Technical Data:
- 3” (76.1mm) wall offset
- 1 1/2” (38.1mm) grip
- .078” (1.98mm) thick Acrovyn cover with Acrovyn end caps; maximum 20’ (6.1m) length
- Aluminum retainer; maximum 20’ (6.1m) length
- Stainless steel mounting brackets; powder coat finishes available

Features:
- UL Class A/1 fire rated
- Shadowgrain texture Acrovyn
- Engineered PETG free of PVC and PBTs
- CA 01350 protocol for low VOC
- 5 year product warranty
- Chameleon™ limited lifetime warranty

Options:
- Factory-formed radius (round grip only) and ramp transitions
- 90 degree inside and outside corners
- P-OAN - oval Acrovyn grip - 5 1/2” (139.4mm) height; optional vertical accent reveal; minimum handrail length is 13 3/4” (349.3mm)
- P-RAN - round Acrovyn grip - 5 7/8” (148.9mm) height; minimum handrail length is 13 1/4” (335.6mm)
- P-RANSS - round Acrovyn grip; stainless steel end caps; minimum handrail length is 13 3/4” (349.3mm)
- Stainless steel continuous 90 degree inside and outside corners and 3” (76.2mm) splices available for round handrail models
Part 1 - General

1.01 Summary
A. This section includes the following types of wall protection systems:

1. Handrails

B. Related sections: The following sections contain requirements related to this section:

1. Corner Guards, Bumper Guards, Corner Guards, Crash Rails, Accent Rails, Wall Covering, Wall Panels, Door Protection; refer to section 10 26 00 "Wall and Door Protection"

2. Blocking in walls for fasteners; refer to section 09 22 00 "Supports for Plaster and Gypsum Board"

1.02 References
A. National codes (IBC, UBC, SBCCI, BOCA, OSHA, Life Safety, OSHPD and ADA) maintained.
B. American Society for Testing and Materials (ASTM) Procedures and Specifications
C. Underwriters Laboratories (UL)
D. California 01350 specification

1.03 Submittals
General: Submit the following in accordance with conditions of contract and Division 1 specification section 01 33 00 "Submittal Procedures":
A. Product data and detailed specifications for each system component and installation accessory required, including installation methods for each type of substrate.
B. Shop drawings showing locations, extent and installation details of handrails. Show methods of attachment to adjoining construction.
C. Samples for verification purposes: Submit the following samples, as proposed for this work, for verification of color, texture, pattern, finish and end cap attachment and alignment:
   1. 12” (304.8mm) long sample of each model specified including end cap.
   2. Product test reports from a qualified independent testing laboratory showing compliance of each component with requirements indicated.
D. Maintenance data for wall protection system components for inclusion in the operating and maintenance manuals specified in Division 1.

1.04 Quality Assurance
A. Installer qualifications: Engage an installer who has no less than 3 years experience in installation of systems similar in complexity to those required for this project.
B. Manufacturer’s qualifications: Not less than 5 years experience in the production of specified products and a record of successful in-service performance.
C. Code compliance: Assemblies should conform to all applicable codes including IBC, UBC, SBCCI, BOCA, OSHA, Life Safety, OSHPD, ADA and CA 01350.
D. Fire performance characteristics: Provide engineered PETG wall protection system components with UL label indicating that they are identical to those tested in accordance with ASTM E84 for Class A/1 characteristics listed below:
   1. Flame spread: 25 or less
   2. Smoke developed: 450 or less

2.01 Materials
A. Engineered PETG: Extruded material should be high-impact Acrovyn 4000 with Shadowgrain texture, nominal .078” (1.98mm) thickness. Chemical and stain resistance should be per ASTM D543 standards as established by the manufacturer. Colors to be indicated in the finish schedule from one of manufacturer’s available colors and patterns.
B. Aluminum: Extruded aluminum should be 6063-T6 alloy. Oval handrail retainer to be nominal .075” (1.911mm) thickness. Round handrail retainer and crash rail retainer to be nominal .090” (2.29mm) thickness. Minimum strength and durability properties as specified in ASTM B221.
C. Stainless Steel: Cast brackets to be type 304 alloy with #4 satin finish.

2.02 Handrails
A. Engineered PETG Handrails to be CS Acrovyn: Surface mounted handrail configuration with mounting brackets spaced as indicated on installation instructions. Attachment hardware shall be appropriate for wall construction.

1. Model P-DAN 5 1/2” (139.4mm) high single line oval handrail assembly with matching end caps returning to the wall. Select from one of Acrovyn solid colors or Chameleon™ simulated patterns. Optional vertical accent reveal; select from Acrovyn solid colors. Cantilevered mounting brackets to be stainless steel available with optional powder coat; select from standard powder coat finishes.

G. Color match: Provide PETG wall protection components that are color matched in accordance with the following:

   1. Delta Ecnc of no greater than 1.0 using CIELab color space. (Specifier note: Construction Specialties’ colors are matched under cool white fluorescent lighting and computer controlled within manufacturing tolerances. Color may vary if alternate lighting sources are present.)

H. Single source responsibility: Provide all components of the wall protection system manufactured by the same company to ensure compatibility of color, texture and physical properties.

1.05 Delivery, Storage and Handling
A. Deliver materials to the project site in unopened original factory packaging clearly labeled to show manufacturer.
B. Store materials in original, undamaged packaging in a cool, dry place out of direct sunlight and exposure to the elements. A minimum room temperature of 40°F (4°C) and a maximum of 100°F (38°C) should be maintained.
C. Material must be stored flat.

1.06 Project Conditions
A. Materials must be acclimated in an environment of 65°-75°F (18°-24°C) for at least 24 hours prior to beginning the installation.
B. Installation areas must be enclosed and weatherproofed before installation commences.

2.03 Installation
A. Preparation: Prior to installation, clean substrate to remove dirt, debris and loose particles. Perform additional preparation procedures as required by manufacturer’s instructions.
B. Protection: Take all necessary steps to prevent damage to material during installation as required in manufacturer’s installation instructions.

3.03 Installation
A. Install the work of this section in strict accordance with the manufacturer’s recommendations using only approved mounting hardware and locating all components firmly in position, level and plumb.
B. Temperature at the time of installation must be between 65°-75°F (18°-24°C) and be maintained for at least 48 hours after the installation.
C. Where splices occur in horizontal runs, splice retainer and rail at different locations along the run.

3.04 Cleaning
A. General: Immediately upon completion of installation, clean rails and accessories in accordance with manufacturer’s recommended cleaning method.
B. Remove surplus materials, rubbish and debris resulting from installation as work progresses and upon completion of work.

3.05 Protection
A. Protect installed materials to prevent damage by other trades. Use materials that may be easily removed without leaving residue or permanent stains.

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