

NOTES:

1. THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH REQUIREMENTS OF THE FLORIDA BUILDING CODE. IN ACCORDANCE WITH SECTION 1715.5.5
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

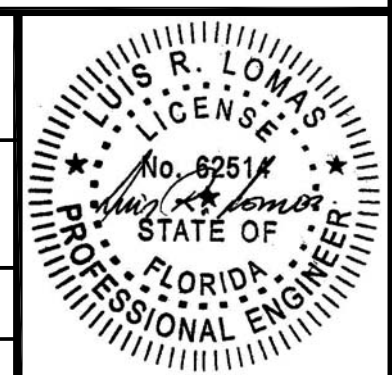
ANCHORING NOTES:

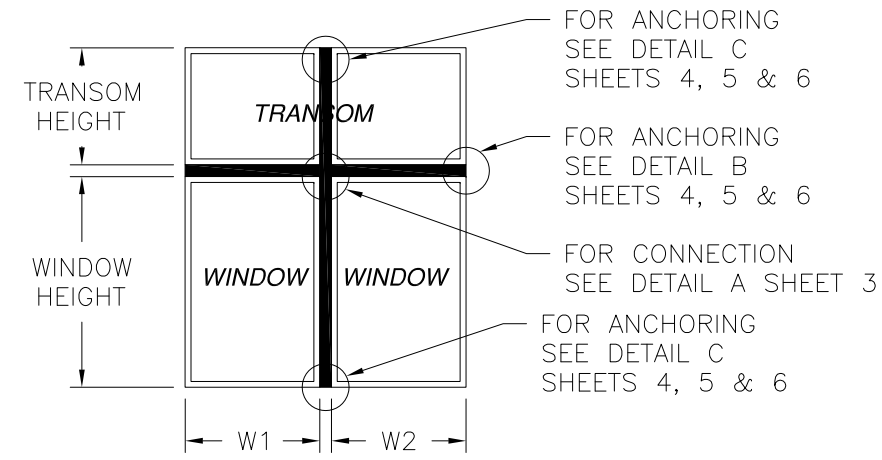
1. FOR ANCHORING INTO WOOD FRAMING OR 2X BUCK USE #10 WOOD SCREW WITH SUFFICIENT LENGTH TO ACHIEVE A 1 3/8" MINIMUM EMBEDMENT. LOCATE ANCHORS AS SHOWN IN INSTALLATION DETAILS SHEET 3.
2. FOR ANCHORING INTO CONCRETE USE 3/16" TAPCON WITH SUFFICIENT LENGTH TO ACHIEVE A 1 3/4" MINIMUM EMBEDMENT WITH 2 1/2" 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

SIGNED: 10/03/2013

TABLE OF CONTENTS	
SHEET NO.	DESCRIPTION
1	NOTES
2	RATING CHARTS
3 – 6	INSTALLATION DETAILS & ANCHOR CHARTS
7	COMPONENTS

WINDOW MART 5760 ALBERT PIKE ROYAL, AR 71968		
VX MULLION – IMPACT (2) 1/4"x3/4" ALUMINUM REINFORCEMENTS NOTES		
DRAWN: V.L.	DWG NO. 08-02227	REV -
SCALE NTS	DATE 10/02/13	SHEET 1 OF 7





REVISIONS			
REV	DESCRIPTION	DATE	APPROVED

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

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

Design pressure chart (psf)									
Mullion span (in)	Tributary Height (in)	Tributary Height (in)	Tributary width (in)						
			24.00	30.00	36.00	42.00	48.00	54.00	60.00
54.00	36.00	18.00	98.9	82.3	71.5	63.6	57.3	52.1	47.8
60.00	42.00	18.00	70.0	58.2	50.5	45.2	41.1	37.7	34.8
66.00	48.00	18.00	51.1	42.5	36.8	32.9	30.0	27.8	25.8
72.00	54.00	18.00	38.4	31.8	27.5	24.6	22.4	20.8	19.5
78.00	60.00	18.00	29.5	24.4	21.1	18.8	17.1	15.8	-
84.00	66.00	18.00	23.1	19.1	16.5	-	-	-	-
90.00	72.00	18.00	18.4	15.2	-	-	-	-	-

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

Design pressure chart (psf)									
Mullion span (in)	Tributary Height (in)	Tributary Height (in)	Tributary width (in)						
			24.00	30.00	36.00	42.00	48.00	54.00	60.00
72.00	42.00	30.00	41.2	33.8	28.9	25.4	22.7	20.5	18.7
76.00	46.00	30.00	34.7	28.4	24.3	21.3	19.1	17.3	15.9
80.00	50.00	30.00	29.4	24.1	20.6	18.1	16.2	-	-
84.00	54.00	30.00	25.1	20.6	17.6	15.4	-	-	-
88.00	58.00	30.00	21.6	17.7	15.1	-	-	-	-
92.00	62.00	30.00	18.7	15.3	-	-	-	-	-
96.00	66.00	30.00	16.3	-	-	-	-	-	-

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

Design pressure chart (psf)									
Mullion span (in)	Tributary Height (in)	Tributary Height (in)	Tributary width (in)						
			24.00	30.00	36.00	42.00	48.00	54.00	60.00
60.00	36.00	24.00	72.4	59.8	51.4	45.2	40.4	36.5	33.3
66.00	42.00	24.00	53.2	43.9	37.7	33.3	30.0	27.2	25.0
72.00	48.00	24.00	40.1	33.0	28.4	25.1	22.6	20.7	19.1
78.00	54.00	24.00	30.9	25.4	21.8	19.3	17.4	16.0	-
84.00	60.00	24.00	24.2	19.9	17.1	15.1	-	-	-
90.00	66.00	24.00	19.3	15.9	-	-	-	-	-
96.00	72.00	24.00	15.6	-	-	-	-	-	-

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

Design pressure chart (psf)									
Mullion span (in)	Tributary Height (in)	Tributary Height (in)	Tributary width (in)						
			24.00	30.00	36.00	42.00	48.00	54.00	60.00
72.00	36.00	36.00	41.5	34.0	29.1	25.5	22.7	20.5	18.6
76.00	40.00	36.00	35.1	28.8	24.5	21.5	19.2	17.3	15.8
80.00	44.00	36.00	29.9	24.5	20.9	18.3	16.3	-	-
84.00	48.00	36.00	25.6	21.0	17.9	15.6	-	-	-
88.00	52.00	36.00	22.1	18.1	15.4	-	-	-	-
92.00	56.00	36.00	19.2	15.7	-	-	-	-	-
96.00	60.00	36.00	16.8	-	-	-	-	-	-

DESIGN PRESSURE TABLE INSTRUCTIONS:

1. DEFINE REQUIRED DESIGN LOAD PER FLORIDA BUILDING CODE CHAPTER 16.
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.

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

<b>WINDOW MART</b> 5760 ALBERT PIKE ROYAL, AR 71968		
<b>VX MULLION - IMPACT</b> (2) 1/4"x3/4" ALUMINUM REINFORCEMENTS CONFIGURATION & CHARTS		
DRAWN: V.L.	DWG NO. 08-02227	REV -
SCALE NTS	DATE 10/02/13	SHEET 2 OF 7

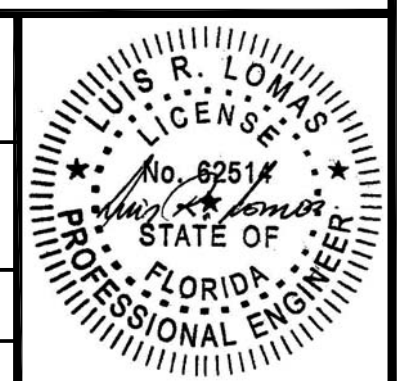


CHART #3  
18" TRANSOM

Number of anchors required at vertical mullion end									
Mullion span (in)	Tributary Height (in)	Tributary Height (in)	Tributary width (in)						
			24.00	30.00	36.00	42.00	48.00	54.00	60.00
54.00	36.00	18.00	6	6	6	6	6	6	6
60.00	42.00	18.00	4	4	4	4	4	4	4
66.00	48.00	18.00	4	4	4	4	4	4	4
72.00	54.00	18.00	4	4	4	4	4	4	4
78.00	60.00	18.00	2	2	2	2	4	4	-
84.00	66.00	18.00	2	2	2	-	-	-	-
90.00	72.00	18.00	2	2	-	-	-	-	-

CHART #6  
24" TRANSOM

Number of anchors required at vertical mullion end									
Mullion span (in)	Tributary Height (in)	Tributary Height (in)	Tributary width (in)						
			24.00	30.00	36.00	42.00	48.00	54.00	60.00
60.00	36.00	24.00	4	4	4	4	4	4	4
66.00	42.00	24.00	4	4	4	4	4	4	4
72.00	48.00	24.00	4	4	4	4	4	4	4
78.00	54.00	24.00	4	4	4	2	2	2	-
84.00	60.00	24.00	2	2	2	2	-	-	-
90.00	66.00	24.00	2	2	-	-	-	-	-
96.00	72.00	24.00	2	-	-	-	-	-	-

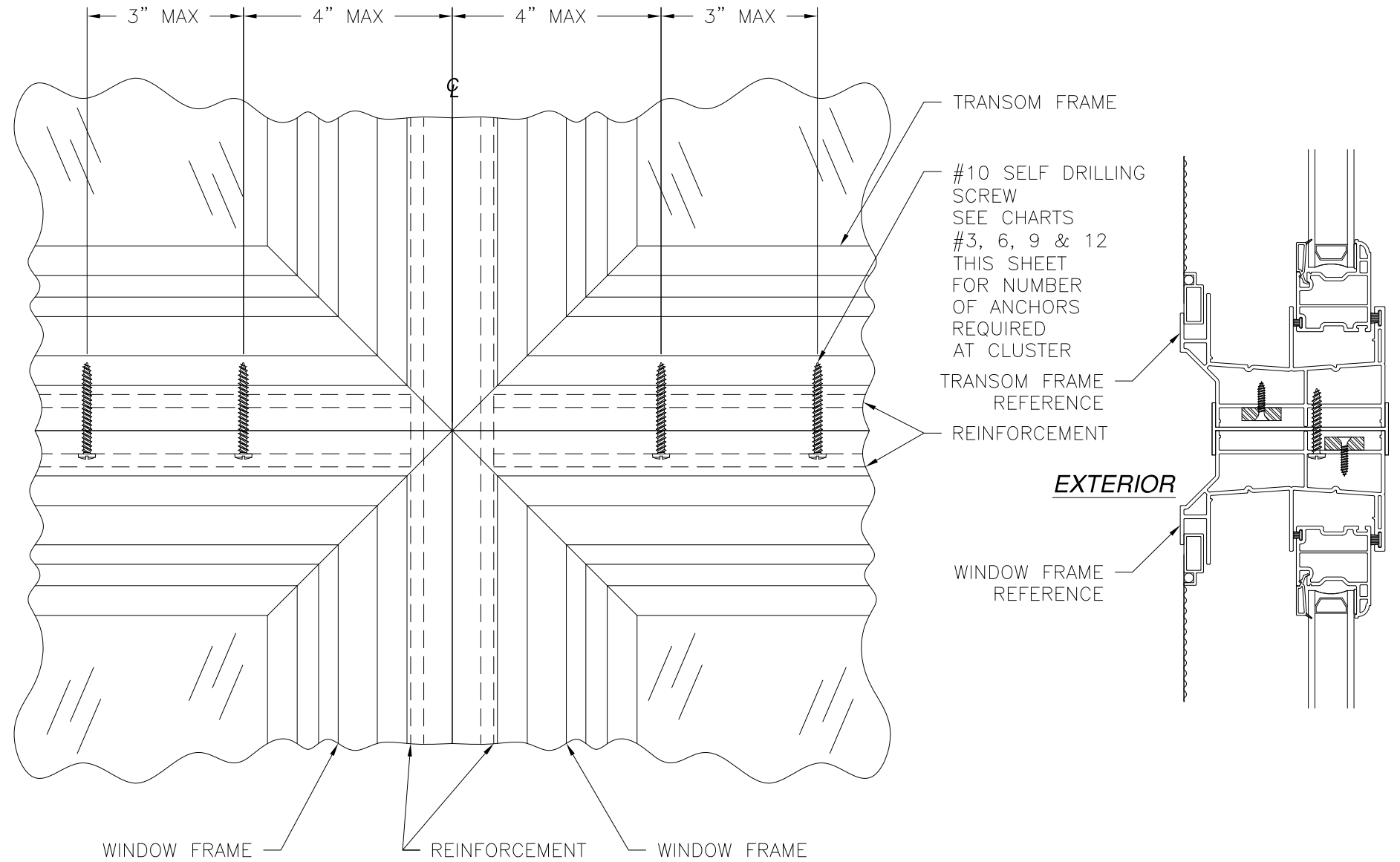
CHART #9  
30" TRANSOM

Number of anchors required at vertical mullion end									
Mullion span (in)	Tributary Height (in)	Tributary Height (in)	Tributary width (in)						
			24.00	30.00	36.00	42.00	48.00	54.00	60.00
72.00	42.00	30.00	4	4	4	4	4	4	4
76.00	46.00	30.00	4	4	4	4	4	4	4
80.00	50.00	30.00	4	2	2	2	2	-	-
84.00	54.00	30.00	2	2	2	2	-	-	-
88.00	58.00	30.00	2	2	2	-	-	-	-
92.00	62.00	30.00	2	2	-	-	-	-	-
96.00	66.00	30.00	2	-	-	-	-	-	-

CHART #12  
36" TRANSOM

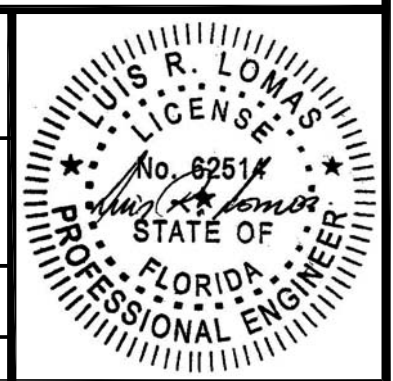
Number of anchors required at vertical mullion end									
Mullion span (in)	Tributary Height (in)	Tributary Height (in)	Tributary width (in)						
			24.00	30.00	36.00	42.00	48.00	54.00	60.00
72.00	36.00	36.00	4	4	4	4	4	4	4
76.00	40.00	36.00	4	4	4	4	4	4	2
80.00	44.00	36.00	4	2	2	2	2	-	-
84.00	48.00	36.00	2	2	2	2	-	-	-
88.00	52.00	36.00	2	2	2	-	-	-	-
92.00	56.00	36.00	2	2	-	-	-	-	-
96.00	60.00	36.00	2	-	-	-	-	-	-

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED

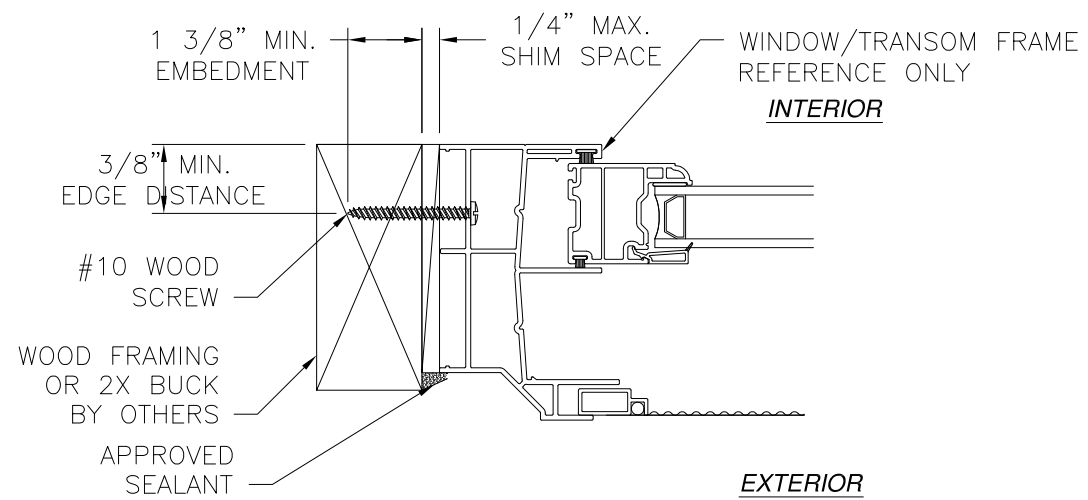


**TRANSOM/WINDOW CONNECTION DETAIL A**  
SEE DETAIL D SHEET 7 FOR FRAME TO REINFORCEMENT INSTALLATION

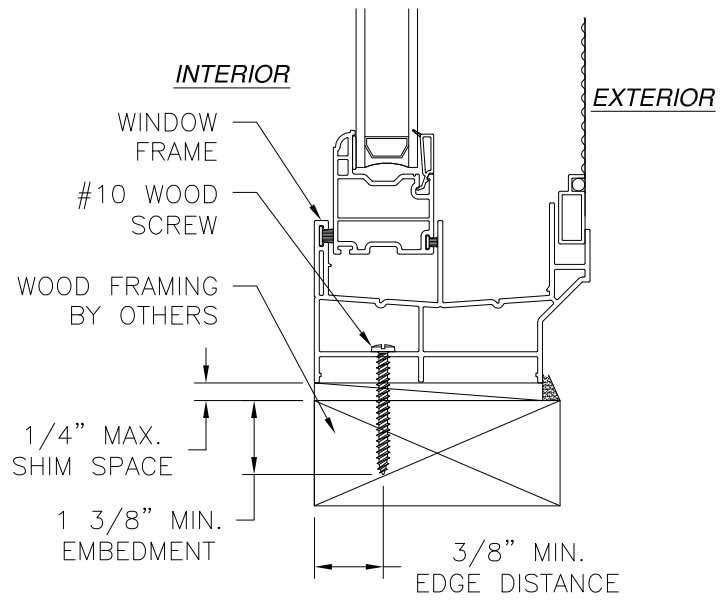
WINDOW MART 5760 ALBERT PIKE ROYAL, AR 71968		
VX MULLION - IMPACT (2) 1/4"x3/4" ALUMINUM REINFORCEMENTS INSTALLATION DETAILS		
DRAWN: V.L.	DWG NO. 08-02227	REV -
SCALE NTS	DATE 10/02/13	SHEET 3 OF 7



REVISIONS			
REV	DESCRIPTION	DATE	APPROVED

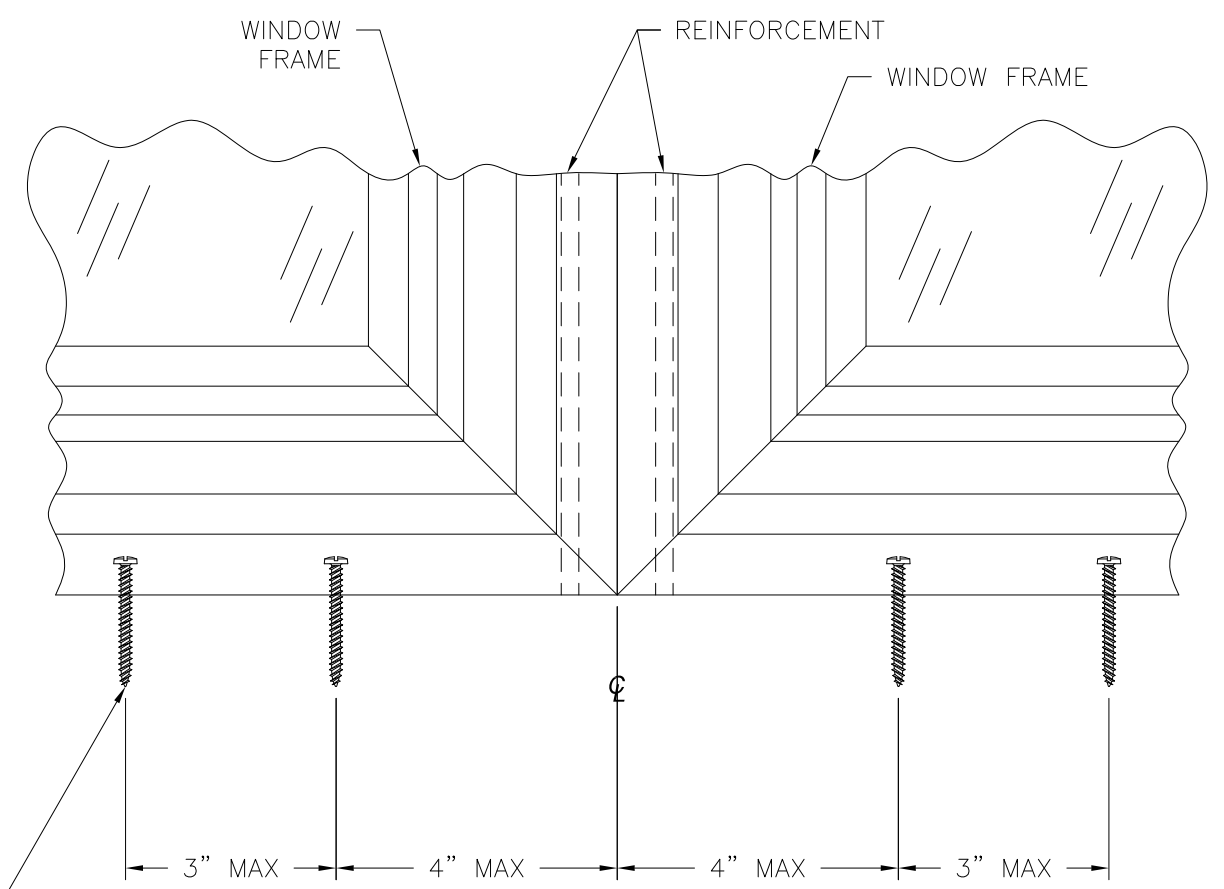


**EXTERIOR**



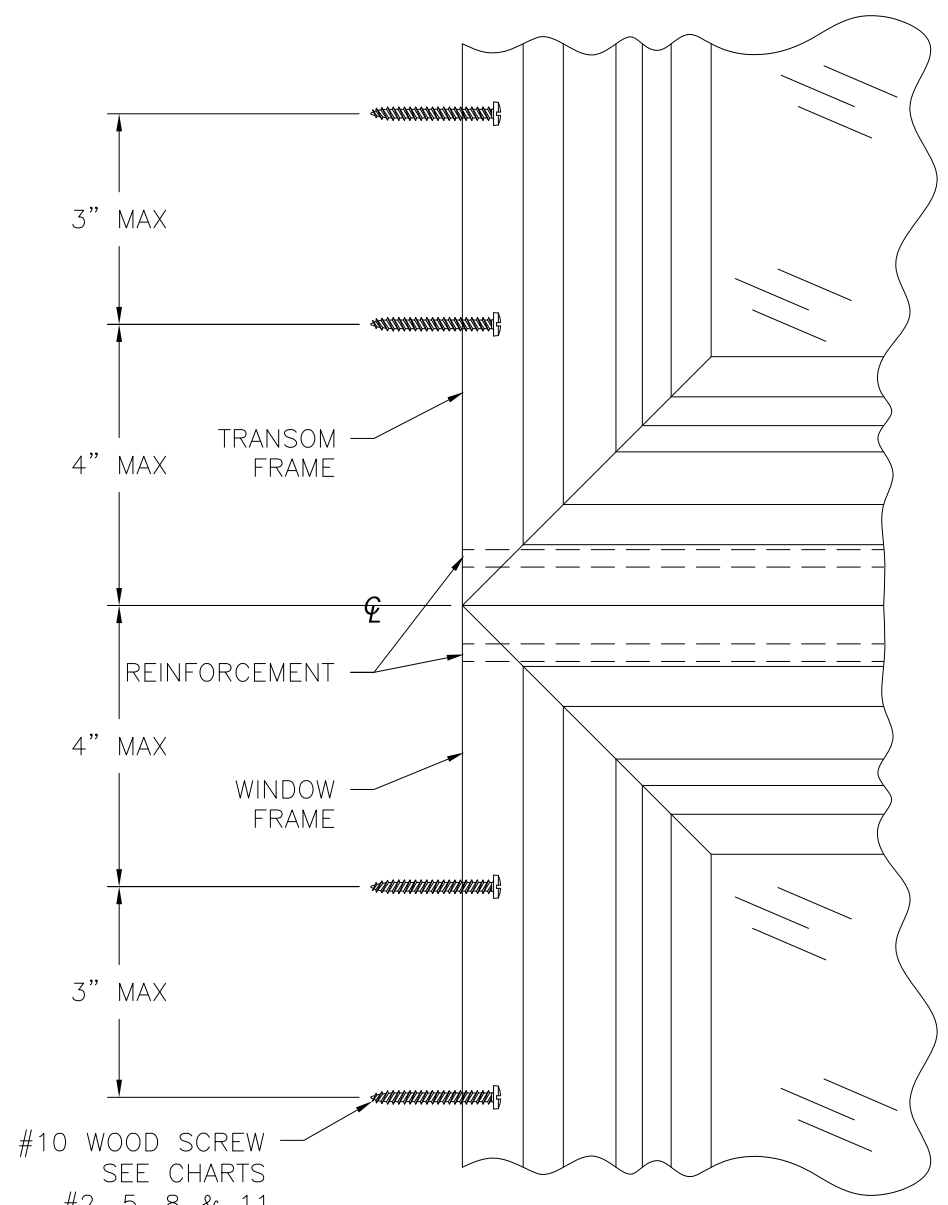
**INTERIOR**

**EXTERIOR**



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

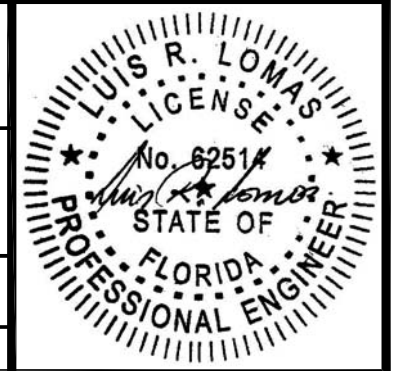
**INSTALLATION DETAIL C**  
WOOD FRAMING OR 2X BUCK  
SILL SHOWN HEAD SIMILAR



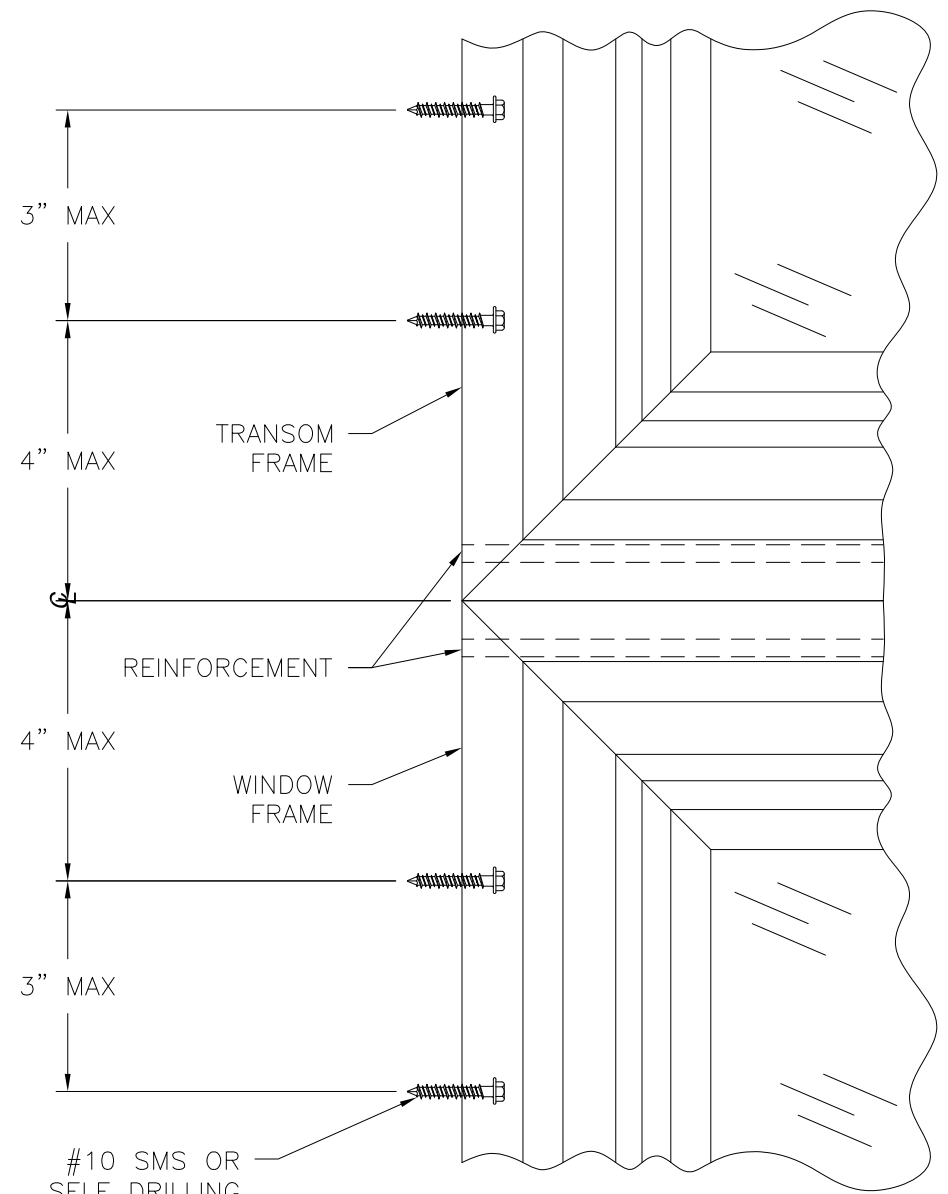
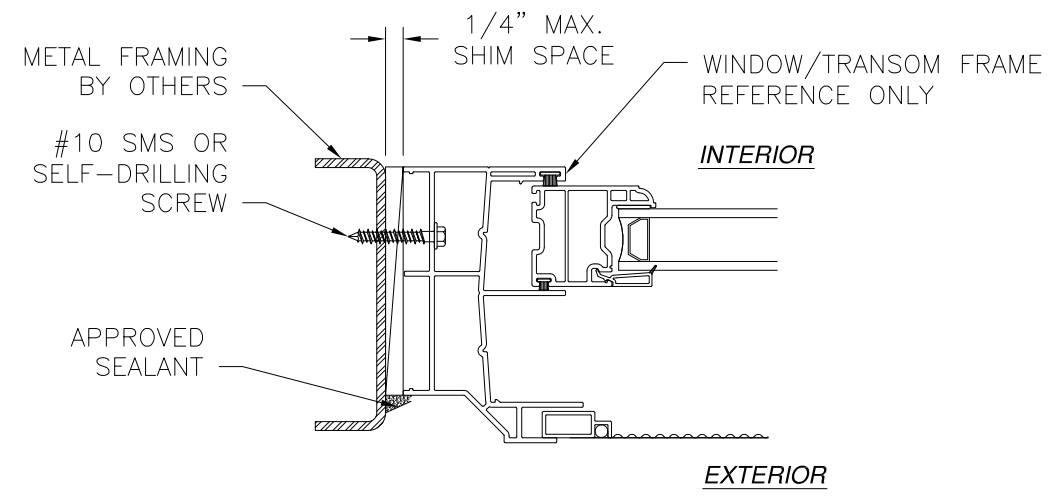
**INSTALLATION DETAIL B**  
WOOD FRAMING OR 2X BUCK

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

<b>WINDOW MART</b> 5760 ALBERT PIKE ROYAL, AR 71968		
VX MULLION - IMPACT (2) 1/4"x3/4" ALUMINUM REINFORCEMENTS INSTALLATION DETAILS		
DRAWN: V.L.	DWG NO. 08-02227	REV -
SCALE NTS	DATE 10/02/13	SHEET 4 OF 7

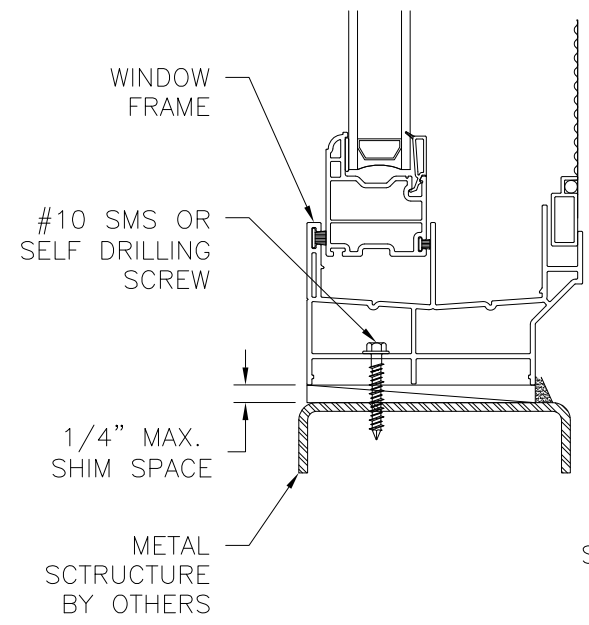


REVISIONS			
REV	DESCRIPTION	DATE	APPROVED



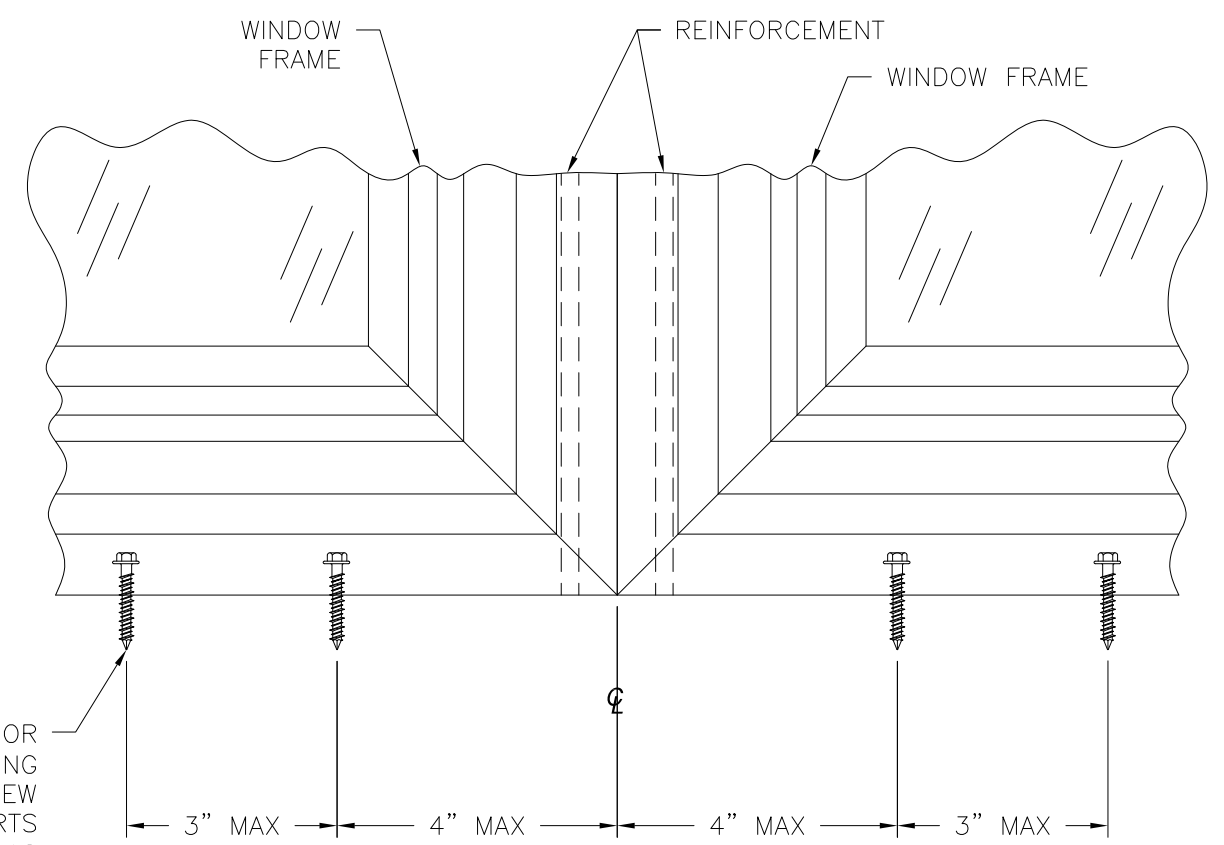
#10 SMS OR SELF DRILLING SCREW  
SEE CHARTS #2, 5, 8 & 11  
SHEET 7  
FOR NUMBER OF ANCHORS REQUIRED AT CLUSTER

**INSTALLATION DETAIL B**  
METAL STRUCTURE

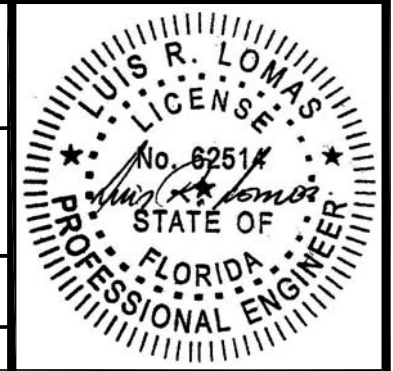


#10 SMS OR SELF DRILLING SCREW  
SEE CHARTS #3, 6, 9 & 12  
SHEET 3  
FOR NUMBER OF ANCHORS REQUIRED AT CLUSTER

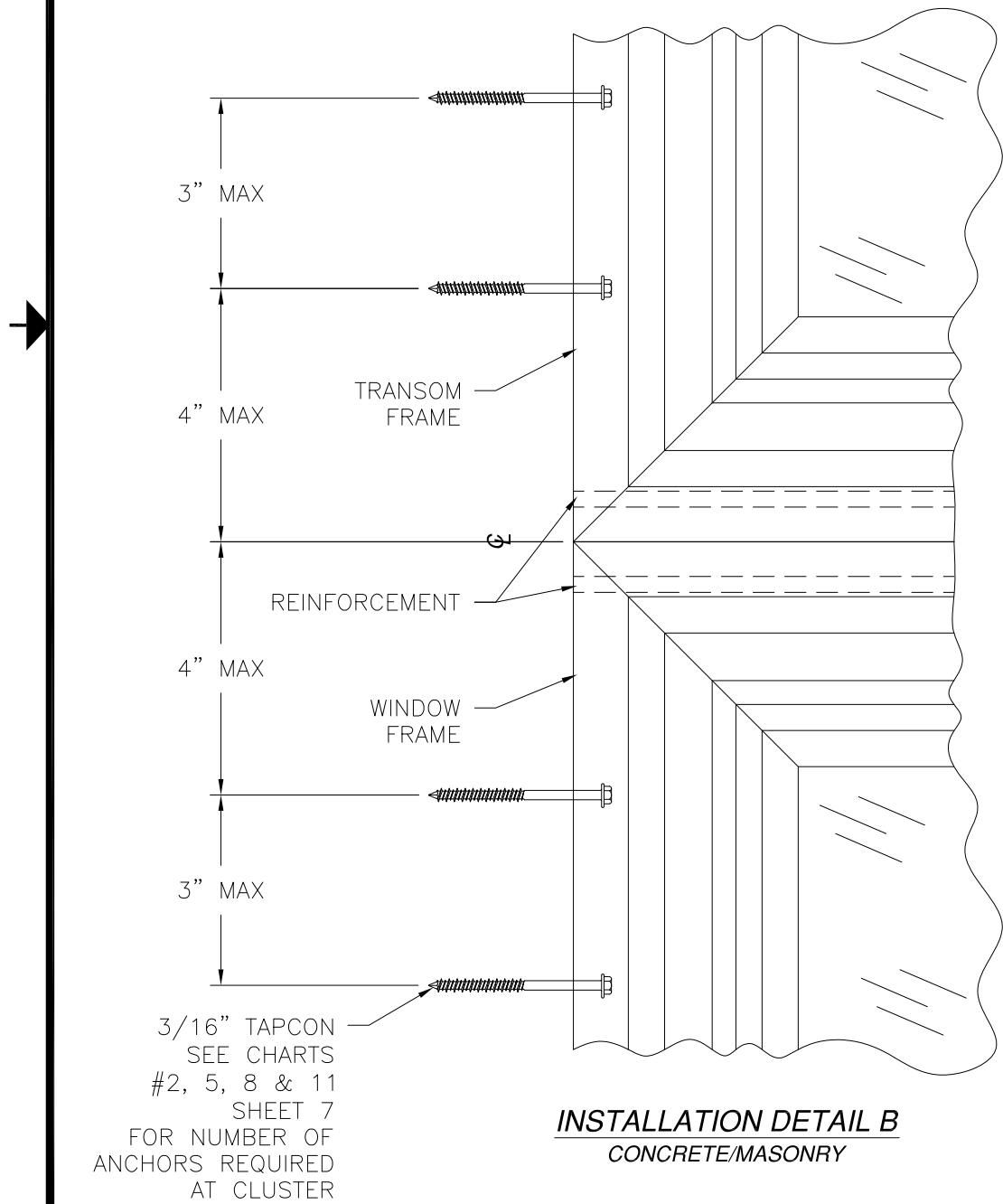
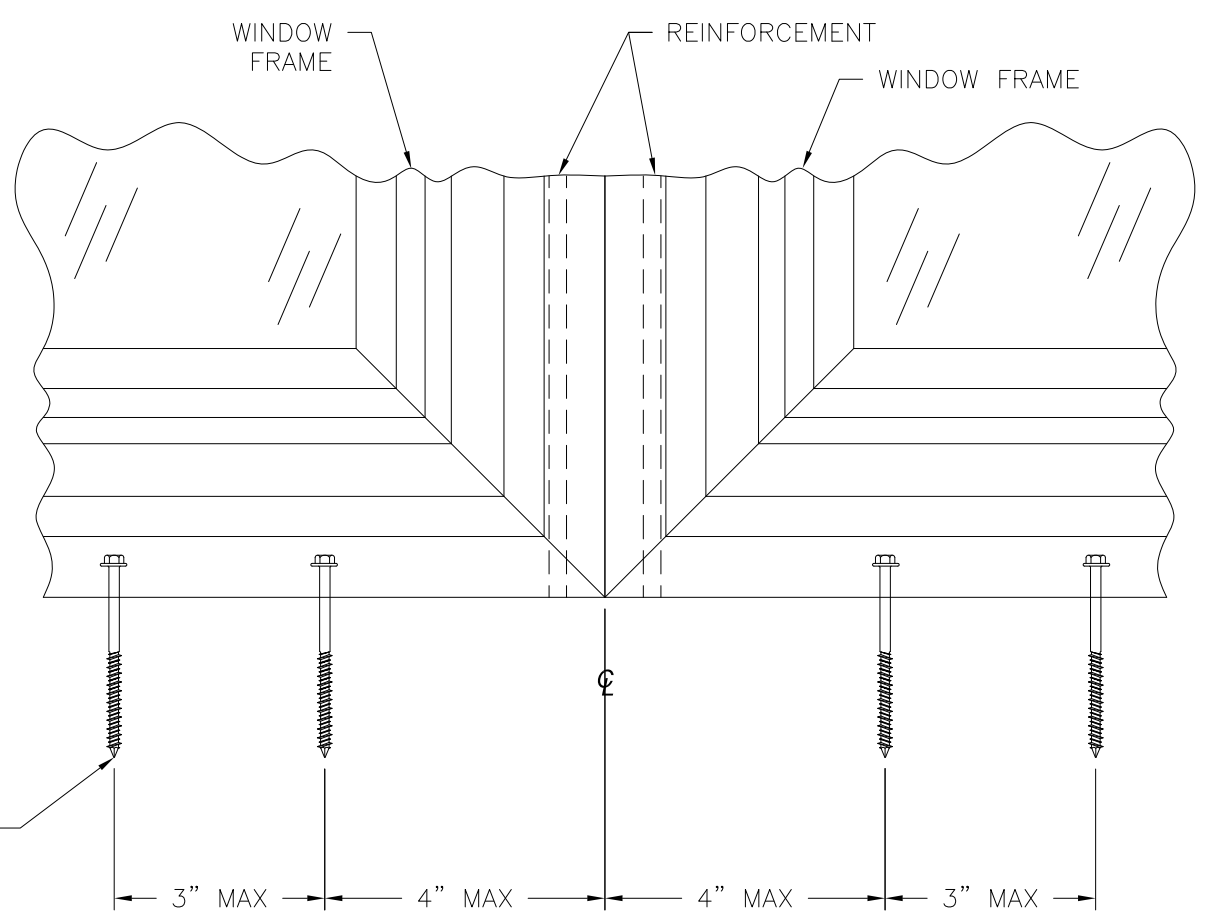
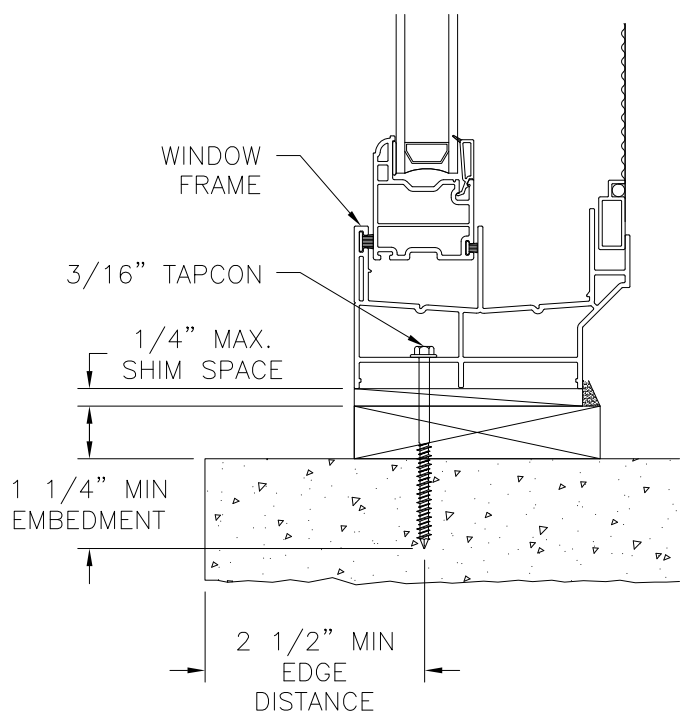
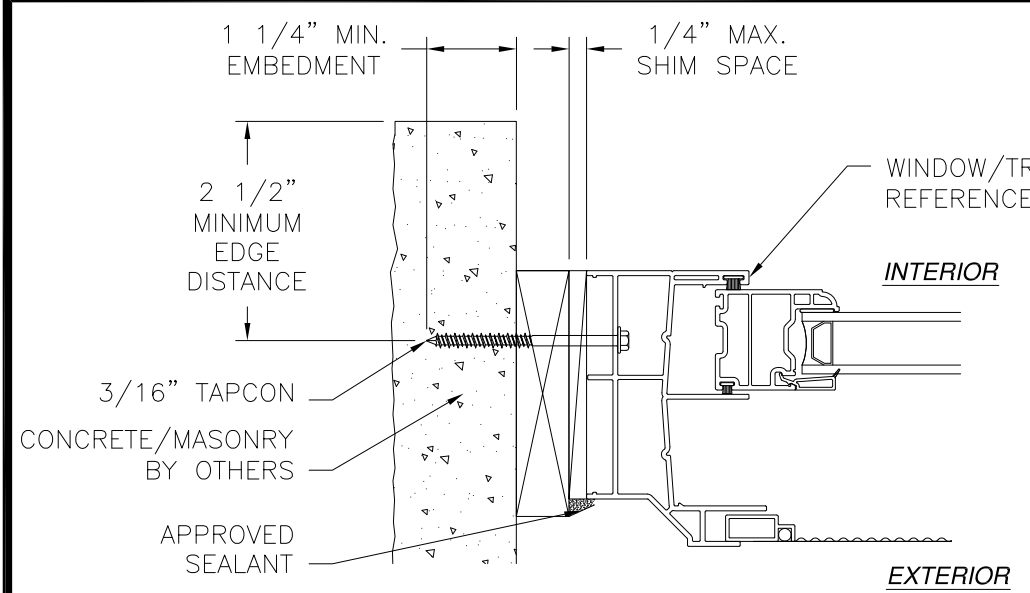
**INSTALLATION DETAIL C**  
METAL STRUCTURE  
SILL SHOWN HEAD SIMILAR



<b>WINDOW MART</b> 5760 ALBERT PIKE ROYAL, AR 71968		
VX MULLION - IMPACT (2) 1/4"x3/4" ALUMINUM REINFORCEMENTS INSTALLATION DETAILS		
DRAWN: V.L.	DWG NO. 08-02227	REV -
SCALE NTS	DATE 10/02/13	SHEET 5 OF 7



REVISIONS			
REV	DESCRIPTION	DATE	APPROVED

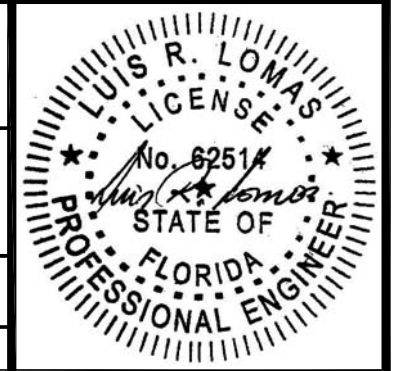


**INSTALLATION DETAIL B**  
CONCRETE/MASONRY

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

**INSTALLATION DETAIL C**  
CONCRETE/MASONRY  
SILL SHOWN HEAD SIMILAR

<b>WINDOW MART</b> 5760 ALBERT PIKE ROYAL, AR 71968		
VX MULLION - IMPACT (2) 1/4"x3/4" ALUMINUM REINFORCEMENTS INSTALLATION DETAILS		
DRAWN: V.L.	DWG NO. 08-02227	REV -
SCALE NTS	DATE 10/02/13	SHEET 6 OF 7



REVISIONS			
REV	DESCRIPTION	DATE	APPROVED

CHART #2  
18" TRANSOM

Number of anchors required at horizontal mullion end									
Mullion span (in)	Tributary Height (in)	Tributary Height (in)	Tributary width (in)						
			24.00	30.00	36.00	42.00	48.00	54.00	60.00
54.00	36.00	18.00	2	2	2	2	4	4	4
60.00	42.00	18.00	2	2	2	2	2	2	2
66.00	48.00	18.00	2	2	2	2	2	2	2
72.00	54.00	18.00	2	2	2	2	2	2	2
78.00	60.00	18.00	2	2	2	2	2	2	-
84.00	66.00	18.00	2	2	2	-	-	-	-
90.00	72.00	18.00	2	2	-	-	-	-	-

CHART #5  
24" TRANSOM

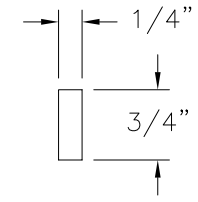
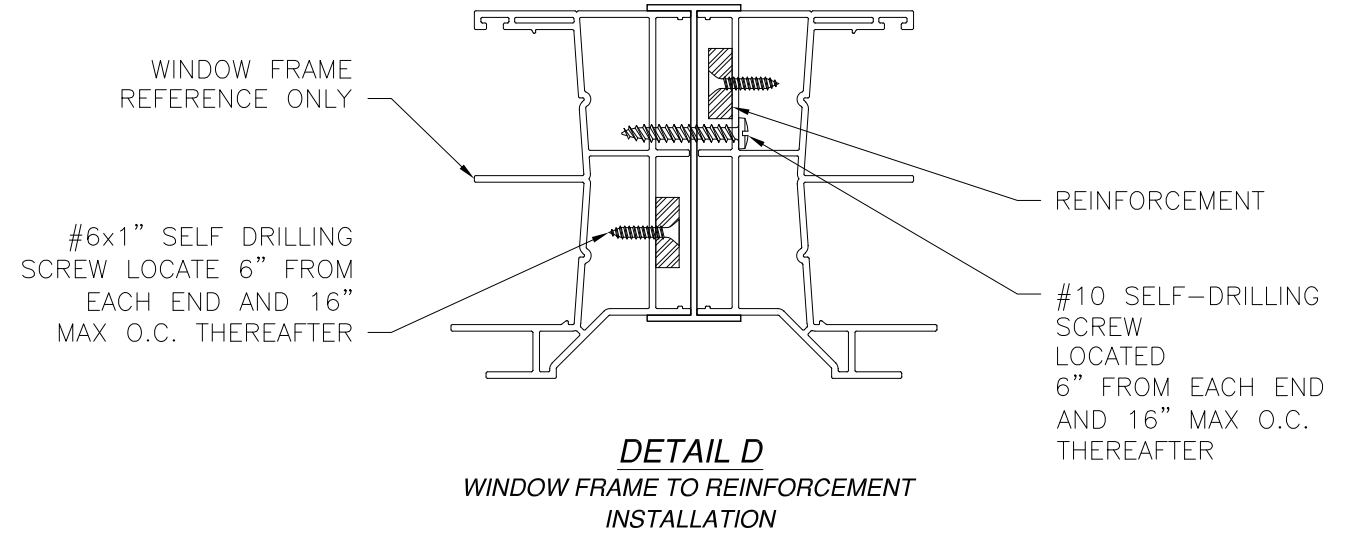
Number of anchors required at horizontal mullion end									
Mullion span (in)	Tributary Height (in)	Tributary Height (in)	Tributary width (in)						
			24.00	30.00	36.00	42.00	48.00	54.00	60.00
60.00	36.00	24.00	2	2	2	2	2	2	2
66.00	42.00	24.00	2	2	2	2	2	2	2
72.00	48.00	24.00	2	2	2	2	2	2	2
78.00	54.00	24.00	2	2	2	2	2	2	-
84.00	60.00	24.00	2	2	2	2	-	-	-
90.00	66.00	24.00	2	2	-	-	-	-	-
96.00	72.00	24.00	2	-	-	-	-	-	-

CHART #8  
30" TRANSOM

Number of anchors required at horizontal mullion end									
Mullion span (in)	Tributary Height (in)	Tributary Height (in)	Tributary width (in)						
			24.00	30.00	36.00	42.00	48.00	54.00	60.00
72.00	42.00	30.00	2	2	2	2	2	2	2
76.00	46.00	30.00	2	2	2	2	2	2	2
80.00	50.00	30.00	2	2	2	2	2	-	-
84.00	54.00	30.00	2	2	2	2	-	-	-
88.00	58.00	30.00	2	2	2	-	-	-	-
92.00	62.00	30.00	2	2	-	-	-	-	-
96.00	66.00	30.00	2	-	-	-	-	-	-

CHART #11  
36" TRANSOM

Number of anchors required at horizontal mullion end									
Mullion span (in)	Tributary Height (in)	Tributary Height (in)	Tributary width (in)						
			24.00	30.00	36.00	42.00	48.00	54.00	60.00
72.00	36.00	36.00	2	2	2	2	2	2	2
76.00	40.00	36.00	2	2	2	2	2	2	2
80.00	44.00	36.00	2	2	2	2	2	-	-
84.00	48.00	36.00	2	2	2	2	-	-	-
88.00	52.00	36.00	2	2	2	-	-	-	-
92.00	56.00	36.00	2	2	-	-	-	-	-
96.00	60.00	36.00	2	-	-	-	-	-	-



REINFORCEMENT  
ALUMINUM 6105-T5

WINDOW MART 5760 ALBERT PIKE ROYAL, AR 71968		
VX MULLION - IMPACT (2) 1/4"x3/4" ALUMINUM REINFORCEMENTS COMPONENTS		
DRAWN: V.L.	DWG NO. 08-02227	REV -
SCALE NTS	DATE 10/02/13	SHEET 7 OF 7

