



Privacy Railing Guide Specification

This section is based on the products of RDI Railing, an Oldcastle® APG brand, Atlanta, GA 30346; (877) 265-2220 www.rdirail.com.

Privacy Rail provides a contemporary and modern look to your deck or patio while offering you the option of privacy in your outdoor space. Powder coated aluminum framing provides strength for your installation while a selection of vinyl infill boards lock securely together with our patented ClickConnect™ technology. Designed to meet IBC and IRC, Privacy Rail allows you to create privacy that is safe, secure, and code compliant for decks of any height.

Oldcastle® APG, a CRH Company, is North America's leading provider of innovative outdoor living solutions that enable customers to Live Well Outside. The manufacturer's portfolio of premier building products inspires endless possibilities while providing enduring outdoor spaces where people can connect, reflect and recharge.

SECTION 057300 - DECORATIVE METAL RAILING

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Privacy railing system including aluminum posts and rails with vinyl infill panels.

1.2 DEFINITIONS

- A. Privacy Railings: Free-standing panel system designed to create visual barrier at exterior locations.

1.3 REFERENCES

Specifier: If retaining this optional Article, edit list below to correspond to those references retained in edited specification section.

- A. References, General: Versions of the following standards current as of the date of issue of the project or required by applicable code apply to the Work of this Section.
- B. American Architectural Manufacturer's Association (AAMA):
 - 1. AAMA 2604 - Voluntary Specification, Performance Requirements and Test Procedures For Pigmented Organic Coatings on Aluminum Extrusions and Panels.

- C. American Society of Civil Engineers (ASCE):
 - 1. ASCE 7 - Minimum Design Loads for Buildings and Other Structures.
- D. ASTM International (ASTM):
 - 1. ASTM A307 - Carbon Steel Bolts, Studs, and Threaded Rod 60 000 PSI Tensile Strength.
 - 2. ASTM B117 - Operating Salt Spray (Fog) Apparatus.
 - 3. ASTM B221 - Aluminum-Alloy Extruded Bar, Rod, Wire, Shape and Tube.

1.4 SUBMITTALS

- A. Product Data: Manufacturer's technical literature for each product specified.
 - 1. Include preparation instructions and recommendations.
 - 2. Include storage and handling requirements and recommendations.
 - 3. Include manufacturer's installation instructions.
- B. Shop Drawings:
 - 1. Include plans, elevations, sections, and details.
 - 2. Include points of attachment and their corresponding static and dynamic loads imposed on deck and post foundations.

Specifier: Retain "Delegated Design Submittal" Paragraph and related paragraphs under Quality Assurance and Performance Requirements articles when required due to privacy railing size, design wind pressure, or other exceptional Project requirements.

- C. Delegated Design Submittal: For privacy railing, including analysis data signed and sealed by the qualified professional engineer responsible for their preparation.

Retain both "Samples for Initial Selection" and "Samples for Verification" paragraphs below for two-stage Samples.

- D. Samples for Initial Selection: For each finish product and finish specified, sets of color chips representing manufacturer's full range of available colors.
- E. Samples for Verification: For each material and for each color, in manufacturer's standard size.

1.5 QUALITY ASSURANCE

- A. Qualification Data:
 - 1. Manufacturer Qualifications: Company specializing in manufacturing products specified in this Section with minimum five years documented experience.
 - 2. Installer Qualifications: Privacy railing manufacturer, or experienced Installer with a record of successful installations of similar type and size to that specified.

Specifier: Retain below for delegated design requirement.

- B. Professional Engineer Qualifications: Documented experience with providing delegated-design engineering services of the kind required by this Section, including documentation that engineer is licensed in the jurisdiction in which Project is located.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Transport, handle, store and protect privacy railing components so they are in undamaged condition when installed.
- B. Store privacy railing components in manufacturer's unopened packaging.
- C. Store privacy railing components off the ground in a dry, protected, covered and secure area.

1.7 WARRANTY

- A. Special Warranty: On manufacturer's standard form on which manufacturer agrees to repair or replace aluminum components on which finishes fail in materials or workmanship within specified warranty period.

Specifier: RDI offers a limited lifetime warranty for single-family residential installations and a 20-year warranty for other building types.

- 1. Warranty Period: 20 years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Structural Requirements: Engineer privacy railings to withstand live and dead loads according to authorities having jurisdiction and information indicated within limits and under conditions indicated, without material failure or permanent deformation of structural members.

Specifier: If retaining requirement for delegated design by Contractor, edit below to Project conditions per ASCE-7 or other local jurisdiction requirements. Custom engineering is available via authorized Privacy Railing dealers.

- B. Delegated Design: Design privacy railing to withstand wind loading and operational loads.
 - 1. Design Wind Speed: [As indicated on Drawings] <Insert design wind speed>.
 - 2. Design Wind Pressure: [As indicated on Drawings] <Insert design wind pressure>.

2.2 MANUFACTURER

- A. Basis of Design: [Privacy Railing](#) with ClickConnect vinyl infill boards manufactured by RDI Railing; Atlanta, Georgia 30346; (877) 265-2220; www.rdirail.com.

Specifier: Retain one of the following two paragraphs.

- 1. Substitutions: Not permitted.
- 2. Substitutions: Submit request for substitution according to [Instructions to Bidders and] Division 01 General Requirements.

2.3 PRIVACY RAILING SYSTEM

- A. Use manufacturer's standard components.
- B. Posts: Powder-coated aluminum posts with pre-mounted base plates.

1. End Posts: At end of each panel. 2.31 by 4.00 inches, 0.06-inch metal thickness.
2. Mid Posts: 2.31 by 4.00 inches, 0.07-inch metal thickness.
3. Corner Posts: 3.39 by 3.39 inches, 0.06-inch metal thickness.
4. Height: [36 inches] [42 inches] [72 inches]
5. Color: [White] [Satin black].

C. Rails: Powder-coated aluminum rails.

1. Top/Bottom Rail: 1.17 by 3.50 inches, 0.08-inch metal thickness.
2. Middle Rail: For 72-inch high panels. 1.17 inches by 3.50 inches, 0.08-inch metal thickness.
3. Color: [White] [Satin black].

D. Infill Boards: Interlocking vinyl infill boards providing secure fit with no spaces between boards.

1. 6 inches by 0.88 inches, 0.05-inch wall thickness.
2. Length: 66 inches. Cut as required for shorter spans as indicated on Shop Drawings.
3. Color:
 - a. Solid: [White] [Clay] [Sand] [Slate Gray]
 - b. Wood Grain: [Coastal Cedar].

E. Accessories: Include trim rings, plastic infill board adapters, post hardware covers, channel covers, and flat caps.

2.4 MATERIALS

A. Aluminum, General: Provide alloys and tempers with not less than the strength and durability properties of alloy and temper designated in paragraphs below for each aluminum form required.

1. Extrusions: ASTM B221, Alloy 6005-T5.

B. Vinyl Infill Panels: Securely locking, integrally colored, rigid polyvinyl chloride (PVC) designed to fit tightly into post channels.

C. Fasteners:

1. Stainless steel fasteners, all to be concealed upon installation.
2. Attachment to Wood Decking: 3/8-inch diameter A307 bolts for through bolt attachment.
3. Attachment to Concrete: Comply with manufacturer's instructions.

2.5 FINISHES

A. Powder Coatings, Coating Finish Process: One-coat dry system with 70 percent fluoropolymer resin, meeting performance requirements of AAMA 2604 and the following:

Specifier: Privacy Railing finishes test to 10,000 hours, likely the only manufacturer to do so. Modify requirement below if higher performance is required and a closed specification is acceptable.

1. Dry Film Salt Spray, ASTM B117: Minimum 3,000 hours.

PART 3 - EXECUTION

3.1 INSPECTION

- A. Examine privacy railing system substrate with Installer present. Inspect for erection tolerances and other conditions that would adversely affect installation of privacy railing system.
 - 1. Inspect substrate that will support privacy railing system to determine if support components are installed as indicated on approved shop drawings and are within tolerances acceptable to privacy railing system manufacturer.
- B. Proceed with privacy railing installation once out-of-tolerance work and other deficient conditions are corrected.

3.2 PRIVACY RAILING INSTALLATION

- A. General: Install privacy railing system in accordance with approved shop drawings and manufacturer's written instructions.
- B. Support Installation: Install blocking and other supports at locations, spacings, and with fasteners recommended by manufacturer.
- C. During installation, carefully handle and store aluminum components to avoid contact with abrasive surfaces. Install components in sequence as recommended by manufacturer.

3.3 CLEANING AND PROTECTION

- A. Clean finished surfaces as recommended by privacy railing system manufacturer.
- B. Replace damaged or discolored components that cannot be restored by field repair.

END OF SECTION