

Head/Sill Attachment/Support Method

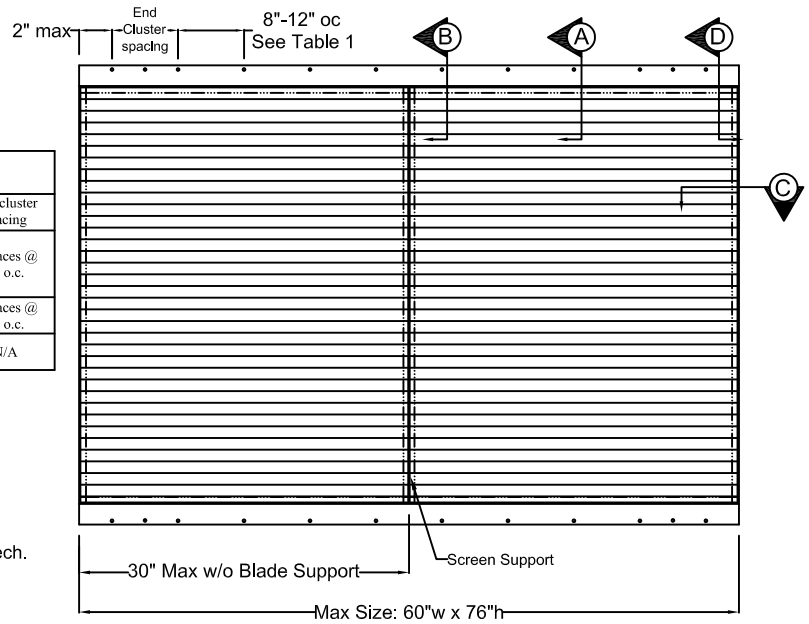
The model FEMA-8 grille/louver has been tested in accordance with FEMA 361, and ICC 500. These products are intended for use in windstorm-rated assemblies. The maximum single section of model FEMA-8 is 60"w x 76"h. Openings taller than 76" may incorporate multiple single sections up to 60" in width to be installed to protect the opening. Substrates available to be used with this installation are shown below with their requirements and limitations. When installed in accordance with these instructions, the wind design load for these units is based on a 300 psf design wind load and complies with storm shelter and safe room standards for debris impact of FEMA 361, and ICC 500.

Table 1

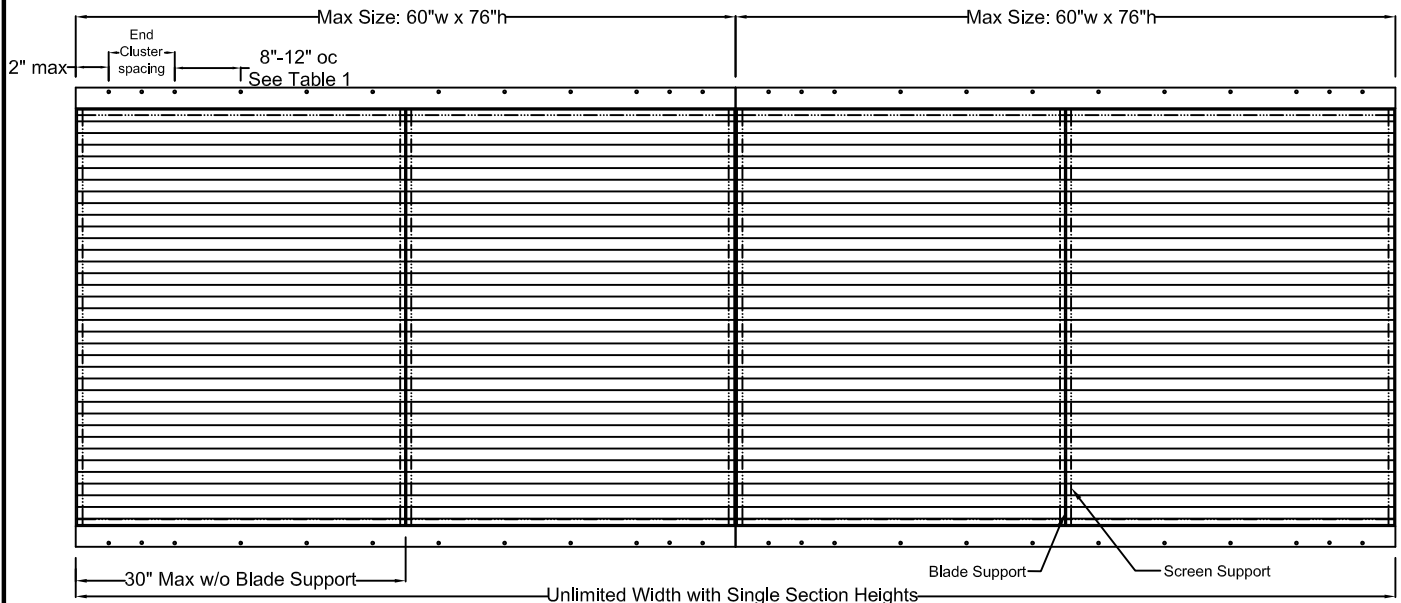
Anchor/Fasteners Requirements					
Substrate Type	Anchor/Fastener Type	Min Edge Distance	Min. Embedment	Spacing (oc)	End cluster spacing
Concrete (Min. 3000 psi)	1/2" Simpson Strong-Tie Titen HD Screw Anchor	3.25 Inches	2.75 Inches	12 Inch	3 spaces @ 2" o.c.
Steel (min. Fy 36,000 psi)	3/8" Bolt	1.0 Inches	0.25 Inches	12 Inch	2 spaces @ 2" o.c.
Wood, (G=0.55)	1/4" x 3-1/2" Lag Bolt	.75 Inches	3.25 Inches	8 Inch	N/A

Fasteners into building substrate are not supplied by United Enertech.

Single Section



Multi-Section



Anchor and fasteners used to attach FEMA-8 Louver into the substrate are not supplied by United Enertech. This product may not sufficiently remove water from the airflow into the building, thus an additional louver may be required to prevent water penetration. Factory construction of the FEMA-8 determines if it is acceptable to be internal or externally mounted. Installation method and orientation must be determined before placing order to the factory. Refer to installation pages 2 through 4 for specific details on mounting the FEMA-8 louver into the plane of the substrate or on the exterior of the substrate.

Head/Sill Support (External Mount)

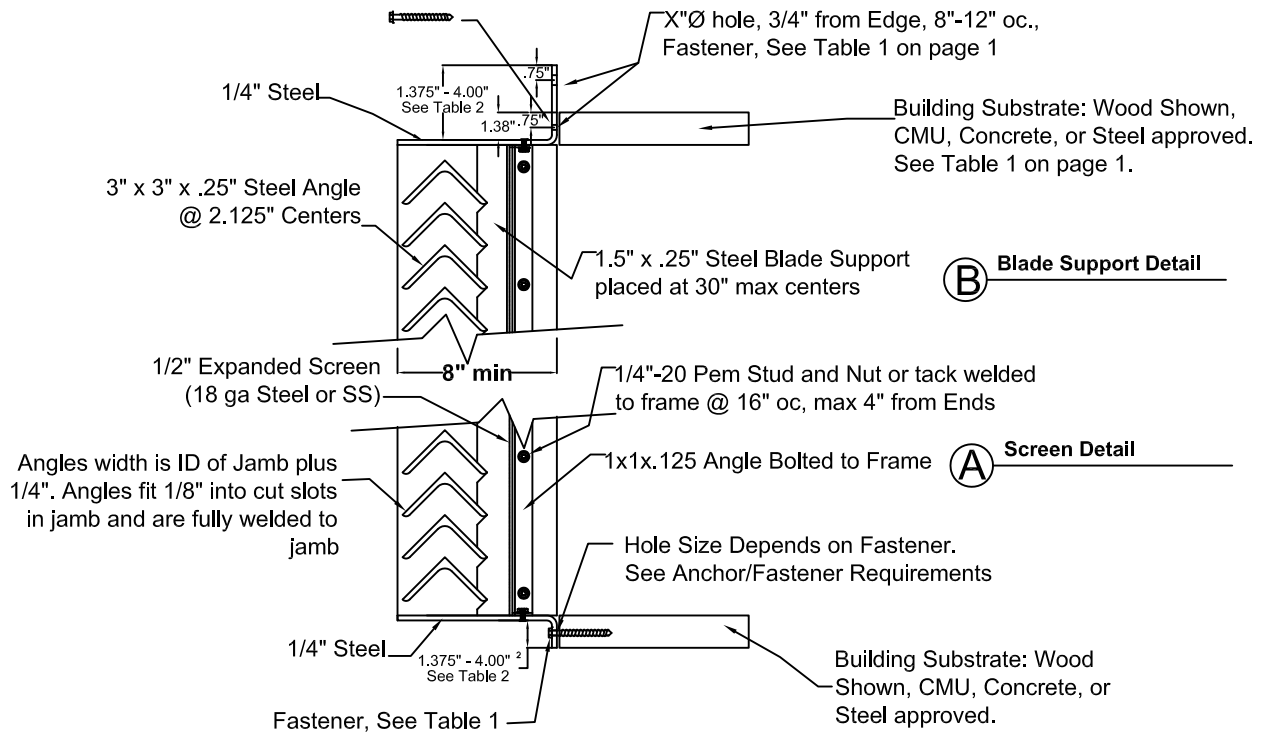
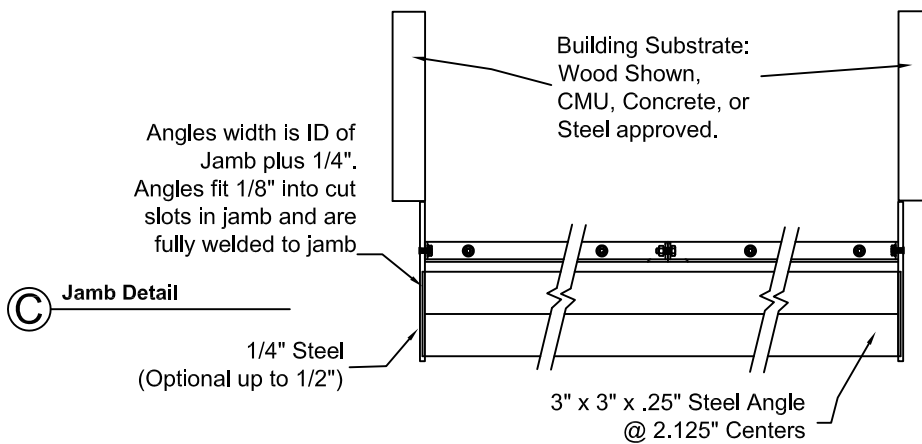


Table 2

Mounting Angle Leg Length	
Substrate	Min. Leg Length ²
Concrete (Min. 3000 psi)	4.00 Inch
Steel (min. Fy 36,000 psi)	1.75 Inch
Wood, (G=0.55)	1.375 Inch



Head/Sill Support (Internal Mount)

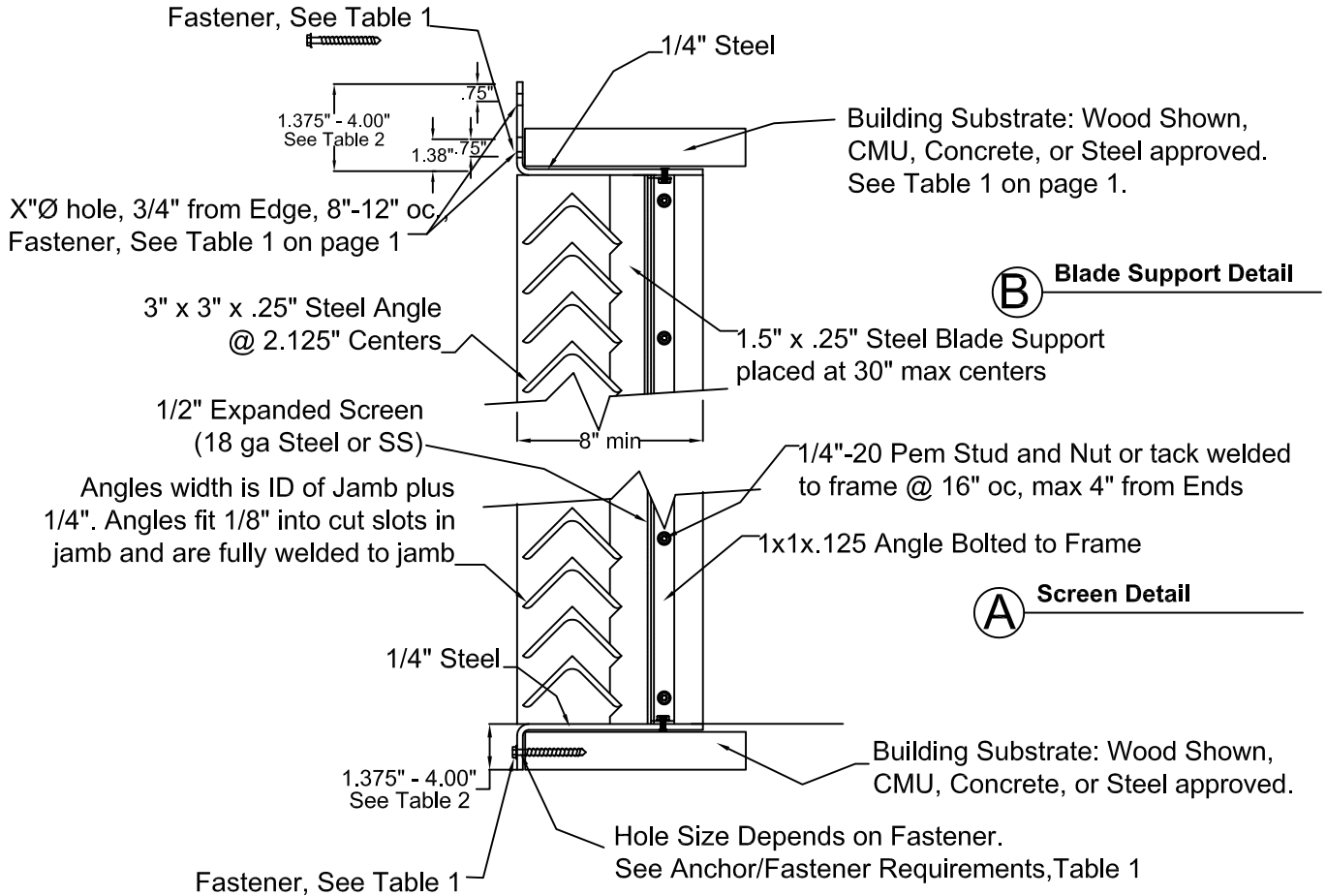
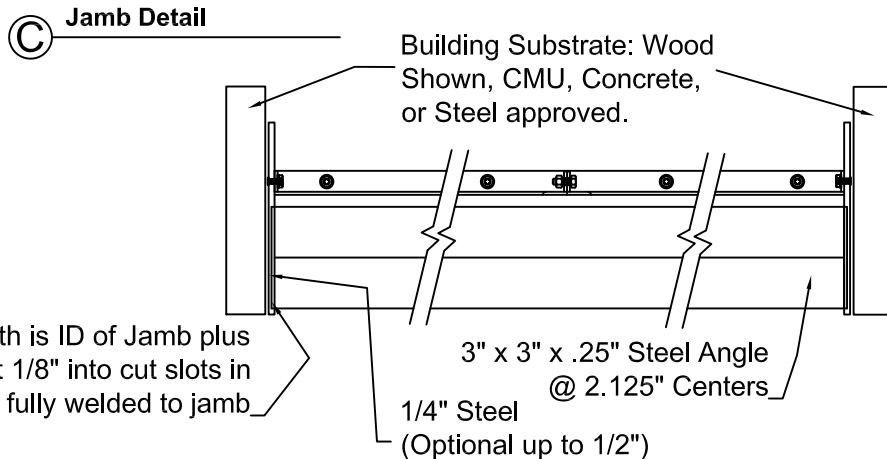


Table 2

Mounting Angle Leg Length	
Substrate	Min. Leg Length ²
Concrete (Min. 3000 psi)	4.00 Inch
Steel (min. Fy 36,000 psi)	1.75 Inch
Wood, (G=0.55)	1.375 Inch



**Head/Sill Mount
Externally Substrate Mounted**

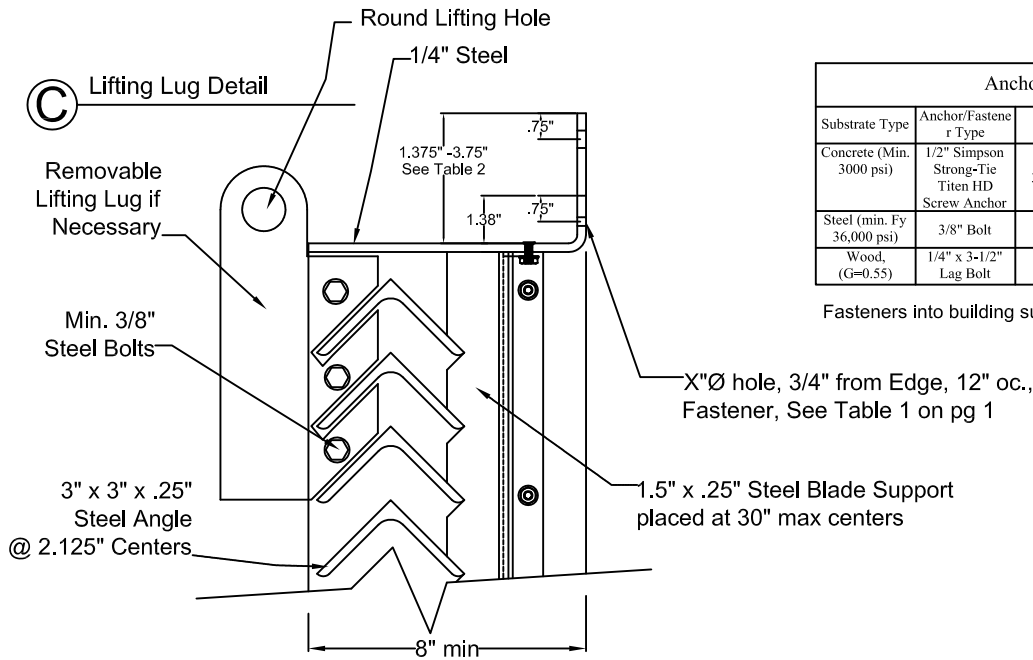


Table 1

Anchor/Fasteners Requirements					
Substrate Type	Anchor/Fastener Type	Min Edge Distance	Min. Embedment	Spacing (oc)	End cluster spacing
Concrete (Min. 3000 psi)	1/2" Simpson Strong-Tie Titen HD Screw Anchor	3.25 Inches	2.75 Inches	12 Inch	3 spaces @ 2" o.c.
Steel (min. Fy 36,000 psi)	3/8" Bolt	1.0 Inches	0.25 Inches	12 Inch	2 spaces @ 2" o.c.
Wood, (G=0.55)	1/4" x 3-1/2" Lag Bolt	.75 Inches	3.25 Inches	8 Inch	N/A

Fasteners into building substrate are not supplied by United Energetech.

**Head/Sill Mount
Internally Substrate Mounted**

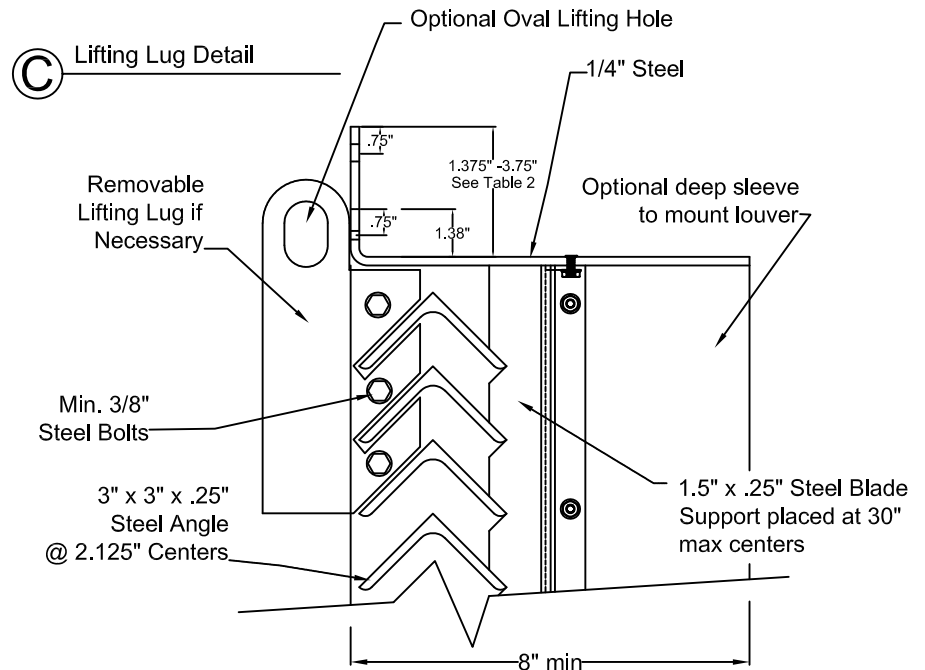


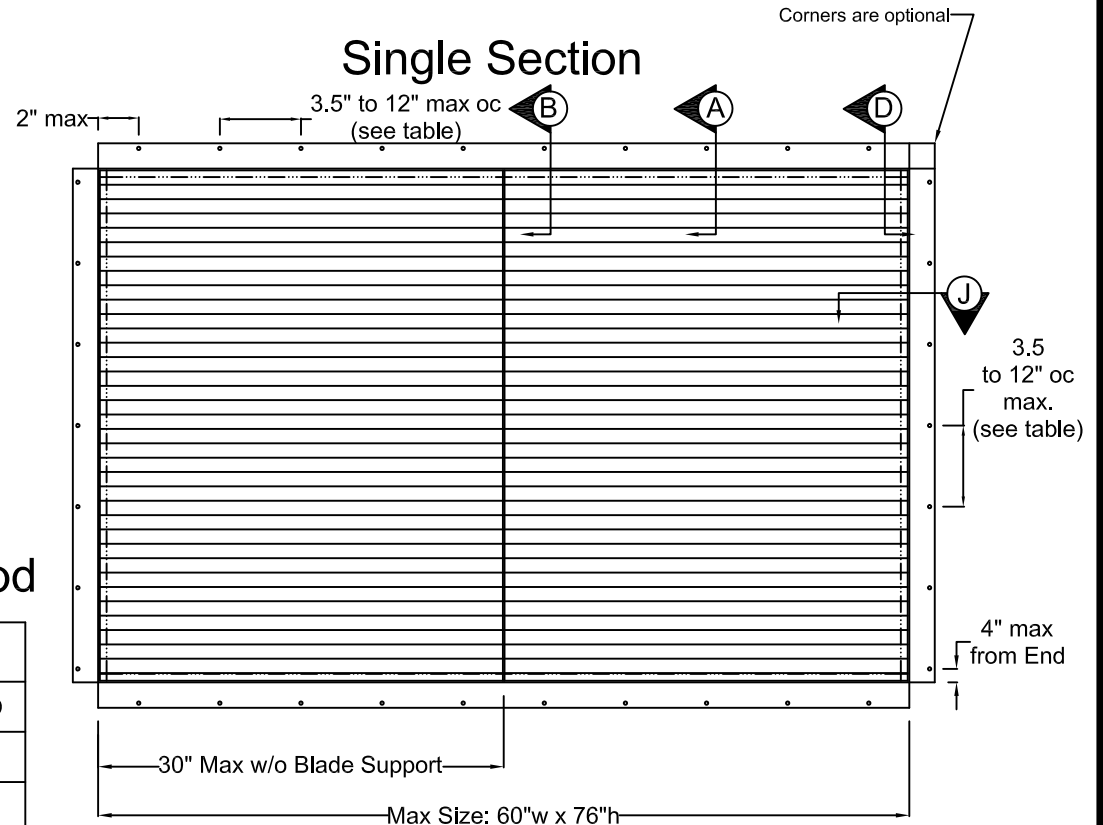
Table 2

Mounting Angle Leg Length	
Substrate	Min. Leg Length ²
Concrete (Min. 3000 psi)	4.00 Inch
Steel (min. Fy 36,000 psi)	1.75 Inch
Wood, (G=0.55)	1.375 Inch

Perimeter Flange attachment method

Anchor/Fasteners Requirements				
Substrate Type	Anchor/Fastener Type	Min Edge Distance	Min. Embedment	Spacing (oc)
Concrete (Min. 3000 psi)	1/4" Tapcon	3.25 Inches	2.5 Inches	3.5 Inch
Concrete (Min. 3000 psi)	1/2" Simpson Strong-Tie Titen HD Screw Anchor	3.25 Inches	2.5 Inches	12 Inch
CMU (Grout Filled, min. 1500 psi)	1/2" Simpson Strong-Tie Titen HD Screw Anchor	3.25 Inches	3.5 Inches	11 Inch
Steel (min. Fy 36,000 psi)	3/8" Bolt	1.0 Inches	0.25 Inches	12 Inch
Wood, (G=0.55)	1/4" x 3-1/2" Lag Bolt	.75 Inches	3.25 Inches	8 Inch

Fasteners into building substrate are not supplied by United Enertech.



Notes:

Model: FEMA-8
Optional Flange on all sides Unit

Date: 12-7-17 (rev.1)

Drawn By: C. Jackson

Dwg #: FEMA Installation -11.dwg

