SECTION 102600

WALL AND DOOR PROTECTION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - Corner guards.
 - 2. Wall protection panels. (Addendum-02)

1.3 ACTION SUBMITTALS

- A. Product Data: Include construction details, material descriptions, impact strength, fire-test-response characteristics, dimensions of individual components and profiles, and finishes for each impact-resistant wall protection unit.
- B. Shop Drawings: For each impact-resistant wall protection unit showing locations and extent. Include sections, details, and attachments to other work.
 - 1. For installed products indicated to comply with design loads, include structural analysis data signed and sealed by the qualified professional engineer responsible for their preparation.
- C. Samples for Initial Selection: For each type of impact-resistant wall protection unit indicated.
 - 1. Include similar Samples of accent strips and accessories involving color selection.
- D. Samples for Verification: For each type of exposed finish required, prepared on Samples of size indicated below. Include Samples of accent strips to verify color selected.
 - 1. **Wall and** Corner Guards *(Addendum-02)*: 12 inches long. Include examples of joinery, corners, end caps, top caps, and field splices.

E. LEED Submittals:

- Complete the LEED Material Buyout Form (MBoF) with all materials provided to the project.
 A complete submittal includes providing all material costs in the MBoF and all of the supporting documentation for the following credits:
 - a. MRc2 Environmental Product Declarations (EPD): Provide Industry-Wide or Product-Specific EPD.

- b. MRc3 Sourcing of Raw Materials Recycled Content: Provide product data for pre- and post- consumer recycled content.
- c. MRc4 Material Ingredients, Provide manufacturers Declare label, Health Product Declaration (HPD), Cradle to Cradle Certification, or Cradle to Cradle Health Product Certificate.

1.4 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For qualified Installer.
- B. Material Certificates: For each impact-resistant plastic material, from manufacturer.
- C. Material Test Reports: For each impact-resistant plastic material.
- D. Warranty: Sample of special warranty.

1.5 CLOSEOUT SUBMITTALS

- A. Maintenance Data: For each impact-resistant wall protection unit to include in maintenance manuals.
 - Include recommended methods and frequency of maintenance for maintaining optimum condition of plastic covers under anticipated traffic and use conditions. Include precautions against using cleaning materials and methods that may be detrimental to plastic finishes and performance.

1.6 MATERIALS MAINTENANCE SUBMITTALS

- A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
 - 1. Wall-Guard Covers: Full-size plastic covers of maximum length equal to 2 percent of each type, color, and texture of units installed, but no fewer than two, 8-foot-long units. (Addendum-02)
 - 2.1. Corner-Guard Covers: Full-size plastic covers of maximum length equal to 2 percent of each type, color, and texture of units installed, but no fewer than two, 4-foot- long units.
- B. Include mounting and accessory components. Replacement materials shall be from same production run as installed units.

1.7 QUALITY ASSURANCE

- A. Installer Qualifications: An employer of workers trained and approved by manufacturer.
- B. Source Limitations: Obtain impact-resistant wall protection units from single source from single manufacturer.
- C. Product Options: Drawings indicate size, profiles, and dimensional requirements of impactresistant wall protection units and are based on the specific system indicated. Refer to Section 014000 "Quality Requirements."

- 1. Do not modify intended aesthetic effects, as judged solely by Architect, except with Architect's approval. If modifications are proposed, submit comprehensive explanatory data to Architect for review.
- D. Surface-Burning Characteristics: Provide impact-resistant, plastic wall protection units with surface-burning characteristics as determined by testing identical products per ASTM E 84, NFPA 255, or UL 723 by UL or another qualified testing agency.
- E. Regulatory Requirements: Comply with applicable provisions in the U.S. Architectural & Transportation Barriers Compliance Board's ADA-ABA Accessibility Guidelines and ICC/ANSI A117.1.

1.8 DELIVERY, STORAGE, AND HANDLING

- A. Store impact-resistant wall protection units in original undamaged packages and containers inside well-ventilated area protected from weather, moisture, soiling, extreme temperatures, and humidity.
 - 1. Maintain room temperature within storage area at not less than 70 deg F during the period plastic materials are stored.
 - 2. Keep plastic sheet material out of direct sunlight.
 - 3. Store plastic wall protection components for a minimum of 72 hours, or until plastic material attains a minimum room temperature of 70 deg F.
 - a. Store corner-guard covers in a vertical position.
 - b. Store wall-guard covers in a horizontal position.

1.9 PROJECT CONDITIONS

A. Environmental Limitations: Do not deliver or install impact-resistant wall protection units until building is enclosed and weatherproof, wet work is complete and dry, and HVAC system is operating and maintaining temperature at 70 deg F for not less than 72 hours before beginning installation and for the remainder of the construction period.

1.10 WARRANTY

- A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components of impact-resistant wall protection units that fail in materials or workmanship within specified warranty period.
 - 1. Failures include, but are not limited to, the following:
 - a. Structural failures.
 - b. Deterioration of plastic and other materials beyond normal use.
 - 2. Warranty Period: Five years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 LEED REQUIREMENTS

- A. IW/PS EPD: Products specified under this section shall have either a Type III Product Specific EPD or the company shall be listed in the industry group responsible for the Industry Wide Externally Verified EPD.
- B. Ceilings, Walls, Thermal and Acoustic Insulation: All ceilings, thermal insulation, acoustic insulation, products provided under this specification section shall be compliant with CDPH Standard Method v1.2-2017 emissions testing with proper unexpired CDPH testing certificates or acceptable third party certification.

2.2 MATERIALS

- A. Stainless-Steel Sheet: ASTM A240.
- B. Vinyl: Chemical and stain resistant polyvinyl chloride with impact modifiers.
- C. Adhesive: As recommended by wall protection manufacturer.

2.3 CORNER GUARDS

- A. Surface-Mounted, Stainless Steel Corner Guards:
 - 1. Basis-of-Design: Refer to Finish Schedule on Drawings.
- B. Surface-Mounted Vinyl Corner Guards:
 - 1. Basis-of-Design: Refer to Finish Schedule on Drawings.

2.4 WALL PROTECTION PANELS (Addendum-02)

- A. Stainless Steel.
 - 1. Basis-of-Design: Refer to Finish Schedule on Drawings.
- B. Engineered PETG.
 - 1. Basis-of-Design: Refer to Finish Schedule on Drawings.

2.52.4 FABRICATION

- A. Fabricate impact-resistant wall protection units to comply with requirements indicated for design, dimensions, and member sizes, including thicknesses of components.
- B. Assemble components in factory to greatest extent possible to minimize field assembly. Disassemble only as necessary for shipping and handling.
- C. Fabricate components with tight seams and joints with exposed edges rolled. Provide surfaces free of wrinkles, chips, dents, uneven coloration, and other imperfections. Fabricate members and fittings to produce flush, smooth, and rigid hairline joints.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates and wall areas, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of work.
- B. For impact-resistant wall protection units attached with adhesive, verify compatibility with and suitability of substrates, including compatibility with existing finishes or primers. (Addendum-02)
- C.B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Complete finishing operations, including painting, before installing impact-resistant wall protection system components.
- B. Surface preparation: Prior to installation, clean substrate to remove dirt, debris and loose particles. Perform additional preparation procedures as required by manufacturer's instructions.
- C. Protection: Take all necessary steps to prevent damage to material during installation as required in manufacturer's installation instructions.

3.3 INSTALLATION

- A. General: Install impact-resistant wall protection units level, plumb, and true to line without distortions and in strict accordance with the manufacturer's recommendations using approved adhesive. Do not use materials with chips, cracks, voids, stains, or other defects that might be visible in the finished Work.
 - Adhere corner guards in accordance with manufacturer's recommendations, unless otherwise shown.
 - 2. Temperature at the time of installation must be between 65-75°F and be maintained for at least 48 hours after the installation to allow for proper adhesive set-up.
 - 3. Relative humidity shall not exceed 80%.
 - 4. Do not expose wall covering to direct sunlight during or after installation. This will cause the surface temperature to rise, which in turn will cause bubbles and delamination.
 - 5. Provide splices, mounting hardware, anchors, and other accessories required for a complete installation.
 - a. Provide anchoring devices to withstand imposed loads.
 - b. Where splices occur in horizontal runs of more than 20 feet, splice aluminum retainers and plastic covers at different locations along the run, but no closer than 12 inches. (Addendum-02)
 - e.b. Adjust end and top caps as required to ensure tight seams.

3.4 CLEANING

- A. Immediately after completion of installation, clean plastic covers and accessories using a standard, ammonia-based, household cleaning agent.
- B. Remove excess adhesive using methods and materials recommended in writing by manufacturer.
- C. Protect installed materials to prevent damage by other trades. Use materials that may be easily removed without leaving residue or permanent stains.

END OF SECTION