

GENERAL NOTES

1. **MODEL WDV-130** VERTICAL ALUMINUM LOUVER SYSTEM SHOWN ON THIS PRODUCT EVALUATION DOCUMENT (P.E.D.) HAS BEEN VERIFIED FOR COMPLIANCE IN ACCORDANCE WITH THE **2023 (8th EDITION)** OF THE FLORIDA BUILDING CODE. THIS ALUMINUM LOUVER SYSTEM MAY BE INSTALLED AT HIGH VELOCITY HURRICANE ZONES (H.V.H.Z) AND OUT OF IT (N.H.V.H.Z).
- DESIGN WIND LOADS SHALL BE DETERMINED AS PER SECTIONS **1620 & 1609** OF THE ABOVE MENTIONED CODE, USING **ASCE 7-22** AND SHALL NOT EXCEED THE MAXIMUM (A.S.D.) DESIGN PRESSURE RATINGS INDICATED ON THIS SHEET.
- IN ORDER TO VERIFY THE ABOVE CONDITION, ULTIMATE DESIGN WIND LOADS DETERMINED PER **ASCE 7-22** SHALL BE FIRST REDUCED TO A.S.D. DESIGN WIND LOADS BY MULTIPLYING THEM BY 0.6 IN ORDER TO COMPARE THESE W/ MAX. (A.S.D.) DESIGN PRESSURE RATINGS INDICATED ON THIS SHEET.
- IN ORDER TO VERIFY THAT COMPONENTS AND ANCHORS 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.
A DURATION FACTOR CD=1.60 WAS USED FOR VERIFICATION OF FASTENERS IN WOOD.
- ALUMINUM LOUVER SYSTEM ADEQUACY FOR IMPACT AND FATIGUE RESISTANCE HAS BEEN VERIFIED IN ACCORDANCE WITH SECTIONS 1626 & 1609.1.2 OF THE ABOVE MENTIONED CODE AS PER PRI CONSTRUCTION MATERIALS TECHNOLOGIES, LLC. TESTING LAB REPORT # 1697T0001.01, AS PER TAS-201, TAS-202, TAS-203, AS WELL AS PER AMCA IMPACT STANDARD 540, PER TESTING REPORT # 1697T0001.03, AND AS PER AMCA STANDARD 550-15 HIGH VELOCITY WIND DRIVEN RAIN AND TAS 100(A)-95, PER TEST REPORT # 1697T0001.02 .
2. ALL ALUMINUM EXTRUSIONS SHALL BE 6063-T5 ALLOY AS PER BILL OF MATERIALS ON SHEET 2.
3. ALL SCREWS TO BE STAINLESS STEEL 304 OR 316 SERIES WITH 50 ksi YIELD POINT AND 90 ksi TENSILE STRENGTH OR CORROSION RESISTANT CARBON STEEL AS PER DIN 50018 AND SHALL COMPLY W/ FLORIDA BUILDING CODE SECTION 2411.3.3.4.
4. ALL WELDING OF ALUMINUM FRAMING SHALL BE IN ACCORDANCE WITH THE AMERICAN WELDING SOCIETY A.W.S. D.1.2 REGULATIONS. USE CERTIFIED WELDERS. USE ER-5356 ELECTRODES.
5. ANCHOR **(10)** TO EXISTING STRUCTURE SHALL BE AS FOLLOWS (SEE SHEETS 4 , 5).
- (A). ANCHORS SHALL BE INSTALLED FOLLOWING ALL THE RECOMMENDATIONS AND SPECIFICATIONS OF THE ANCHORS MANUFACTURER. E.D. IS BEYOND ANY WALL FINISH.

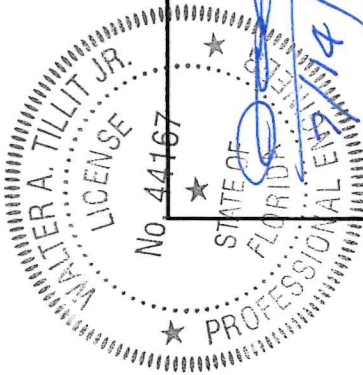
ANCHOR TYPE	MANUFACTURER	DIAMETER OR GAGE	MIN. EMBEDMENT				MIN. EDGE DISTANCE (E.D)		
			TO CONCRETE (f'c=3,000 psi) MIN.	TO CONCRETE BLOCK ASTM (C-90 UNIT) f'c=1.5 ksi GROUTED	1/8" MIN. ALUM. (Fy=25ksi) or 14 GA. GALV. STEEL(Fy=33ksi)	TO WOOD (G ≥ 0.55)	CONCRETE OR CONCRETE BLOCK	STEEL	WOOD
SCREW-BOLT+	DEWALT	3/8"	3 1/4"	3 1/4"	N/A	N/A	1 1/2"	N/A	N/A
LAG SCREW	-	3/8"	N/A	N/A	N/A	1 1/2"	N/A	N/A	1 1/2"
TAP-FLEX	ELCO CONST.	3/8"	N/A	N/A	FULLY EMB. PLUS 3 THREADS BEYOND.	N/A	N/A	3/4"	N/A

6. **MODEL WDV-130** ALUMINUM LOUVER SYSTEM MAY BE INSTALLED IN LOCATIONS WHERE THE ROOM BEHIND IS NOT DESIGNED TO DRAIN WATER PENETRATING INTO THE ROOM, OR THE ROOM WILL HOUSE NON-WATER RESISTANT EQUIPMENT. COMPONENTS OR SUPPLIES INSTALLATION ON LOUVER IS LIMITED TO 40 FT. IN HEIGHT ACCORDING TO TABLE 3 OF TAS 100(A)-95.
7. ALUMINUM MEMBERS IN CONTACT WITH DISSIMILAR MATERIALS SHALL COMPLY WIH SECTION III-6 OF THE 2020 ALUMINUM DESIGN MANUAL.

8. IT SHALL BE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE SOUNDNESS OF THE STRUCTURE WHERE LOUVER SYSTEM IS TO BE ATTACHED TO INSURE PROPER ANCHORAGE.
9. (A). THIS PRODUCT EVALUATION DOCUMENT (P.E.D.) PREPARED BY THIS ENGINEER IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SPECIFIC PROJECT; i.e. WHERE THE SITE CONDITIONS DEVIATE FROM THE P.E.D.
- (B). CONTRACTOR 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 PRODUCT EVALUATION DOCUMENT WILL BE CONSIDERED INVALID IF MODIFIED.
- (D). SITE SPECIFIC PROJECTS SHALL BE PREPARED BY A FLORIDA REGISTERED ENGINEER OR ARCHITECT WHICH 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.
- (E). ORIGINAL P.E.D. SHALL BEAR THE DATE AND ORIGINAL SEAL AND SIGNATURE OF THE PROFESSIONAL ENGINEER THAT PREPARED IT.
10. PRODUCT MANUFACTURER'S LABEL SHALL BE LOCATED ON A READILY VISIBLE LOCATION AT PRODUCT IN ACCORDANCE WITH SECTION 1703.5 OF FLORIDA BUILDING CODE. ONE LABEL SHALL BE PLACED FOR EVERY OPENING.

A.S.D. DESIGN PRESSURE RATING:
+150, -150 psf.

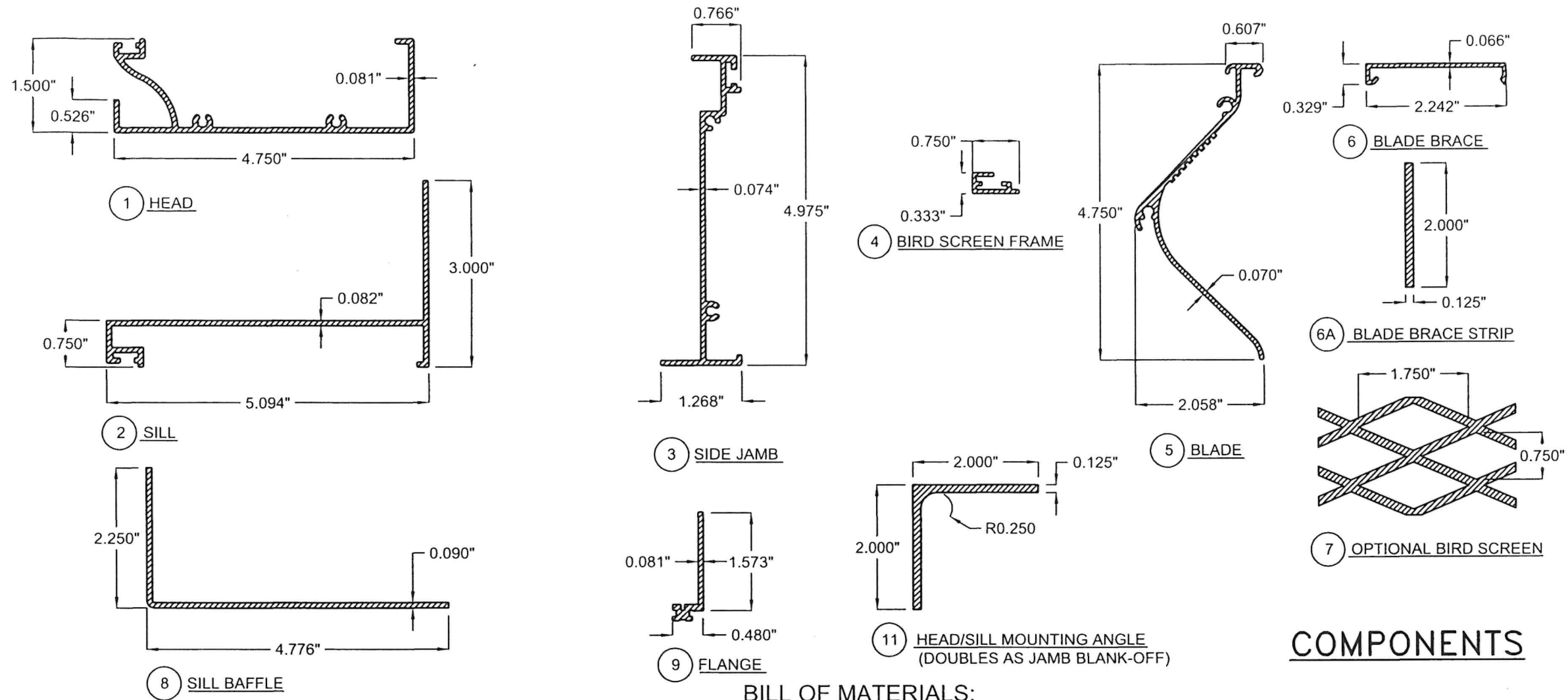
THIS DRAWING SHALL ONLY BE USED TO
OBTAIN PERMITS IN THE STATE OF FLORIDA



FLORIDA BUILDING CODE (HIGH & NON HIGH VELOCITY HURRICANE ZONE)		Y.M. DRAWN BY: 7/14/2023 DATE:		23-094 DRAWING No. SHEET 1 OF 6	
MODEL WDV-130 VERTICAL ALUMINUM LOUVER SYSTEM		UNITED ENERTECH HOLDINGS, LLC		159 GENCO DRIVE, HARTFORD, AL 36344 PHONE: (423)698-7715 FAX: (423)698-6629	
REV. NO.	DESCRIPTION	DATE	REV. NO.	DESCRIPTION	DATE
1	OLD 20-210	7/14/2023	3		
2			4		

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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



BILL OF MATERIALS:

COMPONENT #	DESCRIPTION	MATERIAL	NOTES
①	HEAD	6063-T5 ALUMINUM ALLOY/TEMPER	CONTINUOUS
②	SILL	6063-T5 ALUMINUM ALLOY/TEMPER	CONTINUOUS USE W/⑧
③	SIDE JAMB	6063-T5 ALUMINUM ALLOY/TEMPER	CONTINUOUS
④	BIRD SCREEN FRAME	6063-T5 ALUMINUM ALLOY/TEMPER	OPTIONAL
⑤	BLADE	6063-T5 ALUMINUM ALLOY/TEMPER	WDV-130 MODEL
⑥	BLADE BRACE	6063-T5 ALUMINUM ALLOY/TEMPER	2" LONG
⑥A	BLADE BRACE STRIP	6063-T5 ALUMINUM ALLOY/TEMPER	CONTINUOUS ACROSS UNIT. SEE SHEET 3 FOR REQUIREMENTS.
⑦	STANDARD BIRD SCREEN	3/4" x 0.051" FLATTENED ALUMINUM	OPTIONAL
⑧	SILL BAFFLE	3003 H14 ALUMINUM ALLOY/HARDNESS	CONTINUOUS USE W/②
⑨	FLANGE	6063-T5 ALUMINUM ALLOY/TEMPER	OPTIONAL
⑩	ANCHOR	SEE GENERAL NOTE 5A/1	SEE DETAILS FOR SPACING SHEETS 4 , 5
⑪	HEAD/SILL MOUNTING ANGLE, JAMB BLANK-OFF	6061-T6 ALUMINUM ALLOY/TEMPER	CONTINUOUS
⑫	#8 x 1-1/2" HEX HEAD, ZINC PLATED S.M.S.	-	USE AT FRAME ASSEMBLY
⑬	#10 x 1-1/2" HEX HEAD, ZINC PLATED S.M.S.	-	USE (2) FOR BLADE ATTACHMENT EA. END
⑭	1/4 -14 x 1-1/2" HEX HEAD, ZINC PLATED TEK SCREW	-	ANGLE CLIP ATTACHMENT TO HEAD & SILL
⑮	#10 x 3/4" HEX HEAD, ZINC PLATED TEK SCREW	-	BLADE BRACE ATTACHMENT & ⑪ ATTACHMENT

COMPONENTS

FLORIDA BUILDING CODE (HIGH & NON HIGH VELOCITY HURRICANE ZONE)

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MODEL WDV-130
VERTICAL ALUMINUM LOUVER SYSTEM

UNITED ENERTECH HOLDINGS, LLC

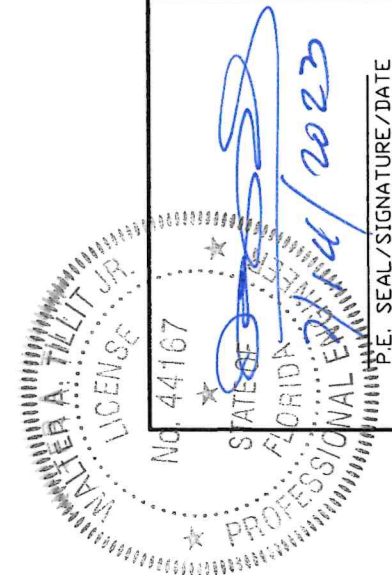
159 GENCO DRIVE
HARTFORD, AL 35344
PHONE: (423)898-6629

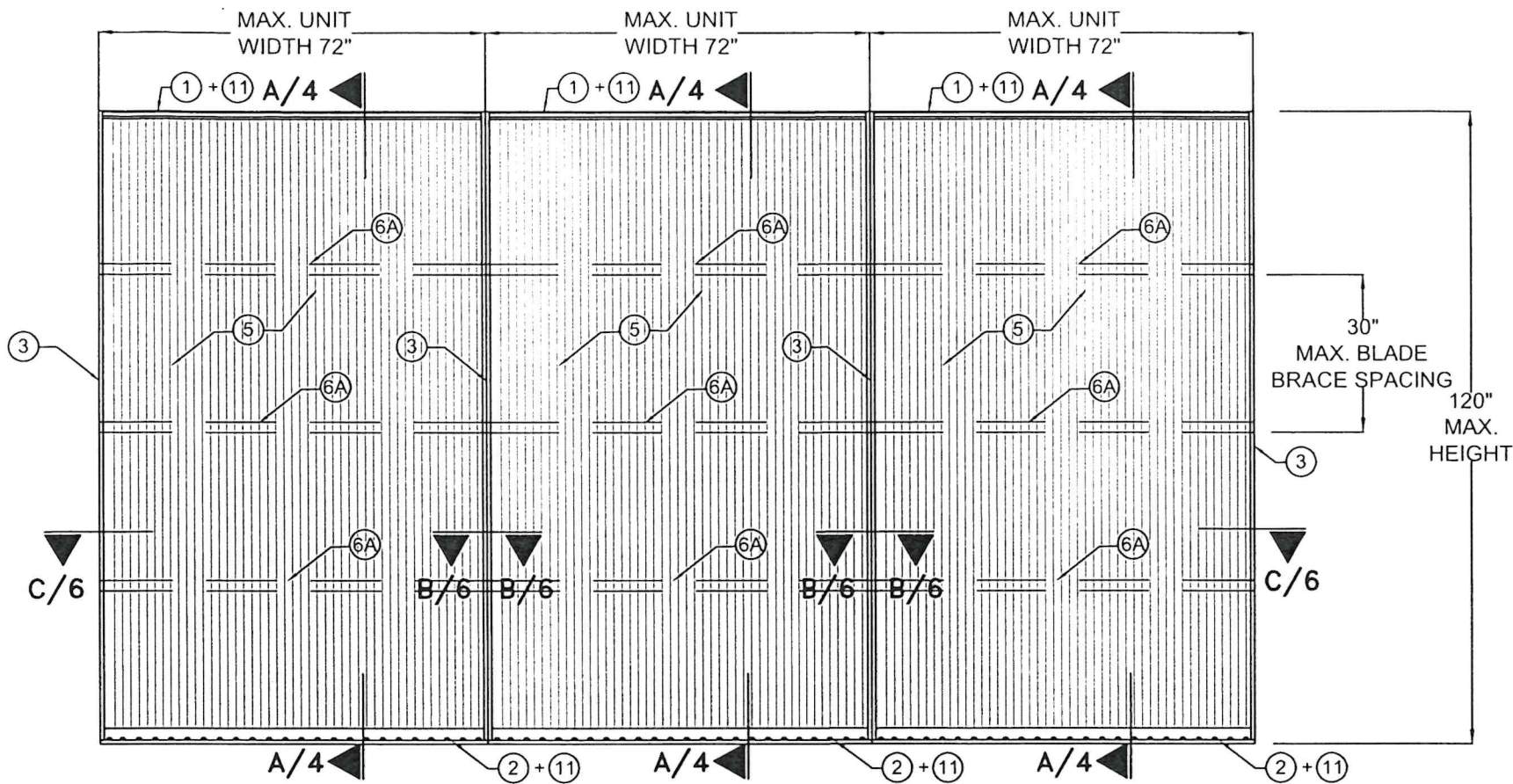
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7/14/2023
DATE:

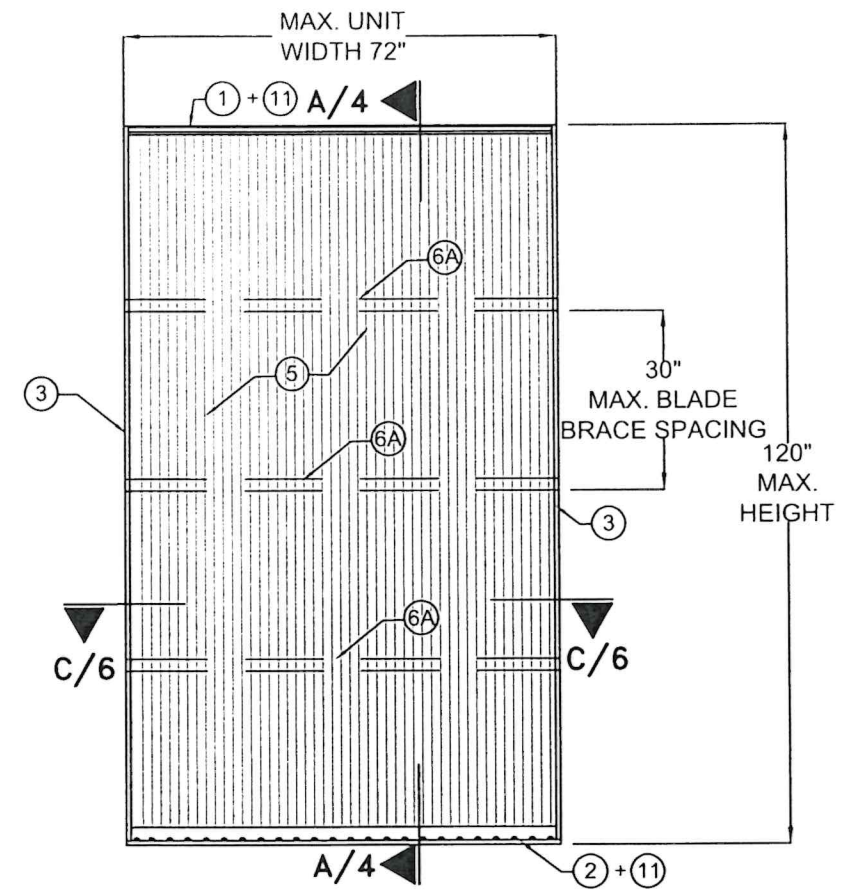
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DRAWING No.

SHEET 2 OF 6

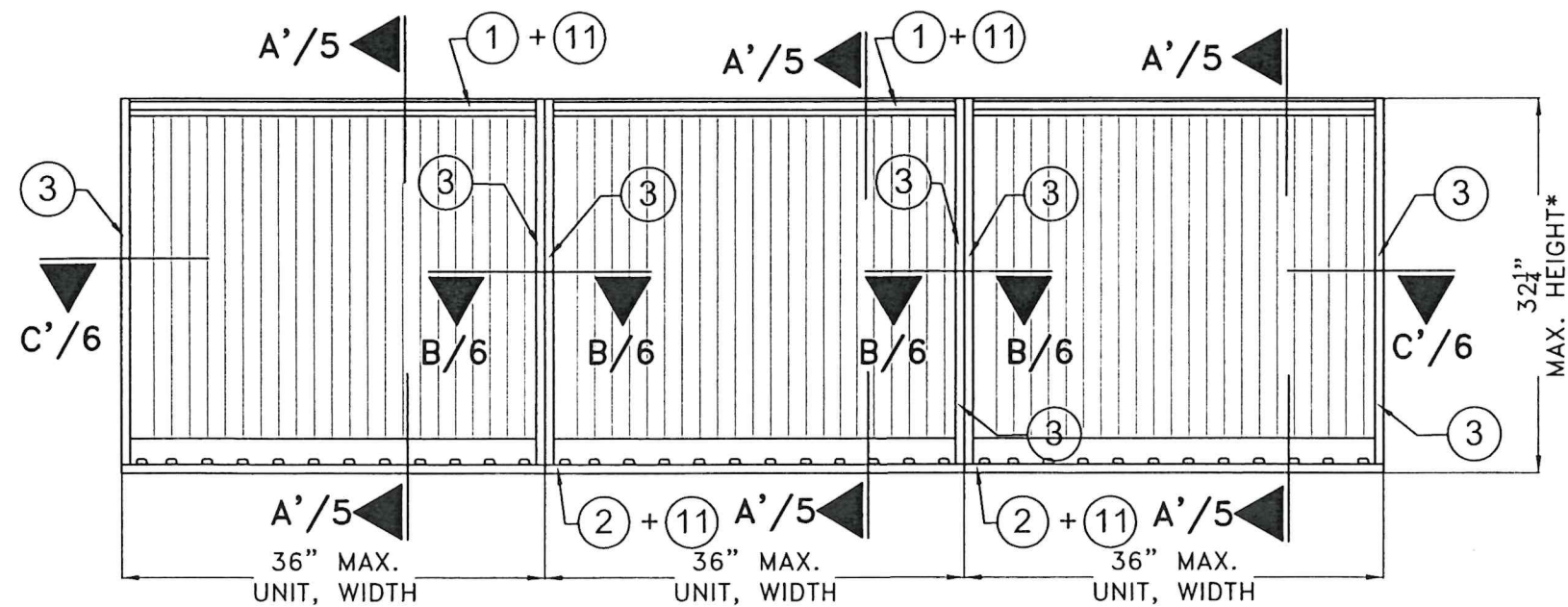




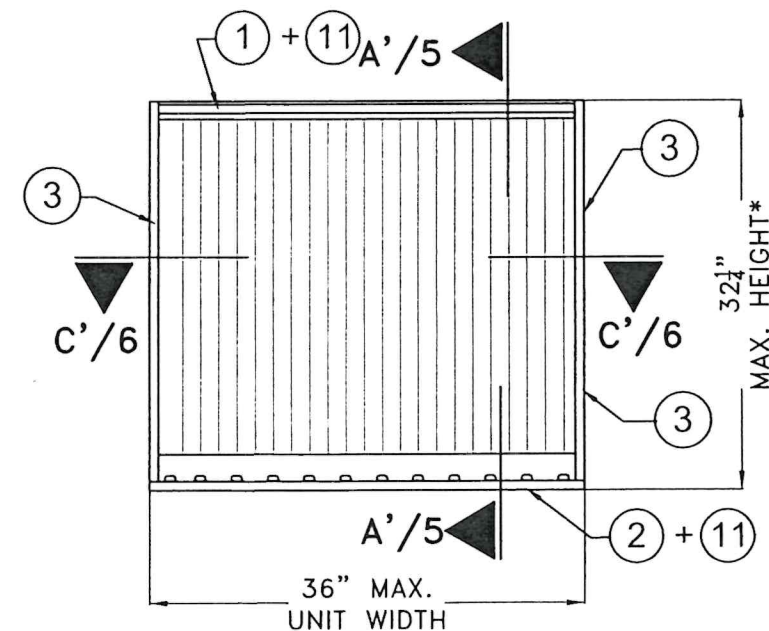
EXTERIOR ELEVATION
MULTIPLE UNITS W/ 6A



EXTERIOR ELEVATION
SINGLE UNIT W/ 6A



EXTERIOR ELEVATION
(MULTIPLE UNITS W/O 6A)



EXTERIOR ELEVATION
SINGLE UNIT W/O 6A

* MINIMUM HEIGHT IS 12" FOR AMCA 540 COMPLIANCE (IF REQUIRED)

FLORIDA BUILDING CODE (HIGH & NON HIGH VELOCITY HURRICANE ZONE)

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MODEL WDV-130
VERTICAL ALUMINUM LOUVER SYSTEM

UNITED ENERTECH HOLDINGS, LLC

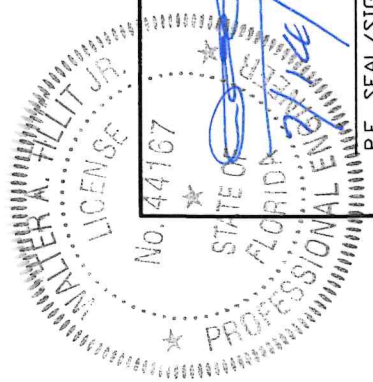
3005 SOUTH HICKORY ST.
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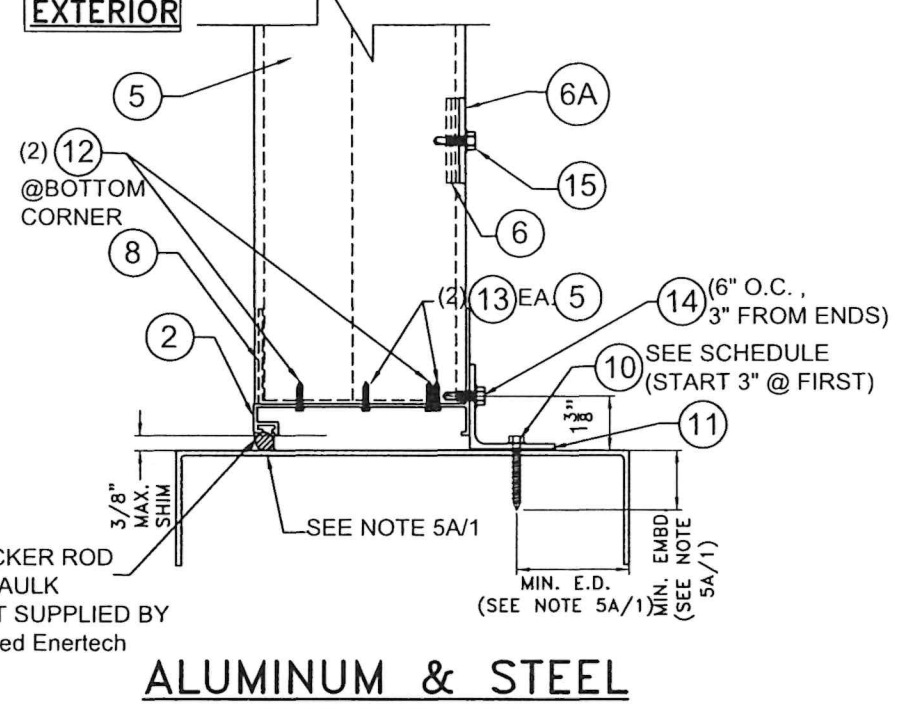
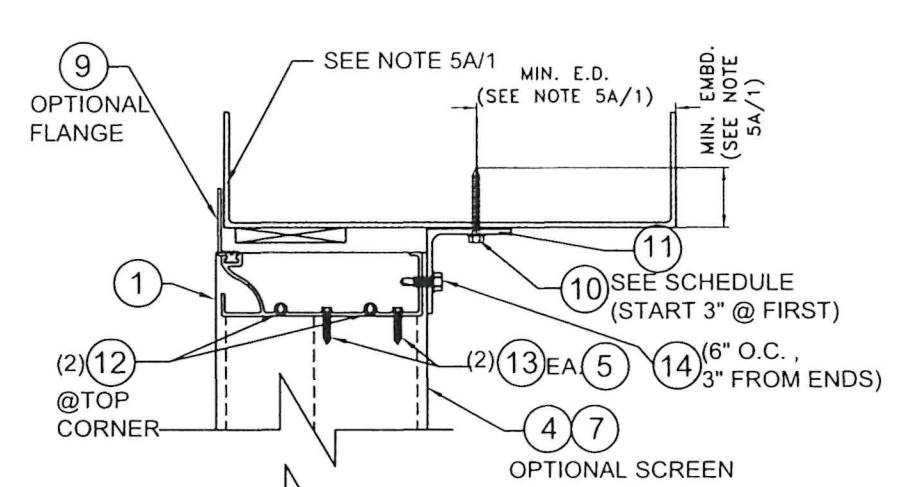
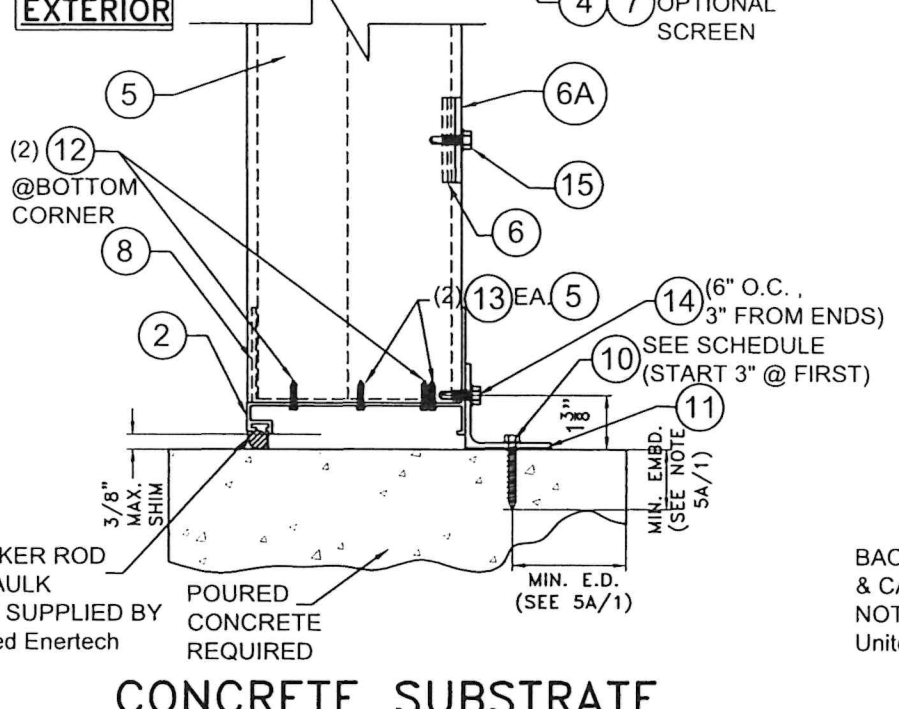
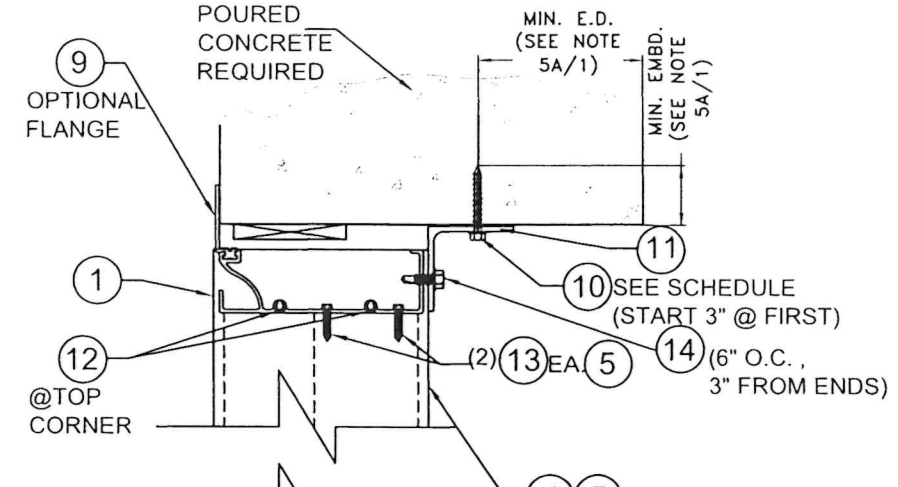
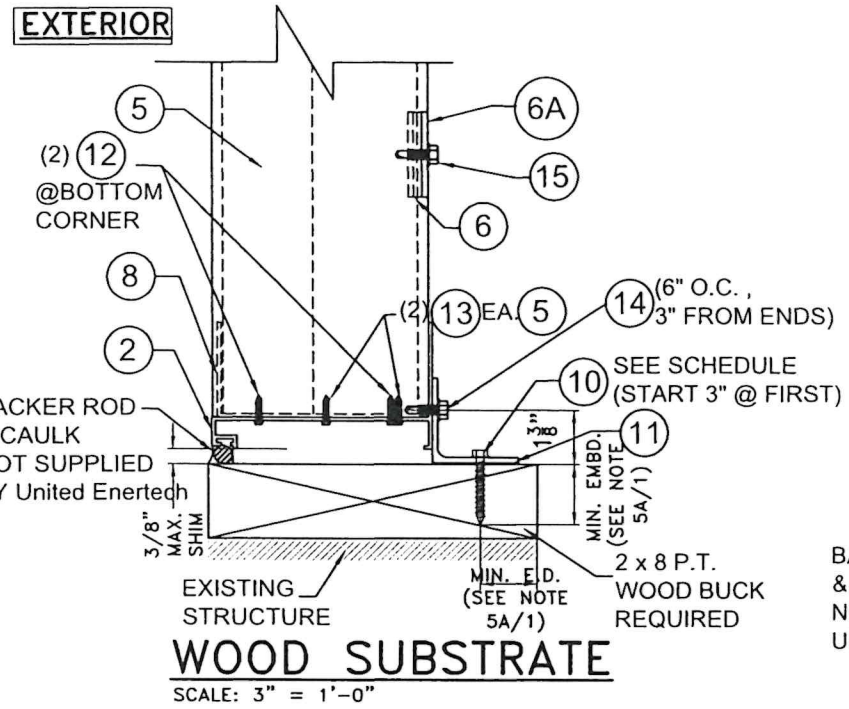
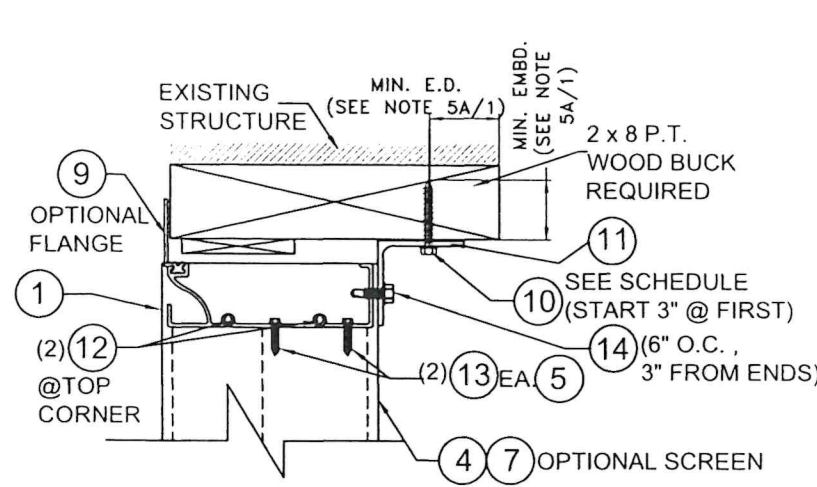
Y.M. DRAWN BY:

7/14/2023 DATE:

23-094
DRAWING No.

SHEET 3 OF 6





WOOD SUBSTRATE
SCALE: 3" = 1'-0"

CONCRETE SUBSTRATE
SCALE: 3" = 1'-0"

ALUMINUM & STEEL SUBSTRATE
SCALE: 3" = 1'-0"

SECTIONS A-A W/6A

MAX. ANCHOR 10 SPACING SCHEDULE AS PER NOTE 5A/1 AT ANGLE 11 TOP & BOTTOM

A.S.D. DESIGN LOAD (p.s.f.)	MAX. UNIT HEIGHT (FT)	SUBSTRATE			
		CONCRETE	GROUTED CONCRETE BLOCK	WOOD	STEEL OR ALUMINUM
≤ 75.0	≤ 5'-0"	6" O.C.	6" O.C.	6" O.C.	6" O.C.
	> 5'-0" - 10'-0"	6" O.C.	6" O.C.	3 1/4" O.C.	6" O.C.
>75-150	≤ 5'-0"	6" O.C.	6" O.C.	3 1/4" O.C.	6" O.C.
	>5'-0" - 10'-0"	6" O.C.	4 1/2" O.C.	N/A	4" O.C.

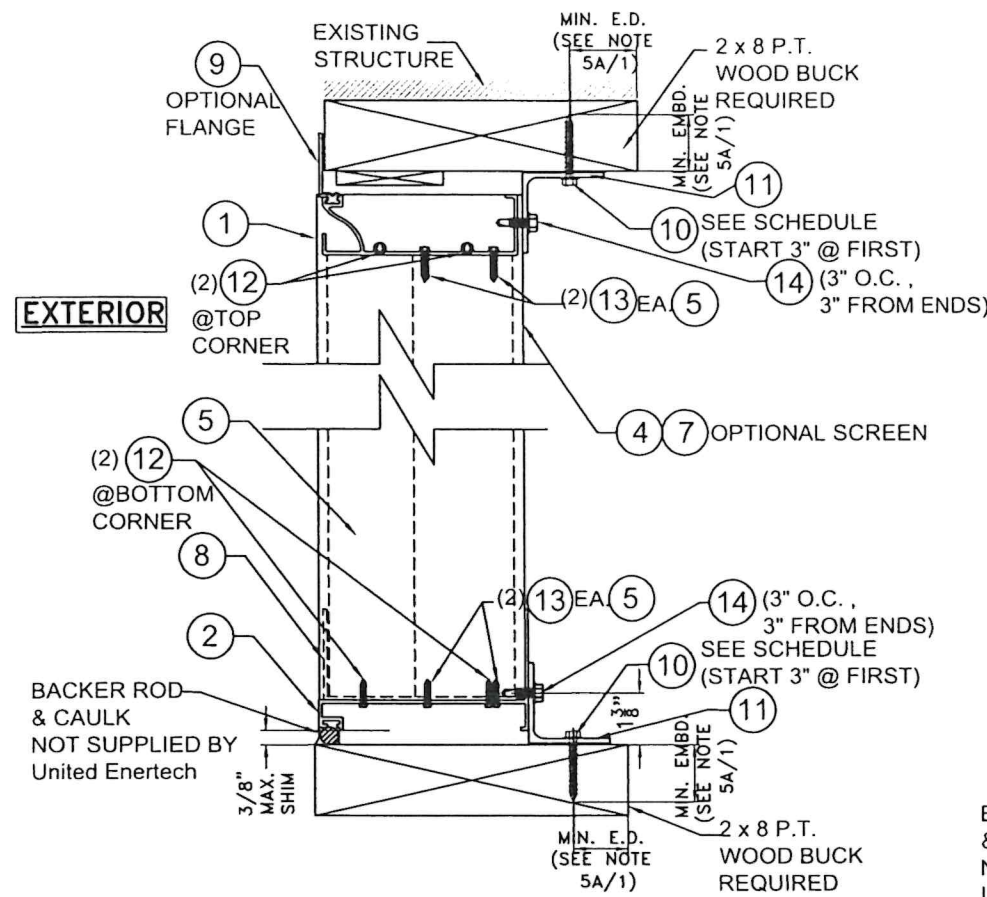
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Y.M. DRAWN BY: 7/14/2023 DATE: 23-094 DRAWING NO. SHEET 4 OF 6

MODEL WDV-130
VERTICAL ALUMINUM LOUVER SYSTEM
UNITED ENERTECH HOLDINGS, LLC
3005 SOUTH HICKORY ST.
CHATTANOOGA, TN 37407
PHONE: (423)698-7715 FAX: (423)698-6629

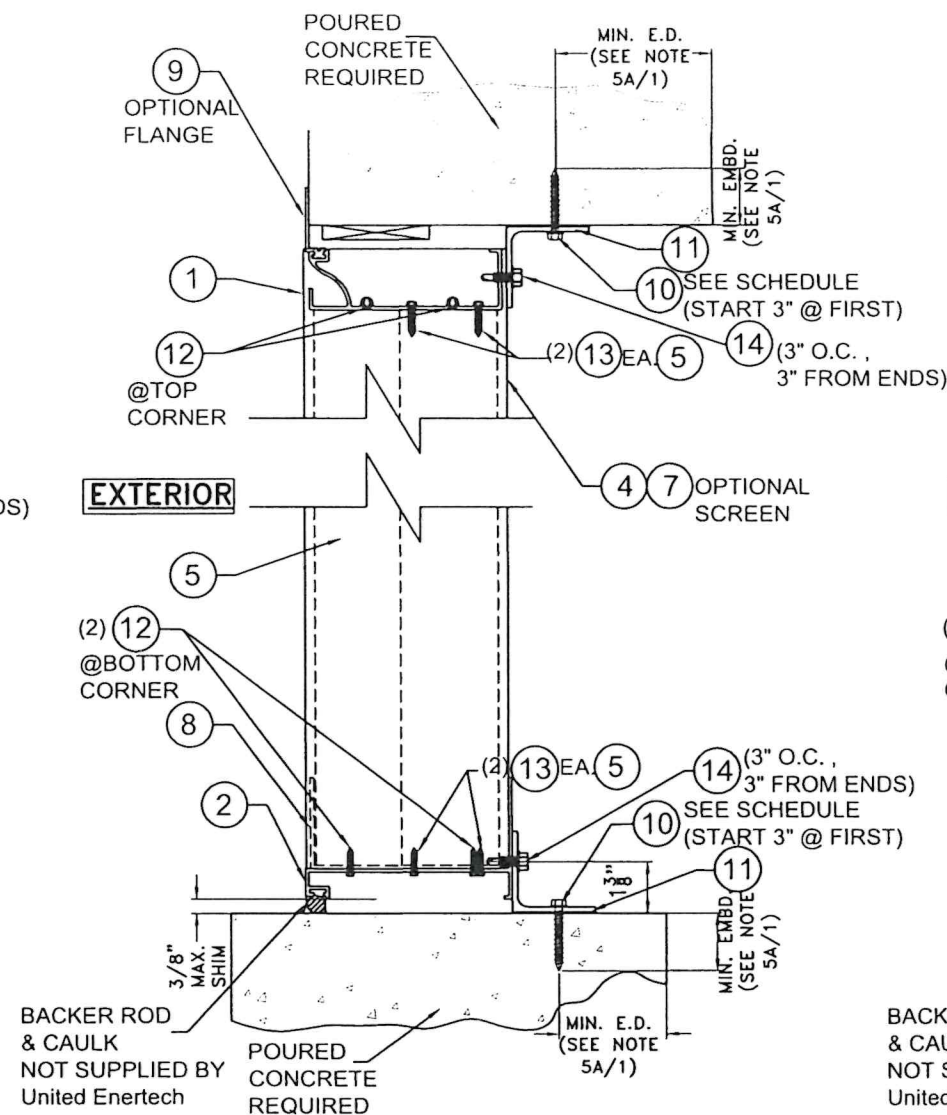
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WALTER A. TILLIT JR., P.E.
FLORIDA Lic. # 44167

Signature: *[Handwritten Signature]*
Date: 7/14/2023
Professional Seal: WALTER A. TILLIT JR. P.E. No. 44167 STATE OF FLORIDA PROFESSIONAL ENGINEER



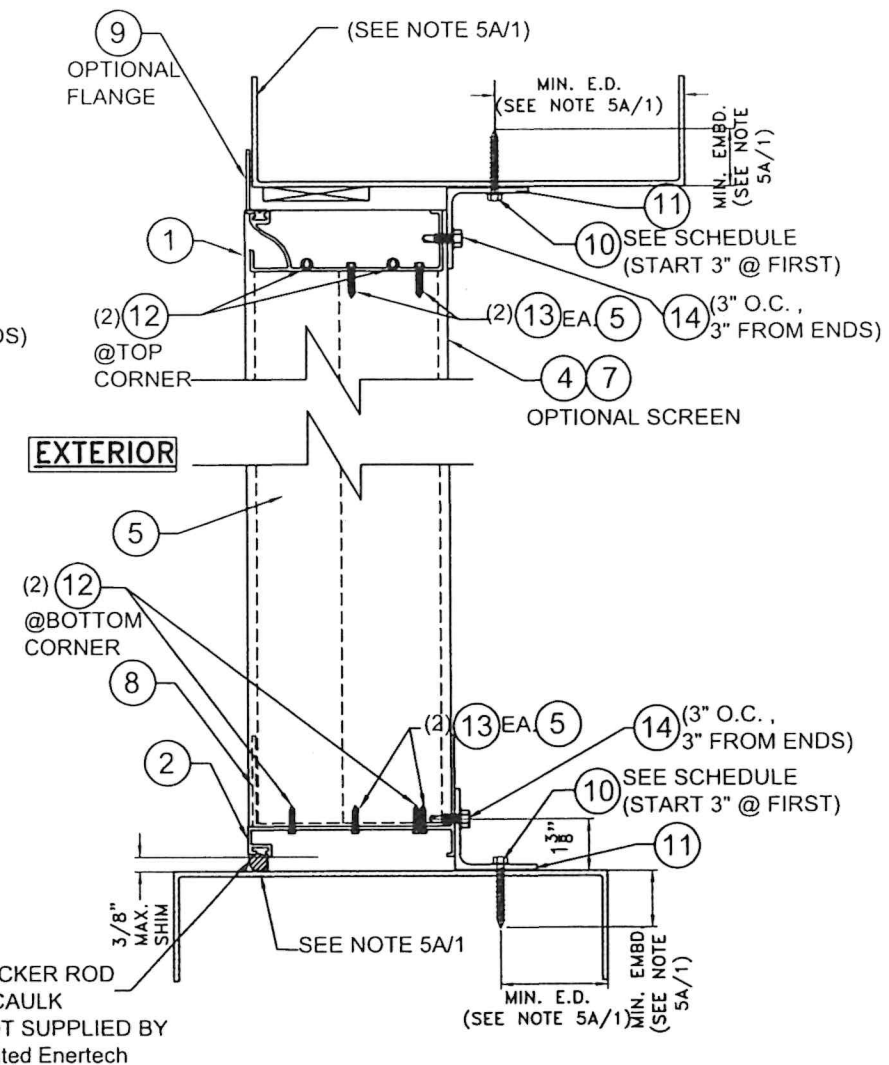
WOOD SUBSTRATE

SCALE: 3" = 1'-0"



CONCRETE SUBSTRATE

SCALE: 3" = 1'-0"



ALUMINUM & STEEL SUBSTRATE

SCALE: 3" = 1'-0"

SECTIONS A'-A' W/O (6A)

MAX. ANCHOR (10) SPACING SCHEDULE AS PER
NOTE 5A/1 AT ANGLE (11) TOP & BOTTOM

A.S.D. DESIGN LOAD (p.s.f.)	MAX. UNIT HEIGHT (FT)	SUBSTRATE			
		CONCRETE	GROUTED CONCRETE BLOCK	WOOD	STEEL OR ALUMINUM
≤ 75.0	≤ 5'-0"	6" O.C.	6" O.C.	6" O.C.	6" O.C.
	> 5'-0" - 10'-0"	6" O.C.	6" O.C.	3 1/4" O.C.	6" O.C.
>75-150	≤ 5'-0"	6" O.C.	6" O.C.	3 1/4" O.C.	6" O.C.
	>5'-0" - 10'-0"	6" O.C.	4 1/2" O.C.	N/A	4" O.C.

FLORIDA BUILDING CODE (HIGH & NON HIGH VELOCITY HURRICANE ZONE)

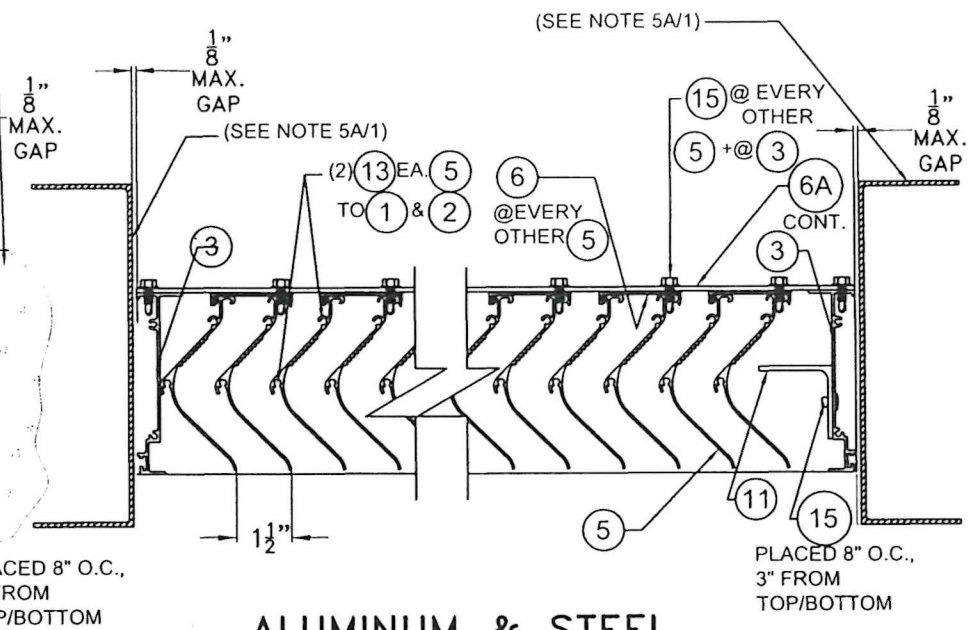
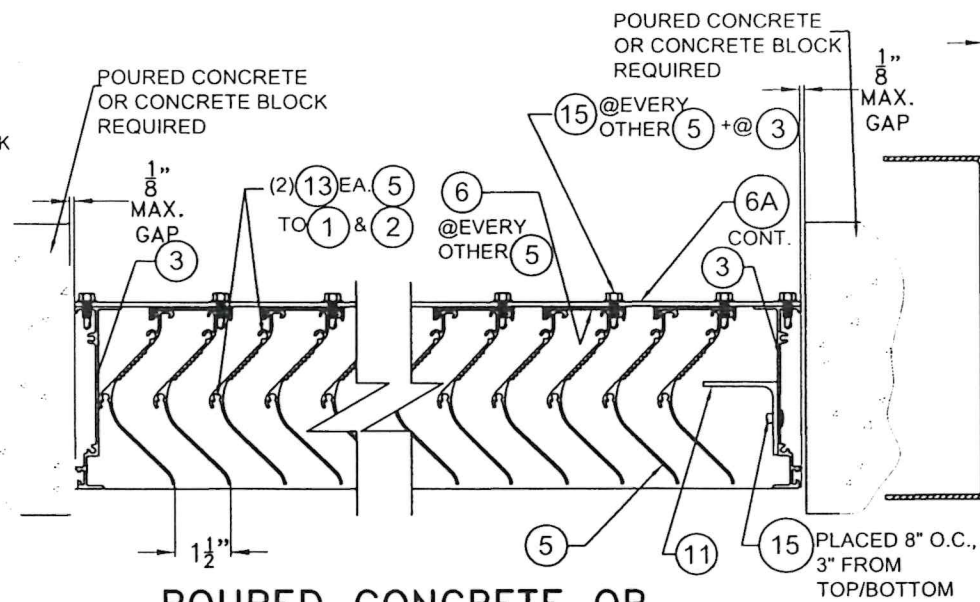
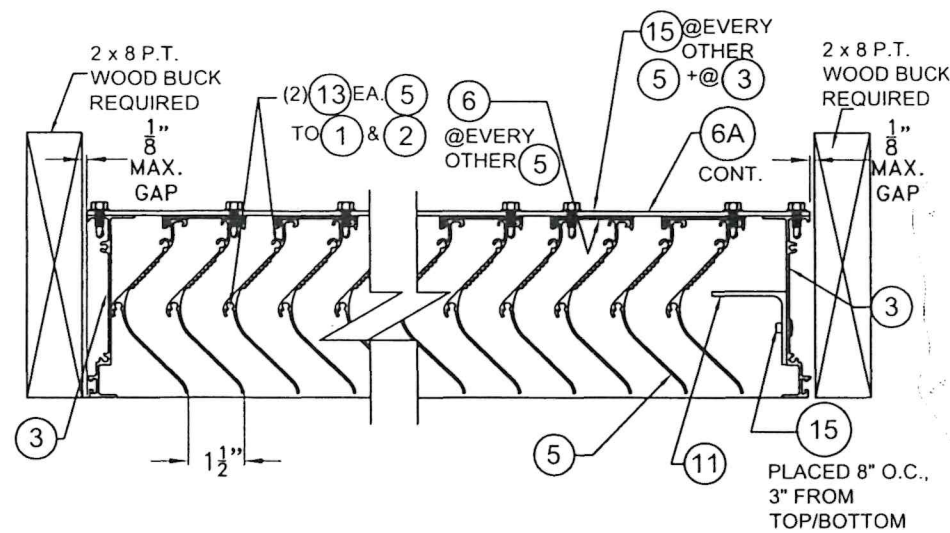
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SHEET 5 OF 6

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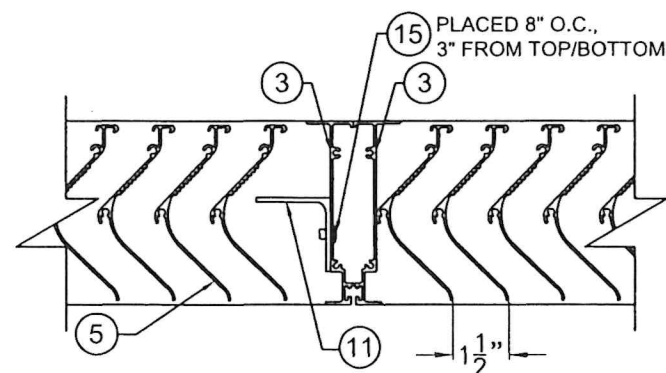
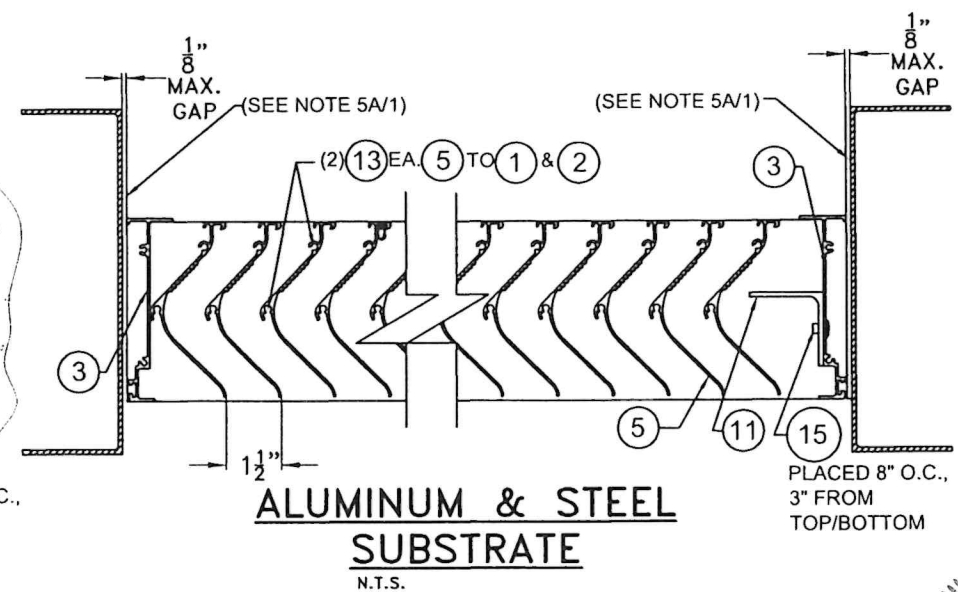
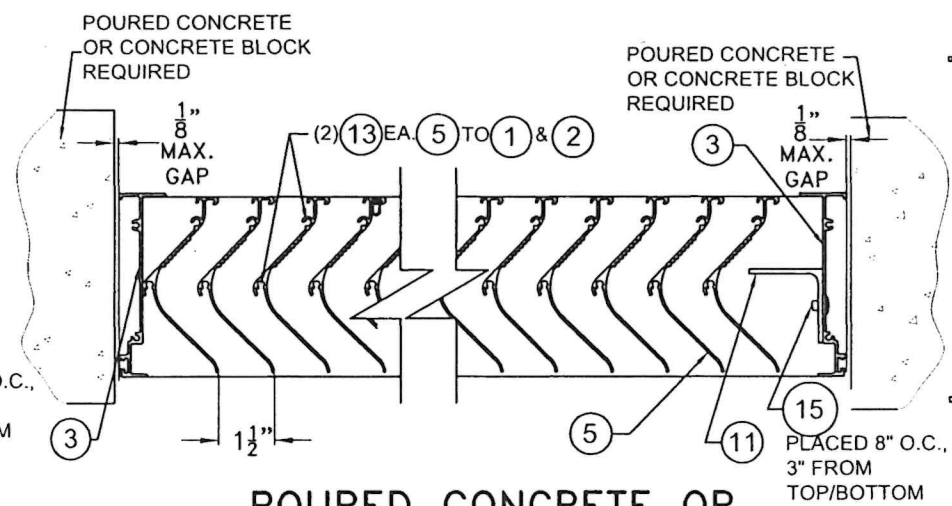
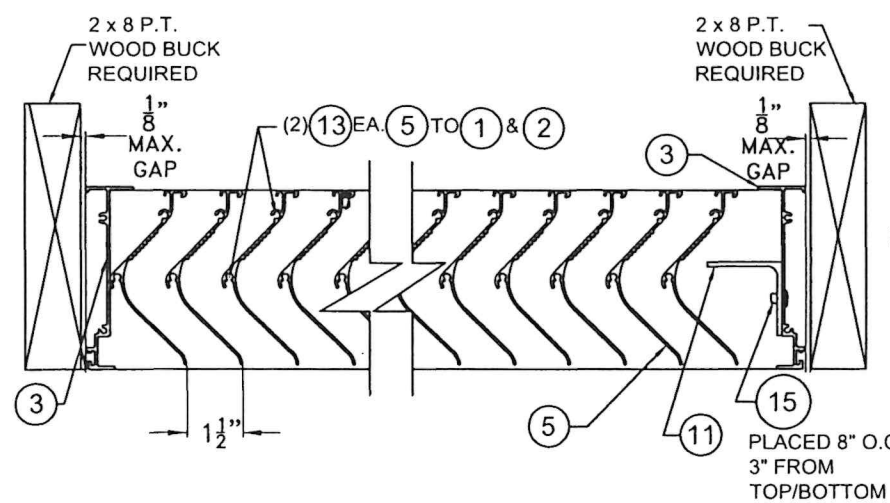
TILECO INC.
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No. 44167
STATE OF FLORIDA
WALTER A. TILLIT JR.
PROFESSIONAL ENGINEER
SEAL/SIGNATURE/DATE

7/14/2023



SECTIONS C-C W/6A
N.T.S.



SECTIONS C'-C' W/O (6A)
SCALE: 3" = 1'-0"

FLORIDA BUILDING CODE (HIGH & NON HIGH VELOCITY HURRICANE ZONE)

**MODEL WDV-130
VERTICAL ALUMINUM LOUVER SYSTEM**

UNITED ENERTECH HOLDINGS, LLC

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MATTANOOGA, TN 37407
PHONE: (423)898-7715

23-094
DRAWING No.

SHEET 6 OF 6

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P.E. SEAL/SIGNATURE/DATE