THREE PART SHORT FORM SPECIFICATIONS (CSI)

**ASH590 ROLLING ALUMINUM PERFORATED SHUTTER**

1. **GENERAL**
	1. SECTION INCLUDES

\*\* NOTE TO SPECIFIER \*\* Select from the following list. Delete items not required for project.

* + 1. Rolling Shutter – Overhead Rolling Door and Grille
		2. Preparation of door opening, structural or miscellaneous ironwork, access panels, electrical wiring, conduit, disconnect switches, drywall and finish painting are in the scope of the work of other sections or trades.
	1. WARRANTY
		1. The standard warranty shall cover the repair or replacement of defective components or assembly labour for a period of two year or specified cycles, whichever comes first following the installation of the grille.
1. \*\* NOTE TO SPECIFIER \*\* Warranty covers products installed by a recognized or approved installer and covers reasonable labor costs performed during regular business hours. Maintenance must be completed and followed as laid out in the Owners Manual.
2. **PRODUCTS**
	1. MANUFACTURERS
		1. Acceptable Manufacturer: Amstel Manufacturing (1993) Inc

128 Centre Street East, Richmond Hill, Ontario. L4C 1A6. Canada.

Ph. 1-800-663-6206 or 905-508-0855 Fx. 1-866-525-1304 or 905-508-8487

E. projects@amstel-doors.com

W. [www.amstel-doors.com](http://www.amstel-doors.com).

\*\* NOTE TO SPECIFIER \*\* Delete one of the following two paragraphs; coordinate with requirements of Division 1 section on product options and substitutions.

* + 1. Substitute products by the following manufacturers are accepted:
			1. McKinlay Door Sales
		2. Requests for substitutions will be considered in accordance with provisions of Section 01 60 00.
	1. MATERIALS
		1. ASH590 Rolling Aluminum Perforated Shutter
			1. Curtain:
				1. Constructed of interlocking extruded aluminum slat sections 18 gauge (0.04”/1.02 mm) thick, 3/4” (19.7 mm) deep and individually 3-3/16” (81 mm) high, with an overall width sized to suit the door opening. Surface of slat is flat and 2-3/4” (70 mm) high. Slats are perforated with 0.046” (1.17 mm) diameter holes to allow 25% airflow with an overall width sized to suit door opening.
			2. Aluminum is to be 6063 aluminum alloy with t-5 temper conforming to ASTM B 221.
			3. Aluminum Bottom Bar:
				1. Standard: Econo Bottom Bar. Members are to be horizontal bottom bars of tubular aluminum extrusion 2” (51 mm) in width and 3.25” (82.5 mm) in height and 0.10” (2.5 mm) wall thickness
				2. Option: Bell Bottom Bar. Members are to be horizontal bottom bars of aluminum extrusion shaped like a bell. The base of the bottom bar is 4” (101.6 mm) in width. The height of the bottom bar is 3.25” (82.5 mm) and 0.08” (2 mm) wall thickness. The two-piece bottom bar design creates a removeable base to service locking components
			4. Locking:
				1. Standard: Mortise cylinder locking at center of bottom bar on coil side.
				2. Optional: Mortise cylinder locking at both sides at center of bottom bar.
			5. Guides:
				1. Members are to be 1-3/8” (35 mm) wide by 2-1/2” (63.5 mm) deep and 0.09” (2.38 mm) thick extruded aluminum guide sections with built-in upset shoulders to provide curtain retention. Each guide to be fabricated with a bell mouth to provide smooth curtain operation.
				2. Mount steel stoppers to end plate to prevent roll over and travel above finished bulkhead. Guides shall be fitted with a rigid P.V.C. strip to ensure smooth and quiet operation.
				3. Structural steel support to have minimum 3/16” (4.75 mm) thickness. Fasten guides to steel angles, HSS supports or HSS spacers with concealed fasteners at max. 2’-0” (610 mm) O.C.
			6. Counterbalance: Construct of standard steel pipe of adequate diameter to prevent deflection exceeding 0.03” per foot (2.5 mm per meter) of door width. Pipe barrel shall enclose oil tempered helical torsion springs of a design to ensure proper counterbalancing. Spring tension adjustment shall be by means of an adjusting wheel and pin on the outside of the bracket plate.
			7. Bracket Plates: Construct of minimum 1/8” (3.2 mm) thick steel plate, primer painted “gray”.
			8. Hood:
				1. Construct of 0.040” (1 mm) clear anodized aluminum sheet, press-bent to form suitable coil enclosure.
				2. Hoods and fascias will have maximum length of 144” (3658 mm) per section. Steel channel fabricated hood supports will be provided for hoods and fascias that exceed 144” (3658 mm) in width. In such cases the client is responsible for suitable support within the bulkhead.
				3. Hoods are not furnished for doors where coil is located above ceiling. Fascias will have ¾” (19 mm) plywood backing board supplied.
			9. Factory Finishes: use letter suffix to denote required door finish.
				1. Standard: AA Clear Anodized, 0.0004 inch (10 micron) clear anodizing.
				2. Options: CC Aluminum to be painted RAL colour or match colour sampled.
			10. Operation:
				1. Standard: Manual push-up operation. Depending on door model and size, manual push-up operation may be unsuitable, and manufacturer will make recommendations.
				2. Optional: hand-crank, chain-hoist, tube motor direct drive 120v 1ph, bracket mount direct drive 120v 1ph, bracket mount jackshaft indirect drive 120v 1ph.
				3. Operational Cycles: 30,000 Cycles
1. **EXECUTION**
	1. PREPARATION & EXAMINATION
		1. Site preparations are to be detailed by approved shop drawings. Verify opening dimensions by actual site measurements.
		2. Contractor shall make structural or other preparation of the opening to receive guides and grille, provide finish or trim to the opening.
	2. INSTALLATION
		1. Install in accordance with manufacturer's instructions.
		2. Structural steel support, where provided by Amstel, is not self-supporting and must be adequately secured during installation for proper and safe operation of the door.

* 1. MAINTENANCE
		1. The guides should be kept clean of dirt, particularly in the area of the bottom of the guide pocket where dust and dirt can accumulate.
		2. The curtains should be cleaned at least once a year with a damp rag and a non-abrasive cleaner.
		3. It is recommended that the shutter balance should be checked on a yearly basis and the tension adjusted if necessary.
		4. For jackshaft motorized or indirect hand crank operated shutters the chain should be lubricated four times a year.

**END OF SECTION**

*SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE*