

The Executed Agreement including General Conditions and Supplementary Conditions, Division 01, applicable Drawings and amendments are part of and are to be read in conjunction with this Section

## PART 1 - GENERAL

### 1.1 NOT USED

### 1.2 REFERENCES

- .1 Aluminum Association Designation System For Aluminum Finishes (AA).
  - .1 DAF 45-2003 (R2009), Designation System For Aluminum Finishes.
- .2 American Society for Testing and Materials International, (ASTM).
  - .1 ASTM B209-14, Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate
  - .2 ASTM B221-14, Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes
  - .3 ASTM E283-04 (2012), Test Method for Determining Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen
  - .4 ASTM E331-00 (2009), Test Method for Water Penetration of Exterior Windows, Skylights, Doors and Curtain Walls by Uniform Static Air Pressure Difference

### 1.3 PERFORMANCE REQUIREMENTS

- .1 Design and size components to withstand dead and live loads caused by pressure and suction of wind, acting normal to plane of system as calculated in accordance with NBC 2010.
- .2 Limit air infiltration through assembly to 10 l /s/m<sup>2</sup> of wall area, measured at a reference differential pressure across assembly of 75Pa as measured in accordance with ASTM E283.
- .3 Vapour seal with interior atmospheric pressure of 25 mm sp, 22 degrees C, 40% RH: No failure.
- .4 Water leakage: none, when measured in accordance with ASTM E331.

### 1.4 SHOP DRAWINGS

- .1 Submit shop drawings in accordance with Section 01 33 00 - Submittal Procedures.
- .2 Indicate system dimensions, framed opening requirements and tolerances, adjacent construction, anchor details anticipated deflection under load, affected related Work,

weep drainage network, expansion and contraction joint location and details, and field welding required.

## 1.5 WASTE MANAGEMENT AND DISPOSAL

- .1 Remove from site and dispose of packaging materials at appropriate recycling facilities.

## PART 2 - PRODUCTS

### 2.1 MATERIALS

- .1 Extruded aluminum: ASTM B221.
- .2 Sheet aluminum: ASTM B209.
- .3 Fasteners: stainless steel finish.
- .4 Sealant:
  - .1 Perimeter sealant: Type as per Section 07 92 00 – Joint Sealers.

### 2.2 COMPONENTS

- .1 Mullion profile:
  - .1 Vertical members: Drawings based on 65mm frame width, all thermally broken.
  - .2 Horizontal members: Drawings based on 65mm frame width, all thermally broken.
  - .3 Thermally broken with interior tubular section insulated from exterior pressure plate.
- .2 Flashings: 1.5 mm thick aluminum, finish to match curtain wall mullion sections where exposed, secured with concealed fastening method.
- .3 Approved Window Frame Manufacturers:
  - .1 Kawneer
  - .2 Alumicor
  - .3 Anotec
  - .4 A&D Prevost

### 2.3 FABRICATION

- .1 Fabricate system components with minimum clearances and shim spacing around perimeter of assembly, yet enabling installation and dynamic movement of perimeter seal.
- .2 Accurately fit and secure joints and corners. Make joints flush, hairline, and weatherproof.

- .3 Prepare components to receive anchor devices. Install anchors.
- .4 Arrange fasteners and attachments to ensure concealment from view.
- .5 Visible manufacturer's identification labels not permitted.

## 2.4 FINISHES

- .1 Clear anodized finish No. 17 conforming to standard AA-M12C2231 Class 1 finish.

## 2.5 GLAZING

- .1 Refer to Section 08 80 00.

## 2.6 SEALANTS

- .1 Refer to Section 07 92 00 or in accordance with manufacturer's standards.

# PART 3 - EXECUTION

## 3.1 INSTALLATION

- .1 Install window system in accordance with manufacturer's instructions.
  - .2 Attach to structure to permit sufficient adjustment to accommodate construction tolerances and other irregularities.
  - .3 Provide alignment attachments and shims to permanently fasten system to building structure. Clean weld surfaces; apply protective primer to field welds and adjacent surfaces.
  - .4 Align assembly plumb and level, free of warp or twist. Maintain assembly dimensional tolerances and align with adjacent work.
  - .5 Pack fibrous insulation in shim spaces at perimeter of assembly to maintain continuity of thermal barrier.
  - .6 Co-ordinate attachment and seal of perimeter air barrier and vapour retarder materials.
  - .7 Install sill flashings.
  - .8 Install glass in accordance with Section 08 80 00 - Glazing.
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3.2            CLEANING

- .1        Remove protective material from prefinished aluminum surfaces.
- .2        Wash down surfaces with a solution of mild detergent in warm water, applied with soft, clean wiping cloths. Take care to remove dirt from corners. Wipe surfaces clean.

END OF SECTION