

GENERAL NOTES:

1. ROLL-UP SHUTTER SHOWN ON THIS PRODUCT EVALUATION DOCUMENT (P.E.D.) HAS BEEN VERIFIED FOR CODE COMPLIANCE IN ACCORDANCE WITH THE 2026 (9th EDITION) OF THE FLORIDA BUILDING CODE. THIS ROLL-UP SHUTTER SHALL NOT BE INSTALLED AT HIGH VELOCITY HURRICANE ZONES (MIAMI-DADE COUNTY / BROWARD COUNTIES).

DESIGN WIND LOADS SHALL BE DETERMINED AS PER SECTION 1609 OF THE ABOVE MENTIONED CODE, FOR A BASIC WIND SPEED AS REQUIRED BY THE JURISDICTION WHERE THESE SHUTTERS WILL BE INSTALLED FOR A DIRECTIONALITY FACTOR $K_d=0.85$. USING ASCE 7-22 AND SHALL NOT EXCEED THE MAXIMUM (A.S.D.) DESIGN PRESSURE RATINGS INDICATED ON SHEETS 5, 6, 8, 9 & 10 THRU 13.

IN ORDER TO VERIFY THE ABOVE CONDITION, ULTIMATE DESIGN WIND LOADS DETERMINED PER ASCE 7-22 SHALL FIRST BE REDUCED TO A.S.D. DESIGN WIND LOADS BY MULTIPLYING THEM BY 0.6 IN ORDER TO TO COMPARE THESE W/ MAX. (A.S.D) DESIGN PRESSURE RATINGS INDICATED ON SHEETS 5, 6, 8, 9 & 10 THRU 13.

IN ORDER TO VERIFY THAT COMPONENTS ON THIS P.E.D. AS TESTED WERE NOT OVER STRESSED, A 33% INCREASE IN ALLOWABLE STRESS FOR WIND LOADS WAS NOT USED IN THEIR ANALYSIS, HOWEVER A DURATION FACTOR $CD=1.60$ WAS USED FOR ANCHORS IN WOOD, PER ANSI/AWC NDS-2024.

ROLL-UP SHUTTER'S ADEQUACY FOR IMPACT (L.M.I) AND FATIGUE RESISTANCE HAS BEEN VERIFIED IN ACCORDANCE WITH SECTION 1609.1.2 OF THE ABOVE MENTIONED CODE AS PER HTL REPORTS # 0187-0406-99, 0187-0422-99, 0187-0407-99, 0187-0408-99, 0187-0423-99, 0187-0413-99, 0187-0414-99 AND FTL REPORTS #3521, #3522, #3523, #3524 AS PER TAS-201, TAS-202 & TAS-203 PROTOCOLS. IMPACT IS 9Lb, 2"X4" 50ft/Sec FOR LARGE MISSILE AND 130ft/Sec FOR SMALL MISSILE.

2. ALL ALUMINUM EXTRUSIONS SHALL BE ALUMINUM ASSOCIATION 6063-T6 ALLOY & TEMPER (SEE SHEET 2).

3. ALL SCREWS SHALL BE STAINLESS STEEL 304 OR 316 AISI SERIES OR CORROSION RESISTANT COATED CARBON STEEL AS PER DIN 50018 W/ 50 ksi YIELD STRENGTH AND 90 ksi TENSILE STRENGTH. ALL TEK SCREWS SHALL BE AS MANUFACTURED BY ITW BUILDEX, INC. & SHALL COMPLY WITH FLORIDA BUILDING CODE SECTIONS 2411.3.3.4. & 1711.

4. BOLTS TO BE ASTM A-307 GALVANIZED STEEL OR AISI 304 SERIES STAINLESS STEEL, WITH 36 ksi MINIMUM YIELD STRENGTH, AND SHALL COMPLY WITH SECTION 1711 OF THE FLORIDA BUILDING CODE.

5. STORM BARS AT FLOOR AND CEILING MOUNTING INSTALLATIONS MAY BE REMOVABLE AT NON HURRICANE CONDITIONS. HOWEVER, EACH STORM BAR SHALL BEAR A PERMANENT LABEL IN A VISIBLE PLACE WITH A WARNING NOTE INSTRUCTING THE TENANT OR OWNER THAT STORM BARS MUST BE INSTALLED WITH CORRESPONDING HARDWARE DURING PERIODS OF HURRICANE WARNING AND THAT ROLL UP SHUTTERS WILL NOT OFFER HURRICANE PROTECTION UNLESS ALL STORM BAR ARE INSTALLED AS DIRECTED.

6. REMOVABLE STORM BARS SHALL BE STORED IN A CONSPICUOUS PLACE WITH EASY AND IMMEDIATE ACCESS SO THAT THEY CAN BE REACHED AND INSTALLED ANY TIME (HURRICANE CONDITIONS OR NOT) SLATS ARE ROLLED DOWN. THE EFFECT OF THE SLATS ROLLED DOWN WITHOUT STORM BARS IS; THOSE SLATS WILL SLIP OUT OF TRACK DUE TO THE DEFLECTION CAUSED BY WIND FORCES. WHEN REMOVING STORM BARS, ONE STORM BAR SHALL ALWAYS BE LEFT INSTALLED (SHALL NOT BE REMOVED). THIS CONDITION IS ONLY REQUIRED FOR HEADER SPANS EQUAL OR GREATER THAN 12'-0".

7. ANCHORS TO WALL FOR SIDE RAILS & BOX CONNECTION SHALL BE AS FOLLOWS: (UNLESS OTHERWISE NOTED)

(A) TO EXISTING POURED CONCRETE ($f'c=3192$ psi Min.):
-1/4" Ø 410 S.S TAPCON ANCHORS AS MANUFACTURED BY ITW BUILDEX, INC

NOTES:
A.1) MINIMUM EMBEDMENT OF TAPCON ANCHORS INTO POURED CONCRETE SHALL BE 1 3/4", NO EMBEDMENT INTO STUCCO SHALL BE CONSIDERED AS PART OF THE REQUIRED EMBEDMENT.

A.2) IN CASE THAT PRECAST STONE, PRECAST CONCRETE PANELS, OR PAVERS BE FOUND ON THE EXISTING WALL OR FLOOR, ANCHORS SHALL BE LONG ENOUGH TO REACH THE MAIN STRUCTURE BEHIND SUCH PANELS.

(B) TO EXISTING CONCRETE BLOCK WALL (ASTM C-90):
-1/4" Ø 410 S.S TAPCON ANCHORS, AS MANUFACTURED BY ITW BUILDEX, INC.

NOTES:
B.1) MINIMUM EMBEDMENT OF TAPCON ANCHORS, INTO THE CONCRETE BLOCK UNIT SHALL BE 1 1/4".

B.2) IN CASE THAT PRECAST STONE OR PRECAST CONCRETE PANELS BE FOUND ON THE EXISTING WALL, ANCHORS SHALL BE LONG ENOUGH TO REACH THE MAIN STRUCTURE BEHIND SUCH PANELS.

(C) TO EXISTING WOOD FRAME BUILDING: SOUTHERN PINE #2 W/ $G=0.55$ OR DOUGLAS FIR W/ $G=0.42$ MIN.
-1/4" Ø S.S LAG SCREW PER NDS, WITH 1 1/2" MINIMUM THREADED PENETRATION BEYOND ANY WALL FINISH..

(D) ANCHORS REQUIRED FOR STORM BARS, HEADERS & MULLION CONNECTIONS TO CONCRETE ($f'c=3$ ksi) SHALL BE AS SPECIFIED ON APPLICABLE SECTIONS SHOWN ON SHEETS 5, 6, 7 & 8 OF 13 RESPECTIVELY.

S.S KWIK BOLT 3 AS MANUFACTURED BY HILTI, INC. CALK-IN ANCHORS AND S.S POWER BOLTS TO BE MANUFACTURED BY DEWALT INC., & TAPCON ANCHORS AS MANUFACTURED BY ITW BUILDEX, INC.

(E) ANCHORS SHALL BE INSTALLED FOLLOWING ALL OF THE RECOMMENDATIONS AND SPECIFICATIONS OF THE ANCHOR'S MANUFACTURER.

8. A-150-H & A-200-H SLATS FOAM PLASTIC CORE SHALL CONSIST OF 100/100 PARTS BY WEIGHT OF ELASTOPOR R P12041 R(1.06 SPECIFIC GRAVITY) RESIN + ELASTOPOR R P1001 U (1.22 SPECIFIC GRAVITY) ISOCYANATE.

SLATS FOAM PLASTIC CORE SURFACE BURNING CHARACTERISTICS HAVE BEEN VERIFIED IN ACCORDANCE WITH SECTION 2603.3 OF THE FLORIDA BUILDING CODE AS PER CELOTEX CORPORATION TEST REPORT #520274A & 520274B RESPECTIVELY.

9. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE SOUNDNESS OF THE STRUCTURE WHERE SHUTTER IS TO BE ATTACHED TO ENSURE PROPER ANCHORAGE. THIS SHUTTER SHALL ONLY BE ATTACHED TO CONCRETE, BLOCK OR WOOD FRAME BUILDINGS.

10. THE INSTALLATION CONTRACTOR IS TO SEAL/CAULK ALL SHUTTER COMPONENT EDGES WHICH REMAIN IN CONTINUOUS CONTACT WITH THE BUILDING TO PREVENT WIND/RAIN INTRUSION. CAULK AND SEAL SHUTTER TRACKS ALL AROUND FULL LENGTH.

11. ROLL-UP MECHANISM IS NOT PART OF THIS APPROVAL, BUT SHALL BE CERTIFIED BY AN INDEPENDENT TESTING AGENCY.

12. ROLL-UP SHUTTER INSTALLATION SHALL COMPLY WITH SPECS INDICATED IN THIS DRAWING PLUS ANY BUILDING AND ZONING REGULATIONS PROVIDED BY THE JURISDICTION WHERE A PERMIT IS APPLIED FOR.

13. (a) THIS P.E.D. PREPARED BY THIS ENGINEER IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SITE-SPECIFIC PROJECT; i.e. WHERE THE SITE CONDITIONS DEVIATE FROM THE P.E.D.

(b) THE CONTRACTOR IS TO BE RESPONSIBLE FOR THE SELECTION, PURCHASE AND INSTALLATION INCLUDING LIFE SAFETY OF THIS PRODUCT, BASED ON THIS P.E.D. PROVIDED HE/SHE DOES NOT DEVIATE FROM THE CONDITIONS DETAILED ON THIS DOCUMENT. CONSTRUCTION SAFETY AT SITE IS THE CONTRACTOR'S RESPONSIBILITY.

(c) THIS P.E.D. WILL BE CONSIDERED INVALID IF ALTERED BY ANY MEANS.

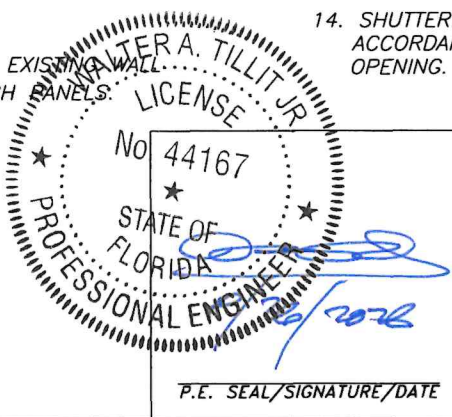
(d) SITE-SPECIFIC PROJECTS SHALL BE PREPARED BY A FLORIDA REGISTERED ENGINEER OR ARCHITECT WHO WILL BECOME THE ENGINEER OF RECORD (E.O.R.) FOR THE PROJECT AND WHO WILL BE RESPONSIBLE FOR THE PROPER USE OF THE P.E.D. ENGINEER OF RECORD, ACTING AS A DELEGATED ENGINEER TO THE P.E.D. ENGINEER, SHALL SUBMIT TO THE LATTER THE SITE-SPECIFIC DRAWINGS FOR REVIEW.

(e) THIS P.E.D. SHALL BEAR THE DATE AND ORIGINAL SEAL AND SIGNATURE OF THE PROFESSIONAL ENGINEER OF RECORD WHO PREPARED IT.

14. SHUTTER MANUFACTURER'S LABEL SHALL BE LOCATED AT A READILY VISIBLE LOCATION ON THE ROLL-UP IN ACCORDANCE WITH SECTION 1709.9.3 OF FLORIDA BUILDING CODE. ONE LABEL SHALL BE PLACED FOR EVERY OPENING. LABELING TO COMPLY WITH SECTION 1709.9.2 OF THE FLORIDA BUILDING CODE.

FLORIDA BUILDING CODE (Non High Velocity Hurricane Zone)

THIS DRAWING SHALL ONLY BE USED TO
OBTAIN PERMITS IN THE STATE OF FLORIDA

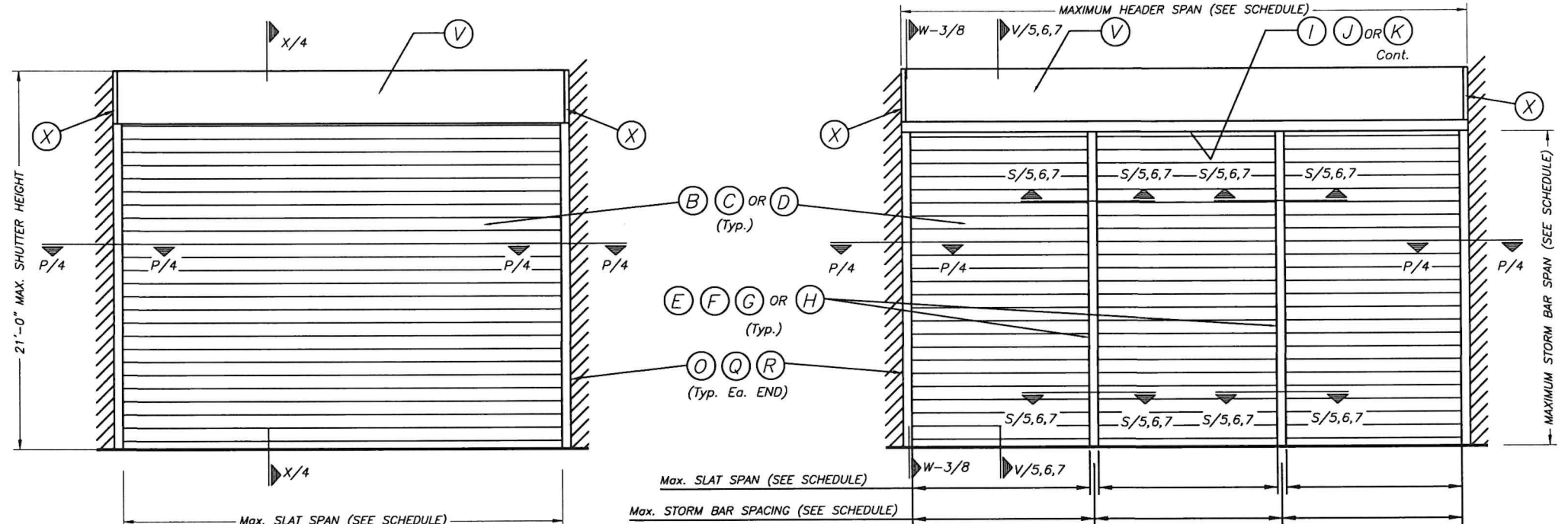


© 2026 TILTECO, INC.

TILTECO inc.

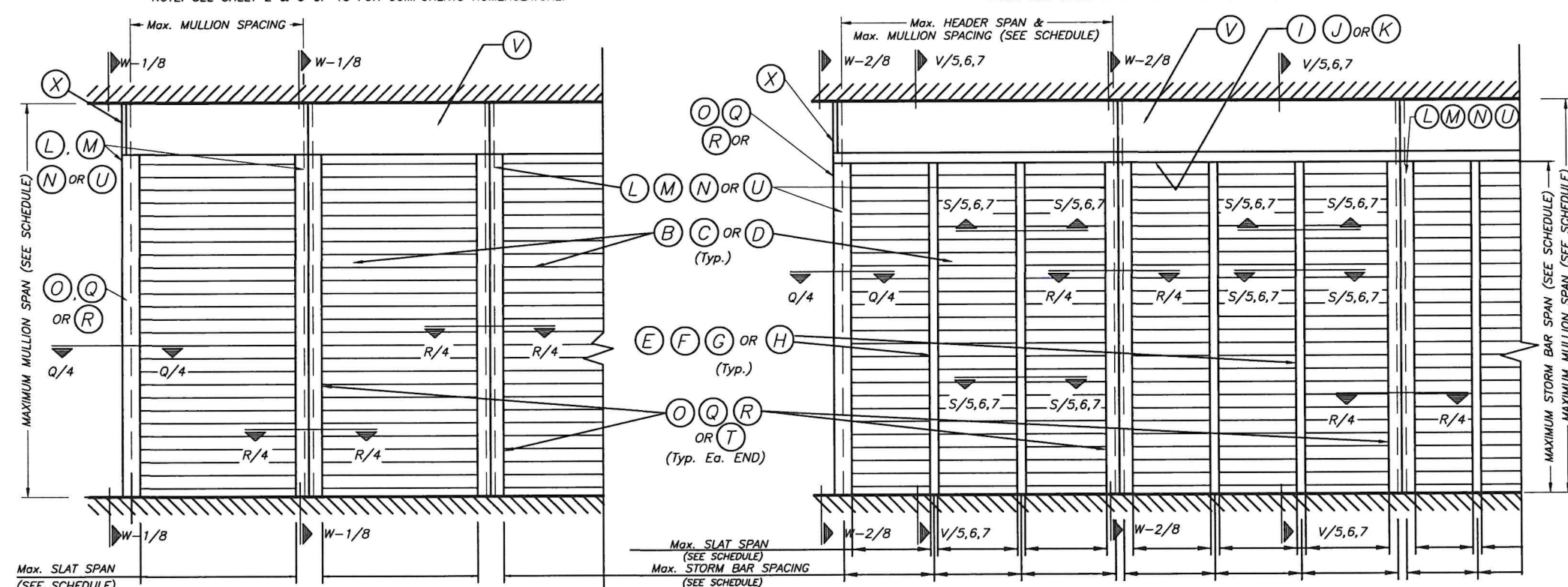
TILLIT TESTING & ENGINEERING COMPANY
6355 N.W. 36th. St., Ste. 305, VIRGINIA GARDENS, FL 33166
Phone : (305)871-1530 . Fax : (305)871-1531
CA-0006719
WALTER A. TILLIT Jr. P.E.
FLORIDA Lic. # 44167

ROLL-UP SHUTTER/WIND BORNE DEBRI REGION RLL-3, A-200-H, A-150-H SLATS				W.H. DRAWN BY:	
ROLLAC SHUTTERS OF TEXAS, INC.				06/25/2026 DATE	
5331 ORANGE STREET PEARLAND, TX. 77581 PHONE: (800) 880-0922, FAX: (281) 485-0839				26-072 DRAWING No	
REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 25-051	6/25/26	3		
2			4		
				SHEET 1 OF 13	



TYPICAL SINGLE UNIT ELEVATION (NO STORM BARS REQUIRED)
NOTE: SEE SHEET 2 & 3 OF 13 FOR COMPONENTS NOMENCLATURE.

TYPICAL MULTIPLE UNIT ELEVATION (STORM BARS REQUIRED)
NOTE: SEE SHEET 2 & 3 OF 13 FOR COMPONENTS NOMENCLATURE.



TYPICAL CONSECUTIVE SINGLE UNIT ELEVATION (NO STORM BARS REQUIRED)
NOTE: SEE SHEET 2 & 3 OF 13 FOR COMPONENTS NOMENCLATURE.

TYPICAL CONSECUTIVE MULTIPLE UNIT ELEVATION (STORM BARS REQUIRED)
NOTE: SEE SHEET 2 & 3 OF 13 FOR COMPONENTS NOMENCLATURE.

WALTER A. TILLIT JR.
LICENSE
No. 44167
STATE OF FLORIDA
PROFESSIONAL ENGINEER
WALTER A. TILLIT JR. P.E.
FLORIDA Lic. # 44167

© 2026 TILTECO, INC.

TILTECO INC.

TILLIT TESTING & ENGINEERING COMPANY
6355 N.W. 36th St., Ste. 305, VIRGINIA GARDENS, FL 33166
Phone : (305)871-1530 . Fax : (305)871-1531
CA-0006719
WALTER A. TILLIT Jr. P.E.
FLORIDA Lic. # 44167

FLORIDA BUILDING CODE (Non High Velocity Hurricane Zone)

ROLL-UP SHUTTER/WIND BORNE DEBRI REGION
RLL-3, A-200-H, A-150-H SLATS

ROLLAC SHUTTERS OF TEXAS, INC.

5331 ORANGE STREET
PEARLAND, TX. 77581
PHONE: (800) 880-0922, FAX: (281) 485-0839

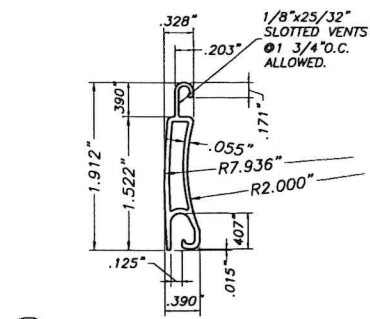
W.H.
DRAWN BY:

06/25/2026
DATE

26-072
DRAWING No

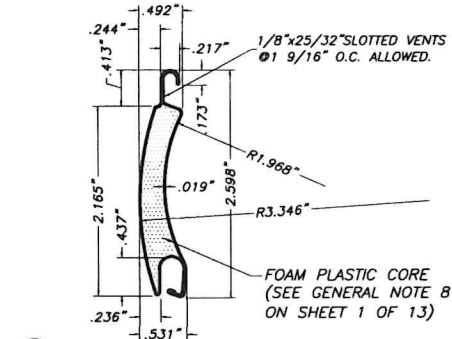
SHEET 1A OF 13

REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 25-051	6/25/26	3		
2			4		

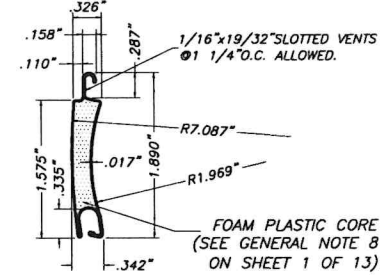


B TYPE 2 SLAT:
RLL-3 SLAT
EXTRUDED ALUMINUM
6063-T5 ALUMINUM ALLOY
SCALE: 1/2" = 1"

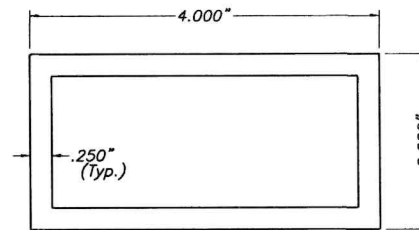
NOTE:
TYPE 1 THRU 4 SLATS SHALL BE INSTALLED
W/SIDE LOCKS AT EVERY OTHER SLAT.



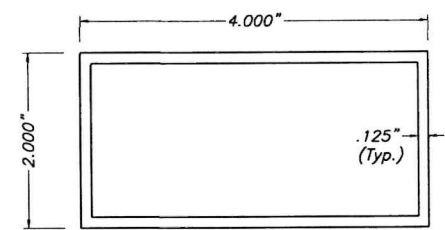
C TYPE 3 SLAT:
A-200-H SLAT
55mm (t = .019") HIGH
DENSITY FOAM PLASTIC CORE
SHEET METAL ALUMINUM SLAT
3005-H48 ALUMINUM ALLOY
SCALE: 1/2" = 1"



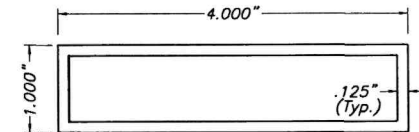
D TYPE 4 SLAT:
A-150-H SLAT
40mm (t = .017") HIGH
DENSITY FOAM PLASTIC CORE
SHEET METAL ALUMINUM SLAT
3005-H48 ALUMINUM ALLOY
SCALE: 1/2" = 1"



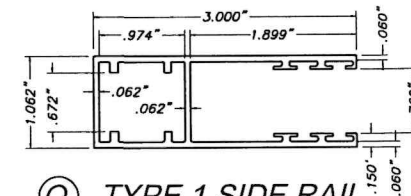
I TYPE 1 HEADER:
4" HEAVY EXTRUDED HEADER
6063-T6 ALUMINUM ALLOY
SCALE: 1/2" = 1"



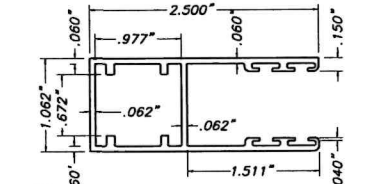
J TYPE 2 HEADER:
4" EXTRUDED HEADER
6063-T6 ALUMINUM ALLOY
SCALE: 1/2" = 1"



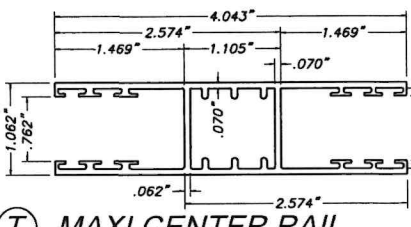
K TYPE 3 HEADER:
1"x4" EXTRUDED HEADER
6063-T5 ALUMINUM ALLOY
SCALE: 1/2" = 1"



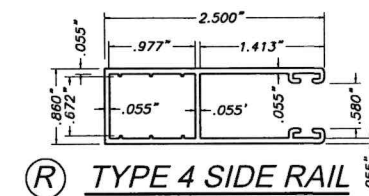
O TYPE 1 SIDE RAIL
RLL-25 SIDE RAIL
6063-T5 Alum. ALLOY
SCALE: 1/2" = 1"



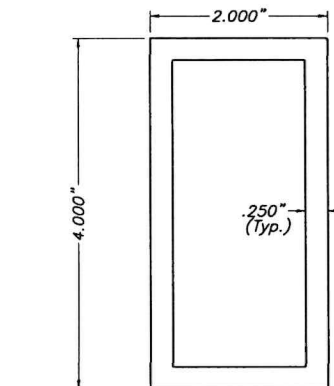
Q TYPE 3 SIDE RAIL
RLL-1 SIDE RAIL
6063-T5 Alum. ALLOY
SCALE: 1/2" = 1"



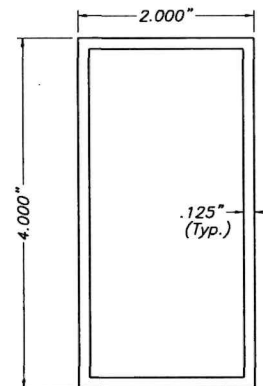
T MAXI CENTER RAIL
RLL-7 SIDE RAIL
6063-T5 Alum. ALLOY
SCALE: 1/2" = 1"



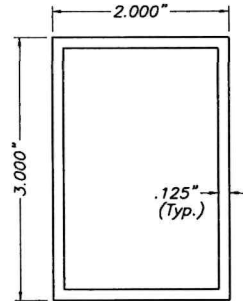
R TYPE 4 SIDE RAIL
RLL-32 SIDE RAIL
6063-T5 Alum. ALLOY
SCALE: 1/2" = 1"



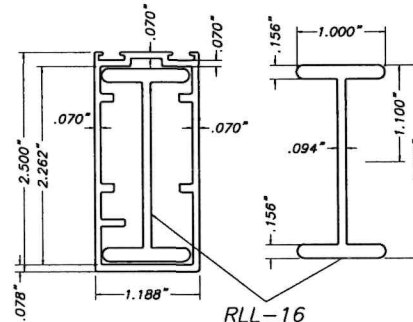
E TYPE 1 STORM BAR:
4" HEAVY EXTRUDED STORM BAR
6063-T6 ALUMINUM ALLOY
SCALE: 1/2" = 1"



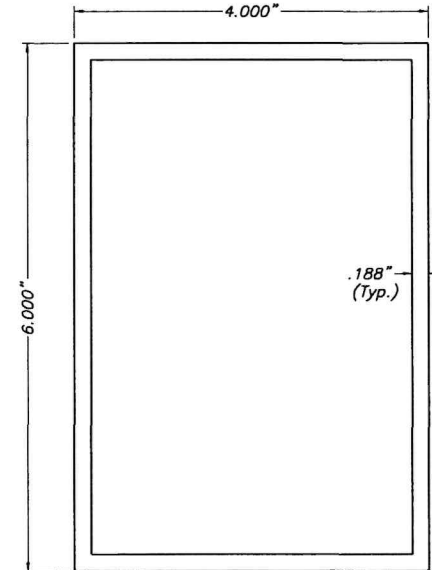
F TYPE 2 STORM BAR:
4" EXTRUDED STORM BARS
6063-T6 ALUMINUM ALLOY
SCALE: 1/2" = 1"



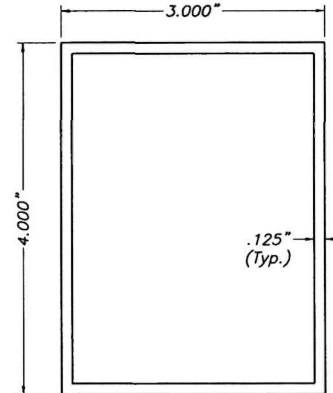
G TYPE 3 STORM BAR:
3" EXTRUDED STORM BARS
6063-T6 ALUMINUM ALLOY
SCALE: 1/2" = 1"



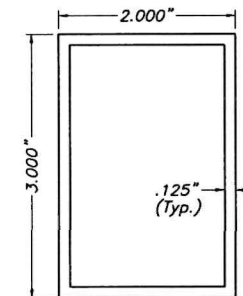
H TYPE 4 STORM BAR:
RLL-15 + RLL-16 EXTRUDED STORM BAR
6063-T5 ALUMINUM ALLOY
SCALE: 1/2" = 1"



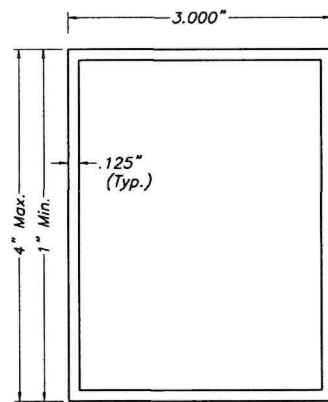
L TYPE 1 MULLION:
6" EXTRUDED MULLION
6063-T5 ALUMINUM ALLOY
SCALE: 1/2" = 1"



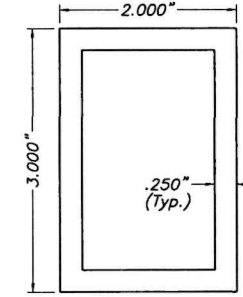
M TYPE 2 MULLION:
4" EXTRUDED MULLION
6063-T5 ALUMINUM ALLOY
SCALE: 1/2" = 1"



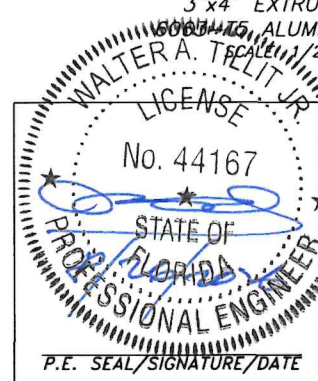
N TYPE 3 MULLION:
3" EXTRUDED MULLION
6063-T6 ALUMINUM ALLOY
SCALE: 1/2" = 1"



Y BUILD-OUT TUBES
3"x4" EXTRUDED TUBE
6063-T5 ALUMINUM ALLOY
SCALE: 1/2" = 1"



U TYPE 4 MULLION:
3" EXTRUDED MULLION
6063-T6 ALUMINUM ALLOY
SCALE: 1/2" = 1"



TILTECO INC.
TILLIT TESTING & ENGINEERING COMPANY
6355 N.W. 36th. St., Ste. 305, VIRGINIA GARDENS, FL 33166
Phone : (305)871-1530 Fax : (305)871-1531
CA-0006719
WALTER A. TILLIT Jr. P.E.
FLORIDA Lic. # 44167

FLORIDA BUILDING CODE (Non High Velocity Hurricane Zone)

ROLL-UP SHUTTER/WIND BORNE DEBRI REGION
RLL-3, A-200-H, A-150-H SLATS

ROLLAC SHUTTERS OF TEXAS, INC.

5331 ORANGE STREET
PEARLAND, TX. 77581

PHONE: (800) 880-0922, FAX: (281) 485-0839

REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 25-051	6/25/26	3		
2			4		

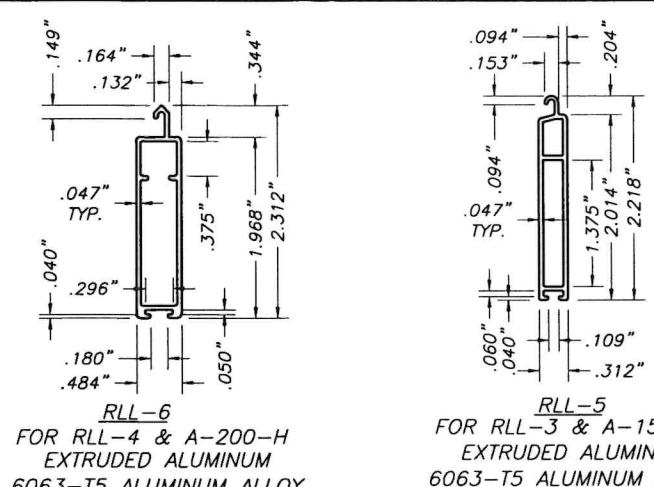
W.H.
DRAWN BY:

06/25/2026
DATE

26-072
DRAWING No

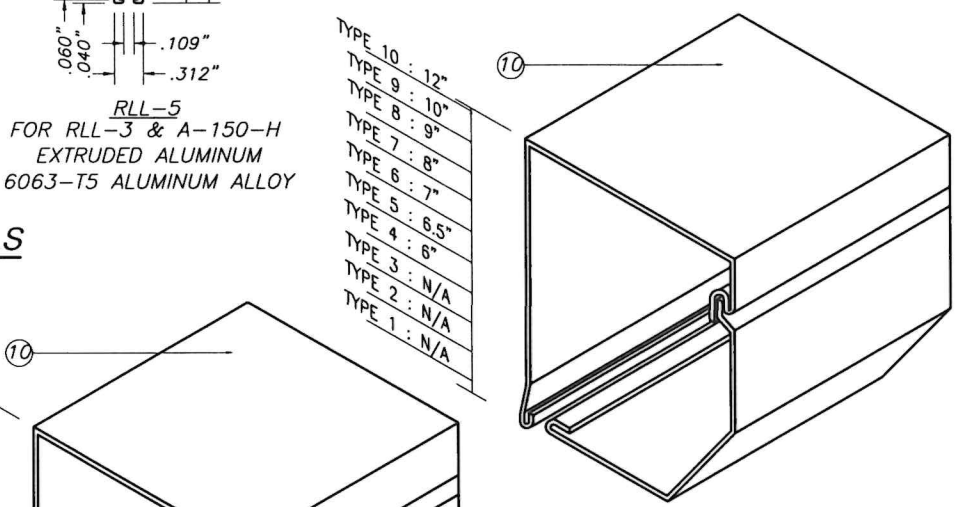
SHEET 2 OF 13

COMPONENTS

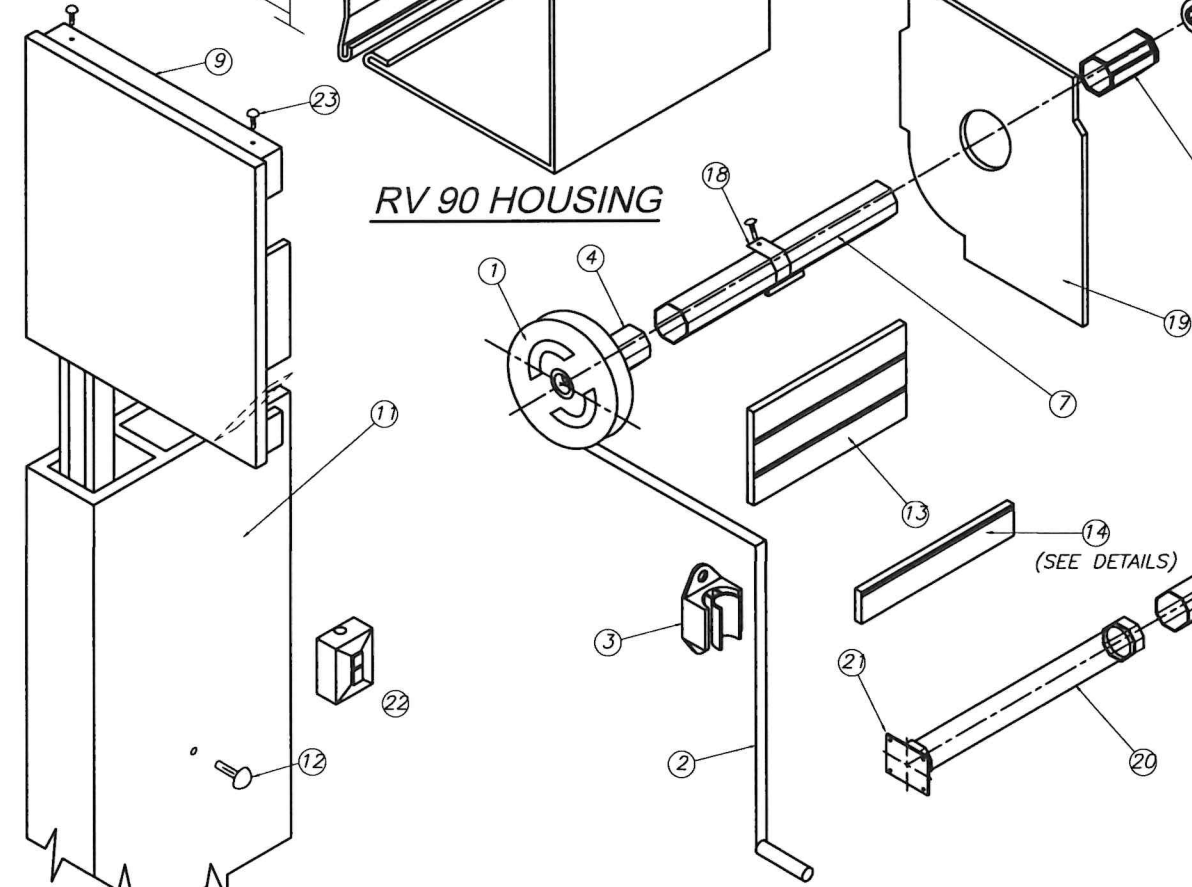


14 DETAILS

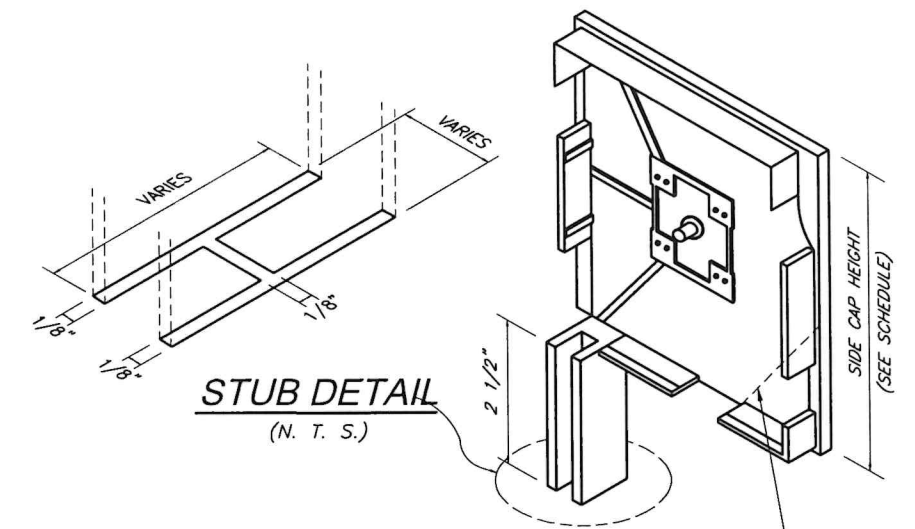
TYPE 10 : N/A
TYPE 9 : 10"
TYPE 8 : 9"
TYPE 7 : 8"
TYPE 6 : 7"
TYPE 5 : 6.5"
TYPE 4 : 6"
TYPE 3 : 5.5"
TYPE 2 : 5"
TYPE 1 : 4"



RV 90 HOUSING



V BOX COMPONENTS AND ASSEMBLY DETAIL
(SEE NOTE 11 ON SHEET 1)



COMPONENTS FOR GEAR OPERATED SYSTEM

- ① - GEAR
- ② - UNIVERSAL & CRANK
- ③ - CRANK HOLDER(OPTIONAL)
- ④ - GEAR INSERT(GEAR TO AXLE CONNECTOR)
- ⑤ - IDLER INSERT
- ⑥ - BALL BEARING
- ⑦ - OCTAGONAL AXLE *
- ⑧ - ENTRY GUIDES (ONLY FOR A-150-H SLAT)
- ⑨ - SIDE/END CAP *
- ⑩ - HOUSING(FRONT & BOTTOM), 0.040" THICK
- ⑪ - SIDE RAIL
- ⑫ - PLUG-BOTTOMS
- ⑬ - ALUMINUM SLATS
- ⑭ - BASE SLAT
- ⑮ - PLASTIC STOPS(OPTIONAL)
- ⑯ - SIDE LOCKS(OPTIONAL)
- ⑰ - STAPLES(OPTIONAL)
- ⑱ - SPRINGLOCK HANGER
- ⑲ - SAFETY PLATES

**ADDITIONAL COMPONENTS FOR
MOTORIZED OPERATED SYSTEM**

- ⑳ - TUBULAR MOTOR
- ㉑ - MOTOR BRACKET
- ㉒ - SWITCH

FASTENERS

- ㉓ - 3/16" ALUMINUM POP RIVETS(6 REQ'D EA. SIDE CAP) : 2 @ TOP, 2 @ REAR, 2@ BOTTOM

SIDE CAP HEIGHT SCHEDULE		
TYPE	90°	45°
1	4.0"	N/A
2	5.0"	N/A
3	5.5"	N/A
4	6.0"	6.0"
5	6.5"	6.5"
6	7.0"	7.0"
7	8.0"	8.0"
8	9.0"	9.0"
9	10.0"	10.0"
10	N/A	12.0"

N/A = NOT APPLICABLE

* SHALL BE CAPABLE TO SUSTAIN SLAT'S WEIGHT AND ASSURE LIFTING MECHANISM (SEE NOTE 11/1).

WALTER A. TILLIT JR.
LICENSE
No. 44167
STATE OF FLORIDA
PROFESSIONAL ENGINEER
P.E. SEAL/SIGNATURE/DATE

© 2026 TILTECO, INC.

TILTECO INC.

TILLIT TESTING & ENGINEERING COMPANY
6355 N.W. 36th. St., Ste. 305, VIRGINIA GARDENS, FL 33166
Phone : (305)871-1530 . Fax : (305)871-1531
CA-0006719
WALTER A. TILLIT Jr. P.E.
FLORIDA Lic. # 44167

FLORIDA BUILDING CODE (Non High Velocity Hurricane Zone)

ROLL-UP SHUTTER/WIND BORNE DEBRI REGION
RLL-3, A-200-H, A-150-H SLATS

ROLLAC SHUTTERS OF TEXAS, INC.

5331 ORANGE STREET
PEARLAND, TX. 77581
PHONE: (800) 880-0922, FAX: (281) 485-0839

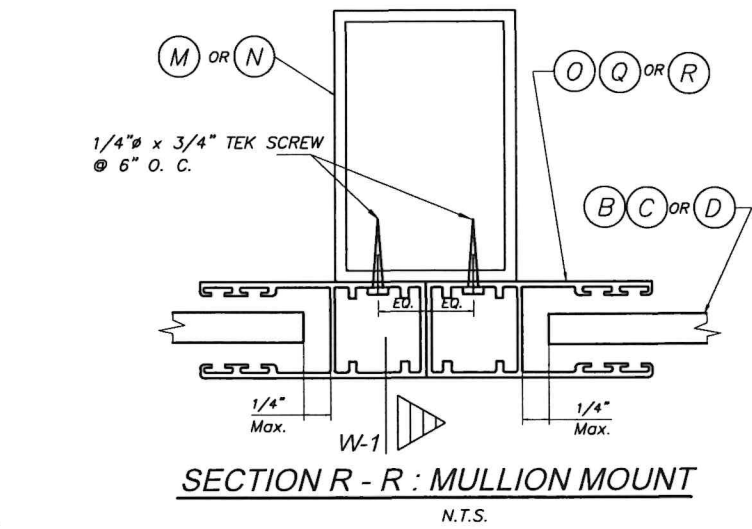
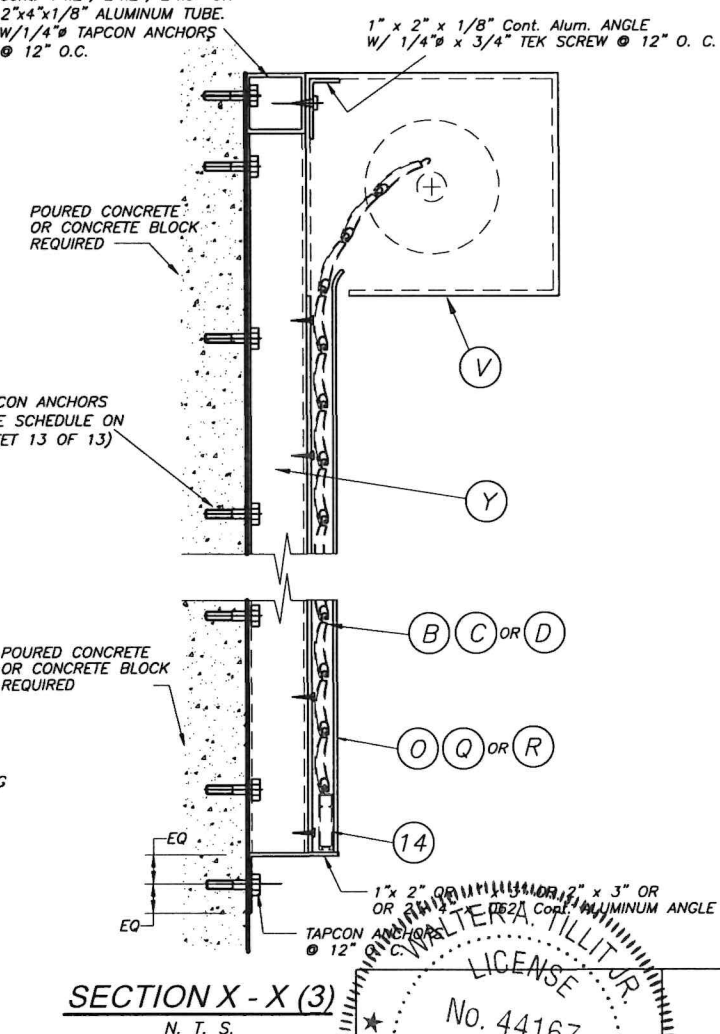
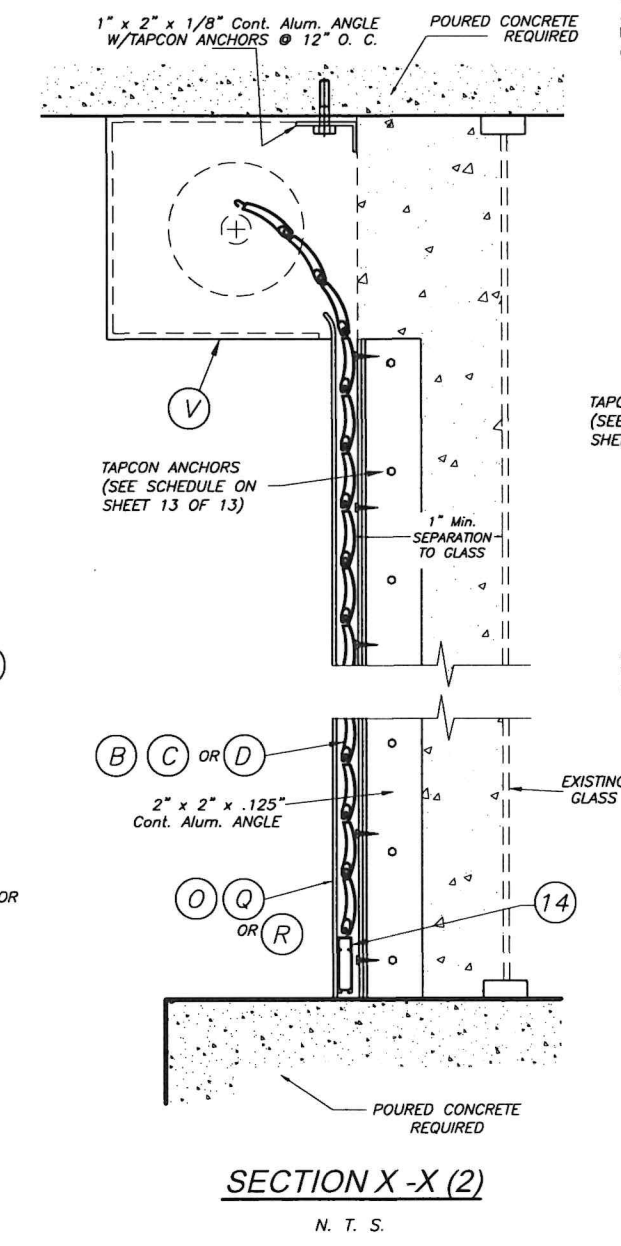
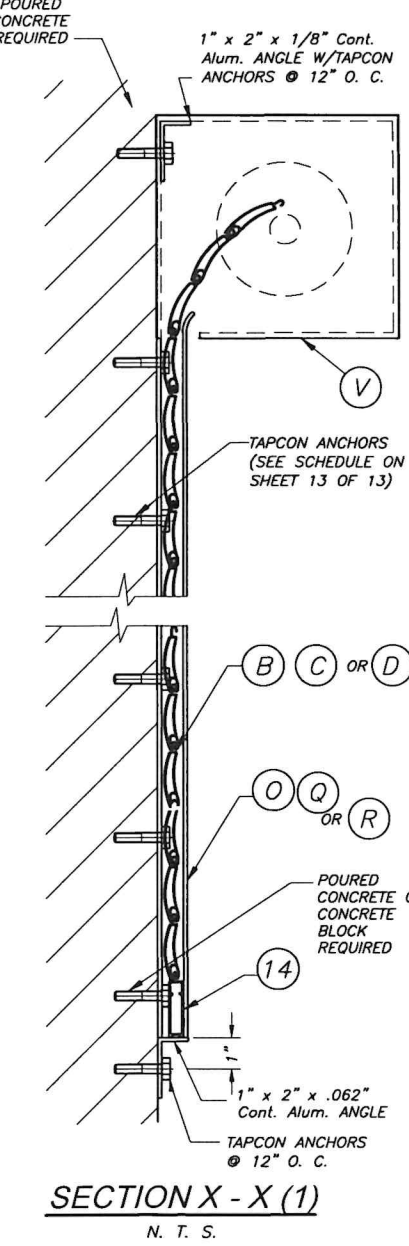
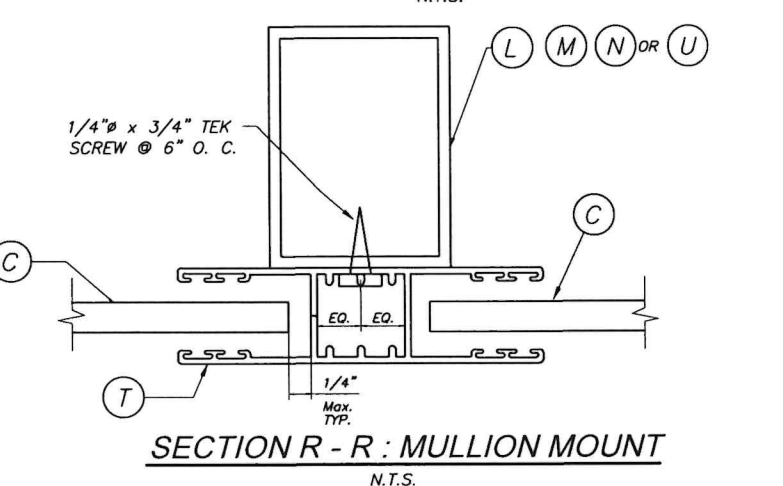
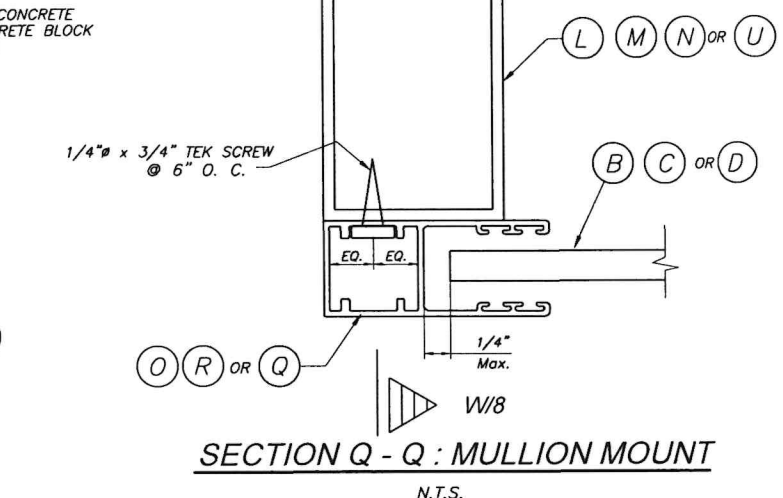
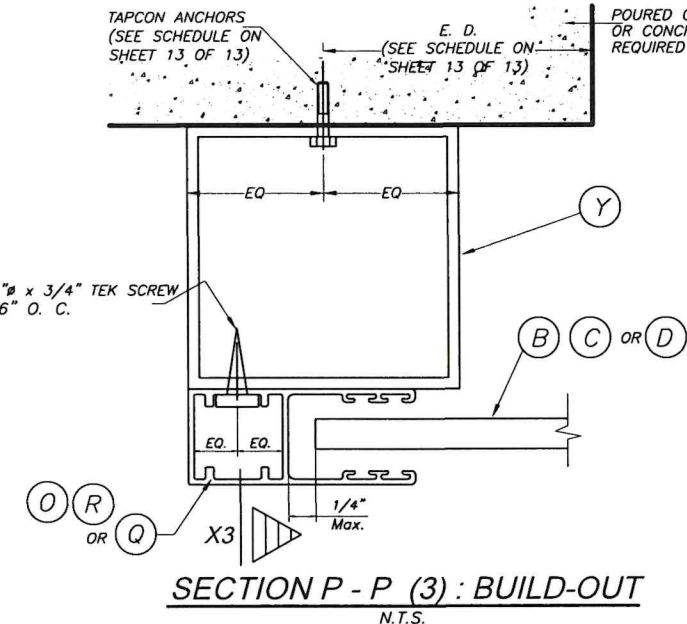
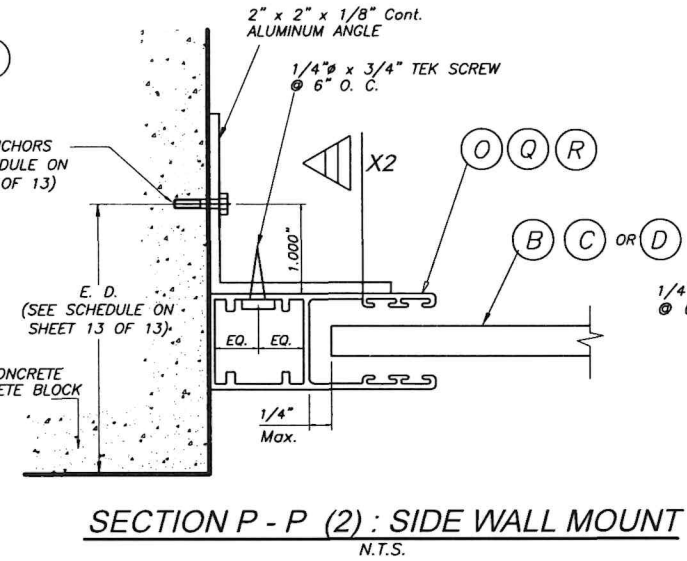
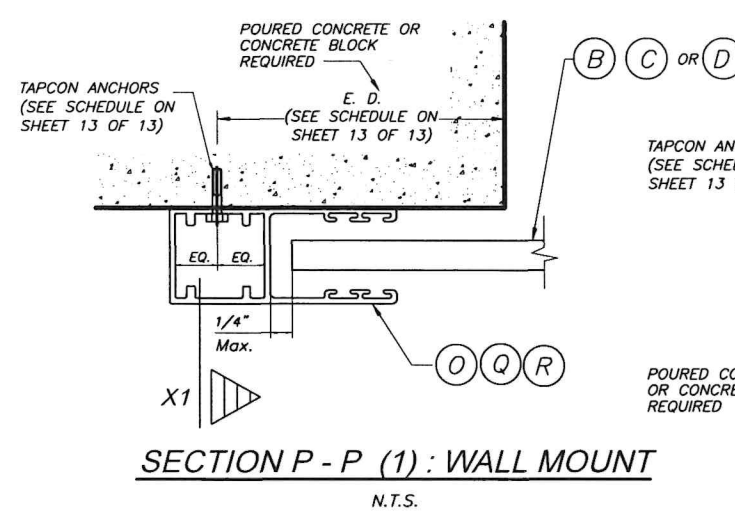
REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 25-051	6/25/26	3		
2			4		

W.H.
DRAWN BY:

06/25/2026
DATE

26-072
DRAWING No

SHEET 3 OF 13

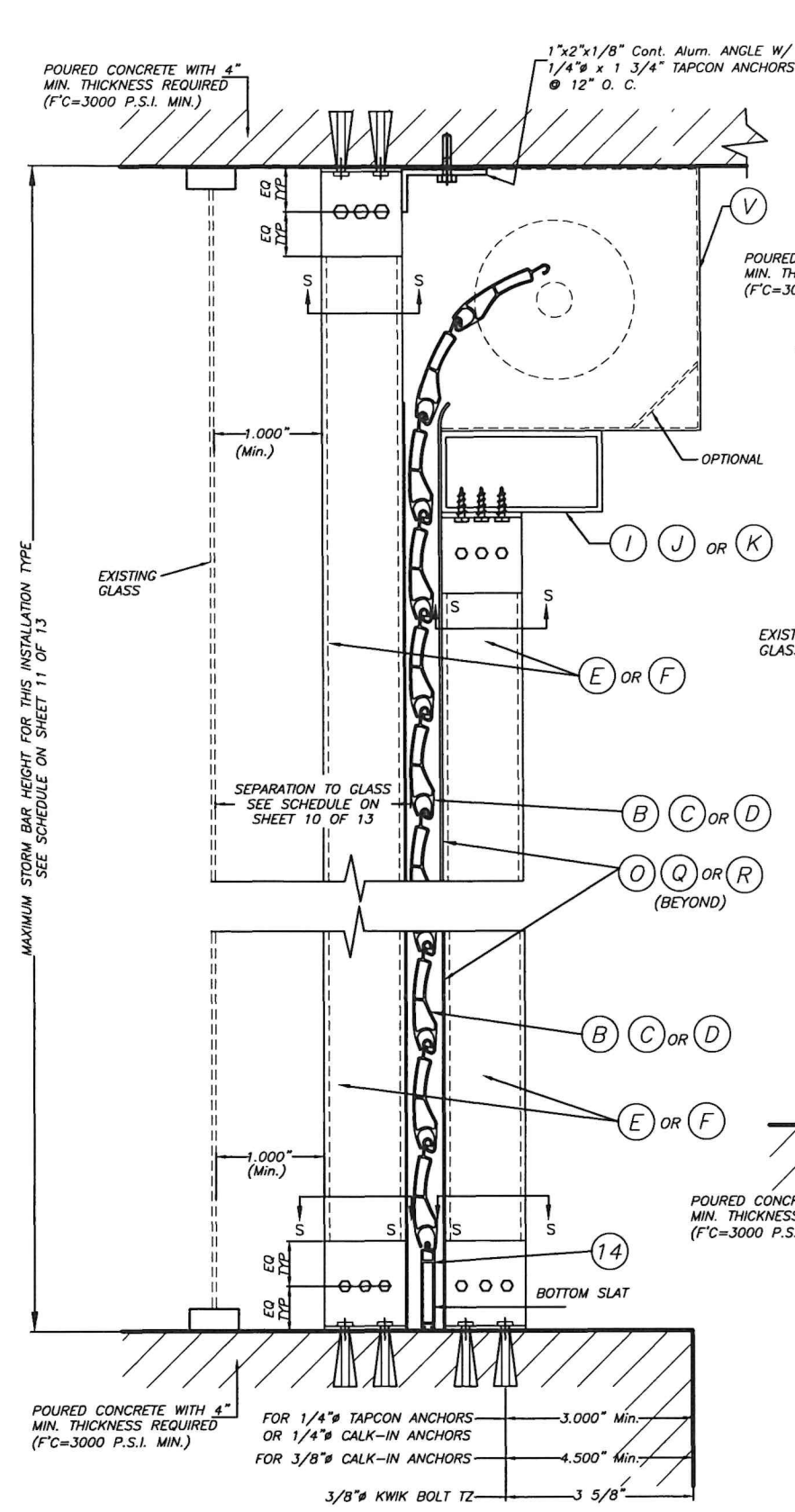


LICENSE
 No. 44167
 STATE OF FLORIDA
 PROFESSIONAL ENGINEER
 P.E. SEAL/SIGNATURE/DATE

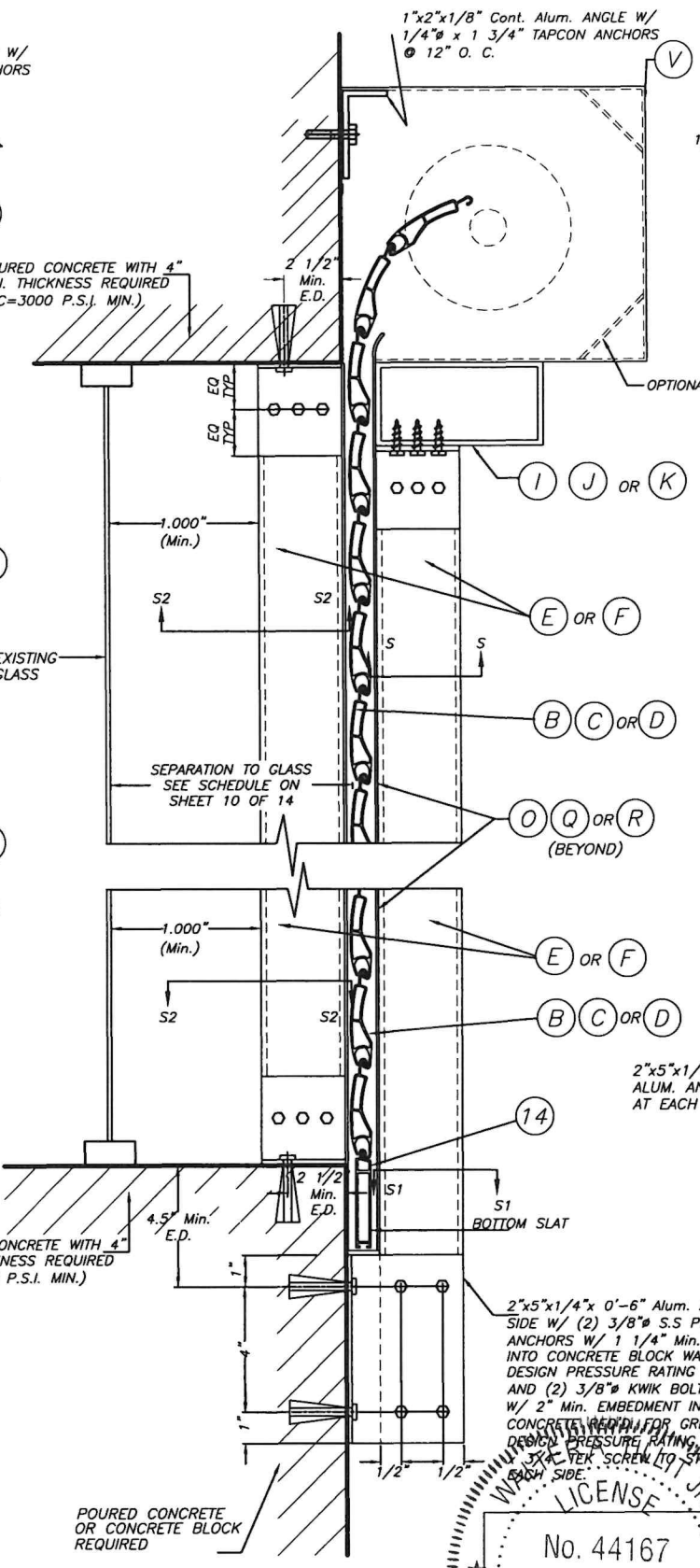
© 2026 TILTECO, INC.
TILTECO INC.
 TILLIT TESTING & ENGINEERING COMPANY
 6355 N.W. 36th St., Ste. 305, VIRGINIA GARDENS, FL 33166
 Phone : (305) 871-1530 Fax : (305) 871-1531
 CA-0006719
 WALTER A. TILLIT Jr. P.E.
 FLORIDA Lic. # 44167

FLORIDA BUILDING CODE (Non High Velocity Hurricane Zone)

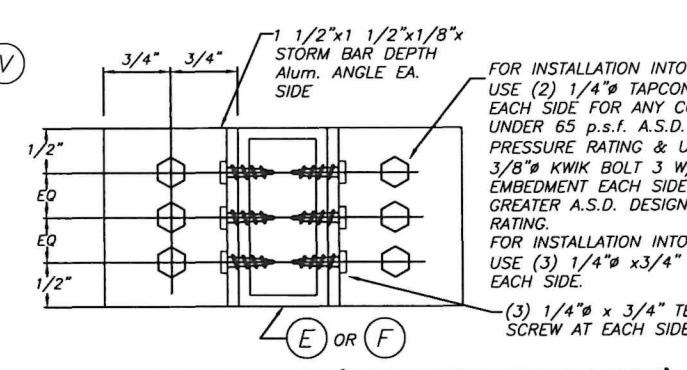
ROLL-UP SHUTTER/WIND BORNE DEBRI REGION RLL-3, A-200-H, A-150-H SLATS			W.H. DRAWN BY:		
ROLLAC SHUTTERS OF TEXAS, INC.			06/25/2026 DATE		
5331 ORANGE STREET PEARLAND, TX. 77581			26-072		
PHONE: (800) 880-0922, FAX: (281) 485-0839			DRAWING No		
REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 25-051	6/25/26	3		
2			4		



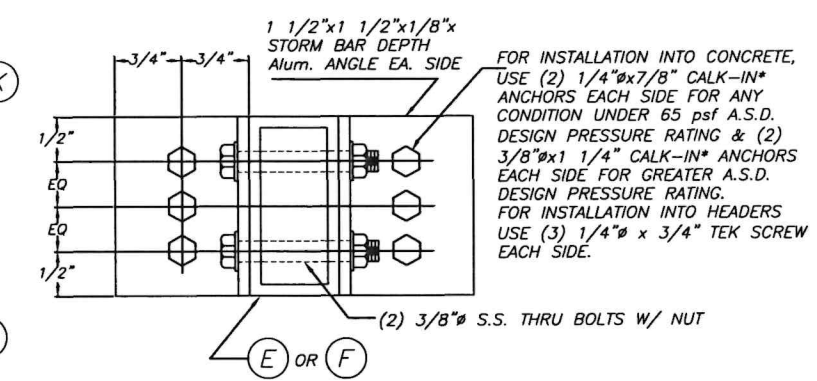
CEILING & FLOOR MOUNTING: SECTION V-V(2) INSTALLATION W/ FIXED OR REMOVABLE STORM BARS W/CONCRETE ANCHORS
(SEE SECTION "S" FOR ANCHOR TYPE REQUIREMENT)
SCALE : N.T.S.



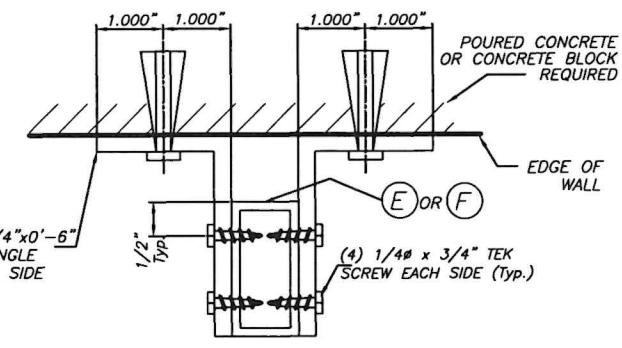
WALL MOUNTING: SECTION V-V(1) INSTALLATION W/ FIXED STORM BARS W/CONCRETE ANCHORS
SCALE : N.T.S.



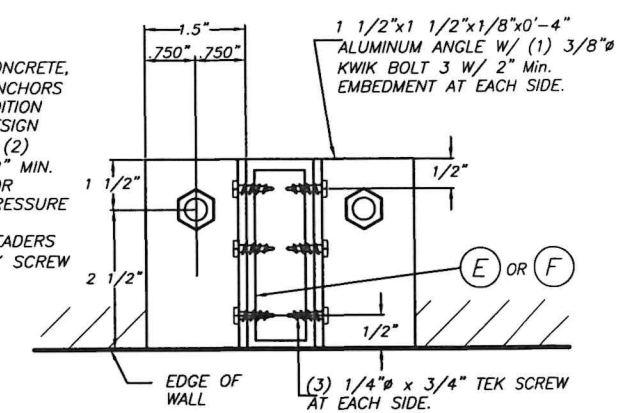
SECTION S - S (FOR FIXED STORM BAR)
SCALE : N.T.S.



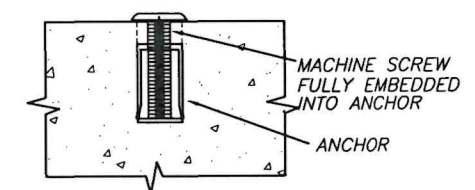
SECTION S - S (FOR REMOVABLE STORM BAR)
SCALE : N.T.S.



SECTION S1 - S1
SCALE : N. T. S.



SECTION S2 - S2
SCALE : N.T.S.

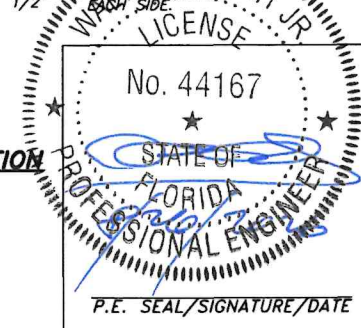


DETAIL A
SCALE : 1/2" = 1"
* 1/4" Ø-20 OR 3/8" Ø-16 S.S. MACHINE SCREWS USED JOINTLY W/ 1/4" Ø x 7/8" OR 3/8" Ø x 1 1/4" CALK-IN ANCHORS RESPECTIVELY SHALL BE LEFT TOGETHER W/ ANCHORS AT THE TIME STORM BARS ARE REMOVED. (SEE DET. A).

SINGLE SPAN SECTIONS AND DETAILS ARE SIMILAR TO ABOVE SHOWN WITHOUT STORM BAR & HEADERS.

SECTION V - V

FLORIDA BUILDING CODE (Non High Velocity Hurricane Zone)

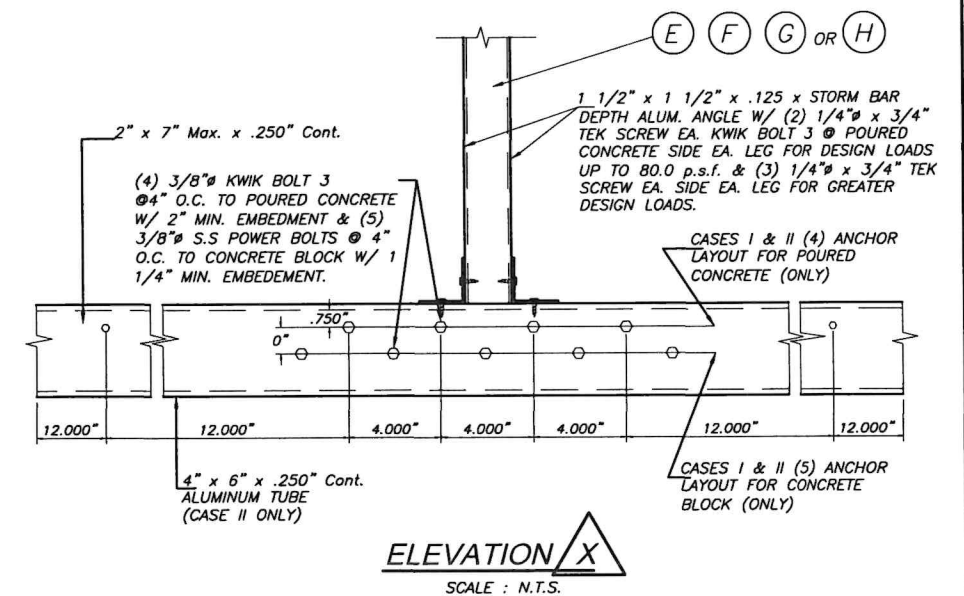
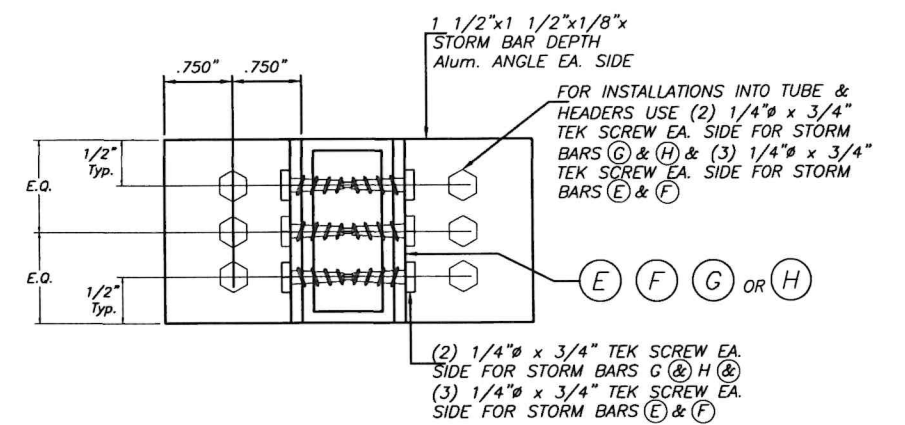
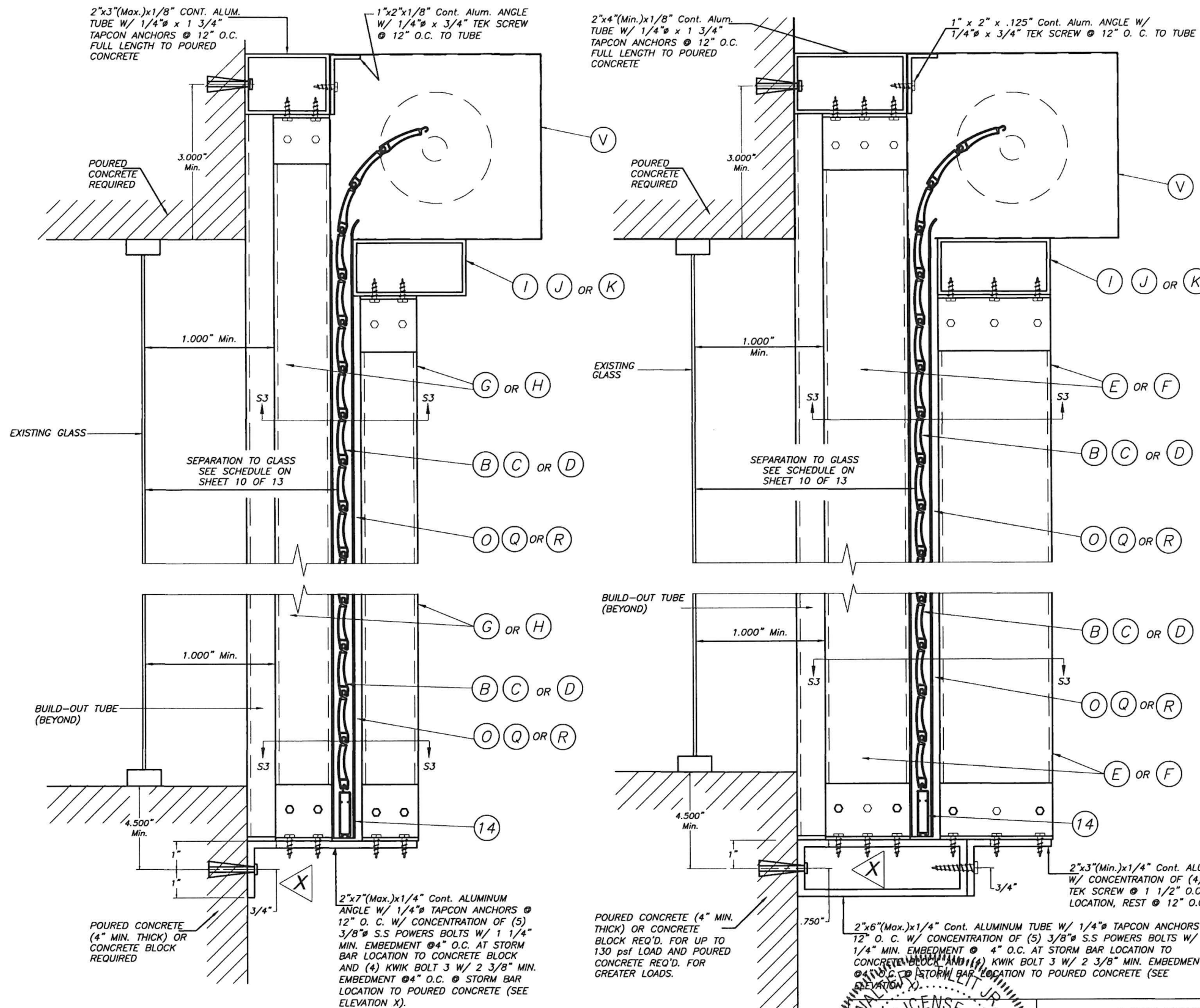


© 2026 TILTECO, INC.

TILTECO inc.

TILLIT TESTING & ENGINEERING COMPANY
6355 N.W. 36th. St., Ste. 305, VIRGINIA GARDENS, FL 33166
Phone : (305)871-1530 . Fax : (305)871-1531
CA-0006719
WALTER A. TILLIT Jr. P.E.
FLORIDA Lic. # 44167

ROLL-UP SHUTTER/WIND BORNE DEBRI REGION RLL-3, A-200-H, A-150-H SLATS						W.H. DRAWN BY:
ROLLAC SHUTTERS OF TEXAS, INC.						06/25/2026 DATE
5331 ORANGE STREET PEARLAND, TX. 77581 PHONE: (800) 880-0922, FAX: (281) 485-0839						26-072 DRAWING No
REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE	SHEET 6 OF 13
1	OLD 25-051	6/25/26	3			
2			4			



CASE I

CASE II

STORM BAR CONNECTION AT BUILD-OUT INSTALLATION : SECTIONS V - V (3)

SCALE : 1/4" = 1"

FLORIDA BUILDING CODE (Non High Velocity Hurricane Zone)

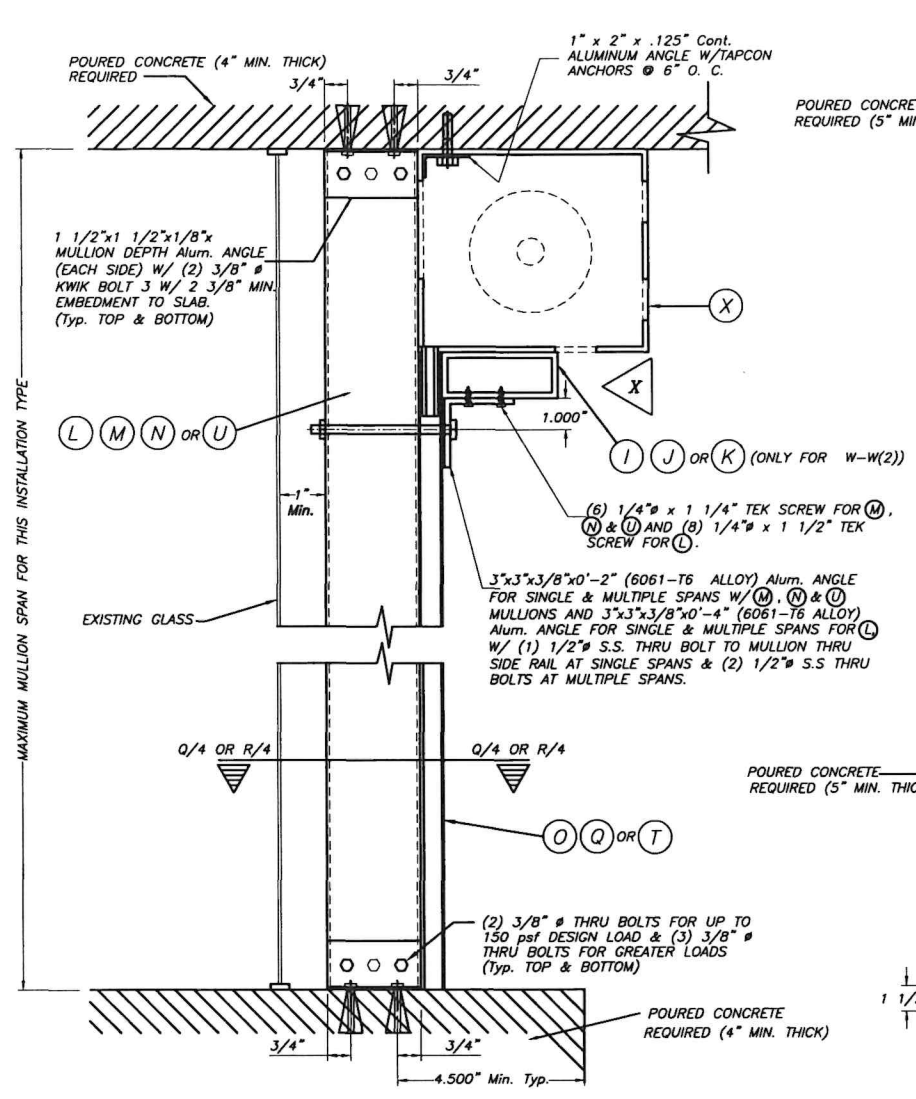


©2026 TILTECO, INC.

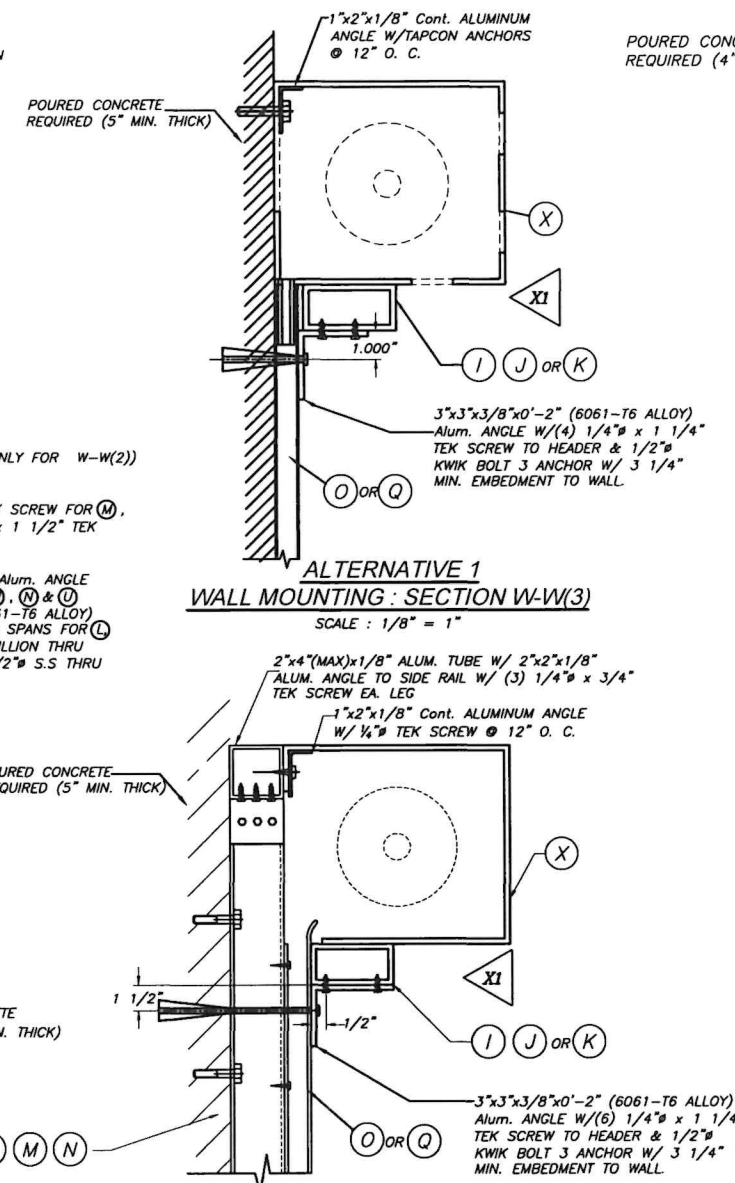
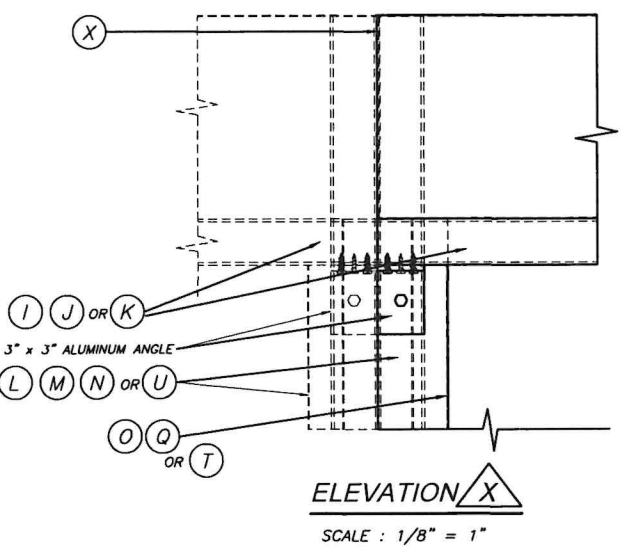
TILTECO INC.

TILLIT TESTING & ENGINEERING COMPANY
 6355 N.W. 36th. St., Ste. 305, VIRGINIA GARDENS, FL 33166
 Phone : (305)871-1530 Fax : (305)871-1531
 CA-0006719
 WALTER A. TILLIT Jr. P.E.
 FLORIDA Lic. # 44167

ROLL-UP SHUTTER/WIND BORNE DEBRI REGION RLL-3, A-200-H, A-150-H SLATS					W.H. DRAWN BY:
ROLLAC SHUTTERS OF TEXAS, INC.					06/25/2026 DATE
5331 ORANGE STREET PEARLAND, TX. 77581 PHONE: (800) 880-0922, FAX: (281) 485-0839					26-072 DRAWING No
REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 25-051	6/25/26	3		
2			4		
					SHEET 7 OF 13



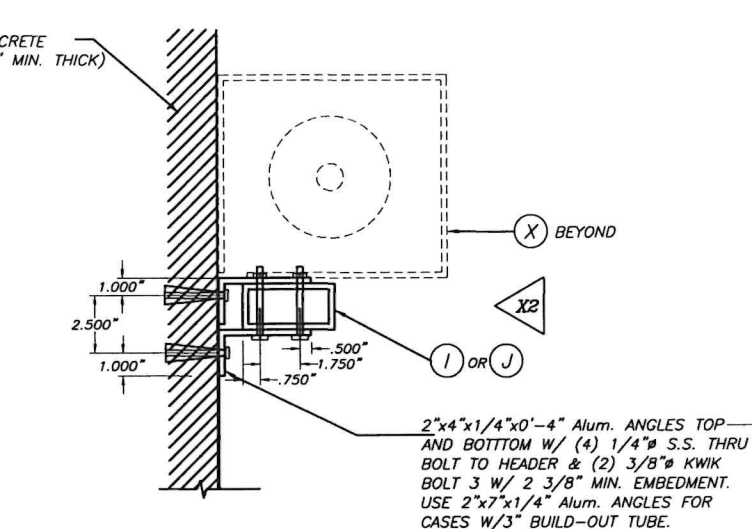
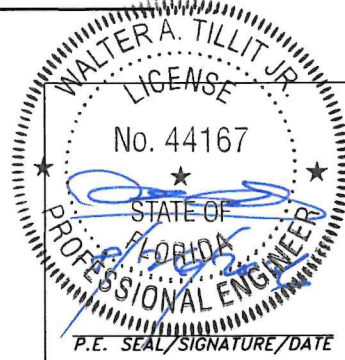
FLOOR/CEILING MOUNTING:
SECTION W-W (1), W/O HEADER
SECTION W-W (2), W/HEADER
 SCALE : 1/8" = 1"



ALTERNATIVE 2
WALL MOUNTING : SECTION W-W(3)
 SCALE : 1/8" = 1"

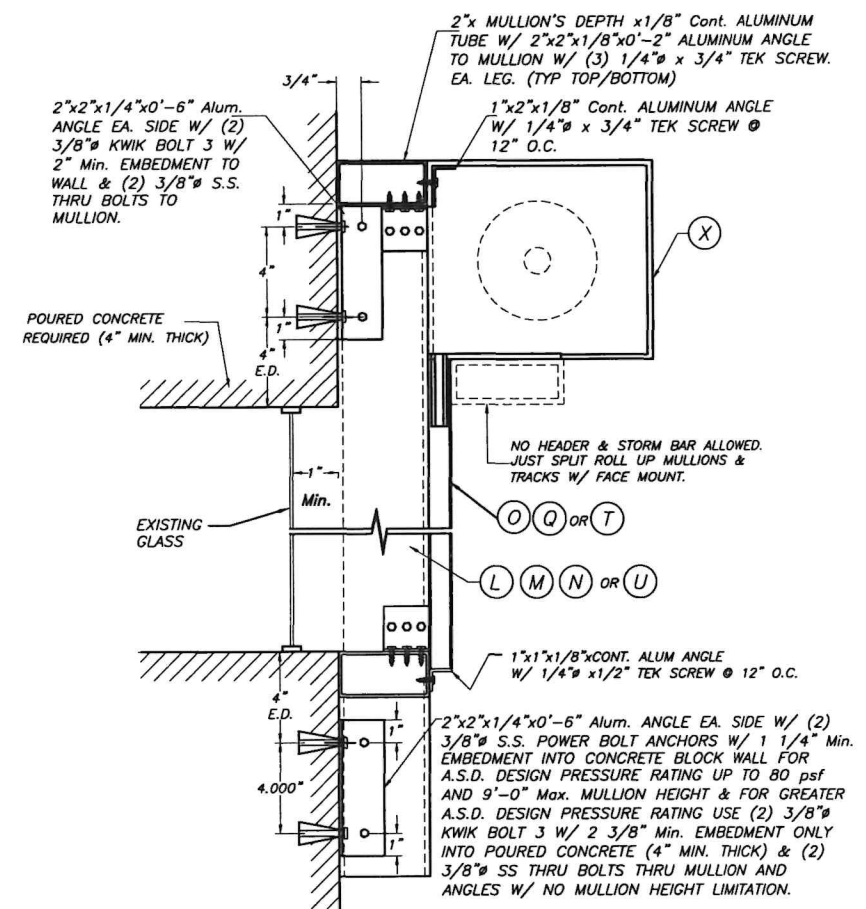
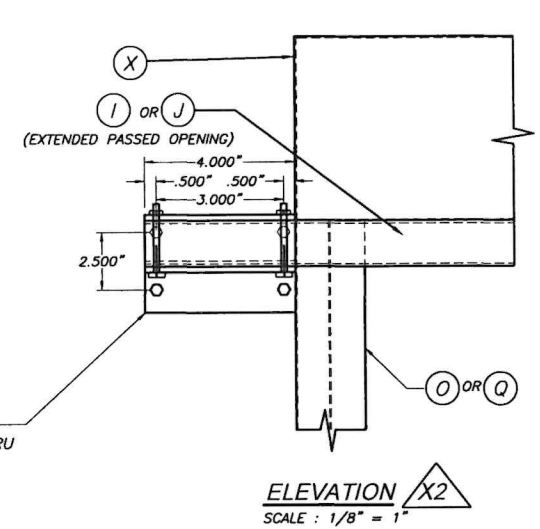
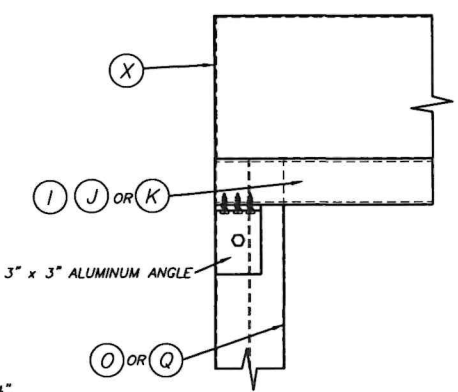
NOTE:
 INSTALLATION DETAILS SHOWN ON ALTERNATIVES 1 & 2 ARE VALID FOR ANY STORM BAR HEIGHT AND HEADER SPAN CONDITION UNDER 175 psf A.S.D. DESIGN PRESSURE RATING.

TYPICAL HEADER CONNECTION AT ENDS:
SECTIONS W-W



ALTERNATIVE 3
WALL MOUNTING : SECTION W-W(3)
 SCALE : 1/8" = 1"

NOTE:
 VALID FOR ANY SPAN AND LOAD CONDITION



WALL MOUNTING : MULLION CONNECTION
AT TOP & BOTTOM : SECTION W-W (1)
 SCALE : 1/8" = 1"

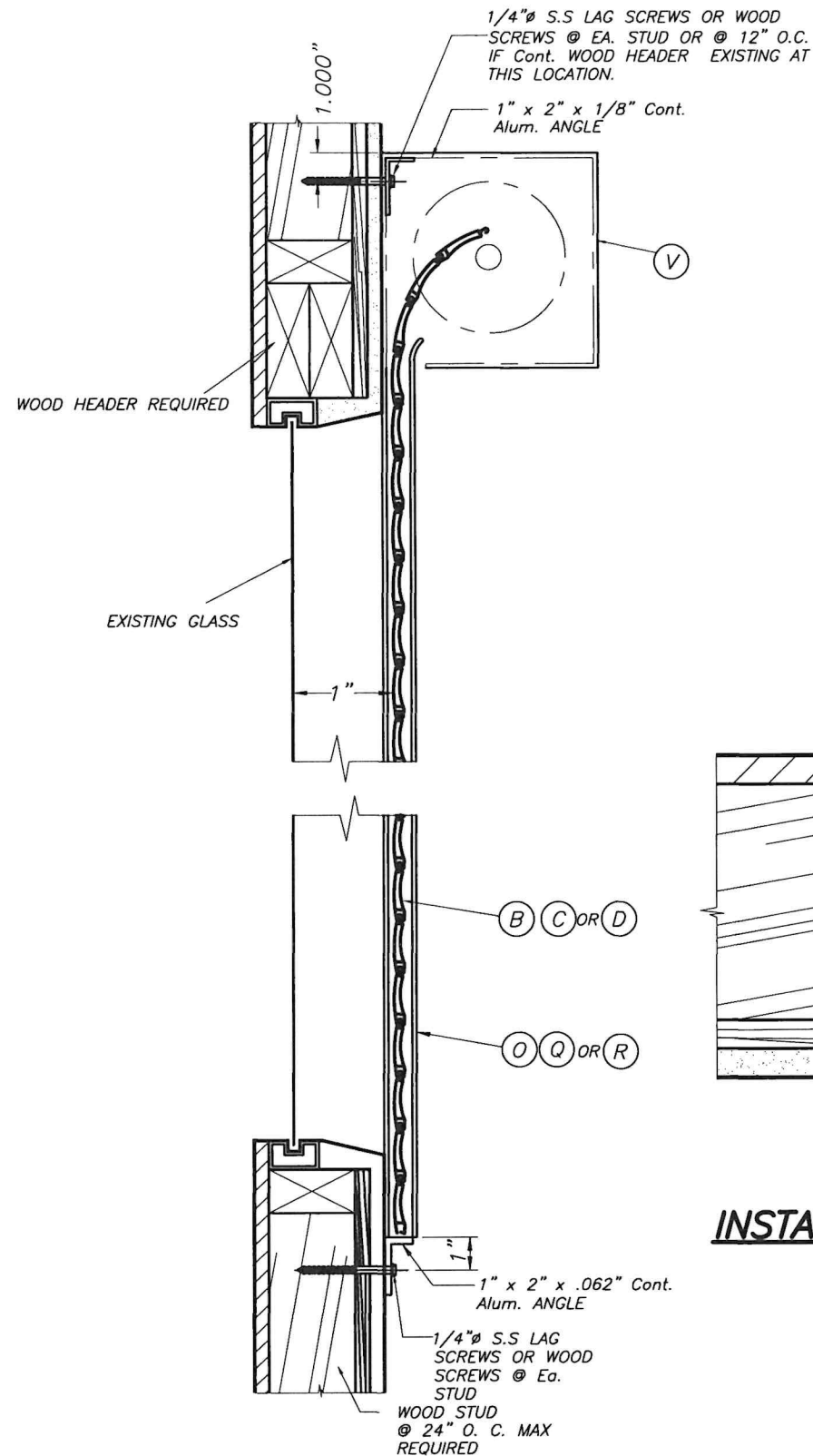
FLORIDA BUILDING CODE (Non High Velocity Hurricane Zone)

© 2026 TILTECO, INC.

TILTECO INC.

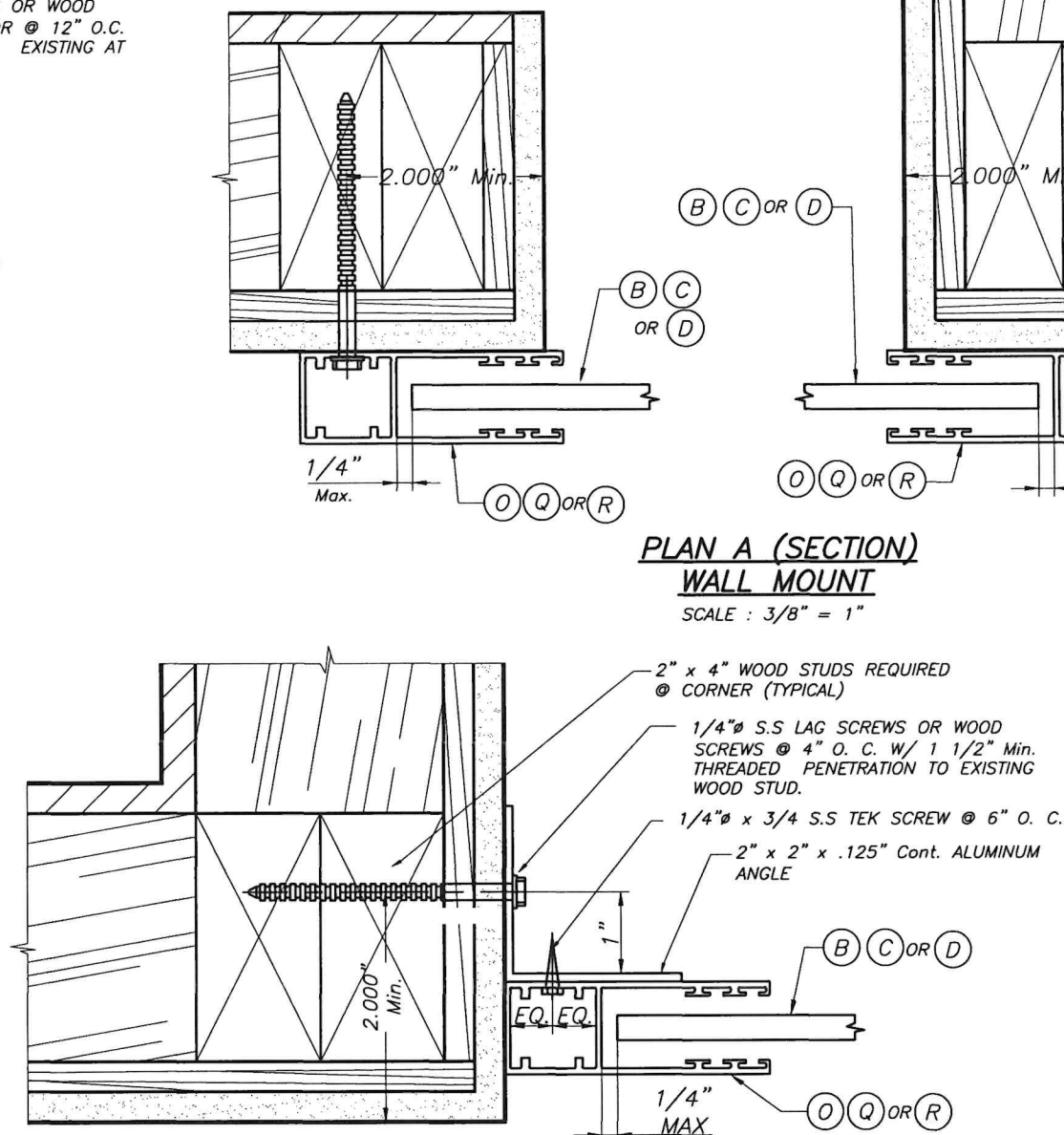
TILLIT TESTING & ENGINEERING COMPANY
 6355 N.W. 36th St., Ste. 305, VIRGINIA GARDENS, FL 33166
 Phone : (305) 871-1530 Fax : (305) 871-1531
 CA-0006719
 WALTER A. TILLIT Jr. P.E.
 FLORIDA Lic. # 44167

ROLL-UP SHUTTER/WIND BORNE DEBRI REGION RLL-3, A-200-H, A-150-H SLATS						W.H. DRAWN BY:	
ROLLAC SHUTTERS OF TEXAS, INC.						06/25/2026 DATE	
5331 ORANGE STREET PEARLAND, TX. 77581 PHONE: (800) 880-0922, FAX: (281) 485-0839						26-072 DRAWING No	
REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE	SHEET 8 OF 13	
1	OLD 25-051	6/25/26	3				
2			4				



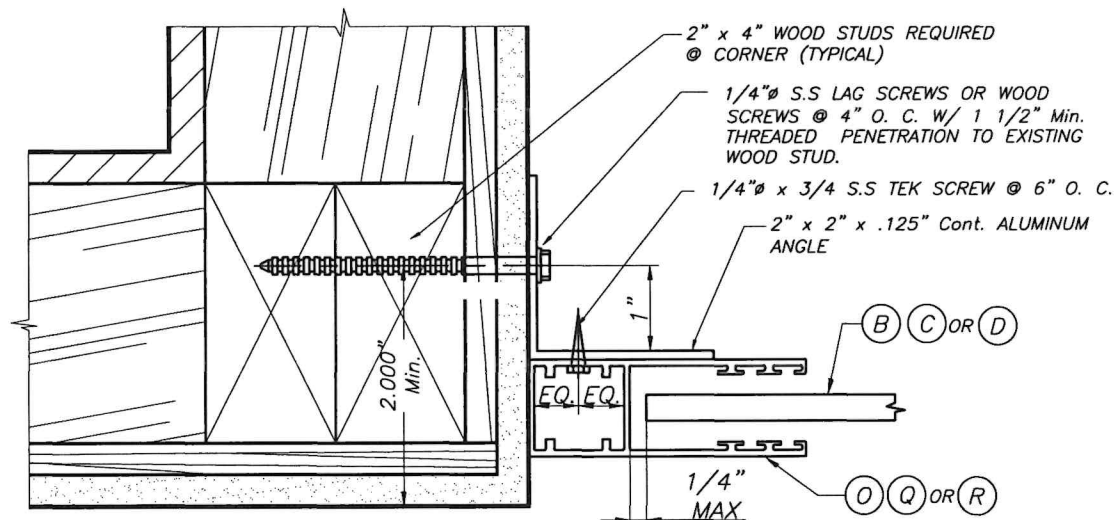
**WALL MOUNTING INSTALLATION
SINGLE SPAN CONDITION**

N. T. S.



**PLAN A (SECTION)
WALL MOUNT**

SCALE : 3/8" = 1"



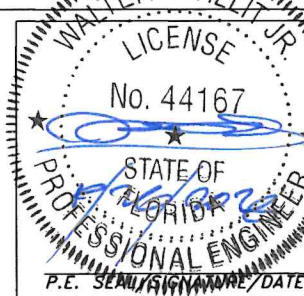
**PLAN B (SECTION)
INSIDE MOUNT**

SCALE : 3/8" = 1"

INSTALLATIONS INTO EXISTING WOOD BUILDINGS

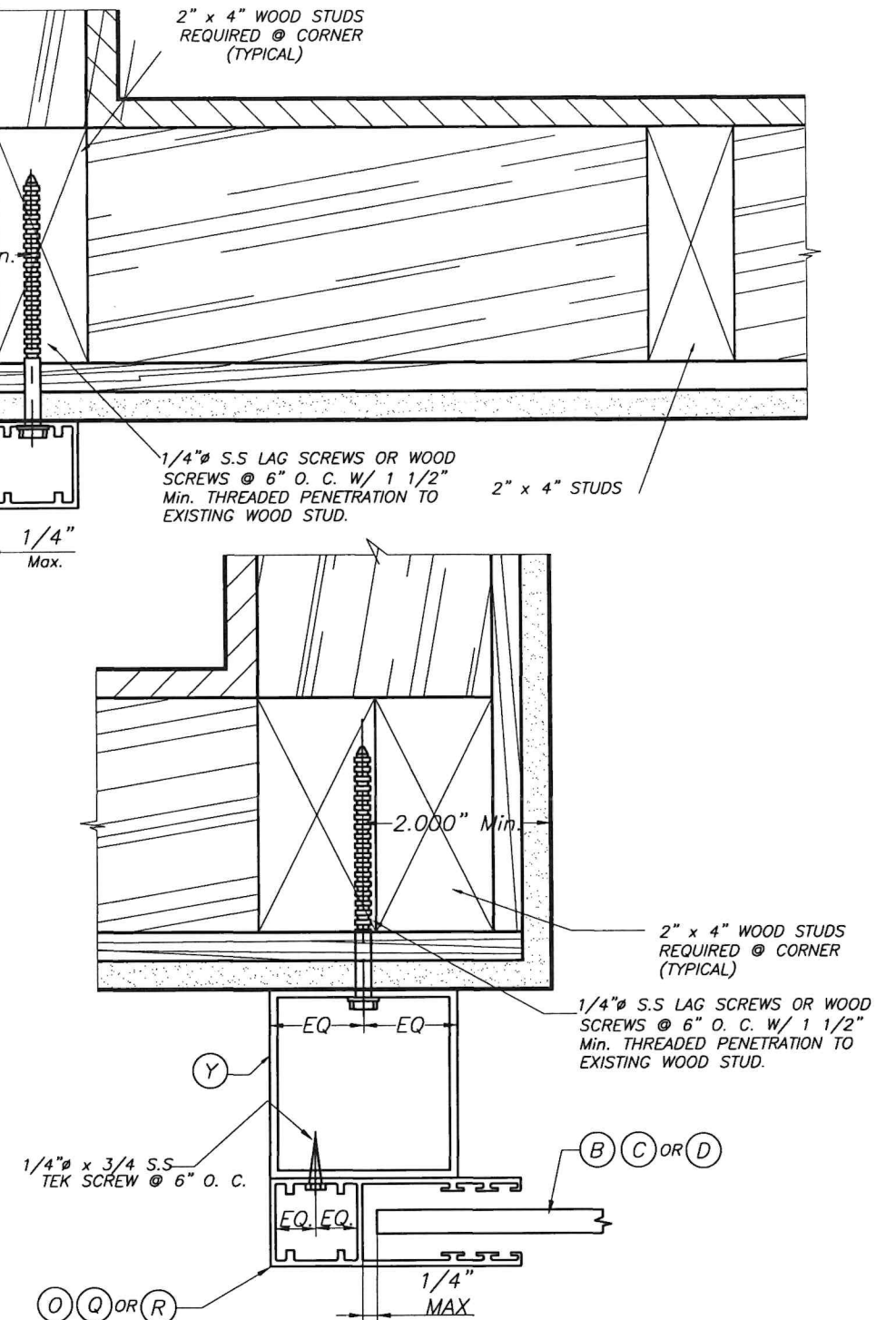
NOTES:

1. INSTALLATIONS ARE ONLY VALID FOR BUILDINGS WITH A.S.D. DESIGN PRESSURE RATING UP TO 80 p.s.f.
2. FOR NEW FRAME CONSTRUCTION: WOOD MEMBER TO BE SOUTHERN PINE No. 2 W/ SPECIFIC DENSITY OF 0.55 OR DOUGLAS FIR W/ SPECIFIC DENSITY OF 0.42.
3. MINIMUM PENETRATION OF S.S LAG SCREWS OR S.S WOOD SCREWS INTO WOOD MEMBER TO BE 1 1/2".



TILTECO INC.
TILLIT TESTING & ENGINEERING COMPANY
6355 N.W. 36th St., Ste. 305, VIRGINIA GARDENS, FL 33166
Phone : (305)871-1530 . Fax : (305)871-1531
CA-0006719
WALTER A. TILLIT Jr. P.E.
FLORIDA Lic. # 44167

©2026 TILTECO, INC.



**PLAN C (SECTION)
BUILD-OUT**

SCALE : 3/8" = 1"

FLORIDA BUILDING CODE (Non High Velocity Hurricane Zone)

ROLL-UP SHUTTER/WIND BORNE DEBRI REGION
RLL-3, A-200-H, A-150-H SLATS

ROLLAC SHUTTERS OF TEXAS, INC.

5331 ORANGE STREET
PEARLAND, TX. 77581
PHONE: (800) 880-0922, FAX: (281) 485-0839

REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 25-051	6/25/26	3		
2			4		

W.H.
DRAWN BY:

06/25/2026
DATE

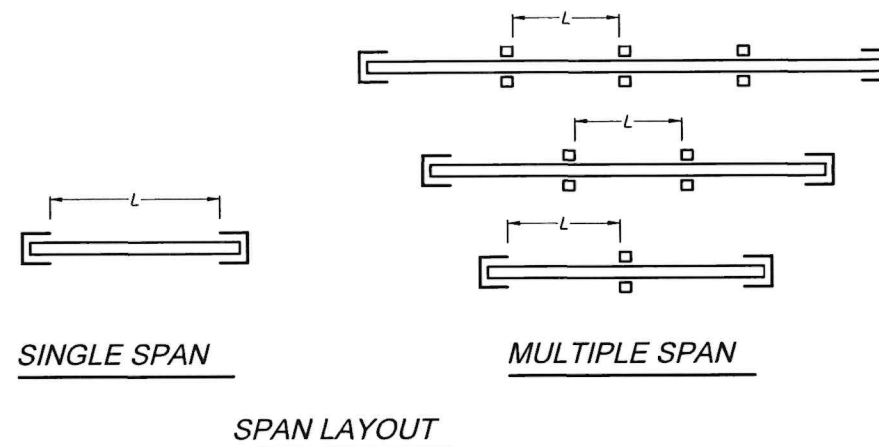
26-072
DRAWING No

SHEET 9 OF 13

SLAT PERFORMANCE CHART
MAXIMUM A.S.D. DESIGN PRESSURE RATING (p. s. f.)
AND CORRESPONDING MAXIMUM SLAT SPAN "L"

(USE MAXIMUM VALUES BETWEEN POSITIVE AND NEGATIVE LOAD)

MAXIMUM A.S.D. DESIGN PRESSURE RATING (p.s.f.)	TYPE 2 SLAT RLL-3 SLAT		TYPE 3 SLAT A-200-H SLAT		TYPE 4 SLAT A-150-H SLAT *	
	MAXIMUM SLAT SPAN	MINIMUM SEPARATION TO GLASS	MAXIMUM SLAT SPAN	MINIMUM SEPARATION TO GLASS	MAXIMUM SLAT SPAN	MINIMUM SEPARATION TO GLASS
	SINGLE & MULTIPLE UNIT	SINGLE & MULTIPLE UNIT	SINGLE & MULTIPLE UNIT	SINGLE & MULTIPLE UNIT	SINGLE & MULTIPLE UNIT	SINGLE & MULTIPLE UNIT
25.0	5'-11"	1"	6'-0"	1"	4'-5"	1"
30.0	5'-8"	1"	5'-9"	1"	4'-3"	1"
35.0	5'-5"	1"	5'-4"	1"	4'-1"	1"
40.0	5'-3"	1"	5'-0"	1"	4'-0"	1"
45.0	5'-1"	1"	4'-8"	1"	3'-10"	1"
50.0	4'-11"	1"	4'-5"	1"	3'-8"	1"
55.0	4'-9"	1"	4'-3"	1"	3'-7"	1"
60.0	4'-8"	1"	4'-1"	1"	3'-6"	1"
65.0	4'-7"	1"	3'-11"	1"	3'-4"	1"
70.0	4'-5"	1"	3'-9"	1"	3'-3"	1"
75.0	4'-4"	1"	3'-8"	1"	3'-1"	1"
80.0	4'-3"	1"	3'-6"	1"	3'-0"	1"
85.0	4'-1"	1"	3'-5"	1"	2'-11"	1"
90.0	4'-0"	1"	3'-4"	1"	2'-10"	1"
95.0	3'-11"	1"	3'-3"	1"	2'-9"	1"
100.0	3'-10"	1"	3'-2"	1"	2'-8"	1"
105.0	3'-8"	1"	3'-1"	1"	-	-
110.0	3'-7"	1"	3'-0"	1"	-	-
115.0	3'-6"	1"	2'-11"	1"	-	-
120.0	3'-6"	1"	2'-11"	1"	-	-
125.0	3'-5"	1"	2'-10"	1"	-	-
130.0	3'-4"	1"	2'-9"	1"	-	-
135.0	3'-3"	1"	2'-9"	1"	-	-
140.0	3'-2"	1"	2'-8"	1"	-	-
145.0	3'-2"	1"	2'-7"	1"	-	-
150.0	3'-1"	1"	2'-7"	1"	-	-
155.0	3'-1"	1"	2'-6"	1"	-	-
160.0	3'-0"	1"	2'-6"	1"	-	-
165.0	2'-11"	1"	2'-5"	1"	-	-
170.0	2'-11"	1"	2'-5"	1"	-	-
175.0	2'-10"	1"	2'-5"	1"	-	-
180.0	2'-10"	1"	2'-4"	1"	-	-
185.0	2'-9"	1"	2'-4"	1"	-	-
190.0	2'-9"	1"	2'-3"	1"	-	-
195.0	2'-9"	1"	2'-3"	1"	-	-



NOTE: MINIMUM SEPARATION TO GLASS FOR SINGLE AND MULTIPLE UNITS SHALL BE MEASURED FROM BACK OF SLAT TO GLASS.

- : NOT APPLICABLE.

* TYPE 4 SLAT SHALL BE ONLY INSTALLED ABOVE 30' ELEVATION OF BUILDING MEASURED AT BOTTOM OF SHUTTER. (SMALL MISSILE)

SIDE RAIL REQUIRED FOR A GIVEN TYPE OF SLAT

SLAT TYPE	REQ'D SIDE RAIL TO BE USED
(B) (RLL-3)	(R) (RLL-32)
(C) (A-200-H)	(O) (RLL-25), (Q) (RLL-1) & (T) (RLL-7)
(D) (A-150-H)	(R) (RLL-32)



© 2026 TILTECO, INC.

TILTECO inc.

TILLIT TESTING & ENGINEERING COMPANY
6355 N.W. 36th. St., Ste. 305, VIRGINIA GARDENS, FL 33166
Phone : (305)871-1530 . Fax : (305)871-1531
CA-0006719
WALTER A. TILLIT Jr. P.E.
FLORIDA Lic. # 44167

FLORIDA BUILDING CODE (Non High Velocity Hurricane Zone)

ROLL-UP SHUTTER/WIND BORNE DEBRI REGION
RLL-3, A-200-H, A-150-H SLATS

ROLLAC SHUTTERS OF TEXAS, INC.

5331 ORANGE STREET
PEARLAND, TX. 77581

PHONE: (800) 880-0922, FAX: (281) 485-0839

W.H.
DRAWN BY:

06/25/2026
DATE

26-072
DRAWING No

SHEET 10 OF 13

REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 25-051	6/25/26	3		
2			4		

STORM BAR LOADING CHART MAXIMUM A.S.D. DESIGN PRESSURE RATING (p. s. f.) AND CORRESPONDING
MAXIMUM SPAN "L" FOR A GIVEN TYPE OF STORM BAR AND STORM BAR SPACING.
(USE MAXIMUM VALUES BETWEEN POSITIVE AND NEGATIVE LOAD)

MAXIMUM A.S.D. DESIGN PRESSURE RATING (p.s.f.)	Ⓔ TYPE 1 STORM BAR 2" x 4" x 1/4"				Ⓕ TYPE 2 STORM BAR 2" x 4" x 1/8"				Ⓖ TYPE 3 STORM BAR 2" x 3" x 1/8"				Ⓗ TYPE 4 STORM BAR RLL-15 + RLL-16			
	* STORM BAR SPACING				* STORM BAR SPACING				* STORM BAR SPACING				* STORM BAR SPACING			
	≤ 3'-0"	3' TO 4'	4' TO 5'	5' TO 6'	≤ 3'-0"	3' TO 4'	4' TO 5'	5' TO 6'	≤ 3'-0"	3' TO 4'	4' TO 5'	5' TO 6'	≤ 3'-0"	3' TO 4'	4' TO 5'	5' TO 6'
30.0 OR LESS	10'-0"	10'-0"	10'-0"	10'-0"	9'-0"	9'-0"	9'-0"	8'-11"	8'-0"	8'-0"	8'-0"	7'-3"	5'-4"	4'-8"	4'-2"	-
35.0	10'-0"	10'-0"	10'-0"	10'-0"	9'-0"	9'-0"	9'-0"	8'-3"	8'-0"	8'-0"	7'-5"	6'-9"	5'-0"	4'-3"	3'-10"	-
40.0	10'-0"	10'-0"	10'-0"	9'-11"	9'-0"	9'-0"	8'-6"	7'-9"	8'-0"	7'-9"	6'-11"	6'-4"	4'-8"	4'-0"	3'-7"	-
45.0	10'-0"	10'-0"	10'-0"	9'-8"	9'-0"	8'-11"	8'-0"	7'-4"	8'-0"	7'-3"	6'-6"	5'-11"	4'-4"	3'-9"	3'-5"	-
50.0	10'-0"	10'-0"	9'-10"	9'-3"	9'-0"	8'-6"	7'-7"	6'-11"	8'-0"	6'-11"	6'-2"	5'-8"	4'-2"	3'-7"	3'-3"	-
55.0	10'-0"	10'-0"	9'-7"	8'-10"	9'-0"	8'-1"	7'-3"	6'-7"	7'-7"	6'-7"	5'-11"	5'-5"	4'-0"	3'-5"	3'-0"	-
60.0	10'-0"	9'-11"	9'-3"	8'-5"	8'-11"	7'-9"	6'-11"	6'-4"	7'-3"	6'-4"	5'-8"	5'-2"	3'-9"	3'-3"	2'-11"	-
65.0	10'-0"	9'-9"	8'-11"	8'-1"	8'-7"	7'-5"	6'-8"	6'-1"	7'-0"	6'-1"	5'-5"	4'-11"	3'-8"	3'-2"	2'-10"	-
70.0	10'-0"	9'-7"	8'-7"	7'-10"	8'-3"	7'-2"	6'-5"	5'-10"	6'-9"	5'-10"	5'-3"	4'-9"	3'-6"	3'-0"	2'-9"	-
75.0	10'-0"	9'-3"	8'-3"	7'-7"	8'-0"	6'-11"	6'-2"	5'-8"	6'-6"	5'-8"	5'-1"	4'-7"	3'-5"	2'-11"	2'-8"	-
80.0	9'-11"	8'-11"	8'-0"	7'-4"	7'-9"	6'-9"	6'-0"	5'-6"	6'-4"	5'-6"	4'-11"	4'-6"	3'-4"	-	-	-
85.0	9'-10"	8'-8"	7'-9"	7'-1"	7'-6"	6'-6"	5'-10"	5'-4"	6'-1"	5'-4"	4'-9"	4'-4"	-	-	-	-
90.0	9'-8"	8'-5"	7'-7"	6'-11"	7'-4"	6'-4"	5'-8"	5'-2"	5'-11"	5'-2"	4'-7"	4'-2"	-	-	-	-
95.0	9'-6"	8'-3"	7'-4"	6'-8"	7'-1"	6'-2"	5'-6"	5'-0"	5'-9"	5'-0"	4'-6"	4'-1"	-	-	-	-
100.0	9'-3"	8'-0"	7'-2"	6'-6"	6'-11"	6'-0"	5'-4"	4'-11"	5'-8"	4'-11"	4'-4"	4'-0"	-	-	-	-
105.0	9'-0"	7'-10"	7'-0"	6'-5"	6'-9"	5'-10"	5'-3"	4'-9"	5'-6"	4'-9"	4'-3"	3'-11"	-	-	-	-
110.0	8'-10"	7'-8"	6'-10"	6'-3"	6'-7"	5'-9"	5'-1"	4'-8"	5'-5"	4'-8"	4'-2"	3'-10"	-	-	-	-
115.0	8'-7"	7'-6"	6'-8"	6'-1"	6'-6"	5'-7"	5'-0"	4'-7"	5'-3"	4'-7"	4'-1"	3'-9"	-	-	-	-
120.0	8'-5"	7'-4"	6'-6"	6'-0"	6'-4"	5'-6"	4'-11"	4'-6"	5'-2"	4'-6"	4'-0"	3'-8"	-	-	-	-
125.0	8'-3"	7'-2"	6'-5"	5'-10"	6'-2"	5'-4"	4'-10"	4'-5"	5'-1"	4'-4"	3'-11"	3'-7"	-	-	-	-
130.0	8'-1"	7'-0"	6'-3"	5'-9"	6'-1"	5'-3"	4'-9"	4'-4"	4'-11"	4'-3"	3'-10"	3'-6"	-	-	-	-
135.0	7'-11"	6'-11"	6'-2"	5'-8"	6'-0"	5'-2"	4'-7"	4'-3"	4'-10"	4'-2"	3'-9"	3'-5"	-	-	-	-
140.0	7'-10"	6'-9"	6'-1"	5'-6"	5'-10"	5'-1"	4'-6"	4'-2"	4'-9"	4'-2"	3'-8"	3'-4"	-	-	-	-
145.0	7'-8"	6'-8"	5'-11"	5'-5"	5'-9"	5'-0"	4'-6"	4'-1"	4'-8"	4'-1"	3'-8"	3'-4"	-	-	-	-
150.0	7'-7"	6'-6"	5'-10"	5'-4"	5'-8"	4'-11"	4'-5"	4'-0"	4'-7"	4'-0"	3'-7"	3'-3"	-	-	-	-
155.0	7'-5"	6'-5"	5'-9"	5'-3"	5'-7"	4'-10"	4'-4"	3'-11"	4'-6"	3'-11"	3'-6"	3'-2"	-	-	-	-
160.0	7'-4"	6'-4"	5'-8"	5'-2"	5'-6"	4'-9"	4'-3"	3'-11"	4'-6"	3'-10"	3'-5"	3'-2"	-	-	-	-
165.0	7'-2"	6'-3"	5'-7"	5'-1"	5'-5"	4'-8"	4'-2"	3'-10"	4'-5"	3'-10"	3'-5"	3'-1"	-	-	-	-
170.0	7'-1"	6'-2"	5'-6"	5'-0"	5'-4"	4'-7"	4'-1"	3'-9"	4'-4"	3'-9"	3'-4"	3'-1"	-	-	-	-
175.0	7'-0"	6'-1"	5'-5"	4'-11"	5'-3"	4'-6"	4'-1"	3'-8"	4'-3"	3'-8"	3'-4"	3'-0"	-	-	-	-
180.0	6'-11"	6'-0"	5'-4"	4'-10"	5'-2"	4'-6"	4'-0"	3'-8"	4'-2"	3'-8"	3'-3"	3'-0"	-	-	-	-
185.0	6'-10"	5'-11"	5'-3"	4'-10"	5'-1"	4'-5"	3'-11"	3'-7"	4'-2"	3'-7"	3'-3"	2'-11"	-	-	-	-
190.0	6'-8"	5'-10"	5'-2"	4'-9"	5'-0"	4'-4"	3'-11"	3'-7"	4'-1"	3'-7"	3'-2"	2'-11"	-	-	-	-
195.0	6'-7"	5'-9"	5'-2"	4'-8"	5'-0"	4'-4"	3'-10"	3'-6"	4'-0"	3'-6"	3'-2"	2'-11"	-	-	-	-

* STORM BAR SPACING SHALL BE SUCH THAT MAXIMUM SLAT SPAN SHALL NOT BE EXCEEDED.

FLORIDA BUILDING CODE (Non High Velocity Hurricane Zone)



© 2026 TILTECO, INC.
TILTECO INC.
TILLIT TESTING & ENGINEERING COMPANY
6355 N.W. 36th St., Ste. 305, VIRGINIA GARDENS, FL 33166
Phone : (305)871-1530 . Fax : (305)871-1531
CA-0006719
WALTER A. TILLIT Jr. P.E.
FLORIDA Lic. # 44167

ROLL-UP SHUTTER/WIND BORNE DEBRI REGION
RLL-3, A-200-H, A-150-H SLATS

ROLLAC SHUTTERS OF TEXAS, INC.

5331 ORANGE STREET
PEARLAND, TX. 77581

PHONE: (800) 880-0922, FAX: (281) 485-0839

REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 25-051	6/25/26	3		
2			4		

W.H.
DRAWN BY:

06/25/2026
DATE

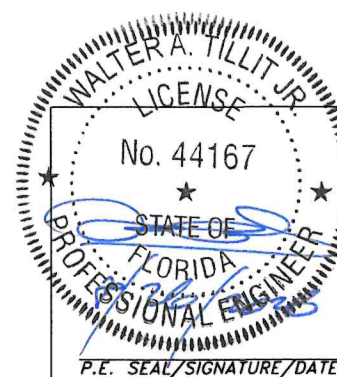
26-072
DRAWING No

SHEET 11 OF 13

HEADER LOADING CHART
 MAXIMUM A.S.D. DESIGN PRESSURE RATING (p. s. f.) AND CORRESPONDING MAXIMUM
 SPAN "L" (Ft.) FOR A GIVEN TYPE OF HEADER AND STORM BAR HEIGHT (Ft.).

(USE MAXIMUM VALUES BETWEEN POSITIVE AND NEGATIVE LOAD)

MAXIMUM A.S.D. DESIGN PRESSURE RATING (p.s.f.)	Ⓘ TYPE 1 HEADER 2" x 4" X 1/4"			⓵ TYPE 2 HEADER 2" x 4" X 1/8"		Ⓚ TYPE 3 HEADER 1" x 4" X 1/8"	
	STORM BAR HEIGHT			STORM BAR HEIGHT		STORM BAR HEIGHT	
	≤ 7'-0"	7' TO 9'	9' TO 10'	≤ 5'-0"	5' TO 8'	≤ 5'-0"	5' TO 7'
30.0 OR LESS	15'-1"	14'-0"	13'-2"	12'-0"	11'-2"	7'-1"	6'-6"
35.0	14'-9"	13'-0"	12'-4"	12'-0"	10'-4"	7'-1"	6'-6"
40.0	13'-9"	12'-2"	11'-6"	12'-0"	9'-8"	7'-1"	6'-6"
45.0	13'-0"	11'-5"	10'-10"	11'-6"	9'-1"	7'-1"	6'-4"
50.0	12'-4"	10'-10"	10'-4"	10'-11"	8'-8"	7'-1"	6'-0"
55.0	11'-9"	10'-4"	9'-10"	10'-5"	8'-3"	6'-10"	5'-9"
60.0	11'-3"	9'-11"	9'-5"	10'-0"	7'-11"	6'-6"	5'-6"
65.0	10'-10"	9'-6"	9'-0"	9'-7"	7'-7"	6'-3"	5'-4"
70.0	10'-5"	9'-2"	8'-8"	9'-3"	7'-4"	6'-0"	5'-1"
75.0	10'-1"	8'-10"	8'-5"	8'-11"	7'-1"	5'-10"	4'-11"
80.0	9'-9"	8'-7"	8'-2"	8'-8"	6'-10"	5'-8"	4'-9"
85.0	9'-5"	8'-4"	7'-11"	8'-5"	6'-7"	5'-6"	4'-8"
90.0	9'-2"	8'-1"	7'-8"	8'-2"	6'-5"	5'-4"	4'-6"
95.0	8'-11"	7'-11"	7'-6"	7'-11"	6'-3"	5'-2"	4'-5"
100.0	8'-8"	7'-8"	7'-3"	7'-9"	6'-1"	5'-1"	4'-3"
105.0	8'-6"	7'-6"	7'-1"	7'-6"	6'-0"	4'-11"	4'-2"
110.0	8'-4"	7'-4"	6'-11"	7'-4"	5'-10"	4'-10"	4'-1"
115.0	8'-1"	7'-2"	6'-9"	7'-2"	5'-8"	4'-9"	4'-0"
120.0	7'-11"	7'-0"	6'-8"	7'-1"	5'-7"	4'-7"	3'-11"
125.0	7'-9"	6'-10"	6'-6"	6'-11"	5'-6"	4'-6"	3'-10"
130.0	7'-8"	6'-9"	6'-5"	6'-9"	5'-4"	4'-5"	3'-9"
135.0	7'-6"	6'-7"	6'-3"	6'-8"	5'-3"	4'-4"	3'-8"
140.0	7'-4"	6'-6"	6'-2"	6'-6"	5'-2"	4'-3"	3'-7"
145.0	7'-3"	6'-5"	6'-1"	6'-5"	5'-1"	4'-2"	3'-7"
150.0	7'-1"	6'-3"	5'-11"	6'-4"	5'-0"	4'-2"	3'-6"
155.0	7'-0"	6'-2"	5'-10"	6'-2"	4'-11"	4'-1"	3'-5"
160.0	6'-11"	6'-1"	5'-9"	6'-1"	4'-10"	4'-0"	3'-5"
165.0	6'-9"	6'-0"	5'-8"	6'-0"	4'-9"	3'-11"	3'-4"
170.0	6'-8"	5'-11"	5'-7"	5'-11"	4'-8"	3'-11"	3'-3"
175.0	6'-7"	5'-10"	5'-6"	5'-10"	4'-7"	3'-10"	3'-3"
180.0	6'-6"	5'-9"	5'-5"	5'-9"	4'-7"	3'-9"	3'-2"
185.0	6'-5"	5'-8"	5'-4"	5'-8"	4'-6"	3'-9"	3'-2"
190.0	6'-4"	5'-7"	5'-3"	5'-7"	4'-5"	3'-8"	3'-1"
195.0	6'-3"	5'-6"	5'-3"	5'-6"	4'-4"	3'-7"	3'-1"



© 2026 TILTECO, INC.

TILLIT TESTING & ENGINEERING COMPANY
 6355 N.W. 36th. St., Ste. 305, VIRGINIA GARDENS, FL 33166
 Phone : (305)871-1530 . Fax : (305)871-1531
 CA-0006719
 WALTER A. TILLIT Jr. P.E.
 FLORIDA Lic. # 44167

FLORIDA BUILDING CODE (Non High Velocity Hurricane Zone)

ROLL-UP SHUTTER/WIND BORNE DEBRI REGION RLL-3, A-200-H, A-150-H SLATS						W.H. DRAWN BY:	
ROLLAC SHUTTERS OF TEXAS, INC.						06/25/2026 DATE	
5331 ORANGE STREET PEARLAND, TX. 77581 PHONE: (800) 880-0922, FAX: (281) 485-0839						26-072 DRAWING No	
REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE	SHEET 12 OF 13	
1	OLD 25-051	6/25/26	3				
2			4				

MULLION LOADING CHART
MAXIMUM A.S.D. DESIGN PRESSURE RATING (p. s. f.) AND
CORRESPONDING MAXIMUM SPAN "L" (Ft.) FOR A GIVEN TYPE OF
MULLION AND MULLION SPACING (Ft.).

(USE MAXIMUM VALUES BETWEEN POSITIVE AND NEGATIVE LOAD)

MAXIMUM A.S.D. DESIGN PRESSURE RATING (p.s.f.)	Ⓛ TYPE 1 MULLION 4" x 6" x 3/16"			Ⓜ TYPE 2 MULLION 3" x 4" x 1/8"			Ⓝ TYPE 3 MULLION 2" x 3" x 1/8"			Ⓤ TYPE 4 MULLION 2" x 3" x 1/4"			
	MULLION SPACING			MULLION SPACING			MULLION SPACING			MULLION SPACING			
	≤ 4'-0"	4' TO 5'	5' TO 8'	≤ 4'-0"	4' TO 5'	5' TO 8'	≤ 3'-0"	3' TO 4'	4' TO 5'	< 3'-0"	3' TO 4'	4' TO 5'	5' TO 6'
30.0 OR LESS	12'-0"	12'-0"	12'-0"	9'-0"	9'-0"	8'-10"	7'-10"	7'-2"	6'-7"	9'-5"	8'-7"	7'-11"	7'-6"
35.0	12'-0"	12'-0"	12'-0"	9'-0"	9'-0"	8'-2"	7'-5"	6'-9"	6'-3"	8'-11"	8'-2"	7'-7"	7'-1"
40.0	12'-0"	12'-0"	12'-0"	8'-10"	9'-0"	7'-8"	7'-2"	6'-6"	6'-0"	8'-7"	7'-9"	7'-3"	6'-10"
45.0	12'-0"	12'-0"	12'-0"	8'-4"	9'-0"	7'-3"	6'-10"	6'-3"	5'-9"	8'-3"	7'-6"	6'-11"	6'-6"
50.0	12'-0"	12'-0"	12'-0"	7'-10"	8'-8"	6'-10"	6'-7"	6'-0"	5'-7"	7'-11"	7'-3"	6'-8"	6'-4"
55.0	12'-0"	12'-0"	11'-6"	7'-6"	8'-3"	6'-6"	6'-5"	5'-10"	5'-5"	7'-8"	7'-0"	6'-6"	6'-1"
60.0	12'-0"	12'-0"	11'-0"	7'-2"	7'-11"	6'-3"	6'-3"	5'-8"	5'-3"	7'-6"	6'-10"	6'-4"	5'-11"
65.0	12'-0"	12'-0"	10'-7"	6'-11"	7'-7"	6'-0"	6'-1"	5'-6"	5'-1"	7'-3"	6'-7"	6'-2"	5'-9"
70.0	11'-9"	12'-0"	10'-2"	6'-8"	7'-4"	5'-9"	5'-11"	5'-4"	5'-0"	7'-1"	6'-6"	6'-0"	5'-8"
75.0	11'-4"	12'-0"	9'-10"	6'-5"	7'-1"	5'-7"	5'-9"	5'-3"	4'-11"	6'-11"	6'-4"	5'-10"	5'-6"
80.0	11'-0"	12'-0"	9'-6"	6'-3"	6'-10"	5'-5"	5'-8"	5'-2"	4'-9"	6'-10"	6'-2"	5'-9"	5'-5"
85.0	10'-8"	11'-8"	9'-3"	6'-0"	6'-8"	5'-3"	5'-7"	5'-0"	4'-8"	6'-8"	6'-1"	5'-7"	5'-3"
90.0	10'-4"	11'-5"	9'-0"	5'-10"	6'-5"	5'-1"	5'-5"	4'-11"	4'-7"	6'-6"	5'-11"	5'-6"	5'-2"
95.0	10'-1"	11'-1"	8'-9"	5'-9"	6'-3"	5'-0"	5'-4"	4'-10"	4'-6"	6'-5"	5'-10"	5'-5"	5'-1"
100.0	9'-10"	10'-10"	8'-6"	5'-7"	6'-1"	4'-10"	5'-3"	4'-9"	4'-5"	6'-4"	5'-9"	5'-4"	5'-0"
105.0	9'-7"	10'-6"	8'-4"	5'-5"	6'-0"	4'-9"	5'-2"	4'-8"	4'-4"	6'-3"	5'-8"	5'-3"	4'-11"
110.0	9'-4"	10'-3"	8'-2"	5'-4"	5'-10"	4'-7"	5'-1"	4'-7"	4'-2"	6'-1"	5'-7"	5'-2"	4'-10"
115.0	9'-2"	10'-1"	7'-11"	5'-2"	5'-9"	4'-6"	5'-0"	4'-7"	4'-1"	6'-0"	5'-6"	5'-1"	4'-9"
120.0	8'-11"	9'-10"	7'-9"	5'-1"	5'-7"	4'-5"	4'-11"	4'-6"	4'-0"	5'-11"	5'-5"	5'-0"	4'-9"
125.0	8'-9"	9'-8"	7'-8"	5'-0"	5'-6"	4'-4"	4'-11"	4'-5"	3'-11"	5'-10"	5'-4"	4'-11"	4'-8"
130.0	8'-7"	9'-6"	7'-6"	4'-11"	5'-4"	4'-3"	4'-10"	4'-4"	3'-10"	5'-9"	5'-3"	4'-11"	4'-7"
135.0	8'-5"	9'-3"	7'-4"	4'-9"	5'-3"	4'-2"	4'-9"	4'-3"	3'-9"	5'-9"	5'-2"	4'-10"	4'-6"
140.0	8'-3"	9'-1"	7'-3"	4'-8"	5'-2"	4'-1"	4'-8"	4'-2"	3'-9"	5'-8"	5'-2"	4'-9"	4'-5"
145.0	8'-2"	9'-0"	7'-1"	4'-7"	5'-1"	4'-0"	4'-8"	4'-1"	3'-8"	5'-7"	5'-1"	4'-8"	4'-4"
150.0	8'-0"	8'-10"	7'-0"	4'-7"	5'-0"	3'-11"	4'-7"	4'-0"	3'-7"	5'-6"	5'-0"	4'-8"	4'-3"
155.0	7'-11"	8'-8"	6'-10"	4'-6"	4'-11"	3'-11"	4'-6"	3'-11"	3'-6"	5'-5"	4'-11"	4'-7"	4'-2"
160.0	7'-9"	8'-6"	6'-9"	4'-5"	4'-10"	3'-10"	4'-6"	3'-11"	3'-6"	5'-5"	4'-11"	4'-6"	4'-1"
165.0	7'-8"	8'-5"	6'-8"	4'-4"	4'-9"	3'-9"	4'-5"	3'-10"	3'-5"	5'-4"	4'-10"	4'-5"	4'-1"
170.0	7'-6"	8'-3"	6'-7"	4'-3"	4'-8"	3'-9"	4'-4"	3'-9"	3'-5"	5'-3"	4'-10"	4'-5"	4'-0"
175.0	7'-5"	8'-2"	6'-5"	4'-3"	4'-8"	3'-8"	4'-4"	3'-9"	3'-4"	5'-3"	4'-9"	4'-4"	3'-11"
180.0	7'-4"	8'-1"	6'-4"	4'-2"	4'-7"	3'-7"	4'-3"	3'-8"	3'-3"	5'-2"	4'-9"	4'-3"	3'-11"
185.0	7'-3"	7'-11"	6'-3"	4'-1"	4'-6"	3'-7"	4'-2"	3'-7"	3'-3"	5'-2"	4'-8"	4'-2"	3'-10"
190.0	7'-1"	7'-10"	6'-2"	4'-0"	4'-5"	3'-6"	4'-2"	3'-7"	3'-2"	5'-1"	4'-8"	4'-2"	3'-9"
195.0	7'-0"	7'-9"	6'-1"	4'-0"	4'-5"	3'-6"	4'-1"	3'-6"	3'-2"	5'-1"	4'-7"	4'-1"	

NOTES : REFER TO ELEVATIONS ON SHEET 1A OF 13

1-. FOR MULLIONS INSTALLED W/O STORM BARS

A) MULLION SPACING SHALL BE SUCH THAT MAXIMUM SLAT SPAN SHALL NOT BE EXCEEDED

2-. FOR MULLIONS INSTALLED W/ STORM BARS & HEADERS

A) MULLION SPACING SHALL BE SUCH THAT MAXIMUM HEADER SPAN SHALL NOT BE EXCEEDED

B) STORM BAR SPACING SHALL BE SUCH THAT MAXIMUM SLAT SPAN SHALL NOT BE EXCEEDED

MAXIMUM ANCHOR SPACING AT SIDE RAILS *

MAXIMUM A.S.D. DESIGN PRESSURE RATING (p.s.f.)		SLAT TYPE 2 (ⓑ) (RLL-3)		
		ⓑ (RLL-32) SIDE RAIL		
		WALL MOUNT	INSIDE MOUNT	BUILD-OUT MOUNT
80 OR LESS	MASONRY	5 1/2"	5 1/2"	6"
	CONCRETE	6"	6"	6"
>80 TO 120	MASONRY	4"	4 1/2"	6"
	CONCRETE	6"	6"	6"
>120 TO 150	MASONRY	3 1/2"	4"	6"
	CONCRETE	6"	6"	6"
>150 TO 195	MASONRY	3"	3 1/2"	6"
	CONCRETE	6"	6"	6"

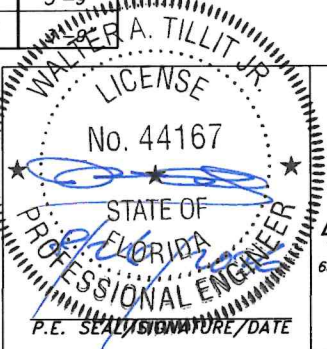
MAXIMUM A.S.D. DESIGN PRESSURE RATING (p.s.f.)		SLAT TYPE 3 (ⓒ) (A-200-H)					
		ⓐ (RLL-25) SIDE RAIL			ⓐ (RLL-1) SIDE RAIL		
		WALL MOUNT	INSIDE MOUNT	MOUNT	WALL MOUNT	INSIDE MOUNT	BUILD-OUT MOUNT
80 OR LESS	MASONRY	6"	6"	6"	6"	6"	6"
	CONCRETE	6"	6"	6"	6"	6"	6"
>80 TO 120	MASONRY	5"	5"	5"	5 1/2"	5 1/2"	6"
	CONCRETE	6"	6"	6"	6"	6"	6"
>120 TO 150	MASONRY	4 1/2"	4 1/2"	6"	5"	5"	6"
	CONCRETE	6"	6"	6"	6"	6"	6"
>150 TO 195	MASONRY	3 1/2"	4"	6"	4"	4"	6"
	CONCRETE	6"	6"	6"	6"	6"	6"

MAXIMUM A.S.D. DESIGN PRESSURE RATING (p.s.f.)		SLAT TYPE 4 (ⓓ) (A-150-H)		
		ⓑ (RLL-32) SIDE RAIL		
		WALL MOUNT	INSIDE MOUNT	MOUNT
80 OR LESS	MASONRY	6"	6"	6"
	CONCRETE	6"	6"	6"
>80 TO 100	MASONRY	6"	6"	6"
	CONCRETE	6"	6"	6"

* MAXIMUM ANCHOR SPACING (in.) AT SIDE RAILS VERSUS EDGE DISTANCE = E.D.

MAXIMUM ANCHOR SPACING ARE VALID FOR 3" EDGE DISTANCE.

FLORIDA BUILDING CODE (Non High Velocity Hurricane Zone)



© 2026 TILTECO, INC.

TILTECO inc.

TILLIT TESTING & ENGINEERING COMPANY
6355 N.W. 36th. St., Ste. 305, VIRGINIA GARDENS, FL 33166
Phone : (305)871-1530 . Fax : (305)871-1531
CA-0006719
WALTER A. TILLIT Jr. P.E.
FLORIDA Lic. # 44167

ROLL-UP SHUTTER/WIND BORNE DEBRI REGION RLL-3, A-200-H, A-150-H SLATS			W.H. DRAWN BY:		
ROLLAC SHUTTERS OF TEXAS, INC.			06/25/2026 DATE		
5331 ORANGE STREET PEARLAND, TX. 77581 PHONE: (800) 880-0922, FAX: (281) 485-0839			26-072 DRAWING No		
REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 25-051	6/25/26	3		
2			4		
			SHEET 13 OF 13		