



DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)  
 BOARD AND CODE ADMINISTRATION DIVISION  
**NOTICE OF ACCEPTANCE (NOA)**

**United Enertech Corp.**  
**3005 South Hickory Street**  
**Chattanooga, TN 37407**

**SCOPE:**

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER-Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code, including the High Velocity Hurricane Zone.

**DESCRIPTION: Model SED-5.1 Aluminum Louver with or without CD-151 Damper**

**APPROVAL DOCUMENT:** Drawing No. 17-125, titled "SED-5.1 Louver System with or without CD-151 Damper Assembly", sheets 1 through 16 (including sheet 4A) of 16, dated 08/02/2017, prepared by Tilteco, Inc., signed and sealed by Walter A. Tillit Jr., P.E., bearing the Miami-Dade County Product Control renewal stamp with the Notice of Acceptance number and expiration date by the Miami-Dade County Product Control Section.

**MISSILE IMPACT RATING: Large and Small Missile Impact Resistant.**

**LABELING:** Each unit shall bear a permanent label with the manufacturer's name or logo, city, state, model/series, and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

**LIMITATIONS:**

1. See sheet 1, notes 6, 7 & 8 for louver system w/wo damper applications.
2. See sheet 4 for single span multi-louver unit application with 72" max O.C. mullion (12L w/ mullion connectors). See sheet 15 for Design Pressure Rating, mullion spacing and connections to substrates. See sheet 16 for jamb anchors.
3. See sheet 4A for Single max 72" width louver units with Design Pressure Ratings VS Height. See sheet 16 for jamb anchors.

**RENEWAL** of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

**TERMINATION** of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

**ADVERTISEMENT:** The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

**INSPECTION:** A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA **renews NOA # 17-0823.08** and consists of this page 1 and evidence pages E-1 and E-2, as well as approval document mentioned above.

The submitted documentation was reviewed by **Ishaq I. Chanda, P.E.**



NOA No. 19-0520.01  
 Expiration Date: November 20, 2023  
 Approval Date: June 20, 2019  
 Page 1

6/11/19

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

**1. EVIDENCE SUBMITTED UNDER PREVIOUS NOA's**

**A. DRAWINGS "Submitted under NOA # 16-0209.13"**

1. Drawing No. **15-026**, titled "SED-5.1 Louver System with or without CD-151 Damper Assembly", sheets 1 through 16 (including sheet 4A) of 16, dated 03/16/2015, with revision 2 dated 01/19/2016, prepared by Tilteco, Inc., signed and sealed by Walter A. Tillit Jr., P.E.

**B. TESTS "Submitted under NOA # 08-1003.07"**

1. Test reports on 1) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94  
2) Large Missile Impact Test per FBC, TAS 201-94  
3) Cyclic Wind Pressure Loading per FBC, TAS 203-94  
along with marked-up drawings and installation diagram of Model SED-5.1 Louver System, prepared by American Test Lab of South Florida, Test Report No. **0514.01-08**, dated 09/15/2008, signed and sealed by William R. Mehner, P.E., and Henry Hattem, P.E.
2. Test Report on Wind and Wind Driven Rain Resistance Test per TAS 100(A)-95 of a Model CD-151 Parallel Blade Damper, prepared by PRI Asphalt Technologies, Report No. **UEC-001-02-01**, dated 02/08/2005, signed and sealed by Charles L. Thomas, P.E.

**C. CALCULATIONS "Submitted under NOA # 15-0420.02 and # 08-1003.07"**

1. Anchor calculations, prepared by Tilteco Inc, dated 03/16/2015, sheets 1 through 3 of 3, complying with F.B.C. 2014, signed and sealed by Walter A. Tillit Jr., P.E.
2. Anchor, stress and deflection calculations, prepared by Tilteco Inc, dated 09/09/2009, sheets 1 through 13 of 13, complying with F.B.C. 2007, signed and sealed by Walter A. Tillit Jr., P.E.
3. Anchor, stress and deflection calculations, prepared by Tilteco Inc, dated 09/17/2008, sheets 1 through 79 of 79, complying with F.B.C. 2004, signed and sealed by Walter A. Tillit Jr., P.E.

**D. QUALITY ASSURANCE**

1. Miami-Dade Department of Regulatory and Economic Resources (RER)

**E. MATERIAL CERTIFICATIONS**

1. None.

**F. STATEMENTS "Submitted under NOA # 15-0420.02"**

1. Statement letter of code conformance to the 5<sup>th</sup> edition (2014) FBC issued by Tilteco, Inc. on 03/31/2015, signed and sealed by Walter A. Tillit Jr., P.E.
2. Statement letter of code conformance to 2010 FBC issued by Tilteco, Inc. on 05/28/2013, signed and sealed by Walter A. Tillit Jr., P.E. "**Submitted under NOA # 13-0604.09**"
3. No financial interest letter issued by Tilteco, Inc., dated 09/10/2009, signed and sealed by Walter A. Tillit Jr., P.E. "**Submitted under NOA # 08-1003.07**".

**2. EVIDENCE SUBMITTED under NOA # 17-0823.08.**

**A. DRAWINGS**

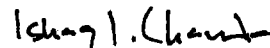
1. Drawing No. **17-125**, titled "SED-5.1 Louver System with or without CD-151 Damper Assembly", sheets 1 through 16 (including sheet 4A) of 16, dated 08/02/2017, prepared by Tilteco, Inc., signed and sealed by Walter A. Tillit, Jr., P.E.

**B. TESTS**

1. None.

**C. CALCULATIONS**

1. None.



Ishaq I. Chanda, P.E.

Product Control Unit Supervisor

NOA No. 19-0520.01

Expiration Date: November 20, 2023

Approval Date: June 20, 2019

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

**2. EVIDENCE under NOA # 17-0823.08 (continue):**

**D. QUALITY ASSURANCE**

1. Miami-Dade Department of Regulatory and Economic Resources (RER)

**E. MATERIAL CERTIFICATIONS**

1. None.

**F. STATEMENTS**

1. Statement letter of code conformance to **6<sup>th</sup> Edition (2017) FBC**, issued by Tilteco, Inc., dated 08/02/2017, signed and sealed by Walter A. Tillit Jr., P.E.

**3. New EVIDENCE SUBMITTED**

**A. DRAWINGS "Submitted under NOA # 17-0823.08"**

1. Drawing No. **15-026**, titled "SED-5.1 Louver System with or without CD-151 Damper Assembly", sheets 1 through 16 (including sheet 4A) of 16, dated 03/16/2015, with revision 2 dated 01/19/2016, prepared by Tilteco, Inc., signed and sealed by Walter A. Tillit Jr., P.E.

**B. TESTS (Verification Tests)**

1. Test reports on 1) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94  
2) Large Missile Impact Test per FBC, TAS 201-94  
3) Cyclic Wind Pressure Loading per FBC, TAS 203-94  
along with marked-up drawings and installation diagram of Model SED-5.1 Louver System w/ CD-151 damper, prepared by PRI Construction Materials Technologies, LLC, Test Report No. **UNEN-003-02-02**, dated 04/23/2019, signed and sealed by Zachary Priest, P.E.
2. Test Report on Wind and Wind Driven Rain Resistance Test per TAS 100(A)-95 of a Model SED-5.1 Louver System w/ CD-151 damper, prepared by PRI Construction Materials Technologies, LLC, Report No. **UNEN-003-02-01**, dated 04/17/2019, signed and sealed by Zachary Priest, P.E.

**C. CALCULATIONS "Submitted under NOA # 15-0420.02"**

1. None.

**D. QUALITY ASSURANCE**

1. Miami-Dade Department of Regulatory and Economic Resources (RER).

**E. MATERIAL CERTIFICATIONS**

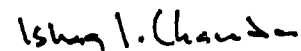
1. None.

**F. STATEMENTS "Submitted under NOA # 15-0420.02"**

1. Statement letter for renewal with verification test, issued by Tilteco, Inc., dated 05/16/2019, signed and sealed by Walter A. Tillit Jr., P.E.
2. Statement letter of code conformance to **6<sup>th</sup> Edition (2017) FBC**, issued by Tilteco, Inc., dated 08/02/2017, signed and sealed by Walter A. Tillit Jr., P.E. (submitted under file #17-0823.08).

**G. OTHER**

1. This NOA **renews NOA # 17-0823.08**, expiring 11/20/2023.



Ishaq I. Chanda, P.E.  
Product Control Unit Supervisor  
NOA No. 19-0520.01

Expiration Date: November 20, 2023  
Approval Date: June 20, 2019

**GENERAL NOTES:**

1). SED-5.1 LOUVER SYSTEM WITH OR WITHOUT CD-151 DAMPER SHOWN ON THIS PRODUCT APPROVAL DOCUMENT (P.A.D.) HAS BEEN VERIFIED FOR COMPLIANCE IN ACCORDANCE WITH THE 2017 (6th EDITION) OF THE FLORIDA BUILDING CODE. THIS SED-5.1 LOUVER SYSTEM WITH OR WITHOUT CD-151 DAMPER MAY BE INSTALLED AT HIGH VELOCITY HURRICANE ZONES (MIAMI-DADE / BROWARD COUNTIES).

DESIGN WIND LOADS SHALL BE DETERMINED AS PER SECTION 1620 OF THE ABOVE MENTIONED CODE, USING ASCE 7-10 AND SHALL NOT EXCEED THE MAXIMUM (A.S.D.) DESIGN PRESSURE RATINGS INDICATED ON SHEETS 4A & 15.

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 TO COMPARE THESE W/ MAX. (A.S.D) DESIGN PRESSURE RATINGS INDICATED ON SHEETS 4A & 15.

IN ORDER TO VERIFY THAT COMPONENTS ON THIS (P.A.D.), AS TESTED, WERE NOT OVERSTRESSED, A 33% INCREASE IN ALLOWABLE STRESS FOR WIND LOADS WAS NOT USED IN THEIR ANALYSIS. ALUMINUM SED-5.1 LOUVER SYSTEM WITH OR WITHOUT CD-151 DAMPER ADEQUACY FOR IMPACT AND FATIGUE RESISTANCE HAS BEEN VERIFIED IN ACCORDANCE WITH SECTION 1626 OF THE ABOVE MENTIONED CODES AS PER AMERICAN TESTING LAB REPORT# 0514.01-08, AS PER TAS-201, TAS-202, TAS-203, AS WELL AS PER ANSI/AMCA IMPACT STANDARD 540, PER INTERTEK/ARCHITECTURAL TESTING REPORT # F 3136.01-550-44 & PRI TECHNOLOGIES LAB REPORT # UEC-001-02-01, PER TAS-100A (WIND DRIVEN RAIN, EXCEEDS ANSI/AMCA 550-15 STANDARD). THE LOUVER MUST HAVE THE CD-151 DAMPER INSTALLED BEHIND IT (AND IN THE CLOSED BLADE POSITION) TO MEET THE TAS 100(A) OR AMCA 550 REQUIREMENTS.

**A.S.D. DESIGN PRESSURE RATING:**

VARIES (psf), FOR ALL SINGLE UNITS W/ SQUARE EDGES WITHOUT MULLIONS WITH OR WITHOUT DAMPER. (SEE SCHEDULE ON SHEET 4A), AND +150, -150 psf. FOR ALL SINGLE UNITS W/ CURVED EDGES W/O DAMPER.

VARIES (psf), FOR ALL MULTIPLE UNITS WITH MULLIONS (12L) WITH OR WITHOUT DAMPER (SEE SCHEDULE ON SHEET 15).

- 2). ALL ALUMINUM EXTRUSIONS SHALL BE 6063-T5 ALLOY WITH MIN. SPECIFIC YIELD STRENGTHS AS SHOWN ON SHEET 2 AND 3.
- 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). ANCHORS TO EXISTING STRUCTURE'S JAMBS SHALL BE AS FOLLOWS (SEE SHEETS 11 AND 16):

- ANCHORS SHALL BE INSTALLED FOLLOWING ALL OF THE RECOMMENDATIONS AND SPECIFICATIONS OF THE ANCHOR'S 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= 3192psi) MIN.	TO CONCRETE BLOCK (C-90 UNIT)	TO 1/8" MIN. STEEL Fy=33 ksi (MIN.)	CONCRETE OR CONCRETE BLOCK	STEEL
TAPCONS	ITW/ BUILDEX	1/4"	1-3/4"	1-1/4"	N/A	3"	N/A
TEK SCREWS	ITW/ BUILDEX	1/4"	N/A	N/A	3/4"	N/A	1"

- ANCHORS FOR MULLION CONNECTIONS SHALL BE AS INDICATED ON SHEETS 12 AND 13

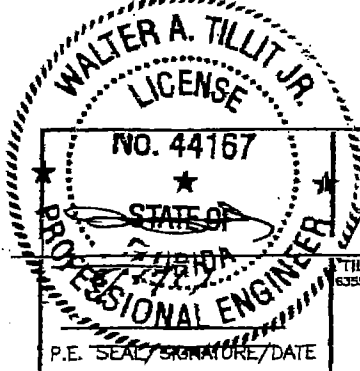
- 6). SED-5.1 LOUVER SYSTEM WITHOUT CD-151 DAMPER SHALL ONLY BE INSTALLED IN A LOCATION WHERE THE ROOM BEHIND THE LOUVER IS DESIGNED TO DRAIN WATER PENETRATING INTO THE ROOM, AND THE ROOM WILL HOUSE WATER RESISTANT/WATER PROOF EQUIPMENT, COMPONENTS OR SUPPLIES.
- 7). SED-5.1 LOUVER SYSTEM WITH CD-151 DAMPER MAY BE INSTALLED IN LOCATIONS WHERE THE ROOM BEHIND THE LOUVER 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 WITH DAMPER IS LIMITED TO 40 FT IN HEIGHT ACCORDING TO TABLE 3 OF TAS 100(A)-95.
- 8). CD-151 DAMPER IS AN OPERABLE ASSEMBLY, IT MAY BE OPERATED BY MEANS OF A HAND QUADRANT HANDLE MECHANISM (AS SHOWN ON SHEET 7) OR THROUGH AN ELECTRICAL OR PNEUMATIC ACTUATOR. DAMPER'S OPERATIVE MECHANISM IS NOT PART OF THIS APPROVAL, BUT SHALL BE CERTIFIED BY AN INDEPENDENT TESTING AGENCY.
- 9). ALL ALUMINUM IN CONTACT WITH DISSIMILAR MATERIALS MUST BE PAINTED PER SECTIONS 2003.8.4.2, 2003.8.4.4, 2003.8.4.5 AND 2003.8.4.6 OF THE FLORIDA BUILDING CODE AS APPLICABLE.
- 10). 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.
- 11).
  - (A) THIS PRODUCT APPROVAL DOCUMENT (P.A.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 PRODUCT APPROVAL DOCUMENT (P.A.D.)
  - (B) CONTRACTOR TO BE RESPONSIBLE FOR THE SELECTION, PURCHASE AND INSTALLATION INCLUDING LIFE SAFETY OF THIS PRODUCT, BASED ON THIS PRODUCT APPROVAL DOCUMENT (P.A.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 APPROVAL DOCUMENT (P.A.D.) 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.A.D.
  - (E) ORIGINAL PRODUCT APPROVAL DOCUMENT (P.A.D.) SHALL BEAR THE DATE AND ORIGINAL SEAL AND SIGNATURE OF THE PROFESSIONAL ENGINEER OR RECORD THAT PREPARED IT.

12). 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 EACH OPENING. LABELING TO COMPLY WITH SECTION 1709.9.2 OF THE FLORIDA BUILDING CODE.

**PRODUCT REVISED**  
as complying with the Florida Building Code  
Acceptance No. 19-0520-01  
Expiration Date Nov 20, 2023  
By Walter A. Tillit Jr.  
Miami Dade Product Control

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

**PRODUCT REVISED**  
as complying with the Florida Building Code  
NOA-No. 17-0823.08  
Expiration Date 11/20/2018  
By Walter A. Tillit Jr.  
Miami-Dade Product Control

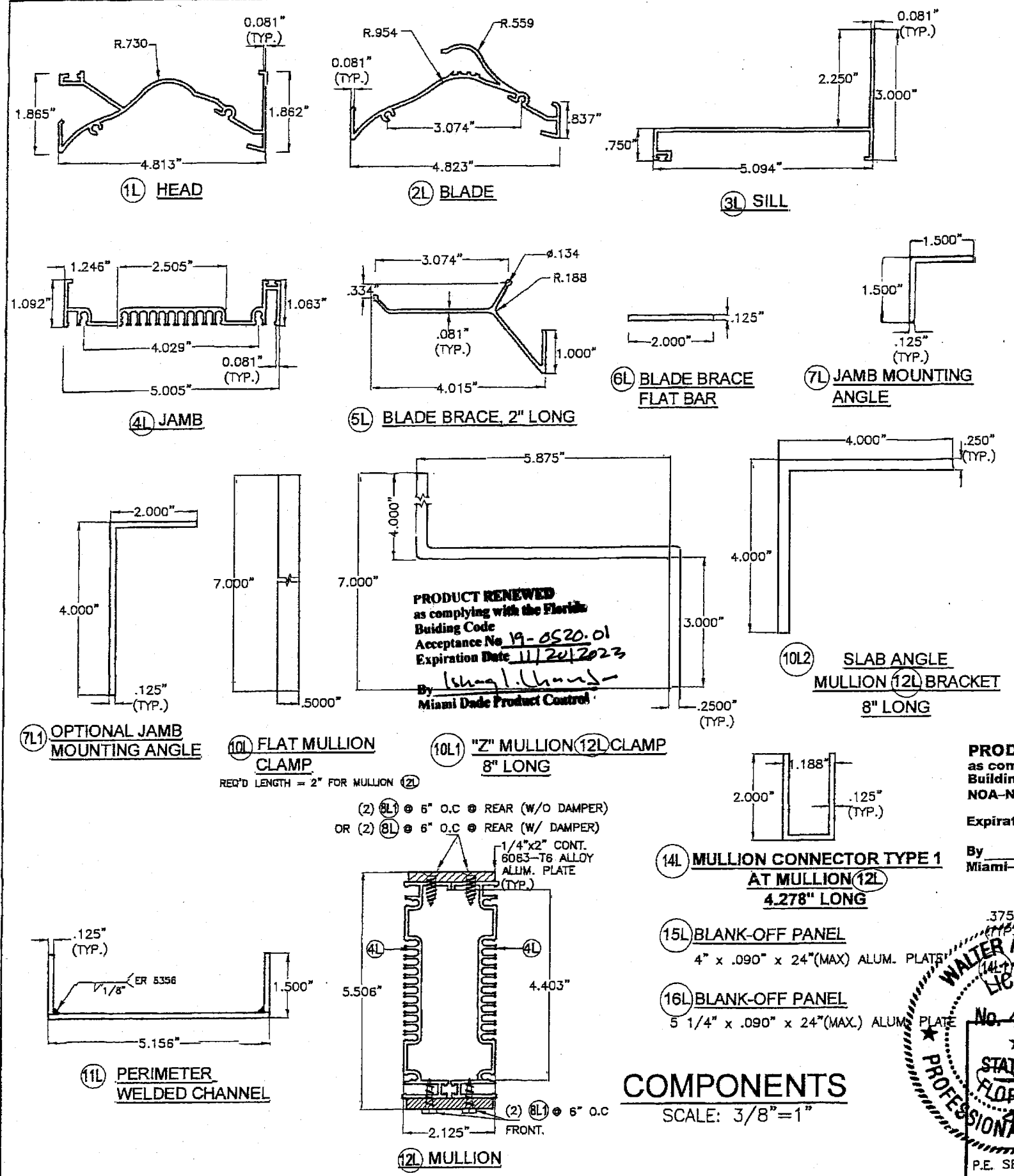


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**TILTECO INC.**  
TILLIT TESTING & ENGINEERING COMPANY  
6355 N.W. 38th. St., Ste. 305, VIRGINIA GARDENS, FL 33166  
Phone: (305)871-1530 Fax: (305)871-1531  
e-mail: tilteco@aol.com  
EB-0006719  
WALTER A. TILLIT JR. P.E.  
FLORIDA Lic. # 44167

FLORIDA BUILDING CODE (High Velocity Hurricane Zone)

SED-5.1 LOUVER SYSTEM WITH OR WITHOUT CD-151 DAMPER ASSEMBLY		DRAWN BY M.L.	
UNITED ENERTECH, INC.		08/02/17 DATE	
3005 SOUTH HICKORY ST. CHATTANOOGA, TN 37407 PHONE: (423)698-7715 FAX:(423)698-6829		17-125 DRAWING No	
REV. No	DESCRIPTION	DATE	REV. No
1	OLD 15-026	08/02/17	3
2			4

SHEET 1 OF 16



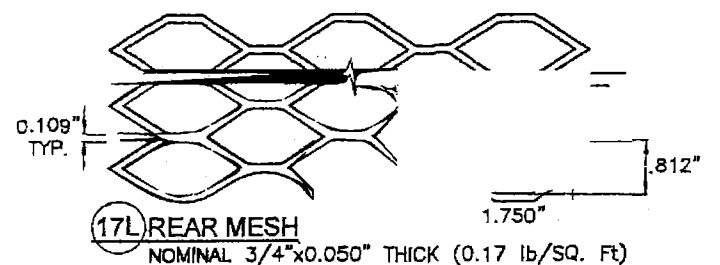
BILL OF MATERIALS SED-5.1 LOUVER ASSEMBLY				
ITEM	DESCRIPTION	MATERIAL	SIZE	REMARKS
1L	EXTRUDED ALUM. HEAD	6063-T5 ALLOY	SEE DETAIL	Fy (MIN.) = 16 ksi
2L	EXTRUDED ALUM. BLADE	6063-T5 ALLOY	SEE DETAIL	Fy (MIN.) = 16 ksi
3L	EXTRUDED ALUM. SILL	6063-T5 ALLOY	SEE DETAIL	Fy (MIN.) = 16 ksi
4L	EXTRUDED ALUM. JAMB	6063-T5 ALLOY	SEE DETAIL	Fy (MIN.) = 16 ksi
5L	EXTRUDED ALUM. BLADE BRACE	6063-T5 ALLOY	SEE DETAIL	Fy (MIN.) = 16 ksi
6L	EXTRUDED ALUM. FLAT BAR	6063-T5 ALLOY	SEE DETAIL	Fy (MIN.) = 16 ksi
7L	EXTRUDED ALUM. JAMB MOUNTING ANGLE	6063-T6 ALLOY	SEE DETAIL	Fy (MIN.) = 25 ksi
7L1	OPTIONAL EXTRUDED ALUM. JAMB MOUNTING ANGLE	6063-T6 ALLOY	SEE DETAIL	Fy (MIN.) = 25 ksi
8L	FLAT HEAD TEK SCREWS	ZINC PLATED STEEL	1/4" x 3/4" LONG	ITW / BUILDDEX
8L1	HEX HEAD TEK SCREWS	ZINC PLATED STEEL	1/4" x 1" LONG	ITW / BUILDDEX
9L	NEOPRENE WASHER HEAD S.M.S.	410 STAINLESS STEEL	#8 x 1-1/2" LONG	LOUVER BLADE AND FRAME ASSEMBLY (1L, 2L, & 4L)
10L	FLAT MULLION CLAMP	ASTM A-36 OR ASTM A-653 GRADE 40 OR AISI 304 S.S. *	SEE DETAIL	REQ'D LENGTH = 2" FOR MULLION (2L) Fy (MIN.) = 36 ksi
10L1	"Z" MULLION CLAMP	ASTM A-36 OR ASTM A-653 GRADE 40 OR AISI 304 S.S. *	SEE DETAIL	8" LONG AT HEAD & SILL AT BLADE W/ MULLION (2L) Fy (MIN.) = 36 ksi
10L2	ANGLE MULLION BRACKET	6063-T6 ALLOY	SEE DETAIL	8" LONG AT HEAD & SILL AT BLADE W/ MULLIONS. Fy (MIN.) = 25 ksi
11L	PERIMETER WELDED CHANNEL	6063-T5 ALLOY	SEE DETAIL	Fy (MIN.) = 16 ksi
12L	MULLION	6063-T5 ALLOY	SEE DETAIL	Fy (MIN.) = 16 ksi
14L	MULLION CONNECTOR TYPE 1 AT MULLION (2L)	6063-T6 ALLOY	SEE DETAIL	Fy (MIN.) = 16 ksi
14L1	MULLION CONNECTOR TYPE 2 AT MULLION (2L)	ASTM A-36 *	SEE DETAIL	Fy (MIN.) = 36 ksi
15L	BLANK-OFF PANEL	6063-T5 ALLOY	SEE DETAIL	Fy (MIN.) = 16 ksi
16L	BLANK-OFF PANEL	6063-T5 ALLOY	SEE DETAIL	Fy (MIN.) = 16 ksi
17L	REAR MESH	3003-H14 ALLOY	SEE DETAIL	Fy (MIN.) = 16 ksi

\* NOTE: STEEL COMPONENTS SHALL BE PROTECTED FROM CORROSION W/ A PRIMER CONSISTING OF RED OXIDE PAINT OR SIMILAR W/ GALVANIZING (G-60) AS AN OPTION. ADDITIONALLY, FINAL (FINISH) PAINT FOR THESE PROFILES SHALL BE IN ACCORDANCE W/ SECTION 2003.8.4.2 OF THE F.B.C., ADDRESSING PROTECTION OF ALUMINUM IN CONTACT W/ METALS NOT CONSIDERED COMPATIBLE.

**COMPONENTS**  
SCALE: 3/8"=1"

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

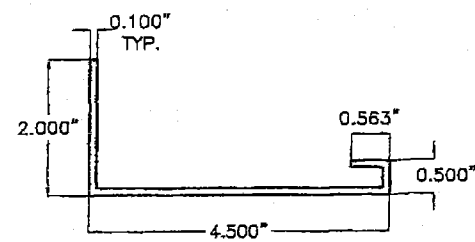
2017 TILTECO INC.  
**TILTECO INC.**  
TILLIT TESTING & ENGINEERING COMPANY  
6355 N.W. 36th St., Ste. 305, VIRGINIA GARDENS, FL 33166  
Phone: (305)871-1930 Fax: (305)871-1531  
e-mail: tilteco@aol.com  
EB-0006719  
WALTER A. TILLIT JR. P.E.  
FLORIDA Lic. # 44167



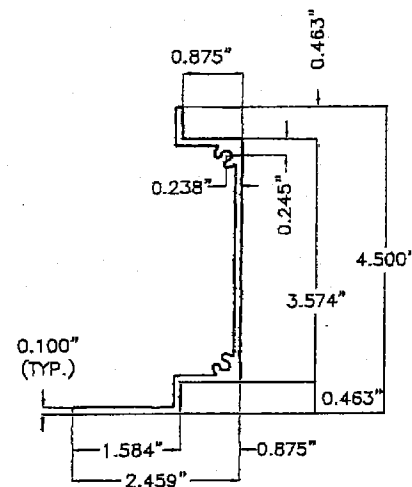
FLORIDA BUILDING CODE (High Velocity Hurricane Zone)

SED-5.1 LOUVER SYSTEM WITH OR WITHOUT CD-151 DAMPER ASSEMBLY		DRAWN BY M.L.	
UNITED ENERTECH, INC. 3005 SOUTH HICKORY ST. CHATTANOOGA, TN 37407 PHONE: (423)698-7715 FAX:(423)698-6629		08/02/17 DATE	
REV. No. DESCRIPTION DATE REV. No. DESCRIPTION DATE		17-125 DRAWING No	
1	OL D 15-028	08/02/17	3
2			4

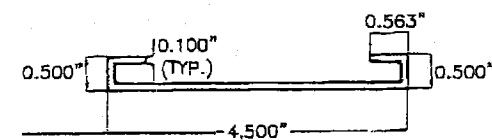
SHEET 2 OF 15



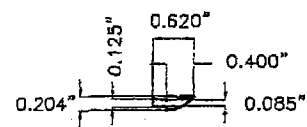
1D HEAD & SILL



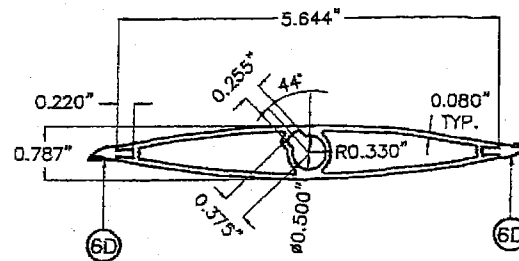
2D JAMB



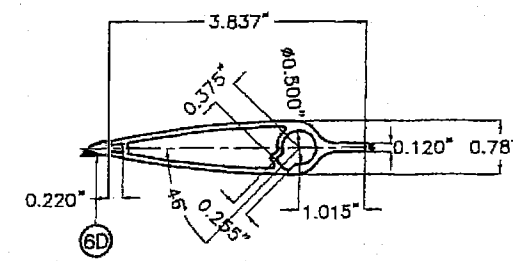
7D MID-HEIGHT HEAD or SILL



6D BLADE SEAL



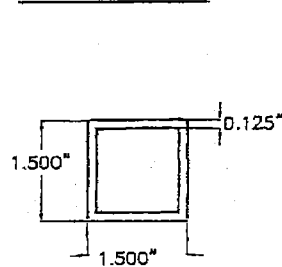
3D REGULAR DAMPER BLADE



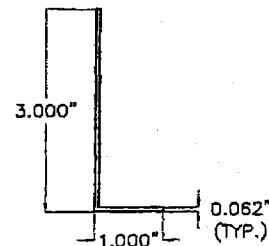
3D1 TOP DAMPER HALF BLADE

BILL OF MATERIALS CD-151 DAMPER ASSEMBLY

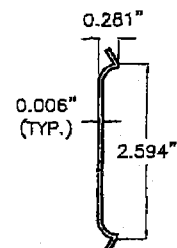
ITEM	DESCRIPTION	MATERIAL	SIZE	REMARKS
1D	EXTRUDED ALUM. HEAD & SILL	6063-T5 ALUMINUM ALLOY	SEE DETAIL	Fy(MIN.)=33.4 ksi
2D	EXTRUDED ALUM. JAMB	6063-T5 ALUMINUM ALLOY	SEE DETAIL	Fy(MIN.)=31.6 ksi
3D	EXTRUDED ALUM. REGULAR DAMPER BLADE	6063-T5 ALUMINUM ALLOY	SEE DETAIL	Fy(MIN.)=31.8 ksi
3D1	EXTRUDED ALUM. TOP DAMPER HALF BLADE	6063-T5 ALUMINUM ALLOY	SEE DETAIL	Fy(MIN.)=31.8 ksi
4D	BUSHING	BRONZE	1/2" I.D.(5/8" O.D.)x1/4"	0.059" THICK @ WASHER SIDE
5D	AXLE PIN	ZAMAC No. 3 ZINC	1/2"x3 1/8"	WITH NYLON WASHER & LOCK RING
6D	BLADE SEAL	SILICONE	SEE DETAIL	ASTM D-2000, 60-65 DUROMETER
7D	MID-HEIGHT EXTRUDED ALUM. HEAD or SILL	6063-T5 ALUMINUM ALLOY	SEE DETAIL	Fy(MIN.)=29.8 ksi
8D	ALUM. ANGLE BLADE STOP	6063-T5 ALUMINUM ALLOY	SEE DETAIL	WITH VINYL WEATHER STRIP AT END OF 3" LEG
9D	JAMB SEAL	STAINLESS STEEL 316 SERIES	SEE DETAIL	ATTACHED TO 2D W/ (3) DOUBLE SIDED (1"x1/8") TAPES
10D	S.D.S. TEK SCREW	ZINC PLATED	#8 X 1/2"	FASTEN TO 6D @ 12" O.C., 2 1/2" FROM ENDS
11	INTERMEDIATE TUBE FRAME	6063-T5 ALUMINUM ALLOY	SEE DETAIL IN THIS SHEET AND SHEET 9.	Fy(MIN.)=31.9 ksi INSTALL BETWEEN DAMPER & LOUVER FRAME.



1I INTERMEDIATE TUBE FRAME



8D ALUM. ANGLE BLADE STOP



9D JAMB SEAL

CD-151 DAMPER AND INTERMEDIATE TUBE FRAME COMPONENTS

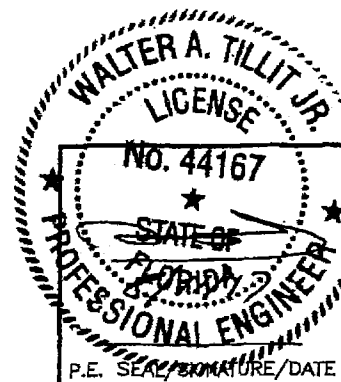
(EXCLUDES COMPONENTS FOR OPERATIVE MECHANISM, SEE NOTE 8/1)

COMPONENTS

SCALE: 3/8"=1"

PRODUCT RENEWED  
as complying with the Florida  
Building Code  
Acceptance No. 19-0520.01  
Expiration Date 11/20/2023  
By *Walter A. Tillit Jr.*  
Miami Dade Product Control

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NOA-No. 17-0823.08  
Expiration Date 11/20/2018  
By *Walter A. Tillit Jr.*  
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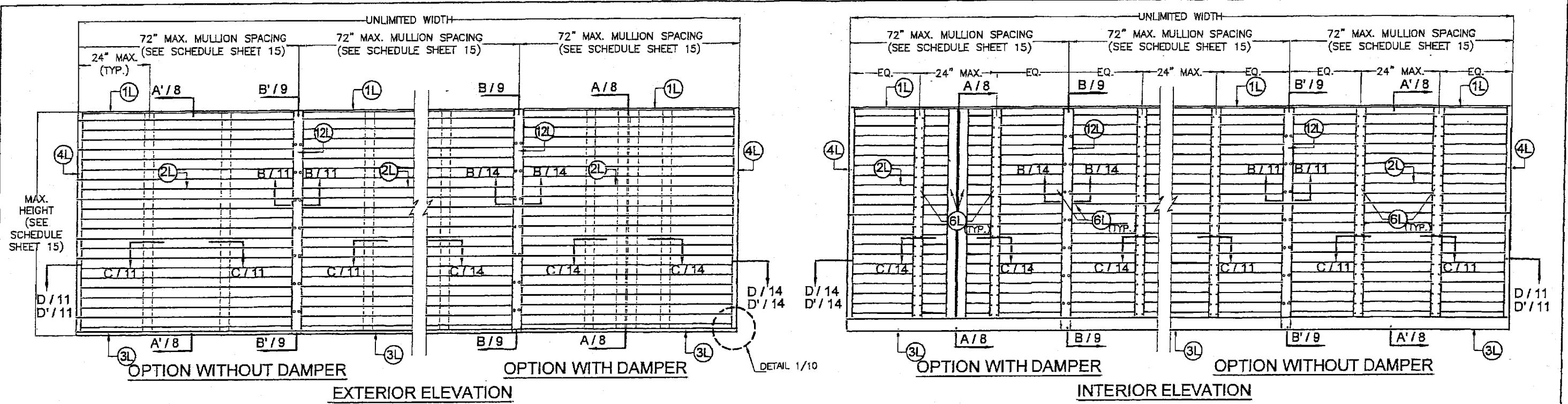
**TILTECO INC.**

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6355 N.W. 36th St., Ste. 305, VIRGINIA GARDENS, FL 33168  
Phone: (305)871-1530, Fax: (305)871-1531  
e-mail: tiltco@aol.com  
EB-0006719  
WALTER A. TILLIT Jr. P.E.  
FLORIDA Lic. # 44167

FLORIDA BUILDING CODE (High Velocity Hurricane Zone)

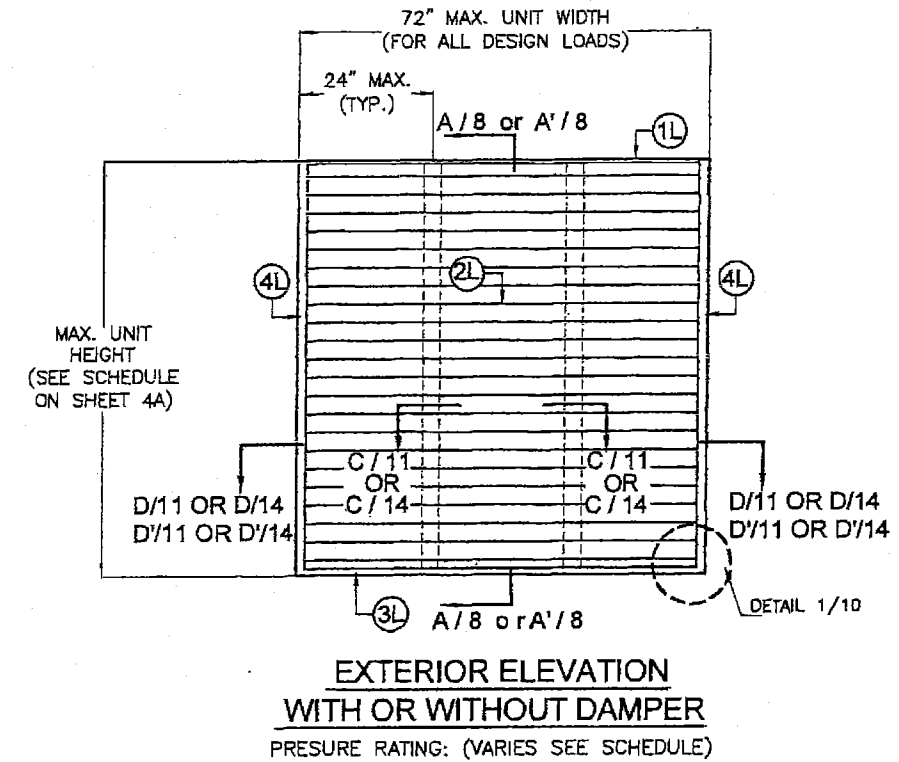
SED-5.1 LOUVER SYSTEM WITH OR WITHOUT CD-151 DAMPER ASSEMBLY	DRAWN BY M.L.
<b>UNITED ENERTECH, INC.</b> 3005 SOUTH HICKORY ST. CHATTANOOGA, TN 37407 PHONE: (423)698-7715 FAX:(423)698-6629	08/02/17 DATE
REV. No. DESCRIPTION DATE REV. No. DESCRIPTION DATE	17-125 DRAWING No
1 OLD 15-025 08/02/17 3	
2	

SHEET 3 OF 18

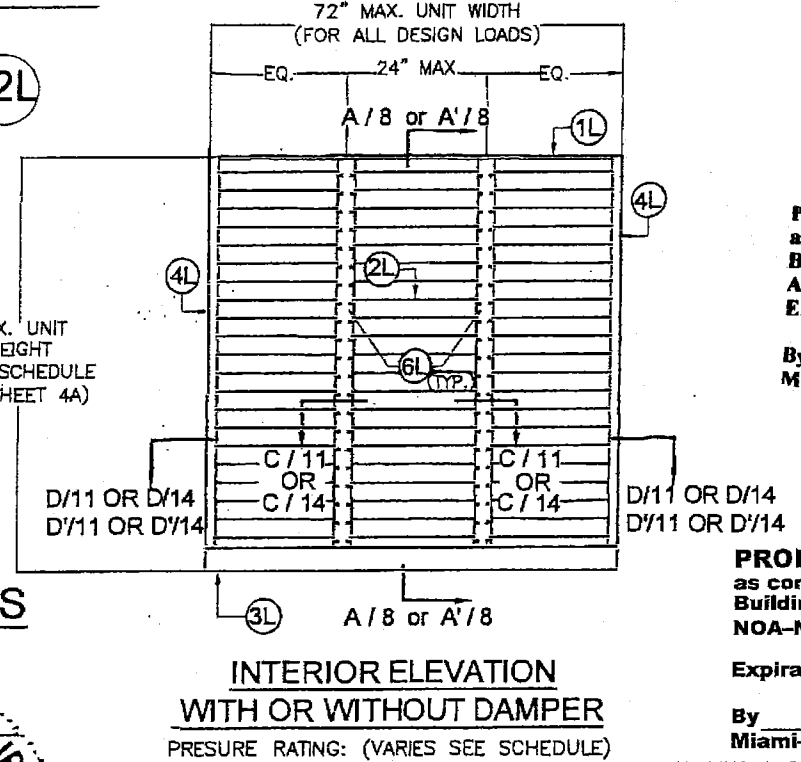


**MULTIPLE SED 5.1 LOUVER UNITS  
WITH OR WITHOUT  
DAMPER WITH MULLION 12L**

N.T.S.  
(PRESSURE RATING VARIES, SEE SCHEDULE  
ON SHEET 15)



**EXTERIOR ELEVATION  
WITH OR WITHOUT DAMPER**  
PRESURE RATING: (VARIES SEE SCHEDULE)

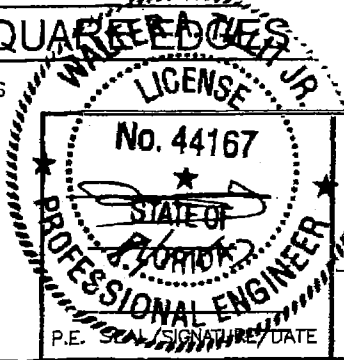


**SINGLE SED 5.1 LOUVER UNITS  
WITH OR WITHOUT  
DAMPER W/ SQUARE EDGES**

N.T.S.

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Building Code  
Acceptance No. 19-0520-01  
Expiration Date 11/20/2023  
By *Ishag I. Ibrahim*  
Miami Dade Product Control

**PRODUCT REVISED**  
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Building Code  
NOA-No. 17-0823.08  
Expiration Date 11/20/2018  
By *[Signature]*  
Miami-Dade Product Control  
FLORIDA BUILDING CODE (High Velocity Hurricane Zone)



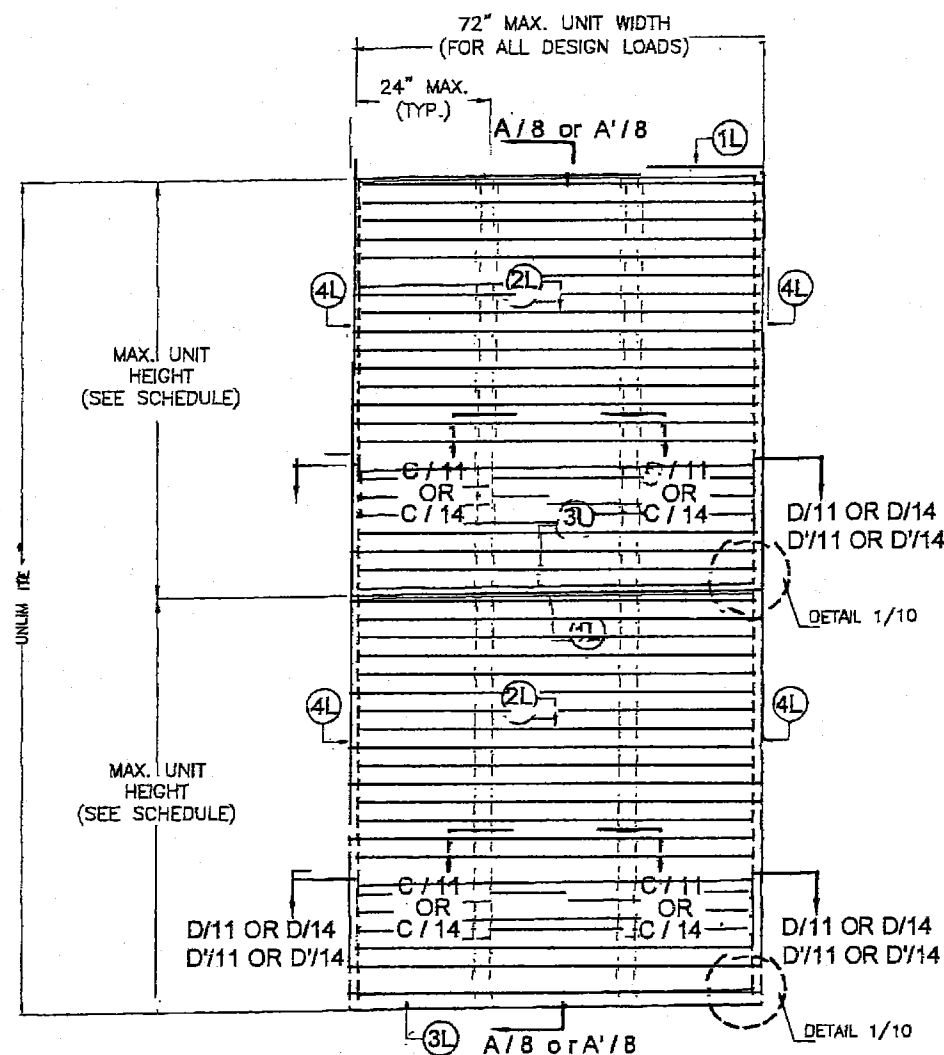
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WILLIT TESTING & ENGINEERING COMPANY  
3005 SOUTH HICKORY ST. SUITE 300 VIRGINIA CARRIENS, FL 33168  
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e-mail: tilteco@aol.com  
EB-0006719  
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FLORIDA Lic. # 44167

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<b>UNITED ENERTECH, INC.</b>		08/02/17 DATE	
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PHONE: (423)698-7715 FAX:(423)698-6629		SHEET 4 OF 16	
REV. No	DESCRIPTION	DATE	REV. No
1	OLD 15-0 28	08/0 2/1	3
2			4

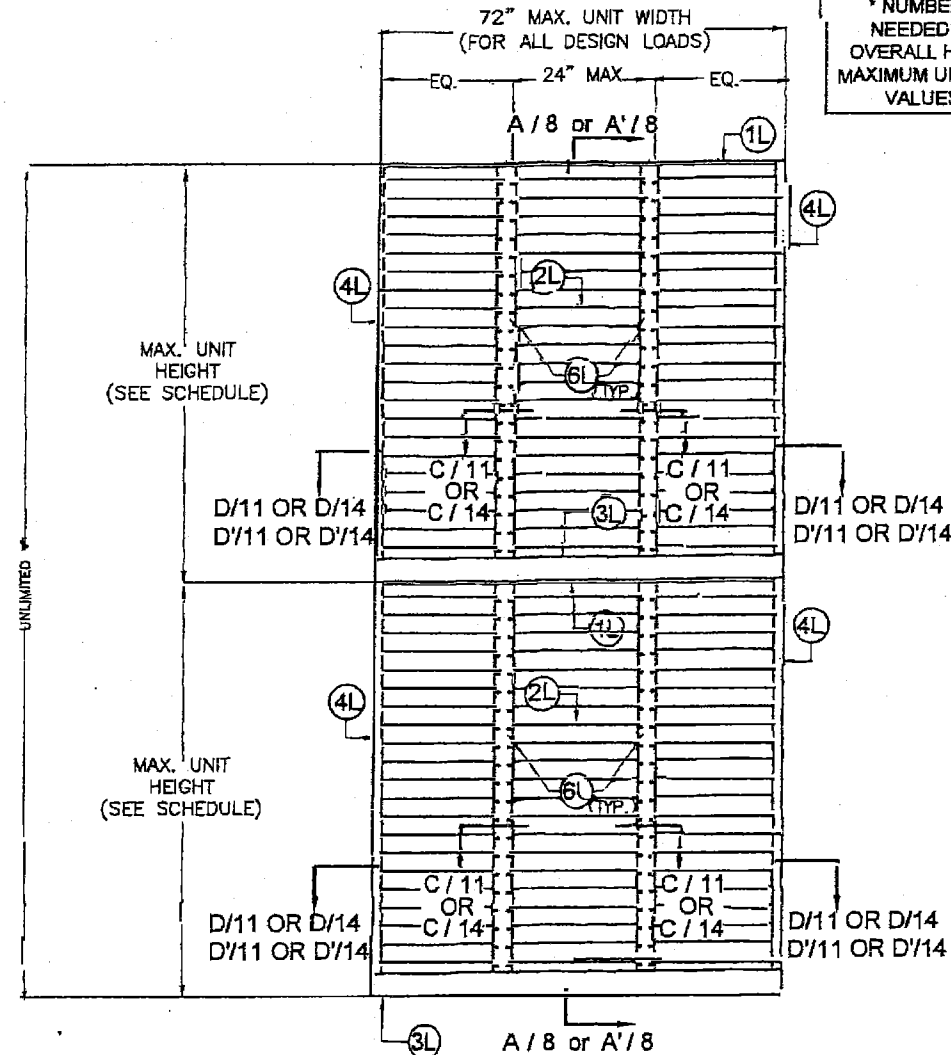
MAX. UNIT HEIGHT FOR A GIVEN A.S.D. DESIGN PRESSURE RATING SCHEDULE APPLICABLE TO SINGLE UNITS W/ SQUARE EDGES W/O MULLION

MAXIMUM A.S.D. DESIGN PRESSURE RATING (p.s.f)	MAX. UNIT HEIGHT
40	10'-0"
45	10'-0"
50	10'-0"
55	10'-0"
60	10'-0"
65	10'-0"
70	10'-0"
75	9'-11"
80	9'-7"
85	9'-4"
90	9'-0"
95	8'-10"
100	8'-7"
105	8'-4"
110	8'-2"
115	7'-12"
120	7'-10"
125	7'-8"
130	7'-6"
135	7'-5"
140	7'-3"
145	7'-1"
150	7'-0"

\* NUMBER OF LOUVER PANEL UNITS NEEDED TO ACHIEVE THE OPENING OVERALL HEIGHT MAY VARY. HOWEVER MAXIMUM UNIT HEIGHT SHALL NO EXCEED VALUES, SHOWN ON SCHEDULE.



**EXTERIOR ELEVATION**  
WITH OR WITHOUT DAMPER  
PRESURE RATING: (VARIES SEE SCHEDULE)



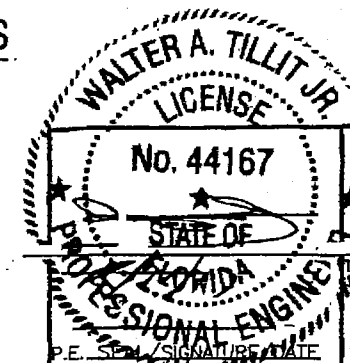
**INTERIOR ELEVATION**  
WITH OR WITHOUT DAMPER  
PRESURE RATING: (VARIES SEE SCHEDULE)

**SINGLE SED 5.1 LOUVER UNITS**  
**WITH OR WITHOUT**  
**DAMPER W/ SQUARE EDGES**

N.T.S

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By *Walter A. Tillit, Jr.*  
Miami-Dade Product Control

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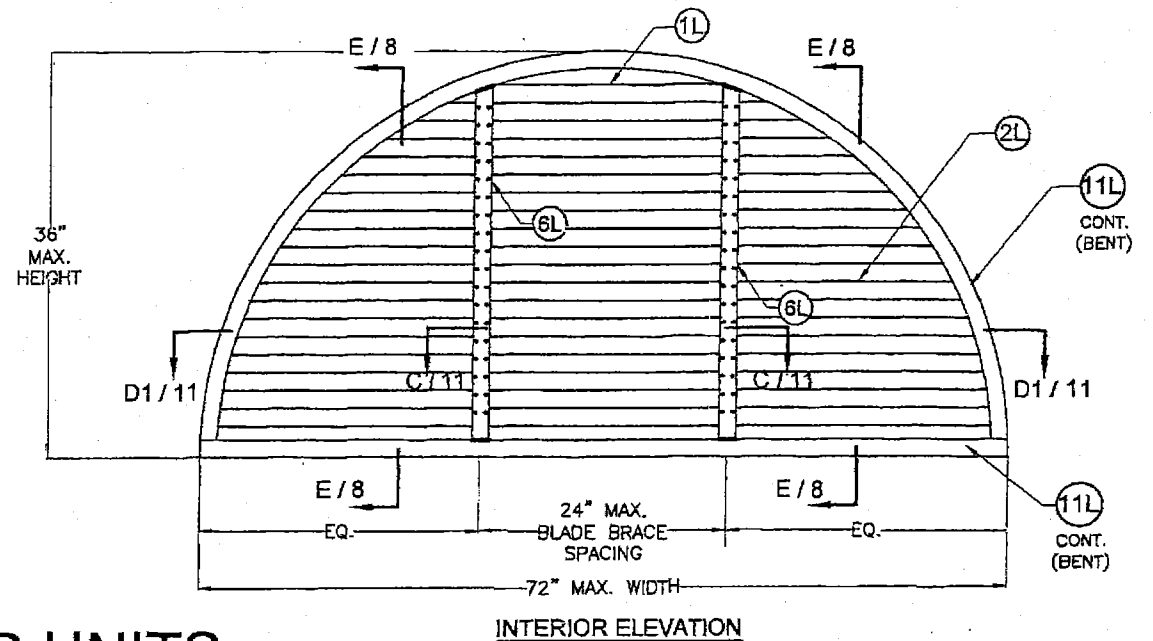
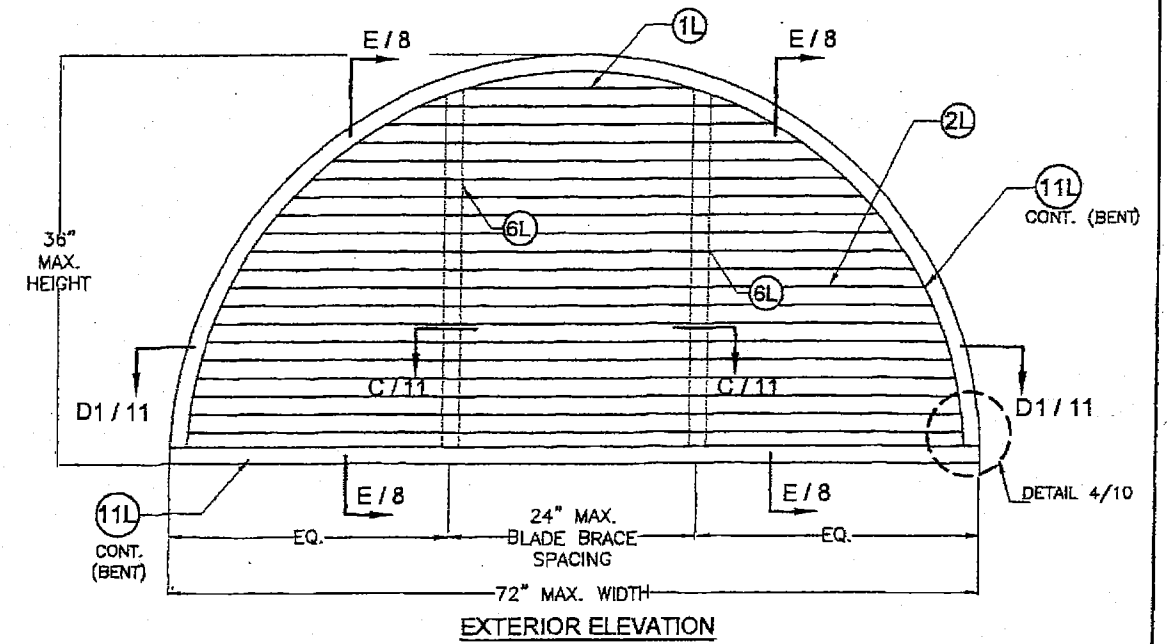
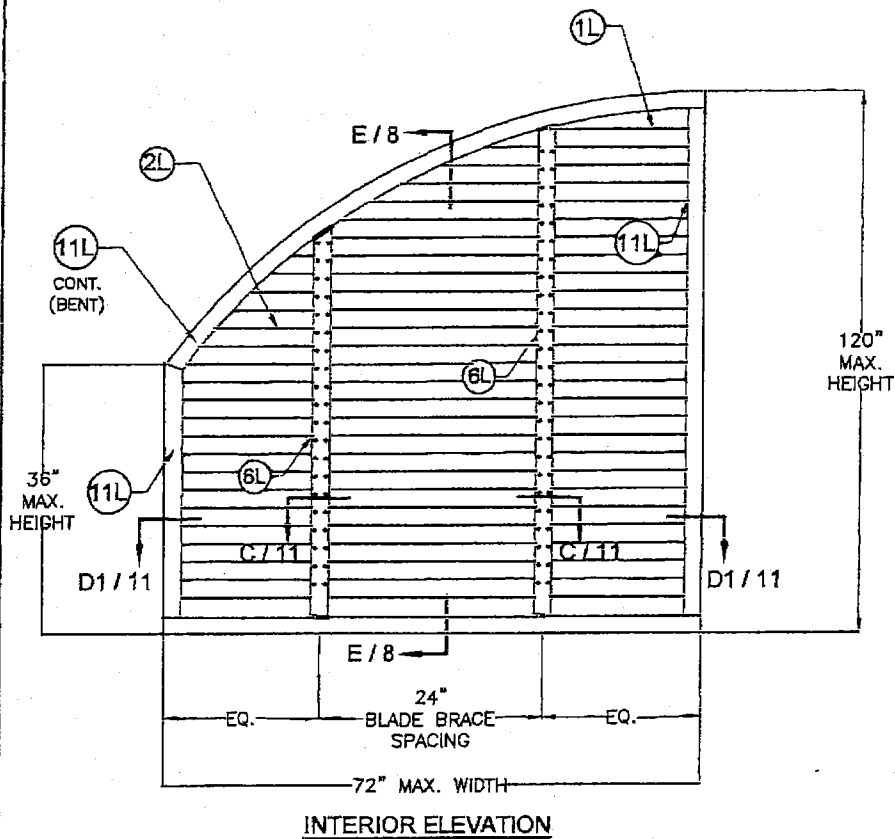
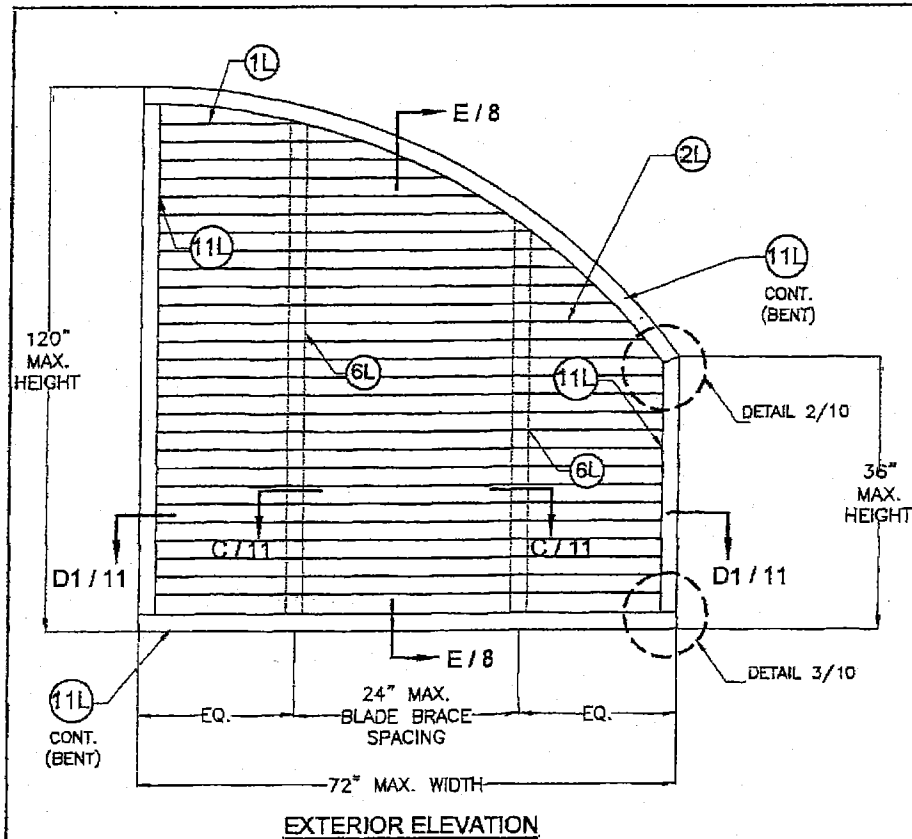
**TILTECO INC.**

TESTING & ENGINEERING COMPANY  
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Phone: (305)871-1530, Fax: (305)871-1531  
e-mail: tilteco@aol.com  
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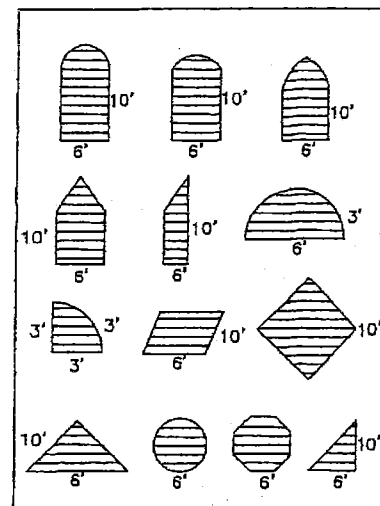
FLORIDA BUILDING CODE (High Velocity Hurricane Zone)

SED-5.1 LOUVER SYSTEM WITH OR WITHOUT CD-151 DAMPER ASSEMBLY	DRAWN BY M.L.
<b>UNITED ENERTECH, INC.</b> 3005 SOUTH HICKORY ST. CHATTANOOGA, TN 37407 PHONE: (423)698-7715 FAX:(423)698-6629	08/02/17 DATE
REV. No. DESCRIPTION DATE REV. No. DESCRIPTION DATE	17-125 DRAWING No
OLD 15-026 08/02/17 3	SHEET 4A OF 16



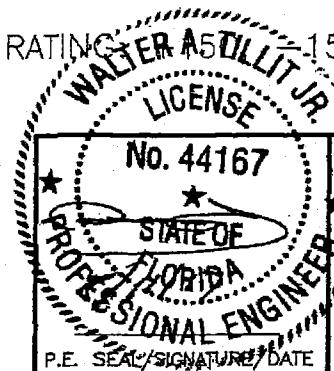


QUALIFIES THE FOLLOWING SHAPES:



# SINGLE SED 5.1 LOUVER UNITS WITHOUT DAMPER W/ CURVED EDGES

N.T.S.  
(A.S.D. DESIGN PRESSURE RATING: 150 PSF)



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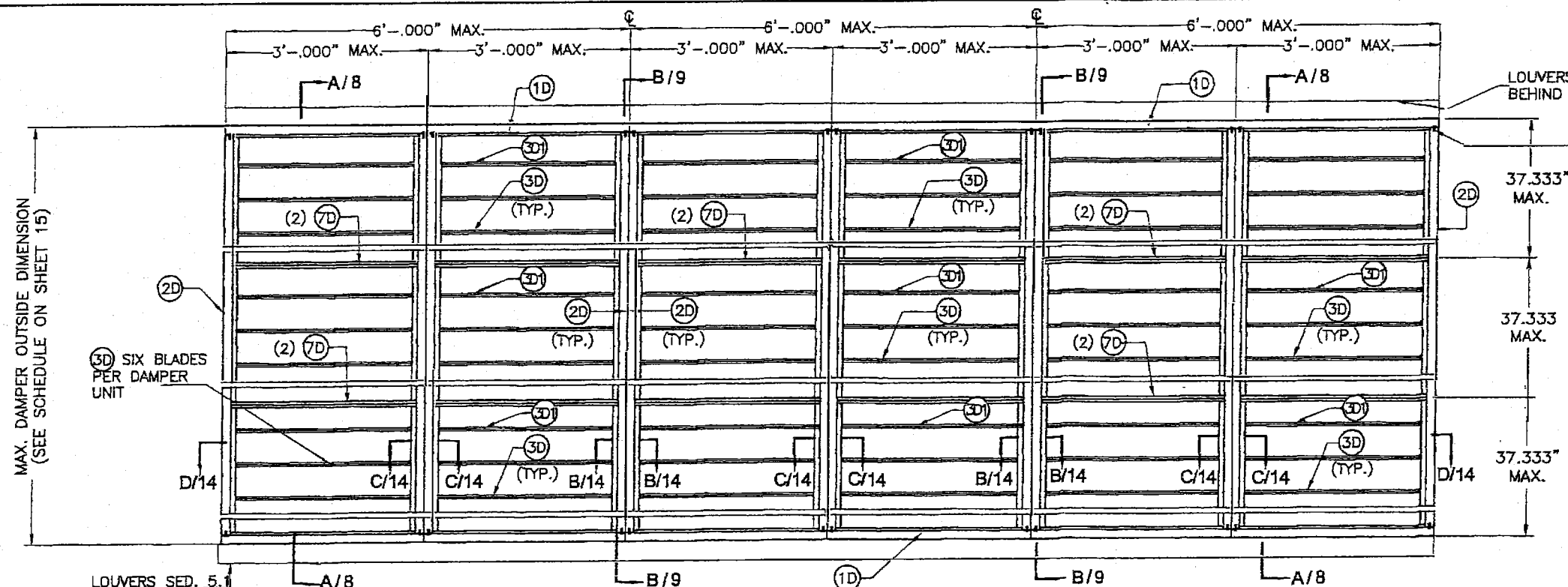
**TILTECO INC.**  
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355 N.W. 36th St., Ste. 305, VIRGINIA GARDENS, FL 33166  
Phone: (305)871-1530 Fax: (305)871-1531  
e-mail: tilteco@aol.com  
EB-0006719  
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FLORIDA Lic. # 44167

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By *Ishay I. Chan*  
Miami Dade Product Control

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By *[Signature]*  
Miami-Dade Product Control

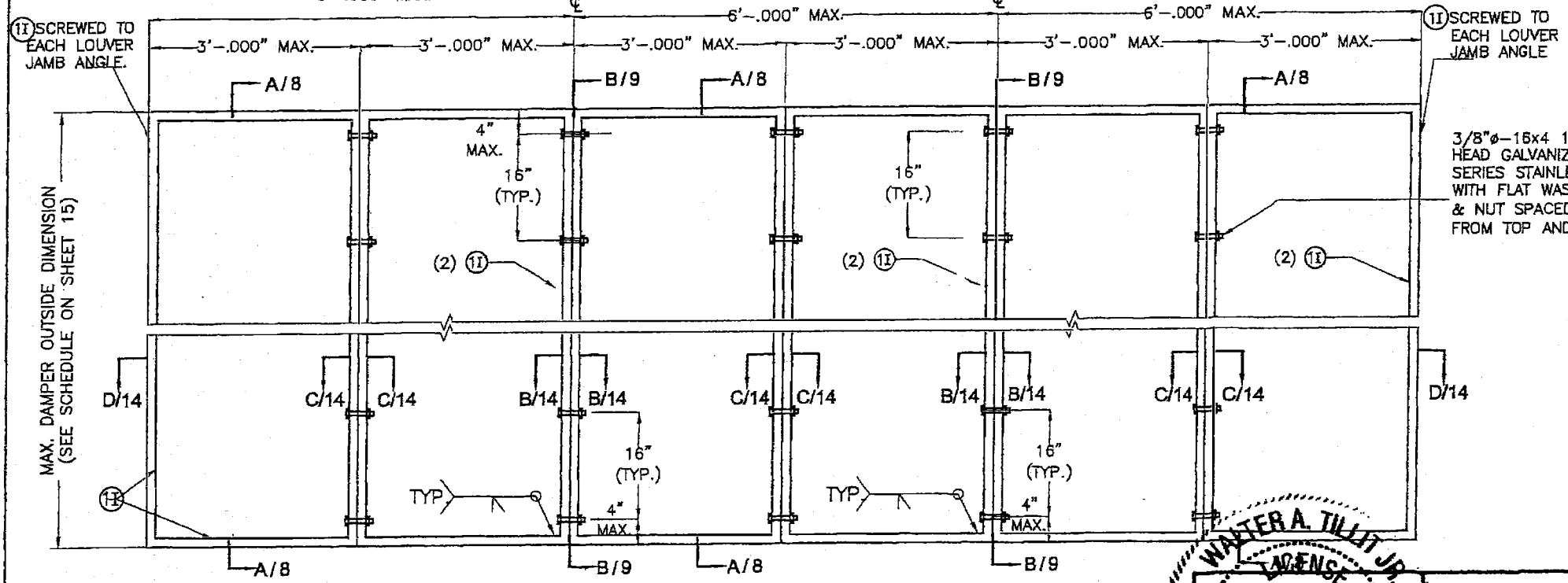
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SED-5.1 LOUVER SYSTEM WITH OR WITHOUT CD-151 DAMPER ASSEMBLY		DRAWN BY M.L.	
<b>UNITED ENERTECH, INC.</b> 3005 SOUTH HICKORY ST. CHATTANOOGA, TN 37407 PHONE: (423)898-7715 FAX:(423)898-6629		08/02/17 DATE	
REV. No		DRAWING No	
1	GLD 15-026	08/02/17	3
2			4
			SHEET 5 OF 16



**INTERIOR ELEVATION: CD-151 DAMPER MULTIPLE UNITS WITH MULLION (12L)**  
SCALE: 1/2"=1'-0"

NOTE:  
(1) SEE COMPONENTS ON SHEET 3.

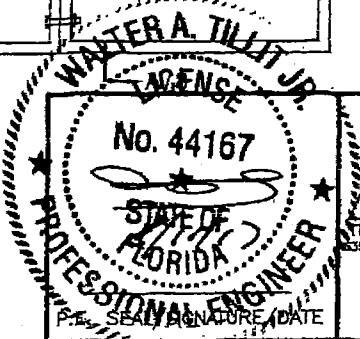


**EXTERIOR ELEVATION: INTERMEDIATE TUBE FRAME FOR CD-151 DAMPER ATTACHMENT AT MULTIPLE UNITS WITH MULLION (12L)**  
SCALE: 1/2"=1'-0"

3/8"Ø-16x4 1/2" LONG A 307 HEX HEAD GALVANIZED STEEL OR 304 SERIES STAINLESS STEEL BOLTS WITH FLAT WASHER, LOCK WASHER, & NUT SPACED @ 16" O.C. & 4" FROM TOP AND BOTTOM (TYP.).

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By *Ishmael Hernandez*  
Miami Dade Product Control

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Expiration Date 11/20/2018  
By *[Signature]*  
Miami Dade Product Control

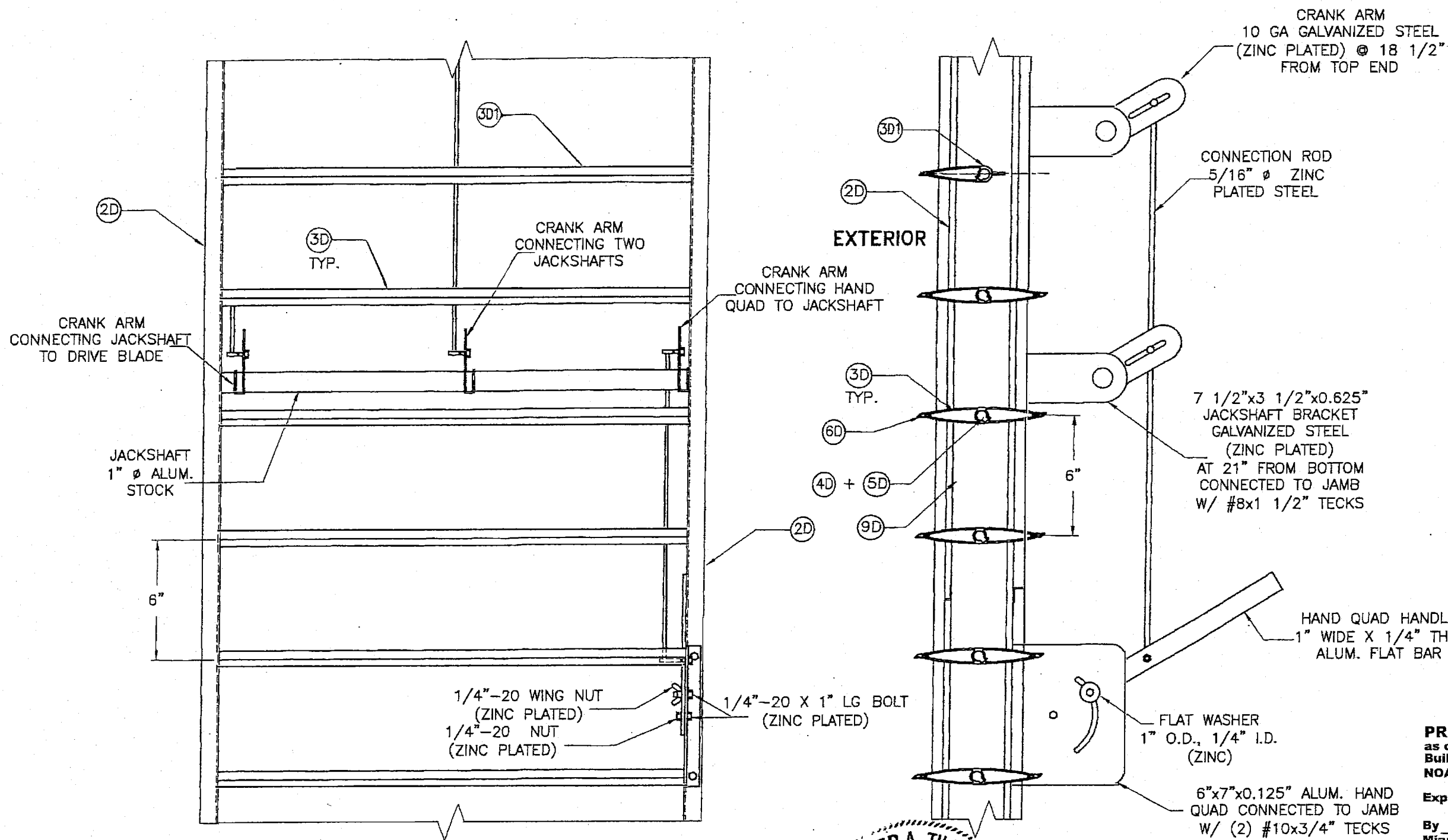


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e-mail: tilteco@aol.com  
EB-0006719  
WALTER A. TILLIT JR., P.E.  
FLORIDA Lic. # 44167

FLORIDA BUILDING CODE (High Velocity Hurricane Zone)

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<b>UNITED ENERTECH, INC.</b>		08/02/17 DATE	
3005 SOUTH HICKORY ST. CHATTANOOGA, TN 37407 PHONE: (423)698-7715 FAX:(423)698-8629		17-125 DRAWING No	
REV. No	DESCRIPTION	DATE	REV. No
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2			1

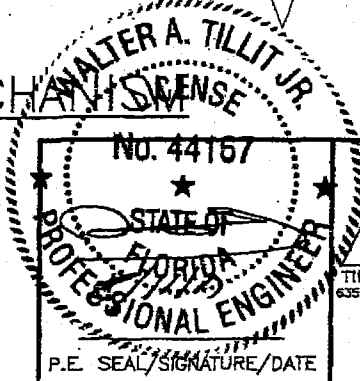
SHEET 6 OF 16



**PRODUCT RENEWED**  
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 By Isham L. Howard  
 Miami Dade Product Control

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 By [Signature]  
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**HAND QUADRANT HANDLE MECHANISM**  
 N.T.S.



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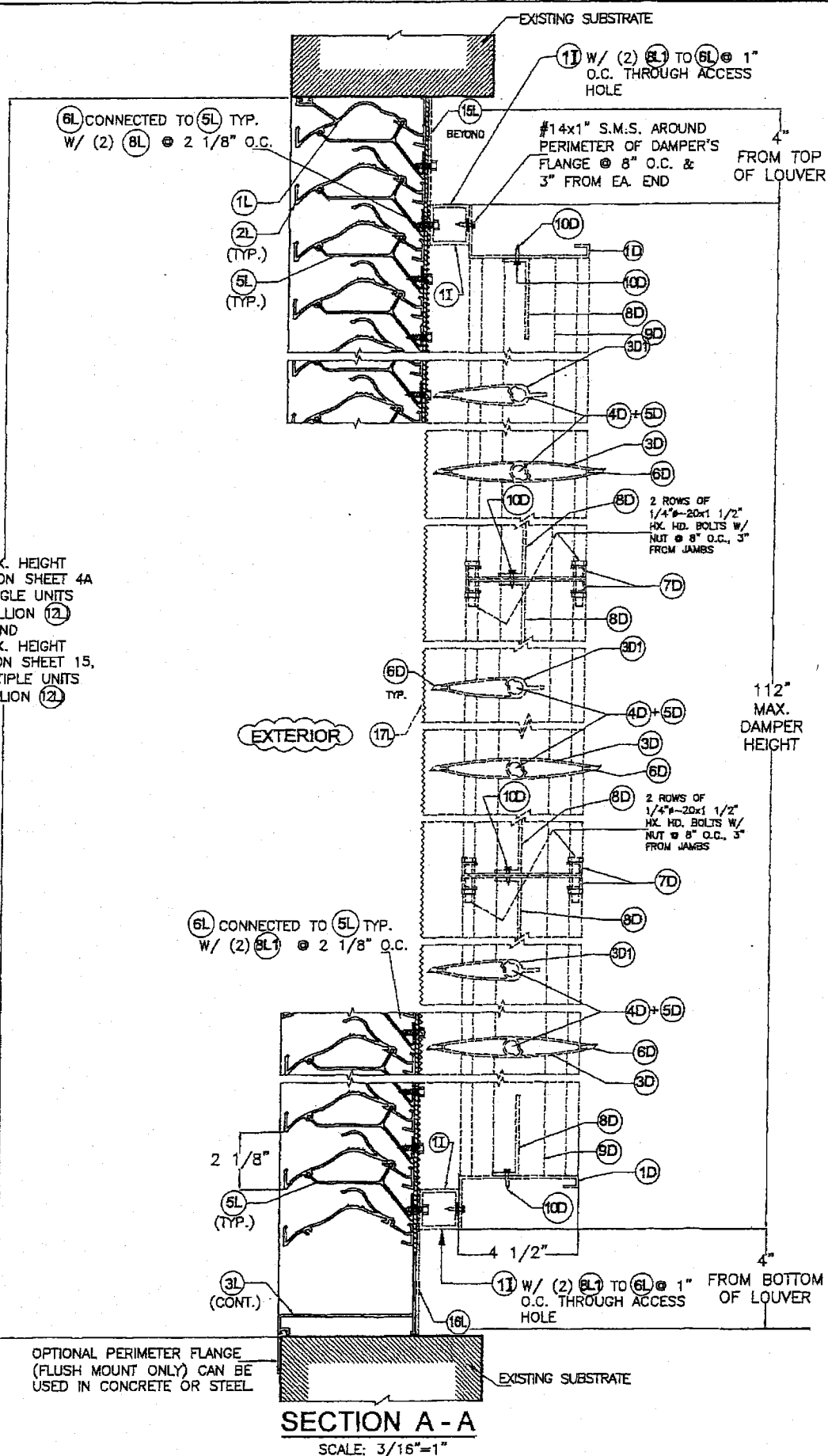
**TILTECO INC.**

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 6355 N.W. 39th St., Ste. 305, VIRGINIA GARDENS, FL 33168  
 Phone: (305)871-1830 Fax: (305)871-1831  
 e-mail: tilteco@aol.com  
 EB-0006719  
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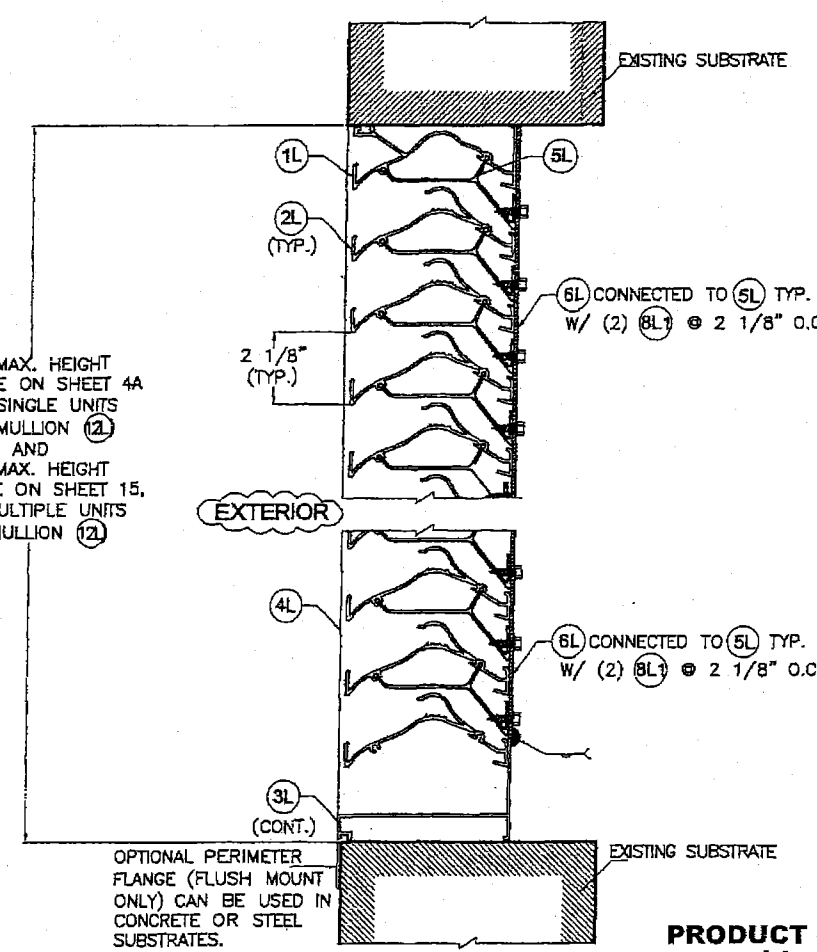
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SED-5.1 LOUVER SYSTEM WITH OR WITHOUT CD-151 DAMPER ASSEMBLY		DRAWN BY M.L.	
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		17-125 DRAWING No	
REV. No	DESCRIPTION	DATE	REV. No
1	OLD 15-026	08/02/17	3
2			4

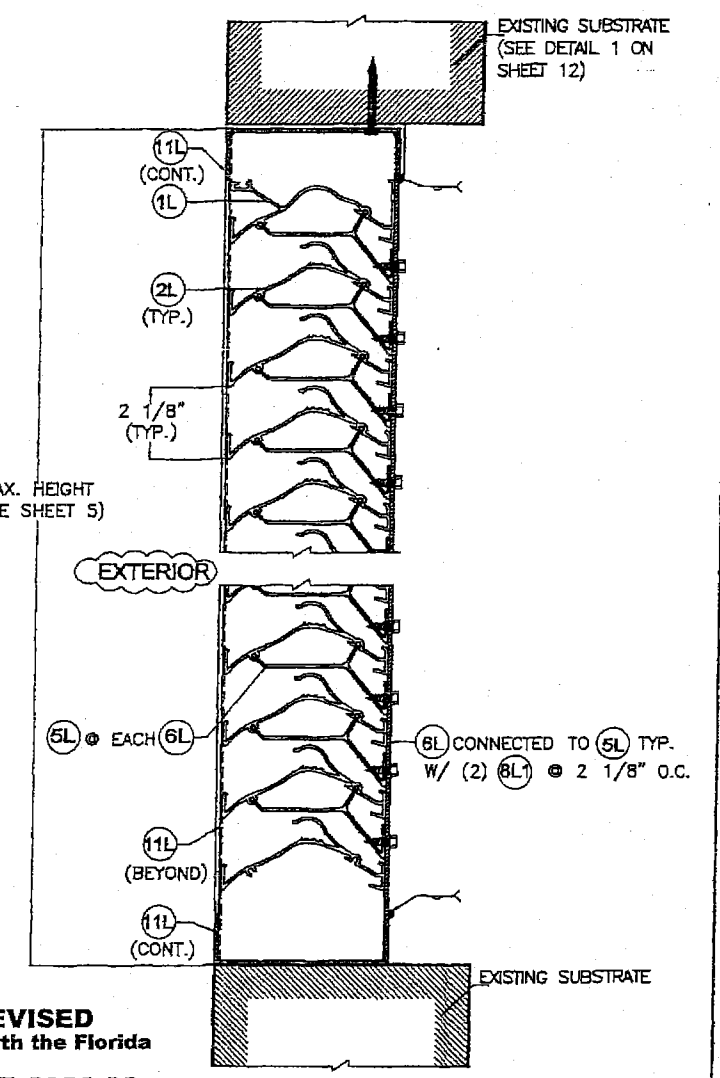
SHEET 7 OF 16



**SECTION A-A**  
SCALE: 3/16"=1"



**SECTION A'-A'**  
SCALE: 3/16"=1"



**SECTION E-E**  
SCALE: 3/16"=1"

SEE MAX. HEIGHT SCHEDULE ON SHEET 4A (FOR SINGLE UNITS W/O MULLION (12) AND SEE MAX. HEIGHT SCHEDULE ON SHEET 15, (FOR MULTIPLE UNITS W/ MULLION (12)

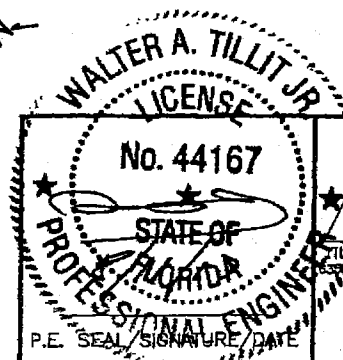
SEE MAX. HEIGHT SCHEDULE ON SHEET 4A (FOR SINGLE UNITS W/O MULLION (12) AND SEE MAX. HEIGHT SCHEDULE ON SHEET 15, (FOR MULTIPLE UNITS W/ MULLION (12)

MAX. HEIGHT (SEE SHEET 5)

112" MAX. DAMPER HEIGHT

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By *Walter A. Tillit Jr.*  
Miami Dade Product Control

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Expiration Date 11/20/2018  
By *Walter A. Tillit Jr.*  
Miami-Dade Product Control

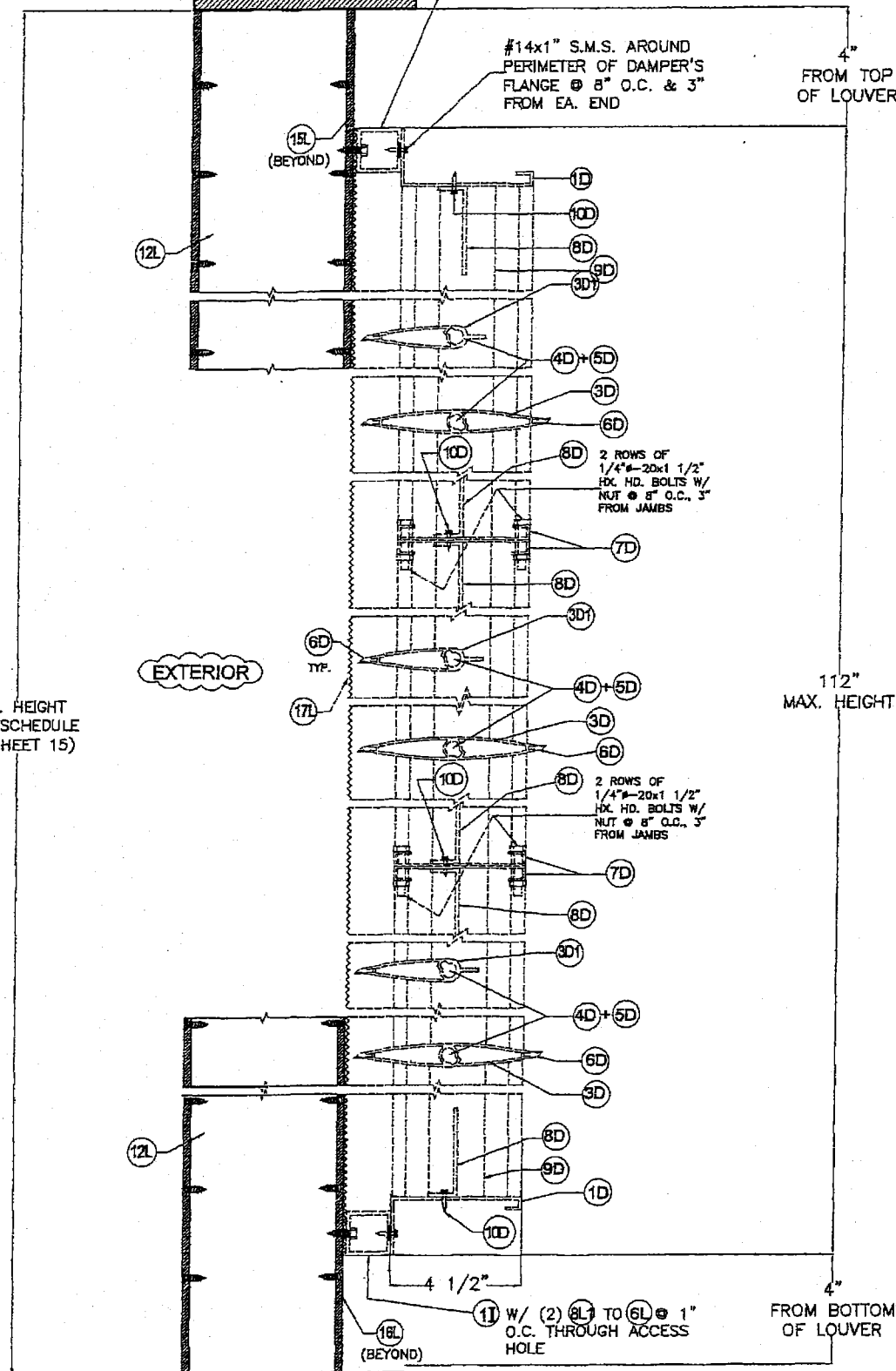


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e-mail: tiltco@aol.com  
EB-0006719  
WALTER A. TILLIT JR. P.E.  
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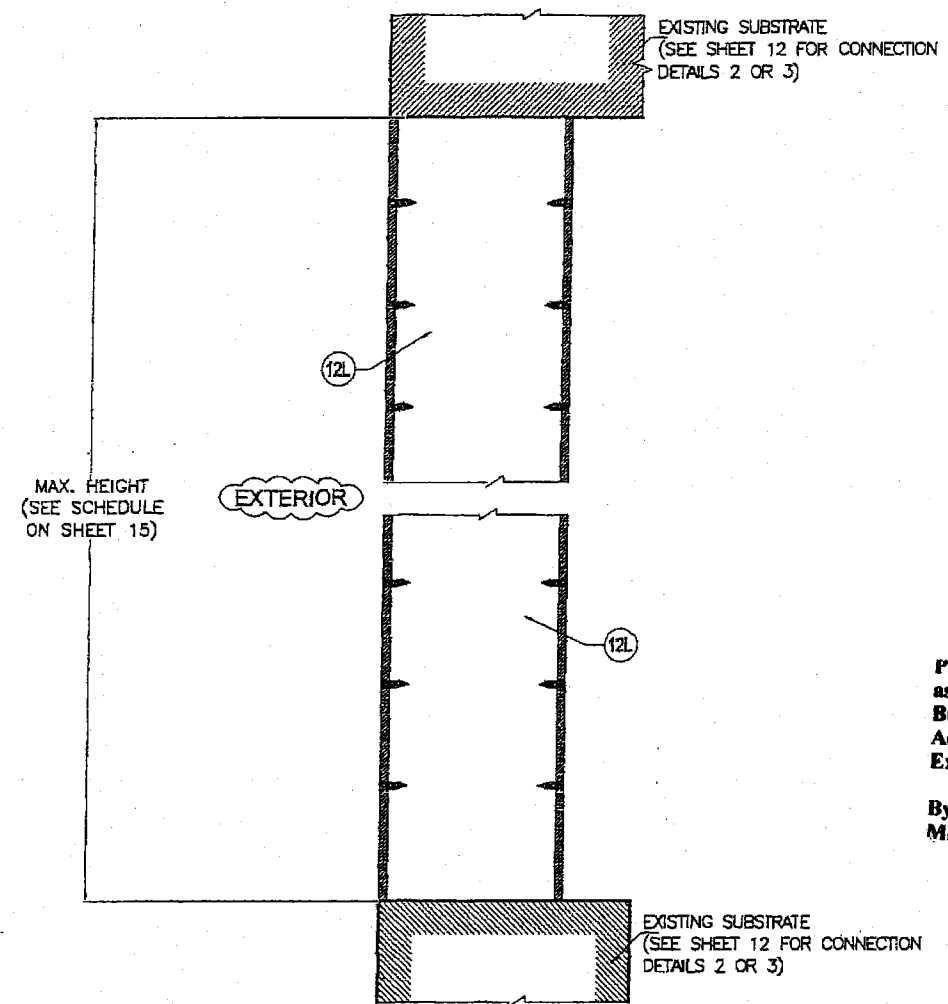
FLORIDA BUILDING CODE (High Velocity Hurricane Zone)

SED-5.1 LOUVER SYSTEM WITH OR WITHOUT CD-151 DAMPER ASSEMBLY		DRAWN BY M.L.			
UNITED ENERTECH, INC. 3005 SOUTH HICKORY ST. CHATANOOGA, TN 37407 PHONE: (423)698-7715 FAX:(423)698-6629		08/02/17 DATE			
REV. No   DESCRIPTION   DATE   REV. No   DESCRIPTION   DATE		17-125 DRAWING No			
1	OLD 15-026	08/02/17	3		
2			4		

EXISTING SUBSTRATE  
(SEE SHEET 12 FOR CONNECTION  
DETAILS 2 OR 3)



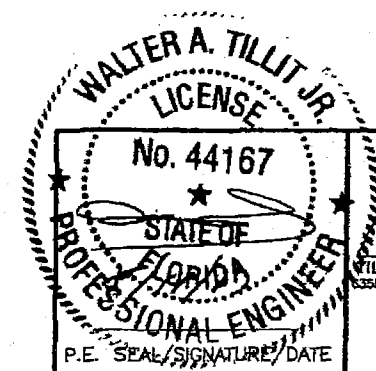
**SECTION B - B**  
SCALE: 3/16"=1"  
(DAMPER BEYOND)



**SECTION B' - B'**  
SCALE: 3/16"=1"

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Expiration Date 11/20/2023  
By Shang L. Chen  
Miami Dade Product Control

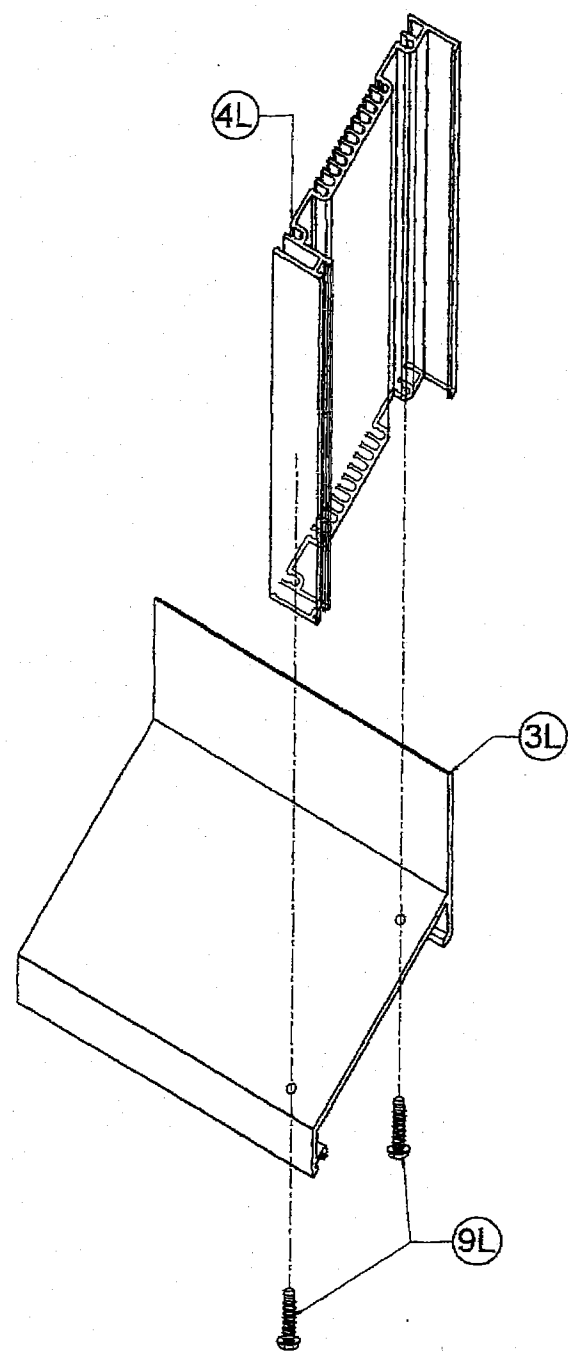
**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
NOA-No. 17-0823.08  
Expiration Date 11/20/2018  
By [Signature]  
Miami-Dade Product Control



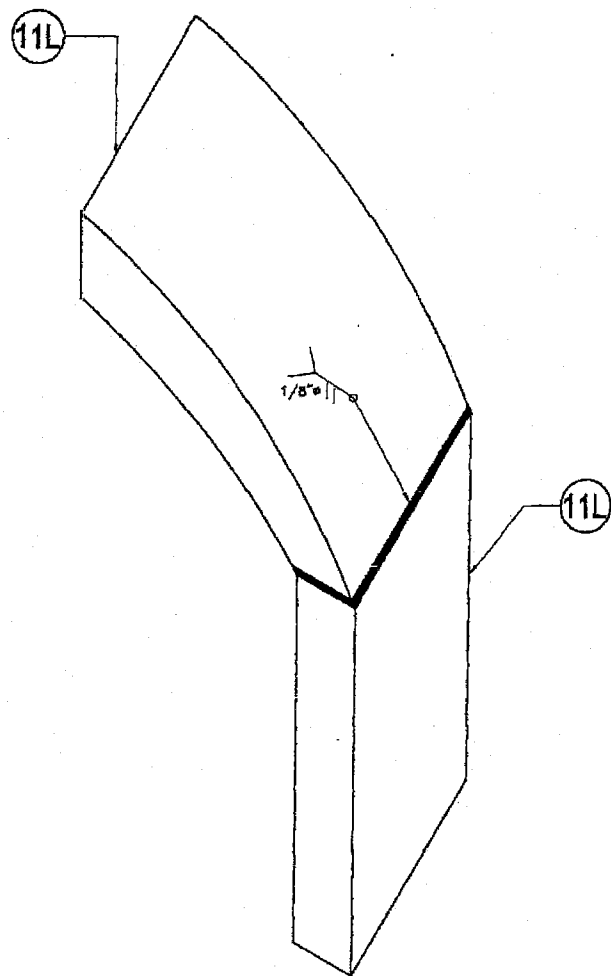
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e-mail: tilteco@aol.com  
EB-0006719  
WALTER A. TILLIT JR. P.E.  
FLORIDA Lic. # 44167

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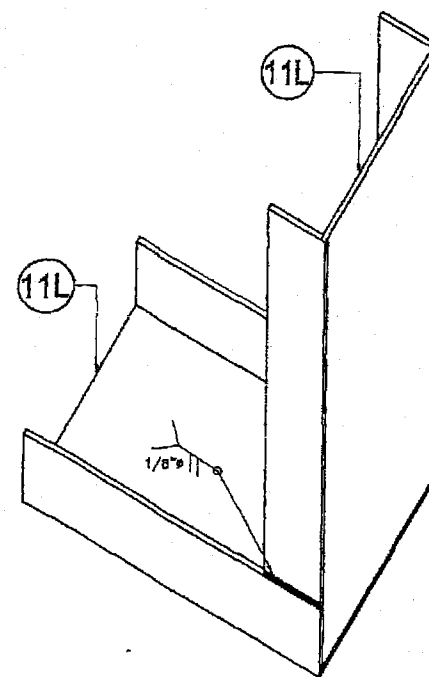
SED-5.1 LOUVER SYSTEM WITH OR WITHOUT CD-151 DAMPER ASSEMBLY		DRAWN BY M.L.	
<b>UNITED ENERTECH, INC.</b> 3005 SOUTH HICKORY ST. CHATTANOOGA, TN 37407 PHONE: (423)698-7715 FAX:(423)698-6629		08/02/17 DATE	
		17-125 DRAWING No	
REV. No	DESCRIPTION	DATE	REV. No
1	OLD 15-025	08/02/17	3
2			4
			SHEET 9 OF 16



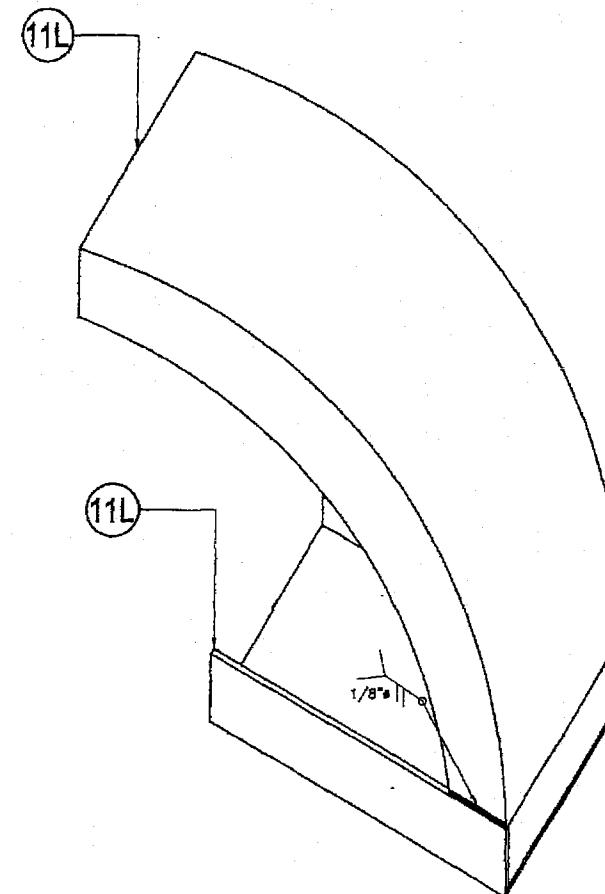
**DETAIL 1**  
CORNER AT BOTTOM  
N.T.S



**DETAIL 2**  
CORNER AT TOP  
N.T.S



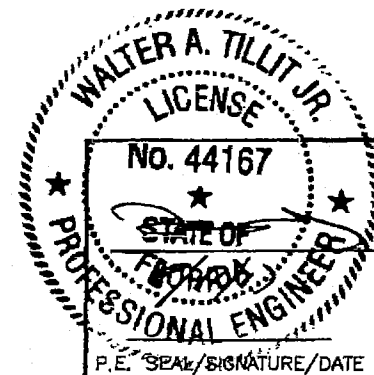
**DETAIL 3**  
CORNER AT BOTTOM  
N.T.S



**DETAIL 4**  
CORNER AT BOTTOM  
N.T.S

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Building Code  
Acceptance No. 19-0520-01  
Expiration Date 11/20/2023  
By *Shay Lillman*  
Miami Dade Product Control

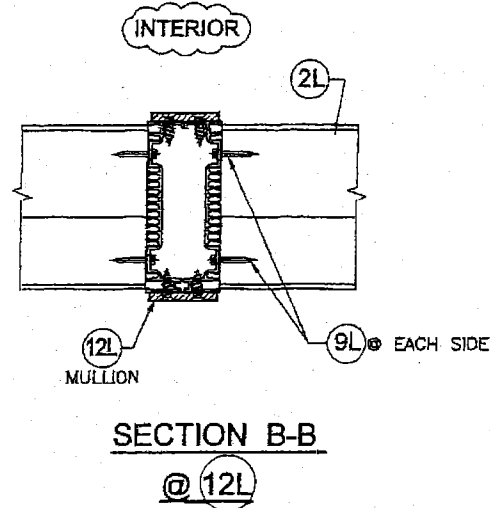
**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
NOA-No. 17-0823.08  
Expiration Date 11/20/2018  
By *[Signature]*  
Miami-Dade Product Control



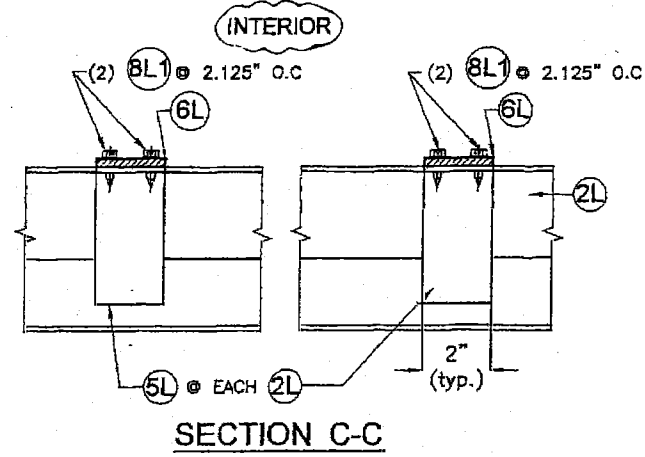
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**TILTECO INC.**  
TILLIT TESTING & ENGINEERING COMPANY  
6355 N.W. 36th St., Ste. 305, VIRGINIA GARDENS, FL 33166  
Phone: (305)871-1530 Fax: (305)871-1531  
e-mail: tilteco@aol.com  
EB-0006719  
WALTER A. TILLIT Jr. P.E.  
FLORIDA Lic. # 44167

FLORIDA BUILDING CODE (High Velocity Hurricane Zone)

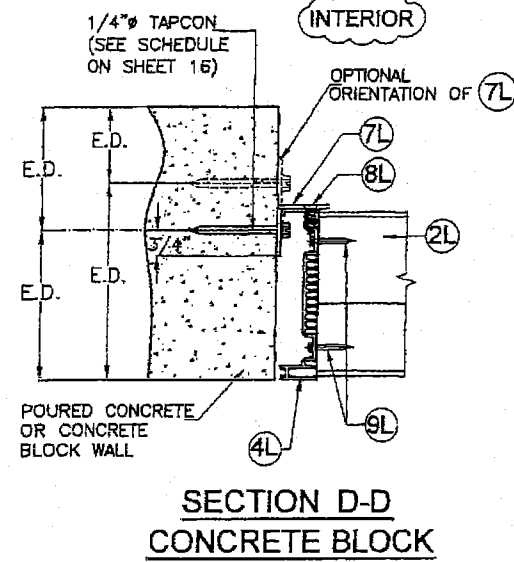
SED-5.1 LOUVER SYSTEM WITH OR WITHOUT CD-151 DAMPER ASSEMBLY		DRAWN BY M.L.
<b>UNITED ENERTECH, INC.</b> 3005 SOUTH HICKORY ST. CHATTAHOOGA, TN 37407 PHONE: (423)698-7715 FAX:(423)698-6629		08/02/17 DATE
REV. No. DESCRIPTION DATE REV. No. DESCRIPTION DATE		17-125 DRAWING No
1	OLD 15-028	08/02/17
2		
		SHEET 10 OF 16



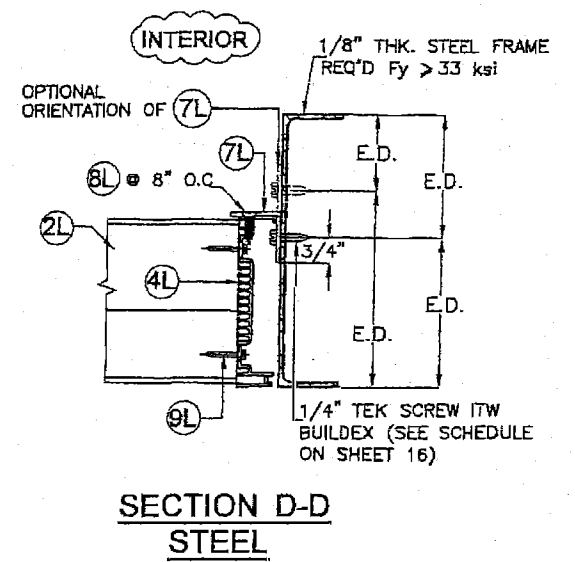
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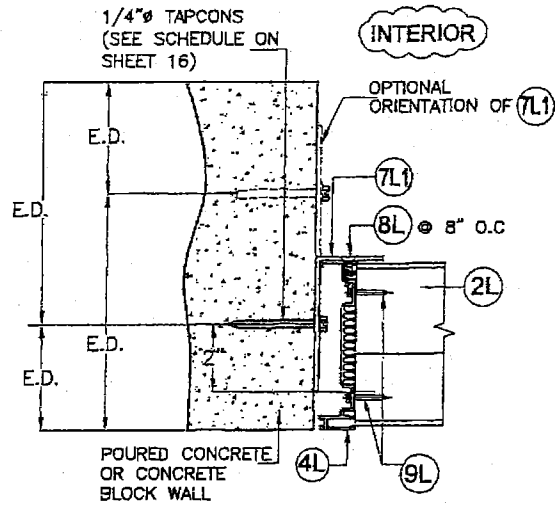
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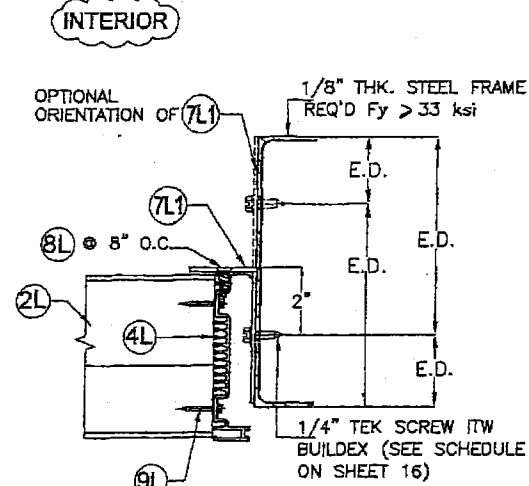
SECTION D-D  
CONCRETE BLOCK



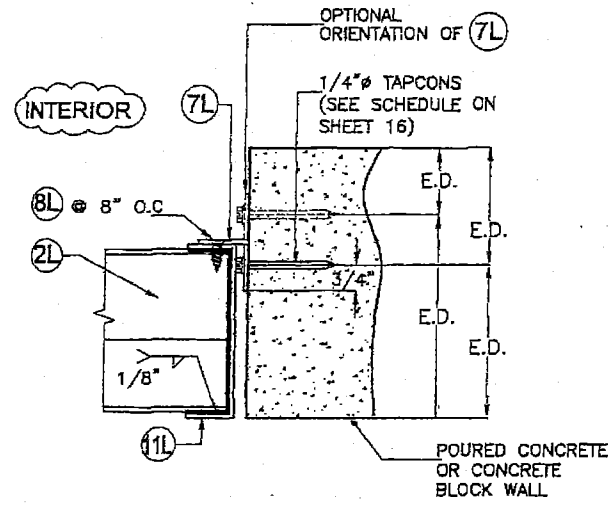
SECTION D-D  
STEEL



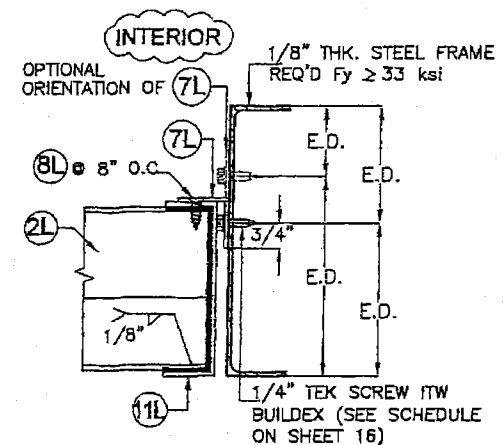
SECTION D'-D'  
CONCRETE BLOCK



SECTION D'-D'  
STEEL



SECTION D1-D1  
CONCRETE BLOCK

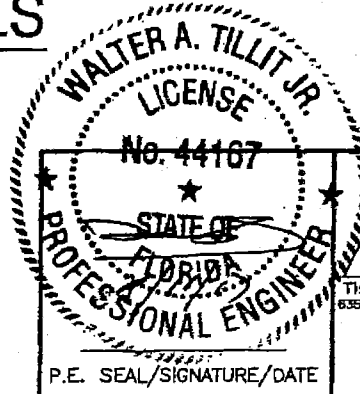


SECTION D1-D1  
STEEL

CONNECTION DETAILS  
SCALE: 3/16"=1"

PRODUCT RENEWED  
as complying with the Florida  
Building Code  
Acceptance No. 19-0520.01  
Expiration Date 11/20/2023  
By *Walter A. Tillit Jr.*  
Miami-Dade Product Control

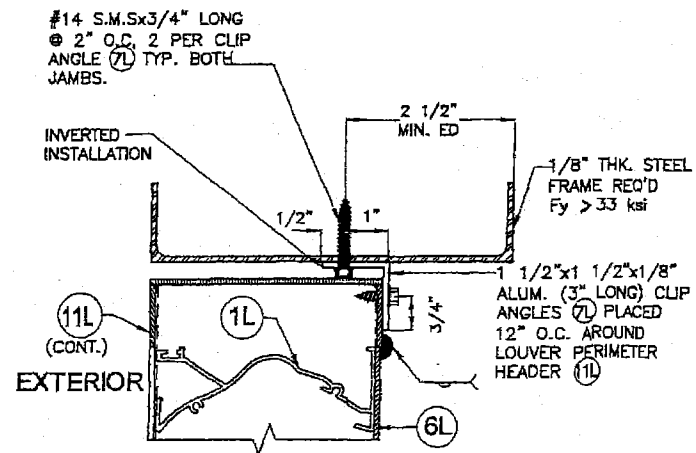
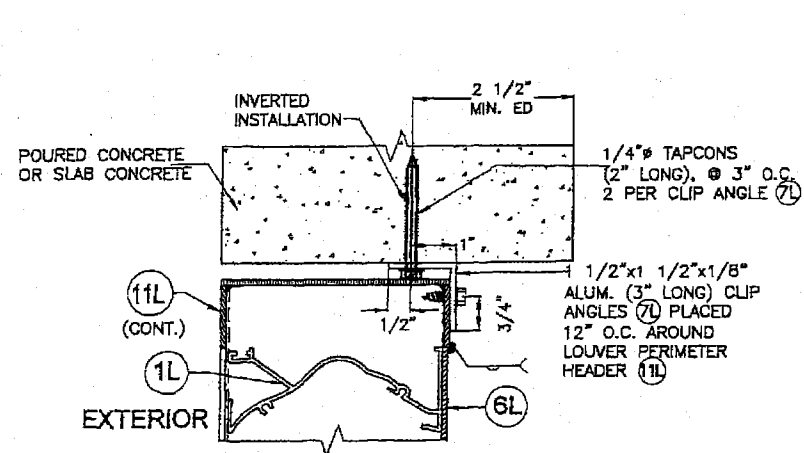
PRODUCT REVISED  
as complying with the Florida  
Building Code  
NOA-No. 17-0823.08  
Expiration Date 11/20/2018  
By *Walter A. Tillit Jr.*  
Miami-Dade Product Control



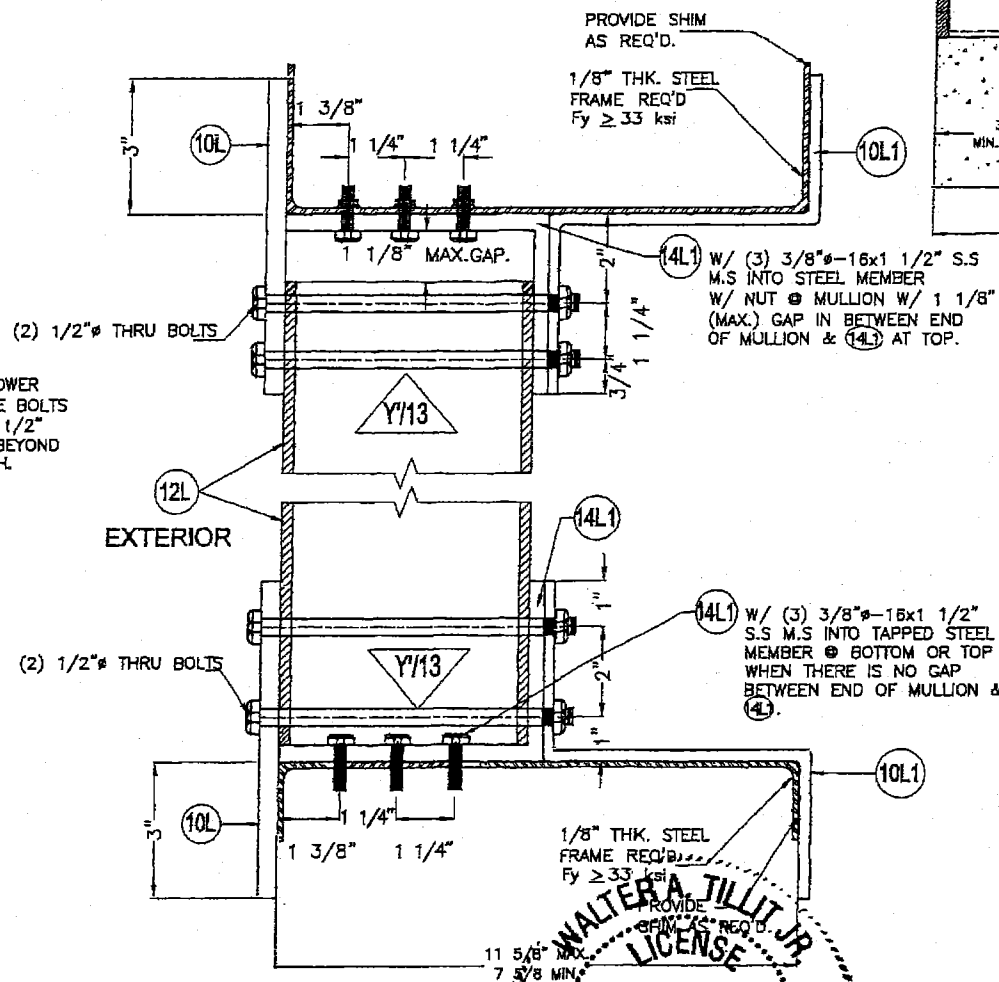
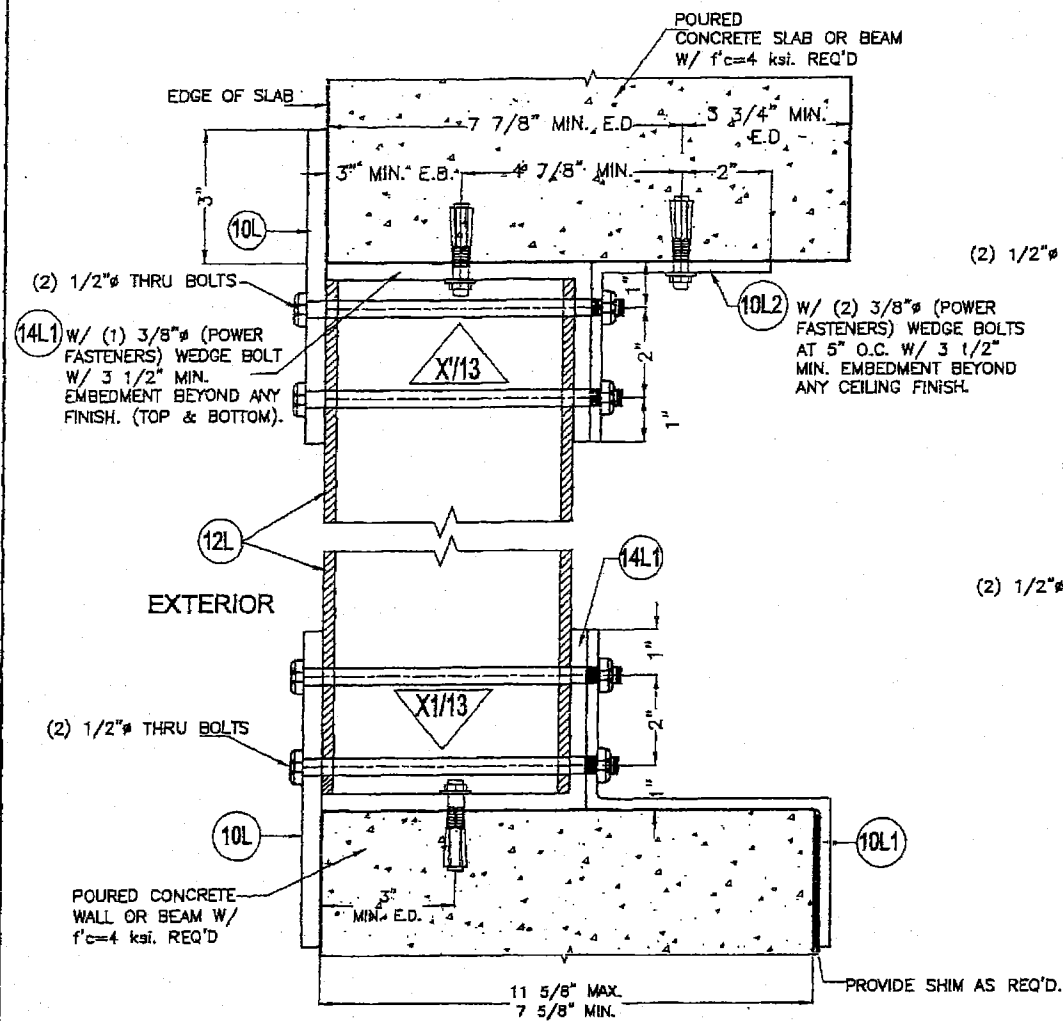
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6365 N.W. 36th St., Ste. 305, VIRGINIA GARDENS, FL 33196  
Phone: (305)871-1530 Fax: (305)871-1531  
e-mail: tilteco@aol.com  
EB-0008719  
WALTER A. TILLIT JR. P.E.  
FLORIDA Lic. # 44167

FLORIDA BUILDING CODE (High Velocity Hurricane Zone)					
REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 15-028	08/02/17	3		
2			4		

SED-5.1 LOUVER SYSTEM WITH OR WITHOUT CD-151 DAMPER ASSEMBLY  
DRAWN BY M.L.  
**UNITED ENERTECH, INC.**  
3005 SOUTH HICKORY ST.  
CHATTANOOGA, TN 37407  
PHONE: (423)698-7715 FAX:(423)698-5629  
08/02/17 DATE  
17-125 DRAWING No  
SHEET 11 OF 16



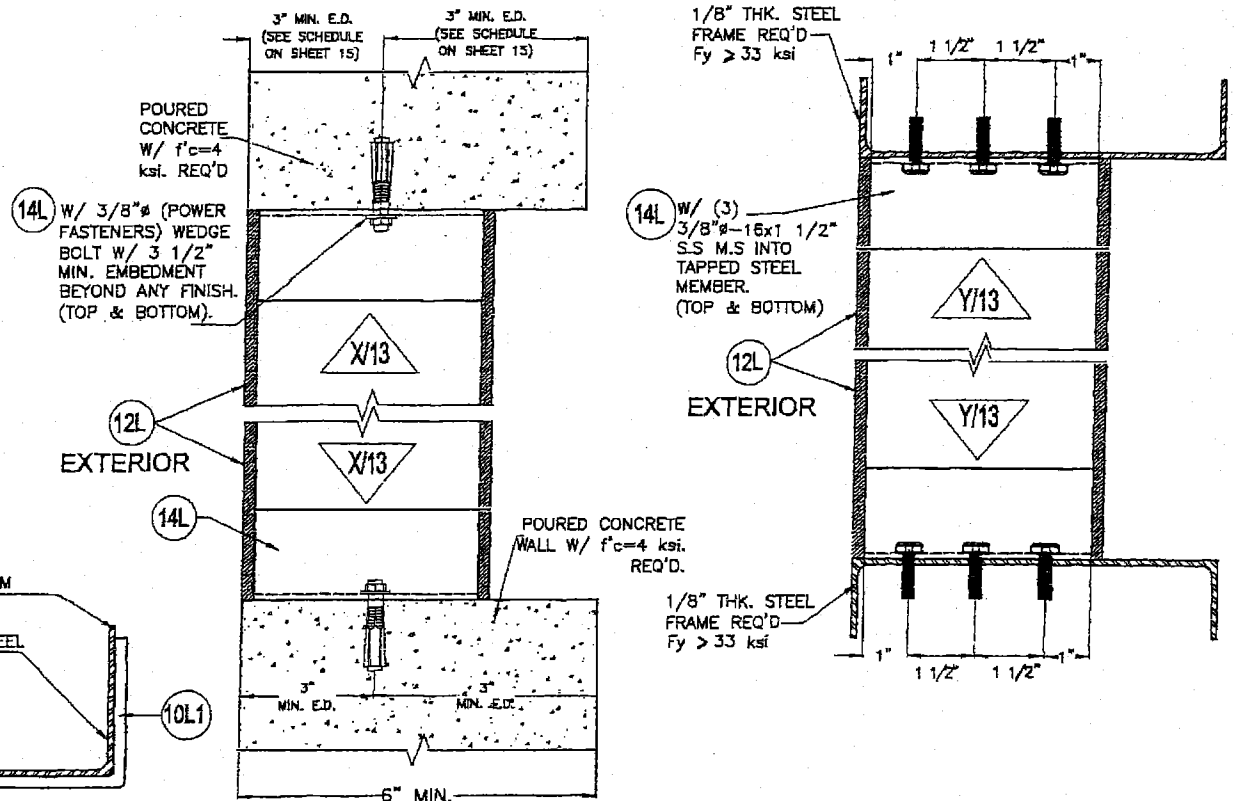
DETAIL - 1



DETAIL - 3

NOTE: TOP & BOTTOM MOUNTINGS MAY BE INTERCHANGEABLE

(SEE SHEET 15 FOR MAX. MULLION HEIGHT SCHEDULE GIVEN A MULLION SPACING AND A.S.D. DESIGN PRESSURE RATING FOR APPLICABILITY OF THIS DETAIL)



DETAIL - 2

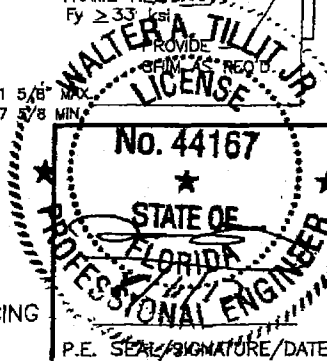
(SEE SHEET 15 FOR MAX. MULLION HEIGHT SCHEDULE GIVEN A MULLION SPACING AND A.S.D. DESIGN PRESSURE RATING FOR APPLICABILITY OF THIS DETAIL)

# CONNECTION DETAILS

SCALE: 1/4" = 1"

PRODUCT RENEWED as complying with the Florida Building Code Acceptance No. 19-0520-01 Expiration Date 11/20/2023 By *Shang L. Chang* Miami Dade Product Control

PRODUCT REVISED as complying with the Florida Building Code NOA-No. 17-0823.08 Expiration Date 11/20/2018 By *[Signature]* Miami-Dade Product Control



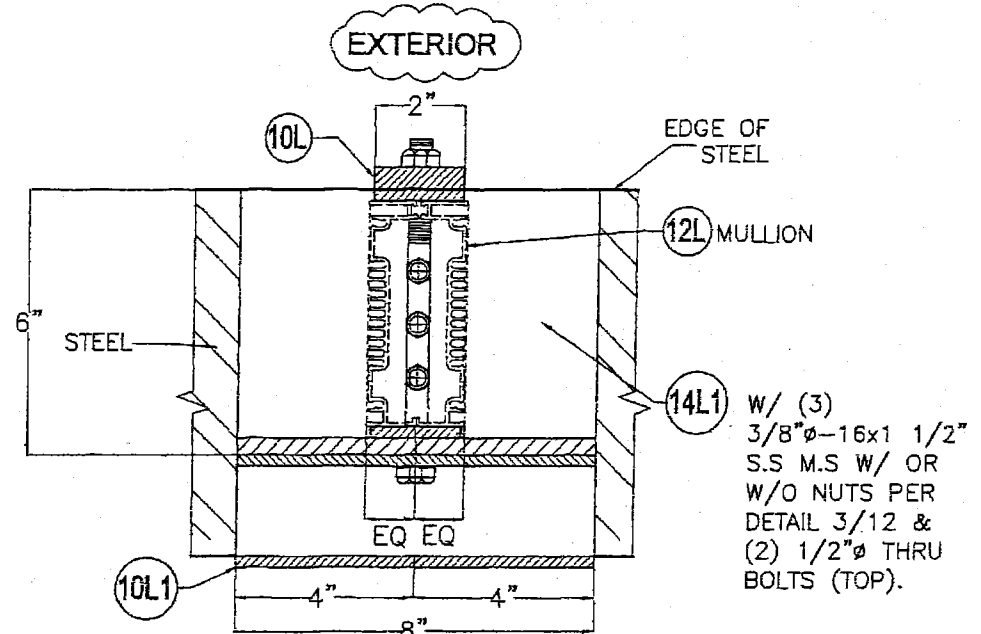
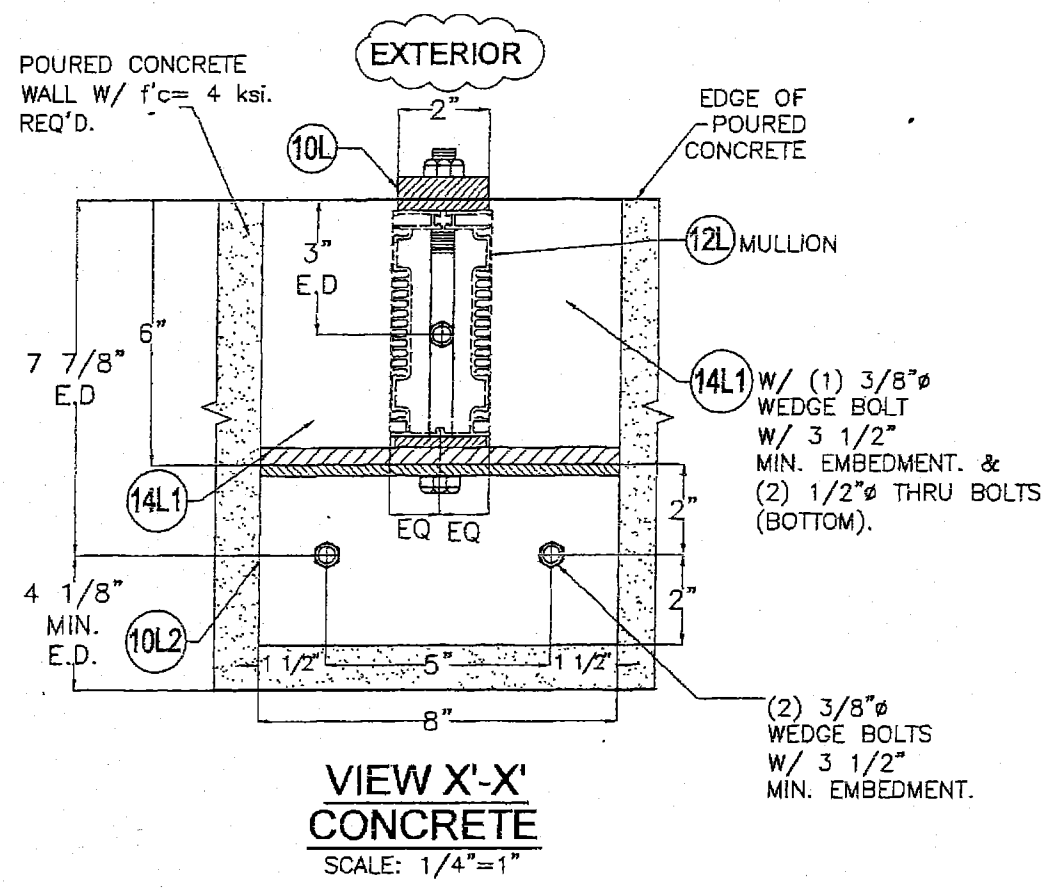
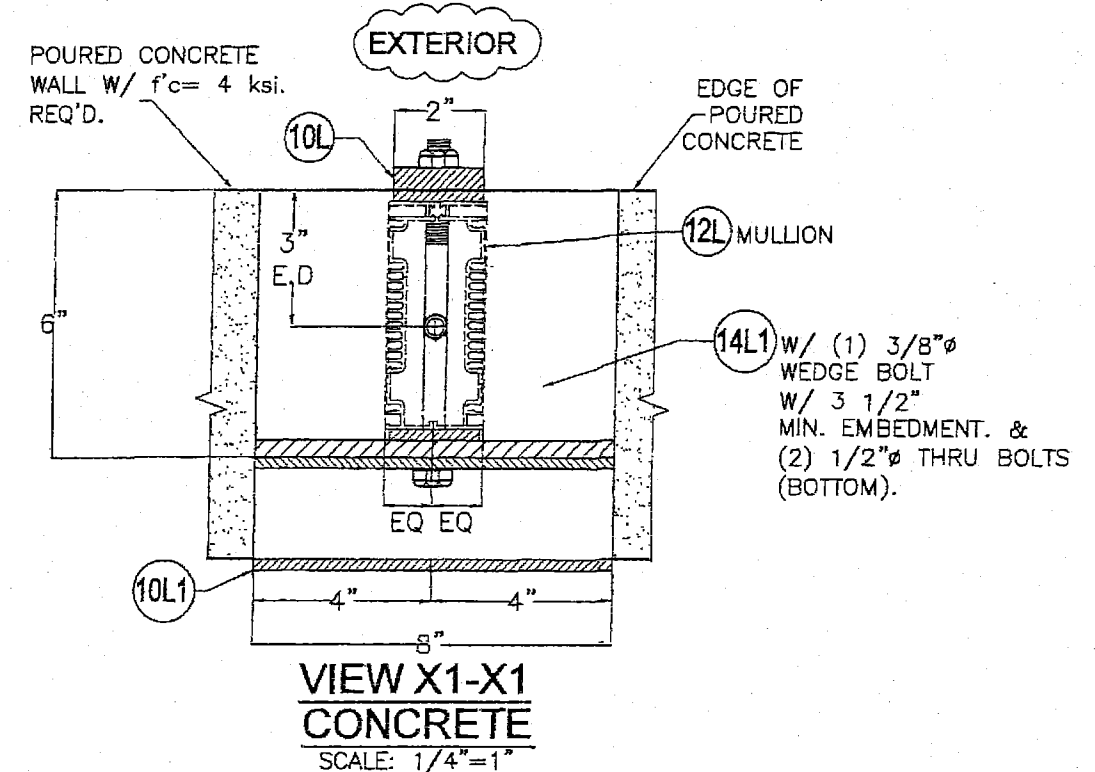
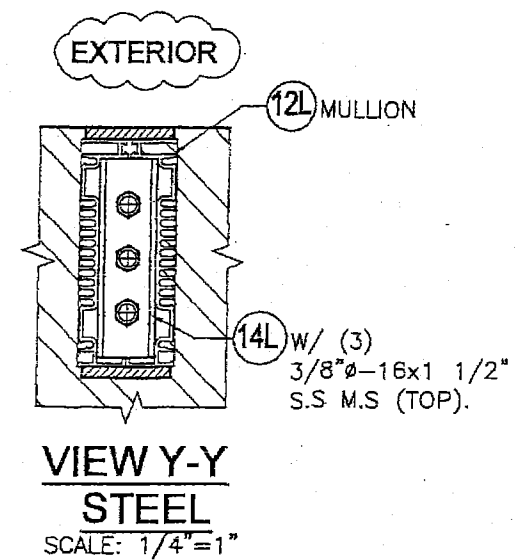
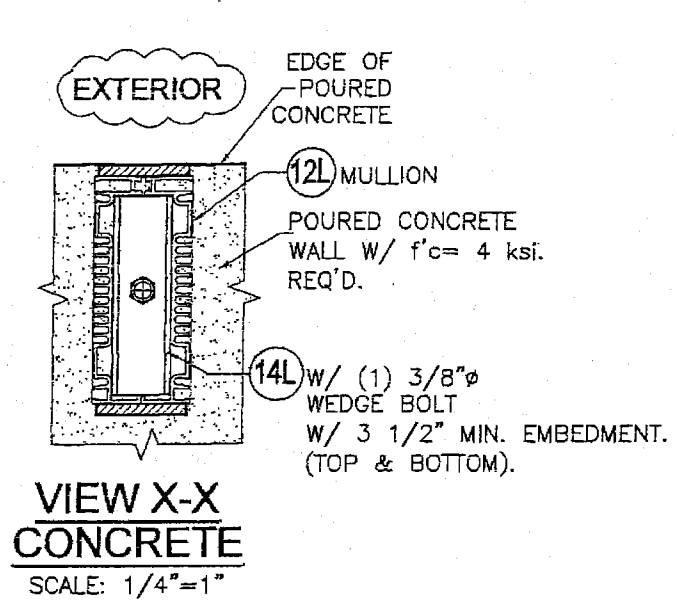
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e-mail: tilteco@aol.com  
EB-0006719  
WALTER A. TILLIT JR., P.E.  
FLORIDA Lic. # 44167

FLORIDA BUILDING CODE (High Velocity Hurricane Zone)		SED-5.1 LOUVER SYSTEM WITH OR WITHOUT CD-151 DAMPER ASSEMBLY	DRAWN BY M.L.		
UNITED ENERTECH, INC.		3005 SOUTH HICKORY ST. CHATTANOOGA, TN 37407	08/02/17 DATE		
PHONE: (423)698-7715 FAX:(423)698-6629			17-125 DRAWING No		
REV. No	DESCRIPTION	DATE	REV. No DESCRIPTION DATE		
1	OLD 15-026	08/02/17	3		
2			4		





**PRODUCT RENEWED**  
 as complying with the Florida Building Code  
 Acceptance No 17-0520-01  
 Expiration Date 11/20/2023  
 By *[Signature]*  
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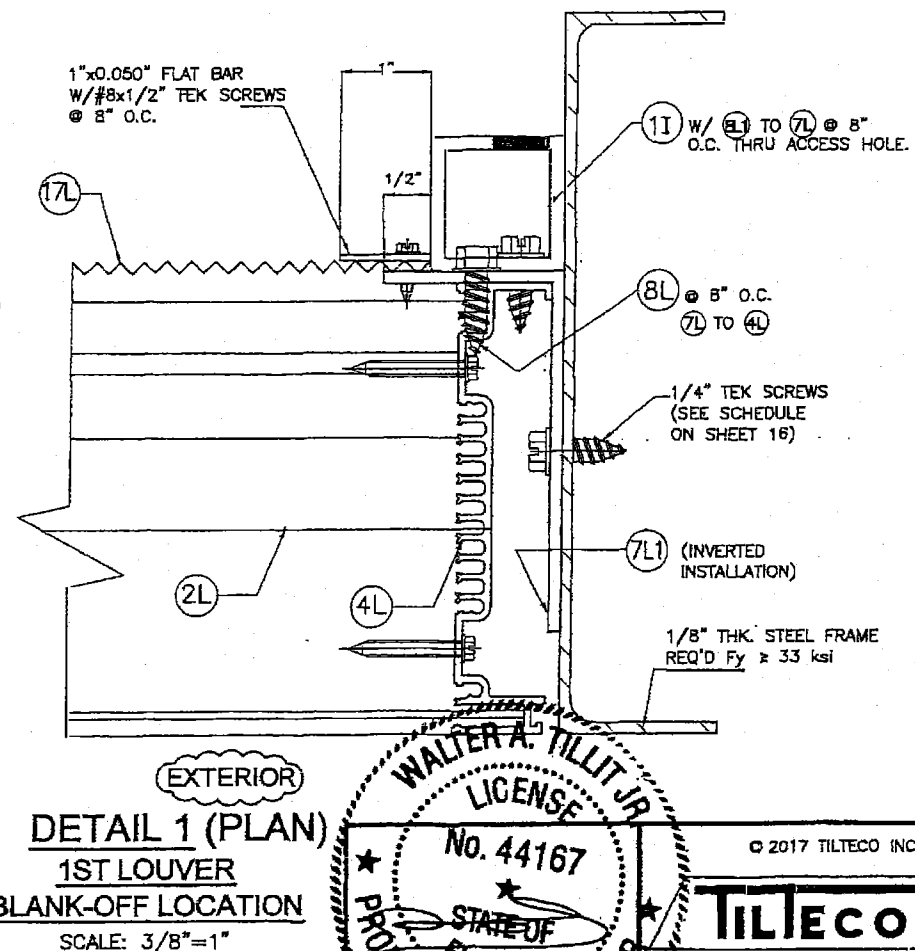
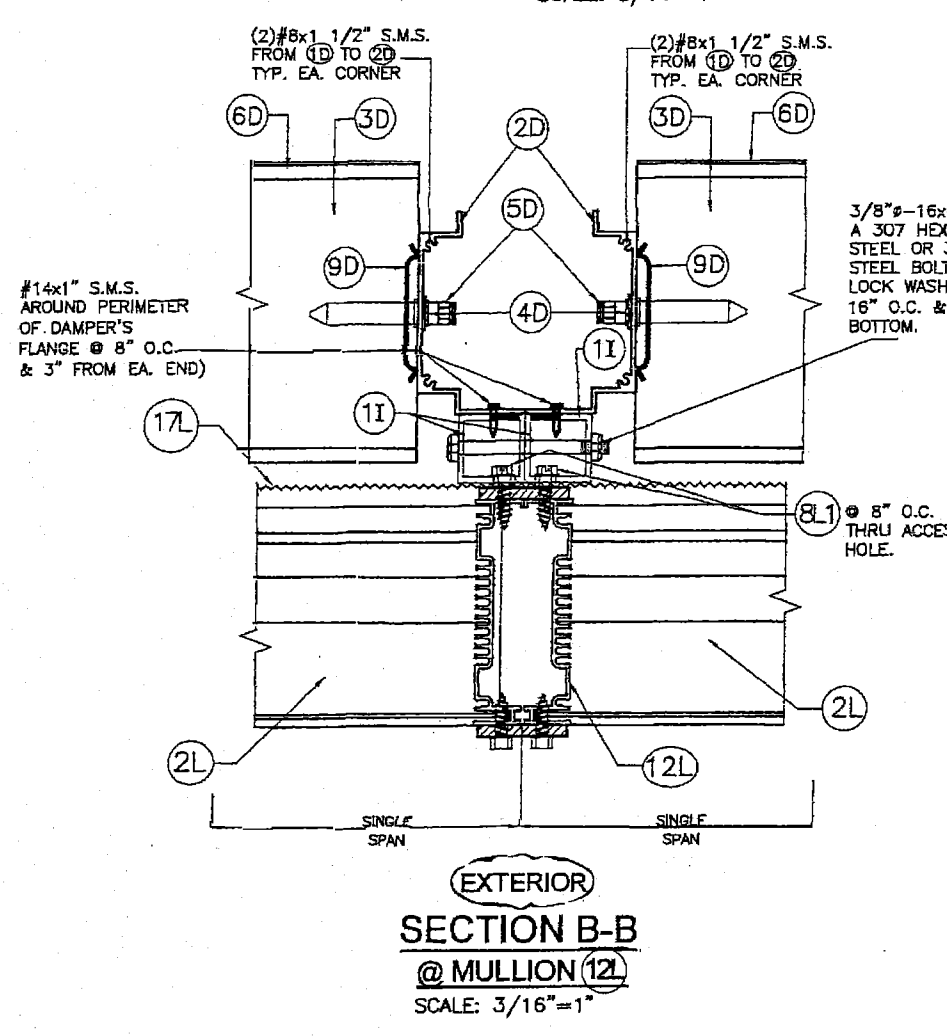
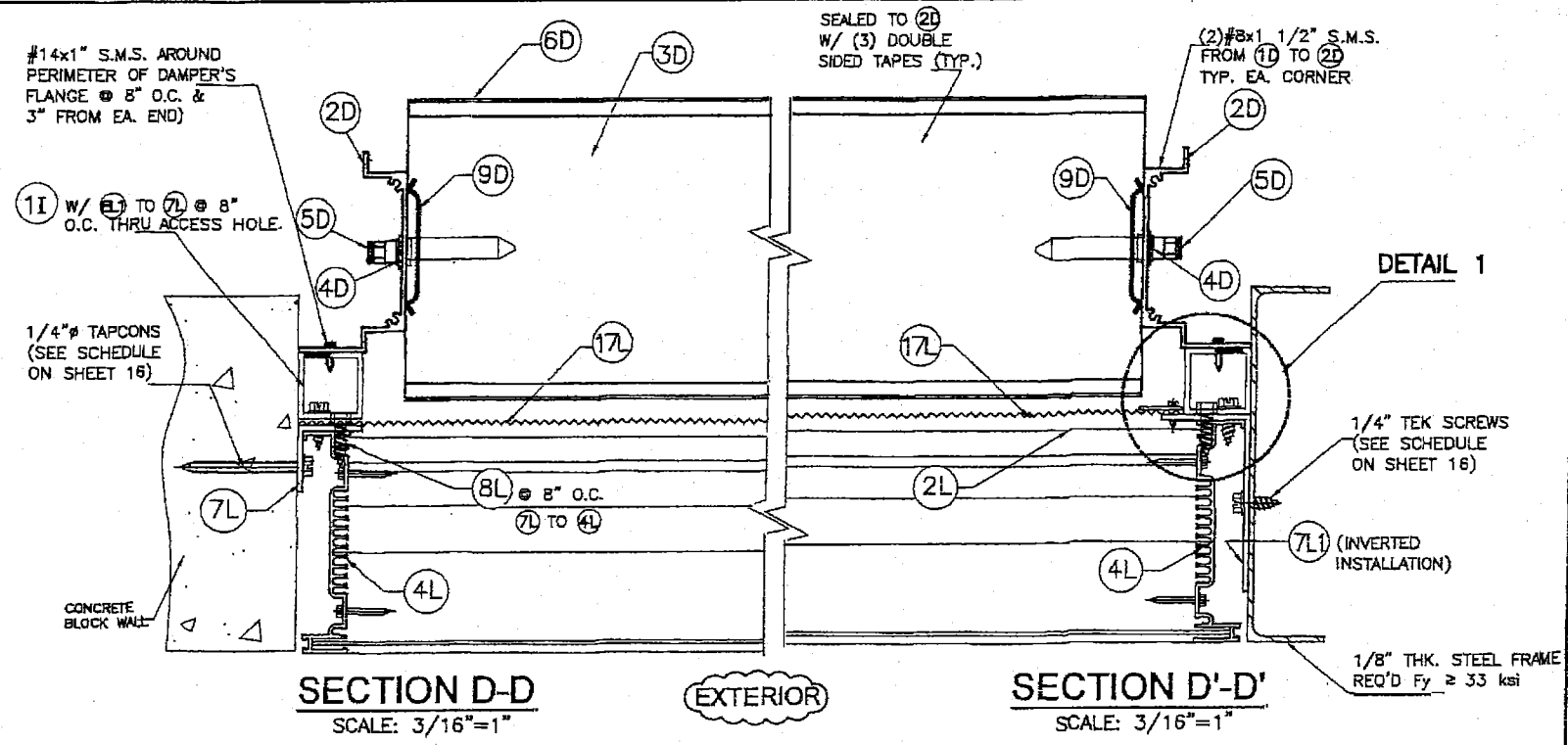
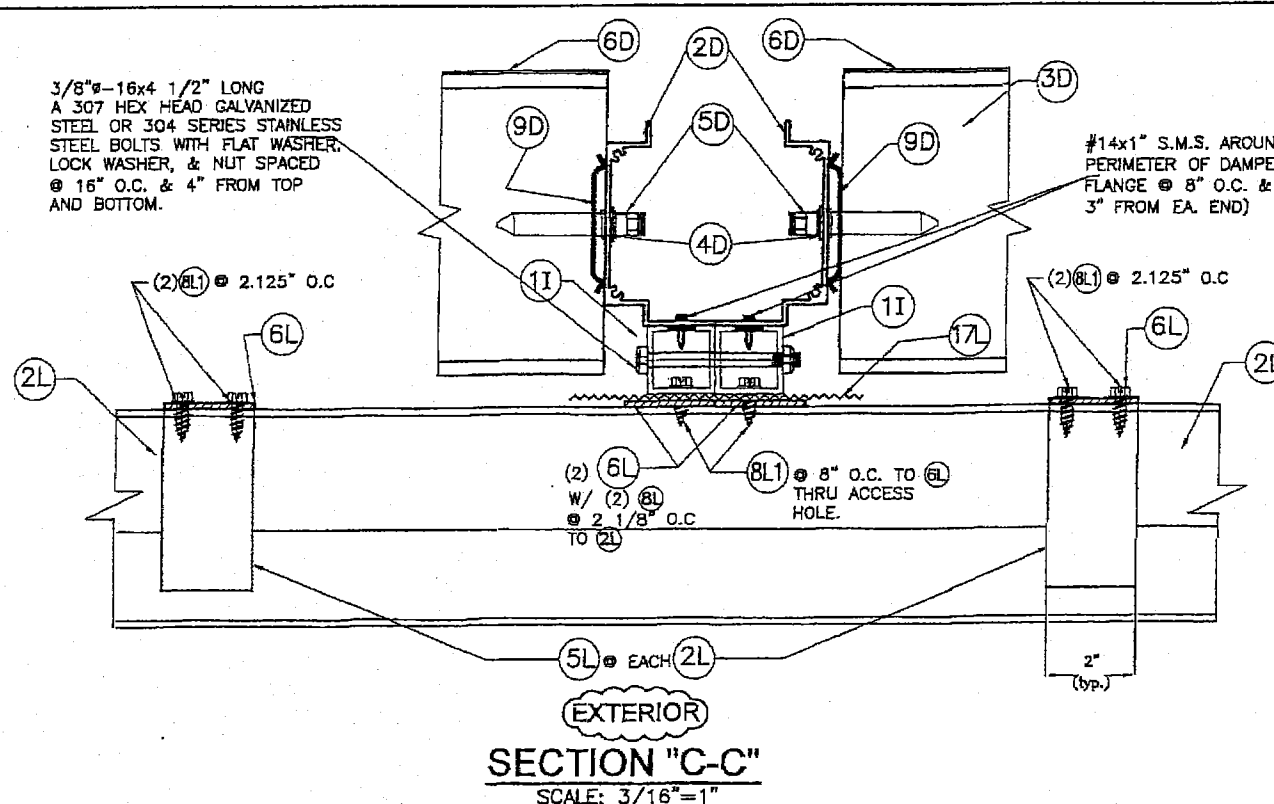
**PRODUCT REVISED**  
 as complying with the Florida Building Code  
 NOA-No. 17-0823-08  
 Expiration Date 11/20/2018  
 By *[Signature]*  
 Miami Dade Product Control

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

TILTECO INC.  
 TILLIT TESTING & ENGINEERING COMPANY  
 3005 SOUTH HICKORY ST., CHATTANOOGA, TN 37407  
 PHONE: (423)698-7715 FAX:(423)698-6629  
 e-mail: tilteco@aol.com  
 EB-0006719  
 WALTER A. TILLIT JR. P.E.  
 FLORIDA Lic. # 44167

FLORIDA BUILDING CODE (High Velocity Hurricane Zone)

SED-5.1 LOUVER SYSTEM WITH OR WITHOUT CD-151 DAMPER ASSEMBLY		DRAWN BY M.L.			
UNITED ENERTECH, INC.		08/02/17 DATE			
3005 SOUTH HICKORY ST. CHATTANOOGA, TN 37407		17-125 DRAWING No			
PHONE: (423)698-7715 FAX:(423)698-6629		SHEET 13 OF 18			
REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 15-026	08/02/17	3		
2			4		



**PRODUCT RENEWED**  
as complying with the Florida  
Building Code  
Acceptance No. 19-0520-01  
Expiration Date 11/20/2023  
By *[Signature]*  
Miami Dade Product Control

**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
NOA-No. 17-0823.08  
Expiration Date 11/20/2018  
By *[Signature]*  
Miami Dade Product Control

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

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TILTECO INC. COMPANY  
3005 SOUTH HICKORY ST.  
CHATTANOOGA, TN 37407  
PHONE: (423)698-7715 FAX: (423)698-8629  
e-mail: tilteco@aol.com  
EB-0008719  
WALTER A. TILLIT JR. P.E.  
FLORIDA Lic. # 44167

FLORIDA BUILDING CODE (High Velocity Hurricane Zone)

SED-5.1 LOUVER SYSTEM WITH OR WITHOUT CD-151 DAMPER ASSEMBLY		DRAWN BY M.L.	
<b>UNITED ENERTECH, INC.</b> 3005 SOUTH HICKORY ST. CHATTANOOGA, TN 37407 PHONE: (423)698-7715 FAX: (423)698-8629		08/02/17 DATE	
		17-125 DRAWING No	
REV. No	DESCRIPTION	DATE	REV. No
1	OLD 15-028	08/02/17	3
2			4

SHEET 14 OF 16

**MAXIMUM LOUVER SYSTEM HEIGHT (ft) SCHEDULE FOR A GIVEN A.S.D. DESIGN PRESSURE RATING (psf) AND A(12) MULLION SPACING (ft), APPLICABLE TO MULLION CONNECTION TO CONCRETE OR STEEL TOP AND BOTTOM COVERED BY DETAIL 2, SHEET 12 W/ ED. = 3" (FOR CONCRETE W/ MIN. f<sub>c</sub> = 4 ksi.)**

	Concrete			Steel	
	Concrete	Steel		Concrete	Steel
40	48	10'-0"	100	48	4'-11"
	60	9'-10"		60	3'-11"
	72	8'-3"		72	3'-3"
45	48	10'-0"	105	48	4'-8"
	60	8'-9"		60	3'-9"
	72	7'-4"		72	3'-2"
50	48	9'-10"	110	48	4'-6"
	60	7'-11"		60	3'-7"
	72	6'-7"		72	2'-12"
55	48	8'-12"	115	48	4'-3"
	60	7'-2"		60	3'-5"
	72	5'-12"		72	2'-10"
60	48	8'-3"	120	48	4'-1"
	60	6'-7"		60	3'-3"
	72	5'-6"		72	2'-9"
65	48	7'-7"	125	48	3'-11"
	60	6'-1"		60	3'-2"
	72	5'-1"		72	2'-8"
70	48	7'-1"	130	48	3'-10"
	60	5'-8"		60	3'-0"
	72	4'-8"		72	2'-6"
75	48	6'-7"	135	48	3'-8"
	60	5'-3"		60	2'-11"
	72	4'-5"		72	2'-5"
80	48	6'-2"	140	48	3'-6"
	60	4'-11"		60	2'-10"
	72	4'-1"		72	2'-4"
85	48	5'-10"	145	48	3'-5"
	60	4'-8"		60	2'-9"
	72	3'-10"		72	2'-3"
90	48	5'-6"	150	48	3'-3"
	60	4'-5"		60	2'-8"
	72	3'-8"		72	2'-2"
95	48	5'-2"		48	7'-4"
	60	4'-2"		60	5'-11"
	72	3'-6"		72	4'-11"

**MAXIMUM LOUVER SYSTEM HEIGHT (ft) SCHEDULE FOR A GIVEN A.S.D. DESIGN PRESSURE RATING (psf) AND A(12) MULLION SPACING (ft), APPLICABLE TO MULLION CONNECTION TO CONCRETE OR STEEL TOP AND BOTTOM COVERED BY DETAIL 2, SHEET 12 W/ ED. = 4" (FOR CONCRETE W/ MIN. f<sub>c</sub> = 4 ksi.)**

	Concrete			Steel	
	Concrete	Steel		Concrete	Steel
40	48	10'-0"	100	48	6'-12"
	60	10'-0"		60	5'-7"
	72	10'-0"		72	4'-8"
45	48	10'-0"	105	48	6'-8"
	60	10'-0"		60	5'-4"
	72	10'-0"		72	4'-5"
50	48	10'-0"	110	48	6'-4"
	60	10'-0"		60	5'-1"
	72	9'-4"		72	4'-3"
55	48	10'-0"	115	48	6'-1"
	60	10'-0"		60	4'-10"
	72	8'-6"		72	4'-1"
60	48	10'-0"	120	48	5'-10"
	60	9'-4"		60	4'-8"
	72	7'-9"		72	3'-11"
65	48	10'-0"	125	48	5'-7"
	60	8'-7"		60	4'-6"
	72	7'-2"		72	3'-9"
70	48	9'-12"	130	48	5'-5"
	60	7'-12"		60	4'-4"
	72	6'-8"		72	3'-7"
75	48	9'-4"	135	48	5'-2"
	60	7'-6"		60	4'-2"
	72	6'-3"		72	3'-5"
80	48	8'-9"	140	48	4'-12"
	60	6'-12"		60	3'-12"
	72	5'-10"		72	3'-4"
85	48	8'-3"	145	48	4'-10"
	60	6'-7"		60	3'-10"
	72	5'-6"		72	3'-3"
90	48	7'-9"	150	48	4'-8"
	60	6'-3"		60	3'-9"
	72	5'-2"		72	3'-1"
95	48	7'-4"		48	7'-4"
	60	5'-11"		60	5'-11"
	72	4'-11"		72	4'-11"

**MAXIMUM LOUVER SYSTEM HEIGHT (ft) SCHEDULE FOR A GIVEN A.S.D. DESIGN PRESSURE RATING (psf) AND A(12) MULLION SPACING (ft), APPLICABLE TO MULLION CONNECTION TO CONCRETE OR STEEL TOP AND BOTTOM COVERED BY DETAIL 3, SHEET 12 W/ ED. = 3" (FOR CONCRETE W/ MIN. f<sub>c</sub> = 4 ksi.)**

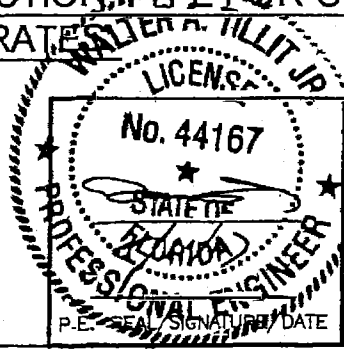
	Concrete			Steel	
	Concrete	Steel		Concrete	Steel
40	48	10'-0"	100	48	9'-2"
	60	10'-0"		60	8'-6"
	72	10'-0"		72	8'-0"
45	48	10'-0"	105	48	9'-0"
	60	10'-0"		60	8'-5"
	72	10'-0"		72	7'-11"
50	48	10'-0"	110	48	8'-11"
	60	10'-0"		60	8'-3"
	72	10'-0"		72	7'-9"
55	48	10'-0"	115	48	8'-9"
	60	10'-0"		60	8'-2"
	72	9'-9"		72	7'-8"
60	48	10'-0"	120	48	8'-8"
	60	10'-0"		60	8'-0"
	72	9'-6"		72	7'-6"
65	48	10'-0"	125	48	8'-6"
	60	9'-10"		60	7'-11"
	72	9'-3"		72	7'-5"
70	48	10'-0"	130	48	8'-5"
	60	9'-7"		60	7'-10"
	72	9'-0"		72	7'-4"
75	48	10'-0"	135	48	8'-4"
	60	9'-4"		60	7'-8"
	72	8'-10"		72	7'-3"
80	48	9'-11"	140	48	8'-2"
	60	9'-2"		60	7'-7"
	72	8'-8"		72	7'-2"
85	48	9'-8"	145	48	8'-1"
	60	8'-12"		60	7'-6"
	72	8'-6"		72	7'-1"
90	48	9'-6"	150	48	8'-0"
	60	8'-10"		60	7'-5"
	72	8'-4"		72	7'-0"
95	48	9'-4"		48	9'-4"
	60	8'-8"		60	8'-8"
	72	8'-2"		72	8'-2"

NOTE: TOP & BOTTOM MOUNTINGS AT DETAIL 3 MAY BE INTERCHANGEABLE.

**MAXIMUM MULLION (12) HEIGHT FOR MULTIPLE LOUVER SYSTEM SED 5.1 W/ OR W/O DAMPER FOR A GIVEN A.S.D. DESIGN PRESSURE RATING, MULLION SPACING AND CONNECTION TYPE FOR CONNECTIONS INTO CONCRETE OR STEEL SUBSTRATE**

**PRODUCT REVISED**  
as complying with the Florida Building Code  
NOA-No. **17-0823.08**  
Expiration Date **11/20/2018**  
By *[Signature]*  
Miami-Dade Product Control  
FLORIDA BUILDING CODE (High Velocity Hurricane Zone)

**PRODUCT RENEWED**  
as complying with the Florida Building Code  
Acceptance No. **19-052001**  
Expiration Date **11/20/2023**  
By *[Signature]*  
Miami Dade Product Control



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e-mail: [titeco@aol.com](mailto:titeco@aol.com)  
EB-0006719  
WALTER A. TILLIT JR. P.E.  
FLORIDA Lic. # 44167

SED-5.1 LOUVER SYSTEM WITH OR WITHOUT CD-151 DAMPER ASSEMBLY		DRAWN BY M.L.	
<b>UNITED ENERTECH, INC.</b>		08/02/17 DATE	
3005 SOUTH HICKORY ST. CHATTANOOGA, TN 37407 PHONE: (423)898-7715 FAX:(423)698-6629		17-125 DRAWING No	
REV. No	DESCRIPTION	DATE	REV. No
1	OLD 15-026	08/02/17	3
2			4

**ANCHOR SPACING SCHEDULE AT JAMBS, VALID FOR CONNECTION TO  
CONCRETE, CONCRETE BLOCK & STEEL SUBSTRATES.**

ANCHOR SPACING SCHEDULE AT JAMBS W/7L (1 1/2"x1 1/2"x1/8" ANGLE)				
A.S.D. DESIGN PRESSURE RATING	SINGLE UNIT WIDTH OR MULLION	MAX. SPACING (in)		
(psf.)	SPACING (S) AT MULTIPLE UNITS	TO CONCRETE	TO CONCRETE BLOCK	TO STEEL
75 OR LESS	48	8" O.C	4" O.C	8" O.C
	60	8" O.C	3" O.C	8" O.C
	72	8" O.C	3" O.C	8" O.C
> 75 TO 110	48	8" O.C	3" O.C	8" O.C
	60	8" O.C	3" O.C**	8" O.C
	72	7" O.C	N/A	7 1/2" O.C
> 110 TO 150	48	8" O.C	3" O.C*	8" O.C
	60	6 1/2" O.C	N/A	6 1/2" O.C
	72	5" O.C	N/A	5 1/2" O.C

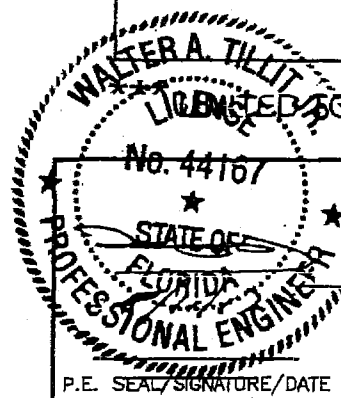
ANCHOR SPACING SCHEDULE AT JAMBS W/7L1 (2"x4"x1/8" ANGLE)				
A.S.D. DESIGN PRESSURE RATING	SINGLE UNIT WIDTH OR MULLION	MAX. SPACING (in)		
(psf.)	SPACING (S) AT MULTIPLE UNITS	TO CONCRETE	TO CONCRETE BLOCK	TO STEEL
75 OR LESS	48	8" O.C	7" O.C	8" O.C
	60	8" O.C	6" O.C	8" O.C
	72	8" O.C	5" O.C	8" O.C
> 75 TO 110	48	8" O.C	5" O.C	8" O.C
	60	8" O.C	4" O.C	8" O.C
	72	8" O.C	3" O.C	8" O.C
> 110 TO 150	48	8" O.C	3" O.C	8" O.C
	60	8" O.C	3" O.C	8" O.C
	72	7 1/2" O.C	3" O.C***	8" O.C

PRODUCT RENEWED  
as complying with the Florida  
Building Code  
Acceptance No. 19-0520-01  
Expiration Date NOV 20, 2023  
By Walter A. Tilt  
Miami-Dade Product Control

\* LIMITED TO 114.0 psf. A.S.D. DESIGN PRESSURE RATING.

\*\* LIMITED TO 91.0 psf. A.S.D. DESIGN PRESSURE RATING.

PRODUCT REVISED  
as complying with the Florida  
Building Code  
NOA-No. 17-0823.08  
Expiration Date 11/20/2018  
By Walter A. Tilt  
Miami-Dade Product Control



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**TILTECO INC.**  
TILIT TESTING & ENGINEERING COMPANY  
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Phone: (305)871-1530 Fax: (305)871-1531  
e-mail: tiltco@aol.com  
EB-0005719  
WALTER A. TILIT Jr. P.E.  
FLORIDA Lic. # 44167

SED-5.1 LOUVER SYSTEM WITH OR WITHOUT CD-151 DAMPER ASSEMBLY		DRAWN BY M.L.	
UNITED ENERTECH, INC. 3005 SOUTH HICKORY ST. CHATTANOOGA, TN 37407 PHONE: (423)698-7715 FAX:(423)698-6629		08/02/17 DATE	
17-125 DRAWING No		SHEET 16 OF 16	
REV. No	DESCRIPTION	DATE	REV. No
1	OLD 15-026	08/02/17	3
2			4

127.0 psf. A.S.D. DESIGN PRESSURE RATING.

FLORIDA BUILDING CODE (High Velocity Hurricane Zone)