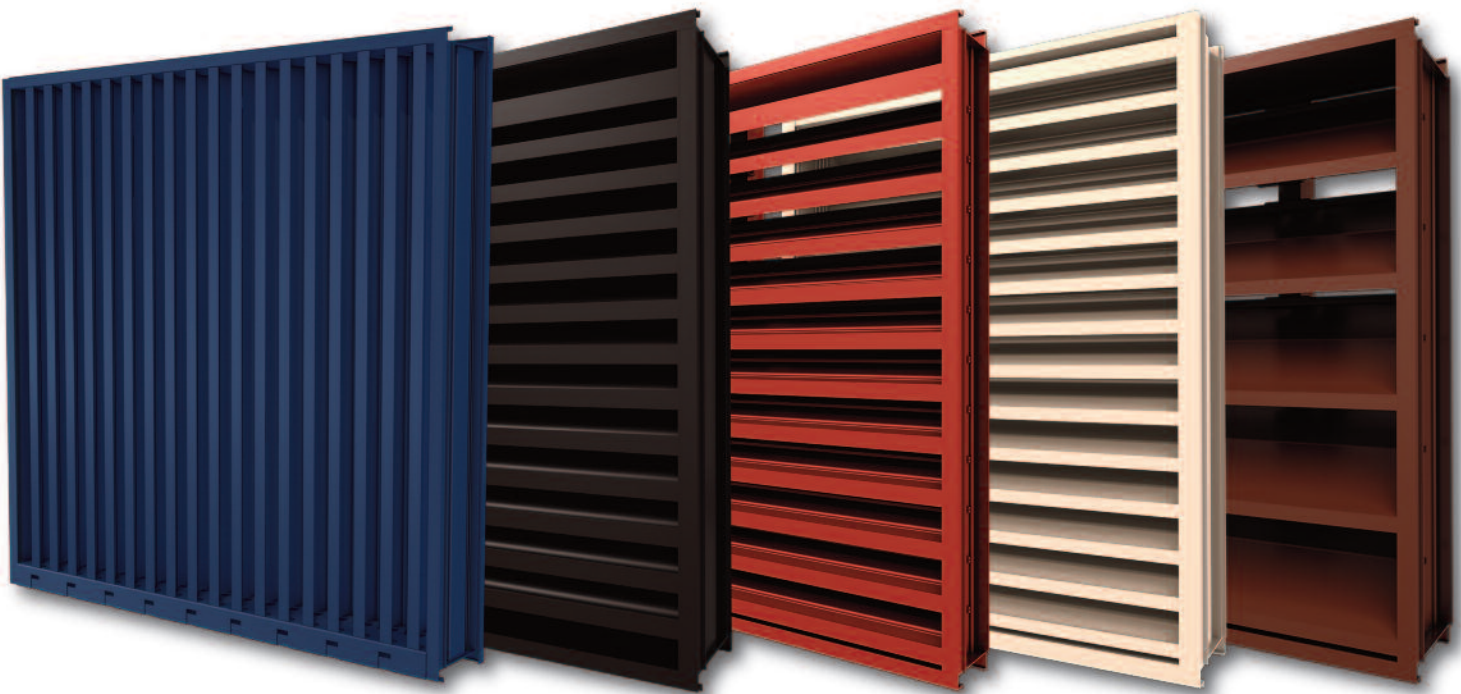


QUALIFICATIONS:

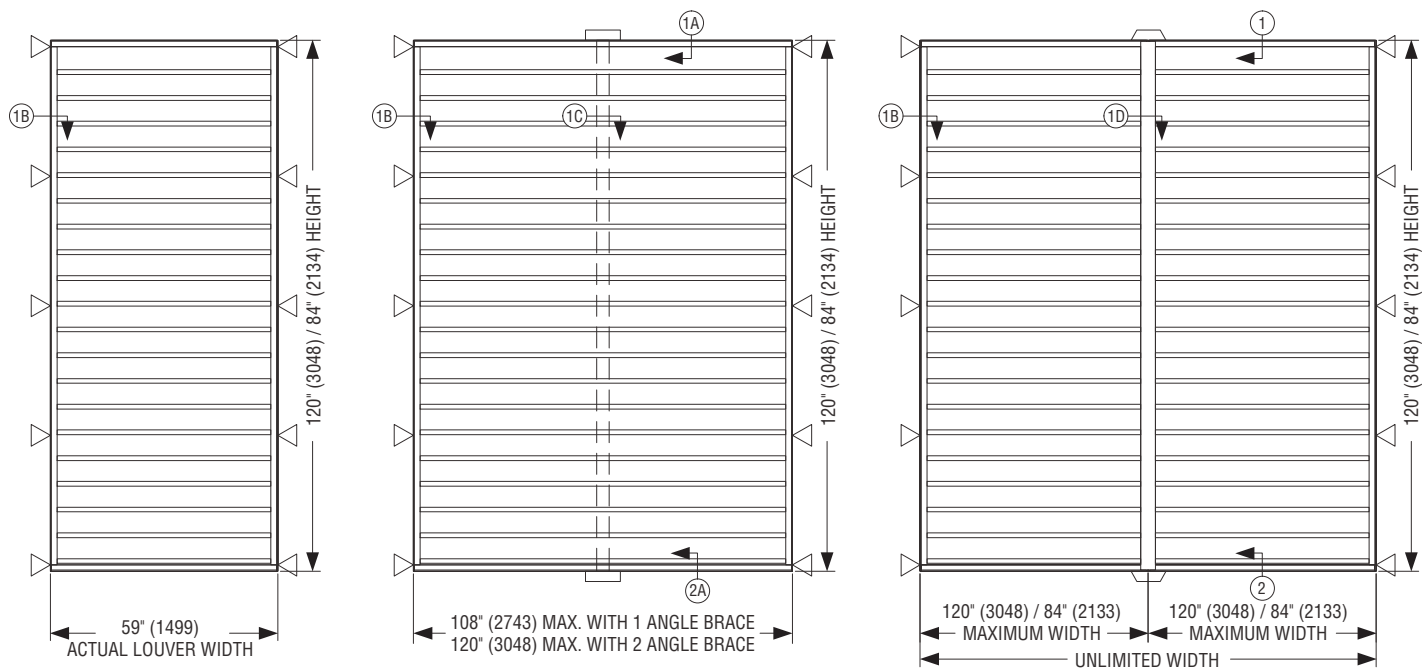
- Florida Product Approved.
- UL Classified R38431 ZHLA Windstorm Rated Assembly.
- TAS-202 (Uniform Static Air Pressure) Wind loads up to 200 psf.
- AMCA Licensed (see specific model submittal for details).

I. General Notes

1. It shall be the responsibility of the permit holder to verify the structural integrity of the existing structure to support the loads imposed by the louvers.
2. The louvers have been designed and tested in accordance with the Florida Building Code 5th Edition (2014) and Test Protocols TAS-202, and AMCA 500-L.
3. All wood substrate shall be SG – 0.42 SPF or better.
4. All metal stud substrate shall be minimum 16 ga., Fy = 50 ksi.
5. All structural steel substrate shall be minimum 1/4" (6) thick, Fy = 36 ksi.
6. All concrete substrate shall be minimum 4,000 psi.
7. All concrete substrate shall be ASTM C90, Type II, 2500 psi grout filled.
8. Installer shall provide separation of dissimilar metals as required.
9. Multi-section wide and high louver systems, with visible or non-visible (concealed) mullions, are allowable provided the individual sections are supported per the details in this instruction manual.
10. Critical equipment to be protected from moisture ingress.
11. Other building conditions than those denoted can be utilized if analyzed and approved by a professional engineer.

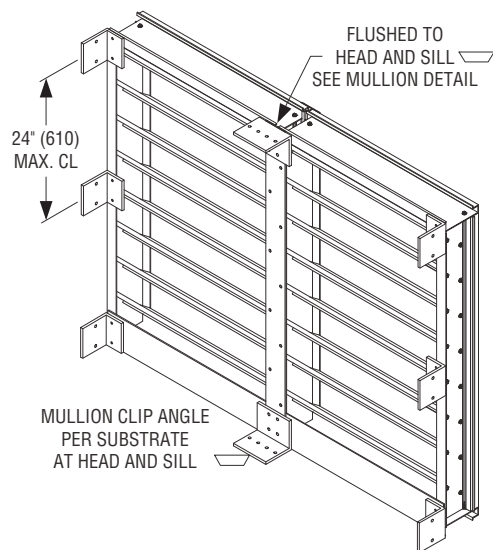
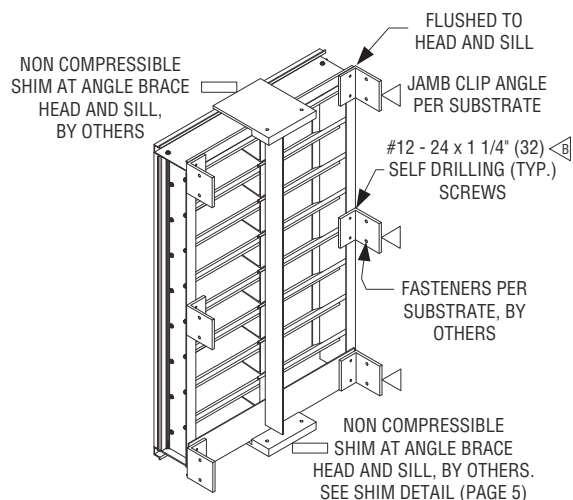
**SAFETY WARNING:**

Improper installation, alteration, adjustment, service or maintenance can cause property damage, injury or death. Read the installation, operation and maintenance instructions for louvers thoroughly before installing or servicing this equipment.



Single Section w/o Vertical Angle Brace Single Section Wide w/ Vertical Angle Brace

Multiple Sections Wide w/ Mullion(s)

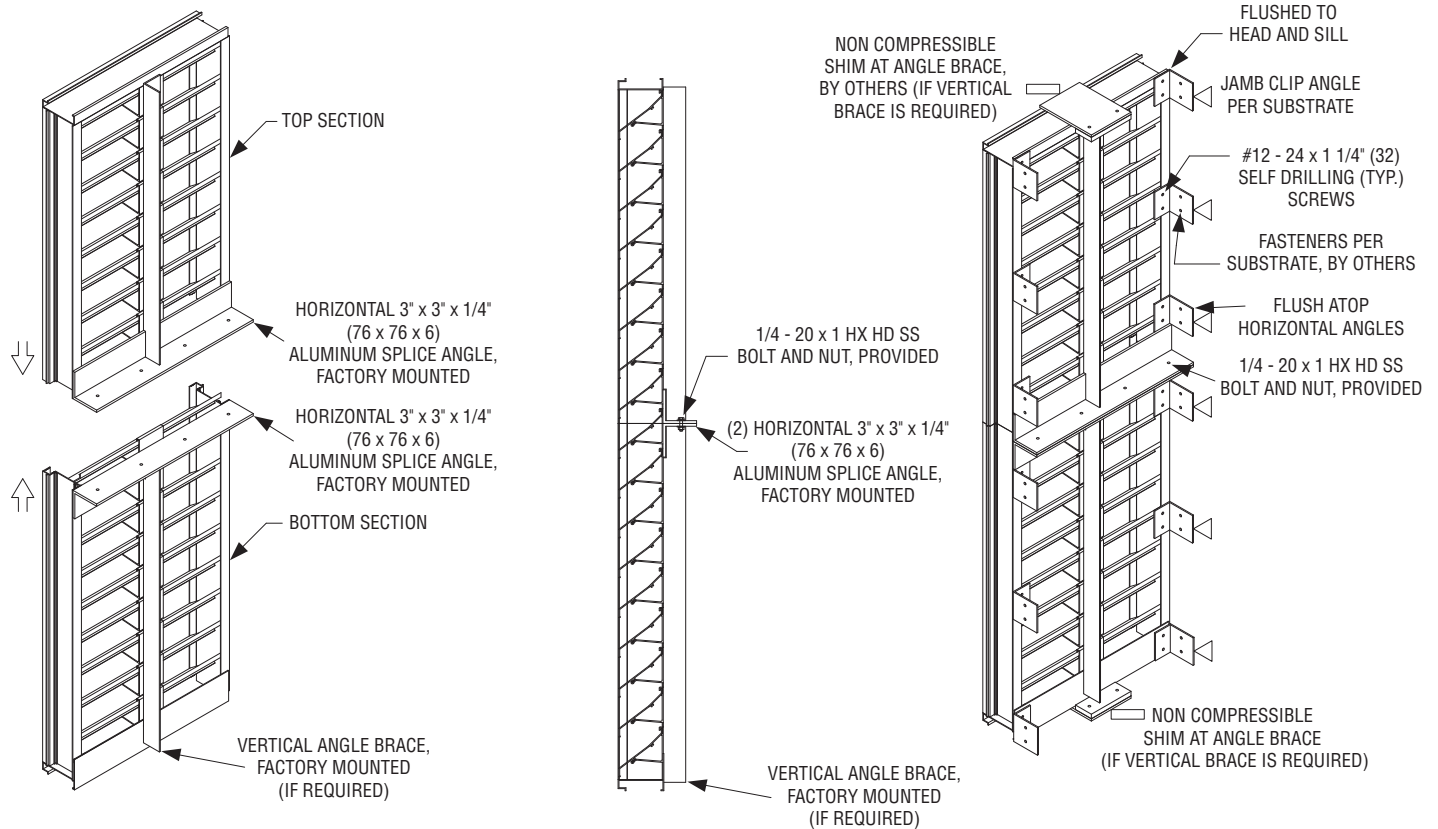


SCHEDULE OF SUBSTRATE FASTENERS (FIELD INSTALLATION – NOT BY NAILOR)

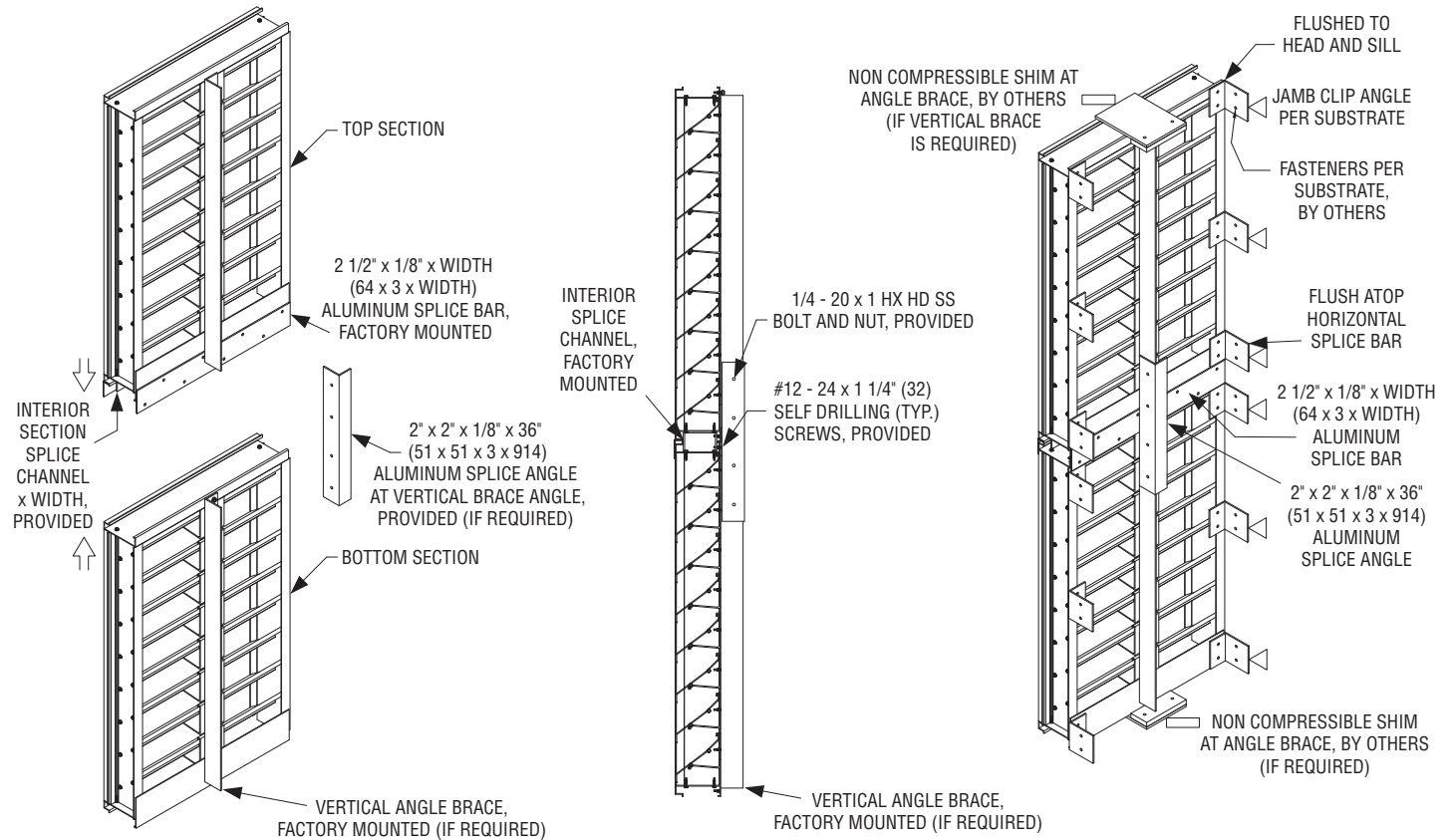
*Manufacturers require (1) anchor per cell.

INSTALLATION SUBSTRATE	FASTENER DETAIL	DESCRIPTION	ANGLE ANCHOR CLIP LOCATION	QUANTITY	MIN. EMBED	MIN. END	MIN. SPACE	MIN. EDGE
Wood	A	1/4" (6) dia. Wood Screw Cut Threads (Fy = 80,000 psi)	Jamb(s)	Varies (2 Per)	2" (51)	1" (25)	2" (51)	
Wood	A	1/4" (6) dia. Wood Screw Cut Threads (Fy = 80,000 psi)	Vert. Angle Brace at Shim, Head and Sill	Varies (2 Per)		1" (25)	3 1/2" (89)	
Wood	A	1/4" (6) dia. Wood Screw Cut Threads (Fy = 80,000 psi)	Vert. Mullion, Head and Sill	Varies (4 Per)	2" (51)	3/8" (10)	1" (25)	
Concrete	C	1/4" (6) dia. Hilti Kwik HUS-EZ (KH-EZ)	Jamb(s)	Varies (2 Per)	1 5/8" (41)	1/2" (13)	2" (51)	4" (102)
Concrete	C	1/4" (6) dia. Hilti Kwik HUS-EZ (KH-EZ)	Vert. Angle Brace at Shim, Head and Sill	Varies (2 Per)	2 1/2" (64)	1" (25)	3 1/2" (89)	4" (102)
Concrete	C	1/4" (6) dia. Hilti Kwik HUS-EZ (KH-EZ)	Vert. Mullion, Head and Sill	Varies (2 Per)	2 1/2" (64)	3/8" (10)	3" (76)	4" (102)
Masonry (CMU)	D	1/4" (6) dia. Powers Tapper+	Jamb(s)	Varies (2 Per)	1 1/2" (38)	1/2" (13)	2" (51)	3" (76)
Masonry (CMU)	D	1/4" (6) dia. Powers Tapper+	Vert. Angle Brace at Shim, Head and Sill	Varies (2 Per)	1 1/2" (38)	1" (25)	3 1/2" (89)	3" (76)
Masonry (CMU)	D	1/2" (13) dia. Hilti HIT HY 150 Epoxy w/Stainless Steel HAS Rod	Vert. Mullion, Head and Sill	Varies (1 Per)	4 1/4" (108)	4" (102)	*8" (203)	2 3/4" (70)
16 ga. Steel	E	1/4" - 20 dia. S.S. Elco Drill-Flex Drill Screws 300 Series (Fy = 92 ksi)	Jamb(s)	Varies (2 Per)	FULL	1/2" (13)	2" (51)	
16 ga. Steel	E	1/4" - 20 dia. S.S. Elco Drill-Flex Drill Screws 300 Series (Fy = 92 ksi)	Vert. Angle Brace at Shim, Head and Sill	Varies (2 Per)	FULL	1" (25)	3 1/2" (89)	
16 ga. Steel	E	1/4" - 20 dia. S.S. Elco Drill-Flex Drill Screws 300 Series (Fy = 92 ksi)	Vert. Mullion, Head and Sill	Varies (4 Per)	FULL	3/8" (10)	1" (25)	
Steel	F	1/4" - 20 dia. S.S. Elco Drill-Flex Drill Screws 300 Series (Fy = 92 ksi)	Jamb(s)	Varies (2 Per)	FULL	1/2" (13)	2" (51)	
Steel	F	1/4" - 20 dia. S.S. Elco Drill-Flex Drill Screws 300 Series (Fy = 92 ksi)	Vert. Angle Brace at Shim, Head and Sill	Varies (2 Per)	FULL	1" (25)	3 1/2" (89)	
Steel	F	1/4" - 20 dia. S.S. Elco Drill-Flex Drill Screws 300 Series (Fy = 92 ksi)	Vert. Mullion, Head and Sill	Varies (4 Per)	FULL	3/8" (10)	1" (25)	

MULTIPLE-SECTION HIGH NON-VISIBLE (CONCEALED) MULLION



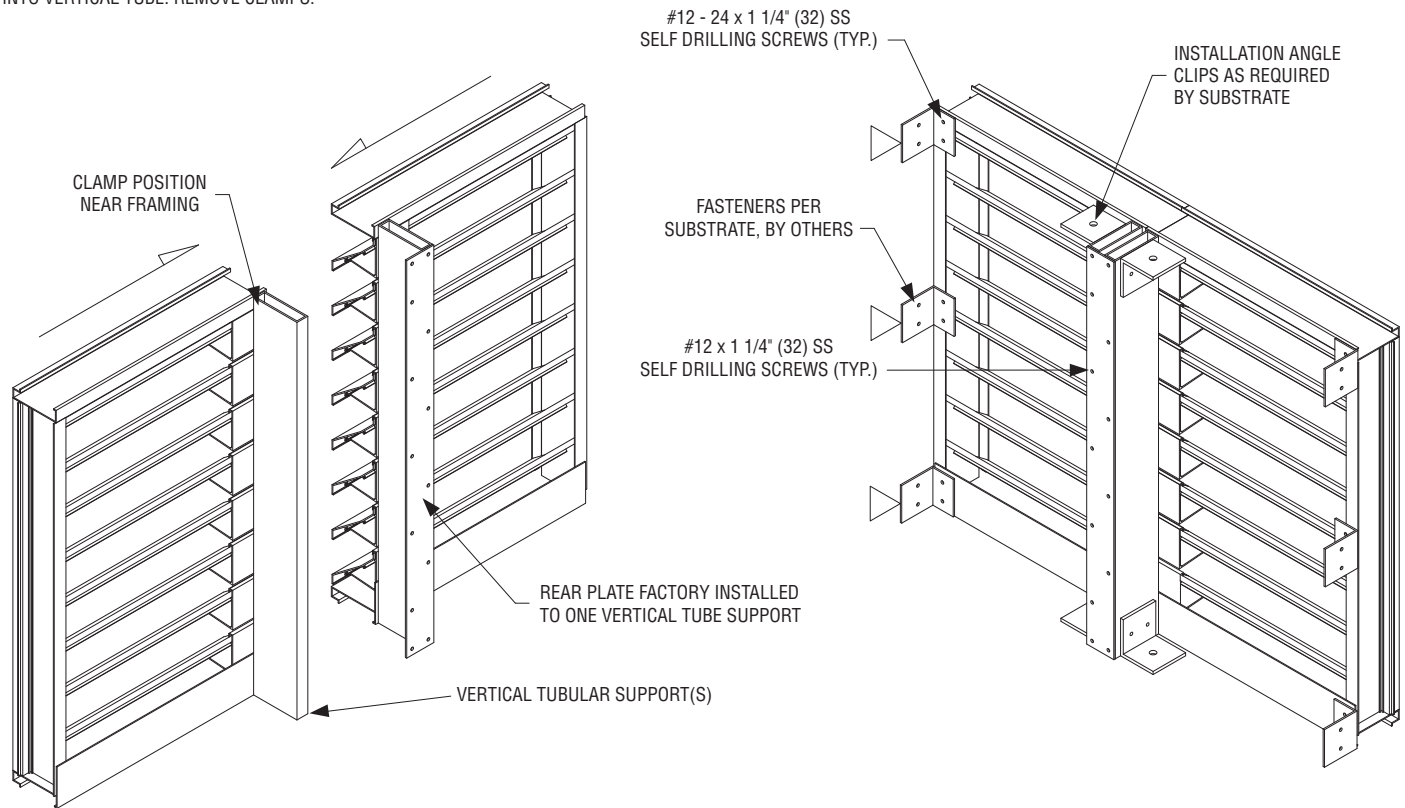
MULTIPLE-SECTION HIGH VISIBLE MULLION



Dimensions are in inches (mm).

MULTIPLE-SECTION WIDE NON-VISIBLE (CONCEALED) MULLION

SLIDE SECTIONS TOGETHER. COMPRESS BY CLAMPING TOGETHER.
SECURE AT REAR PLATE, USING #12 - 24 x 1 1/4 (32) SS SELF DRILLING SCREWS
INTO VERTICAL TUBE. REMOVE CLAMPS.



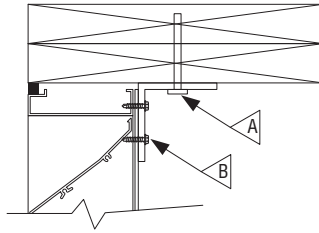
Notes

1. Vertical angles braces requiring shims are not shown for clarity. For details; see page 6.
2. Architectural non-visible (concealed) mullions are recommended on Models 1604JF and 1606JF only.

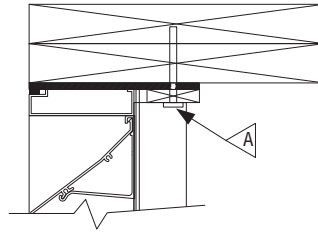
Dimensions are in inches (mm).

INSTALLATION DETAIL WORK SHEET

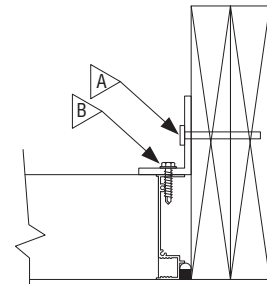
WOOD OPENING



① HEAD AND SILL DETAIL AT MULLION

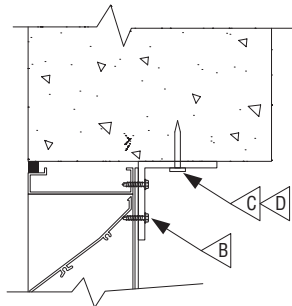


①A HEAD AND SILL DETAIL W/SHIM AT VERTICAL ANGLE BRACE

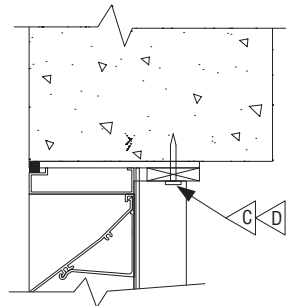


①B JAMB DETAIL

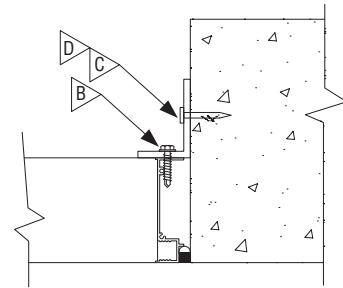
CONCRETE/CMU OPENING



① HEAD AND SILL DETAIL AT MULLION

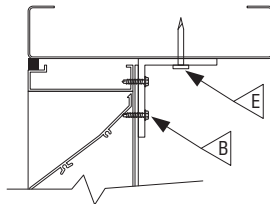


①A HEAD AND SILL DETAIL W/SHIM AT VERTICAL ANGLE BRACE

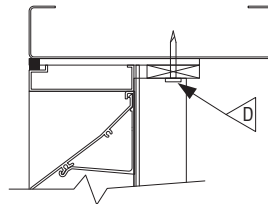


①B JAMB DETAIL

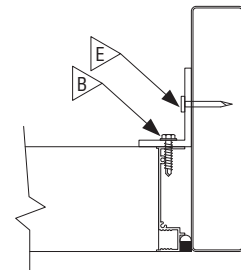
STEEL STUD OPENING



① HEAD AND SILL DETAIL AT MULLION

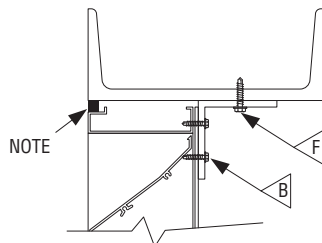


①A HEAD AND SILL DETAIL W/SHIM AT VERTICAL ANGLE BRACE

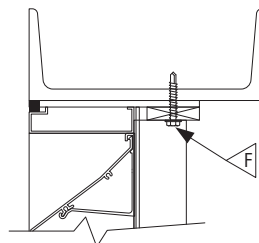


①B JAMB DETAIL

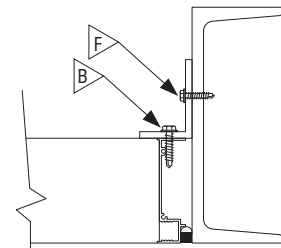
STRUCTURAL STEEL OPENING



① HEAD AND SILL DETAIL AT MULLION



①A HEAD AND SILL DETAIL W/SHIM AT VERTICAL ANGLE BRACE



①B JAMB DETAIL

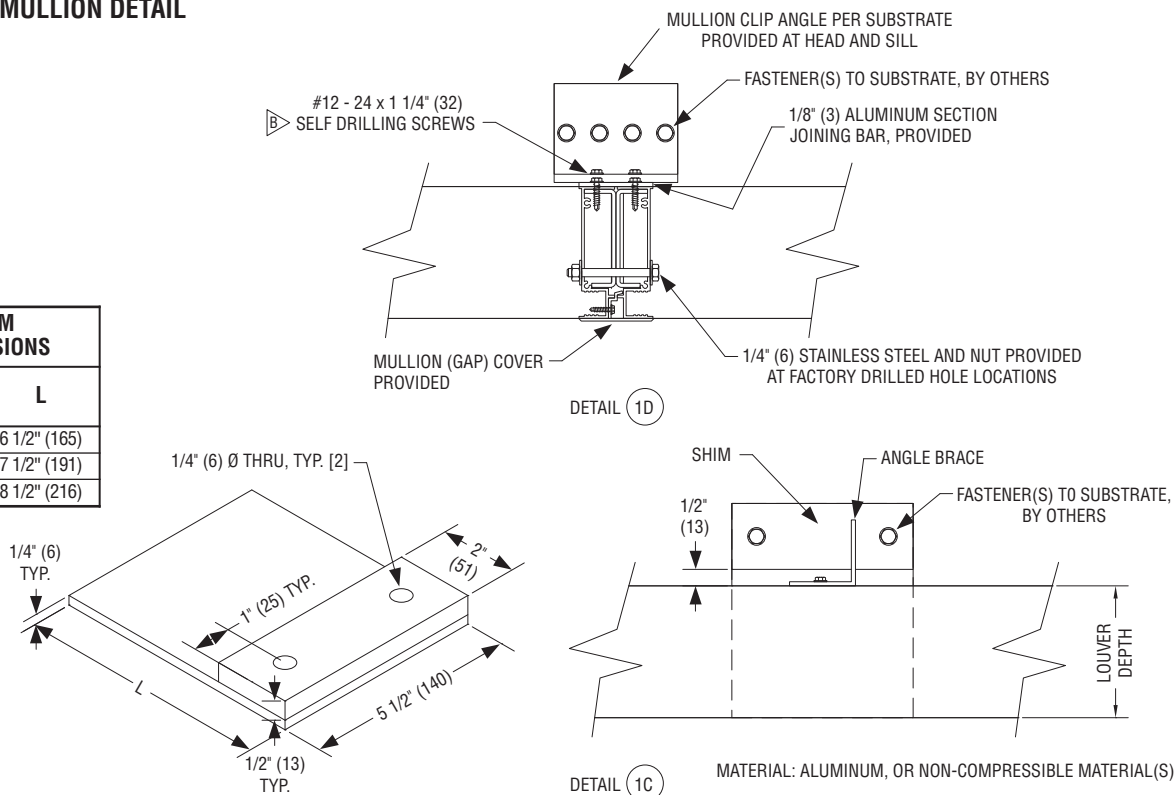
 = #12 - 24 x 1 1/4" (32) HWH STAINLESS STEEL SELF DRILLING SCREW.

NOTE: SEALANT AND BACKER ROD BY OTHERS, TYPICAL AT PERIMETER, ALL ABOVE.

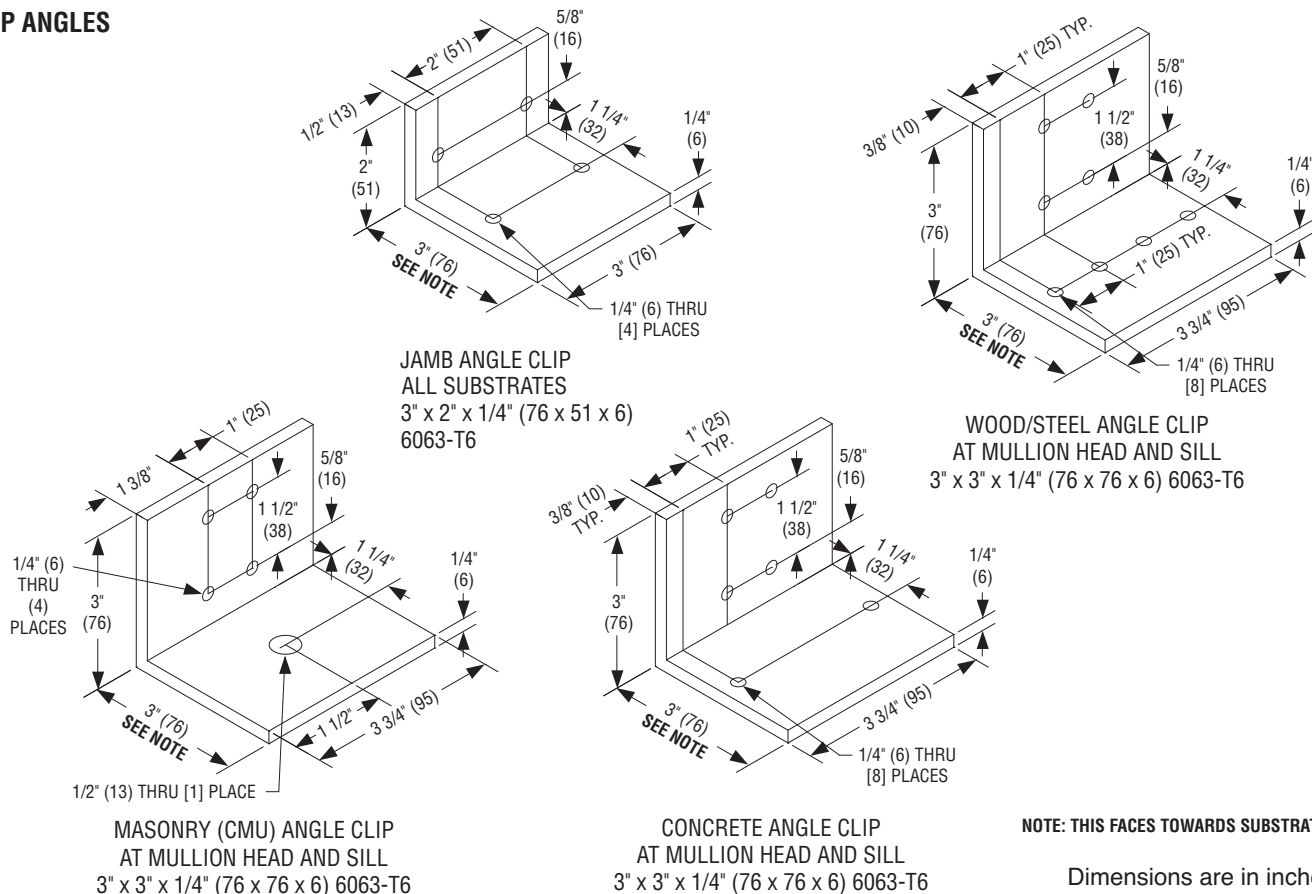
Dimensions are in inches (mm).

SHIM AND MULLION DETAIL

SHIM DIMENSIONS	
LOUVER DEPTH	L
4 (102)	6 1/2" (165)
5 (127)	7 1/2" (191)
6 (152)	8 1/2" (216)



CLIP ANGLES



Nailor
Industries Inc.

Houston, Texas
Tel: 281-590-1172
Fax: 281-590-3086

Las Vegas, Nevada
Tel: 702-648-5400
Fax: 702-638-0400

Toronto, Canada
Tel: 416-744-3300
Fax: 416-744-3360

Calgary, Canada
Tel: 403-279-8619
Fax: 403-279-5035