

## SECTION 07 44 00 – Glass Wall Panel System

### PART 1 – GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions, and Division 1 Specification sections.

#### 1.2 SUMMARY

- A. Panel system requirements:

1. Glass façade panels with mounting system. Panel mounting system including z-girts, extruded aluminum rails and clips, and fasteners for a complete back ventilated rainscreen façade.
2. Free floating attachment clips allowing for expansion and contraction and seismic movement.
3. Surface mounted fasteners

- B. Related Sections include the following

1. Section 05400 - Cold Formed Metal Framing
2. Section 07600 - Flashing and Sheet Metal
3. Section 08520 - Aluminum Windows
4. Section 08911 - Glazed Aluminum Curtain Wall

#### 1.3 DESIGN REQUIREMENTS

- A. General: Provide systems capable of withstanding normal thermal movements, wind and impact loads without failure, including loss or glass breakage due to defective manufacture, fabrication, or installation.
- B. Glass Design: Provide tempered glass panels in the thickness and strengths to meet or exceed the following criteria based on analysis of project loads and in-service conditions.
  1. Specified Design Wind Loads: As indicated on the Structural Drawings
  2. Specified Design Snow Loads: As indicated on the Structural Drawings.
  3. Minimum Glass Thickness for Exterior Panels: Not less than 10mm

#### 1.4 SUBMITTALS

- A. General: Submit the following in accordance with conditions of the Contract and Division 1 specification section 01 34 00

1. Shop Drawings: Submit shop drawings showing the project layout, elevations, sections, panel dimensions, details, and attachments to other work.
2. Product Data: Submit manufacturer's product data; including product description, fabrication information, and compliance with specified performance requirements.
3. Building Code Approvals: Façade Systems are to have been evaluated and comply to requirements of the National and/or local jurisdictions.

B. Initial Panel System Review for Approval.

1. Fabricator to exhibit portable 4-way joint system sample to Architect/Prime Consultant that shows fabrication and assembly method of panel system .

C. Samples for Approval:

1. Submit minimum 4-inch by 4-inch glass sample for each type and color.

D. Mockups – as requested:

1. Build mockups to verify selections made under sample Submittals and to demonstrate aesthetic effects.
2. Approved mockups may become part of the completed work if undistributed at time of Substantial Completion.

E. Maintenance Data: Submit manufacturer's care and maintenance data, including care, repair, and cleaning instructions. Include in Project closeout documents.

## 1.5 QUALITY ASSURANCE

A. Fabricator:

1. Company experienced in designing, engineering, and fabricating back-ventilated Rainscreen wall systems as described in this Section.
2. Able to document minimum 10 years experience. Submit project contact information. Owner, General Contractor, Architect names and phone numbers. Project addresses.
3. Approved by glass manufacturer as qualified to perform work of this Section.

B. Installer:

1. Company experienced in installing work described in this Section.
2. Able to document minimum 5 years experience. Submit project contact information. Owner, General Contractor, Architect names and phone numbers. Project addresses.
3. Trained and authorized by wall panel system fabricator as qualified to perform work of this Section.

## 1.6 DELIVERY, STORAGE, AND HANDLING

- A. Protect glass panels according to manufacturer's written instructions and as needed to prevent damage to glass and other façade system materials.
- B. Store materials in a flat orientation in a dry place that is not exposed to exterior elements.
- C. Handle materials to prevent damage to finished surfaces.
- D. Before installing glass façade panels, permit them to reach room temperature.

## 1.7 WARRANTY

- A. Glass Manufacturer's Warranty on Glass panels: Manufacturer's standard form agreeing to repair or replace units that fail in material or workmanship within the specified warranty period.
- B. Warranty Period: 5 years from ship date.

## Part 2 – PRODUCTS

### 2.1 MANUFACTURER / FABRICATOR

- A. Panel System Fabricator: Keith Panel Systems, 2-40 Gostick Place, North Vancouver, BC, Canada. T. 604-987-4499

### 2.2 GLASS PRODUCTS

- A. Clear Tempered
  - 1. ASTM C 1048 Heat Treated Flat Glass
  - 2. SGCC third part test program to ANSI Z97.1, CAN 12.1 M90, and 16 CFR 1201 II
    - a. 10mm thickness
    - b. Ceramic Frit with Custom Colour 100% coverage silk screened
    - c. Drilled holes at edge work as required
    - d. Edges to be crafted smooth

### 2.3 PANEL SYSTEM

- A. Keith Panel Systems: KPS RS Glass Back-ventilated Rainscreen

1. Panel mounting system including z-girts, extruded aluminum rails and clips, and fasteners for a complete back ventilated rainscreen façade.
2. Free floating attachment clips allowing for expansion and contraction and seismic movement.
3. Surface mounted fasteners

## 2.4 SUBSTITUTIONS

- A. No Panel System substitutions acceptable without formal written consent from the Prime Consultant.

## 2.5 ACCESSORIES

- A. Decorative face fasteners, gaskets, shims, and integrated thru-wall flashings included.
- B. Cleaner: Type recommended by manufacturer.

## PART 3 – EXECUTION

### 3.1 EXAMINATION

- A. Examine substrates, areas, and conditions where installation of Façade Systems will occur, with Installer present, for compliance with manufacturer's requirements. Verify that substrates and conditions are satisfactory for installation and comply with requirements specified.

### 3.2 INSTALLATION

- A. General: Comply with manufacturer's and fabricator's instructions for the installation of Façade System.
- B. Material that is chipped, warped, hazed or discolored as a result of installation or fabrication methods will be rejected.
- C. Install components plumb, level and rigid, scribed to adjacent finishes, in accordance with approved shop drawings and product data.

### 3.3 CLEANING AND PROTECTION

- A. Protect surfaces from damage until date of substantial completion.

End of Section 07 44 00