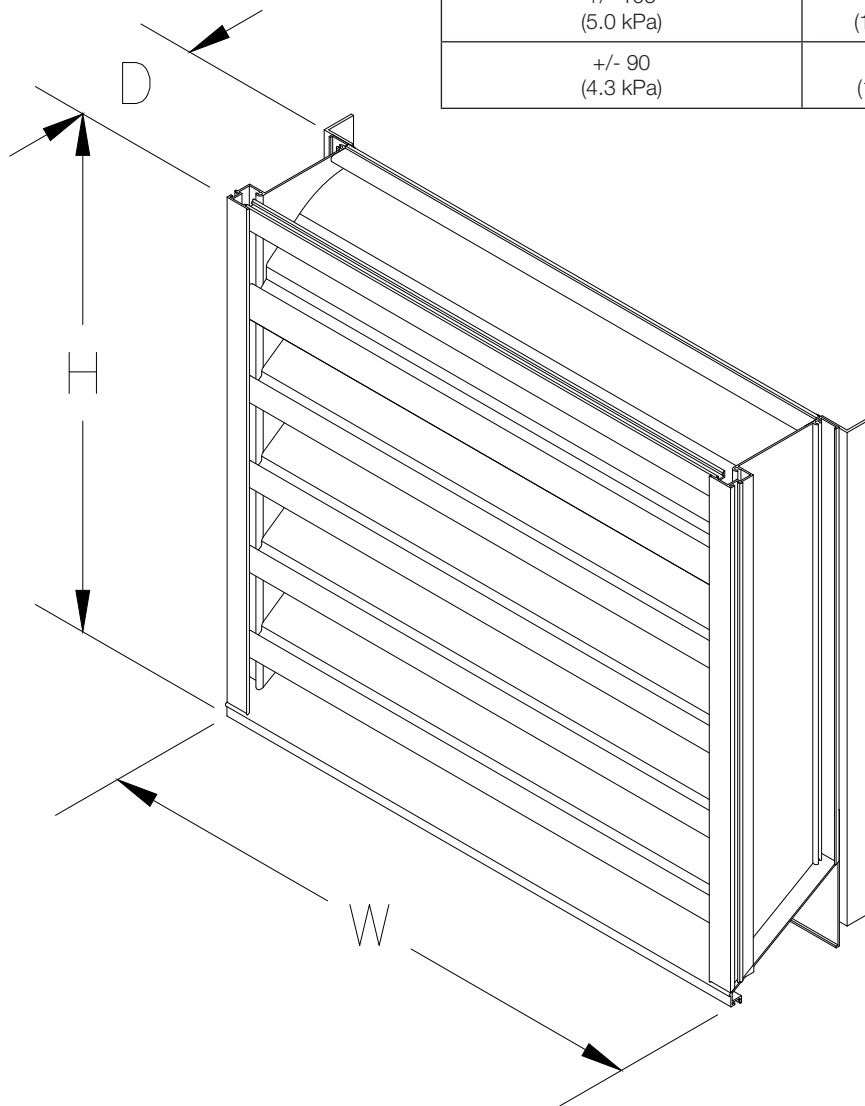


## Installation, Operation and Maintenance Manual

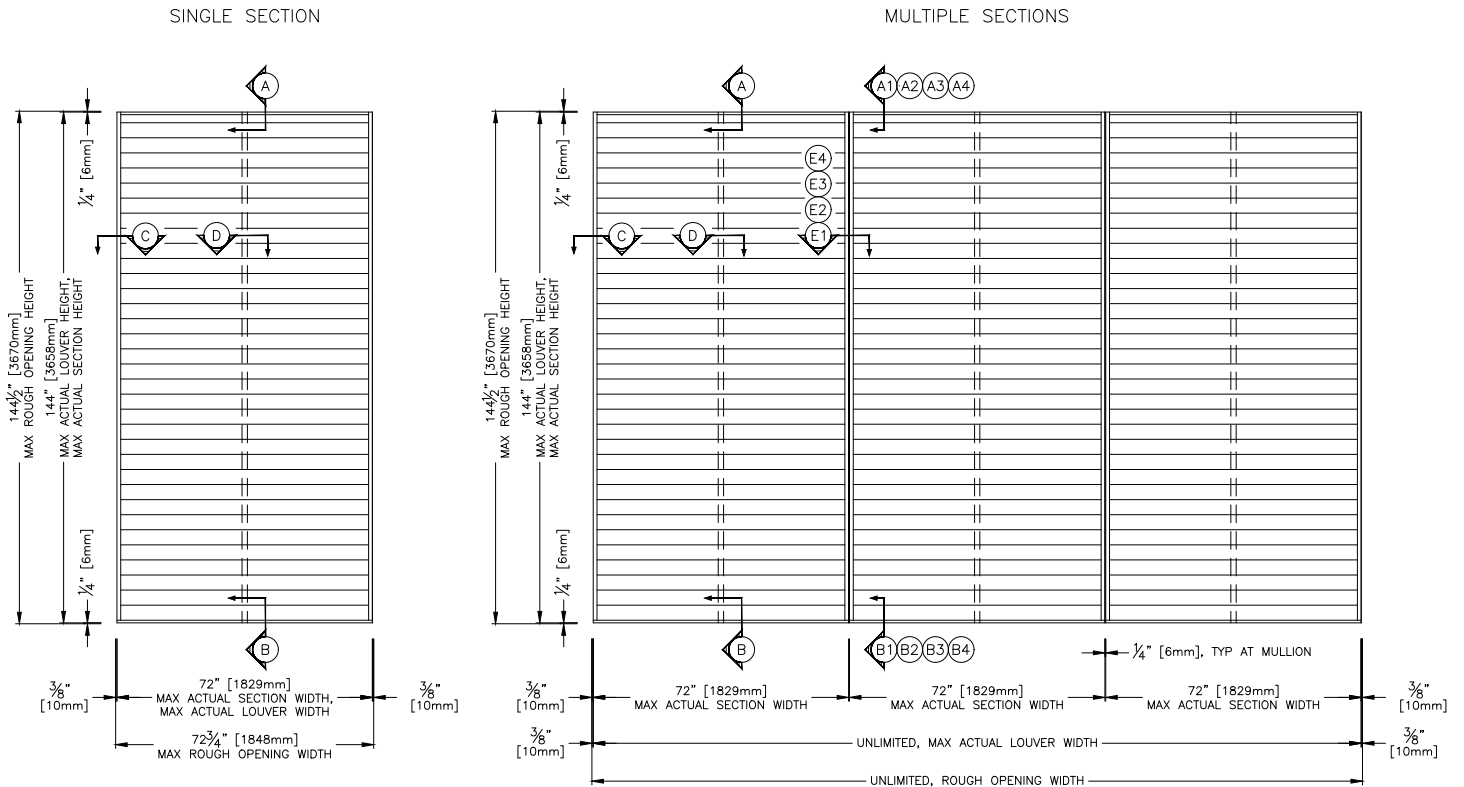
Please read and save these instructions for future reference. Read carefully before attempting to assemble, install, operate or maintain the product described. Protect yourself and others by observing all safety information. Failure to comply with these instructions will result in voiding of the product warranty and may result in personal injury and/or property damage.

Wind Load Table	
Design Pressure Rating	Maximum Single Section Size
+/- 150 PSF (7.2 kPa)	43 in. W x 144 in. H (1092 mm W x 3658 mm H)
+/- 130 (6.2 kPa)	49.5 in. W x 144 in. H (1257 mm W x 3658 mm H)
+/- 105 (5.0 kPa)	61.5 in. W x 144 in. H (1562 mm W x 3658 mm H)
+/- 90 (4.3 kPa)	72 in. W x 144 in. H (1829mm W x 3658 mm H)



## Maximum Size and Installation Information

Model K6746MD is a Miami-Dade Qualified and Florida Product Approved louver and must be installed in accordance with the installation instructions shown herein. Model K6746MD is qualified for installation within concrete/masonry, steel stud, and structural steel framed building conditions. Model K6746MD is structurally calculated to withstand positive and negative wind-loads up to 150 PSF (reference wind load table). The maximum single section rough opening width is 72.75 in. The maximum single section rough opening height is 144.50 in. While the maximum rough opening height is limited to 144.50 in., the rough opening width is limited to 1,000 in. as multiple sections may be installed side by side in accordance with installation instructions.



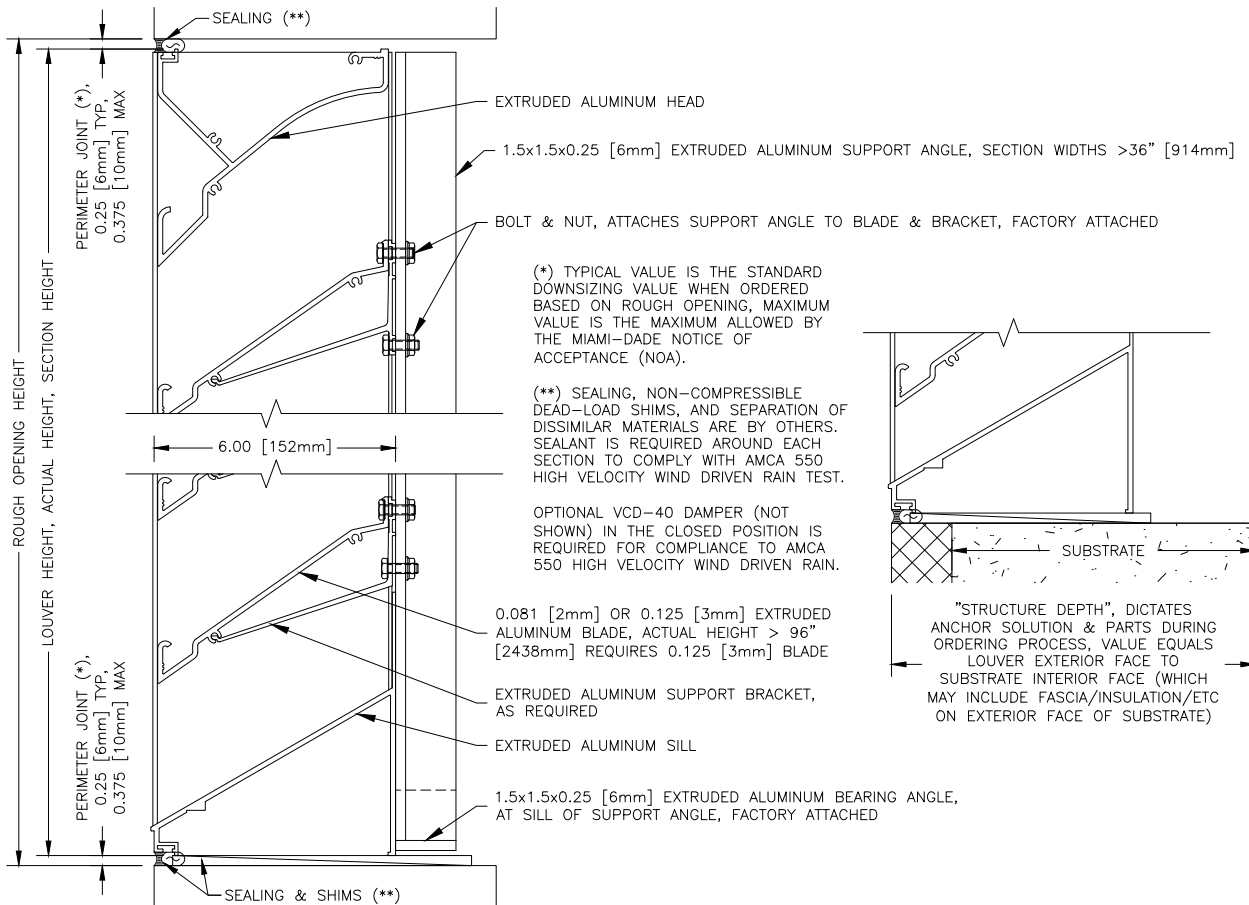
**Minimum Rough  
 Opening Size**  
 12 in. W x 12 in. H

**Maximum Single Section  
 Rough Opening Size**  
 72.75 in. W x 144.50 in. H

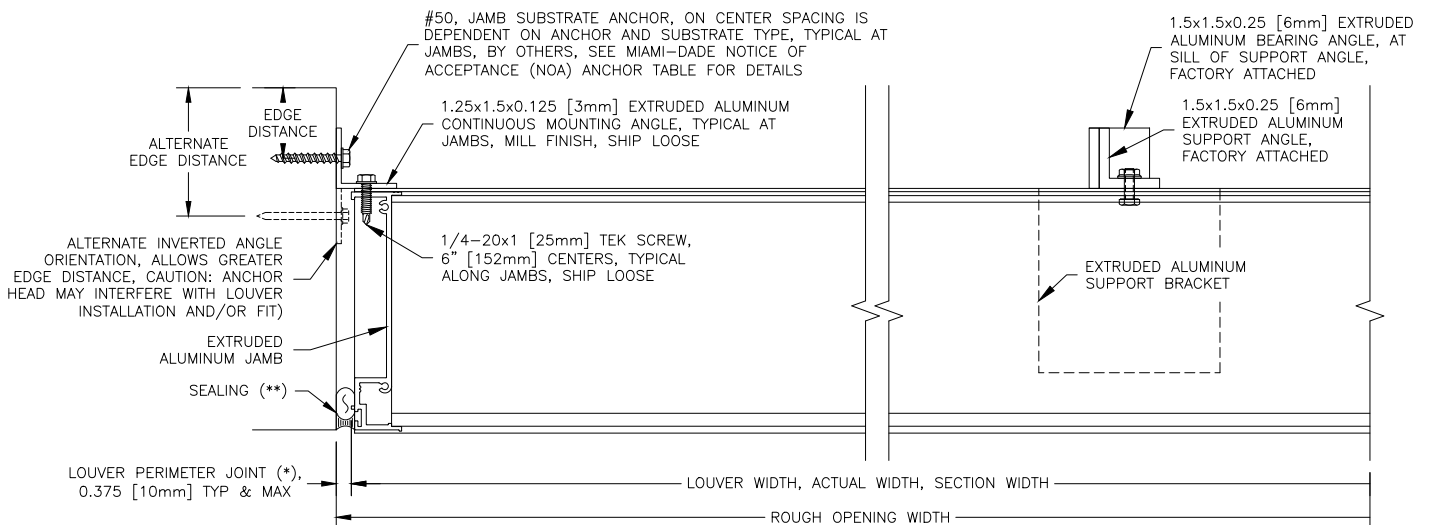
## Building Condition/Substrate Limitations

- All structural steel and steel stub substrate shall be min. 0.125 in. thick FY = 36 KSI
- All concrete substrate shall be min. 3000 PSI
- Concrete masonry shall be ASTM C90, Type II, 2000 PSI, grout-filled

**A** HEAD DETAIL, CHANNEL FRAME  
 SUPPORT ANGLE



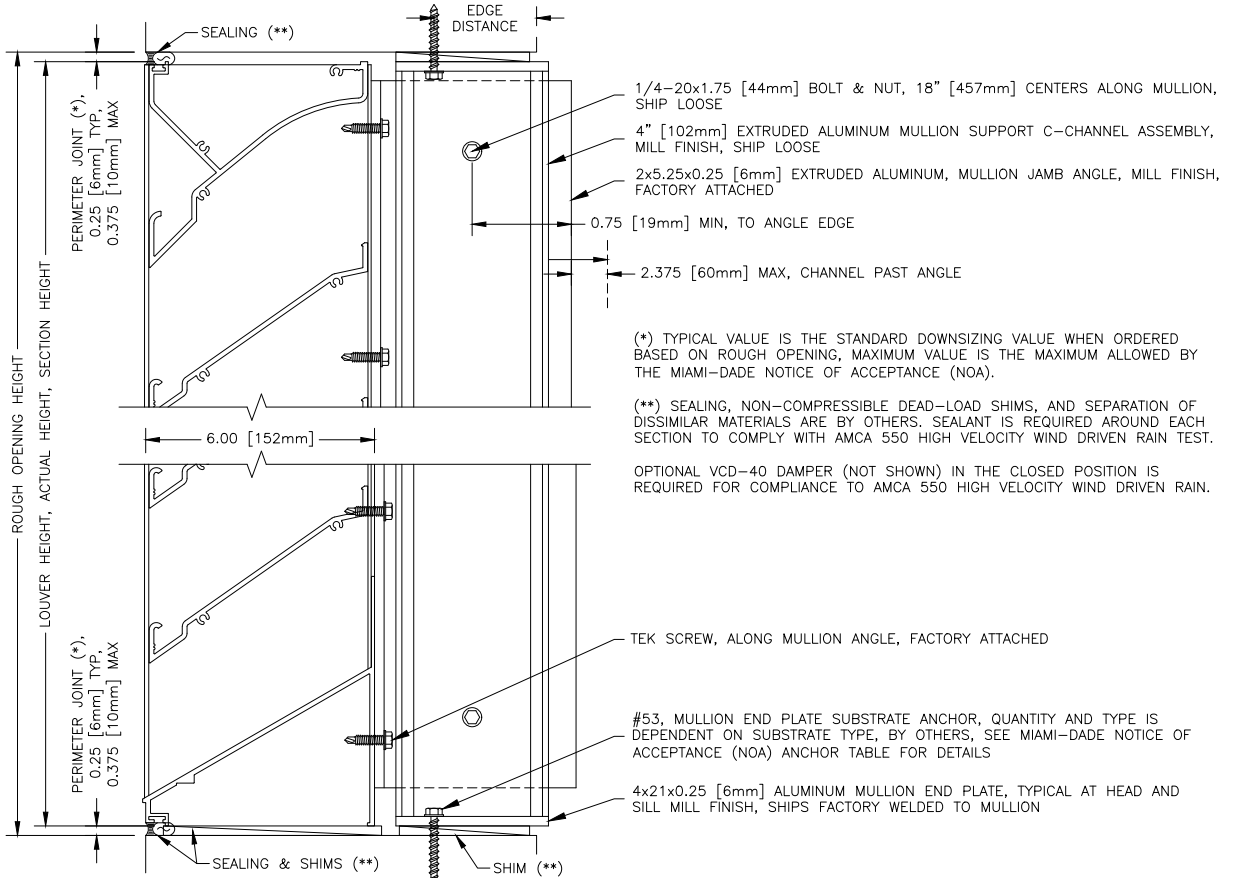
**B** SILL DETAIL, CHANNEL FRAME  
 SUPPORT ANGLE



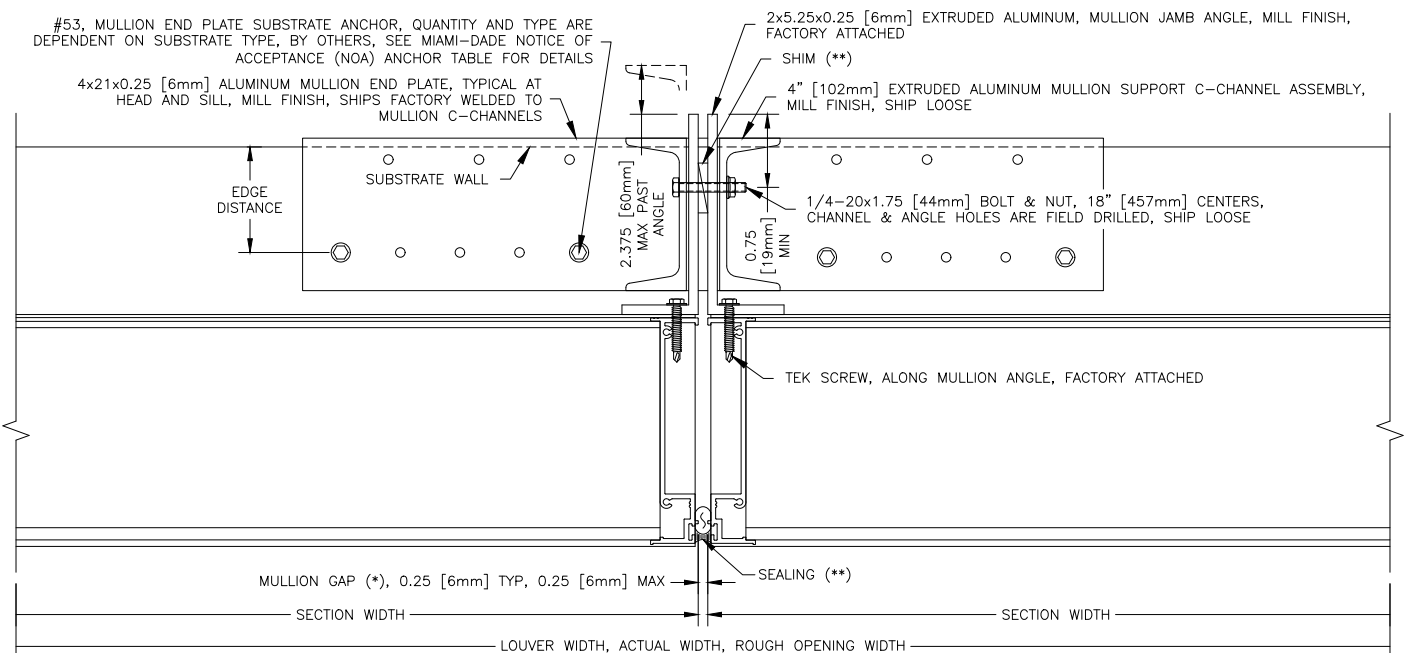
**C** JAMB DETAIL, CHANNEL FRAME

**D** SUPPORT DETAIL, CHANNEL FRAME  
 SECTION WIDTHS >36" [914mm]

**A1** HEAD DETAIL, MULLION, CHANNEL FRAME  
 ROUGH OPENING HEIGHT  $\leq 96.5"$  [2451mm]

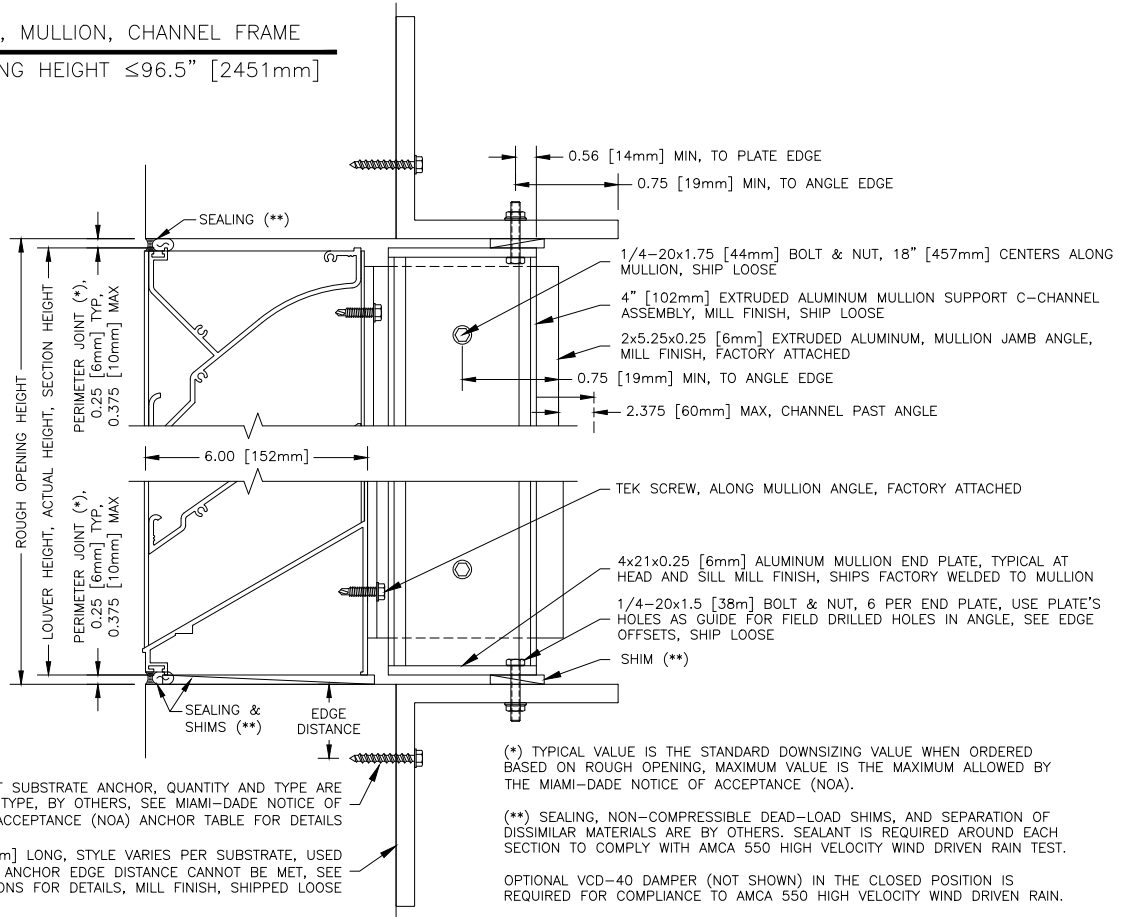


**B1** SILL DETAIL, MULLION, CHANNEL FRAME  
 ROUGH OPENING HEIGHT  $\leq 96.5"$  [2451mm]



**E1** MULLION DETAIL, CHANNEL FRAME  
 ROUGH OPENING HEIGHT  $\leq 96.5"$  [2451mm]

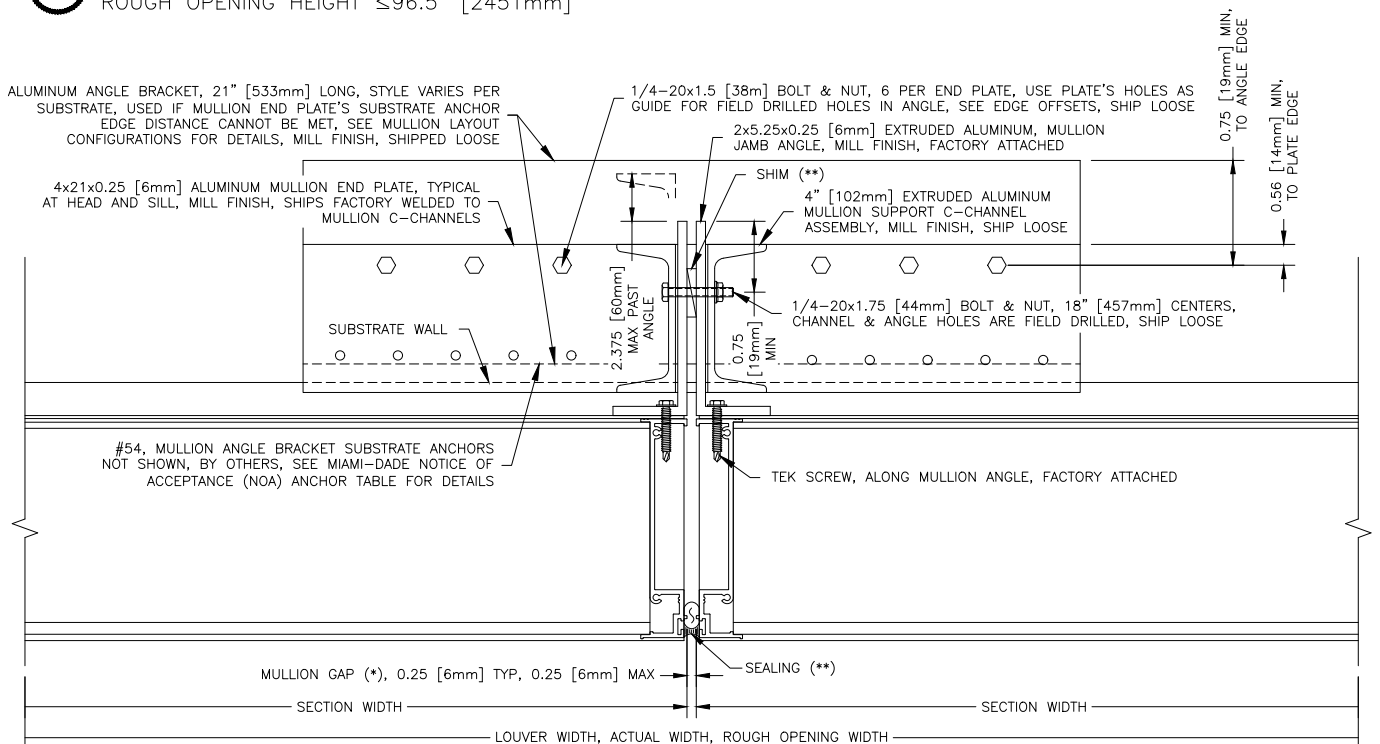
**A2** HEAD DETAIL, MULLION, CHANNEL FRAME  
 ROUGH OPENING HEIGHT ≤96.5" [2451mm]



#54, MULLION ANGLE BRACKET SUBSTRATE ANCHOR, QUANTITY AND TYPE ARE DEPENDENT ON SUBSTRATE TYPE, BY OTHERS, SEE MIAMI-DADE NOTICE OF ACCEPTANCE (NOA) ANCHOR TABLE FOR DETAILS

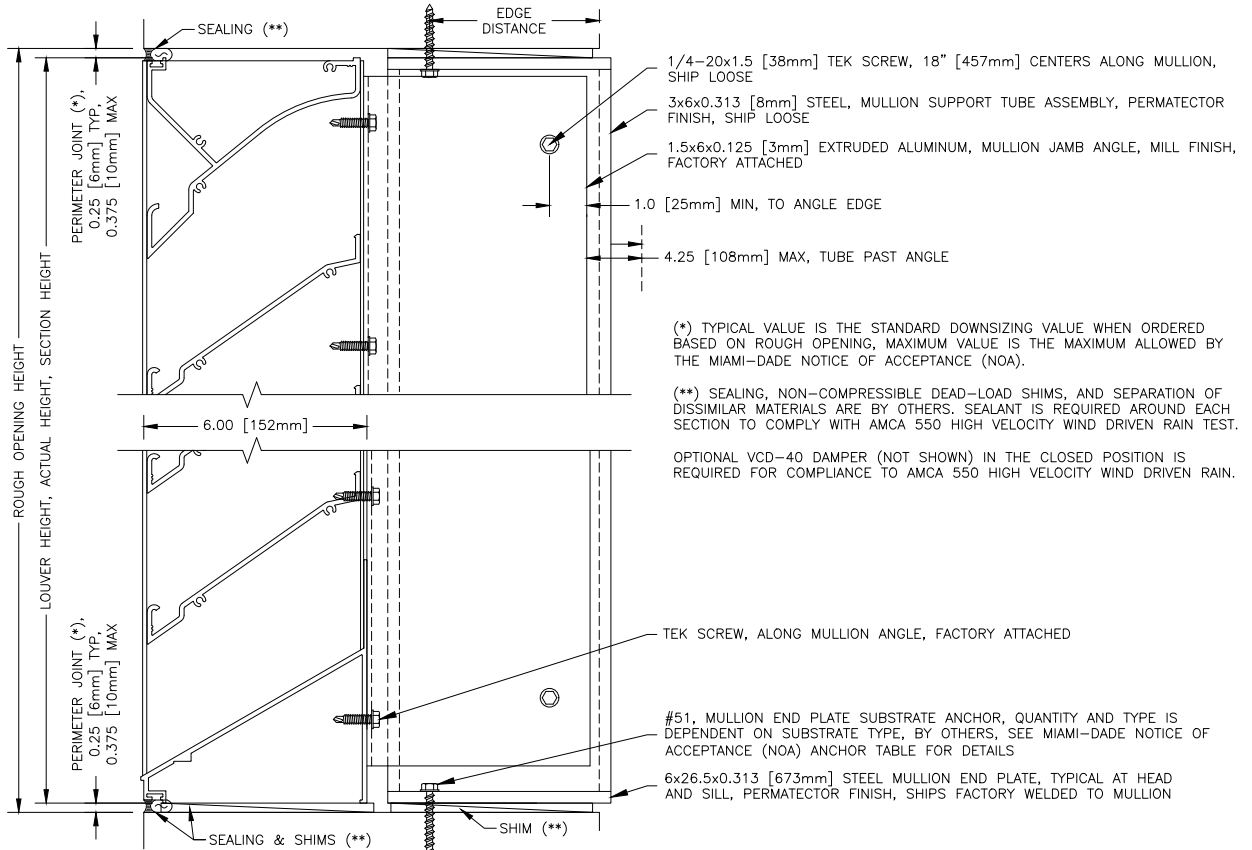
ALUMINUM ANGLE BRACKET, 21" [533mm] LONG, STYLE VARIES PER SUBSTRATE, USED IF MULLION END PLATE'S SUBSTRATE ANCHOR EDGE DISTANCE CANNOT BE MET, SEE MULLION LAYOUT CONFIGURATIONS FOR DETAILS, MILL FINISH, SHIPPED LOOSE

**B2** SILL DETAIL, MULLION, CHANNEL FRAME  
 ROUGH OPENING HEIGHT ≤96.5" [2451mm]

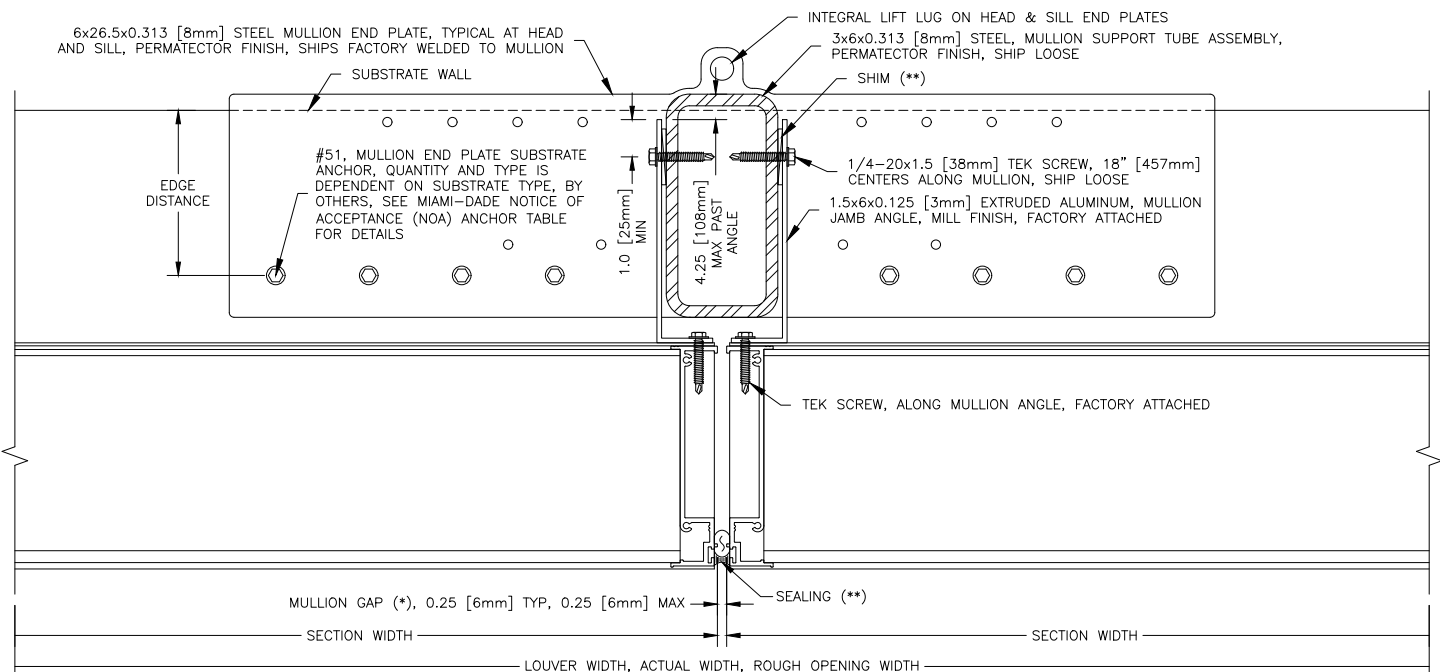


**E2** MULLION DETAIL, CHANNEL FRAME  
 ROUGH OPENING HEIGHT ≤96.5" [2451mm]

**A3** HEAD DETAIL, MULLION, CHANNEL FRAME  
 ROUGH OPENING HEIGHT >96.5" [2451mm]

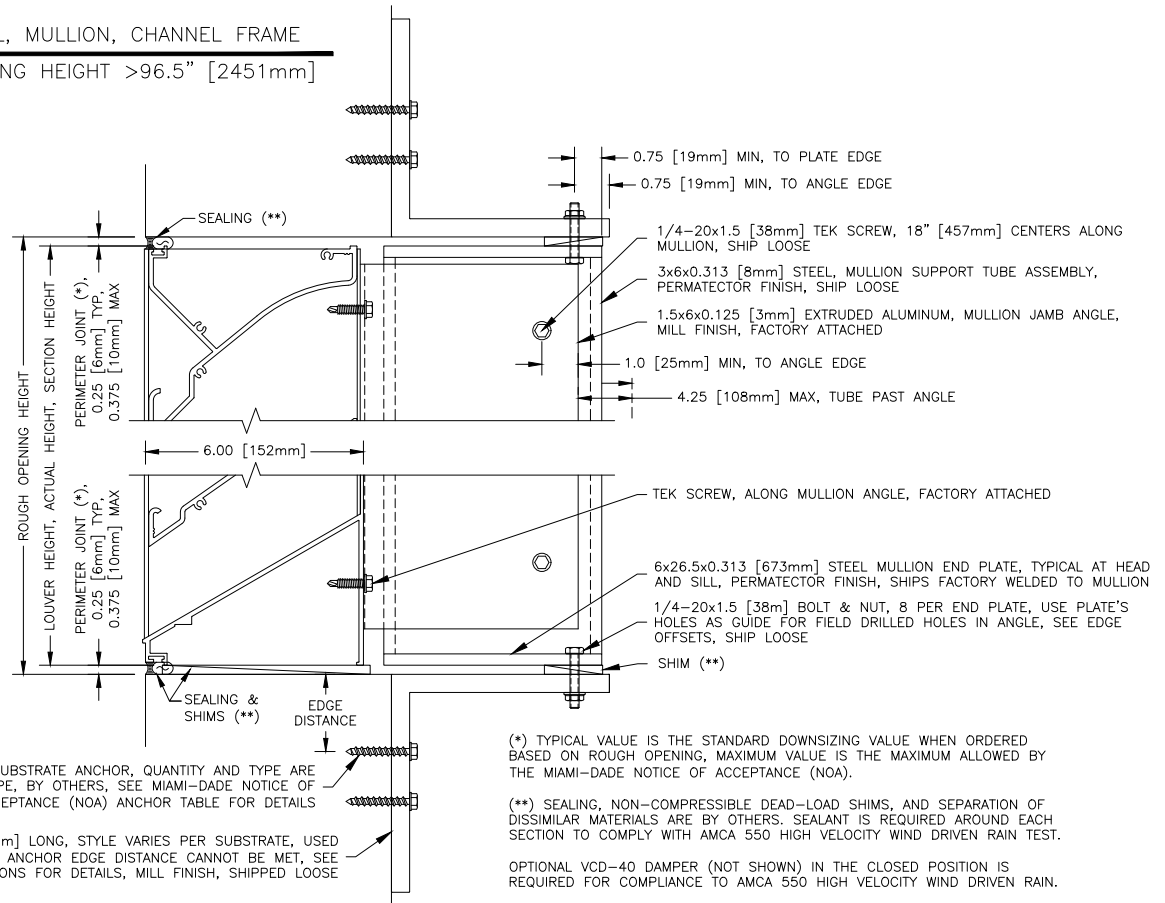


**B3** SILL DETAIL, MULLION, CHANNEL FRAME  
 ROUGH OPENING HEIGHT >96.5" [2451mm]



**E3** MULLION DETAIL, CHANNEL FRAME  
 ROUGH OPENING HEIGHT >96.5" [2451mm]

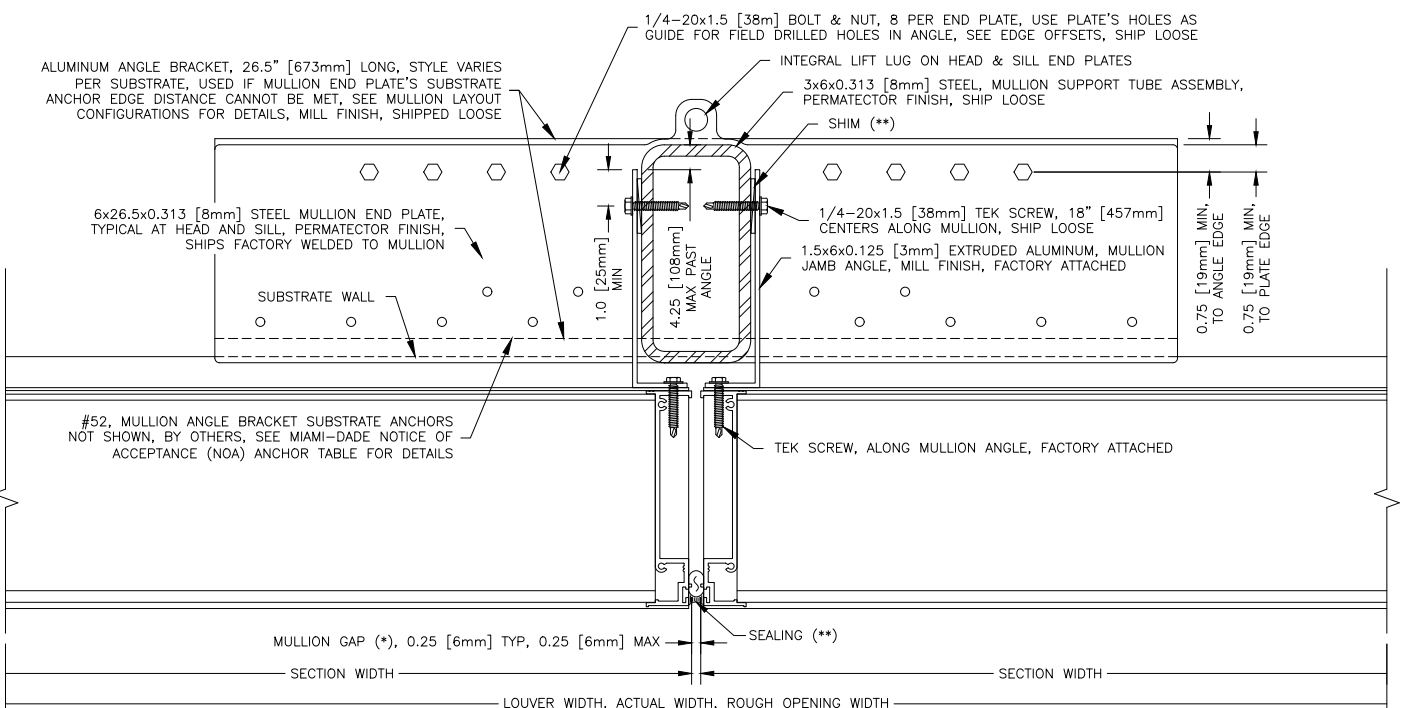
**A4** HEAD DETAIL, MULLION, CHANNEL FRAME  
ROUGH OPENING HEIGHT >96.5" [2451mm]



#52, MULLION ANGLE BRACKET SUBSTRATE ANCHOR, QUANTITY AND TYPE ARE DEPENDENT ON SUBSTRATE TYPE, BY OTHERS, SEE MIAMI-DADE NOTICE OF ACCEPTANCE (NOA) ANCHOR TABLE FOR DETAILS

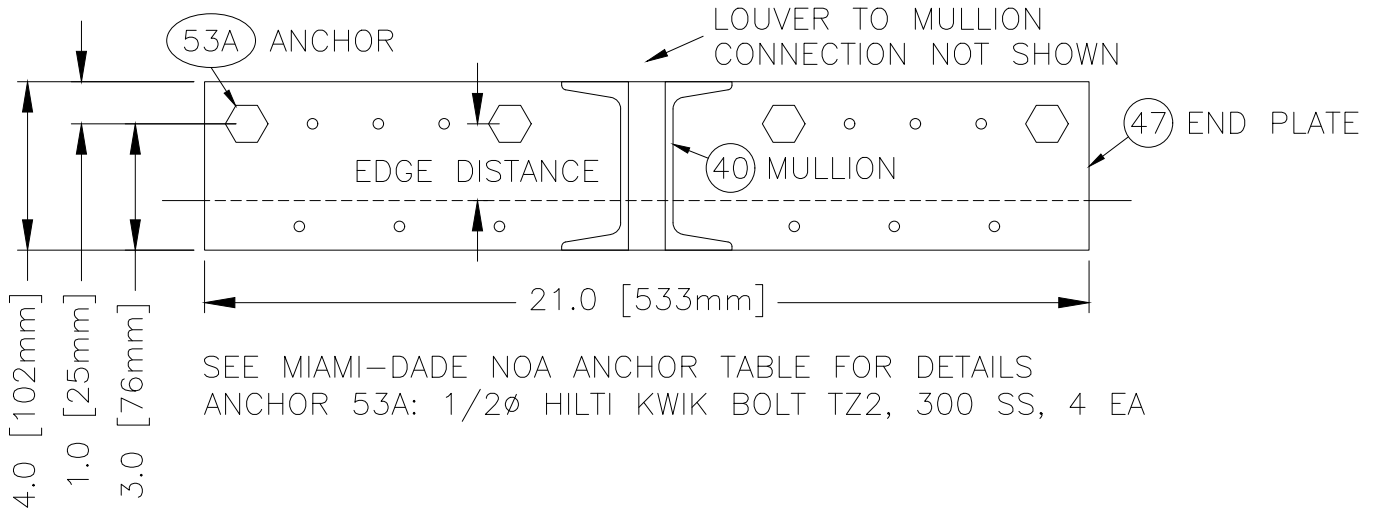
ALUMINUM ANGLE BRACKET, 21" [533mm] LONG, STYLE VARIES PER SUBSTRATE, USED IF MULLION END PLATE'S SUBSTRATE ANCHOR EDGE DISTANCE CANNOT BE MET, SEE MULLION LAYOUT CONFIGURATIONS FOR DETAILS, MILL FINISH, SHIPPED LOOSE

**B4** SILL DETAIL, MULLION, CHANNEL FRAME  
ROUGH OPENING HEIGHT >96.5" [2451mm]

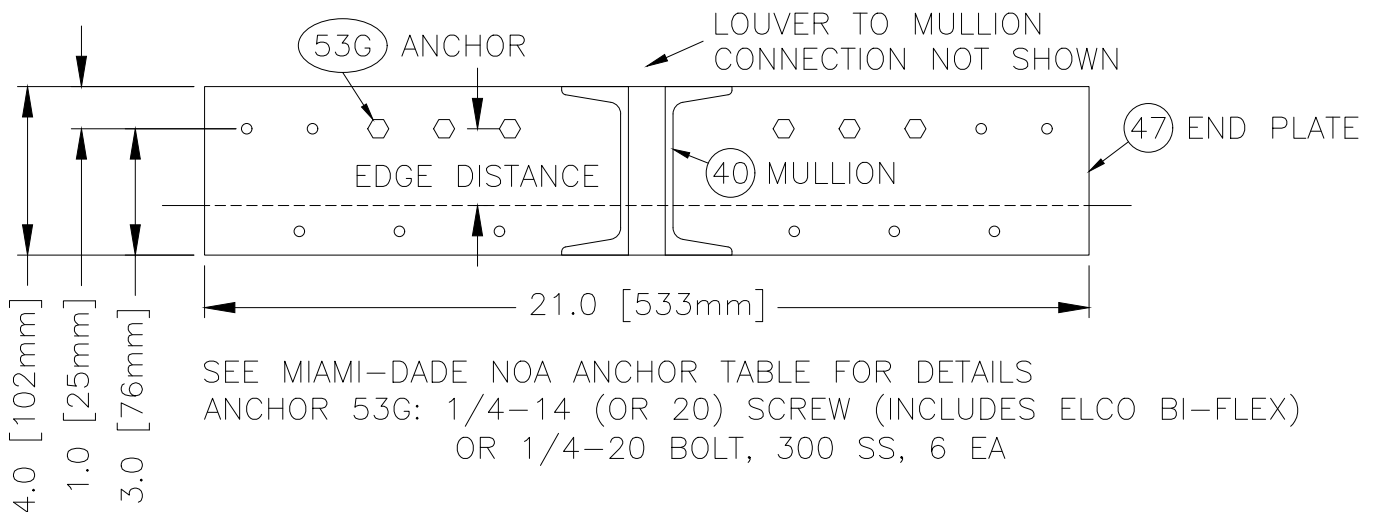


**E4** MULLION DETAIL, CHANNEL FRAME  
ROUGH OPENING HEIGHT >96.5" [2451mm]

MOUNTING: CHANNEL FRAME, AT MULLION END PLATE  
 ROUGH OPENING HEIGHT:  $\leq 96.5"$  [2451mm]  
 SUBSTRATE: CRACKED CONCRETE, MIN 5" [127mm] THICK



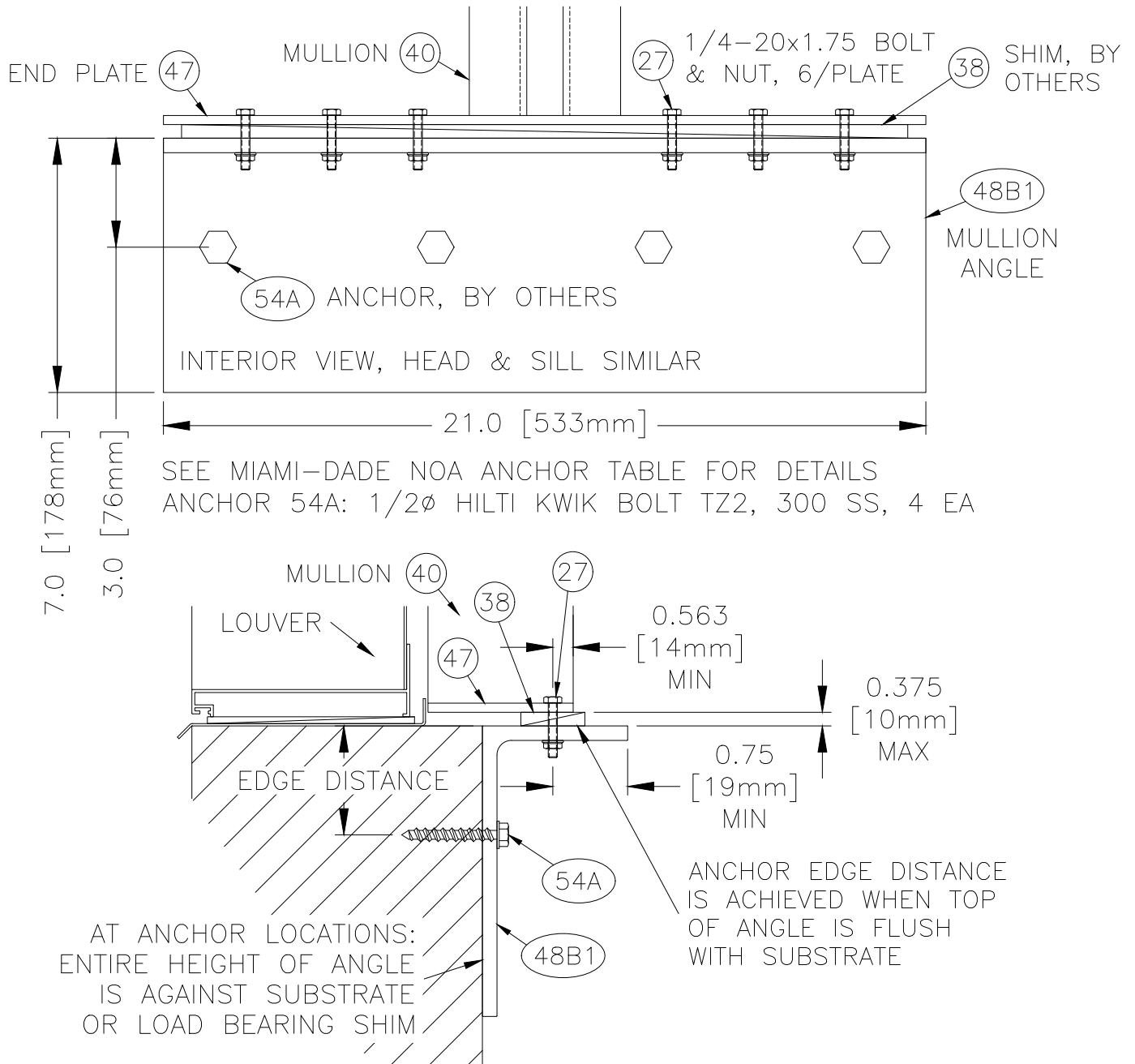
MOUNTING: CHANNEL FRAME, AT MULLION END PLATE  
 ROUGH OPENING HEIGHT:  $\leq 96.5"$  [2451mm]  
 SUBSTRATE: STEEL, MIN 0.125" [3.2mm] THICK



ALL ITEMS THIS PAGE: FACTORY PROVIDES PILOT OR FULL SIZE HOLES AT REQUIRED LOCATIONS PER SELECTED SUBSTRATE. NON-REQUIRED HOLES MAY STILL BE PRESENT IN MULLION END PLATE AND ANGLE. OTHER HOLES & PATTERNS CAN BE USED IF ANCHOR ON-CENTER & EDGE DISTANCE REQUIREMENTS ARE MET. ANCHOR PATTERNS SHALL BE MIRRORED WHEN POSSIBLE.



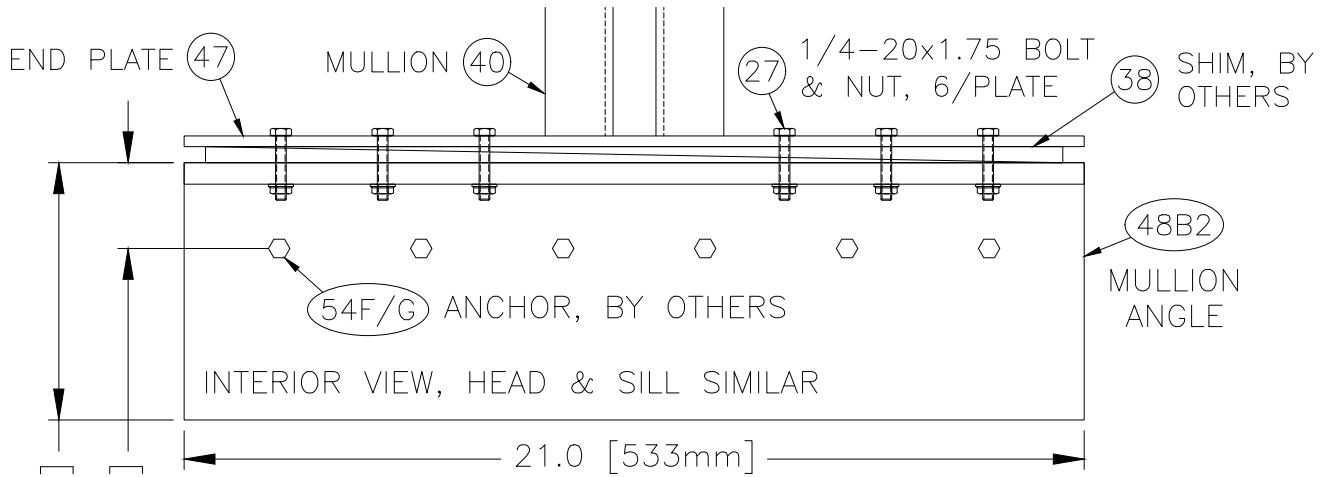
MOUNTING: CHANNEL FRAME, AT MULLION MOUNTING ANGLE  
 ROUGH OPENING HEIGHT:  $\leq 96.5''$  [2451mm]  
 SUBSTRATE: CRACKED CONCRETE, MIN 5'' [127mm] THICK



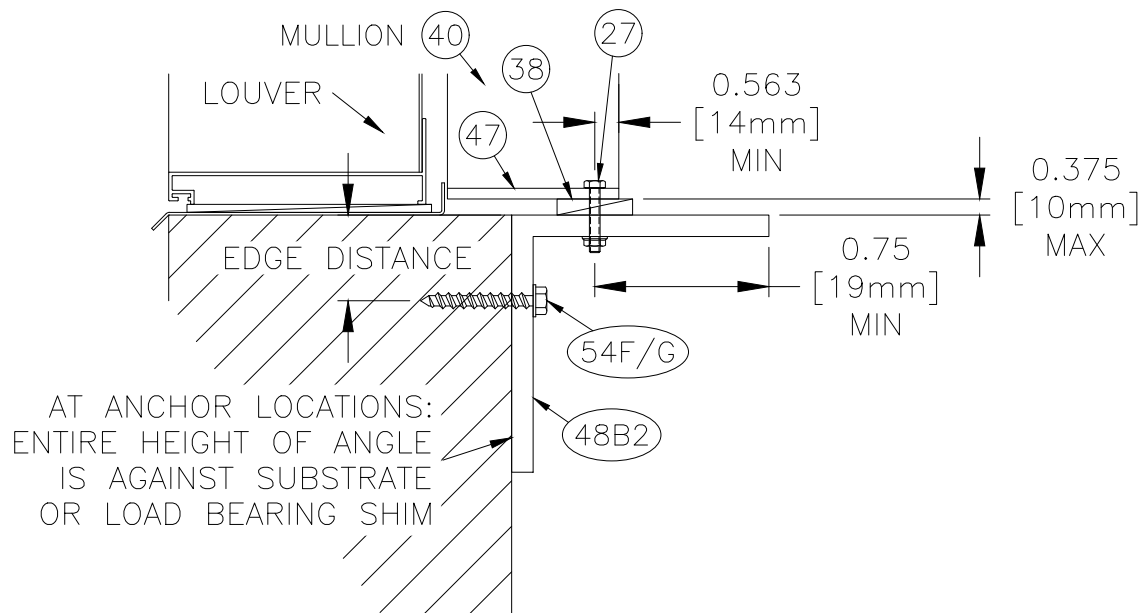
ALL ITEMS THIS PAGE: FACTORY PROVIDES PILOT OR FULL SIZE HOLES AT REQUIRED LOCATIONS PER SELECTED SUBSTRATE. NON-REQUIRED HOLES MAY STILL BE PRESENT IN MULLION END PLATE AND ANGLE. OTHER HOLES & PATTERNS CAN BE USED IF ANCHOR ON-CENTER & EDGE DISTANCE REQUIREMENTS ARE MET. ANCHOR PATTERS SHALL BE MIRRORED WHEN POSSIBLE.



MOUNTING: CHANNEL FRAME, AT MULLION MOUNTING ANGLE  
ROUGH OPENING HEIGHT:  $\leq 96.5"$  [2451mm]  
SUBSTRATE: STEEL, MIN 0.125" [3.2mm] THICK

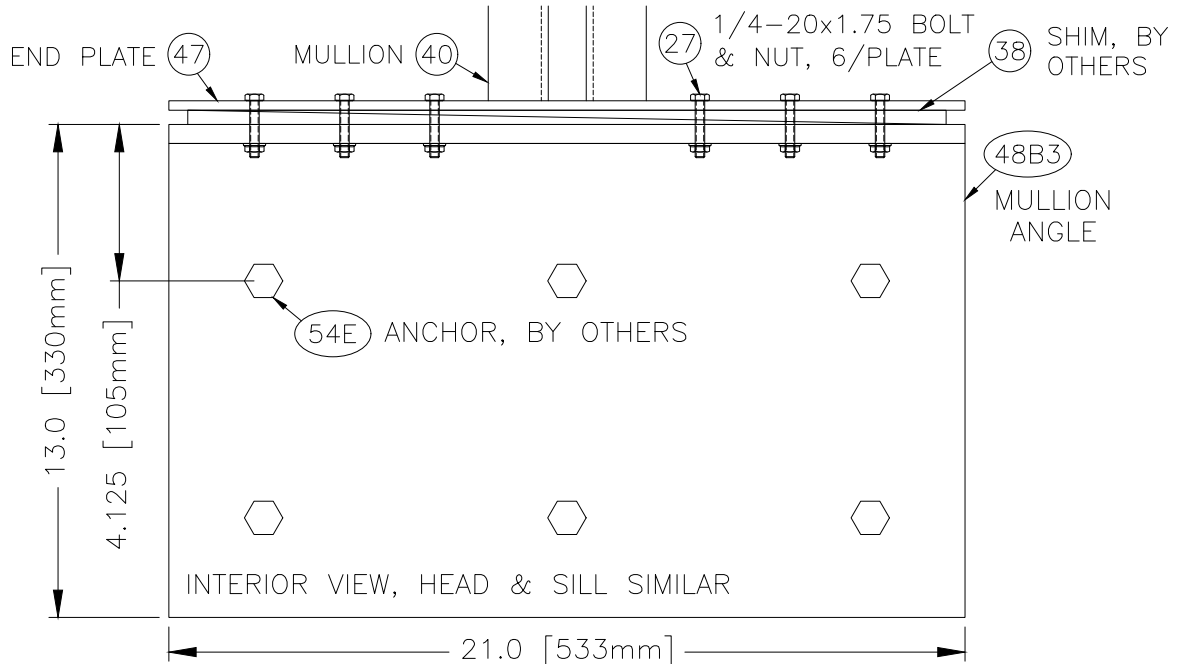


SEE MIAMI-DADE NOA ANCHOR TABLE FOR DETAILS  
ANCHOR 54F: 0.160" THICK, 1/4-20 SCREW (INCLUDES ELCO BI-FLEX)  
OR BOLT, 300 SS, 6 EA (SHOWN)  
ANCHOR 54G: 0.125" THICK, 5/16-18 BOLT, 300 SS, 2 EA

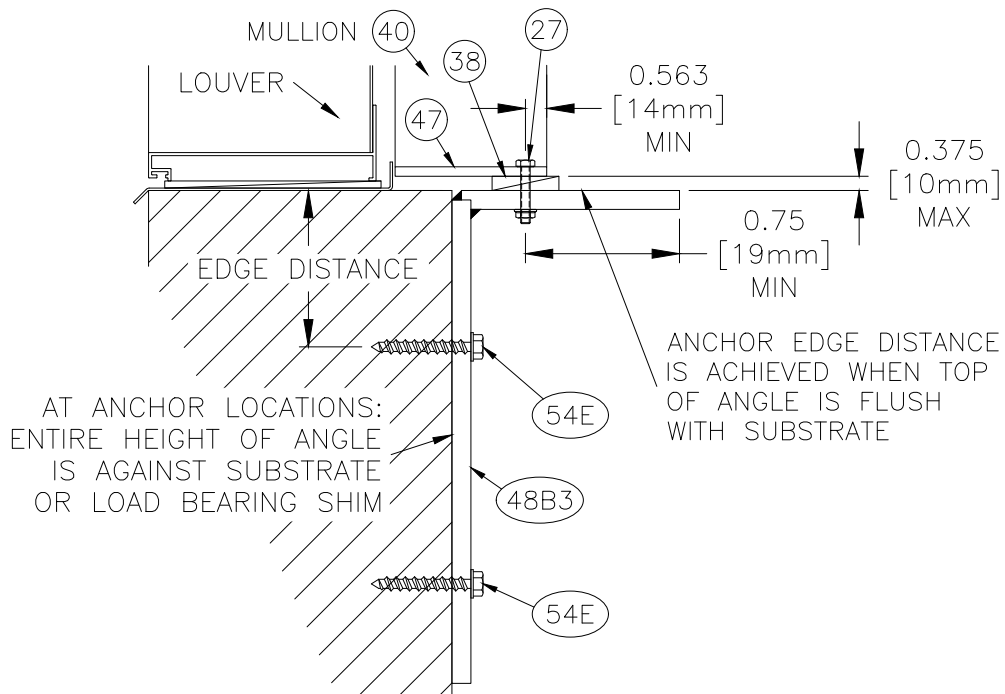


ALL ITEMS THIS PAGE: FACTORY PROVIDES PILOT OR FULL SIZE HOLES AT REQUIRED LOCATIONS PER SELECTED SUBSTRATE. NON-REQUIRED HOLES MAY STILL BE PRESENT IN MULLION END PLATE AND ANGLE. OTHER HOLES & PATTERNS CAN BE USED IF ANCHOR ON-CENTER & EDGE DISTANCE REQUIREMENTS ARE MET. ANCHOR PATTERS SHALL BE MIRRORED WHEN POSSIBLE.

MOUNTING: CHANNEL FRAME, AT MULLION MOUNTING ANGLE  
 ROUGH OPENING HEIGHT:  $\leq 96.5"$  [2451mm]  
 SUBSTRATE: GROUT FILLED CMU, 8" [203mm] NOMINAL

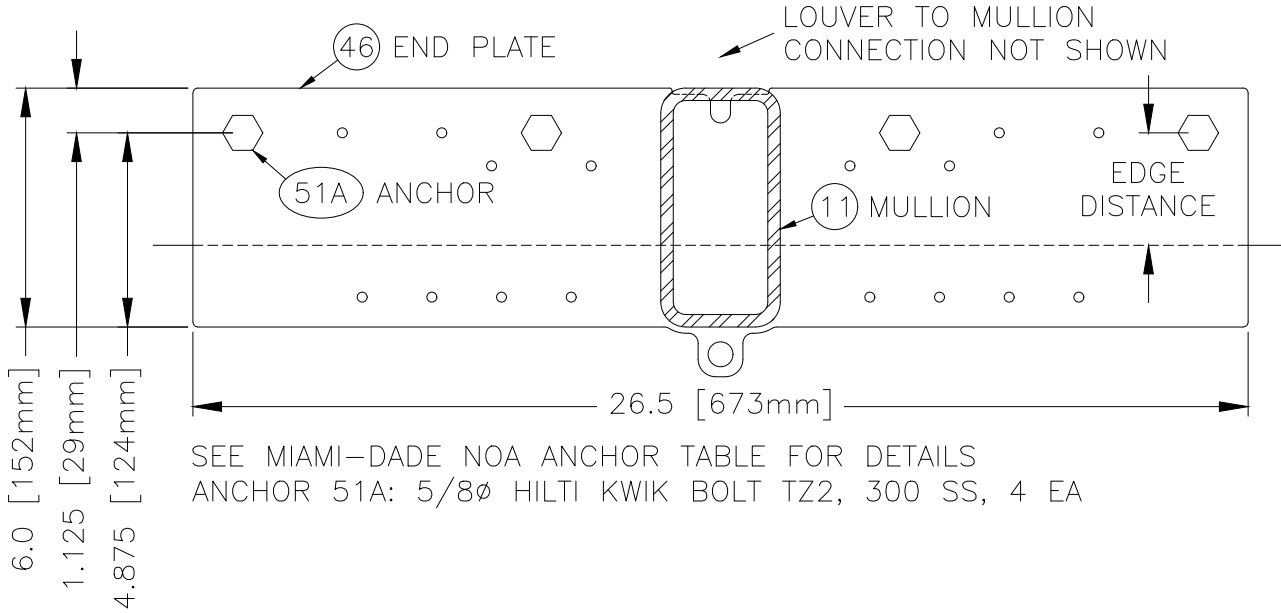


SEE MIAMI-DADE NOA ANCHOR TABLE FOR DETAILS  
 ANCHOR 54E: W/ HILTI HY-100 EPOXY & 5/8 $\phi$  THREAD ROD, 300 SS, 6 EA

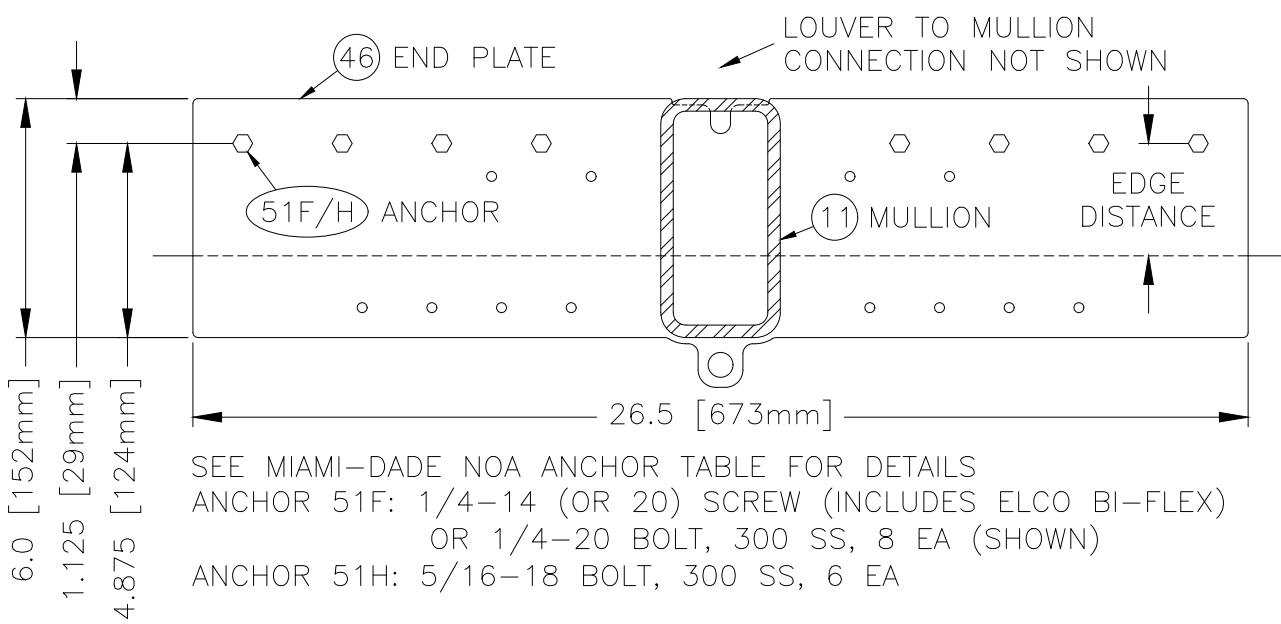


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MOUNTING: CHANNEL FRAME, AT MULLION END PLATE  
ROUGH OPENING HEIGHT: > 96.5" [2451mm]  
SUBSTRATE: CRACKED CONCRETE, MIN 6" [152mm] THICK

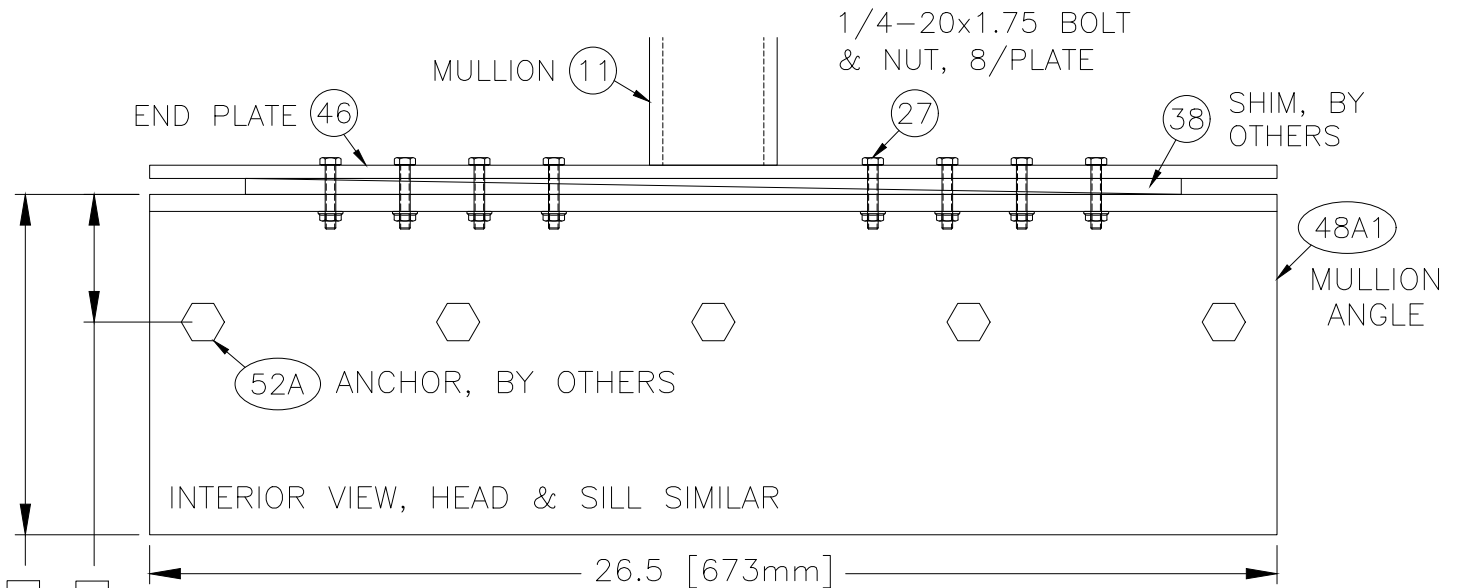


MOUNTING: CHANNEL FRAME, AT MULLION END PLATE  
ROUGH OPENING HEIGHT: > 96.5" [2451mm]  
SUBSTRATE: STEEL, MIN 0.125" [3.2mm] THICK

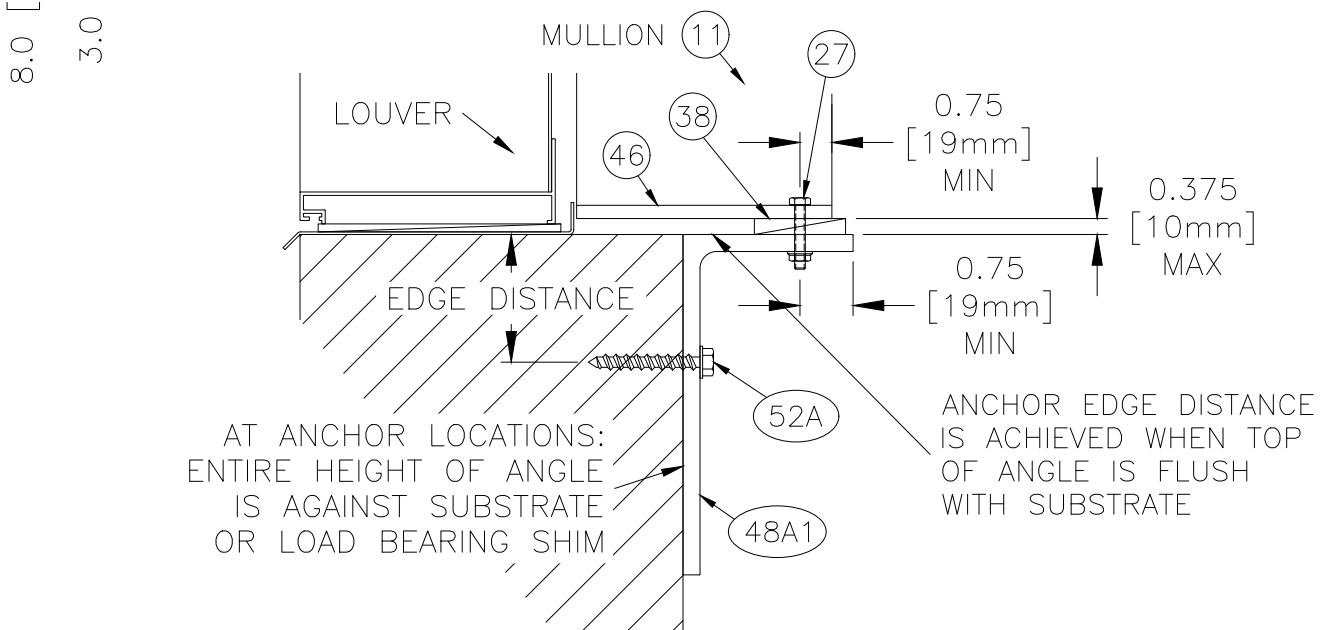


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MOUNTING: CHANNEL FRAME, AT MULLION MOUNTING ANGLE  
 ROUGH OPENING HEIGHT: > 96.5" [2451mm]  
 SUBSTRATE: CRACKED CONCRETE, MIN 6" [152mm] THICK

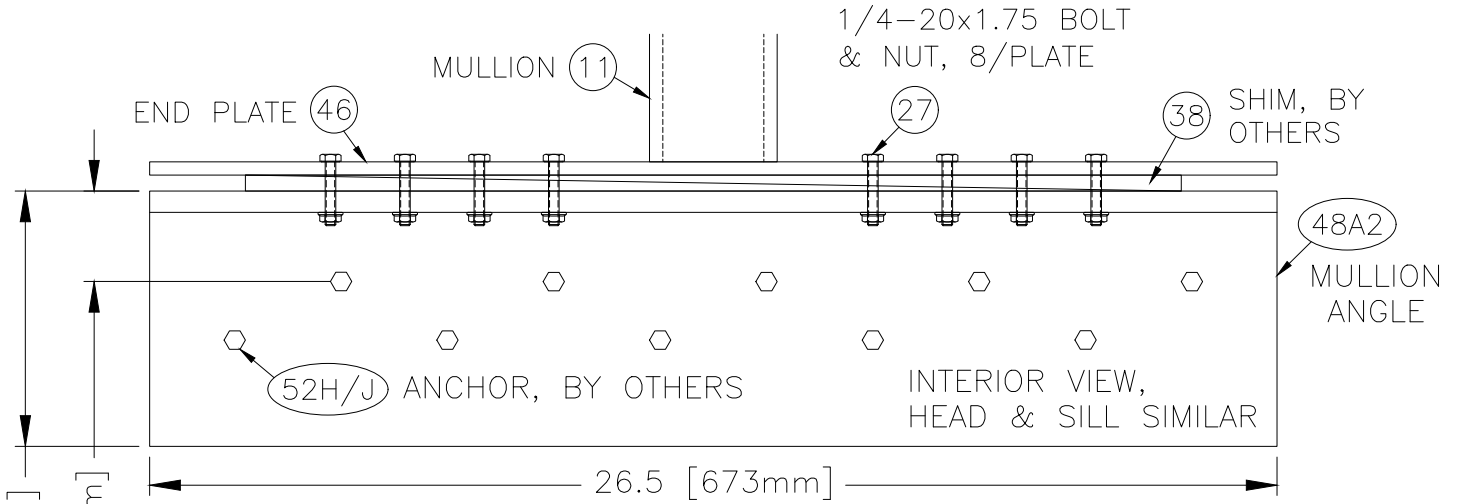


SEE MIAMI-DADE NOA ANCHOR TABLE FOR DETAILS  
 ANCHOR 52A: 1/2 $\phi$  HILTI KWIK BOLT TZ2, 300 SS, 5 EA

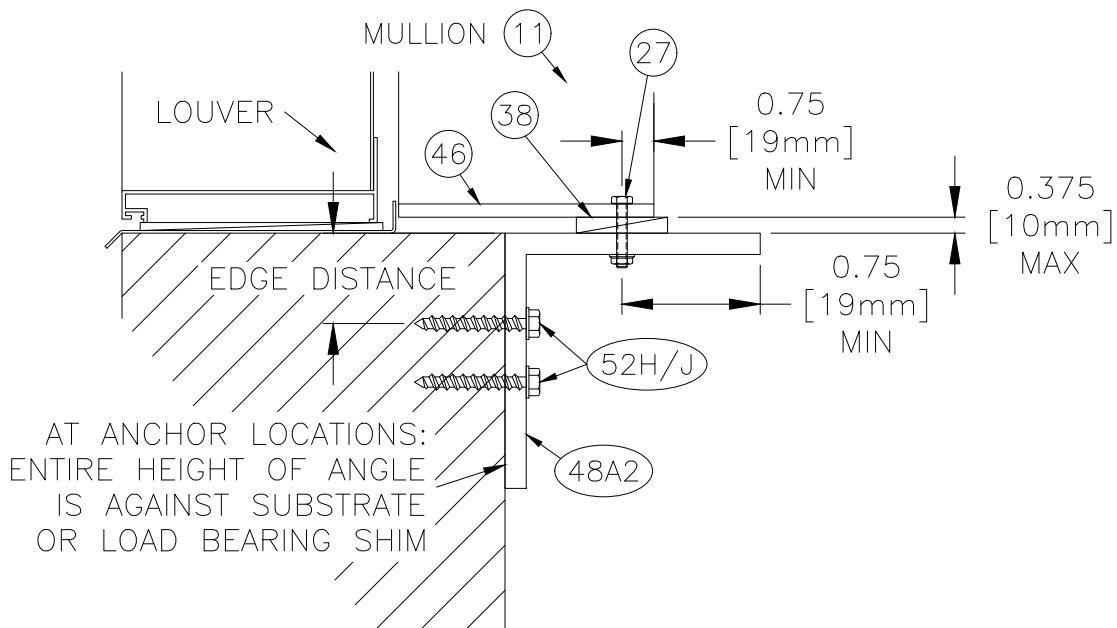


ALL ITEMS THIS PAGE: FACTORY PROVIDES PILOT OR FULL SIZE HOLES AT REQUIRED LOCATIONS PER SELECTED SUBSTRATE. NON-REQUIRED HOLES MAY STILL BE PRESENT IN MULLION END PLATE AND ANGLE. OTHER HOLES & PATTERNS CAN BE USED IF ANCHOR ON-CENTER & EDGE DISTANCE REQUIREMENTS ARE MET. ANCHOR PATTERNS SHALL BE MIRRORED WHEN POSSIBLE.

MOUNTING: CHANNEL FRAME, AT MULLION MOUNTING ANGLE  
ROUGH OPENING HEIGHT: > 96.5" [2451mm]  
SUBSTRATE: STEEL, MIN 0.144" [3.7mm] THICK

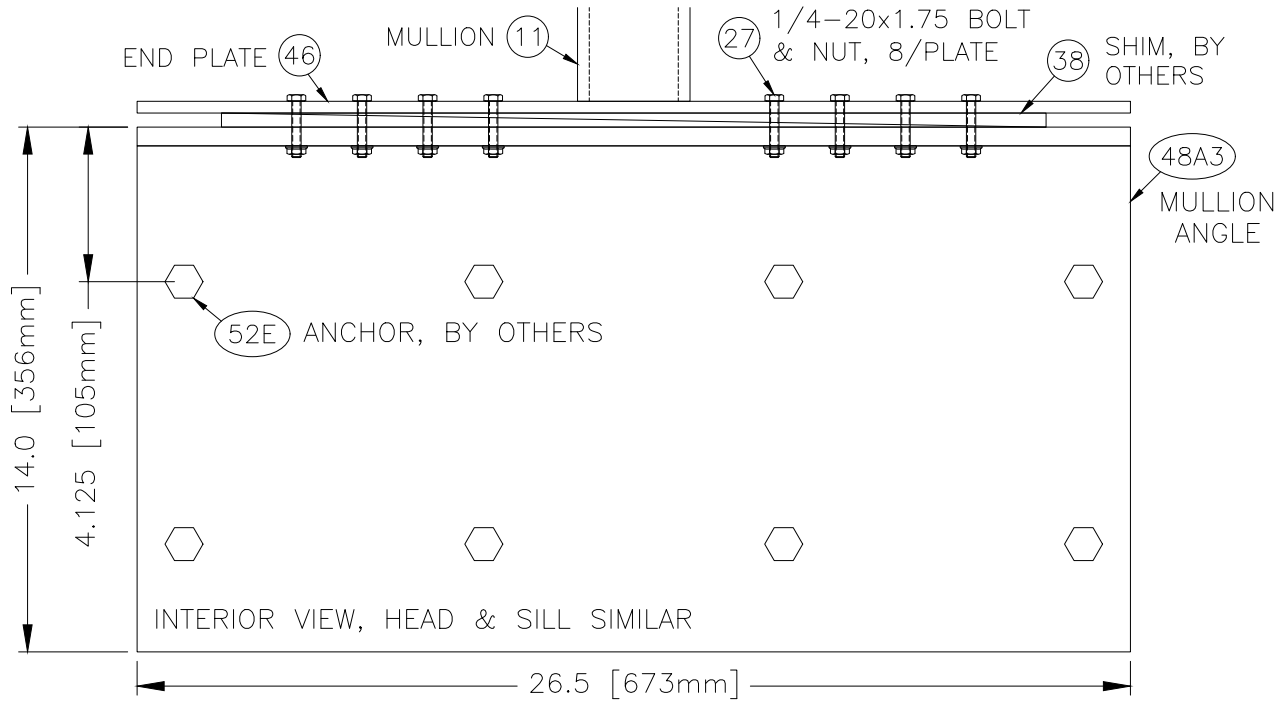


SEE MIAMI-DADE NOA ANCHOR TABLE FOR DETAILS  
ANCHOR 52H: 0.160" THICK, 1/4-20 SCREW (INCLUDES ELCO BI-FLEX)  
OR BOLT, 300 SS, 10 EA (SHOWN)  
ANCHOR 52J: 0.144" THICK, 5/16-18 BOLT & NUT, 300 SS, 3 EA

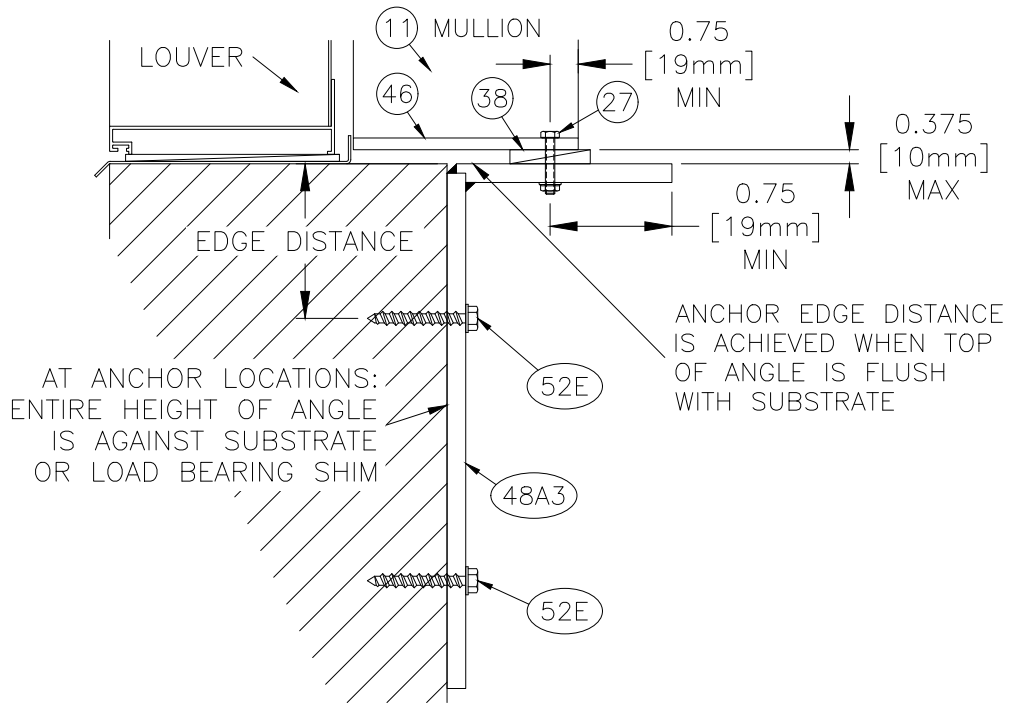


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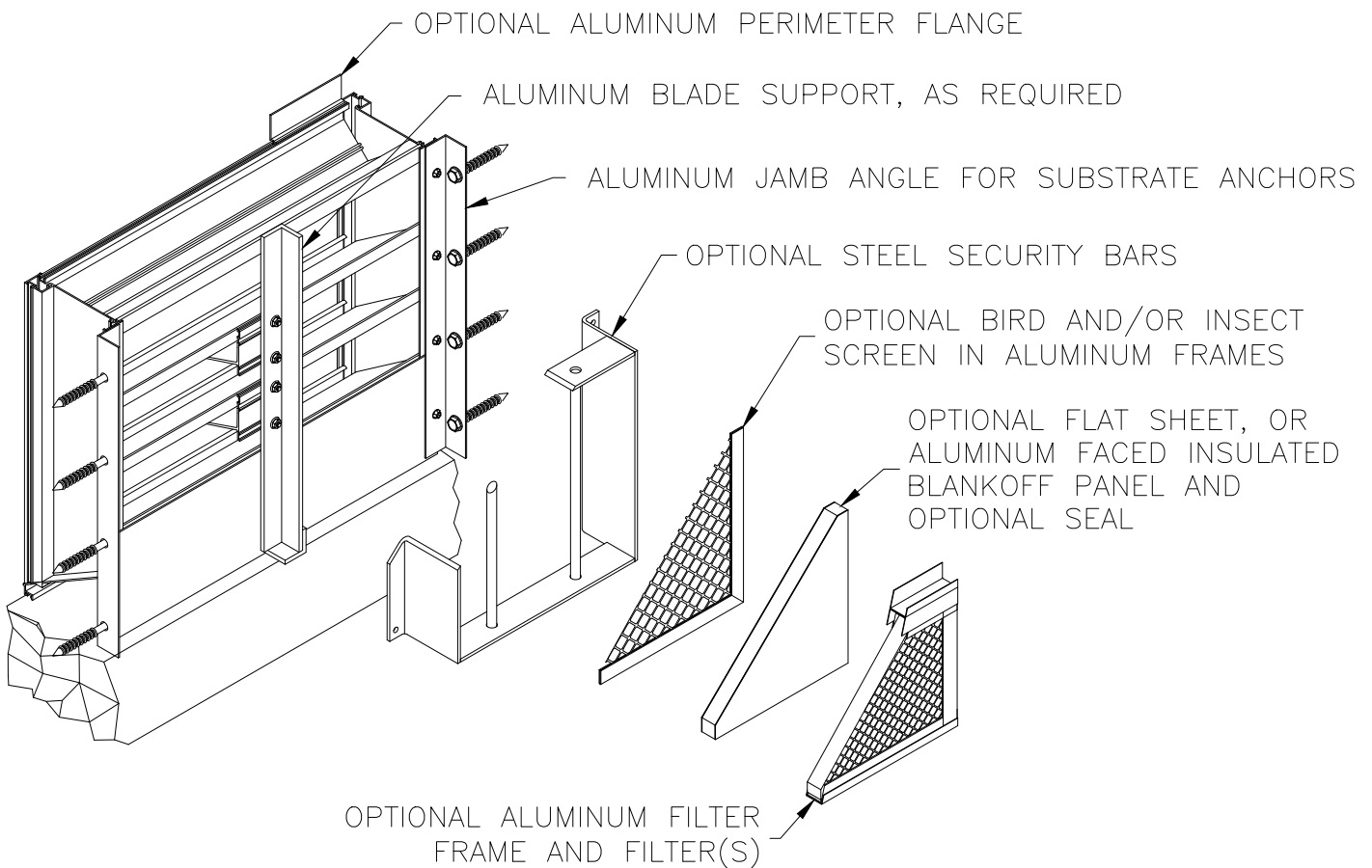
MOUNTING: CHANNEL FRAME, AT MULLION MOUNTING ANGLE  
 ROUGH OPENING HEIGHT: > 96.5" [2451mm]  
 SUBSTRATE: GROUT FILLED CMU, 8" [203mm] NOMINAL



SEE MIAMI-DADE NOA ANCHOR TABLE FOR DETAILS  
 ANCHOR 52E: HILTI HY-100 EPOXY & 5/8 $\phi$  THREADED ROD, 300 SS, 8 EA



ALL ITEMS THIS PAGE: FACTORY PROVIDES PILOT OR FULL SIZE HOLES AT REQUIRED LOCATIONS PER SELECTED SUBSTRATE. NON-REQUIRED HOLES MAY STILL BE PRESENT IN MULLION END PLATE AND ANGLE. OTHER HOLES & PATTERNS CAN BE USED IF ANCHOR ON-CENTER & EDGE DISTANCE REQUIREMENTS ARE MET. ANCHOR PATTERNS SHALL BE MIRRORED WHEN POSSIBLE.



### Structure Depth

#### CMU/Concrete Substrate

- Min. structure depth 8.75 in.
- Max. structure depth infinite

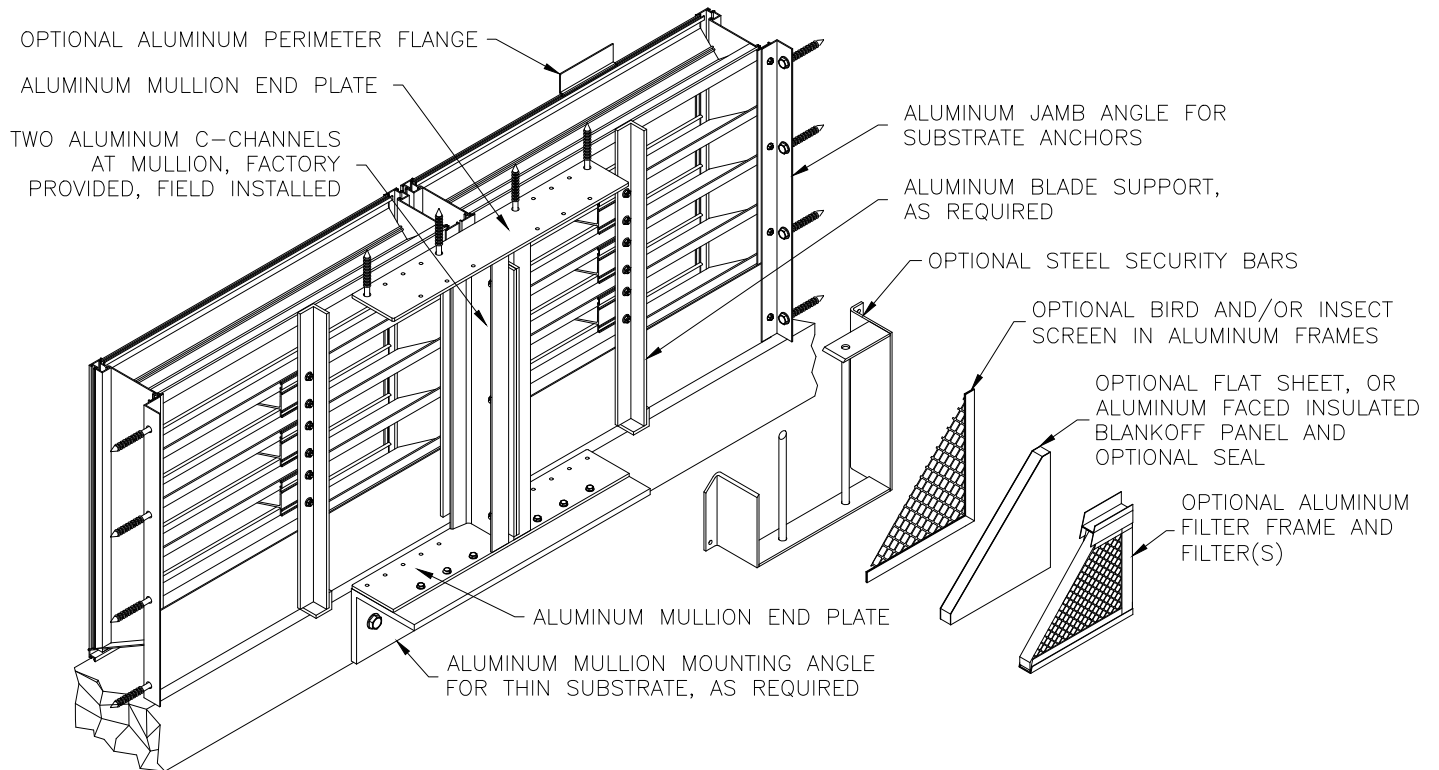
#### Steel Stud/Structural Steel Substrate

- Min. structure depth 7.5 in.
- Max. structure depth infinite



MULLION END PLATE MOUNT (SHOWN AT HEAD):

FOR SUBSTRATES WHERE MINIMUM FASTENER EDGE DISTANCE CAN BE ACHIEVED BY USE OF HOLES IN THE MULLION END CAP. SHOWN CONFIGURATION IS FOR ROUGH OPENING HEIGHTS  $\leq 96.5"$  [2451mm].



MULLION MOUNTING ANGLE (SHOWN AT SILL):

FOR SUBSTRATES WHERE MINIMUM FASTENER EDGE DISTANCE CANNOT BE ACHIEVED BY USE OF HOLES IN THE MULLION END CAP. SHOWN CONFIGURATION IS FOR ROUGH OPENING HEIGHTS  $\leq 96.5"$  [2451mm].

**Structure Depth**

CMU Substrate

- Min. structure depth 8.75 in.
- Max. structure depth infinite in.

Concrete Substrate

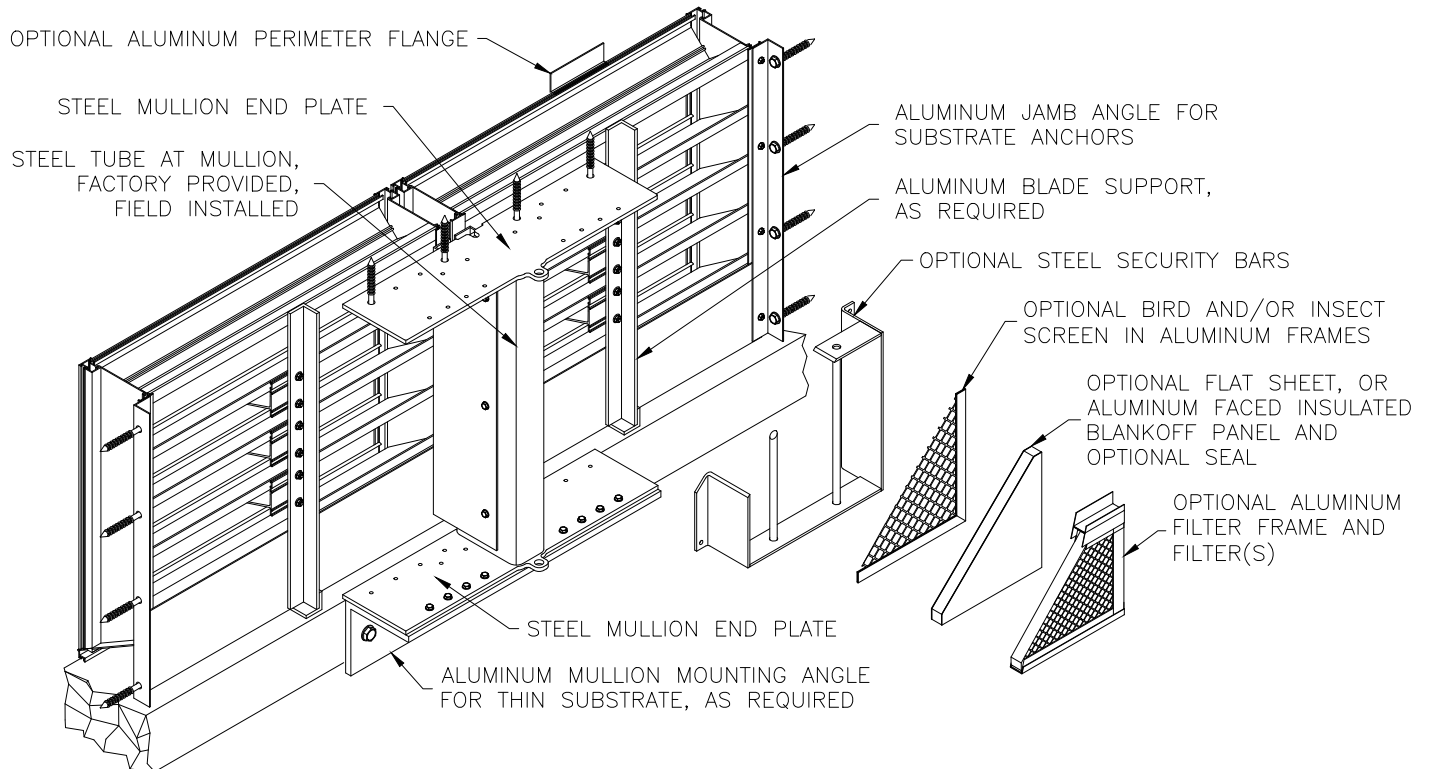
- Min. structure depth 8.25 in.
- Max. structure depth infinite

Steel Stud/Structural Steel Substrate

- Min. structure depth 7.5 in.
- Max. structure depth infinite

MULLION END PLATE MOUNT (SHOWN AT HEAD):

FOR SUBSTRATES WHERE MINIMUM FASTENER EDGE DISTANCE CAN BE ACHIEVED BY USE OF HOLES IN THE MULLION END CAP. SHOWN CONFIGURATION IS FOR ROUGH OPENING HEIGHTS > 96.5" [2451mm].



MULLION MOUNTING ANGLE (SHOWN AT SILL):

FOR SUBSTRATES WHERE MINIMUM FASTENER EDGE DISTANCE CANNOT BE ACHIEVED BY USE OF HOLES IN THE MULLION END CAP. SHOWN CONFIGURATION IS FOR ROUGH OPENING HEIGHTS > 96.5" [2451mm].

<b>Structure Depth</b>	
<u>CMU Substrate</u>	
•	Min. structure depth 8.75 in.
•	Max. structure depth 14.25 in.
<u>Concrete Substrate</u>	
•	Min. structure depth 8.25 in.
•	Max. structure depth infinite
<u>Steel Stud/Structural Steel Substrate</u>	
•	Min. structure depth 7.5 in.
•	Max. structure depth infinite

MIAMI-DADE NOTICE OF ACCEPTANCE (NOA) ANCHOR TABLE (FIELD INSTALLED - BY OTHERS)											
ITEM	CRACKED CONCRETE	GROUT FILLED CMU	STEEL	MIN VALUE	MIN THICKNESS	ANCHOR TYPE	ALL FASTENERS ARE STAINLES STEEL				
<b>ITEM 52: JAMB PERIMETER ANGLE ANCHOR, ALL HEIGHTS</b>							DIAMETER	# REQ'D	CENTERS	MIN EMBED.	SUBSTRATE MIN EDGE (3)
52A	X			3 KSI	4" (1)	HILTI KWIK HUS EZ (KH-EZ), 300 SS	3/8"	VARIES	6" MIN/MAX	2.5" NOM.	1.5"
52E		X		1.5 KSI	3" (1)	DEWALT AGGRE-GATOR, 300 SS	1/4"	VARIES	3" MIN 6" MAX	2" NOM.	2"
52F			X	A36	1/8" (1)	BOLT OR SCREW, 300 SS, INCLUDES ELCO BI-FLEX	1/4-20	VARIES	6" MAX	1/8"	3/4"
52H			X	A36	1/8" (1)	BOLT, 300 SS	5/16-18	VARIES	6" MAX	1/8"	3/4"
<b>ITEM 53: MULLION END PLATE ANCHOR, ROUGH OPENING HEIGHT &gt; 96.5"</b>							DIAMETER	# REQ'D	MIN CENTERS	MIN EMBED.	SUBSTRATE MIN EDGE (3)
53A	X			3 KSI	6" (1)	HILTI KWIK BOLT TZ2, 300 SS	5/8"	4/PLATE	7.5" & 9" MIN	3.25" NOM.	4"
53F			X	A36	1/8" (1)	BOLT OR SCREW, 300 SS, INCLUDES ELCO BI-FLEX	1/4-14 1/4-20	8/PLATE	1" MIN	1/8"	1/2"
53H			X	A36	1/8" (1)	BOLT, 300 SS	5/16-18	6/PLATE	1.5" MIN	1/8"	1/2"
<b>ITEM 54: MULLION ANGLE MOUNT ANCHOR, ROUGH OPENING HEIGHT &gt; 96.5"</b>							DIAMETER	# REQ'D	MIN CENTERS	MIN EMBED.	SUBSTRATE MIN EDGE (3)
54A	X			3 KSI	6" (1)(2)	HILTI KWIK BOLT TZ2 (KB-TZ2), 300 SS	1/2"	5/ANGLE	6" MIN	3" NOM.	3" EDGE 1 4" EDGE 2
54E		X		2 KSI GROUT	8" NOM. (1)(2)	HILTI HIT-HY 100 EPOXY & THREADED ROD, 300 SS	5/8"	8/ANGLE	8" HOR. MIN 7" VER. MIN	5.625" ACT.	4.125"
54H			X	A36	3/16" (1) (2)	BOLT OR SCREW, 300 SS, INCLUDES ELCO BI-FLEX	1/4-20	10/ANGLE	1" MIN	3/16"	1/2"
54J			X	A36	0.144" (1)(2)	BOLT, 300 SS	5/16-18	3/ANGLE	1" MIN	0.144"	3/4"
<b>ITEM 55: MULLION END PLATE ANCHOR, ROUGH OPENING HEIGHT &lt;= 96.5"</b>							DIAMETER	# REQ'D	MIN CENTERS	MIN EMBED.	SUBSTRATE MIN EDGE (3)
55A	X			3 KSI	5" (1)	HILTI KWIK BOLT TZ2, 300 SS	1/2"	4/PLATE	6.25" & 6.5" MIN	3" NOM.	2.5" EDGE 1 3.25" EDGE 2
55G			X	A36	1/8"(1)	BOLT OR SCREW, 300 SS, INCLUDES ELCO BI-FLEX	1/4-14 1/4-20	6/PLATE	1" MIN	1/8"	1/2"
<b>ITEM 56: MULLION ANGLE MOUNT ANCHOR, ROUGH OPENING HEIGHT &lt;= 96.5"</b>							DIAMETER	# REQ'D	MIN CENTERS	MIN EMBED.	SUBSTRATE MIN EDGE (3)
56A	X			3 KSI	5" (1)(2)	HILTI KWIK BOLT TZ2, 300 SS	1/2"	4/ANG.	6" MIN	2.5" NOM.	3" EDGE 1 4" EDGE 2
56E		X		2 KSI GROUT	8" NOM. (1)(2)	HILTI HIT-HY 100 EPOXY & THREADED ROD, 300 SS	5/8"	6/ANG.	8" HOR. MIN 6.25" VER. MIN	5.625" ACT.	4.125"
56F			X	A36	0.160" (1)(2)	BOLT OR SCREW, 300 SS, INCLUDES ELCO BI-FLEX	1/4-20	6/ANG.	1" MIN	0.160"	1/2"
56G			X	A36	1/8" (1)(2)	BOLT, 300 SS	5/16-18	6/ANG.	1" MIN	1/8"	3/4"

NOTES: (1) IN DIRECTION OF ANCHOR PENETRATION. (2) SUBSTRATE THICKNESS IS ONE PORTION OF OVERALL WALL DEPTH.  
(3) EDGE 1 IS CLOSEST TO ANCHOR, AND EDGE 2 IS OPPOSITE EDGE 1. IF EDGE # NOT SPECIFIED, THEN MIN VALUE IS SAME TO BOTH EDGES.



*As a result of our commitment to continuous improvement, Airlite reserves the right to change specifications without notice.*