

## Section 05 73 00: P + P Artec “Double Baluster” Stainless Steel Railing Systems

### Part 1 - General

#### 1.1 *Sections Includes*

- A. Component type, seamless weld stainless steel handrails, guardrails, and railing systems, including connectors, fasteners, and system required accessories.

#### 1.2 *Submittals*

- A. Product Data: Submit P + P Artec’s specification’s for all components of each product type specified.
- B. Shop Drawings: Show complete layout including plan views, elevations, sections and details.

#### 1.3 *Performance Requirements*

- A. Structural Performance: Please use structural code requirements, after confirming with P + P Artec.
- B. Rail Tested per ASTM E 894-88 Standard Test Method for Anchorage of Permanent Metal Railing Systems and Rails for Buildings.

E 935-93 Standard Test Methods for Performance of Permanent Metal Railing Systems and Rails for Buildings.

E 985-93 Standard Specification for Permanent Metal Railing Systems and Rails for Buildings.

- C. Thermal Action and Corrosion Control:

- 1. Allow for thermal action resulting from the maximum range change in ambient temperature in the design, fabrication and installation of rail systems, to prevent opening of joints, buckling, and other detrimental effects, including over-stressing of connections and components.
- 2. Prevent galvanic action, and other forms of corrosion by isolating dissimilar metals to prevent them from being in direct contact with each other.

#### 1.4 *Quality Assurance*

- A. Manufacturer Qualifications: Provide handrails, guardrails, and railing systems from P + P Artec only. Provide quality in appearance and physical properties, without delaying the work. All connection fittings must be bolted, clamped or screwed. The finish of handrail welds must be completely seamless and invisible.

1.5 *Delivery, Storage and Handling*

- A. Deliver handrails, guardrails, and railing systems and related components in protective packaging and store components to avoid damage from moisture, abrasion and other construction activities. All materials must be delivered, stored and handled by P + P Artec technicians only.

1.6 *Alternatives*

- A. No alternatives will be allowed or considered.

**Part 2 - Products**

2.1 *Manufacturer*

- A. "P + P Artec" stainless steel component part railing systems must be manufactured by P + P Artec, 700 Creel Drive, Wood Dale, IL 60191, TEL(800) 927-7346.

2.2 *Materials*

- A. Material quality: Provide materials free from surface blemishes where exposed to view in the finished installation.
- B. Handrails: 304 or 316 stainless steel pipe - 1.9" O.D. approved by ADA (1 7/8" diameter) or 1.5" O.D. (1 1/2" diameter) with a 360- 400 grit finish.
- C. Double Balusters: 2 hard drawn stainless steel tubes per baluster - 22mm (7/8" O.D.) with a 360-400 grit finish.
- D. Frame tubes: hard drawn stainless steel tubes - 15mm (5/8" O.D.) with a 360-400 grit finish.
- E. Connection fittings: 304 stainless steel with the following finishes (please specify) #7 polished, #5 satin (brushed), Titanium plated (brass look).
- F. In-fill Panel (please specify one of the following):
  - horizontal frame tubes (same as in D.)  
vertical frame tubes, hard drawn stainless steel - 10mm (3/8" O.D.) with 360-400 grit finish.
  - glass lites or stripes, 3/8" clear tempered, all four sides polished. Also available in other commercially available colors.
  - tempered glass logo will appear, please check your own local codes.
  - custom design, to be specified.
- G. Bolts, Screws & Nuts: Stainless steel. All visible surfaces must have a #7 polished surface. Do not use metals that will be corrosive and incompatible with materials being fastened.
- H. Mixes: Use Ceramic 6 Epoxy to cast Double Baluster into concrete.

### 2.3 *Fabrication*

- A. Fabricate handrails and railing systems to comply with P + P Artec's specifications for project design, details, dimensions, finish, and anchorage, but not less than the structural requirements to support loading.
- B. All fabrication by P & P Artec technicians.

## **Part 3 - Execution**

### 3.1 *Examination/Preparation*

- A. Examine system components, substrate and condition where railing systems are to be installed. Field measurements must be taken by a P + P Artec technician prior to fabrication.
- B. Review and coordinate setting drawings, templates, and related items that are to be embedded in concrete and masonry.

### 3.2 *Installation*

- A. Railing installation by P + P Artec technicians only per approved shop drawings and conditions.
- B. Top rail will have to terminate in either a wall ending or floor ending to achieve maximum stability. Exceptions are permissible with instructions from P + P Artec.
- C. Mounting of railing systems can be done in two ways:
  - side mount with baluster foot
  - top mount with cover-plate
- D. Where ever possible achieve equal spacing of balusters.

### 3.3 *Cleaning and protection*

- A. Immediately upon completion of installation, clean all railing system surfaces using silicon free stainless steel cleaner. Do not use abrasive agents or harsh chemicals. Provide plastic sheet protection for all surfaces of completed installations to prevent damage during remainder of construction activities.