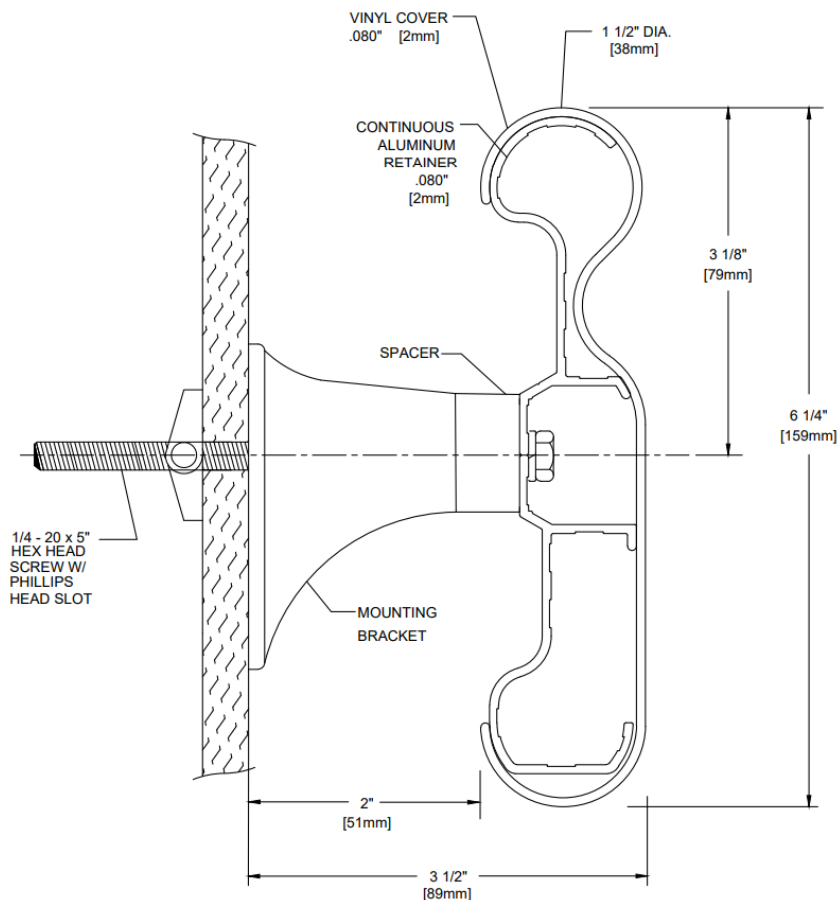


# 1200 Series

## Handrail



- 159mm height x 38mm gripping diameter, extends 89mm from wall
- Mounted on a sturdy 2mm thick, continuous aluminium retainer
- 2mm thick, scratch and stain resistant rigid vinyl cover
- Easy installation, clean-up and maintenance
- Approved in California by OSHPD for hospital use
- Meets ADA and ANSI criteria
- Manufactured in 3660mm standard lengths
- All mounting fasteners are included with each order
- 1255 Model - 64mm high accent strip available in several patterns and finish options.
- 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

# 1200 Series

## Handrail

### PART 1 - GENERAL

#### 1.01 SUMMARY

A. Handrail systems for pedestrian safety and wall protection.

#### 1.02 SECTION INCLUDES

A. 1200/1255 Handrail Systems with Internationally Compliant Spacers

#### 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 Building Code of Canada (NBC)
- E. National Fire Protection Association (NFPA)
- F. Office of Statewide Health Planning and Development (OSHDP)
- G. Society of Automotive Engineers (SAE)
- H. Underwriters Laboratory (UL)
- I. Underwriters Laboratory of Canada (ULC)
- J. 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 UL Classified handrails conforming with NFPA Class A fire rating. Surface burning characteristics, as determined by UL-723 (ASTM E-84), shall be flame spread of 10 and smoke development of 350 - 450. Provide ULC (Canada) listed handrails conforming to the requirements of the National Building Code of Canada 2010, Subsection 3.1.13. Surface burning characteristics, as determined by CAN/ULC-S102.2, shall be flame spread of 15 and smoke developed of 35.

2. Self-Extinguishing: Provide handrails with a CC1 classification, as tested in accordance with the procedures specified in ASTM D-635-74, Standard Test Method for Rate of Burning and/or Extent and Time of Burning of Self-Supporting Plastics in a Horizontal Position, as referenced in UBC 52-4-1988.

3. Impact Strength: Provide rigid vinyl profile materials that have an Impact Strength of 30.2 ft-lbs/inch of thickness as tested in accordance with the procedures specified in ASTM D-256-90b, Impact Resistance of Plastics.

4. Chemical and Stain Resistance: Provide handrails that show resistance to stain when tested in accordance with applicable provisions of ASTM D-543.

5. GREENGUARD Certified: Provide GREENGUARD Certified material. Profiles shall meet the requirements of GREENGUARD Certification Standards for Low-Emitting Products and GREENGUARD Product Emission Standard for Children & Schools.

6. 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.

7. Colour Consistency: Provide components matched in accordance with SAE J-1545 - (Delta E) with a colour difference no greater than 1.0 units using CIE Lab, CIE CMC, CIE LCh, Hunter Lab or similar colour space scale systems.

#### 1.05 SUBMITTALS

A. Product Data: Manufacturer's printed product data for each type of handrail specified.

B. Detail Drawings: Mounting details with the appropriate fasteners for specific project substrates.

C. Samples: Verification samples of handrail, 203mm long, in full size profiles of each type and colour indicated.

D. Manufacturer's Installation Instruction: 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: Products must be installed 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 SUPPLIER

A. Acculine Architectural Systems: 135-139 Northcorp Blvd, Broadmeadows VIC 3047, Telephone: (03) 9334 5911, [www.acculine.com.au](http://www.acculine.com.au)

#### 2.01 MANUFACTURER

A. Acceptable Manufacturer: IPC Door and Wall Protection Systems, InPro Corporation, PO Box 406 Muskego, WI USA Telephone: 800-222-5556, Fax: 888-715-8407, [www.inprocorp.com](http://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. 1200 Handrail, 159mm height x 38mm gripping diameter, extends 76mm from wall.

2. 1255 Handrail, 159mm height x 38mm gripping diameter, extends 76mm from wall, with 64mm accent strip.

3. Options: Curved handrail, specify radius. Minimum radius - 1220mm

#### 2.03 MATERIALS

A. Vinyl: Snap-on covers of 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). Accent strips when used shall be of polyvinyl chloride (PVC).

B. Aluminium: Continuous aluminium retainer of 2mm thickness shall be fabricated from 6063-T5 aluminium, with a mill finish.

### 2.04 COMPONENTS

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

B. Fasteners: All mounting systems accessories appropriate for substrates indicated on the drawings shall be provided.

### 2.05 FINISHES

A. Vinyl Covers: Handrail colour to be selected by the architect from the PC finish selection.

B. Moulded components: Inside corners, outside corners, returns and brackets shall be of a colour and pattern matching the handrails. Surface shall have a pebblette texture.

### PART 3 - EXECUTION

#### 3.01 EXAMINATION

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

1. Complete all finish operations, including painting, before beginning installation of the handrail system materials.

B. 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 the 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 1200/1255 Handrails:

1. Cut the aluminium retainer to the desired length, allowing 83mm for each return, 6mm for each outside corner and 119mm for each inside corner. Allow 6mm for each 135 degrees outside corner and 52mm from the corner of the wall for each 135 degrees inside corner.

2. Attach the returns, inside corners, outside corners and brackets to the aluminium retainer. It is recommended that brackets are installed 102mm from the ends of a run. Spacing of brackets is to be a maximum of 813mm.

3. Mount the aluminium retainer to the wall using the provided fasteners. Level and secure the aluminium retainer to the wall.

4. Cut the vinyl cover to fit between the returns and/or corners. NOTE: Trim all factory edges square before installation. Position the vinyl cover on the aluminium retainer starting at the top of the retainer and pivoting the vinyl cover over the bottom of the retainer until it snaps into place.

#### 3.04 CLEANING

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