



October 2000

## DRAFT PROPOSAL TO REGULATE FACTORY-BUILT FENESTRATION PRODUCTS

The following is an initial draft proposal to regulate the thermal performance of factory-built fenestration products under the *Energy Efficiency Act*. Your comments and suggestions are welcome.

### Products Covered

Under this proposal, the following factory-built products would be included: 1) Residential Windows; 2) Non-residential Windows; 3) Flat-glazed Skylights; 4) Roof Windows; and 5) Sliding Glass Doors. The proposed regulations will apply to the products if they are traded interprovincially or imported into Canada. Doorlites will be excluded from this regulation.

### Product Definitions

*Window.* As defined by the CSA A440.2 Standard. Specifically:

1. Vertical and horizontal sliding
2. Tilt-and-Turn
3. Casement
4. Projecting
5. Fixed (including fixed-window sidelights and transom windows)

A combination or composite window is considered to be more than one window.

*Residential Window.* A window where the thickest lite of glazing is 4 mm or less when the total glass area is less than 2 square metres; or, the thickest lite of glazing is 5 mm or less when the total glass area is 2 square metres or more.

*Non-residential Window.* A window where the thickest lite of glazing is greater than 4 mm when the total glass area is less than 2 square metres; or, the thickest lite of glazing is greater than 5 mm when the total glass area is 2 square metres or more.

*Skylight with flat glazing (including roof windows).* Skylights are windows intended for installation in a non-vertical position not normally within the reach of the building occupants. Roof windows are windows intended for installation in a non-vertical position normally within the reach of the building occupants.

*Sliding Glass Door.* As defined by the CSA A440.2 Standard.

*Lite.* A flat transparent or translucent material.

*Glaze or Glazing.* Composed of a lite or lites.

*Glass Area.* As defined by the *National Building Code of Canada*. The material used may be other than glass.

*Factory-built.* A product that, when it leaves the factory, has its main frame and, if applicable, sash components completely assembled.

### **Energy Performance Test Procedures**

Products will either be tested or computer-simulated using the latest version of the CAN/CSA A440.2 *Energy Performance Evaluation of Windows and other Fenestration Systems* Standard. Frame 4 and Vision 4 (Frameplus) software or higher will be used to computer-simulate products.

### **Proposed Minimum Energy Efficiency Standards**

Residential Windows: An Energy Rating (ER) of -13 or higher for operable products and -3 or higher for fixed products, i.e. an Energy Level (EL<sup>1</sup>) of 3 or better.

Non-residential Windows: A total window U value ( $U_w$ ) of 2.6 W/m<sup>2</sup>EC or less.

Flat-glazed Skylights and Roof Windows: A total window U value ( $U_w$ ) of 3.1 W/m<sup>2</sup>EC or less.

Sliding Glass Doors: An Energy Rating (ER) of -13 (EL 3) or higher.

### **Labelling Requirements**

It is proposed that Canadian dealers<sup>2</sup> of the regulated products will be required to affix the appropriate EnerGuide label on the product. The format of the labels is still under development. It is proposed, however, that each label show the appropriate Energy Level or U value for that product. Comments on labelling and the label format are welcome.

### **Product Identification Mark**

In order to enforce the proposed regulations, each product should have a permanent Product Identification Mark (PIM) according to its unique thermal performance value. The PIM is analogous to a model number and would ensure that documentation can be related to a specific product. The exact nature of the identification mark is still under consideration. Comments on the nature of this product identification mark are welcome.

### **Timetable**

The proposed effective date for the prescribed labelling of products is **June 1, 2002**, and the date for meeting the minimum energy requirements is **September 1, 2003**.

### **Other Requirements**

#### *Verification Mark*

Each regulated product will bear a verification mark from a certification organization proving that the model has been tested or simulated and its energy performance has been verified.

#### *Energy Efficiency Report*

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<sup>1</sup> Energy Levels as per the CSA A440.3 98 User Guide to CSA A440.2 98 Standard, Section I8.2

<sup>2</sup> Dealer means a manufacturer, importer, or their agent.

Dealers of regulated products will be required to file an energy efficiency report with Natural Resources Canada prior to inter-provincial shipments or importation. Details regarding these requirements are currently being developed. Any comments or suggestions regarding the nature of this report and procedures would be welcome.

#### *Import Requirements*

Dealers importing regulated products into Canada will also be required to submit specific documentation to Canada Customs and Revenue Agency (CCRA).

#### **Comments Invited**

Please send your comments regarding this proposal *in writing* to:

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