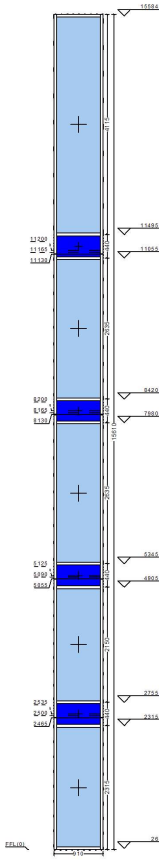
# U-Value Report

Date: 17/03/2025
**Project:** AVA9421-Downley Drive, New Islington, Man-RevE-DGU Uvalue Check

Aire-Valley ARCHITECTURAL ALUMINIUM LTD

**Position: Bill Item A**

| | | | |
|---|---|---|---|
| Quantity: | 1 Pcs. | Perimeter: | 33.0 m |
| System: | Senior SF52 (Zone Drained) Fully Capped | Area: | 14.2 m² |
| Colour: | Painted Painted | Frame: | 910 x 15,610 mm |



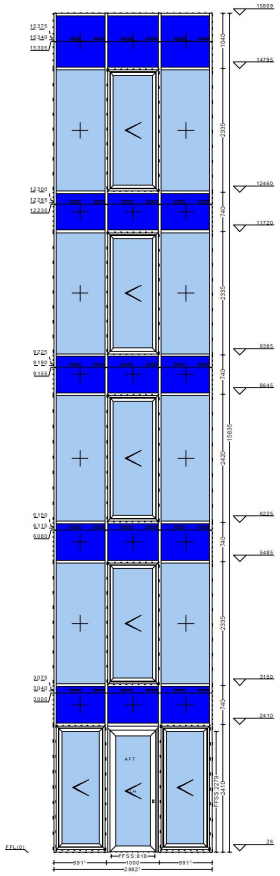
| Area | Perimeter [m] | 'psi' Value [W/mK] | Area [m²] | U-Value [W/m²K] |
|---|---|---|---|---|
| Profiles | | | 2.043 | 2.2 |
| (Test by System Supplier/Declaration by System Supplier) | | | | |
| Glass | | | 12.163 | 0.90 |
| (Test by System Supplier/Declaration by Fabricator) | | | | |
| (Test by System Supplier/Declaration by Fabricator) | | | | |
| (Test by System Supplier/Declaration by Fabricator) | | | | |
| (Test by System Supplier/Declaration by Fabricator) | | | | |
| Spacer Glass | 44.69 | 0.083 | | |
| (Specification of BV Flachglas) | | | | |
| (Specification of BV Flachglas) | | | | |
| (Specification of BV Flachglas) | | | | |
| (Specification of BV Flachglas) | | | | |

| | | | |
|---|---|---|---|
| **Total** | **44.69** | **14.205** | **1.4** |

The thermal transmission coefficients were determined for insertion elements and windows (Uw) according to EN ISO 10077-1: 2017 and for curtain walls (Ucw) according to EN-ISO 12631: 2017.

**Position: Bill Item B**

| | | | |
|---|---|---|---|
| Quantity: | 1 Pcs. | Perimeter: | 37.6 m |
| System: | Senior SF52 (Zone Drained) Fully Capped | Area: | 47.2 m² |
| Colour: | Painted Painted | Frame: | 2,983 x 15,835 mm |



| Area | Perimeter [m] | 'psi' Value [W/mK] | Area [m²] | U-Value [W/m²K] |
|---|---|---|---|---|
| Profiles | | | 9.650 | 2.2 |
| (Test by System Supplier/Declaration by System Supplier) | | | | |
| Glass | | | 37.578 | 0.80 |
| (Test by System Supplier/Declaration by Fabricator) | | | | |
| (Test by System Supplier/Declaration by Fabricator) | | | | |
| (Test by System Supplier/Declaration by Fabricator) | | | | |
| (Test by System Supplier/Declaration by Fabricator) | | | | |
| Spacer Glass | 140.81 | 0.074 | | |
| (Specification of BV Flachglas) | | | | |
| (Specification of BV Flachglas) | | | | |
| (Specification of BV Flachglas) | | | | |
| (Specification of BV Flachglas) | | | | |
| Spacer Insertions | 45.45 | 0.070 | | |
| **Total** | **186.26** | | **47.228** | **1.4** |

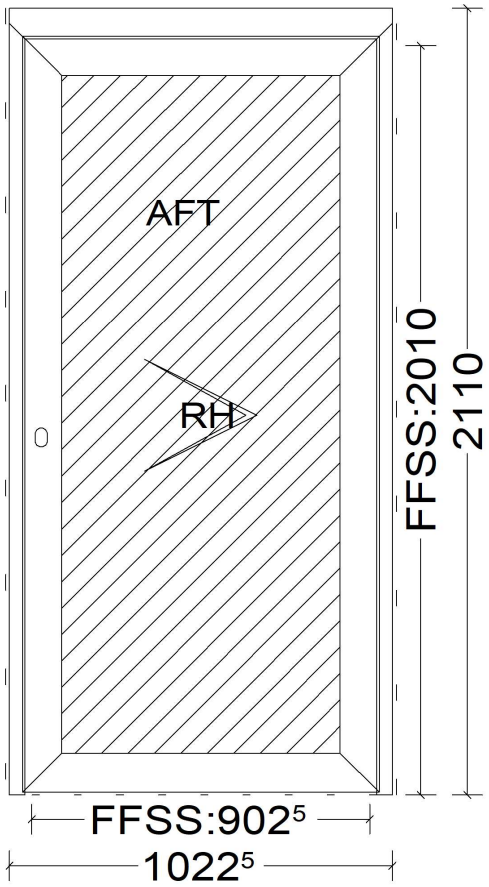
The thermal transmission coefficients $U_W$ were determined for single windows according to EN ISO 10077-1:2017.

The thermal transmittance coefficients $U_D$ were determined for door elements according to EN ISO 10077-1:2017, corrected version 2020-02.

The thermal transmission coefficients were determined for insertion elements and windows (Uw) according to EN ISO 10077-1: 2017 and for curtain walls (Ucw) according to EN-ISO 12631: 2017.

**Position: Bill Item E**

| | | | |
|---|---|---|---|
| Quantity: | 1 Pcs. | Perimeter: | 6.3 m |
| System: | Senior PURe® | Area: | 2.2 m² |
| Colour: | Painted Painted | Frame: | 1,023 x 2,110 mm |

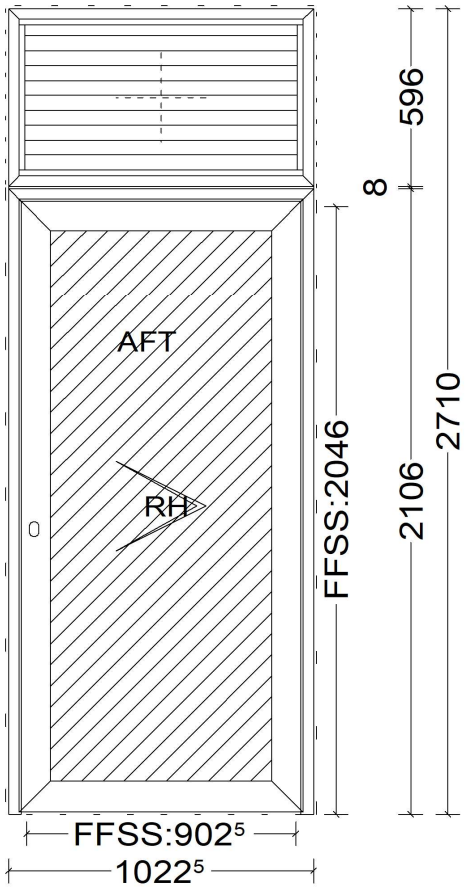



| Area | Perimeter [m] | 'psi' Value [W/mK] | Area [m²] | U-Value [W/m²K] |
|---|---|---|---|---|
| Profiles | | | 0.808 | 2.0 |
| (Test by System Supplier/Declaration by System Supplier) | | | | |
| Panel | | | 1.350 | 1.4 |
| (Test by System Supplier/Declaration by Fabricator) | | | | |
| () | | | | |
| **Total** | **5.12** | | **2.157** | **1.7** |

The thermal transmittance coefficients $U_D$ were determined for door elements according to EN ISO 10077-1:2017, corrected version 2020-02.

**Position: Bill Item F**

| | | | |
|---|---|---|---|
| Quantity: | 1 Pcs. | Perimeter: | 7.5 m |
| System: | Senior PURe® | Area: | 2.8 m² |
| Colour: | Painted Painted | Frame: | 1,023 x 2,710 mm |

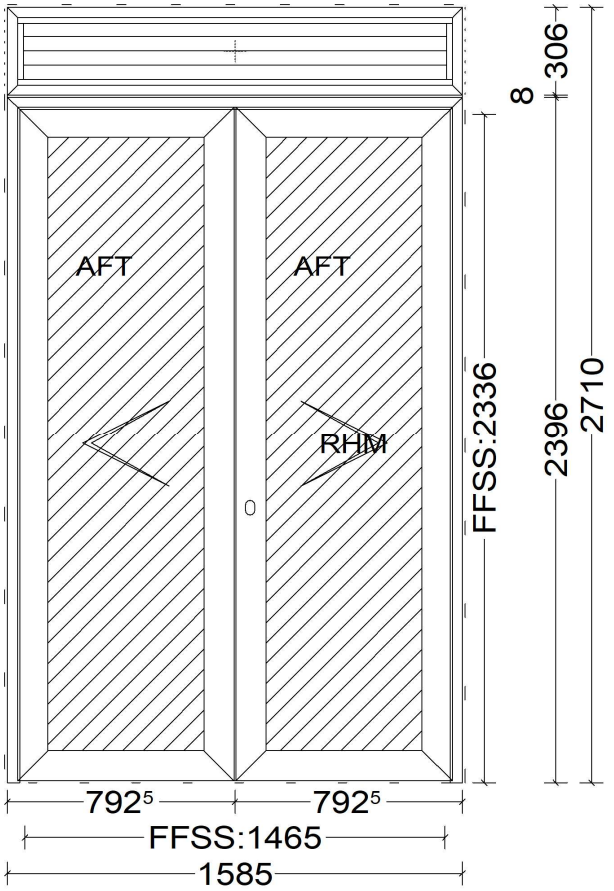



| Area | Perimeter [m] | 'psi' Value [W/mK] | Area [m²] | U-Value [W/m²K] |
|---|---|---|---|---|
| Profiles | | | 0.951 | 1.9 |
| (Test by System Supplier/Declaration by System Supplier) | | | | |
| Panel | | | 1.820 | 1.1 |
| (Test by System Supplier/Declaration by Fabricator) | | | | |
| (Test by System Supplier/Declaration by Fabricator) | | | | |
| () | | | | |
| () | | | | |
| **Total** | **7.99** | | **2.771** | **1.6** |

The thermal transmittance coefficients $U_D$ were determined for door elements according to EN ISO 10077-1:2017, corrected version 2020-02.

**Position: Bill Item G**

| | | | |
|---|---|---|---|
| Quantity: | 1 Pcs. | Perimeter: | 8.6 m |
| System: | Senior PURe® | Area: | 4.3 m² |
| Colour: | Painted Painted | Frame: | 1,585 x 2,710 mm |

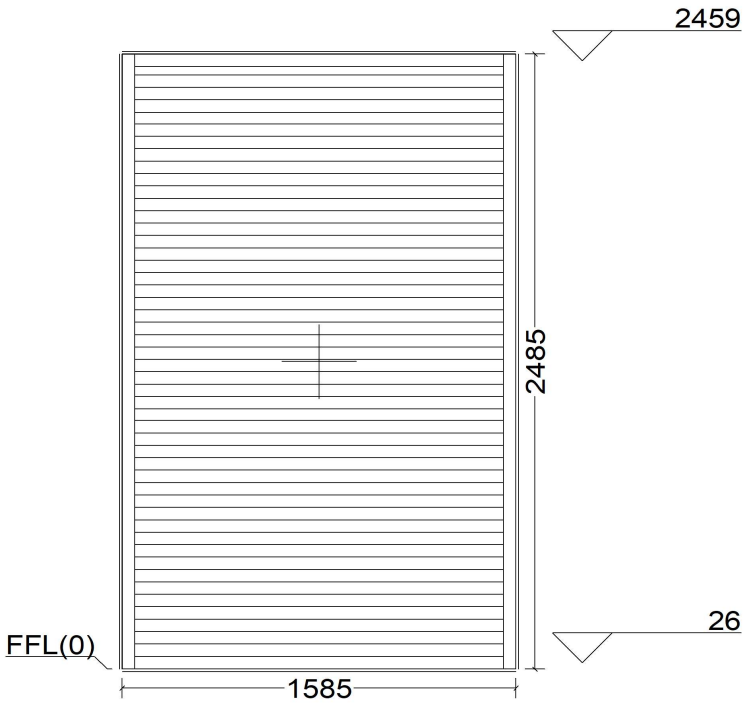



| Area | Perimeter [m] | 'psi' Value [W/mK] | Area [m²] | U-Value [W/m²K] |
|---|---|---|---|---|
| Profiles | | | 1.672 | 1.9 |
| (Test by System Supplier/Declaration by System Supplier) | | | | |
| Panel | | | 2.624 | 1.3 |
| (Test by System Supplier/Declaration by Fabricator) | | | | |
| (Test by System Supplier/Declaration by Fabricator) | | | | |
| () | | | | |
| () | | | | |
| **Total** | **14.10** | | **4.296** | **1.7** |

The thermal transmittance coefficients $U_D$ were determined for door elements according to EN ISO 10077-1:2017, corrected version 2020-02.

**Position: Bill Item I**

| | | | |
|---|---|---|---|
| Quantity: | 1 Pcs. | Perimeter: | 8.1 m |
| System: | Senior SF52 (Zone Drained) Fully Capped | Area: | 3.9 m² |
| Colour: | Painted Painted | Frame: | 1,585 x 2,485 mm |

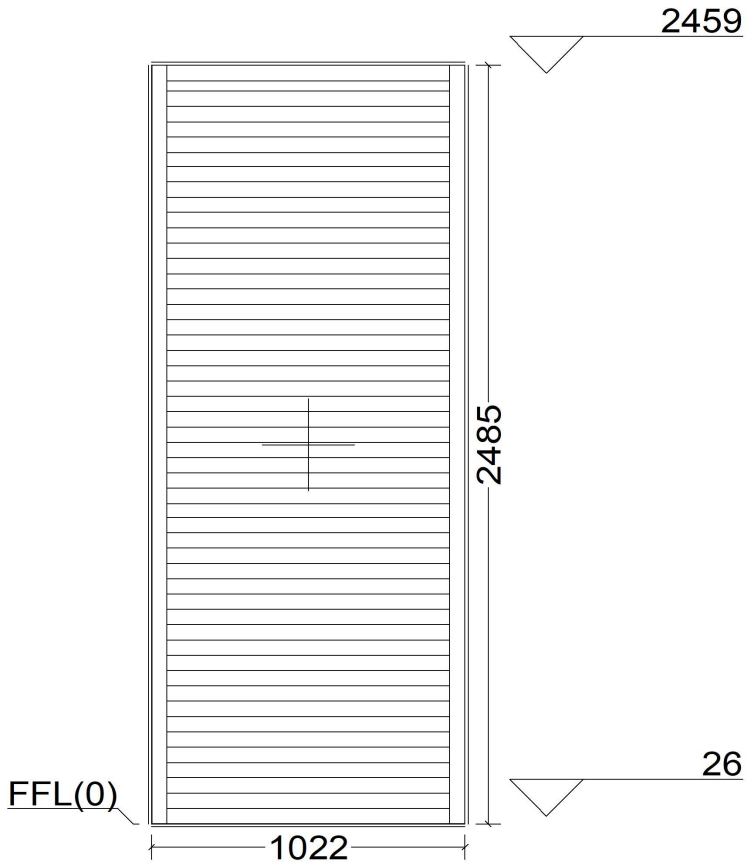



| Area | Perimeter [m] | 'psi' Value [W/mK] | Area [m²] | U-Value [W/m²K] |
|---|---|---|---|---|
| Profiles | | | 0.412 | 2.3 |
| (Test by System Supplier/Declaration by System Supplier) | | | | |
| Panel | | | 3.526 | 0.35 |
| (Test by System Supplier/Declaration by Fabricator) | | | | |
| () | | | | |
| **Total** | **7.72** | | **3.939** | **0.75** |

The thermal transmission coefficients were determined for insertion elements and windows (Uw) according to EN ISO 10077-1: 2017 and for curtain walls (Ucw) according to EN-ISO 12631: 2017.

**Position: Bill Item J**

| | | | |
|---|---|---|---|
| Quantity: | 2 Pcs. | Perimeter: | 7.0 m |
| System: | Senior SF52 (Zone Drained) Fully Capped | Area: | 2.5 m² |
| Colour: | Painted Painted | Frame: | 1,022 x 2,485 mm |




| Area | Perimeter [m] | 'psi' Value [W/mK] | Area [m²] | U-Value [W/m²K] |
|---|---|---|---|---|
| Profiles | | | 0.354 | 2.3 |
| (Test by System Supplier/Declaration by System Supplier) | | | | |
| Panel | | | 2.186 | 0.35 |
| (Test by System Supplier/Declaration by Fabricator) | | | | |
| () | | | | |
| **Total** | **6.60** | | **2.540** | **0.88** |

The thermal transmission coefficients were determined for insertion elements and windows (Uw) according to EN ISO 10077-1: 2017 and for curtain walls (Ucw) according to EN-ISO 12631: 2017.

**Summary**

| Position | Quantity [Pcs.] | Element area [m²] | Element area Total [m²] | U-Value [W/m²K] | Heat Loss [W/K] | Area ratio [%] |
|---|---|---|---|---|---|---|
| Bill Item A | 1 | 14.205 | 14.205 | 1.4 | 19.9 | 17.83 |
| Bill Item B | 1 | 47.228 | 47.228 | 1.4 | 66.1 | 59.28 |
| Bill Item E | 1 | 2.157 | 2.157 | 1.7 | 3.7 | 2.71 |
| Bill Item F | 1 | 2.771 | 2.771 | 1.6 | 4.4 | 3.48 |
| Bill Item G | 1 | 4.296 | 4.296 | 1.7 | 7.3 | 5.39 |
| Bill Item I | 1 | 3.939 | 3.939 | 0.75 | 2.95 | 4.94 |
| Bill Item J | 2 | 2.540 | 5.080 | 0.88 | 4.47 | 6.38 |
| **Total** | **8** | | **79.676** | **1.4** | **108.8** | **100.00** |

| | | |
|---|---|---|
| Frame area (m²) | 3.136 | 3.94 |
| Glass area (m²) | 49.740 | 62.43 |
| Panel area (m²) | 13.692 | 17.18 |

* The position includes profiles which do not have U-values entries in the database. Thus, the standard U-value is applied instead.

** No U value calculated for this position!

The thermal transmission coefficients $U_W$ were determined for single windows according to EN ISO 10077-1:2017.

The thermal transmittance coefficients $U_D$ were determined for door elements according to EN ISO 10077-1:2017, corrected version 2020-02.

The thermal transmission coefficients were determined for insertion elements and windows (Uw) according to EN ISO 10077-1: 2017 and for curtain walls (Ucw) according to EN-ISO 12631: 2017.

The calculation of 17/03/2025 of the Uw values of windows and the UD values of doors or the Ucw values of facades was carried out using the software Logikal (U-value determination version 1.1.0.0) according to EN ISO 10077-1:2017-07, corrected version 2020-02 or EN ISO 12631:2017-07.