

Test Conditions

| | (Metric units) | (Imperial Units) |
|------------------------------------------------------------------|----------------|------------------|
| 1. Average Metering Room Air Temperature : | 21,03 °C | (69,85) °F |
| 2. Average Cold Side Air Temperature : | -18,03 °C | (-0,45) °F |
| 3. Average Guard/Environmental Air Temperature : | 21,24 °C | (70,24) °F |
| 4. Metering Room Maximum Relative Humidity : | 12,58 % | (12,58) % |
| 5. Measured Cold Side Wind Velocity: | 14,93 km/h | (9,28) mph |
| 6. Measured Metering Side Wind Velocity: | 2,00 km/h | (1,24) mph |
| 7. Measured Maximum Static Pressure Difference Across Specimen : | 2,49 Pa | (0,05) psf |

Surface Temperature Data

| | (Metric units) | (Imperial Units) |
|-----------------------------------------------------------------|----------------|------------------|
| 1. Area-Weighted Surround Panel Warm Side Surface Temperature: | 20,08 °C | (68,15) °F |
| 2. Area-Weighted Surround Panel Cold Side Surface Temperature : | -17,64 °C | (0,25) °F |

Results

| | (Metric units) | (Imperial Units) |
|-----------------------------------------------------------------------|---------------------------|------------------------------------|
| 1. Thermal Transmittance of Test Specimen (U_s) : | 1,28 W/(m ² C) | (0,23) BTU/hr/ft ² °F |
| 2. Standardized Thermal Transmittance of Test Specimen (U_{st}) : | 1,27 W/(m ² C) | (0,22) BTU/hr/ft ² °F |

Calculated Test Data,

Method B (Equivalent CTS Method) :

| | (Metric units) | (Imperial Units) |
|-----------------------------------------------------------------|----------------------------|------------------------------------|
| 1. Emittance of Glass (ϵ_i) : | 0,84 | 0,84 |
| 2. Warm Side Baffle Emittance (ϵ_{b1}) : | 0,91 | 0,91 |
| 3. Equivalent Warm Side Surface Temperature: | 13,91 °C | (57,03) °F |
| 4. Equivalent Weather Side Surface Temperature: | -16,27 °C | (2,71) °F |
| 5. Warm Side Baffle Surface Temperature: | 21,08 °C | (69,94) °F |
| 6. Measured Warm Side Surface Conductance (h_i) : | 7,05 W/(m ² C) | (1,24) BTU/hr/ft ² °F |
| 7. Measured Weather Side Surface Conductance (h_{w1}) : | 28,55 W/(m ² C) | (5,03) BTU/hr/ft ² °F |
| 8. Test Specimen Thermal Conductance (C_s) : | 1,66 W/(m ² C) | (0,29) BTU/hr/ft ² °F |
| 9. Convection Coefficient (K) : | 1,65 W/(m ² C) | (0,29) BTU/hr/ft ² °F |
| 10. Radiative Test Specimen Heat Flow (Q_{r1}) : | 61,39 W | (209,65) BTU/hr |
| 11. Conductive Test Specimen Heat Flow (Q_{c1}): | 38,07 W | (130,01) BTU/hr |
| 12. Radiative Heat Flux of Test Specimen (q_{r1}) : | 30,96 W/m ² | (9,82) BTU/hr/ft ² |
| 13. Convective Heat Flux of Test Specimen (q_{c1}): | 19,20 W/m ² | (6,09) BTU/hr/ft ² |
| 14. Standardized Warm Side Surface Conductance (h_{st1}): | 6,66 W/(m ² C) | (1,17) BTU/hr/ft ² °F |
| 15. Standardized Cold Side Surface Conductance (h_{st11}) : | 30,00 W/(m ² C) | (5,28) BTU/hr/ft ² °F |
| 16. Standardized Thermal Transmittance (U_{st}) : | 1,27 W/(m ² C) | (0,22) BTU/hr/ft ² °F |

Test Duration

| | |
|-----------------------------------------------------------------------------------------------|------------------------------|
| 1. The environmental systems were started at : | 23:45 on 2007-01-11 |
| 2. The test parameters were considered stable for two consecutive two hour test periods from: | 7:30 to 11:30 on 2007-01-12 |
| 3. The thermal performance test results were derived from: | 13:30 to 15:30 on 2007-01-12 |

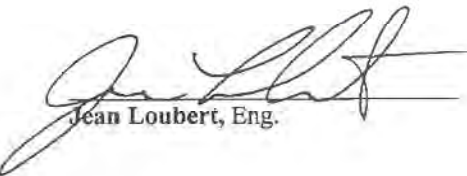
Thermal validation test


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This test method does not include procedures to determine the heat flow due to either air movement through the specimen or solar radiation effects. As a consequence, the thermal transmittance results obtained do not reflect performances which may be expected from field installations due to not accounting for solar radiation, air leakage effects, and the thermal bridge effects that may occur due to the specific design and construction of the fenestration system opening. Therefore, it should be recognized that the thermal transmittance results obtained from this test method are for ideal laboratory conditions and should only be used for fenestration product comparisons and as input to thermal performance analyses which also include solar, air leakage, and thermal bridge effects.

Detailed drawings were available for laboratory records and compared to the test specimen at the time of this report. A copy of this report along with representative sections of the test specimen will be retained by Air-Ins Inc. for a period of four (4) years. The results obtained apply only to the specimen tested. Testing described in this report was conducted in full compliance with NFRC requirements.

Appendix A of this report includes drawings and information of the product.


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Person-in-Responsible Charge