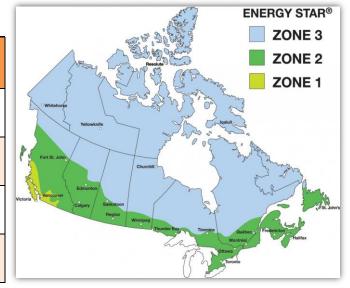


Double and Single Hung Windows - PVC Designer

Energy Performance

| Model Direct link to ENERGY STAR site | Details | Product Name | U-factor (W/m² - K) | Solar heat gain (SHGC) | Energy Rating ER | ENERGY STAR zone(s) 2015 | ENERGY STAR zone(s) 2010 | NFRC | | |
|--|-----------------|---------------------|------------------------|---------------------------------|---------------------|-----------------------------------|-----------------------------------|----------------|--|--|
| <u>GD-4350-CL-ARG95-SG400-SU</u> | Th2 | Double Hung 4350 | 1.65 | 0.51 | 32 | 1 2 | A B C | <u>MPE-M-7</u> | | |
| GD-4350-CL-ARG95-SG400-SU-GEOR | Th2 Georgian | Double Hung 4350 | 1.65 | 0.46 | 29 | 1 2 | A B C | <u>MPE-M-7</u> | | |
| <u>GS-4450-CL-ARG95-SG400-SU</u> | Th2 | Single Hung 4450 | 1.65 | 0.54 | 34 | 1 2 3 | A B C D | MPE-M-13 | | |
| GS-4450-CL-ARG95-SG400-SU-GEOR | Th2 Georgian | Single Hung 4450 | 1.65 | 0.49 | 31 | 1 2 | A B C | MPE-M-13 | | |



Th2 [3]: Double [triple] glazed insulated glass unit (two [three] glass panes) - Georgian: integrated grilles in double [triple] glazed insulated glass unit.

U-factor: (W/m²-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 Concil (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 | | | | |
| Double Hung Windows - PVC Designer | R- PG60 -H | A3 / F | В5 | C3 | S1 | F20 | Successful | Successful | | | | |
| Single Hung Windows - PVC Designer | R- PG60 -H | А3 | B4 | C4 | S1 | F20 | Successful | Successful | | | | |

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.