

**Part 1 – General****1.01 – SUMMARY**

- A. Handrail system for wall protection and decoration.

**1.02 – SECTION INCLUDES**

- A. wX8 Series, 6-1/4" Vinyl Handrail System
- B. The following sections contain product info related to this section:
  1. Corner Guards, Wall Guards, Wall Covering, Door Protection, Rub Rail, refer to section 10 26 00 "Wall and Door Protection"

**1.03 – REFERENCES**

- A. American Society for Testing and Materials (ASTM)
- B. National codes (IBC, UBC, SBCCI, BOCA and Life Safety)
- C. Society of Automotive Engineers (SAE)
- D. National Fire Protection Association (NFPA)

**1.04 – SUBMITTALS**

- A. Product Data: Manufacturer's printed product data for each type of handrail specified.
- B. Shop Drawings: Mounting details with the appropriate fasteners for specific substrates.
- C. Samples: Verification samples of the handrail, 8" (203mm) long, in full size profiles for each product indicated.
- D. Manufacturer's Installation Instruction: Printed installation instructions for each handrail.
- E. Maintenance Data: Wall protection maintenance data for inclusion in the Division 1 operating and maintenance manuals.

**1.05 – QUALITY ASSURANCE**

- A. Appoint an installer with 3 or more years of experience in installation projects of similar complexity.
- B. Manufacturer has 5 or more years of experience in the production of specified product and reliable product performance.
- C. Assemblies should follow all applicable codes including IBC, UBC, SBCCI, BOCA, and Life Safety.
- D. *Fire Performance Characteristics*: Provide materials with a Class A (NFPA 101 Life Safety) when tested in accordance with ASTM E84.
  1. Flame Spread: 25 or less
  2. Smoke Developed: 450 or less
 Classification of HB, tested in accordance with ASTM D-635.
- E. *Impact Strength*: Provide rigid vinyl profile materials that have an Izod impact strength ASTM D-256 method A notched, 23.8 ft-lbs/in average with no break. Charpy impact strength ASTM D-6110 notched, 26.1 ft-lbs/in average with no break.
- F. *Chemical and Stain Resistance*: Provide handrails that show resistance to stain when tested in accordance with applicable provisions of ASTM D-543.
- G. *Fungal and Bacterial Resistance*: Provide rigid vinyl that does not support fungal or bacterial growth as tested in accordance with ASTM G-21 and ASTM G-22.
- H. *Color Consistency*: Provide components matched in accordance with SAE J-1545—(Delta E) with a color difference no greater than 3.0 units using CIE Lab, CIE CMC, CIE Lch, Hunter Lab or similar color space scale systems.
- I. Cold, heat and chemical resistance: Provide wood handrail with a finish that complies with the applicable provisions of

ANSI/KCMA A161.1-1900 for cold check, heat and chemical resistance.

- J. Environmental compliance: Provide wood handrail with a finish that does not off gas or emit any VOC, after a full cure, as tested in accordance to the EPA, NESHAP, Method 24, 40CFR, Volume 60, Appendix A.

**1.06 – DELIVERY, STORAGE, AND HANDLING**

- A. Deliver materials in unopened factory packaging to the jobsite.
- B. Inspect materials at time of delivery to assure that specified products have been received.
- C. Store in original packaging in a climate controlled location away from direct sunlight and from exposure to the elements. Maintain a minimum room temperature of 40°F and a maximum of 100°F.
- D. Store material flat and do not stack.

**1.07 – PROJECT CONDITIONS**

- A. Environmental Requirements: Products must be acclimated to a temperature of 65°F to 75° F for at least 24 hours before beginning installation.
- B. Install products in an enclosed and weatherproofed area of the same temperature.

**1.08 – WARRANTY**

- A. Standard Wallprotex limited lifetime warranty against material and manufacturing defects.

**Part 2 – Products****2.01 – MANUFACTURER**

- A. Acceptable Manufacturer: Wallprotex, 3750 Ohio Ave., St. Charles, IL 60174, Phone: 877-880-8115, www.wallprotex.com
- B. Substitutions: Not permitted.
- C. Provide all handrails and wall protection from a single source.
- D. All products are to be manufactured in the USA.

**2.02 – MANUFACTURED UNITS**

- A. Handrail Profile
  1. wX8 Series 6-1/4" (159mm) height, 1-1/2" (38mm) wood hand grip, 3/4" (19mm) colored accent strip, 4" (102mm) vinyl cover, two interior vinyl impact absorbers, extending 3" (76mm) from the wall with aluminum retainer.
  2. Standard Length: 12'.

**2.03 – MATERIALS**

- A. Vinyl: Snap on covers and accent of .080" (2mm) thickness shall be extruded from chemical and stain resistant polyvinyl chloride. No plasticizers shall be added.
- B. Snap on impact bumpers of .080" (2.0mm) thickness shall be extruded from 100% recycled material.
- C. Aluminum: Continuous aluminum retainer of .080" (2mm) thickness shall be fabricated from 6063-T5 aluminum with a mill finish.
- D. Smooth wood 1-1/2" (38mm) hand grip, made of Poplar, Maple, or Red Oak species wood.

**2.04 – ACCESSORIES**

- A. End caps, outside corners, standoffs, and brackets shall be made of molded thermoplastics.
- B. Fasteners may be provided for standard drywall and steel stud wall installations. Manufacturer will provide appropriate fasteners if required.



**2.05 - FABRICATION**

- A. Fabricate handrail systems according to design, dimensions, detail, and finish per plans and specifications.

**2.06 - FINISHES**

- A. Vinyl Covers: Colors of the handrail to be selected by the architect from the Wallprotex color selection. Surface must have a haircell texture.
- B. Molded Components: End caps, outside corners, stand offs, and brackets must be of a color matching the handrail. Surface must have a haircell texture unless otherwise specified by the manufacturer.
- C. Wood hand grip to be smooth with finish selected by the architect from the Wallprotex finishes selection.

**Part 3 - Execution****3.01 - EXAMINATION**

- A. Prior to installation, examine areas and conditions in which the handrail systems will be installed for defects, damage, or incomplete site preparation.
- B. Complete all finishing operations, including painting, before beginning installation of the handrail system. New paint must be allowed to cure for an appropriate amount of time according to the paint manufacturer before handrail system is installed.
- C. Do not install handrail if wall surface is not adequately prepared.

**3.02 - PREPARATION**

- A. Prior to installation of the handrail system, clean substrate to remove dust, debris, grease, or any loose particles.

**3.03 - INSTALLATION**

- A. Locate handrail as indicated on the approved shop drawing for the appropriate substrate. Install handrail flush and tight at the height indicated on the appropriate drawing, with surfaces free from distortion or other defects in appearance.
- B. Use the approved mounting hardware.
- C. Install all handrail systems in accordance and compliance with Wallprotex installation instructions.

**3.04 - CLEANING**

- A. At completion of the installation, clean surfaces in accordance with the Wallprotex cleanup and maintenance instructions.
- B. Remove extra materials and debris accumulated from installation.

