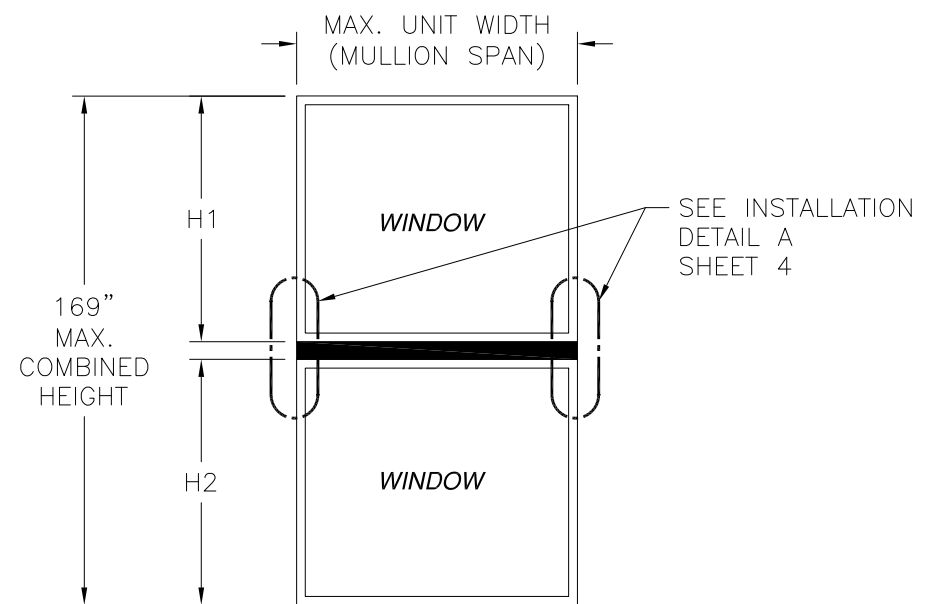


REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	ADDED X AND T MULLION DETAILS	02/17/11	R.L.



NOTES:

- 1) THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH REQUIREMENTS OF THE 2006 INTERNATIONAL BUILDING CODE AND 2006 INTERNATIONAL RESIDENTIAL CODE WITH TEXAS STATE MODIFICATIONS.
- 2) WOOD FRAMING AND MASONRY OPENING TO BE DESIGNED AND ANCHORED TO PROPERLY TRANSFER ALL LOADS TO STRUCTURE. FRAMING AND MASONRY OPENING IS THE RESPONSIBILITY OF THE ARCHITECT OR ENGINEER OF RECORD.
- 3) CONTRACTOR IS RESPONSIBLE FOR MAINTAINING STRUCTURAL INTEGRITY OF WINDOW OPENING AND ALL WOOD FRAMING AROUND WINDOW.
- 4) RESPONSIBILITY OF SELECTING FENESTRATION PRODUCTS TO MEET ANY APPLICABLE LOCAL LAWS, BUILDING CODES, ORDINANCES OR OTHER SAFETY REQUIREMENTS REST SOLELY WITH THE ARCHITECT, ENGINEER OF RECORD, BUILDING OWNER OR CONTRACTOR.
- 5) APPROVED IMPACT PROTECTIVE SYSTEM IS NOT REQUIRED FOR THIS PRODUCT IN WIND BORNE DEBRIS REGIONS UP TO WIND ZONE 3.
- 6) DESIGN PRESSURE AND INSTALLATION DETAILS SHOWN IN THIS DOCUMENT APPLY ONLY TO THE MULLION. WINDOW COMPANY, LLC MUST BE APPROVED UNDER SEPARATE APPROVAL.
- 7) SINGLE UNITS TO BE MULLED ARE NOT LIMITED TO THOSE SHOWN IN THIS DRAWING. SINGLE UNITS TO BE MULLED TOGETHER MUST BE MANUFACTURED BY WINCORE WINDOW COMPANY, LLC.
- 8) DESIGN PRESSURE OF MULLED UNIT SHALL BE CONTROLLED BY THE LESSER DESIGN PRESSURE OF THE MULLION OR THE INDIVIDUAL WINDOW UNIT.
- 9) VERTICAL MULLIONS ARE NOT PART OF THIS APPROVAL. VERTICAL MULLIONS USED TO MULL UNITS SIDE BY SIDE MUST HAVE SEPARATE APPROVAL.
- 10) FOR ADDITIONAL APPROVED CONFIGURATIONS SEE SHEET 2.
- 11) ALLOWABLE STRESS INCREASE OF 1/3 WAS NOT USED IN THE DESIGN OF THE PRODUCT SHOWN HEREIN. WIND LOAD DURATION FACTOR Cd=1.6 WAS USED FOR WOOD ANCHOR CALCULATIONS.

**Maximum design pressure capacity chart  
1" x 3" Horizontal Mullion with Bull Nose Clip 1" x 3"**

Tributary Height	Unit width (in)									
	24.0	30.0	36.0	42.0	48.0	54.0	60.0	66.0	72.0	78.0
24.0	120.0	120.0	120.0	104.8	87.3	74.9	65.5	58.2	52.4	44.1
30.0	120.0	120.0	119.8	93.2	76.2	64.5	55.9	49.3	44.1	38.8
36.0	120.0	120.0	116.4	87.3	69.9	58.2	49.9	43.7	38.8	35.2
42.0	120.0	120.0	116.4	85.6	66.5	54.4	46.1	39.9	35.2	32.8
48.0	120.0	120.0	116.4	85.6	65.5	52.4	43.7	37.4	32.8	31.1
54.0	120.0	120.0	116.4	85.6	65.5	51.8	42.3	35.8	31.1	29.9
60.0	120.0	120.0	116.4	85.6	65.5	51.8	41.9	34.9	29.9	29.3
66.0	120.0	120.0	116.4	85.6	65.5	51.8	41.9	34.6	29.3	29.1
72.0	120.0	120.0	116.4	85.6	65.5	51.8	41.9	34.6	29.1	29.1
78.0	120.0	120.0	116.4	85.6	65.5	51.8	41.9	34.6	29.1	29.1
84.0	120.0	120.0	116.4	85.6	65.5	51.8	41.9	34.6	29.1	29.1

**Maximum design pressure capacity chart  
1" x 3" Horizontal Mullion with Bracket Clip 1" x 3"**

Tributary Height	Unit width (in)									
	24.0	30.0	36.0	42.0	48.0	54.0	60.0	66.0	72.0	78.0
24.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	116.4	104.8	88.3
30.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	111.8	98.6	88.3
36.0	120.0	120.0	120.0	120.0	120.0	120.0	116.4	99.8	87.3	77.1
42.0	120.0	120.0	120.0	120.0	120.0	108.9	92.1	79.8	68.6	62.8
48.0	120.0	120.0	120.0	120.0	120.0	104.8	87.3	74.9	62.8	58.9
54.0	120.0	120.0	120.0	120.0	120.0	103.5	84.7	71.7	58.9	56.3
60.0	120.0	120.0	120.0	120.0	120.0	103.5	83.8	69.9	56.3	54.8
66.0	120.0	120.0	120.0	120.0	120.0	103.5	83.8	69.3	54.8	54.3
72.0	120.0	120.0	120.0	120.0	120.0	103.5	83.8	69.3	54.3	54.3
78.0	120.0	120.0	120.0	120.0	120.0	103.5	83.8	69.3	54.3	54.3
84.0	120.0	120.0	120.0	120.0	120.0	103.5	83.8	69.3	54.3	54.3

DESIGN PRESSURE TABLE INSTRUCTIONS:

- 1) DEFINE REQUIRED DESIGN LOAD PER 2006 INTERNATIONAL BUILDING CODE AND 2006 RESIDENTIAL CODE WITH TEXAS STATE MODIFICATIONS.
- 2) DETERMINE TRIBUTARY HEIGHT AND MULLION SPAN BASED ON PRODUCT TO BE INSTALLED. SEE FORMULA FOR TRIBUTARY HEIGHT.
- 3) LOCATE MULLION SPAN (UNIT WIDTH) AND TRIBUTARY HEIGHT. AT THE INTERSECTION OF COLUMN AND ROW CONTAINING THE MULLION SPAN AND TRIBUTARY HEIGHT RESPECTIVELY IS THE MULLION RATING FOR PRODUCT IN STEP 2. MULLION RATING MUST BE EQUAL OR GREATER THAN REQUIRED DESIGN PRESSURE OBTAINED IN STEP 1.

$$\text{TRIBUTARY HEIGHT} = \frac{H1 + H2}{2}$$

TABLE OF CONTENTS	
SHEET NO.	DESCRIPTION
1 - 3	ELEVATION, NOTES AND DESIGN PRESSURE CHARTS
4 - 6	BILL OF MATERIALS AND INSTALLATION DETAILS
7	COMPONENTS

**WINCORE WINDOW COMPANY, LLC**  
250 STAUNTON AVE.  
PARKERSBURG, WV 26104

1" x 3" STRUCTURAL TUBING MULLION  
HORIZONTAL IMPACT WIND ZONE 3  
ELEVATION NOTES AND DESIGN PRESSURE CHARTS

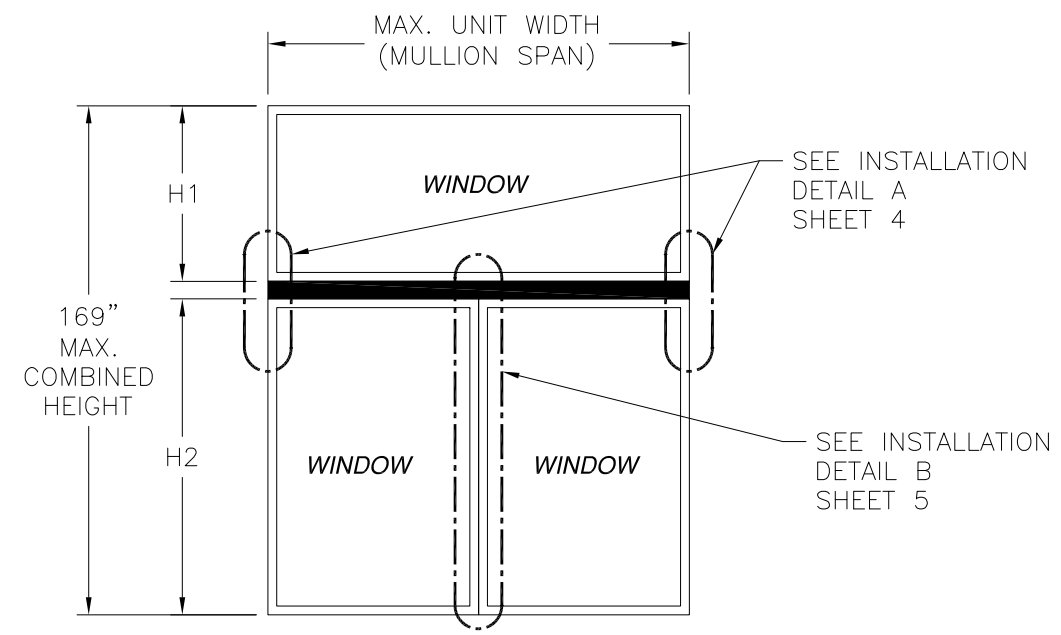
DRAWN: TJH      DWG NO. 08-01063      REV A

SCALE NTS      DATE 07/29/10      SHEET 1 OF 7

SIGNED: 04/05/2011

Luis R. Lomas P.E.  
Texas No. 101889

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	ADDED X AND T MULLION DETAILS	02/17/11	R.L.



**Maximum design pressure capacity chart (psf)**  
**1" x 3" Horizontal mullion with bull nose clip**  
 Design pressure limited by mullion, anchors or clip capacity

Tributary Height (in)	Span and Tributary width (in)								
	48.00	60.00	72.00	84.00	96.00	108.00	120.00	132.00	144.00
24.00	87.3	65.5	52.4	43.7	37.4	31.0	22.5	16.8	12.9
30.00	75.5	55.9	44.1	36.5	31.1	25.2	18.2	13.6	10.4
36.00	67.6	49.6	38.8	31.8	26.9	21.3	15.4	11.5	-
42.00	62.1	45.1	35.1	28.5	24.0	18.5	13.4	-	-
48.00	58.2	41.7	32.2	26.1	21.8	16.5	11.9	-	-
54.00	55.2	39.2	30.1	24.2	20.2	15.0	10.7	-	-
60.00	52.4	37.3	28.3	22.7	18.9	13.8	-	-	-
66.00	49.9	35.7	27.0	21.5	17.8	12.8	-	-	-
72.00	47.6	34.2	25.9	20.5	16.9	11.9	-	-	-
78.00	45.6	32.9	25.0	19.7	16.2	11.3	-	-	-
84.00	43.7	31.6	24.1	19.0	15.5	10.7	-	-	-

**Maximum design pressure capacity chart (psf)**  
**1" x 3" Horizontal mullion with bracket clip**  
 Design pressure limited by mullion, anchors or clip capacity

Tributary Height (in)	Span and Tributary width (in)								
	48.00	60.00	72.00	84.00	96.00	108.00	120.00	132.00	144.00
24.00	120.0	120.0	107.7	67.0	44.5	31.0	22.5	16.8	12.9
30.00	120.0	120.0	88.4	54.7	36.2	25.2	18.2	13.6	10.4
36.00	120.0	120.0	75.8	46.6	30.7	21.3	15.4	11.5	-
42.00	120.0	111.5	67.0	40.9	26.8	18.5	13.4	-	-
48.00	120.0	103.2	60.5	36.8	24.0	16.5	11.9	-	-
54.00	120.0	96.9	55.5	33.6	21.8	15.0	10.7	-	-
60.00	120.0	92.2	51.7	31.0	20.1	13.8	-	-	-
66.00	120.0	88.2	48.7	29.0	18.7	12.8	-	-	-
72.00	117.8	84.5	46.4	27.4	17.6	11.9	-	-	-
78.00	112.7	80.2	44.4	26.1	16.6	11.3	-	-	-
84.00	108.0	76.3	42.6	25.0	15.8	10.7	-	-	-

DESIGN PRESSURE TABLE INSTRUCTIONS:

- 1) DEFINE REQUIRED DESIGN LOAD PER 2006 INTERNATIONAL BUILDING CODE AND 2006 RESIDENTIAL CODE WITH TEXAS STATE MODIFICATIONS.
- 2) DETERMINE TRIBUTARY WIDTH AND MULLION SPAN BASED ON PRODUCT TO BE INSTALLED. SEE FORMULA FOR TRIBUTARY HEIGHT.
- 3) LOCATE MULLION SPAN (UNIT WIDTH) AND TRIBUTARY HEIGHT. AT THE INTERSECTION OF COLUMN AND ROW CONTAINING THE MULLION SPAN AND TRIBUTARY WIDTH RESPECTIVELY IS THE MULLION RATING FOR PRODUCT IN STEP 2. MULLION RATING MUST BE EQUAL OR GREATER THAN REQUIRED DESIGN PRESSURE OBTAINED IN STEP 1.

$$\text{TRIBUTARY HEIGHT} = \frac{H1 + H2}{2}$$

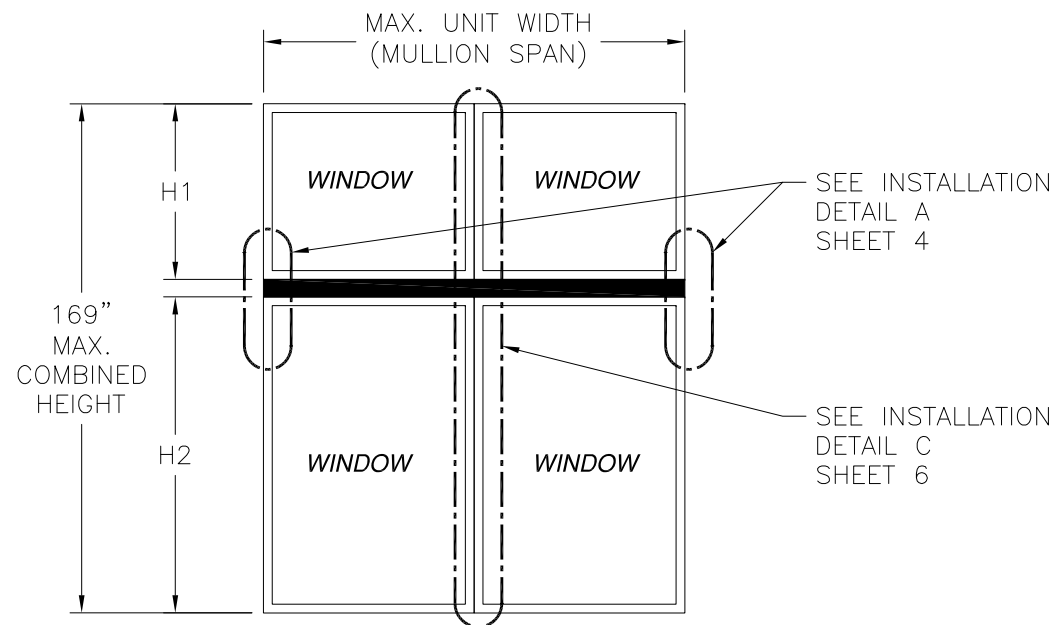
**WINCORE WINDOW COMPANY, LLC**  
 250 STAUNTON AVE.  
 PARKERSBURG, WV 26104

1" x 3" STRUCTURAL TUBING MULLION  
 HORIZONTAL IMPACT WIND ZONE 3  
 T MULLION ELEVATION AND DP CHARTS

DRAWN: TJH	DWG NO. 08-01063	REV A
SCALE NTS	DATE 07/29/10	SHEET 2 OF 7

Luis R. Lomas P.E.  
 Texas No. 101889

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	ADDED X AND T MULLIION DETAILS	02/17/11	R.L.



**Maximum design pressure chart**  
**1"x3" Horizontal mullion with bull nose clip.**  
 Design pressure limited by mullion, anchor or clip capacity (psf)

Tributary Height (in)	Span and Tributary width (in)								
	48.00	60.00	72.00	84.00	96.00	108.00	120.00	132.00	144.00
24.00	87.3	65.5	52.4	43.7	37.4	30.2	21.9	16.4	12.5
30.00	74.9	55.9	44.1	36.5	31.1	24.6	17.8	13.3	10.2
36.00	65.5	49.3	38.8	31.8	26.9	20.8	15.0	11.2	-
42.00	58.2	44.1	34.9	28.5	24.0	18.1	13.1	-	-
48.00	52.4	39.9	31.8	26.0	21.8	16.2	11.6	-	-
54.00	47.6	36.5	29.1	24.0	20.2	14.6	10.5	-	-
60.00	43.7	33.5	26.9	22.2	18.7	13.4	-	-	-
66.00	40.3	31.1	25.0	20.7	17.5	12.3	-	-	-
72.00	37.4	28.9	23.3	19.3	16.4	11.4	-	-	-
78.00	34.9	27.0	21.8	18.1	15.3	10.6	-	-	-
84.00	32.8	25.4	20.5	17.1	14.3	-	-	-	-

**Maximum design pressure chart**  
**1"x3" Horizontal mullion with bracket clip.**  
 Design pressure limited by mullion, anchor or clip capacity (psf)


Tributary Height (in)	Span and Tributary width (in)								
	48.00	60.00	72.00	84.00	96.00	108.00	120.00	132.00	144.00
24.00	120.0	120.0	105.4	65.4	43.4	30.2	21.9	16.4	12.5
30.00	120.0	120.0	86.5	53.5	35.3	24.6	17.8	13.3	10.2
36.00	120.0	120.0	74.0	45.5	30.0	20.8	15.0	11.2	-
42.00	120.0	109.1	64.9	39.9	26.2	18.1	13.1	-	-
48.00	120.0	98.6	57.7	35.6	23.4	16.2	11.6	-	-
54.00	117.8	87.6	52.0	32.2	21.2	14.6	10.5	-	-
60.00	108.0	78.9	47.4	29.3	19.3	13.4	-	-	-
66.00	99.7	71.7	43.5	26.9	17.8	12.3	-	-	-
72.00	92.6	65.7	40.1	24.9	16.5	11.4	-	-	-
78.00	86.4	60.7	37.3	23.2	15.3	10.6	-	-	-
84.00	81.0	56.3	34.8	21.7	14.3	-	-	-	-

DESIGN PRESSURE TABLE INSTRUCTIONS:

- 1) DEFINE REQUIRED DESIGN LOAD PER 2006 INTERNATIONAL BUILDING CODE AND 2006 RESIDENTIAL CODE WITH TEXAS STATE MODIFICATIONS.
- 2) DETERMINE TRIBUTARY WIDTH AND MULLION SPAN BASED ON PRODUCT TO BE INSTALLED. SEE FORMULA FOR TRIBUTARY HEIGHT.
- 3) LOCATE MULLION SPAN (UNIT WIDTH) AND TRIBUTARY HEIGHT. AT THE INTERSECTION OF COLUMN AND ROW CONTAINING THE MULLION SPAN AND TRIBUTARY WIDTH RESPECTIVELY IS THE MULLION RATING FOR PRODUCT IN STEP 2. MULLION RATING MUST BE EQUAL OR GREATER THAN REQUIRED DESIGN PRESSURE OBTAINED IN STEP 1.

$$\text{TRIBUTARY HEIGHT} = \frac{H1 + H2}{2}$$

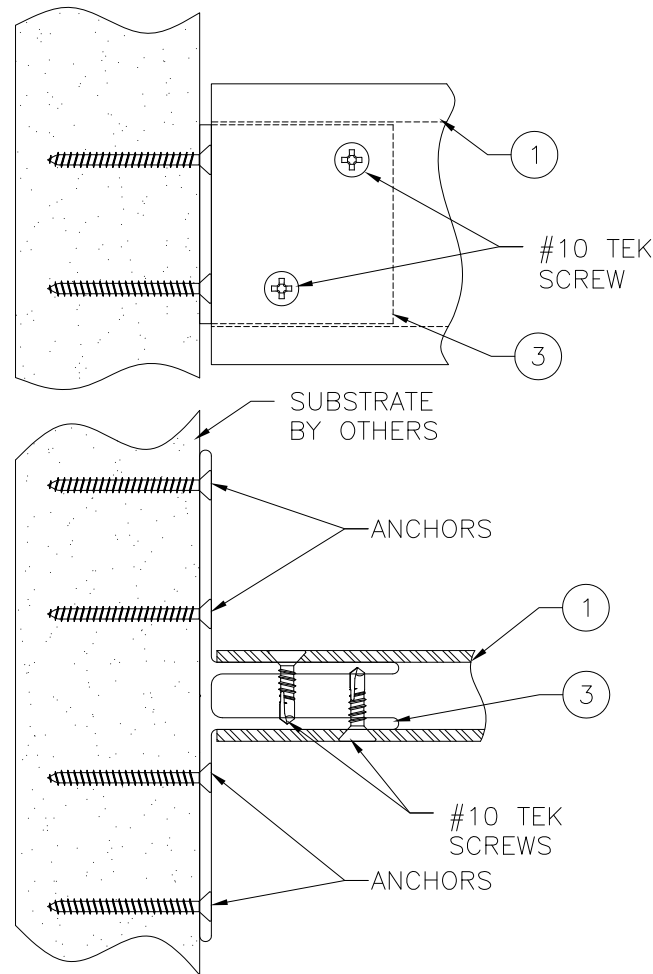
<b>WINCORE WINDOW COMPANY, LLC</b> 250 STAUNTON AVE. PARKERSBURG, WV 26104		
1" x 3" STRUCTURAL TUBING MULLION HORIZONTAL IMPACT WIND ZONE 3 X MULLION ELEVATION AND DP CHARTS		
DRAWN: TJH	DWG NO. 08-01063	REV A
SCALE NTS	DATE 07/29/10	SHEET 3 OF 7



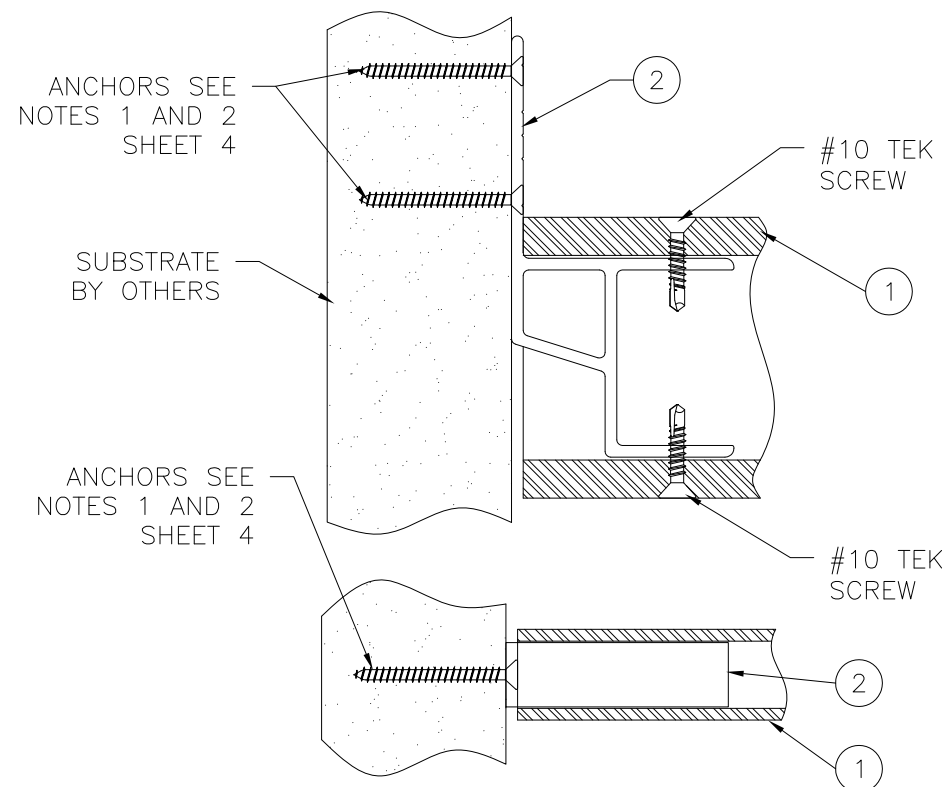
Luis R. Lomas P.E.  
Texas No. 101889

PARTS LIST		
NO.	PART NUMBER	DESCRIPTION
1		1X3 STRUCTURAL TUBING MULLION, AL 6063-T6
2		BULL NOSE CLIP 1X3, ALUMINUM 6063-T6
3		BRACKET CLIP, ALUMINUM 6063-T6
4	AM72	COVER, PVC

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	ADDED X AND T MULLION DETAILS	02/17/11	R.L.



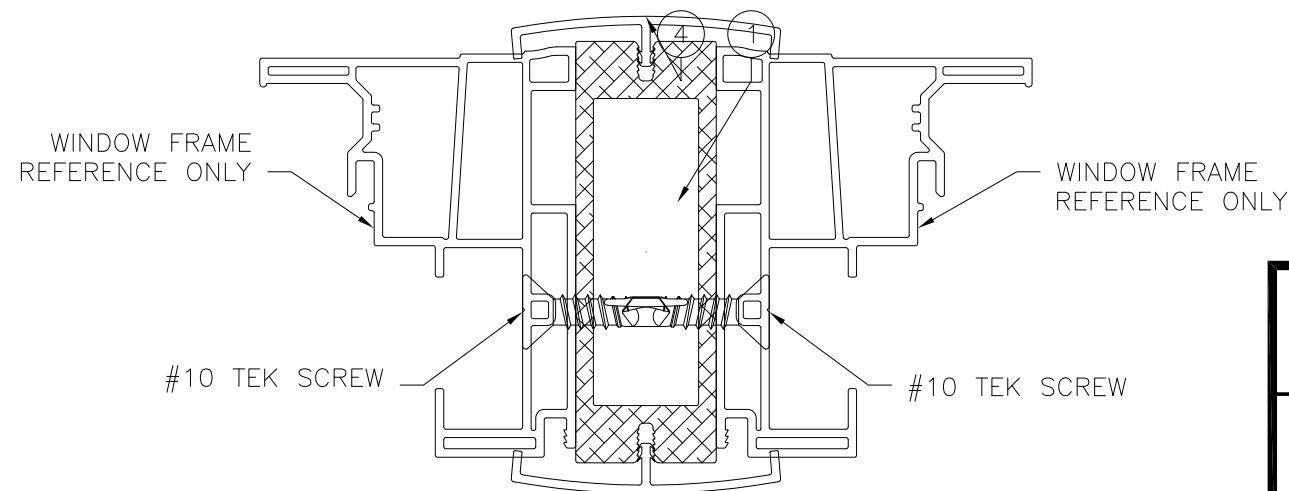
**DETAIL A**  
BRACKET CLIP INSTALLATION  
TYPICAL AT EACH SIDE OF MULLION



**DETAIL A**  
BULL NOSE CLIP INSTALLATION  
TYPICAL AT EACH SIDE OF MULLION

ANCHORING NOTES:

- 1) FOR ANCHORING INTO MASONRY USE 3/16" ITW TAPCONS WITH SUFFICIENT LENGTH TO ACHIEVE A 1 1/4" MINIMUM EMBEDMENT INTO SUBSTRATE WITH 2 5/8" MINIMUM EDGE DISTANCE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
- 2) FOR ANCHORING INTO WOOD FRAMING OR 2X BUCK USE #10 WOOD SCREW WITH SUFFICIENT LENGTH TO ACHIEVE A 1 3/8" MINIMUM EMBEDMENT INTO SUBSTRATE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
- 3) FOR ATTACHING WINDOW UNITS TO MULLION USE #10 TEK SELF TAPPING SCREWS WITH SUFFICIENT LENGTH TO ACHIEVE A MINIMUM EMBEDMENT OF THREE THREADS PAST THE MULLION WALL. LOCATE SCREWS 6" FROM EACH MULLION END AND 8" MAX. O.C. THEREAFTER. STAGGER SCREWS AT EACH WINDOW.
- 5) FOR WINDOW UNITS ANCHORING SCHEDULE REFER TO WINDOW APPROVED INSTALLATION INSTRUCTIONS.
- 6) FOR ATTACHING VERTICAL MULLION TO HORIZONTAL MULLION THROUGH CLIP USE #10 SELF TAPPING SCREWS WITH SUFFICIENT LENGTH TO ACHIEVE A MINIMUM EMBEDMENT OF THREE THREADS PAST THE HORIZONTAL MULLION WALL. LOCATE SCREWS AS SHOWN IN INSTALLATION DETAILS.
- 7) ALL FASTENERS TO BE CORROSION RESISTANT.
- 8) 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 BELOW:
  - A. WOOD - MINIMUM SPECIFIC GRAVITY OF G=0.42
  - B. CONCRETE - MINIMUM COMPRESSIVE STRENGTH OF 3,200 PSI.
  - C. MASONRY - STRENGTH CONFORMANCE TO ASTM C-90, GRADE N, TYPE 1 (OR GREATER).



**DETAIL D**  
WINDOW TO MULLION INSTALLATION

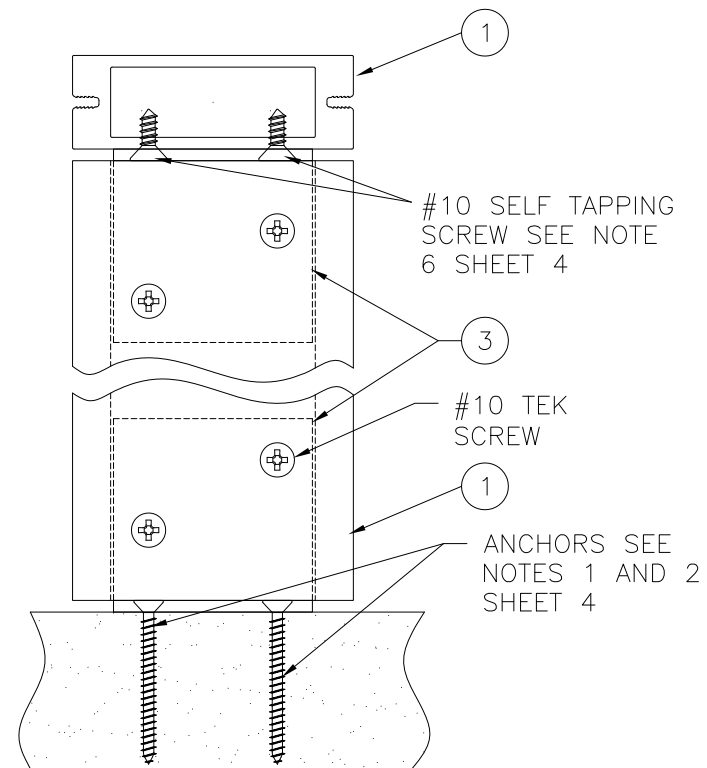
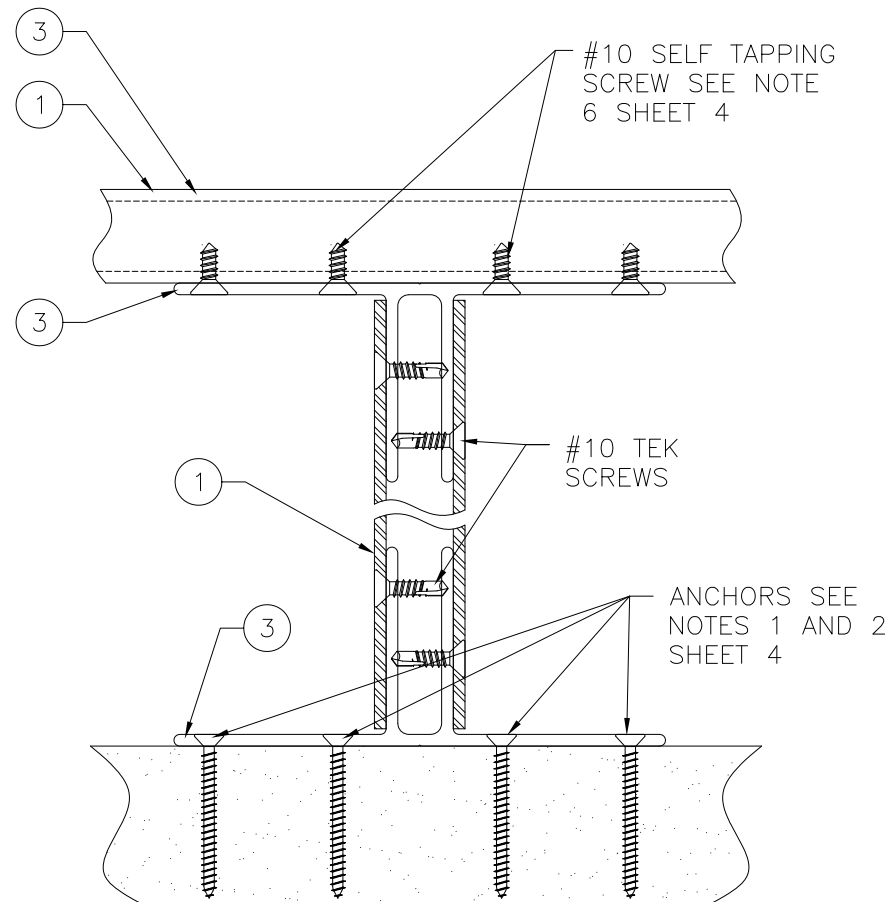
**WINCORE WINDOW COMPANY, LLC**  
250 STAUNTON AVE.  
PARKERSBURG, WV 26104

1" x 3" STRUCTURAL TUBING MULLION  
HORIZONTAL IMPACT WIND ZONE 3  
BILL OF MATERIALS AND INSTALLATION DETAILS

DRAWN: TJH	DWG NO. 08-01063	REV A
SCALE NTS	DATE 07/29/10	SHEET 4 OF 7

Luis R. Lomas P.E.  
Texas No. 101889

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	ADDED X AND T MULLION DETAILS	02/17/11	R.L.



**DETAIL B**  
T MULLION CLIP INSTALLATION

WINCORE WINDOW COMPANY, LLC  
250 STAUNTON AVE.  
PARKERSBURG, WV 26104

1" x 3" STRUCTURAL TUBING MULLION  
HORIZONTAL IMPACT WIND ZONE 3  
T MULLION INSTALLATION DETAILS

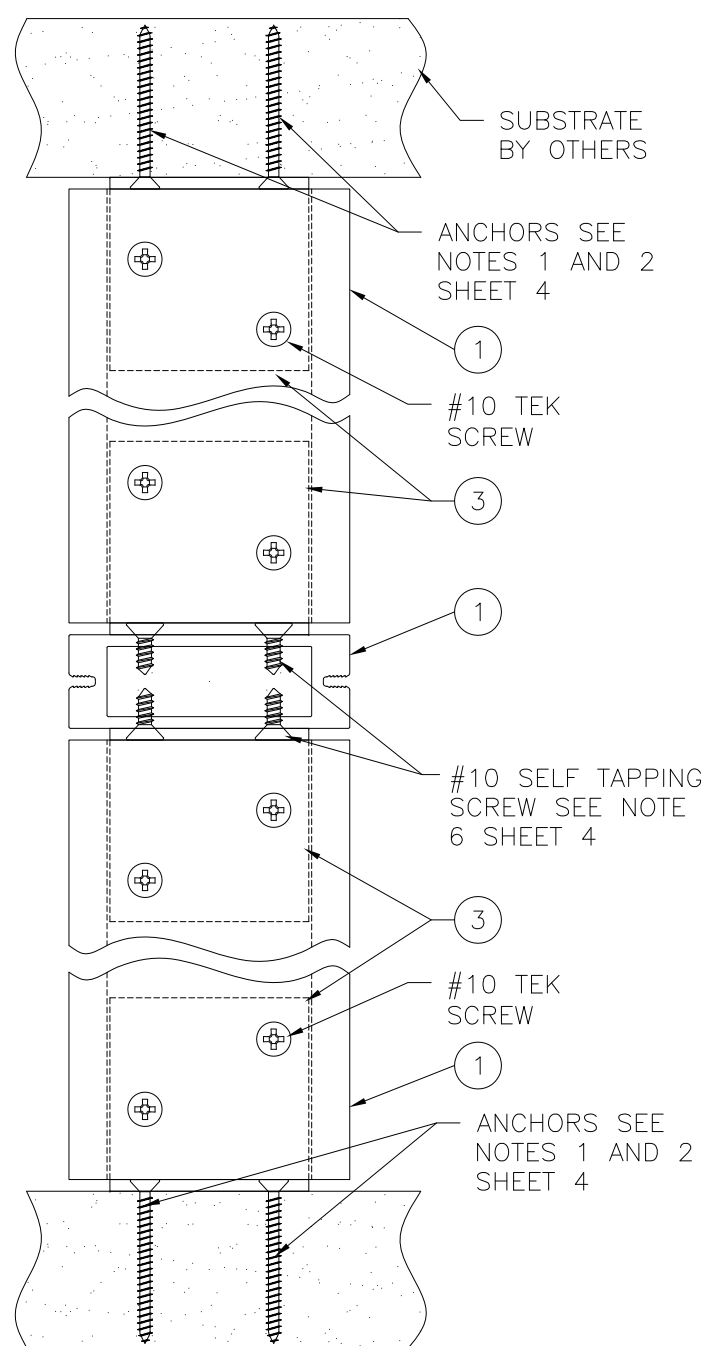
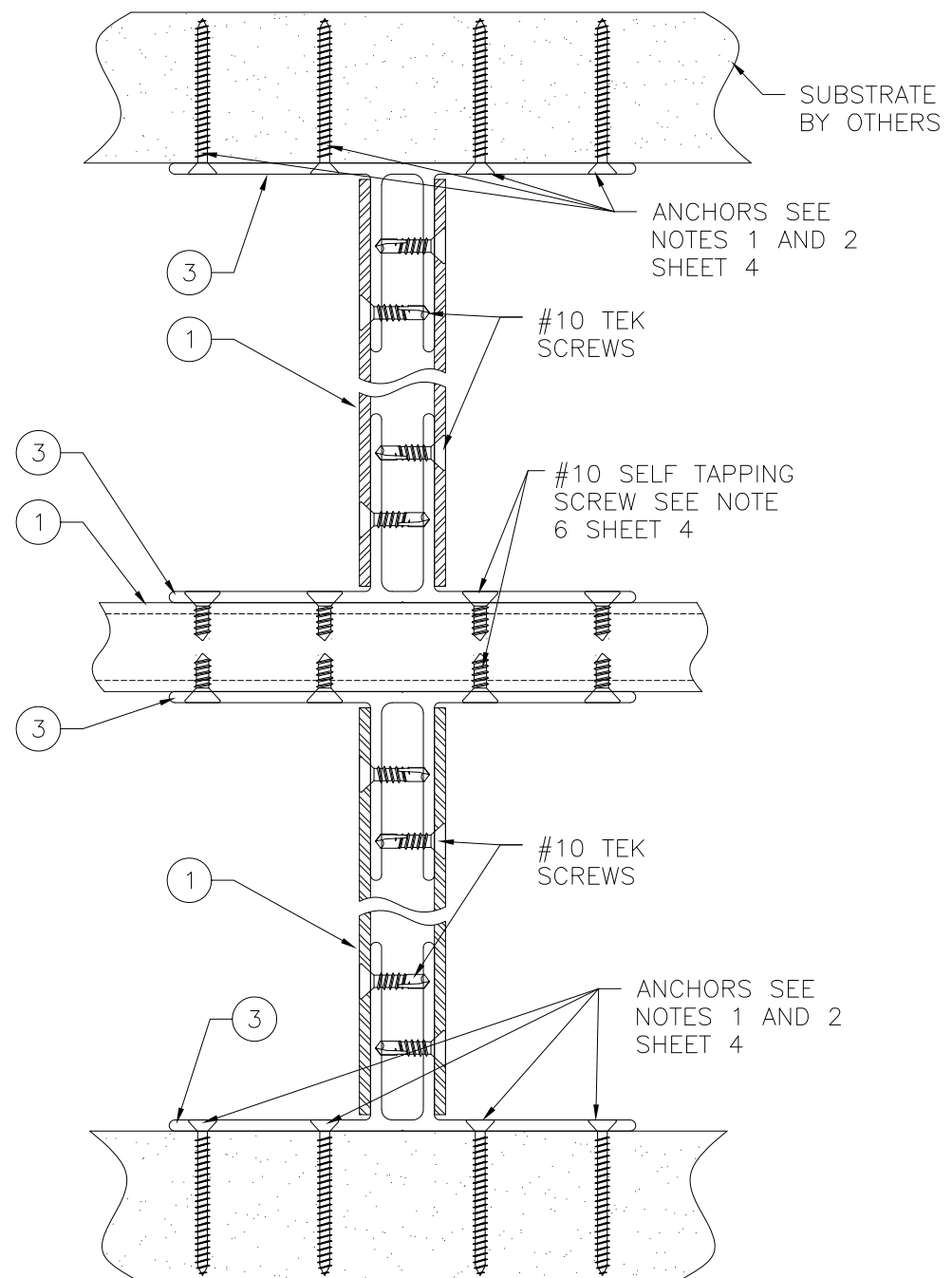
DRAWN: TJH	DWG NO. 08-01063	REV A
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SCALE NTS	DATE 07/29/10	SHEET 5 OF 7
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Luis R. Lomas P.E.  
Texas No. 101889

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	ADDED X AND T MULLION DETAILS	02/17/11	R.L.



**DETAIL C**  
X MULLION CLIP INSTALLATION

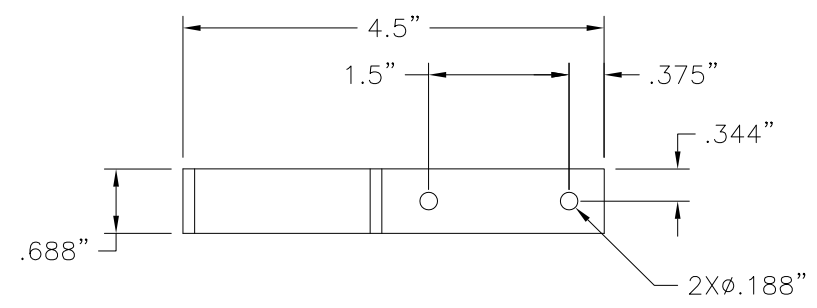
WINCORE WINDOW COMPANY, LLC  
 250 STAUNTON AVE.  
 PARKERSBURG, WV 26104

1" x 3" STRUCTURAL TUBING MULLION  
 HORIZONTAL IMPACT WIND ZONE 3  
 X MULLION INSTALLATION DETAILS

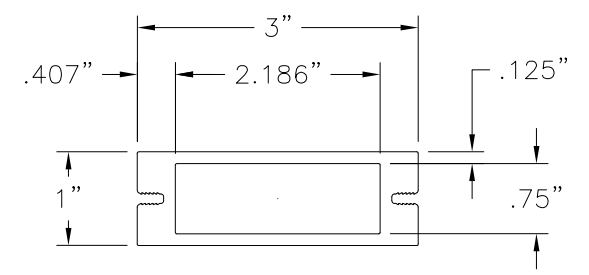
DRAWN: TJH	DWG NO. 08-01063	REV A
SCALE NTS	DATE 07/29/10	SHEET 6 OF 7

Luis R. Lomas P.E.  
 Texas No. 101889

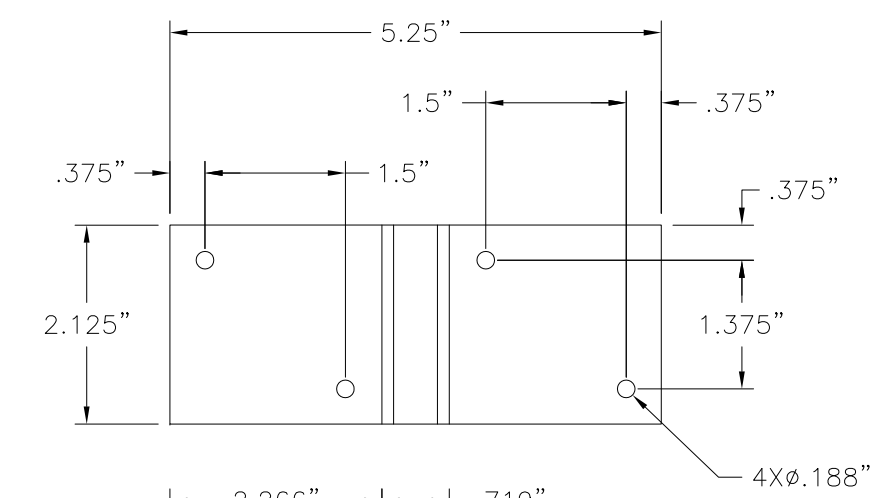
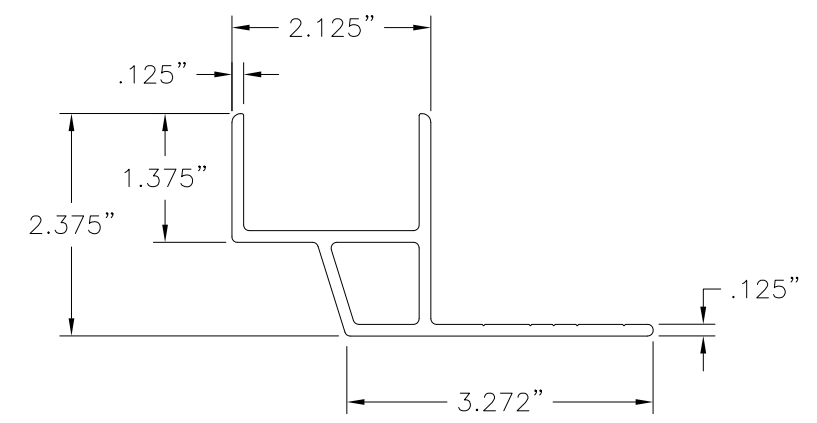
REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	ADDED X AND T MULLION DETAILS	02/17/11	R.L.



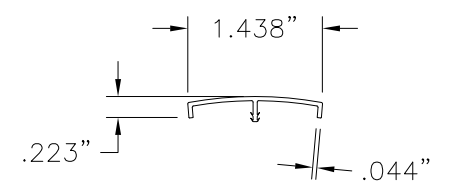
② **BULL NOSE CLIP (1X3)**  
6063-T6 ALUMINUM



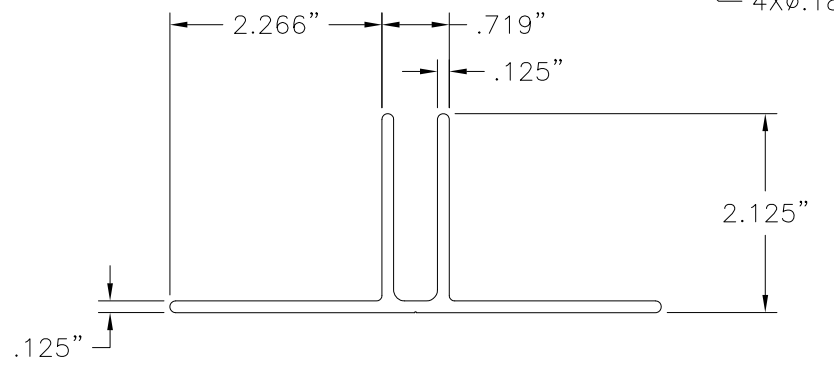
① **1X3 STRUCTURAL TUBING MULLION**  
6063-T6 ALUMINUM



③ **BRACKET CLIP**  
6063-T6 ALUMINUM



④ **COVER**  
PVC



WINCORE WINDOW COMPANY, LLC  
250 STAUNTON AVE.  
PARKERSBURG, WV 26104

1" x 3" STRUCTURAL TUBING MULLION  
HORIZONTAL IMPACT WIND ZONE 3  
COMPONENTS

DRAWN: TJH	DWG NO. 08-01063	REV A
SCALE NTS	DATE 07/29/10	SHEET 7 OF 7

Luis R. Lomas P.E.  
Texas No. 101889