

SECTION 08300 - ROLLSHUTTERS

General Product and Installation Specifications

PART 1 - GENERAL

1.1 Related Work

- .1 Related work to be determined by the project architect or owner's representative.
- .2 School District #XX, or their General Contractor, to provide all wood blocking and/or solid mounting surfaces required for proper installation.
- .3 The School District #XX, or their General contractor, to provide and install all flashing for rollshutter panel boxes.
- .4 If required, School District #XX, or their General contractor, to provide and install exterior and/or interior finishing trim for the rollshutters and security screens (Vandal Panels™).

1.2 Scope of Work

- .1 The work of this section covers the supply and installation of rollshutters and security screens (Vandal Panels™) detailed on architectural drawings, and/or the Job-site Specifications Addendum and herein specified.

1.3 Quality Assurance

- .1 **Approved Manufacturer: TALIUS Head Office: PO Box 3279, Salmon Arm, BC V1E 4S1
Tel: 1-888-550-6205
E-mail: info@talius.com**

1.4 Product Delivery, Handling and Storage

- .1 Deliver materials to site in shipping crates and packing. Store un-installed materials off-site at a secure location prior to, and until, installation completion. Store off the ground on wood supports spaced to prevent damage, and under cover to prevent damage from weather. Coordinate delivery with construction schedule to prevent loss or damage.

1.5 Operation and Maintenance

- .1 Rollshutters are to be of maintenance-free design.

1.6 Guarantee

- .1 Manufacturer to provide a written warranty that all components are guaranteed against defects in material, design and workmanship for one year from date of installation. Installer to provide written guarantee that there will be no labour charge for warranty repairs for one year from the date of installation.

PART 2 - PRODUCTS

2 Rollshutters

.1 Curtain:

The rollshutter curtain is to be made from individual roll-formed aluminum profiles with an injected super-hard resin foam core and shall have a cover width of 38 mm (1 1/2") and a thickness of 9 mm (11/32"). Minimum aluminum gauge to be 0.62 mm (0.0244"). The minimum weight per square metre is to be 8.0 kg (0.0114 lbs/inch²). Manufacturer's description: **SAFE MINI**.

Alternate slats are to be fitted with inserts to hold the curtain in alignment. The bottom of the curtain shall be finished with an extruded aluminum bar and fitted with a sealing bottom vinyl strip.

On locations with spans between 3300 mm - 6500 mm and no centre rails can be installed the rollshutter curtain is to be made from individual roll-formed aluminum profiles with an injected foam core and shall have a cover width of 77 mm (3") and a thickness of 19 mm (3/4"). Minimum aluminum gauge to be 0.62 mm (0.0244"). The minimum weight per square metre is to be 4.64 kg. Manufacturer's description: **AG/77**. Alternate slats are to be fitted with Side Locks (SP/77-MSM) to hold the curtain in alignment and hook inside the guide rails. The bottom of the curtain shall be finished with an extruded aluminum bar and fitted with a sealing bottom vinyl strip.

PART 2 - PRODUCTS**2.1 Rollshutters***(continued)***.1 Curtain:****a. Performance:**

All AG/77 shutters to have met or exceeded EN12414 class 2 wind load resistance testing. Maximum width 6500 mm per single curtain section with a maximum surface area of 20m².

.2 Guide Rails:

The guide rails are to be minimum 0.065" or 1.60 mm gauge aluminum extrusions fitted with two noise and weather insulating strips. All guide rails must have undergone a multiple-stage pre-treatment procedure and be painted with baked-on paint. Guide rails to be acid, alkali and oil resistant. The guide rail is to be made of two snap-together parts that prevent unauthorized access to the mounting screws when the curtain is in the down position. Curtain penetration into the guide rail shall be at least 41 mm (1 5/8") for sections less than 1.83 m (72") in width and at least 66 mm (2 5/8") for sections over 1.83 m (72") in width. Manufacturer's description: **SAFE RAIL** and **SAFE 40 RAIL** respectively.

On rollshutter sections where width dimensions exceed 3.3 m (130"), split the rollshutter into two or more sections by means of a centre guide rail(s). Manufacturer's description: **SAFE CENTRE RAIL**.

On locations with spans between 3300 mm - 6500 mm and no centre rails can be installed the guide rails are to be a single extrusion with built in edge retention ledges that work with side lock inserts (SP/77-MSM). Manufacturer's description: **GR100 rails**. Each guide rail is to have 2 noise reduction weather stripping gures to provide no metal contact between the curtain and the inside edges of the rail. Rail to be 100 mm (4") wide and 35 mm (1 3/8") deep.

.3 Sill:

Provide a 30 mm x 47 mm (1 1/8" x 1 13/16") U-shaped aluminum sill to hold the curtain securely in place when closed, achieving 1 3/8" penetration. The wide wall thickness is to be minimum 0.080" or 2 mm gauge aluminum to reduce prying damage. Manufacturer's description: **SAFE U-SILL**.

Where the U-sill is exposed to weather, drill a minimum of two "weep" holes in the inside channel of the U-sill to allow for moisture drainage.

.4 Build-Up:

If applicable, provide heavy-gauge aluminum build-up underneath the guide rails, along the panel box top, panel box bottom, and sill. Unless otherwise specified, the width of the build-up is to be 35 mm (1 3/8"), depth to be suitable to provide obstruction-free operation of the rollshutter curtain.

.5 Panel Box Housing:

Panel boxes are to be precision roll-formed from 1.0 - 1.2 mm (0.040" - 0.0472") aluminum with an electro-statically bonded and baked finish. The lower half of the panel box must be detachable for future servicing access. Panel box service panel to be secured with tamper-resistant fasteners on all panel boxes below 2.13m (7') off the ground. All panels to be delivered to job site covered with protective, adhesive plastic film to prevent scratching. Film to be removed by installer after job completion. Please note that custom painted panel boxes will not have protective adhesive plastic film. All panel box endplates to be manufactured by pressure die-casting procedure from high-grade aluminum alloy. Endplates must be chromed and laminated with a resistant PVC surface. The panel box style to be 5-corner using a roller guide at each



(continued)

end of the panel box, to allow for smooth guided entry into the guide rails. Panel box sizes to suit Rollshutters dimensions. All panel boxes are to be CSA or UL certified and have a grounding lug mounted on the inside of the endplate.

.6 Colour Selection:

Unless otherwise indicated, items to be selected from manufacturer's standard colour range: **white, beige, brown, black or silver.**

- curtain
- bottom curtain profile
- guide rails
- sill
- aluminum build-up
- panel box housing

.7 Operation Individual Control:

Unless otherwise indicated, the Rollshutters shall be electrically operated. Provide a tubular 120 VAC hardwired (NO Radio Frequency accepted) motor installed inside the shaft. The motor unit shall be constructed with solenoid brakes, thermal overload protection switch with automatic reset and enclosed, permanently lubricated bearings and gears. All electrical components to be C.S.A. and U.L. certified. Each motor unit shall be controlled by a momentary-contact, three-position switch.

All switches to fit standard electrical boxes and shall be Decora momentary contact style. Locations as shown on drawings. All wiring as per manufacturer's instructions and to local electrical code requirements. Supply and installation of electrical wiring (including drilling of wiring routing holes through mounting surfaces), mounting of supplied electrical switches, and the connection of all wiring to be performed by the School District's certified electricians, or other approved certified electricians as approved by the School District.

The ground wire is to be grounded to the panel box end plate grounding lug.

.8 Battery Back-up Multi-interface on approved egress doors:

All Rollshutters covering egress doors must have individual switch control (daily operation) and "Fire" interface. These locations must automatically open with or without main building power in the event of a fire alarm. These locations must also have an Exit emergency button located beside the door to raise the shutter in a non-fire event to allow the shutter to be opened and allow exit.

The Battery Back-up Multi-Interface assembly must be inside a self-contained enclosure. For the 2-motor design, it must be able to supply up to 4.25 Amps, for 3 months between charging or up to 10 open/closed cycles of the shutter. For the 4-motor design, it must be able to supply up to 8.5 Amps, for 3 months between charging or up to 10 open/closed cycles of the shutter. Appropriate constant power from the building circuit panel must be run to the Battery Back-up Multi-interface assembly. All switching to be low voltage and allow for multiple building switch/device inputs (N.O. dry contacts).

.9 Locking Devices:

All rollshutters shall be equipped with hanger locks constructed of corrosion-resistant materials, or an approved alternate automatic locking device. Hanger locks are to be installed at sufficient intervals between shaft and curtain to prevent curtains from being lifted by more than 40 mm (1 9/16") from the closed position, without the use of an operator. Talius hanger locks meet the requirements of European Standard EN 13659 and resist an upward force of 100 kg (220 lbs).

**PART 3 – EXECUTION****3.1 Installation**

- . Rollshutters and hardware as described herein shall be installed by approved rollshutter installers. Installers must be a factory authorized and installation must proceed in accordance with manufacturer's installation instructions.
- . The rollshutter contractor shall provide written confirmation before commencing installation that its Workers' Compensation Board account is currently active and in good standing and that all of its employees working on site are covered by the rollshutter contractor's WCB account
- . The rollshutter contractor to supply and use suitable mounting hardware for the mounting surface application, including hollow-wall and concrete anchors, where necessary. Mounting hardware size to be a minimum of #8 x 2". Mounting hardware for the guide rails, build-up and U-sills to be installed between 20 cm – 30 cm (8" – 12") on centres. Mounting hardware for the panel box to be installed between 40 cm – 50 cm (16" – 20") on centres, horizontally along the top inside corner of the panel box, and each screw head to be supplemented with a large flat washer to avoid tearing through the sheet aluminum. Each cast aluminum end plate on a panel box to be secured with one fastener to the mounting surface, two if the rollshutter curtain weight exceeds 22 kg (50 lbs). When installation into brick or concrete surfaces is necessary, mounting hardware to be used shall be Tapcon style of suitable diameter and length.
- . Install Rollshutters plumb, true, square and level, free from distortion or defects affecting appearance or performance. Adjust and test moving parts to ensure smooth operation.
- . Suitable exterior caulking to be applied by the rollshutter contractor around the exterior perimeter of the completed rollshutter installation to prevent infiltration of moisture, wind and debris behind the rollshutter when the curtain is fully closed.
- . All work to be completed in a professional, safe and timely manner.

3.2 Clean-Up

- . As the work proceeds and upon completion, clean up and remove from the site all rubbish and packages. Leave all rollshutter and Vandal Panels™ parts clean.

3.3 Schedule

- . As per the Jobsite Specification Addendum.