

SECTION 10715

IMPACT SHUTTERS

Copyright 2017 The Tapco Group - All rights reserved

GENERAL

1.1 SECTION INCLUDES

- A. Storm rated shutters.
- B. Shutter hardware.

1.2 RELATED SECTIONS

A. Section 09900 - Paints and Coatings.

1.3 REFERENCES

- A. ASTM E 330 Structural Performance of Exterior Windows, Curtain Walls and Doors by Uniform Static Air Pressure Difference.
- B. ASTM E 1886 Standard Test method for Performance of Exterior Windows, Curtain Walls, Doors and Storm Shutters Impacted by Missiles and Exposed to Cyclic Pressure Differentials.
- C. ASTM E 1996 Standard Specification for Performance of Exterior Windows, Curtain Walls, Doors and Storm Shutters Impacted by Windborne Debris in Hurricanes.

1.4 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 31 standard colors.
- E. Verification Samples: For each finish product specified, two samples, representing actual product, color, and textures.

1.5 QUALITY ASSURANCE

- A. Storm Rated Hurricane Shutters: The completed shutter assembly conforms to:
 - 1. ASTM E 330 for Static Air Pressure.
 - 2. ASTM E 1886 and ASTM E 1996 for large missile impact and cyclic pressure loading.
- B. Thermal Stability: Fiberglass louvers and side rails thermally stable from minus 100 degrees F (minus 38 C) to 200 degrees F (93 C).

1.6 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.

1.7 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.

1.8 WARRANTY

A. Architectural Shutter: Provide with a limited lifetime warranty on structural components and manufacturers defects and factory applied paint finish. Warranty is limited to the original purchaser.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturer: Atlantic Premium Shutters The Tapco Group, which is located at: 29797 Beck Rd.; Wixom, MI 48398-2834; Toll Free Tel: 866-288-2726; Tel: 877-437-0608; Fax: 843-752-0111; Email: Wayne_Sanderson@tapcoint.com; Web: www.thetapcogroup.com/brands/atlantic
- B. Substitutions: Not permitted.

C. Requests for substitutions will be considered in accordance with provisions of Section 01600.

2.2 SHUTTERS

- A. Raised Panel Shutters: Atlantic Architectural Collection Raised Panel Shutters fabricated of high density solid core composite material, and high density PVC sheet machined and interlocked with pultruded fiberglass stiles and backed with 1/8 inch (3 mm) thick polycarbonate sheet. Finished Raised Panel is 1 inch (26 mm) thick. Shutters are finished with two part urethane paint, oven cured.
 - 1. Style:
 - a. Standard two panel.
 - b. Single panel.
 - c. Extra panel (3 panel).
 - d. Extra panel (4 panel).
 - e. Custom rail location.
 - f. Single panel with vertical cut profile.
 - g. Rabbeted edge with beading.
 - 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. Pine 644.
 - b. White 631.
 - c. Walnut 641.
 - d. Craftsman Brown 659.
 - e. Federal Brown 635.
 - f. Hammered Silver 661.
 - g. Roycraft Mist Gray 664.
 - h. Chelsea Gray 662.
 - i. Evergreen 638.
 - j. Deep Sea Blue 637.
 - k. Pewter 646.
 - I. Roycraft Pewter 663.
 - m. Midnight Sky 639.
 - n. Tempest Blue 666.
 - o. Hamilton Blue 667.
 - p. Harbor 645.
 - g. Rockwood Dark Green 656.
 - r. Rockwood Shutter Green 654.
 - s. Roycraft Bottle Green 655.
 - t. Forest Green 633.
 - u. Charleston Green 653.
 - v. Weathered Shingle 660.
 - w. Rockwood Medium Brown 658.
 - x. Polished Mahogany 657.
 - y. Roycraft Copper Red 668.
 - z. Board and Batten Red 650.
 - aa. Black 632.
 - bb. Cascade 647.
 - cc. Bordeaux 640.
 - dd. Sand 642.

- ee. Plum Creek 643.
- ff. Prime finish.
- gg. Custom color as selected.
- B. Louver Shutters: Atlantic Architectural Collection Louvered Colonial Shutters fabricated of pultruded fiberglass for vertical stiles and horizontal louvers and backed with 1/8 inch (3 mm) thick polycarbonate sheet. High density PVC sheet is machined and interlocked with fiberglass stiles. Finished louver is 1-1/4 inch (32 mm) thick. Shutters are finished with two part urethane paint, oven cured.
 - 1. Style:
 - a. Standard.
 - b. Additional Rails.
 - c. Vertical mullion.
 - d. Faux tilt rod.
 - e. Custom top or bottom rail.
 - f. Horns.
 - g. Rabbeted edge.
 - h. Bahama 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. Pine 644.
 - b. White 631.
 - c. Walnut 641.
 - d. Craftsman Brown 659.
 - e. Federal Brown 635.
 - f. Hammered Silver 661.
 - g. Roycraft Mist Gray 664.
 - h. Chelsea Gray 662.
 - i. Evergreen 638.
 - j. Deep Sea Blue 637.
 - k. Pewter 646.
 - I. Roycraft Pewter 663.
 - m. Midnight Sky 639.
 - n. Tempest Blue 666.
 - o. Hamilton Blue 667.
 - p. Harbor 645.
 - q. Rookwood Dark Green 656.
 - r. Rookwood Shutter Green 654.
 - s. Roycraft Bottle Green 655.
 - t. Forest Green 633.
 - u. Charleston Green 653.
 - v. Weathered Shingle 660.
 - w. Rookwood Medium Brown 658.
 - x. Polished Mahogany 657.
 - y. Roycraft Copper Red 668.
 - z. Board and Batten Red 650.
 - aa. Black 632.
 - bb. Cascade 647.
 - cc. Bordeaux 640.
 - dd. Sand 642.

- ee. Plum Creek 643.
- ff. Prime Finish.
- gg. Custom color as selected.
- C. Bahama Louvered Shutters: Bahama Shutters fabricated of pultruded fiberglass for vertical stiles, horizontal rails and horizontal louvers and backed with 1/8 inch (3 mm) thick polycarbonate sheet. Finished shutter is 1-1/4 inch (32 mm) thick. Shutters are finished with two part urethane paint, oven cured.
 - 1. Style:
 - a. Standard.
 - b. Additional rails.
 - c. Additional vertical mullion.
 - d. Colonial louver spacing.
 - 2. Width:
 - a. Single Panel.
 - b. Double panel with vertical mullion.
 - c. inch (mm).
 - d. As indicated on the Drawings.
 - 3. Height:
 - a. inch (mm).
 - b. As indicated on the Drawings.
 - 4. Colors:
 - a. Pine 644.
 - b. White 631.
 - c. Walnut 641.
 - d. Craftsman Brown 659.
 - e. Federal Brown 635.
 - f. Hammered Silver 661.
 - g. Roycraft Mist Gray 664.
 - h. Chelsea Grav 662.
 - i. Evergreen 638.
 - j. Deep Sea Blue 637.
 - k. Pewter 646.
 - I. Roycraft Pewter 663.
 - m. Midnight Sky 639.
 - n. Tempest Blue 666.
 - o. Hamilton Blue 667.
 - p. Harbor 645.
 - q. Rookwood Dark Green 656.
 - r. Rookwood Shutter Green 654.
 - s. Roycraft Bottle Green 655.
 - t. Forest Green 633.
 - u. Charleston Green 653.
 - v. Weathered Shingle 660.
 - w. Rookwood Medium Brown 658.
 - x. Polished Mahogany 657.
 - y. Roycraft Copper Red 668.
 - z. Board and Batten Red 650.
 - aa. Black 632.
 - bb. Cascade 647.
 - cc. Bordeaux 640.
 - dd. Sand 642.
 - ee. Plum Creek 643.
 - ff. Custom color as selected.

2.3 HARDWARE

- A. Atlantic Architectural Collection Raised Panel and Louver Shutters Hardware only.
 - 1. Hardware:
 - a. Inside Locking "U" Shaped Storm Bar System.
 - 1) Provide two "U" Shaped Storm Bars for each pair of shutters.
 - b. Horizontal Storm Bar System: Two Horizontal Storm Bars are required per shutter pair.
 - 1) inch (mm).
 - 2) As indicated on the Drawings.
 - c. Pintel: Provide in same size pairs.
 - 1) Pintel plate size 1-1/2 inch (38 mm) by 3-1/2 inch (89 mm) by 1/8 inch (3.2 mm), Pin diameter 3/8 inch (9.5 mm).
 - 2) Stainless Steel with a matte black powder coat finish.
 - 3) Offsets:
 - a) 1/2 inch (12.5 mm).
 - b) 1-1/2 inch (38 mm).
 - c) 2-1/4 inch (57 mm).
 - d) 3-1/2 inch (89 mm).
 - d. 4 inch (102 mm) Lag Pintel: Provide in pairs.
 - 1) Stainless Steel with a matte black powder coat finish.
 - e. 6 inch (152 mm) L-Hinge: Provide in same size pairs.
 - 1) Stainless Steel with a matte black powder coat finish.
 - 2) Offsets:
 - a) 0 inch
 - b) 1/2 inch (12.5 mm).
 - c) 1-1/2 inch (38 mm).
 - d) 2-1/4 inch (57 mm).
 - f. 9 inch (229 mm) adjustable L-Hinge: Provided in pairs.
 - 1) Stainless Steel with a matte black powder coat finish.
 - g. 10 inch (254 mm) Strap Hinge: Provide in same size pairs.
 - 1) Stainless Steel with a matte black powder coat finish.
 - 2) Offsets:
 - a) 0 inch
 - b) 1/2 inch (12.5 mm).
 - c) 1-1/2 inch (38 mm).
 - d) 2-1/4 inch (57 mm).
 - h. 12 inch (305 mm) Strap Hinge: Provide in same size pairs.
 - 1) Stainless Steel with a matte black powder coat finish.
 - 2) Offsets:
 - a) 1/2 inch (12.5 mm).
 - b) 1-1/2 inch (38 mm).
 - c) 2-1/4 inch (57mm).
 - i. 10 inch (254 mm) Backplate: Provide in same size pairs.
 - 1) Stainless Steel with a matte black powder coat finish.
 - j. 12 inch (305 mm) Backplate: Provide in same size pairs.
 - 1) Stainless Steel with a matte black powder coat finish.
 - k. Jamb Pintel: Provide in same size pairs.
 - 1) Stainless Steel with a matte black powder coat finish.
 - 2) Offsets:
 - a) 1/2 inch (12.5 mm).
 - b) 1 inch (25 mm).
 - c) 2 inch (51 mm).
 - I. Flat Hinge:
 - 1) Stainless Steel, 12 gauge with matte black powder coat finish.

- 2) Offsets:
 - a) 0 inch
 - b) 1/2 inch (12.5 mm).
 - c) 1-1/2 inch (38 mm).
 - d) 2-1/4 inch (57 mm).
- m. 6 inch (152 mm) L-Hinge Backplate: Stainless Steel with matte black powder coat finish. Provided in pairs.
- n. Flat Hinge Backplate: Stainless Steel with matte black powder coat finish. Provided in pairs.
- o. H-Hinge: Stainless Steel with matte black powder coat finish. Provided in pairs.
- p. Pintel Shim: Stackable, black polyamide plastic, 1/4 inch (6 mm) thick.
- q. S Holdback: Stainless Steel with matte black powder coat finish. Provided in pairs with Stainless Steel lag bolt, washer, and cotter pin.
- r. Dog Post Holdback: Stainless Steel with matte black powder coat finish. Provided in pairs.
- s. Rat Tail Holdback: Stainless Steel with matte black powder coat finish. Provided in pairs.
- t. 6 inch (152 mm) Lag Bolt: Stainless Steel with matte black powder coat finish. Provided in pairs. For use with S Holdback and Rat Tail Holdback.
- u. Shutter Slide Bolt, 12 inch (305 mm). Stainless Steel with matte black powder coat finish.
 - 1) Non-locking slide bolt.
 - 2) Locking slide bolt.
- v. Acorn Holdback.
- B. Atlantic Architectural Collection Bahama Shutter Hardware only.
 - Hardware:
 - a. Male Hinge:
 - 1) Plate size 1-1/8 inch (28 mm) backplate.
 - b. Female Hinge Track. 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 Track, 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. Tilt Arms:
 - 1) Aluminum tilt arms with nylon end caps.
 - 2) Black Anodized tilt arms with nylon end caps.
 - 3) Nylon hinges/eye end sets.
 - 4) Stainless steel clevis pins:
 - e. Locking bar and mounting brackets.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Do not begin installation until substrates have been properly prepared.
- B. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.
- C. Commencement of work will imply acceptance of substrate.

3.2 PREPARATION

- A. Clean surfaces thoroughly prior to installation.
- B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

3.3 INSTALLATION

- A. Install in accordance with manufacturer's instructions and with no fasteners through the face of the shutters.
- 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