

Ward 9D Renovations
VA WNY Health Care System
3495 Bailey Ave
Buffalo, New York

SECTION 07 41 50
EXTERIOR WALL PANELS & SYSTEMS

PART 1: GENERAL

1.1 WORK INCLUDED

Section Includes: Laminated panels for use as glazing infill.

1.2 RELATED SECTIONS

- A. Section 07 21 13: Thermal Insulation
- B. Section 07 60 00: Flashing and Sheet Metal
- C. Section 07 92 00: Joint Sealants

1.3 SYSTEM DESCRIPTION

- A. Panels exposed finishes shall perform according to AAMA 2603-98 or AAMA 2605-98; exposed anodized aluminum according to AAMA 611-98; exposed porcelain enamel steel according to PEI S-100.
- B. Panel composite assembly shall conform to ASTM E84, flame spread resistance, Class A; Class B with expanded polystyrene (EPS) core.
- C. Design wall system to withstand a positive and negative windload pressure acting inward and outward normal to the plane of the wall to meet the requirements of the latest adopted Local Building Code.
- D. Make adequate provisions in the wall system for thermal expansion and contraction of the component parts and fastening of the system to prevent harmful damage caused by buckling, opening of joints, contraction and expansion due to accumulation of dead loads and variations of live loads.
- E. Design wall system to be sealed at all joints, intersections and cutouts to prevent moisture intrusion of any type.

1.4 QUALITY ASSURANCE

- A. Panel Manufacturer: Manufacturer shall have a minimum of ten (10) years experience in the manufacture of composite architectural wall systems and must have ISO 9001:2000 Certification.
- B. Panel Installer: Installer shall be experienced in performing work of this section and be specialized in the installation of similar work required on this project.
- C. Field Measurements: When possible, measurements should be taken prior to the completion of shop manufacturing and assembly.
- D. Pre-Installation Meetings: Conduct pre-installation meetings to verify project requirements, substrate condition, and installation instructions and warranty requirements. Comply with Division 1 Project Management and Coordination, Project Meetings Section.

1.5 REFERENCES

- A. American Society for Testing and Materials (ASTM):
 - 1. ASTM E84: Surface Burning Characteristics
 - 2. Architectural Aluminum Manufacturers' Association (AAMA):
 - a. AAMA 2603-98: Voluntary Specification, Performance Requirements and Test Procedures for Pigmented Organic Coatings on Aluminum Extrusions and Panels
 - b. AAMA 2605-98: Voluntary Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels
 - c. AAMA 611-98: Voluntary Specification for Anodized Architectural Aluminum
- C. Porcelain Enamel Institute (PEI):
 - PEI S-100: Specification for Porcelain Enamel on Steel.

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1.6 SUBMITTALS

- A. Samples:
 - Panel: Two samples of each type of assembly.
 - Color Standards: Two 3" x 5" samples of each color of finish selected.
- B. Shop Drawings: Indicate thickness and dimension of parts, fastening and anchoring methods, detail and location of joints, including joints necessary to accommodate thermal movement.
- C. Material Certification: Two (2) copies certifying that material meets the requirements specified.
- D. Manufacturer's Literature: Two (2) copies of manufacturer's literature for panel material.
- E. Test Reports: Two (2) copies of third party test reports on testing required in Section 1.03.

1.7 DELIVERY, STORAGE AND HANDLING

- A. General: Comply with Division 1 Product Requirements Section.
- B. Delivery: Package all panels for protection against transportation damage in accordance with manufacturer's requirements.
- C. Storage: Store all materials in accordance with manufacturer's installation instructions. Stack materials on pallets or platforms, covered with suitable ventilated covering.
- D. Do not store panels where accumulation of water may occur or in contact with other materials that might cause staining, denting or other damage.
- E. Handling: All materials should be handled in a manner to prevent damage to the product in accordance with manufacturer's installation instructions.

1.8 WARRANTY

- A. Manufacturer's Warranty: Furnish panel manufacturer's standard warranty document executed by authorized company official. Manufacturer's warranty is in addition to and not a limitation of other rights Owner may have under the Contract Documents.
- B. Panel Lamination Warranty: Five (5) years commencing on Date of Substantial Completion.
- C. Finish Warranty:
 - {Polyester: Five (5) years}
 - {Acrylic Urethane: Five (5) years}
 - {Kynar 500®: Twenty (20) years}
 - {Kynar 500® Metallic: Twenty (20) years}
 - {Anodized: Twenty (20) years}
 - {Porcelain Enamel: Twenty (20) years}

PART 2: PRODUCTS

2.1 EXTERIOR WALL PANELS & SYSTEMS

- A. Opaque Glazing Panels
 - 1. Panel Composition:
 - a. Face Skin:
 - .010" prefinished textured aluminum, painted to match
VA Standard: Citadel Glaze Guard 1000, Classic Bronze.
 - b. Face Stabilizer: 1/8" tempered hardboard
 - c. Core:
 - {21/32" expanded polystyrene (EPS) foam}
 - d. Back Stabilizer: 1/8" tempered hardboard
 - e. Back Skin:
 - .010" prefinished textured aluminum, painted to match
VA Standard: Citadel Glaze Guard 1000, Classic Bronze.

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2. Panel Tolerances:
 - a. Thickness: $\pm 1/32$ "
 - b. Length and Width: +0, -1/8"
 - c. Squareness: 1/64" per lineal foot
3. Attachment System:

To be used as glazing infill or inserted into encapsulating watertight channel.

2.2 SUBSTITUTIONS

- A. Acceptable Alternatives: Panels of similar composition providing manufacturer has a minimum of ten (10) years experience.
- B. The materials and products specified in this section establish a standard of required function, dimension, appearance and quality to be met by any proposed substitution.
- C. No substitution will be considered unless written request for approval has been submitted by the bidder and has been received by the Architect ten (10) days prior to the date for receipt of bids.
- D. Each request shall include the name of the materials and a complete description of the proposed material, including test performance and any other information necessary for evaluation.

2.3 FINISH

- A. Exposed Finish:

Standard textured polyester
- B. Color: Classic Bronze

PART 3: EXECUTION

3.1 EXAMINATION

- A. Examine and verify substrate surfaces to receive composite metal panel system and associated work and condition which work will be installed.
- B. Maximum deviation from vertical and horizontal alignment of substrate shall be no more than 1/4" in 20'-0".
- C. Do not proceed with work until unsatisfactory conditions have been corrected in a manner acceptable to installer. Starting work within a particular area will be construed as installer's acceptance of surface conditions.

3.2 PREPARATION

- A. Comply with manufacturer's product data including product technical bulletins, product catalog installation instructions, and product carton instructions.
- B. Surfaces to receive panels shall be even, smooth, sound, clean, and free from defects detrimental to panel installation.
- C. Field measure and verify dimensions as required.
- D. Protect adjacent areas or surfaces from damage as a result of the Work of this Section.

3.3 INSTALLATION

- A. Sheathing and water resistant membrane (if specified) by others.
- B. Erect panels level and true to intended plane.
- C. Maximum deviation from vertical and horizontal alignment of erected panels shall be no more than 1/4" in 20'-0".
- D. Maximum deviation in panel flatness shall be 0.6% of the assembled

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- units.
- E. Conform to panel manufacturer's instructions for attachment systems.
- F. Weather seal all joints as required using methods and materials as recommended by the panel manufacturer.

3.4 CLEANING

- A. Remove temporary coverings and protection to adjacent work areas. Repair or replace damaged installed products. Clean installed products in accordance with manufacturer's instructions prior to Owner's acceptance.
- B. Remove and legally dispose of construction debris from project site.

-- END OF SECTION --