WINDSOR WINDOWS & DOORS

PINNACLE CLAD IMPACT
4" LVL COMPOSITE MULLION

INSTALLATION NOTES:

1. ONE (1) INSTALLATION ANCHOR IS REQUIRED AT EACH ANCHOR LOCATION SHOWN.
2. THE NUMBER OF INSTALLATION ANCHORS DEPICTED IS THE MINIMUM NUMBER OF ANCHORS TO BE USED FOR PRODUCT INSTALLATION OF THE MAXIMUM SIZE LISTED.
3. INSTALL INDIVIDUAL INSTALLATION ANCHORS WITHIN A TOLERANCE OF ±1/2 INCH (I.E., WITHOUT CONSIDERATION OF TOLERANCES). TOLERANCES ARE NOT CUMULATIVE FROM ONE INSTALLATION ANCHOR TO THE NEXT.
4. SHIM AS REQUIRED AT EACH INSTALLATION ANCHOR WITH LOAD BEARING SHIM(S). MAXIMUM ALLOWABLE SHIM STACK TO BE 1/4 INCH. SHIM WHERE SPACE OF 1/16 INCH OR GREATER OCCURS. SHIM(S) SHALL BE CONSTRUCTED OF HIGH DENSITY PLASTIC OR BETTER.
5. REFER TO SHEETS 2 & 3 FOR INSTALLATION DETAILS, ANCHOR SELECTION, AND ANCHOR REQUIREMENTS.
6. MINIMUM EMBEDMENT AND EDGE DISTANCE EXCLUDE WALL FINISHES, INCLUDING BUT NOT LIMITED TO STUCCO, FOAM, BRICK VENEER, AND SIDING.
7. INSTALLATION ANCHORS AND ASSOCIATED HARDWARE MUST BE MADE OF CORROSION RESISTANT MATERIAL OR HAVE A CORROSION RESISTANT COATING.
8. 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.
9. 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.
10. 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. CMU - STRENGTH CONFORMANCE TO ASTM C90.
    D. STEEL - MINIMUM YIELD STRENGTH OF 33 KSI. MINIMUM GA. WALL THICKNESS

GENERAL NOTES:

1. THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH THE 6TH EDITIONOD THE FLORIDA BUILDING CODE (FBC) AND INTERNATIONAL BUILDING CODE (IBC), EXCLUDING HVHZ AND HAS BEEN EVALUATED ACCORDING TO THE FOLLOWING:
   - AAMA/WDMA/CSA 101/I.S.2/A440-08/11
   - AAMA 506-11
   - ASTM E1886-02
   - ASTM E1996-05/06/09/12
2. ADEQUACY OF THE EXISTING STRUCTURAL CONCRETE/MASONRY AND 2X 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.
5. APPROVED IMPACT PROTECTIVE SYSTEM **IS NOT REQUIRED** FOR THIS PRODUCT IN **ZONE 3 OR LESS**. INDIVIDUAL WINDOW UNITS MUST BE IMPACT RATED WHERE APPLICABLE.
6. MULLION MATERIAL: GLULAM LVL COMPOSITE, COMMON PINE OUTTER.

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Digitally signed by Hermes F. Norero, P.E.
Reason: I am approving this document
Date: 2017.06.16 21:03:44 -04'00'

WINDSOR WINDOWS & DOORS
A Woodgrain Millwork Company

WINDSOR WINDOWS & DOORS.
900 S. 19TH ST.
WEST DES MOINES, IA 50265
PH: (515) 223-6660 FX: (515) 224-1938

TITLE: PINNACLE CLAD IMPACT 4" LVL MULLION INSTALLATION & GENERAL NOTES

PREPARED BY:
BUILDING DROPS, INC.
398 E. DANIA BEACH BLVD. #338
DANIA BEACH, FL 33004
PH: 954.399.8478 FX: 954.744.4738

REVISIONS

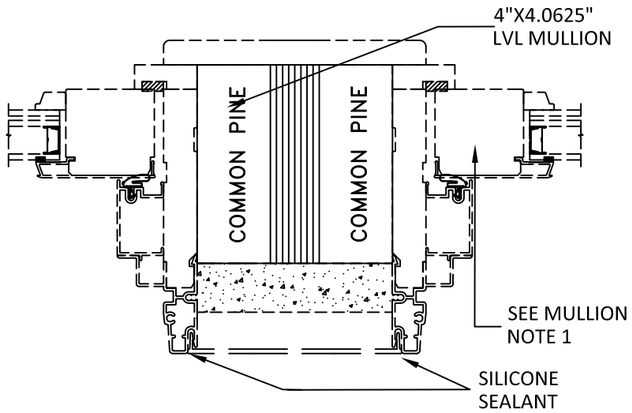
NO.	DESCRIPTION	BY	DATE
A	FBC COMMENTS	RL	02.27.17
B	6TH EDITION CODE CHANGE	LS	06.14.17

HERMES F. NORERO ★ LICENSE No. 73778 ★ STATE OF FLORIDA ★ PROFESSIONAL ENGINEER
HERMES F. NORERO, P.E. FLORIDA P.E. NO. 73778 398 E. DANIA BEACH BLVD. #338 DANIA BEACH, FL 33004 FBPE CERT. OF AUTHORIZATION No. 29578

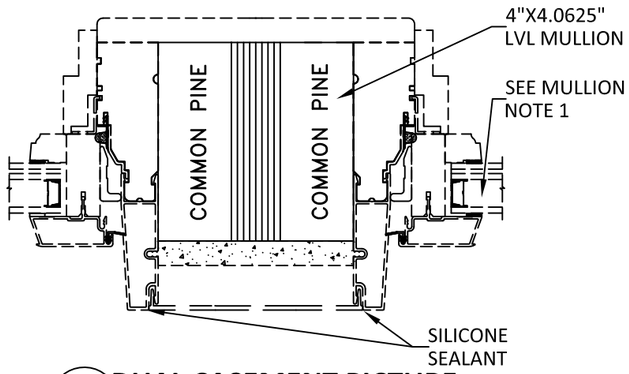
DATE: 02.10.17 | DWN BY: LA | CHK BY: SM | SCALE: NTS

DWG #: WWD003

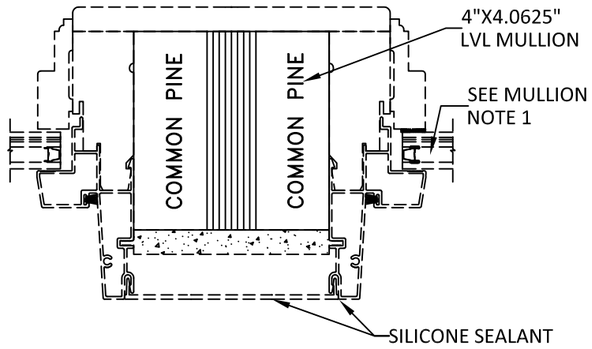
SHEET: 1 OF 8



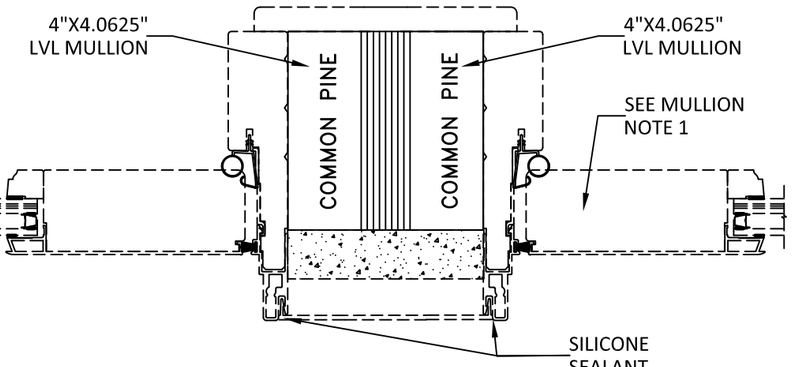
A/2 **DUAL DOUBLE HUNG PIC.**
VERTICAL MULLION



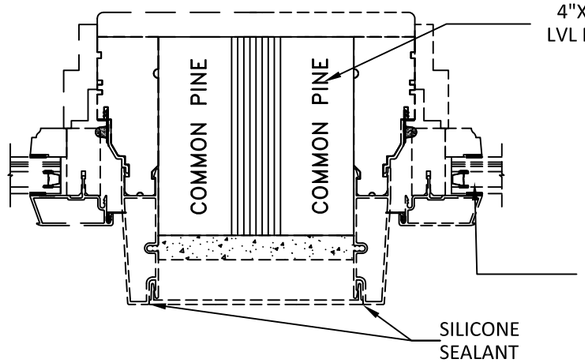
B/2 **DUAL CASEMENT PICTURE**
VERTICAL MULLION



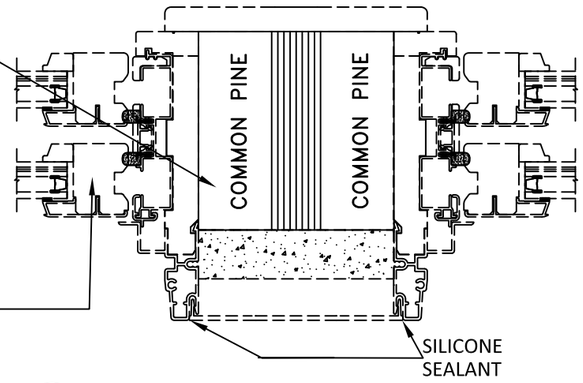
C/2 **DUAL DIRECT SET**
VERTICAL MULLION



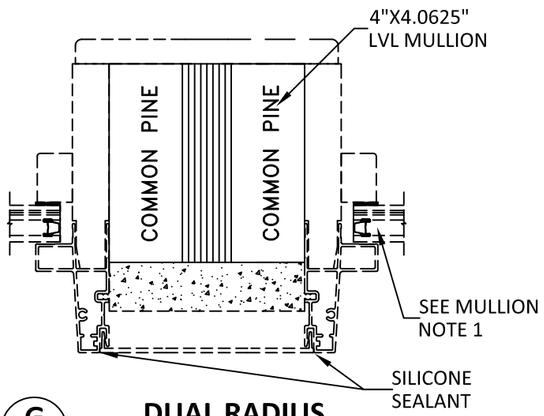
D/2 **DUAL OUTSWING PATIO**
VERTICAL MULLION



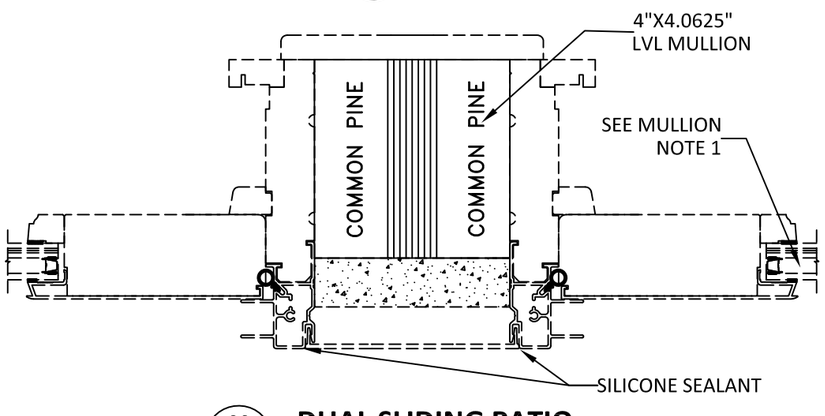
E/2 **DUAL CASEMENT OP.**
VERTICAL MULLION



F/2 **DUAL DOUBLE HUNG OP.**
VERTICAL MULLION



G/2 **DUAL RADIUS**
VERTICAL MULLION



H/2 **DUAL SLIDING PATIO**
VERTICAL MULLION

MULLION NOTES:

1. WINDOW UNIT SHOWN ON THIS SHEET IS TYPICAL AND SHALL BE USED FOR DIAGRAMMATIC PURPOSES ONLY. ALL WINDOW AND DOOR PRODUCTS TO BE MULLED TO 4" LVL MULLION SHALL BE UNDER SEPARATE FL APPROVAL.
2. MULLION SHOWN HEREIN MAY BE USED WITH APPROVED WINDOW OR DOOR PRODUCTS WHICH ARE COMPATIBLE WITH 4" LVL MULLION (E.G. WINDSOR WINDOWS PINNACLE CLAD SERIES PRODUCTS)
3. INSTALLATION SHALL FOLLOW MANUFACTURER'S RECOMMENDATIONS FOR SEALING & ASSEMBLY. SHOULD MANUFACTURER'S INSTALLATION INSTRUCTION AND THOSE SHOWN HEREIN DEVIATE, THE DRAWINGS HEREIN SHALL GOVERN.
4. TWO ANCHORS CLUSTERED TO EACH SIDE OF MULLION, SPACED 3" & 6" AWAY FROM MULLION AT BOTH ENDS.

WINDSOR WINDOWS & DOORS
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TITLE: PINNACLE CLAD IMPACT
4" LVL MULLION
VERTICAL MULLION
ASSEMBLIES

PREPARED BY:
BUILDING DROPS, INC.
398 E. DANIA BEACH BLVD. #338
DANIA BEACH, FL 33004
PH: 954.399.8478 FX: 954.744.4738

REVISIONS

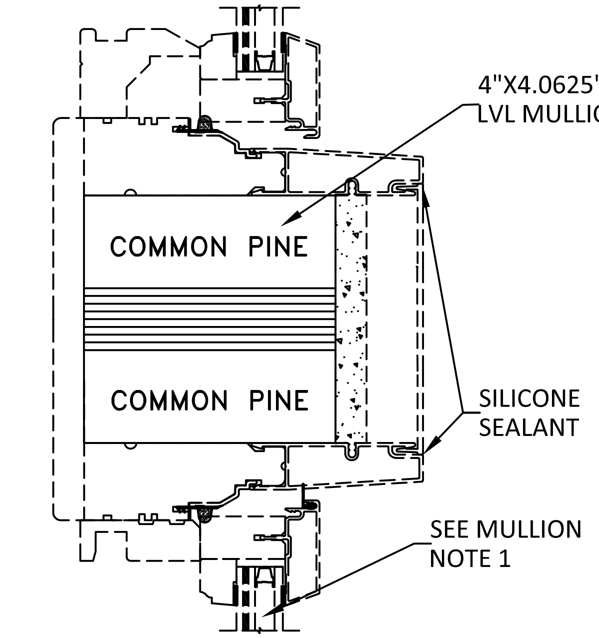
NO.	DESCRIPTION	BY	DATE

HERMES F. NORERO
LICENSE No. 73778
STATE OF FLORIDA
PROFESSIONAL ENGINEER
NORERO & ASSOCIATES, P.E.
398 E. DANIA BEACH BLVD. #338
DANIA BEACH, FLORIDA 33004
CERTIFICATE OF AUTHORIZATION NO. 29578
FBPE

DATE: 02.10.17
DWN BY: LA
CHK BY: SM
SCALE: NTS

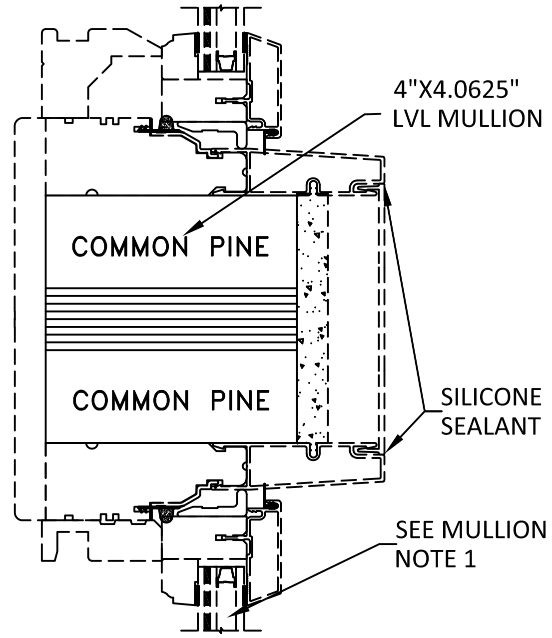
DWG #: WWD003

SHEET: 2 OF 8



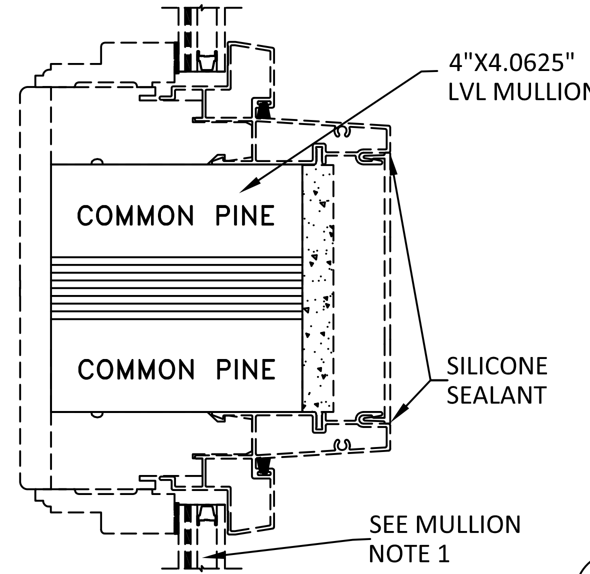
I/3 **DUAL CASEMENT OP**

HORIZONTAL MULLION



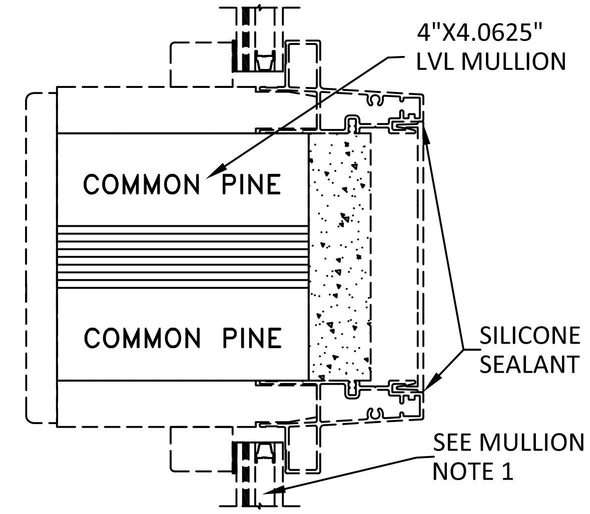
J/3 **DUAL CASEMENT PIC**

HORIZONTAL MULLION



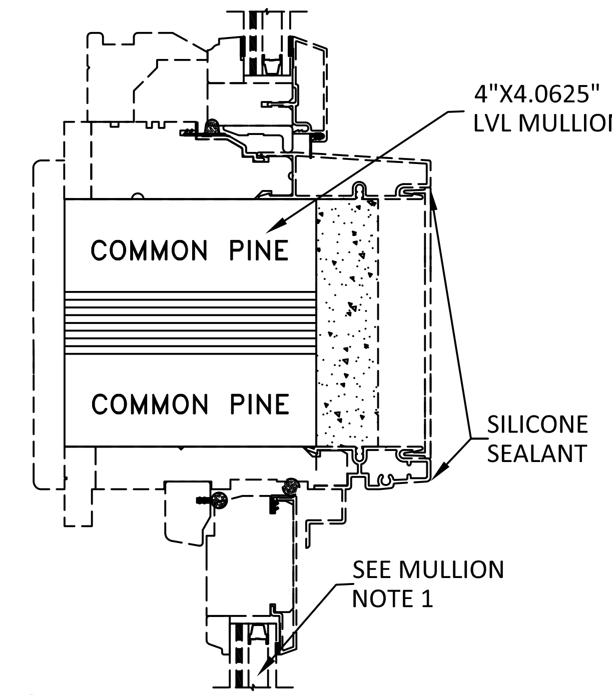
K/3 **DUAL DIRECT SET**

HORIZONTAL MULLION



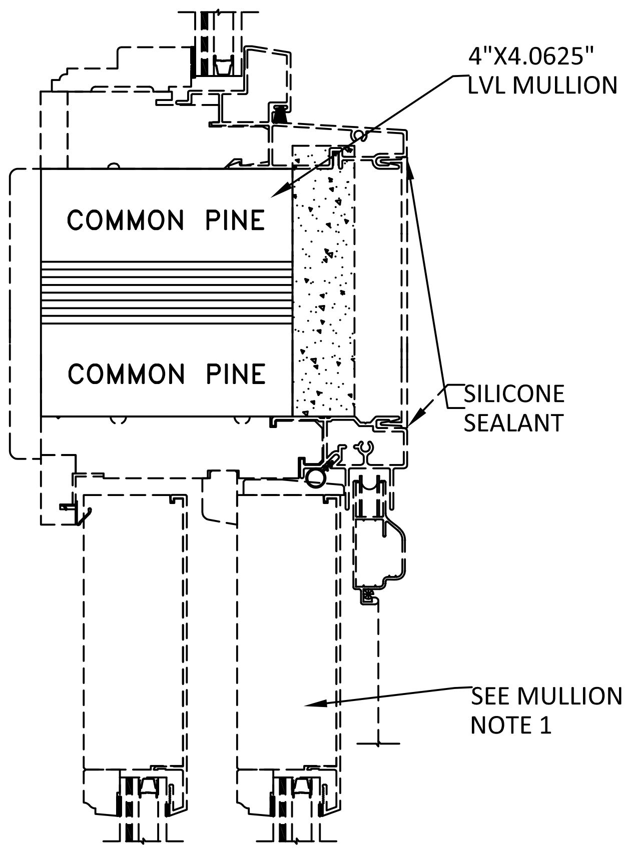
L/3 **DUAL RADIUS**

HORIZONTAL MULLION



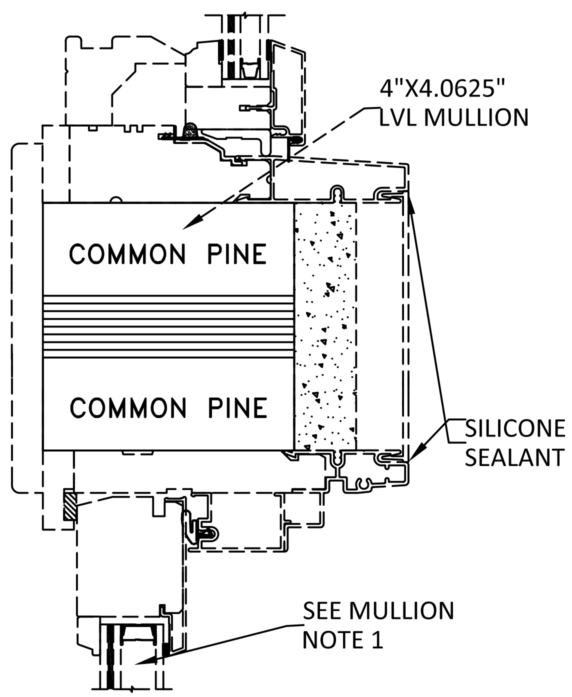
P/3 **DH OP - CASEMENT OP**

HORIZONTAL MULLION



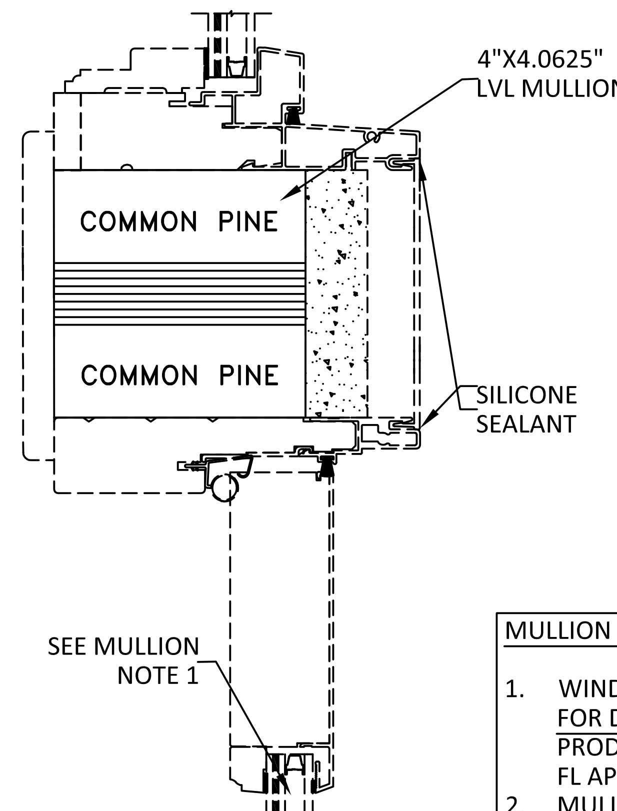
M/3 **SLIDING - DIRECT SET**

HORIZONTAL MULLION



N/3 **DH PIC - CASEMENT OP**

HORIZONTAL MULLION



O/3 **OUTSWING-CASEMENT OP**

HORIZONTAL MULLION

MULLION NOTES:

1. WINDOW UNIT SHOWN ON THIS SHEET IS TYPICAL AND SHALL BE USED FOR DIAGRAMMATIC PURPOSES ONLY. ALL WINDOW AND DOOR PRODUCTS TO BE MULLED TO 4" LVL MULLION SHALL BE UNDER SEPARATE FL APPROVAL.
2. MULLION SHOWN HEREIN MAY BE USED WITH APPROVED WINDOW OR DOOR PRODUCTS WHICH ARE COMPATIBLE WITH 4" LVL MULLION (E.G. WINDSOR WINDOWS PINNACLE CLAD SERIES PRODUCTS)
3. INSTALLATION SHALL FOLLOW MANUFACTURER'S RECOMMENDATIONS FOR SEALING & ASSEMBLY. SHOULD MANUFACTURER'S INSTALLATION INSTRUCTION AND THOSE SHOWN HEREIN DEVIATE, THE DRAWINGS HEREIN SHALL GOVERN.
4. TWO ANCHORS CLUSTERED TO EACH SIDE OF MULLION, SPACED 3" & 6" AWAY FROM MULLION AT BOTH ENDS.

WINDSOR WINDOWS & DOORS
A Woodgrain Millwork Company

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TITLE: PINNACLE CLAD IMPACT 4" LVL MULLION HORIZONTAL MULLION ASSEMBLIES

PREPARED BY:
BUILDING DROPS, INC.
398 E. DANIA BEACH BLVD. #338
DANIA BEACH, FL 33004
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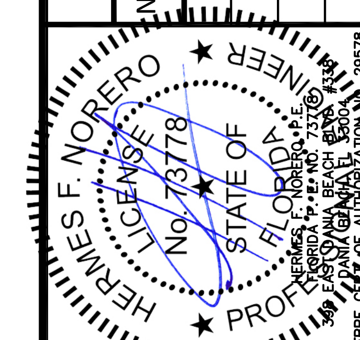
REVISIONS

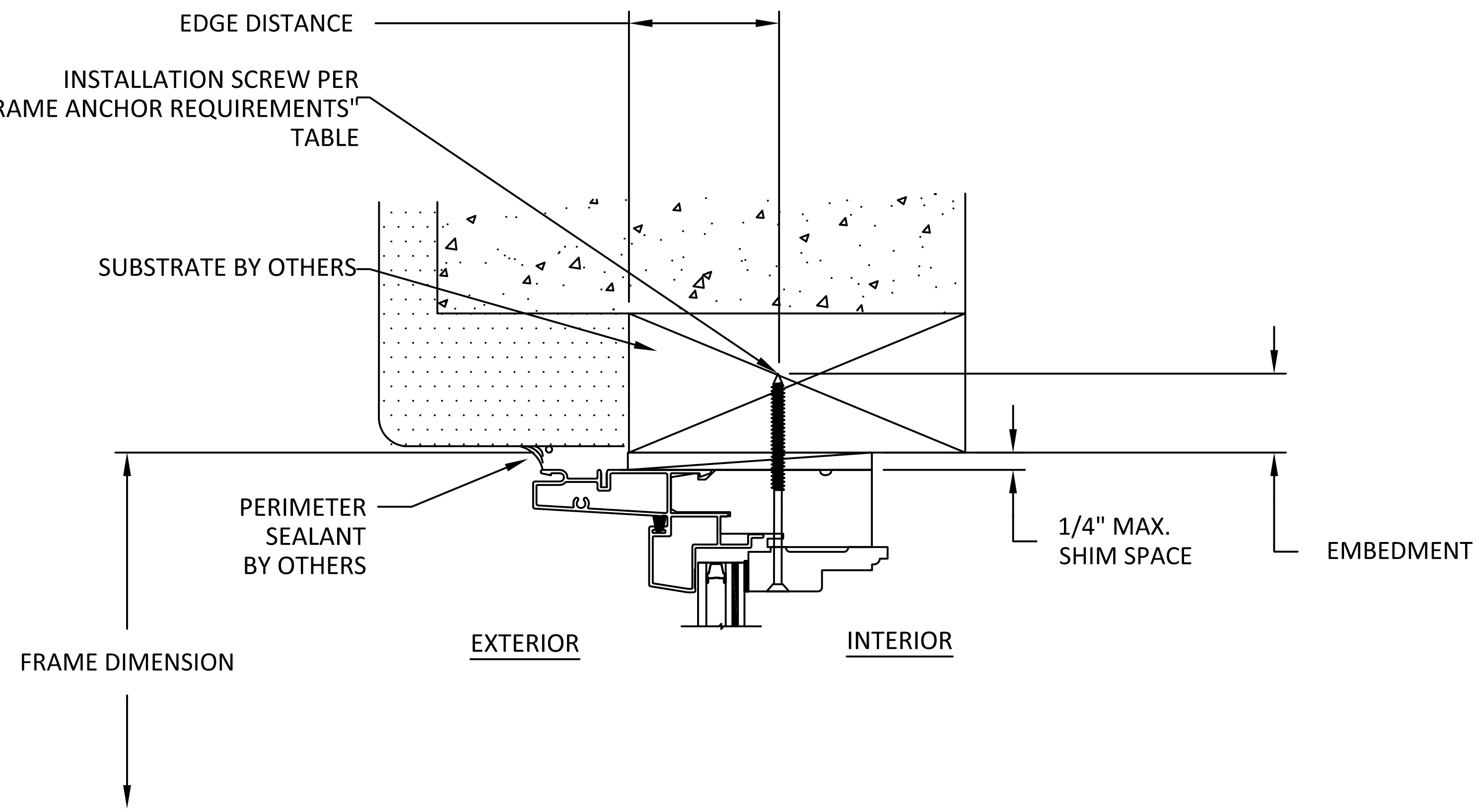
NO.	DESCRIPTION	BY	DATE



DATE: 02.10.17 | DWN BY: LA | CHK BY: SM | SCALE: NTS

DWG #: WWD003

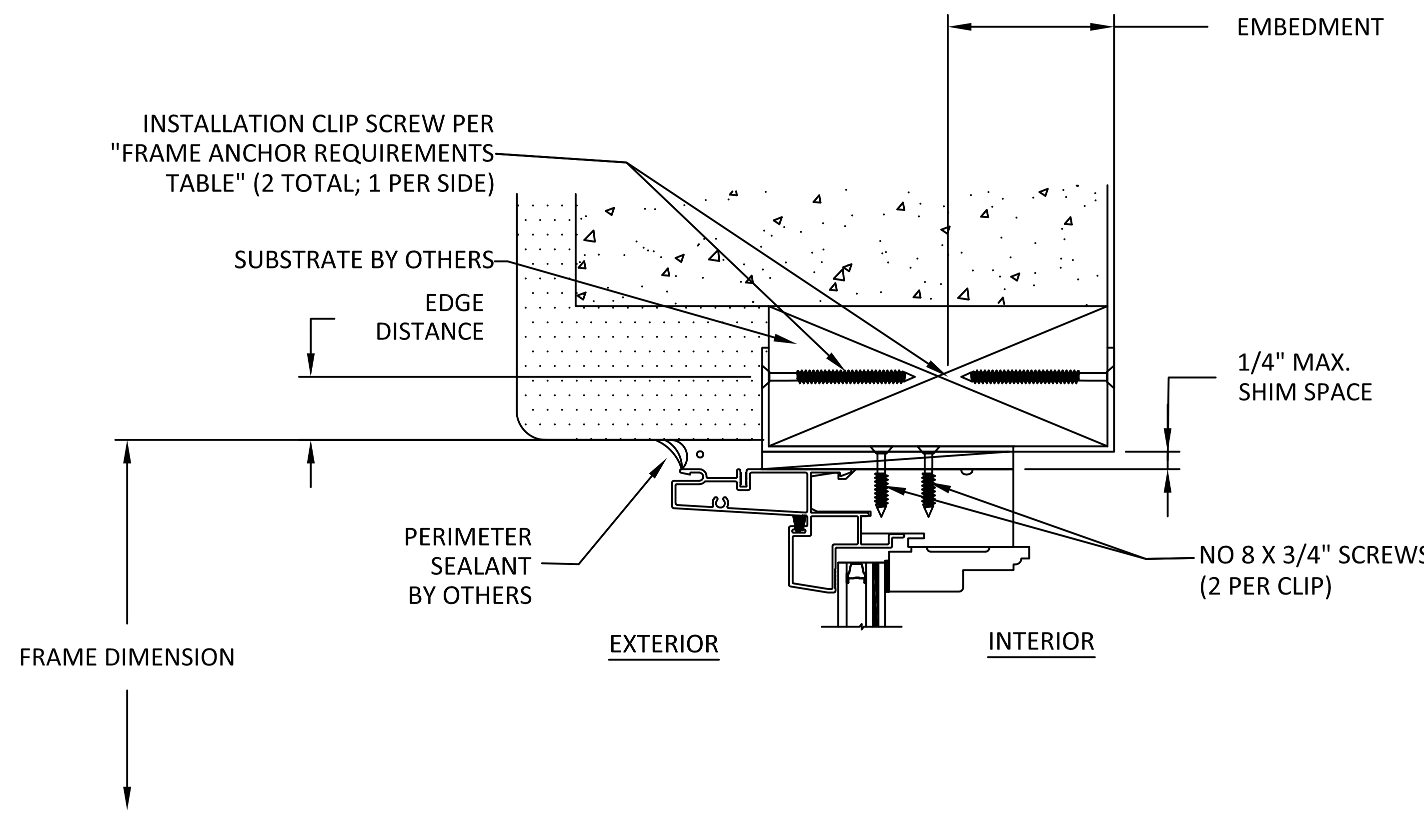
SHEET: 3 OF 8



A
4

HEAD SECTION

THROUGH FRAME INSTALLATION
(SILL & SIDES ARE INSTALLED THE SAME)



B
4

HEAD SECTION

STRAP INSTALLATION
(SILL & SIDES ARE INSTALLED THE SAME)

FRAME ANCHOR REQUIREMENTS		
ANCHOR SUMMARY TABLE		
ANCHOR	EMBEDMENT	EDGE DISTANCE
#10 WOOD	1-1/4"	3/4"
#10 SMS	3 PITCHES OF THREAD	1/2"
1/4" ULTRACON	1-1/4"	2-1/2"

WINDSOR WINDOWS & DOORS
A Woodgrain Millwork Company

WINDSOR WINDOWS & DOORS.
900 S. 19TH ST.
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TITLE: PINNACLE CLAD IMPACT 4" LVL MULLION INSTALLATION DETAILS

PREPARED BY:
BUILDING DROPS, INC.
398 E. DANIA BEACH BLVD. #338
DANIA BEACH, FL 33004
PH: 954.399.8478 FX: 954.744.4738

REVISIONS

NO.	DESCRIPTION	BY	DATE
A	FBC COMMENTS	RL	02.27.17

HERMES F. NORERO
LICENSE No. 73778
STATE OF FLORIDA
PROFESSIONAL ENGINEER

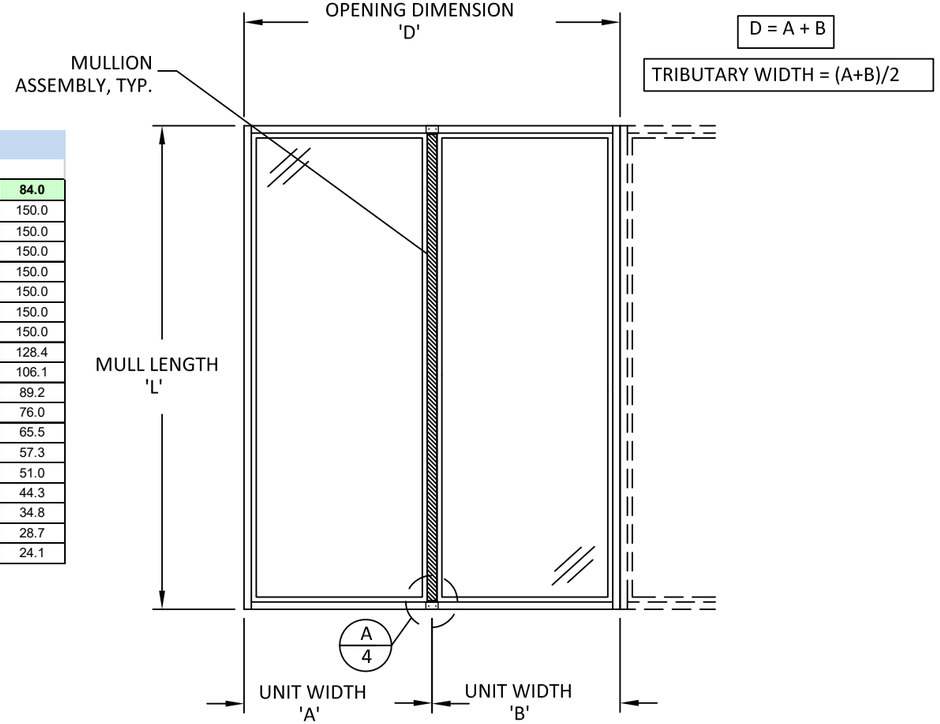
DATE:	DWN BY:	CHK BY:	SCALE:
02.10.17	LA	SM	NTS

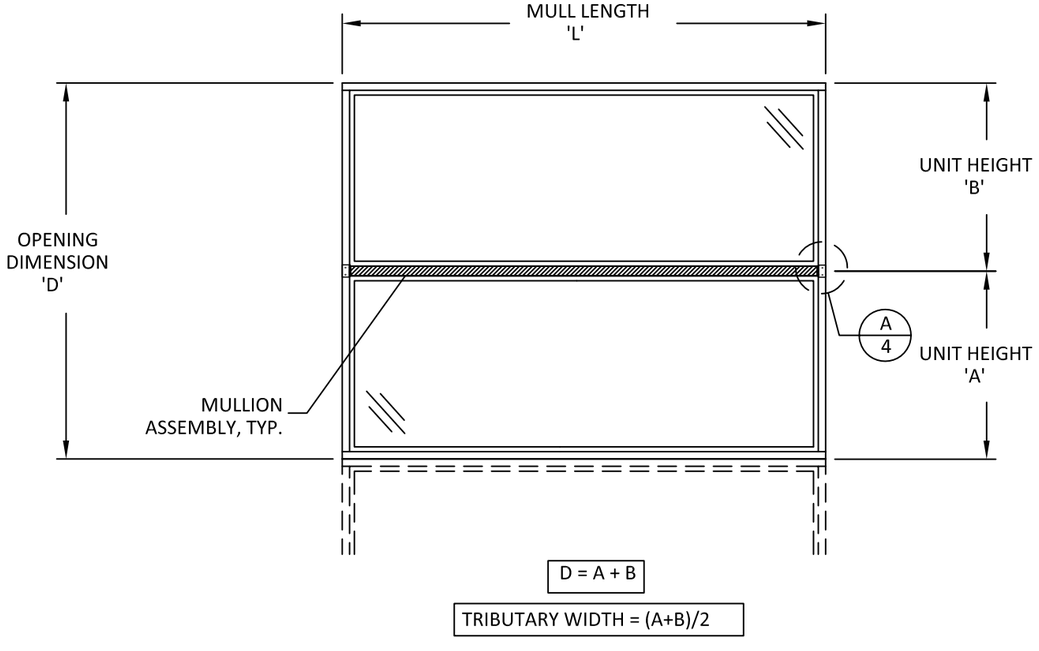
DWG #: WWD003

4" LVL MULLION - THROUGH FRAME INSTALLATION
ONE-WAY CONFIGURATIONS (NO INTERMEDIATE MEMBERS)

Maximum design pressure capacity chart (*psf*):

L - Mull Length (*in*)	W - Tributary Width (*in*)																	
	21.0	**24.0**	**27.0**	**30.0**	**33.0**	**36.0**	**39.0**	**42.0**	**45.0**	**48.0**	**51.0**	**54.0**	**57.0**	**60.0**	**66.0**	**72.0**	**78.0**	**84.0**
18.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
24.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
30.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
36.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
42.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
48.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
54.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
60.0	150.0	150.0	150.0	150.0	150.0	150.0	146.3	141.1	137.0	133.8	131.4	129.7	128.7	128.4	128.4	128.4	128.4	128.4
66.0	150.0	150.0	150.0	150.0	141.5	133.8	127.5	122.3	118.1	114.7	111.9	109.8	108.1	107.0	106.1	106.1	106.1	106.1
72.0	150.0	150.0	146.3	135.2	126.2	118.9	112.9	107.9	103.8	100.3	97.5	95.1	93.2	91.7	89.8	89.2	89.2	89.2
78.0	150.0	145.9	132.7	122.3	113.9	107.0	101.3	96.5	92.5	89.2	86.3	83.9	81.9	80.3	77.8	76.4	76.0	76.0
84.0	149.7	133.8	121.4	111.7	103.8	97.3	91.9	87.4	83.5	80.3	77.5	75.1	73.1	71.3	68.7	66.9	65.9	65.5
90.0	138.4	123.5	111.9	102.7	95.3	89.2	84.1	79.8	76.1	73.0	70.3	67.9	65.9	64.2	61.4	59.4	58.1	57.3
96.0	128.7	114.7	103.8	95.1	88.1	82.3	77.5	73.4	69.9	66.9	64.3	62.0	60.1	58.4	55.6	53.5	52.0	51.0
101.0	121.6	108.2	97.8	89.6	82.9	77.4	72.7	68.8	65.4	62.5	60.0	57.5	55.2	53.2	50.0	47.5	45.6	44.3
108.0	109.0	95.9	85.7	77.6	71.0	65.6	61.0	57.2	53.8	51.0	48.5	46.3	44.4	42.7	39.9	37.7	36.0	34.8
114.0	92.6	81.4	72.7	65.8	60.2	55.5	51.6	48.3	45.5	43.0	40.8	39.0	37.3	35.8	33.4	31.5	29.9	28.7
120.0	79.2	69.6	62.2	56.2	51.4	47.4	44.0	41.2	38.7	36.6	34.7	33.1	31.7	30.4	28.2	26.5	25.2	24.1





NOTES:

1. 'ONE-WAY' MULLIONS REFER TO EITHER VERTICAL SINGLE SPAN OR HORIZONTAL STACKED ASSEMBLIES SIMILAR TO THOSE DIAGRAMMED ON THIS SHEET.
2. THE POSITIVE AND NEGATIVE DESIGN PRESSURE CHARTS ABOVE ARE APPLICABLE FOR 'STANDARD INSTALLATION' PROCEDURES, SEE DETAIL A/4.
3. WINDOW OR DOORS SHALL BE UNDER SEPARATE APPROVAL.
4. DESIGN PRESSURES SHALL BE GOVERNED BY THE LESSER OF THE MULLION ASSEMBLY (LISTED IN TABLE) OR INDIVIDUAL WINDOW OR DOOR UNIT UNDER SEPARATE APPROVAL.
5. MULLIONS MAY BE USED IN ASSEMBLIES UTILIZING MORE THAN TWO WINDOW OR DOOR UNITS AND CAN BE USED FOR UNLIMITED NUMBER OF PANELS.

WINDSOR WINDOWS & DOORS
A Woodgrain Millwork Company

WINDSOR WINDOWS & DOORS.
900 S. 19TH ST.
WEST DES MOINES, IA 50265
PH: (515) 223-6660 FX: (515) 224-1938

TITLE: PINNACLE CLAD IMPACT
4" LVL MULLION
1-WAY DESIGN PRESSURE TABLES - THROUGH FRAME INSTALLATION

PREPARED BY:
BUILDING DROPS, INC.
398 E. DANIA BEACH BLVD. #338
DANIA BEACH, FL 33004
PH: 954.399.8478 FX: 954.744.4738

REVISIONS

NO.	DESCRIPTION	BY	DATE

JAMES F. NORERO LICENSE No. 73778 STATE OF FLORIDA PROFESSIONAL ENGINEER
JAMES F. NORERO, P.E. FLORIDA LICENSE #73778
398 E. DANIA BEACH BLVD. #338
DANIA BEACH, FL 33004
CERTIFICATE OF AUTHORIZATION NO. 29578
FBPE

DATE: 02.10.17
DWN BY: LA
CHK BY: SM
SCALE: NTS

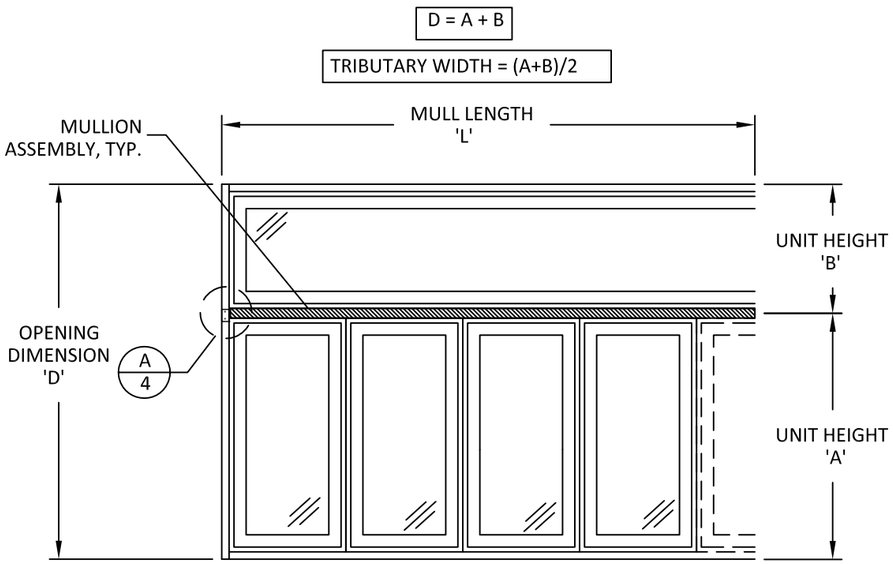
DWG #: WWD003

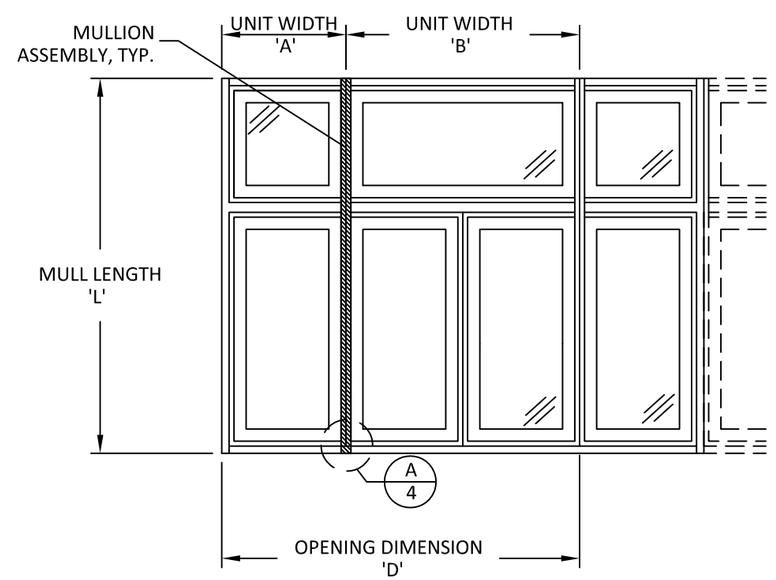
SHEET: 5 OF 8

4" LVL MULLION - THROUGH FRAME INSTALLATION
TWO-WAY CONFIGURATIONS (WITH INTERMEDIATE MEMBERS)

Maximum design pressure capacity chart (*psf*):

L - Mull Length (*in*)	W - Tributary Width (*in*)																	
	21.0	**24.0**	**27.0**	**30.0**	**33.0**	**36.0**	**39.0**	**42.0**	**45.0**	**48.0**	**51.0**	**54.0**	**57.0**	**60.0**	**66.0**	**72.0**	**78.0**	**84.0**
18.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
24.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	145.9	133.8	123.5	114.7
30.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	142.7	135.2	128.4	116.7	107.0	98.8	91.7
36.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	142.7	133.8	125.9	118.9	112.6	107.0	97.3	89.2	82.3	76.4
42.0	150.0	150.0	150.0	150.0	150.0	150.0	141.1	131.0	122.3	114.7	107.9	101.9	96.5	91.7	83.4	76.4	70.6	65.5
48.0	150.0	150.0	150.0	150.0	145.9	133.8	123.5	114.7	107.0	100.3	94.4	89.2	84.5	80.3	73.0	66.9	61.7	57.3
54.0	150.0	150.0	150.0	142.7	129.7	118.9	109.8	101.9	95.1	89.2	83.9	79.3	75.1	71.3	64.9	59.4	54.9	51.0
60.0	150.0	150.0	142.7	128.4	116.7	107.0	98.8	91.7	85.6	80.3	75.5	71.3	67.6	64.2	58.4	53.5	49.4	45.9
66.0	150.0	145.9	129.7	116.7	106.1	97.3	89.8	83.4	77.8	73.0	68.7	64.9	61.4	58.4	53.1	48.6	44.9	41.7
72.0	150.0	133.8	118.9	107.0	97.3	89.2	82.3	76.4	71.3	66.9	62.9	59.4	56.3	53.5	48.6	44.6	41.2	38.2
78.0	141.1	123.5	109.8	98.8	89.8	82.3	76.0	70.6	65.9	61.7	58.1	54.9	52.0	49.4	44.9	41.2	38.0	35.3
84.0	131.0	114.7	101.9	91.7	83.4	76.4	70.6	65.5	61.1	57.3	54.0	51.0	48.3	45.9	41.7	38.2	35.3	32.8
90.0	122.3	107.0	95.1	85.6	77.8	71.3	65.9	61.1	57.1	53.5	50.4	47.6	45.1	42.8	38.9	35.7	32.9	30.6
96.0	114.7	100.3	89.2	80.3	73.0	66.9	61.7	57.3	53.5	50.2	47.2	44.6	42.2	40.1	36.5	33.4	30.9	28.7
101.0	109.0	95.4	84.8	76.3	69.3	63.6	58.7	54.5	50.9	47.7	44.9	42.4	40.1	38.1	34.7	31.8	29.3	27.2
108.0	101.9	89.2	79.3	71.3	64.9	59.4	54.9	51.0	47.6	44.6	42.0	39.6	37.5	35.7	32.4	29.7	27.4	25.5
114.0	91.4	80.0	71.1	64.0	58.1	53.3	49.2	45.7	42.6	40.0	37.6	35.5	33.7	32.0	29.1	26.7	24.6	22.8
120.0	78.3	68.5	60.9	54.8	49.9	45.7	42.2	39.2	36.6	34.3	32.3	30.5	28.9	27.4	24.9	22.8	21.1	19.6





NOTES:

1. 'TWO-WAY' MULLIONS REFER TO EITHER VERTICAL OR HORIZONTAL WITH INTERMEDIATE MEMBERS SIMILAR TO THOSE DIAGRAMMED ON THIS SHEET.
2. THE POSITIVE AND NEGATIVE DESIGN PRESSURE CHARTS ABOVE ARE APPLICABLE FOR 'STANDARD INSTALLATION' PROCEDURES, SEE DETAIL A/4.
3. WINDOW OR DOORS SHALL BE UNDER SEPARATE APPROVAL.
4. DESIGN PRESSURES SHALL BE GOVERNED BY THE LESSER OF THE MULLION ASSEMBLY (LISTED IN TABLE) OR INDIVIDUAL WINDOW OR DOOR UNIT UNDER SEPARATE APPROVAL.
5. MULLIONS MAY BE USED IN ASSEMBLIES UTILIZING MORE THAN TWO WINDOW OR DOOR UNITS AND CAN BE USED FOR UNLIMITED NUMBER OF PANELS.

WINDSOR WINDOWS & DOORS
A Woodgrain Millwork Company

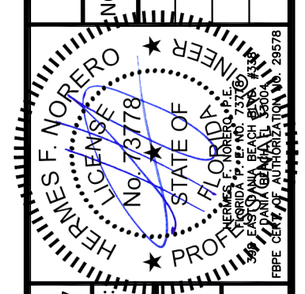
WINDSOR WINDOWS & DOORS.
900 S. 19TH ST.
WEST DES MOINES, IA 50265
PH: (515) 223-6660 FX: (515) 224-1938

TITLE: PINNACLE CLAD IMPACT 4" LVL MULLION 2-WAY DESIGN PRESSURE TABLES - THROUGH FRAME INSTALLATION

PREPARED BY:
BUILDING DROPS, INC.
398 E. DANIA BEACH BLVD. #338
DANIA BEACH, FL 33004
PH: 954.399.8478 FX: 954.744.4738

REVISIONS

NO.	DESCRIPTION	BY	DATE



DATE: 02.10.17 | DWN BY: LA | CHK BY: SM | SCALE: NTS

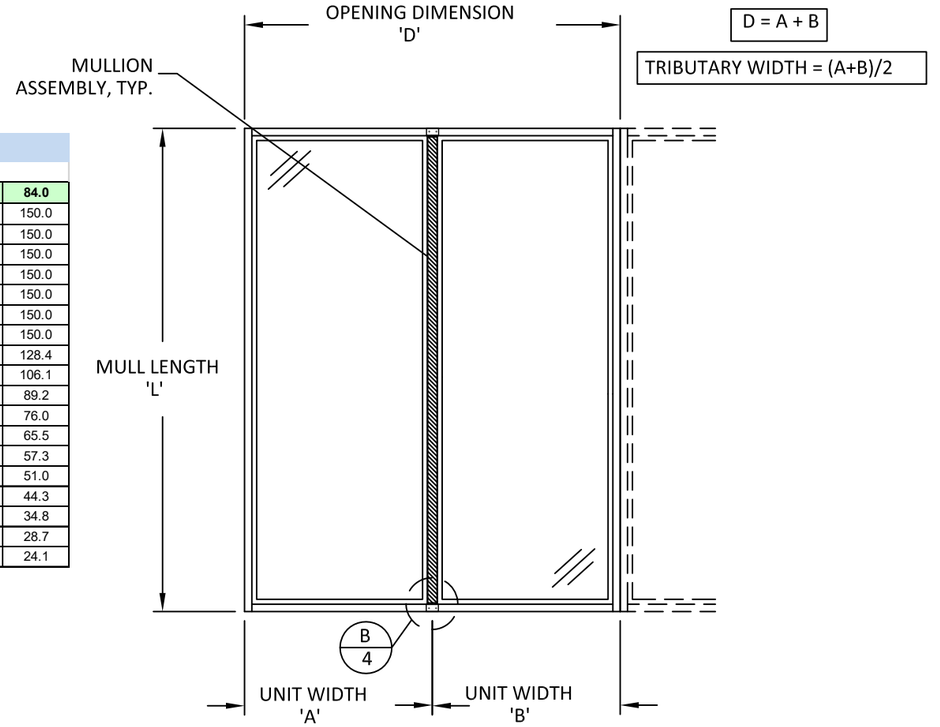
DWG #: WWD003

SHEET: 6 OF 8

4" LVL MULLION - STRAP INSTALLATION
ONE-WAY CONFIGURATIONS (NO INTERMEDIATE MEMBERS)

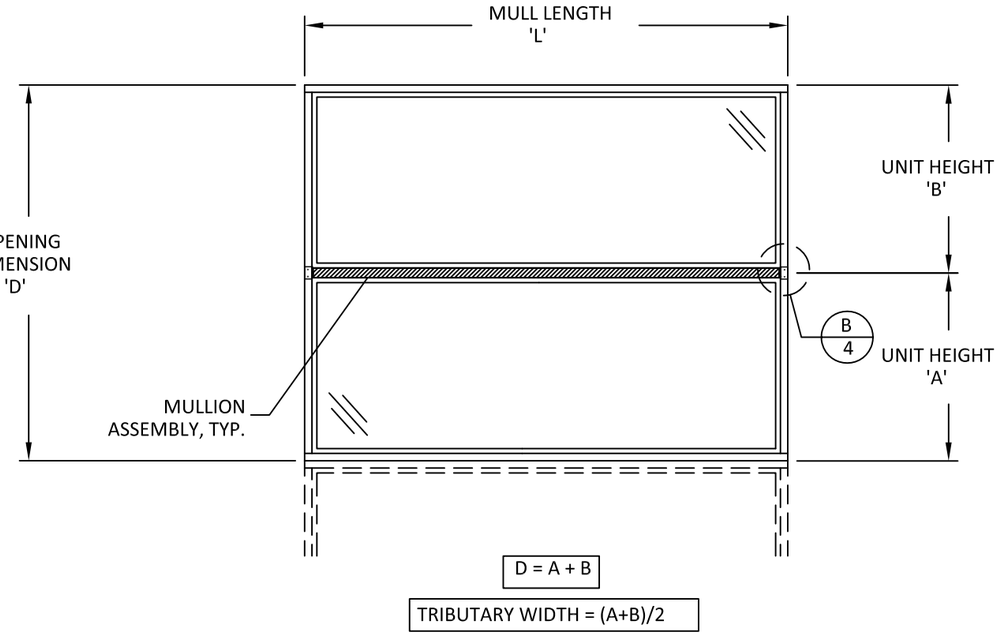
Maximum design pressure capacity chart (*psf*):

L - Mull Length (*in*)	W - Tributary Width (*in*)																	
	21.0	**24.0**	**27.0**	**30.0**	**33.0**	**36.0**	**39.0**	**42.0**	**45.0**	**48.0**	**51.0**	**54.0**	**57.0**	**60.0**	**66.0**	**72.0**	**78.0**	**84.0**
18.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
24.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
30.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
36.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
42.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
48.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
54.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
60.0	150.0	150.0	150.0	150.0	150.0	150.0	146.3	141.1	137.0	133.8	131.4	129.7	128.7	128.4	128.4	128.4	128.4	128.4
66.0	150.0	150.0	150.0	150.0	141.5	133.8	127.5	122.3	118.1	114.7	111.9	109.8	108.1	107.0	106.1	106.1	106.1	106.1
72.0	150.0	150.0	146.3	135.2	126.2	118.9	112.9	107.9	103.8	100.3	97.5	95.1	93.2	91.7	89.8	89.2	89.2	89.2
78.0	150.0	145.9	132.7	122.3	113.9	107.0	101.3	96.5	92.5	89.2	86.3	83.9	81.9	80.3	77.8	76.4	76.0	76.0
84.0	149.7	133.8	121.4	111.7	103.8	97.3	91.9	87.4	83.5	80.3	77.5	75.1	73.1	71.3	68.7	66.9	65.9	65.5
90.0	138.4	123.5	111.9	102.7	95.3	89.2	84.1	79.8	76.1	73.0	70.3	67.9	65.9	64.2	61.4	59.4	58.1	57.3
96.0	128.7	114.7	103.8	95.1	88.1	82.3	77.5	73.4	69.9	66.9	64.3	62.0	60.1	58.4	55.6	53.5	52.0	51.0
101.0	121.6	108.2	97.8	89.6	82.9	77.4	72.7	68.8	65.4	62.5	60.0	57.5	55.2	53.2	50.0	47.5	45.6	44.3
108.0	109.0	95.9	85.7	77.6	71.0	65.6	61.0	57.2	53.8	51.0	48.5	46.3	44.4	42.7	39.9	37.7	36.0	34.8
114.0	92.6	81.4	72.7	65.8	60.2	55.5	51.6	48.3	45.5	43.0	40.8	39.0	37.3	35.8	33.4	31.5	29.9	28.7
120.0	79.2	69.6	62.2	56.2	51.4	47.4	44.0	41.2	38.7	36.6	34.7	33.1	31.7	30.4	28.2	26.5	25.2	24.1



NOTES:

1. 'ONE-WAY' MULLIONS REFER TO EITHER VERTICAL SINGLE SPAN OR HORIZONTAL STACKED ASSEMBLIES SIMILAR TO THOSE DIAGRAMMED ON THIS SHEET.
2. THE POSITIVE AND NEGATIVE DESIGN PRESSURE CHARTS ABOVE ARE APPLICABLE FOR 'ALTERNATE INSTALLATION' PROCEDURES, SEE DETAIL B/4.
3. WINDOW OR DOORS SHALL BE UNDER SEPARATE APPROVAL.
4. DESIGN PRESSURES SHALL BE GOVERNED BY THE LESSER OF THE MULLION ASSEMBLY (LISTED IN TABLE) OR INDIVIDUAL WINDOW OR DOOR UNIT UNDER SEPARATE APPROVAL.
5. MULLIONS MAY BE USED IN ASSEMBLIES UTILIZING MORE THAN TWO WINDOW OR DOOR UNITS AND CAN BE USED FOR UNLIMITED NUMBER OF PANELS.



WINDSOR WINDOWS & DOORS
A Woodgrain Millwork Company

WINDSOR WINDOWS & DOORS.
900 S. 19TH ST.
WEST DES MOINES, IA 50265
PH: (515) 223-6660 FX: (515) 224-1938

TITLE: PINNACLE CLAD IMPACT
4" LVL MULLION
1-WAY DESIGN PRESSURE TABLES -
STRAP INSTALLATION

PREPARED BY:
BUILDING DROPS, INC.
398 E. DANIA BEACH BLVD. #338
DANIA BEACH, FL 33004
PH: 954.399.8478 FX: 954.744.4738

REVISIONS

NO.	DESCRIPTION	BY	DATE

HERMES F. NORERO LICENSE No. 73778 STATE OF FLORIDA PROFESSIONAL ENGINEER
HERMES F. NORERO, P.E. #73778
STATE OF FLORIDA
398 E. DANIA BEACH BLVD. #338
DANIA BEACH, FL 33004
CERTIFICATE OF AUTHORIZATION NO. 29578
FBPE

DATE: 02.10.17
DWN BY: LA
CHK BY: SM
SCALE: NTS

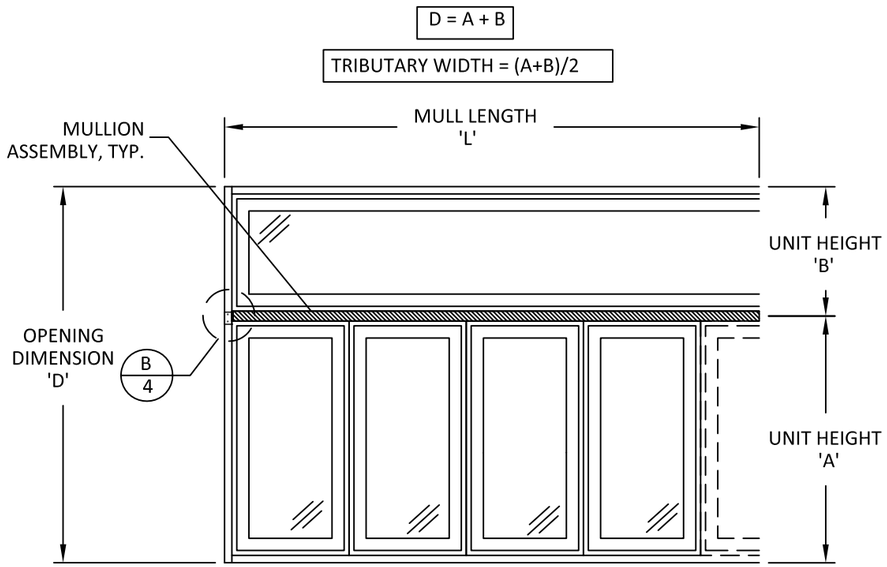
DWG #: WWD003

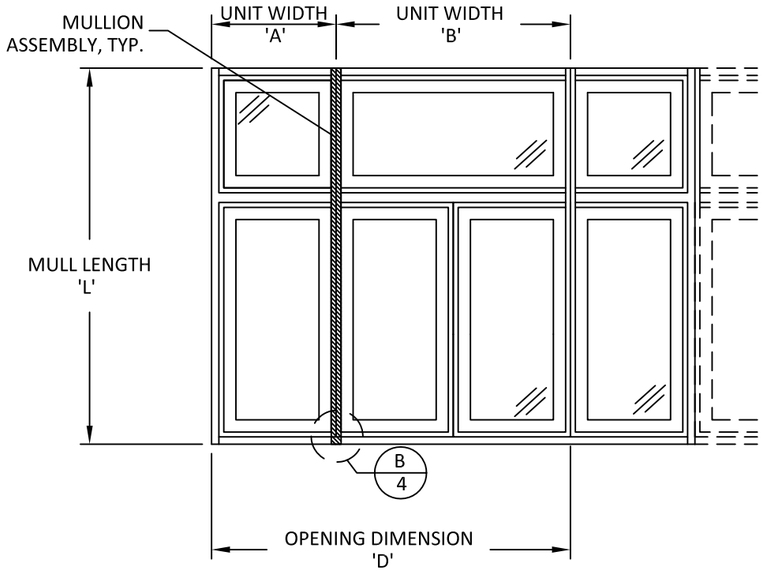
SHEET: 7 OF 8

4" LVL MULLION - STRAP INSTALLATION
TWO-WAY CONFIGURATIONS (WITH INTERMEDIATE MEMBERS)

Maximum design pressure capacity chart (*psf*):

L - Mull Length (*in*)	W - Tributary Width (*in*)																	
	21.0	**24.0**	**27.0**	**30.0**	**33.0**	**36.0**	**39.0**	**42.0**	**45.0**	**48.0**	**51.0**	**54.0**	**57.0**	**60.0**	**66.0**	**72.0**	**78.0**	**84.0**
18.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
24.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	145.9	133.8	123.5	114.7
30.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	142.7	135.2	128.4	116.7	107.0	98.8	91.7
36.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	142.7	133.8	125.9	118.9	112.6	107.0	97.3	89.2	82.3	76.4
42.0	150.0	150.0	150.0	150.0	150.0	150.0	141.1	131.0	122.3	114.7	107.9	101.9	96.5	91.7	83.4	76.4	70.6	65.5
48.0	150.0	150.0	150.0	150.0	145.9	133.8	123.5	114.7	107.0	100.3	94.4	89.2	84.5	80.3	73.0	66.9	61.7	57.3
54.0	150.0	150.0	150.0	142.7	129.7	118.9	109.8	101.9	95.1	89.2	83.9	79.3	75.1	71.3	64.9	59.4	54.9	51.0
60.0	150.0	150.0	142.7	128.4	116.7	107.0	98.8	91.7	85.6	80.3	75.5	71.3	67.6	64.2	58.4	53.5	49.4	45.9
66.0	150.0	145.9	129.7	116.7	106.1	97.3	89.8	83.4	77.8	73.0	68.7	64.9	61.4	58.4	53.1	48.6	44.9	41.7
72.0	150.0	133.8	118.9	107.0	97.3	89.2	82.3	76.4	71.3	66.9	62.9	59.4	56.3	53.5	48.6	44.6	41.2	38.2
78.0	141.1	123.5	109.8	98.8	89.8	82.3	76.0	70.6	65.9	61.7	58.1	54.9	52.0	49.4	44.9	41.2	38.0	35.3
84.0	131.0	114.7	101.9	91.7	83.4	76.4	70.6	65.5	61.1	57.3	54.0	51.0	48.3	45.9	41.7	38.2	35.3	32.8
90.0	122.3	107.0	95.1	85.6	77.8	71.3	65.9	61.1	57.1	53.5	50.4	47.6	45.1	42.8	38.9	35.7	32.9	30.6
96.0	114.7	100.3	89.2	80.3	73.0	66.9	61.7	57.3	53.5	50.2	47.2	44.6	42.2	40.1	36.5	33.4	30.9	28.7
101.0	109.0	95.4	84.8	76.3	69.3	63.6	58.7	54.5	50.9	47.7	44.9	42.4	40.1	38.1	34.7	31.8	29.3	27.2
108.0	101.9	89.2	79.3	71.3	64.9	59.4	54.9	51.0	47.6	44.6	42.0	39.6	37.5	35.7	32.4	29.7	27.4	25.5
114.0	91.4	80.0	71.1	64.0	58.1	53.3	49.2	45.7	42.6	40.0	37.6	35.5	33.7	32.0	29.1	26.7	24.6	22.8
120.0	78.3	68.5	60.9	54.8	49.9	45.7	42.2	39.2	36.6	34.3	32.3	30.5	28.9	27.4	24.9	22.8	21.1	19.6





NOTES:

1. 'TWO-WAY' MULLIONS REFER TO EITHER VERTICAL OR HORIZONTAL WITH INTERMEDIATE MEMBERS SIMILAR TO THOSE DIAGRAMMED ON THIS SHEET.
2. THE POSITIVE AND NEGATIVE DESIGN PRESSURE CHARTS ABOVE ARE APPLICABLE FOR 'STANDARD INSTALLATION' PROCEDURES, SEE DETAIL B/4.
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WINDSOR WINDOWS & DOORS
A Woodgrain Millwork Company

WINDSOR WINDOWS & DOORS.
900 S. 19TH ST.
WEST DES MOINES, IA 50265
PH: (515) 223-6660 FX: (515) 224-1938

TITLE: PINNACLE CLAD IMPACT 4" LVL MULLION 2-WAY DESIGN PRESSURE TABLES - STRAP INSTALLATION

PREPARED BY:
BUILDING DROPS, INC.
398 E. DANIA BEACH BLVD. #338
DANIA BEACH, FL 33004
PH: 954.399.8478 FX: 954.744.4738

REVISIONS

NO.	DESCRIPTION	BY	DATE

HERMES F. NORERO LICENSE No. 73778 STATE OF FLORIDA PROFESSIONAL ENGINEER
HERMES F. NORERO, P.E. 73778
398 E. DANIA BEACH BLVD. #338
DANIA BEACH, FL 33004
FBPE CERT. OF AUTHORIZATION No. 29578

DATE: 02.10.17 | DWN BY: LA | CHK BY: SM | SCALE: NTS

DWG #: WWD003

SHEET: 8 OF 8