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INSTALLATION NOTES:

1. *ONE (1)* INSTALLATION ANCHOR IS REQUIRED AT EACH ANCHOR LOCATION SHOWN, UNLESS OTHERWISE STATED.
2. THE NUMBER OF INSTALLATION ANCHORS DEPICTED IS THE MINIMUM NUMBER OF ANCHORS TO BE USED FOR PRODUCT INSTALLATION.
3. INSTALL INDIVIDUAL INSTALLATION ANCHORS WITHIN A TOLERANCE OF ±1/2 INCH OF THE DEPICTED LOCATION IN THE ANCHOR LAYOUT DETAIL (I.E., WITHOUT CONSIDERATION OF TOLERANCES). TOLERANCES ARE NOT CUMULATIVE FROM ONE INSTALLATION ANCHOR TO THE NEXT.
4. FOR INSTALLATION THROUGH 1X BUCK TO CONCRETE/MASONRY, OR DIRECTLY INTO CONCRETE/MASONRY, USE *1/4" ELCO ULTRACON* ANCHORS. INSTALLATION SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:

4.1. MINIMUM EMBEDMENT OF 1-1/4" WHEN INTO CMU

4.2. MINIMUM EMBEDMENT OF 1-3/4" WHEN INTO CONCRETE

4.3. MINIMUM EDGE DISTANCE OF 2-1/2" WHEN INTO CONCRETE

4.4. MINIMUM EDGE DISTANCE OF 2" WHEN INTO CMU

4.5. MINIMUM O.C. DISTANCE OF 3"
5. FOR INSTALLATION THROUGH 2X BUCK USE 1/4" ELCO ULTRACON WOOD SCREWS. INSTALLATION SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:

5.1. MINIMUM EMBEDMENT OF 1-1/2" INTO WOOD

5.2. MINIMUM EDGE DISTANCE OF 1"

5.3. MINIMUM O.C. DISTANCE OF 3/4"
6. FOR INSTALLATION THROUGH METAL FRAME USE #12 SMS OR SELF-DRILLING, SAE GR. 5, TYPE SCREWS. INSTALLATION SHALL CONFORM TO THE FOLLOWING REQUIREMENTS.

6.1. THREE (3) THREADS MINIMUM PENETRATION BEYOND METAL FRAME WALL.

6.2. MINIMUM EDGE DISTANCE OF 3/4"

6.3. MINIMUM O.C. DISTANCE OF 3/4"
7. MINIMUM EMBEDMENT AND EDGE DISTANCE EXCLUDE WALL FINISHES, INCLUDING BUT NOT LIMITED TO STUCCO, FOAM, BRICK VENEER, AND SIDING.
8. #12 WOOD SCREWS THROUGH UNIT FRAMES SHALL BE OF SUFFICIENT LENGTH TO FULLY PENETRATE LVL MULLION AND INTO ADJACENT FRAME. REFER TO MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR SPECIFIC LENGTHS.
9. INSTALLATION ANCHORS AND ASSOCIATED HARDWARE MUST BE MADE OF CORROSION RESISTANT MATERIAL OR HAVE A CORROSION RESISTANT COATING.
10. FOR HOLLOW BLOCK AND GROUT FILLED BLOCK, DO NOT INSTALL INSTALLATION ANCHORS INTO MORTAR JOINTS.EDGE DISTANCE IS MEASURED FROM FREE EDGE OF BLOCK OR EDGE OF MORTAR JOINT INTO FACE SHELL OF BLOCK.
11. INSTALLATION ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH ANCHOR MANUFACTURER'S INSTALLATION INSTRUCTIONS, AND ANCHORS SHALL NOT BE USED IN SUBSTRATES WITH STRENGTHS LESS THAN THE MINIMUM STRENGTH SPECIFIED BY THE ANCHOR MANUFACTURER.
12. INSTALLATION ANCHOR CAPACITIES FOR PRODUCTS HEREIN ARE BASED ON SUBSTRATE MATERIALS WITH THE FOLLOWING PROPERTIES:

A. WOOD - MINIMUM SPECIFIC GRAVITY OF *0.55*.

B. CONCRETE -MINIMUM COMPRESSIVE STRENGTH OF *3000 PSI*.

C. GROUT-FILLED CMU- UNIT STRENGTH CONFORMS TO ASTM C-90 WITH MINIMUM COMPRESSIVE STRENGTH OF 2000 PSI AND GROUT CONFORMS TO ASTM C 476, MINIMUM GROUT COMPRESSIVE STRENGTH OF 2000 PSI.

D. HOLLOW BLOCK CMU - UNIT STRENGTH CONFORMS TO ASTM C-90 WITH MINIMUM COMPRESSIVE STRENGTH OF 2000 PSI.

E. STEEL - MINIMUM WALL THICKNESS OF 75 MILS (14 GA.) WHEN THROUGH GUSSET INSTALLATION. MINIMUM WALL THICKNESS OF 48 MILS (18 GA.) WHEN THROUGH L-BRACKET INSTALLATION. MINIMUM YIELD STRENGTH OF 36 KSI.

F. ALUMINUM - 1/8" MINIMUM THICKNESS (6063-T5)

GENERAL NOTES:

1. THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH THE CURRENT FLORIDA BUILDING CODE (FBC) INCLUDING HVHZ. ALL PRODUCTS UNDER THE SCOPE OF THIS DOCUMENT HAVE BEEN EVALUATED ACCORDING TO SECTION 1709.8 OF THE CURRENT EDITION FBC AND THE FOLLOWING:

TAS 201-94

TAS 202-94

TAS 203-94
2. ADEQUACY OF THE EXISTING STRUCTURAL CONCRETE/MASONRY, 2X AND METAL STUD FRAMING AS A MAIN WIND FORCE RESISTING SYSTEM CAPABLE OF WITHSTANDING AND TRANSFERRING APPLIED PRODUCT LOADS TO THE FOUNDATION IS THE RESPONSIBILITY OF THE ENGINEER OR ARCHITECT OF RECORD FOR THE PROJECT OF INSTALLATION.
3. 1X AND 2X BUCKS (WHEN USED) SHALL BE DESIGNED AND ANCHORED TO PROPERLY TRANSFER ALL LOADS TO THE STRUCTURE. BUCK DESIGN AND INSTALLATION IS THE RESPONSIBILITY OF THE ENGINEER OR ARCHITECT OF RECORD FOR THE PROJECT OF INSTALLATION.
4. THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT IN NON-HVHZ AREAS. IN HVHZ AREAS, ONE TIME PRODUCT APPROVAL TO BE OBTAINED FROM MIAMI-DADE PERA OR AHJ.
5. APPROVED IMPACT PROTECTIVE SYSTEM **IS NOT REQUIRED** TO PROTECT THIS PRODUCT IN AREAS REQUIRING IMPACT RESISTANCE.
6. DOOR FRAME MATERIAL: *PONDEROSA PINE OR EQUIVALENT (S.G.=0.55)*.
7. IN ACCORDANCE WITH CURRENT FBC, WOOD COMPONENTS SHALL HAVE BEEN PRESERVATIVE TREATED OR SHALL BE OF A DURABLE SPECIES AS DEFINED IN CHAPTER 23.
8. LVL MULLION COMPLIES WITH APPLICABLE STANDARDS SET FORTH IN THE CURRENT FBC, AS PRESCRIBED IN CHAPTER 23.
9. IN ACCORDANCE WITH THE CURRENT FBC DISSIMILAR METALS INCLUDING FASTENERS THAT MAY COME INTO CONTACT WITH ALUMINUM UNIT FRAMING SHALL BE PROTECTED AS DEFINED IN CHAPTER 20.
- 10.DESIGNATIONS "X" AND "O" STAND FOR THE FOLLOWING:

X: OPERABLE PANEL

O: FIXED PANEL
- 11.CUSTOM SIZES AVAILABLE UPON REQUEST. CUSTOM DESIGN PRESSURE WILL BE ASSIGNED EQUAL TO NEXT LARGER STANDARD SIZE.
- 12.MULL ASSEMBLIES ARE QUALIFIED FOR TWO OR MORE UNITS PER OPENING IN THE FOLLOWING CONFIGURATIONS:

"ONE WAY" - RIBBON OR STACKED MULLIONS

"TWO WAY" - 'X' OR 'T' MULLIONS

ANDERSEN CORPORATION

SERIES 400 LVL MULLION SYSTEM

(HVHZ) (IMPACT)

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SHEET	REVISION	SHEET DESCRIPTION
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3	-	MULLION ASSEMBLY SECTIONS 2
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7	-	MULLION CONNECTION DETAIL
8	-	MULLION CONNECTION DETAIL WITH GUSSET PLATE
9	-	MULLION ASSEMBLY
10	-	VERTICAL MULLION CONNECTION TO HORIZONTAL MULLION
11	-	BILL OF MATERIALS, COMPONENTS & LAMINATED VENEERED LUMBER NOTES
12	-	ONE WAY MULLION CAPACITY CHARTS
13	-	TWO WAY MULLION CAPACITY CHARTS

MULLING INSTRUCTIONS:

- STEP 1: ESTABLISH MULL ASSEMBLY FRAME TYPES AND MULL CONFIGURATION.

STEP 2: DETERMINE MULL ASSEMBLY GROUP NUMBER FROM SHEETS 2-6 (REFER TO ABBREVIATION TABLE ABOVE).

STEP 3: DETERMINE ALLOWABLE LOAD OF MULL ASSEMBLY FROM APPLICABLE LOAD TABLE BASED ON MULL GROUP NUMBER, REFER TO SHEETS 12-13.

STEP 4: INSTALL MULLION BASED ON APPLICABLE SPECIFICATIONS SHOWN ON SHEETS 7-10.

MISSILE IMPACT RATING
SMALL AND LARGE MISSILE IMPACT RATED



ANDERSEN
WINDOWS & DOORS

100 FOURTH AVE NORTH
BAYPORT, MN 55003-1096
PH: (651) 264-5150 FX: (651) 264-5485

TITLE:
SERIES 400 LVL MULLION SYSTEM
(HVHZ)(IMPACT)

GENERAL AND INSTALLATION NOTES

PREPARED BY:

BUILDING DROPS, INC.

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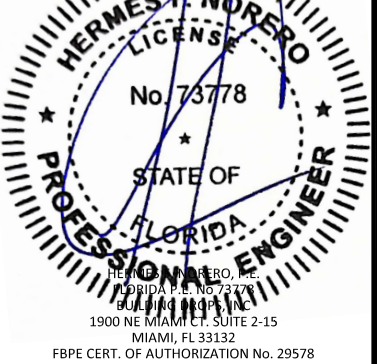
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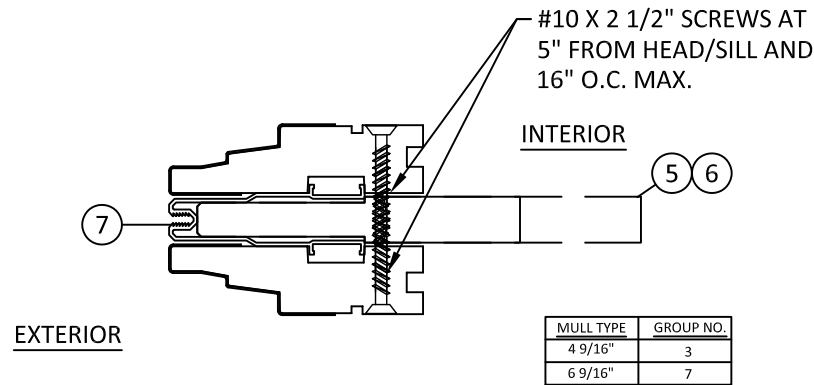
REMARKS	BY	DATE
6TH FBC CODE CHANGE	RV	10/17
7TH CODE CHANGE	YC	10/20
2023 CODE CHANGE	MS	10/19/23

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Digitally signed by Hermes F. Norero, P.E.
Reason: I am approving this document
Date: 2023.10.20 09:53:53 -0400

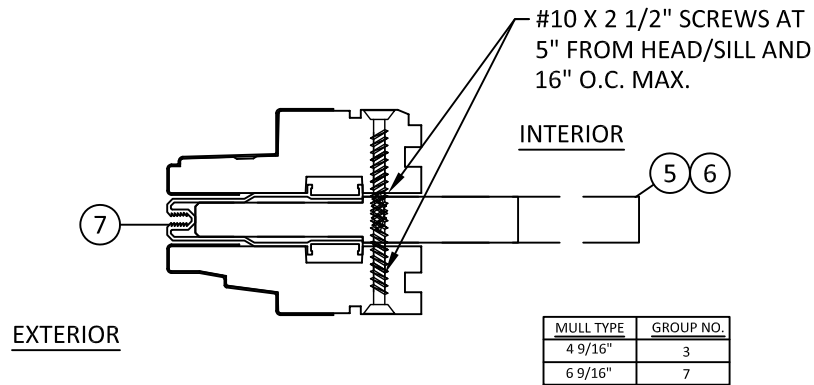


FL #: FL15922	
DATE: 10.17.17	
DWG. BY: RV	CHK. BY: HFN
SCALE: NTS	
DWG. #: AWD233	
SHEET: 1	
OF 13	

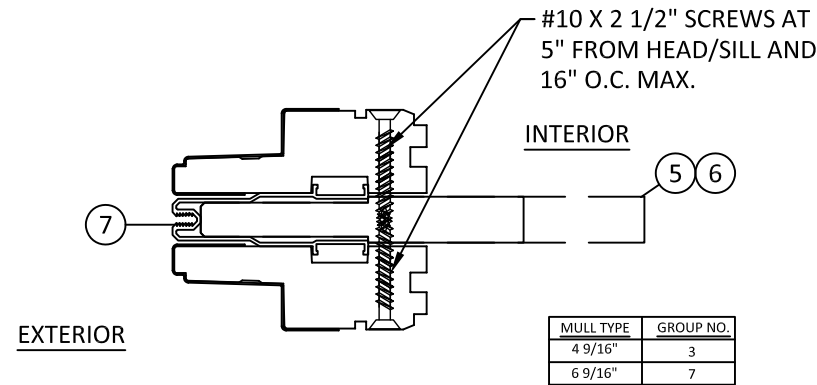


A
2 CASEMENT TO CASEMENT
VERTICAL MULL

B
2 AWNING TO AWNING
HORIZONTAL MULL

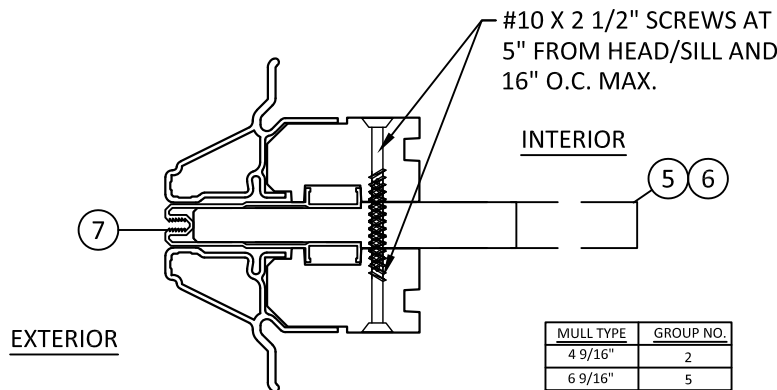


C
2 CASEMENT TO AWNING
VERTICAL OR HORIZONTAL MULL

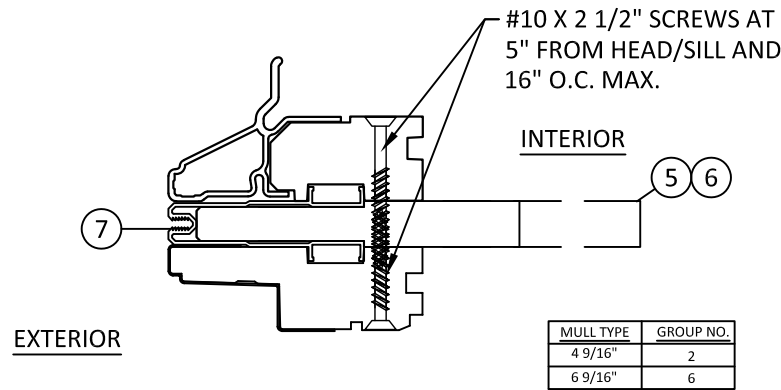


D
2 CASEMENT TO CASEMENT
HORIZONTAL MULL

E
2 AWNING TO AWNING
VERTICAL MULL

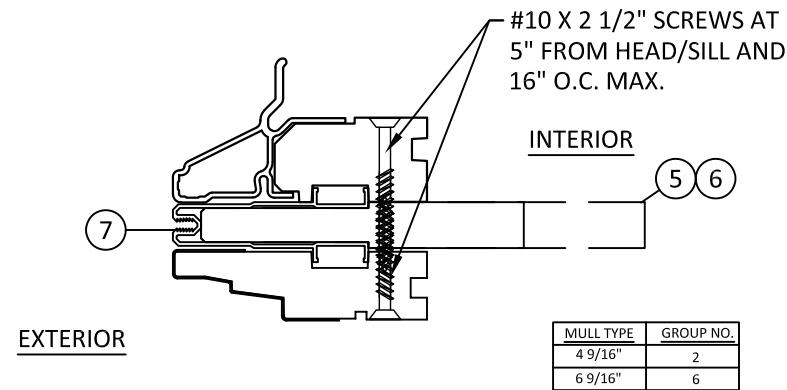


F
2 FLEXIFRAME TO FLEXIFRAME
VERTICAL OR HORIZONTAL MULL



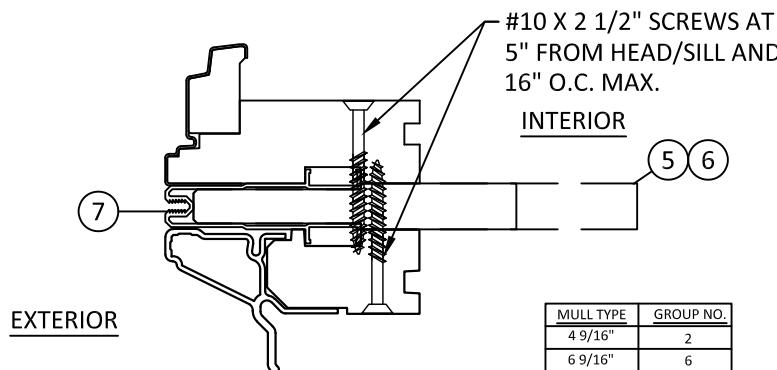
G
2 CASEMENT TO FLEXIFRAME
HORIZONTAL MULL

H
2 AWNING TO FLEXIFRAME
VERTICAL MULL



I
2 CASEMENT TO FLEXIFRAME
VERTICAL MULL

J
2 AWNING TO FLEXIFRAME
HORIZONTAL MULL



K
2 FLEXIFRAME TO CIRCLE TOP/ QUARTER
VERTICAL OR HORIZONTAL MULL

NOTE:

- 1- TYPICAL ANDERSEN FRAME MEMBERS FOR DOORS, TRANSOMS AND SIDELITES UNDER SEPARATE APPROVAL.
- 2- 4" HORIZONTAL MULLIONS CAN BE USED WITH ALL F.B.C. APPROVED IMPACT AND NON-IMPACT RESISTANT PRODUCTS.



100 FOURTH AVE NORTH
BAYPORT, MN 55003-1096
PH: (651) 264-5150 FX: (651) 264-5485

TITLE: SERIES 400 LVL MULLION SYSTEM
(HVHZ)/(IMPACT)

MULLION ASSEMBLY SECTIONS 1

PREPARED BY: BUILDING DROPS, INC.

1900 NE MIAMI CT, SUITE 2-15
MIAMI, FL 33132
PH: (954)399-8478
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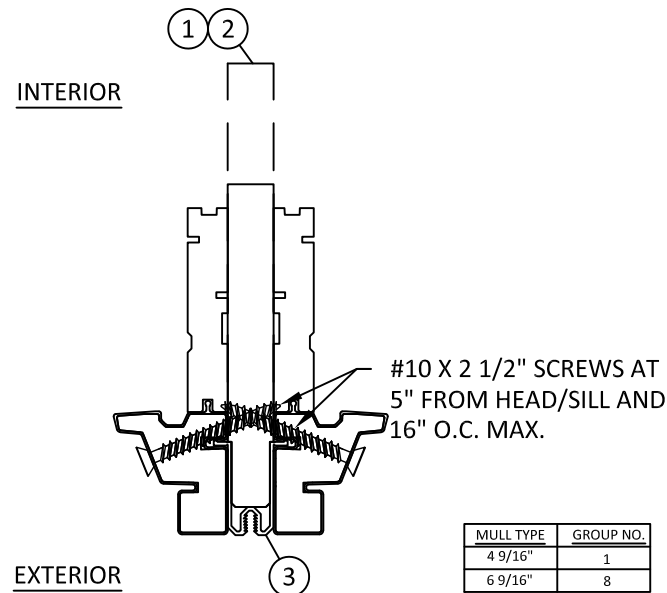
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CHK. BY: HFN

SCALE: NTS

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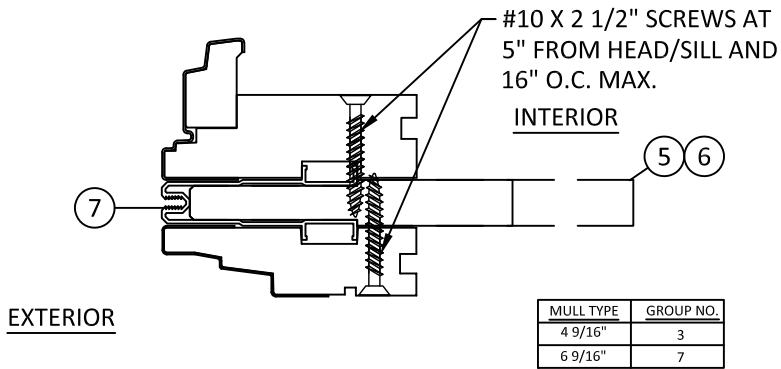
SHEET: 2



MULL TYPE	GROUP NO.
4 9/16"	1
6 9/16"	8

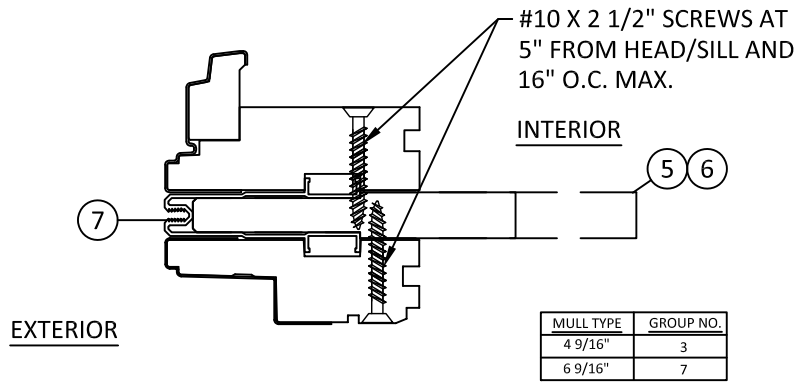
A
3 400 TWDH WDW TO 400 TWDH WDW
VERTICAL MULL

B
3 400 TWDH WDW TO 400 TWDH PICTURE WDW
VERTICAL MULL



MULL TYPE	GROUP NO.
4 9/16"	3
6 9/16"	7

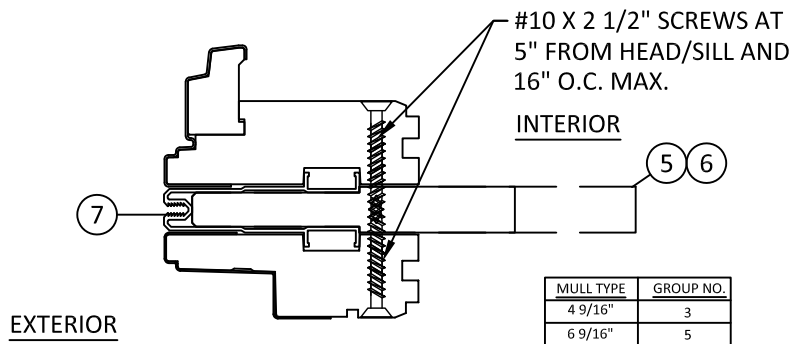
C
3 CIRCLE TOP TO AWNING
HORIZONTAL MULL



MULL TYPE	GROUP NO.
4 9/16"	3
6 9/16"	7

D
3 CIRCLE TOP TO CASEMENT
HORIZONTAL MULL

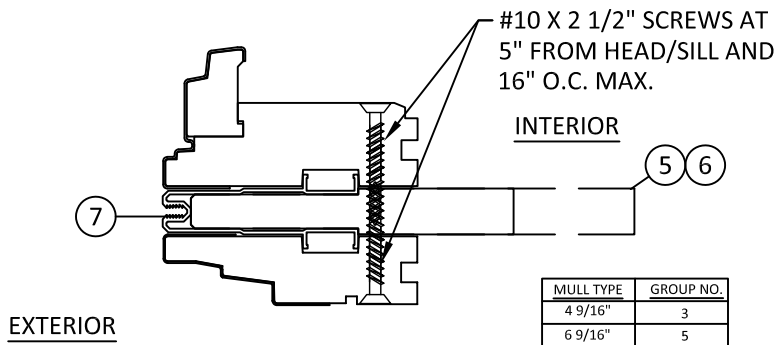
NOTE:
1- TYPICAL ANDERSEN FRAME MEMBERS FOR DOORS, TRANSOMS AND SIDELITES UNDER SEPARATE APPROVAL.
2- 4 9/16" & 6 9/16" MULLIONS CAN BE USED WITH ALL F.B.C. APPROVED IMPACT AND NON-IMPACT RESISTANT PRODUCTS.



MULL TYPE	GROUP NO.
4 9/16"	3
6 9/16"	5

E
3 CASEMENT PICTURE WDW TO AWNING
VERTICAL MULL

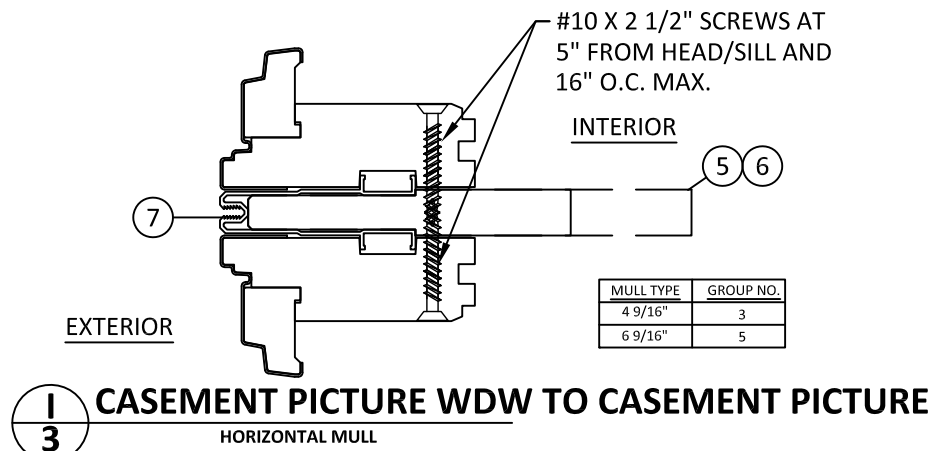
F
3 CASEMENT PICTURE WDW TO CASEMENT
HORIZONTAL MULL



MULL TYPE	GROUP NO.
4 9/16"	3
6 9/16"	5

G
3 CASEMENT PICTURE WDW TO AWNING
HORIZONTAL MULL

H
3 CASEMENT PICTURE WDW TO CASEMENT
VERTICAL MULL



MULL TYPE	GROUP NO.
4 9/16"	3
6 9/16"	5

I
3 CASEMENT PICTURE WDW TO CASEMENT PICTURE
HORIZONTAL MULL



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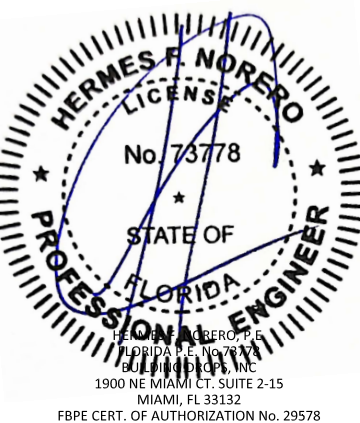
MULLION ASSEMBLY SECTIONS 2

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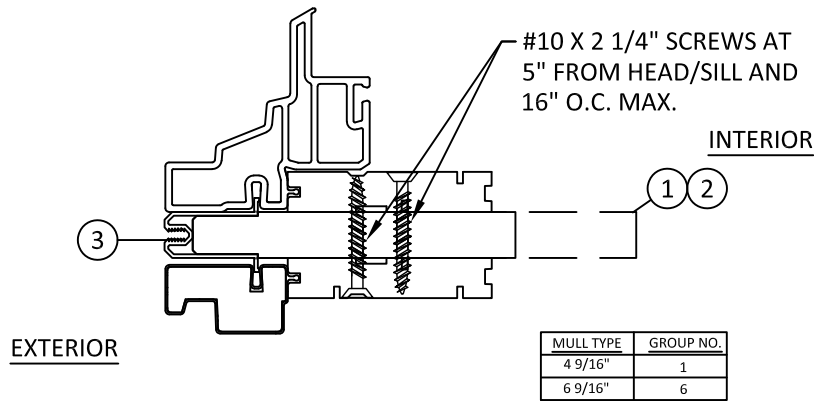


REMARKS	BY	DATE
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FL #:		FL15922	
DATE:		10.17.17	
DWG. BY:		CHK. BY:	
RV		HFN	
SCALE:		NTS	
DWG. #:		AWD233	
SHEET:		3	
		OF 13	



A
4 **400 TW TO TW TRANSOM**
HORIZONTAL MULL

NOTE:
1- TYPICAL ANDERSEN FRAME MEMBERS FOR DOORS, TRANSOMS AND SIDELITES UNDER SEPARATE APPROVAL.
2- 4" HORIZONTAL MULLIONS CAN BE USED WITH ALL F.B.C. APPROVED IMPACT AND NON-IMPACT RESISTANT PRODUCTS.

GROUP #	COMBINED MOMENT OF INERTIA, 'I' IN^4	SECTION MODULUS 'Sx' IN^3
1	12.7400	5.07
2	15.1800	6.41
3	16.1800	7.90
4	16.1800	8.62
5	29.5900	9.50
6	29.5900	10.49
7	29.5900	10.58
8	29.5900	11.37
9	29.5900	12.46

PRODUCT ABBREVIATION KEY	
ABBREVIATION	PRODUCT NAME
TWDH =	400 Series Tilt Wash double Hung
PSNL =	400 Series Perma Sheild Narrow Line
WDW =	400 Series
TW =	400 Series Tilt Wash
FW =	400 Series French Wood
FWH =	400 Series French Wood
FWO =	400 Series French Wood



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SERIES 400 LVL MULLION SYSTEM
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MULLION ASSEMBLY SECTIONS 3

PREPARED BY:
 BUILDING DROPS

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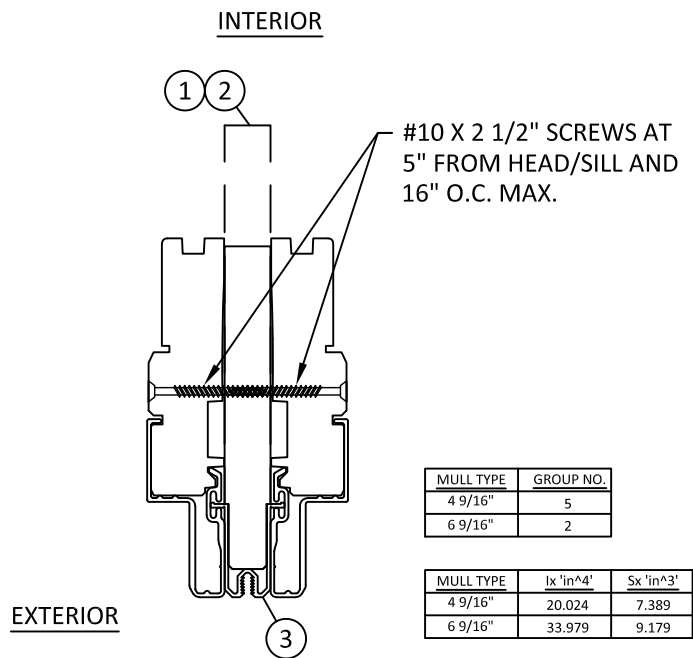
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SCALE: **NTS**

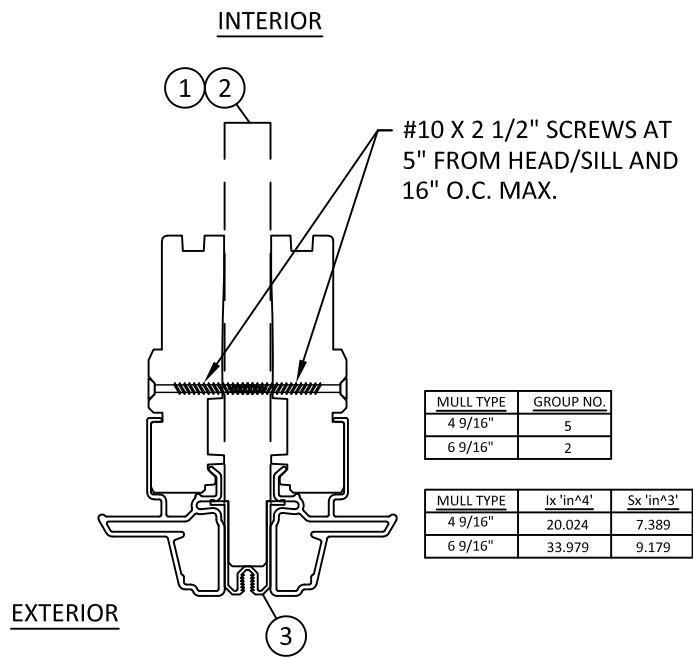
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SHEET:
4

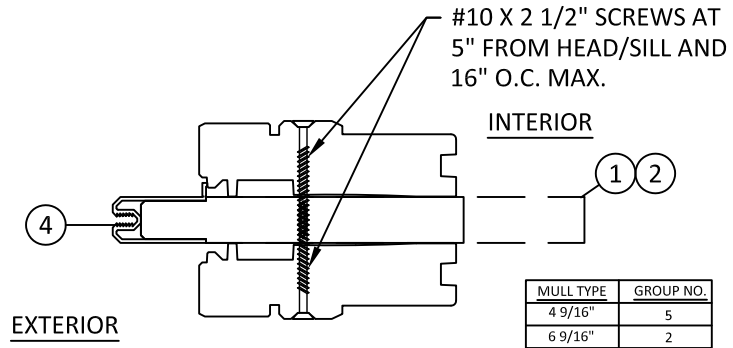


NOTE:
1- 4 9/16" & 6 9/16" VERTICAL MULLIONS CAN BE USED IN ANY COMBINATIONS OF FRAME JAMBS OF OUTSWING/INSWING DOORS, GLIDING DOORS, SIDELITES AND TRANSOMS, SEE SHEET FOR DETAILS

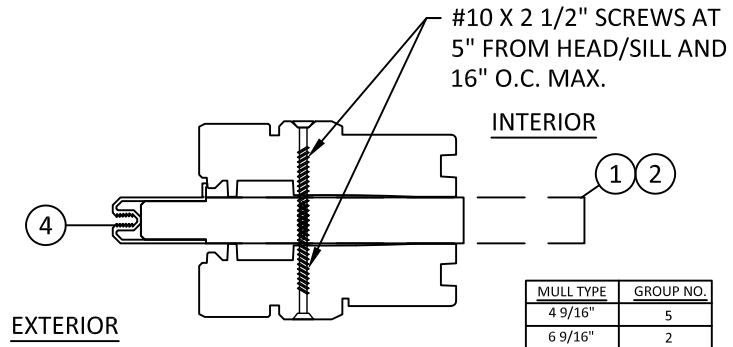
A
5 FWO DOOR TO FWO DOOR
VERTICAL MULL



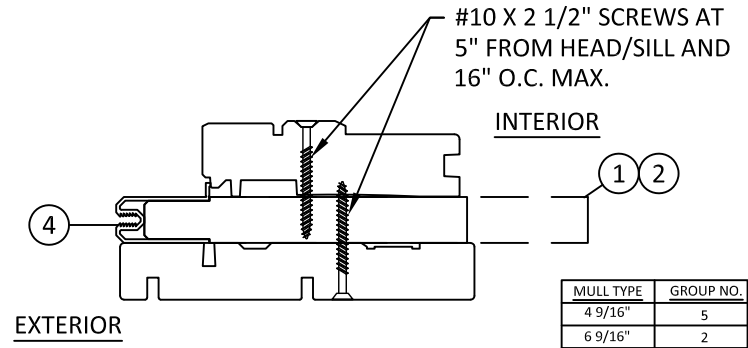
B
5 FWT/FWSL TO FWT/FWSL FRAME
VERTICAL MULL



D
5 FWT/FWSL TO FWT/FWSL FRAME
HORIZONTAL MULL



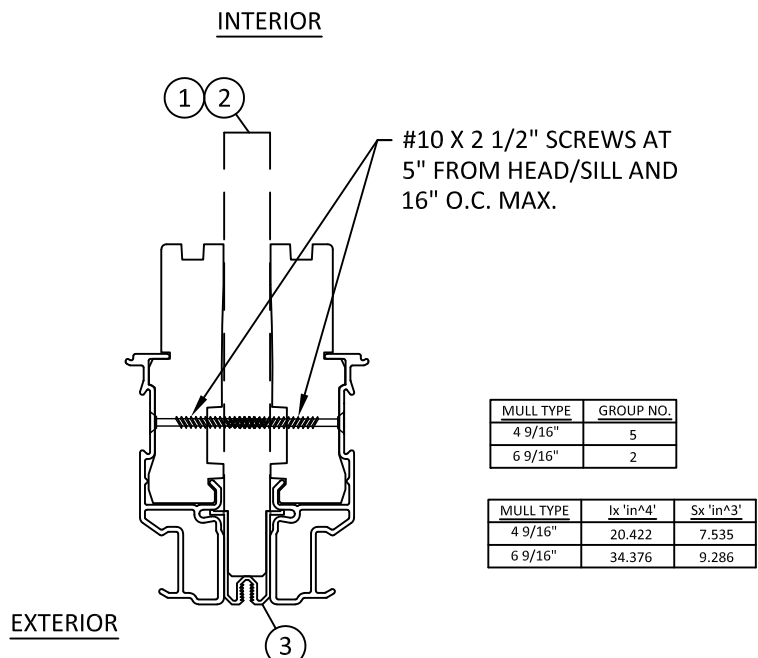
D
5 FWT/FWSL TO FWO FRAME
HORIZONTAL MULL



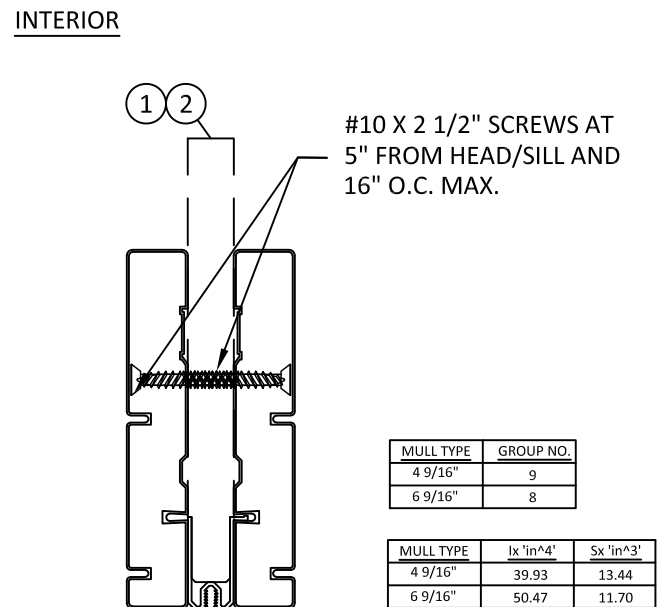
E
5 FWT/FWSL TO FWT/FWSL FRAME
HORIZONTAL MULL

MULL TYPE	Ix 'in^4'	Sx 'in^3'
4 9/16"	20.104	7.418
6 9/16"	34.059	9.200

HEADER



C
5 FWH DOOR TO FWH DOOR
VERTICAL MULL



D
5 FWG DOOR TO FWG DOOR
VERTICAL MULL



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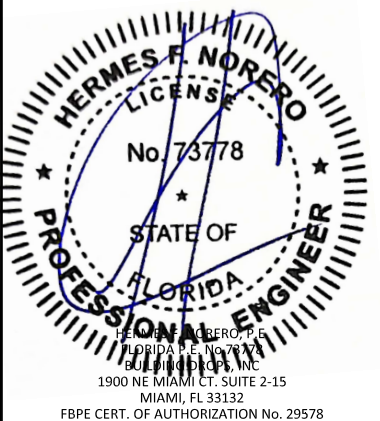
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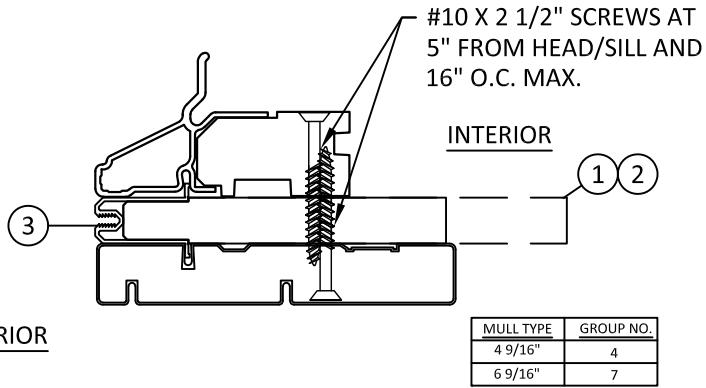


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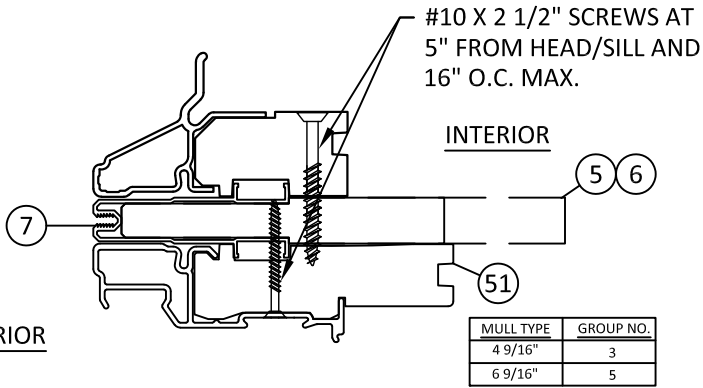
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DWG. BY:	RV
CHK. BY:	HFN
SCALE:	NTS
DWG. #:	AWD233
SHEET:	5



EXTERIOR

MULL TYPE	GROUP NO.
4 9/16"	4
6 9/16"	7

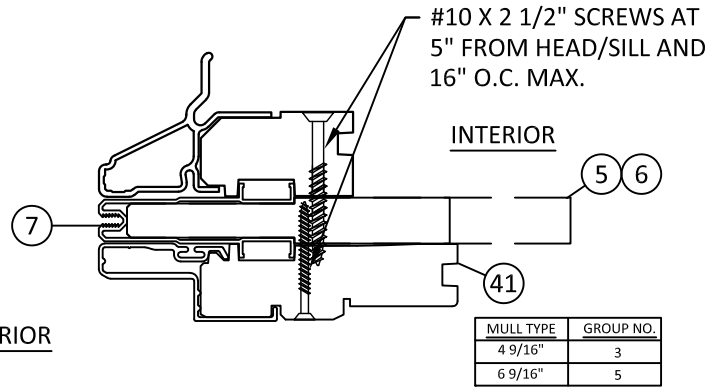
A
6 FLEXIFRAME/ARCH/SPRINGLINE TO FW GLIDING DOOR
HORIZONTAL MULL



EXTERIOR

MULL TYPE	GROUP NO.
4 9/16"	3
6 9/16"	5

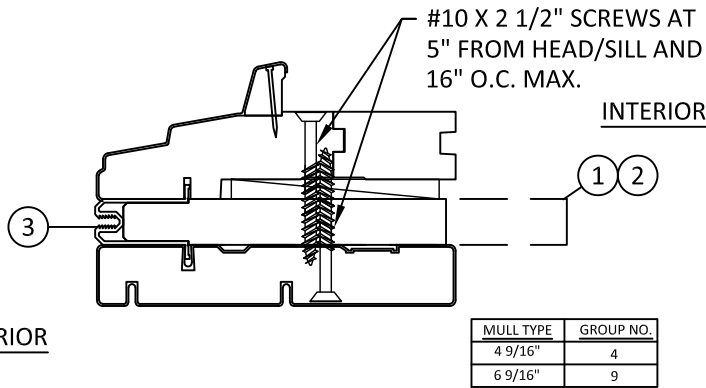
B
6 FLEXIFRAME/ARCH/SPRINGLINE TO FWH DOOR
HORIZONTAL MULL



EXTERIOR

MULL TYPE	GROUP NO.
4 9/16"	3
6 9/16"	5

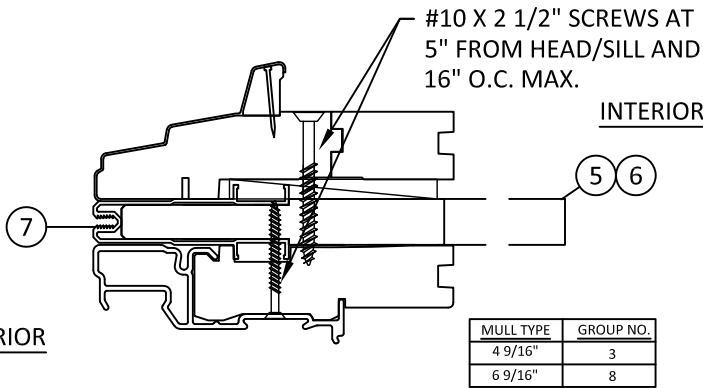
C
6 FLEXIFRAME/ARCH/SPRINGLINE TO FWO DOOR
HORIZONTAL MULL



EXTERIOR

MULL TYPE	GROUP NO.
4 9/16"	4
6 9/16"	9

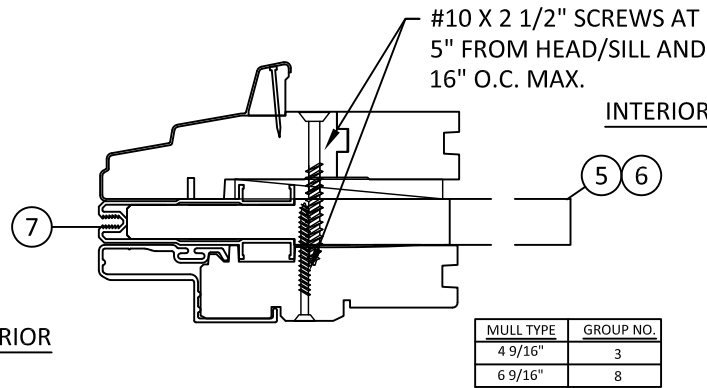
D
6 ELLIPTICAL (ET) TO FW GLIDING DOOR
HORIZONTAL MULL



EXTERIOR

MULL TYPE	GROUP NO.
4 9/16"	3
6 9/16"	8

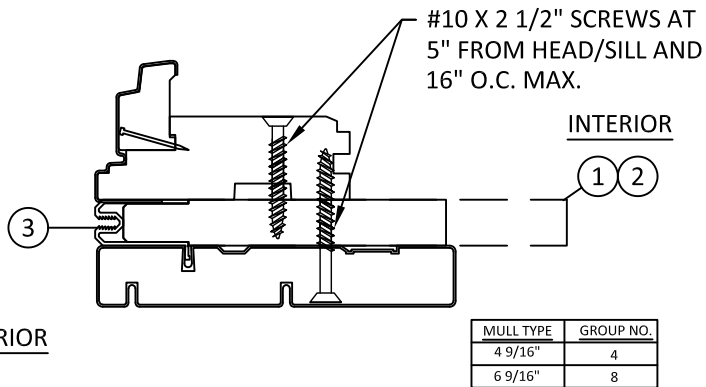
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6 ELLIPTICAL (ET) TO FWH DOOR
HORIZONTAL MULL



EXTERIOR

MULL TYPE	GROUP NO.
4 9/16"	3
6 9/16"	8

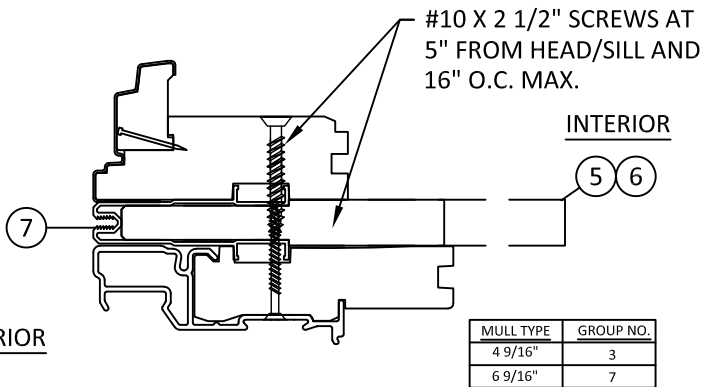
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6 ELLIPTICAL (ET) TO FWO DOOR
HORIZONTAL MULL



EXTERIOR

MULL TYPE	GROUP NO.
4 9/16"	4
6 9/16"	8

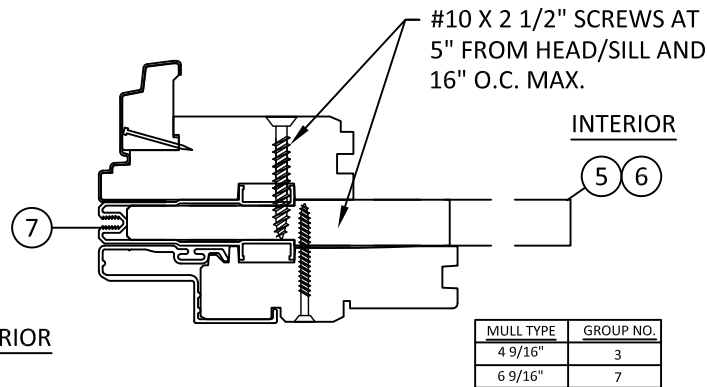
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6 PSCA PICTURE WDW TO FW GLIDING DOOR
HORIZONTAL MULL



EXTERIOR

MULL TYPE	GROUP NO.
4 9/16"	3
6 9/16"	7

H
6 PSCA PICTURE WDW TO FWH DOOR
HORIZONTAL MULL



EXTERIOR

MULL TYPE	GROUP NO.
4 9/16"	3
6 9/16"	7

I
6 PSCA PICTURE WDW TO FWO DOOR
HORIZONTAL MULL



100 FOURTH AVE NORTH
BAYPORT, MN 55003-1096
PH: (651) 264-5150 FX: (651) 264-5485

TITLE:
SERIES 400 LVL MULLION SYSTEM
(HVHZ)/(IMPACT)

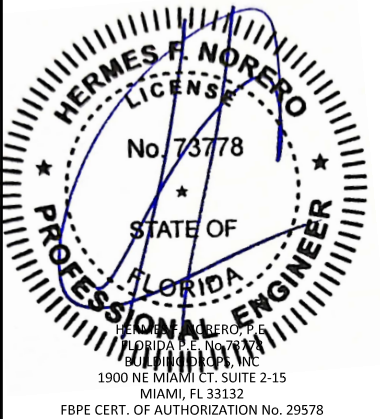
MULLION ASSEMBLY SECTIONS 5

PREPARED BY:
BUILDING DROPS, INC.
1900 NE MIAMI CT, SUITE 2-15
MIAMI, FL 33132
PH: (954)399-8478
FAX: (954)744-4738
WEB: www.buildingdrops.com

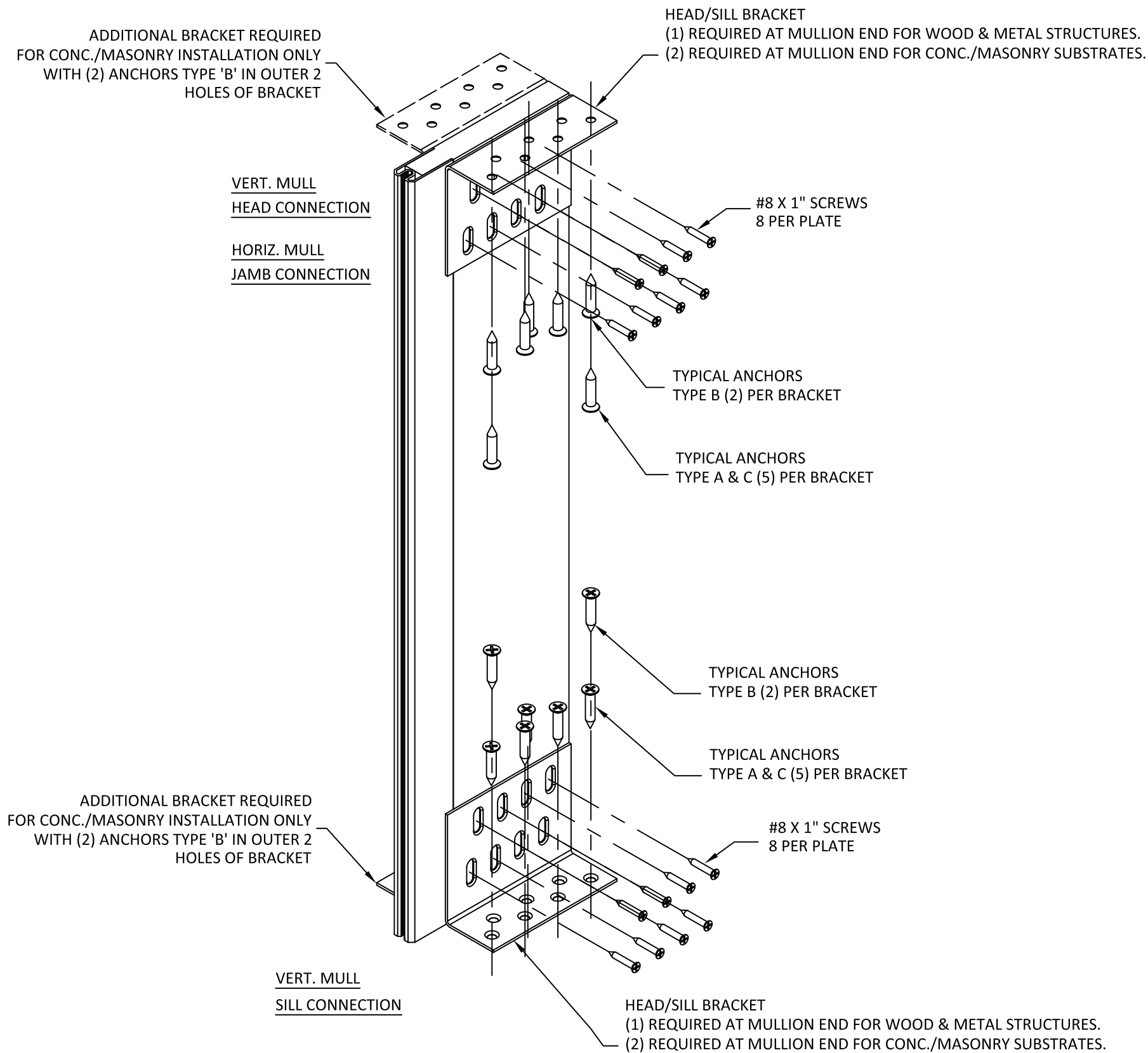


REMARKS	BY	DATE
6TH FBC CODE CHANGE	RV	10/17
7TH CODE CHANGE	YC	10/20
2023 CODE CHANGE	MS	10/19/23

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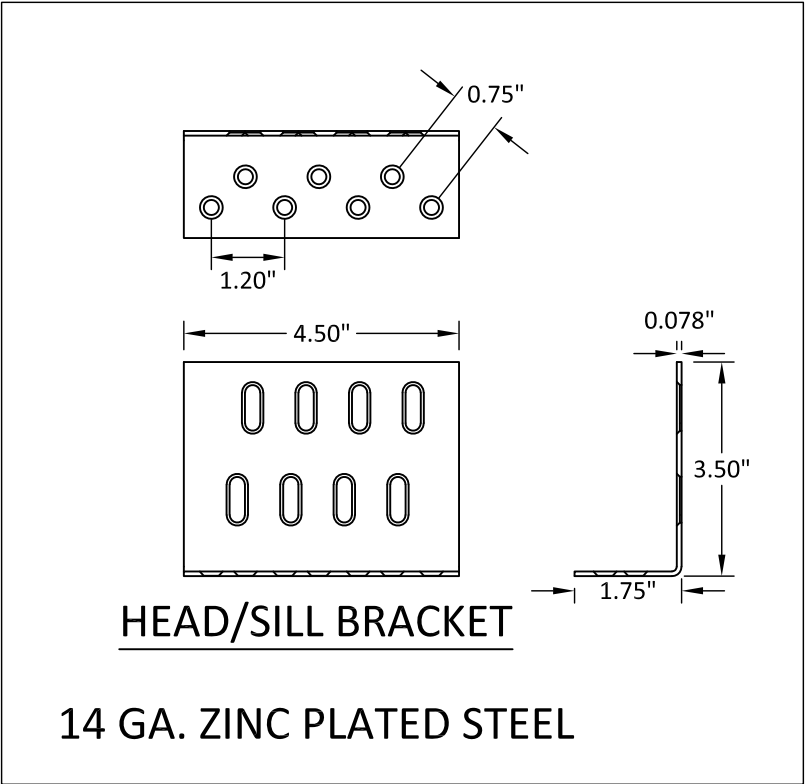


FL #:	FL15922
DATE:	10.17.17
DWG. BY:	RV
CHK. BY:	HFN
SCALE:	NTS
DWG. #:	AWD233
SHEET:	



A
7

VERTICAL MULLION
4 9/16" & 6 9/16" MULLION CONNECTION DETAIL



- TYPE 'A'- #14 WOOD SCREW
INTO 2X WOOD BUCKS OR WOOD STRUCTURES
1 1/2" MIN. PENETRATION INTO WOOD.
(OR)
1/4" DIA. ULTRACON BY 'ELCO' (Fu=177 KSI, Fy=155 KSI)
INTO 2X WOOD BUCKS OR WOOD STRUCTURES
1 1/2" MIN. PENETRATION INTO WOOD
- TYPE 'B'- 1/4" DIA. ULTRACON BY 'ELCO' (Fu=177 KSI, Fy=155 KSI)
DIRECTLY INTO CONCRETE OR MASONRY
1-3/4" MIN. EMBED INTO CONCRETE
1-1/4" MIN. EMBED INTO MASONRY
- TYPE 'C'- #12 SMS OR SELF DRILLING SCREWS (GRADE 2 CRS)
INTO METAL STRUCTURES
STEEL : 12 GA. MIN. (Fy = 36 KSI MIN.)
ALUMINUM : 1/8" THK. MIN. (6063-T5 MIN.)
(STEEL IN CONTACT WITH ALUMINUM TO BE PLATED OR PAINTED)
- TYPICAL EDGE DISTANCE
INTO CONCRETE = 2" MIN.
INTO MASONRY = 2" MIN.
INTO WOOD STRUCTURE = 1" MIN.
INTO METAL STRUCTURE = 3/4" MIN.
- ANCHORS CL TO CL DISTANCES
INTO CONCRETE AND MASONRY = 3" MIN.
INTO WOOD STRUCTURE = 3/4" MIN.
INTO METAL STRUCTURE = 3/4" MIN.
- CONCRETE AT HEAD, SILL OR JAMBS f'c = 3000 PSI MIN.
C-90 HOLLOW/FILLED BLOCK AT JAMBS f'm = 2000 PSI MIN.

100 FOURTH AVE NORTH
BAYPORT, MN 55003-1096
PH: (651) 264-5150 FX: (651) 264-5485

TITLE: **SERIES 400 LVL MULLION SYSTEM (HVHZ)/(IMPACT)**

MULLION CONNECTION DETAIL

PREPARED BY: **BUILDING DROPS, INC.**
1900 NE MIAMI CT. SUITE 2-15
MIAMI, FL 33132
PH: (954)399-8478
FAX: (954)744-4738
WEB: www.buildingdrops.com

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HERMES F. NORERO
LICENSE
No. 73778
STATE OF FLORIDA
PROFESSIONAL ENGINEER
HERMES F. NORERO, P.E.
FLORIDA P.E. No. 73778
BUILDING DROPS, INC.
1900 NE MIAMI CT. SUITE 2-15
MIAMI, FL 33132
FBPE CERT. OF AUTHORIZATION No. 29578

FL #:

FL15922

DATE: **10.17.17**

DWG. BY: **RV** CHK. BY: **HFN**

SCALE: **NTS**

DWG. #: **AWD233**

SHEET:

7

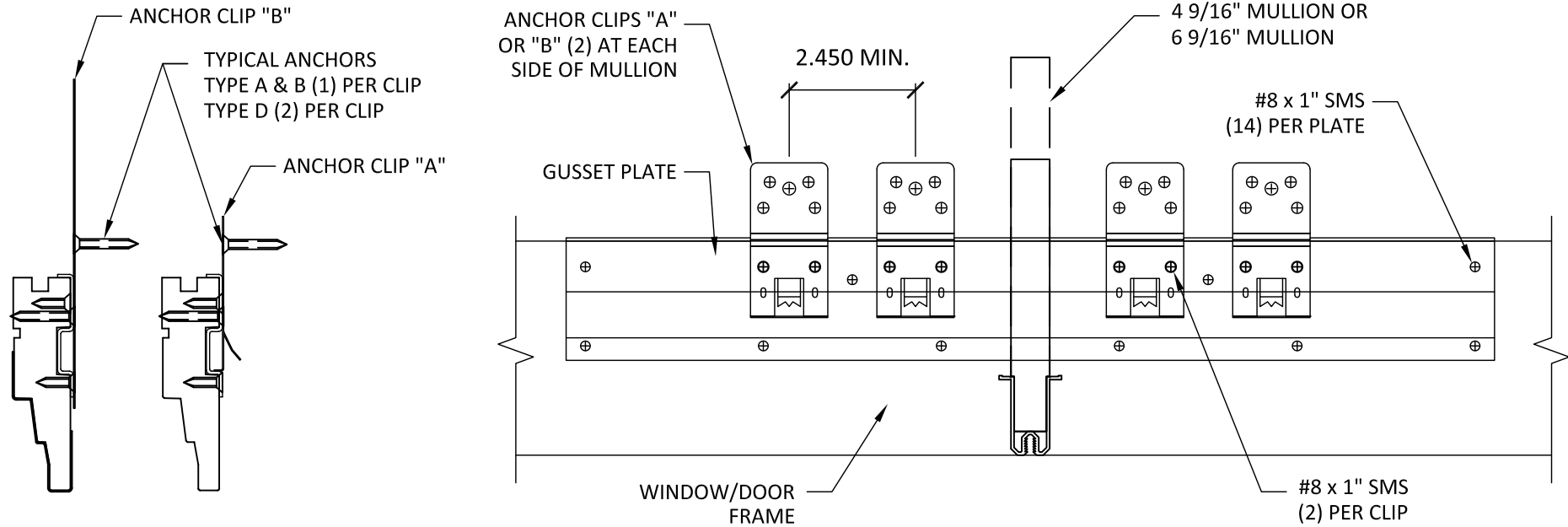
OF 13

TYPICAL ANCHORS:

- TYPE 'A'- #14 WOOD SCREW
INTO 2X WOOD BUCKS OR WOOD STRUCTURES
1 1/2" MIN. PENETRATION INTO WOOD.
(OR)
1/4" DIA. ULTRACON BY 'ELCO' (Fu=177 KSI, Fy=155 KSI)
INTO 2X WOOD BUCKS OR WOOD STRUCTURES
1 1/2" MIN. PENETRATION INTO WOOD
- TYPE 'B'- 1/4" DIA. ULTRACON BY 'ELCO' (Fu=177 KSI, Fy=155 KSI)
THRU 1BY BUCKS INTO CONC. OR MASONRY
1-1/4" MIN. EMBED INTO CONCRETE OR MASONRY
DIRECTLY INTO CONCRETE OR MASONRY
1-1/4" MIN. EMBED INTO CONCRETE OR MASONRY
- TYPE 'D'- #8 SMS OR SELF DRILLING SCREWS (GRADE 2 CRS)
INTO METAL STRUCTURES
STEEL : 12 GA. MIN. (Fy = 36 KSI MIN.)
ALUMINUM : 1/8" THK. MIN. (6063-T5 MIN.)
(STEEL IN CONTACT WITH ALUMINUM TO BE PLATED OR PAINTED)

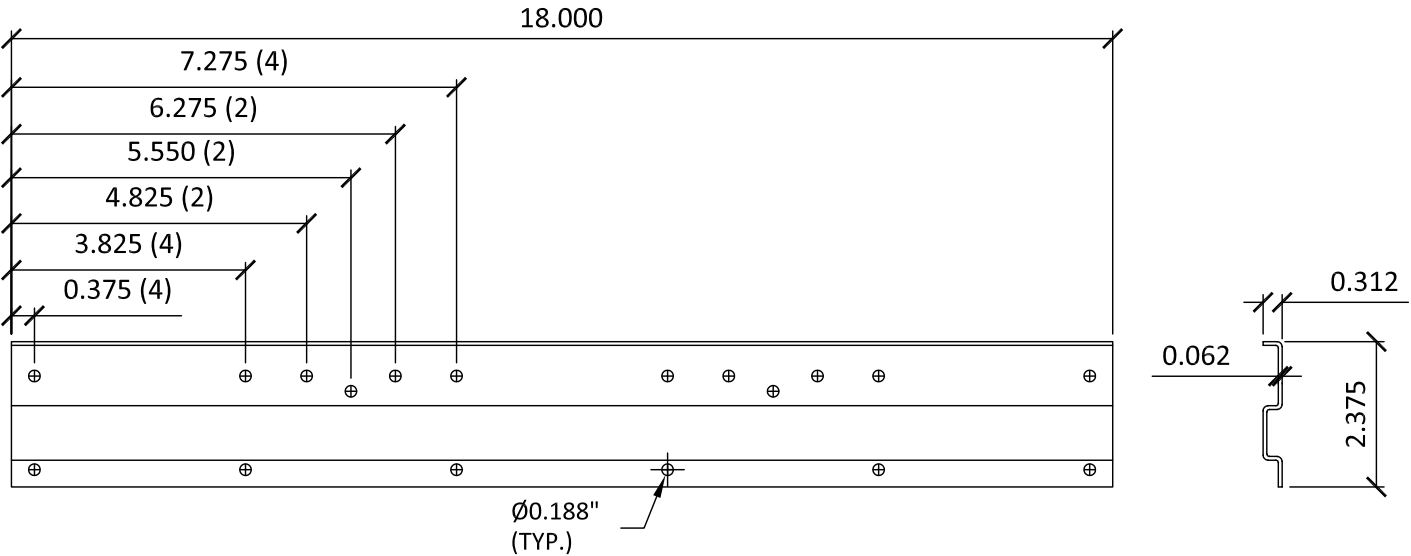
TYPICAL EDGE DISTANCE
INTO CONCRETE AND MASONRY= 1-1/4" MIN.
INTO WOOD STRUCTURE = 1" MIN.
INTO METAL STRUCTURE = 3/4" MIN.

ANCHORS CL TO CL DISTANCES
INTO CONCRETE AND MASONRY = 3" MIN.
INTO WOOD STRUCTURE = 3/4" MIN.
INTO METAL STRUCTURE = 3/4" MIN.
CONCRETE AT HEAD, SILL OR JAMBS f'c = 3000 PSI MIN.
C-90 HOLLOW/FILLED BLOCK AT JAMBS f'm= 2000 PSI MIN.

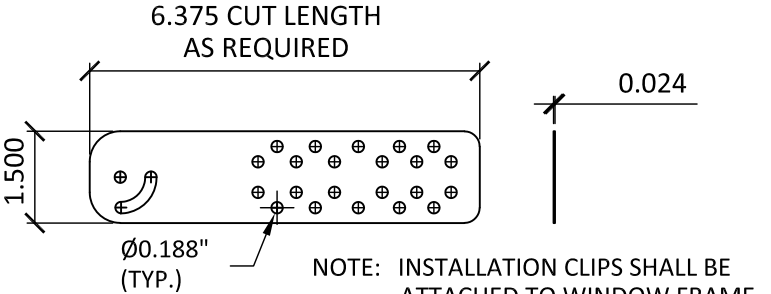


GUSSET PLATE FASTENED TO HEAD OR SILL OF TWO ADJACENT DOOR/WINDOW FRAMES. ANCHOR CLIPS ATTACHED TO GUSSET PLATES AS SHOWN ABOVE. SEE SHEET FOR ILLUSTRATION.

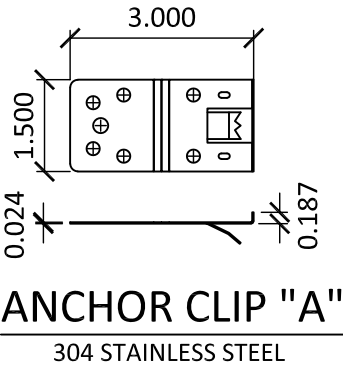
4 9/16" & 6 9/16" MULLION
CONNECTION DETAIL WITH GUSSET
PLATE



GUSSET PLATE
16 GA GALV. G60 STEEL



ANCHOR CLIP "B"
304 STAINLESS STEEL



100 FOURTH AVE NORTH
BAYPORT, MN 55003-1096
PH: (651) 264-5150 FX: (651) 264-5485

TITLE:
SERIES 400 LVL MULLION SYSTEM
(HVHZ)(IMPACT)

MULLION CONNECTION DETAIL
WITH GUSSET PLATE

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1900 NE MIAMI CT, SUITE 2-15
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PH: (954)399-8478
FAX: (954)744-4738
WEB: www.buildingdrops.com

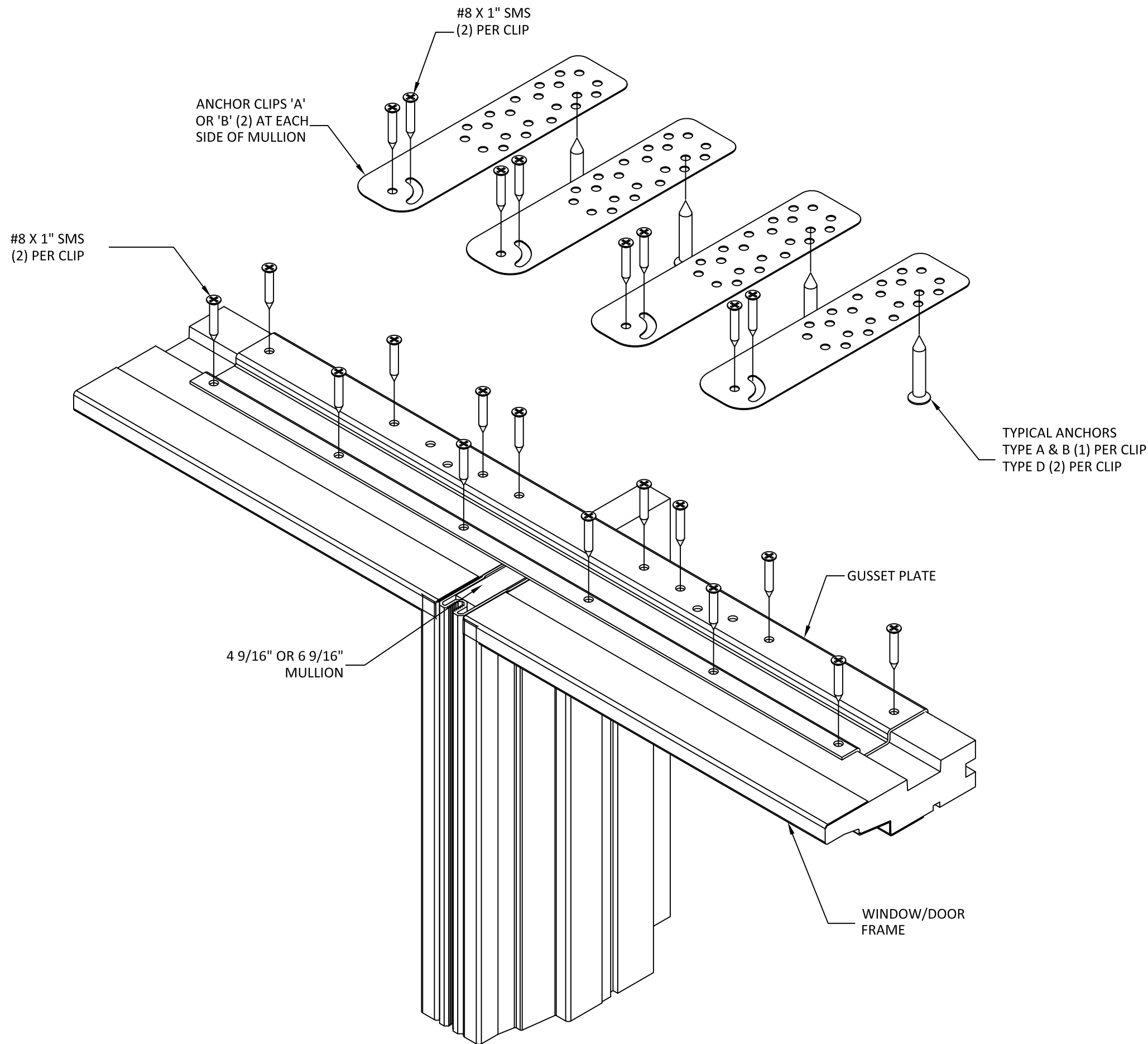
BUILDING DROPS

REMARKS	BY	DATE
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2023 CODE CHANGE	MS	10/19/23

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DWG. BY:	RV	CHK. BY:	HFN
SCALE:		NTS	
DWG. #:		AWD233	
SHEET:			



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BAYPORT, MN 55003-1096
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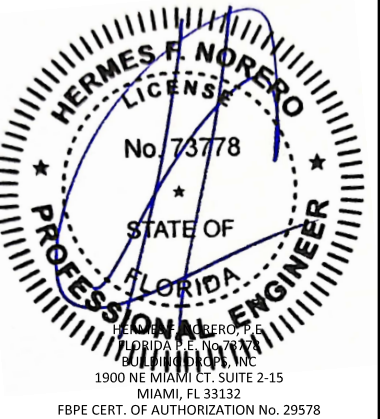
TITLE:
SERIES 400 LVL MULLION SYSTEM
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MULLION ASSEMBLY

PREPARED BY:
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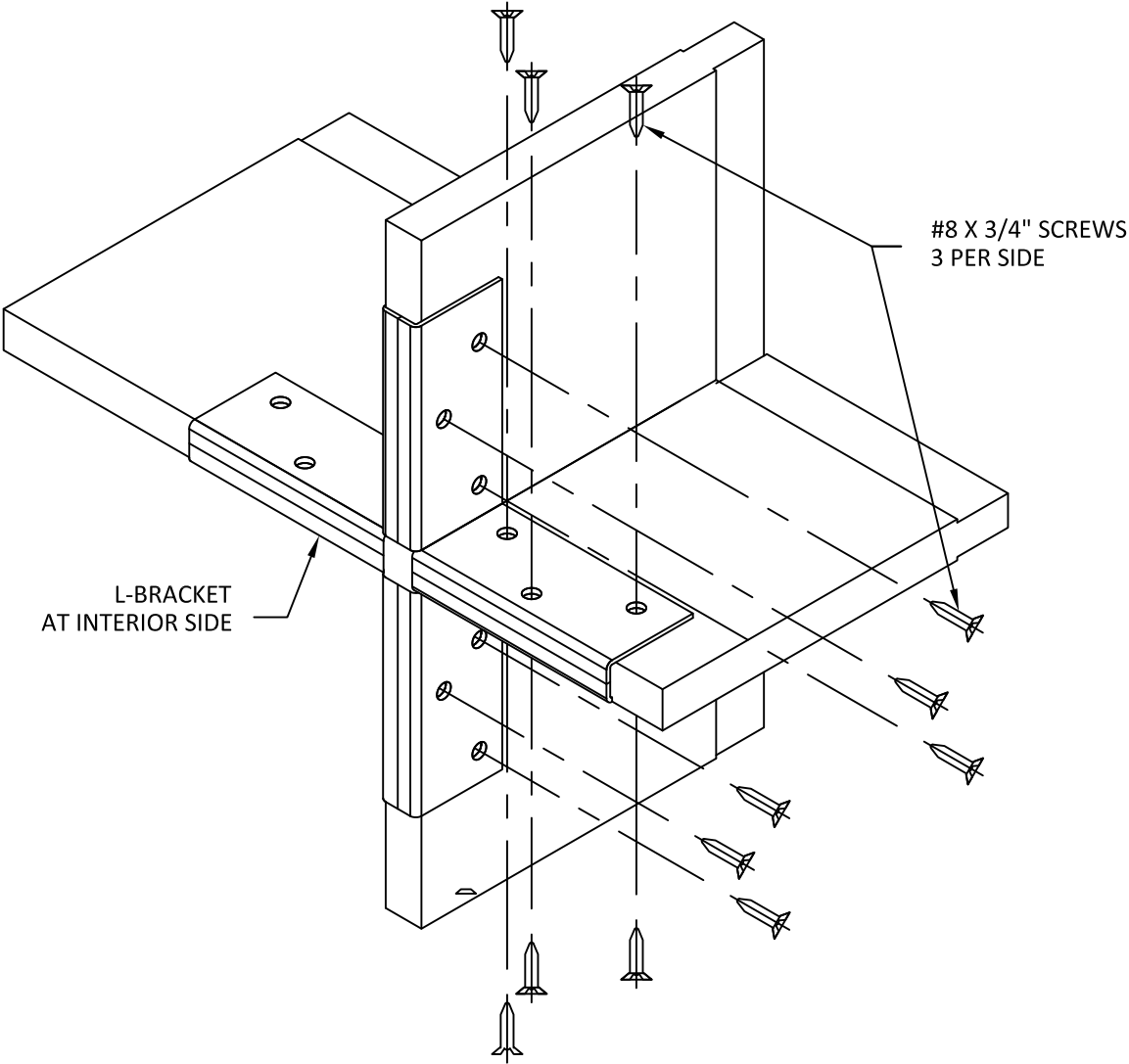
DATE: **10.17.17**

DWG. BY: **RV**CHK. BY: **HFN**

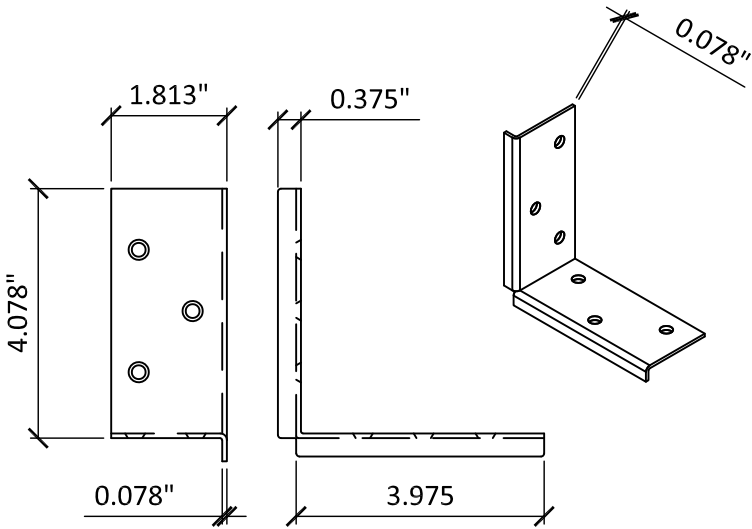
SCALE: **NTS**

DWG. #: **AWD233**

SHEET:
9



A
10 **CONNECTION DETAIL**
VERTICAL MULLION CONNECTION
TO HORIZONTAL MULLION



B
10 **L BRACKET**
MULLION CONNECTION



100 FOURTH AVE NORTH
BAYPORT, MN 55003-1096
PH: (651) 264-5150 FX: (651) 264-5485

TITLE:
SERIES 400 LVL MULLION SYSTEM
(HVHZ)/(IMPACT)

VERTICAL MULLION CONNECTION
TO HORIZONTAL MULLION

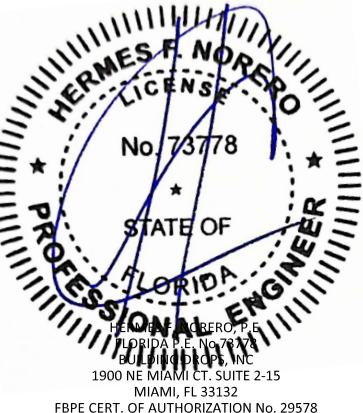
PREPARED BY:
BUILDING DROPS, INC.

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DWG. BY: RV	CHK. BY: HFN
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SCALE: **NTS**

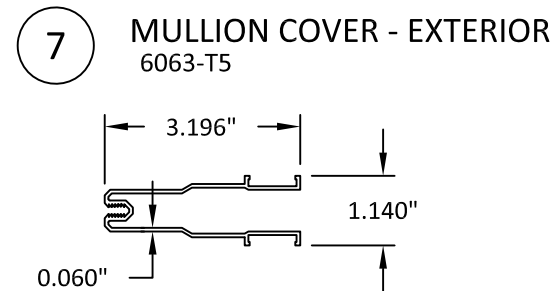
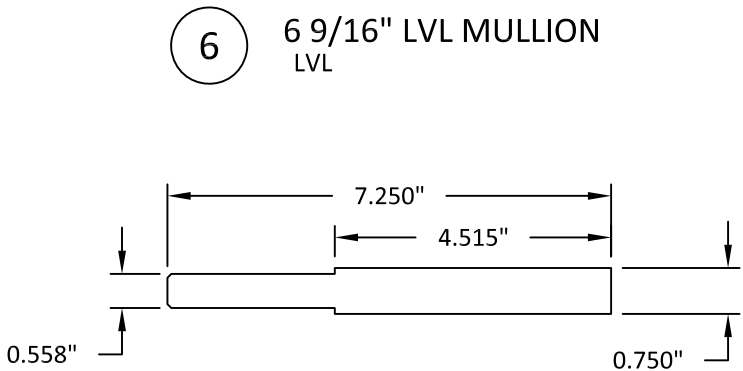
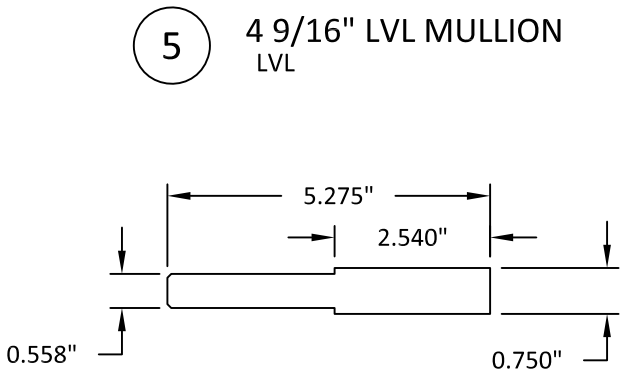
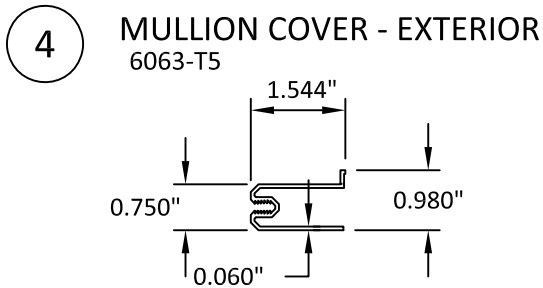
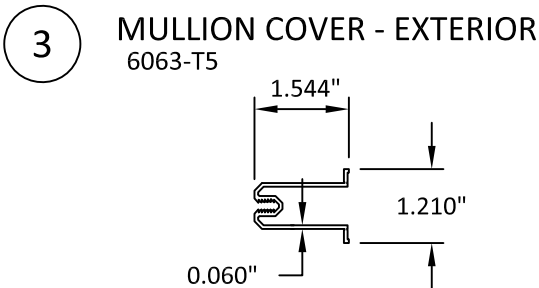
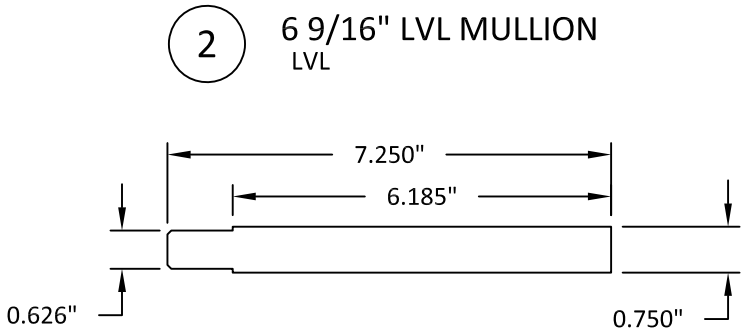
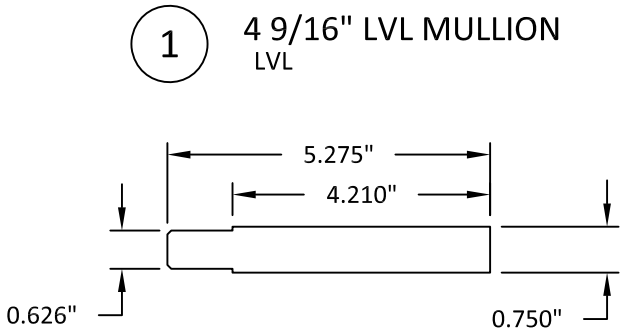
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SHEET:
10

10/19/2023 5:08 PM

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BILL OF MATERIALS		
ITEM	DESCRIPTION	MATERIAL
1	4 9/16" LVL MULLION	LVL
2	6 9/16" LVL MULLION	LVL
3	MULLION COVER - EXTERIOR	6063-T5
4	MULLION COVER - EXTERIOR	6063-T5
5	4 9/16" LVL MULLION	LVL
6	6 9/16" LVL MULLION	LVL
7	MULLION COVER - EXTERIOR	6063-T5



LAMINATED VENEERED LUMBER (LVL)

FB = 2.6 KSI BENDING.

FC = 2.51 KSI COMPRESSION.

MINIMUM FV=190 LBS TO MAXIMUM FV=275 LBS LATERAL FORCES.

E = 1,100 KSI.

SPECIFIC GRAVITY MINIMUM SG=0.40 TO MAXIMUM SG=0.56.

NOTCHES, COPIES AND HOLES IN WOOD MEMBERS ARE NOT PERMITTED UNLESS SPECIFICALLY DETAILED.
NOTCHES, COPIES AND HOLES IN PRE-ENGINEERED MEMBERS SHALL BE IN ACCORDANCE AND APPROVAL
BY THE MANUFACTURER.

LUMBER MOISTURE CONTENT SHALL BE LESS THAN 19%.

ALL LUMBER SHALL HAVE A GRADE STAMP FOR VISUAL INSPECTION IN THE FIELD PER NDS.

MAXIMUM ALLOWABLE DEFLECTION L/180, MODULES OF ELASTICITY (E) TO MODULUS OF

RIGIDITY RATIO (G) E/G = 16, RATION OF LAMINATION THICKNESS TO RADIUS OF

CURVATURE OF CC = 1/100, FLAT USE FACTOR CFU PER NDS 2012.

LAMINATED VENEERED LUMBER (LVL) MULLION SYTEM

TO MEET ALL REQUIREMENT OF

A. ANSI/AITC A190.1-2012 STRUCTURAL GLUED LAMINATED TIMBER.

B. ANSI 119-2010 STANDARD SPECIFICATION STRUCTURAL GLUED LAMINATED TIMBER.

C. ANSI/AITC A117-04 STRUCTURAL GLULAM TIMBER.

D. ANSI/APA/AWC/NDS 2012 INCLUDING APPENDIXES G & H, COMMENTARY C5 STRUCTURAL GLUED
LAMINATED TIMBER.



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TITLE:
SERIES 400 LVL MULLION SYSTEM
(HVHZ)/(IMPACT)

BILL OF MATERIALS, COMPONENTS
AND LAMINATED VENEERED
LUMBER NOTES

PREPARED BY:

BUILDING DROPS, INC.

1900 NE MIAMI CT, SUITE 2-15

MIAMI, FL 33132

PH: (954)399-8478

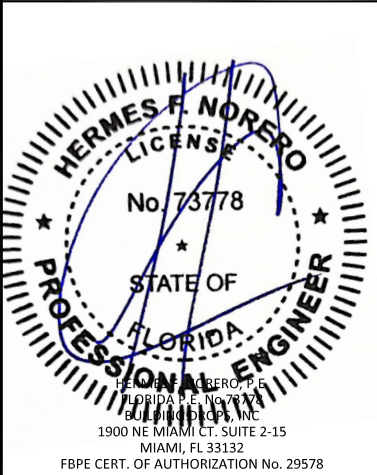
FAX: (954)744-4738

WEB: www.buildingdrops.com



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DWG. BY:

RV

CHK. BY:

HFN

SCALE: NTS

DWG. #: AWD233

SHEET:

11

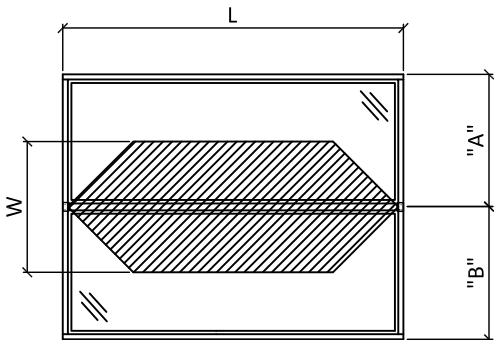
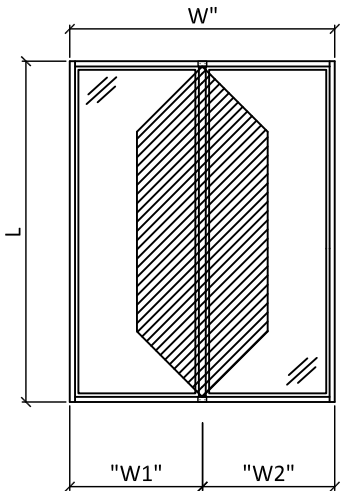
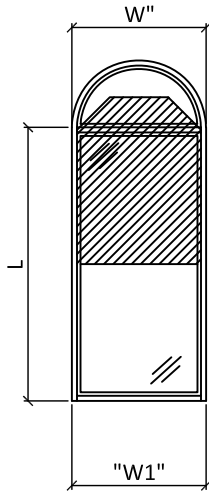
OF 13

ONE WAY MULLION CAPACITY CHARTS

DESIGN LOAD CAPACITY - PSF 4-9/16" MULLIONS					
WINDOW DIMS.		WITHOUT INTERMEDIATE HORIZONTALS			
WIDTH (W) (INCHES)	MULL SPAN	GROUP #1	GROUP #2	GROUP #3	GROUP #4
30.0	48.0	70.0	70.0	70.0	70.0
36.0		70.0	70.0	70.0	70.0
42.0		70.0	70.0	70.0	70.0
48.0		70.0	70.0	70.0	70.0
51.4		70.0	70.0	70.0	70.0
54.0		70.0	70.0	70.0	70.0
60.0		70.0	70.0	70.0	70.0
66.0		70.0	70.0	70.0	70.0
72.0		70.0	70.0	70.0	70.0
30.0		70.0	70.0	70.0	70.0
36.0	54.0	70.0	70.0	70.0	70.0
42.0		70.0	70.0	70.0	70.0
48.0		70.0	70.0	70.0	70.0
51.4		70.0	70.0	70.0	70.0
54.0		70.0	70.0	70.0	70.0
60.0		70.0	70.0	70.0	70.0
66.0		70.0	70.0	70.0	70.0
72.0		70.0	70.0	70.0	70.0
30.0		70.0	70.0	70.0	70.0
36.0		70.0	70.0	70.0	70.0
42.0	60.0	70.0	70.0	70.0	70.0
48.0		70.0	70.0	70.0	70.0
51.4		68.1	70.0	70.0	70.0
54.0		67.1	70.0	70.0	70.0
60.0		66.1	70.0	70.0	70.0
66.0		66.1	70.0	70.0	70.0
72.0		66.1	70.0	70.0	70.0
30.0		70.0	70.0	70.0	70.0
36.0		67.4	70.0	70.0	70.0
42.0		60.1	68.4	70.0	70.0
48.0	66.0	55.3	62.8	64.7	69.2
51.4		53.3	60.6	62.4	66.7
54.0		52.1	59.2	61.0	65.2
60.0		50.3	57.2	58.9	63.0
30.0		65.0	70.0	70.0	70.0
36.0		55.6	63.3	65.1	69.6
42.0		49.3	56.1	57.7	61.7
48.0		44.9	51.1	52.6	56.2
51.4		43.0	48.9	50.4	53.9
54.0		41.8	47.6	49.0	52.4
60.0	72.0	39.8	45.3	46.6	49.9
30.0		54.9	62.4	64.2	68.7
36.0		46.8	53.2	54.8	58.6
42.0		41.2	46.9	48.3	51.6
48.0		37.3	42.4	43.7	46.7
51.4		35.6	40.5	41.7	44.6
54.0		34.5	39.2	40.4	43.2
30.0		47.0	53.4	55.0	58.8
36.0		39.9	45.4	46.7	50.0
42.0		35.0	39.8	41.0	43.9
48.0	84.0	31.5	35.9	36.9	39.5
51.4		30.0	34.1	35.1	37.5

DESIGN LOAD CAPACITY - PSF 6-9/16" MULLIONS						
WINDOW DIMS.		WITHOUT INTERMEDIATE HORIZONTALS				
WIDTH (W) (INCHES)	MULL SPAN	GROUP #5	GROUP #6	GROUP #7	GROUP #8	GROUP #9
24.0	60.0	70.0	70.0	70.0	70.0	70.0
30.0		70.0	70.0	70.0	70.0	70.0
36.0		70.0	70.0	70.0	70.0	70.0
40.0		70.0	70.0	70.0	70.0	70.0
42.0		70.0	70.0	70.0	70.0	70.0
48.0		70.0	70.0	70.0	70.0	70.0
54.0		70.0	70.0	70.0	70.0	70.0
60.0		70.0	70.0	70.0	70.0	70.0
66.0		70.0	70.0	70.0	70.0	70.0
72.0		70.0	70.0	70.0	70.0	70.0
24.0	66.0	70.0	70.0	70.0	70.0	70.0
30.0		70.0	70.0	70.0	70.0	70.0
36.0		70.0	70.0	70.0	70.0	70.0
40.0		70.0	70.0	70.0	70.0	70.0
42.0		70.0	70.0	70.0	70.0	70.0
48.0		70.0	70.0	70.0	70.0	70.0
54.0		70.0	70.0	70.0	70.0	70.0
60.0		70.0	70.0	70.0	70.0	70.0
64.0		70.0	70.0	70.0	70.0	70.0
24.0		72.0	70.0	70.0	70.0	70.0
30.0	70.0		70.0	70.0	70.0	70.0
36.0	70.0		70.0	70.0	70.0	70.0
40.0	70.0		70.0	70.0	70.0	70.0
42.0	70.0		70.0	70.0	70.0	70.0
48.0	70.0		70.0	70.0	70.0	70.0
54.0	70.0		70.0	70.0	70.0	70.0
60.0	68.7		70.0	70.0	70.0	70.0
24.0	78.0	70.0	70.0	70.0	70.0	70.0
30.0		70.0	70.0	70.0	70.0	70.0
36.0		70.0	70.0	70.0	70.0	70.0
40.0		70.0	70.0	70.0	70.0	70.0
42.0		70.0	70.0	70.0	70.0	70.0
48.0		64.3	70.0	70.0	70.0	70.0
54.0		59.4	65.7	66.2	65.7	65.6
24.0	84.0	70.0	70.0	70.0	70.0	70.0
30.0		70.0	70.0	70.0	70.0	70.0
36.0		68.8	70.0	70.0	70.0	70.0
40.0		62.9	69.5	70.0	69.5	69.4
42.0		60.4	66.7	67.3	66.8	66.7
48.0		54.4	60.1	60.6	60.1	60.0
24.0	90.0	70.0	70.0	70.0	70.0	70.0
30.0		70.0	70.0	70.0	70.0	70.0
36.0		59.5	65.7	66.2	65.7	65.7
40.0		54.2	59.9	60.4	59.9	59.9
42.0		52.0	57.5	57.9	57.5	57.4
48.0		46.6	51.5	51.9	51.5	51.5
24.0	96.0	70.0	70.0	70.0	70.0	70.0
30.0		61.4	67.8	68.4	67.8	67.8
36.0		51.9	57.4	57.8	57.4	57.3
40.0		47.3	52.2	52.6	52.2	52.2
42.0		45.3	50.0	50.5	50.1	50.0
48.0		40.5	44.7	45.1	44.7	44.7

DESIGN LOAD CAPACITY - PSF 6-9/16" MULLIONS						
WINDOW DIMS.		WITHOUT INTERMEDIATE HORIZONTALS				
WIDTH (W) (INCHES)	MULL SPAN	GROUP #5	GROUP #6	GROUP #7	GROUP #8	GROUP #9
24.0	102.0	67.0	70.0	70.0	70.0	70.0
30.0		54.2	59.8	60.3	59.9	59.8
36.0		45.7	50.5	50.9	50.5	50.5
40.0		41.6	45.9	46.3	45.9	45.9
42.0		39.8	44.0	44.3	44.0	44.0
24.0	108.0	59.6	65.9	66.4	65.9	65.9
30.0		48.2	53.2	53.6	53.2	53.2
36.0		40.6	44.9	45.2	44.9	44.8
40.0		36.9	40.7	41.1	40.7	40.7
24.0	114.0	53.4	59.0	59.5	59.1	59.0
30.0		43.1	47.6	48.0	47.6	47.6
36.0		36.3	40.1	40.4	40.1	40.1
24.0	120.0	48.2	53.2	53.6	53.2	53.2
30.0		38.8	42.9	43.2	42.9	42.9
36.0		32.7	36.1	36.4	36.1	36.1



W1 + W2 = W
2



100 FOURTH AVE NORTH
BAYPORT, MN 55003-1096
PH: (651) 264-5150 FX: (651) 264-5485

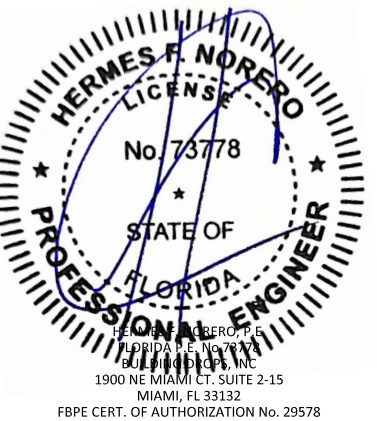
TITLE:
SERIES 400 LVL MULLION SYSTEM
(HVHZ)/(IMPACT)

ONE WAY MULLION CAPACITY CHARTS

PREPARED BY:
BUILDING DROPS, INC.
1900 NE MIAMI CT, SUITE 2-15
MIAMI, FL 33132
PH: (954)399-8478
FAX: (954)744-4738
WEB: www.buildingdrops.com

REMARKS	BY	DATE
6TH FBC CODE CHANGE	RV	10/17
7TH CODE CHANGE	YC	10/20
2023 CODE CHANGE	MS	10/19/23

THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT.



FL #:
FL15922

DATE:
10.17.17

DWG. BY:
RV

CHK. BY:
HFN

SCALE:
NTS

DWG. #:
AWD233

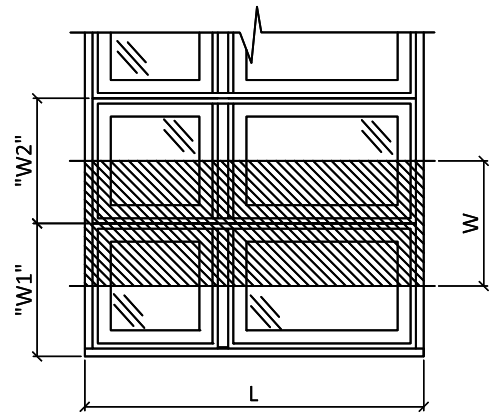
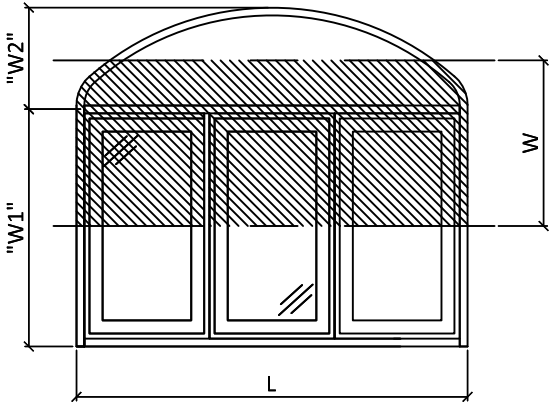
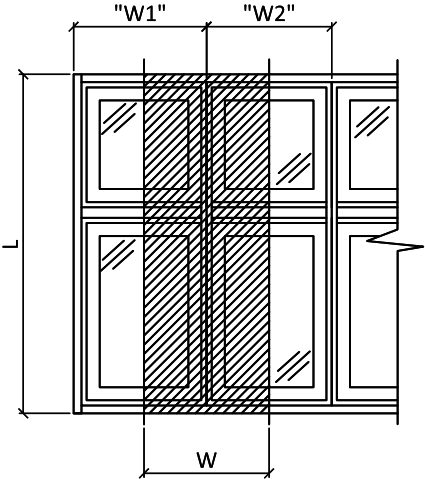
SHEET:

TWO WAY MULLION CAPACITY CHARTS

DESIGN LOAD CAPACITY - PSF 4-9/16" MULLION					
WINDOW DIMS.		WITH INTERMEDIATE HORIZONTALS			
WIDTH (W) (INCHES)	MULL SPAN	GROUP #1	GROUP #2	GROUP #3	GROUP #4
30.0	48"	70.0	70.0	70.0	70.0
36.0		70.0	70.0	70.0	70.0
42.0		70.0	70.0	70.0	70.0
48.0		70.0	70.0	70.0	70.0
51.4		70.0	70.0	70.0	70.0
54.0		70.0	70.0	70.0	70.0
60.0		68.9	70.0	70.0	70.0
66.0		62.6	70.0	70.0	70.0
72.0	54"	57.4	66.8	70.0	66.7
30.0		70.0	70.0	70.0	70.0
36.0		70.0	70.0	70.0	70.0
42.0		70.0	70.0	70.0	70.0
48.0		68.0	70.0	70.0	70.0
51.4		63.5	70.0	70.0	70.0
54.0		60.5	70.0	70.0	70.0
60.0		54.4	63.4	70.0	70.0
66.0	60"	49.5	57.6	70.0	64.8
72.0		45.3	52.8	65.3	59.4
30.0		70.0	70.0	70.0	70.0
36.0		70.0	70.0	70.0	70.0
42.0		63.0	70.0	70.0	70.0
48.0		55.1	64.2	70.0	70.0
51.4		51.5	59.9	70.0	68.8
54.0		49.0	57.0	70.0	65.5
60.0	66"	44.1	51.3	63.5	58.9
66.0		40.1	46.7	57.7	53.6
72.0		36.7	42.8	52.9	49.1
30.0		70.0	70.0	70.0	70.0
36.0		60.7	70.0	70.0	70.0
42.0		52.0	60.6	70.0	70.0
48.0		45.5	53.0	65.5	61.9
51.4		42.5	49.5	61.2	57.8
54.0	72"	40.5	47.1	58.3	55.0
60.0		36.4	42.4	52.4	49.5
30.0		61.2	70.0	70.0	70.0
36.0		51.0	59.4	70.0	70.0
42.0		43.7	50.9	62.9	70.0
48.0		38.3	44.6	55.1	61.9
51.4		35.7	41.6	51.5	57.8
54.0		34.0	39.6	49.0	55.0
60.0	78"	30.6	35.6	44.1	49.5
30.0		52.2	60.7	70.0	70.0
36.0		43.5	50.6	62.6	70.0
42.0		37.3	43.4	53.6	60.3
48.0		32.6	38.0	46.9	52.7
51.4		30.5	35.5	43.8	49.3
54.0		29.0	33.7	41.7	46.9
30.0		45.0	52.4	64.7	70.0
36.0	84"	37.5	43.6	54.0	60.6
42.0		32.1	37.4	46.2	51.9
48.0		28.1	32.7	40.5	45.4
51.4		26.3	30.6	37.8	42.4

DESIGN LOAD CAPACITY - PSF 6-9/16" MULLION							
WINDOW DIMS.		WITH INTERMEDIATE HORIZONTALS					
WIDTH (W) (INCHES)	MULL SPAN	GROUP #5	GROUP #6	GROUP #7	GROUP #8	GROUP #9	
24.0	60"	70.0	70.0	70.0	70.0	70.0	
30.0		70.0	70.0	70.0	70.0	70.0	
36.0		70.0	70.0	70.0	70.0	70.0	
40.0		70.0	70.0	70.0	70.0	70.0	
42.0		70.0	70.0	70.0	70.0	70.0	
48.0		70.0	70.0	70.0	70.0	70.0	
54.0		70.0	70.0	70.0	70.0	70.0	
60.0		70.0	70.0	70.0	70.0	70.0	
66.0		65.5	65.5	65.5	65.5	65.5	
72.0		60.0	-	-	-	-	
24.0	66"	70.0	70.0	70.0	70.0	70.0	
30.0		70.0	70.0	70.0	70.0	70.0	
36.0		70.0	70.0	70.0	70.0	70.0	
40.0		70.0	70.0	70.0	70.0	70.0	
42.0		70.0	70.0	70.0	70.0	70.0	
48.0		70.0	70.0	70.0	70.0	70.0	
54.0		69.8	70.0	65.5	70.0	70.0	
60.0		62.8	65.5	59.5	65.5	65.5	
66.0		-	-	-	-	-	
24.0		72"	70.0	70.0	70.0	70.0	70.0
30.0	70.0		70.0	70.0	70.0	70.0	
36.0	70.0		70.0	70.0	70.0	70.0	
40.0	70.0		70.0	70.0	70.0	70.0	
42.0	70.0		70.0	70.0	70.0	70.0	
48.0	66.0		70.0	70.0	70.0	70.0	
54.0	58.7		64.8	65.3	66.7	66.7	
60.0	52.8		58.3	58.8	-	-	
24.0	78"		70.0	70.0	70.0	70.0	70.0
30.0			70.0	70.0	70.0	70.0	70.0
36.0		70.0	70.0	70.0	70.0	70.0	
40.0		67.5	70.0	70.0	70.0	70.0	
42.0		64.3	70.0	70.0	70.0	70.0	
48.0		56.2	62.1	62.6	69.2	69.2	
54.0		50.0	55.2	55.7	-	-	
24.0	84"	70.0	70.0	70.0	70.0	70.0	
30.0		70.0	70.0	70.0	70.0	70.0	
36.0		64.6	70.0	70.0	70.0	70.0	
40.0		58.2	64.3	64.8	70.0	70.0	
42.0		55.4	61.2	61.7	70.0	70.0	
48.0		48.5	53.6	54.0	63.6	64.3	
24.0		90"	70.0	70.0	70.0	70.0	70.0
30.0	67.6		70.0	70.0	70.0	70.0	
36.0	56.3		62.2	62.7	70.0	70.0	
40.0	50.7		56.0	56.4	66.5	70.0	
42.0	48.3		53.3	53.7	63.3	68.6	
48.0	42.2		46.6	47.0	55.4	60.0	
24.0	96"		70.0	70.0	70.0	70.0	70.0
30.0		59.4	65.6	66.1	70.0	70.0	
36.0		49.5	54.7	55.1	65.0	70.0	
40.0		44.5	49.2	49.6	58.5	64.3	
42.0		42.4	46.9	47.2	55.7	61.2	
45.0		39.6	43.7	44.1	52.0	57.1	

DESIGN LOAD CAPACITY - PSF 6-9/16" MULLION						
WINDOW DIMS.		WITH INTERMEDIATE HORIZONTALS				
WIDTH (W) (INCHES)	MULL SPAN	GROUP #5	GROUP #6	GROUP #7	GROUP #8	GROUP #9
24.0	102"	65.8	70.0	70.0	70.0	70.0
30.0		52.6	58.1	58.6	69.0	70.0
36.0		43.8	48.4	48.8	57.5	61.9
40.0		39.5	43.6	43.9	51.8	55.7
42.0		37.6	41.5	41.8	49.3	53.0
24.0	108"	58.7	64.8	65.3	70.0	70.0
30.0		46.9	51.8	52.3	61.6	62.5
36.0		39.1	43.2	43.5	51.3	52.1
40.0		35.2	38.9	39.2	46.2	46.9
24.0	114	52.6	58.1	58.6	66.5	66.5
30.0		42.1	46.5	46.9	53.2	53.2
36.0		35.1	38.8	39.1	44.3	44.3
24.0	120	47.5	52.5	52.9	57.0	57.0
30.0		38.0	42.0	42.3	45.6	45.6
36.0		31.7	35.0	35.3	38.0	38.0



$$\frac{W1 + W2}{2} = W$$



100 FOURTH AVE NORTH
BAYPORT, MN 55003-1096
PH: (651) 264-5150 FX: (651) 264-5485

TITLE:
SERIES 400 LVL MULLION SYSTEM
(HVHZ)/(IMPACT)

TWO WAY MULLION CAPACITY CHARTS

PREPARED BY:
BUILDING DROPS, INC.
1900 NE MIAMI CT, SUITE 2-15
MIAMI, FL 33132
PH: (954)399-8478
FAX: (954)744-4738
WEB: www.buildingdrops.com

REMARKS	BY	DATE
6TH FBC CODE CHANGE	RV	10/17
7TH CODE CHANGE	YC	10/20
2023 CODE CHANGE	MS	10/19/23

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HERMES F. NORERO, P.E.
FLORIDA P.E. NO. 73778
BUILDING DROPS, INC.
1900 NE MIAMI CT, SUITE 2-15
MIAMI, FL 33132
FBPE CERT. OF AUTHORIZATION No. 29578

FL #:		FL15922	
DATE:		10.17.17	
DWG. BY:	RV	CHK. BY:	HFN
SCALE:		NTS	
DWG. #:		AWD233	
SHEET:			