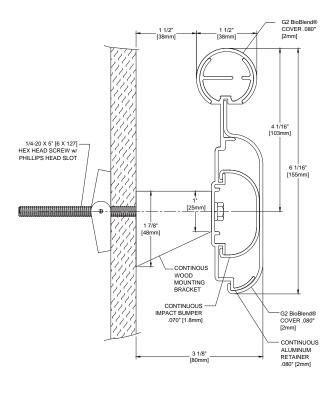
# **G2-3110VV Handrail with Ligature Resistant\* Bracket**

# **Suggested Specifications**





- 6-1/16" (155mm) height x 1-1/2" (38mm) round gripping diameter, extends 3-1/8" (79mm) from the wall
- G2-3110VV Solid color non-PVC handrail and integrated non-PVC wall quard. Black reveals for returns and corners
- Solid wood ligature resistant\* bracket.
- Non-PVC cover is manufactured with G2 BioBlend®, Inpro's exclusive blend of PETG and biopolymer
- Mounted on a sturdy .080" (2mm) thick, continuous aluminum retainer
- Manufactured in 12' (3.66m) standard lengths
- Meets ADA and ANSI criteria
- All mounting fasteners are included with each order
- 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
  - \* While these products are designed for behavioral health applications, they do not guarantee patient safety.



IPC.2157/REV.1



# **G2-3110V Handrail with Ligature Resistant Bracket**

## **Suggested Specifications**

PART 1 – GENERAL

1.01 SUMMARY

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

#### 1.02 SECTION INCLUDES

A. G2-3110V Round Handrail Systems with integrated wall guard, with Ligature Resistant\* Bracket

#### 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. 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.

1. 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.

2. Impact Strength: Provide materials that have been tested in accordance with the applicable provisions of ASTM D-256, Impact Resistance of Plastics.

3. Chemical and Stain Resistance: Provide material that shows resistance to stain when tested in accordance with applicable provisions of ASTM D-543.

4. 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. 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 MANUFACTURED UNITS

A. Handrail

1. G2-3110V Handrail, 6-1/16" (155mm) height x 1-1/2" (38mm) round gripping diameter, system extends 3-1/8" (79mm) from the wall. Integrated cover, 4" (101mm) high. Inner impact bumper, 2-1/4" (57mm) high

B. Ligature Resistant\* Handrail Bracket: Ligature resistant\*bracket shall be solid wood and continuous behind handrail.

#### 2.03 MATERIALS

A. G2 BioBlend®, a blend of PETG and biopolymer: Snap-on cover of .080" (2mm) thickness shall be extruded from chemical and stain resistant G2 BioBlend®. Inner snap-on impact bumper of .070" (1.8mm) thickness shall be extruded from chemical and stain resistant G2 BioBlend®.

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

C. Ligature Resistant\*Handrail Bracket: Ligature resistant\*bracket shall be milled from kiln dried poplar wood.

### 2.04 COMPONENTS

A. Returns, inside corners, outside corners and brackets shall be made of injection molded thermoplastics.

B. Molded reveals shall have a smooth finish and shall be black.

C. Fasteners: All mounting system accessories appropriate for substrates indicated on the drawing shall be provided.

### 2.05 FINISHES

A. Handrail Covers: Handrail colors to be selected by the architect from the IPC finish selection.

B. Molded components: Inside corners, outside corners and brackets shall be of a color matching the handrails. Surface shall have a pebblette texture.

C. Ligature resistant\* Handrail Bracket: Ligature resistant\* handrail bracket shall be painted black and have a smooth finish.

#### PART 3 - EXECUTION

3.01 EXAMINATION

A. Examine areas and conditions in which the handrail system will be installed.

1. 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.

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