



Classic Architectural Exterior Shutters

SECTION 10 71 13.13 Exterior Shutters

PART 1 GENERAL

1.1 RELATED SECTIONS

- A. Functional exterior shutters.
- B. Exterior shutter hardware.

1.2 RELATED SECTIONS

- A. Section 09 90 00 - Paints and Coatings.

1.3 SUBMITTALS

- A. Submit under provisions of Section 01300.
- B. Shop Drawings: Show materials, layout, dimensions, profiles, fasteners and anchors, hardware, finishes, and interface with adjacent construction.
- C. Product Data: Manufacturer's data sheets on each product to be used, including:
 - 1. Preparation instructions and recommendations.
 - 2. Storage and handling requirements and recommendations.
 - 3. Installation methods.
- D. Selection Samples: For each finish product specified, two complete sets of color chips representing manufacturer's 26 standard colors or Custom Colors.
- E. Verification Samples: For each finish product specified, one sample, minimum size 12 inches (305 mm) square, representing actual product, color, and textures.

1.4 QUALITY ASSURANCE

- A. Thermal Stability: Styrene Plastic and/or Aluminum louvers finished with Sherwin Williams Polane® two-part Solar Reflective Polyurethane Enamel are thermally stable up to 200 degrees F (94 C).
- B. Thermal Stability: reinforced aluminum alloy structural louvers for wider spans up to 48" and side rails finished with Sherwin Williams Polane® two-part Solar Reflective Polyurethane Enamel thermally stable up to 800 degrees F (427 C).
- C. Shutter Finish: Certified to AAMA 2605-17 and AAMA 615-17 specifications.
- D. Thermal Stability: SuperKor™ Structural Expanded Foam PVC top middle and bottom rails and panel shutters finished with Sherwin Williams Polane® two-part Solar Reflective Polyurethane Enamel thermally stable up to 200 degrees F (94 C) with ASTM standard E84 and class A fire rating.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials to site in manufacturer's original, unopened packaging, with labels clearly identifying product name and manufacturer.
- B. Store products in manufacturer's unopened packaging until ready for installation.
- C. Store materials in a clean, cool and dry area in accordance with manufacturer's instructions. Do not leave unopened shutters in direct sunlight.

D. Protect materials during handling and installation to prevent damage.

1.6 PROJECT CONDITIONS

A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.

1.7 WARRANTY

A. Provide with a lifetime warranty on structural components and finish under normal weather conditions. Hardware is warranted from manufacturer's defects. Warranty is limited to the original purchaser.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturer: Royal Corinthian, 603 Fenton Lane, West Chicago, IL 60185. Phone: 888-265-8661 Fax: 888-344-2937 Email: royalcor@royalcorinthian.com Website: www.RoyalCorinthian.com
- B. Substitutions: Not permitted.
- C. Requests for substitutions will be considered in accordance with provisions of Section 01 60 00 – Product Requirements.

2.2 SHUTTERS

A. Raised Panel Shutters: [Royal Corinthian](#). Classic Architectural Raised Panel Shutters fabricated of SuperKor™ Structural Expanded Foam PVC sheet machined and interlocked with reinforced aluminum alloy stiles. Finished Raised Panel is 1-1/4 inch (32 mm) thick. Shutters are finished with Sherwin Williams Polane® two-part Solar Reflective Polyurethane Enamel, oven cured.

1. Style:
 - a. Standard two panel.
 - b. Single panel.
 - c. Extra panel (3 panel or Tri panel).
 - d. Flat panel.
 - e. Custom rail location.
 - f. Arch or radius top.
 - g. V-Groove flat panel.
 - h. Rabbeted edge with beading.
 - i. Cut out.
 - j. Custom make.
2. Width:
 - a. _____ inch (____ mm).
 - b. As indicated on the Drawings.
3. Height:
 - a. _____ inch (____ mm).
 - b. As indicated on the Drawings.
4. Colors:
 - a. Bahama Blue 113
 - b. Black 125
 - c. Black Forest Green 122
 - d. Board & Batten Red 110
 - e. Bordeaux 111
 - f. Charleston Green (New) 123
 - g. Charleston Green (Old) 124
 - h. Chelsea Gray 105
 - i. Classic White 101

- j. Deep Sea Blue 116
- k. Driftwood 103
- l. Essex Green 119
- m. Evergreen 120
- n. Federal Brown 109
- o. Forest Green 118
- p. Hamilton Blue 115
- q. Hunter Green 117
- r. Pewter 104
- s. Polished Mahogany 112
- t. Quaker Bronze 108
- u. Roycroft Bottle Green 121
- v. Roycroft Pewter 106
- w. Stratford Blue 114
- x. Tricorn Black 126
- y. Weathered Shingle 107
- z. White 102
- aa. Custom color as selected.

B. Louver Shutters: [Royal Corinthian](#). Classic Architectural Louvered Colonial Shutters fabricated of reinforced aluminum alloy stiles, horizontal SuperKor™ Structural Expanded Foam PVC rails, and styrene plastic and/or aluminum louvers. SuperKor™ Structural Expanded Foam PVC sheet is machined and interlocked with aluminum alloy stiles. Finished louver is 1-1/4 inch (32 mm) thick. Shutters are finished with Sherwin Williams Polane® two-part Solar Reflective Polyurethane Enamel, oven cured.

1. Style:
 - a. Standard.
 - b. Additional rails.
 - c. Vertical mullion.
 - d. Faux tilt rod.
 - e. Custom top or bottom rail.
 - f. Solid panel arch top / full louver arch top.
 - g. Horns.
 - h. Rabbeted edge.
 - i. Bahama louver spacing.
 - j. Custom louver spacing.
2. Width:
 - a. _____ inch (_____ mm).
 - b. As indicated on the Drawings.
3. Height:
 - a. _____ inch (_____ mm).
 - b. As indicated on the Drawings.
4. Colors:
 - a. Bahama Blue 113
 - b. Black 125
 - c. Black Forest Green 122
 - d. Board & Batten Red 110
 - e. Bordeaux 111
 - f. Charleston Green (New) 123
 - g. Charleston Green (Old) 124
 - h. Chelsea Gray 105
 - i. Classic White 101
 - j. Deep Sea Blue 116
 - k. Driftwood 103
 - l. Essex Green 119
 - m. Evergreen 120

- n. Federal Brown 109
- o. Forest Green 118
- p. Hamilton Blue 115
- q. Hunter Green 117
- r. Pewter 104
- s. Polished Mahogany 112
- t. Quaker Bronze 108
- u. Roycroft Bottle Green 121
- v. Roycroft Pewter 106
- w. Stratford Blue 114
- x. Tricorn Black 126
- y. Weathered Shingle 107
- z. White 102
- aa. Custom color as selected.

C. Combination Shutters: [Royal Corinthian](#). Classic Architectural Combination Shutters fabricated of reinforced aluminum alloy for vertical stiles, horizontal SuperKor™ Structural Expanded Foam PVC rails, and styrene plastic and/or aluminum louvers. SuperKor™ Structural Expanded Foam PVC sheet is machined and interlocked with of reinforced aluminum alloy stiles. Finished combination is 1-1/4 inch (32 mm) thick. Shutters are finished with Sherwin Williams Polane® two-part Solar Reflective Polyurethane Enamel, oven cured.

1. Style:
 - a. Standard.
 - b. Additional rail.
 - c. Extra panel.
 - d. Vertical mullion.
 - e. Faux tilt rod.
 - f. Custom rail sizes.
 - g. Solid panel arch top / full louver arch top.
 - h. Bahama louver spacing.
 - i. Rabbeted edge.
 - j. Cut out.
2. Width:
 - a. _____ inch (_____ mm).
 - b. As indicated on the Drawings.
3. Height:
 - a. _____ inch (_____ mm).
 - b. As indicated on the Drawings.
4. Colors:
 - a. Bahama Blue 113
 - b. Black 125
 - c. Black Forest Green 122
 - d. Board & Batten Red 110
 - e. Bordeaux 111
 - f. Charleston Green (New) 123
 - g. Charleston Green (Old) 124
 - h. Chelsea Gray 105
 - i. Classic White 101
 - j. Deep Sea Blue 116
 - k. Driftwood 103
 - l. Essex Green 119
 - m. Evergreen 120
 - n. Federal Brown 109
 - o. Forest Green 118
 - p. Hamilton Blue 115

- q. Hunter Green 117
- r. Pewter 104
- s. Polished Mahogany 112
- t. Quaker Bronze 108
- u. Roycroft Bottle Green 121
- v. Roycroft Pewter 106
- w. Stratford Blue 114
- x. Tricorn Black 126
- y. Weathered Shingle 107
- z. White 102
- aa. Custom color as selected.

D. Bahama Shutters: [Royal Corinthian](#). Classic Architectural Bahama Shutters fabricated of reinforced aluminum alloy stiles, vertical SuperKor™ Structural Expanded Foam PVC mullions, horizontal SuperKor™ Structural Expanded Foam PVC rails, and styrene plastic and/or aluminum louvers. SuperKor™ Structural Expanded Foam PVC sheet is machined and interlocked with aluminum alloy stiles. Finished louver is 1-1/4 inch (32 mm) thick. Shutters are finished with Sherwin Williams Polane® two-part Solar Reflective Polyurethane Enamel, oven cured.

1. Style:
 - a. Additional rails.
 - b. Additional vertical mullion.
 - c. Colonial louver spacing.
 - d. Custom louver spacing.
2. Width:
 - a. Single panel.
 - b. Double panel with vertical mullion.
 - c. Triple panel with vertical mullions.
 - d. Four panel with vertical mullions.
 - e. _____ inch (_____ mm).
 - f. As indicated on the Drawings.
3. Height:
 - a. _____ inch (_____ mm).
 - b. As indicated on the Drawings.
4. Colors:
 - a. Bahama Blue 113
 - b. Black 125
 - c. Black Forest Green 122
 - d. Board & Batten Red 110
 - e. Bordeaux 111
 - f. Charleston Green (New) 123
 - g. Charleston Green (Old) 124
 - h. Chelsea Gray 105
 - i. Classic White 101
 - j. Deep Sea Blue 116
 - k. Driftwood 103
 - l. Essex Green 119
 - m. Evergreen 120
 - n. Federal Brown 109
 - o. Forest Green 118
 - p. Hamilton Blue 115
 - q. Hunter Green 117
 - r. Pewter 104
 - s. Polished Mahogany 112
 - t. Quaker Bronze 108
 - u. Roycroft Bottle Green 121

- v. Roycroft Pewter 106
- w. Stratford Blue 114
- x. Tricorn Black 126
- y. Weathered Shingle 107
- z. White 102
- aa. Custom color as selected.

E. Board and Batten Shutters: [Royal Corinthian](#). Classic Architectural Board and Batten Shutters fabricated of high density solid core composite material. Finished shutter including batten is 1-1/2 inch (38 mm) thick. Shutters are finished with Sherwin Williams Polane® two-part Solar Reflective Polyurethane Enamel, oven cured.

1. Style:
 - a. Standard.
 - b. Z-Bar (cross buck).
 - c. Extra batten.
 - d. No battens.
 - e. Arch or radius top.
 - f. Cut out.
 - g. Custom horizontal groove.
 - h. Custom diagonal groove.
2. Width:
 - a. _____ inch (_____ mm).
 - b. As indicated on the Drawings.
3. Height:
 - a. _____ inch (_____ mm).
 - b. As indicated on the Drawings.
4. Colors:
 - a. Bahama Blue 113
 - b. Black 125
 - c. Black Forest Green 122
 - d. Board & Batten Red 110
 - e. Bordeaux 111
 - f. Charleston Green (New) 123
 - g. Charleston Green (Old) 124
 - h. Chelsea Gray 105
 - i. Classic White 101
 - j. Deep Sea Blue 116
 - k. Driftwood 103
 - l. Essex Green 119
 - m. Evergreen 120
 - n. Federal Brown 109
 - o. Forest Green 118
 - p. Hamilton Blue 115
 - q. Hunter Green 117
 - r. Pewter 104
 - s. Polished Mahogany 112
 - t. Quaker Bronze 108
 - u. Roycroft Bottle Green 121
 - v. Roycroft Pewter 106
 - w. Stratford Blue 114
 - x. Tricorn Black 126
 - y. Weathered Shingle 107
 - z. White 102
 - aa. Custom color as selected.

2.3 HARDWARE

A. [Royal Corinthian](#). Classic Architectural Raised Panel, Louver, Combination, or Board and Batten Shutters Hardware only.

1. Hardware:
 - a. Pintel: Provide in same size pairs.
 - 1) Pintel plate size – 1-1/2 inch (38mm) or 3/4 (19 mm) by 1/8 inch (3.2 mm), Pin diameter 3/8 inch (9.5 mm).
 - 2) Type 304 Stainless Steel or Galvanized Steel with a matte black powder coat finish.
 - 3) Offsets:
 - a) 1/2 inch (12.7 mm).
 - b) 1-1/2 inch (38 mm).
 - c) 2-1/4 inch (57 mm).
 - d) 3-1/4 inch (82.5 mm).
 - b. 4-inch (102 mm) or 6-inch (152mm) Lag Pintel: Provide in pairs.
 - 1) Type 304 Stainless Steel or Galvanized Steel with a matte black powder coat finish.
 - c. 6-inch (152 mm) L-Hinge: Provide in same size pairs.
 - 1) Type 304 Stainless Steel or Galvanized Steel with a matte black powder coat finish.
 - 2) Offsets:
 - a) 0 inch (flat).
 - b) 1/2 inch (12.7 mm).
 - c) 1-1/2 inch (38 mm).
 - d) 2-1/4 inch (57 mm).
 - d. 10-inch (254 mm) Strap Hinge: Provide in same size pairs.
 - 1) Type 304 Stainless Steel with a matte black powder coat finish.
 - 2) Offsets:
 - a) 0 inch (flat)
 - b) 1/2 inch (12.7 mm).
 - c) 1-3/4 inch (44.5 mm).
 - e. 12-inch (305 mm) Strap Hinge: Provide in same size pairs.
 - 1) Type 304 Stainless Steel with a matte black powder coat finish.
 - 2) Offsets:
 - a) 1 inch (25 mm).
 - f. Jamb Pintel (leaf pintel): Provide in same size pairs.
 - 1) Galvanized Steel with a matte black powder coat finish.
 - 2) Offsets:
 - a) 1-1/4 inch (32 mm).
 - b) 2-1/4 inch (57 mm).
 - g. Flat Hinge (center hinge):
 - 1) Type 304 Stainless Steel with matte black powder coat finish.
 - 2) Offsets:
 - a) 0 inch (flat).
 - b) 1/2 inch (12.7 mm).
 - c) 1-3/4 inch (44.5 mm).
 - d) 2-1/4 inch (57 mm).
 - h. Pintel Shim: Stackable, black polyamide plastic, 1/4 inch (6 mm) thick.
 - i. S Holdback: Type 304 Stainless Steel or Aluminum with matte black powder coat finish. Provided in pairs with Type 304 Stainless Steel lag bolt, washer, and cotter pin.
 - j. Shutter Slide Bolt, 12-inch (305 mm). Type 304 Stainless Steel with matte black powder coat finish.
 - 1) Non-locking slide bolt.
 - k. Acorn Holdback. Type 304 Stainless steel.
 - l. Rat Tail Holdback: Aluminum with matte black powder coat finish. Provide in pairs.

B. **Royal Corinthian**. Bahama Shutter Hardware only.

1. Hardware:
 - a. Male Hinge:
 - 1) Plate size - 1-1/8 inch (28 mm) backplate.
 - b. Female Hinge (standard) 2-3/8 inch (60 mm):
 - 1) Plate size 1-1/4 inch (32 mm) with 1/4 inch (6 mm) lip.
 - 2) Projection 2-3/8 inch (60 mm).
 - c. Female Hinge (one inch build out), 3-3/8 inch (86 mm):
 - 1) Plate size 1-1/4 inch (32 mm) with 1/4 inch (6 mm) lip.
 - 2) Projection 3-3/8 inch (86 mm).
 - d. Female Hinge (lintel) 2-3/8 inch (60 mm):
 - 1) Plate size 3-3/8 inch (86 mm) with 1/4 inch (6 mm) lip.
 - 2) Projection 0 inch (0 mm).
 - e. Standoff Rods:
 - 1) Aluminum standoff rods with nylon or Type 304 Stainless Steel end caps.
 - 2) Aluminum telescoping standoff rods.
 - 3) Nylon or Type 304 Stainless Steel hinges/eye end sets.
 - 4) Type 304 Stainless steel clevis pins.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Do not begin installation until shutters have been properly prepared.

3.2 PREPARATION

- A. Clean surfaces thoroughly prior to installation.

3.3 INSTALLATION

- A. Install in accordance with manufacturer's instructions.
- B. Adjust operable units for smooth unobstructed operation.

3.4 PROTECTION

- A. Protect installed products from damage by weather and other work until Date of Substantial Completion.
- B. Touch-up and repair damaged products before Date of Substantial Completion.

END OF SECTION