

SECTION 10710  
EXTERIOR SHUTTERS

PART     GENERAL

SECTION INCLUDES

Ornamental Fixed Shutters.

Top-Hinged Shutters.

Folding Shutters.

Sliding Shutters.

Sliding Louvered Doors.

Folding Louvered Doors.

Window and Door Inserts.

Equipment Screens.

Sunscreens.

RELATED SECTIONS

Section 05500 - Metal Fabrications.

Section 06100 - Rough Carpentry.

REFERENCES

ASTM B 209/B 209M - Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate.

ASTM B 221/B 221M - Standard Specification for Aluminum and Aluminum-Alloy Bars, Rods, Wire, Shapes, and Tubes.

FS HH-I-524A - Specification for Expanded Polystyrene Insulation Board.

SUBMITTALS

Submit under provisions of Section 01300.

Product Data: Manufacturer's descriptive literature for products specified in this section.

Shop Drawings: Indicate shutter sizes, and mounting details for project conditions.

Selection Samples: Two sets, representing manufacturer's full range of available finish selections.

Verification Samples: Two samples, minimum surface 36 square inches each, indicating match to specified finish.

Quality Assurance Submittals:

Certificates: Contractor's certification that:

Products of this section, as provided, meet or exceed specified requirements.

Manufacturer of products of this section meets specified qualifications.

Manufacturer's Instructions: Printed installation instructions for each specified product.

Closeout Submittals:

Operation and maintenance data: Manufacturer's printed instructions for maintaining operating hardware and finishes.

Warranty documents: Issued and executed by manufacturer of product, in Owner's name.

## QUALITY ASSURANCE

Manufacturer Qualifications: Minimum five (5) years documented experience producing products specified in this section.

Regulatory Requirements: Specified products to conform to requirements of South Florida Building Code.

Pre-installation Meetings:

Convene at job site seven (7) calendar days prior to scheduled beginning of construction activities of this section to review requirements of this section.

Require attendance by representatives of the following:

Product manufacturer, if requested by installer of this section.

Installer of this section.

Other entities directly affecting, or affected by, construction activities of this section.

Notify Architect four (4) calendar days in advance of scheduled meeting date.

#### DELIVERY, STORAGE, AND HANDLING

##### Storage and Protection:

Store products of this section in manufacturer's unopened packaging until installation.

Maintain dry, heated storage area for products of this section until installation of products.

#### PROJECT/SITE CONDITIONS

Existing Conditions: Obtain field measurements of existing openings and verify shop drawing dimensions before fabricating units.

#### WARRANTY

Manufacturer's Warranty: Supply manufacturer's standard warranty against defects in product workmanship and materials.

#### PART PRODUCTS

##### MANUFACTURERS

Acceptable Manufacturer: Willard Shutter Company, Inc.; 4420 N.W. 35th Ct., Miami FL 33142; Telephone 1-800-826-4530, FAX 1-305-638-8634.

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

Substitutions: Not permitted.

##### MATERIALS

Aluminum Sheet: Conforming to ASTM B 209.

Aluminum Extrusions and Shapes: Conforming to ASTM B 221.

Expanded Polystyrene: Conforming to FS HH-I-524A.

##### COMPONENTS

Shutter Unit Type \_\_:

Door Unit Type \_\_:

Acceptable Product: Islander Decorator Shutter.

Acceptable Product: Islander Colonial Hinged Shutter.

Acceptable Product: Islander Bahama Shutter.

Acceptable Product: Islander Standard Rolling Shutter.

Acceptable Product: Islander Sill Track Rolling Shutter.

Acceptable Product: Islander Sliding Door.

Acceptable Product: Islander Folding Door.

Product Description: Fixed horizontal-louver shutter, with louver spacing 1-1/4 inches OC vertical, set into foam-filled frame at 44 degrees from horizontal.

Frame: Aluminum sheet, Alloy 3004-H36, 0.025 inch minimum sheet thickness; roll-formed to box beam profile 2-1/2 inches wide by 1-5/8 inches deep.

Intermediate Mullion: Aluminum sheet, Alloy 3004-H36, 0.025 inch minimum sheet thickness; roll-formed to box beam profile 2-1/2 inches wide by 1-5/8 inches deep.

Louver: Aluminum sheet, Alloy 3004-H36, 0.025 inch minimum sheet thickness; roll-formed to profile 1-3/4 inches wide, with converse bevelled front and rear edges.

Foam Core Material: Expanded polystyrene conforming to FS HH-I-524A.

Fasteners: Stainless steel self-tapping machine screws, or aluminum Alloy 2024-T4 pop-rivets, manufacturer's option.

Internal Reinforcement: Aluminum extrusion, Alloy 6063-T5, 0.062 inch minimum wall thickness, mill finish; formed to I-beam profile to fit inside frame.

Mounting Hardware: Factory-prepare units for specified mounting hardware.

Finish: Roller-coated baked enamel, medium gloss finish, \_\_\_\_\_ color.

Finish: Roller-coated baked enamel, medium gloss finish, color selected from manufacturer's full range of available colors.

Finish: Custom finish, \_\_\_\_\_.

Sizes: Indicated on drawings.

Size: Height \_\_ feet \_\_ inches by width \_\_ feet \_\_ inches.

Mounting Hardware for Shutter Type \_\_: Anchoring devices; types and sizes specified in shutter manufacturer's printed instructions for project conditions.

Mounting Hardware for Shutter Type \_\_:

Shutter manufacturer's standard mounting hardware as follows:

Side Hinges: Aluminum, AAMA anodized finish R1-201; continuous piano hinge.

Locking Bar: Aluminum extrusion, Alloy 6063-T5, AAMA anodized finish R1-201.

Hold-Open: Friction catch, nickel-plated brass.

Anchoring Devices: Types and sizes specified in shutter manufacturer's printed instructions for project conditions.

#### Mounting Hardware for Shutter Type \_\_:

Shutter manufacturer's standard mounting hardware as follows:

Header Hinge: Aluminum extrusion, Alloy 6063-T6, AAMA anodized finish R1-201; shutter-mounted pivot and wall-mounted receiver, continuous full shutter width.

Adjustable Tube Support: Aluminum extrusions, Alloy 6063-T6; telescoping operation for adjustable shutter projection, maximum 44 degrees from vertical.

Fixed Support Components:

Support Arm: Aluminum extrusion, Alloy 6063-T6; fixed length for shutter projection \_\_ degrees from vertical.

Wall Bracket: Aluminum extrusion, Alloy 6063-T6; camel-back bracket pivot-connected to support arm for horizontal or vertical mounting.

Shutter Bracket: Aluminum extrusion, Alloy 6063-T6; non-removable pivot connection to shutter for fixed shutter position.

Shutter Bracket: Aluminum extrusion, Alloy 6063-T6; removable pivot connection to shutter to allow return of shutter to vertical position.

Anchoring Devices: Types and sizes specified in shutter manufacturer's printed instructions for project conditions.

#### Mounting Hardware for Shutter Type \_\_:

Shutter manufacturer's standard mounting hardware as follows:

Single Head Rail: Aluminum extrusion, Alloy 6063-T6, AAMA anodized finish R1-201; single wall-mounted rail, continuous full indicated length.

Double Head Rail: Aluminum extrusion, Alloy 6063-T6, AAMA anodized finish R1-201; double wall-mounted rail, continuous full indicated length.

Roller Bracket: Aluminum extrusion, Alloy 6063-T6, AAMA anodized finish R1-201; shutter-mounted, with nylon roller.

Tie-Down Bracket: Aluminum extrusion, Alloy 6063-T6,

AAMA anodized finish R1-201; shutter-mounted, with locking device.

Anchoring Devices: Types and sizes specified in shutter manufacturer's printed instructions for project conditions.

Mounting Hardware for Shutter Type \_\_:

Shutter manufacturer's standard mounting hardware as follows:

Single Head Rail: Aluminum extrusion, Alloy 6063-T6, AAMA anodized finish R1-201; single wall-mounted rail, continuous full indicated length.

Double Head Rail: Aluminum extrusion, Alloy 6063-T6, AAMA anodized finish R1-201; double wall-mounted rail, continuous full indicated length.

Roller Bracket: Aluminum extrusion, Alloy 6063-T6, AAMA anodized finish R1-201; shutter-mounted, with nylon roller.

Single Sill Track: Aluminum extrusion, Alloy 6063-T6, AAMA anodized finish R1-201; single wall-mounted track, continuous full indicated length.

Double Sill Track: Aluminum extrusion, Alloy 6063-T6, AAMA anodized finish R1-201; double wall-mounted track, continuous full indicated length.

Guide Stud: Aluminum extrusion, Alloy 6063-T6, vinyl-coated; shutter-mounted for aligning bottom of shutter with sill track.

Locking Device: Flush bolt mounted at bottom of shutter.

Anchoring Devices: Types and sizes specified in shutter manufacturer's printed instructions for project conditions.

Mounting Hardware for Door Type \_\_:

Door manufacturer's standard mounting hardware as follows:

Single Head Rail: Aluminum extrusion, Alloy 6063-T6, AAMA anodized finish R1-201; single wall-mounted rail, continuous full indicated length.

Double Head Rail: Aluminum extrusion, Alloy 6063-T6, AAMA anodized finish R1-201; double wall-mounted rail, continuous full indicated length.

Roller Bracket: Aluminum extrusion, Alloy 6063-T6, AAMA anodized finish R1-201; door-mounted, with nylon roller.

Single Sill Track: Aluminum extrusion, Alloy 6063-T6, AAMA anodized finish R1-201; single wall-mounted track, continuous full indicated length.

Double Sill Track: Aluminum extrusion, Alloy 6063-T6, AAMA anodized finish R1-201; double wall-mounted track, continuous full indicated length.

Guide Stud: Aluminum extrusion, Alloy 6063-T6, vinyl-coated; door-mounted for aligning bottom of door with sill track.

Locking Device: Flush bolt mounted at bottom of door.

Anchoring Devices: Types and sizes specified in door manufacturer's printed instructions for project conditions.

#### Mounting Hardware for Door Type \_\_:

Door manufacturer's standard mounting hardware as follows:

Side Hinges: Aluminum, AAMA anodized finish R1-201; continuous piano hinge.

Single Head Rail: Aluminum extrusion, Alloy 6063-T6, AAMA anodized finish R1-201; single wall-mounted rail, continuous full indicated length.

Double Head Rail: Aluminum extrusion, Alloy 6063-T6, AAMA anodized finish R1-201; double wall-mounted rail, continuous full indicated length.

Roller Bracket: Aluminum extrusion, Alloy 6063-T6, AAMA anodized finish R1-201; door-mounted, with nylon roller.

Single Sill Track: Aluminum extrusion, Alloy 6063-T6, AAMA anodized finish R1-201; single wall-mounted track, continuous full indicated length.

Double Sill Track: Aluminum extrusion, Alloy 6063-T6, AAMA anodized finish R1-201; double wall-mounted track, continuous full indicated length.

Guide Stud: Aluminum extrusion, Alloy 6063-T6, vinyl-coated; door-mounted for aligning bottom of door with sill track.

Locking Device: Flush bolt mounted at bottom of door.

Anchoring Devices: Types and sizes specified in door manufacturer's printed instructions for project conditions.

Support Structure: Specified in Section 05500.

## PART EXECUTION

### EXAMINATION

#### Verification of Conditions:

Openings are correct sizes in accordance with Architect-accepted shop drawings.

Substrates are prepared to receive products of this section.

#### Installer's Examination:

Have installer of this section examine conditions under which

construction activities of this section are to be performed, then submit written notification if such conditions are unacceptable. Transmit two copies of installer's report to Architect within 24 hr. of receipt.

Beginning construction activities of this section before unacceptable conditions have been corrected is prohibited. Beginning construction activities of this section indicates installer's acceptance of conditions.

#### INSTALLATION

Install products specified in this section in accordance with Architect-approved shop drawings and manufacturer's printed installation instructions.

#### ADJUSTING

Adjust operating hardware for correct operation of units in accordance with manufacturer's printed instructions.

#### CLEANING

Clean finishes of units in accordance with manufacturer's printed instructions.

#### PROTECTION OF INSTALLED PRODUCTS

Protect units from damage by subsequent construction activities until Substantial Completion; replace damaged units having damage other than minor finish damage at Contractor's expense.

Repair minor finish damage to units in accordance with manufacturer's instructions; Architect will be sole judge of acceptability of repairs.

END OF SECTION