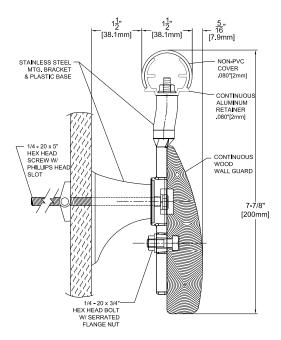
# **EnviroGT G2-3500VW**

## Silhouette Handrail









- Handrail utilizes a non-PVC cover manufactured with G2 Bio-Blend™, Inpro's exclusive blend of PETG and biopolymer; available in 100 standard colors and 11 Global Colours. Includes black reveals for returns and corners
- Engineered to provide an ultimate hand grasp for all users
- Protects interior walls from damage using an expanded impact surface
- Wood lower wall guard available in unfinished poplar or red oak, maple or FSC® Certified Ash, each available in natural or your choice of 7 stain colors
- Meets ADA and ANSI criteria
- Meets the most rigorous standards and criteria of chemical emissions as prescribed by the GREENGUARD Environmental Institute
- Has been tested and meets GREENGUARD Environmental Institute's and the state of California's requirements for low emitting products as tested by Air Quality Sciences
- Has been tested and meets the GREENGUARD Children & School chemical emissions levels

IPC.1165/REV.3

## **EnviroGT G2-3500VW Silhouette Handrail**

## **Suggested Specifications**

#### PART 1 - GENERAL

#### 1.01 SUMMARY

A. Non PVC Handrail systems for pedestrian safety and wall protection

#### 1.02 SECTION INCLUDES

A. G2-3500VW Silhouette Handrail System, handrail with integrated wood wall guard

#### 1.03 REFERENCES

- A. American National Standards Institute (ANSI)
- B. American Society for Testing and Materials (ASTM)
- C. Americans with Disabilities Act (ADA)
- D. National Fire Protection Association (NFPA)
- E. Kitchen Cabinets Manufacturers Association (KCMA)
- F. National Emission Standards for Hazardous Air Pollutants (NESHAP)
- G. Society of Automotive Engineers (SAE)

## 1.04 SYSTEM DESCRIPTION

- A. Performance Requirements: Provide handrail systems that conform to the following requirements of regulatory agencies and the quality control of IPC Door and Wall Protection Systems, Inpro Corporation.
- Fire Performance Characteristics: Provide handrail conforming with the NFPA Class A fire rating. Surface burning characteristics, as determined by ASTM E-84, shall be flame spread of 25 or less and smoke development of 450 or less.
- Impact Strength: Provide materials that have been tested in accordance with the applicable provisions of ASTM D-256, Impact Resistance of Plastics.
- Chemical and Stain Resistance: Provide material that shows resistance to stain when tested in accordance with applicable provisions of ASTM D-543.
- Fungal and Bacterial Resistance: Provide material that does not support fungal or bacterial growth as tested in accordance with ASTM G-21 and ASTM G-22.
- 5. GREENGUARD Certified: Provide GREENGUARD Certified profiles. Profiles shall meet the requirements of GREENGUARD Certification Standards for Low-Emitting Products and GREENGUARD Product Emission Standard for Children & Schools.
- 6. Color Consistency: Provide components matched in accordance with SAE J-1545 - (Delta E) with a color difference no greater than 1.0 units using CIE Lab, CIE CMC, CIE LCh, Hunter Lab or similar color space scale systems.
- 7. Cold, heat and chemical resistance: Provide handrail system with wood components that have a finish that complies with the applicable provisions of ANSI/ KCMA A161.1- 1990 for cold check, heat and chemical resistance
- Environmental compliance: Provide handrail system with wood components that have 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.
- 9. Code Compliance: Provide handrails that comply with all current ANSI and ADA requirements.

#### 1.05 SUBMITTALS

- A. Product Data: Manufacturer's printed product data for each product indicated in this section.
- B. Detail Drawings: Mounting details with the appropriate fasteners for specific project substrates.
- C. Samples: Verification samples of handrail, 8" (203mm) long, in full size profiles of each type and color indicated
- D. Manufacturer's Installation Instructions: Printed installation instructions for each handrail.

#### 1.06 DELIVERY, STORAGE AND HANDLING

- A. Deliver materials in unopened factory packaging to the jobsite
- B. Inspect materials at delivery to assure that specified products have been received.
- C. Store in original packaging in a climate controlled location away from direct sunlight.

#### 1.07 PROJECT CONDITIONS

A. Environmental Requirements: Install products in an interior climate controlled environment.

#### 1.08 WARRANTY

A. Standard IPC Limited Lifetime Warranty against material and manufacturing defects.

#### PART 2 - PRODUCTS

#### 2.01 MANUFACTURER

- A. Acceptable Manufacturer: IPC Interior Protection Products and Decorative Surfaces, Inpro Corporation, PO Box 406, Muskego, WI 53150, USA; Telephone: 800.222.5556, Fax: 888.715.8407, www. inprocorp.com
- B. Substitutions: Not permitted
- C. Provide all handrails and wall protection from a single manufacturer.

## 2.02 LEED CRITERIA

- A. Provide handrail systems with components that have recycled content.
- 1. MR Credit 4.1, 10%(post-consumer + ½ pre-consumer), 1 credit
- 2. MR Credit 4.2, 20%(post-consumer +  $\frac{1}{2}$  pre-consumer), 1 credit

## 2.03 MANUFACTURED UNITS

## A. Handrail

 G2-3500VW Silhouette Handrail, 7-7/8" (200mm) height x 1-1/2" (38mm) gripping diameter, system extends 3-1/4" (83mm) from the wall. System includes 1-1/2" (38mm) diameter cover/aluminum retainer, top rail and an integrated 5" (127mm) wood wall guard.

## 2.04 MATERIALS

## A. PETG

 Reformulated PETG with Biopolymer Blend: Snap-on covers of .080" (2mm) thickness shall be extruded from chemical and stain resistant PETG.

## B. Aluminum

 Continuous aluminum retainer of .080" (2mm) thickness shall be fabricated from 6063-T5 aluminum with a mill finish.

## C. Wood

1. Wood shall be FAS grade, kiln dried, solid maple or red oak with moisture content of 5-9%.

#### D. Stainless Steel

1. Stainless Steel Bracket Extensions shall be made of type 201 stainless steel.

#### 2.05 COMPONENTS

- A. Molded handrail returns, corners and brackets shall be made of injection molded thermoplastic.
- B. Wall guard returns and corners shall be fabricated of wood in a finish/color to match the wall guard.
- Molded reveals shall have a smooth finish and shall be black.
- D. Stainless steel bracket shall be fabricated from cast stainless steel with a brushed finish or a solid color powder coat metal tone finish.
- E. Fasteners: All mounting systems accessories appropriate for substrates indicated on the drawings shall be provided.

#### 2.06 FINISHES

- A. Covers: Color of the handrail cover to be selected, by the architect, from the IPC finish selection. Surface shall have a pebblette texture.
- B. Wood Stain: Color of the wall guard to be selected, by the architect, from the IPC stain selection.
- C. Wood Finish: Wall guard shall be finished with low-VOC water based UV finish.
- D. Stainless Steel Brackets
- Color of the stainless steel bracket to be selected by the architect from the solid color metal tone color palette.
- 2. Color of stainless steel brackets shall be #4 satin finish stainless steel.
- E. Molded Components: Molded handrail returns and corners shall be of a color matching the handrail. Surface shall have a pebblette texture.
- F. Molded bracket components shall be a color matching the wall guard. Surface shall have a pebblette texture.

## PART 3 – EXECUTION

## 3.01 EXAMINATION

- A. Examine areas and conditions in which the handrail system will be installed.
- Complete all finishing operations, including painting, before beginning installation of handrail system materials.
- 2. Wall surface shall be dry and free from dirt, grease and loose paint.

## 3.02 PREPARATION

A. General: Prior to installation, clean substrate to remove dust, debris and loose particles.

## 3.03 INSTALLATION

A. General: Locate handrail as indicated on approved detail drawings for the appropriate substrate and in compliance with the IPC installation instructions. Install handrail level and plumb at the height indicated on the drawings.

## 3.04 CLEANING

 A. At completion of the installation, clean surfaces in accordance with the IPC clean-up and maintenance instructions.