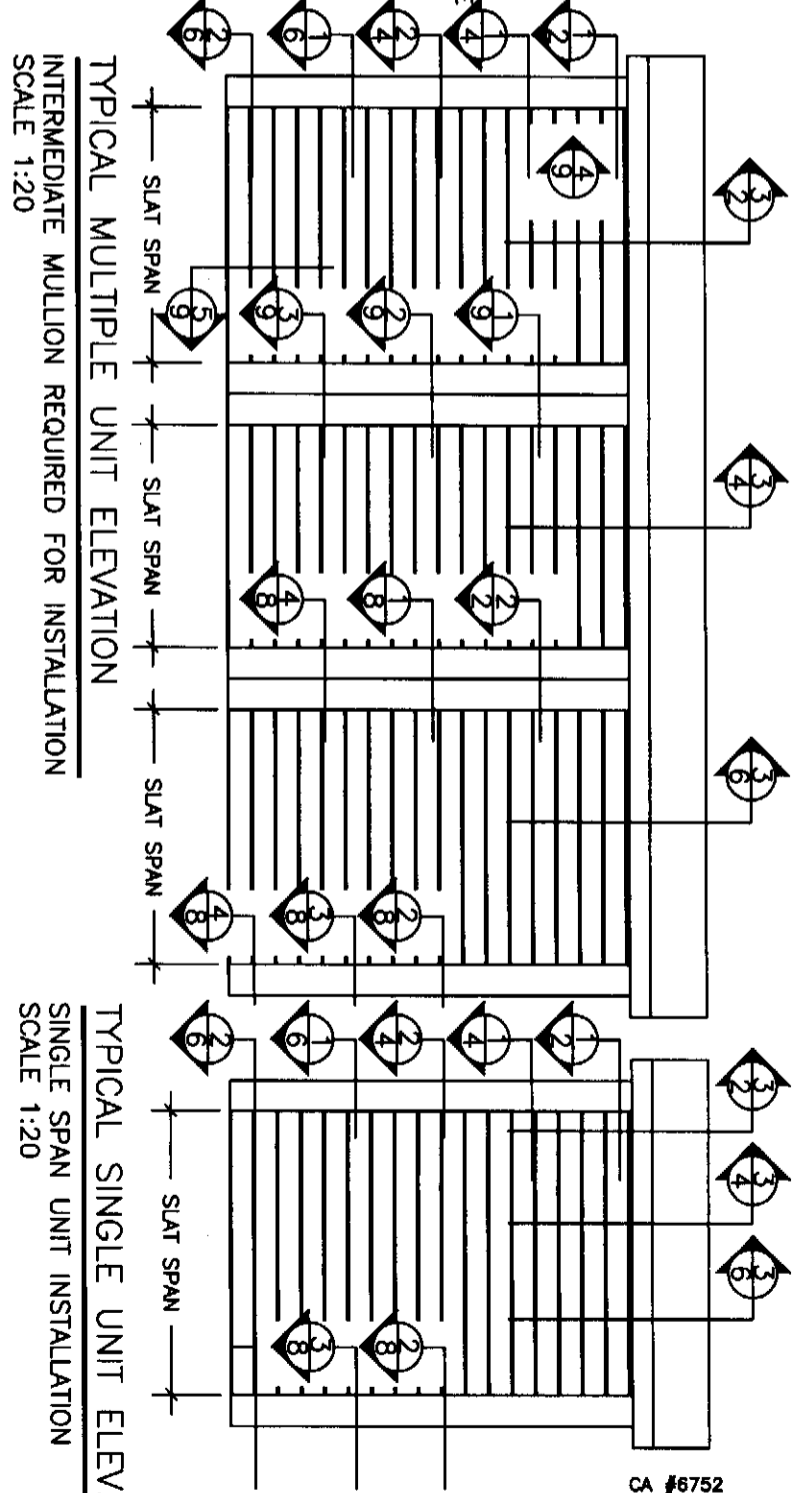


**STRUCTURAL NOTES:**

1. THIS NON POROUS SYSTEM HAS BEEN VERIFIED FOR COMPLIANCE IN ACCORDANCE WITH THE 2010 EDITION OF THE FLORIDA BUILDING CODE (FBC) . THIS SYSTEM SHALL NOT BE INSTALLED IN THE HIGH VELOCITY HURRICANE ZONE (MIAMI-DADE/ BROWARD COUNTIES), NOR WIND ZONE 4 (FBC SECTION 1609.1.2.4) NOR ESSENTIAL FACILITIES IN WIND ZONES 1,2,3 OR 4. THE ADEQUACY FOR IMPACT, DEFLECTION AND FATIGUE RESISTANCE HAS BEEN VERIFIED IN ACCORDANCE WITH SECTION 1626 OF THE ABOVE REFERENCED CODE, AND ASTM E330-02, ASTM E1886-05 AND ASTM E1996-06. SEE LIST OF REPORTS ON SHEET 1 OF 11.
2. DESIGN PRESSURE REQUIREMENTS OF A SPECIFIC SITE SHALL BE DETERMINED BY OTHERS IN CONFORMANCE TO SECTION 1609 OF THE FBC FOR A BASIC WIND SPEED (ALLOWABLE STRESS DESIGN) AS REQUIRED BY THE JURISDICTION WHERE THE SYSTEM WILL BE INSTALLED. ULTIMATE DESIGN LOADS (UD) DETERMINED BY ASCE 7-10 SHALL BE REDUCED TO ALLOWABLE STRESS DESIGN LOADS (ASD) BY MULTIPLYING THE UD BY 0.6. TO COMPARE THEM TO THE ASD PRESSURE RATINGS SHOWN ON SHEETS 3, 5 & 7 OF 11. USE OF DIRECTIONALITY FACTOR  $K_d=0.85$  IS ALLOWED.
3. IMPACT AND FATIGUE RESISTANCE HAS BEEN DETERMINED IN ACCORDANCE WITH THE FBC SECTION 1626 LARGE MISSILE AND 1609.1.2 MISSILE TYPE "D" AS LISTED HEREIN.
4. NO 33-1/3% INCREASE IN ALLOWABLE STRESS INCREASE HAS BEEN USED IN THE DESIGN OF THIS PRODUCT.
5. THIS PRODUCT EVALUATION DOCUMENT (PED) DETAILED HEREIN IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SPECIFIC SITE. IF SITE CONDITIONS DEVIATE FROM THE CONDITIONS DETAILED HEREIN, A LICENSED ENGINEER OR REGISTERED ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS TO BE USED IN CONJUNCTION WITH THIS DOCUMENT.
6. THE CONTRACTOR AND / OR PERMIT HOLDER IS TO BE RESPONSIBLE FOR THE SELECTION, PURCHASE AND INSTALLATION OF THIS SYSTEM, INCLUDING VERIFYING THE ADEQUACY OF THE EXISTING STRUCTURE TO WITHSTAND THE NEW SUPERIMPOSED LOADS SHOWN BELOW AND THE SOUNDNESS OF THE STRUCTURE WHERE THE SYSTEM IS TO BE ATTACHED TO INSURE PROPER ANCHORAGE.
7. SITE SPECIFIC PROJECTS SHALL BE PREPARED BY A FLORIDA LICENSED ENGINEER OR ARCHITECT WHO WILL BECOME THE ENGINEER OF RECORD (EOR) FOR THE PROJECT AND WHO WILL BE RESPONSIBLE FOR THE PROPER USE OF THE PED. THE ENGINEER OF RECORD, ACTING AS A DELEGATED ENGINEER TO THE PED ENGINEER SHALL SUBMIT TO THIS ENGINEER THE SITE SPECIFIC DRAWINGS FOR REVIEW.
8. THIS PED SHALL BEAR THE DATE AND ORIGINAL SEAL OF THE PROFESSIONAL ENGINEER OF RECORD THAT PREPARED IT REGARDLESS OF ITS AVAILABILITY FROM THE FLORIDA PRODUCT APPROVAL WEBSITE.
9. AN OPTIONAL UV AND / OR SOLAR EXTERNAL LAYER MAY BE ADDED ONTO THE SYSTEM.
10. LIMITATIONS OF USE:  
THE MAXIMUM SIZE SHALL BE SHOWN ON SHEETS 3, 5 & 7 OF 11.
11. MAXIMUM HEIGHT OF ROLL-UP SHALL BE 15'-0".  
FOR DETERMINING INTERNAL PRESSURE IN THE ABOVE REFERENCED CODES, THIS PRODUCT IS CLASSIFIED AS NON-POROUS WITH A POROSITY OF LESS THAN 10% FOR THE CONDITIONS SHOWN IN THIS PRODUCT EVALUATION DOCUMENT. THIS PRODUCT MUST COMPLETELY COVER AN OPENING IN ALL DIRECTIONS.
12. ALL SCREWS TO BE STAINLESS STEEL 304 OR GALVANIZED A307 STEEL.
13. ALL BOLTS TO BE ASTM A307, GALVANIZED OR 304 SERIES STAINLESS STEEL.
14. SUPPORTBRACKETS AND ANCHORS :  
A. ANCHORS INTO THE SUPPORT SUBSTRUCTURE (WALL, CEILINGS, BEAMS AND FLOORS) SHALL BE INSTALLED PER MANUFACTURER'S REQUIREMENTS.  
B. THE ANCHOR SPACING SHOWN ON SHEETS 3, 5, & 7 OF 11 INDICATED FOR 1/4" and 3/8" DIAMETERS REFER TO CENTER OF SUPPORTING BRACKETS.  
C. ANCHOR MINIMUM EMBEDMENT AND EDGE DISTANCES

SUBSTRUCTURE	EMBEDMENT	EDGE DISTANCE
HOLLOW BLOCK	1-1/4 INCH	12 D OR PER MANUF.
GROUT FILLED OR KSI CONCRETE	1-3/4 INCH	12 D OR PER MANUF.
4 KSI CONCRETE OR 2 KSI CONCRETE	1-3/4 INCH	12 D OR PER MANUF.
WOOD OR TIMBER	8 D	3/4 INCH

- D. NO EMBEDMENT INTO NON-STRUCTURAL MATERIAL SUCH AS STUCCO, SIDING AND PAVERS SHALL BE INCLUDED AS PART OF THE EMBEDMENT REQUIREMENT.
15. STEEL SURFACES TO BE PLACED IN CONTACT WITH ALUMINUM SHALL BE GIVEN ONE COAT OF ZINC CHROMATE PRIMER IN ACCORDANCE WITH FEDERAL SPEC NO.: TTP-645, OR BE GALVANIZED.
16. MAXIMUM DESIGN PRESSURE VERSUS PANEL SPAN SHOWN ON SHEETS 3, 5 & 7 OF 11.
17. ALL ALUMINUM ALLOYS SHALL BE 6063-T6 OR 6005-T6 U.N.O.
18. ANCHORING OR LOADING CONDITIONS OTHER THAN THOSE SHOWN IN THESE DETAILS ARE NOT PART OF THIS APPROVAL.
19. MANUFACTURER LABEL SHALL BE PLACED ON A READILY AND VISIBLE LOCATION ON THE ROLL-UP. ONE LABEL SHALL BE PLACED FOR EVERY OPENING. LABEL SHALL READ AS FOLLOWS:  
JUPITER INDUSTRIES LLC  
12311 Crystal Commerce Loop  
Fort Myers, FL 33966
20. THIS DOCUMENT IN ITS ENTIRETY WILL BE CONSIDERED INVALID IF IT IS ALTERED BY ANY MEANS OR DOES NOT BEAR THE DATE AND ORIGINAL SEAL OF THE PROFESSIONAL ENGINEER OF RECORD THAT PREPARED IT.



**LIST OF REPORTS**

EVALUATION BASED ON:  
ARCHITECTURAL TESTING INC.  
LAB NO.: B4522.01-401-18  
DATED 12/16/2011  
TAS 201, TAS 203 - LARGE MISSILE IMPACT RESISTANCE & CYCLIC LOADING PERFORMANCE  
TAS 202 - UNIFORM STATIC LOADS

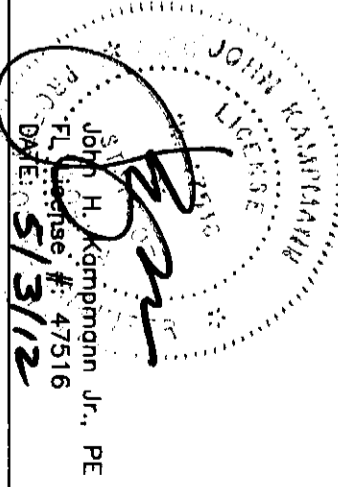
LAB NO.: B4519.01-401-18  
DATED 02/02/2012  
TAS 201, TAS 203 - LARGE MISSILE IMPACT RESISTANCE & CYCLIC LOADING PERFORMANCE  
TAS 202 - UNIFORM STATIC LOADS

LAB NO.: B4521.02-401-44  
DATED 02/22/2012  
ASTM E330-02 - UNIFORM STATIC LOADS  
ASTM E1886-05 & ASTM E1996-06 - LARGE MISSILE TYPE "D" IMPACT RESISTANCE & CYCLIC LOADING PERFORMANCE

LAB NO.: B4520.02-401-44  
DATED 02/22/2012  
ASTM E330-02 - UNIFORM STATIC LOADS  
ASTM E1886-05 & ASTM E1996-06 - LARGE MISSILE TYPE "D" IMPACT RESISTANCE & CYCLIC LOADING PERFORMANCE

**SPAN SCHEDULE**

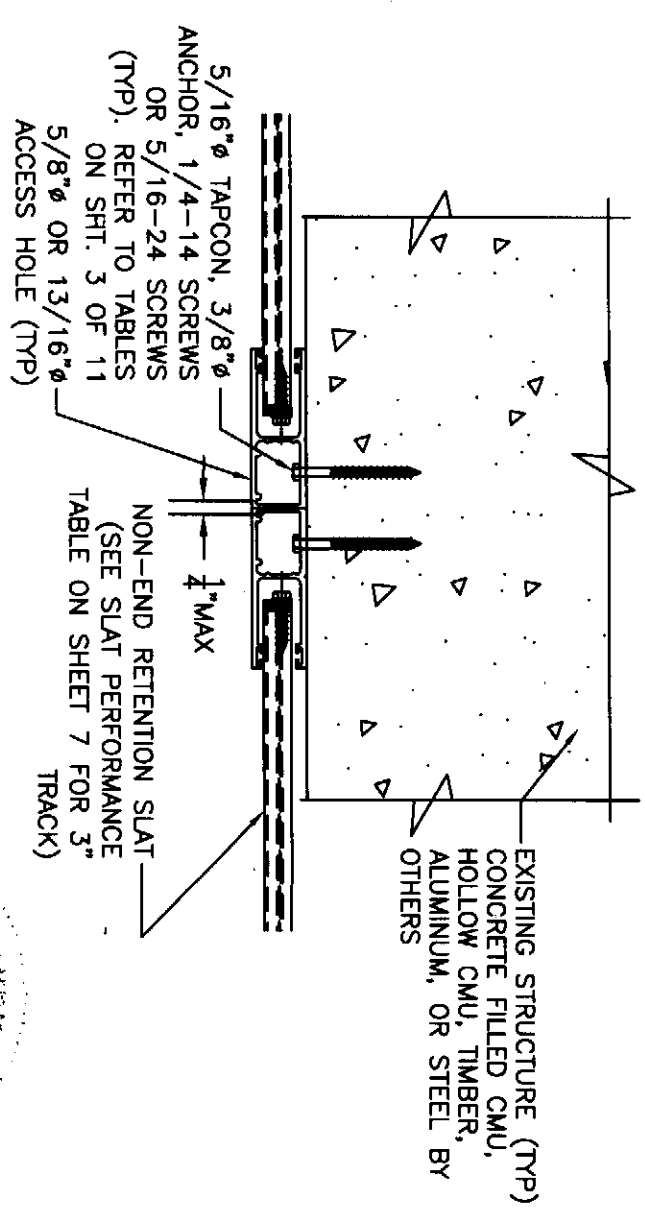
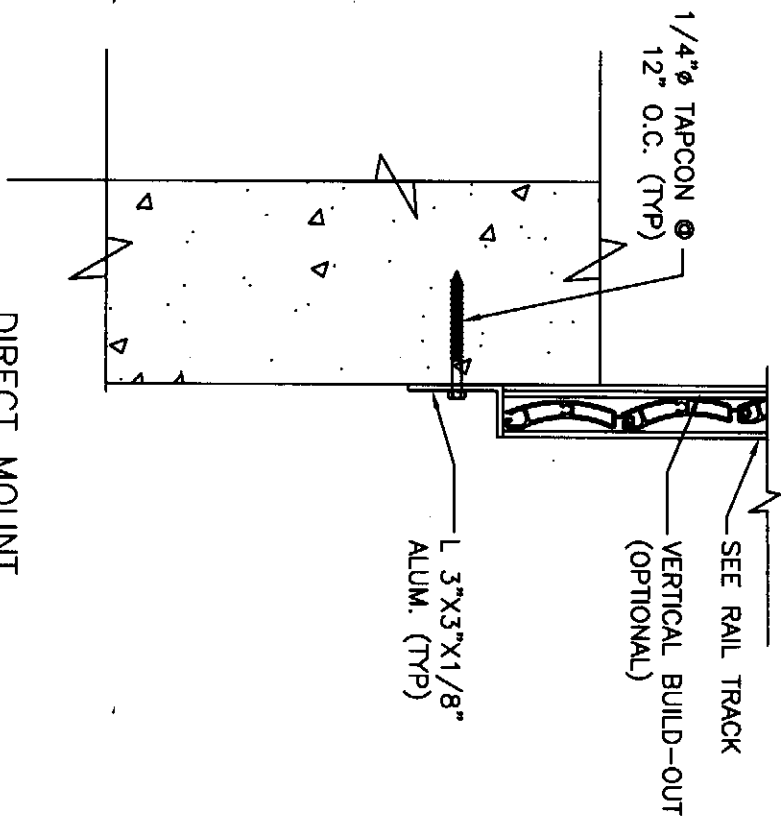
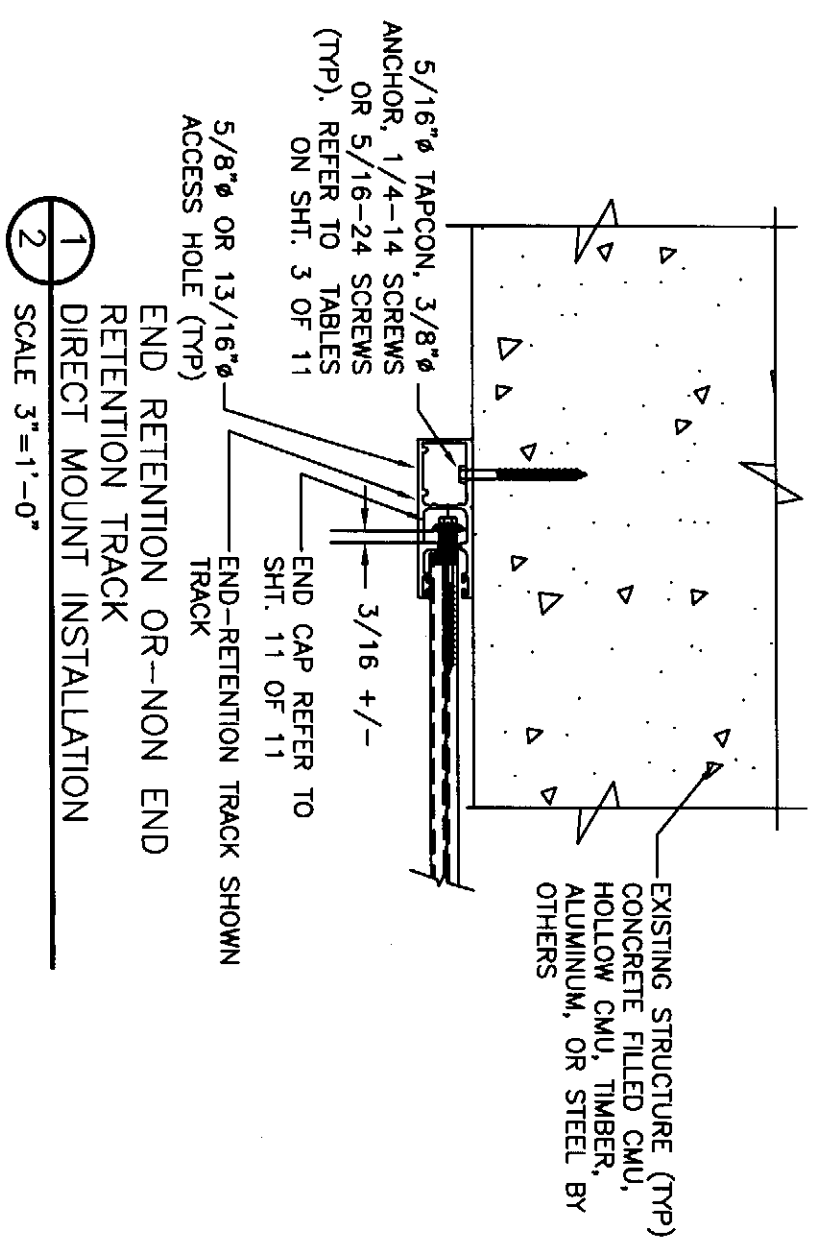
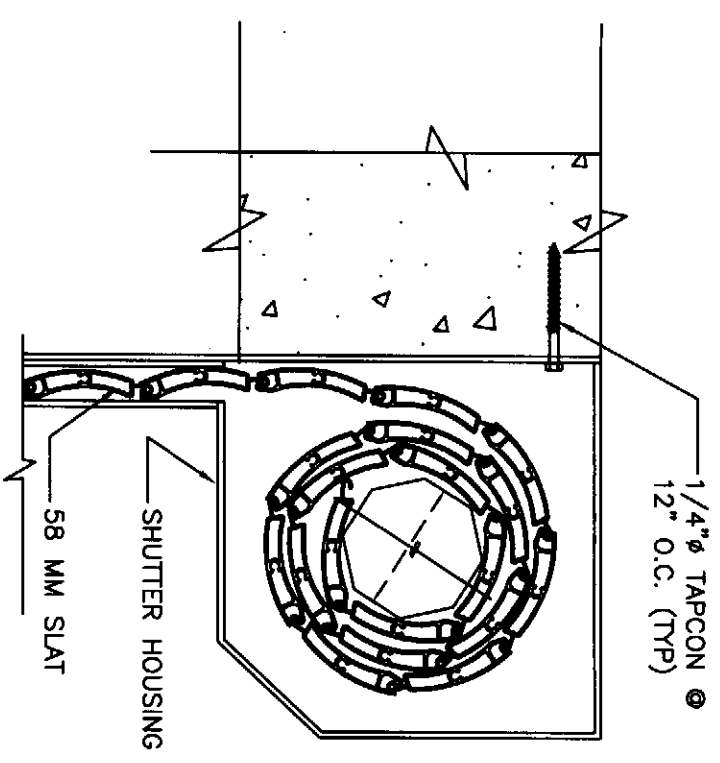
END RETENTION SHUTTER SLAT SPAN	ALLOWABLE DESIGN PRESSURE
84.0"	+/- 120.0 PSF
90.0"	+/- 107.9 PSF
100.0"	+/- 92.6 PSF
110.0"	+/- 81.4 PSF
120.0"	+/- 72.9 PSF
130.0"	+/- 66.2 PSF
140.0"	+/- 60.8 PSF
168.0"	+/- 50.0 PSF
190.0"	+/- 46.6 PSF
200.0"	+/- 45.2 PSF
210.0"	+/- 44.0 PSF
220.0"	+/- 43.0 PSF
230.0"	+/- 42.0 PSF
240.0"	+/- 41.0 PSF
250.0"	+/- 40.2 PSF
252.0"	+/- 40.0 PSF



CA #6752  
WWW.MEAENGINEERS.COM

5856 Lawton Drive  
Sarasota, Florida 34233  
(941) 922-3854 CA-6072

FBC (NON-HIGH VELOCITY HURRICANE ZONE)



**3** DIRECT MOUNT  
 3-1/4" END RETENTION TRACK  
 WALL MOUNT INSTALLATION  
**2** SCALE 3"=1'-0"

**1** END RETENTION OR-NON END  
 RETENTION TRACK  
 DIRECT MOUNT INSTALLATION  
**2** SCALE 3"=1'-0"

**2** NON-END RETENTION TRACK SHOWN  
 WALL MOUNT INSTALLATION  
**2** SCALE 3"=1'-0"

John H. Kammann Jr., PE  
 FL License #: 47516  
 DATE: 5/3/12

FBC (NON-HIGH VELOCITY HURRICANE ZONE)

CA #6752  
 WWW.MEAENGINEERS.COM

2 of 11

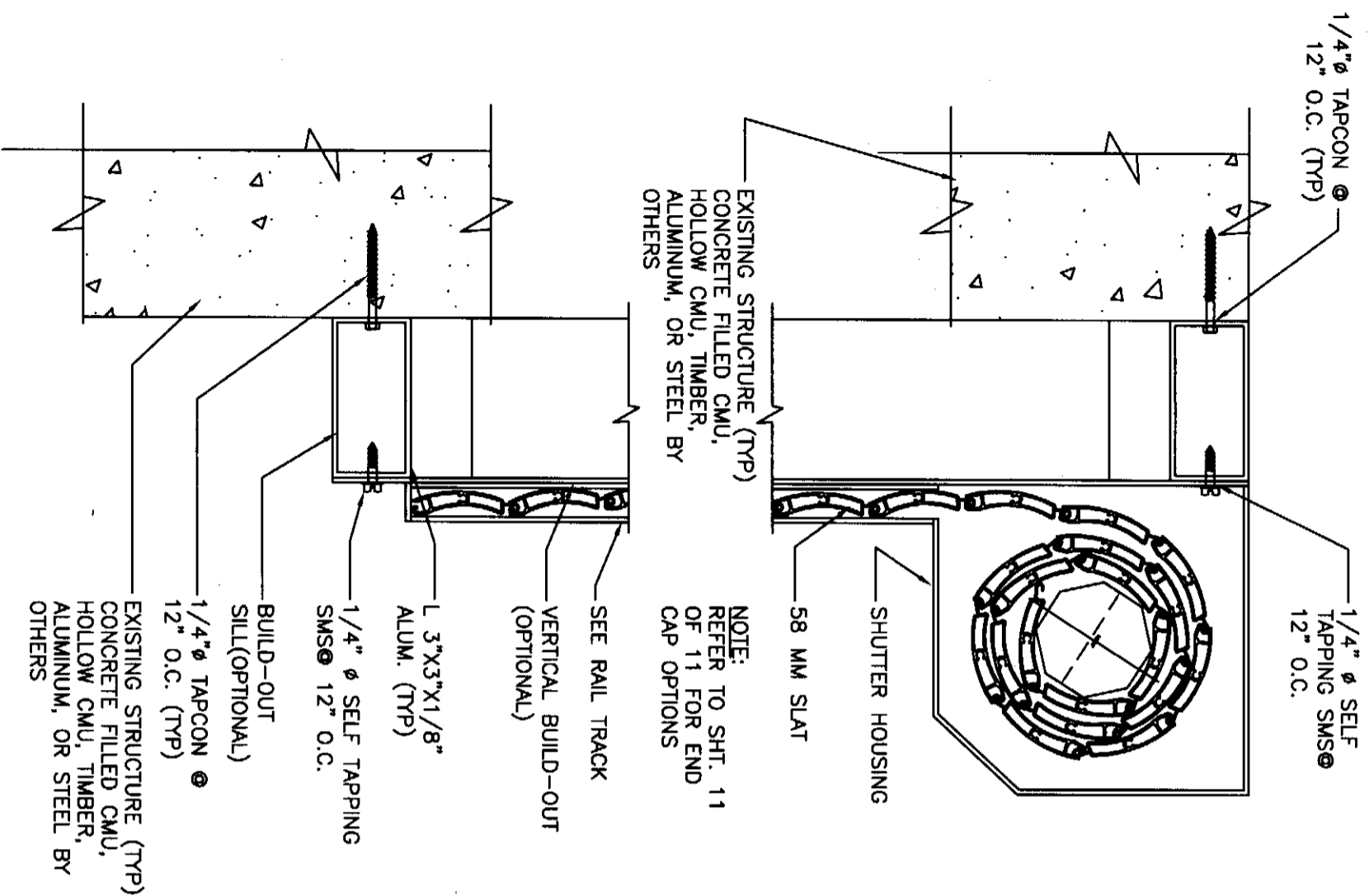
**JUPITER 58 MILLIMETER  
 ROLL-UP SHUTTER SYSTEM**

**JUPITER INDUSTRIES LLC**  
 12311 Crystal Commerce Loop  
 Fort Myers, FL 33966  
 Phone: (239) 225-9041  
 information@jupiter-industries.com

REV.	DESCRIPTION
1	XX/XX/XX - RESERVED.

**MEA ENGINEERS, INC.**  
 5656 Lawton Drive  
 Sarasota, Florida 34233  
 (941) 922-3854 CA-8072



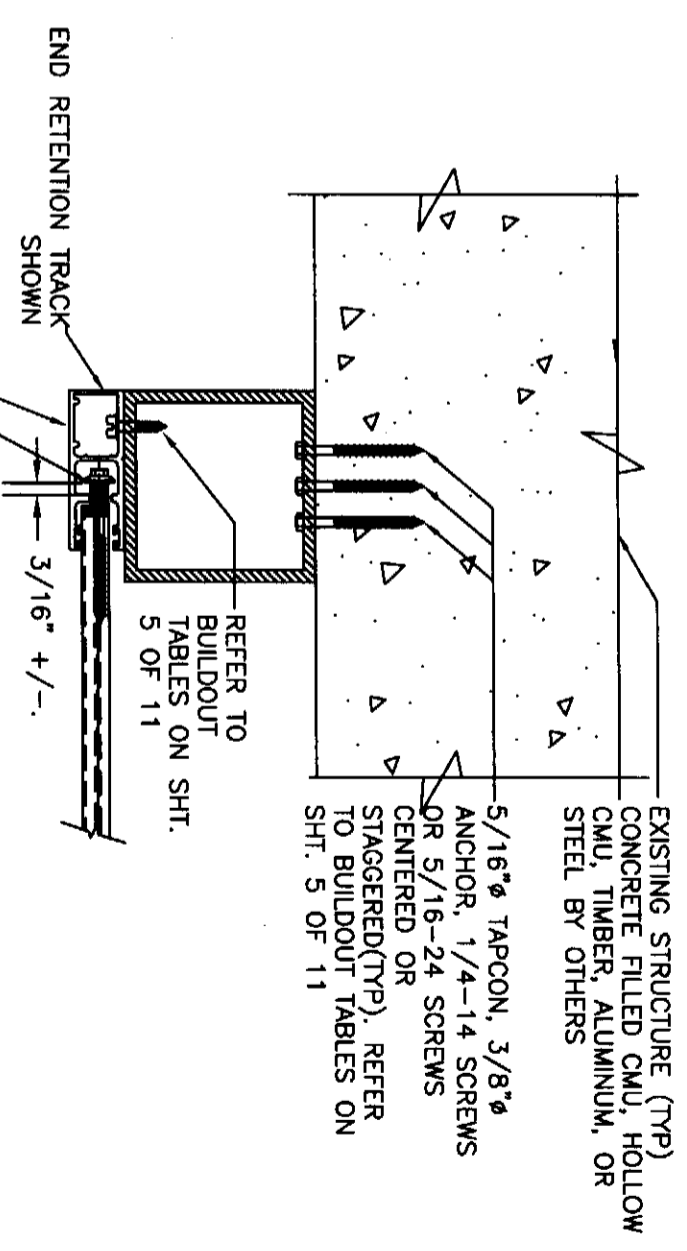


EXISTING STRUCTURE (TYP)  
 CONCRETE FILLED CMU,  
 HOLLOW CMU, TIMBER,  
 ALUMINUM, OR STEEL BY  
 OTHERS

NOTE:  
 REFER TO SHT. 11  
 OF 11 FOR END  
 CAP OPTIONS

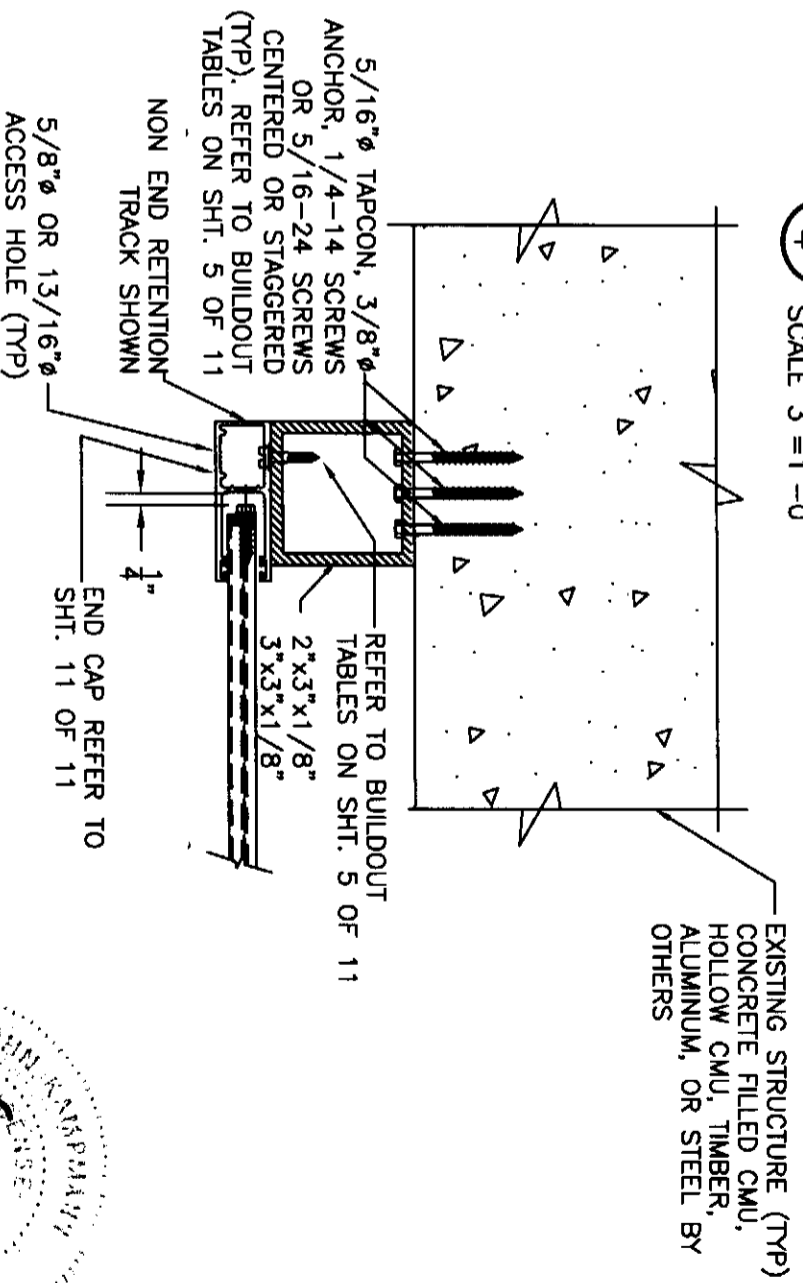
SEE RAIL TRACK  
 (OPTIONAL)  
 VERTICAL BUILD-OUT  
 (OPTIONAL)  
 L 3"x3"x1/8"  
 ALUM. (TYP)  
 1/4"  $\phi$  SELF TAPPING  
 SMS  $\odot$  12" O.C.  
 BUILD-OUT  
 SILL (OPTIONAL)  
 1/4"  $\phi$  TAPCON  $\odot$   
 12" O.C. (TYP)  
 EXISTING STRUCTURE (TYP)  
 CONCRETE FILLED CMU,  
 HOLLOW CMU, TIMBER,  
 ALUMINUM, OR STEEL BY  
 OTHERS

3 WALL MOUNT INSTALLATION  
 4 SCALE 3"=1'-0"



5/8"  $\phi$  OR 13/16"  $\phi$   
 ACCESS HOLE (TYP)  
 END CAP REFER TO  
 SHT. 11 OF 11

4" BUILD-OUT INSTALLATION  
 END RETENTION &  
 NON-END RETENTION



5/8"  $\phi$  OR 13/16"  $\phi$   
 ACCESS HOLE (TYP)  
 END CAP REFER TO  
 SHT. 11 OF 11

2"-3" BUILD-OUT INSTALLATION  
 END RETENTION &  
 NON-END RETENTION

2 NON-END RETENTION  
 4 SCALE 3"=1'-0"

JOHN KARRMANN  
 PE  
 JOHN H. KARRMANN JR., PE  
 FL. LIC. NO. 47516  
 DATE: 5/3/12

FBC (NON-HIGH VELOCITY HURRICANE ZONE)

CA #6752  
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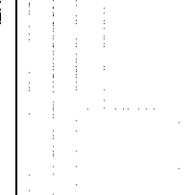
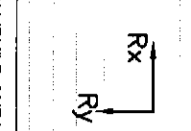
4 OF 11

JUPITER 58 MILLIMETER  
 ROLL-UP SHUTTER SYSTEM

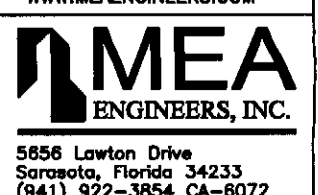
Project Name: JUPITER INDUSTRIES LLC  
 12311 Crystal Commerce Loop  
 Fort Myers, FL 33966  
 Phone: (239) 225-9041  
 information@jupiter-industries.com

REV.	DESCRIPTION
1	XX/XX/XX - RESERVED.

**MEA**  
 ENGINEERS, INC.  
 5858 Lawton Drive  
 Sarasota, Florida 34233  
 (941) 922-3854 CA-6072



END RETENTION (BUILD-OUT MOUNT)		MAXIMUM SPACING (O.C.)	
SLAT SPAN	DESIGN PRESSURE	Rx	Ry
16.0 FT	+/- 30 PSF	143.1 LB/FT	145.0 LB/FT
	+/- 35 PSF	249.4 LB/FT	194.2 LB/FT
	+/- 40 PSF	365.5 LB/FT	245.2 LB/FT
	+/- 45 PSF	461.4 LB/FT	298.0 LB/FT
	+/- 50 PSF	567.1 LB/FT	352.4 LB/FT
	+/- 60 PSF	778.1 LB/FT	466.5 LB/FT
	+/- 70 PSF	988.2 LB/FT	587.4 LB/FT
	+/- 80 PSF	1197.6 LB/FT	715.0 LB/FT
	+/- 90 PSF	1406.1 LB/FT	849.3 LB/FT
	+/- 100 PSF	1613.7 LB/FT	990.2 LB/FT
	+/- 110 PSF	1820.4 LB/FT	1137.6 LB/FT
	+/- 120 PSF	2026.1 LB/FT	1291.5 LB/FT
12.0 FT	+/- 30 PSF	84.9 LB/FT	86.3 LB/FT
	+/- 35 PSF	102.9 LB/FT	104.3 LB/FT
	+/- 40 PSF	128.9 LB/FT	128.9 LB/FT
	+/- 45 PSF	150.8 LB/FT	150.8 LB/FT
	+/- 50 PSF	174.8 LB/FT	174.8 LB/FT
	+/- 60 PSF	236.7 LB/FT	236.7 LB/FT
	+/- 70 PSF	297.0 LB/FT	297.0 LB/FT
	+/- 80 PSF	356.3 LB/FT	356.3 LB/FT
	+/- 90 PSF	414.3 LB/FT	414.3 LB/FT
	+/- 100 PSF	470.9 LB/FT	470.9 LB/FT
	+/- 110 PSF	526.1 LB/FT	526.1 LB/FT
	+/- 120 PSF	579.9 LB/FT	579.9 LB/FT
10.0 FT	+/- 30 PSF	78.9 LB/FT	78.9 LB/FT
	+/- 35 PSF	96.9 LB/FT	96.9 LB/FT
	+/- 40 PSF	122.9 LB/FT	122.9 LB/FT
	+/- 45 PSF	144.8 LB/FT	144.8 LB/FT
	+/- 50 PSF	162.7 LB/FT	162.7 LB/FT
	+/- 60 PSF	217.2 LB/FT	217.2 LB/FT
	+/- 70 PSF	269.1 LB/FT	269.1 LB/FT
	+/- 80 PSF	318.4 LB/FT	318.4 LB/FT
	+/- 90 PSF	365.9 LB/FT	365.9 LB/FT
	+/- 100 PSF	411.4 LB/FT	411.4 LB/FT
	+/- 110 PSF	455.9 LB/FT	455.9 LB/FT
	+/- 120 PSF	498.4 LB/FT	498.4 LB/FT
8.0 FT	+/- 30 PSF	61.4 LB/FT	61.4 LB/FT
	+/- 35 PSF	72.0 LB/FT	72.0 LB/FT
	+/- 40 PSF	89.2 LB/FT	89.2 LB/FT
	+/- 45 PSF	102.2 LB/FT	102.2 LB/FT
	+/- 50 PSF	118.2 LB/FT	118.2 LB/FT
	+/- 60 PSF	157.8 LB/FT	157.8 LB/FT
	+/- 70 PSF	194.2 LB/FT	194.2 LB/FT
	+/- 80 PSF	227.7 LB/FT	227.7 LB/FT
	+/- 90 PSF	267.3 LB/FT	267.3 LB/FT
	+/- 100 PSF	303.0 LB/FT	303.0 LB/FT
	+/- 110 PSF	334.7 LB/FT	334.7 LB/FT
	+/- 120 PSF	362.4 LB/FT	362.4 LB/FT
6.0 FT	+/- 30 PSF	47.0 LB/FT	47.0 LB/FT
	+/- 35 PSF	55.9 LB/FT	55.9 LB/FT
	+/- 40 PSF	69.9 LB/FT	69.9 LB/FT
	+/- 45 PSF	79.0 LB/FT	79.0 LB/FT
	+/- 50 PSF	92.2 LB/FT	92.2 LB/FT
	+/- 60 PSF	118.2 LB/FT	118.2 LB/FT
	+/- 70 PSF	144.2 LB/FT	144.2 LB/FT
	+/- 80 PSF	170.3 LB/FT	170.3 LB/FT
	+/- 90 PSF	196.4 LB/FT	196.4 LB/FT
	+/- 100 PSF	222.5 LB/FT	222.5 LB/FT
	+/- 110 PSF	248.6 LB/FT	248.6 LB/FT
	+/- 120 PSF	274.7 LB/FT	274.7 LB/FT
4.0 FT	+/- 30 PSF	30.0 LB/FT	30.0 LB/FT
	+/- 35 PSF	35.0 LB/FT	35.0 LB/FT
	+/- 40 PSF	42.0 LB/FT	42.0 LB/FT
	+/- 45 PSF	46.0 LB/FT	46.0 LB/FT
	+/- 50 PSF	51.0 LB/FT	51.0 LB/FT
	+/- 60 PSF	66.0 LB/FT	66.0 LB/FT
	+/- 70 PSF	81.0 LB/FT	81.0 LB/FT
	+/- 80 PSF	96.0 LB/FT	96.0 LB/FT
	+/- 90 PSF	111.0 LB/FT	111.0 LB/FT
	+/- 100 PSF	126.0 LB/FT	126.0 LB/FT
	+/- 110 PSF	141.0 LB/FT	141.0 LB/FT
	+/- 120 PSF	156.0 LB/FT	156.0 LB/FT
2.0 FT	+/- 30 PSF	15.0 LB/FT	15.0 LB/FT
	+/- 35 PSF	17.5 LB/FT	17.5 LB/FT
	+/- 40 PSF	21.0 LB/FT	21.0 LB/FT
	+/- 45 PSF	22.5 LB/FT	22.5 LB/FT
	+/- 50 PSF	25.0 LB/FT	25.0 LB/FT
	+/- 60 PSF	33.0 LB/FT	33.0 LB/FT
	+/- 70 PSF	40.5 LB/FT	40.5 LB/FT
	+/- 80 PSF	48.0 LB/FT	48.0 LB/FT
	+/- 90 PSF	55.5 LB/FT	55.5 LB/FT
	+/- 100 PSF	63.0 LB/FT	63.0 LB/FT
	+/- 110 PSF	70.5 LB/FT	70.5 LB/FT
	+/- 120 PSF	78.0 LB/FT	78.0 LB/FT



REV.	DESCRIPTION
1	XX/XX/XX - RESERVED.

**JUPITER INDUSTRIES LLC**  
12311 Crystal Commerce Loop  
Fort Myers, FL 33966  
Phone: (239) 225-9041  
information@jupiter-industries.com

**JUPITER 58 MILLIMETER ROLL-UP SHUTTER SYSTEM**

Project Name: JK  
Description: JK  
Project # 11-1002  
Date: 10/02/11  
Status: NOTED

John J. Kampmann Jr., PE  
FL License # 47516  
Date 5/3/12

