



## **SECUREX INFRASTRUCTURE EXPANDED METAL FENCE SYSTEM NILES FENCE – SECURITY STANDARD**

Type 1 – New Fence

Basic Installation Specifications

8' High – 3 rail system

Mesh specs – ½”- #13R, ½”- #13R (.188), ¾”-9R, ¾”-#9F, 1”- #7(.240) , 1-1/2”- #6,

**Fence Framework** – 3” OD Schedule 40/SS40 line posts set 93” – 117” O.C. Each fence post will have a 3” pressed steel dome cap to seal out moisture. The expanded metal fence system includes three horizontal line rails (top, mid and bottom). Fence line rails consist of 1-5/8" x 1-5/8" x 12 ga steel channel installed using 3” Securex bands with 1” square washers. Fence top and bottom rail is to be installed 3-8” from top or bottom edge of mesh and should be equal. Mid rails are installed evenly spaced between top and bottom rails.

**Fence Terminal Posts (end and corner)** – 4” OD Schedule 40/SS40 posts will attach to remaining fence framework with 4” Securex bands. Additionally, mesh will attach to terminal posts with 2 (total of 4), 4” Securex end tensioners spaced evenly between rails at a max of 18” from rail. Corner posts will attach to line rails with 4” Securex bands. Terminal posts will have matching dimension pressed steel dome cap. Expanded metal mesh will fit flush to post or overlap max of 2” to eliminate open space.

**Securex Expanded Metal Mesh** – Galvanized expanded metal mesh material will be zinc coated hot dip galvanized per ASTM A123. If color coated mesh is required coating will meet specifications per ASTM 1043-06. Expanded metal mesh will overlap up to 3 diamonds or 3 inches (depending on diamond size) at line posts except where adjustment is needed to follow contour of terrain. Expanded metal mesh shall be installed flush and/or overlap the fence end post a maximum of 2”. Mesh panels shall have no more than 1” space between bottom of mesh and grade.

**Fence Fittings** – Expanded metal mesh is connected to fence line post framework using 3” Securex c-clamps and Securex bar clamp. Install 2 (total of 4) c-clamps evenly spaced between the three line rails at a max of 18” along line post. Mesh is attached to line rails using Securex latch clamps and u-washers through the slotted channel rails at a max of 18” per panel. Securex latch clamps are also added each at post clamp set/line rail assembly point. Mesh is connected to fence terminal posts with 4” Securex end tensioners, latch clamps and u-washers. If, due to terrain or spacing requirements, the expanded metal mesh overlaps at a position that does not coincide with a line post, mesh is joined using Securex bar clamps vertically positioned and evenly spaced.

**Fence Fasteners/Bolts-** The Securex expanded metal fence system recommends the use of stainless steel square shoulder carriage bolts with stainless steel breakaway nuts. Alternatively, the Securex system can be installed with standard carriage bolts tightened securely then peened to prevent removal.