

**SECTION 10 26 13
WALL AND CORNER GUARDS**

PART 1 GENERAL**1.1 REFERENCES**

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

ALUMINUM ASSOCIATION (AA)

AA DAF-45 (2003) Designation System for Aluminum Finishes

ASTM INTERNATIONAL (ASTM)

ASTM B 221 (2005) Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes

ASTM D 256 (2004) Determining the Izod Pendulum Impact Resistance of Plastics

ASTM D 543 (1995; R 2001) Evaluating the Resistance of Plastics to Chemical Reagents

ASTM D 635 (2003) Rate of Burning and/or Extent and Time of Burning of Plastics in a Horizontal Position

ASTM E 84 (2005) Surface Burning Characteristics of Building Materials

ASTM G 21 (1996; R 2002) Determining Resistance of Synthetic Polymeric Materials to Fungi

ASTM G 22 (1976; R 1996) Determining Resistance of Plastics to Bacteria

SOCIETY OF AUTOMOTIVE ENGINEERS INTERNATIONAL (SAE)

SAE J1545 (1986) Instrumental Color Difference Measurement for Exterior Finishes, Textiles and Colored Trim

1.2 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for Contractor Quality Control approval. The following shall be submitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-02 Shop Drawings

Corner Guards; G

Wall Guards (Bumper Guards); G

Handrails; G

Drawings indicating locations and typical elevations of each type of item. Drawings shall show vertical and horizontal dimensions, full size sections, thickness of materials, and fastening details.
SD-03 Product Data

Corner Guards; G

Wall Guards (Bumper Guards); G

Handrails; G

Manufacturer's descriptive data, catalog cuts, installation instructions, and recommended cleaning instructions.
SD-04 Samples

Finish; G

Submit three samples indicating color and texture of materials requiring color and finish.

SD-06 Test Reports

Corner Guards

Wall Guards (Bumper Guards)

Handrails; G

Fire rating and extinguishing test results for resilient material.
SD-07 Certificates

Corner Guards

Wall Guards (Bumper Guards)

Handrails; G

Statements attesting that the items comply with specified fire and safety code requirements.

1.3 DELIVERY AND STORAGE

Materials shall be delivered to the project site in manufacturer's original unopened containers with seals unbroken and labels and trademarks intact. Materials shall be kept dry, protected from weather and damage, and stored under cover. Materials shall be stored at approximately 70 degrees F for at least 48 hours prior to installation.

1.4 WARRANTY

Manufacturer's standard performance guarantees or warranties that extend beyond a 1 year period shall be provided.

PART 2 PRODUCTS**2.1 GENERAL**

To the maximum extent possible, corner guards, door and , wall guards (bumper guards), and handrails shall be the standard products of a single manufacturer and shall be furnished as detailed. Drawings show general configuration of products required, and items differing in minor details from those shown will be acceptable.

2.1.1 Resilient Material

Resilient material shall consist of high impact resistant extruded acrylic vinyl, polyvinyl chloride, or injection molded thermal plastic and shall conform to the following:

2.1.1.1 Minimum Impact Resistance

Minimum impact resistance shall be 18 ft-lbs/sq. inch when tested in accordance with ASTM D 256, (Izod impact, ft-lbs per sq inch notched).

2.1.1.2 Fire Rating

Fire rating shall be Class 1 when tested in accordance with ASTM E 84, having a maximum flame spread of 25 and a smoke developed rating of 450 or less. Material shall be rated self extinguishing when tested in accordance with ASTM D 635. Material shall be labeled and tested by an approved nationally known testing laboratory. Resilient material used for protection on fire rated doors and frames shall be listed by the testing laboratory performing the tests. Resilient material installed on fire rated wood/steel door and frame assemblies shall have been tested on similar type assemblies. Test results of material tested on any other combination of door/frame assembly will not be acceptable.

2.1.1.3 Integral Color

Colored components shall have integral color and shall be matched in accordance with SAE J1545 to within plus or minus 1.0 on the CIE-LCH scales.

2.1.1.4 Chemical and Stain Resistance

Materials shall be resistant to chemicals and stains reagents in accordance with ASTM D 543.

2.1.1.5 Fungal and Bacterial Resistance

Materials shall be resistant to fungi and bacteria in accordance with ASTM G 21 or ASTM G 22, as applicable.

2.2 CORNER GUARDS**2.2.1 Resilient Corner Guards (CG)**

Corner guard units shall be surface mounted type, radius formed to profile shown. Corner guards shall extend from the top of the wall base to ceiling unless noted otherwise on the drawings. Mounting hardware, cushions, and base plates shall be furnished. Assembly shall consist of a snap-on corner guard formed from high impact resistant resilient material, minimum 0.078 inch thick, mounted on a continuous aluminum retainer. Extruded aluminum retainer shall conform to ASTM B 221, alloy 6063, temper T5 or T6. Flush

mounted type guards shall act as a stop for adjacent wall finish material. Factory fabricated end closure caps shall be furnished for top and bottom of surface mounted corner guards. Insulating materials that are an integral part of the corner guard system shall be provided by the manufacturer of the corner guard system. Exposed metal portions of fire rated assemblies shall have a paintable surface.

2.3 WALL GUARDS (BUMPER GUARDS)(BG) and HANDRAILS(HR)

2.3.1 Wall Guards, Combination Handrail/Wall Guards and Handrails

Wall guards, combination handrail/wall guards, and handrails shall be provided with prefabricated end closure caps, inside and outside corners, concealed splices, cushions, mounting hardware and other accessories standard with the manufacturer. Extruded aluminum retainers shall conform to ASTM B 221, alloy 6063, temper T5 or T6. End caps and corners shall be field adjustable to assure close alignment with handrails and wall guards. Wall guards and combination handrail/wall guards shall have profile as shown on the drawings.

2.3.1.1 Handrails

Handrails shall consist of snap-on covers of high impact resistant resilient material, minimum 0.078 inch thick on a continuous extruded aluminum retainer, minimum 0.072 inch thick anchored to wall at maximum 32 inches on center. Handrails shall be provided with prefabricated end closure caps, inside and outside corners, concealed splices, cushions, mounting hardware and other accessories standard with the manufacturer. End caps and corners shall be field adjustable to assure close alignment with handrails. Where indicated on the drawings, provide solid wood grip rail manufactured from plain sawn, FAS grade hardwood, kiln dried to moisture content of 6%-10%. Factory finish to meet AWI standards.

2.4 TRIM, FASTENERS AND ANCHORS

Vinyl trim, fasteners and anchors shall be provided for each specific installation as shown.

2.5 FINISH

2.5.1 Aluminum Finish

Finish for aluminum shall be in accordance with AA DAF-45. Exposed aluminum shall be designation AA-C22A31 chemically etched medium matte, with clear anodic coating AA-C22A32 chemically etched medium matte with integrally colored anodic coating class II architectural coating 0.4 mil thick. Concealed aluminum shall be mill finish as fabricated, uniform in natural color and free from surface blemishes.

2.5.2 Resilient Material Finish

Finish for resilient material shall be embossed stipple texture with colors in accordance with SAE J1545.

2.6 ADHESIVES

Adhesive for resilient material shall be in accordance with manufacturers

recommendations.

2.7 COLOR

Color shall be as indicated on the drawings. Color listed is not intended to limit the selection of equal colors from other manufacturers.

PART 3 EXECUTION

3.1 INSTALLATION

3.1.1 Corner Guards and Wall Guards (Bumper Guards) and Handrails
Material shall be mounted at location indicated in accordance with manufacturer's recommendations.

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