

## Weather Shield Thermal Performance Criteria

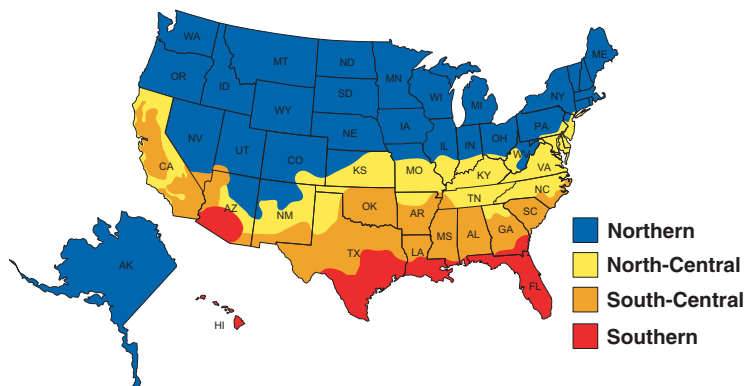


**Weather Shield®**  
Premium Windows & Doors



As a proud ENERGY STAR® partner, we ensure our products are rated, certified and labeled for U-Value and Solar Heat Gain by the National Fenestration Rating Council (NFRC). The 2010 ENERGY STAR criteria for residential windows and doors are tailored to four Climate Zones. A product's energy efficiency for a given climate is based on its impact on heat gain and loss in cold weather and heat gain in warm weather.

### United States ENERGY STAR Criteria



#### Windows

| Climate Zone  | U-Factor <sup>1</sup> | SHGC <sup>2</sup> |                               |
|---------------|-----------------------|-------------------|-------------------------------|
| Northern      | ≤0.30                 | Any               | Prescriptive                  |
|               | = 0.31                | ≥0.35             | Equivalent Energy Performance |
|               | = 0.32                | ≥0.40             |                               |
| North-Central | ≤0.32                 | ≤0.40             |                               |
| South-Central | ≤0.35                 | ≤0.30             |                               |
| Southern      | ≤0.60                 | ≤0.27             |                               |

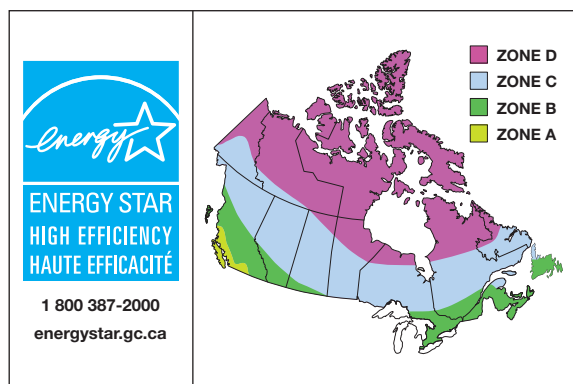
#### Doors

| Glazing Level | U-Factor <sup>1</sup> | SHGC <sup>2</sup> |
|---------------|-----------------------|-------------------|
| Opaque        | ≤0.21                 | No Rating         |
| ≤ 1/2-Lite    | ≤0.27                 | ≤0.30             |
| > 1/2-Lite    | ≤0.32                 | ≤0.30             |

<sup>1</sup> Btu/h • ft<sup>2</sup> • °F

<sup>2</sup> Fraction of Incident solar radiation

### Canadian ENERGY STAR Criteria



#### ENERGY STAR Requirements for Windows (Effective October 1, 2010)

| Zone | Heating Degree-Day Range | Compliance Paths                                                                                              |    |                                                                                                     |
|------|--------------------------|---------------------------------------------------------------------------------------------------------------|----|-----------------------------------------------------------------------------------------------------|
|      |                          | Energy Rating (ER)                                                                                            | or | U-Factor                                                                                            |
|      |                          | Minimum ER (unitless)<br>Maximum U-Factor 2.00<br>W/m <sup>2</sup> • K<br>(0.35 Btu/h • ft <sup>2</sup> • °F) |    | Maximum U-Factor<br>W/m <sup>2</sup> • K<br>(Btu/h • ft <sup>2</sup> • °F)<br>Minimum ER (unitless) |
| A    | ≤ 3500                   | 21                                                                                                            | or | 1.80 (0.32) 13                                                                                      |
| B    | > 3500 to ≤ 5500         | 25                                                                                                            | or | 1.60 (0.28) 17                                                                                      |
| C    | > 5500 to ≤ 8000         | 29                                                                                                            | or | 1.40 (0.25) 21                                                                                      |
| D    | > 8000                   | 34                                                                                                            | or | 1.20 (0.21) 25                                                                                      |

#### ENERGY STAR Requirements for Doors (Effective October 1, 2010)

| Zone | Heating Degree-Day Range | Compliance Paths                                                                                              |    |                                                                                                     |
|------|--------------------------|---------------------------------------------------------------------------------------------------------------|----|-----------------------------------------------------------------------------------------------------|
|      |                          | Energy Rating (ER)                                                                                            | or | U-Factor                                                                                            |
|      |                          | Minimum ER (unitless)<br>Maximum U-Factor 2.00<br>W/m <sup>2</sup> • K<br>(0.35 Btu/h • ft <sup>2</sup> • °F) |    | Maximum U-Factor<br>W/m <sup>2</sup> • K<br>(Btu/h • ft <sup>2</sup> • °F)<br>Minimum ER (unitless) |
| A    | ≤ 3500                   | 21                                                                                                            | or | 1.80 (0.32) 13                                                                                      |
| B    | > 3500 to ≤ 5500         | 25                                                                                                            | or | 1.60 (0.28) 17                                                                                      |
| C    | > 5500 to ≤ 8000         | 29                                                                                                            | or | 1.40 (0.25) 21                                                                                      |
| D    | > 8000                   | 34                                                                                                            | or | 1.20 (0.21) 25                                                                                      |

<sup>1</sup> The U-factor measures how well a window/door prevents hot or cold from transferring through the product. The lower the U-factor, the more energy efficient the material.

<sup>2</sup> The Solar Heat Gain Coefficient (SHGC) measures how well a window or door prevents heat from passing through it. The lower the window or door SHGC, the less heat it allows to pass through it.

Patio Doors are tested to the specification of > 1/2 lite panel.

All units are tested in accordance to National Fenestration Rating Council (NFRC) procedures. U-Factors are derived from computer simulations using WINDOW 5.2 and THERM 5.2 programs. Simulations are then verified by testing in accordance with NFRC 100-04.

The performance of windows and doors may be affected by factors beyond Weather Shield's control, such as handling and installation, construction details of the building, exposure conditions, maintenance, normal wear and tear, migration of an inert gas from the insulated glass unit and the like. Ratings (for example, R or U-factors, infiltration tests, etc.) are for comparison purposes only. While Weather Shield products are manufactured to meet or exceed published ratings, it is not possible to guarantee that they will meet or exceed those ratings after they have been installed, and this is specifically excluded from any warranty.

Weather Shield reserves the right to change its products without prior notification. Please verify with labels on products to confirm ratings and test dates. Ratings vary based on glazing, grilles, etc. This information is accurate based on the date specified on the test date referred to in the document.

# Thermal Performance Data

## Signature Casement Windows (8205)



**Weather Shield®**  
Windows & Doors

| ENERGY PERFORMANCE DATA                   |                        |                                |         |                             |                             |                                |  |    |    |      | CANADIAN ENERGY PERFORMANCE DATA |                            |                 |  |   |   |   |
|-------------------------------------------|------------------------|--------------------------------|---------|-----------------------------|-----------------------------|--------------------------------|------------------------------------------------------------------------------------|----|----|------|----------------------------------|----------------------------|-----------------|-------------------------------------------------------------------------------------|---|---|---|
| NFRC Total Unit Calculations <sup>a</sup> |                        |                                |         |                             |                             |                                | US<br>Energy Star                                                                  |    |    |      | U-Value (metric)                 | Air Infiltration<br>L/s/m2 | Energy R rating | CANADA<br>Energy Star                                                               |   |   |   |
| Grille Option                             | Glazing thickness      | Glazing Option                 | U Value | Solar Heat Gain Coefficient | Visible Light Transmittance | Condensation Resistance Rating | N                                                                                  | NC | SC | S    |                                  |                            |                 | A                                                                                   | B | C | D |
| No Grilles                                | 3/4"                   | Clear Insul                    | 0.44    | 0.55                        | 0.58                        | 44                             |                                                                                    |    |    |      | 2.50                             | 0.05                       | 17              |                                                                                     |   |   |   |
|                                           | 3/4"                   | Insul Low-E                    | 0.32    | 0.30                        | 0.52                        | 56                             |                                                                                    | Y  | Y  |      | 1.82                             | 0.05                       | 18              | Y                                                                                   |   |   |   |
|                                           | 3/4"                   | Insul Low E w/Argon            | 0.29    | 0.30                        | 0.52                        | 59                             | Y                                                                                  | Y  | Y  |      | 1.65                             | 0.05                       | 21              | Y                                                                                   |   |   |   |
|                                           | 3/4"                   | Zo-e-shield 5                  | 0.31    | 0.20                        | 0.46                        | 56                             |                                                                                    | Y  | Y  | Y    | 1.76                             | 0.05                       | 13              | Y                                                                                   |   |   |   |
|                                           | 3/4"                   | Zo-e-shield 5 w/ Argon         | 0.28    | 0.20                        | 0.46                        | 60                             | Y                                                                                  | Y  | Y  | Y    | 1.59                             | 0.05                       | 17              | Y                                                                                   | Y |   |   |
|                                           | 3/4"                   | Zo-e-shield 5 Extreme          | 0.27    | 0.19                        | 0.42                        | 44                             | Y                                                                                  | Y  | Y  | Y    | 1.53                             | 0.05                       | 17              | Y                                                                                   | Y |   |   |
|                                           | 3/4"                   | Zo-e-shield 5 Extreme w/ Argon | 0.25    | 0.19                        | 0.42                        | 48                             | Y                                                                                  | Y  | Y  | Y    | 1.42                             | 0.05                       | 20              | Y                                                                                   | Y | Y |   |
|                                           | 3/4"                   | Zo-e-shield 6                  | 0.33    | 0.20                        | 0.45                        | 53                             |                                                                                    |    | Y  | Y    | 1.87                             | 0.05                       | 10              |                                                                                     |   |   |   |
|                                           | 3/4"                   | Zo-e-shield 6 w/ Argon         | 0.29    | 0.20                        | 0.45                        | 58                             | Y                                                                                  | Y  | Y  | Y    | 1.65                             | 0.05                       | 15              | Y                                                                                   |   |   |   |
|                                           | 1"                     | Zo-e-shield 7                  | 0.25    | 0.19                        | 0.37                        | 64                             | Y                                                                                  | Y  | Y  | Y    | 1.42                             | 0.05                       | 20              | Y                                                                                   | Y | Y |   |
| 1"                                        | Zo-e-shield 7 w/ Argon | 0.22                           | 0.18    | 0.37                        | 68                          | Y                              | Y                                                                                  | Y  | Y  | 1.25 | 0.05                             | 23                         | Y               | Y                                                                                   | Y |   |   |
| 5/8" - 13/16" GIA                         | 3/4"                   | Clear Insul                    | 0.44    | 0.50                        | 0.53                        | 44                             |                                                                                    |    |    |      | 2.50                             | 0.05                       | 14              |                                                                                     |   |   |   |
|                                           | 3/4"                   | Insul Low-E                    | 0.32    | 0.28                        | 0.47                        | 56                             |                                                                                    | Y  | Y  |      | 1.82                             | 0.05                       | 16              | Y                                                                                   |   |   |   |
|                                           | 3/4"                   | Insul Low E w/Argon            | 0.29    | 0.28                        | 0.47                        | 59                             | Y                                                                                  | Y  | Y  |      | 1.65                             | 0.05                       | 20              | Y                                                                                   |   |   |   |
|                                           | 3/4"                   | Zo-e-shield 5                  | 0.31    | 0.19                        | 0.42                        | 56                             |                                                                                    | Y  | Y  | Y    | 1.76                             | 0.05                       | 12              | Y                                                                                   |   |   |   |
|                                           | 3/4"                   | Zo-e-shield 5 w/ Argon         | 0.28    | 0.18                        | 0.42                        | 60                             | Y                                                                                  | Y  | Y  | Y    | 1.59                             | 0.05                       | 16              | Y                                                                                   | Y |   |   |
|                                           | 3/4"                   | Zo-e-shield 5 Extreme          | 0.27    | 0.18                        | 0.38                        | 44                             | Y                                                                                  | Y  | Y  | Y    | 1.53                             | 0.05                       | 17              | Y                                                                                   | Y |   |   |
|                                           | 3/4"                   | Zo-e-shield 5 Extreme w/ Argon | 0.25    | 0.17                        | 0.38                        | 48                             | Y                                                                                  | Y  | Y  | Y    | 1.42                             | 0.05                       | 19              | Y                                                                                   | Y | Y |   |
|                                           | 3/4"                   | Zo-e-shield 6                  | 0.34    | 0.19                        | 0.41                        | 53                             |                                                                                    |    | Y  | Y    | 1.93                             | 0.05                       | 9               |                                                                                     |   |   |   |
|                                           | 3/4"                   | Zo-e-shield 6 w/ Argon         | 0.30    | 0.18                        | 0.41                        | 58                             | Y                                                                                  | Y  | Y  | Y    | 1.70                             | 0.05                       | 13              | Y                                                                                   |   |   |   |
|                                           | 1"                     | Zo-e-shield 7                  | 0.26    | 0.17                        | 0.34                        | 64                             | Y                                                                                  | Y  | Y  | Y    | 1.48                             | 0.05                       | 17              | Y                                                                                   | Y |   |   |
| 1"                                        | Zo-e-shield 7 w/ Argon | 0.23                           | 0.17    | 0.34                        | 68                          | Y                              | Y                                                                                  | Y  | Y  | 1.31 | 0.05                             | 21                         | Y               | Y                                                                                   | Y |   |   |
| Over 7/8" GIA or SDL                      | 3/4"                   | Clear Insul                    | 0.44    | 0.45                        | 0.48                        | 44                             |                                                                                    |    |    |      | 2.50                             | 0.05                       | 11              |                                                                                     |   |   |   |
|                                           | 3/4"                   | Insul Low-E                    | 0.32    | 0.25                        | 0.42                        | 56                             |                                                                                    | Y  | Y  | Y    | 1.82                             | 0.05                       | 15              | Y                                                                                   |   |   |   |
|                                           | 3/4"                   | Insul Low E w/Argon            | 0.29    | 0.25                        | 0.42                        | 59                             | Y                                                                                  | Y  | Y  | Y    | 1.65                             | 0.05                       | 18              | Y                                                                                   |   |   |   |
|                                           | 3/4"                   | Zo-e-shield 5                  | 0.31    | 0.17                        | 0.38                        | 56                             |                                                                                    | Y  | Y  | Y    | 1.76                             | 0.05                       | 11              | Y                                                                                   |   |   |   |
|                                           | 3/4"                   | Zo-e-shield 5 w/ Argon         | 0.28    | 0.17                        | 0.38                        | 60                             | Y                                                                                  | Y  | Y  | Y    | 1.59                             | 0.05                       | 15              | Y                                                                                   | Y |   |   |
|                                           | 3/4"                   | Zo-e-shield 5 Extreme          | 0.27    | 0.16                        | 0.34                        | 44                             | Y                                                                                  | Y  | Y  | Y    | 1.53                             | 0.05                       | 16              | Y                                                                                   | Y |   |   |
|                                           | 3/4"                   | Zo-e-shield 5 Extreme w/ Argon | 0.25    | 0.16                        | 0.34                        | 48                             | Y                                                                                  | Y  | Y  | Y    | 1.42                             | 0.05                       | 18              | Y                                                                                   | Y | Y |   |
|                                           | 3/4"                   | Zo-e-shield 6                  | 0.34    | 0.17                        | 0.37                        | 53                             |                                                                                    |    | Y  | Y    | 1.93                             | 0.05                       | 8               |                                                                                     |   |   |   |
|                                           | 3/4"                   | Zo-e-shield 6 w/ Argon         | 0.30    | 0.17                        | 0.37                        | 58                             | Y                                                                                  | Y  | Y  | Y    | 1.70                             | 0.05                       | 12              | Y                                                                                   |   |   |   |
|                                           | 1"                     | Zo-e-shield 7                  | 0.26    | 0.16                        | 0.30                        | 64                             | Y                                                                                  | Y  | Y  | Y    | 1.48                             | 0.05                       | 17              | Y                                                                                   | Y |   |   |
| 1"                                        | Zo-e-shield 7 w/ Argon | 0.23                           | 0.16    | 0.30                        | 68                          | Y                              | Y                                                                                  | Y  | Y  | 1.31 | 0.05                             | 21                         | Y               | Y                                                                                   | Y |   |   |

<sup>a</sup> Total Unit calculations are derived from computer simulations that are then verified by 3rd party testing in accordance with NFRC 100-04.

| US Qualification Criteria                                                                                 | Climate Zone  | U-Factor | *SHGC  |
|-----------------------------------------------------------------------------------------------------------|---------------|----------|--------|
| <br>As of January 2010 | Northern      | <=0.30   | Any    |
|                                                                                                           |               | <=0.31   | >=0.35 |
|                                                                                                           |               | <=0.32   | >=0.40 |
|                                                                                                           | North-Central | <=0.32   | <=0.40 |
|                                                                                                           | South-Central | <=0.35   | <=0.30 |
|                                                                                                           | Southern      | <=0.60   | <=0.27 |

\* SHGC = Solar Heat Gain Coefficient

# Thermal Performance Data

## Signature Casement Picture Windows (8205)

| ENERGY PERFORMANCE DATA                   |                   |                                |         |                             |                             |                                | <br>ENERGY STAR<br>US<br>Energy Star |    |    |   | CANADIAN ENERGY PERFORMANCE DATA |                         |                 | <br>ENERGY STAR<br>CANADA<br>Energy Star |   |   |   |
|-------------------------------------------|-------------------|--------------------------------|---------|-----------------------------|-----------------------------|--------------------------------|------------------------------------------------------------------------------------------------------------------------|----|----|---|----------------------------------|-------------------------|-----------------|-----------------------------------------------------------------------------------------------------------------------------|---|---|---|
| NFRC Total Unit Calculations <sup>a</sup> |                   |                                |         |                             |                             |                                |                                                                                                                        |    |    |   | U-Value (metric)                 | Air Infiltration L/s/m2 | Energy R rating |                                                                                                                             |   |   |   |
| Grille Option                             | Glazing thickness | Glazing Option                 | U Value | Solar Heat Gain Coefficient | Visible Light Transmittance | Condensation Resistance Rating | N                                                                                                                      | NC | SC | S |                                  |                         |                 | A                                                                                                                           | B | C | D |
| No Grilles                                | 3/4"              | Clear Insul                    | 0.45    | 0.62                        | 0.66                        | 44                             |                                                                                                                        |    |    |   | 2.56                             | 0.05                    | 20              |                                                                                                                             |   |   |   |
|                                           | 3/4"              | Insul Low-E                    | 0.31    | 0.34                        | 0.59                        | 55                             |                                                                                                                        | Y  |    |   | 1.76                             | 0.05                    | 21              | Y                                                                                                                           |   |   |   |
|                                           | 3/4"              | Insul Low E w/Argon            | 0.27    | 0.34                        | 0.59                        | 59                             | Y                                                                                                                      | Y  |    |   | 1.53                             | 0.05                    | 26              | Y                                                                                                                           | Y |   |   |
|                                           | 3/4"              | Zo-e-shield 5                  | 0.30    | 0.23                        | 0.53                        | 56                             | Y                                                                                                                      | Y  | Y  | Y | 1.70                             | 0.05                    | 16              | Y                                                                                                                           |   |   |   |
|                                           | 3/4"              | Zo-e-shield 5 w/ Argon         | 0.27    | 0.23                        | 0.53                        | 59                             | Y                                                                                                                      | Y  | Y  | Y | 1.53                             | 0.05                    | 20              | Y                                                                                                                           | Y |   |   |
|                                           | 3/4"              | Zo-e-shield 5 Extreme          | 0.25    | 0.21                        | 0.48                        | 44                             | Y                                                                                                                      | Y  | Y  | Y | 1.42                             | 0.05                    | 21              | Y                                                                                                                           | Y | Y |   |
|                                           | 3/4"              | Zo-e-shield 5 Extreme w/ Argon | 0.22    | 0.21                        | 0.48                        | 47                             | Y                                                                                                                      | Y  | Y  | Y | 1.25                             | 0.05                    | 25              | Y                                                                                                                           | Y | Y |   |
|                                           | 3/4"              | Zo-e-shield 6                  | 0.32    | 0.23                        | 0.52                        | 53                             |                                                                                                                        | Y  | Y  | Y | 1.82                             | 0.05                    | 13              | Y                                                                                                                           |   |   |   |
|                                           | 3/4"              | Zo-e-shield 6 w/ Argon         | 0.28    | 0.23                        | 0.52                        | 57                             | Y                                                                                                                      | Y  | Y  | Y | 1.59                             | 0.05                    | 18              | Y                                                                                                                           | Y |   |   |
|                                           | 1"                | Zo-e-shield 7                  | 0.24    | 0.21                        | 0.42                        | 65                             | Y                                                                                                                      | Y  | Y  | Y | 1.36                             | 0.05                    | 22              | Y                                                                                                                           | Y | Y |   |
|                                           | 1"                | Zo-e-shield 7 w/ Argon         | 0.20    | 0.21                        | 0.42                        | 69                             | Y                                                                                                                      | Y  | Y  | Y | 1.14                             | 0.05                    | 27              | Y                                                                                                                           | Y | Y | Y |
| 5/8" - 13/16" GIA                         | 3/4"              | Clear Insul                    | 0.45    | 0.56                        | 0.59                        | 44                             |                                                                                                                        |    |    |   | 2.56                             | 0.05                    | 16              |                                                                                                                             |   |   |   |
|                                           | 3/4"              | Insul Low-E                    | 0.31    | 0.31                        | 0.52                        | 55                             |                                                                                                                        | Y  |    |   | 1.76                             | 0.05                    | 19              | Y                                                                                                                           |   |   |   |
|                                           | 3/4"              | Insul Low E w/Argon            | 0.27    | 0.31                        | 0.52                        | 59                             | Y                                                                                                                      | Y  |    |   | 1.53                             | 0.05                    | 24              | Y                                                                                                                           | Y |   |   |
|                                           | 3/4"              | Zo-e-shield 5                  | 0.30    | 0.21                        | 0.47                        | 56                             | Y                                                                                                                      | Y  | Y  | Y | 1.70                             | 0.05                    | 15              | Y                                                                                                                           |   |   |   |
|                                           | 3/4"              | Zo-e-shield 5 w/ Argon         | 0.27    | 0.20                        | 0.47                        | 59                             | Y                                                                                                                      | Y  | Y  | Y | 1.53                             | 0.05                    | 18              | Y                                                                                                                           | Y |   |   |
|                                           | 3/4"              | Zo-e-shield 5 Extreme          | 0.25    | 0.19                        | 0.43                        | 44                             | Y                                                                                                                      | Y  | Y  | Y | 1.42                             | 0.05                    | 20              | Y                                                                                                                           | Y | Y |   |
|                                           | 3/4"              | Zo-e-shield 5 Extreme w/ Argon | 0.22    | 0.19                        | 0.43                        | 47                             | Y                                                                                                                      | Y  | Y  | Y | 1.25                             | 0.05                    | 24              | Y                                                                                                                           | Y | Y |   |
|                                           | 3/4"              | Zo-e-shield 6                  | 0.34    | 0.21                        | 0.46                        | 53                             |                                                                                                                        |    | Y  | Y | 1.93                             | 0.05                    | 10              |                                                                                                                             |   |   |   |
|                                           | 3/4"              | Zo-e-shield 6 w/ Argon         | 0.29    | 0.20                        | 0.46                        | 57                             | Y                                                                                                                      | Y  | Y  | Y | 1.65                             | 0.05                    | 15              | Y                                                                                                                           |   |   |   |
|                                           | 1"                | Zo-e-shield 7                  | 0.25    | 0.19                        | 0.38                        | 65                             | Y                                                                                                                      | Y  | Y  | Y | 1.42                             | 0.05                    | 20              | Y                                                                                                                           | Y | Y |   |
|                                           | 1"                | Zo-e-shield 7 w/ Argon         | 0.21    | 0.19                        | 0.38                        | 69                             | Y                                                                                                                      | Y  | Y  | Y | 1.19                             | 0.05                    | 25              | Y                                                                                                                           | Y | Y | Y |
| Over 7/8" GIA or SDL                      | 3/4"              | Clear Insul                    | 0.45    | 0.50                        | 0.53                        | 44                             |                                                                                                                        |    |    |   | 2.56                             | 0.05                    | 13              |                                                                                                                             |   |   |   |
|                                           | 3/4"              | Insul Low-E                    | 0.31    | 0.28                        | 0.47                        | 55                             |                                                                                                                        | Y  | Y  |   | 1.76                             | 0.05                    | 18              | Y                                                                                                                           |   |   |   |
|                                           | 3/4"              | Insul Low E w/Argon            | 0.27    | 0.28                        | 0.47                        | 59                             | Y                                                                                                                      | Y  | Y  |   | 1.53                             | 0.05                    | 23              | Y                                                                                                                           | Y |   |   |
|                                           | 3/4"              | Zo-e-shield 5                  | 0.30    | 0.19                        | 0.42                        | 56                             | Y                                                                                                                      | Y  | Y  | Y | 1.70                             | 0.05                    | 14              | Y                                                                                                                           |   |   |   |
|                                           | 3/4"              | Zo-e-shield 5 w/ Argon         | 0.27    | 0.19                        | 0.42                        | 59                             | Y                                                                                                                      | Y  | Y  | Y | 1.53                             | 0.05                    | 17              | Y                                                                                                                           | Y |   |   |
|                                           | 3/4"              | Zo-e-shield 5 Extreme          | 0.25    | 0.18                        | 0.38                        | 44                             | Y                                                                                                                      | Y  | Y  | Y | 1.42                             | 0.05                    | 19              | Y                                                                                                                           | Y | Y |   |
|                                           | 3/4"              | Zo-e-shield 5 Extreme w/ Argon | 0.22    | 0.17                        | 0.38                        | 47                             | Y                                                                                                                      | Y  | Y  | Y | 1.25                             | 0.05                    | 22              | Y                                                                                                                           | Y | Y |   |
|                                           | 3/4"              | Zo-e-shield 6                  | 0.34    | 0.19                        | 0.41                        | 53                             |                                                                                                                        |    | Y  | Y | 1.93                             | 0.05                    | 9               |                                                                                                                             |   |   |   |
|                                           | 3/4"              | Zo-e-shield 6 w/ Argon         | 0.29    | 0.19                        | 0.41                        | 57                             | Y                                                                                                                      | Y  | Y  | Y | 1.65                             | 0.05                    | 15              | Y                                                                                                                           |   |   |   |
|                                           | 1"                | Zo-e-shield 7                  | 0.25    | 0.17                        | 0.33                        | 65                             | Y                                                                                                                      | Y  | Y  | Y | 1.42                             | 0.05                    | 19              | Y                                                                                                                           | Y | Y |   |
|                                           | 1"                | Zo-e-shield 7 w/ Argon         | 0.21    | 0.17                        | 0.33                        | 69                             | Y                                                                                                                      | Y  | Y  | Y | 1.19                             | 0.05                    | 24              | Y                                                                                                                           | Y | Y | Y |

<sup>a</sup> Total Unit calculations are derived from computer simulations that are then verified by 3rd party testing in accordance with NFRC 100-04.

| US Qualification Criteria                                                                                 | Climate Zone  | U-Factor | *SHGC  |
|-----------------------------------------------------------------------------------------------------------|---------------|----------|--------|
| <br>As of January 2010 | Northern      | <=0.30   | Any    |
|                                                                                                           |               | <=0.31   | >=0.35 |
|                                                                                                           |               | <=0.32   | >=0.40 |
|                                                                                                           | North-Central | <=0.32   | <=0.40 |
|                                                                                                           | South-Central | <=0.35   | <=0.30 |
|                                                                                                           | Southern      | <=0.60   | <=0.27 |

\* SHGC = Solar Heat Gain Coefficient