

XP500

FEMA Louver

Installation Guide



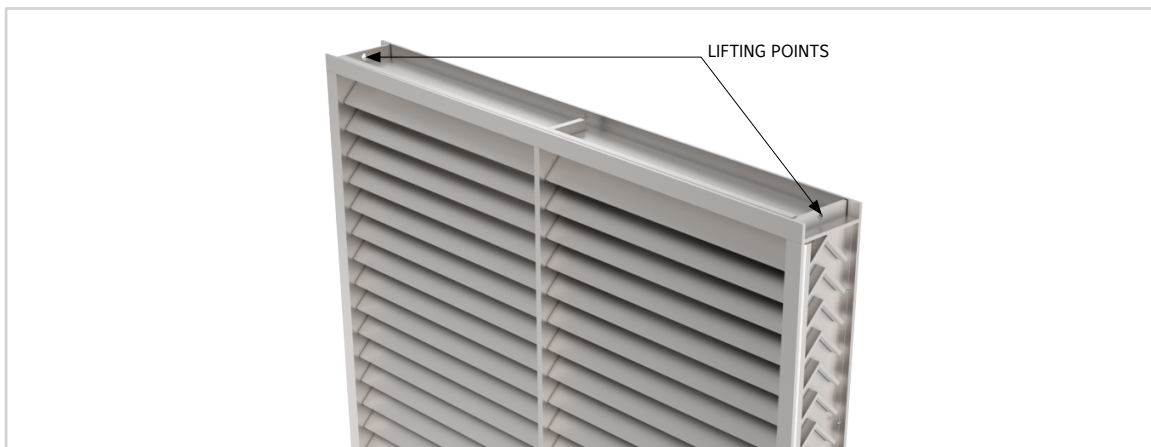
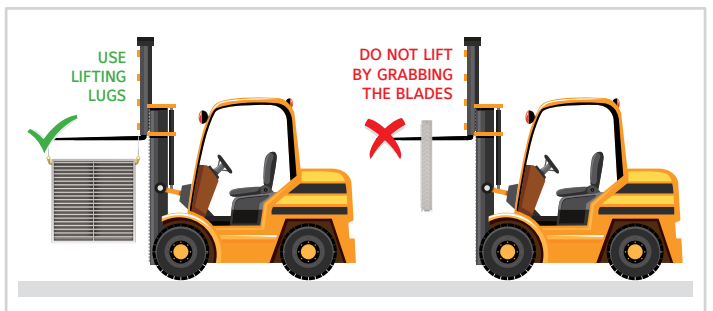
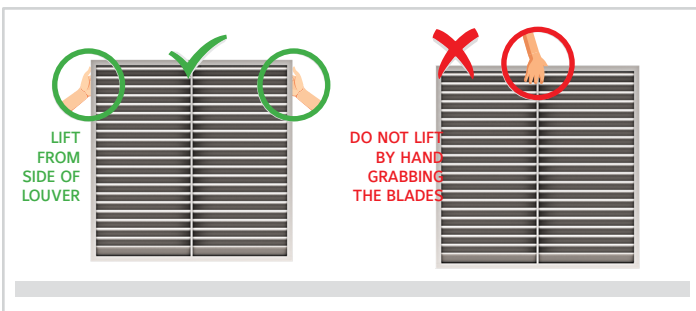
PRE-ASSEMBLY INSTRUCTIONS:

1. Remove louvers & accessories from shipping containers & inspect for damage. Single section units will be shipped fully assembled. Multi-section units will be shipped in shipping sections to be assembled at the job site. Large multi section units may be packaged in more than one shipping crate.
2. Care must be taken when handling components. Lift louver sections carefully by the supports or frames. Avoid lifting by louver blades. Do not apply excessive force to any point of the section. Lift at multiple points, if necessary to avoid deformation or racking of components.
3. Inspect louvers & components after removal from containers. Verify that all components & fasteners are accounted for. Report any shortages immediately to Ruskin manufacturing.
4. Inspect the openings that the louvers will be installed in. Verify that the openings are square & that the unit will fit prior to installation.
5. Contact your local Ruskin representative if you have questions pertaining to this installation or other field modifications.
6. Ensure that you have received ship loose parts & a box with hardware.

ASSEMBLY PROCEDURE:

1. Remove louver from crate. (Louver will come with clip angles already attached.)
2. Position & level the louver assembly both horizontally & vertically in the opening using shims . (shims not provided by Ruskin)
3. Position the louver in the opening so that the desired sealant joint will be maintained around the perimeter of louver
4. Locate ship loose kit (includes angles, bolts, & nuts.)
5. Locate support angles then align and secure them to the clip angles on louver. (using supplied bolts & nuts)
6. Secure the support angles to substrate using specified anchor bolts (not supplied by Ruskin)
7. After louver is secured, install backer rod & sealant around louver perimeter. (Sealant not provided by Ruskin)

LOUVER LIFTING INSTRUCTIONS



INSTALLATION DETAILS

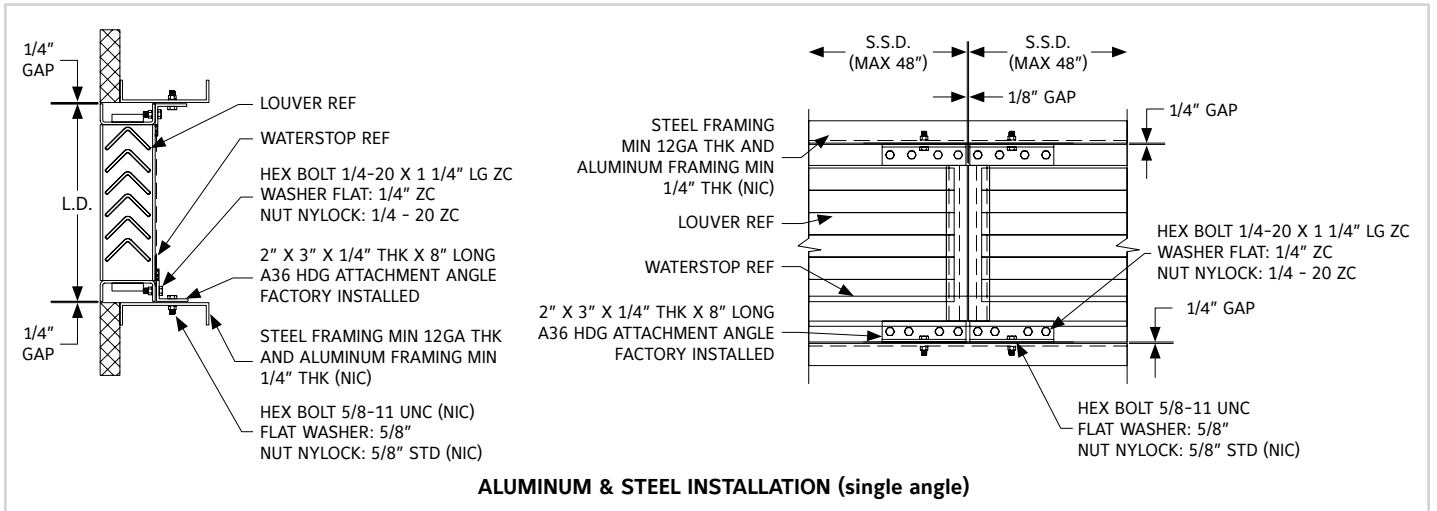
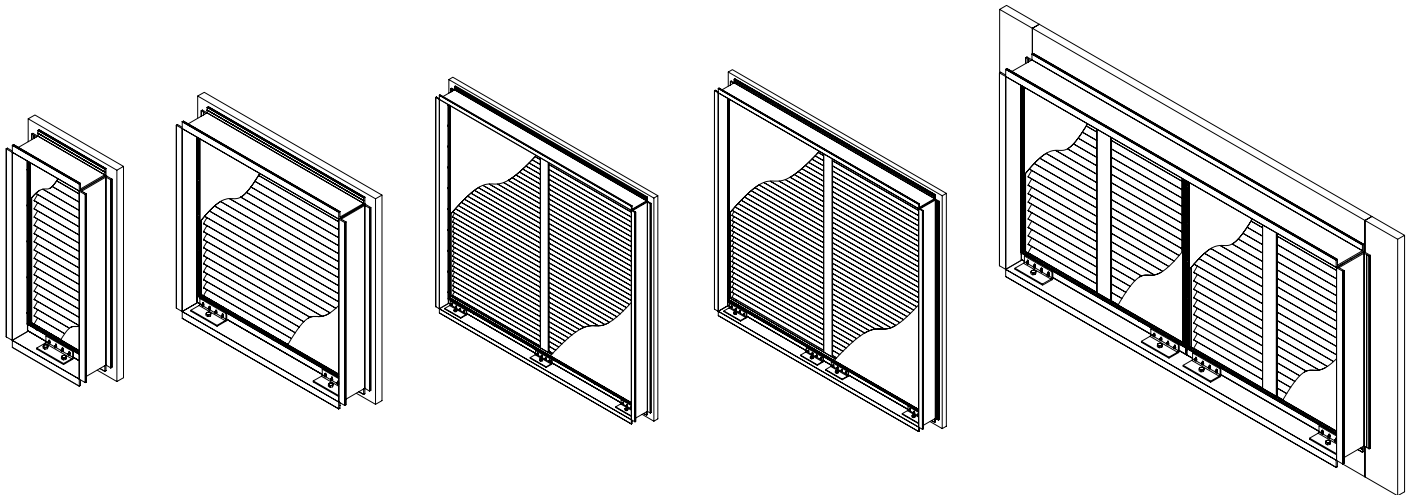


TABLE 01 - WALL FASTENER TABLE (BY OTHERS)

WALL TYPE	MIN. SUBSTRATE THICKNESS	MIN. SUBSTRATE STRENGTH	MIN. EDGE DISTANCE	MIN. SUBSTRATE DEPTH	FASTENER	MIN. EMBEDMENT
STEEL	12 GA	45 ksi TENSILE	1"	2"	5/8-11 A307 GRADE A STEEL BOLT	-
ALUMINUM	1/4"	25 ksi TENSILE	1"	2"	5/8"-11 A307 GRADE A STEEL BOLT	-



SINGLE SECTION CLIP PLACEMENT

LOUVER WIDTH	#OF CLIPS ALONG HEAD/SILL	PLACEMENT
72" - 96"	4	2 CLIPS AT BLADE SUPPORT
48" - 72"	3	1 CLIP AT BLADE SUPPORT CENTER
32" - 48"	2	ONLY AT CORNERS
12" - 32"	1	AT CENTER OF LOUVER

INSTALLATION DETAILS

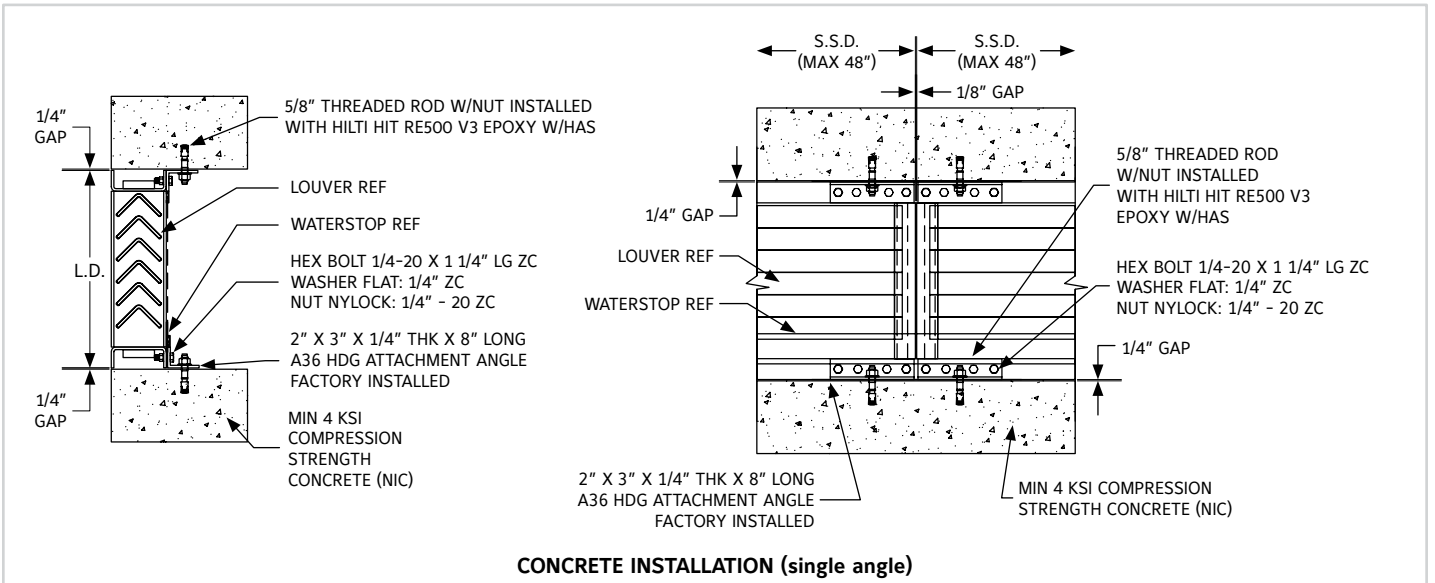
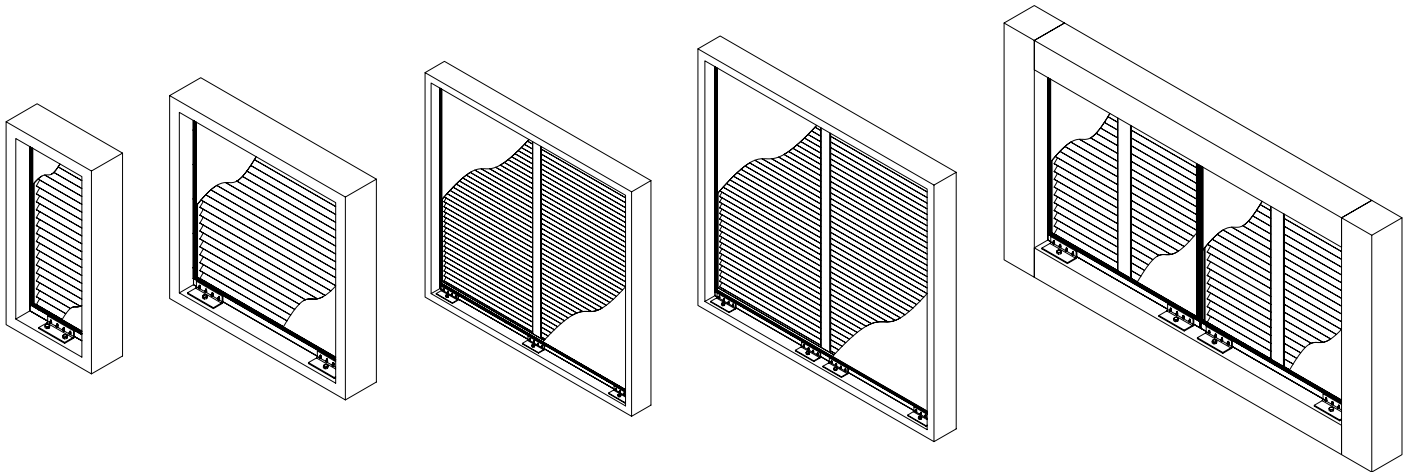


TABLE 02- WALL FASTENER TABLE (BY OTHERS)

WALL TYPE	MIN. SUBSTRATE THICKNESS	MIN. SUBSTRATE STRENGTH	MIN. EDGE DISTANCE	MIN. SUBSTRATE DEPTH	FASTENER	MIN. EMBEDMENT
CONCRETE UNCRACKED (SINGLE ANGLE)	9"	4 ksi COMPRESSION	6"	12"	5/8" THREADED ROD W/NUT INSTALLED WITH HILTI HIT RE500 V3 EPOXY W/ HAS	4 3/8"



SINGLE SECTION CLIP PLACEMENT

LOUVER WIDTH	#OF CLIPS ALONG HEAD/SILL	PLACEMENT
72" - 96"	4	2 CLIPS AT BLADE SUPPORT
48" - 72"	3	1 CLIP AT BLADE SUPPORT CENTER
32" - 48"	2	ONLY AT CORNERS
12" - 32"	1	AT CENTER OF LOUVER

INSTALLATION DETAILS

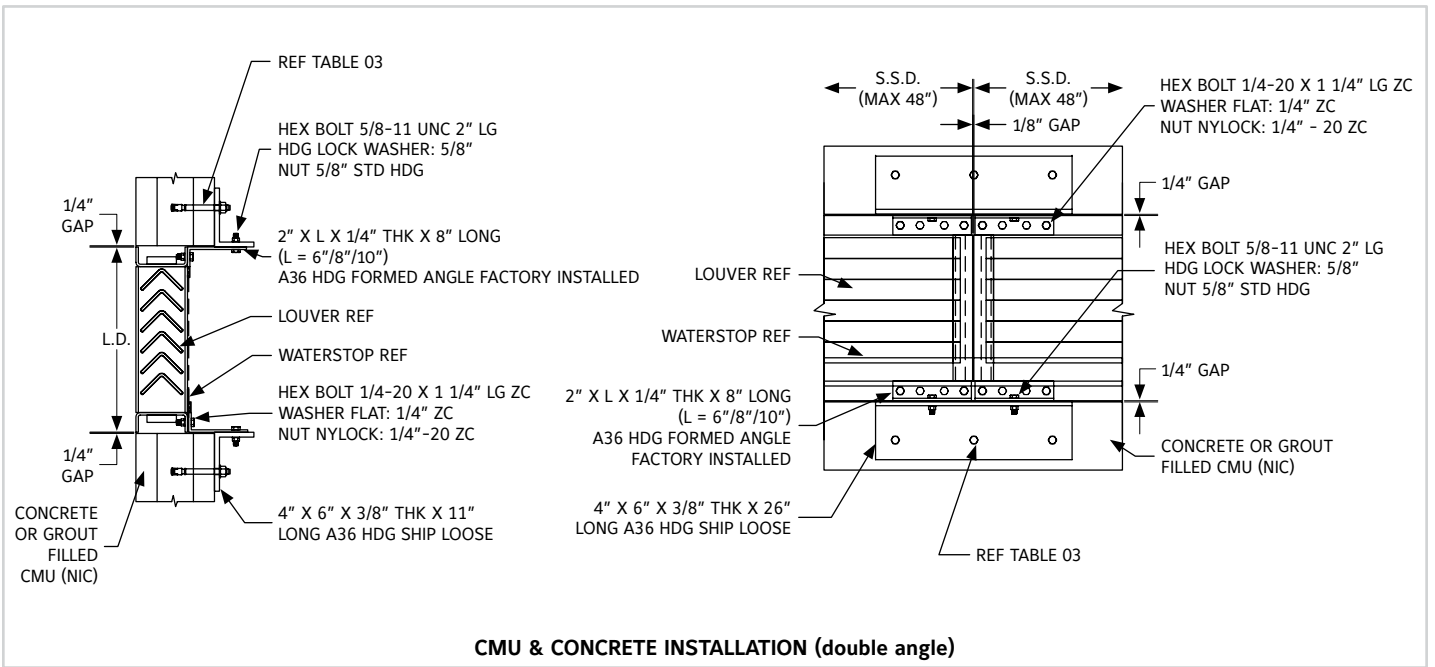
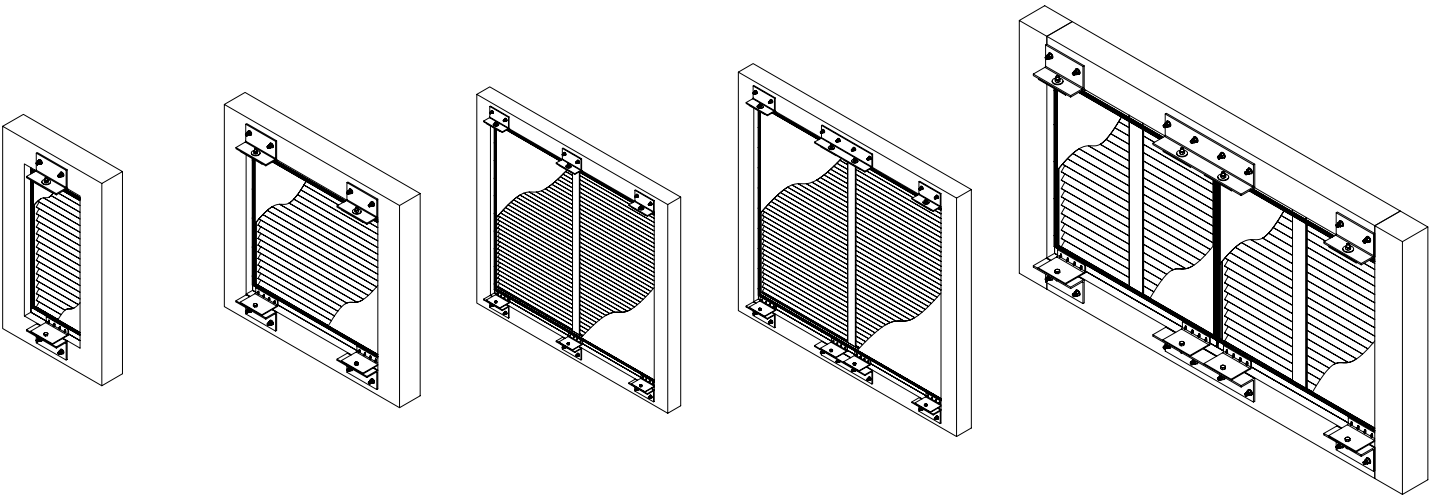


TABLE 03 - WALL FASTENER TABLE (BY OTHERS)

WALL TYPE	MIN. SUBSTRATE THICKNESS	MIN. SUBSTRATE STRENGTH	MIN. EDGE DISTANCE	MIN. SUBSTRATE DEPTH	FASTENER	MIN. EMBEDMENT
CONCRETE UNCRACKED (DOUBLE ANGLE)	6"	3 ksi COMPRESSION	4"	6"	5/8" THREADED ROD W/NUT INSTALLED WITH HILTI HIT RE500 V3 EPOXY W/ HAS	4 3/8"
GROUT FILLED CMU UNCRACKED	8"	2.0 ksi COMPRESSION	4"	8" NOM.	1/2" THREADED ROD W/NUT INSTALLED WITH HILTI HIT HY 270	3 5/8"



SINGLE SECTION CLIP PLACEMENT

LOUVER WIDTH	#OF CLIPS ALONG HEAD/SILL	PLACEMENT
72" - 96"	4	2 CLIPS AT BLADE SUPPORT
48" - 72"	3	1 CLIP AT BLADE SUPPORT CENTER
32" - 48"	2	ONLY AT CORNERS
12" - 32"	1	AT CENTER OF LOUVER

INSTALLATION DETAILS

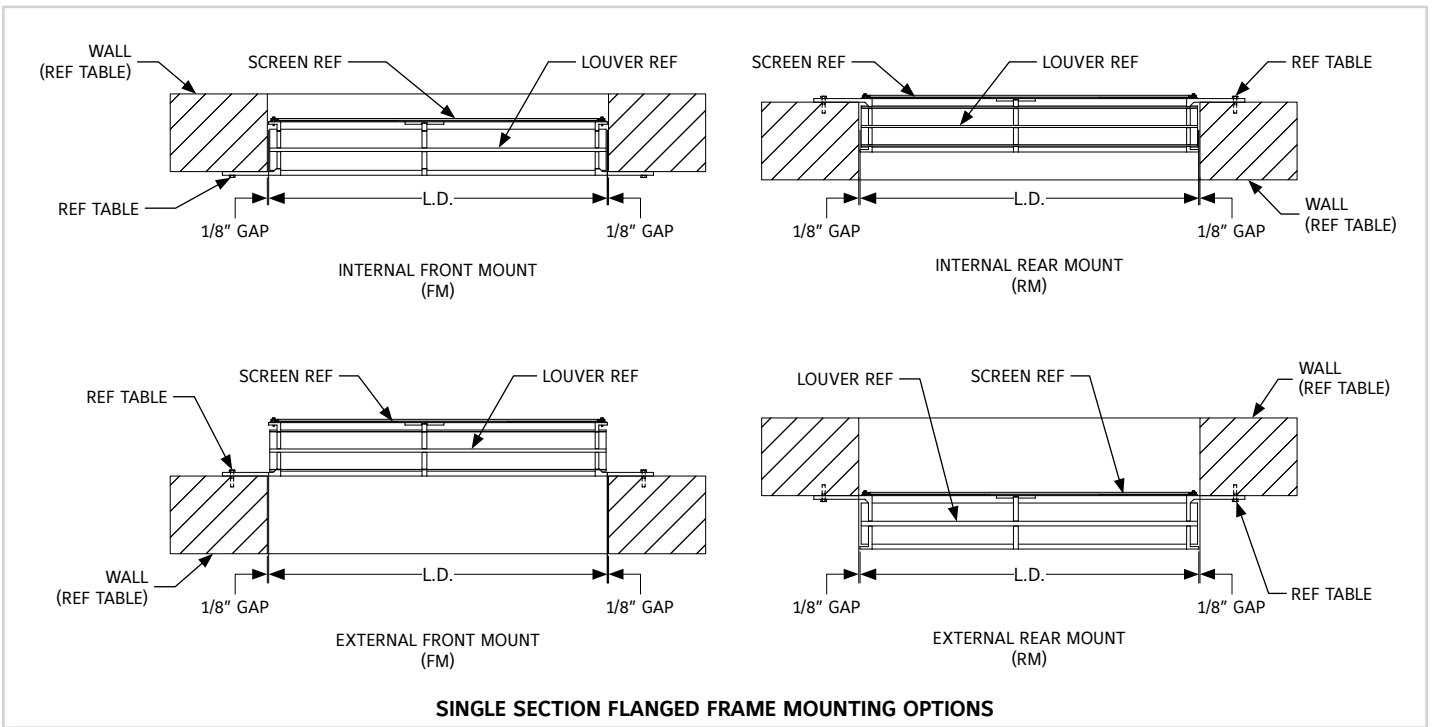
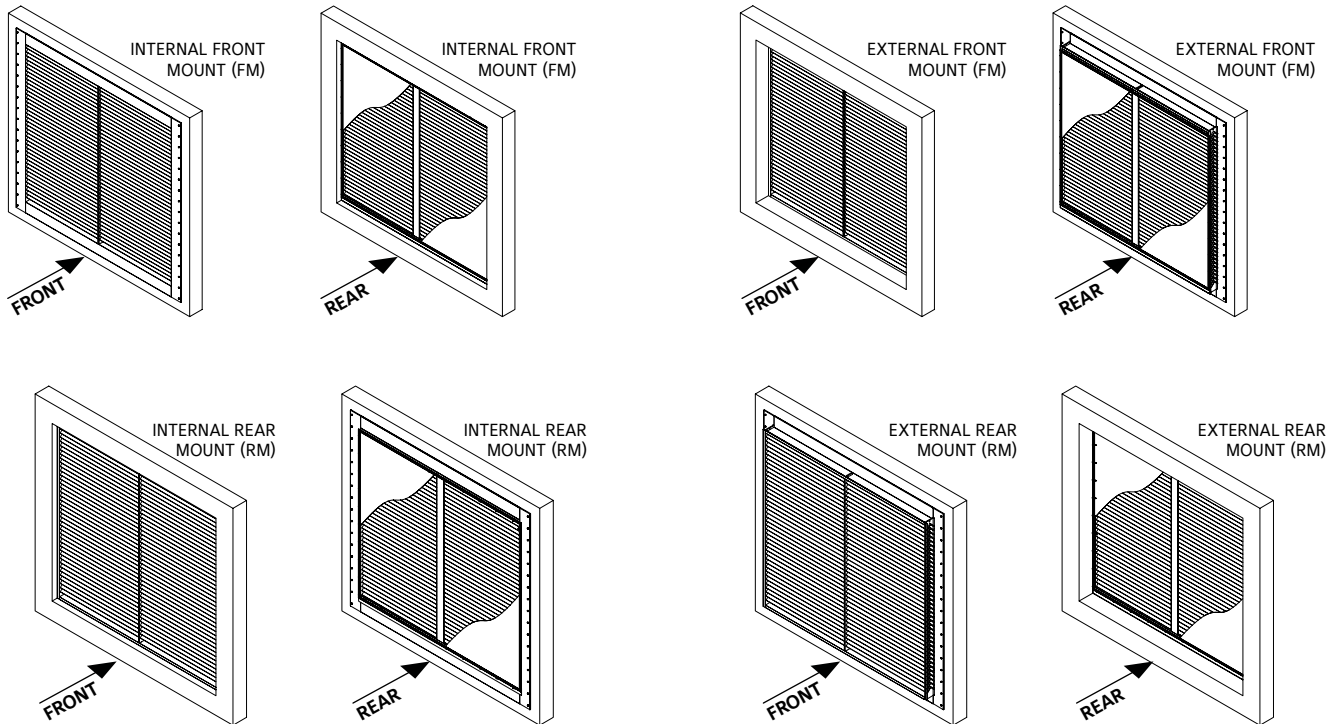


TABLE 04- WALL FASTENER TABLE (BY OTHERS)

WALL TYPE	MIN. SUBSTRATE THICKNESS	MIN. SUBSTRATE STRENGTH	MIN. EDGE DISTANCE	FASTENER	MIN. EMBEDMENT
STEEL	12 GA	45 ksi TENSILE	1/2"	5/16"-18 A307 GRADE A SCREW FASTENER	N/A
CONCRETE (CRACKED)	4"	2.5 ksi COMPRESSION	3"	3/8" DIA HILTI KWIK HUS EZ	2 1/2"
CMU (CRACKED)	8"	2 ksi COMPRESSION	4"	3/8" DIA HILTI KWIK HUS EZ	3 1/4"



INSTALLATION DETAILS

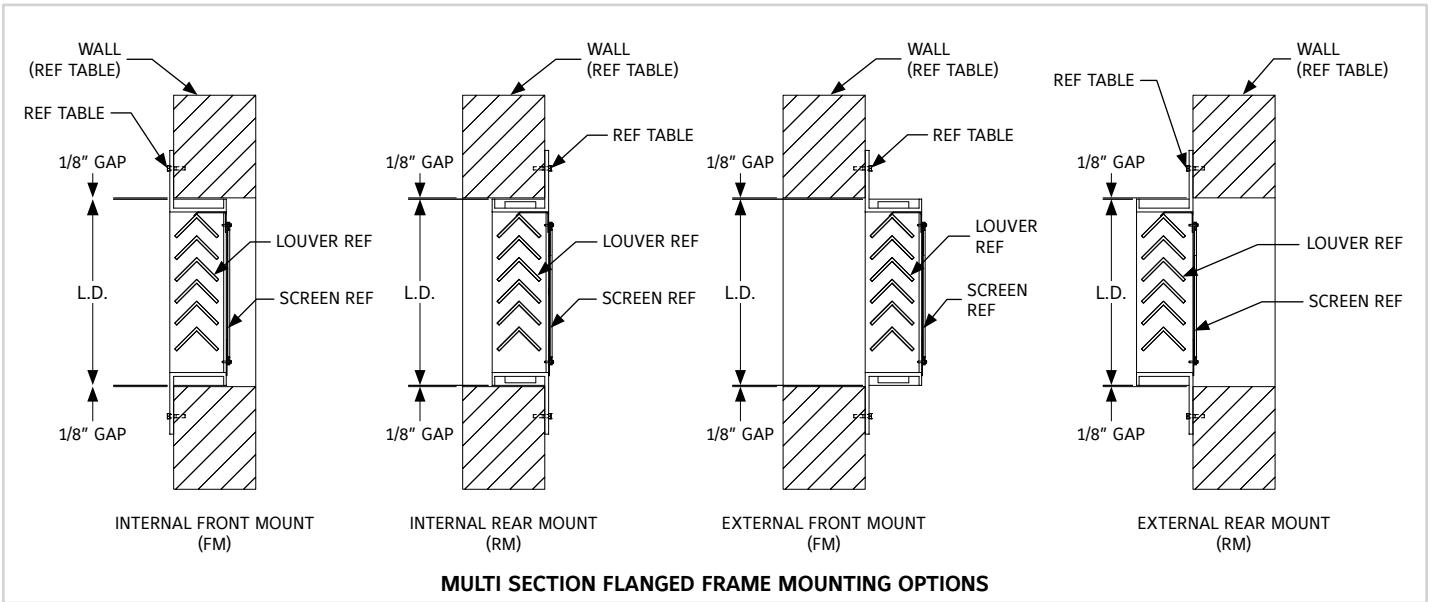
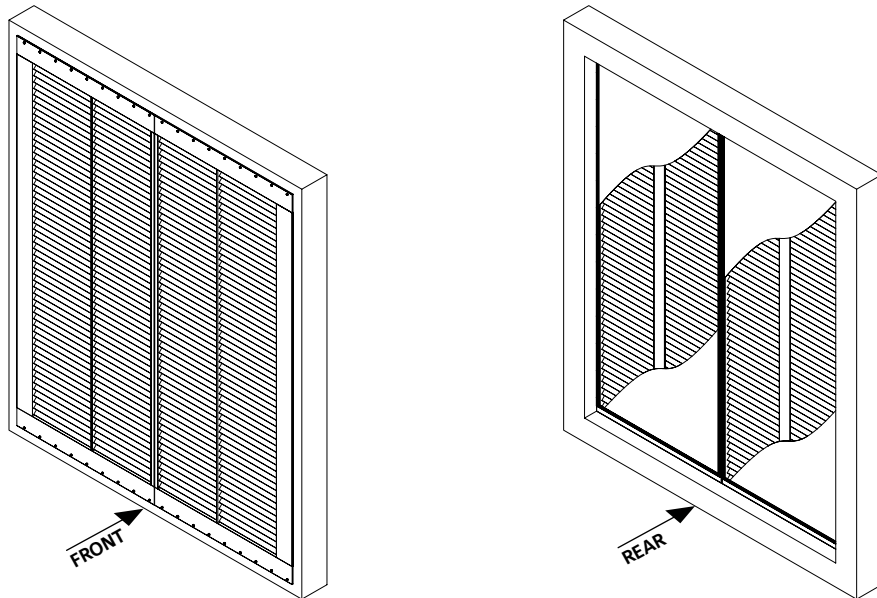


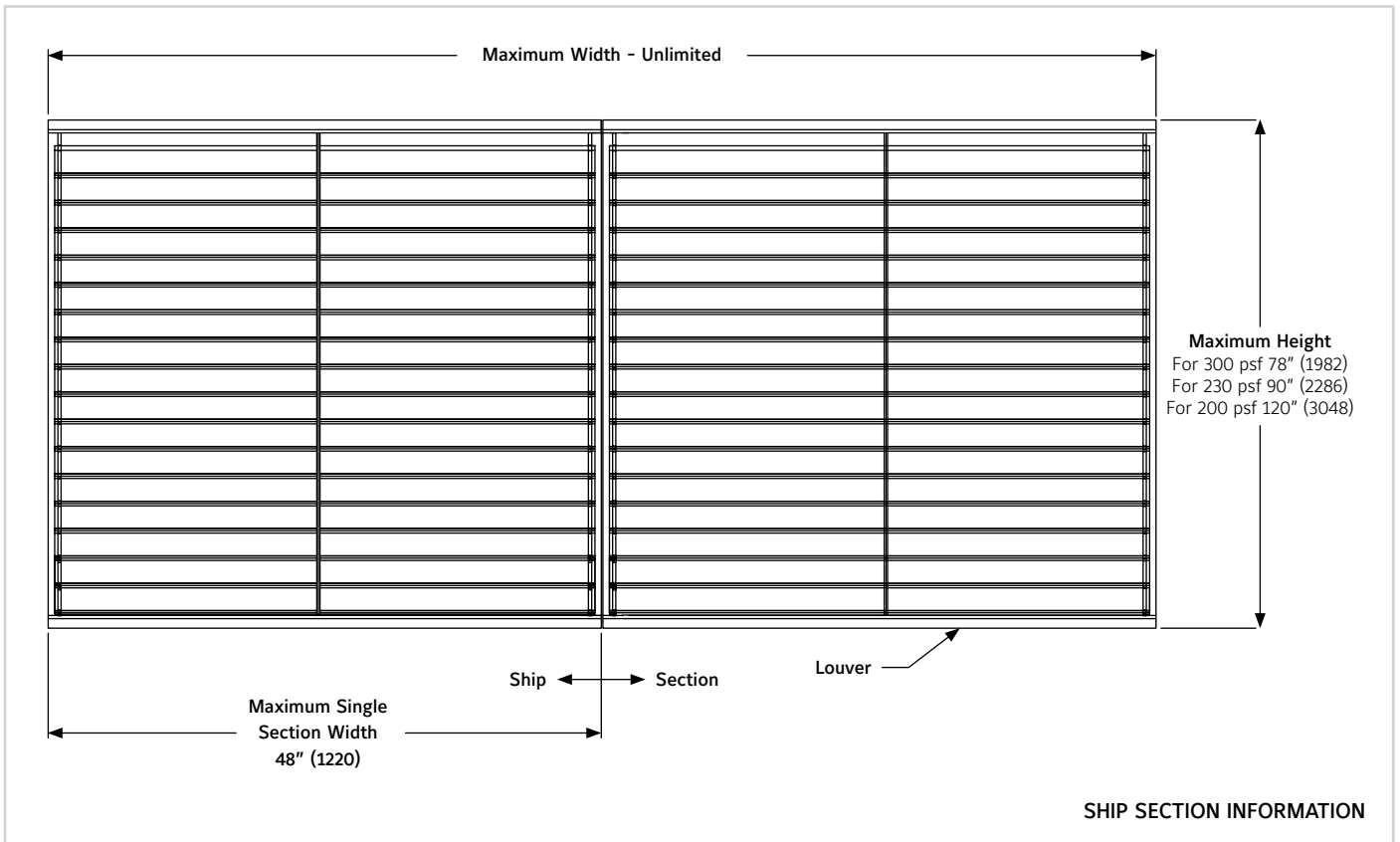
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CONCRETE (CRACKED)	4"	2.5 ksi COMPRESSION	3"	3/8" DIA HILTI KWIK HUS EZ	2 1/2"
CMU (CRACKED)	8"	2 ksi COMPRESSION	4"	3/8" DIA HILTI KWIK HUS EZ	3 1/4"



MULTI SECTION FLANGED FRAME MOUNTING OPTIONS

CONSTRUCTION INFORMATION



1. On special orders, Ruskin may provide submittal and/or shop drawings. Reference these drawings for additional installation information.
2. Louvers wider than the maximum single section width will be shipped in multiple sections and will require field assembly. Field assembly is not by Ruskin.

LINKS TO IMPORTANT DOCUMENTS

Document Title

Limited Warranty Document



3900 Doctor Greaves Road
Grandview, MO 64030
Website: www.ruskin.com
Phone: (816) 761-7476