

SECTION 10260
WALL PROTECTION SYSTEMS

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division-1 specification section, apply to work of this section.

1.2 Summary

- A. This section includes the following types of wall protection systems:
 - 1. Handrails
 - 2. Bumper Guards/Crash Rails
 - 3. Corner Guards
- B. Related Sections: The following sections contain requirements related to this section:
 - 1. Blocking in walls for fasteners refer to section 06100 "Rough Carpentry" and section 09260 "Gypsum Board Systems"
 - 2. Kick plates and door protection; refer to section 08710 "Finish Hardware"
 - 3. Sheet vinyl wall covering; refer to section 09720 "Wall Coverings"

1.3 REFERENCES

- A. Florida Building Code
- B. American Society for Testing and Materials (ASTM)
- C. Underwriters Laboratories (UL)

1.4 Submittals

- A. General: Submit the following in accordance with conditions of contract and Division 1 specification section 01300.
- B. Product data and detailed specifications for each system component and installation accessory required, including installation methods for each type of substrate.
- C. Shop drawings showing locations, extent and installation details of handrails, bumper guards, corner guards and other protection systems.
 - 1. Show methods of attachment to adjoining construction.
- D. Samples for verification purposes: Submit the following samples, as proposed for this work, for verification of color, texture, pattern and end cap attachment/alignment:
 - 1. One, 12" long sample of each model specified including end cap and mounting hardware.
- E. Product test reports from a qualified independent testing laboratory showing compliance of each component with requirements indicated.
- F. Maintenance data for wall protection system components for inclusion in the operating and maintenance manuals specified in Division 1.

1.5 Quality Assurance

- A. Installer qualifications: Engage an installer who has not less than three years experience in installation of systems similar in complexity to those required for this project.
- B. Manufacturer's qualifications: not less than five years experience in the production of specified products and a record of successful in-service performance.
- C. Code compliance: Assemblies shall conform to all applicable and referenced codes.

- D. Fire performance characteristics: Provide wall protection system components with a UL label indicating that they are identical to those tested in accordance with ASTM- E84-91A for Class 1 characteristics listed below:
 - 1. Flame spread 25 or less
 - 2. Smoke developed: 450 or less
- E. Impact Strength: Provide assembled wall protection units that have been tested in accordance with the applicable provisions of ASTM F476 76 and FBC 1608.
- F. Color match: Unless otherwise indicated, provide wall protection components that are color matched in accordance with the following:
 - 1. Delta E difference of no greater than 1.0 using the Hunter (Lab) Scale.
- G. 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.

1.6 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. Maintain a min. room temperature of 40° F. and max. of 100° F.

1.7 Project Conditions

- A. Environmental requirements: Installation areas must be enclosed and weatherproof before installation commences. Maintain ambient temperature above 65° F. during, and for 24 hours after installation.

PART 2 PRODUCTS

2.1 Manufacturers

- A. Drawings and specifications are based on manufacturer's Acrovyn literature from Construction Specialties Inc. unless otherwise indicated.
- B. Other manufacturers products that comply with the minimum levels of material and detailing indicated on the drawings and specified herein, shall be acceptable.

2.2 Materials

- A. Vinyl/Acrylic: Extruded material should be high impact with pebblette grain texture with thickness as indicated. Chemical and stain resistance should be per ASTM D-1308 standards as established by the manufacturer. Colors to be as indicated in the finish schedule from one of manufacturer's standard color range.
- B. Aluminum: Extruded aluminum retainers should be 6063-T6 alloy of thickness indicated. Minimum strength and durability properties as specified in ASTM B221.
- C. Fasteners: All fasteners to be non-corrosive and compatible with aluminum retainers. All necessary fasteners to be supplied by the manufacturer.

2.3 Handrails

- A. Vinyl/Acrylic handrails. Surface-mounted assembly consisting of a continuous extruded aluminum retainer with snap-on cover. Include integral shock absorbing cushions where indicated. Handgrip size and wall standoff to be in compliance with accessibility requirements. Color matched mounting brackets to be spaced as indicated on installation instructions. Color matched end caps and corners shall be attached to allow full post-installation adjustment. Attachment hardware shall be appropriate for wall construction.

2.4 Bumper Guards/Crash Rails

- A. Bumper guards and crash rails: Surface-mounted assembly consisting of continuous extruded aluminum retainer with snap-on cover. Include integral shock absorbing cushions where indicated. Mounting cushions and extension brackets to be spaced as indicated on installation instructions. Color matched end caps to be removable for ease of replacement. Attachment hardware shall be appropriate for wall construction.

2.5 Accent Rails/Retail Bumpers

- A. Accent rails: Surface-mounted assembly consisting of a continuous retainer with snap-on cover. Retainer shall be permanently affixed to wall at 16" o.c. Color matched end caps shall be mechanically fastened with concealed fasteners.
- B. Bumper guards: Surface-mounted assembly consisting of continuous co-extruded rigid vinyl retainer, flexible hinge. All profiles offer the integral shock-absorbing feature to protect wall substrates or fixture equipment. Color matched end caps to be removable for ease of replacement. Attachment hardware shall be compatible for wall construction.

2.6 Corner Guards

- A. Surface-mounted corner guards. Surface-mounted guards consisting of continuous aluminum retainer (optional PVC where indicated) with snap-on cover. Color matched end caps to be provided for both partial and full height applications. Attachment hardware shall be appropriate for wall construction.
- B. Flush-mounted corner guards: Flush-mounted guards consisting of continuous aluminum retainer with snap-on cover. Retainer to be taped and spackled into adjacent drywall. Terminator caps provided for partial height and soffit applications to be taped and spackled into adjacent drywall. Install retainer from floor to 2" above finished ceiling. Extruded aluminum base and closure gasket where indicated. Attachment hardware shall be appropriate for wall construction.

2.7 Accessories

- A. Fasteners: Size-mounting hardware for required load and substrate conditions.

2.8 Fabrication

- A. General: Fabricate wall protection systems to comply with requirements indicated for design, dimensions, detail, finish and member sizes.
- B. Preassemble components in the shop to the greatest extent possible to minimize field assembly.
- C. Fabricate components with tight seams and joints with exposed edges rolled. Provide surfaces free of chipping, dents and other imperfections.

2.9 Finishes

- A. General: Comply with NAAMM "Metal Finishes Manual" for recommendations relative to applications and designations of finishes.
- B. Aluminum mill finish: AA-MIO
- C. Wood Finish: AWI 60-degree gloss per ASTM D523

PART 3 EXECUTION

3.1 Examination

- A. Verification of conditions: Examine areas and conditions under which work is to be performed and identify conditions detrimental to proper or timely completion. Do not proceed until unsatisfactory conditions have been corrected.

3.2 Preparation

- A. Surface 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.

3.3 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 into position, level and plumb.
- B. Adjust installed end caps as necessary to ensure tight seams.
- C. Where splices occur in horizontal runs of over 20 feet, splice aluminum retainer and vinyl cover at different locations along the run.

3.4 Cleaning

- A. General: Immediately upon completion of installation, clean vinyl covers 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.

3.5 Protection

- A. 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