

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 2017 (6th EDITION) OF THE FLORIDA BUILDING CODE. THIS ALUMINUM LOUVER SYSTEM MAY BE INSTALLED AT HIGH VELOCITY HURRICANE ZONES AND OUT OF IT.

DESIGN WIND LOADS SHALL BE DETERMINED AS PER SECTIONS 1620 & 1609 OF THE ABOVE MENTIONED CODE, USING ASCE 7-10 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 7-10 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=1.5ksi 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 WITH SECTION III-6 OF THE 2015 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 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.

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)

M.P. DRAWN BY: 12/6/19 DATE: 19-106 DRAWING No. SHEET 1 OF 6

MODEL WDV-130 VERTICAL ALUMINUM LOUVER SYSTEM

UNITED ENERTECH HOLDINGS, LLC
3005 SOUTH HICKORY ST. HARTFORD, AL 36344
CHATTANOOGA, TN 37407 PHONE: (423)698-7715 FAX: (423)698-6629

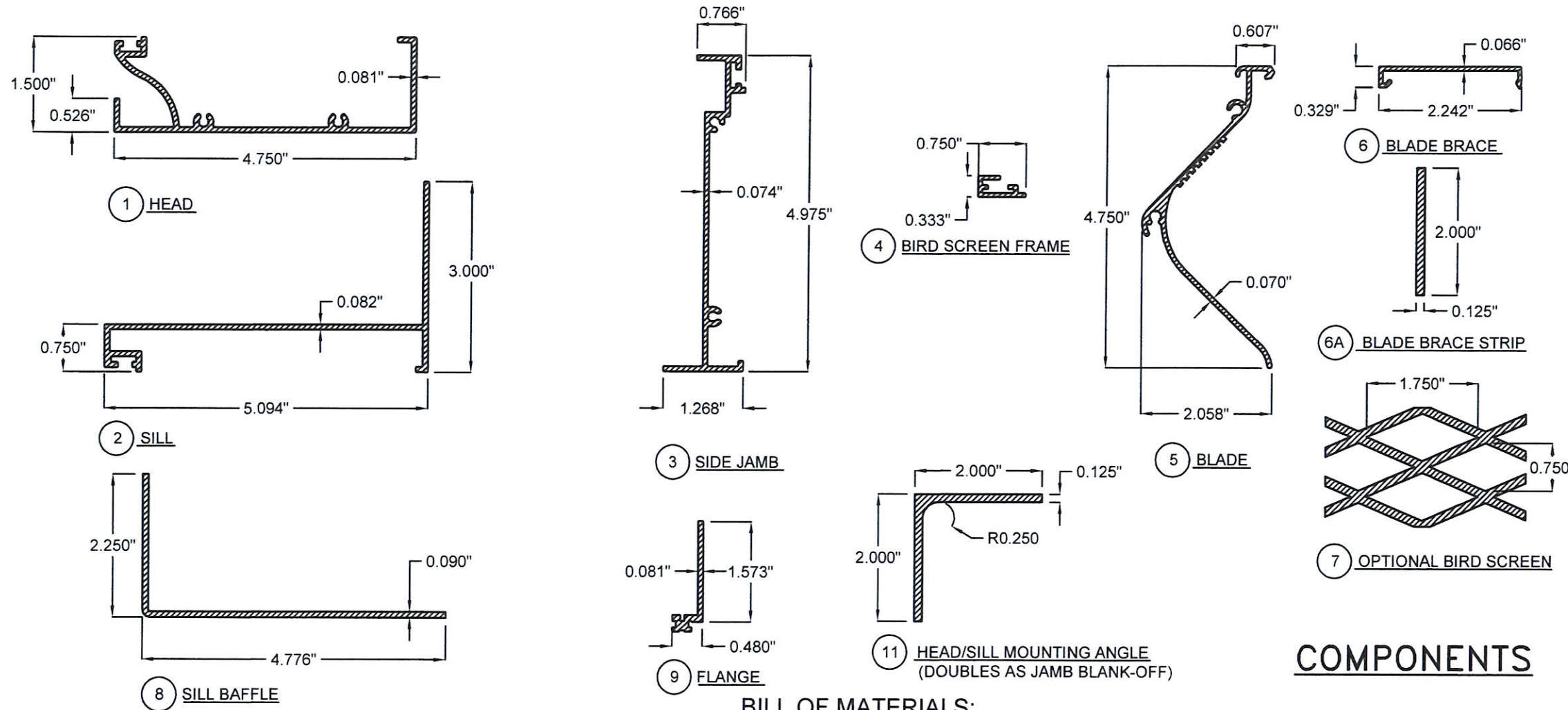
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TILLIT TESTING & ENGINEERING COMPANY
635 W. 36th St., Virginia Gardens, FL 33166
Phone: (305)871-1511
WALTER A. TILLIT JR., P.E.
FLORIDA Lic. # 44167

WALTER A. TILLIT JR. LICENSE No. 44167 STATE OF FLORIDA PROFESSIONAL ENGINEER

12/6/19

P.E. SEAL/SIGNATURE/DATE



COMPONENTS

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 |

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

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 FLORIDA LIC. # 44167

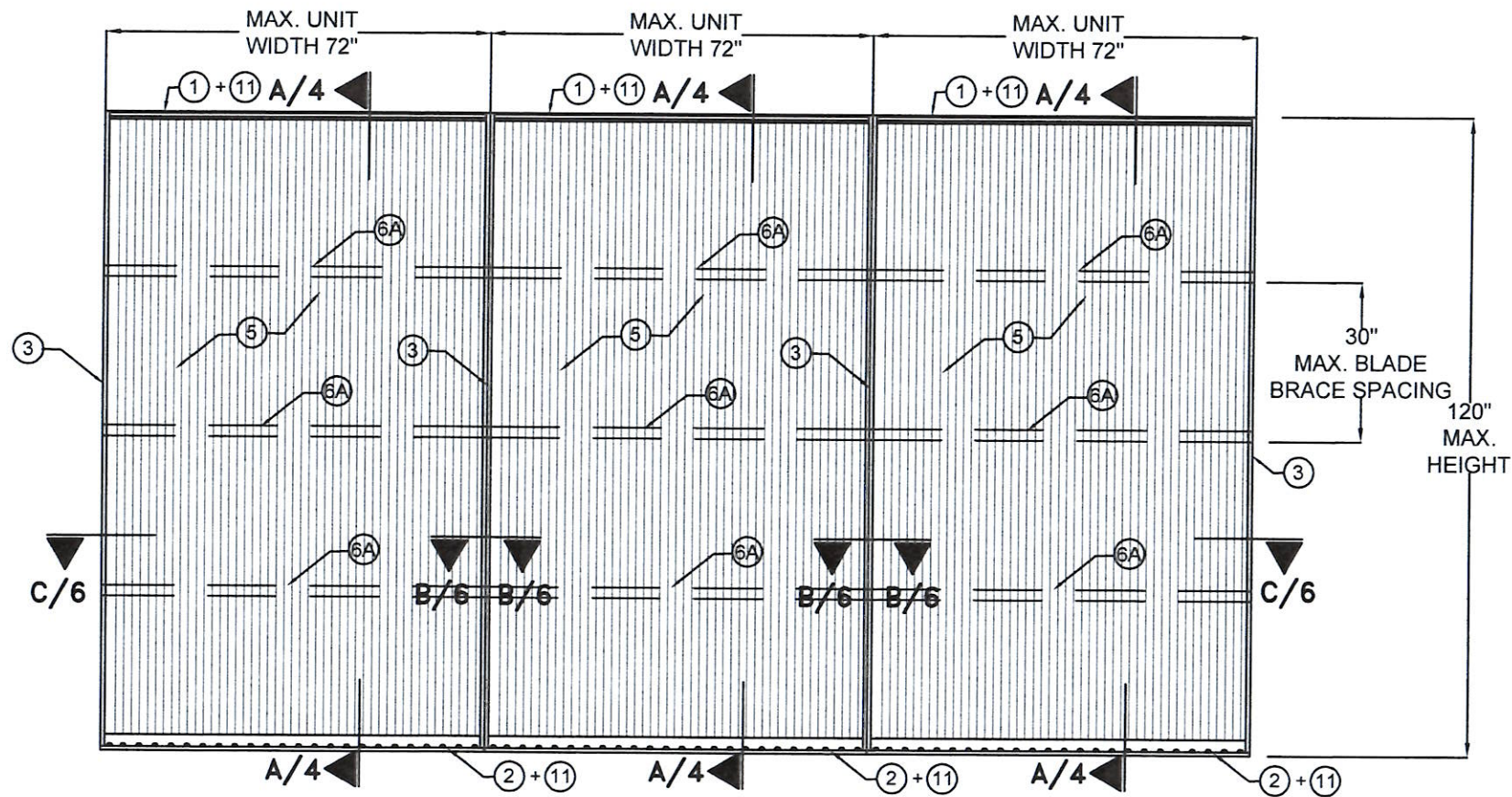
MODEL WDV-130
 VERTICAL ALUMINUM LOUVER SYSTEM

UNITED ENERTECH HOLDINGS, LLC
 3005 SOUTH HICKORY ST.
 CHATTANOOGA, TN 37407 HARTFORD, AL 36344
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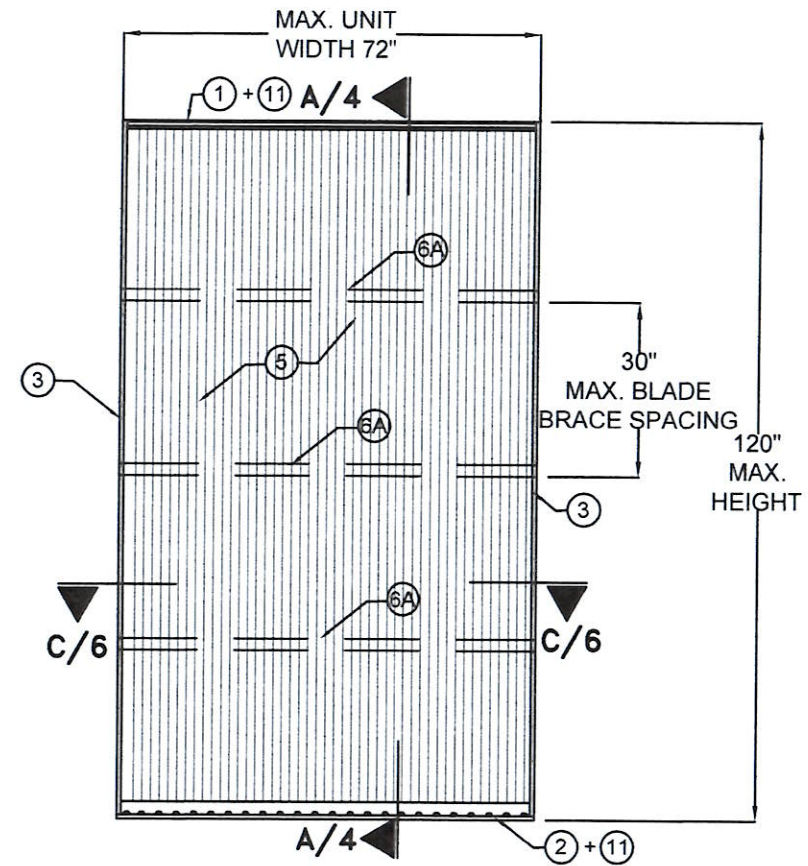
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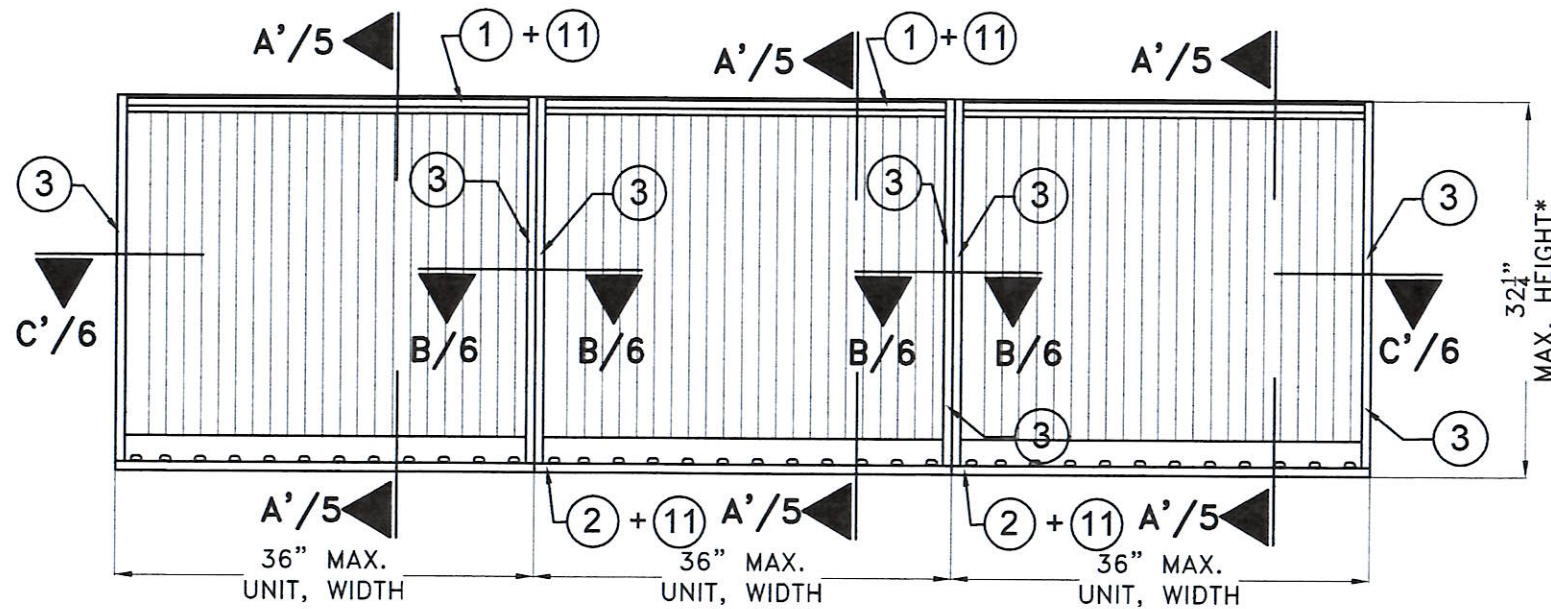
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 LICENSE No. 44167
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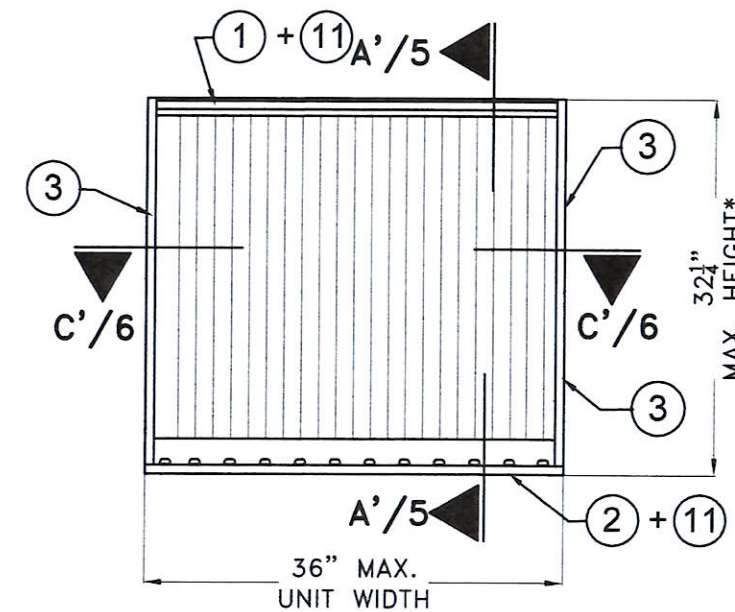
**EXTERIOR ELEVATION
MULTIPLE UNITS W/ 6A**



**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)

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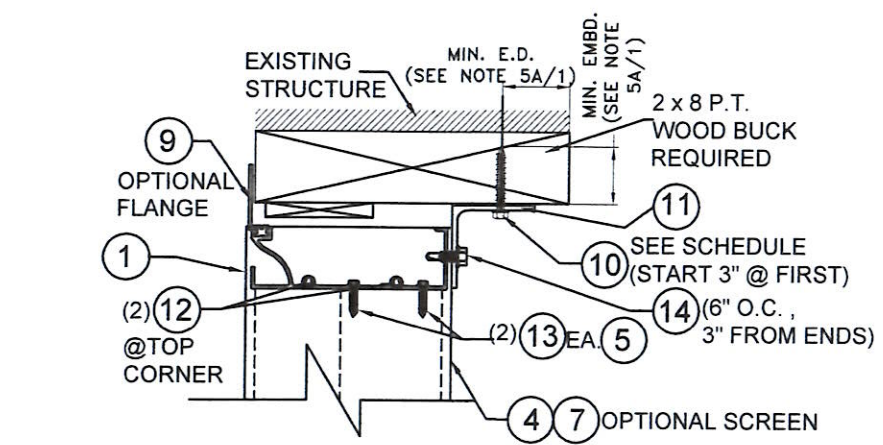
MODEL WDV-130
VERTICAL ALUMINUM LOUVER SYSTEM

UNITED ENERTECH HOLDINGS, LLC

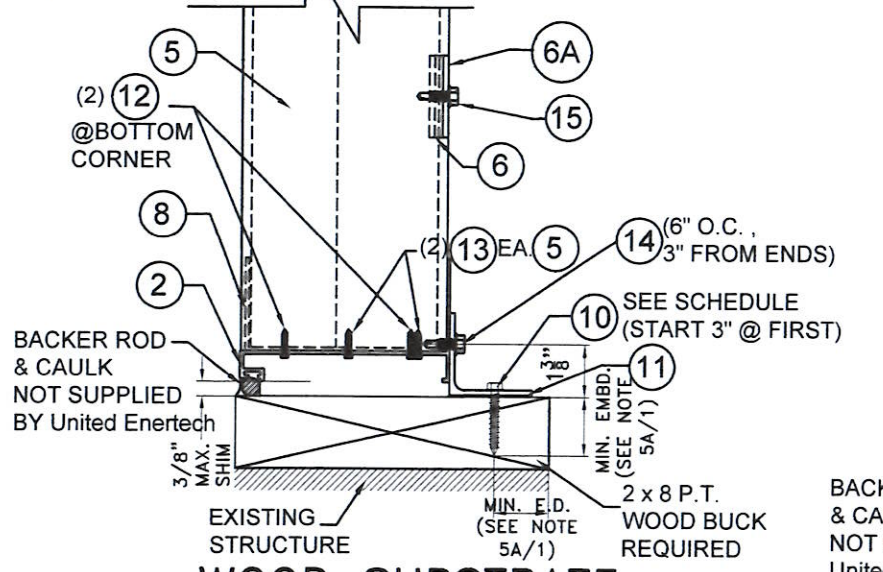
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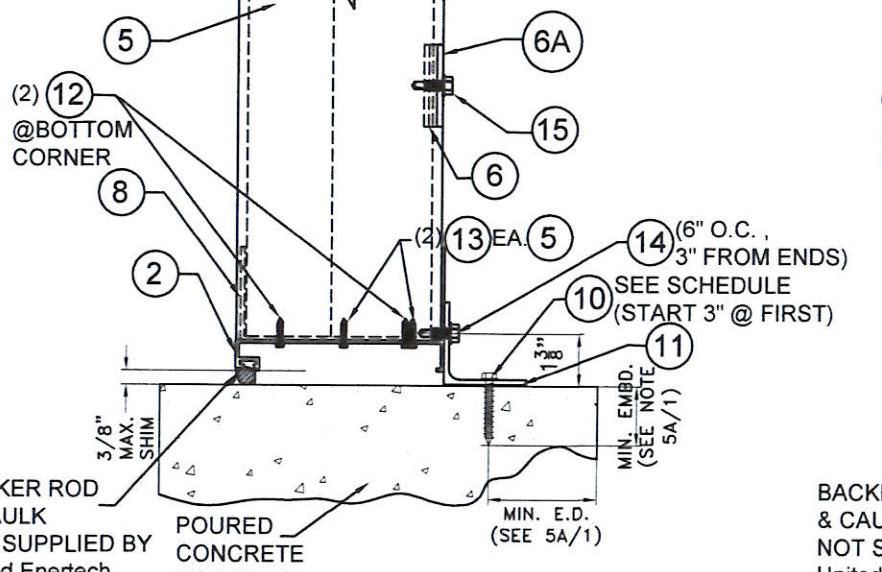
Signature: *Walter A. Tillit Jr.*
Date: 12/6/19
P.E. SEAL/SIGNATURE/DATE



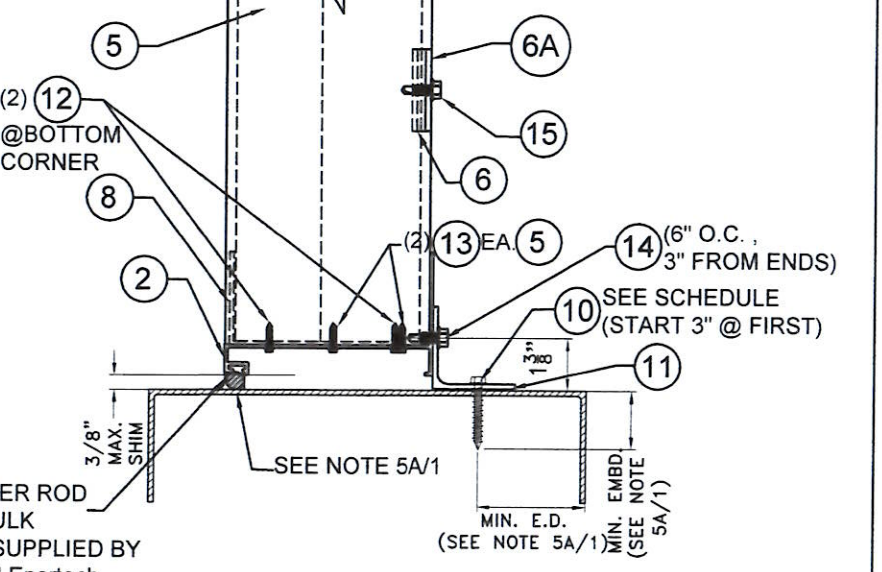
EXTERIOR



EXTERIOR



EXTERIOR



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. |

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

MODEL WDV-130
VERTICAL ALUMINUM LOUVER SYSTEM

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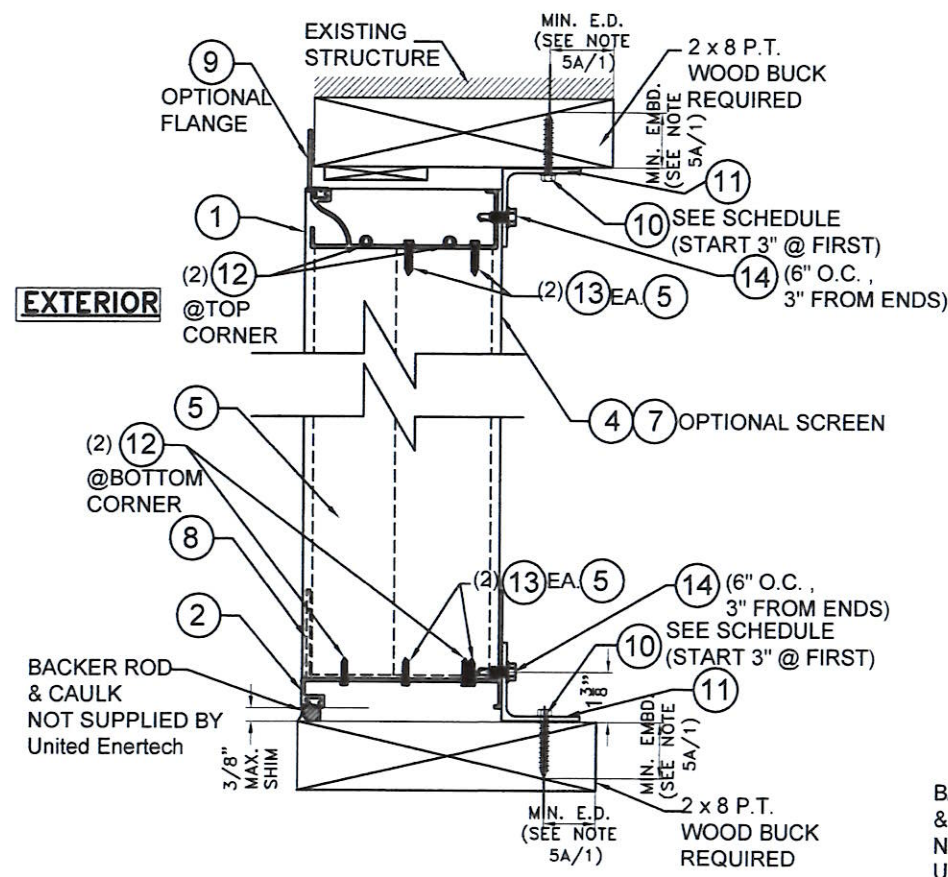
TILECO INC.
TILIT TESTING & ENGINEERING COMPANY
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Phone: (305)871-1530 Fax: (305)871-1531
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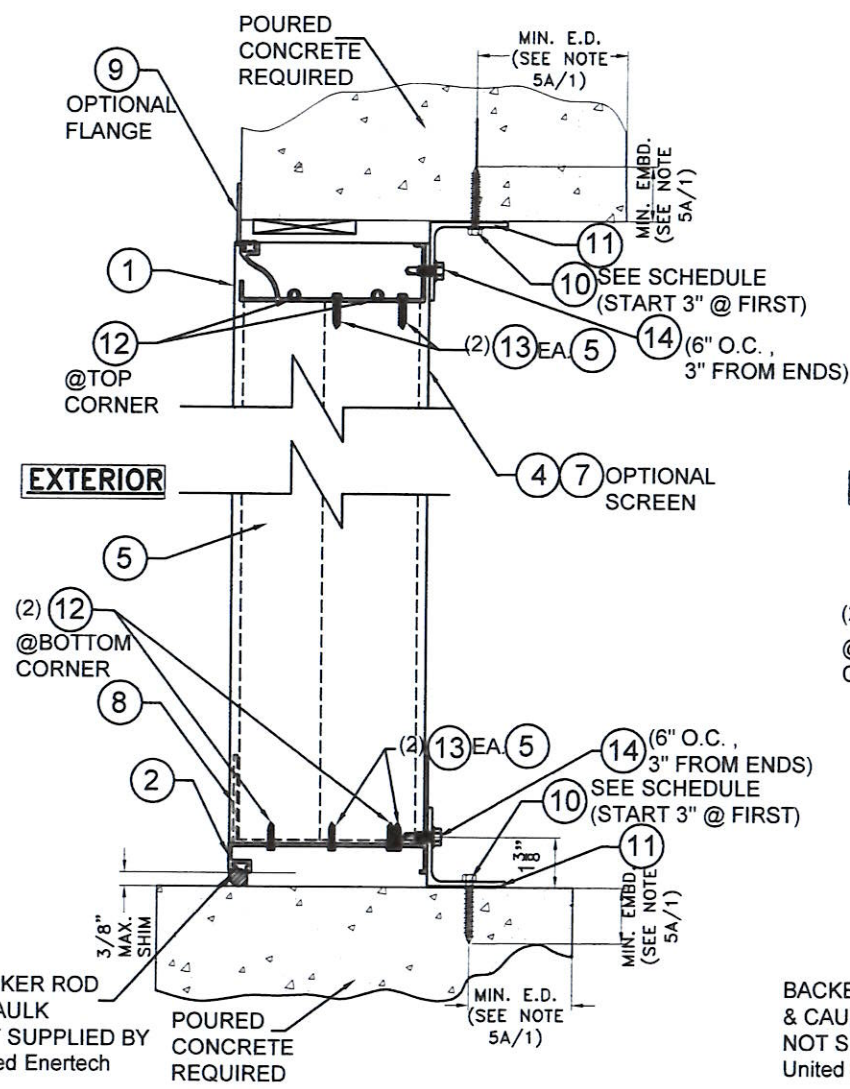
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Professional Engineer Seal for Walter A. Tilit Jr., P.E., License No. 44167, State of Florida.

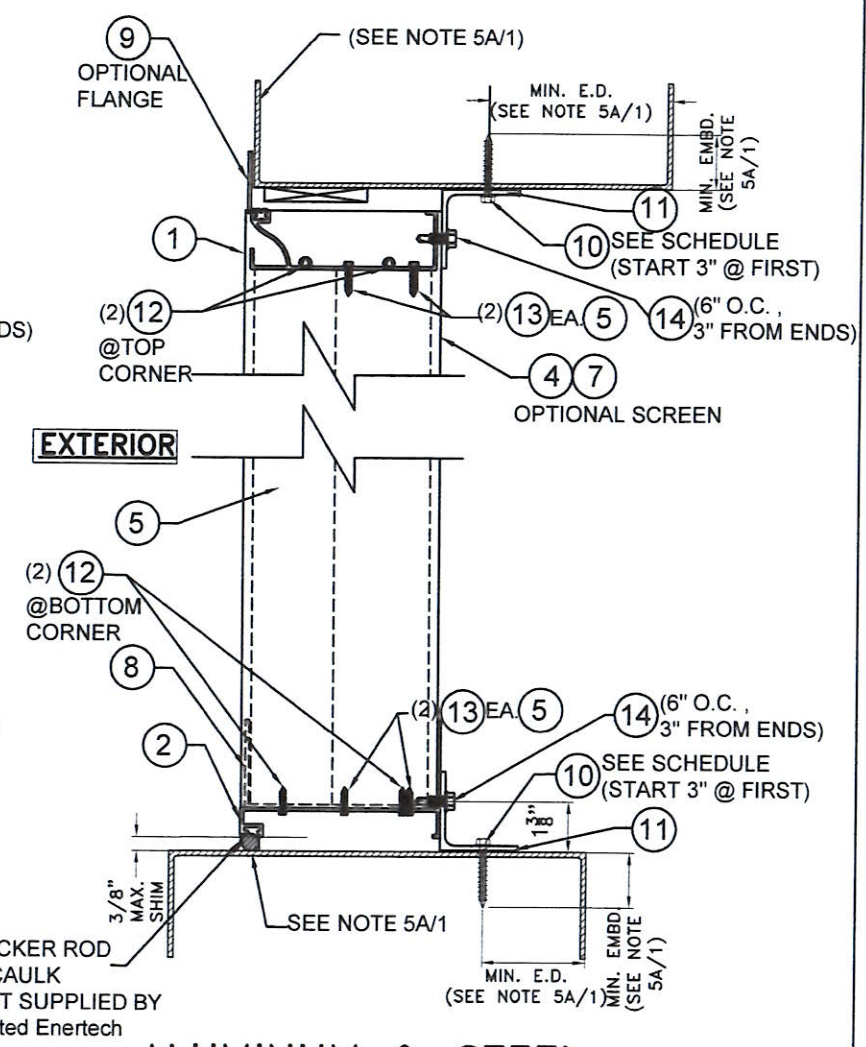
Signature: *[Handwritten Signature]*
Date: 12/6/19



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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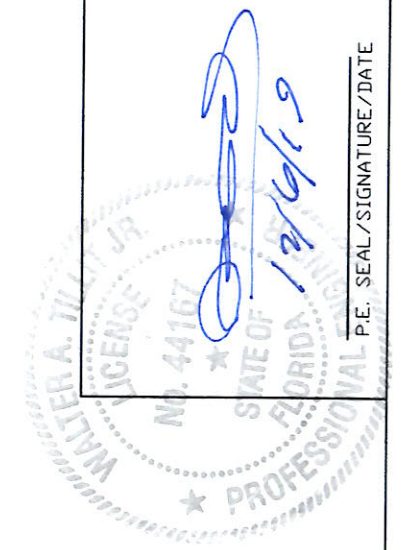
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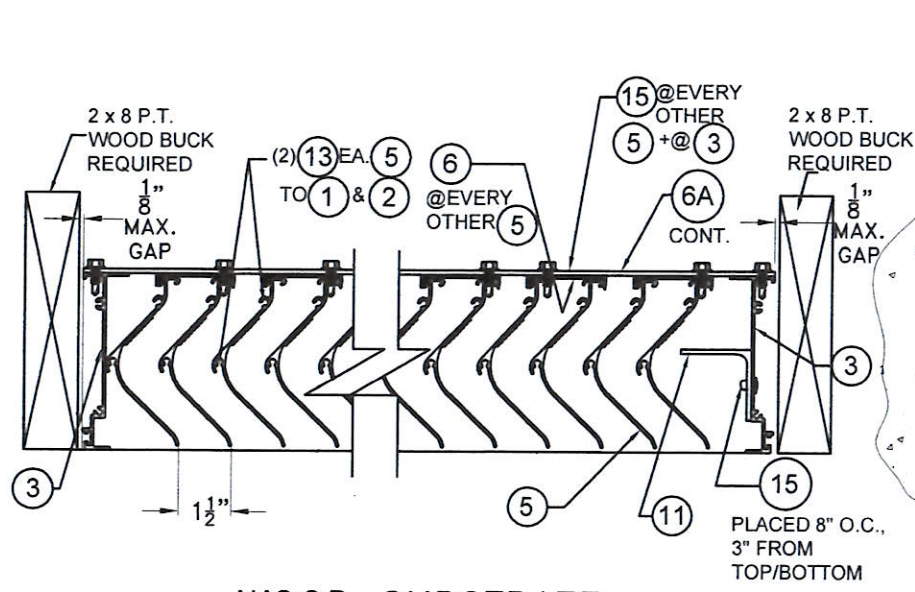
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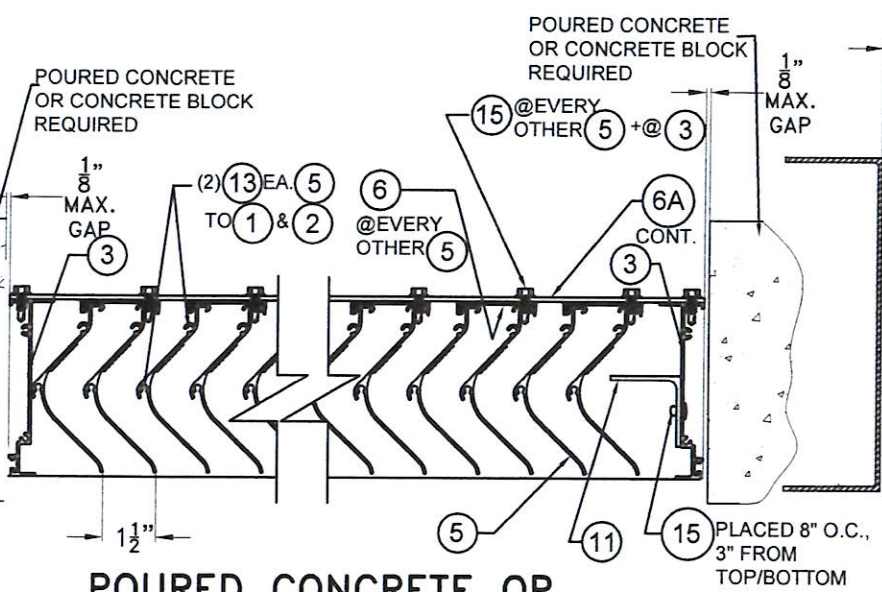
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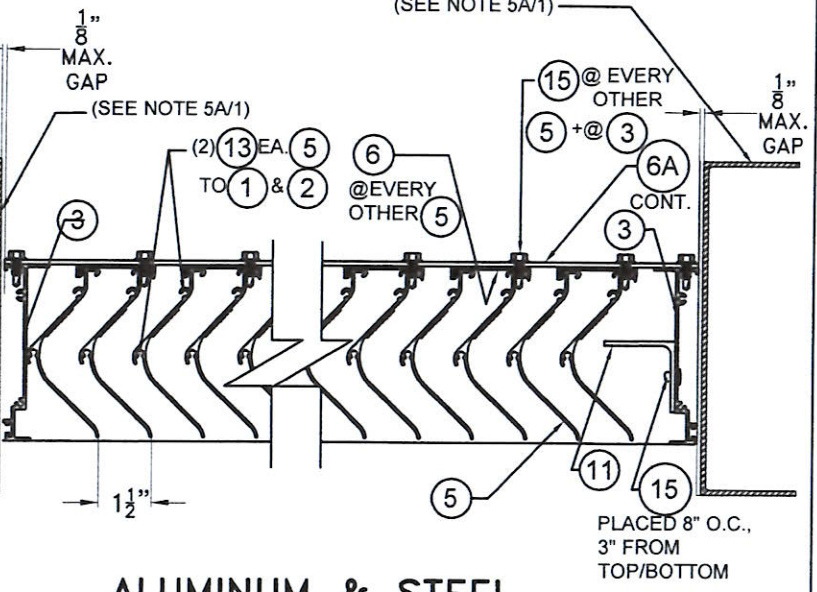




WOOD SUBSTRATE
N.T.S.

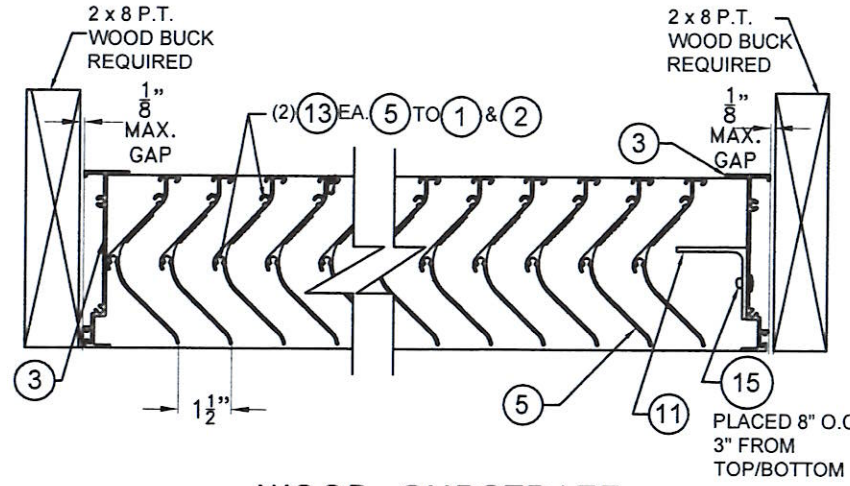


POURED CONCRETE OR CONCRETE BLOCK SUBSTRATE
N.T.S.

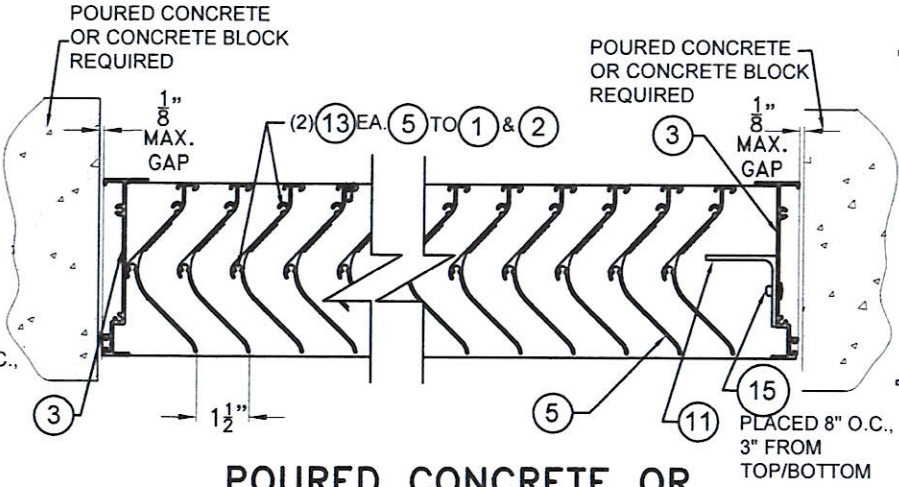


ALUMINUM & STEEL SUBSTRATE
N.T.S.

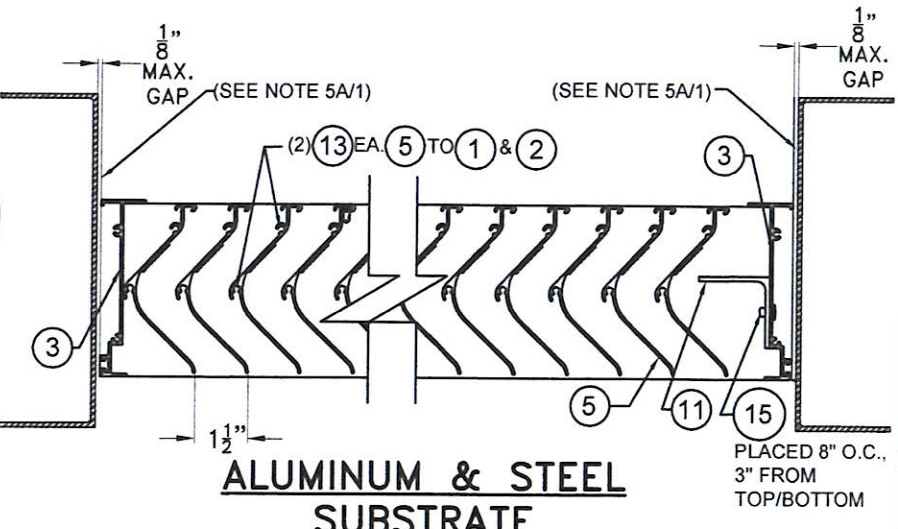
SECTIONS C-C W/6A
N.T.S.



WOOD SUBSTRATE
N.T.S.

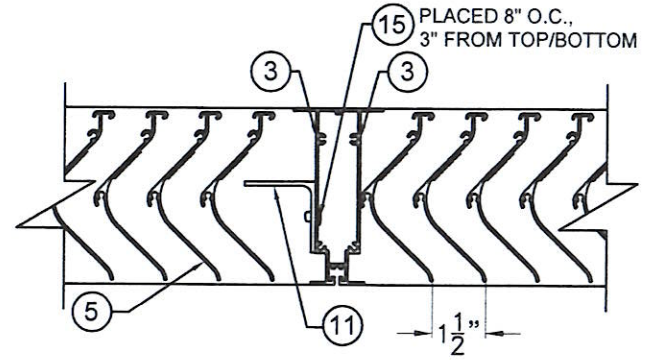


POURED CONCRETE OR CONCRETE BLOCK SUBSTRATE
N.T.S.



ALUMINUM & STEEL SUBSTRATE
N.T.S.

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



SECTION B-B
N.T.S.

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