

SECTION 10262

WALL GUARDS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Aluminum and vinyl wall guard system.
- B. Mounting hardware, accessories, and trim.

1.2 RELATED SECTIONS

- A. Section 10261 - Handrails: Handrails used in conjunction with wall guards.
- B. Section 10263 - Corner Guards.
- C. Section 10264 - Wall Covering.
- D. Section 09210 - Gypsum Plaster.
- E. Section 09260 - Gypsum Board Systems,

1.3 REFERENCES

- A. ANSI/CABO A117.1 - American National Standard for Buildings and Facilities - Providing Accessible and usable Buildings and Facilities.
- B. ASTM B 221 - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Shapes, and Tubes.
- C. ASTM D 256 - Standard Test Methods for Determining the Pendulum Impact Resistance of Notched Specimens of Plastics.
- D. ASTM D 543 - Standard Test Methods for Resistance of Plastics to Chemical Reagents.
- E. ASTM D 635 - Standard Test Method for Rate of Burning and/or Extent and Time of Burning of Self-Supporting Plastics in a Horizontal Position.
- F. ASTM D 638 - Standard Test Method for Tensile Properties of Plastics.

- G. ASTM D 648 - Standard Test Method for Deflection Temperature of Plastics Under Flexural Load.
- H. ASTM D 785 - Standard Test Method for Rockwell Hardness of Plastics and Electrical Insulating Materials.
- I. ASTM D 790 - Standard Test Methods for Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials.
- J. ASTM D 792 - Standard Test Methods for Density and Specific Gravity (Relative Density) of Plastics by Displacement.
- K. ASTM D 1784 - Standard Specification for Rigid Poly(Vinyl Chloride) (PVC) Compounds and Chlorinated Poly(Vinyl Chloride) (CPVC) Compounds.
- L. ASTM D 1822 - Standard Test Method for Tensile-Impact Energy to Break Plastics and Electrical Insulating Materials.
- M. ASTM D 2240 - Standard Test Method for Rubber Property-- Durometer Hardness.
- N. ASTM E 84 - Standard Test Method for Surface Burning Characteristics of Building Materials.
- O. CAN/ULC S102.2 - Standard Method of Test for Surface Burning Characteristics of Building Materials.
- P. SAE J-1545 - Recommended Practice; Society of Automotive Engineers.
- Q. UL 94 - Tests for Flammability of Plastic Materials for Parts in Devices and Appliances.

1.4 SUBMITTALS

- A. Submit under provisions of Section 01300.
- B. Product Data: Manufacturer's complete and current product data for each product required, including complete installation requirements.

- C. Shop Drawings: Show locations of each item and installation details. Provide elevations of non-standard conditions.
- D. Selection Samples: Color charts consisting of actual product pieces, demonstrating full range of available colors, for initial color selection.
- E. Verification Samples: 12 inch long assemblies, including one end cap, in color specified.

1.5 QUALITY ASSURANCE

- A. Provide test reports showing compliance with the performance specified for:
 - 1. Fire-related properties.
 - 2. Accessibility and safety properties.
 - 3. Impact strength.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Provide Pro-Tek Wall Guards as manufactured by Pawling Corporation, Standard Products Division; Borden Lane, P.O. Box 200; Wassaic NY 12592; ASD. Tel. (800) 431-3456 (U.S. and Canada) or (914) 373-9300, Fax. (800) 451-2200 (U.S. and Canada) or (914) 373-8712, E-mail address sales@pawling.com
- B. Substitutions: Not permitted.

2.2 MATERIALS

- A. Vinyl: Provide wall guard covers extruded or molded of fire retardant, high impact polyvinyl chloride (PVC) with tributyl tin stabilizer as an antimicrobial agent, and an embossed matte finish.
 - 1. Minimum thickness: 0.080 inch.
 - 2. Vinyl Properties:
 - a. Vinyl cell classification in accordance with ASTM D 1784: 16354.
 - b. Specific gravity, tested in accordance with ASTM D 792: 1.33, minimum.
 - c. Tensile strength at yield, tested in accordance with ASTM D 638: 6500 psi, minimum.

- d. Modulus of elasticity, tested in accordance with ASTM D 638: 400,000 psi.
 - e. Tensile impact energy, tested in accordance with ASTM D 1822: 75 ft lb/sq inch.
 - f. Flexural strength, tested in accordance with ASTM D 790: 12,500 psi.
 - g. Modulus of rupture, tested in accordance with ASTM D 790: 400,000 psi.
 - h. Izod impact strength, tested in accordance with ASTM D 256: 23.0 ft lb/inch of notch, minimum, 1/8 inch notch.
 - i. Izod impact strength, tested in accordance with ASTM D 256: 15.0 ft lb/inch of notch, minimum, 1/4 inch notch.
 - j. Hardness, Shore D, tested in accordance with ASTM D 2240: 79, minimum.
 - k. Hardness, Rockwell, tested in accordance with ASTM D 785: 108, minimum.
 - l. Deflection temperature at 264 psi, tested in accordance with ASTM D 648: 162 degrees F (72 degrees C).
 - m. Flammability, tested in accordance with ASTM D 635: Self-extinguishing.
 - n. Flammability, tested in accordance with UL 94: V-O.
3. Extruded Vinyl Component Properties:
- a. Surface burning characteristics, tested in accordance with ASTM E 84: Flame spread 5, smoke developed 180; maximum.
 - b. Surface burning characteristics, tested in accordance with CAN/ULC S102.2: Flame spread 10, smoke developed 250-330; maximum.
 - c. Izod impact strength, tested in accordance with ASTM D 256: 25.3 ft lb/inch of notch, average.
 - d. Charpy impact strength, tested in accordance with ASTM D 256: 26 ft lb/inch of notch, average.
 - e. Chemical and stain resistance, tested in accordance with ASTM D 543, 7 day immersion in standard reagents: Results available upon request.
 - f. Color match when tested in accordance with SAE J-1545: Accurate to within 1.0 or less Delta E by CIE LAB 10 degree standard observer color difference and equation.
 - g. Combustion toxicity: Registered in accordance with New York State Uniform Fire Prevention and Building Code.

- B. Aluminum for Wall Guard Retainers: Alloy 6063-T5, in accordance with ASTM B 221 or FS QQ-A-200; anodized finish complying with AAMA 611, Class II minimum.

2.3 WALL GUARDS

- A. Wall Guards - Performance Requirements: Pull out and live load capacity complying with State of California requirements, as administered by the Office of Statewide Health Planning and Development (OSHPD), and ANSI A117.1 requirements.
- B. WG-415: High impact 4 inch high wall guard with strong sculptured appearance and high gloss finish of rigid 0.100 inch thick vinyl cover, internal shock absorbing rubber bumper, and continuous 0.080 inch aluminum rail.
- C. EBR-30: High impact 2 inch high wall guard similar to a half-round but with a slightly lower profile of rigid 0.100 inch thick high gloss finish vinyl cover, and continuous 0.063 inch aluminum rail.
- D. EB-40: 2 inch high sculptured wainscot/wall guard used as an accent stripe or equipment bumper as well as a chair rail. Rigid 0.100 inch thick high gloss vinyl cover shall combine angular shape with soft fluting over a continuous 0.063 inch aluminum rail.
- E. WG-9: 9 inch high wall guard of rigid 0.100 inch thick vinyl cover with built-in paint brush guide at top, and continuous 0.100 inch aluminum rail.
 - 1. Attach BR-1200 handrails at 7/16 inch x 2-1/4 inch channel, forming BR-900 Uni-Rail system.
- F. WG-22: 2 inch diameter half-round shaped wall guard of smooth finish rigid 0.100 inch thick vinyl cover, and continuous 0.080 inch aluminum rail, installed as indicated on drawings in single or multiple horizontal rows as an accent stripe or equipment bumper.
- G. EBRU-1: 1 inch high wall guard of smooth finish rigid 0.100 inch thick vinyl cover, and continuous 0.100 inch aluminum rail, installed as indicated on drawings in single or multiple horizontal rows as an accent stripe or equipment bumper.

- H. EB-25: 1-1/8 inch diameter half-round shape wall guard of smooth finish rigid 0.100 inch thick vinyl cover, and continuous 0.063 inch aluminum rail, installed as indicated on drawings in single or multiple horizontal rows as an accent stripe or equipment bumper.
- I. CR-3: 3 inch high clear "Lexan" wall guard 0.100 inch thick allowing wall textures and colors to show through installation; include fasteners.
- J. CR-4: 4 inch high clear "Lexan" wall guard 0.100 inch thick allowing wall textures and colors to show through installation; include fasteners.
- K. CR-8: ___ inch high chair rub rail cut from 0.060 inch thick vinyl sheet, of same texture as vinyl wall covering available from Pawling Corporation specified in Section 10264.
- L. WG-3: 3 inch high wall guard with gentle radius at the top and bottom which eliminates sharp edge and shelf for litter, dust; eliminates potential as a foot rest when installed above cove base; rigid 0.100 inch thick vinyl cover, and continuous 0.063 inch aluminum rail.
 - 1. WG-3EXT: Include rubber spacers at maximum 16 inches on center to extend the wall guard out a distance of 1/4 inch from the wall surface.
 - 2. Provide cover with shallow parallel grooves.
- M. WG-4: 4 inch high wall guard with gentle radius at top which eliminates sharp edge and shelf for litter, dust; eliminates potential as a foot rest when installed above cove base; squared-off base at bottom for wainscot style appearance. Rigid 0.080 inch thick vinyl cover, and continuous 0.080 inch aluminum rail.
 - 1. WG-4EXT: Include rubber spacers at maximum 16 inches on center to extend the wall guard out a distance of 1/4 inch from the wall surface.
 - 2. Provide cover with shallow parallel grooves.
- N. WG-6: 6 inch high wall guard with gentle radius at top and bottom which eliminates sharp edge and shelf for litter, dust; eliminates potential as a foot rest when installed above cove base, of rigid 0.100 inch thick vinyl cover, and continuous 0.080 inch aluminum rail. Width shall be approximately the same as handrail styles BR-1100, BR-500 and BR-800, allowing for similar width color line when installed together.

1. WG-6EXT: Include rubber spacers at maximum 16 inches on center to extend the wall guard out a distance of 1/4 inch from the wall surface.
 2. Provide cover with shallow parallel grooves.
- O. WG-8: 7-3/4 inch high cart and equipment bumper with gentle radius at the top and bottom which eliminates sharp edge and shelf for litter, dust; eliminates potential as a foot rest when installed above cove base, of rigid 0.110 inch thick vinyl cover, and continuous 0.063 inch aluminum rail.
1. WG-8EXT: Include rubber spacers at maximum 16 inches on center to extend the wall guard out a distance of 1/4 inch from the wall surface.
 2. Provide cover with shallow parallel grooves.
- P. WG-35: 3-1/2 inch high sculptured wall guard with gentle radius at the top and bottom which eliminates sharp edge and shelf for litter, dust; eliminates potential as a foot rest when installed above cove base, of rigid 0.085 inch thick vinyl cover, and continuous 0.063 inch aluminum rail with 1-3/4 inch deep projection out from wall as extra protection from impact damage.
1. WG-35EXT: Include rubber spacers at maximum 16 inches on center to extend the wall guard out a distance of 1/4 inch from the wall surface.
- Q. BB-4: 4 inch high interior base board system of rigid 0.080 inch thick vinyl cover, and continuous 0.063 inch aluminum rail.
- R. WR-50: Wall reveal with color vinyl insert and continuous anodized aluminum channel with gypsum board stop for vertical or horizontal installation.

2.4 FINISHES

- A. Colors: Provide wall guards in colors and textures as follows:
1. As selected from manufacturer's standard palette of colors and textures.
 2. As scheduled on the drawings.
 3. Color _____, textured.
 4. Color _____, smooth.

2.5 ACCESSORIES

- A. Provide appropriate returns, corners, and mounting brackets as required to properly finish wall guard system and to support it securely.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify that wall surfaces are properly prepared and finished to receive installation of wall guards.

3.2 INSTALLATION

- A. Install wall guards in full compliance with manufacturer's installation instructions.
- B. Mount wall guards at heights indicated on drawings. If not otherwise indicated, mount so top surface is at 32 inches above floor.
- C. Measure and cut aluminum allowing appropriate space for accessories. Attach retainer to wall with appropriate fasteners. Attach end caps and outside corners through mounting tabs, on through aluminum retainer, and into vertical steel stud or solid substrate. Snap on vinyl cover.

3.3 ADJUSTING AND CLEANING

- A. Verify that wall guards are level and are rigidly secured to substrate; make any adjustments required.
- B. Clean areas of installation and wall guard components, using materials and methods recommended by manufacturer. Remove from project site packaging and debris caused by installation.

END OF SECTION