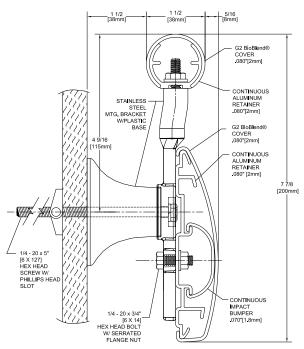
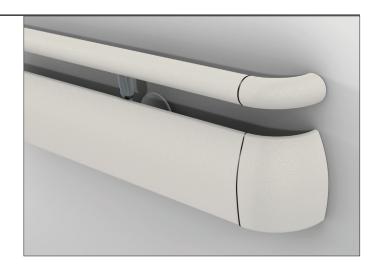
# **G2-3510VV Handrail**

# **Suggested Specifications**





STANDARD G2-3510VV

11/1-20 X 3" FLAT

HEAD SCREW
WING

1/4 - 20 X 3/4"
HEX HEAD SLOT
& TOGGLE

WING

1/4 - 20 X 3/4"
HEX HEAD SLOT
& TOGGLE

WING

1/4 - 20 X 3/4"
HEX HEAD SLOT
& TOGGLE

WING

1/4 - 20 X 3/4"
HEX HEAD SLOT
& SERRANCE
FLANGE NUIT

2 1/4"

3510 G2BIO
BLEND
CONT. ALUM.
RETAINER
J3600

7 7/18"
J3600

RETAINER
J3610 G2BIO
BLEND
COVER
Zmm [.080"]

3510 G2BIO
BLEND
B

G2-3510VV W/TWO ARM CAST BRACKET OPTION

- 7-7/8" (200mm) height x 1-½" (38mm) round gripping diameter, extends 3-3/4" (95mm) from the wall.
- G2-3510VV Solid color non-PVC handrail and integrated non-PVC wall guard. Black reveals for returns and corners
- Non-PVC cover is manufactured with G2 BioBlend®, Inpro's exclusive blend of PETG and biopolymer;
- Lower wall guard is mounted on a sturdy .080" (2mm) thick, continuous aluminum retainer
- .070" (1.8mm) thick continuous impact bumper
- 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



IPC.2197/REV.3



# **G2-3510VV 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. G2-3510VV Handrail System, round handrail with integrated wall guard.

#### 1.03 REFERENCES

A. American National Standards Institute (ANSI) B. American Society for Testing and Materials (ASTM)

C. American with Disabilities Act (ADA)

D. National Building Code of Canada (NBC)

E. National Fire Protection Association (NFPA)

F. Society of Automotive Engineers (SAE)

G. Underwriters Laboratory (UL)

H. Underwriters Laboratory of Canada (ULC)
I. Uniform Building Code (UBC)

#### 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. G2-3510VV Silhouette Handrail, 7-7/8" (200mm) height x 1-1/2" (38mm) round gripping diameter, system extends 3-1/4" (82mm) from the wall. Integrated wall guard cover, 5" (127mm) high. Inner impact bumper, 1-7/8" (48mm) high. a. Standard: molded returns, corners, bracket with stainless bracket stem.

b. Optional cast aluminum one-piece bracket c. Optional stainless-steel returns and corner d. Options: Curved handrail, specify radius. Minimum radius - 3 feet (.91m)

# 2.03 MATERIALS

## A. Vinyl

1. Vinyl: Snap-on covers of .080" (2mm) thickness shall be extruded from chemical and stain resistant unplasticized polyvinyl chloride (uPVC) with the addition of impact modifiers. No plasticizers shall be added (plasticizers may aid in bacterial growth. Woodland patterns when used shall be of polyvinyl chloride (PVC).

2. Molded Vinyl: Returns and corners shall be made of injection mold grade, chemical and stain resistant polyvinyl chloride.

#### B. Aluminum

- 1. Continuous aluminum retainer of .080" (2mm) thickness shall be fabricated from 6063-T5 aluminum with a mill finish.
- 2. Cast aluminum brackets shall be fabricated of ADC 12 cast aluminum with a metallic gray powder-coated finish.
- C. Stainless Steel
- 1. Stainless steel brackets shall be type 304

stainless steel with a #4 satin finish.

2. Stainless steel returns, corners, and brackets shall be made of type 201SS.

D. Zinc: Bracket adapters shall be cast from zinc.

#### 2.04 COMPONENTS

A. Molded handrail returns, corners and brackets shall be made of injection molded thermoplastic. B. Molded wall guard returns, corners and brackets shall be made of injection molded thermoplastic. C. Stainless steel bracket shall be fabricated from cast stainless steel with a brushed finish or a solid color powder coat metal tone finish.

D. One-piece cast aluminum bracket to be finished with a gray metallic powder coat.

E. Fasteners: All mounting systems accessories appropriate for substrates indicated on th

#### 2.05 FINISHES

A. Vinyl Covers: Color of the handrail vinyl cover to be selected, by the architect, from the Inpro finish selection. Surface shall have a pebblette texture. B. Molded Components: Molded handrail returns and corners shall be of a color matching the handrail. Surface shall have a pebblette texture. Molded bracket components shall be a color matching the wall guard. Surface shall have a pebblette texture.

C. Aluminum bracket: One piece cast bracket to be finished with gray metallic powder coat.

D. Stainless Steel Brackets (optional: returns and corners)

1. Color of stainless steel brackets shall be #4 satin finish stainless steel.

Color of the stainless steel bracket to be selected by the architect from the solid color metal tone color palette.

## PART 3 – EXECUTION

## 3.01 FXAMINATION

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.

