

SPECIFICATIONS

Section 08330
ROLLING SECURITY SHUTTER - ALUMINUM
Page 1

PART 1 GENERAL

1.1 SECTION INCLUDES

- .1 (Manual) or (electric) operation rolling aluminum shutters.

1.2 RELATED SECTIONS

- .1 Section 05500 - Metal Fabrications. Door opening jamb and head members.
- .2 Section 06100 - Rough Carpentry. Door opening jamb and head members.
- .3 Section 08700 - Door Hardware: Master keyed cylinder.
- .4 Division 16. Electrical wiring and conduit, fuses, disconnect, switches, connection of operator to power supply, and installation of control station and wiring.

1.3 SYSTEM DESCRIPTION

- .1 Manual Tape Operation: Manual strap attached to internal tape disk which is connected to axle. Complete with tape recoil box assembly.

OR

- .1 Manual Push-up Operation: Manual push up unit with overhead counter balance device, requiring 14 Kg nominal force to operate.

OR

Manual Crank Operation: Hoist operator including crank gear box, steel crank drive shaft and geared reduction unit. Removable crank handle.

OR

Motor operated. Internal tubular motor within the winding axle with progressive limit switch. Single phase 110V - 60Hz.

1.4 SUBMITTALS

- .1 Section 01330 Submittal Procedures.
- .2 Product Data: Provide general construction, component connections and details, electrical connections.
- .3 Shop Drawings: Indicate pertinent dimensioning, anchorage methods, hardware locations, and installation details.
- .4 Samples: Submit two shutter slats, 200mm x 200mm in size illustrating shape, colour and finish texture.
- .5 Manufacturers Instructions: Indicate installation sequence and procedures, adjustment and alignment procedures.
- .6 Maintenance Data: Indicate lubrication requirements and frequency, and periodic adjustments required.

PART 2 PRODUCTS

2.1

- .1

2.2 MODEL

- .1 .1 Pentagon Series 400
- OR
- .1 .1 Pentagon Series 420
- OR
- .1 .1 Pentagon Series 450
- OR
- .1 .1 Pentagon Series 500

2.3 CONSTRUCTION

- .1 Curtain:
 - .1 .1 Pentagon Series 400 - Aluminum rollformed foam-filled slats, Aluminum 3005 H26 alloy with polyurethane foam insulation core. Colour: Arctic White, Medium Brown, Ivory Tusk, Aluminum Grey.
- OR
- .1 .1 Pentagon Series 420 - Aluminum rollformed High Density foam-filled slats, Aluminum 3005 H26 alloy with high density polyurethane foam insulation core. Colour: Arctic White, Medium Brown, Ivory Tusk, Aluminum Grey.

OR

.1 .1 Pentagon Series 450 - Aluminum double walled extruded slats, Aluminum 6063-T5 alloy. Colour: Satin Clear Anodized Finish.

OR

.1 .1 Pentagon Series 500 - Aluminum rollformed foam-filled slats, Aluminum 3005 H26 alloy with polyurethane foam insulation core. Colour: Arctic White.

- .2 Bottom Bar: Extruded double walled extruded 6063-T5 aluminum alloy bar with black compressible rubber insert. Colour: To match slats.

OR

- .2 Bottom Bar for 1 1/8" 5 pin mortise cylinder lock: Extruded .095 wall extruded 6063-T5 aluminum alloy bar, with black compressible rubber insert. Colour: To match slats.

- .3 Guide Rails: Heavy gauge extruded 6063-T5 aluminum alloy rails with two high grade brush inserts. Colour: To match slats.

- .4 Hood Enclosure: 3005-H27 aluminum alloy box section, detachable for future servicing. Colour: To match slats.

- .5 Roller Shaft Counterbalance: Steel pipe and torsion steel spring system, capable of producing torque sufficient to ensure smooth operation of curtain from any position and with adjustable spring tension.

- .6 Locking:

.1 Bottom bar slide bolt locking operated by knobs at each end,

OR

.1 Slide bolt locking operated by center mounted thumb turn,

OR

.1 Centre mounted 1 1/8" mortise cylinder lock operable from one side (or both sides). Master keyable cylinder available on request.

PART 3 EXECUTION

3.1 EXAMINATION

- .1 Section 01001 Verification of existing conditions before starting work.
- .2 Verify that opening sizes, tolerances and conditions are acceptable.

3.2 INSTALLATION

- .1 Install shutter unit assemblies in accordance with manufacturers instructions.
- .2 Use anchorage devices to securely fasten assembly to wall construction and building framing without distortion or stress.
- .3 Fit and align assembly including hardware; level and plumb to provide smooth operation.
- .4 Co-ordinate installation of backing materials at frame perimeter as specified in Section 07900.

3.3 ERECTION TOLERANCES

- .1 Maintain dimensional tolerances and alignment with adjacent work.
- .2 Maximum variation from plumb: 1.5mm.
- .3 Maximum variation from level: 1.5mm.
- .4 Longitudinal or diagonal warp: Plus or minus 3mm per 3m straight edge.

3.4 ADJUSTING

- .1 Adjust door and shutter, hardware and operating assemblies for smooth and noiseless operation.

3.5 CLEANING

- .1 Section 01001: Cleaning installed work.
- .2 Clean door, shutters and components.

3.6 DEMONSTRATION

- .1 Demonstrate proper operation to Owners Representative.
- .2 Instruct Owners Representative in maintenance procedures.

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DETAIL SHEET ■ SERIES 400

Prefinished Aluminum Slat filled with polyurethane foam

POSITION

FACE OF WALL

BETWEEN JAMB

BOX SIZING

Height H	D
Up to 60" (1524 mm)	6-1/2" (165 mm)
60" to 108" (1524 mm to 2743 mm)	8" (205 mm)
108" to 144" (2743 mm to 3657 mm)	10" (250 mm)

DIMENSIONS

SLAT PROFILE	BOTTOM BAR	GUIDE RAIL

COLOURS

COLOURS AVAILABLE:

Arctic White
Medium Brown
Ivory Tusk
Aluminum Grey
Custom Finish

OPERATION

CRANK ROD	ELECTRIC MOTOR	COUNTER BALANCE	TAPE COILER

SECURITY

SLIDE BOLT LOCKS	CENTER MOUNTED KEY LOCK
ELECTRIC TOGGLE SWITCH 	ELECTRIC KEY SWITCH

DETAIL SHEET ■ SERIES 420

Prefinished Aluminum Slat filled with High Density polyurethane foam

POSITION

FACE OF WALL

2 1/8" (53mm) ← clear opg → 2 1/8" (53mm)

BETWEEN JAMB

2 1/8" (53mm) ← clear opg → 2 1/8" (53mm)

BOX SIZING

Height H	D
Up to 60" (1524 mm)	6-1/2" (165 mm)
60" to 108" (1524 mm to 2743 mm)	8" (205 mm)
108" to 144" (2743 mm to 3657 mm)	10" (250 mm)

DIMENSIONS

SLAT PROFILE

1 9/16" (40 mm)
21/64" (8.5 mm)

BOTTOM BAR

2" (51 mm)
9/32" (7.5 mm)

Extrusion added when using cylinder lock

GUIDE RAIL

7/8" (22 mm)
2 1/8" (53 mm)

COLOURS

COLOURS AVAILABLE:

Arctic White
Medium Brown
Ivory Tusk
Aluminum Grey
Custom Finish

OPERATION

CRANK ROD

ELECTRIC MOTOR

COUNTER BALANCE

TAPE COILER

SECURITY

SLIDE BOLT LOCKS

CENTER MOUNTED KEY LOCK

ELECTRIC TOGGLE SWITCH

ELECTRIC KEY SWITCH

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DETAIL SHEET ■ SERIES 450

Double Wall Extruded Aluminum Slat

POSITION

FACE OF WALL

BETWEEN JAMB

BOX SIZING

Height H	D
Up to 60" (1524 mm)	6-1/2" (165 mm)
60" to 108" (1524 mm to 2743 mm)	8" (205 mm)
108" to 144" (2743 mm to 3657 mm)	10" (250 mm)

DIMENSIONS

SLAT PROFILE

BOTTOM BAR

GUIDE RAIL

COLOURS

COLOURS AVAILABLE:

Clear Anodized
Aluminum Finish

Custom Finish

OPERATION

CRANK ROD

ELECTRIC MOTOR

COUNTER BALANCE

TAPE COILER

SECURITY

SLIDE BOLT LOCKS

CENTER MOUNTED KEY LOCK

ELECTRIC TOGGLE SWITCH

ELECTRIC KEY SWITCH

DETAIL SHEET - SERIES 500

Prefinished Aluminum Slat filled with polyurethane foam

POSITION

FACE OF WALL

BETWEEN JAMB

BOX SIZING

Height H	D
Up to 58" (1473 mm)	8" (205 mm)
58" to 108" (1473 mm to 2743 mm)	10" (250 mm)
108" to 144" (2743 mm to 3657 mm)	12" (300 mm)

DIMENSIONS

SLAT PROFILE

BOTTOM BAR

GUIDE RAIL

COLOURS

COLOURS AVAILABLE:

Arctic White

Custom Finish

OPERATION

CRANK ROD

ELECTRIC MOTOR

COUNTER BALANCE

TAPE COILER

SECURITY

SLIDE BOLT LOCKS

CENTER MOUNTED KEY LOCK

ELECTRIC TOGGLE SWITCH

ELECTRIC KEY SWITCH