

DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER) BOARD AND CODE ADMINISTRATION DIVISION NOTICE OF ACCEPTANCE (NOA)

CGI Windows and Doors, LLC 3780 W 104th Street Hialeah, FL 33018

Scope:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER - Product Control Section to be used in Miami-Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami-Dade County) and/or the AHJ (in areas other than Miami-Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code, including the High Velocity Hurricane Zone.

DESCRIPTION: Series "238" Impact Resistant Aluminum Tube Mullion - L.M.I.

APPROVAL DOCUMENT: Drawing No. 238MULL-1, titled "Aluminum, Clipped Tube Mullions (LM)", sheets 1 thru 7 of 7, dated 02/22/22, with revision **B** dated 03/12/25, prepared by manufacturer, signed and sealed by Anthony Lynn Miller, P.E., bearing the Miami-Dade County Product Control Revision stamp with the Notice of Acceptance number and expiration date by the Miami-Dade County Product Control Section.

MISSILE IMPACT RATING: Large and Small Missile Impact Resistant

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state, model/series, and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA **revises NOA No. 23-0913.03** and consists of this page 1 and evidence pages E-1, E-2 and E-3, as well as approval document mentioned above.

The submitted documentation was reviewed by Manuel Perez, P.E.



NOA No. 25-0319.06 Expiration Date: April 26, 2027 Approval Date: April 10, 2025 Page 1

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. EVIDENCE SUBMITTED UNDER PREVIOUS NOA's

A. DRAWINGS

- 1. Manufacturer's die drawings and sections. *(Submitted under NOA No. 02-0123.07)*
- Drawing No. 238MULL-1, titled "Aluminum, Clipped Tube Mullions (LM)", sheets 1 thru 7 of 7, dated 02/22/22, with revision A dated 08/23/23, prepared by manufacturer, signed and sealed by Anthony Lynn Miller, P.E. (Submitted under NOA No. 23-0913.03)

B. TESTS

- 1. Test reports on: 1) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94
 - 2) Large Missile Impact Test per FBC, TAS 201-94

3) Cyclic Wind Pressure Loading per FBC, TAS 203-94

along with marked-up drawings and installation diagram of aluminum fixed windows mulled together, prepared by Hurricane Test Laboratory, LLC, Test Report No. **HTL-0080-0105-08**, dated 03/26/08, signed and sealed by Vinu J. Abraham, P.E. *(Submitted under NOA No. 08-0429.04)*

- Test reports on: 1) Uniform Static Air Pressure Test, Loading per FBC PA-202-94 along with marked-up drawings and installation diagram of an aluminum fixed window, prepared by Hurricane Engineering & Testing Inc., Test Report No. HETI-96-525, dated 02/12/95 signed and sealed by Hector Medina, P.E. (Submitted under NOA No. 02-0123.07)
- Test reports on: 1) Large Missile Impact Test, Loading per FBC PA 201-94 along with marked-up drawings and installation diagram of an aluminum fixed window, prepared by Hurricane Engineering & Testing Inc., Test Report No. HETI-96-525, dated 10/30/95, signed and sealed by Timothy S. Marshall, P.E. (Submitted under NOA No. 02-0123.07)

C. CALCULATIONS

 Anchor verification calculations and structural analysis, complying FBC 7th Edition (2020) dated 03/04/22, prepared by manufacturer, signed and sealed by Anthony Lynn Miller, P.E.
 (Submitted up der NOA No. 22, 0012, 02)

(Submitted under NOA No. 23-0913.03)

D. QUALITY ASSURANCE

1. Miami-Dade Department of Regulatory and Economic Resources (RER).

Manuel Pérez, P.E. Product Control Examiner NOA No. 25-0319.06 Expiration Date: April 26, 2027 Approval Date: April 10, 2025

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. EVIDENCE SUBMITTED UNDER PREVIOUS NOA's (CONTINUED)

E. MATERIAL CERTIFICATIONS

1. None.

F. STATEMENTS

- Statement letter of conformance, complying with FBC 7th Edition (2020), with FBC 8th Edition (2023), and of no financial interest, dated August 23, 2023, signed and sealed by Anthony Lynn Miller, P.E. (Submitted under NOA No. 23-0913.03)
- 2. Statement letter of successor engineer per 61G15-27.001 Florida Administrative Code. (Submitted under NOA No. 20-0610.08)

G. OTHERS

1. Notice of Acceptance No. **22-0309.01**, issued to CGI Windows and Doors, Inc. for their Series "238" Impact Resistant Aluminum Tube Mullions - L.M.I., approved on 04/07/2022 and expiring on 04/26/27.

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Manuel Perez, P.E. Product Control Examiner NOA No. 25-0319.06 Expiration Date: April 26, 2027 Approval Date: April 10, 2025

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

2. NEW EVIDENCE SUBMITTED

A. DRAWINGS

1. Drawing No. 238MULL-1, titled "Aluminum, Clipped Tube Mullions (LM)", sheets 1 thru 7 of 7, dated 02/22/22, with revision **B** dated 03/12/25, prepared by manufacturer, signed and sealed by Anthony Lynn Miller, P.E.

B. TESTS

1. None.

C. CALCULATIONS

1. None.

D. QUALITY ASSURANCE

1. Miami-Dade Department of Regulatory and Economic Resources (RER)

E. MATERIAL CERTIFICATIONS

1. None.

F. STATEMENTS

- 1. Statement letter of conformance, complying with **FBC 8th Edition (2023)**, dated March 13, 2025, prepared by manufacturer, signed and sealed by Anthony Lynn Miller, P.E.
- 2. Statement letter of no financial interest, dated March 13, 2025, prepared by manufacturer, signed and sealed by Anthony Lynn Miller, P.E.
- **3.** Certificate of conversion for the formation of CGI Windows and Doors, LLC from CGI Windows and Doors, Inc. dated March 28, 2024, issued by the State of Delaware, signed by Mathew G. DeSoto.
- **4.** Florida Department of State, Division of Corporation listing # M240000058609 of CGI Windows and Doors, LLC as active status since 07/08/24.
- 5. CGI Name change organization chart layout prepared by RER (for file use only).

G. OTHERS

1. Notice of Acceptance No. 23-0913.03, issued to CGI Windows and Doors, Inc. for their Series "238" Impact Resistant Aluminum Tube Mullions – L.M.I., approved on 10/26/23 and expiring on 04/26/27.

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Manuel Pérez, P.E. Product Control Examiner NOA No. 25-0319.06 Expiration Date: April 26, 2027 Approval Date: April 10, 2025

SERIES 238, IMPACT-RESISTANT, ALUMINUM TUBE MULLIONS

1) MULLIONS AND CLIPS HAVE BEEN DESIGNED & TESTED TO COMPLY WITH THE REQUIREMENTS OF THE FLORIDA BUILDING CODE, AND ARE APPROVED FOR IMPACT AND NON-IMPACT APPLICATIONS IN THE HVHZ. MULLIONS ARE ONLY TO BE USED WITH THE MANUFACTURER'S FENESTRATION PRODUCTS.

2) DETAILS SHOWN ARE FOR THE MULLION ONLY. ANCHORS SHOWN ARE IN ADDITION TO ANY ANCHORS REQUIRED FOR THE FENESTRATION PRODUCT INSTALLATION. TYPICAL APPLICATIONS ARE SHOWN. EACH SITUATION IS UNIQUE AND SHOULD BE EVALUATED BY AN EXPERIENCED INSTALLER FOR THE BEST INSTALLATION METHOD. OPTIONAL 1X OR 2X WOOD BUCKS IF USED, MUST BE ANCHORED PROPERLY TO TRANSFER LOADS AND ARE TO BE DESIGNED BY OTHERS.

3) THE TYPE AND NUMBER OF ANCHORS IS CRITICAL TO THE STRUCTURAL PERFORMANCE OF THE MULLED UNITS. MULLIONS HAVE BEEN TESTED AS "FREE-FLOATING" WHEN USING THE MULLION CLIP (ITEM# 4), BUT SHALL NOT HAVE A GAP OF MORE THAN 1/4" FROM THE END OF THE MULLION TO THE BOTTOM OF THE CLIP, SEE SHEET 3.

4) THE ANCHORAGE METHODS SHOWN HAVE BEEN DESIGNED TO RESIST THE WINDLOADS CORRESPONDING TO THE REQUIRED DESIGN PRESSURE. MULLIONS ARE CALCULATED TO DEFLECT NO MORE THAN L/180. THE 1/3 STRESS INCREASE WAS NOT USED IN THIS ANCHOR EVALUATION. THE 1.6 LOAD DURATION FACTOR WAS USED FOR THE EVALUATION OF WOOD SCREWS.

5) PROPER SEALING OF ENTIRE ASSEMBLY IS THE RESPONSIBILITY OF OTHERS AND IS BEYOND THE SCOPE OF THESE INSTRUCTIONS.

6) USE THE COMBINED WIDTH OR HEIGHT OF ONLY TWO ADJACENT FENESTRATION PRODUCTS TO DETERMINE PRESSURES AND ANCHORAGE FOR THE COMMON MULLION. FOR MULTIPLE UNITS, CONSIDER ONLY TWO ADJACENT UNITS AT A TIME WHEN USING THE DESIGN PRESSURE AND ANCHORAGE TABLES. THE LOWEST DESIGN PRESSURE OF MULTIPLE MULLIONS OR FENESTRATION PRODUCTS SHALL APPLY.

7) ANCHOR EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND WALL DRESSING OR STUCCO. WOOD BUCKS BY OTHERS, MUST BE ANCHORED PROPERLY TO TRANSFER LOADS TO THE STRUCTURE. ANCHORS SHALL BE COATED OR CORROSION RESISTANT AS APPROPRIATE FOR SUBSTRATE MATERIAL. DISSIMILAR MATERIALS SHALL BE PROTECTED AS REQUIRED TO PREVENT REACTIONS.

8) REFERENCE: DEWALT ULTRACON+, DEWALT/ELCO AGGRE-GATOR & CRETEFLEX NOA'S

9) QUANTITY OF UNITS WITHIN A MULTIPLE MULLED ASSEMBLY IS UNLIMITED PROVIDED THAT THE SPAN AND OPENING WIDTH/HEIGHT OF EACH INDIVIDUAL MULLION COMPLIES WITH THE REQUIREMENTS OF THIS APPROVAL.

10) SUBSTRATES: CONCRETE SHALL CONFORM TO ACI 301 SPECIFICATIONS. HOLLOW AND GROUT-FILLED CONCRETE BLOCK UNIT (CMU) SHALL CONFORM TO ASTM C-90. WOOD SHALL HAVE A MIN. SG OF 0.55. ALUMINUM SHALL BE 6063-T5 AND BE A MINIMUM OF .125" THICK. STEEL STUDS TO BE A MINIMUM GRADE 33 AND .045" THICK (18 GAUGE). STRUCTURAL STEEL TO BE AT LEAST .125" THICK AND A36. ALL ANCHORS INTO METAL SHALL EXTEND AT LEAST 3 SCREW THREADS BEYOND THE MATERIAL

ANCHOR CAPACITY ADJUSTMENT FORMULA:

 $(DP_{ReQ}) \times \left(\frac{ANCHOR CAP_{ROM TABLE}}{MULLION CAP_{ROM TABLE}}\right) = ANCHOR CAP_{REQ}$

USE THIS FORMULA TO OBTAIN THE "ANCHOR CAPACITY REQUIRED" CORRESPONDING TO AN ACTUAL PRESSURE REQUIREMENT FOR THE OPENING, WHEN IT IS LOWER THAN THE MULLION CAPACITY (FROM THE TABLE) OF THE SELECTED MULLION. IT WILL YIELD A MINIMUM ANCHOR CAPACITY WHICH MAY BE USED TO QUALIFY ADDITIONAL ANCHOR OPTIONS FROM THE CLIP/ANCHOR CAPACITY TABLE.

CODES / STANDARDS USED:

- 2023 FLORIDA BUILDING CODE (FBC), 8TH EDITION
- ANSI/AF&PA NDS-2018 FOR WOOD CONSTRUCTION
- ALUMINUM DESIGN MANUAL, ADM-2020
- AISI S100-16

AISC 360-16









1) ANCHOR EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND WALL DRESSING OR STUCCO. ANCHOR HEAD TYPE MAY BE PANHEAD, HEXHEAD OR FLATHEAD.

2) QUANTITY OF ANCHORS AND MULLION SIZE SHOWN ABOVE ARE FOR PICTORIAL REPRESENTATION ONLY. BECAUSE THE ANCHOR CAPACITY IS BASED PARTLY ON THE ANCHOR TO ANCHOR DISTANCE, THE CORRECT QUANTITY AND LOCATION OF ANCHORS MUST BE FOLLOWED, REFER TO THE TABLES ON THE FOLLOWING SHEETS.

3) FOR 2X WOOD-BACKED STEEL STUDS, WOOD ANCHOR VALUES ARE TO BE USED.

4) MAY BE INSTALLED HORIZONTALLY OR VERTICALLY.

	ATERIALS.		
ITEM#	PART#	DESCRIPTION	MATERIAL
1	AL-403	1" X 2" X 1/8" Tube Mullion	6063-T6
2	AL-1035	1" X 3" X 1/8" Tube Mullion	6063-T6
3	AL-404	1" X 4" X 1/8" Tube Mullion	6063-T6
4	CGI-383	Mullion Clip	6063-T6
5	STD	2" X 2" X 1/8" Angle Clip	6063-T6
6	AL-416	1" X 3/4" X 1/8" U-Channel Clip	6063-T6
7	CGI-373	Panel Top Rail	6063-T6
8	CGI-386	Panel Top Rail	6063-T6
9	CGI-387	Panel Top Rail	6063-T6
10	CGI-387IG	Panel Top Rail	6063-T6





4

MULLION CLIP



TAB	LE 1A:																												
														0	pening [Dimensi	on												
			50) in			60	in			70	in			80	in			90	in			100) in			120) in	
1 N	" x 2" Iullion Design	Po Loaded	oint Mullion	Unifo Loaded	ormly Mullion	Po Loaded	oint Mullion	Unifo Loaded	ormly Mullion	Po Loaded	oint Mullion	Unifc Loaded	ormly Mullion	Po Loaded	oint Mullion	Unife Loaded	ormly I Mullion	Po Loaded	oint Mullion	Unifor Loaded I	mly Mullion	Po Loaded	int Mullion	Unifo Loaded	ormly Mullion	Poi Loaded	nt Mullion	Unifo Loaded	ormly Mullion
Pro Anc Req	essure & hor Load uirement	Mullion Capacity (lbs/ft2)	Anchor Capacity Required (lbs)	Mullion Capacity (Ibs/ft2)	Anchor Capacity Required (Ibs)	Mullion Capacity (lbs/ft2)	Anchor Capacity Required (Ibs)	Mullion Capacity (lbs/ft2)	Anchor Capacity Required (lbs)	Mullion Capacity (lbs/ft2)	Anchor Capacity Required (Ibs)	Mullion Capacity (lbs/ft2)	Anchor Capacity Required (lbs)	Mullion Capacity (lbs/ft2)	Anchor Capacity Required (Ibs)	Mullion Capacity (Ibs/ft2)	Anchor Capacity Required (Ibs)	Mullion Capacity (lbs/ft2)	Anchor Capacity Required (lbs)	Mullion Capacity (Ibs/ft2)	Anchor Capacity Required (lbs)								
	42 in	170.0	620	170.0	435	170.0	744	170.0	478	170.0	868	170.0	506	170.0	992	170.0	519	170.0	1116	170.0	521	170.0	1240	170.0	521	156.0	1365	170.0	521
	48 in	170.0	708	170.0	524	170.0	850	170.0	584	170.0	992	170.0	630	156.8	1045	170.0	661	139.4	1045	170.0	677	125.4	1045	170.0	680	104.5	1045	170.0	680
	50-5/8 in	170.0	747	170.0	563	170.0	896	170.0	631	152.7	940	170.0	684	133.6	940	170.0	723	118.8	940	167.7	737	106.9	940	165.1	734	89.1	940	165.0	734
	54 in	170.0	797	170.0	612	146.8	826	166.7	677	125.9	826	149.9	665	110.1	826	138.9	656	97.9	826	132.0	650	88.1	826	128.4	647	73.4	826	127.5	645
pan	60 in	128.4	669	137.9	569	107.0	669	118.6	556	91.7	669	105.6	545	80.3	669	96.7	537	71.4	669	90.6	531	64.2	669	86.6	526	53.5	669	83.6	523
<u>5</u>	63 in	111.0	607	118.3	519	92.5	607	101.5	507	79.3	607	90.0	498	69.3	607	82.0	490	61.6	607	76.4	484	55.5	607	72.6	479	46.2	607	69.0	475
n li i	66 in	96.5	553	102.3	4/5	80.4	553	87.5	465	68.9	553	(1.4	456	60.3	553	/0.2	449	53.6	553	65.1	443	48.3	553	61.6	438	40.2	553	57.8	433
Σ	/2 in	/4.3	465	/8.1	403	61.9	465	66.5	395	53.1	465	58.5	387	46.5	465	52.8	381	41.3	465	48.6	376	37.2	465	45.5	3/1	31.0	465	41.8	366
	76 in	63.2	41/	66.1	364	52.7	417	56.1	357	45.1	417	49.2	350	39.5	417	44.3	344	35.1	417	40.6	339	31.6	417	37.9	335	26.3	417	34.4	329
	78 in	58.5	396	61.0	347	48.7	396	51.8	340	41.8	396	45.4	333	36.5	396	40.7	328	32.5	396	37.3	323	29.2	396	34.7	319	24.4	396	31.3	313
	90 in	38.1	297	39.3	264	31.7	297	33.2	259	27.2	297	28.9	255																
	90 11	31.4	201	32.Z	234	20.1	201	21.2	229	22.4	201																		
	. = . 5																												
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	Clip/An	∠ chor			Anc	chor Type	/pe: 3/16" Dewa Ultracon+			Ultracon+		AggreGator		Ultra	acon+	Ultracor		ימונ 1+	AggreGa	tor Cret	CreteFlex	Dewalt	Dewalt	alt Ago	AggreGator	Screw (G	5) Screv	v (G5) S	crew (G5)
	Capa	city		F	dae Diet	tance (in)	. 1"	1" 0.1/0"		4" 0 4/0"				1" 2		2011 411 1		2 1/2"	2"	2 1/2"		Ultracon-	+ Uitraco	con+ / .99,00at		0.54"	0	60	0.36
	•	•			Embed	ment (in)	: 1-3/4	2-1 1-3	3/4"	' 1-3/4''	1-3/4"	2	//O	1-1/4"	1-1/4	· 1-'	' ·	1-1/4"		1-	1/4"	1-3/4''	1-3/4	4"	2"	1-3/8"	1-3	3/8"	varies *
2	Anchors in	nto Mullic	n Clip or	2x2 Ang	le Clip P	air, Fig 1	: 310 lb	s 630	lbs 2	20 lbs	870 lbs	518	lbs	230 lbs	370 lb	s 320) lbs 5	580 lbs	374 lbs	s 49 [°]	7 Ibs	170 lbs	347	bs 94	46 Ibs	442 lbs	537	' Ibs	536 lbs
4	Anchors in	nto Mullic	n Clip or	2x2 Ang	le Clip P	air, Fig 2	: 320 lb	s N	/A 3	60 lbs	N/A	N/	Ά	N/A	N/A	N	/A	N/A	N/A	Ν	√A	N/A	N/A	1	N/A	885 lbs	107:	3 lbs	1073 lbs
6	Anchors in	nto Mullic	n Clip or	2x2 Ang	le Clip P	air, Fig 3	: 480 lb	s N	/A 5	640 lbs	N/A	N/	'A	N/A	N/A	N	/A	N/A	N/A	Ν	√A	N/A	N/A	1	N/A	1327 lbs	s 161) lbs	1609 lbs
			2	Anchors	into U-C	Clip, Fig 4	: N/A	N	/A	N/A	N/A	N/	'A	N/A	N/A	N	/A	N/A	N/A	Ν	√A	N/A	N/A	1	N/A	N/A	N	/A	536 lbs
																				* SEE NO	OTE 10	ON SH	EET 1 F	OR ADI	DITIONA	AL SUBS	TRATE	INFOR	MATION.
-	1" X 2" (CLIP A	ANCH	OR LC	CATI	ONS, ⁻	TOP V	<u>IEW:</u>																					
_		— 0.3	6" TYP.				мо	LLION		0.3	6" TYP.					M	ULLION												
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1.013"

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MAX. O.C.

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-MULLION

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0.36" TYP.

0.968"

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FIGURE 4

CLIP NOTES:

SHEET ARE FOLLOWED.

1) CLIP HOLES MAY BE DRILLED IN THE FIELD. CLIP

VARIATIONS ARE ALLOWED (SEE SHEET 1),

PROVIDED THE DIMENSIONS SHOWN ON THIS

FIGURE 1

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FIGURE 3

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MAX. O.C.

ROUND UP TO THE NEXT SIZE SHOWN ON THE TABLE. LINEAR INTERPOLATION BETWEEN MULL LENGTHS AND/OR OPENING WIDTHS IS ALLOWABLE.

2) IF A LOWER ANCHOR CAPACITY IS ACCEPTABLE, USE THE FORMULA FROM SHEET 2 TO CALCULATE THE CORRESPONDING, LOWER DESIGN PRESSURE OF THE ANCHOR/MULLION SYSTEM.

3) FOR CROSSING MULLIONS, DETERMINE THE CAPACITIES FOR EACH MULLION. FOR TRIPLE+ MULLED WINDOWS, ONLY USE THE OPENING DIMENSION OF TWO ADJACENT WINDOWS.

4) WINDOW/MULL IMAGES MAY BE ROTATED 90°.

5) A POINT LOADED MULLION IS ONE THAT SUPPORTS THE END OF ANOTHER MULLION ALONG ITS SPAN.



TA	BLE 2A:																												
						1				Π				0	pening I	Dimensi	on	1				1				1			
	411 11 211		50	0 in		<u> </u>	60	in		<u> </u>	70	in			80) in			90) in		<u> </u>	100	0 in		<u> </u>	120) in	
	Mullion	Po Loaded	ont Mullion	Loaded	ormly I Mullion	Po Loaded	Mullion	Unif	ormly Mullion	Loaded	oint Mullion	Unito	ormly I Mullion	Po Loaded	oint I Mullion	Unif Loaded	ormly I Mullion	Loaded	oint I Mullion	Unito Loaded	Mullion	Loaded	oint Mullion	Unife Loaded	ormly I Mullion	Pc Loaded	nt Mullion	Unifo	ormly Mullion
F Ai Re	Design ressure & ichor Load quirement	n Capacity 2)	or Capacity red (lbs)	n Capacity 2)	or Capacity red (lbs)	n Capacity 2)	or Capacity red (Ibs)	n Capacity 2)	or Capacity red (lbs)	in Capacity 2)	or Capacity red (lbs)	n Capacity 2)	or Capacity red (lbs)	in Capacity 2)	or Capacity red (lbs)	n Capacity 2)	or Capacity red (lbs)	n Capacity 2)	or Capacity red (lbs)	n Capacity 2)	or Capacity red (lbs)	n Capacity 2)	or Capacity red (Ibs)	n Capacity 2)	or Capacity red (Ibs)	n Capacity 2)	or Capacity red (Ibs)	n Capacity 2)	or Capacity red (Ibs)
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	42 in	190.0	693	190.0	487	190.0	831	190.0	534	190.0	970	190.0	566	190.0	1108	190.0	581	190.0	1247	190.0	582	190.0	1385	190.0	582	190.0	1663	190.0	582
	48 in	190.0	/92	190.0	586	190.0	950	190.0	653	190.0	1108	190.0	704	190.0	1267	190.0	/39	190.0	1425	190.0	/5/ 925	190.0	1583	190.0	760	167.0	1670	190.0	760 845
	50-5/6 in	190.0	891	190.0	684	190.0	1002	190.0	705	190.0	1247	190.0	843	175 9	1330	190.0	897	109.0	1320	190.0	035 935	1/0.0	1320	190.0	957	142.3	1320	190.0	045 962
	60 in	190.0	990	190.0	783	171.0	1069	189.5	888	146.6	1069	168.7	871	128.3	1020	154.4	858	114.0	1020	144.7	848	102.6	1069	138.4	841	85.5	1020	133.6	835
Dan	63 in	177.3	969	189.1	829	147.7	969	162.1	811	126.6	969	143.8	795	110.8	969	131.0	782	98.5	969	122.1	773	88.6	969	116.0	765	73.9	969	110.3	758
uo Suo	66 in	154.2	883	163.5	759	128.5	883	139.8	743	110.1	883	123.6	729	96.4	883	112.2	717	85.7	883	104.1	707	77.1	883	98.3	700	64.2	883	92.3	692
luli,	72 in	118.8	742	124.8	644	99.0	742	106.3	631	84.8	742	93.5	619	74.2	742	84.3	609	66.0	742	77.6	600	59.4	742	72.7	593	49.5	742	66.7	584
²	76 in	101.0	666	105.5	582	84.1	666	89.7	570	72.1	666	78.7	559	63.1	666	70.7	550	56.1	666	64.9	542	50.5	666	60.5	535	42.1	666	54.9	526
	78 in	93.4	632	97.4	554	77.8	632	82.7	543	66.7	632	72.5	533	58.4	632	65.0	524	51.9	632	59.5	516	46.7	632	55.4	510	38.9	632	50.1	501
	90 in	60.8	475	62.7	422	50.7	475	53.0	414	43.4	475	46.2	407	38.0	475	41.2	401	33.8	475	37.4	395	30.4	475	34.5	390	25.3	475	30.5	381
	96 in	50.1	418	51.5	373	41.8	418	43.4	367	35.8	418	37.8	360	31.3	418	33.6	355	27.8	418	30.5	350	25.1	418	28.0	345				
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	2 Anchors in	to Mullic	n Clip or	r 2x2 Ang	le Clip P	air, Fig 1	310 lb	s 630) lbs	220 lbs	870 lbs	518	lbs	230 lbs	370 lb	s 320	lbs 5	80 lbs	374 lbs	5 49	7 lbs	170 lbs	347 II	bs 94	46 lbs	442 lbs	537	lbs	536 lbs
	4 Anchors in	to Mullic	n Clip o	r 2x2 Ang	le Clip P	air, Fig 2	537 lb	s 126	0 lbs	412 lbs	1712 lbs	1036	6 lbs	361 lbs	740 lb:	s 456	lbs 10	018 lbs	N/A	89	2 lbs	340 lbs	474 II	bs	N/A	885 lbs	1073	3 lbs - ^	1073 lbs
	6 Anchors in	to Mullic	n Clip or	r 2x2 Ang	le Clip P	air, Fig 3	: 555 lb:	s 189	0 lbs	578 lbs	N/A	N	/A	N/A	1110 lb	s N	'A	N/A			N/A	N/A	N/A	`	N/A	1327 lbs	s 1610) lbs	1609 lbs
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	54 in	210.0	984	210.0	757	210.0	1181	210.0	853	210.0	1378	210.0	932	210.0	1575	210.0	992 2	210.0	1772	210.0	1034	210.0	1969	210.0	1057	210.0	2213	210.0	1063 E
	60 in	210.0	1094	210.0	866	210.0	1313	210.0	984	210.0	1531	210.0	1085	210.0	1750	210.0	1167	207.3	1944	210.0	1230	186.6	1944	210.0	1276	155.5	1944	210.0	1313 M
	63 in	210.0	1148	210.0	921	210.0	1378	210.0	1050	210.0	1608	210.0	1161	201.5	1763	210.0	1254	179.1	1763	210.0	1329	161.2	1763	210.0	1385	134.3	1763	200.6	1379 OI
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lulli	76 in	183.6	1211	191.9	1058	153.0	1211	163.1	1036	131.2	1211	143.1	1017	114.8	1211	128.6	1000	102.0	1211	117.9	986	91.8	1211	110.0	974	76.5	1211	99.8	957 R0
2	78 in	169.8	1150	177.1	1007	141.5	1150	150.4	987	121.3	1150	131.8	969	106.2	1150	118.3	953	94.4	1150	108.3	939	84.9	1150	100.8	927	70.8	1150	91.0	910 5)
	90 in	110.6	864	114.1	767	92.1	864	96.4	753	79.0	864	84.0	740	69.1	864	74.9	729	61.4	864	68.1	718	55.3	864	62.8	708	46.1	864	55.5	693 TH
	96 in	91.1	759	93.6	679	75.9	759	79.0	667	65.1	759	68.7	655	56.9	759	61.1	645	50.6	759	55.4	636	45.6	759	50.9	628	38.0	759	44.6	614 AI
	108 in	64.0	600	65.4	542	53.3	600	55.0	533	45.7	600	47.7	525	40.0	600	42.3	517	35.5	600	38.2	510	32.0	600	34.9	503	26.7	600	30.3	492
	111 in	58.9	568	60.1	514	49.1	568	50.6	506	42.1	568	43.8	498	36.8	568	38.8	491	32.7	568	35.0	484	29.5	568	32.0	478	24.6	568	27.7	467
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	1" x / Clip/An Capac	4" chor sity			And And	hor Type	3/16 Ult	3 " DeWal tracon+ 2-1	It /2"	1/4" D Ultrad	eWalt con+ 2-1/2"	1/4" D Aggre	eWalt Gator /8"	3/16" [Ultra 1"	eWalt con+ 2-1/2"	Hollov 1/4 U 1"	" DeWalt Itracon+	1/4 1/4 /2"	4" DeWa .ggreGato 2"	alt DeW Dr Crete	4" Valt Flex L	3/16" DeWalt Jltracon+ 1"	1/4" DeWa Ultracoi 1"	llt n+	DeWalt eGator \$ 2"	#12 Stee Screw (G	1000 * 1 #14 S 5) Screw 0.6	teel #1 (G5) Sci 0	2 Steel rew (G5) 0.36
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CLIP NOTES:

1) CLIP HOLES MAY BE DRILLED IN THE FIELD. CLIP VARIATIONS ARE ALLOWED (SEE SHEET 2), PROVIDED THE DIMENSIONS SHOWN ON THIS SHEET ARE FOLLOWED.

