

# RoyalCast™ Fiberglass Balustrades

Fiberglass Composite Balustrade Systems  
Architectural Specifications

## 1.0 General

### 1.1 Description:

- A. Balustrades shall be Royal Corinthian, Inc. RoyalCast™ Balustrades.
- B. Baluster shall be Royal Corinthian Baluster according to their Design No. \_\_\_\_\_.
- C. Top Rail shall be Royal Corinthian Top Rail according to their Design No. \_\_\_\_\_.
- D. Bottom Rail shall be Royal Corinthian Bottom Rail according to their Design No. \_\_\_\_\_.
- E. Newel Post shall be Royal Corinthian Newel Post according to their Design No. \_\_\_\_\_.
- F. Newel Post Cap shall be Royal Corinthian Newel Post Cap according to their Design No. \_\_\_\_\_.
- G. Decorative Finials shall be Royal Corinthian Decorative Finials according to their Design No. \_\_\_\_\_.
- H. All railing connections shall be made with Royal Corinthian Rail Connectors with spring loaded attachment pins (RB411 and RB431).
- I. All Rails will be elevated to allow for drainage, if required, using Royal Corinthian Drainage Spacers (RS-1 through RS-5).
- J. Filler material (Select One): General purpose, lightweight, or ASTM E 84-01 Class A rated.

### 1.2 Submittals

- A. Submit Royal Corinthian, Inc. literature and shop drawings if required.
- B. Submit baluster and/or top/bottom rail sample as requested by Architect.
- C. Field samples shall be capable of being incorporated into the actual construction.

### 1.3 Warranty

- A. The balustrade system shall be guaranteed in writing against defects of materials or workmanship for a period of 5 years to the original owner.
- B. Balustrade must be installed following Royal Corinthian, Inc. guidelines.

### 1.4 Verification of Design

- A. The components incorporated into the drawings show dimensions and styles chosen to accomplish the Architect's intended aesthetic result and to conform to the building's configuration in both form and function. The contractor shall verify that all components to be provided by Royal Corinthian for the work of this section will fit the building's structural elements and meet the visual design criteria on the drawings without materially altering profiles and alignments.
- B. Any additional support or backing components shall be provided by the installing contractor as part of the work of this section.

## **2.0 Products**

### **2.1 Acceptable Manufacturer**

- A. Royal Corinthian, Inc.  
603 Fenton Lane  
West Chicago, IL 60185  
T. 888-265-8661 F. 888-344-2937  
royalcor@royalcorinthian.com  
www.royalcorinthian.com
- B. Substitutions: Not permitted.

### **2.2 Resin and Filler Materials**

- A. Polyester resins shall be general purpose. The resin will be flame retardant polyester resin designed for use in the roto-cast method.
- B. Filler material shall be General Purpose, lightweight filler, or ASTM E 84-01 Class A rated.
- C. Final ratio of materials shall consist of polyester resin, filler, and fiberglass chop.
- D. Material thickness shall be 1/4" to 2" depending on product.
- E. Allowable Tolerances
  - 1. Wind Load Resistance:
    - a. Fiberglass components when installed shall resist wind loading.
    - b. Minimum wind loading requirements as per standard building code.
  - 2. Dimensional Tolerances of Finished Units
    - a. Dimensions 10' or under: +/- 1/4". Out of Square: 1/8" per 6'

## **3.0 Execution**

### **3.1 Delivery**

- A. Deliver materials in original packages, containers, or bundles bearing brand name & identification of manufacturer or supplier. Customer to unload and store materials onsite under cover and in manner to keep them dry, protected from weather, direct sunlight, surface contamination, corrosion, and damage from construction traffic and other causes.
- B. Handle materials and products to prevent damages to edges, ends, or surfaces
- C. Balustrade components shall be protected from dirt, rain (other elements,) and damage prior to and during installation.
- D. Water and/or dirt should not be allowed to get trapped between the protective shrink wrap and column components.

### **3.2 Installation**

- A. Follow manufacturers detailed installation guidelines. They are available online or by request.
- B. Recommend Caulk for all joints is a high end construction adhesive that is flexible and matches the product in color and texture if available.
- C. Protect balustrade finish during storage and installation.