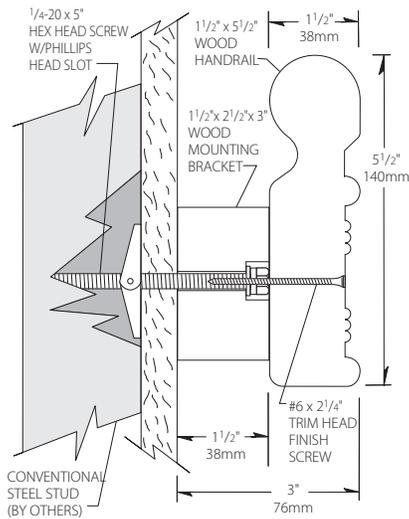


# HR1 Wood/Bamboo

## Handrail



- 5 1/2" (140mm) height x 1 1/2" (38mm) gripping diameter, extends 3" (76mm) from the wall
- Perfectly suited for elegant applications in low abuse areas
- Available in red oak, maple or FSC® Certified Ash wood or bamboo
- Easy installation, clean-up and maintenance
- Manufactured in 8'-16' (2.44m - 4.88m) standard lengths
- All mounting fasteners are included with each order

IPC.300/REV.7

# HR1 Wood/Bamboo Handrail

## Suggested Specifications

### PART 1 GENERAL

#### 1.01 SUMMARY

A. Handrail systems for pedestrian safety and wall protection

#### 1.02 SECTIONS INCLUDES

- A. Northern Hardwoods HR1 Handrail. Solid wood handrail in red oak.  
B. Northern Hardwoods HR1 Handrail. Solid wood handrail in maple.  
C. Northern Hardwoods HR1 Handrail. Solid wood handrail in FSC® Certified Ash  
D. Northern Hardwoods HR1 Handrail. Solid Bamboo handrail.

#### 1.03 REFERENCES

- A. American National Standards Institute (ANSI)  
B. American with Disabilities Act (ADA)  
C. Environmental Protection Agency (EPA)  
D. Kitchen Cabinets Manufacturers Association (KCMA)  
E. National Emission Standards for Hazardous Air Pollutants (NESHAP)

#### 1.04 SYSTEM DESCRIPTION

A. Performance Requirements: Provide wood 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. Cold, heat and chemical resistance: Provide wood handrail with a finish that complies with the applicable provisions of ANSI/KCMA A161.1-1990 for cold check, heat and chemical resistance.
2. Environmental compliance: Provide wood handrail and with 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.
3. 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 appropriate fasteners for specific project substrates.  
C. Loaner Samples: Verification samples of handrail, 15" (381 mm) long, in full size profiles with one return and one mounting bracket of each type and color indicated. Return samples to IPC after review.  
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 environment away from direct sunlight.

#### 1.07 WARRANTY

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

### PART 2 PRODUCTS

#### 2.01 MANUFACTURERS

- A. Acceptable Manufacturer: IPC Door and Wall Protection Systems, 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. Wood Handrail

1. HR1 Handrail, 5 1/2" (140mm) height x 1 1/2" (38mm) gripping diameter, extends 3" (76mm) from the wall.

##### 2.03 MATERIALS

- A. Wood: Shall be FAS grade, kiln dried, solid maple or red oak with moisture content of 5-9%.  
B. Forest Stewardship Council® Certified Wood: Shall be kiln dried solid FSC® Certified Ash.  
C. Bamboo: Shall be 100% bamboo, kiln dried, with a moisture content of 7-10%.

#### 2.04 COMPONENTS

- A. Returns, outside corners, inside corners, and brackets shall be solid wood or bamboo and a finish to match handrails.  
B. Fasteners: All mounting systems accessories appropriate for substrates indicated on the drawings shall be provided.

#### 2.05 FINISHES

- A. Wood/Bamboo Stain: Color of the handrail to be selected, by the architect, from the IPC stain selection. Bamboo color shall be neutral or carbonized.  
B. Wood/Bamboo Finish: Handrail shall be finished with a water-based clear coat finish. Finish shall be a low luster satin finish.

### PART 3 EXECUTION

#### 3.01 INSTALLERS

- A. Installer should be familiar with the installation of fine finished wood products.

#### 3.02 EXAMINATION

- A. Examine areas and conditions in which handrail 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.

#### 3.03 PREPARATION

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

#### 3.04 INSTALLATION

- A. General: Locate the handrail as indicated on the approved detail drawing 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 the pre-assembled HR1 Handrail.

1. Pre-assembled handrails ship in pre-cut lengths with returns attached, and inside and outside corners miter cut.
  2. Layout and identify the components needed for each section to be installed. Determine bracket locations on the wall and drill appropriate size holes for the fasteners. Brackets should be 10" (254mm) from the returns and corners and spaced a maximum of 32" (813mm).
  3. Attach the brackets to the wall with the correct fastener for that substrate
  4. Attach the rail to the brackets using two #8 x 2 1/4" finish screws or two 2 1/4" finish nails per bracket. Fill the screw or nail holes with wood putty from the touch up kit.
  5. Glue and pin nail inside and outside corner conditions. Fill the nail holes with wood putty from the touch up kit.
- C. Installation of stock length HR1 Handrails
1. Handrails ship in 8' - 16' (2.44m - 4.88m) lengths. Returns and corners must be field cut.
  2. Cut the handrail to the required length allowing for returns and corners.
  3. Field cut, glue and attach returns and corners.
  4. Determine bracket locations on the wall and drill appropriate size holes for the fasteners. Brackets should be on each return, 3" (76mm) from each draw bolt and spaced a maximum of 32" (813mm).
  5. Attach the brackets to the wall with the correct fastener for that substrate.
  6. Attach the rail to the brackets using two #8 x 2 1/4" finish screws or two 2 1/4" finish nails per bracket. Fill the screw or nail holes with wood putty from the touch up kit.
- 3.05 CLEANING
- A. At completion of the installation, clean surfaces in accordance with the IPC clean-up and maintenance instructions.