonized Standard. These products must conform to NAFS and the Canadian Supplement

NAFS - NORTH AMERICAN FENESTRATION STANDARD 2008

(Officially AAMA/WDMA/CSA 101/I.S.2/A440-08)

Note: NAFS does not include interior doors and windows, vehicular access doors (garage doors), curtain wall, storefront, storm doors, storm windows, commercial entrance systems, sunrooms, revolving doors, site built door systems and commercial steel doors

Note: For commercial products used in a residential application, registered professionals may be required to ensure compliance to codes and standards

Officially adopted by National Building Code of Canada 2010 and BC Building Code 2012

CANADIAN SUPPLEMENT CSA-A440S1-09

Increasing performance

ALL PRODUCTS RATED TO SEVERAL LEVELS OF PERFORMANCE:

PERFORMANCE CLASS*:

R – min. 15 psf
LC – min. 25 psf
CW – min. 30 psf
AW – min. 40 psf
(Minimum Gateway Requirements)

PERFORMANCE GRADES:

A single number achieved for a class that represents structural and water performance (e.g. PG-25, PG-30, etc.)

TESTING REQUIREMENTS:

Part 3 and Part 9 Buildings- Window tests required – see Table 27 minimum sizes for each product type

For Part 3 Buildings - determined by Architect
For Part 9 Buildings - determined by Building Dept.

Test results - Strict Labelling requirements, each window/door requiring permanent and temporary labels

Must laboratory test doors, individual windows, combination windows (mulled) and multi lite windows with integral mullions

CANADIAN SUPPLEMENT CSA-A440S-09 USED TO DETERMINE PERFORMANCE GRADES (Use Checklist on page 21 to determine performance requirements)

Permanent labels must indicate at least the name of manufacturer and can be etched into the glass or affixed to the product frame (i.e. must be permanently visible after installation)

Performance labels can be temporary and must indicate both the primary designator (class, performance grade and size tested) and secondary designator(design pressures, water test pressures and air infiltration/exfiltration level denoted by A2, A3 or Fixed)

Use simplified method to determine:

- Wind Pressure (HWP)
- Water Pressure (DRWP)
- Test Pressures
- **Performance Grade and Secondary Designators** required based on the above

Note: only products installed in Canada still require the A rating (either of A2, A3 or Fixed) for infiltration / exfiltration

Performance Grade is dependent upon:

- Building height
- Geographical Location
- **Open or Rough Terrain**
- Building must be on level terrain to use the simplified method of wind load determination

Note: Each Performance Class has a range of product types, as many as 30 in all (e.g. awning (AP), casement (C), fixed (FW), etc.). **Product selection (i.e. what class) is based on the performance requirements of the project**

To ensure compliance to NAFS:

- For each project determine what Performance Class and Grade your product will need to meet – consult building department for Part 9 buildings; review architectural window schedule, project specifications, consult architect and window engineer for Part 3 buildings. Check Canadian Supplement page 21, Figure A.1 Checklist
- Ensure your product meets the required class and grade by way of testing
- Ensure your products have been tested to fully anticipated worst case sizes and configurations that may occur on a project
- For Part 9 Buildings – affix permanent & temporary labels to each window
- For Part 3 Buildings – permanent labels at each window; indicate all performance levels on stamped shop drawings which may substitute for temporary labels (i.e. for window wall on high-rises) although this has not yet been confirmed

NAFS 2008