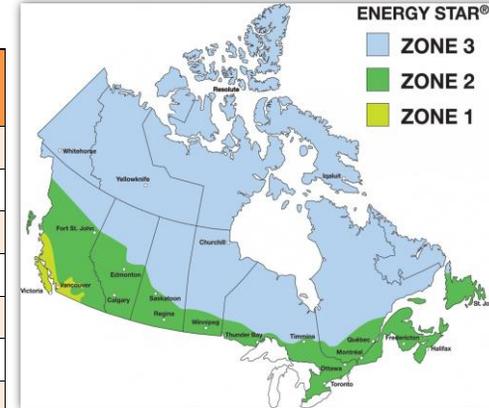




# Casements and Awnings - PVC Performance

## Energy Performance



| Model<br>Direct link to ENERGY STAR site                    | Details      | Product Name       | U-factor (W/m <sup>2</sup> - K) | Solar heat gain (SHGC) | Energy Rating ER | ENERGY STAR zone(s) 2015 | ENERGY STAR zone(s) 2010 | NFRC                     |
|---|--------------|--------------------|---------------------------------|------------------------|------------------|--------------------------|--------------------------|--------------------------|
| <a href="#">A-3850/5550-CL-ARG95-SG400-SU</a>               | Th2          | Awning 5550/3850   | 1.59                            | 0.45                   | 31               | 1   2                    | A   B   C                | <a href="#">MPE-M-18</a> |
| <a href="#">A-3850/5550-CL-ARG95-SG400-SU-GEOR</a>          | Th2 Georgian | Awning 5550/3850   | 1.59                            | 0.41                   | 28               | 1                        | A   B                    | <a href="#">MPE-M-18</a> |
| <a href="#">A-3850/5550-CL-ARG95-CL-ARG95-SG400-SU</a>      | Th3          | Awning 5550/3850   | 1.31                            | 0.41                   | 34               | 1   2   3                | A   B   C   D            | <a href="#">MPE-M-18</a> |
| <a href="#">A-3850/5550-CL-ARG95-CL-ARG95-SG400-SU-GEOR</a> | Th3 Georgian | Awning 5550/3850   | 1.36                            | 0.37                   | 31               | 1   2                    | A   B   C                | <a href="#">MPE-M-18</a> |
| <a href="#">B-3800/5500-CL-ARG95-SG400-SU</a>               | Th2          | Casement 5500/3800 | 1.53                            | 0.45                   | 32               | 1   2                    | A   B   C                | <a href="#">MPE-M-17</a> |
| <a href="#">B-3800/5500-CL-ARG95-SG400-SU-GEOR</a>          | Th2 Georgian | Casement 5500/3800 | 1.53                            | 0.41                   | 30               | 1   2                    | A   B   C                | <a href="#">MPE-M-17</a> |
| <a href="#">B-3800/5500-CL-ARG95-CL-ARG95-SG400-SU</a>      | Th3          | Casement 5500/3800 | 1.31                            | 0.41                   | 35               | 1   2   3                | A   B   C   D            | <a href="#">MPE-M-17</a> |
| <a href="#">B-3800/5500-CL-ARG95-CL-ARG95-SG400-SU-GEOR</a> | Th3 Georgian | Casement 5500/3800 | 1.36                            | 0.37                   | 31               | 1   2                    | A   B   C                | <a href="#">MPE-M-17</a> |
| <a href="#">F-5200-CL-ARG95-SG400-SU</a>                    | Th2          | Fixed 5200         | 1.59                            | 0.61                   | 40               | 1   2   3                | A   B   C   D            | <a href="#">MPE-M-19</a> |
| <a href="#">F-5200-CL-ARG95-SG400-SU-GEOR</a>               | Th2 Georgian | Fixed 5200         | 1.59                            | 0.55                   | 37               | 1   2   3                | A   B   C   D            | <a href="#">MPE-M-19</a> |
| <a href="#">F-5200-CL-ARG95-CL-ARG95-SG400-SU</a>           | Th3          | Fixed 5200         | 1.25                            | 0.56                   | 45               | 1   2   3                | A   B   C   D            | <a href="#">MPE-M-19</a> |
| <a href="#">F-5200-CL-ARG95-CL-ARG95-SG400-SU-GEOR</a>      | Th3 Georgian | Fixed 5200         | 1.31                            | 0.51                   | 41               | 1   2   3                | A   B   C   D            | <a href="#">MPE-M-19</a> |
| <a href="#">F-5600-CL-ARG95-SG400-SU</a>                    | Th2          | Fixed 5200         | 1.59                            | 0.54                   | 36               | 1   2   3                | A   B   C   D            | <a href="#">MPE-M-20</a> |
| <a href="#">F-5600-CL-ARG95-SG400-SU-GEOR</a>               | Th2 Georgian | Fixed 5200         | 1.59                            | 0.48                   | 33               | 1   2                    | A   B   C                | <a href="#">MPE-M-20</a> |
| <a href="#">F-5600-CL-ARG95-CL-ARG95-SG400-SU</a>           | Th3          | Fixed 5200         | 1.25                            | 0.49                   | 41               | 1   2   3                | A   B   C   D            | <a href="#">MPE-M-20</a> |
| <a href="#">F-5600-CL-ARG95-CL-ARG95-SG400-SU-GEOR</a>      | Th3 Georgian | Fixed 5200         | 1.36                            | 0.44                   | 35               | 1   2   3                | A   B   C   D            | <a href="#">MPE-M-20</a> |

**Th2:** Double glazed insulated glass unit (two glass panes) - **Georgian:** integrated grilles in double glazed insulated glass unit.

**U-factor:** (W/m<sup>2</sup>-K) The lower the U-factor, the better the ability to resist to heat transfer.

**SHGC:** Solar Heat Gain Coefficient, the higher the SHGC, the more the solar heat is transmitted inside.

**R-value:** (1 / U-factor) A high R-value indicates a better heat resistance, thus more effective insulation.

The values are determined according to the procedure of the National Fenestration Rating Council (NFRC).

**ER:** The Energy Rating is the result of a formula taking into account the U-value, the SHGC and the airtightness of the product. The ER value measures the overall performance of a window. The higher the value, the better the product efficiency in terms of energy.

## Structural Performance

PERFORMANCE TESTING IN ACCORDANCE WITH AAMA/WDMA/CSA 101/I.S.2/A440-08

|                                | Performance grade (PG) | Airtightness | Water tightness | Wind load resistance | Screen resistance | Resistance to forced entry | Usability  | Structural test |
|--------------------------------|------------------------|--------------|-----------------|----------------------|-------------------|----------------------------|------------|-----------------|
| Awnings - PVC Performance      | LC-PG30-AP             | A3           | B7              | C5                   | S1                | F20                        | Successful | Successful      |
| Casements - PVC Performance    | CW-PG60-C              | A3           | B7              | C4                   | S1                | F20                        | Successful | Successful      |
| Fixed Sashes - PVC Performance | CW-PG100-FW            | Fixed        | B7              | C5                   | -                 | -                          | -          | -               |

**PG:** Performance Grade from the NAFS-08 harmonized standard (North American Fenestration Standard) for a given size on a scale from PG15 to PG100. The higher the value is, the better the product efficiency.

**Airtightness:** Resistance to air exfiltration/infiltration on a scale ranging from A1 to A3. The higher the value, the greater the sealing.

**Water tightness:** Resistance to water infiltration on a scale ranging from B1 to B7. The higher the value, the greater the sealing.

**Wind load resistance:** Resistance to wind pressures on a scale ranging from C1 to C5 without breakage or permanent deformation. The higher the value, the greater the resistance.

**Screen resistance:** Resistance rating without damage or permanent deformation while remaining firmly attached to the window under a force of 60 Newtons outwards.

**Resistance to forced entry:** Capacity when locked to withstand a forced entry under specified load and conditions for a rating of F10 or F20. The higher the value, the greater the resistance.

**Usability:** Test for measuring the force required to initiate and maintain the opening movement of the window or the door.

**Structural test:** Structural test pressure (STP) [greater than values specified in pounds per square foot (psf) or in pascals (Pa)] supported before permanent deformation measured on the jamb of the sash. Maximum values indicated.