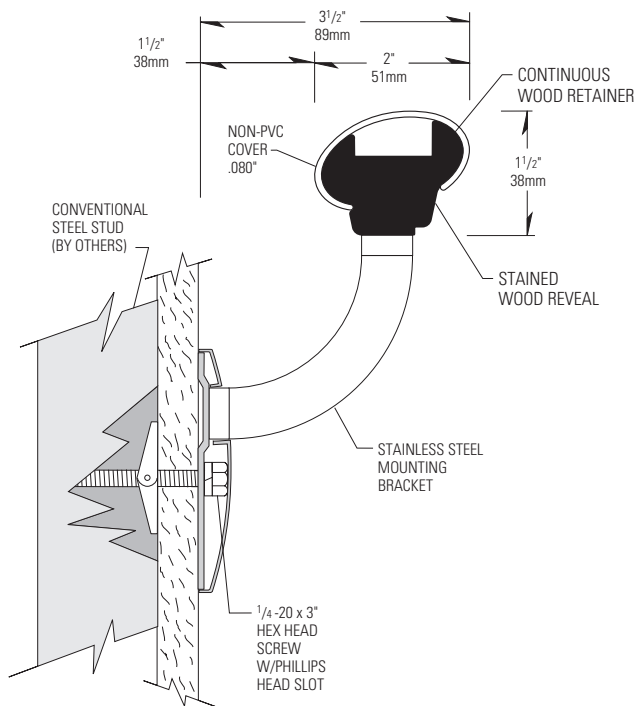
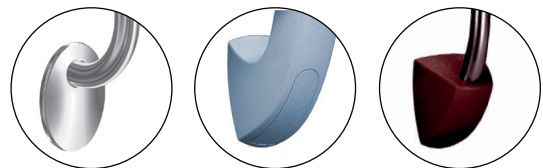


EnviroGT G2-4100 Handrail



3 bracket styles



- ▶ Handrail utilizes a non-PVC cover manufactured with Bio-PolyPETG+, InPro's exclusive reformulated PETG made with a corn-based biopolymer and recycled content; available in 100 standard colors and 11 Global Colours
- ▶ 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
- ▶ Add a decorative or wayfinding element with a wood stained accent strip
- ▶ Extended returns provide a sleek, innovative look
- ▶ Meet safety codes with ADA and ANSI compliance



IPC.1169/REV.2

EnviroGT G2-4100 Handrail

Suggested Specifications

PART 1 – GENERAL

1.01 SUMMARY

- A. Non PVC Handrail systems with stained wood accent that provides pedestrian safety and wall protection

1.02 SECTION INCLUDES

- A. G2-4100 Handrail Systems

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 Profile

1. G2-4100 Handrail with wood accent reveal, 1-1/2" (38mm) x 2" (51mm) gripping surface, extends 3-1/2" (89mm) from wall

2.03 MATERIALS

- A. Reformulated PETG with Biopolymer Blend: Snap on cover of .080" (2mm) thickness shall be extruded from chemical and stain resistant PETG.
B. Wood: Continuous solid wood retainer shall be milled or sealed, kiln dried, FSC Certified Ash.
C. Stainless Steel: Stainless Steel Brackets shall be made of type 201SS with type 304 stainless steel flange cover.

2.04 COMPONENTS

- A. Returns, inside corners, outside corners and brackets shall be made of injection molded thermoplastics.
B. 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 pebble texture.
C. Wood Accent: Wood accent stain color shall be selected by architect from InPro wood stain selection.
D. Stainless Steel: Stainless steel brackets shall have a satin 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.
B. Installation of G2-4100 Handrail: Material must be stored, installed and used in environmentally controlled conditions
1. Cut the wood retainer to desired length, leaving ap-

propriate allowance for the returns, inside corners and outside corners. Allow 5-7/16" (138mm) for each return, 1/16" (2mm) for each inside corner and 3/16" (5mm) for each outside corner. Allow 3/16" (5mm) for each 135° outside corner and 2-3/16" (56mm) for each 135° inside corner.

2. Drill holes in the centerline of the wood retainer for brackets, using a 5/16" drill bit. Holes should be 4" (102mm) from the ends and spaced a maximum of every 32" (813mm).
3. Attach the brackets to the wood retainer using one #12 x 3/4" Phillips pan head screw for each bracket. Attach returns, inside corners and outside corners to the wood retainer using one #12 x 3/4" Phillips pan head screws (one per return and two per corner). Important: Pre-drill the wood in order to prevent splitting. To allow for adjustment, leave at least a 1/16" (1.5mm) gap between the returns/corners and the end of the aluminum retainer when sliding the two components together.
- a. Stainless Steel Brackets - The posts on stainless steel brackets are threaded. Slip either the plastic cover or stainless steel cover over the post and then insert the threaded post through the hole on the retainer. Attach the post to the retainer with a 1/4" lock washer and a 1/4" hex head bolt.
4. Position the wood retainer/bracket assembly against the wall at the desired height. Level the retainer and transfer the locations of the bracket holes to the wall with a marker. Drill all marked holes on the wall with a 3/4" drill bit for toggle bolts or a 1/2" drill bit for lead anchors.
5. Loosely attach the mounting bolts to the brackets (one 1/4"-20 x 5" hex head screw with Phillips head slot, one 1/4" lock washer and one toggle wing or lead anchor for each bracket). For stainless steel brackets, use one 1/4"-20 x 3" hex head screw with Phillips head slot, one 1/4" lock washer and one toggle wing or lead anchor. Mount the wood retainer assembly into the holes on the wall using the provided fasteners. Level and secure the retainer to the wall.
- a. Stainless Steel Brackets - After the handrail is level and the brackets are securely attached to the wall, snap either the molded cover or stainless steel cover over the mounting base.
6. Cut the cover to the distance between the returns and/or corners. NOTE: Trim all factory edges square before installation. (Cutting the cover 1/32" longer will help in achieving a tight fit). Position the cover on the wood retainer at one end. Work to the other end by pushing the cover over the wood until it snaps into place.
7. Left and right returns should be screwed into the wall and/or retainer for added strength. Remove the bottom plate on the return and fasten screws (provided by the installer) into the wall and/or retainer through the holes located underneath the return. Re-attach the bottom plate by snapping into place.

3.04 CLEANING

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