

HZ700MD

Installation Guide



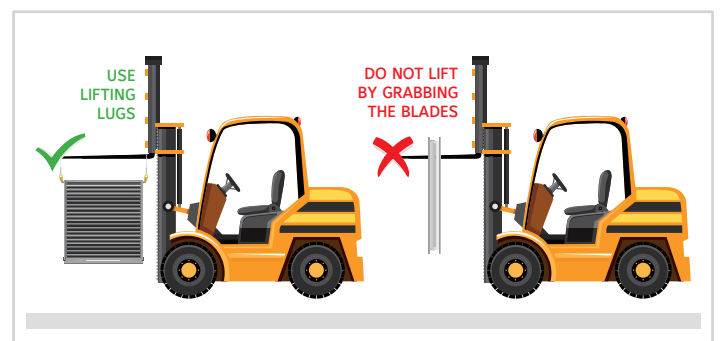
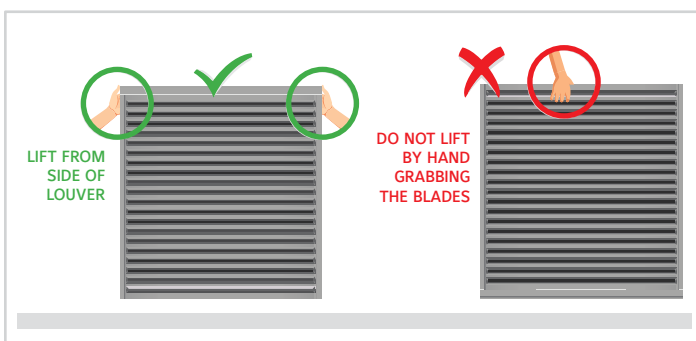
PRE-ASSEMBLY INSTRUCTIONS:

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.

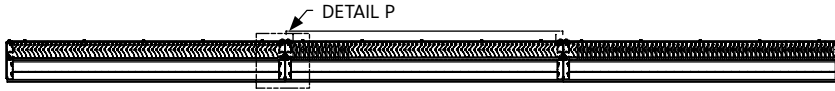
ASSEMBLY PROCEDURE:

1. If installing extended sill (with end dams) in the opening. Install sill pan in between the sections if the louver is single section wide & multi-section high. Install sill pan with lap strips if the louver is multi section wide & high. (As shown in exploded detail) make sure to apply sealant at the location where gutters meet prior to installation of louvers.
2. Locate ship loose hardware required for louver multi-section assembly.
3. Position the louver sections faced down on a level, non-abrasive surface in the configuration they will be assembled in. Reference the tag numbers on each section to ensure the sections are in correct order.
4. Refer to appropriate exploded details for splice hardware identification & location. Now fasten the sections together at frames, support splices. (Supports are pre-drilled at plant for ease).
5. If perimeter clips or continuous angles are to be installed, locate & anchor them in the opening. (Reference clip angle installation guide for instructions).
6. Level the louver assembly both horizontally & vertically in the opening using shims. (Shims not provided by Ruskin).
7. Position the louver in the opening so that the desired sealant joint will be maintained around the perimeter of louver.
8. After louver is secured, install backer rod & sealant around louver perimeter. (Sealant not provided by Ruskin).

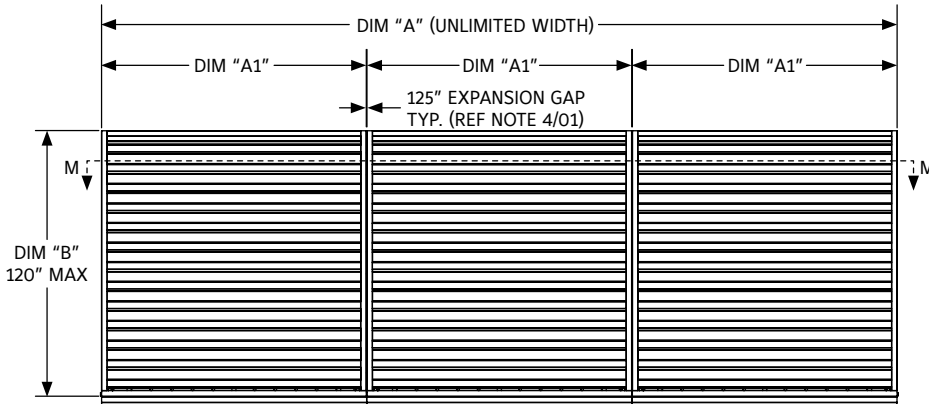
LOUVER LIFTING INSTRUCTIONS



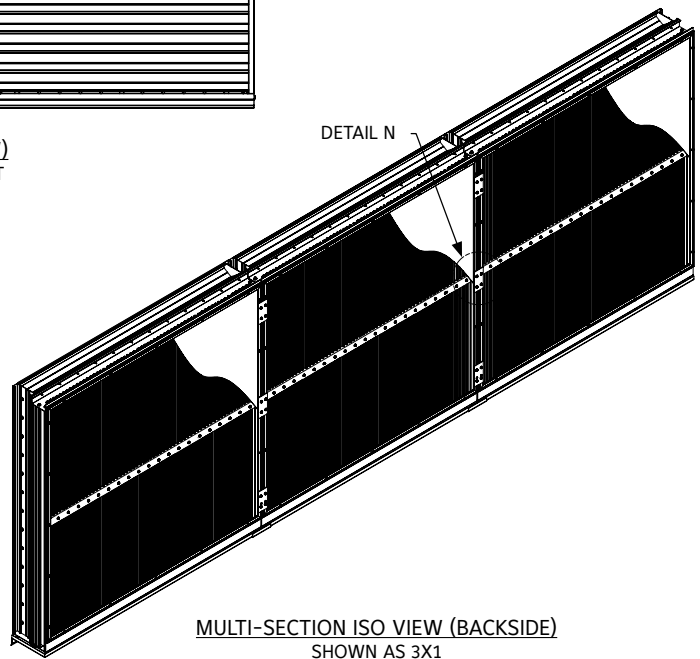
REFERENCE IMAGES



SECTION M-M



3X1 MULTI-SECTION (FRONT VIEW)
UNLIMITED WIDTH X 120" MAX HEIGHT



MULTI-SECTION ISO VIEW (BACKSIDE)
SHOWN AS 3X1

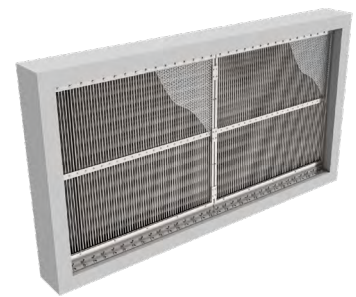
FRONT FLANGE 2X1



FRONT FLANGE-2X1 - RETAINING ANGLE
ISOMETRIC FRONT VIEW

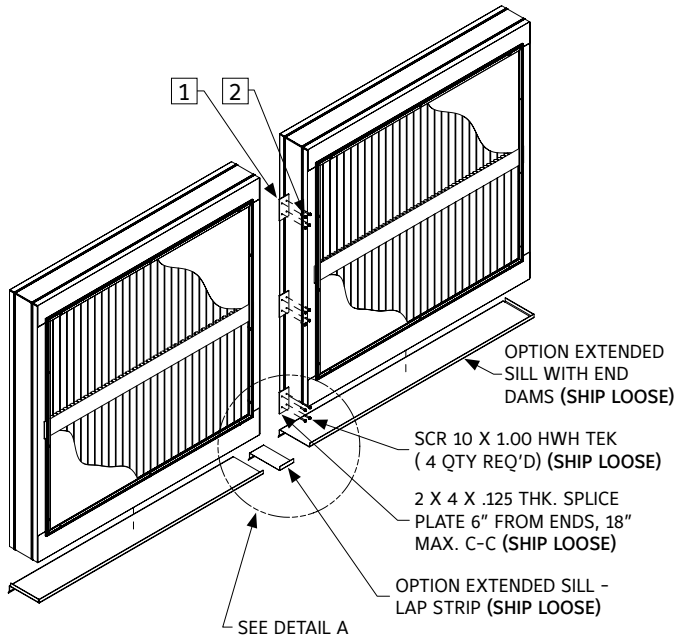


2X1 - RETAINING ANGLE
ISOMETRIC REAR VIEW - 1

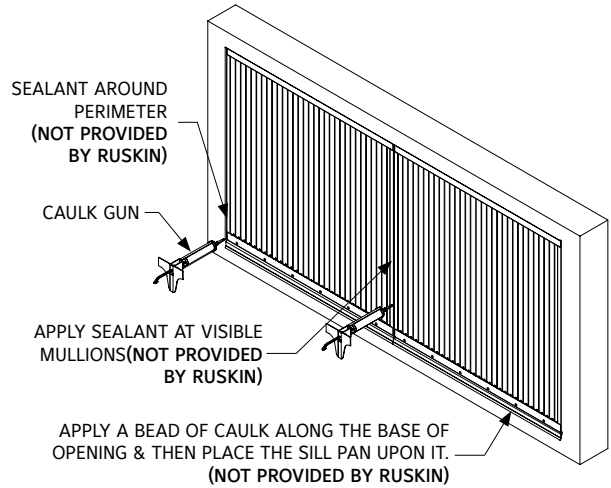


2X1 - RETAINING ANGLE
ISOMETRIC REAR VIEW - 2

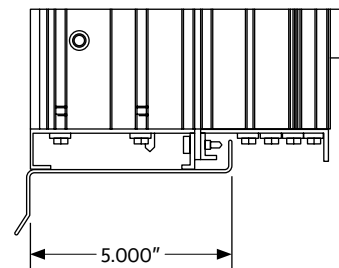
2X1 MULTI SECTION INSTALLATION



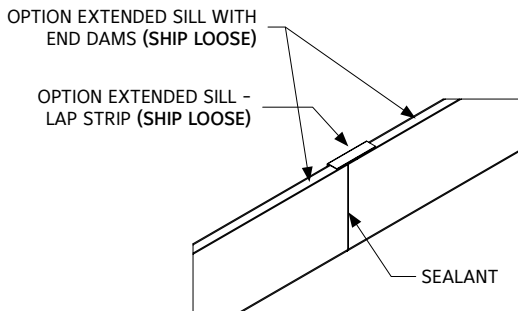
**2X1 MULTI SECTION EXPLODED VIEW
ISOMETRIC REAR VIEW**



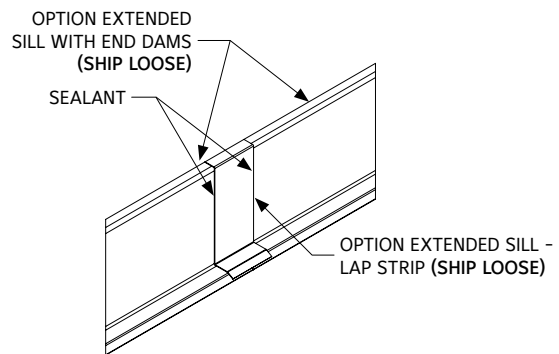
**MULTI SECTION LOUVER ASSEMBLY
ISOMETRIC FRONT VIEW (SEALANT / CAULK INFORMATION)**



EXTENDED SILL OPTION



TOP OF SILL PAN



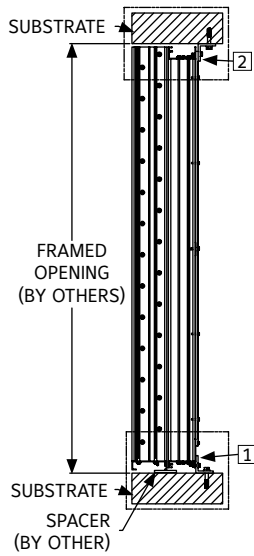
BOTTOM OF SILL PAN

**DETAIL A
MULTI LAP STRIP SEALANT INFO.**

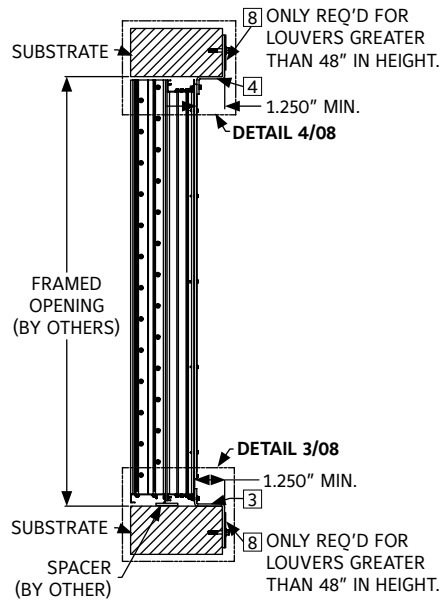
ITEM #	DESCRIPTION	QTY.	PART #	MATERIAL
PARTS LIST TABLE - 2X1 MULTI SECTION (SHIP LOOSE)				
1	2 X 4 X .125 THK SPLICE PLATE	1	360431136	EXT ALUM 6063-T6
2	SCR 10 X 1.0 HWH TEK	4	380430941	410/ZC

** Attachments varies per louver
** Square balloons indicates ship loose parts

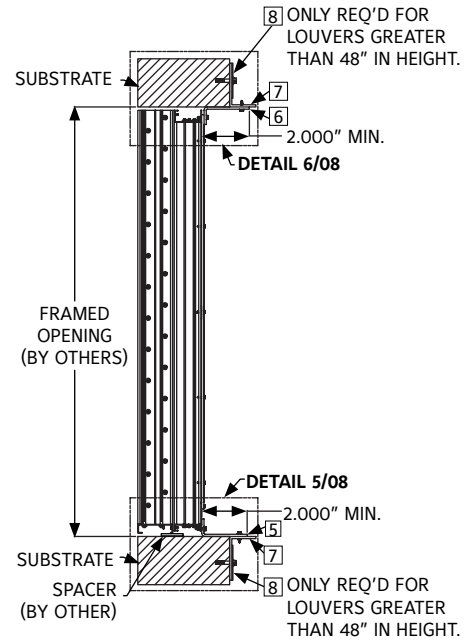
NOA INSTALLATION METHOD



RETAINING ANGLE INSTALLATION
LEG-OUT SHOWN (OPTIONAL LEG-IN)



RETAINING ZEE INSTALLATION

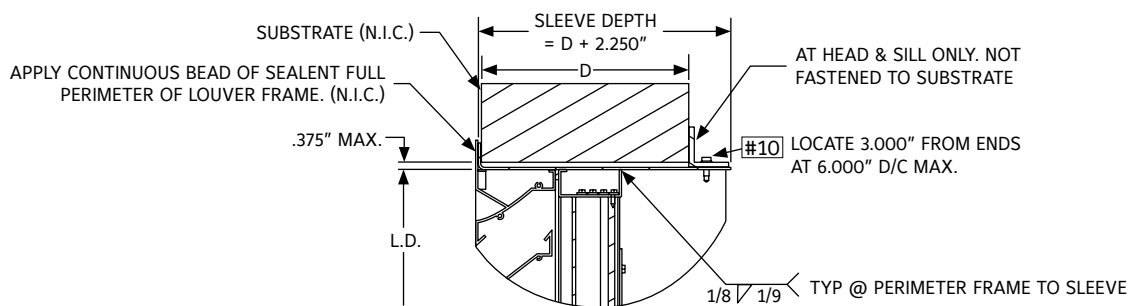


DOUBLE ANGLE INSTALLATION

ALTERNATE NOA INSTALLATION METHODS

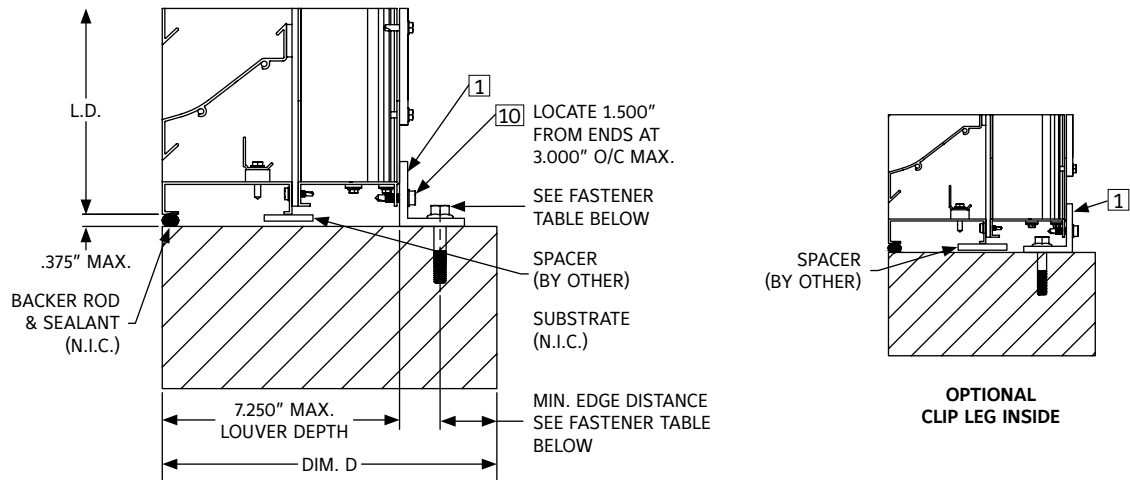
ITEM	DESCRIPTION	PART DIMENSION	PART #	MATERIAL
1	SILL RETAINING ANGLE	2" X 2" X 1/4" CONT. ANGLE	341396M00	EXT ALUM 6063-T6
2	HEAD RETAINING ANGLE	2" X 2" X 1/4" CONT. ANGLE	341396M00	EXT ALUM 6063-T6
3	SILL RETAINING ZEE	2" X D" X 5" X 1/4" CONT. Z ANGLE	800501158	FORMED ALUM 5005-H34
4	HEAD RETAINING ZEE	2" X D" X 5" X 1/4" CONT. Z ANGLE	800501158	ALUM 3003-H14
5	SILL RETAINING ANGLE	2" X D" X 1/4" CONT ANGLE	800501158	ALUM 3003-H14
6	HEAD RETAINING ANGLE	2" X D" X 1/4" CONT ANGLE	800501158	ALUM 3003-H14
7	WALL ANGLE	5" X 3" X 1/4" CONT ANGLE	343430M00	EXT ALUM 6063-T6
8	STIFFENER PLATE	D" X 1/8" CONT STRAP	343663M00	EXT ALUM 6063-T6
9	SUBSTRATE FASTENER (N.I.C.)	SHEETS 7 & 8	-	-
10	SCR 10 X .75 HWK TEK 410/ZC	-	3804331155	ZC

RETAINING ANGLE INSTALLATION

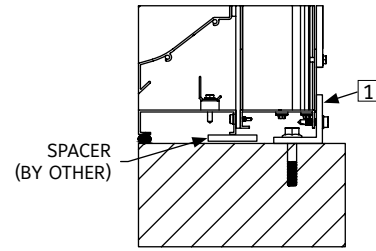


DETAIL 9
RETAINING ANGLE INSTALL AT HEAD (SHOWN). SIMILAR AT SILL.

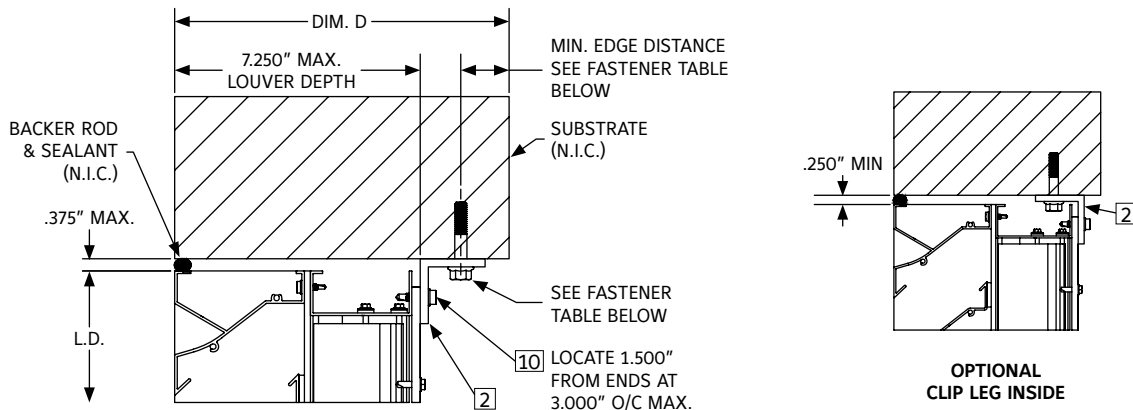
STANDARD INSTALLATION METHOD



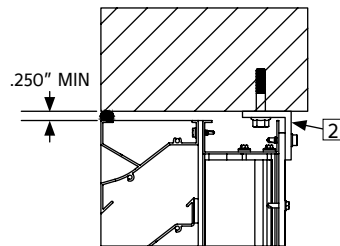
DETAIL 1
RETAINING ANGLE AT SILL



OPTIONAL
CLIP LEG INSIDE



DETAIL 2
RETAINING ANGLE AT HEAD



OPTIONAL
CLIP LEG INSIDE

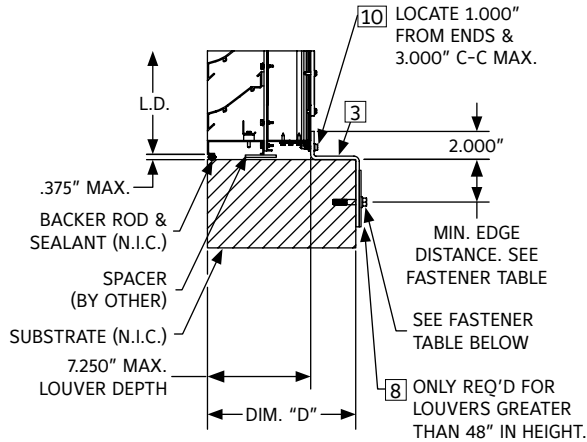
SUBSTRATE FASTENER TABLE SINGLE ANGLE INSTALLATION

SUBSTRATE TYPE	MIN. SUBSTRATE REQUIREMENTS	FASTENER TYPES (NIC)	MAX. C/C SPACING AT HEAD/SILL	MIN. EMBEDMENT	MIN. EDGE DISTANCE	WALL DEPTH	
						STANDARD CLIP ANGLE	REVERSE CLIP ANGLE
WOOD	3" THICK, 0.42 SPECIFIC GRAVITY	* 3/8-16 BOLT W/NUT, MIN A307 GRADE A	6"	3 THREADS BEYOND NUT	1-1/2"	9 5/8"	8 5/8"
		3/8" DIA. LAG SCREW, 2 1/2" LONG, MIN. A307 GRADE A	6"	2-1/4"	1-1/2"		
STEEL	18 GA, 45 KSI TENSILE STRENGTH, 33KSI YIELD STRENGTH	1/4-20 BOLT W/NUT & WASHER MIN A307 GRADE A	6"	3 THREADS BEYOND NUT	1/2"	8 5/8"	6 5/8"
	12 GA, 45 KSI TENSILE STRENGTH, 33KSI YIELD STRENGTH	* 1/4-20 SELF-DRILLING SCREW W/ WASHER CARBON STEEL	3"	3 THREADS BEYOND SUBSTR. THICKNESS	1/2"	8 5/8"	6 5/8"
ALUMINUM	0.125" THICK, 20 KSI TENSILE STRENGTH, 15 KSI YIELD STRENGTH	1/4-20 BOLT W/NUT & WASHER MIN A307 GRADE A	6"	3 THREADS BEYOND NUT	1/2"	8 5/8"	6 5/8"
	0.1875" THICK, 20 KSI TENSILE STRENGTH, 15 KSI YIELD STRENGTH	* 1/4-20 SELF-DRILLING SCREW W/ WASHER CARBON STEEL	3"	3 THREADS BEYOND SUBSTR. THICKNESS	1/2"	8 5/8"	6 5/8"

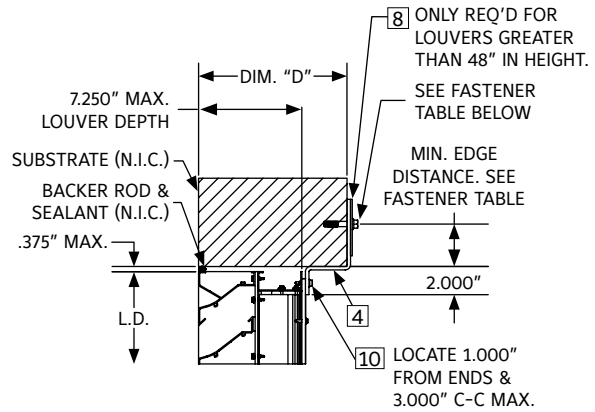
SUBSTRATE FASTENER TABLE SINGLE ANGLE INSTALLATION							
SUBSTRATE TYPE	MIN. SUBSTRATE REQUIREMENTS	FASTENER TYPES (NIC)	MAX. C/C SPACING AT HEAD/SILL	MIN. EMBEDMENT	MIN. EDGE DISTANCE	WALL DEPTH	
						STANDARD CLIP ANGLE	REVERSE CLIP ANGLE
CONCRETE	2500 PSI COMPRESSIVE STRENGTH	3/8" DIA. SIMPSON STRONG-TIE TITEN HD SCREW ANCHOR CARBON STEEL	6"	3-1/4"	3"	11 1/8"	9 1/8"
		3/8" DIA. DEWALT SCREW BOLT + SCREW ANCHOR CARBON STEEL	6"	3-1/4"	6"	13 1/8"	12 1/8"
		3/8" DIA. HILTI KWIK HUS-EZ SCREW ANCHOR CARBON STEEL	6"	3-1/4"	2 1/2"	10 5/8"	8 5/8"
		* 1/4" DIA. ELCO AGGREGATOR W/ WASHER 300 SERIES SS	3"	1-3/8"	1-1/2"	9 5/8"	7 5/8"
GROUT FILLED CMU	ASTM C-90 BLOCK, 1500 PSI GROUT COMPRESSIVE STRENGTH	3/8" DIA. SIMPSON STRONG-TIE TITEN HD SCREW ANCHOR CARBON STEEL	3"	2 -3/4"	4"	12 1/8"	10 1/8"
		3/8" DIA. DEWALT SCREW BOLT + SCREW ANCHOR CARBON STEEL	6"	3 1/4"	2"	10 1/8"	8 1/8"
		3/8" DIA. HILTI KWIK HUS-EZ SCREW ANCHOR CARBON STEEL	6"	3 1/4"	4"	12 1/8"	10 1/8"
		* 1/4" DIA. ELCO AGGREGATOR W/ WASHER 300 SERIES SS	3"	2"	2"	10 1/8"	8 1/8"

* Default fastner type

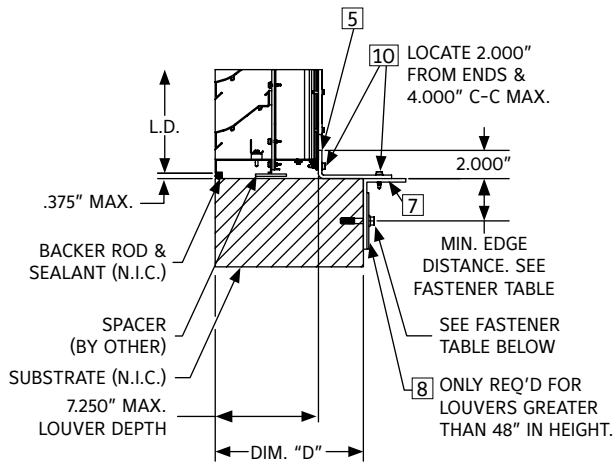
ALTERNATE INSTALLATION METHOD (NON STANDARD - ONLY INTENDED FOR UNIQUE DESIGN CONSIDERATIONS)



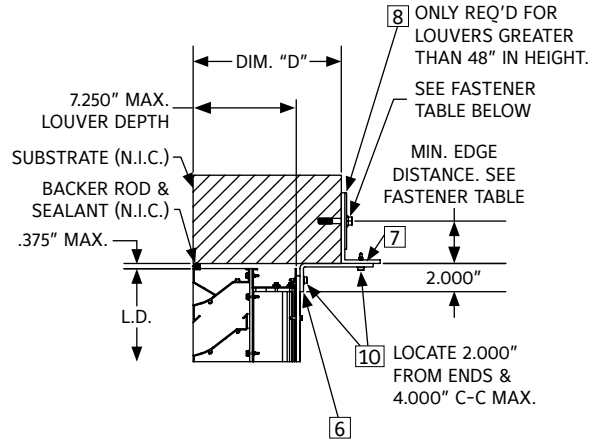
DETAIL 3
RETAINING ZEE INSTALLED AT SILL



DETAIL 4
RETAINING ZEE INSTALLED AT HEAD



DETAIL 5
* DOUBLE ANGLE INSTALLED AT SILL



DETAIL 6
* DOUBLE ANGLE INSTALLED AT HEAD

SUBSTRATE FASTENER TABLE (N.I.C.) / HZ700MD 130 PSF / RETAINING ZEE & DOUBLE ANGLE INSTALL

SUBSTRATE TYPE	MIN. SUBSTRATE REQUIREMENTS	FASTENER TYPES (NIC)	MAX. C/C SPACING AT HEAD/SILL	MIN. EMBEDMENT	MIN. EDGE DISTANCE	RECOMMENDED WALL THICKNESS
WOOD	3" THICK, 0.42 SPECIFIC GRAVITY	* 3/8-16 BOLT W/NUT, MIN A307 GRADE A	12"	3 THREADS BEYOND NUT	1-1/2"	4" to 7 5/8"
		3/8" DIA. LAG SCREW, 2 1/2" LONG, MIN. A307 GRADE A	12"	2-1/4"	1-1/2"	4" to 7 5/8"
STEEL	18 GA, 45 KSI TENSILE STRENGTH, 33KSI YIELD STRENGTH	1/4-20 BOLT W/NUT & WASHER MIN A307 GRADE A	6"	3 THREADS BEYOND NUT	1/2"	4" to 6 5/8"
	12 GA, 45 KSI TENSILE STRENGTH, 33KSI YIELD STRENGTH	* 1/4-20 SELF-DRILLING SCREW W/ WASHER CARBON STEEL	6"	3 THREADS BEYOND SUBSTR. THICKNESS	1/2"	4" to 6 5/8"
ALUMINUM	0.125" THICK, 20 KSI TENSILE STRENGTH, 15 KSI YIELD STRENGTH	1/4-20 BOLT W/NUT & WASHER MIN A307 GRADE A	12"	3 THREADS BEYOND NUT	1/2"	4" to 6 5/8"
	0.1875" THICK, 20 KSI TENSILE STRENGTH, 15 KSI YIELD STRENGTH	* 1/4-20 SELF-DRILLING SCREW W/ WASHER CARBON STEEL	3"	3 THREADS BEYOND SUBSTR. THICKNESS	1/2"	4" to 6 5/8"

SUBSTRATE FASTENER TABLE (N.I.C.) / HZ700MD 130 PSF / RETAINING ZEE & DOUBLE ANGLE INSTALL

SUBSTRATE TYPE	MIN. SUBSTRATE REQUIREMENTS	FASTENER TYPES (NIC)	MAX. C/C SPACING AT HEAD/SILL	MIN. EMBEDMENT	MIN. EDGE DISTANCE	RECOMMENDED WALL THICKNESS
CONCRETE	2500 PSI COMPRESSIVE STRENGTH	3/8" DIA. SIMPSON STRONG-TIE TITEN HD SCREW ANCHOR CARBON STEEL	6"	3-1/4"	3"	4" to 7 5/8"
		3/8" DIA. DEWALT SCREW BOLT + SCREW ANCHOR CARBON STEEL	6"	3-1/4"	6"	4" to 7 5/8"
		3/8" DIA. HILTI KWIK HUS-EZ SCREW ANCHOR CARBON STEEL	6"	3-1/4"	2 1/2"	4" to 7 5/8"
		1/4" DIA. ELCO AGGRE-GATOR W/ WASHER 300 SERIES SS	3"	1-3/8"	1-1/2"	4" to 7 5/8"
GROUT FILLED CMU	ASTM C-90 BLOCK, 1500 PSI GROUT COMPRESSIVE STRENGTH	3/8" DIA. SIMPSON STRONG-TIE TITEN HD SCREW ANCHOR CARBON STEEL	3"	2 -3/4"	4"	4" to 8"
		3/8" DIA. DEWALT SCREW BOLT + SCREW ANCHOR CARBON STEEL	6"	3 1/4"	2"	4" to 8"
		3/8" DIA. HILTI KWIK HUS-EZ SCREW ANCHOR CARBON STEEL	6"	3 1/4"	4"	4" to 8"
		1/4" DIA. ELCO AGGRE-GATOR W/ WASHER 300 SERIES SS	3"	2"	2"	4" to 8"

 LINKS TO IMPORTANT DOCUMENTS

Document Title

Limited Warranty Document



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