



DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)
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/economy

PCI Industries Inc. dba All-Lite Arch. Products
5101 Blue Mound Road
Fort Worth, TX 76106

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 ECD-545-MD Aluminum Louver with Optional CD-51 Damper

APPROVAL DOCUMENT: Drawing No. **ECD-545-MD NOA**, titled "ECD-545-MD", sheets 1 through 19 of 19, dated 06/27/2018, with revision 2 dated 03/19/2021, prepared by the manufacturer, signed and sealed by Wayne K. Helmila, P.E. on 04/06/2021, bearing the Miami-Dade County Product Control revision 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.

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 **revises NOA # 18-1120.05** and consists of this page 1 and evidence pages E-1, E-2, E-3 and E-4, as well as approval document mentioned above.

The submitted documentation was reviewed by **Carlos M. Utrera, P.E.**



NOA No. 21-0427.02
Expiration Date: October 9, 2023
Approval Date: July 1, 2021
Page 1

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. Evidence submitted under previous NOA's

A. DRAWINGS “Submitted under NOA # 17-0227.06”

1. Drawing No. **ECD-545-MD NOA**, titled “ECD-545-MD”, sheets 1 through 19 of 19, dated 05/08/2014, with revision 3 dated 01/26/2017, prepared by the manufacturer, signed and sealed by L. David Rice, P.E.

B. TESTS “Submitted under NOA # 14-0714.02”

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 installation diagram of Model ECD-545-MD Aluminum Louvers, prepared by Architectural Testing, Inc, Test Report No. **C8133.01-801-18**, dated 04/10/2014, with revision 2 dated 01/27/2015, signed and sealed by Shawn G. Collins, 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 installation diagram of Model ECD-545-MD Aluminum Louvers, prepared by Architectural Testing, Inc, Test Report No. **C8133.01-801-18**, dated 04/10/2014, signed and sealed by Vinu J. Abraham, P.E.
3. Test report on High Velocity Wind Driven Rain Resistance per AMCA 550-09 of a Model ECD-545-MD Aluminum Louver, prepared by Architectural Testing, Inc, Test Report No. **C3811.01-801-18**, dated 12/18/2012, signed and sealed by Vinu J. Abraham, P.E.

“Submitted under NOA # 11-0429.02”

4. 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 installation diagram of a Model ECD-545-MD Aluminum Louver, prepared by Architectural Testing, Inc, Test Report No. **A1620.01-801-18**, dated 10/18/2010, signed and sealed by Joseph A. Reed, P.E.

“Submitted under NOA # 09-1015.08”

5. Test report on Wind Driven Rain Resistance per FBC TAS 100(A)-95 (modified by Checklist # 0240) along with marked-up drawings and installation diagram of Model ECD-545-MD Fixed Aluminum Louver with a CD-55 Damper, prepared by Architectural Testing, Inc, Test Report No. **92027.01-109-18**, dated 09/09/2009, with Revision 1 dated 01/11/2010, signed and sealed by Michael D. Stremmel, P.E.



Carlos M. Utrera, P.E.
Product Control Examiner
NOA No. 21-0427.02
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Approval Date: July 1, 2021

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

B. TESTS (Cont.)

“Submitted under NOA # 08-0528.04”

6. 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 ECD-545-MD Aluminum Louver, prepared by Hurricane Test Laboratory, LLC, Test Report No. HTL-0399-0116-07, dated 02/27/2008, signed and sealed by Vinu J. Abraham, P.E.

C. CALCULATIONS *“Submitted under NOA # 14-0714.02”*

1. ECD-545-MD Louver calculations prepared by Rice Engineering, dated 01/21/2015, signed and sealed by L. David Rice, P.E.

“Submitted under NOA # 11-0429.02”

2. ECD-545-MD Louver calculations prepared by Rice Engineering, dated 04/21/2011, signed and sealed by L. David Rice, 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 # 15-0428.01”*

1. Statement letter of code conformance to the 5th edition (2014) FBC issued by Rice Engineering, dated 04/17/2015, signed and sealed by L. David Rice, P.E.

“Submitted under NOA # 14-0714.02”

2. Statement letter of code conformance to 2010 FBC issued by Rice Engineering, dated 11/13/2013, signed and sealed by L. David Rice, P.E.
3. No financial interest letter issued by Rice Engineering, dated 03/30/2011, signed and sealed by L. David Rice, P.E.



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NOA No. 21-0427.02
Expiration Date: October 9, 2023
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NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

2. Evidence submitted under NOA # 18-1120.05

A. DRAWINGS

1. Drawing No. **ECD-545-MD NOA**, titled "ECD-545-MD", sheets 1 through 17 of 17, dated 08/30/2018, prepared by the manufacturer, signed and sealed by Theodore Berman, P.E.

B. 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 (Missile Level 'E')
3) Cyclic Wind Pressure Loading per FBC, TAS 203-94
along with installation diagram of Model ECD-545-MD Aluminum Louvers, prepared by UL LLC, Test Report No. **SV30902-20180808**, dated 09/13/2018, signed and sealed by Alexis Spyrou, P.E.
2. Test report on Wind Driven Rain Resistance per FBC TAS 100(A)-95 on an ECD-545-MD Louver with a CD-51 Damper, prepared by Intertek, Test Report No. **I8042.01-801-44 R0**, dated 09/05/2018, signed and sealed by Tyler Westerling, P.E.
3. Test report on Wind Driven Rain Resistance per FBC AMCA 550-15 on an ECD-545-MD Louver with a CD-51 Damper, prepared by Intertek, Test Report No. **I8042.02-801-44 R0**, dated 09/07/2018, signed and sealed by Tyler Westerling, P.E.

C. CALCULATIONS

1. ECD-545-MD louver structural calculations prepared by the manufacturer, dated 07/17/2018, signed and sealed by Theodore Berman, P.E.

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 the 6th edition (2017) FBC and of no financial interest, dated 12/19/2018, issued, signed and sealed by Theodore Berman, P.E.



Carlos M. Utrera, P.E.
Product Control Examiner
NOA No. 21-0427.02
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NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

3. New evidence submitted

A. DRAWINGS

1. Drawing No. **ECD-545-MD NOA**, titled “ECD-545-MD”, sheets 1 through 19 of 19, dated 06/27/2018, with revision 2 dated 03/19/2021, prepared by the manufacturer, signed and sealed by Wayne K. Helmila, P.E. on 04/06/2021.

B. TESTS

1. None.

C. CALCULATIONS

1. ECD-545-MD louver structural calculations prepared by the Rice Engineering, dated 01/04/2021, signed and sealed by Wayne K. Helmila, P.E.

D. QUALITY ASSURANCE

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

E. MATERIAL CERTIFICATIONS

1. None.

F. STATEMENTS

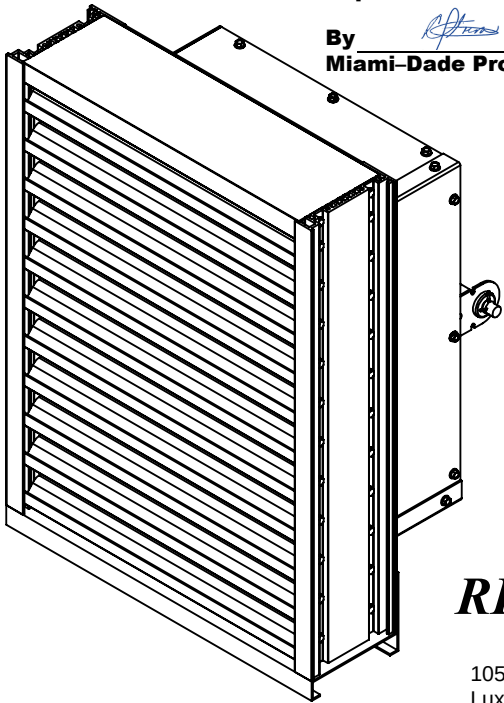
1. Statement letter of code conformance to the 7th edition (2020) of the FBC issued by Rice Engineering, dated 01/04/2021, signed and sealed by Wayne K. Helmila, P.E.
2. Statement letter of no financial interest issued by Rice Engineering, dated 01/04/2021, signed and sealed by Wayne K. Helmila, P.E.



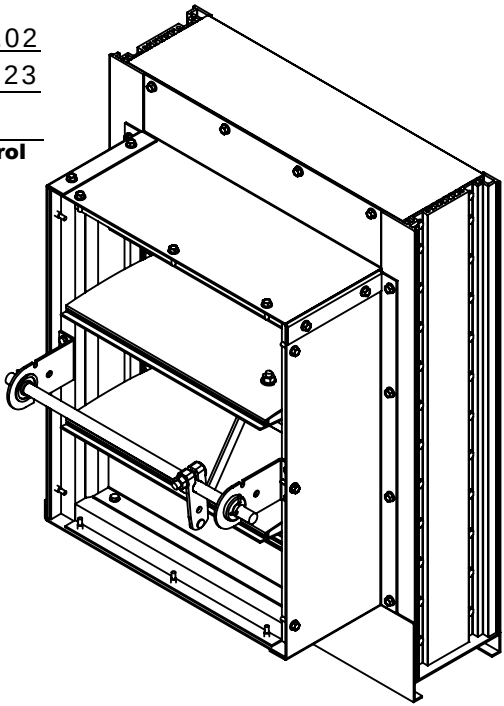
Carlos M. Utrera, P.E.
Product Control Examiner
NOA No. 21-0427.02
Expiration Date: October 9, 2023
Approval Date: July 1, 2021

- NOTES:
- THIS NOA DRAWING INCLUDES INSTALLATION DETAILS TO ATTAIN MAXIMUM DESIGN PRESSURES OF ±150 PSF AS TESTED IN ACCORDANCE WITH PROTOCOLS TAS 201 (LARGE MISSILE IMPACT - LEVEL 'E', 80 FPS), TAS 202 (STATIC WIND PRESSURE), AND TAS 203 (CYCLIC WIND PRESSURE) FOR USE WITHIN HIGH VELOCITY HURRICANE-AFFECTED ZONES DEFINED BY THE FLORIDA BUILDING CODE. THE INSTALLATION OF AN OPTIONAL CD-51 DAMPER YIELDS WATER INGRESS PROTECTION AS TESTED IN ACCORDANCE WITH AMCA 550 AND TAS 100(A).
 - ALL VARIATIONS ARE LARGE MISSILE IMPACT RESISTANT.
 - UNITS OF MEASURE ARE FRACTIONAL INCHES UNLESS OTHERWISE SPECIFIED.
 - IT IS ASSUMED THAT THE LOUVER SYSTEMS DO NOT SUPPORT ANY LOADS TRANSFERRED FROM THE BUILDING CONDITION.
 - IT IS ASSUMED THAT THE BUILDING CONDITIONS ARE ADEQUATELY DESIGNED TO SUPPORT LOADS IMPARTED BY THE LOUVER SYSTEM.
 - TO PREVENT GALVANIC CORROSION, ELECTROCHEMICALLY DISSIMILAR MATERIALS IN CONTACT WITH ONE ANOTHER SHALL BE PROTECTED BY PAINT, GASKETING, OR OTHER MEANS PER THE FLORIDA BUILDING CODE.
 - WATER PENETRATION:
 - WHEN LOUVERS ARE INSTALLED WITHOUT THE OPTIONAL CD-51 DAMPER, THE ROOM BEHIND THE LOUVER MUST BE DESIGNED TO DRAIN WATER PENETRATING INTO THE ROOM, AND THE ROOM MUST HOUSE WATER-RESISTANT/WATERPROOF EQUIPMENT, COMPONENTS, OR SUPPLIES.
 - ADDITIONAL PROTECTION FROM WATER INGRESS IS NOT NECESSARY WHEN LOUVERS ARE INSTALLED WITH CD-51 DAMPERS AND THE DAMPERS ARE CLOSED.
 - OTHER BUILDING CONDITIONS THAN THOSE DENOTED MAY BE UTILIZED IF ANALYZED AND APPROVED BY A PROFESSIONAL ENGINEER.
 - MULTI-SECTION WIDE AND HIGH LOUVER SYSTEMS ARE ALLOWABLE PROVIDED THE INDIVIDUAL SECTIONS ARE SUPPORTED PER THE DETAILS ON THIS DRAWING AND A SUITABLE SUPPORT STRUCTURE IS ANALYZED AND APPROVED BY A PROFESSIONAL ENGINEER.

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 21-0427.02
Expiration Date 10/09/2023
By 
Miami-Dade Product Control



EXTERIOR VIEW
W/ OPTIONAL DAMPER



INTERIOR VIEW
W/ OPTIONAL DAMPER

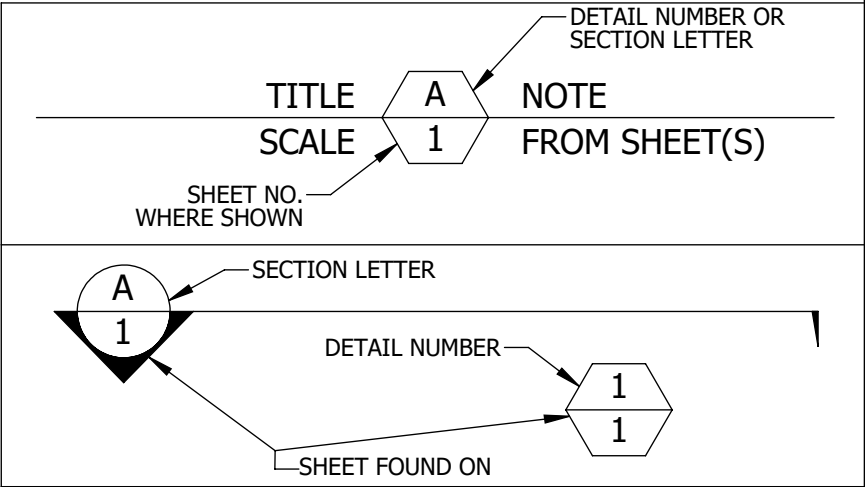
RICE
ENGINEERING

105 School Creek Trail
Luxemburg, WI 54217
Phone: (920) 617-1042
Fax: (920) 617-1100
www.rice-inc.com

Florida Firm No: F-01000005061
Certificate of Authorization: #9090
Wayne K. Helmila
Registration No: 59092

TABLE 1		
SINGLE SECTION SIZE LIMITATIONS		
MAX DESIGN PRESSURE	MIN (W X H)	MAX (W X H)
±150 PSF	6" X 6" STANDARD	60" X 144"
	10" X 14" W/ DAMPER	

TABLE 2	
MULTIPLE SECTION SIZE LIMITATIONS (MAX DESIGN PRESSURE: 150 PSF)	
SINGLE SECTION HIGH - UNLIMITED WIDTH	SEE SHEET #4
SINGLE SECTION WIDE - UNLIMITED HEIGHT	SEE SHEET #12



P.E. STAMP

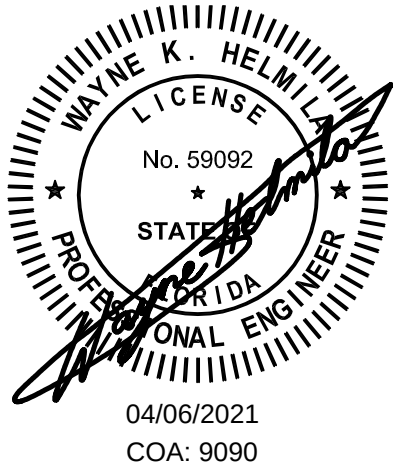


TABLE 3 ANCHOR SCHEDULE						
SUBSTRATE	LOCATION	ANCHOR TYPE	MIN. EMBEDMENT	MIN. EDGE DISTANCE	SPACING (STANDARD)	SPACING (SHAPES)
CONCRETE (f'c ≥ 4000 PSI)	JAMBS	3/8" X 4" DEWALT SCREW-BOLT+ (F-7)	3 1/4"	1 5/8"	8"	8"
	MULLIONS (WALL DEPTH < 12 3/8")	5/8" X 4" DEWALT SCREW-BOLT+ (F-8)	3 1/4"	1 3/4"	7"	--
	MULLIONS (WALL DEPTH ≥ 12 3/8")	5/8" X 6" DEWALT SCREW-BOLT+ (F-9)	5"	5 7/8"	9"	--
GROUT FILLED CMU (f'm ≥ 1500 PSI)	JAMBS	3/8" X 4" DEWALT SCREW-BOLT+ (F-7)	3 1/4"	1 1/2" (1 3/4" FOR SHAPES)	5"	5 1/2"
	MULLIONS	3/8" X 4" DEWALT SCREW-BOLT+ (F-7)	3 1/4"	1 1/2"	4"	--
STRUCTURAL STEEL (MIN. 3/16" THICK, Fy ≥ 36 KSI)	JAMBS	1/4" X 1" SELF-DRILLING SCREW (F-11)	FULL	1/2"	8"	10"
	MULLIONS	1/4" X 1" SELF-DRILLING SCREW (F-11); TWELVE (12) FASTENERS PER CONNECTION	FULL	1/2"	3/4"	--
STEEL STUD (MIN. 12 GA, Fy ≥ 50 KSI)	JAMBS	1/4" X 1" SELF-DRILLING SCREW (F-11)	FULL	1/2"	8"	10"
	MULLIONS	1/4" X 1" SELF-DRILLING SCREW (F-11); TWELVE (12) FASTENERS PER CONNECTION	FULL	1/2"	3/4"	--
WOOD (S.G. ≥ 0.43)	JAMBS	1/2" X 3 1/2" LAG BOLT WITH FLAT WASHER (F-12)	3"	2"	9"	10"
	MULLIONS	1/2" X 3 1/2" LAG BOLT WITH FLAT WASHER (F-12); TWELVE (12) ANCHORS PER CONNECTION	3"	2"	2 1/2"	--

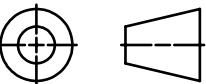
UNLESS OTHERWISE SPECIFIED
DIMENSION ARE IN INCHES.

TOLERANCE UNLESS NOTED:
X.X ±0.060
X.XX ±0.030
X.XXX ±0.010
ANGLE ±1°
FRACTION ±1/16

MAX HOLE BREAKOUT:
15% OF MATERIAL THICKNESS

5101 Blue Mound Road
Fort Worth, Texas 76106
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Fax: 817-831-3110

THIRD ANGLE PROJECTION



PCI INDUSTRIES DOING BUSINESS AS
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ARCHITECTURAL PRODUCTS

DRAWING DESCR: COVER SHEET				
PROJECT: ECD-545-MD				
LOCATION:				
CUSTOMER:				
PROJ. MGR.:		DRAWN BY: LGH		
DATE: 6/27/2018	CHK'D BY: NW	ORDER NUMBER	P.O. NUMBER	DRAWING NUMBER
SHEET: 1 of 19	SCALE: NONE			ECD-545-MD NOA

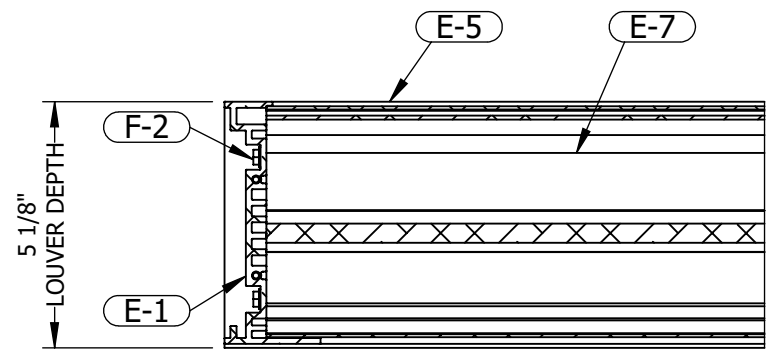
C:\Users\Inwoodworth\Desktop\Miami-Dade Updates (2020)\ECD-545-MD\NOA Drawings (Rev 2)



SECTION VIEW
SCALE: 3/4" = 1'-0"

B
2

GENERAL ASSEMBLY
2

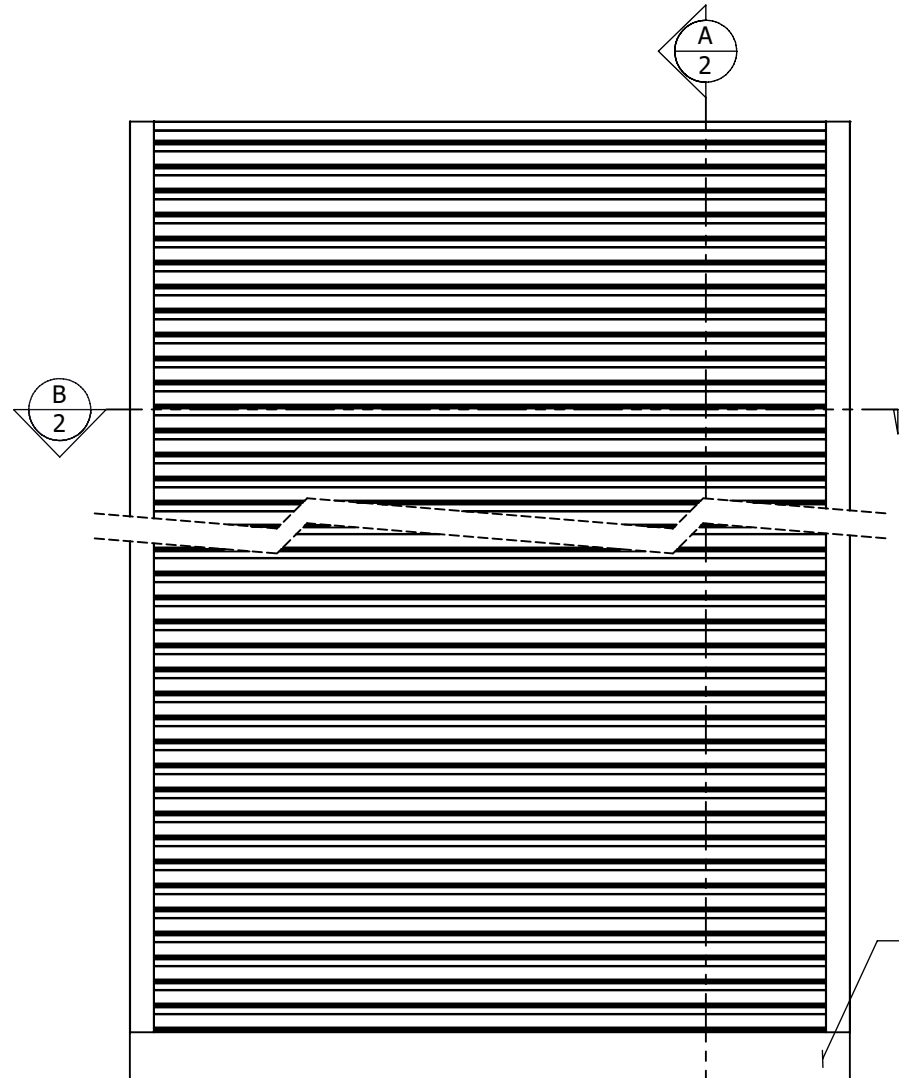


CONSTRUCTION
3"=1'-0"

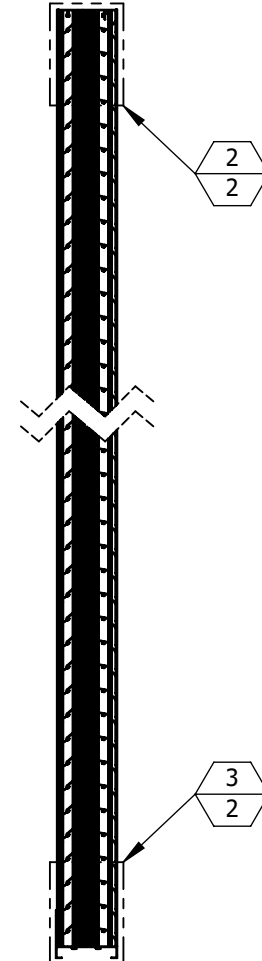
1
2

DETAIL
2

IN FLANGED CONFIGURATIONS:
E-2 WILL BE USED IN PLACE OF E-1
E-6 WILL BE USED IN PLACE OF E-5



INTERIOR ELEVATION



SECTION VIEW
3/4"=1'-0"

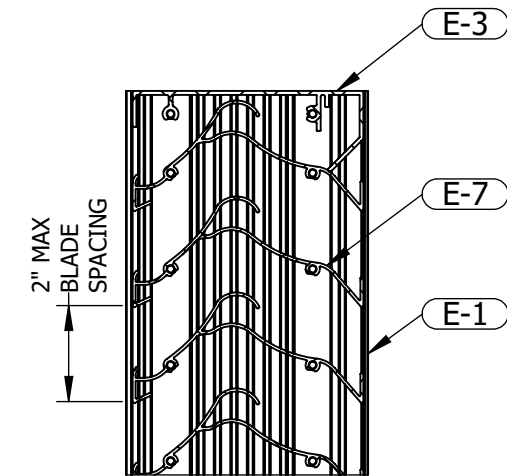
A
2

GENERAL ASSEMBLY
2

ENGRAVED LABEL DETAIL

PCI Industries Inc DBA Miami Dade County
ALL-LITE Product Control
Ft Worth TX Approved
SO #123456

GENERAL LOUVER ASSEMBLY

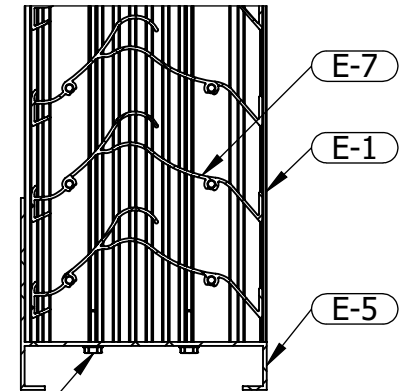


CONSTRUCTION
3"=1'-0"

2
2

DETAIL
2

IN FLANGED CONFIGURATIONS:
E-2 WILL BE USED IN PLACE OF E-1
E-4 WILL BE USED IN PLACE OF E-3



CONSTRUCTION
3"=1'-0"

3
2

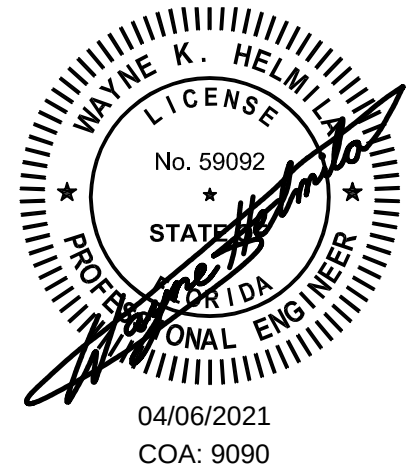
DETAIL
2

IN FLANGED CONFIGURATIONS:
E-2 WILL BE USED IN PLACE OF E-1
E-6 WILL BE USED IN PLACE OF E-5

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 21-0427.02
Expiration Date 10/09/2023
By *[Signature]*
Miami-Dade Product Control

RICE
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Certificate of Authorization: #9090
Wayne K. Helmila
Registration No: 59092

P.E. STAMP



2	UPDATED ANCHORAGE DESIGN AND SHAPE DETAILS	3/19/2021	NWW
1	INITIAL RELEASE	8/30/2018	LGH
REV. NO.	DESCRIPTION	DATE	DRAWN BY

UNLESS OTHERWISE SPECIFIED
DIMENSION ARE IN INCHES.

TOLERANCE UNLESS NOTED:
X.X ±0.060
X.XX ±0.030
X.XXX ±0.010
ANGLE ±1°
FRACTION ±1/16

MAX HOLE BREAKOUT:
15% OF MATERIAL THICKNESS

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Fort Worth, Texas 76106
Phone: 817-509-2300
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THIRD ANGLE PROJECTION

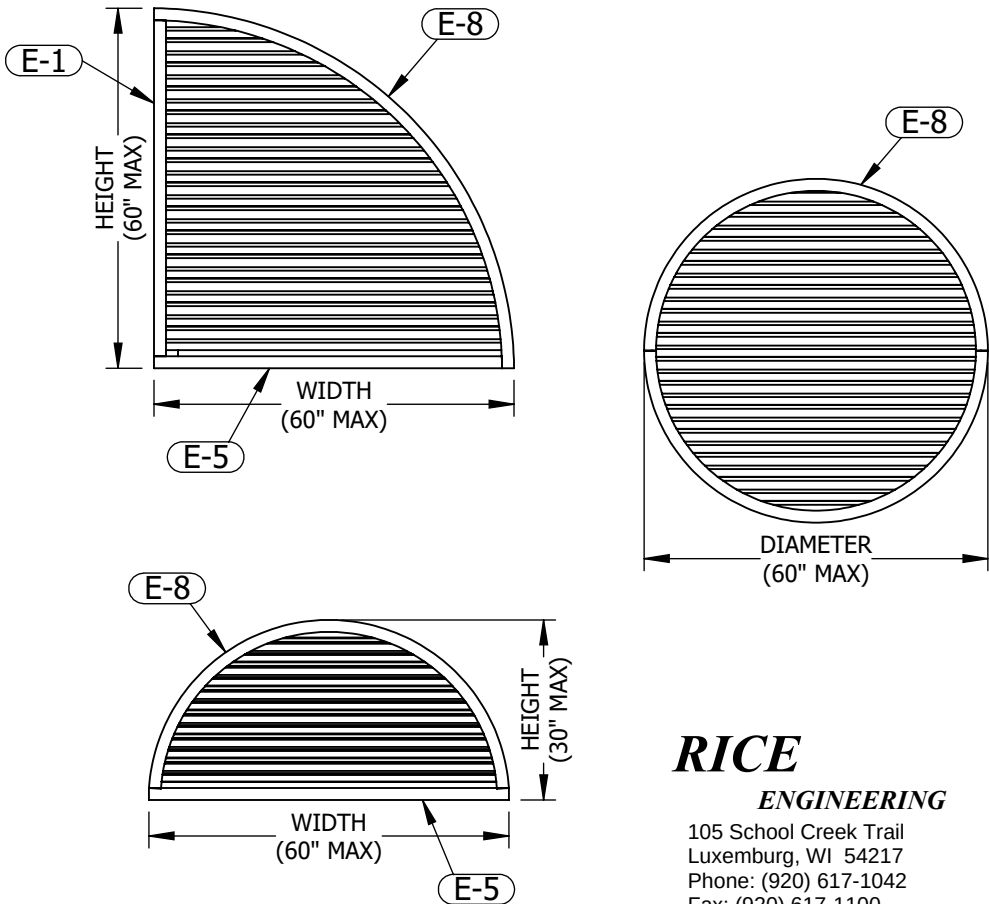
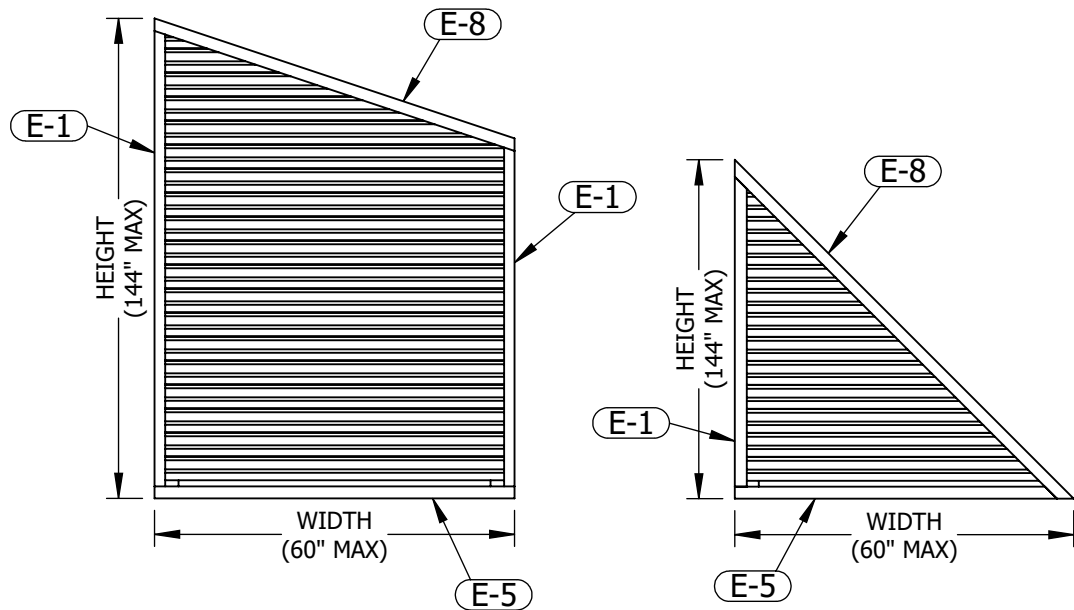
PCI INDUSTRIES DOING BUSINESS AS

ALL-LITE

ARCHITECTURAL PRODUCTS

DRAWING DESCR: GENERAL LOUVER ASSEMBLY			
PROJECT: ECD-545-MD			
LOCATION:			
CUSTOMER:			
PROJ. MGR.:		DRAWN BY: LGH	
DATE: 6/27/2018	CHK'D BY: NW	ORDER NUMBER	P.O. NUMBER
SHEET: 2 of 19	SCALE: 3/4"=1'-0"	DRAWING NUMBER	
		ECD-545-MD NOA	

C:\Users\inwoodworth\Desktop\Miami-Dade Updates (2020)\ECD-545-MD\ECD-545-MD NOA Drawings (Rev 2)\



RICE ENGINEERING

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Florida Firm No: F-01000005061
Certificate of Authorization: #9090
Wayne K. Helmila
Registration No: 59092

NOTES:

1. SHAPED LOUVER DIMENSIONS WILL NOT EXCEED MAX SINGLE SECTION SIZES PER TABLE 1, SHEET 1.
2. SEE SHEETS 11-13 FOR SHAPED LOUVER INSTALLATION DETAILS

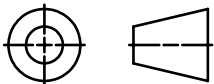
UNLESS OTHERWISE SPECIFIED
DIMENSION ARE IN INCHES.

TOLERANCE UNLESS NOTED:
X.X ±0.060
X.XX ±0.030
X.XXX ±0.010
ANGLE ±1°
FRACTION ±1/16

MAX HOLE BREAKOUT:
15% OF MATERIAL THICKNESS

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THIRD ANGLE PROJECTION



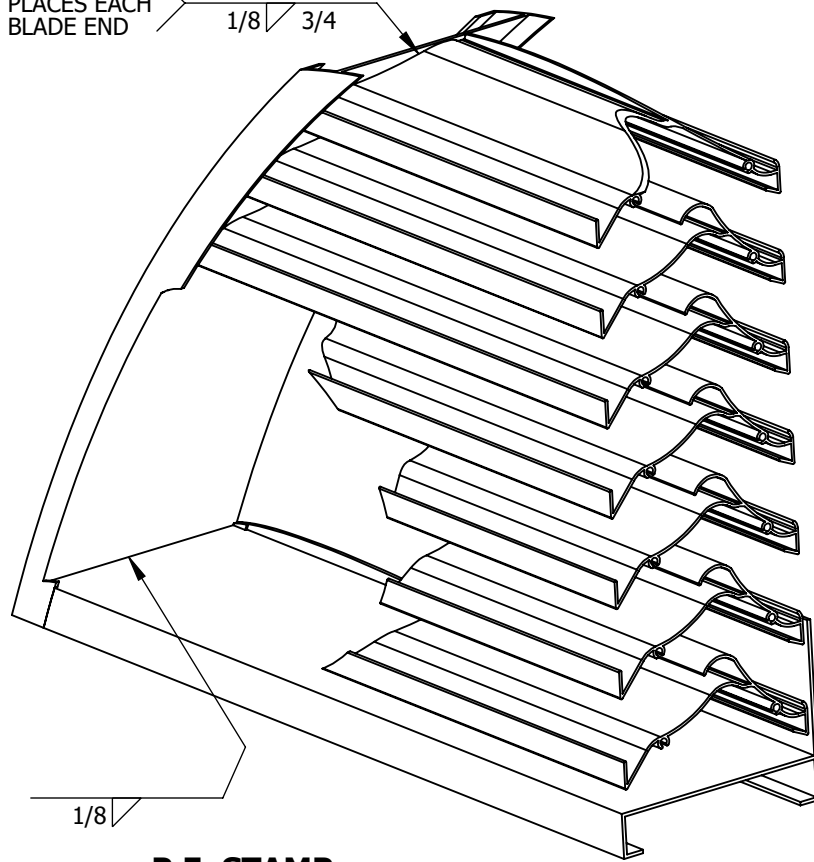
PCI INDUSTRIES DOING BUSINESS AS
ALL-LITE
ARCHITECTURAL PRODUCTS

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 21-0427.02
Expiration Date 10/09/2023
By *[Signature]*
Miami-Dade Product Control

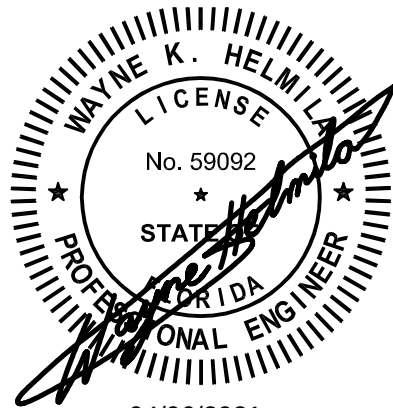
SHAPED LOUVER DETAILS

THREE (3)
PLACES EACH
BLADE END

1/8 3/4



P.E. STAMP



04/06/2021
COA: 9090

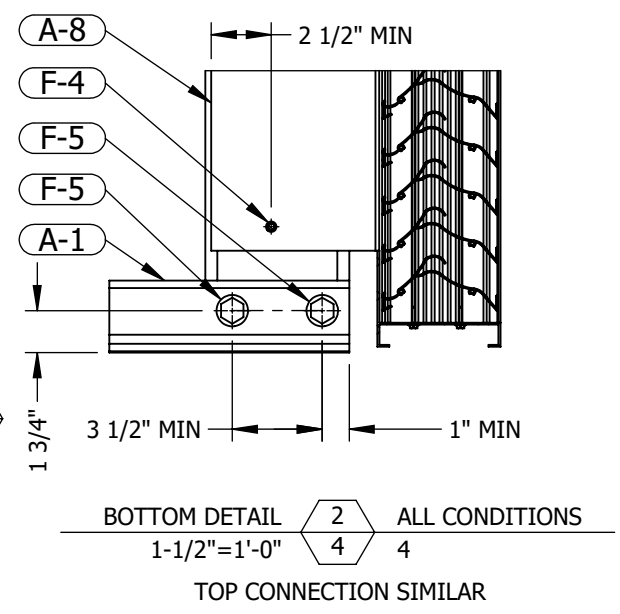
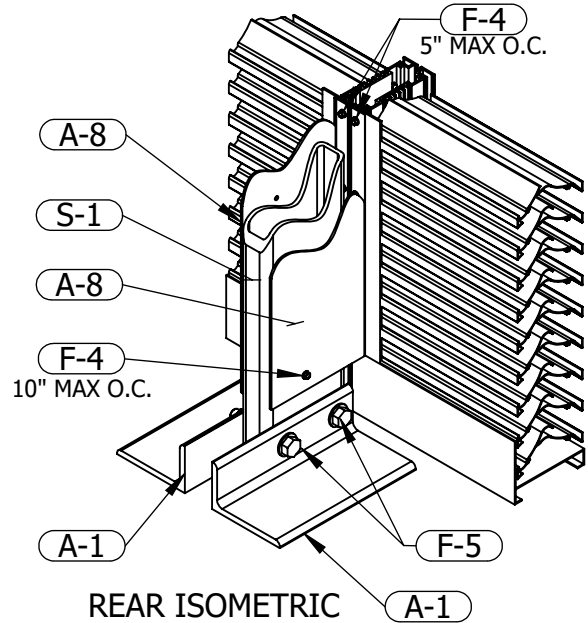
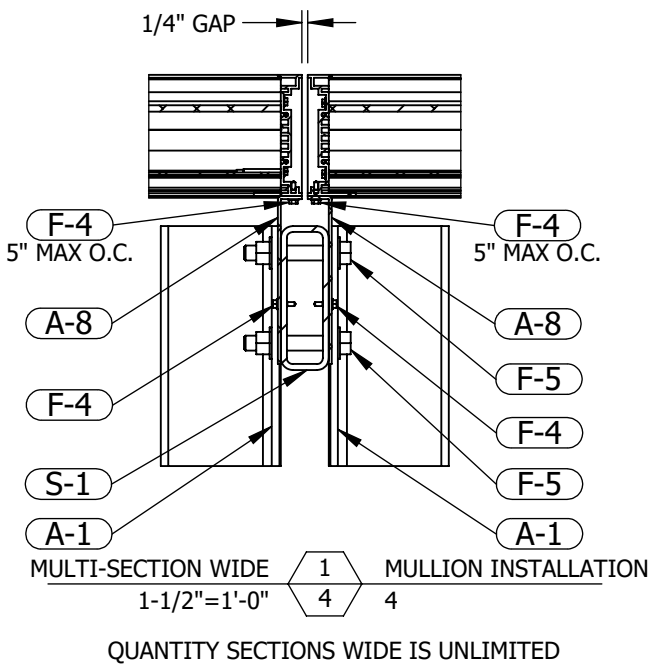
2	UPDATED ANCHORAGE DESIGN AND SHAPE DETAILS	3/19/2021	NWW
1	INITIAL RELEASE	8/30/2018	LGH
REV. NO.	DESCRIPTION	DATE	DRAWN BY

DRAWING DESCR: SHAPED LOUVER DETAILS				
PROJECT: ECD-545-MD				
LOCATION:				
CUSTOMER:				
PROJ. MGR.:		DRAWN BY: LGH		
DATE: 6/27/2018	CHK'D BY: NW	ORDER NUMBER	P.O. NUMBER	DRAWING NUMBER
SHEET: 3 of 19	SCALE: NONE			ECD-545-MD NOA

GENERAL MULLION DETAILS

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 21-0427.02
Expiration Date 10/09/2023
By [Signature]
Miami-Dade Product Control

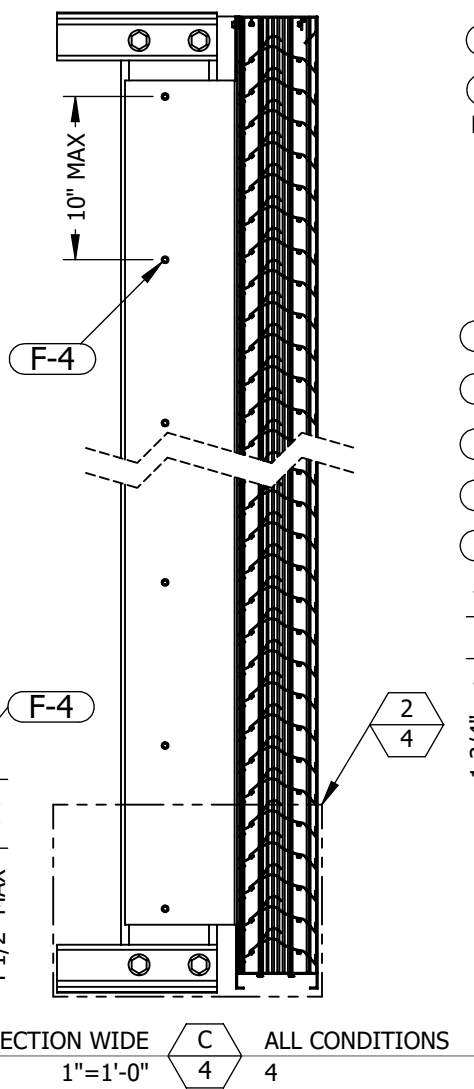
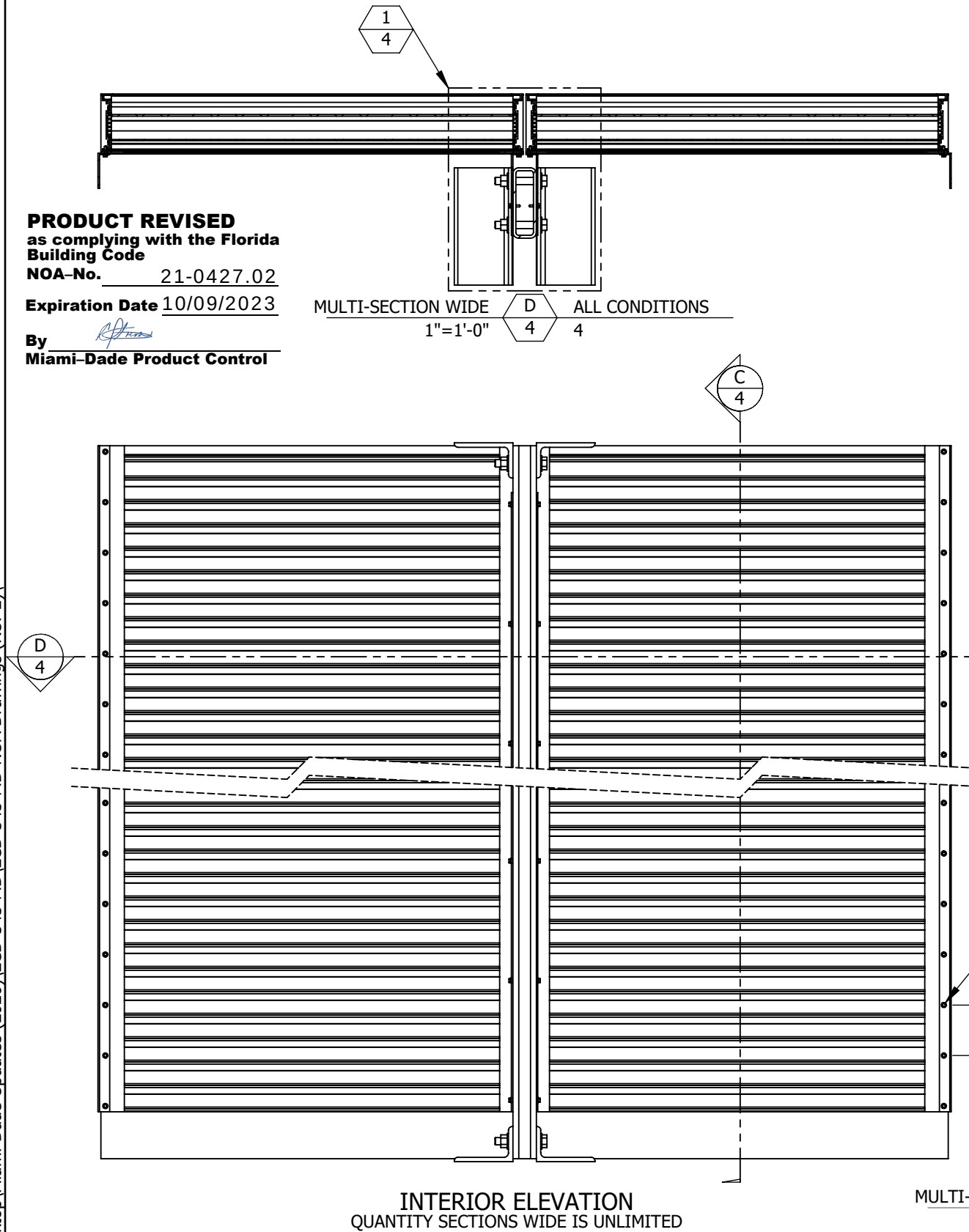
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Luxemburg, WI 54217
Phone: (920) 617-1042
Fax: (920) 617-1100
www.rice-inc.com
Florida Firm No: F-01000005061
Certificate of Authorization: #9090
Wayne K. Helmila
Registration No: 59092



P.E. STAMP

WAYNE K. HELMILA
LICENSE
No. 59092
STATE OF FLORIDA
PROFESSIONAL ENGINEER

[Signature]
04/06/2021
COA: 9090

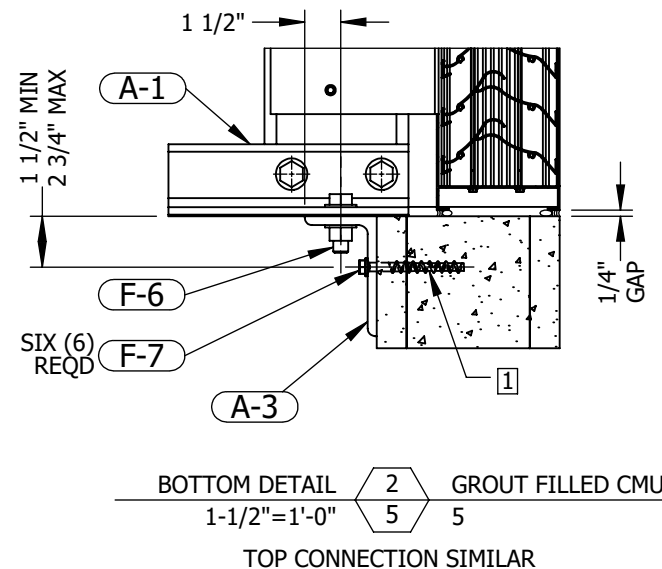
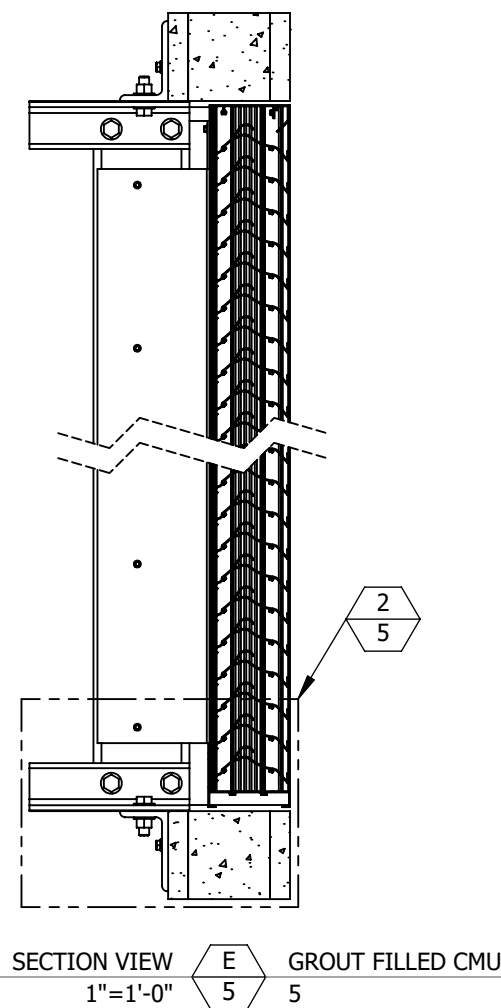
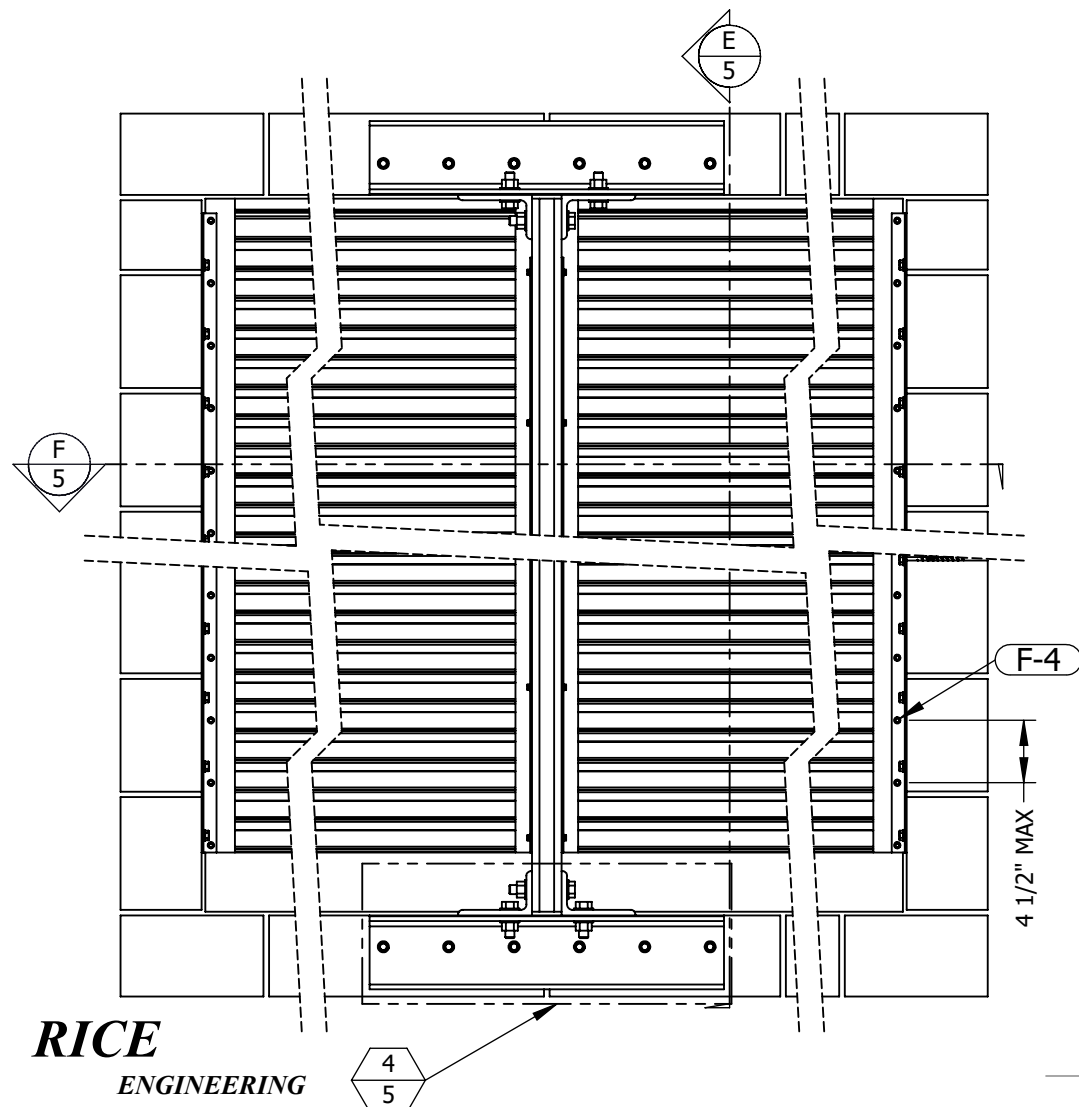
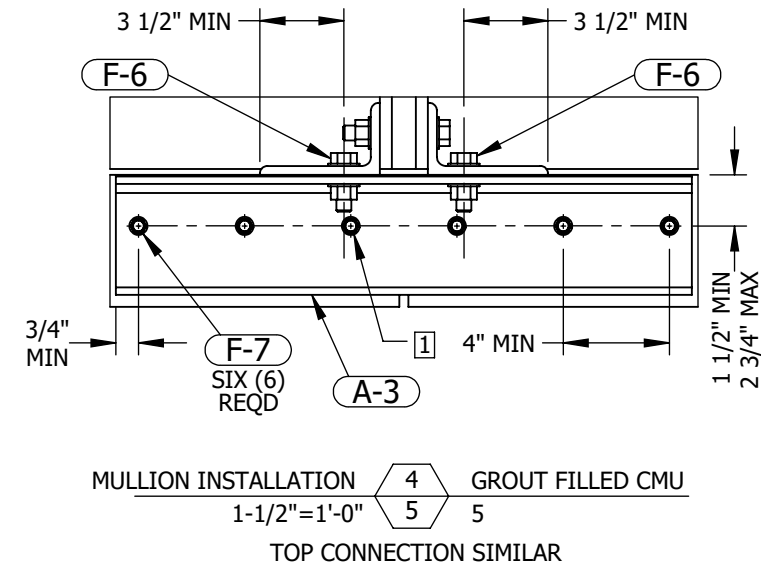
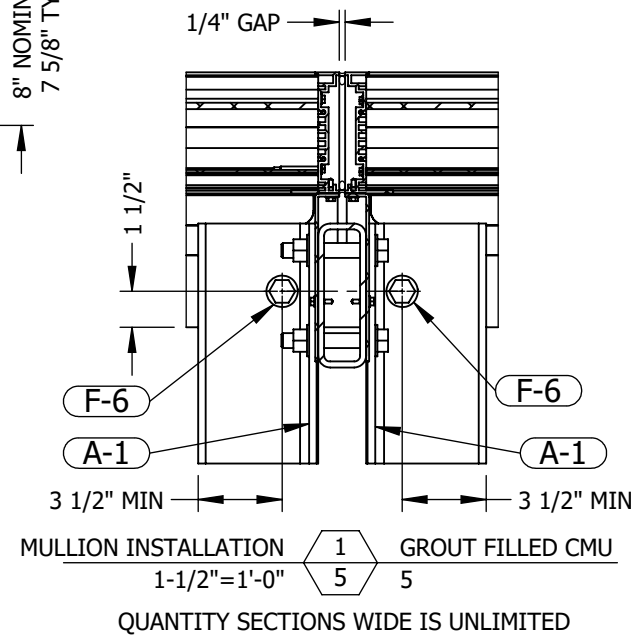
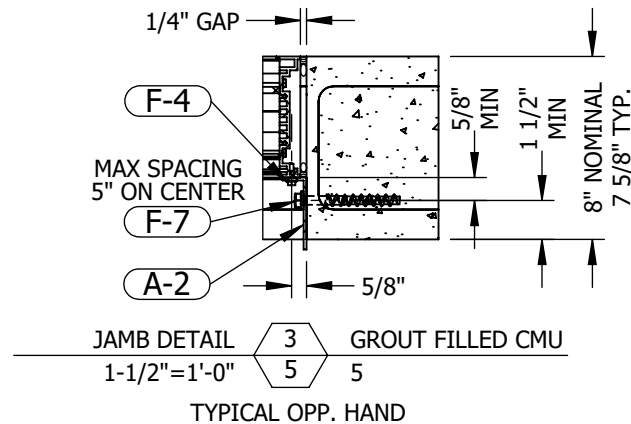
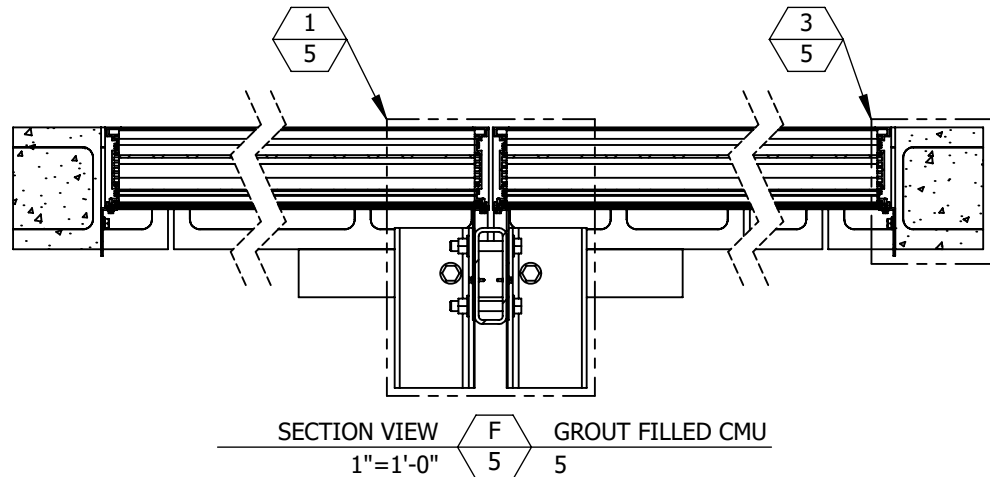


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UNLESS OTHERWISE SPECIFIED DIMENSION ARE IN INCHES.				5101 Blue Mound Road Fort Worth, Texas 76106 Phone: 817-509-2300 Fax: 817-831-3110		DRAWING DESCR: GENERAL MULLION DETAILS	
TOLERANCE UNLESS NOTED: X.X ±0.060 X.XX ±0.030 X.XXX ±0.010 ANGLE ±1° FRACTION ±1/16				THIRD ANGLE PROJECTION		PROJECT: ECD-545-MD	
MAX HOLE BREAKOUT: 15% OF MATERIAL THICKNESS				PCI INDUSTRIES DOING BUSINESS AS ALL-LITE ARCHITECTURAL PRODUCTS		LOCATION:	
						CUSTOMER:	
						PROJ. MGR.:	
						DRAWN BY: LGH	
						DATE: 6/27/2018	CHK'D BY: NW
						ORDER NUMBER	P.O. NUMBER
						SHEET: 4 of 19	DRAWING NUMBER
						SCALE: 1"=1'-0"	ECD-545-MD NOA

2	UPDATED ANCHORAGE DESIGN AND SHAPE DETAILS	3/19/2021	NWW
1	INITIAL RELEASE	8/30/2018	LGH
REV. NO.	DESCRIPTION	DATE	DRAWN BY

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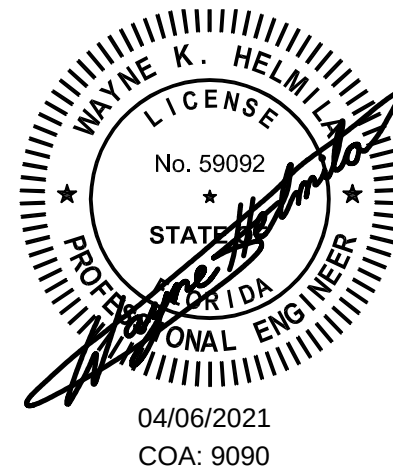


NOTES:
1 NO ANCHOR MAY BE LOCATED CLOSER THAN 1-1/4" TO A VERTICAL (HEAD) JOINT BETWEEN CMU BLOCKS.

GROUT FILLED CMU CONDITION

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 21-0427.02
Expiration Date 10/09/2023
By *[Signature]*
Miami-Dade Product Control

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ENGINEERING

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Florida Firm No: F-01000005061
Certificate of Authorization: #9090
Wayne K. Helmila
Registration No: 59092

INTERIOR ELEVATION
QUANTITY SECTIONS WIDE IS UNLIMITED

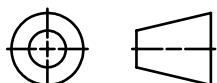
UNLESS OTHERWISE SPECIFIED
DIMENSION ARE IN INCHES.

TOLERANCE UNLESS NOTED:
X.X ±0.060
X.XX ±0.030
X.XXX ±0.010
ANGLE ±1°
FRACTION ±1/16

MAX HOLE BREAKOUT:
15% OF MATERIAL THICKNESS

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THIRD ANGLE PROJECTION



PCI INDUSTRIES DOING BUSINESS AS
ALL-LITE
ARCHITECTURAL PRODUCTS

DRAWING DESCR: GROUT FILLED CMU CONDITION

PROJECT: ECD-545-MD

LOCATION:

CUSTOMER:

PROJ. MGR.:

DRAWN BY: LGH

DATE: 6/27/2018

CHK'D BY: NW

ORDER NUMBER

P.O. NUMBER

DRAWING NUMBER

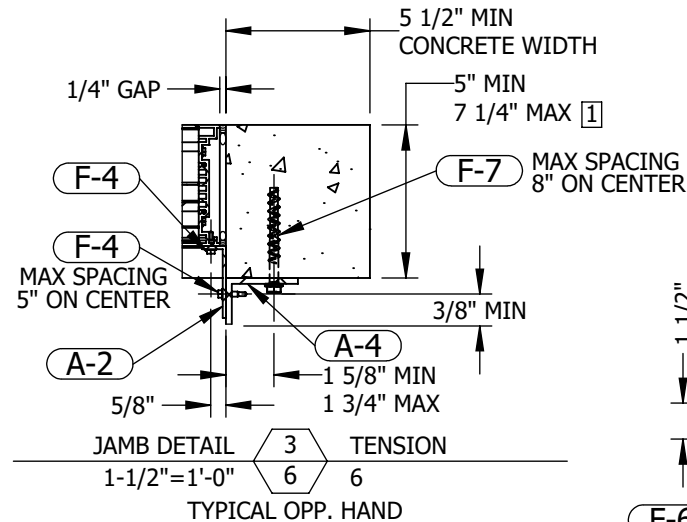
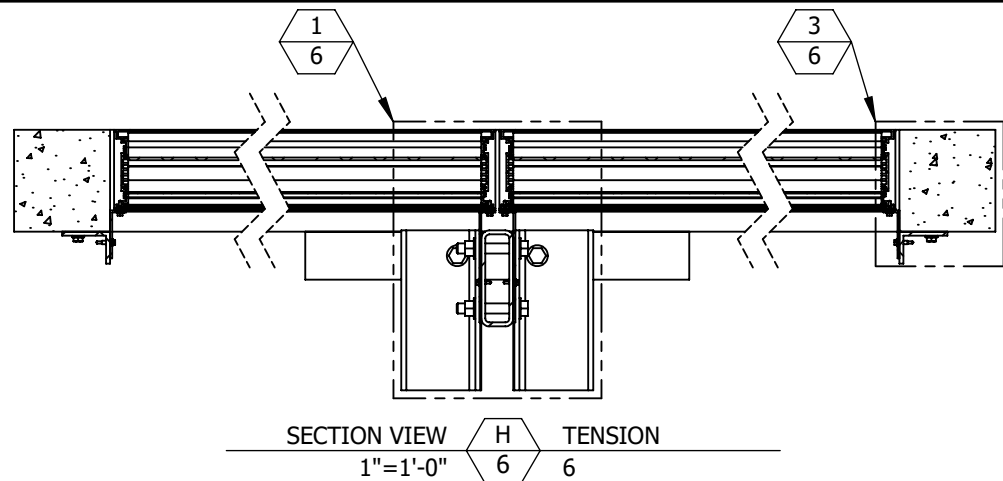
SHEET: 5 of 19

SCALE: 1"=1'-0"

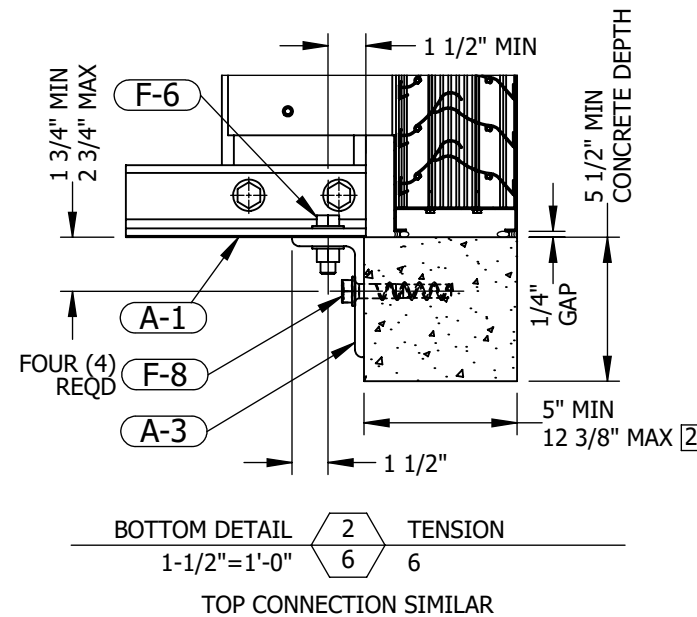
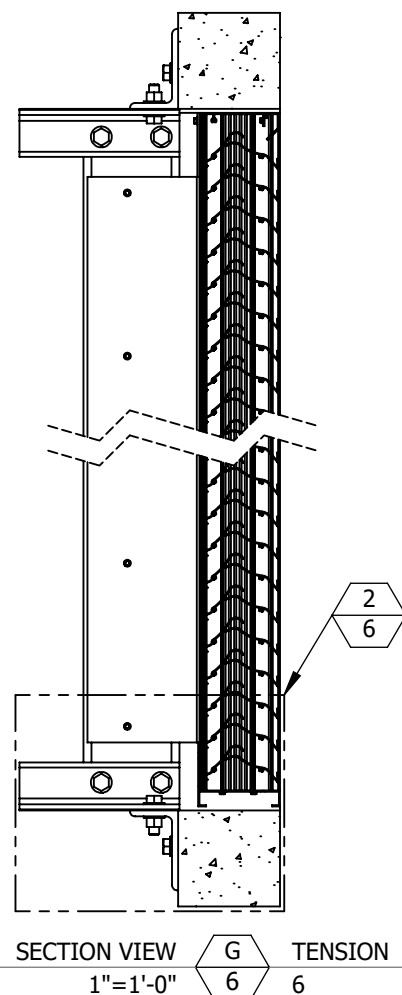
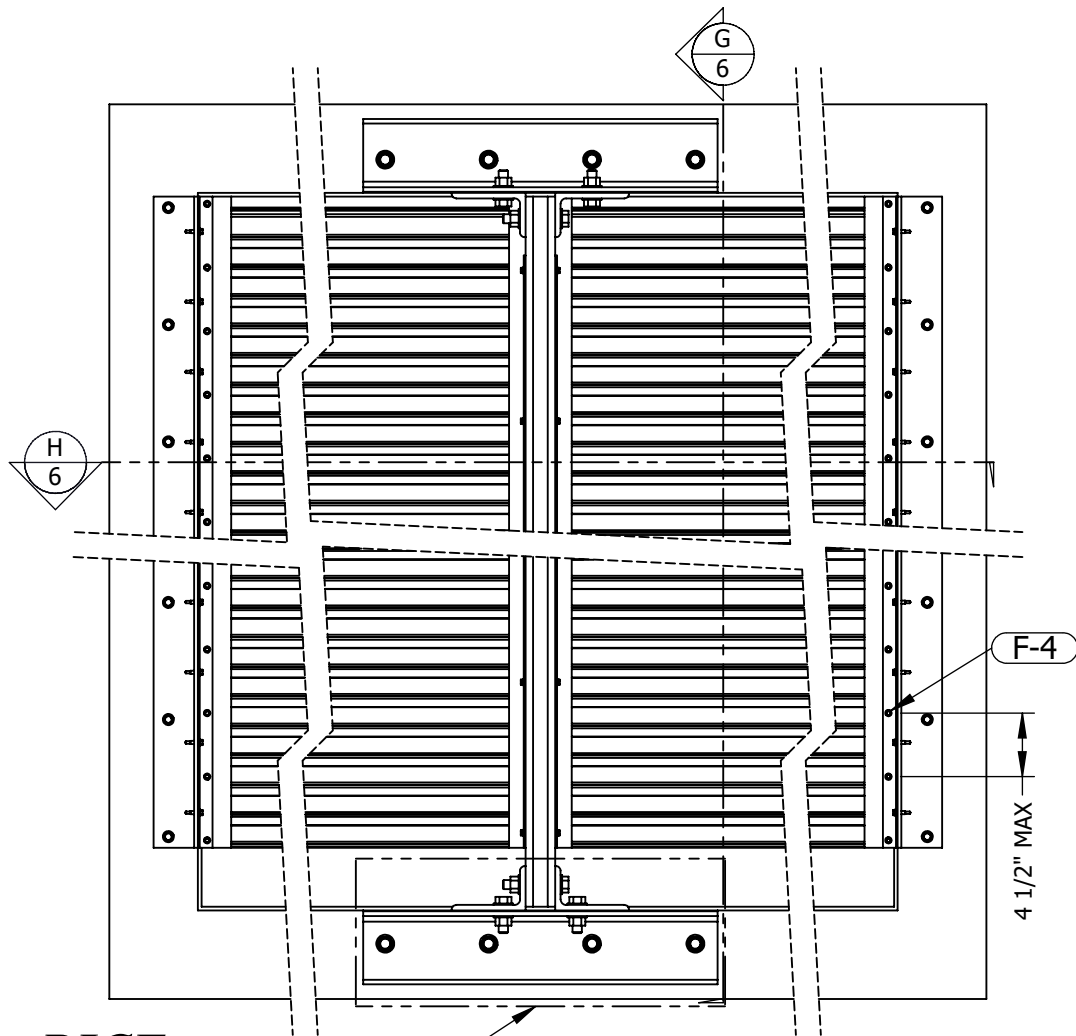
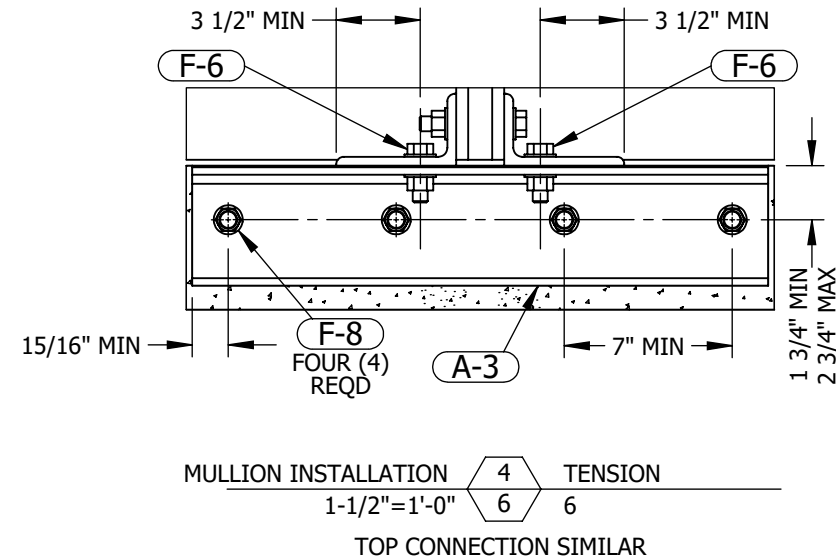
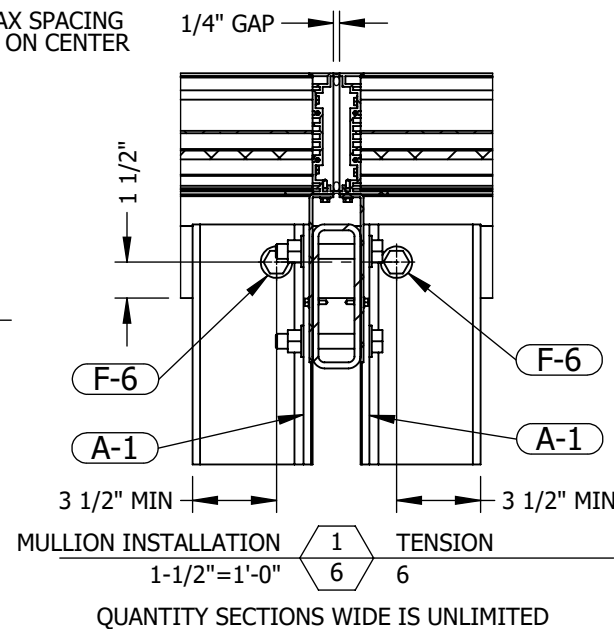
ECD-545-MD NOA

REV. NO.	DESCRIPTION	DATE	DRAWN BY
2	UPDATED ANCHORAGE DESIGN AND SHAPE DETAILS	3/19/2021	NWW
1	INITIAL RELEASE	8/30/2018	LGH

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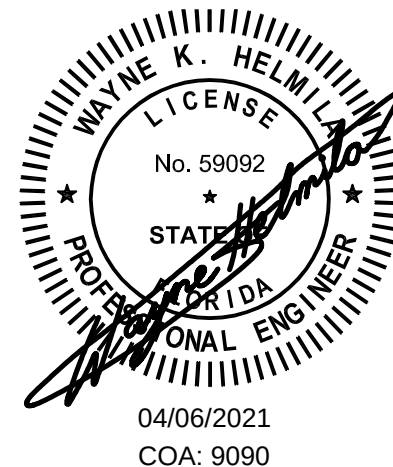
CONCRETE CONDITION TENSION CONNECTION



- NOTES:
- SEE SHEET 7 FOR SHEAR CONNECTION DETAILS WHEN CONCRETE CONDITION AT JAMB > 7 1/4" THICK.
 - SEE SHEET 7 FOR SHEAR CONNECTION DETAILS WHEN CONCRETE CONDITION AT MULLION > 12 3/8" THICK.

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 21-0427.02
Expiration Date 10/09/2023
By *[Signature]*
Miami-Dade Product Control

P.E. STAMP



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Florida Firm No: F-01000005061
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Wayne K. Helmila
Registration No: 59092

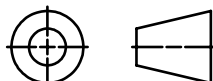
UNLESS OTHERWISE SPECIFIED
DIMENSION ARE IN INCHES.

TOLERANCE UNLESS NOTED:
X.X ±0.060
X.XX ±0.030
X.XXX ±0.010
ANGLE ±1°
FRACTION ±1/16

MAX HOLE BREAKOUT:
15% OF MATERIAL THICKNESS

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Phone: 817-509-2300
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THIRD ANGLE PROJECTION



PCI INDUSTRIES DOING BUSINESS AS
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ARCHITECTURAL PRODUCTS

DRAWING DESCR: CONCRETE CONDITION TENSION CONNECTION

PROJECT: ECD-545-MD

LOCATION:

CUSTOMER:

PROJ. MGR.:

DRAWN BY: LGH

DATE: 6/27/2018

CHK'D BY: NW

ORDER NUMBER

P.O. NUMBER

DRAWING NUMBER

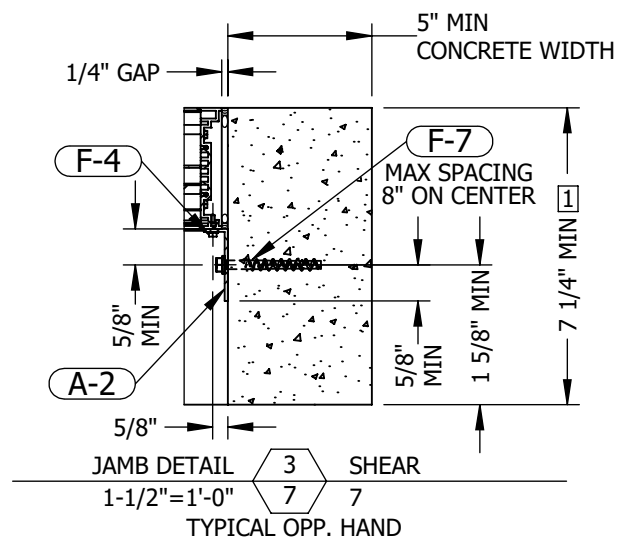
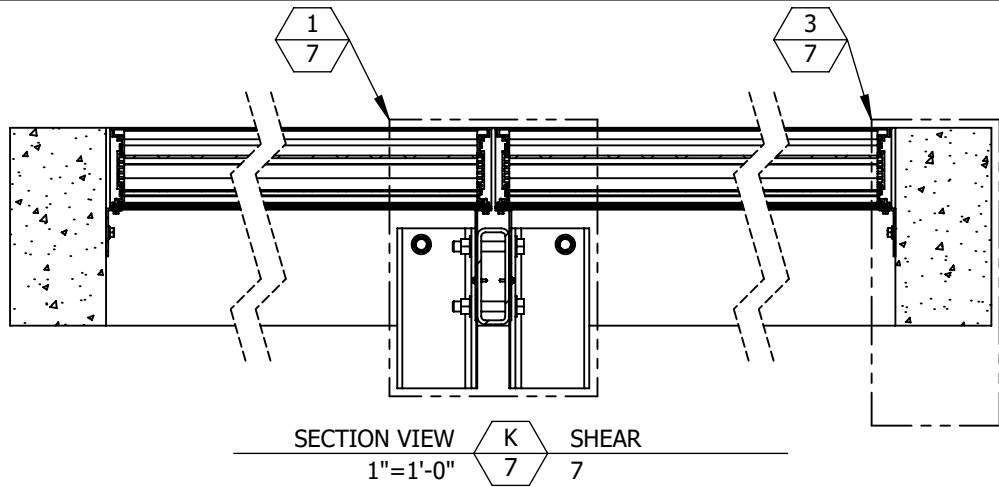
SHEET: 6 of 19

SCALE: 1"=1'-0"

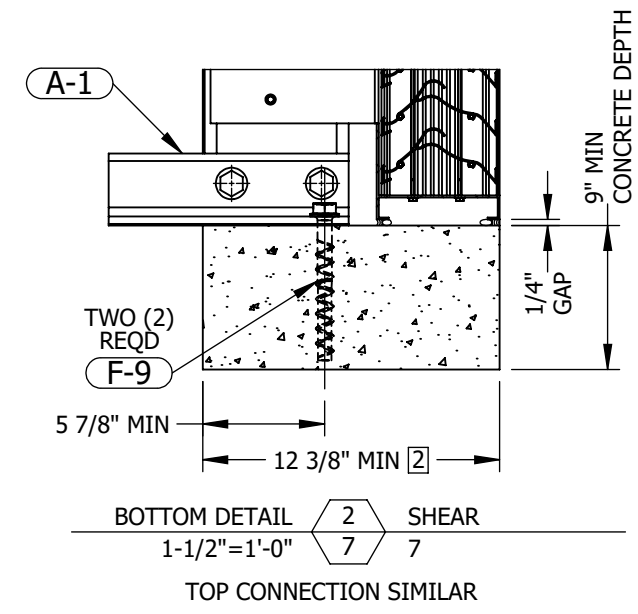
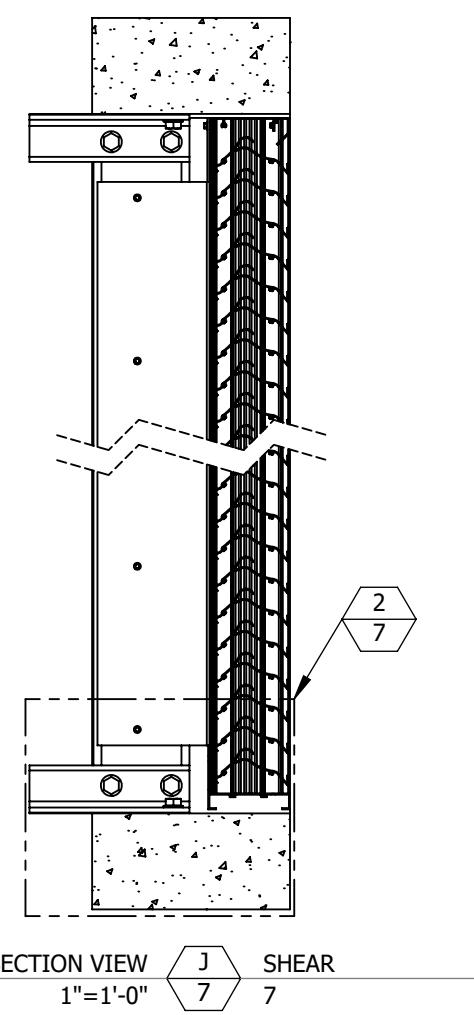
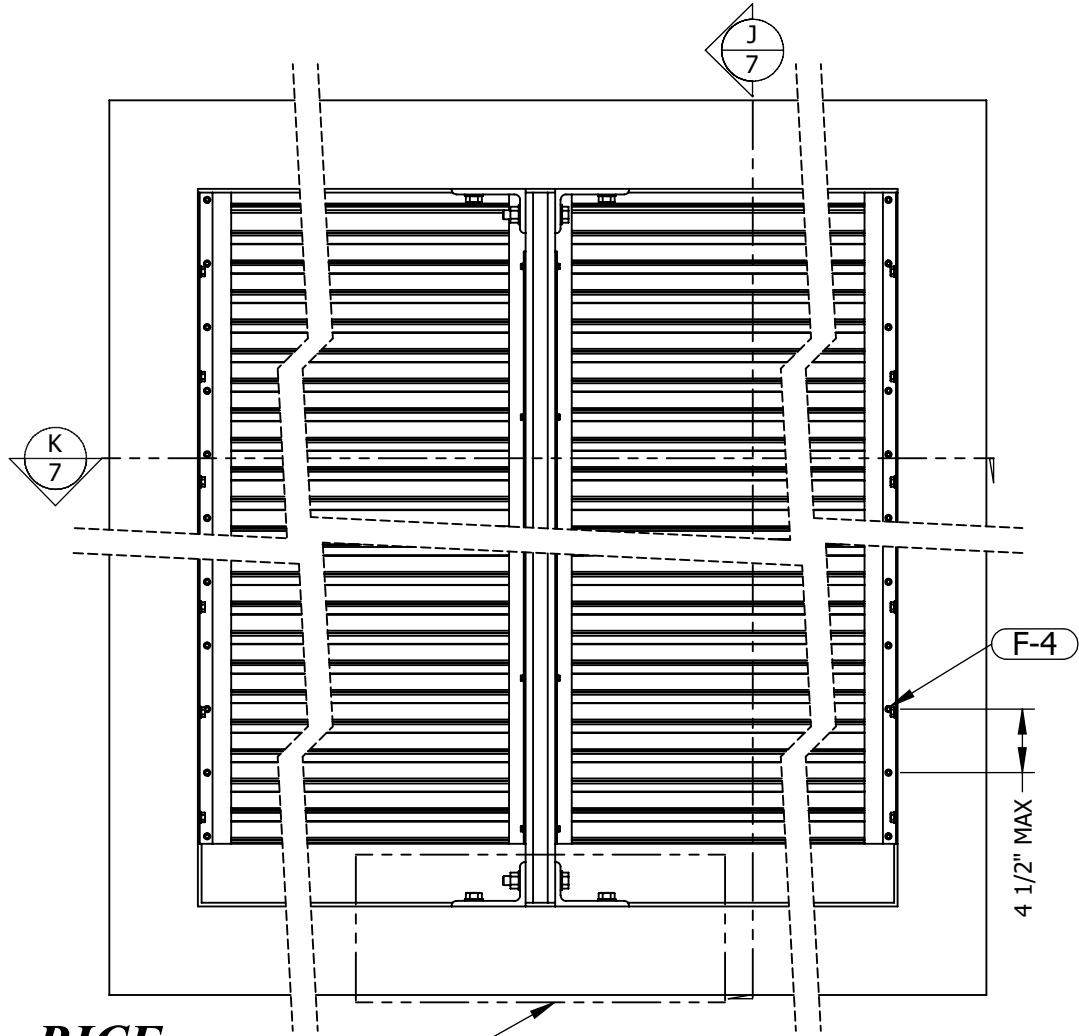
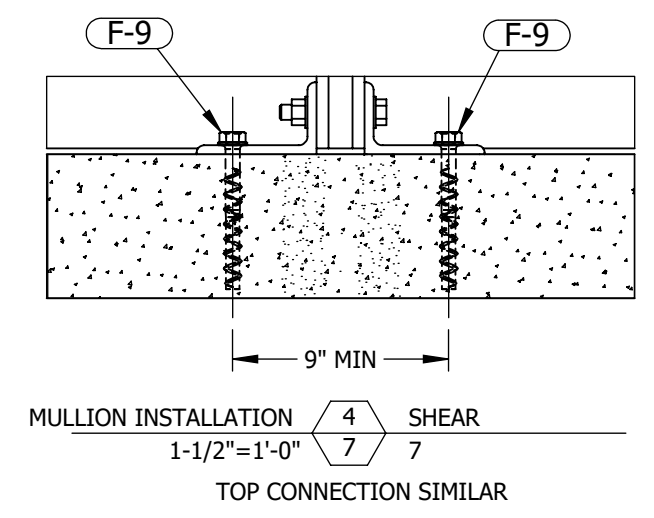
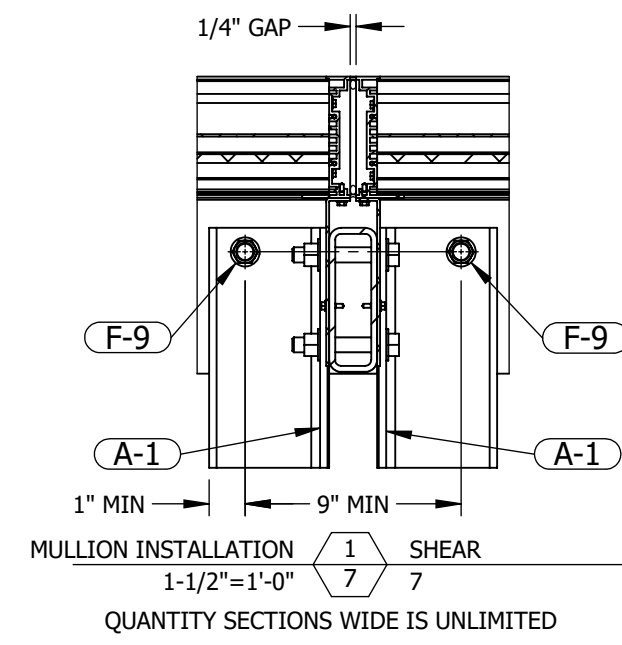
ECD-545-MD NOA

REV. NO.	DESCRIPTION	DATE	DRAWN BY
2	UPDATED ANCHORAGE DESIGN AND SHAPE DETAILS	3/19/2021	NWW
1	INITIAL RELEASE	8/30/2018	LGH

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CONCRETE CONDITION SHEAR CONNECTION



- NOTES:
- 1 SEE SHEET 6 FOR TENSION CONNECTION DETAILS WHEN CONCRETE CONDITION AT JAMB ≤ 7 1/4" THICK.
 - 2 SEE SHEET 6 FOR TENSION CONNECTION DETAILS WHEN CONCRETE CONDITION AT MULLION ≤ 12 3/8" THICK.

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 21-0427.02
Expiration Date 10/09/2023

P.E. STAMP

By *Wayne K. Helmila*
Miami-Dade Product Control

04/06/2021
COA: 9090

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Luxemburg, WI 54217
Phone: (920) 617-1042
Fax: (920) 617-1100
www.rice-inc.com

INTERIOR ELEVATION
QUANTITY SECTIONS WIDE IS UNLIMITED

2	UPDATED ANCHORAGE DESIGN AND SHAPE DETAILS	3/19/2021	NWW
1	INITIAL RELEASE	8/30/2018	LGH
REV. NO.	DESCRIPTION	DATE	DRAWN BY

UNLESS OTHERWISE SPECIFIED
DIMENSION ARE IN INCHES.

TOLERANCE UNLESS NOTED:

X.X	±0.060
X.XX	±0.030
X.XXX	±0.010
ANGLE	±1°
FRACTION	±1/16

MAX HOLE BREAKOUT:
15% OF MATERIAL THICKNESS

5101 Blue Mound Road
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THIRD ANGLE PROJECTION

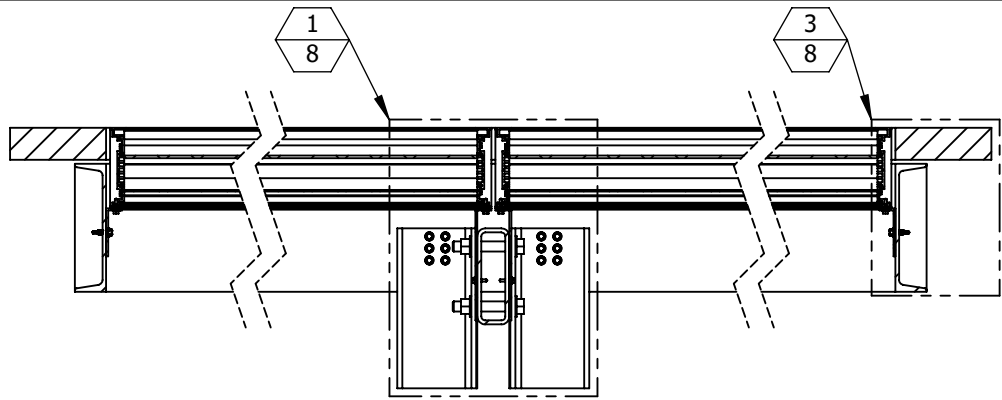
PCI INDUSTRIES DOING BUSINESS AS

ALL-LITE

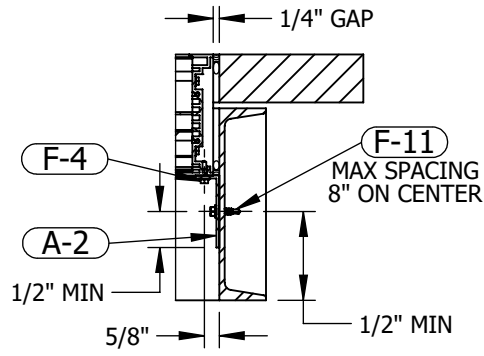
ARCHITECTURAL PRODUCTS

DRAWING DESCR: CONCRETE CONDITION SHEAR CONNECTION				
PROJECT: ECD-545-MD				
LOCATION:				
CUSTOMER:				
PROJ. MGR.:			DRAWN BY: LGH	
DATE: 6/27/2018	CHK'D BY: NW	ORDER NUMBER	P.O. NUMBER	DRAWING NUMBER
SHEET: 7 of 19	SCALE: 1"=1'-0"			ECD-545-MD NOA

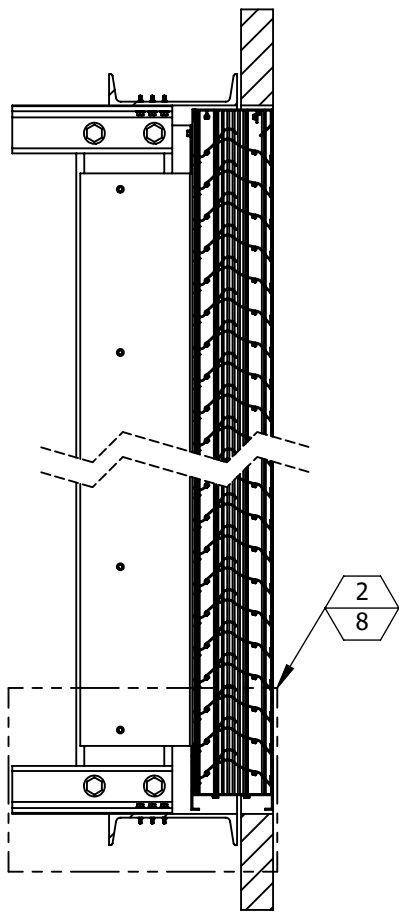
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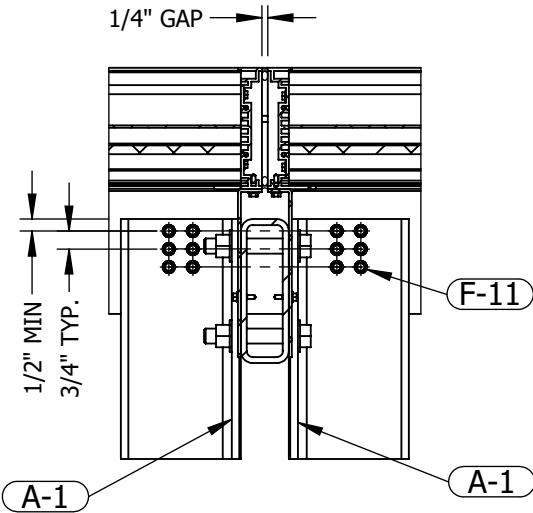
SECTION VIEW M STEEL
1"=1'-0" 8 8



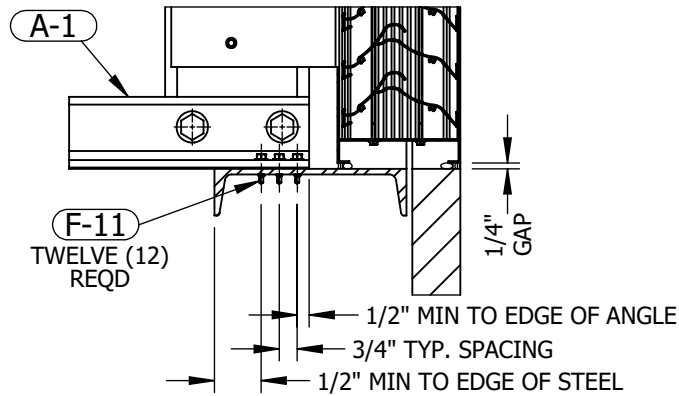
JAMB DETAIL 3 STEEL
1-1/2"=1'-0" 8 8
TYPICAL OPP. HAND



SECTION VIEW L STEEL
1"=1'-0" 8 8



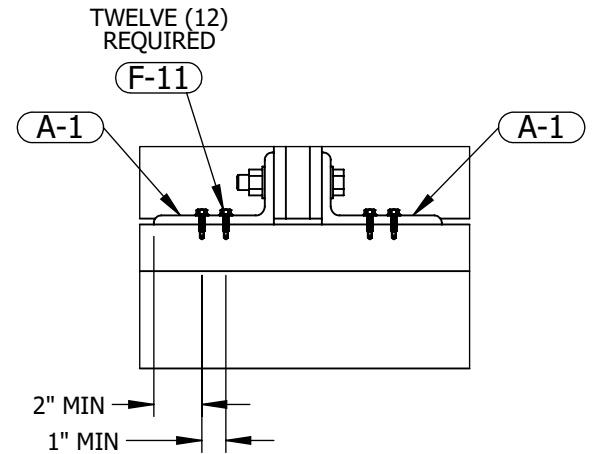
MULLION INSTALLATION 1 STEEL
1-1/2"=1'-0" 8 8
QUANTITY SECTIONS WIDE IS UNLIMITED



BOTTOM DETAIL 2 STEEL
1-1/2"=1'-0" 8 8
TOP CONNECTION SIMILAR

STEEL CONDITION

PRODUCT REVISED
as complying with the Florida
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NOA-No. 21-0427.02
Expiration Date 10/09/2023
By *[Signature]*
Miami-Dade Product Control



MULLION INSTALLATION 4 STEEL
1-1/2"=1'-0" 8 8
TOP CONNECTION SIMILAR

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Wayne K. Helmila
Registration No: 59092

INTERIOR ELEVATION QUANTITY SECTIONS WIDE IS UNLIMITED

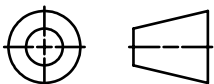
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X.XX ±0.030
X.XXX ±0.010
ANGLE ±1°
FRACTION ±1/16

MAX HOLE BREAKOUT:
15% OF MATERIAL THICKNESS

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THIRD ANGLE PROJECTION



PCI INDUSTRIES DOING BUSINESS AS
ALL-LITE
ARCHITECTURAL PRODUCTS

DRAWING DESCR: STEEL CONDITION

PROJECT: ECD-545-MD

LOCATION:

CUSTOMER:

PROJ. MGR.:

DRAWN BY: LGH

DATE: 6/27/2018

CHK'D BY: NW

ORDER NUMBER

P.O. NUMBER

DRAWING NUMBER

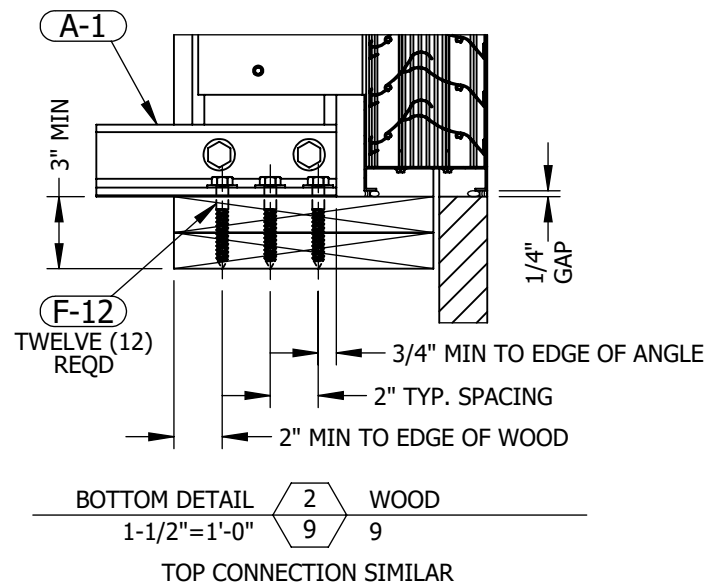
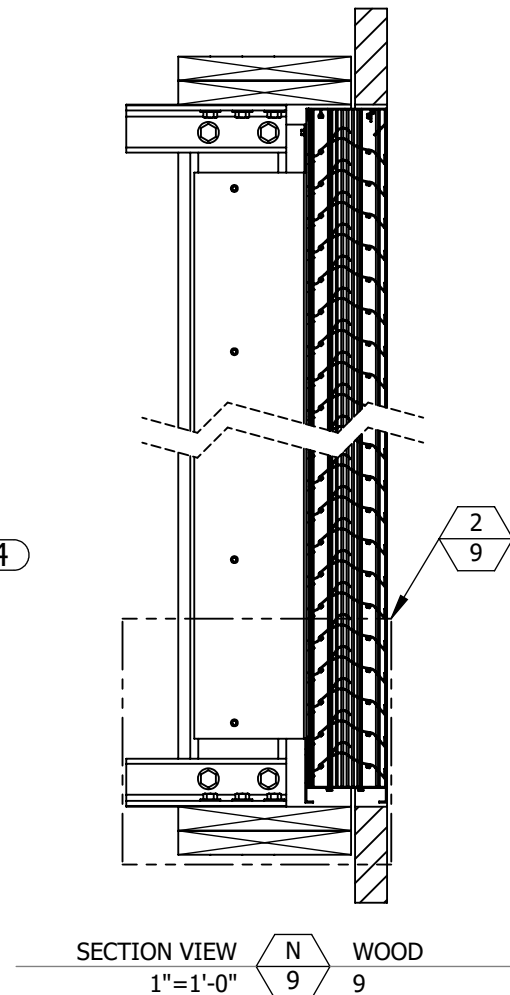
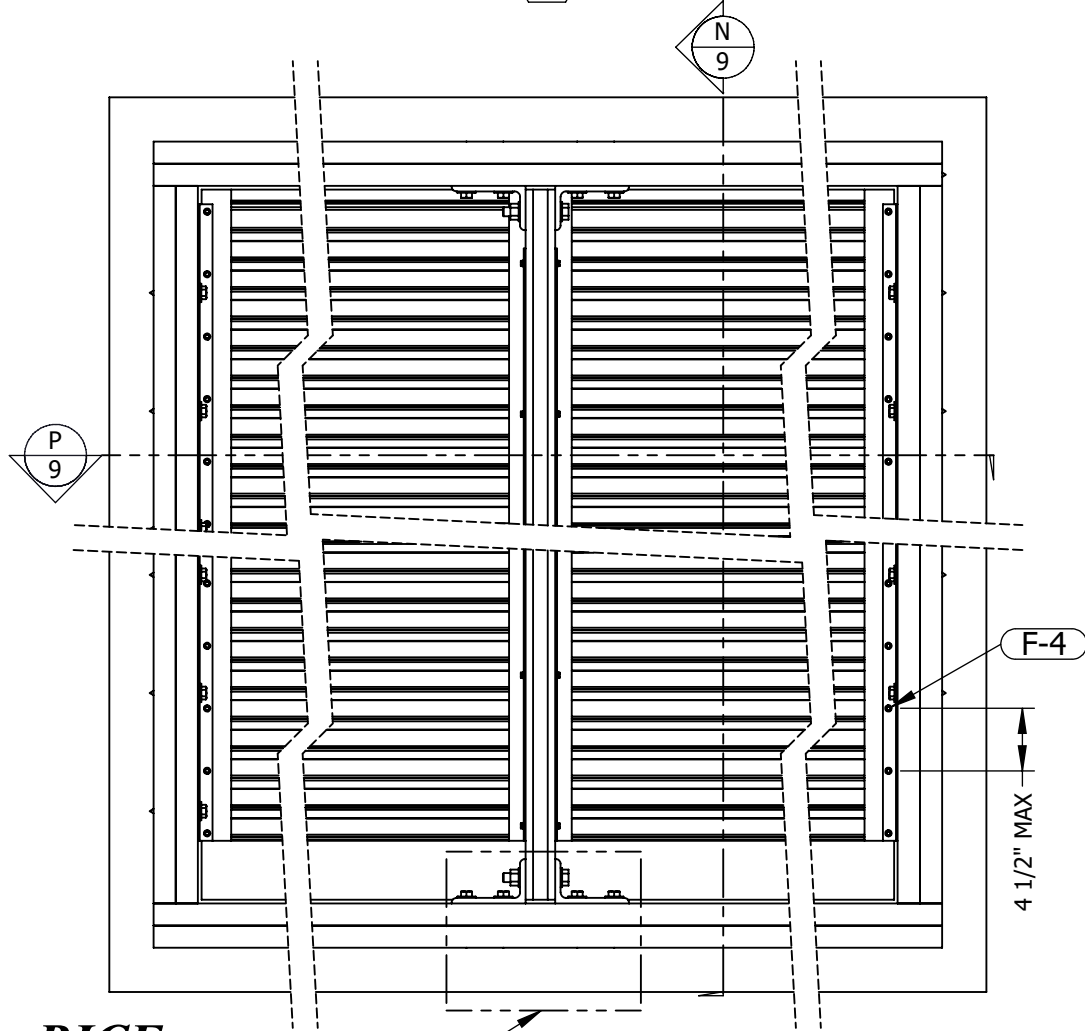
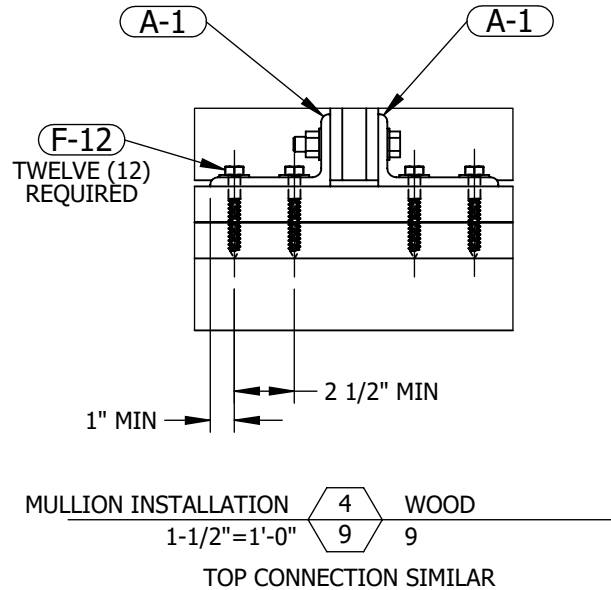
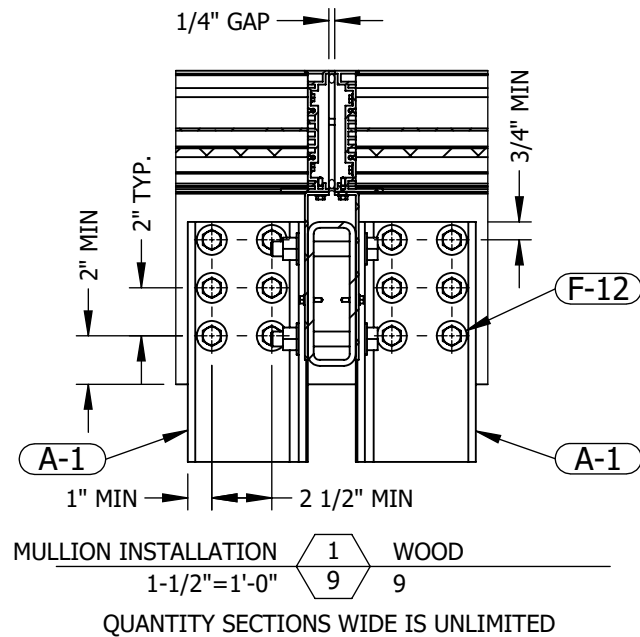
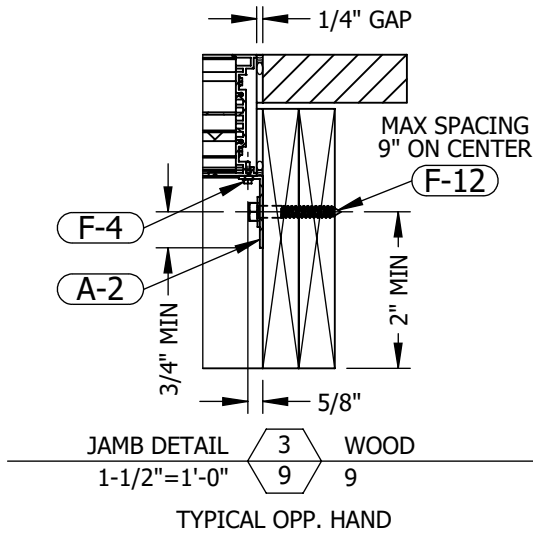
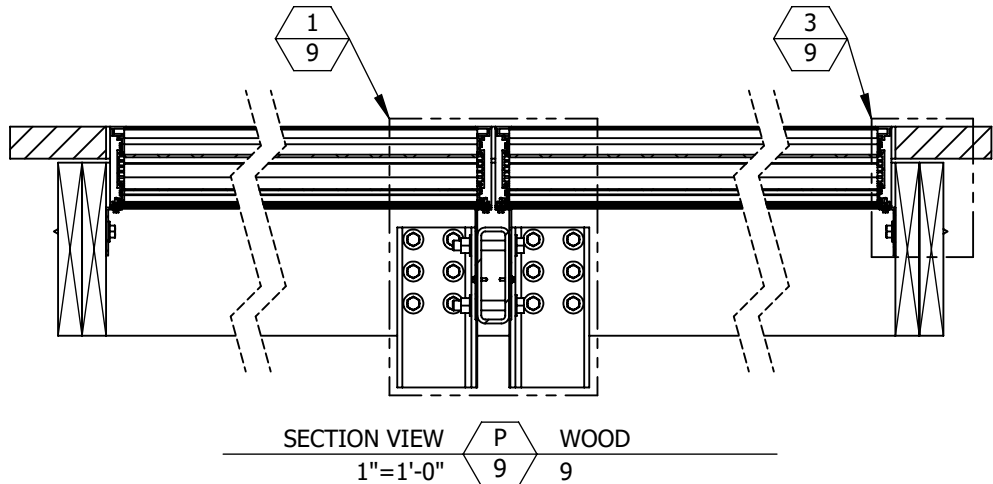
SHEET: 8 of 19

SCALE: 1"=1'-0"

ECD-545-MD NOA

2	UPDATED ANCHORAGE DESIGN AND SHAPE DETAILS	3/19/2021	NWW
1	INITIAL RELEASE	8/30/2018	LGH
REV. NO.	DESCRIPTION	DATE	DRAWN BY

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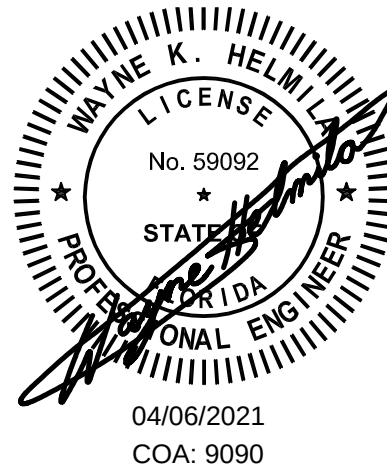


WOOD CONDITION

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 21-0427.02
Expiration Date 10/09/2023

P.E. STAMP

By 
Miami-Dade Product Control



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INTERIOR ELEVATION QUANTITY SECTIONS WIDE IS UNLIMITED

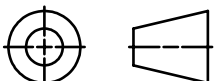
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ANGLE ±1°
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THIRD ANGLE PROJECTION



PCI INDUSTRIES DOING BUSINESS AS
ALL-LITE
ARCHITECTURAL PRODUCTS

DRAWING DESCR: WOOD CONDITION

PROJECT: ECD-545-MD

LOCATION:

CUSTOMER:

PROJ. MGR.:

DRAWN BY: LGH

DATE: 6/27/2018

CHK'D BY: NW

ORDER NUMBER

P.O. NUMBER

DRAWING NUMBER

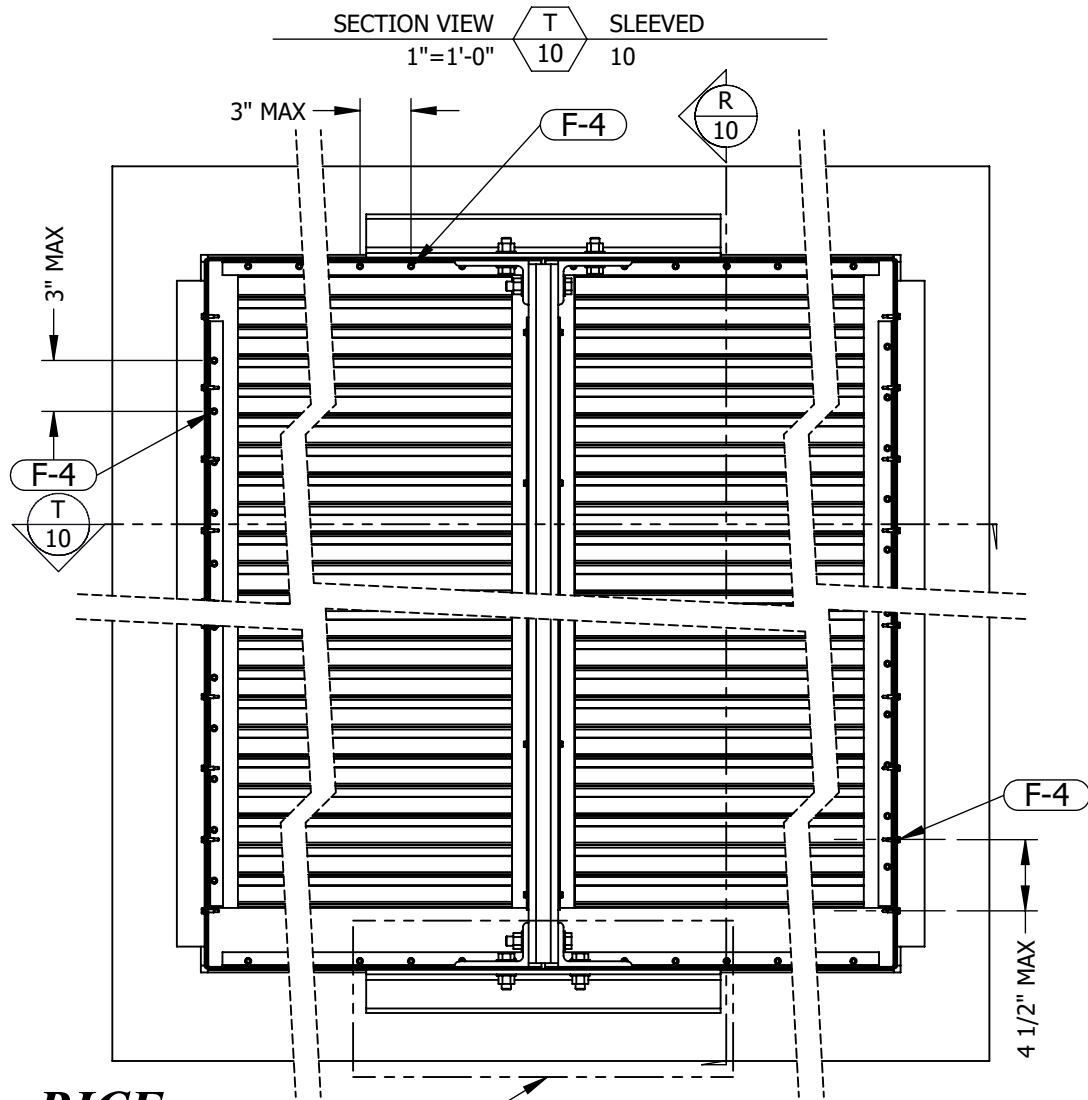
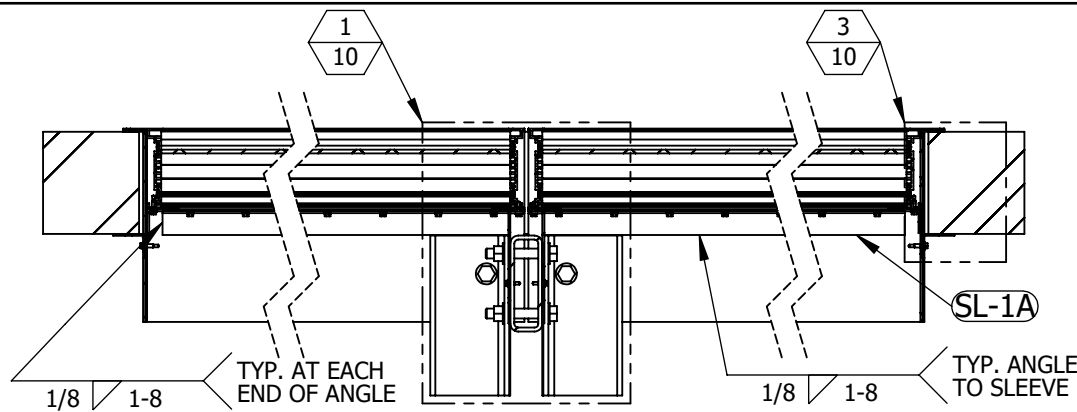
SHEET: 9 of 19

SCALE: 1"=1'-0"

ECD-545-MD NOA

REV. NO.	DESCRIPTION	DATE	DRAWN BY
2	UPDATED ANCHORAGE DESIGN AND SHAPE DETAILS	3/19/2021	NWW
1	INITIAL RELEASE	8/30/2018	LGH

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2	UPDATED ANCHORAGE DESIGN AND SHAPE DETAILS	3/19/2021	NWW
1	INITIAL RELEASE	8/30/2018	LGH
REV. NO.	DESCRIPTION	DATE	DRAWN BY

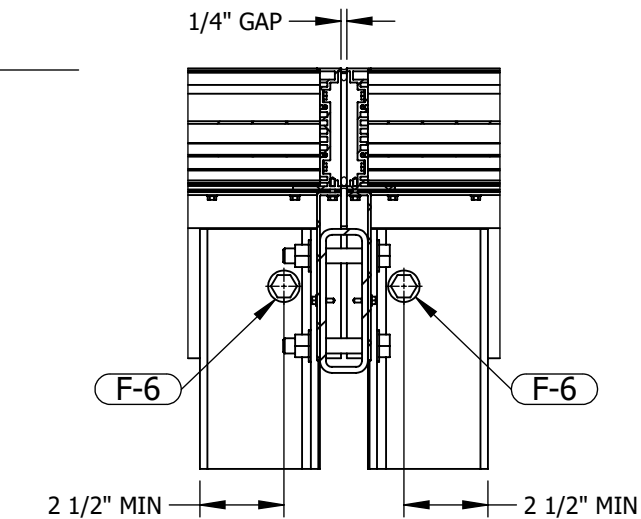
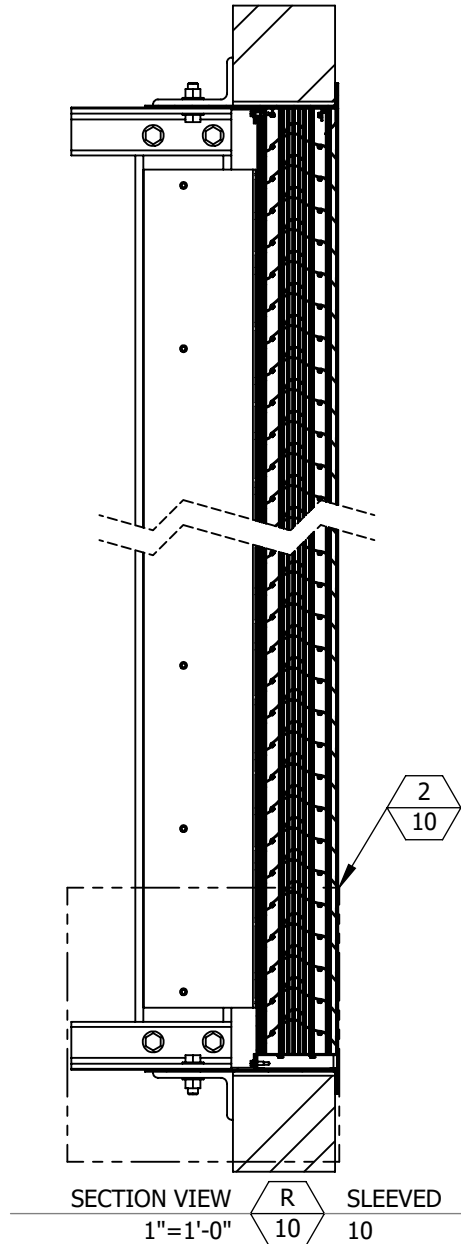
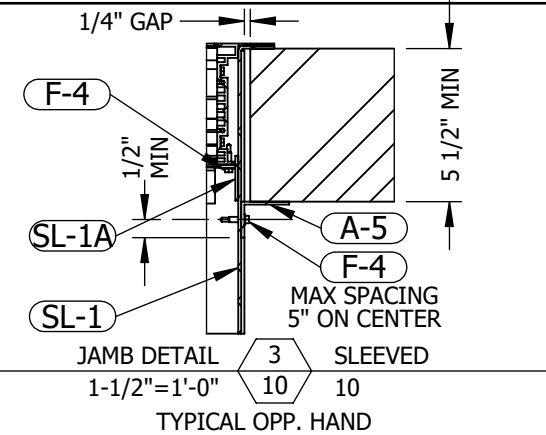
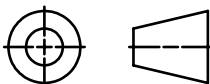
UNLESS OTHERWISE SPECIFIED
DIMENSION ARE IN INCHES.

TOLERANCE UNLESS NOTED:
X.X ±0.060
X.XX ±0.030
X.XXX ±0.010
ANGLE ±1°
FRACTION ±1/16

MAX HOLE BREAKOUT:
15% OF MATERIAL THICKNESS

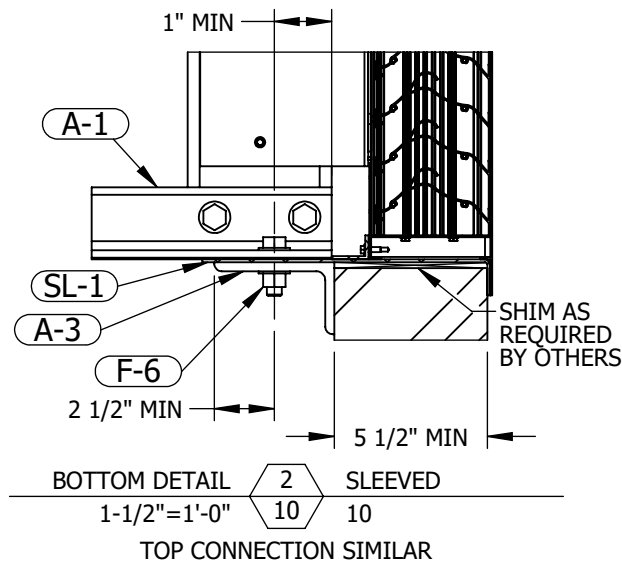
5101 Blue Mound Road
Fort Worth, Texas 76106
Phone: 817-509-2300
Fax: 817-831-3110

THIRD ANGLE PROJECTION



MULLION INSTALLATION 1 SLEEVED 10 10
1-1/2"=1'-0"

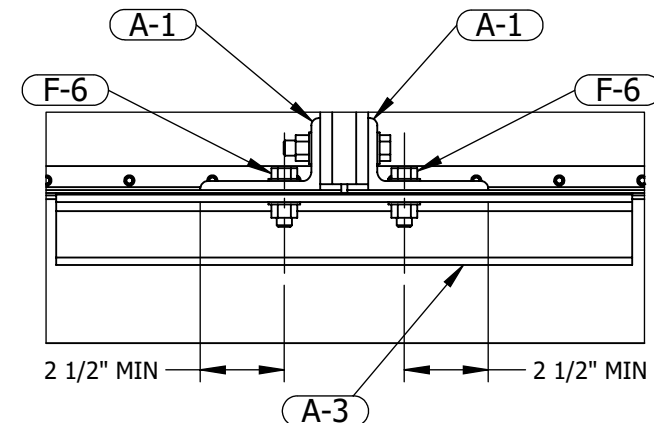
QUANTITY SECTIONS WIDE IS UNLIMITED



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PRODUCT REVISED
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Expiration Date 10/09/2023
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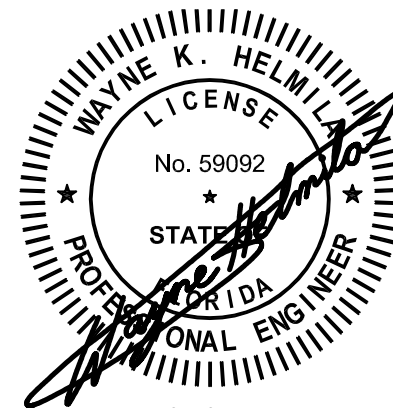
SLEEVED



MULLION INSTALLATION 4 SLEEVED 10 10
1-1/2"=1'-0"

TOP CONNECTION SIMILAR

P.E. STAMP



04/06/2021
COA: 9090

DRAWING DESCR: SLEEVED

PROJECT: ECD-545-MD

LOCATION:

CUSTOMER:

PROJ. MGR.:

DRAWN BY: LGH

DATE: 6/27/2018

CHK'D BY: NW

ORDER NUMBER

P.O. NUMBER

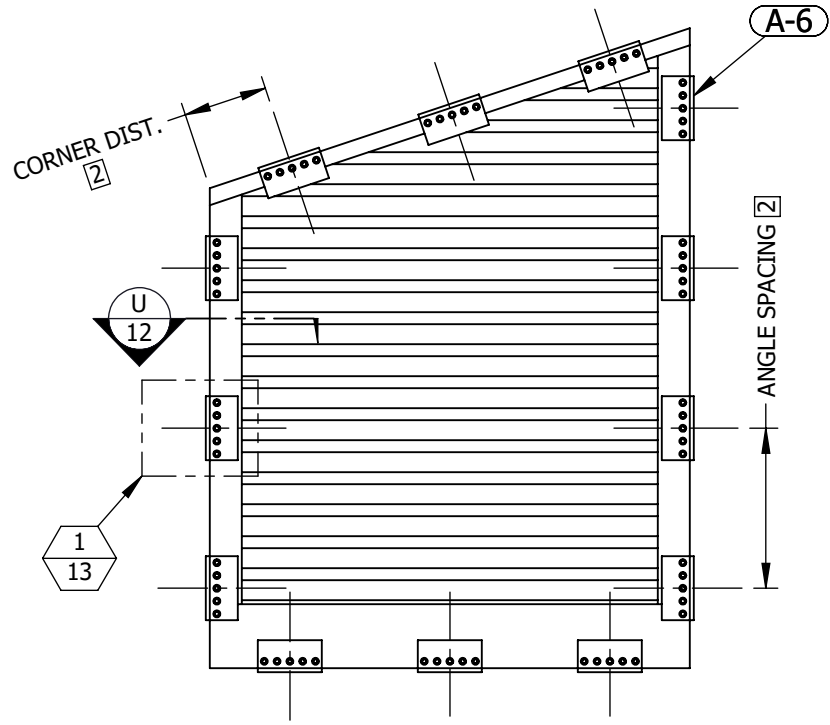
DRAWING NUMBER

SHEET: 10 of 19

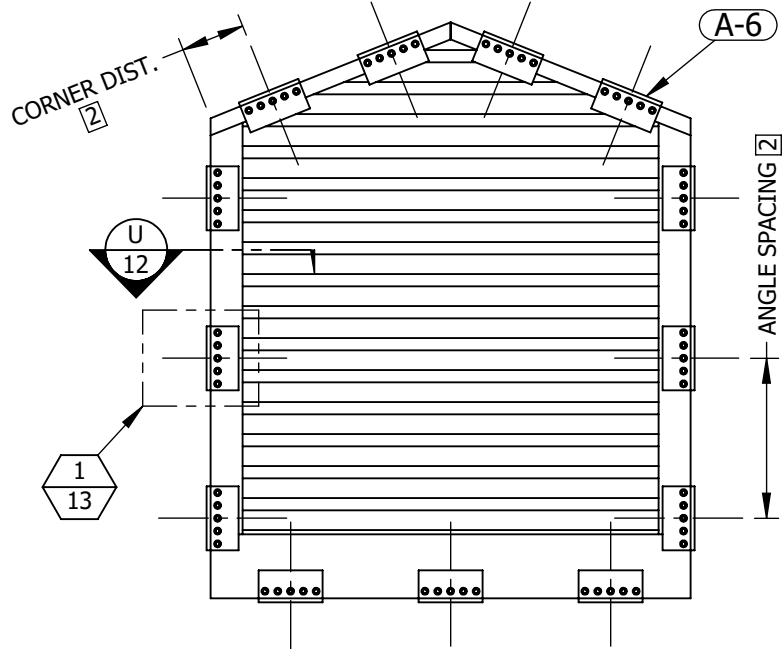
SCALE: 1"=1'-0"

ECD-545-MD NOA

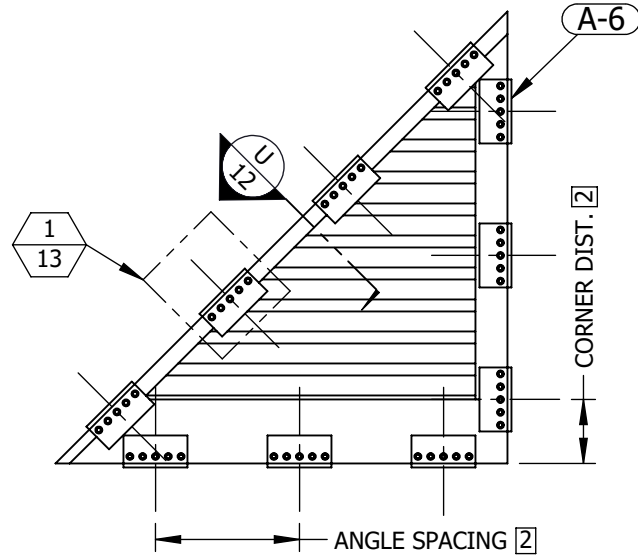
C:\Users\inwoodworth\Desktop\Miami-Dade Updates (2020)\ECD-545-MD\NOA Drawings (Rev 2)



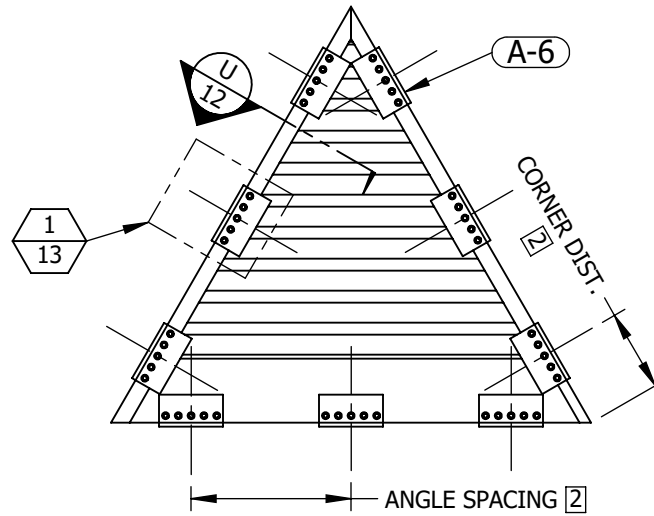
TRAPEZOID 1 11 REAR/INTERIOR VIEW
1"=1'-0"



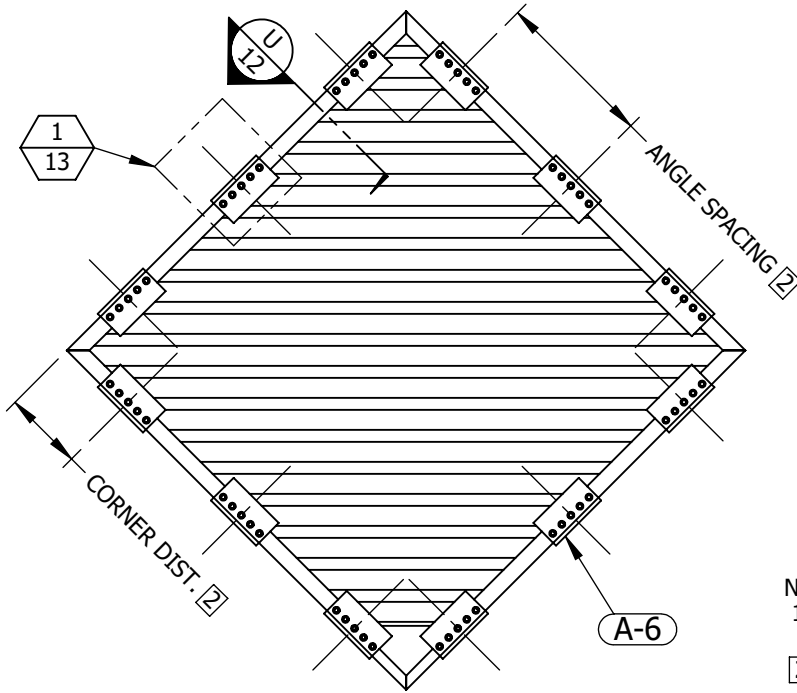
DOUBLE SLOPE TOP 4 11 REAR/INTERIOR VIEW
1"=1'-0"



RIGHT TRIANGLE 2 11 REAR/INTERIOR VIEW
1"=1'-0"



ISOSCELES TRIANGLE 3 11 REAR/INTERIOR VIEW
1"=1'-0"



DIAMOND 5 11 REAR/INTERIOR VIEW
1"=1'-0"

SPECIAL SHAPES INSTALLATION

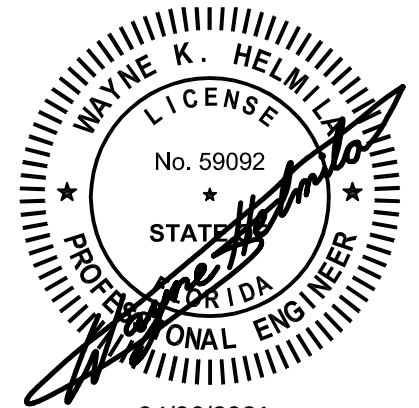
TABLE 4		
SHAPE CLIP ANGLE DIMENSIONS		
SUBSTRATE	ANGLE SPACING	CORNER DISTANCE
CONCRETE	8"	4"
GROUT-FILLED CMU	5 1/2"	2 3/4"
STEEL	10"	5"
WOOD	10"	5"

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Florida Firm No: F-01000005061
Certificate of Authorization: #9090
Wayne K. Helmila
Registration No: 59092

P.E. STAMP



04/06/2021
COA: 9090

PRODUCT REVISED as complying with the Florida Building Code

NOA-No. 21-0427.02

Expiration Date 10/09/2023

By *[Signature]*
Miami-Dade Product Control

NOTES:

1. SHAPED LOUVER WIDTH AND HEIGHT WILL NOT EXCEED MAX SINGLE SECTION SIZES PER TABLE 1, SHEET 1.
2. ALLOWABLE CLIP ANGLE SPACING AND CORNER DISTANCE VARY BY SUBSTRATE. SEE TABLE 4 FOR ALLOWABLE SPACING AND CORNER DISTANCE DIMENSIONS FOR EACH SUBSTRATE TYPE.
3. CLIP ANGLES TO BE INSTALLED AROUND ENTIRE PERIMETER OF OPENING.

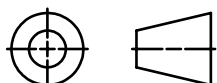
UNLESS OTHERWISE SPECIFIED
DIMENSION ARE IN INCHES.

TOLERANCE UNLESS NOTED:
X.X ±0.060
X.XX ±0.030
X.XXX ±0.010
ANGLE ±1°
FRACTION ±1/16

MAX HOLE BREAKOUT:
15% OF MATERIAL THICKNESS

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THIRD ANGLE PROJECTION



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DRAWING DESCR: SPECIAL SHAPES INSTALLATION

PROJECT: ECD-545-MD

LOCATION:

CUSTOMER:

PROJ. MGR.:

DRAWN BY: LGH

DATE: 6/27/2018

CHK'D BY: NW

ORDER NUMBER

P.O. NUMBER

DRAWING NUMBER

SHEET: 11 of 19

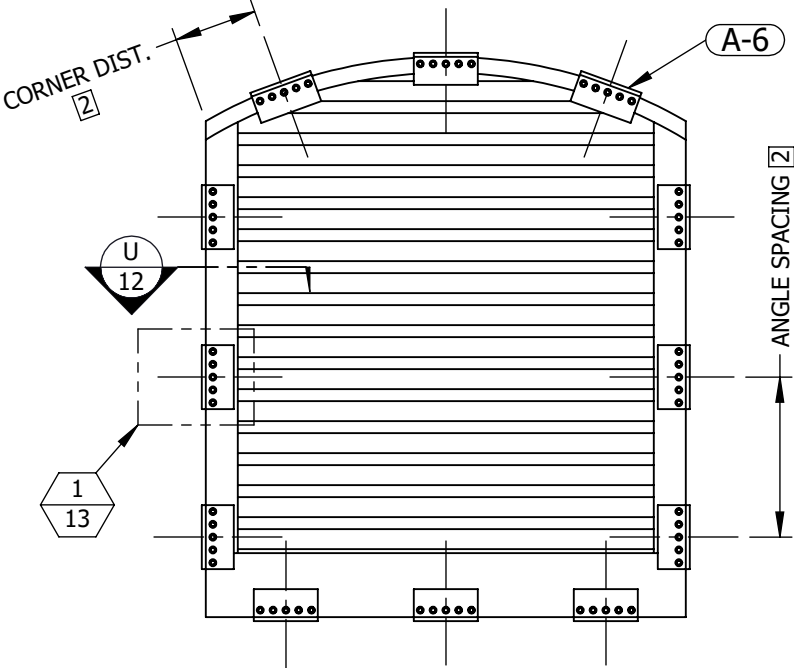
SCALE: 1-1/2"=1'-0"

ECD-545-MD NOA

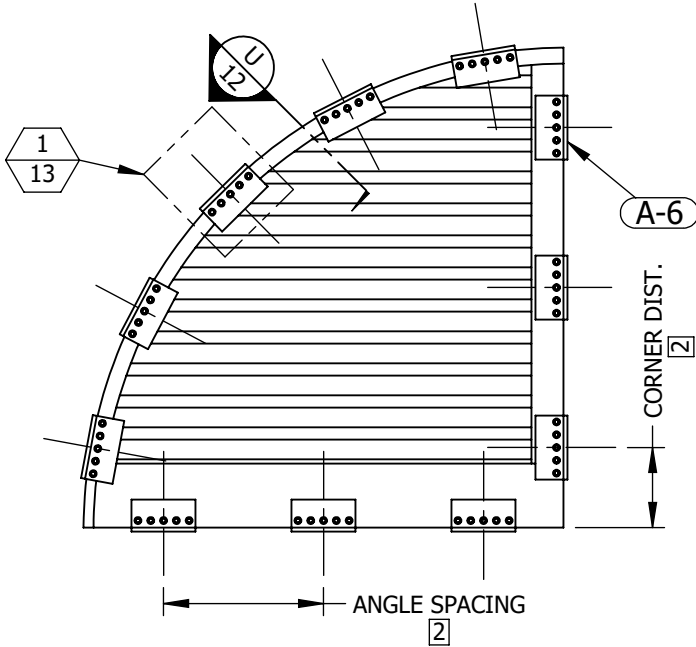
REV. NO.	DESCRIPTION	DATE	DRAWN BY
2	UPDATED ANCHORAGE DESIGN AND SHAPE DETAILS	3/19/2021	NWW
1	INITIAL RELEASE	8/30/2018	LGH

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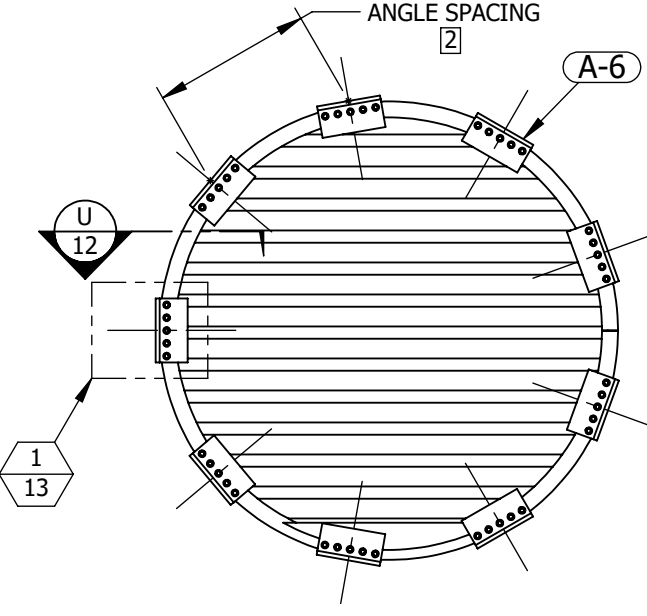
SPECIAL SHAPES INSTALLATION



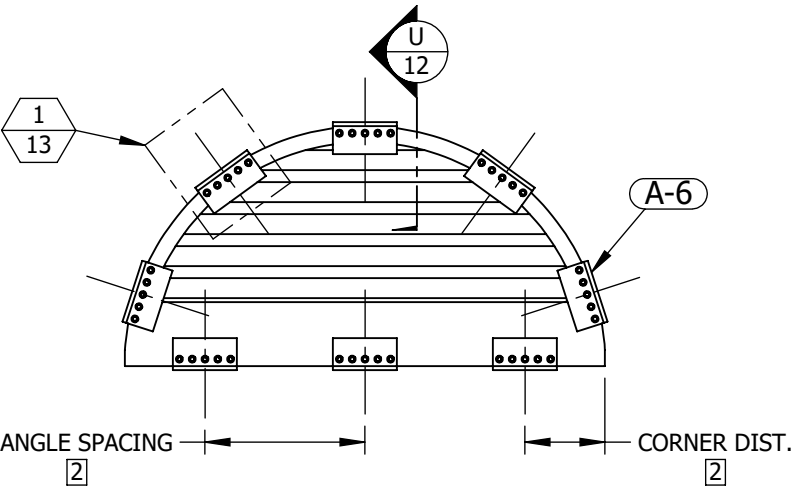
RADIUS TOP 1 12 REAR/INTERIOR VIEW
1"=1'-0" 12



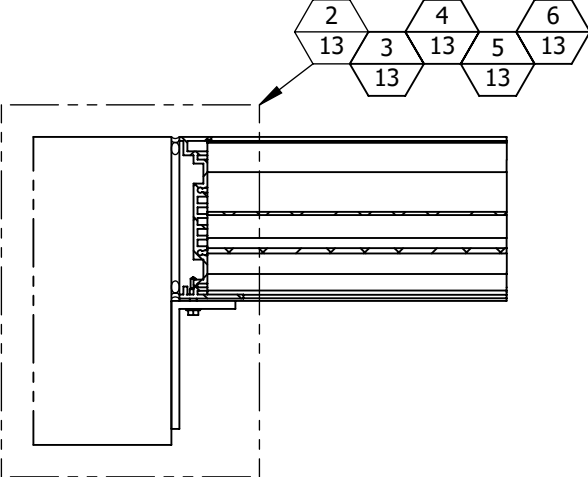
QUARTER ROUND 2 12 REAR/INTERIOR VIEW
1"=1'-0" 12



ROUND 3 12 REAR/INTERIOR VIEW
1"=1'-0" 12



HALF ROUND 4 12 REAR/INTERIOR VIEW
1"=1'-0" 12

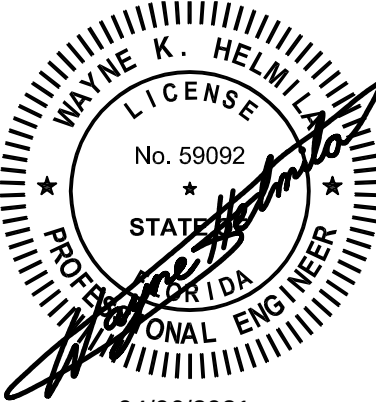


SHAPE CLIP ANGLE U 12 SECTION VIEW
2"=1'-0" 11, 12

PRODUCT REVISED
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NOA-No. 21-0427.02
Expiration Date 10/09/2023
By *[Signature]*
Miami-Dade Product Control

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04/06/2021
COA: 9090

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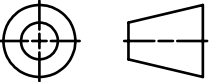
TOLERANCE UNLESS NOTED:

X.X	±0.060
X.XX	±0.030
X.XXX	±0.010
ANGLE	±1°
FRACTION	±1/16

MAX HOLE BREAKOUT:
15% OF MATERIAL THICKNESS

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Fax: 817-831-3110

THIRD ANGLE PROJECTION

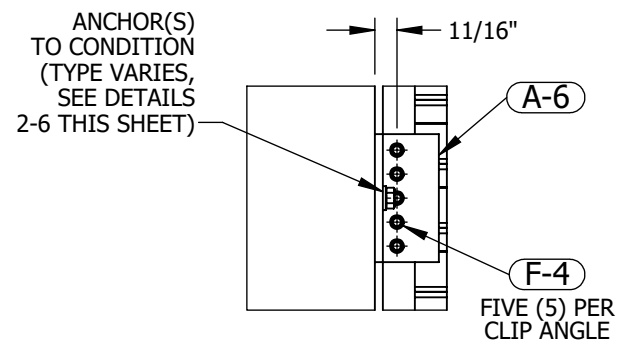


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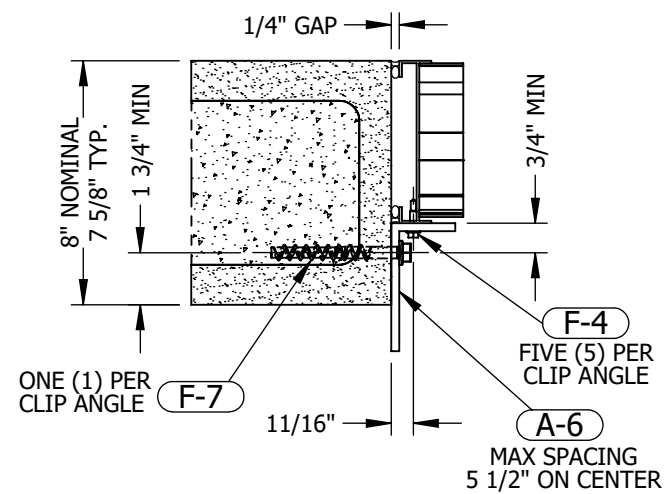
DRAWING DESCR: SPECIAL SHAPES INSTALLATION				
PROJECT: ECD-545-MD				
LOCATION:				
CUSTOMER:				
PROJ. MGR.:		DRAWN BY: LGH		
DATE: 6/27/2018	CHK'D BY: NW	ORDER NUMBER	P.O. NUMBER	DRAWING NUMBER
SHEET: 12 of 19	SCALE: 1-1/2"=1'-0"			ECD-545-MD NOA

2	UPDATED ANCHORAGE DESIGN AND SHAPE DETAILS	3/19/2021	NWW
1	INITIAL RELEASE	8/30/2018	LGH
REV. NO.	DESCRIPTION	DATE	DRAWN BY

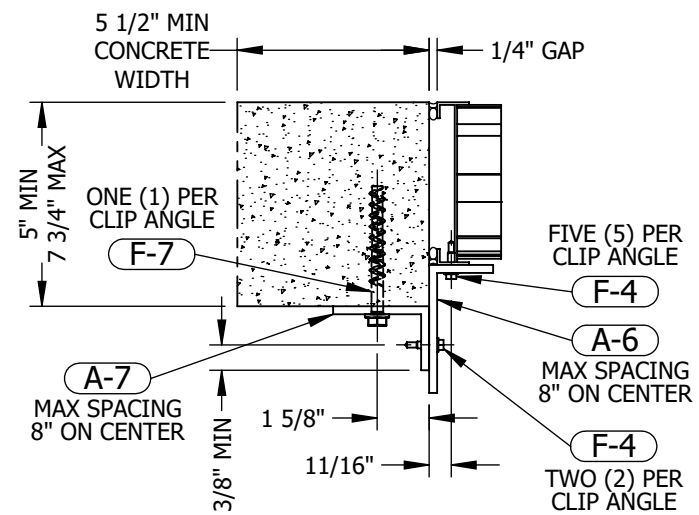
SPECIAL SHAPES INSTALLATION



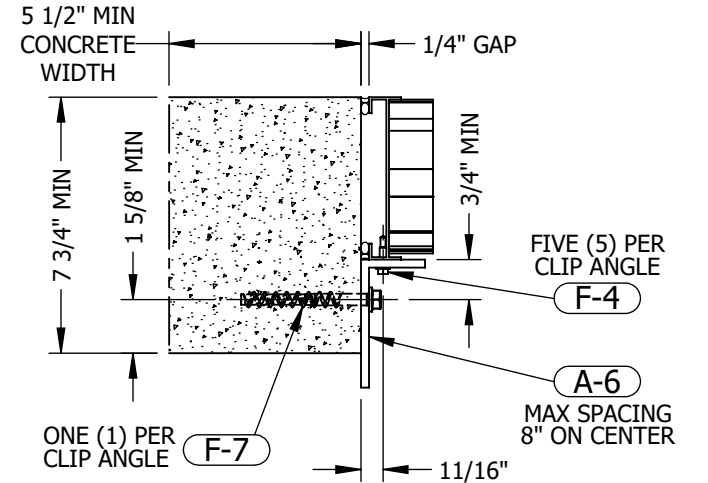
SHAPE CLIP ANGLE	1	REAR/INTERIOR DETAIL
2"=1'-0"	13	11, 12



SHAPE	CLIP	ANGLE		GROUT-FILLED CMU
2"=1'-0"			12	



SHAPE CLIP ANGLE	3	CONCRETE $\leq 7 \frac{3}{4}$ " THICK
2"=1'-0"	13	12

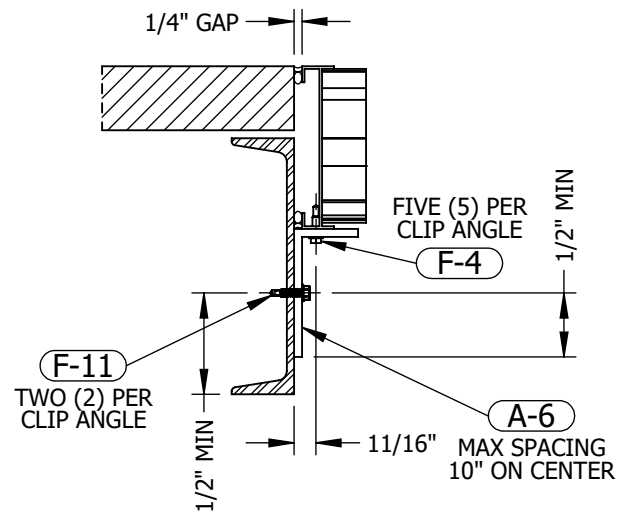


SHAPE CLIP ANGLE	4	CONCRETE $\geq 7 \frac{3}{4}$ " THICK
2"=1'-0"	13	12

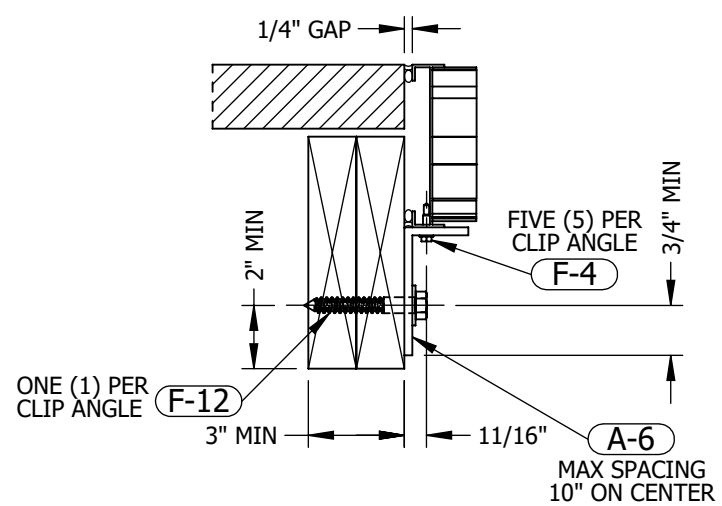
PRODUCT REVISED
as complying with the Florida
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NOA-No. 21-0427.02

Expiration Date 10/09/2023

By 
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SHAPE	CLIP	ANGLE	5	STEEL
2"	=	1'-0"	13	12



SHAPE	CLIP ANGLE	WOOD
2"=1'-0"	6 13	12

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Certificate of Authorization: #9090
Wayne K. Helmila
Registration No: 59092

UNLESS OTHERWISE SPECIFIED
DIMENSION ARE IN INCHES.

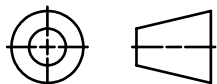
TOLERANCE UNLESS NOTED:

X.X	±0.060
X.XX	±0.030
X.XXX	±0.010
ANGLE	±1°
FRACTION	±1/16

MAX HOLE BREAKOUT:
15% OF MATERIAL THICKNESS

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THIRD ANGLE PROJECTION



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ARCHITECTURAL PRODUCTS

DRAWING DESCR: SPECIAL SHAPES INSTALLATION

PROJECT: ECD-545-MD

LOCATION:

CUSTOMER:

PROJ. MGR.:	
-------------	--

DATE: 6/27/2018

DRAWN BY: LGH

DATE: 6/27/2018	CHK'D BY: NW
-----------------	--------------

ORDER NUMBER

P.O. NUMBER

DRAWING NUMBER

SHEET: 13 of 19

SCALE: 1-1/2"=1'-0"

FCD-545-MD NOA

MULTI-SECTION HIGH

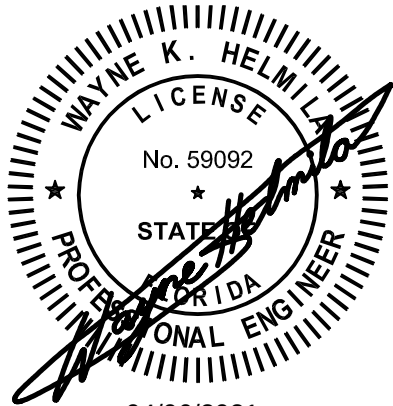
PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 21-0427.02
Expiration Date 10/09/2023
By 
Miami-Dade Product Control

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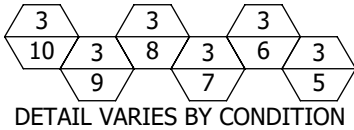
105 School Creek Trail
Luxemburg, WI 54217
Phone: (920) 617-1042
Fax: (920) 617-1100
www.rice-inc.com

Florida Firm No: F-01000005061
Certificate of Authorization: #9090
Wayne K. Helmila
Registration No: 59092

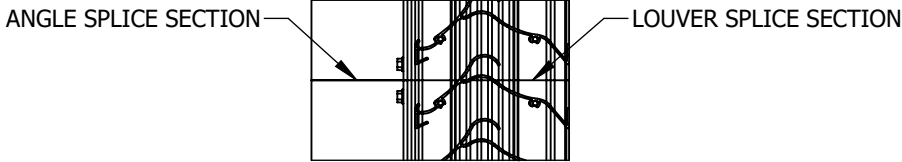
P.E. STAMP



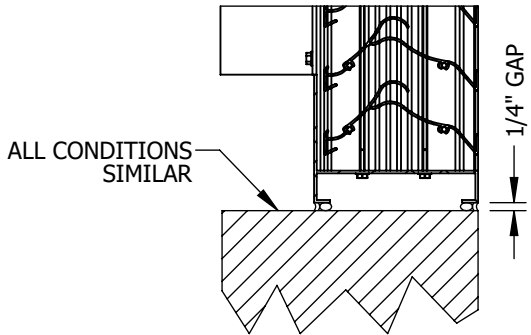
04/06/2021
COA: 9090



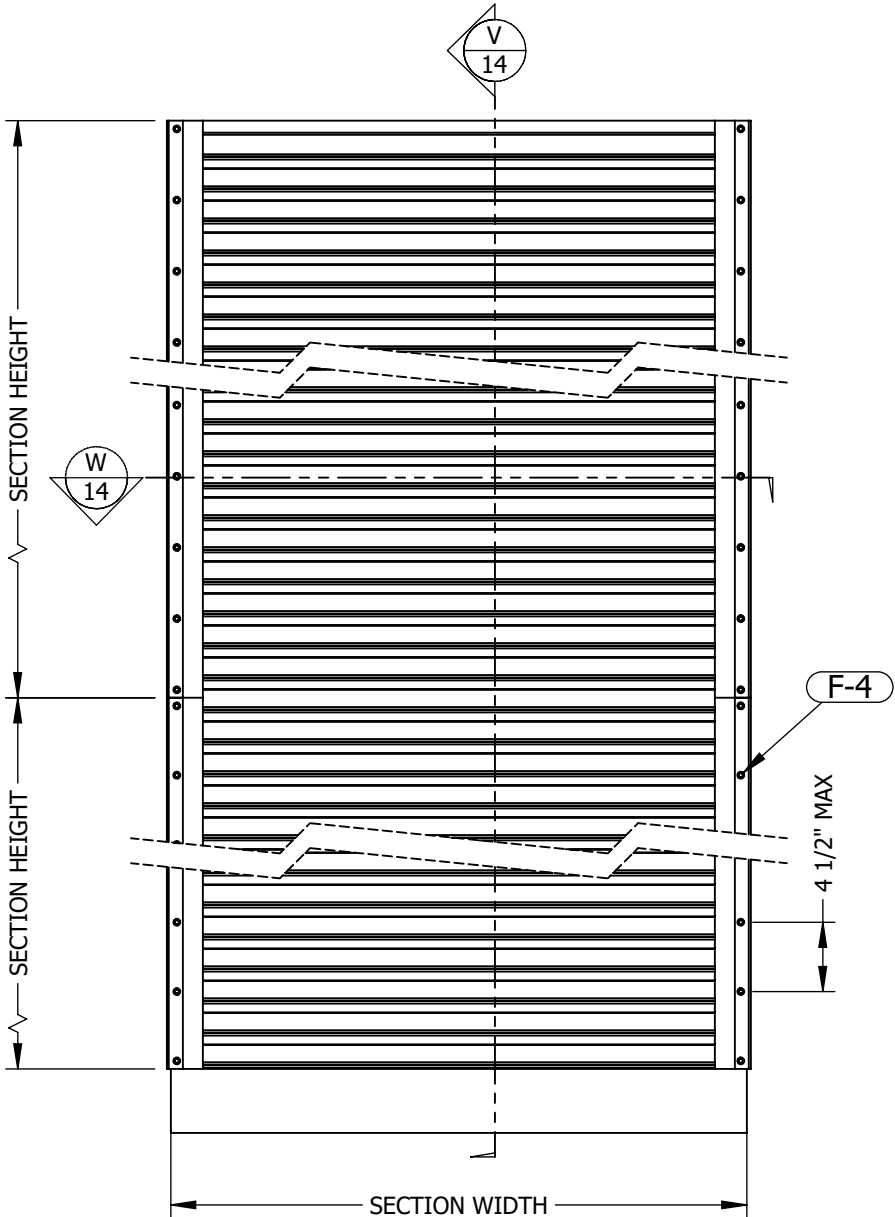
SECTION VIEW W 14 MULTI-SECTION HIGH
1"=1'-0" 14



SPLICE SECTION 1 14 MULTI-SECTION HIGH
2"=1'-0" 14



BOTTOM DETAIL 2 14 MULTI-SECTION HIGH
2"=1'-0" 14
TOP CONNECTION SIMILAR



SECTION VIEW V 14 MULTI-SECTION HIGH
1"=1'-0" 14

SECTION VIEW V 14 MULTI-SECTION HIGH
1"=1'-0" 14

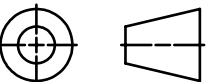
UNLESS OTHERWISE SPECIFIED
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X.X ±0.060
X.XX ±0.030
X.XXX ±0.010
ANGLE ±1°
FRACTION ±1/16

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15% OF MATERIAL THICKNESS

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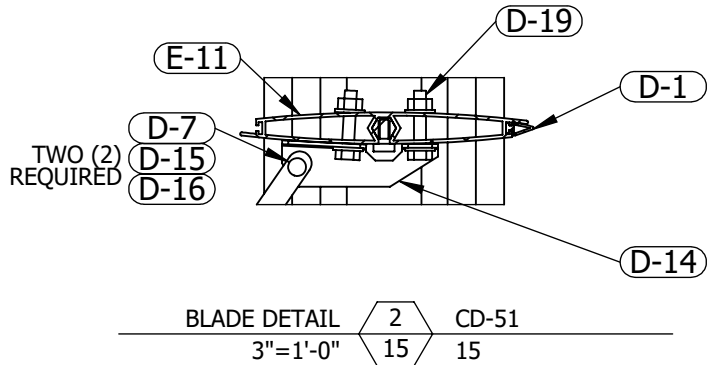
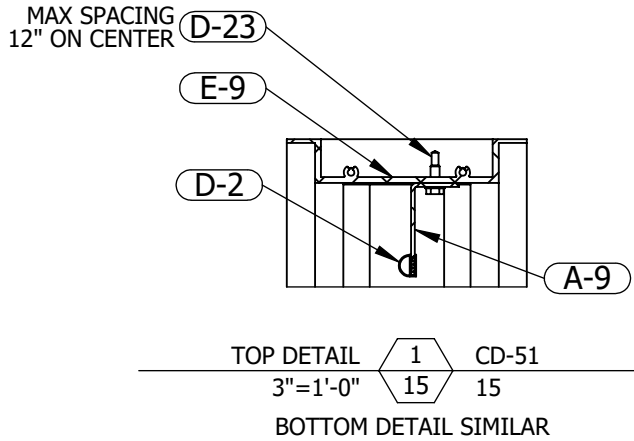
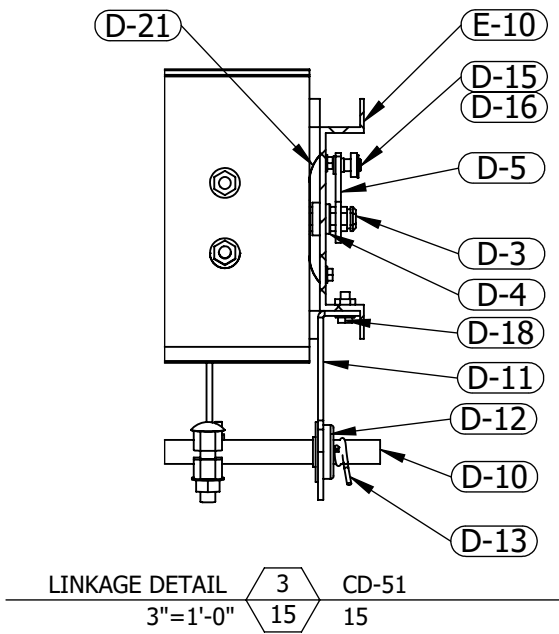
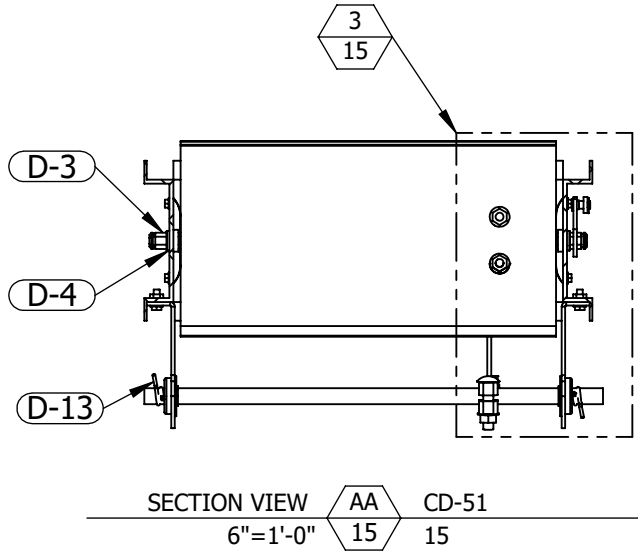
THIRD ANGLE PROJECTION



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DRAWING DESCR: MULTI-SECTION HIGH				
PROJECT: ECD-545-MD				
LOCATION:				
CUSTOMER:				
PROJ. MGR.:		DRAWN BY: LGH		
DATE: 6/27/2018	CHK'D BY: NW	ORDER NUMBER	P.O. NUMBER	DRAWING NUMBER
SHEET: 14 of 19	SCALE: 1"=1'-0"			ECD-545-MD NOA

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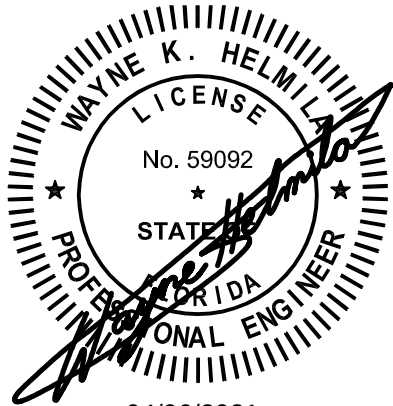


CD-51 DAMPER

RICE ENGINEERING

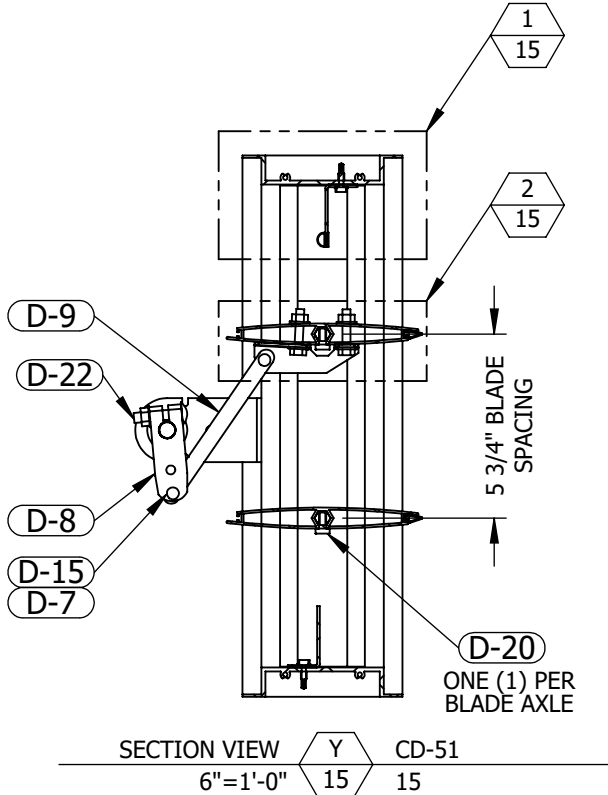
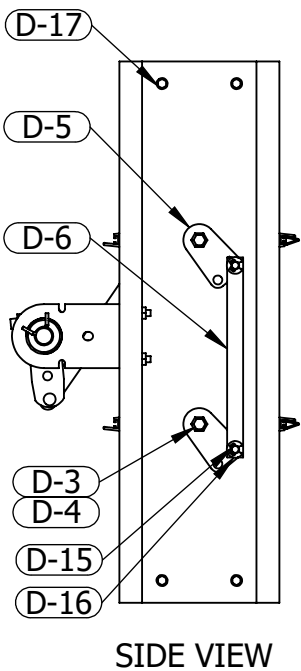
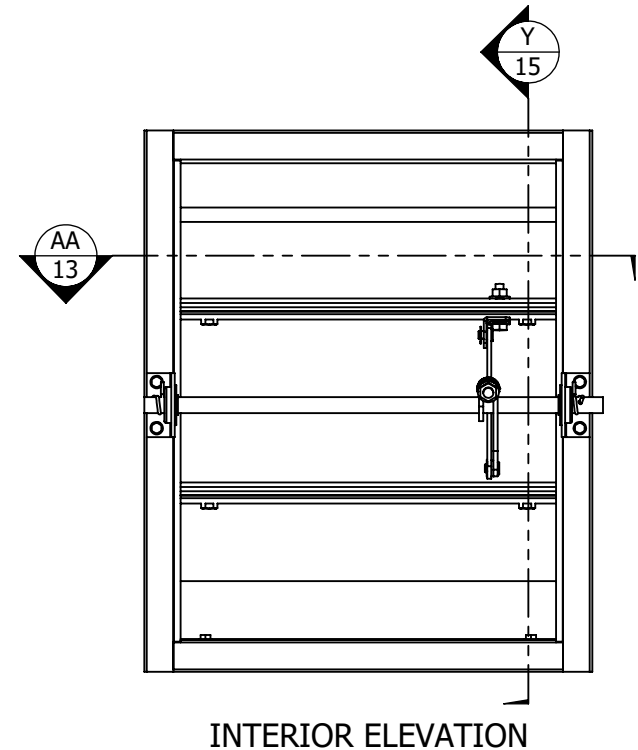
105 School Creek Trail
Luxemburg, WI 54217
Phone: (920) 617-1042
Fax: (920) 617-1100
www.rice-inc.com
Florida Firm No: F-01000005061
Certificate of Authorization: #9090
Wayne K. Helmila
Registration No: 59092

P.E. STAMP



04/06/2021
COA: 9090

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 21-0427.02
Expiration Date 10/09/2023
By *[Signature]*
Miami-Dade Product Control



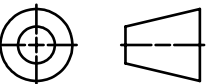
UNLESS OTHERWISE SPECIFIED
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THIRD ANGLE PROJECTION

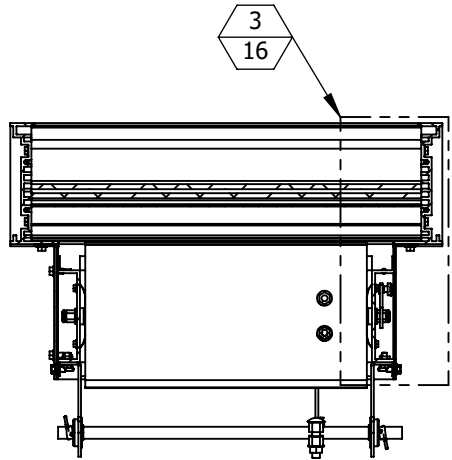


PCI INDUSTRIES DOING BUSINESS AS
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ARCHITECTURAL PRODUCTS

DRAWING DESCR: CD-51 DAMPER				
PROJECT: ECD-545-MD				
LOCATION:				
CUSTOMER:				
PROJ. MGR.:		DRAWN BY: LGH		
DATE: 6/27/2018	CHK'D BY: NW	ORDER NUMBER	P.O. NUMBER	DRAWING NUMBER
SHEET: 15 of 19	SCALE: 2"=1'-0"			ECD-545-MD NOA

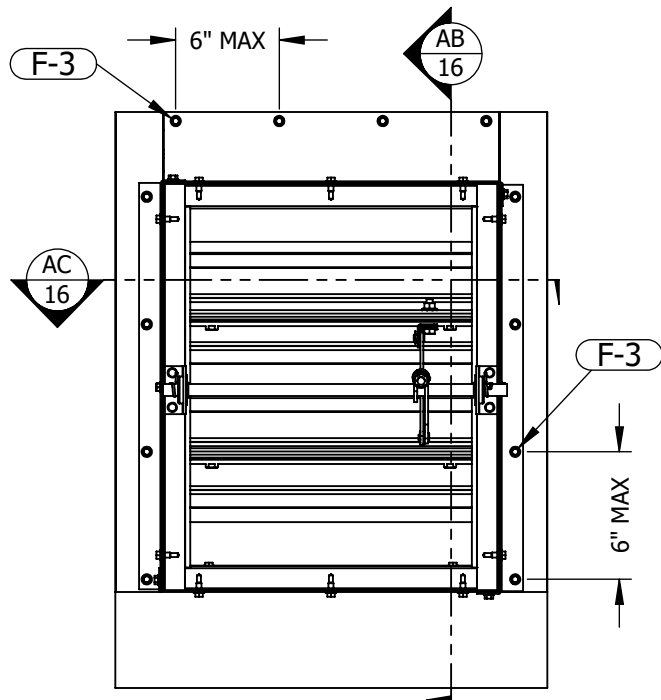
2	UPDATED ANCHORAGE DESIGN AND SHAPE DETAILS	3/19/2021	NWW
1	INITIAL RELEASE	8/30/2018	LGH
REV. NO.	DESCRIPTION	DATE	DRAWN BY

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SECTION VIEW  ECD-545-MD WITH CD-51
1-1/2"=1'-0" 16

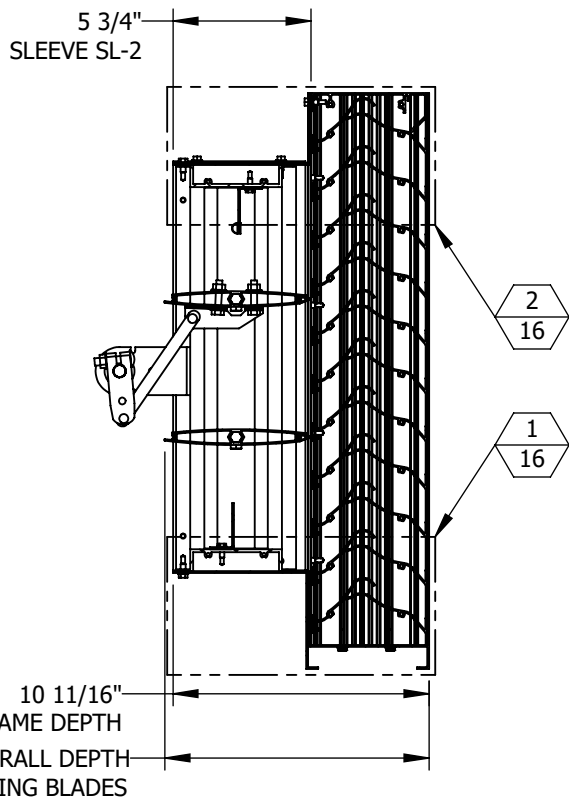
PRODUCT REVISED
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NOA-No. 21-0427.02
Expiration Date 10/09/2023
By 
Miami-Dade Product Control



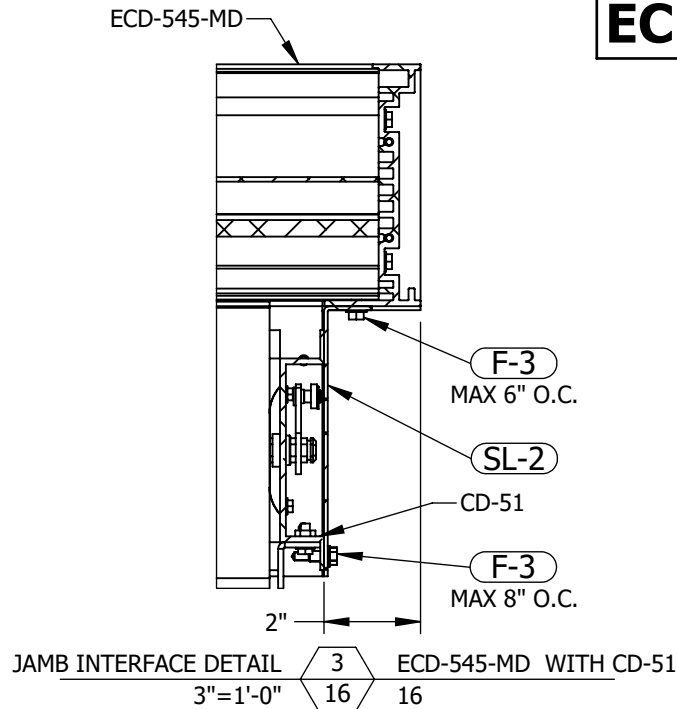
RICE INTERIOR ELEVATION
ENGINEERING

105 School Creek Trail
Luxemburg, WI 54217
Phone: (920) 617-1042
Fax: (920) 617-1100
www.rice-inc.com

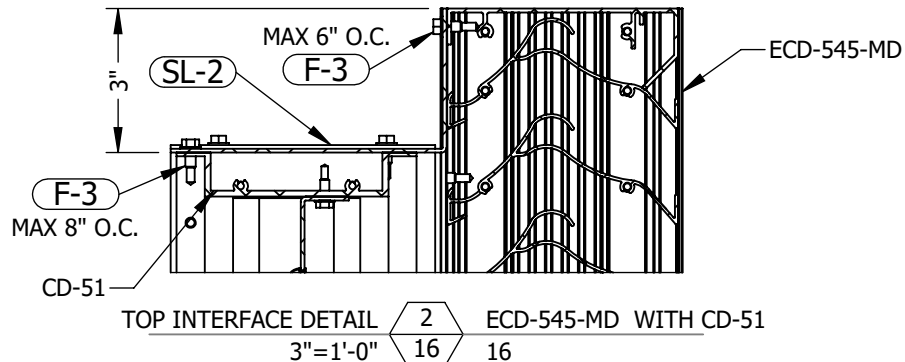
Florida Firm No: F-01000005061
Certificate of Authorization: #9090
Wayne K. Helmila
Registration No: 59092



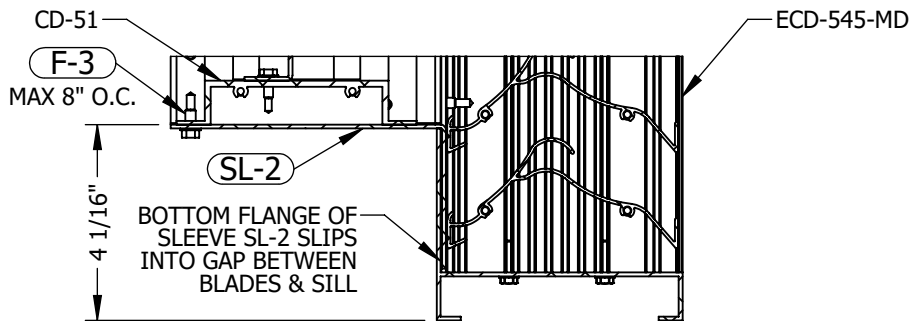
SECTION VIEW  ECD-545-MD WITH CD-51
1-1/2"=1'-0" 16



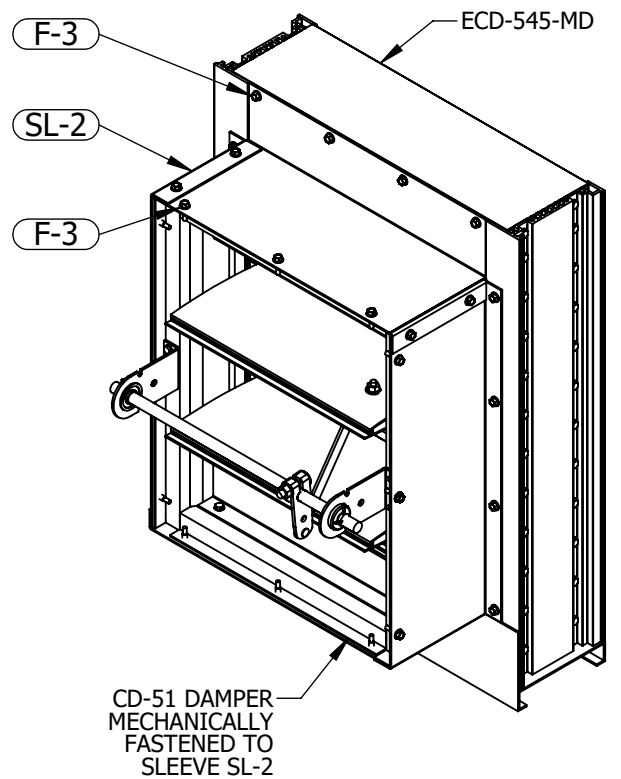
JAMB INTERFACE DETAIL  ECD-545-MD WITH CD-51
3"=1'-0" 16



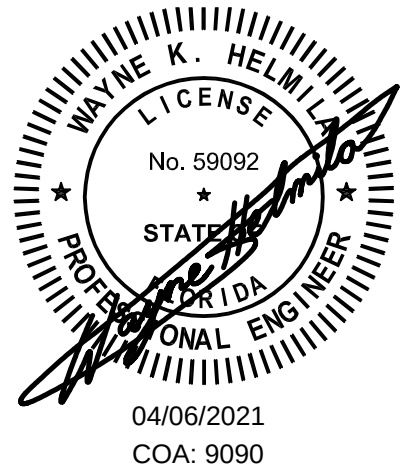
TOP INTERFACE DETAIL  ECD-545-MD WITH CD-51
3"=1'-0" 16



BOTTOM INTERFACE DETAIL  ECD-545-MD WITH CD-51
3"=1'-0" 16



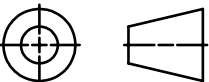
P.E. STAMP



UNLESS OTHERWISE SPECIFIED
DIMENSION ARE IN INCHES.
TOLERANCE UNLESS NOTED:
X.X ±0.060
X.XX ±0.030
X.XXX ±0.010
ANGLE ±1°
FRACTION ±1/16
MAX HOLE BREAKOUT:
15% OF MATERIAL THICKNESS

5101 Blue Mound Road
Fort Worth, Texas 76106
Phone: 817-509-2300
Fax: 817-831-3110

THIRD ANGLE PROJECTION



PCI INDUSTRIES DOING BUSINESS AS
ALL-LITE
ARCHITECTURAL PRODUCTS

DRAWING DESCR: ECD-545-MD WITH CD-51 DAMPER

PROJECT: ECD-545-MD

LOCATION:

CUSTOMER:

PROJ. MGR.:

DATE: 6/27/2018

SHEET: 16 of 19

CHK'D BY: NW

SCALE: 1-1/2"=1'-0"

DRAWN BY: LGH

ORDER NUMBER

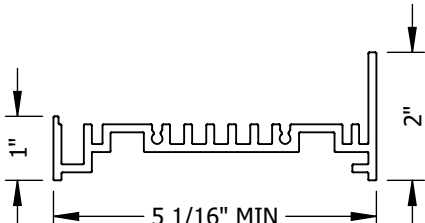
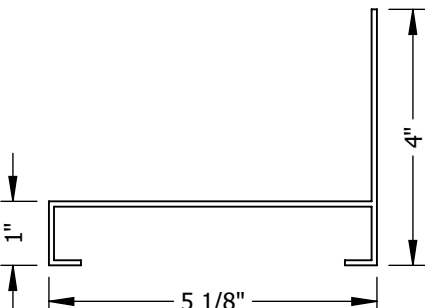
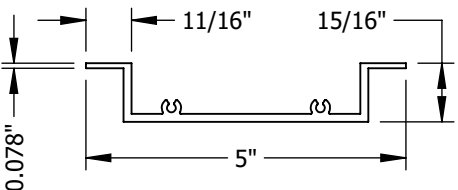
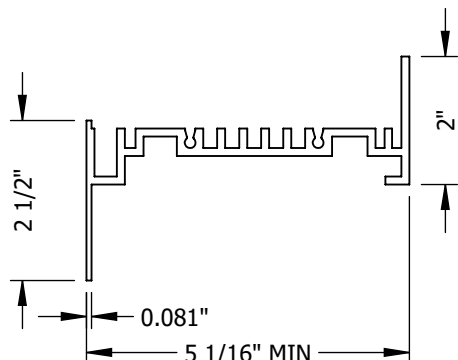
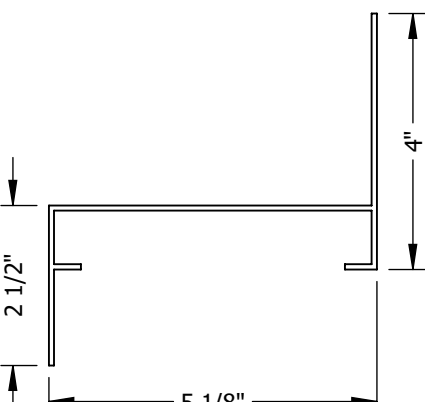
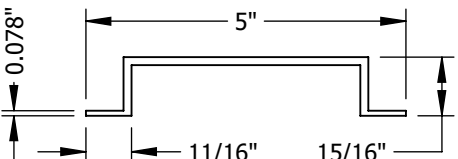
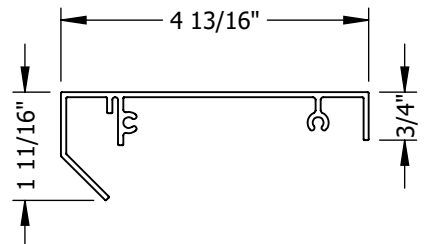
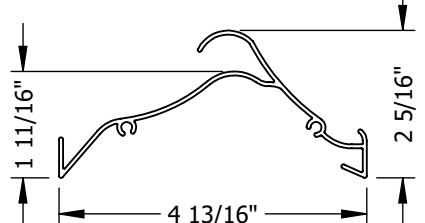
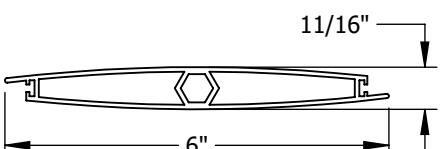
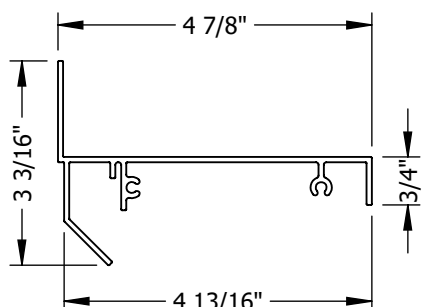
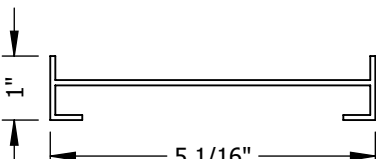
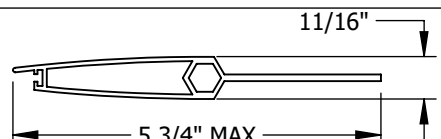
P.O. NUMBER

DRAWING NUMBER

ECD-545-MD NOA

REV. NO.	DESCRIPTION	DATE	DRAWN BY
2	UPDATED ANCHORAGE DESIGN AND SHAPE DETAILS	3/19/2021	NWW
1	INITIAL RELEASE	8/30/2018	LGH

C:\Users\inwoodworth\Desktop\Miami-Dade Updates (2020)\ECD-545-MD\NOA Drawings (Rev 2)\

PART NO: E-1 PART NAME: LOUVER JAMB MATERIAL: 0.125" THICK 6063-T5 EXTRUDED ALUMINUM SCALE: 4"=1'-0" 	PART NO: E-5 PART NAME: LOUVER SILL MATERIAL: 0.081" THICK 6063-T5 EXTRUDED ALUMINUM SCALE: 4"=1'-0" 	PART NO: E-9 PART NAME: DAMPER HEAD, SILL MATERIAL: 0.125" THICK 6063-T5 EXTRUDED ALUMINUM SCALE: 4"=1'-0" BILL OF MATERIALS 
PART NO: E-2 PART NAME: LOUVER JAMB, FLANGED MATERIAL: 0.125" THICK 6063-T5 EXTRUDED ALUMINUM SCALE: 4"=1'-0" 	PART NO: E-6 PART NAME: LOUVER SILL, FLANGED MATERIAL: 0.081" THICK 6063-T5 EXTRUDED ALUMINUM SCALE: 4"=1'-0" 	PART NO: E-10 PART NAME: DAMPER JAMB MATERIAL: 0.125" THICK 6063-T5 EXTRUDED ALUMINUM SCALE: 4"=1'-0" 
PART NO: E-3 PART NAME: LOUVER HEAD MATERIAL: 0.081" THICK 6063-T5 EXTRUDED ALUMINUM SCALE: 4"=1'-0" 	PART NO: E-7 PART NAME: LOUVER BLADE MATERIAL: 0.063" THICK 6063-T5 EXTRUDED ALUMINUM SCALE: 4"=1'-0" 	PART NO: E-11 PART NAME: DAMPER BLADE, FULL MATERIAL: 0.070" THICK 6063-T5 EXTRUDED ALUMINUM SCALE: 4"=1'-0" 
PART NO: E-4 PART NAME: LOUVER HEAD, FLANGED MATERIAL: 0.081" THICK 6063-T5 EXTRUDED ALUMINUM SCALE: 4"=1'-0" 	PART NO: E-8 PART NAME: ROLLFRAME EXTRUSION MATERIAL: 0.081" THICK 6063-T5 EXTRUDED ALUMINUM SCALE: 4"=1'-0" 	PART NO: E-12 PART NAME: DAMPER BLADE, HALF MATERIAL: 0.070" THICK 6063-T5 EXTRUDED ALUMINUM SCALE: 4"=1'-0" 

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 21-0427.02

Expiration Date 10/09/2023

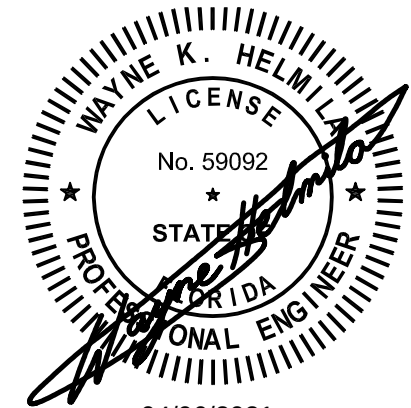
By 
Miami-Dade Product Control

RICE
ENGINEERING

105 School Creek Trail
Luxemburg, WI 54217
Phone: (920) 617-1042
Fax: (920) 617-1100
www.rice-inc.com

Florida Firm No: F-01000005061
Certificate of Authorization: #9090
Wayne K. Helmila
Registration No: 59092

P.E. STAMP



04/06/2021
COA: 9090

2	UPDATED ANCHORAGE DESIGN AND SHAPE DETAILS	3/19/2021	NWW
1	INITIAL RELEASE	8/30/2018	LGH
REV. NO.	DESCRIPTION	DATE	DRAWN BY

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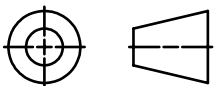
TOLERANCE UNLESS NOTED:

X.X	±0.060
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ANGLE	±1°
FRACTION	±1/16

MAX HOLE BREAKOUT:
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Fort Worth, Texas 76106
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THIRD ANGLE PROJECTION



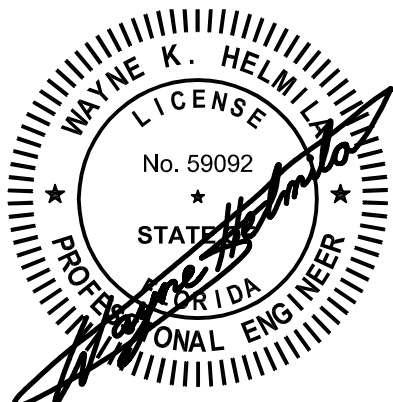
PCI INDUSTRIES DOING BUSINESS AS

ALL-LITE

ARCHITECTURAL PRODUCTS

DRAWING DESCR: BILL OF MATERIALS			
PROJECT: ECD-545-MD			
LOCATION:			
CUSTOMER:			
PROJ. MGR.:		DRAWN BY: LGH	
DATE: 6/27/2018	CHK'D BY: NW	ORDER NUMBER	P.O. NUMBER
SHEET: 17 of 19	SCALE: AS NOTED		DRAWING NUMBER
			ECD-545-MD NOA

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PART NO: SL-1 PART NAME: SLEEVE, LOUVER MATERIAL: MIN 1/8" THICK 5052-H32 SHEET ALUMINUM SCALE: 4"=1'-0"		PART NO: A-3 PART NAME: SHELF ANGLE, MULLION MATERIAL: 5" X 3" X 3/8" X 24" LONG 6061-T6 EXTRUDED ALUMINUM SCALE: 4"=1'-0"		PART NO: A-7 PART NAME: SUPPORT ANGLE, SHAPES MATERIAL: 3" X 2" X 1/4" X 4" LONG 6063-T5 EXTRUDED ALUMINUM SCALE: 4"=1'-0"	
PART NO: SL-2 PART NAME: SLEEVE, DAMPER MATERIAL: 0.080 THICK 5052-H32 SHEET ALUMINUM SCALE: 4"=1'-0"		PART NO: A-4 PART NAME: CONTINUOUS SUPPORT ANGLE MATERIAL: 3" X 2" X 1/4" 6063-T5 EXTRUDED ALUMINUM SCALE: 4"=1'-0"		PART NO: A-8 PART NAME: MULLION ATTACHMENT ANGLE MATERIAL: MIN. 1/8" THICK 5052-H32 SHEET ALUMINUM SCALE: 4"=1'-0"	
PART NO: A-1 PART NAME: CLIP ANGLE, MULLION MATERIAL: 5" X 3" X 3/8" X 10" LONG 6061-T6 EXTRUDED ALUMINUM SCALE: 4"=1'-0"		PART NO: A-5 PART NAME: RETAINING ANGLE MATERIAL: 2" X 1-1/2" X 1/8" 6063-T5 EXTRUDED ALUMINUM SCALE: 4"=1'-0"		PRODUCT REVISED as complying with the Florida Building Code NOA-No. 21-0427.02 Expiration Date 10/09/2023 By  Miami-Dade Product Control RICE ENGINEERING 105 School Creek Trail Luxemburg, WI 54217 Phone: (920) 617-1042 Fax: (920) 617-1100 www.rice-inc.com Florida Firm No: F-01000005061 Certificate of Authorization: #9090 Wayne K. Helmila Registration No: 59092	P.E. STAMP  04/06/2021 COA: 9090
PART NO: A-2 PART NAME: CONTINUOUS ANGLE MATERIAL: 3" X 1" X 1/8" 6063-T5 EXTRUDED ALUMINUM SCALE: 4"=1'-0"		PART NO: A-6 PART NAME: CLIP ANGLE, SHAPES MATERIAL: 4" X 2" X 1/4" X 4" LONG 6063-T5 EXTRUDED ALUMINUM SCALE: 4"=1'-0"			

2	UPDATED ANCHORAGE DESIGN AND SHAPE DETAILS	3/19/2021	NWW
1	INITIAL RELEASE	8/30/2018	LGH
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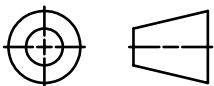
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THIRD ANGLE PROJECTION



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DATE: 6/27/2018	CHK'D BY: NW	ORDER NUMBER	P.O. NUMBER
SHEET: 18 of 19	SCALE: AS NOTED		DRAWING NUMBER
ECD-545-MD NOA			

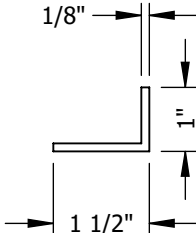
C:\Users\inwoodworth\Desktop\Miami-Dade Updates (2020)\ECD-545-MD\NOA Drawings (Rev 2)\

PART NO: SL-1A

PART NAME: SLEEVE ATTACHMENT ANGLE

MATERIAL: 1-1/2" X 1" X 1/8" 6063-T5
EXTRUDED ALUMINUM

SCALE: 4"=1'-0"

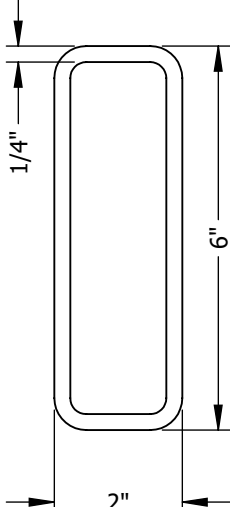


PART NO: S-1

PART NAME: TUBE, MULLION SUPPORT

MATERIAL: 6" X 2" X 1/4" HSS

SCALE: 4"=1'-0"

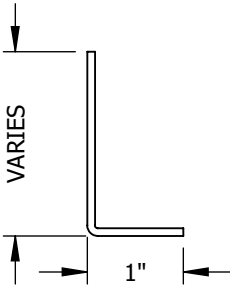


PART NO: A-9

PART NAME: DAMPER STOP

MATERIAL: 0.080" THICK 5052-H32
SHEET ALUMINUM

SCALE: 6"=1'-0"



MISCELLANEOUS FASTENERS	
PART NO.	DESCRIPTION
F-1	#10-24 X 3/4" LONG, HWH, 410 SST, 'F' POINT MACHINE SCREW
F-2	#10-16 X 2" LONG, HWH, 410 SST, TEK SELF-DRILLING SCREW
F-3	#12-14 X 3/4" LONG, HWH, 410 SST, TEK SELF-DRILLING SCREW
F-4	#12-14 X 1" LONG, HWH, TEK SELF-DRILLING SCREW, 300-SERIES SST
F-5	5/8-11 X 4" LONG, 18-8 SST, HEX BOLT, NUT, AND TWO (2) FLAT WASHERS
F-6	5/8-11 X 2" LONG, 18-8 SST, HEX BOLT, NUT, AND TWO (2) FLAT WASHERS
F-7	3/8" X 4" DEWALT SCREW-BOLT+, GALV. FINISH
F-8	5/8" X 4" DEWALT SCREW-BOLT+, GALV. FINISH
F-9	5/8" X 6" DEWALT SCREW-BOLT+, GALV. FINISH
F-11	1/4-14 X 1" LONG, HWH, TEK SELF-DRILLING SCREW, 300-SERIES SST
F-12	1/2" X 3-1/2" LONG HEX LAG BOLT AND FLAT WASHER, 300-SERIES SST

MISCELLANEOUS DAMPER PARTS		
PART NO.	DESCRIPTION	MATERIAL
D-1	BLADE SEAL	PVC
D-2	STOP SEAL	PVC
D-3	HEX AXLE	ZINC-PLATED STEEL
D-4	HEX BUSHING	304 SST
D-5	PARALLEL CAM	ZINC-PLATED STEEL
D-6	LINK BAR, 1/2" WIDE X 1/8" THICK	GALV. STEEL
D-7	WASHER, 1/4" I.D., 1/2" O.D.	NYLON
D-8	SPRING ARM, 10-GA	GALV. STEEL
D-9	DRIVE ROD, 1/2" WIDE X 1/8" THICK	GALV. STEEL
D-10	JACKSHAFT, 1/2" DIA.	ZINC-PLATED STEEL
D-11	JACKSHAFT BRACKET, 12 GA.	GALV. STEEL
D-12	JACKSHAFT BEARING	STEEL
D-13	JACKSHAFT SPRING CLIP	SPRING STEEL
D-14	DRIVE BRACKET, 14 GA.	GALV. STEEL
D-15	LINKAGE PIN, 1/4"	304 SST
D-16	E-RING, 1/4"	ZINC-PLATED STEEL
D-17	#8-18 X 1" LONG, HWH, NEEDLE POINT SCREW	ZINC-PLATED STEEL
D-18	#10-32 X 1/2" LONG HEX BOLT WITH KEPS NUT	ZINC-PLATED STEEL
D-19	1/4-20 X 1-1/4" LONG HEX BOLT WITH KEPS NUT	ZINC-PLATED STEEL
D-20	1/4-20 X 1/2" LONG HEX BOLT	ZINC-PLATED STEEL
D-21	JAMB SEAL, 2-9/16" X 5/16" X 0.007" THICK	302 SST
D-22	5/16-18 X 1-1/2" LONG CARRIAGE BOLT WITH LOCKNUT	ZINC-PLATED STEEL
D-23	#10-16 X 3/4" LONG, HWH, TEK SELF-DRILLING SCREW	ZINC-PLATED STEEL

BILL OF MATERIALS

PRODUCT REVISED
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RICE
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Florida Firm No: F-01000005061
Certificate of Authorization: #9090
Wayne K. Helmila
Registration No: 59092

P.E. STAMP

NOTE: ALL INSTALLATION FASTENERS AND ANCHORS SHALL BE OF CORROSION-RESISTANT STEEL (300-SERIES STAINLESS OR HOT-DIP GALVANIZED)

2

UPDATED ANCHORAGE DESIGN AND SHAPE DETAILS

3/19/2021

NWW

1

INITIAL RELEASE

8/30/2018

LGH

REV. NO.

DESCRIPTION

DATE

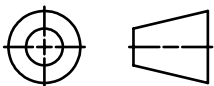
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