



DEPARTMENT OF PERMITTING, ENVIRONMENT, AND REGULATORY  
AFFAIRS (PERA)  
BOARD AND CODE ADMINISTRATION DIVISION  
**NOTICE OF ACCEPTANCE (NOA)**

MIAMI-DADE COUNTY  
PRODUCT CONTROL SECTION  
11805 SW 26 Street, Room 208  
Miami, Florida 33175-2474  
T (786) 315-2590 F (786) 315-2599  
[www.miamidade.gov/pera/](http://www.miamidade.gov/pera/)

**Construction Concepts Unlimited, Inc.**  
560 NE 44th St.  
Fort Lauderdale, FL 33334

**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 PERA-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. PERA 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: Series L-90 "Impact" PTAC Aluminum Louver**

**APPROVAL DOCUMENT:** Drawing No. CCU001, titled "CCU Impact Series L-90 Louver Elevation, Anchor Layout, and Installation Notes", sheets 1 through 4 of 4, prepared by Building Drops, Inc, dated 06/22/2011, signed and sealed by Alexis Spyrou, P.E., bearing the Miami-Dade County Product Control approval stamp with the Notice of Acceptance number and approval 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.

**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 consists of this page 1 and evidence page E-1, as well as approval document mentioned above. The submitted documentation was reviewed by **Carlos M. Utrera, P.E.**



*[Handwritten Signature]*  
08/29/2012

NOA No. 11-1205.02  
Expiration Date: August 30, 2017  
Approval Date: August 30, 2012

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

**A. DRAWINGS**

1. Drawing No. **CCU001**, titled "CCU Impact Series L-90 Louver Elevation, Anchor Layout, and Installation Notes", sheets 1 through 4 of 4, prepared by Building Drops, Inc, dated 06/22/2011, signed and sealed by Alexis Spyrou, P.E.

**B. TESTS**

1. Test Report No. **0902.01-11**, Addendum # 1, Revision # 1, prepared by American Test Lab of South Florida, dated 04/17/2012, signed and sealed by Julio E. Gonzalez, P.E.
2. 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 a Series L-90 PTAC Aluminum Louvers, prepared by American Test Lab of South Florida, Test Report No. **0902.01-11**, dated 09/16/2011, signed and sealed by Julio E. Gonzalez, P.E.

**C. CALCULATIONS**

1. Product evaluation report prepared by Building Drops, Inc, dated 06/11/2012, signed and sealed by Alexis Spyrou, P.E.

**D. QUALITY ASSURANCE**

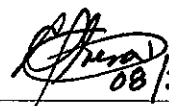
1. Miami-Dade Department of Permitting, Environment, and Regulatory Affairs (PERA)

**E. MATERIAL CERTIFICATIONS**

1. None.

**F. STATEMENTS**

1. Statement letter of code conformance to 2007 and 2010 FBC and no financial interest, issued by Building Drops, Inc, dated 11/21/2011, signed and sealed by Alexis Spyrou, P.E.

  
08/29/2012

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Carlos M. Utrera, P.E.  
Product Control Examiner  
NOA No. 11-1205.02  
Expiration Date: August 30, 2017  
Approval Date: August 30, 2012

# CONSTRUCTION CONCEPTS UNLIMITED, INC.

## CCU IMPACT SERIES L-90 PTAC LOUVER



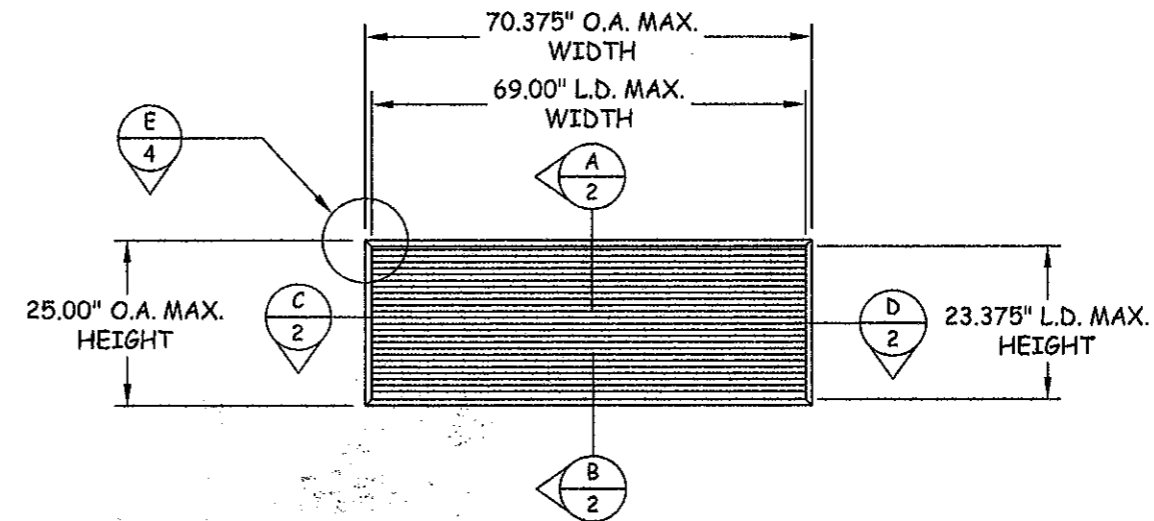
CONSTRUCTION CONCEPTS UNLIMITED  
560 E. PROSPECT RD.  
FT. LAUDERDALE, FL 3334  
PH: (954) 568-3400  
EM: INFO@CCUINC.NET

### INSTALLATION NOTES:

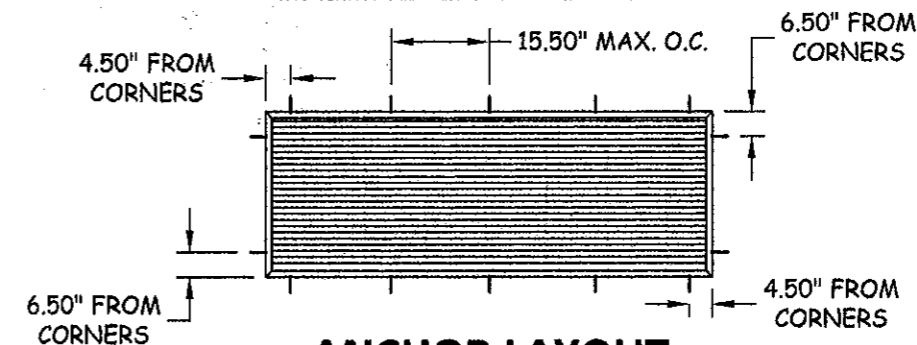
- ONE (1) INSTALLATION ANCHOR IS REQUIRED AT EACH ANCHOR LOCATION SHOWN, UNLESS OTHERWISE STATED.
- THE NUMBER OF INSTALLATION ANCHORS DEPICTED IS THE MINIMUM NUMBER OF ANCHORS TO BE USED FOR PRODUCT INSTALLATION.
- INSTALL INDIVIDUAL INSTALLATION ANCHORS WITHIN A TOLERANCE OF  $\pm 1/16$  INCH OF THE DEPICTED LOCATION IN THE ANCHOR LAYOUT DETAIL (I.E., WITHOUT CONSIDERATION OF TOLERANCES). TOLERANCES ARE NOT CUMULATIVE FROM ONE INSTALLATION ANCHOR TO THE NEXT.
- FOR INSTALLATION INTO METAL STUD, USE ONE (1) 1/4-20 TEK SCREW GR. 2, TYPE INSTALLATION ANCHOR PER LOCATION OF SUFFICIENT LENGTH TO ACHIEVE MINIMUM PENETRATION OF 3 THREADS BEYOND METAL STRUCTURE.
- MINIMUM EMBEDMENT AND EDGE DISTANCE EXCLUDE WALL FINISHES, INCLUDING BUT NOT LIMITED TO STUCCO, FOAM, BRICK VENEER, AND SIDING.
- INSTALLATION ANCHORS AND ASSOCIATED HARDWARE MUST BE MADE OF CORROSION RESISTANT MATERIAL OR HAVE A CORROSION RESISTANT COATING.
- INSTALLATION ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH ANCHOR MANUFACTURER'S INSTALLATION INSTRUCTIONS, AND ANCHORS SHALL NOT BE USED IN SUBSTRATES WITH STRENGTHS LESS THAN THE MINIMUM STRENGTH SPECIFIED BY THE ANCHOR MANUFACTURER.
- ALL MATERIALS SHALL MEET MATERIAL PROTECTION AND DISSIMILAR MATERIAL REQUIREMENTS FROM APPLICABLE HVHZ SECTIONS OF FLORIDA BUILDING CODE.
- INSTALLATION ANCHOR CAPACITIES FOR PRODUCTS HEREIN ARE BASED ON SUBSTRATE MATERIALS WITH THE FOLLOWING PROPERTIES:
  - ALUMINUM - MIN. 6063-T5, MIN. 1/8" THICKNESS. MIN. 1/2" EDGE DISTANCE.
  - STEEL - MIN. TENSILE YIELD STRENGTH OF 36 KSI, ULTIMATE TENSILE STRENGTH OF 58 KSI. MIN. 18 GAUGE THICKNESS (0.0478"), MIN 1/2" EDGE DISTANCE.

### GENERAL NOTES:

- THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH THE 2007 & 2010 FLORIDA BUILDING CODE, INCLUDING HVHZ.
  - TAS 201-94
  - TAS 202-94 (STRUCTURAL ONLY)
  - TAS 203-94
- ADEQUACY OF THE EXISTING STRUCTURAL ALUMINUM AND STEEL STUD FRAMING AS A MAIN WIND FORCE RESISTING SYSTEM CAPABLE OF WITHSTANDING AND TRANSFERRING APPLIED PRODUCT LOADS TO THE FOUNDATION IS THE RESPONSIBILITY OF THE ENGINEER OR ARCHITECT OF RECORD FOR THE PROJECT OF INSTALLATION.
- THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT IN NON-HVHZ AREA. IN HVHZ AREA, ONE TIME PRODUCT APPROVAL TO BE OBTAINED FROM MIAMI-DADE PERA.
- APPROVED IMPACT PROTECTIVE SYSTEM IS **NOT** REQUIRED TO PROTECT THIS PRODUCT IN AREAS REQUIRING IMPACT RESISTANCE.
- FRAME MATERIAL: 6063-T5 ALUMINUM (MIN. 0.125")
- PTAC OPENING FOR VENTILATION, 42-1/4" X 16-1/4", MAY BE LOCATED AT LEFT, RIGHT, OR CENTER WITH OPTIONAL FULL BLANK-OFF PANEL.



EXTERIOR ELEVATION



ANCHOR LAYOUT

TABLE OF CONTENTS		
SHEET	REVISION	SHEET DESCRIPTION
1	-	ELEVATION, ANCHOR LAYOUT, & NOTES
2	-	VERTICAL & HORIZONTAL SECTIONS
3	-	BLANK-OFF PANEL DETAILS - CONSTRUCTION & ATTACHMENT
4	-	CORNER DETAIL, BILL OF MATERIALS, & COMPONENTS

BRACE BAR & SPLINE SPACING	
PTAC OPENING	DESCRIPTION (EXTERIOR VIEW)
FULL BLANK-OFF PANEL	SIX (6) VERTICAL BRACE BARS AND SPLINE LOCATED AT EACH END AND 14", 27-3/8", 40-3/4" AND 54-3/16" FROM THE LEFT
LEFT OFFSET/RIGHT OFFSET/CENTERED PTAC OPENING	SEVEN (7) VERTICAL BRACE BARS AND SPLINE LOCATED AT EACH END AND 10-3/8", 23-1/4", 35-13/16", 41-3/8", AND 54-1/2" FROM THE LEFT

*MAX. DESIGN PRESSURE RATING	
+90.0 / -90.0 PSF	LARGE & SMALL MISSILE IMPACT RATED

### \*NOTE:

- LOUVERS SYSTEM IS TO BE INSTALLED IN A LOCATION WHERE THE ROOM BEHIND LOUVERS IS DESIGNED TO DRAIN WATER PENETRATING INTO THE ROOM, OR THE ROOM WILL HOUSE WATER RESISTANT/WATER-PROOF EQUIPMENT, COMPONENTS, OR SUPPLIES.
- DEFLECTORS ARE TO DIRECT INTAKES & EXHAUST FOR P.T.A.C. INSTALLED IN WINDOW SLEEVE BEYOND. THEY HAVE NO EFFECT ON STRUCTURAL INTEGRITY OF LOUVER DESIGN

Approved as complying with the Florida Building Code  
Date 08/30/2012  
NOA# 11-1205.02  
Miami Dade Product Control  
By *[Signature]*

TITLE: CCU IMPACT SERIES L-90 LOUVER ELEVATION, ANCHOR LAYOUT, AND INSTALLATION NOTES	PREPARED BY: BUILDING DROPS, INC. 127 W. FAIRBANKS AVE., STE. 438 WINTER PARK, FL 32789 PH: (407) 644-6957 FX: (407) 644-2366		
	REVISIONS		
NO.	DESCRIPTION	BY	DATE

*[Signature]*  
ALEXIS SPYROU  
FLORIDA P. E. NO. 68100  
127 W. FAIRBANKS AVE., STE. 438  
WINTER PARK, FL 32789  
FBPE CERT. OF AUTHORIZATION NO. 29578

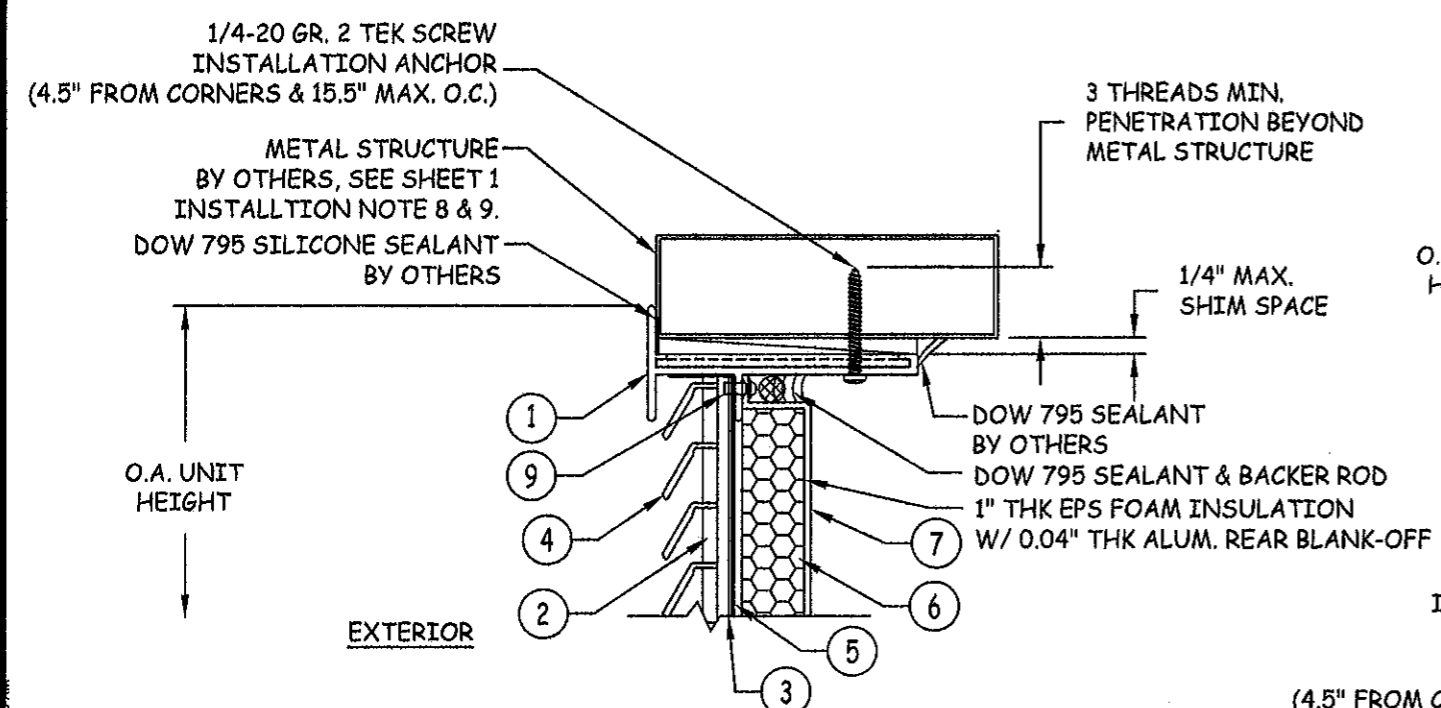
DATE: 6.22.11	DWN BY: MSS	CHK BY: HFN	SCALE: NTS
DWG #: <b>CCU001</b>			
SHEET: 1 OF 4			

6/13/2012 9:23 AM C:\projects\construction\_concepts\_unlimited\louver\louver.dwg

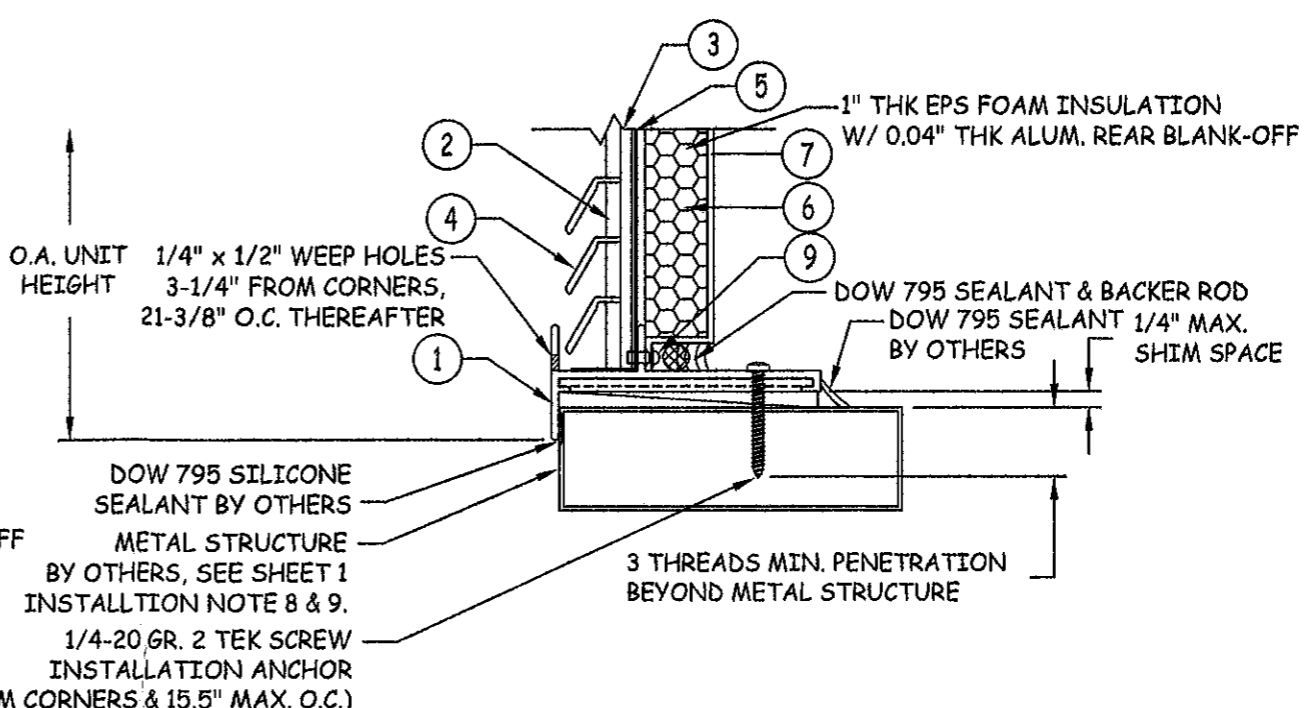


CONSTRUCTION CONCEPTS UNLIMITED  
 860 E. PROSPECT RD.  
 FT. LAUDERDALE, FL 3334  
 PH: (954) 568-3400  
 EM: INFO@CCUINC.NET

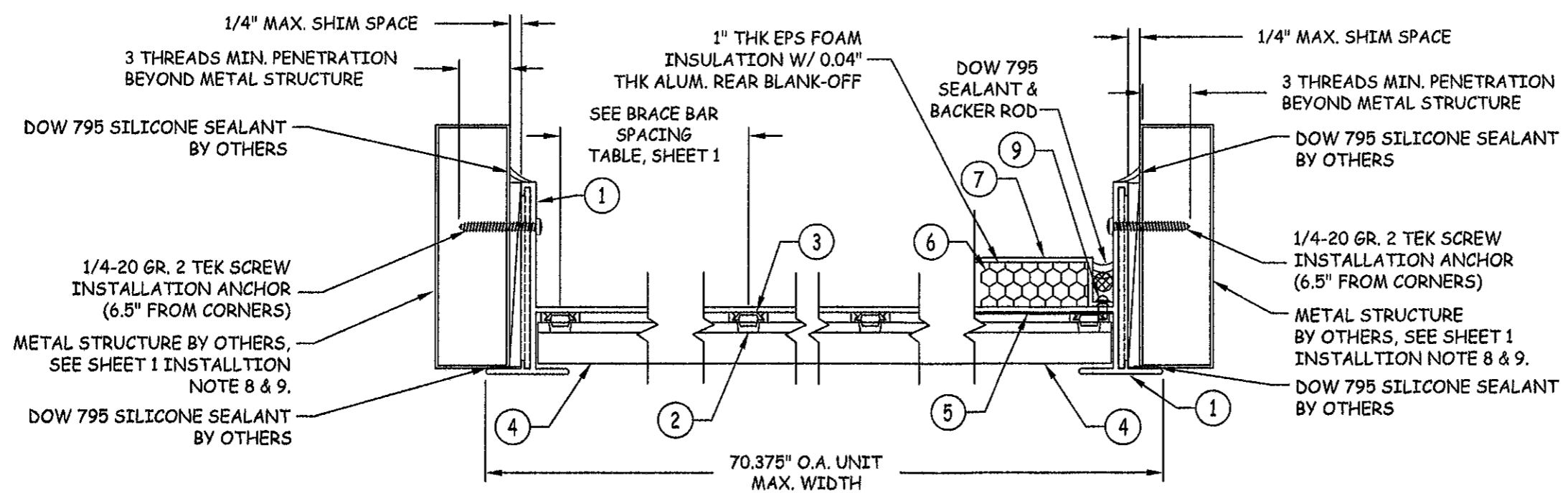
TITLE: CCU IMPACT SERIES L-90 LOUVER  
 VERTICAL SECTIONS & HORIZONTAL SECTIONS  
 PREPARED BY: BUILDING DROPS, INC.  
 127 W. FAIRBANKS AVE., STE. 438  
 WINTER PARK, FL 32789  
 PH: (407) 644-6957 FX: (407) 644-2366



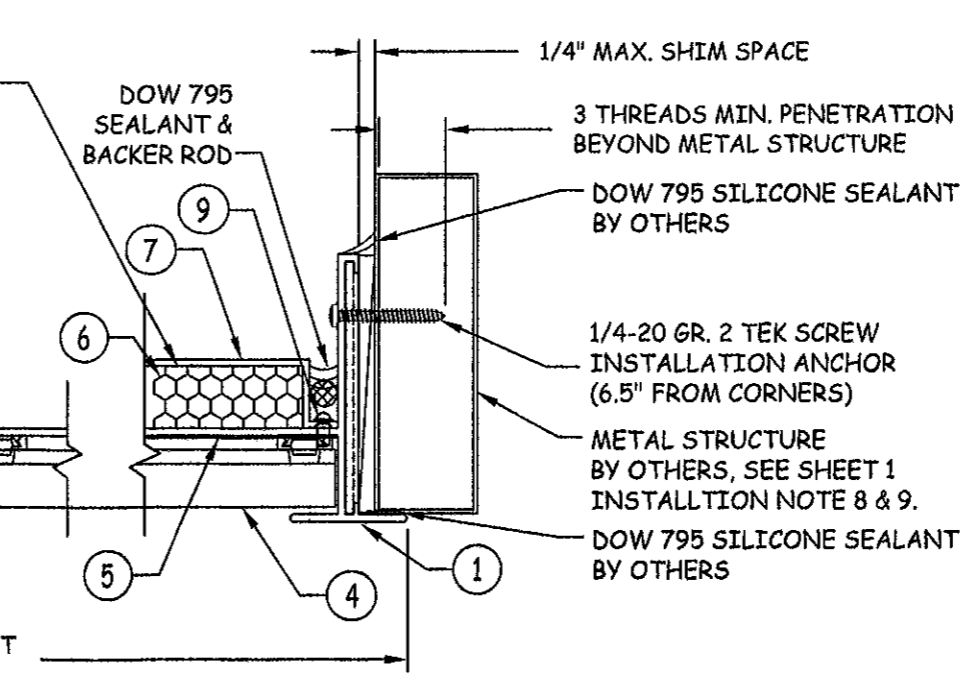
**A**  
**2**  
**VERTICAL SECTION**  
 HEAD - METAL STUD



**B**  
**2**  
**VERTICAL SECTION**  
 SILL - METAL STUD



**C**  
**2**  
**HORIZONTAL SECTION**  
 JAMB - METAL STUD



**D**  
**2**  
**HORIZONTAL SECTION**  
 JAMB - METAL STUD

REVISIONS	NO.	DESCRIPTION	BY	DATE

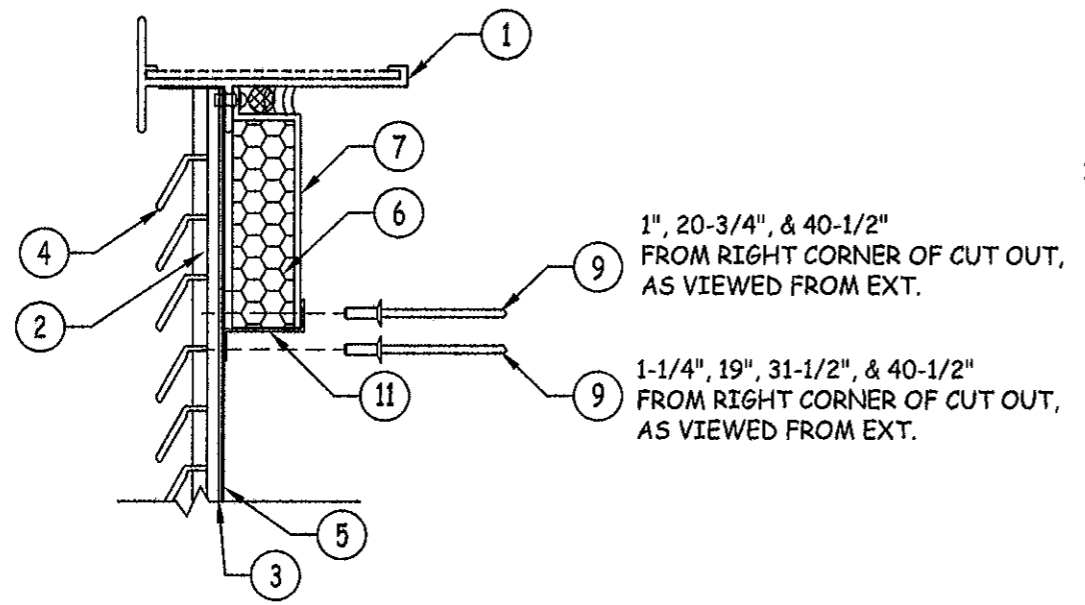
Approved as complying with the  
 Florida Building Code  
 Date 08/30/2012  
 NOA# 11-1205-02  
 Miami Dade Product Control  
 By *[Signature]*

ALEXIS SPYROU  
 FLORIDA P. E. NO. 68101  
 127 W. FAIRBANKS AVE., STE. 438  
 WINTER PARK, FL 32789  
 FBPE CERT. OF AUTHORIZATION NO. 29578

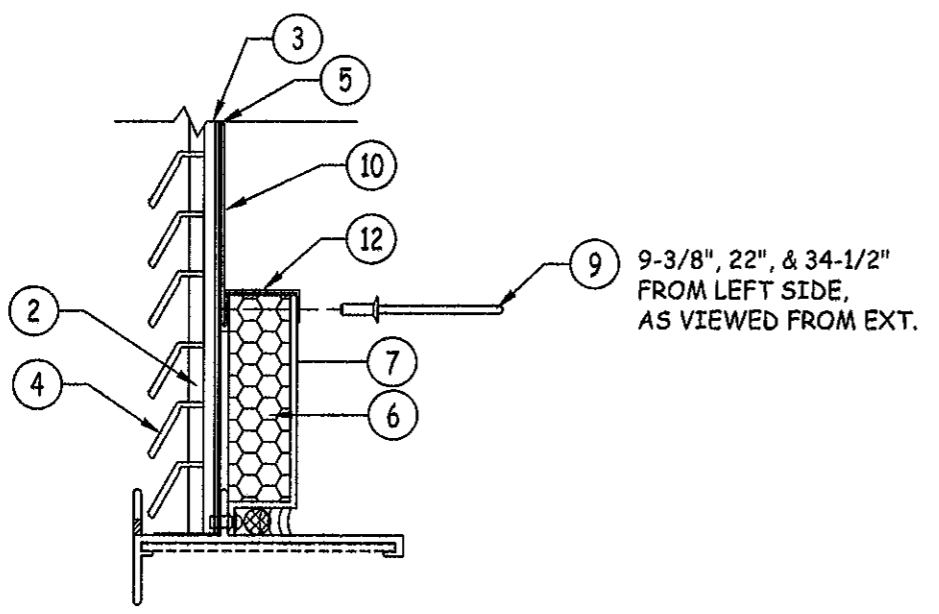
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 DWN BY: MSS  
 CHK BY: HFN  
 SCALE: NTS  
 DWG #: CCU001  
 SHEET: 2 OF 4



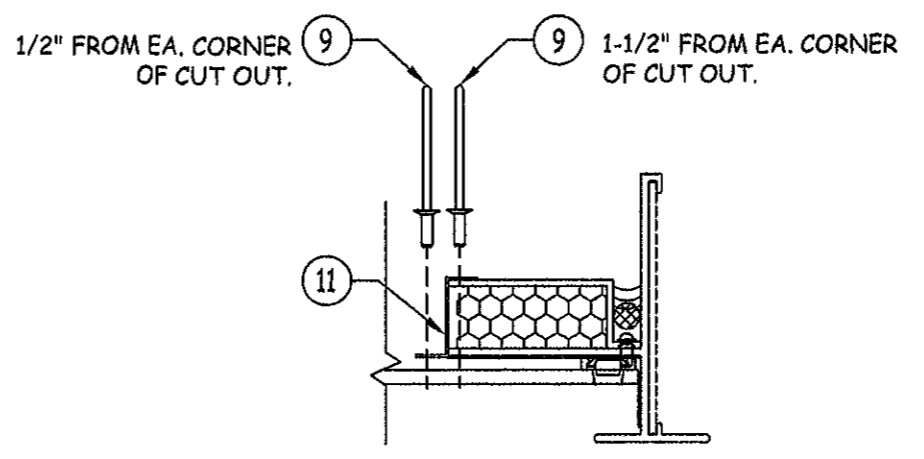
CONSTRUCTION CONCEPTS UNLIMITED  
 860 E. PROSPECT RD.  
 FT. LAUDERDALE, FL 33334  
 PH: (954) 868-3400  
 EM: INFO@CCUINC.NET



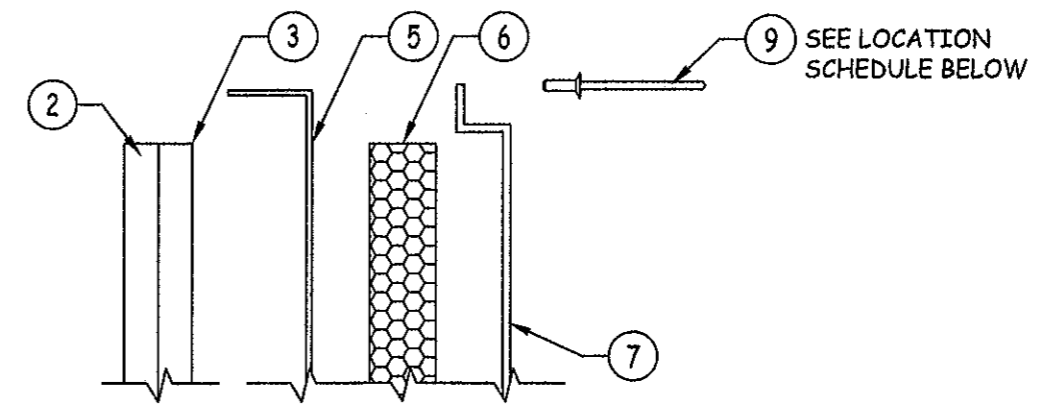
**F**  
**3**  
**BLANK-OFF DETAIL**  
 PTAC OPENING  
 TOP



**G**  
**3**  
**BLANK-OFF DETAIL**  
 PTAC OPENING  
 BOTTOM



**H**  
**3**  
**BLANK-OFF DETAIL**  
 PTAC OPENING  
 SIDE



**I**  
**3**  
**BLANK-OFF DETAIL**  
 BLANK-OFF PANEL ATTACHMENT  
 PERIMETER - TYP.

Item#9: 1/8" Pop-Rivet Locations	
Location	Description
Top/Bottom	1/8" Pop-Rivets shall be fastened through blank-off panel into interior leg of frame 6" from corners and 14.60" Max. O.C. thereafter
Sides	1/8" Pop-Rivets shall be fastened through blank-off panel into interior leg of frame 6" from corners and 13.00" Max. O.C. thereafter

Approved as complying with the  
 Florida Building Code  
 Date 08/30/2012  
 NOA# 11-1205.02  
 Miami Dept. Product Control  
 By *[Signature]*

TITLE:  
 CCU IMPACT SERIES L-90 LOUVER  
 BLANK-OFF PANEL DETAILS -  
 CONSTRUCTION & ATTACHMENT  
 PREPARED BY:  
 BUILDING DROPS, INC.  
 127 W. FAIRBANKS AVE., STE. 438  
 WINTER PARK, FL 32789  
 PH: (407) 644-6957 FX: (407) 644-2366

NO.	DESCRIPTION	BY	DATE

*[Signature]*  
 6-13-12  
 ALEXIS SPYROU  
 FLORIDA P. E. NO. 68101  
 127 W. FAIRBANKS AVE. STE. 438  
 WINTER PARK, FL 32789  
 TYPE CERT. OF AUTHORIZATION NO. 28578

DATE: 6.22.11  
 DWN BY: MSS  
 CHK BY: HFN  
 SCALE: NTS  
 DWG #: CCU001  
 SHEET: 3 OF 4

BILL OF MATERIAL			
NO.	DESCRIPTION	MATERIAL	MANUFACTURER
1	ALUMINUM FRAME	ALUM 6063-T5	CCU
2	BRACE BAR	ALUM 6063-T5	CCU
3	BRACE BAR SPLINE	ALUM 6063-T5	CCU
4	LOUVER BLADE	ALUM 6063-T5	CCU
5	FRONT BLANK-OFF	MIN. 0.03" THK FORMED ALUM.	-
6	INSULATION	1" THICK EPS FOAM	CELLOFOAM
7	REAR BLANK-OFF	MIN. 0.04" THK FORMED ALUM.	-
8	CORNER ANGLE	ALUM 6063-T5	CCU
9	1/8" POP-RIVET (AS42CE)	ALUMINUM/STEEL	MASTERFIX
10	T - FLASHING	MIN. 0.04" THK FORMED ALUM.	-
11	L - ANGLE	MIN. 0.04" THK FORMED ALUM.	-
12	Z - ANGLE	MIN. 0.04" THK FORMED ALUM.	-

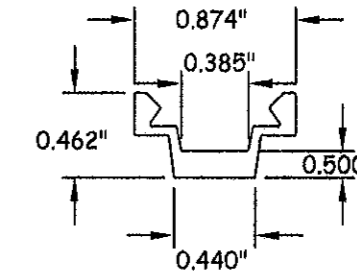
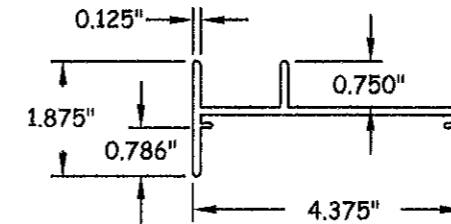
\*NOTE: FOAM, ITEM #6, SHALL COMPLY WITH MINIMUM REQUIREMENTS OF HVHZ SECTION 2612 OF FLORIDA BUILDING CODE (ASTM D1929 & ASTM E84) AND/OR APPROVED UNDER CURRENT NOA.



CONSTRUCTION CONCEPTS UNLIMITED  
560 E. PROSPECT RD.  
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PH: (954) 568-3400  
EM: INFO@CCUINC.NET

1 ALUM. FRAME  
6063-T5 ALUMINUM  
TYPICAL WALL  
THICKNESS: .125"

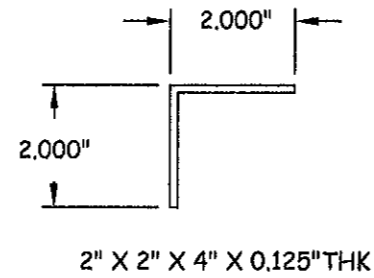
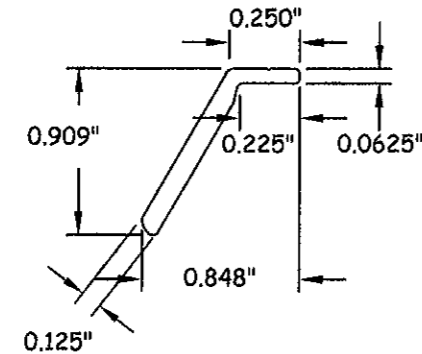
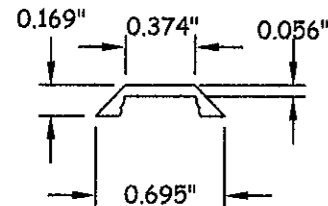
2 BRACE BAR  
6063-T5 ALUMINUM



3 BRACE BAR SPLINE  
6063-T5 ALUMINUM

4 LOUVER BLADE  
6063-T5 ALUMINUM  
TYPICAL WALL  
THICKNESS: .040"

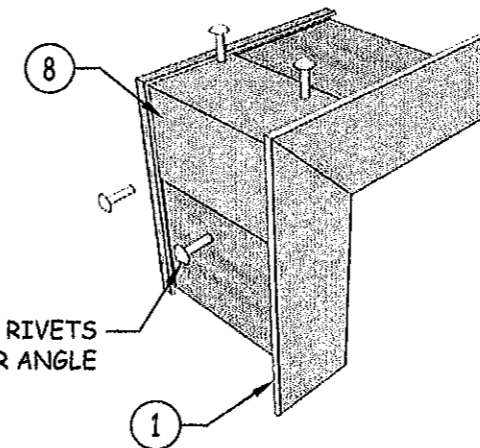
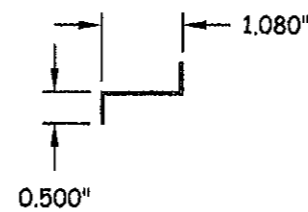
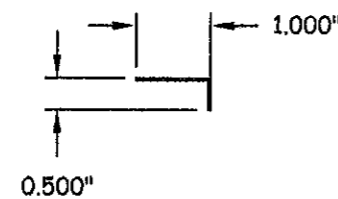
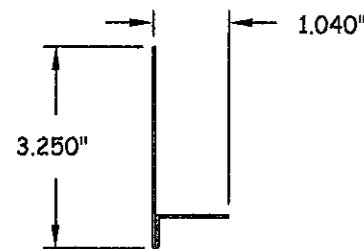
8 FRAME CORNER ANGLE  
6063-T5 ALUMINUM  
TYPICAL WALL  
THICKNESS: .125"



10 T - FLASHING  
FORMED ALUMINUM  
TYPICAL WALL  
THICKNESS: 0.040"

11 L - ANGLE  
FORMED ALUMINUM  
TYPICAL WALL  
THICKNESS: 0.040"

12 T - ANGLE  
FORMED ALUMINUM  
TYPICAL WALL  
THICKNESS: 0.040"



TWO (2) 1/8" POP RIVETS  
PER SIDE OF CORNER ANGLE

E  
4 CORNER DETAIL  
FRAME

TITLE: CCU IMPACT SERIES L-90 LOUVER  
BILL OF MATERIALS,  
COMPONENTS, & CORNER DETAIL  
PREPARED BY:  
BUILDING DROPS, INC.  
127 W. FAIRBANKS AVE., STE. 438  
WINTER PARK, FL 32789  
PH: (407) 644-6957 FX: (407) 644-2366

NO.	DESCRIPTION	BY	DATE	
				REVISIONS

ALEXIS SPYROU  
FLORIDA P. E. NO. 68101  
127 W. FAIRBANKS AVE., STE. 438  
WINTER PARK, FL 32789  
FPPE CERT. OF AUTHORIZATION NO. 29578  
6-13-12

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DATE: 6.22.11  
DWN BY: MSS  
CHK BY: HFN  
SCALE: NTS  
DWG #: CCU001  
SHEET: 4 OF 4