

RAMI DESIGNS, INC.

Odyssey Glass Railing System Product Guide Specification

Specifier Notes: This product guide specification is written according to the Construction Specifications Institute (CSI) 3-Part Format, including *MasterFormat*, *SectionFormat*, and *PageFormat*, as described in *The Project Resource Manual—CSI Manual of Practice, Fifth Edition*.

The section must be carefully reviewed and edited by the Architect to meet the requirements of the project and local building code. Coordinate this section with other specification sections and the Drawings. Delete all “Specifier Notes” after editing this section.

Section numbers are from *MasterFormat 1995 Edition*, with numbers from *MasterFormat 2004 Edition* in parentheses. Delete version not required.

SECTION 05720 (05 73 13)

GLAZED DECORATIVE METAL RAILINGS

Specifier Notes: This section covers RamiDesigns “Odyssey” glass railing system. Consult RamiDesigns for assistance in editing this section for the specific application.

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Glazed decorative metal railings.

1.2 RELATED SECTIONS

Specifier Notes: Edit the following list of related sections as required for the project. List other sections with work directly related to this section.

- A. Section 05520 (05 52 00) – Handrails and Railings (Metal Railings): Metal handrails and railings of utilitarian nature.

1.3 REFERENCES

Specifier Notes: List standards referenced in this section, complete with designations and titles. This article does not require compliance with standards, but is merely a listing of those used.

- A. ANSI Z97.1 – Safety Glazing Material Used in Buildings.
- B. ASTM C 1048 – Standard Specification for Heat-Treated Flat Glass—Kind HS, Kind FT Coated and Uncoated Glass.

- C. ASTM E 488 – Standard Test Methods for Strength of Anchors in Concrete and Masonry Elements.
- D. ASTM E 985 – Standard Specification for Permanent Metal Railing Systems and Rails for Buildings.

1.4 DESIGN REQUIREMENTS

Specifier Notes: Edit the following two paragraphs as required for the project. Consult local building code for minimum load requirements.

- A. Design glazed decorative metal railings to conform to building code and ADA requirements for openings and stress.
- B. Design glazed decorative metal railings to withstand a minimum [concentrated load of 200 pounds applied horizontally or vertically down at any point on top rail] [uniform load of 50 pounds per foot applied vertically down and horizontally, but not simultaneously on top rail].

1.5 SUBMITTALS

- A. Comply with Section 01330 (01 33 00) – Submittal Procedures.
- B. Product Data: Submit manufacturer’s product data, including installation instructions.
- C. Shop Drawings:
 - 1. Submit manufacturer’s shop drawings, including plans, elevations, sections, and details, indicating dimensions, tolerances, materials, components, sizes, fabrication, accessories, fasteners, hardware, and finish.
 - 2. Show details of attaching posts to supports.

Specifier Notes: Edit the following description of samples to be submitted as required for the project.

- D. Samples: Submit manufacturer’s samples of standard materials, finishes, and colors.
 - 1. Handrails: Minimum 12 inches long.
 - 2. Posts: Minimum 12 inches long.
 - 3. Glass Infill: Minimum 6 inches by 6 inches.
 - 4. Other Components: Each type required.
- E. Test Reports: Submit test reports from qualified, independent testing agency indicating compliance of glazed decorative metal railings with ASTM E 985.
- F. Manufacturer’s Certification: Submit manufacturer’s certification that materials comply with specified requirements and are suitable for intended application.
- G. Cleaning Instructions: Submit manufacturer’s cleaning instructions.

1.6 QUALITY ASSURANCE

- A. Qualifications:

1. Installer: Install glazed decorative metal railings by manufacturer or qualified, authorized representative of manufacturer.
2. Welders: Perform welding by certified welders.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Delivery: Deliver materials to site in manufacturer's original, unopened containers and packaging, with labels clearly identifying product name and manufacturer.
- B. Storage:
 1. Store materials in clean, dry area indoors in accordance with manufacturer's instructions.
 2. Do not store materials directly on floor.
 3. Keep materials in manufacturer's original, unopened containers and packaging until installation.
- C. Handling: Protect materials and finish during handling and installation to prevent damage.

PART 2 PRODUCTS

2.1 MANUFACTURER

- A. RamiDesigns, 24 Hammond, Suite E, Irvine, California 92618. Phone (949) 588-8288. Fax (949) 588-9988. Website www.ramidesigns.com. E-mail info@ramidesigns.com.

2.2 GLAZED DECORATIVE METAL RAILINGS

Specifier Notes: Edit this article as required for the specific application. Consult RamiDesigns for custom design of "Odyssey" glass railing system.

- A. Glazed Decorative Metal Railings: "Odyssey" glass railing system.
 1. Description: Modular, decorative, stainless steel railing system with glass infill.
 2. Handrails:
 - a. Size: 1-1/2-inch diameter.
 - b. Wall Thickness: 0.120 inch.

Specifier Notes: Specify type and finish of stainless steel for each component as required.

- c. Material: Stainless steel, Type [304] [316].
 - d. Finish: [Brushed] [Polished].
 3. Posts:
 - a. Size: 2 inches by 3/8 inch.
 - b. Material: Stainless steel, Type [304] [316].
 - c. Finish: [Brushed] [Polished].
 4. Glass Infill:
 - a. Type: Tempered safety glass with polished edges.
 - b. Compliance: ASTM C 1048, Kind FT, Condition A, Type 1, Quality Q3, clear glass Class 1.
 - c. Thickness: 3/8 inch.

Specifier Notes: Specify the color of glass. Consult RamiDesigns for available colors.

- d. Color: [Clear] [_____].
- 5. Knobs:
 - a. Material: Stainless steel, Type [304] [316].
 - b. Finish: [Brushed] [Polished].
 - c. Washers: Rubber.
- 6. Clevises: Stainless steel, Type [304] [316].
- 7. Sleeves: Stainless steel, Type [304] [316].
- 8. Rods: Stainless steel, Type [304] [316].
- 9. Plates: [Carbon steel] [Stainless steel, Type [304] [316]].

2.3 ACCESSORIES

- A. Anchors:
 - 1. Material: Stainless steel, Type [304] [316].
 - 2. Safety Factor: Capable to sustain, without failure, load imposed with a safety factor of 4, as determined by testing in accordance with ASTM E 488.

2.4 FABRICATION

- A. Fabricate glazed decorative metal railings for compliance with structural requirements of building code.
- B. Stainless Steel: Cut stainless steel tubing square, without burrs and where exposed, rounded to produce smooth, rigid hairline joints.
- C. Shop Assembly:
 - 1. Pre-assemble glazed decorative metal railings before shipping to greatest extent possible to minimize field splicing and assembly.
 - 2. Disassemble units only as necessary for shipping and handling limitations.
 - 3. Clearly mark units for re-assembly and for coordination with shop drawings.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Examine areas to receive glazed decorative metal railings.
- B. Notify Architect of conditions that would adversely affect installation or subsequent use.
- C. Do not begin installation until unacceptable conditions are corrected.
- D. Field Measurements:
 - 1. Take field measurements for glazed decorative metal railings from elements to which railings are to fasten.
 - 2. Record field measurements on shop drawings.

3.2 INSTALLATION

- A. Install glazed decorative metal railings in accordance with manufacturer's instructions at locations indicated on the Drawings.
- B. Install glazed decorative metal railings plumb, level, square, true to line, and rigid.
- C. Attach glazed decorative metal railings securely in place using anchors and other components supplied or approved by manufacturer.
- D. Attach glazed decorative metal railings to supports as indicated on the Drawings.
- E. Ensure surfaces of glazed decorative metal railings are smooth with no sharp, rough, or uneven areas.
- F. Site Tolerances:
 - 1. Maximum Variation from Plumb: 1/4 inch.
 - 2. Maximum Offset from True Alignment: 1/4 inch non-accumulative for every 50 feet of length.

3.3 ADJUSTING

- A. Repair minor damages to finish in accordance with manufacturer's instructions and as approved by Architect.
- B. Remove and replace damaged components that cannot be successfully repaired as determined by Architect.

3.4 CLEANING

- A. Clean glazed decorative metal railings promptly after installation in accordance with manufacturer's instructions.
- B. Do not use harsh cleaning materials or methods that could damage glass or finish.

3.5 PROTECTION

- A. Protect installed glazed decorative metal railings from damage during construction.

END OF SECTION