

**SECTION 10 26 00
DOOR AND WALL PROTECTION**

PART 1 GENERAL

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 06 10 00 "Rough Carpentry" and section 09 29 00 "Gypsum Board System"
 - 2. Kick plates and door protection; refer to section 08 71 00 "Door Hardware"

1.3 REFERENCES

- A. ASTM B221 – Standard Specification for Aluminum and Aluminum Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes
- B. ASTM D523 – Standard Test Method for Specular Gloss
- C. ASTM D1308 – Standard Test Method for Effect of Household Chemicals on Clear Pigmented Organic Finishes
- D. FBC - Florida Building Code
- E. Underwriters Laboratories (UL)

1.4 SUBMITTALS

- A. General: Submit the following in accordance with conditions of contract and Division 1 specification section 01 33 00.
- B. Product data and detailed specifications for each system component and installation accessory required, including installation methods for each type of substrate.
- C. Provide 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. 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 3-years of experience in installation of systems similar in complexity to those required for this project.
- B. Manufacturer's qualifications: Shall be not less than 5-years of 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.

The School District of Palm Beach County

Project Name

SDPBC Project No.

- 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 for Class 1 characteristics listed below:
 - 1. Flame spread index of 25 or less
 - 2. Smoke developed index of 450 or less
 - E. Impact Strength: Provide assembled wall protection units tested in accordance with the applicable provisions of FBC 1608.
 - F. Color match, unless otherwise indicated, wall protection components.
 - 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 the materials in original, undamaged packaging in a cool, dry place out of direct sunlight and exposure to the elements.
 - 1. Maintain a minimum 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.
 - B. Maintain ambient temperature above 65° F during, and for 24 hours after installation.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Provide Acrovyn from Construction Specialties Inc. unless otherwise indicated.
- B. Other manufacturer's products complying with the minimum levels of material and detailing indicated on the drawings and specified herein shall be acceptable.

2.2 MATERIALS

- A. Vinyl/Acrylic:
 - 1. Extruded material shall be high impact with pebblette grain texture and thickness as indicated on plans.
 - 2. Chemical and stain resistance shall be per ASTM D1308 standards.
 - 3. Colors are as indicated in the finish schedule from manufacturer's standard color range.
- B. Extruded aluminum retainers should be 6063-T6 alloy of thickness indicated, with a minimum strength and durability properties as specified in ASTM B221.
- C. Fasteners:
 - 1. Provide non-corrosive fasteners compatible with aluminum retainers.
 - 2. Manufacturer shall supply all necessary fasteners.

2.3 HANDRAILS

- A. Vinyl/Acrylic handrails:
 - 1. Use a surface-mounted assembly consisting of a continuous extruded aluminum retainer with snap-on cover.
 - 2. Include integral shock absorbing cushions where indicated.
 - 3. Provide handgrip size and wall standoff in compliance with accessibility codes.
 - 4. Color matched mounting brackets to be spaced as indicated on installation instructions.
 - 5. Attach color matched end caps and corners to allow full post-installation adjustment.
 - 6. Attachment hardware shall be appropriate for wall construction.

2.4 BUMPER GUARDS/CRASH RAILS

A. Bumper guards and crash rails:

1. Provide surface-mounted assembly consisting of continuous extruded aluminum retainer with snap-on cover.
2. Include integral shock absorbing cushions where indicated.
3. Space mounting cushions and extension brackets as indicated on installation instructions.
4. Color matched end caps to be removable for ease of replacement, the attachment hardware shall be appropriate for wall construction.

2.5 ACCENT RAILS/RETAIL BUMPERS

A. Accent rails:

1. Provide surface-mounted assembly consisting of a continuous retainer with snap-on cover.
2. Permanently affix retainer to wall at 16" o.c.
3. Mechanically fasten color matched end caps with concealed fasteners.

B. Bumper guards:

1. Provide surface-mounted assembly consisting of continuous co-extruded rigid vinyl retainer, flexible hinge.
2. All profiles offer the integral shock-absorbing feature to protect wall substrates or fixture equipment.
3. Color matched end caps to be removable for ease of replacement.
4. Attachment hardware shall be compatible for wall construction.

2.6 CORNER GUARDS

A. Surface-mounted corner guards.

1. Surface-mounted guards consisting of continuous aluminum retainer (optional PVC where indicated) with snap-on cover.
2. Provide color matched end caps for both partial and full height applications.
3. Attachment hardware shall be appropriate for wall construction.

B. Flush-mounted corner guards:

1. Flush-mounted guards consisting of continuous aluminum retainer with snap-on cover.
2. Installer shall tape and spackle the retainer into the adjacent drywall.
3. 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.
4. Extruded aluminum base and closure gasket where indicated.
5. Attachment hardware shall be appropriate for wall construction.

2.7 ACCESSORIES

- ##### A. Size all mounting hardware for required load and substrate conditions.

2.8 FABRICATION

- ##### A. 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.
1. Provide surfaces free of chipping, dents, and other imperfections.

The School District of Palm Beach County

Project Name

SDPBC Project No.

2.9 FINISHES

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

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verification of conditions:
 - 1. Examine areas and conditions of work area and identify conditions detrimental to proper or timely completion.
 - 2. Do not proceed with work until unsatisfactory conditions are corrected.

3.2 PREPARATION

- A. Prepare surface prior to installation, clean substrate to remove dirt, debris, and loose particles, and perform additional preparation procedures as required by manufacturer's instructions.
- B. 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, provide splice aluminum retainer and vinyl cover at different locations along the run.

3.4 CLEANING

- A. 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.
- B. Use easily removable materials that do not leaving residue or permanent stains.

END OF SECTION