SECTION 08970
STRUCTURAL GLASS WALLS

PART 1: GENERAL

1.1 SUMMARY

A. Section Includes: Glass, glazing and connections for structural point supported glass wall in accordance with the Contract Documents.

B. Related Sections:
Section 07900 - Sealants for glazing
Section 08800 - Glass and Glazing

C. Manufacturer
The performance of the structural glazing system indicated is according to the specifications and related drawings of the **PARAGON ARCHITECTURAL PRODUCTS, LLC, STRUCTURAL GLASS SYSTEM.**

1.2 QUALITY ASSURANCE

A. Sole Source Responsibility: Glazing Material and System Design: Glass, glazing, system design and accessories are the sole responsibility of Tedwall / Paragon.

B. Installation of structural glass curtain wall system to be supplied by qualified glazing sub-contractor familiar with points supported glazing systems.

1. The installer of the “TEDWALL” is responsible for supplying and erecting the complete structural glazing system, coordinating and maintaining tolerances between structure and glazing system with individual suppliers and manufacturers, and installation of glazing system.

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C. Where safety glass is indicated or required by authorities having jurisdiction, provide type of products which comply with ANSI Z97.1 and testing requirements of 16 CFR, Part 1201 for category II materials.

1.3 SYSTEM DESCRIPTION

A. Design Requirements: (to be confirmed by architect / structural engineer)

1. Design Wind Load: (to be confirmed by architect / structural engineer)

2. Seismic Zone: (to be filled in by architect)
Maximum Inelastic Drift: (to be filled in by architect)

3. Live load deflection of supporting structure if any:
a) Normal to Glass: to be specified by Paragon pending definition of glazing system type.

B. SYSTEM TYPE

1. Architect to indicate glazing system type (wall, canopy, etc) and indicate type of glazing system (fin, steel mullions, cables / tension structure, etc).

2. Design of system and related components by Paragon. Steel works by structural contractor. Steel works to be in compliance we resultant loads and weld/bolt parameters per PARAGON System.

1.4 SUBMITTALS

A. Submit the following in accordance with Section: (to be filled in by architect.)

1. Shop Drawings: Shop drawings shall clearly indicate materials, methods, indicate and coordination with other trades.

2. Product Data: Material description and installation instructions for tapes, compounds, gaskets and other materials.

3. Samples / Submittals:

a. Submit samples relevant of project requirements and parameters set fourth in General project notes / General Spec Section. of glass and glazing materials required for the Project.

1.5 WARRANTIES

A. Manufacturer Warranty: Materials and Design Warranty by PARAGON, (warranty period to be filled in by architect.)

B. Installer Warranty: Installing contractor / glazing subcontractor to provide installation warranty installation (warranty period to be filled in by architect.)

PART 2: PRODUCTS

2.1 MATERIALS

A. Structural Glass System: The drawings and specifications herein are based on the PARAGON (indicated System Type) SYSTEM system as distributed by :

PARAGON ARCHITECTURAL PRODUCTS, LLC,
Phone (480) 767-8266, Phone (480) 236-6887, Fax (480) 767-8267,
www.glassengineer.com, info@glassengineer.com.

B. Glass:

1. All glass must be fully tempered and heat soaked. Non heat-soaked glass shall not be accepted.

2. Indicate float glass type, coating , interlayer, printing, etc.

C. Hardware:

1. Indicates related hardware types
2. Exterior hardware to be grade 316 stainless steel.

D. Software / Accessories:

1. Indicate gasketing and setting block material.

PART 3: EXECUTION

3.1 EXAMINATION

A. Examine surfaces receiving the Work. Verify dimensions of in-place and subsequent construction. Do not begin work until unsatisfactory conditions have been corrected.

3.2 INSTALLATION OF GLASS:

A. Install in accordance with PARAGON requirements and shop drawings.

B. Glass seams are sealed with silicone sealant. Joint dimensions shall be designed to be compatible with sealant properties and live load movement of the structure.

C. Bolt Torque: Torque bolts to torques specified on shop drawings using calibrated tool. Lock torqued bolts into position with sealant properties and live load movement of the structure.

D. Maintain a minimum temperature of 40 degrees F. during glazing unless the manufacturer of the glazing material specifically agrees to application of this material at lower temperature. If job progresses or other conditions require glazing work when temperature is below 40 degrees F. (or below the minimum temperature recommended by the manufacturer), consult the manufacturer and establish the minimum provisions required to ensure satisfactory work.

E. Clean glazing connectors receiving glazing materials of deleterious substances which might impair the work. Remove protective coatings which might fail in adhesion or interfere with bond of sealants.

F. Inspect each unit of glass immediately before installation. Glass which has significant impact damage at edges, scratches or abrasion of faces, or any other evidence of damage shall not be installed.

G. Sealants: Prime surfaces to receive glazing sealants where required, in accordance with manufacturer's recommendations, using recommended primers.

H. Locate setting blocks, per drawings, at the quarter points of sill. Use blocks of proper sizes to support the Glass.

I. Set glass in a manner which produces greatest possible degree of uniformity in appearance. Note front and back of insulated glass units.

J. Use masking tape or other suitable protection to limit coverage of glazing materials to the surfaces intended for sealants.

K. Clean excess sealant from glass and support members immediately after application, using solvents or cleaners recommended by manufacturers.

3.4 CURING, PROTECTION, AND CLEANING

A. Cure sealants in accordance with the manufacturer's instructions to attain maximum durability and adhesion to glass.

B. Clean all surfaces after installation, leaving all in a clean and workmanlike manner.

C. Final cleaning and protection after installation is responsibility of others

- END OF SECTION -