**Guide Specification:**

**GlazeGuard® 1300 IR**

**Citadel Architectural Products, Inc.**

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SECTION 08 80 00 - GLAZING

PART 1 - GENERAL

1.1 SUMMARY

 A. Section Includes:

 1. Glazing Infill Panels

 2. The extent of the glazing and/or curtain wall assembly as indicated in these specifications

 and in the drawings.

 B. Related Sections:

 1. Section 05 10 00 - Structural Metal Framing

 2. Section 06 10 00 - Rough Carpentry

 3. Section 07 20 00 - Thermal Protection

 4. Section 07 60 00 - Flashing And Sheet Metal

 5. Section 07 90 00 - Joint Protection

 6. Section 08 40 00 - Entrances, Storefronts, And Curtain Walls

 7. Section 08 50 00 - Windows

1.2 REFERENCES

 A. American Society For Testing And Materials (ASTM)

 1. ASTM E84 Standard Test Method For Surface Burning Characteristics

 Of Building Materials

 2. ASTM E1886 Standard Test Method for Performance of Exterior Windows, Curtain

 Walls, Doors, and Impact Protective Systems Impacted by Missile(s) and

 Exposed to Cyclic Pressure Differentials

 3. ASTM E1996 Standard Specification for Performance of Exterior Windows, Curtain

 Walls, Doors, and Impact Protective Systems Impacted by Windborne

 Debris in Hurricanes

 1. ASTM C1363 Standard Test Method for Thermal Performance of Building Materials

and Envelope Assemblies by Means of a Hot Box Apparatus

 2. ASTM C518 Standard Test Method for Steady-State Thermal Transmission

Properties by Means of the Heat Flow Meter Apparatus

B. Testing Application Standards (TAS)

1. TAS 201 Impact Test Procedures

2. TAS 202 Criteria for Testing Impact & Non Impact Resistant Building Envelope Components Using Uniform Static Air Pressure

3. TAS 203 Criteria for Testing Products Subject to Cyclic Wind Pressure Loading

 C. American Architectural Manufacturers Association (AAMA)

 1. AAMA 2605 Voluntary Specification, Performance Requirements And Test

 Procedures For Superior Performing Organic Coatings On

 Aluminum Extrusions And Panels

1.3 DEFINITIONS

 A. Leadership In Energy And Environmental Design (LEED):

 A set of guidelines set forth by the United States Green Building Council (USGBC)

 to promote the building of environmentally responsible and sustainable structures.

 B. ISO 9001:2015

 A set of guidelines set forth by the International Organization For Standardization (ISO)

 to provide guidance and tools for companies and organizations who want to ensure that

 their products and services consistently meet customer’s requirements, and that quality is

 consistently improved.

1.4 SYSTEM DESCRIPTION

 A. Design Requirements:

 1. Barrier System:

 Glazing and/or curtain wall assembly shall be designed in accordance with

 manufacturer's guidelines to be sealed at all panel joints, intersections, dissimilar material

 abutments, and cutouts, thus providing a weathertight barrier system.

 2. Expansion And Contraction:

 Glazing and/or curtain wall assembly shall be designed with provisions for thermal

 expansion and contraction of the component parts to prevent buckling, failure of joint

 seals, undue stress on fasteners or other detrimental effects due to accumulation

 of dead loads and various live loads.

 3. Wind load:

 Glazing and/or curtain wall assembly shall be designed to withstand a positive and

 negative wind load pressure acting inward and outward normal to the plane of the wall to

 meet the requirements of the latest adopted Local Building Code.

 B. General Performance:

 Glazing and/or curtain wall assembly shall comply with performance requirements,

 as determined by the following testing performed by a qualified agency.

1.5 SUBMITTALS

 A. Product Data:

 1. Submit manufacturer's datasheet for specified product.

 2. Submit manufacturer's installation guidelines for specified product.

 3. Submit manufacturer's literature indicating pre-consumer and

 post-consumer percentages of recycled content in the context of

 LEED guidelines.

 4. Submit manufacturer's literature indicating compliance with the

 American Recovery & Reinvestment Act (ARRA), Section 1605.

 B. Samples:

 1. Submit two (2) samples 3" x 5" of each product specified.

 2. Submit two (2) samples 3" x 5" of each finish specified.

 C. Test Reports:

 Submit test reports indicating compliance of products with specified performance

 requirements from an independent testing agency.

 D. Warranty:

 Submit manufacturer's warranty meeting the requirements of this section.

1.6 QUALITY ASSURANCE

 A. Qualifications:

 1. Manufacturer:

 Manufacturer shall have a minimum of ten (10) years of experience

 in the manufacture of this product, shall be an ISO 9001:2015 Registered

 Company, and shall be located within the United States of America.

 2. Installer:

 Installer shall be experienced in performing work of this section and in

 work of similar scope required by this project.

 B. Pre-Installation Meeting:

 Conduct pre-installation meeting to verify project requirements, substrate conditions,

 manufacturer's installation instructions, and manufacturer's warranty requirements.

1.7 DELIVERY, STORAGE, AND HANDLING

 A. Acceptance At Site:

 Materials to be packaged to protect against transportation damage. Examine materials

 upon receipt to insure that no damage has occurred during shipment.

 B. Storage And Protection:

 1. Storage:

 Materials should be stored horizontally on pallets or platforms, covered with

 a suitable ventilated and weathertight covering. Do not store materials where accumulation of moisture may occur or in contact with materials that might

 cause staining, denting, or other damage.

 2. Material Handling:

 Use care in unloading, storing, and erecting the materials to prevent bending,

 warping, and twisting. Protect finish and edges from damage. The protective

 film on the panel surface is to remain in place until installation and shall be

 removed immediately upon completion.

1.8 PROJECT CONDITIONS

 A. Field Measurements:

 Verify location and dimension of all elements related to the installation of the

 glazing and/or curtain wall assembly. Indicate those measurements on the shop drawings.

1.9 WARRANTY

 A. Glazing Infill Panels:

 1. Panel:

 The integrity of the panel bond will remain intact for a minimum of ten (10)

 years from the Date Of Substantial Completion.

 2. Finish:

 a. Polyvinylidene Fluoride (PVDF):

 1) The finish will not have a Fade Differential of greater than 5E units.

 Testing shall be in accordance with ASTM D2244.

 2) The finish will not have a Chalk Rating of less than 8.

 Testing shall be in accordance with ASTM D4214.

 3) The finish will not check, peel, lose adhesion or fracture (other

 than minute fractures which may develop due to fabrication and

 which are acceptable by industry standards on the Date Of

 Substantial Completion).

 4) Warranty period shall be thirty (30) years from the Date Of

 Substantial Completion.

 b. Anodized:

 1) The finish will not check, peel, lose adhesion or fracture (other

 than minute fractures which may develop due to fabrication and

 which are acceptable by industry standards on the Date Of

 Substantial Completion).

 2) Warranty period shall be twenty (20) years from the Date Of

 Substantial Completion.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

 A. Acceptable Manufacturer:

 Citadel Architectural Products, Inc.; 6198 W Airport Blvd; Greenfield, IN 46140

 ph: (800) 446-8828; www.citadelap.com; info@citadelap.com

 B. Substitutions:

 1. Not permitted without approval of the architect 10 days prior to bid.

 2. Items being submitted for consideration must be of the same function

 and meet the performance requirements set forth in this section.

 C. Requests for substitutions will be considered in accordance with provisions of

 Section 01 60 00 - Product Requirements.

 1. Product Data:

 Submit product data including testing performed by a qualified agency

 indicating compliance with performance requirements specified in this section.

 2. Samples:

 Submit two (2) samples 3" x 5" of each proposed product substitution.

2.2 GLAZING INFILL PANELS

 A. Panel:

 GlazeGuard® 1300 IR as manufactured by Citadel Architectural Products, Inc.

 1. Composition:

 Face: .024" prefinished smooth aluminum

 Stabilizer: 4mm high density polypropylene

 Core: 10mm high density polypropylene

 Stabilizer: 4mm high density polypropylene

 Core: 10mm high density polypropylene

 Stabilizer: 4mm high density polypropylene

 Back: .024" prefinished smooth aluminum

 2. Thickness: 15/16” (nominal)

 3. Weight: 2.35 lbs/ft²

 4. Tolerance:

 Thickness: ±1/32"

 Length / Width: +0, -1/8"

 Squareness: 1/64" per lineal ft

 B. Performance:

1. Florida Building Code:

Panel shall be tested in accordance with TAS201, TAS202, TAS203, ASTM E1886, and ASTM E1996 and maintain Florida Product Approval for use in Level D, Level E, and High Velocity Hurricane Zones (HVHZ).

1. Surface Burning Characteristics:

Panel shall have a Class A rating with a Flame Spread Index less than 25 and a Smoke Developed Index less than 450. Testing shall be in accordance with ASTM E84

1. R-Value:

Panel shall have a minimum R-Value of 2.2. Testing shall be in accordance with ASTM C1363 or ASTM C518.

 B. Finish:

 1). Polyvinylidene Fluoride (PVDF):

 a. Type:

 Kynar 500® coating using 70% resin.

 Finish shall be in conformance with AAMA 2605.

 b. Color:

 1) As selected by Architect from manufacturer's color guide.

 2) Custom color to match Architect's standard.

 c. Composition:

 1) Two-Coat Colors:

 0.2-mil primer coat, 0.8-mil color coat

 2) Three-Coat Colors:

 0.2-mil primer coat, 0.8-mil color coat, 0.7-mil clear coat

 3. Anodized:

 a. Type:

 AA-C22-A21 (clear)

 AA-C22-A23 (colored)

 b. Color:

 As selected by Architect from manufacturer's color guide.

 c. Composition:

 1) Anodized (clear):

 barrier, aluminum oxide, nickel/hydrate seal

 2) Anodized (colored):

 barrier, aluminum oxide, colorant, nickel/hydrate seal

 C. Accessories:

1. Glazing Materials: Select glazing sealants, tapes, gaskets and additional glazing materials of proven compatibility with other materials they will contact, including glass products, seals of insulating glass units and glazing channel substrates, under conditions of installation and service, as demonstrated by testing and field experience.

PART 3 - EXECUTION

3.1 EXAMINATION

 A. Verification of Conditions:

1. Verify prepared openings for glazing are correctly sized and within tolerance. Verify that the minimum required face and edge clearances are being followed.
2. Verify that a functioning weep system is present.
3. Do not proceed with glazing until unsatisfactory conditions have been corrected

3.2 PREPARATION

 A. Verify dimensions as required.

 B. Protect adjacent work areas and finished surfaces to prevent damage that otherwise

 might occur during the work of this section.

3.3 INSTALLATION

 A. Glazing and/or curtain wall assembly shall be installed in accordance with the manufacturer's

 written installation guidelines and the approved set of shop drawings.

 B. Erect glazing and/or curtain wall assembly level and true to the intended plane.

 C. Maximum deviation from vertical and horizontal alignment of erected glazing and/or curtain wall

 assembly shall be no more than 1/4" in 20'-0".

 D. Maximum deviation in panel flatness shall be 0.6% of the assembled units.

 E. Remove panel masking immediately installation. Delay will result in difficulty

 with removal and possibly residue on the panel surface.

 F. Seal all joints as required using methods and materials as recommended by the panel

 manufacturer.

3.4 CLEANING

 A.

 A. Remove temporary coverings and protection to adjacent work areas.

 B. Remove and legally dispose of construction debris from project site.

END OF SECTION