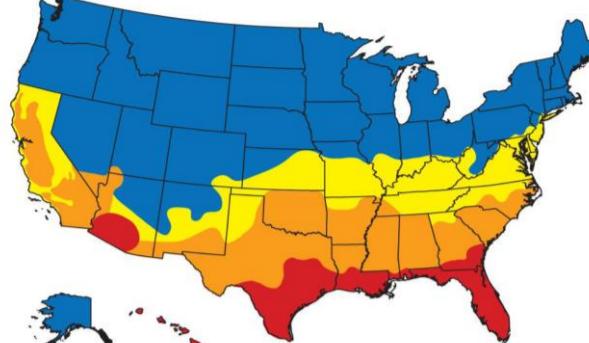


# Thermal Performance Data

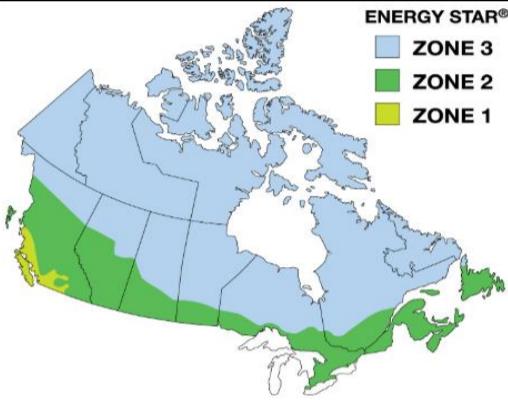
Signature Direct-Set Door Transom with Panel (830)

**WEATHER SHIELD.**

**WINDOWS & DOORS**

| US Qualification Criteria                                                         |               | Climate Zone  | U-Value | SHGC   |                               |
|-----------------------------------------------------------------------------------|---------------|---------------|---------|--------|-------------------------------|
|  | Northern      | Northern      | <=0.27  | Any    | Prescriptive                  |
|                                                                                   |               |               | =0.28   | >=0.32 | Equivalent Energy Performance |
|                                                                                   |               |               | =0.29   | >=0.37 |                               |
|                                                                                   |               |               | =0.30   | >=0.42 |                               |
|                                                                                   | North-Central | North-Central | <=0.30  | <=0.40 |                               |
|                                                                                   | South-Central | South-Central | <=0.30  | <=0.25 |                               |
|                                                                                   | Southern      | Southern      | <=0.40  | <=0.25 |                               |
|                                                                                   |               |               |         |        |                               |
|                                                                                   |               |               |         |        |                               |
|                                                                                   |               |               |         |        |                               |

| Canadian Qualification Criteria                                                    |              | Climate Zone | U-Value | or | Energy Rating |
|------------------------------------------------------------------------------------|--------------|--------------|---------|----|---------------|
|  | ENERGY STAR® | Zone 1       | <=1.60  | or | >=25          |
|                                                                                    |              | Zone 2       | <=1.40  |    | >=29          |
|                                                                                    |              | Zone 3       | <=1.20  |    | >=34          |
| Air Leakage <= 0.3 cfm/ft <sup>2</sup>                                             |              |              |         |    |               |

As of January 2016

As of February 2015

## U-Value

A measurement of how much energy a material conducts. The lower the U-Value, the greater the insulating effect.

## Solar Heat Gain Coefficient (SHGC)

Measures how well a window or door prevents heat from passing through it.

The lower a window or door's SHGC, the less heat it allows to pass through it.

## Visible Light Transmittance

The amount of light in the visible portion of the spectrum that passes through a glazing material.

## Condensation Resistance Rating

Measures how well a window resists the formation of condensation on the inside surface.

The higher the number the better resistance to condensation.

## Energy Rating

A value demonstrating the balance between U-Value, SHGC and air leakage.

The higher the number, the more efficient the product.

## R-Value

A measurement of how much a material resists heat transfer.

A higher R-Value means a greater insulating effect and a lower rate of heat flow out of the home.

While **R-value** measures resistance to heat transfer, **U-value** measures the rate of heat transfer.

In simple terms, **U-value** is the mathematical reciprocal of **R-value**; that is, **U = 1/R** and **R = 1/U**.

<sup>a</sup> Total Unit calculations are derived from computer simulations that are then verified by 3rd party testing in accordance with NFRC 100, NFRC 200, and NFRC 500.

<sup>b</sup> Published values reflect 3mm/3mm glass lite thicknesses.

| ENERGY PERFORMANCE DATA |                   |                                                                          |  |                       |         |                             |                             |                                |                      |    | CANADIAN ENERGY PEFORMANCE DATA |     |                  |                                       | CANADA ENERGY STAR v 4.1              |               |   |   |
|-------------------------|-------------------|--------------------------------------------------------------------------|--|-----------------------|---------|-----------------------------|-----------------------------|--------------------------------|----------------------|----|---------------------------------|-----|------------------|---------------------------------------|---------------------------------------|---------------|---|---|
| Grille Option           | Glazing thickness | <sup>a</sup> NFRC Total Unit Calculations<br><sup>b</sup> Glazing Option |  | CPD #                 | U-Value | Solar Heat Gain Coefficient | Visible Light Transmittance | Condensation Resistance Rating | US ENERGY STAR V 6.0 |    |                                 |     | U-Value (metric) | Maximum Air Leakage Ls/m <sup>2</sup> | Air Infiltration/Exfiltration Average | Energy Rating |   |   |
|                         |                   |                                                                          |  |                       |         |                             |                             |                                | N                    | NC | SC                              | S   |                  |                                       |                                       |               |   |   |
| No GIA or SDL           | 3/4"              | Clear Insul                                                              |  | WEA-N-288-00232-00001 | 0.45    | 0.53                        | 0.56                        | 44                             |                      |    |                                 |     | 2.56             | 0.6                                   | 0.01                                  | 15            |   |   |
|                         | 3/4"              | Insul Low-E                                                              |  | WEA-N-288-00235-00001 | 0.33    | 0.29                        | 0.49                        | 57                             |                      |    |                                 |     | 1.87             | 0.6                                   | 0.01                                  | 16            |   |   |
|                         | 3/4"              | Insul Low E w/Argon                                                      |  | WEA-N-288-00304-00001 | 0.30    | 0.29                        | 0.49                        | 60                             |                      | Y  |                                 |     | 1.70             | 0.6                                   | 0.01                                  | 20            |   |   |
|                         | 3/4"              | Passive Solar                                                            |  | WEA-N-288-00241-00001 | 0.34    | 0.47                        | 0.54                        | 56                             |                      |    |                                 |     | 1.93             | 0.6                                   | 0.01                                  | 25            |   |   |
|                         | 3/4"              | Passive Solar w/Argon                                                    |  | WEA-N-288-00310-00001 | 0.31    | 0.47                        | 0.54                        | 60                             |                      |    |                                 |     | 1.76             | 0.6                                   | 0.01                                  | 29            | Y |   |
|                         | 3/4"              | Passive Solar Extreme                                                    |  | WEA-N-288-00244-00001 | 0.29    | 0.43                        | 0.53                        | 43                             | Y                    |    |                                 |     | 1.65             | 0.6                                   | 0.01                                  | 29            | Y |   |
|                         | 3/4"              | Passive Solar Extreme w/Argon                                            |  | WEA-N-288-00313-00001 | 0.27    | 0.43                        | 0.53                        | 46                             | Y                    |    |                                 |     | 1.53             | 0.6                                   | 0.01                                  | 31            | Y | Y |
|                         | 3/4"              | Zo-e-shield 5                                                            |  | WEA-N-288-00238-00001 | 0.33    | 0.19                        | 0.44                        | 57                             |                      |    |                                 | Y   | 1.87             | 0.6                                   | 0.01                                  | 10            |   |   |
|                         | 3/4"              | Zo-e-shield 5 w/ Argon                                                   |  | WEA-N-288-00307-00001 | 0.29    | 0.19                        | 0.44                        | 61                             |                      | Y  | Y                               | Y   | 1.65             | 0.6                                   | 0.01                                  | 15            |   |   |
|                         | 3/4"              | Zo-e-shield 5 Extreme                                                    |  | WEA-N-288-00253-00001 | 0.28    | 0.19                        | 0.43                        | 44                             |                      | Y  | Y                               | Y   | 1.59             | 0.6                                   | 0.01                                  | 16            | Y |   |
|                         | 3/4"              | Zo-e-shield 5 Extreme w/ Argon                                           |  | WEA-N-288-00322-00001 | 0.26    | 0.19                        | 0.43                        | 48                             | Y                    | Y  | Y                               | Y   | 1.48             | 0.6                                   | 0.01                                  | 19            | Y |   |
|                         | 3/4"              | Zo-e-shield 6                                                            |  | WEA-N-288-00271-00001 | 0.34    | 0.20                        | 0.43                        | 54                             |                      |    |                                 | Y   | 1.93             | 0.6                                   | 0.01                                  | 9             |   |   |
|                         | 3/4"              | Zo-e-shield 6 w/ Argon                                                   |  | WEA-N-288-00334-00001 | 0.30    | 0.19                        | 0.43                        | 58                             |                      | Y  | Y                               | Y   | 1.70             | 0.6                                   | 0.01                                  | 14            |   |   |
|                         | 3/4"              | Zo-e SafeGuard Certified                                                 |  | WEA-N-288-00289-00001 | 0.34    | 0.19                        | 0.43                        | 55                             |                      |    |                                 | Y   | 1.93             | 0.6                                   | 0.01                                  | 9             |   |   |
|                         | 3/4"              | Zo-e SafeGuard Certified w/ Argon                                        |  | WEA-N-288-00352-00001 | 0.30    | 0.19                        | 0.43                        | 59                             |                      | Y  | Y                               | Y   | 1.70             | 0.6                                   | 0.01                                  | 14            |   |   |
|                         | 1"                | Zo-e-shield 7                                                            |  | WEA-N-288-00301-00001 | 0.27    | 0.17                        | 0.34                        | 64                             | Y                    | Y  | Y                               | Y   | 1.53             | 0.6                                   | 0.01                                  | 16            | Y |   |
|                         | 1"                | Zo-e-shield 7 w/ Argon                                                   |  | WEA-N-288-00364-00001 | 0.24    | 0.17                        | 0.34                        | 64                             | Y                    | Y  | Y                               | Y   | 1.36             | 0.6                                   | 0.01                                  | 20            | Y | Y |
|                         | 3/4"              | Insul Low-E 240                                                          |  | WEA-N-288-00247-00001 | 0.33    | 0.18                        | 0.27                        | 56                             |                      |    |                                 | Y   | 1.87             | 0.6                                   | 0.01                                  | 9             |   |   |
|                         | 3/4"              | Insul Low-E 240 w/Argon                                                  |  | WEA-N-288-00316-00001 | 0.30    | 0.18                        | 0.27                        | 60                             |                      | Y  | Y                               | Y   | 1.70             | 0.6                                   | 0.01                                  | 13            |   |   |
|                         | 3/4"              | Insul Low-E 340                                                          |  | WEA-N-288-00250-00001 | 0.33    | 0.13                        | 0.26                        | 57                             |                      |    |                                 | Y   | 1.87             | 0.6                                   | 0.01                                  | 7             |   |   |
|                         | 3/4"              | Insul Low-E 340 w/Argon                                                  |  | WEA-N-288-00319-00001 | 0.30    | 0.13                        | 0.26                        | 60                             |                      | Y  | Y                               | Y   | 1.70             | 0.6                                   | 0.01                                  | 10            |   |   |
|                         | 3/4"              | Bronze Low E                                                             |  | WEA-N-288-00235-00011 | 0.33    | 0.27                        | 0.36                        | 57                             |                      |    |                                 |     | 1.87             | 0.6                                   | 0.01                                  | 15            |   |   |
|                         | 3/4"              | Bronze Low E w/Argon                                                     |  | WEA-N-288-00304-00011 | 0.30    | 0.27                        | 0.36                        | 60                             |                      | Y  |                                 |     | 1.70             | 0.6                                   | 0.01                                  | 18            |   |   |
| Less Than 1" GIA or SDL | 3/4"              | Clear Insul                                                              |  | WEA-N-288-00232-00002 | 0.45    | 0.48                        | 0.49                        | 44                             |                      |    |                                 |     | 2.56             | 0.6                                   | 0.01                                  | 12            |   |   |
|                         | 3/4"              | Insul Low-E                                                              |  | WEA-N-288-00235-00002 | 0.33    | 0.26                        | 0.43                        | 57                             |                      |    |                                 |     | 1.87             | 0.6                                   | 0.01                                  | 14            |   |   |
|                         | 3/4"              | Insul Low E w/Argon                                                      |  | WEA-N-288-00304-00002 | 0.30    | 0.26                        | 0.43                        | 60                             |                      | Y  |                                 |     | 1.70             | 0.6                                   | 0.01                                  | 18            |   |   |
|                         | 3/4"              | Passive Solar                                                            |  | WEA-N-288-00241-00002 | 0.34    | 0.42                        | 0.48                        | 56                             |                      |    |                                 |     | 1.93             | 0.6                                   | 0.01                                  | 22            |   |   |
|                         | 3/4"              | Passive Solar w/Argon                                                    |  | WEA-N-288-00310-00002 | 0.31    | 0.42                        | 0.48                        | 60                             |                      |    |                                 |     | 1.76             | 0.6                                   | 0.01                                  | 26            | Y |   |
|                         | 3/4"              | Passive Solar Extreme                                                    |  | WEA-N-288-00244-00002 | 0.29    | 0.38                        | 0.46                        | 43                             | Y                    | Y  |                                 |     | 1.65             | 0.6                                   | 0.01                                  | 26            | Y |   |
|                         | 3/4"              | Passive Solar Extreme w/Argon                                            |  | WEA-N-288-00313-00002 | 0.27    | 0.38                        | 0.46                        | 46                             | Y                    | Y  |                                 |     | 1.53             | 0.6                                   | 0.01                                  | 28            | Y |   |
|                         | 3/4"              | Zo-e-shield 5                                                            |  | WEA-N-288-00238-00002 | 0.33    | 0.18                        | 0.39                        | 57                             |                      |    |                                 | Y   | 1.87             | 0.6                                   | 0.01                                  | 9             |   |   |
|                         | 3/4"              | Zo-e-shield 5 w/ Argon                                                   |  | WEA-N-288-00307-00002 | 0.29    | 0.17                        | 0.39                        | 61                             |                      | Y  | Y                               | Y   | 1.65             | 0.6                                   | 0.01                                  | 14            |   |   |
|                         | 3/4"              | Zo-e-shield 5 Extreme                                                    |  | WEA-N-288-00253-00002 | 0.28    | 0.17                        | 0.38                        | 44                             |                      | Y  | Y                               | Y   | 1.59             | 0.6                                   | 0.01                                  | 15            |   |   |
|                         | 3/4"              | Zo-e-shield 5 Extreme w/ Argon                                           |  | WEA-N-288-00322-00002 | 0.26    | 0.17                        | 0.38                        | 48                             | Y                    | Y  | Y                               | Y   | 1.48             | 0.6                                   | 0.01                                  | 17            | Y |   |
|                         | 3/4"              | Zo-e-shield 6                                                            |  | WEA-N-288-00270-00001 | 0.36    | 0.18                        | 0.38                        | 54                             |                      |    |                                 | Y   | 2.04             | 0.6                                   | 0.01                                  | 6             |   |   |
|                         | 3/4"              | Zo-e-shield 6 w/ Argon                                                   |  | WEA-N-288-00333-00001 | 0.32    | 0.17                        | 0.38                        | 58                             |                      |    |                                 | Y   | 1.82             | 0.6                                   | 0.01                                  | 10            |   |   |
|                         | 3/4"              | Zo-e SafeGuard Certified                                                 |  | WEA-N-288-00288-00001 | 0.36    | 0.18                        | 0.38                        | 55                             |                      |    |                                 | Y   | 2.04             | 0.6                                   | 0.01                                  | 6             |   |   |
|                         | 3/4"              | Zo-e SafeGuard Certified w/ Argon                                        |  | WEA-N-288-00351-00001 | 0.33    | 0.17                        | 0.38                        | 59                             |                      |    |                                 | Y   | 1.87             | 0.6                                   | 0.01                                  | 9             |   |   |
|                         | 1"                | Zo-e-shield 7                                                            |  | WEA-N-288-00300-00001 | 0.27    | 0.16                        | 0.30                        | 64                             | Y                    | Y  | Y                               | Y   | 1.53             | 0.6                                   | 0.01                                  | 16            |   |   |
|                         | 1"                | Zo-e-shield 7 w/ Argon                                                   |  | WEA-N-288-00363-00001 | 0.24    | 0.16                        | 0.30                        | 64                             | Y                    | Y  | Y                               | Y   | 1.36             | 0.6                                   | 0.01                                  | 19            | Y |   |
|                         | 3/4"              | Insul Low-E 240                                                          |  | WEA-N-288-00247-00002 | 0.33    | 0.16                        | 0.24                        | 56                             |                      |    |                                 | Y   | 1.87             | 0.6                                   | 0.01                                  | 8             |   |   |
|                         | 3/4"              | Insul Low-E 240 w/Argon                                                  |  | WEA-N-288-00316-00002 | 0.30    | 0.16                        | 0.24                        | 60                             |                      | Y  | Y                               | Y   | 1.70             | 0.6                                   | 0.01                                  | 12            |   |   |
|                         | 3/4"              | Insul Low-E 340                                                          |  | WEA-N-288-00250-00002 | 0.33    | 0.12                        | 0.23                        | 57                             |                      |    |                                 | Y</ |                  |                                       |                                       |               |   |   |