

NOTES:

1. THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH REQUIREMENTS OF THE 2006 INTERNATIONAL BUILDING CODE AND THE 2006 INTERNATIONAL RESIDENTIAL CODE WITH THE STATE OF TEXAS MODIFICATIONS.
2. WOOD FRAMING TO BE DESIGNED AND ANCHORED TO PROPERLY TRANSFER ALL LOADS TO STRUCTURE. FRAMING IS THE RESPONSIBILITY OF THE ARCHITECT OR ENGINEER OF RECORD.
3. 1X BUCK OVER MASONRY/CONCRETE IS OPTIONAL. WHERE 1X BUCK IS NOT USED DISSIMILAR MATERIALS MUST BE SEPARATED WITH APPROVED COATING OR MEMBRANE. SELECTION OF COATING OR MEMBRANE IS THE RESPONSIBILITY OF THE ARCHITECT OR ENGINEER OF RECORD.
4. 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.
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 MULLION. WINDOWS MUST BE APPROVED UNDER SEPARATE APPROVAL.
7. SINGLE WINDOWS TO BE MULLED ARE NOT LIMITED TO THOSE SHOWN IN THIS DRAWING. WINDOWS MUST BE MANUFACTURED BY WINDOW MART.
8. DESIGN PRESSURE OF MULLED UNIT SHALL BE CONTROLLED BY THE LESSER DESIGN PRESSURE OF THE MULLION OR THE INDIVIDUAL WINDOW OR DOOR UNIT.
9. UNITS MAY BE MULLED TOGETHER INDEFINITELY AS LONG AS SINGLE UNIT WIDTH AND HEIGHT ARE NOT EXCEEDED AND MULLION IS ANCHORED AS SHOWN HEREIN.

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	ADDED COMPONENT DETAILS	10/02/14	R.L.


ANCHORING NOTES:

1. FOR ANCHORING INTO WOOD FRAMING OR 2X BUCK USE #10 WOOD SCREW WITH SUFFICIENT LENGTH TO ACHIEVE A 1 3/8" MINIMUM EMBEDMENT. LOCATE ANCHORS AS SHOWN IN INSTALLATION DETAILS SHEET 3.
2. FOR ANCHORING INTO CONCRETE USE 3/16" TAPCON WITH SUFFICIENT LENGTH TO ACHIEVE A 1 3/4" MINIMUM EMBEDMENT WITH 2 1/2" MINIMUM EDGE DISTANCE. LOCATE ANCHORS AS SHOWN IN INSTALLATION DETAILS SHEET 4.
3. FOR ANCHORING INTO METAL STRUCTURE USE #10 SMS OR SELF DRILLING SCREWS WITH SUFFICIENT LENGTH TO ACHIEVE 3 THREADS MINIMUM BEYOND STRUCTURE INTERIOR WALL. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
4. FOR ATTACHING REINFORCEMENTS TO WINDOW FRAME USE #6 SELF DRILLING SCREWS WITH SUFFICIENT LENGTH TO ACHIEVE A MINIMUM EMBEDMENT OF THREE THREADS PAST THE MULLION WALL. LOCATE SCREWS IN ACCORDANCE WITH WINDOW ANCHORING SCHEDULE AS SHOWN IN WINDOW SEPARATE APPROVAL.
5. FOR WINDOW UNITS ANCHORING SCHEDULE REFER TO APPROVED INSTALLATION INSTRUCTIONS.
6. ALL FASTENERS TO BE CORROSION RESISTANT.
7. 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).
 - D. METAL STRUCTURE: STEEL 18GA, 33KSI OR ALUMINUM 6063-T5 1/8" THICK MINIMUM

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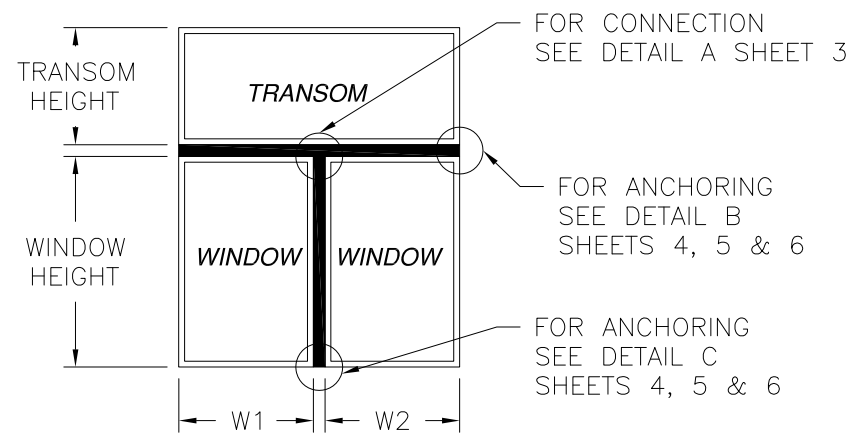
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WINDOW MART 5760 ALBERT PIKE ROYAL, AR 71968		
T MULLION – IMPACT (2) 1/4"x3/4" ALUMINUM REINFORCEMENTS NOTES		
DRAWN: V.L.	DWG NO. 08-02232	REV A
SCALE NTS	DATE 10/02/13	SHEET 1 OF 7



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

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	ADDED COMPONENT DETAILS	10/02/14	R.L.



SEE CHARTS 1-12 FOR DESIGN PRESSURE RATINGS AND NUMBER OF ANCHORS REQUIRED

DESIGN PRESSURE TABLE INSTRUCTIONS:

1. DEFINE REQUIRED DESIGN LOAD PER CHAPTER 16 OF THE 2006 IBC OR SECTION R301.2.1 OF THE 2006 IRC.
2. DETERMINE MULLION SPAN AND TRIBUTARY WIDTH OF PRODUCT TO BE INSTALLED BASED ON FORMULA FOR TRIBUTARY WIDTH BELOW.
3. TO DETERMINE MULLION RATING LOCATE COLUMN FOR MULLION SPAN AND TRIBUTARY WIDTH THEN LOCATE CORRESPONDING ROW FOR BOTTOM AND TRANSOM HEIGHTS. FIND THE INTERSECTION OF THIS COLUMN AND ROW. MULLION RATING IS LOCATED AT THIS INTERSECTION.
4. MULLION RATING MUST BE EQUAL OR GREATER THAN REQUIRED DESIGN PRESSURE OBTAINED IN STEP 1.
5. IF TRANSOM TO BE INSTALLED IS NOT LISTED IN THESE CHARTS GO TO NEXT HIGHER TRANSOM CHART. FOR EXAMPLE IF TRANSOM TO BE INSTALLED IS 20" HIGH THEN USE CHART FOR 24" TRANSOM.
6. WINDOW/DOOR AND TRANSOMS TO BE ANCHORED ON ALL FOUR SIDES.

$$\text{TRIBUTARY WIDTH} = \frac{W1 + W2}{2}$$

CHART #1
18" TRANSOM
SEE CHARTS 2 & 3 FOR NUMBER OF ANCHORS REQUIRED

Design pressure rating (psf)								
Height (in)		Span and Tributary width (in)						
		48.00	56.00	64.00	72.00	80.00	88.00	96.00
Window	Transom	24.00	28.00	32.00	36.00	40.00	44.00	48.00
36.00	18.00	75.0	75.0	54.4	37.7	27.1	20.2	15.4
42.00	18.00	75.0	75.0	49.7	34.5	24.8	18.4	-
48.00	18.00	75.0	69.2	45.8	31.8	22.9	17.0	-
54.00	18.00	75.0	64.0	42.4	29.5	21.3	15.8	-
60.00	18.00	75.0	59.6	39.5	27.5	19.8	-	-
66.00	18.00	75.0	55.8	37.0	25.7	18.6	-	-
72.00	18.00	75.0	52.4	34.8	24.2	17.5	-	-

CHART #4
24" TRANSOM
SEE CHARTS 5 & 6 FOR NUMBER OF ANCHORS REQUIRED

Design pressure rating (psf)								
Height (in)		Span and Tributary width (in)						
		40.00	48.00	56.00	64.00	72.00	80.00	84.00
Window	Transom	20.00	24.00	28.00	32.00	36.00	40.00	42.00
36.00	24.00	75.0	75.0	74.9	49.3	34.1	24.5	21.1
42.00	24.00	75.0	75.0	68.9	45.4	31.5	22.6	19.4
48.00	24.00	75.0	75.0	63.8	42.1	29.2	21.0	18.1
54.00	24.00	75.0	75.0	59.4	39.3	27.2	19.6	16.9
60.00	24.00	75.0	75.0	55.6	36.8	25.5	18.4	15.8
66.00	24.00	75.0	75.0	52.2	34.6	24.0	17.3	-
72.00	24.00	75.0	75.0	49.3	32.6	22.7	16.4	-

CHART #7
30" TRANSOM
SEE CHARTS 8 & 9 FOR NUMBER OF ANCHORS REQUIRED

Design pressure rating (psf)								
Height (in)		Span and Tributary width (in)						
		40.00	48.00	56.00	64.00	72.00	80.00	84.00
Window	Transom	20.00	24.00	28.00	32.00	36.00	40.00	42.00
36.00	30.00	75.0	75.0	69.4	45.5	31.4	22.5	19.3
42.00	30.00	75.0	75.0	64.3	42.1	29.1	20.9	17.9
48.00	30.00	75.0	75.0	59.8	39.3	27.2	19.5	16.8
54.00	30.00	75.0	75.0	55.9	36.8	25.5	18.3	15.7
60.00	30.00	75.0	75.0	52.5	34.6	24.0	17.3	-
66.00	30.00	75.0	75.0	49.5	32.6	22.6	16.3	-
72.00	30.00	75.0	75.0	46.8	30.9	21.4	15.5	-

CHART #10
36" TRANSOM
SEE CHARTS 11 & 12 FOR NUMBER OF ANCHORS REQUIRED

Design pressure rating (psf)								
Height (in)		Span and Tributary width (in)						
		40.00	48.00	56.00	64.00	72.00	80.00	84.00
Window	Transom	20.00	24.00	28.00	32.00	36.00	40.00	42.00
36.00	36.00	75.0	75.0	65.4	42.6	29.2	20.9	17.9
42.00	36.00	75.0	75.0	60.8	39.6	27.3	19.5	16.7
48.00	36.00	75.0	75.0	56.8	37.1	25.5	18.3	15.7
54.00	36.00	75.0	75.0	53.3	34.9	24.0	17.3	-
60.00	36.00	75.0	75.0	50.2	32.9	22.7	16.3	-
66.00	36.00	75.0	75.0	47.4	31.1	21.5	15.4	-
72.00	36.00	75.0	73.4	45.0	29.5	20.4	-	-

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WINDOW MART
5760 ALBERT PIKE
ROYAL, AR 71968

T MULLION - IMPACT
(2) 1/4"x3/4" ALUMINUM REINFORCEMENTS
CONFIGURATION & CHARTS

DRAWN: V.L. DWG NO. 08-02232 REV A

SCALE NTS DATE 10/02/13 SHEET 2 OF 7



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

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	ADDED COMPONENT DETAILS	10/02/14	R.L.

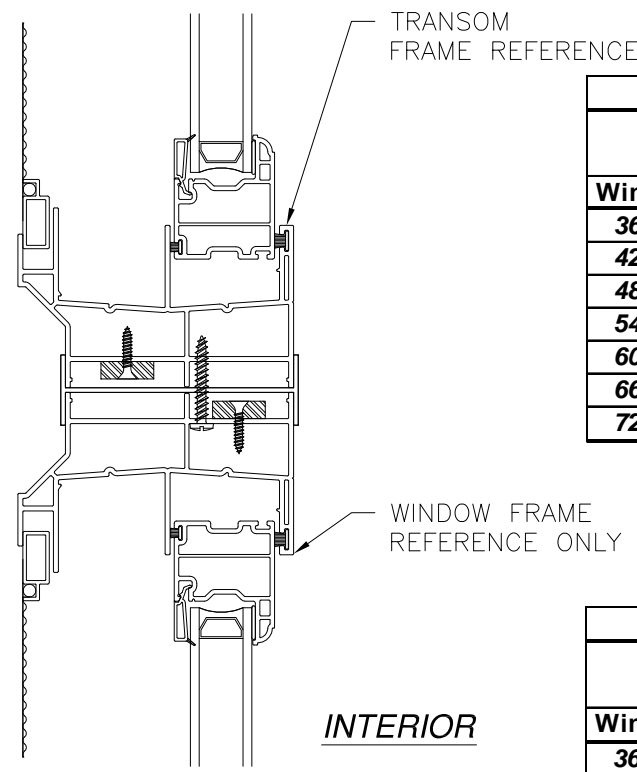
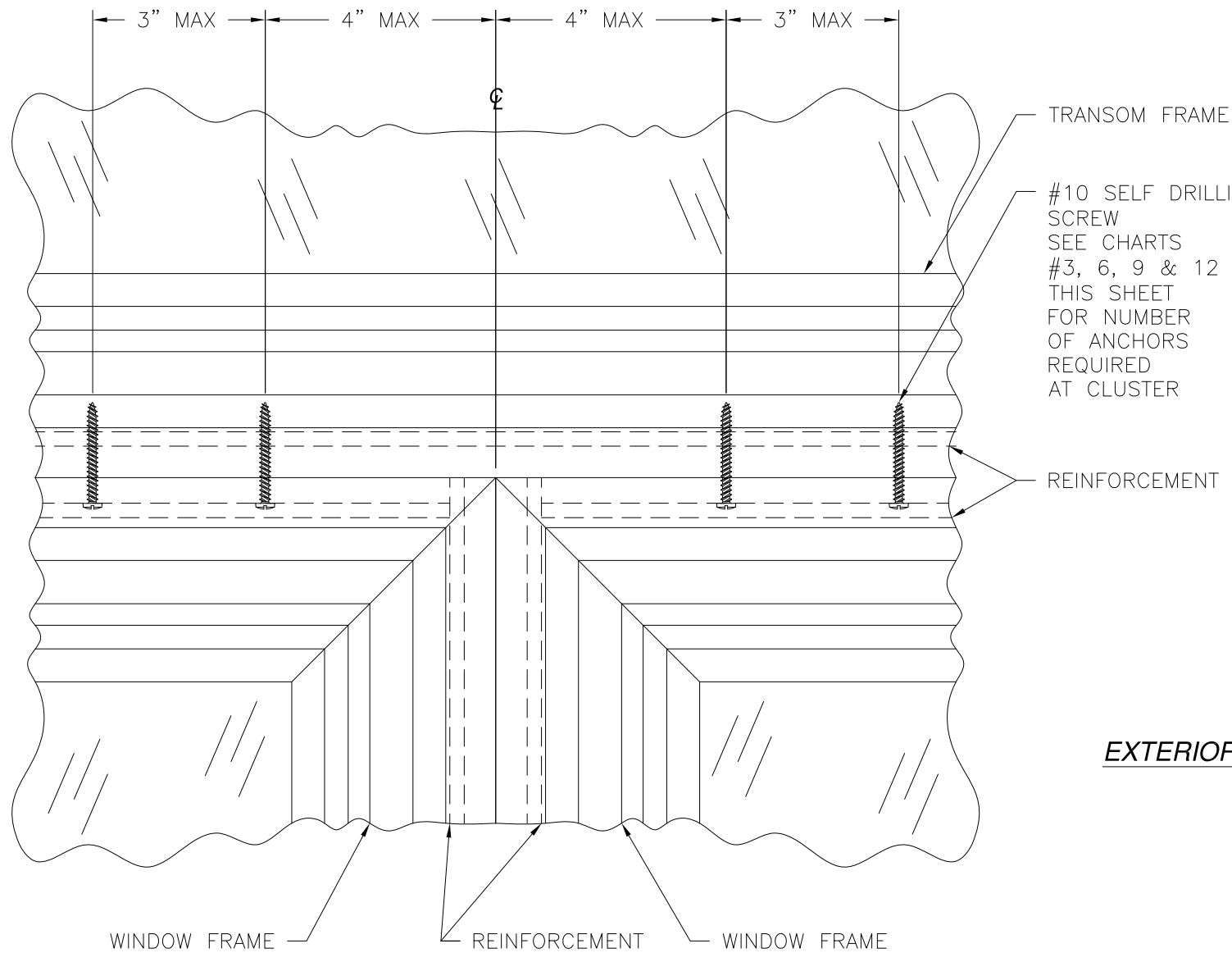


CHART #9
30" TRANSOM

Number of anchors required at Vertical mullion end cluster

Height (in)		Span and Tributary width (in)							
		40.00	48.00	56.00	64.00	72.00	80.00	84.00	
Window	Transom	20.00	24.00	28.00	32.00	36.00	40.00	42.00	
36.00	30.00	2	2	2	2	2	2	2	
42.00	30.00	4	4	4	2	2	2	2	
48.00	30.00	4	4	4	2	2	2	2	
54.00	30.00	4	4	4	2	2	2	2	
60.00	30.00	4	4	4	4	2	2	-	
66.00	30.00	4	6	4	4	2	2	-	
72.00	30.00	4	6	4	4	2	2	-	

CHART #12
36" TRANSOM

Number of anchors required for vertical mullion end cluster

Height (in)		Span and Tributary width (in)							
		40.00	48.00	56.00	64.00	72.00	80.00	84.00	
Window	Transom	20.00	24.00	28.00	32.00	36.00	40.00	42.00	
36.00	36.00	2	2	2	2	2	2	2	
42.00	36.00	4	4	2	2	2	2	2	
48.00	36.00	4	4	4	2	2	2	2	
54.00	36.00	4	4	4	2	2	2	-	
60.00	36.00	4	4	4	2	2	2	-	
66.00	36.00	4	6	4	4	2	2	-	
72.00	36.00	4	6	4	4	2	-	-	

TRANSOM/WINDOW CONNECTION DETAIL A
SEE DETAIL D SHEET 7 FOR FRAME TO REINFORCEMENT INSTALLATION

CHART #3
18" TRANSOM

Number of anchors required at Vertical mullion end cluster

Height (in)		Span and Tributary width (in)						
		48.00	56.00	64.00	72.00	80.00	88.00	96.00
Window	Transom	24.00	28.00	32.00	36.00	40.00	44.00	48.00
36.00	18.00	2	2	2	2	2	2	2
42.00	18.00	4	4	2	2	2	2	-
48.00	18.00	4	4	2	2	2	2	-
54.00	18.00	4	4	4	2	2	2	-
60.00	18.00	4	4	4	2	2	-	-
66.00	18.00	6	4	4	2	2	-	-
72.00	18.00	6	4	4	2	2	-	-

CHART #6
24" TRANSOM

Number of anchors required at Vertical mullion end cluster

Height (in)		Span and Tributary width (in)						
		40.00	48.00	56.00	64.00	72.00	80.00	84.00
Window	Transom	20.00	24.00	28.00	32.00	36.00	40.00	42.00
36.00	24.00	2	2	2	2	2	2	2
42.00	24.00	4	4	4	2	2	2	2
48.00	24.00	4	4	4	2	2	2	2
54.00	24.00	4	4	4	2	2	2	2
60.00	24.00	4	4	4	4	2	2	2
66.00	24.00	4	6	4	4	2	2	-
72.00	24.00	4	6	4	4	2	2	-

WINDOW MART
5760 ALBERT PIKE
ROYAL, AR 71968

T MULLION – IMPACT
(2) 1/4"x3/4" ALUMINUM REINFORCEMENTS
INSTALLATION DETAILS

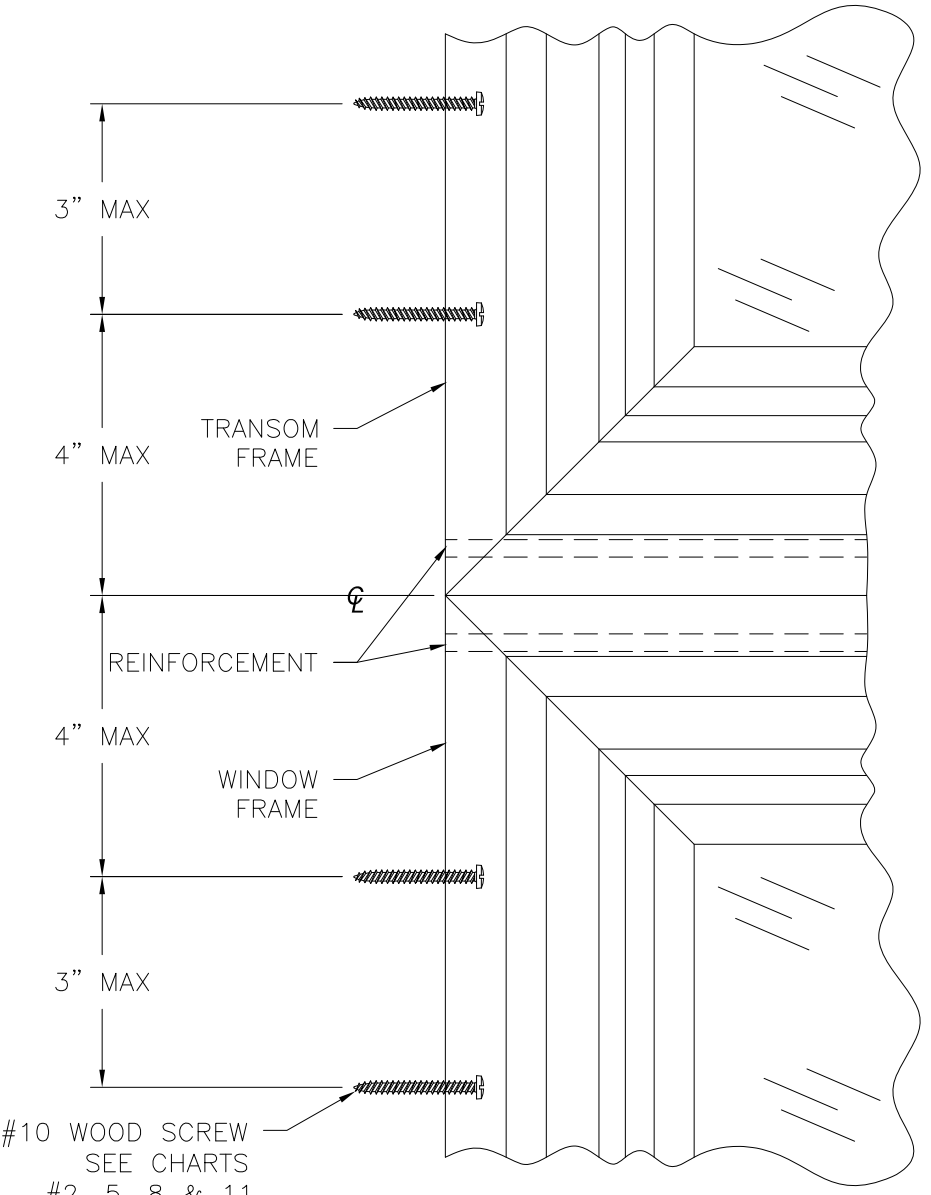
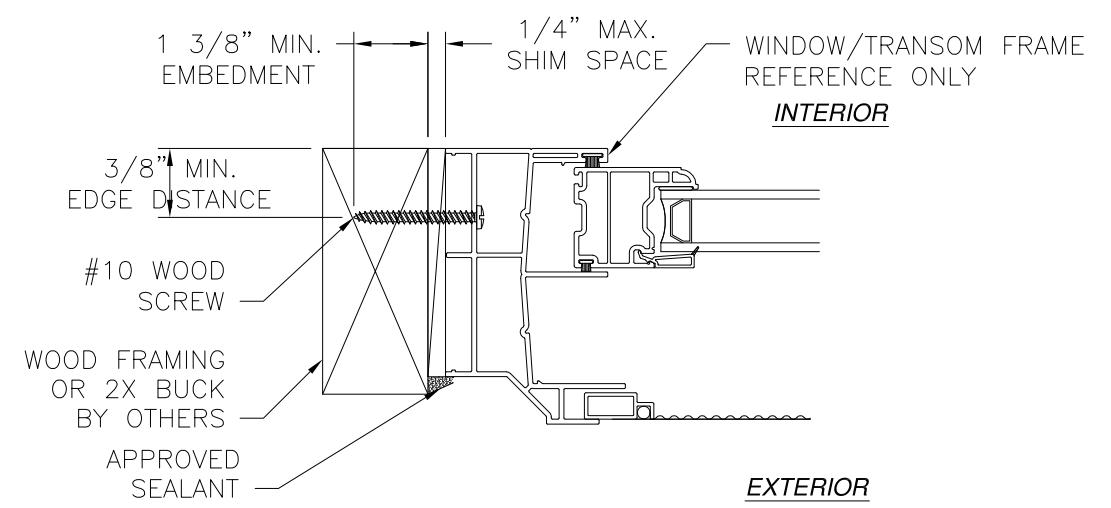
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SCALE NTS DATE 10/02/13 SHEET 3 OF 7

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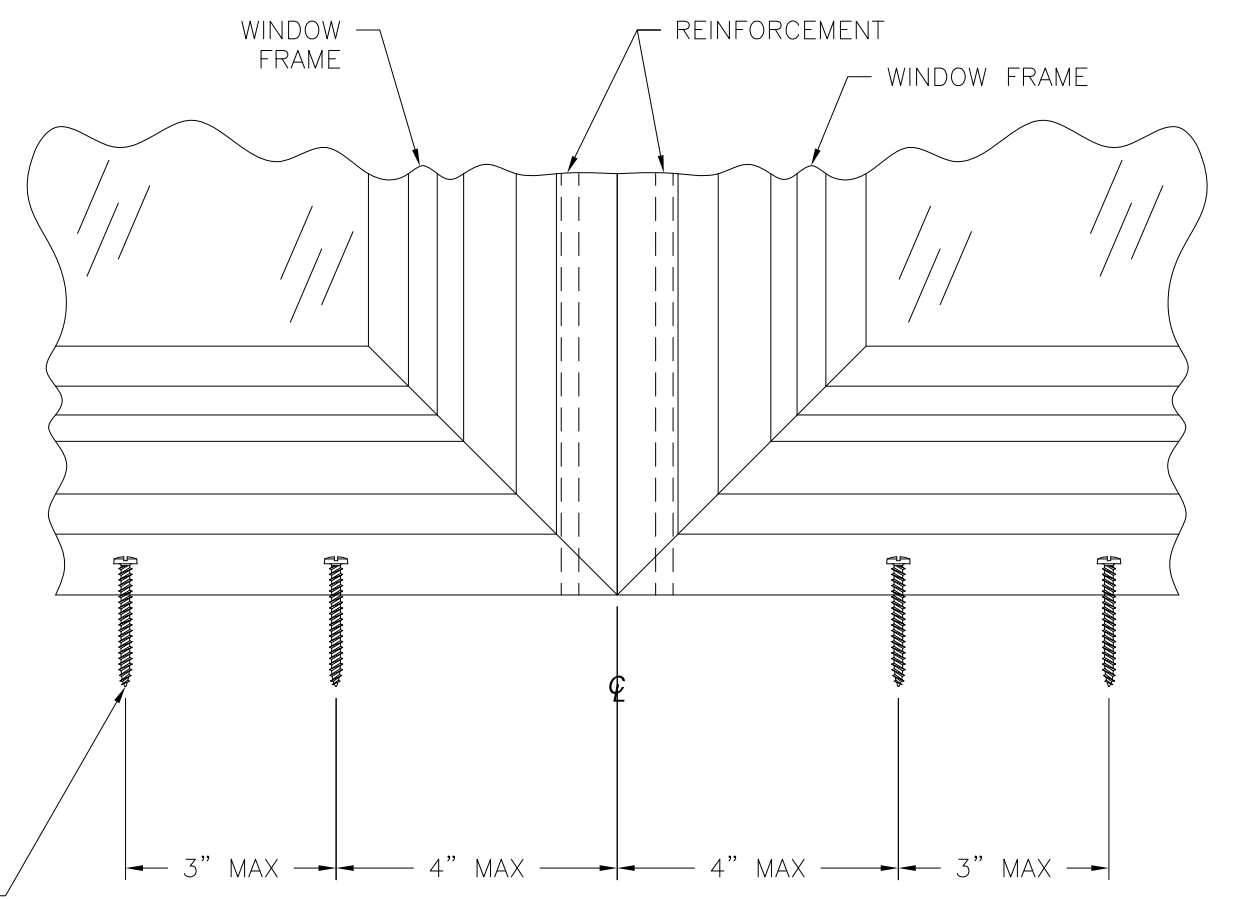
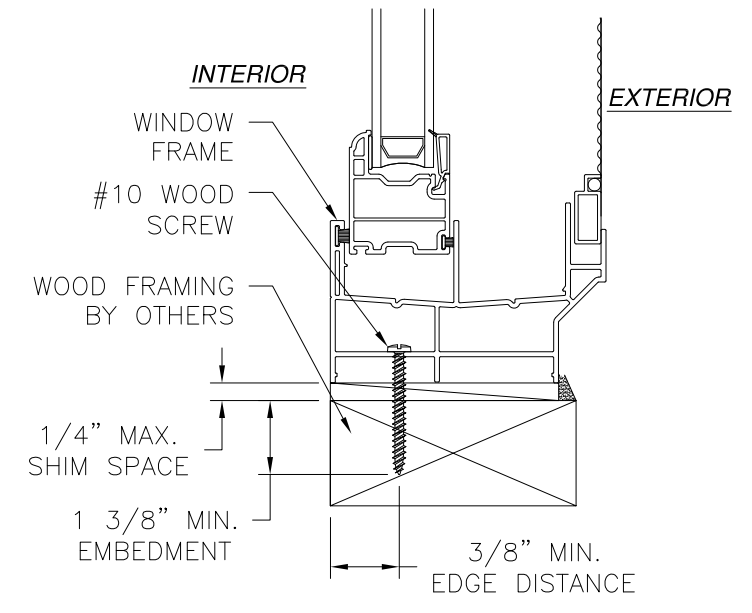
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REVISIONS			
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INSTALLATION DETAIL B
WOOD FRAMING OR 2X BUCK

#10 WOOD SCREW
SEE CHARTS
#2, 5, 8 & 11
SHEET 7
FOR NUMBER
OF ANCHORS
REQUIRED
AT CLUSTER



#10 WOOD SCREW
SEE CHARTS
#3, 6, 9 & 12
FOR NUMBER OF
ANCHORS
REQUIRED
AT CLUSTER

INSTALLATION DETAIL C
WOOD FRAMING OR 2X BUCK

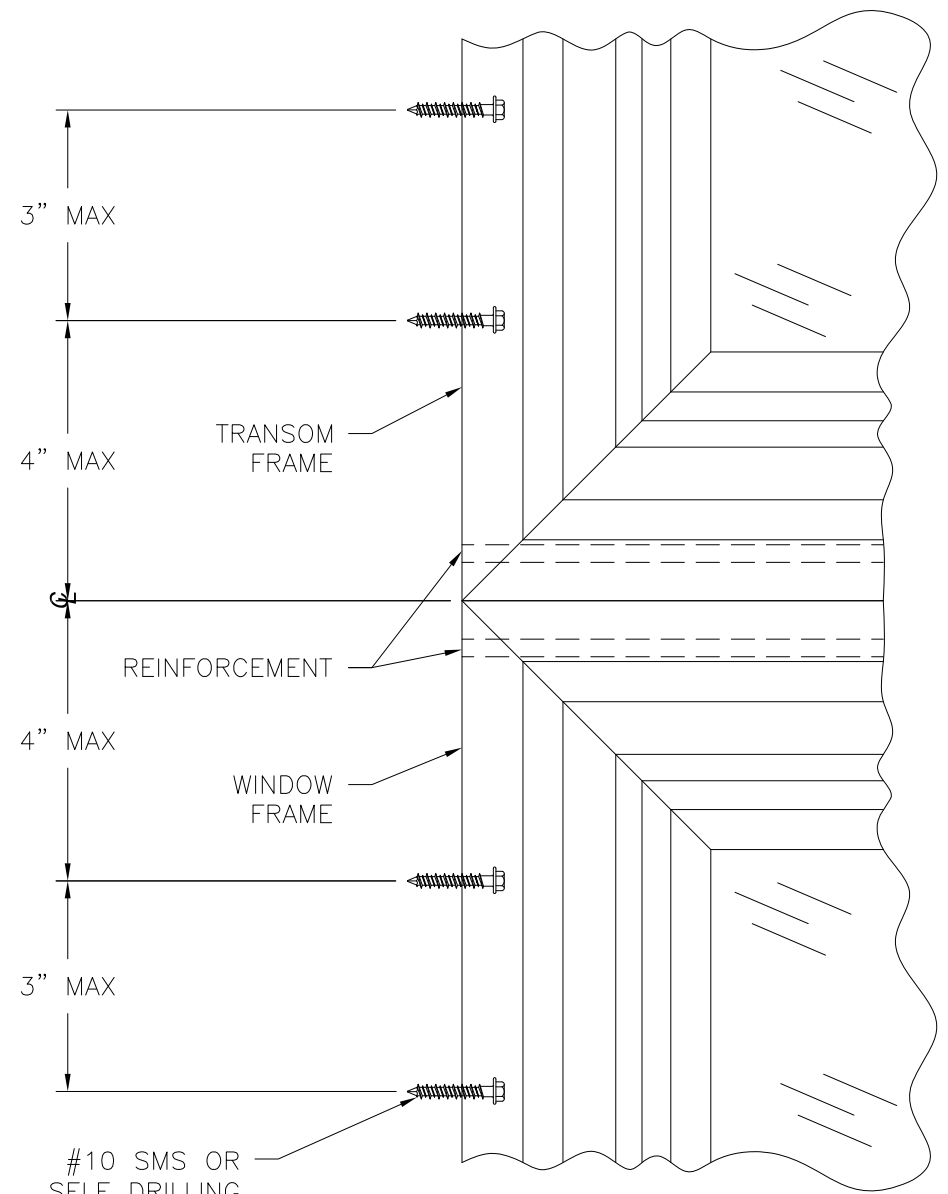
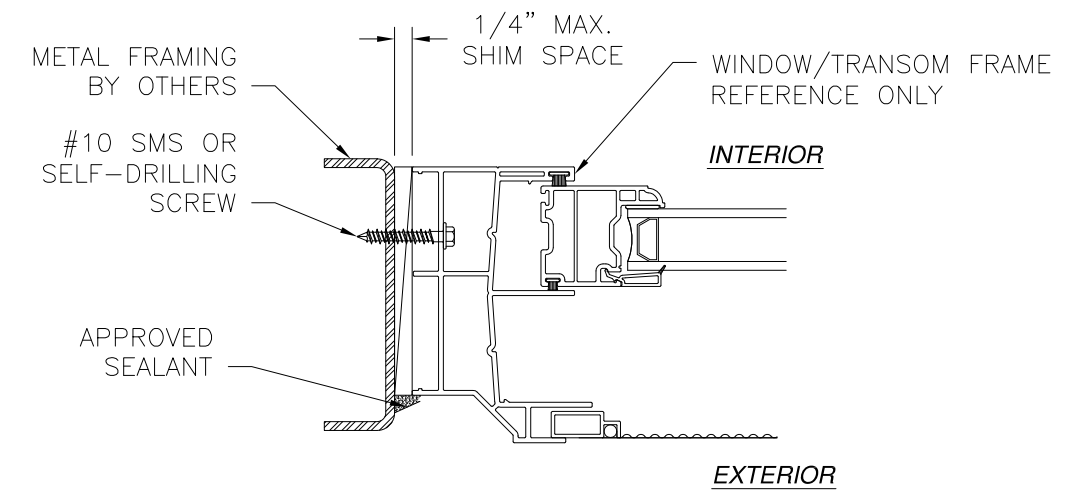
WINDOW MART 5760 ALBERT PIKE ROYAL, AR 71968		
T MULLION - IMPACT (2) 1/4"x3/4" ALUMINUM REINFORCEMENTS INSTALLATION DETAILS		
DRAWN: V.L.	DWG NO. 08-02232	REV A
SCALE NTS	DATE 10/02/13	SHEET 4 OF 7

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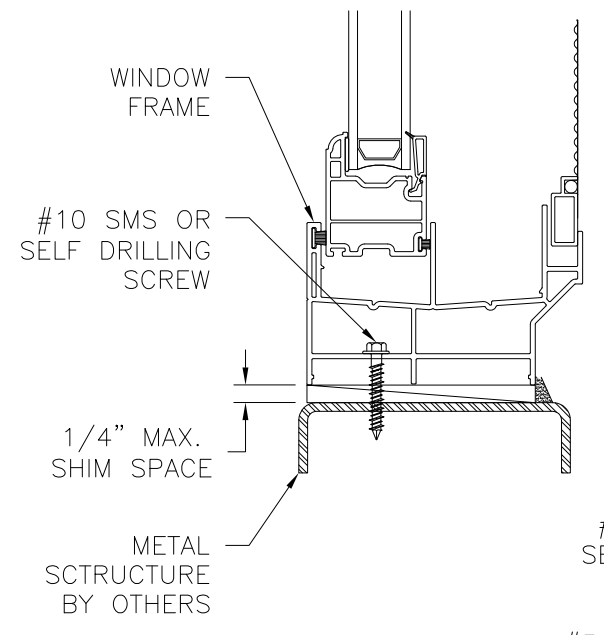
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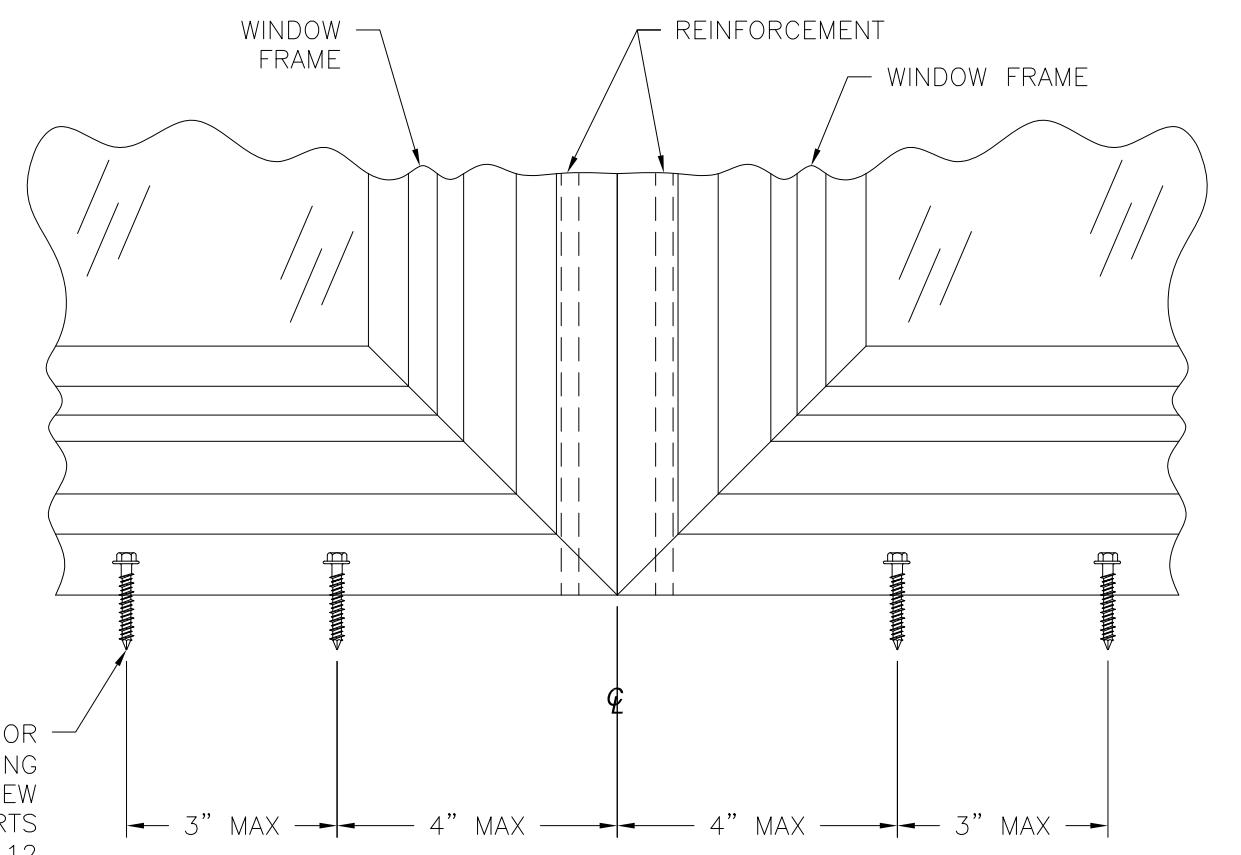
#10 SMS OR SELF DRILLING SCREW
SEE CHARTS #2, 5, 8 & 11
SHEET 7
FOR NUMBER OF ANCHORS REQUIRED AT CLUSTER

INSTALLATION DETAIL B
METAL STRUCTURE



#10 SMS OR SELF DRILLING SCREW
SEE CHARTS #3, 6, 9 & 12
SHEET 3
FOR NUMBER OF ANCHORS REQUIRED AT CLUSTER

INSTALLATION DETAIL C
METAL STRUCTURE



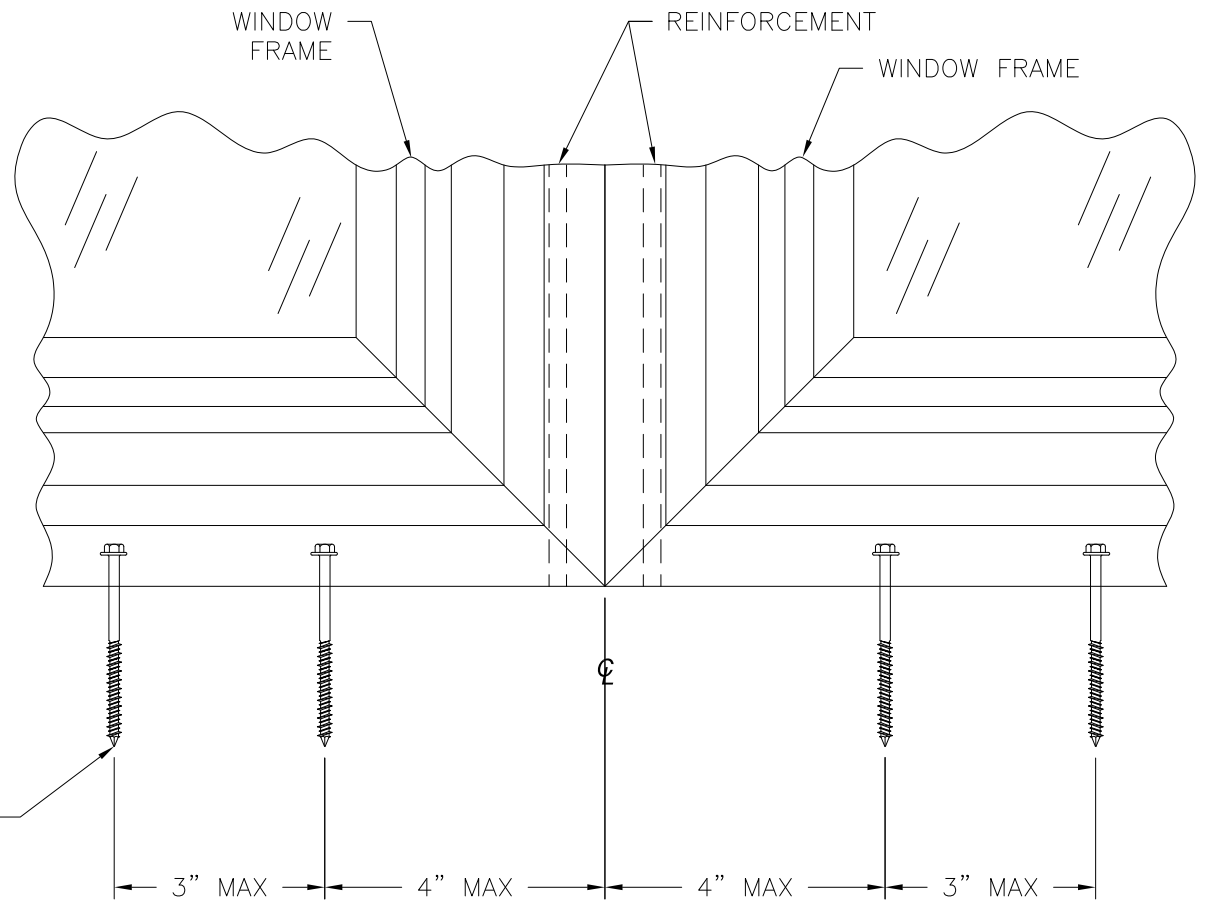
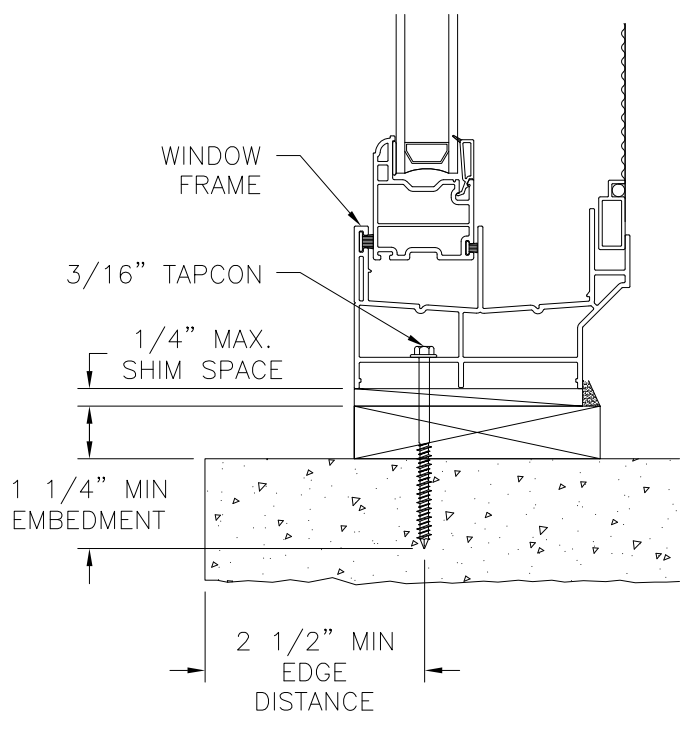
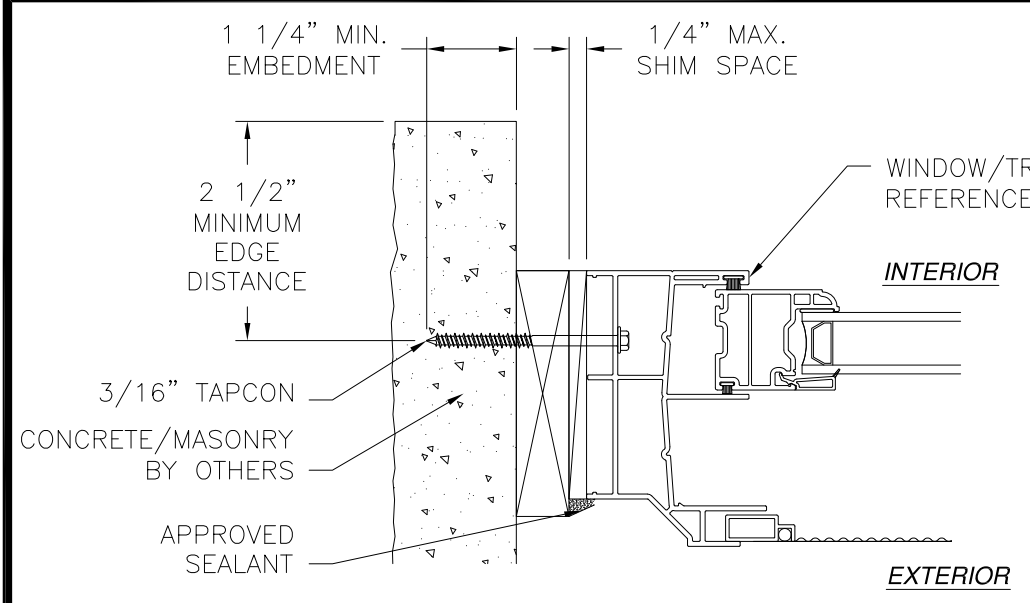
WINDOW MART 5760 ALBERT PIKE ROYAL, AR 71968		
(2) 1/4"x3/4" ALUMINUM REINFORCEMENTS INSTALLATION DETAILS		
DRAWN: V.L.	DWG NO. 08-02232	REV A
SCALE NTS	DATE 10/02/13	SHEET 5 OF 7

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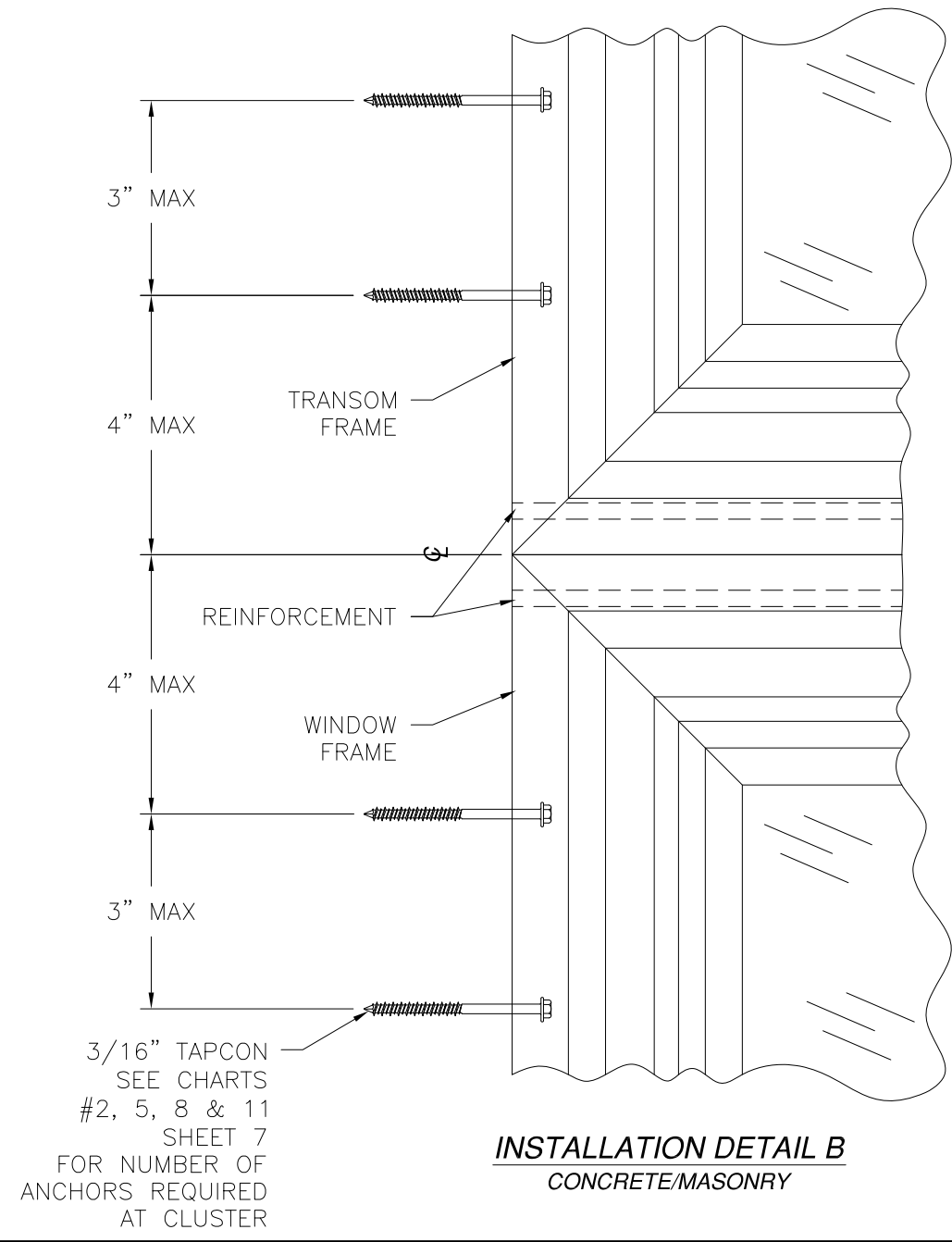
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3/16" TAPCON
SEE CHARTS
3, 6, 9, & 12
SHEET 3
FOR NUMBER OF
ANCHORS REQUIRED
AT CLUSTER

INSTALLATION DETAIL C
CONCRETE/MASONRY



INSTALLATION DETAIL B
CONCRETE/MASONRY

SIGNED: 10/13/2014

WINDOW MART 5760 ALBERT PIKE ROYAL, AR 71968		
T MULLION - IMPACT (2) 1/4"x3/4" ALUMINUM REINFORCEMENTS INSTALLATION DETAILS		
DRAWN: V.L.	DWG NO. 08-02232	REV A
SCALE NTS	DATE 10/02/13	SHEET 6 OF 7



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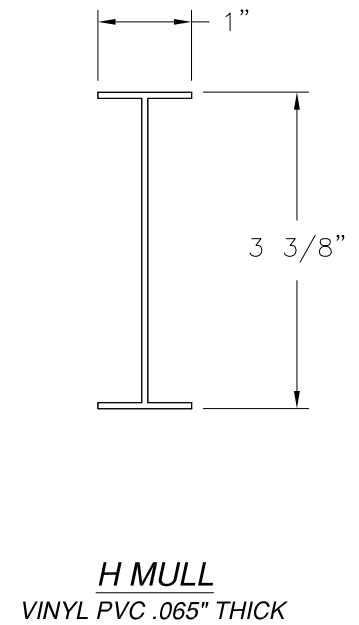
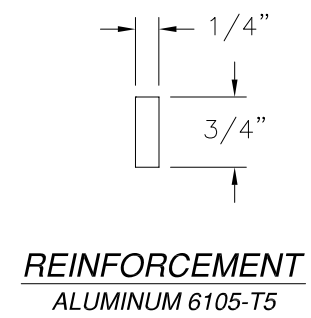
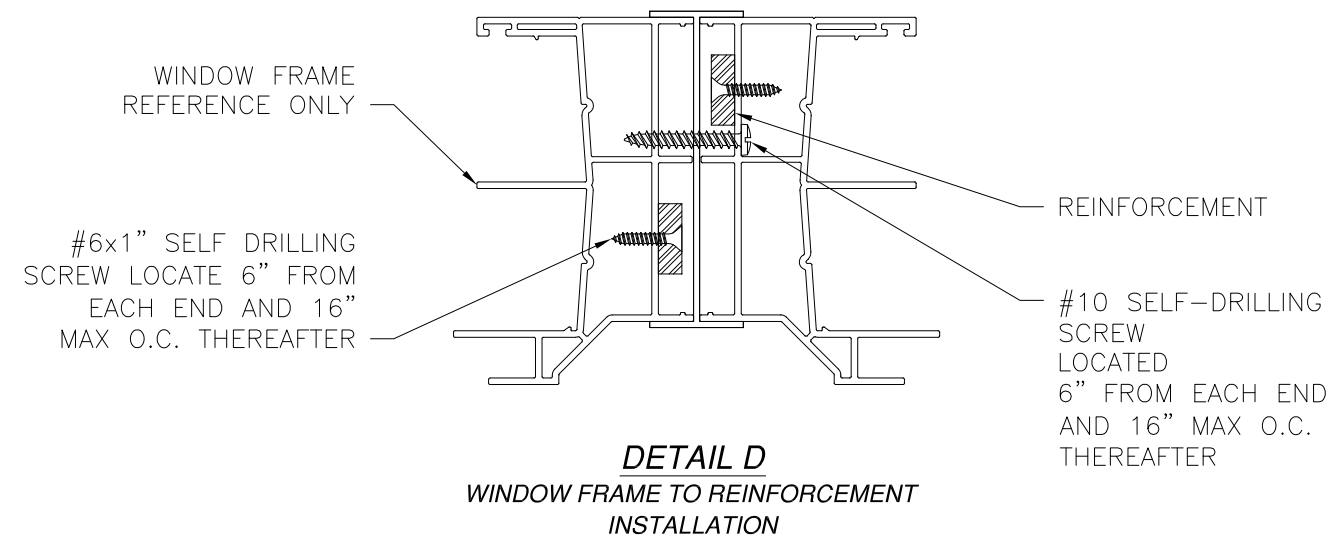


CHART #2
18" TRANSOM

Number of anchors required at Horizontal mullion end cluster								
Height (in)		Span and Tributary width (in)						
Window	Transom	48.00	56.00	64.00	72.00	80.00	88.00	96.00
		24.00	28.00	32.00	36.00	40.00	44.00	48.00
36.00	18.00	4	4	4	4	2	2	2
42.00	18.00	4	4	4	4	2	2	-
48.00	18.00	4	4	4	4	2	2	-
54.00	18.00	4	4	4	4	2	2	-
60.00	18.00	4	4	4	4	2	-	-
66.00	18.00	6	4	4	4	2	-	-
72.00	18.00	6	4	4	4	2	-	-

CHART #5
24" TRANSOM

Number of anchors required at Horizontal mullion end cluster								
Height (in)		Span and Tributary width (in)						
Window	Transom	40.00	48.00	56.00	64.00	72.00	80.00	84.00
		20.00	24.00	28.00	32.00	36.00	40.00	42.00
36.00	24.00	4	4	4	4	4	2	2
42.00	24.00	4	4	4	4	4	2	2
48.00	24.00	4	4	4	4	4	2	2
54.00	24.00	4	4	4	4	4	2	2
60.00	24.00	4	6	4	4	4	2	2
66.00	24.00	4	6	4	4	4	2	-
72.00	24.00	4	6	4	4	4	2	-

CHART #8
30" TRANSOM

Number of anchors required at Horizontal mullion end cluster								
Height (in)		Span and Tributary width (in)						
Window	Transom	40.00	48.00	56.00	64.00	72.00	80.00	84.00
		20.00	24.00	28.00	32.00	36.00	40.00	42.00
36.00	30.00	4	4	4	4	4	2	2
42.00	30.00	4	4	4	4	4	2	2
48.00	30.00	4	4	4	4	4	2	2
54.00	30.00	4	6	4	4	4	2	2
60.00	30.00	4	6	4	4	4	2	-
66.00	30.00	4	6	4	4	4	2	-
72.00	30.00	4	6	4	4	4	2	-

CHART #11
36" TRANSOM

Number of anchors required at Horizontal mullion end cluster								
Height (in)		Span and Tributary width (in)						
Window	Transom	40.00	48.00	56.00	64.00	72.00	80.00	84.00
		20.00	24.00	28.00	32.00	36.00	40.00	42.00
36.00	36.00	4	4	4	4	4	2	2
42.00	36.00	4	4	4	4	4	2	2
48.00	36.00	4	4	4	4	4	2	2
54.00	36.00	4	6	4	4	4	2	-
60.00	36.00	4	6	4	4	4	2	-
66.00	36.00	4	6	4	4	4	2	-
72.00	36.00	4	6	4	4	4	-	-

SIGNED: 10/13/2014

WINDOW MART
5760 ALBERT PIKE
ROYAL, AR 71968

T MULLION - IMPACT
(2) 1/4"x3/4" ALUMINUM REINFORCEMENTS COMPONENTS

DRAWN: V.L.	DWG NO. 08-02232	REV A
SCALE NTS	DATE 10/02/13	SHEET 7 OF 7

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