SECTION 09 29 00

 EXPANDED METAL SECURITY MESH FOR WALLS

\*\* NOTE TO SPECIFIER \*\* Niles Fence and Security Products, LLC; Fencing and Security Fencing.
 This section is based on the products of Niles Fence and Security Products, LLC, which is located at:
 310 N. Pleasant Ave., PO Box 191.
 Niles, OH 44446.
 Toll Free Tel: 800-321-7464.
 Tel: 330-652-0743.
 Fax: 330-299-0329.
 Email: info@nilesfence.com .
 Web: [www.nilesfence.com.](http://www.nilesfence.com.)
 Niles Fence & Security, LLC manufactures and distributes the SECUREX line of expanded metal mesh fence systems. Our comprehensive list of expanded metal fence systems for industry have a range of applications from the highest level of security to perimeter demarcation. SECUREX fence systems were designed for strength, durability and aesthetic appeal featuring clean lines and easy installation. Niles Fence and Security offers a series of fence systems available for site security including SECUREX fence framework and fittings, expanded metal mesh, security gates, and machine guard safety railing.

1. GENERAL
	1. SECTION INCLUDES
		1. Securex Expanded Metal Mesh for security barriers in wall and ceiling applications.
	2. SUBMITTALS
		1. Product Data: Manufacturer's data sheets on each product to be used, including details and drawings.
		2. Shop Drawings: Provide Plan drawings as necessary to depict actual products specified, proper design considerations, and installation procedures.
	3. QUALITY ASSURANCE
		1. Manufacturer Qualifications: All primary products specified in this section will be supplied by a single manufacturer with a minimum of ten (10) years experience.
	4. DELIVERY, STORAGE, AND HANDLING
		1. Materials shall be stored in such a manner to ensure proper ventilation and drainage and protect against damage, weather, vandalism and theft.
2. PRODUCTS
	1. MANUFACTURERS
		1. Acceptable Manufacturer: Niles Fence and Security Products, LLC, which is located at: 310 N. Pleasant Ave. P. O. Box 191 ; Niles, OH 44446; Toll Free Tel: 800-321-7464; Tel: 330-652-0743; Facsimile 330-299-0329; or (info@nilesfence.com); Web: [www.nilesfence.com](http://www.nilesfence.com)
	2. EXPANDED METAL SECURITY MESH
		1. Product: Securex Expanded Metal Security Mesh - Expanded Metal Security Mesh is a steel barrier used inside of finished walls, attached to standard wall or ceiling framing.

\*\* NOTE TO SPECIFIER \*\* Select Expanded Metal fabric mesh from the following options Delete the remaining options.

* + 1. Expanded Metal Security Mesh Panels: Expanded Steel.
			1. Type: 1/2 inch #13F
				1. Strand Width: 0.107inches (2.71mm).
				2. Strand Thickness: 0.078 inches (1.98mm).
				3. SWD: 0.50 inches (12.7mm).
				4. LWD: 1.25 inches (31.75mm).
				5. Percent Open Area: 52.
				6. Weight per sq. ft: 1.40 lbs (.63 Kg).
			2. Type: 3/4 inch #9F
				1. Strand Width: 0.165 inches (4.1mm).
				2. Strand Thickness: 0.120 inches (3mm).
				3. SWD: 0.923 inches (23.4mm).
				4. LWD: 2.10 inches (53.3mm).
				5. Percent Open Area: 63.
				6. Weight per sq. foot: 1.71 lbs. (.77Kg).
			3. Type: 1 1/2 inch #9F.
				1. Strand Width: 0.158 inches (4mm).
				2. Strand Thickness: 0.110 inches (2.8mm).
				3. SWD: 1.33 inches (33mm).
				4. LWD: 3.20 inches (81mm).
				5. Percent Open Area: 75.
				6. Weight per sq. foot: 1.14 lbs (.51Kg).
			4. Type: 3/4 inch #13F.
				1. Strand Width: 0.106 inches (2.69mm).
				2. Strand Thickness: 0.078 inches (1.98mm).
				3. SWD: .923 inches (23.4mm).
				4. LWD: 2.10 inches (53.3mm).
				5. Percent Open Area: 74.
				6. Weight per sq. foot: .75 lbs (0.34 Kg).
			5. Type: 1 inch #16F.
				1. Strand Width: 0.098 inches (2.4mm).
				2. Strand Thickness: 0.050 inches (1.2mm).
				3. SWD: 1.00 inches (25.4mm).
				4. LWD: 2.5 inches (63.5mm).
				5. Percent Open Area: 78.
				6. Weight per sq. foot: .41 lbs (.185Kg).
		2. Mesh Attachment Hardware – Securex expanded metal security mesh panels shall be installed to metal or wood studs using Securex Clips. Clips shall be installed every 12-14 inches on framing members.

NOTE TO SPECIFIER \*\* Choose one type of clip, delete the other.

* + - 1. Square Securex Clips shall be 3 inch by 3 inch (76mm x 76mm) square by .024 inch (.6mm) thick pre-galvanized formed steel plate.
			2. Round Securex Clips shall be 2.376 inches (60.35mm) diameter round pre-galvanized formed steel plate.

2.3 FINISHES

NOTE TO SPECIFIER \*\* Choose one type of finish and delete the others.

* + 1. Mill Finish - Material shall be mill finish, no sealers or galvanizing is required for typical installation behind standard drywall.
		2. Stainless Steel
		3. Galvanized Finish - Material shall be Hot Dip Galvanized per ASTM A123.

PART 3 EXECUTION

3.1 EXAMINATION

* + 1. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.
	1. INSTALLATION
		1. All new installation shall be laid out by contractor in accordance with construction plans.
		2. Install in accordance with manufacturer’s instructions.
		3. Securex expanded metal security mesh panels join at framing members and shall be installed either overlapping or staggering the diamond pattern.
	2. TOLERANCES
		1. Short Way Dimension (SWD): +0-1/4 inch
		2. Long Way Dimension (LWD): +0-1/4 inch

END OF SECTION