



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

Ruskin Company
3900 Dr. Greaves Road
Grandview, MO 64030

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 EME520MD Aluminum Louver

APPROVAL DOCUMENT: Drawing No. **60-022286-00B**, titled "EME520MD", sheets 1 through 21 of 21, dated 08/02/2012, with revision **F** dated 10/24/2017, prepared by Ruskin Company, signed and sealed by Theodore Berman, P.E., 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, Geneva, AL and Juarez, Chihuahua C. P., Mexico, 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 # **16-1107.03** and consists of this page 1 and evidence pages E-1, E-2 and E-3, as well as approval document mentioned above.

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



[Signature]
02/23/2018

NOA No. 17-1214.18
Expiration Date: February 23, 2021
Approval Date: March 1, 2018
Page 1

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED


1. EVIDENCE SUBMITTED UNDER PREVIOUS NOA's

A. DRAWINGS "*Submitted under NOA # 16-0112.02*"

1. Drawing No. **60-022286-00B**, titled "EME520MD", sheets 1 through 21 of 21, dated 08/02/2012, with revision **E** dated 12/22/2015, prepared by Ruskin Company, signed and sealed by Chelsea GQ. Welch, P.E.

B. TESTS "*Submitted under NOA # 12-0816.01*"

1. Test report 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 203-94along with marked-up drawings and installation diagram of Model EME520MD (Assembly A) Aluminum Louvers, prepared by National Certified Testing Laboratories, Report No. **NCTL 210-3792-2**, dated 05/23/2012, signed and sealed by Gerald J. Ferrara, P.E.
2. Test report 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 203-94along with marked-up drawings and installation diagram of Model EME520MD (Assembly B) Aluminum Louvers, prepared by National Certified Testing Laboratories, Report No. **NCTL 210-3782-2**, dated 05/23/2012, signed and sealed by Gerald J. Ferrara, P.E.
3. Test report 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 203-94along with marked-up drawings and installation diagram of Model EME520MD (Assembly C) Aluminum Louvers, prepared by National Certified Testing Laboratories, Report No. **NCTL 210-3784-2**, dated 05/23/2012, signed and sealed by Gerald J. Ferrara, P.E.
4. Test report 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 203-94along with marked-up drawings and installation diagram of Model EME520MD (Assembly D) Aluminum Louvers, prepared by National Certified Testing Laboratories, Report No. **NCTL 210-3790-2**, dated 05/23/2012, signed and sealed by Gerald J. Ferrara, P.E.
5. Test report 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 203-94along with marked-up drawings and installation diagram of Model EME520MD (Assembly E) Aluminum Louvers, prepared by National Certified Testing Laboratories, Report No. **NCTL 210-3785-2**, dated 05/23/2012, signed and sealed by Gerald J. Ferrara, P.E.



02/23/2018

Carlos M. Utrera, P.E.
Product Control Examiner
NOA No. 17-1214.18

Expiration Date: February 23, 2021
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Ruskin Company

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

B. TESTS (Continued)

6. Test report 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 EME520MD (Assembly F) Aluminum Louvers, prepared by National Certified Testing Laboratories, Report No. **NCTL 210-3784-4**, dated 05/23/2012, signed and sealed by Gerald J. Ferrara, P.E.

“Submitted under NOA # 05-0812.07”

7. Test report on 1) Large Missile Impact Test per FBC, TAS 201-94,
2) Cyclic Wind Pressure Test per FBC, TAS 203-94
3) Uniform Static Air Pressure Test per FBC, TAS 202-94
along with marked-up drawings and installation diagram of Series EME520MD aluminum louvers muller together, prepared by Fenestration Testing Laboratory, Inc, Test Report No. **FTL-4525**, dated 04/22/2005, signed and sealed by E. J. Largaespada, P.E.

C. CALCULATIONS “Submitted under NOA # 16-0112.02”

1. Louver wind load review prepared by Ruskin Company, dated 12/22/2015, signed and sealed by Chelsea GQ. Welch, P.E.

“Submitted under NOA # 12-0816.01”

2. Louver wind load review prepared by Ruskin Company, dated 07/25/2012, signed and sealed by Daniel J. Rau, P.E.

“Submitted under NOA # 05-0812.07”

3. Calculations prepared by Ruskin Company, dated 08/10/2005, pages 1 through 13, signed and sealed by E. P. Hutson, P.E.

D. QUALITY ASSURANCE

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

E. MATERIAL CERTIFICATIONS

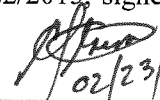
1. None.

F. STATEMENTS “Submitted under NOA # 16-1107.03”

1. Distributor agreement dated 09/22/2016.

“Submitted under NOA # 16-0112.02”

2. Statement letter of code conformance to the 5th edition (2014) FBC issued by Ruskin Company, dated 12/22/2015, signed and sealed by Chelsea GQ. Welch, P.E.
3. No financial interest letter issued by Ruskin Company, dated 12/22/2015, signed and sealed by Chelsea GQ. Welch, P.E.


02/23/2018

Carlos M. Utrera, P.E.
Product Control Examiner
NOA No. 17-1214.18

Expiration Date: February 23, 2021
Approval Date: March 1, 2018

Ruskin Company

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

2. NEW EVIDENCE SUBMITTED

A. DRAWINGS

1. Drawing No. **60-022286-00B**, titled "EME520MD", sheets 1 through 21 of 21, dated 08/02/2012, with revision **F** dated 10/24/2017, prepared by Ruskin Company, signed and sealed by Theodore Berman, P.E.

B. TESTS

1. None.

C. CALCULATIONS

1. Louver wind load review prepared by Ruskin Company, dated 10/20/2017, signed and sealed by Theodore Berman, P.E. of Ted Berman and Associates, LLC.

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 6th edition (2017) FBC, prepared by Ted Berman and Associates, LLC, dated 10/31/2017, signed and sealed by Theodore Berman, P.E.
2. Statement letter of independence and of no financial interest, prepared by Ted Berman and Associates, LLC, dated 10/31/2017, signed and sealed by Theodore Berman, P.E.



10/23/2018

Carlos M. Utrera, P.E.
Product Control Examiner
NOA No. 17-1214.18
Expiration Date: February 23, 2021
Approval Date: March 1, 2018

NOTES:

1. THE EME520MD HAS BEEN TESTED IN ACCORDANCE WITH FLORIDA PROTOCOLS TAS-201, 202 & 203 FOR LARGE MISSILE IMPACT, UNIFORM PRESSURE AND CYCLIC WIND PRESSURE.
2. THIS LOUVER SYSTEM IS APPROVED FOR APPLICATIONS WITH DESIGN PRESSURES OF +/- 120 PSF OR LESS.
3. THIS LOUVER SYSTEM IS TO BE INSTALLED IN LOCATIONS 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.
4. THIS LOUVER SYSTEM IS NON-BEARING AND IS NOT DESIGNED TO WITHSTAND BUILDING DEAD LOADS.
5. THIS LOUVER UTILIZES AN ANCHORLESS INSTALLATION METHOD THAT DOES NOT REQUIRE THE USE OF FASTENERS INTO THE WALL SUBSTRATE THAT WILL WITHSTAND THE LOADS TRANSFERRED TO IT BY THE LOUVER. IT SHALL BE THE RESPONSIBILITY OF PERMIT HOLDER/BUILDING DESIGN ENGINEER OF RECORD TO VERIFY THE STRUCTURAL INTEGRITY OF THE STRUCTURE TO SUPPORT THE LOADS IMPOSED BY THIS LOUVER SYSTEM.
6. MAXIMUM SINGLE SECTION SIZE: 87 15/16" WIDE X 144" HIGH OR 104 15/16" WIDE X 144" HIGH (W/O JAMB ATTACHMENTS, HEAD AND SILL ATTACHMENTS ONLY) OR 144" WIDE X 112" HIGH.
7. MAXIMUM ASSEMBLED LOUVER SIZE: UNLIMITED WIDE X 144" HIGH W/ SECTION MULLIONS AT 87 7/8" (TRAPEZOIDS ALLOWED) OR UNLIMITED WIDE X 144" HIGH W/ SECTION MULLIONS AT 104 15/16" (W/O JAMB ATTACHMENTS, HEAD AND SILL ATTACHMENTS ONLY) OR ROUND ASSEMBLIES UP TO 144" DIAMETER.
8. SECTIONS OR ASSEMBLIES MAY BE STACKED VERTICALLY PROVIDED A SUITABLE STRUCTURAL SUPPORT IS DESIGNED AND INSTALLED BY OTHERS TO SUPPORT ALL LOADS TRANSFERRED FROM THE LOUVER.
9. CMU BLOCKS MUST BE TYPE 1 , GRADE N, LIGHT, MEDIUM OR NORMAL WEIGHT CONFORMING TO ASTM C90. CMU BLOCKS MUST BE FULLY GROUTED WITH COARSE GROUT CONFORMING TO FLORIDA BUILDING CODE SECTION 2122.8. TYPE N, S OR M MORTAR MUST COMPLY WITH FLORIDA BUILDING CODE SECTION 2103.9. MASONRY COMPRESSIVE STRENGTH MUST BE AT LEAST 1500 PSI AT TIME OF INSTALLATION.
10. ABBREVIATIONS: HDG IS HOT DIP GALVANIZED, STL IS STEEL AND HWH IS HEX WASHER HEAD.
11. ALL FASTENERS SHALL BE CORROSION RESISTANT.

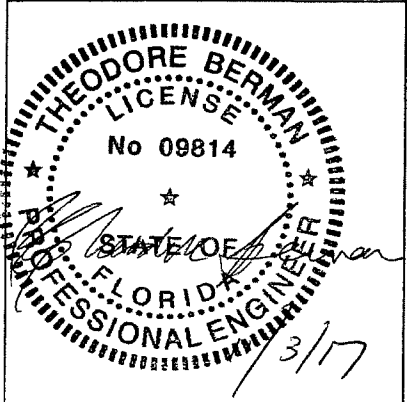
DRAWING INDEX:

- 60-022286-00B SHEET 1 OF 21 - NOTES AND DRAWING INDEX
- 60-022286-00B SHEET 2 OF 21 - ASSY. "A" & CONNECTION DETAILS
- 60-022286-00B SHEET 3 OF 21 - ASSY. "A" ALT. CONNECTION DETAILS
- 60-022286-00B SHEET 4 OF 21 - ASSY. "A", "B", "C", "D" & "F" ALT. CONNECTION DETAILS
- 60-022286-00B SHEET 5 OF 21 - ASSY. "B"
- 60-022286-00B SHEET 6 OF 21 - ASSY. "C"
- 60-022286-00B SHEET 7 OF 21 - ASSY. "D"
- 60-022286-00B SHEET 8 OF 21 - ASSY. "B", "C" & "D" DETAILS
- 60-022286-00B SHEET 9 OF 21 - ASSY. "B", "C" & "D" CONNECTION DETAILS
- 60-022286-00B SHEET 10 OF 21 - ASSY. "B", "C" & "D" ALT. CONNECTION DETAILS
- 60-022286-00B SHEET 11 OF 21 - ASSY. "B", "C" & "D" ALT. CONNECTION DETAILS
- 60-022286-00B SHEET 12 OF 21 - ASSY. "E" & CONNECTION DETAILS
- 60-022286-00B SHEET 13 OF 21 - ASSY. "E" ALT. CONNECTION DETAILS
- 60-022286-00B SHEET 14 OF 21 - ASSY. "E" DETAILS
- 60-022286-00B SHEET 15 OF 21 - ASSY. "F" & CONNECTION DETAILS
- 60-022286-00B SHEET 16 OF 21 - ASSY. "F" ALT. CONNECTION DETAILS
- 60-022286-00B SHEET 17 OF 21 - ASSY. "F" ALT. CONNECTION DETAILS
- 60-022286-00B SHEET 18 OF 21 - PARTS DETAILS
- 60-022286-00B SHEET 19 OF 21 - PARTS DETAILS
- 60-022286-00B SHEET 20 OF 21 - PARTS DETAILS
- 60-022286-00B SHEET 21 OF 21 - ASSY. "B", "C" & "D" SUPPORT TABLES



ENGINEER OF RECORD
THEODORE BERMAN
ENGINEERING DISCIPLINE
CIVIL/STRUCTURAL
REGISTRATION NUMBER
FL# 09814

Ted Berman and Associates LLC
Certificate of Authorization # 27502
Miami Beach, FL 33141
(305) 868-4707
www.flproductapproval.com



ENGINEER OF RECORD SEAL

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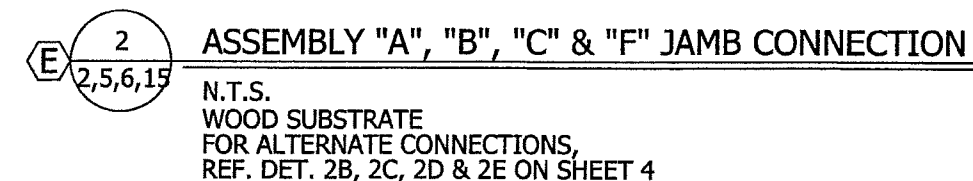
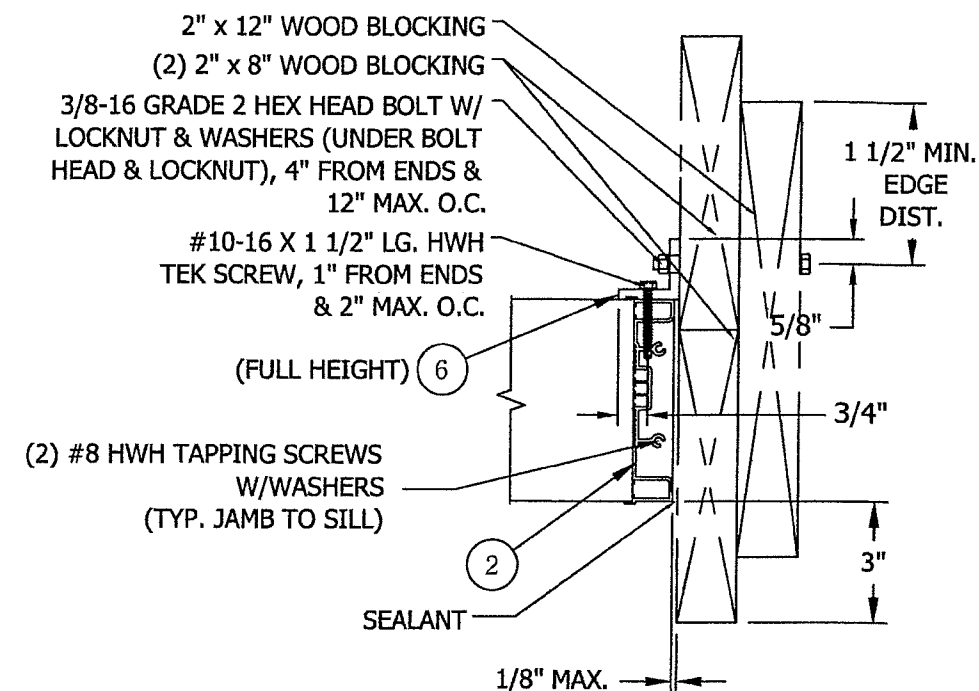
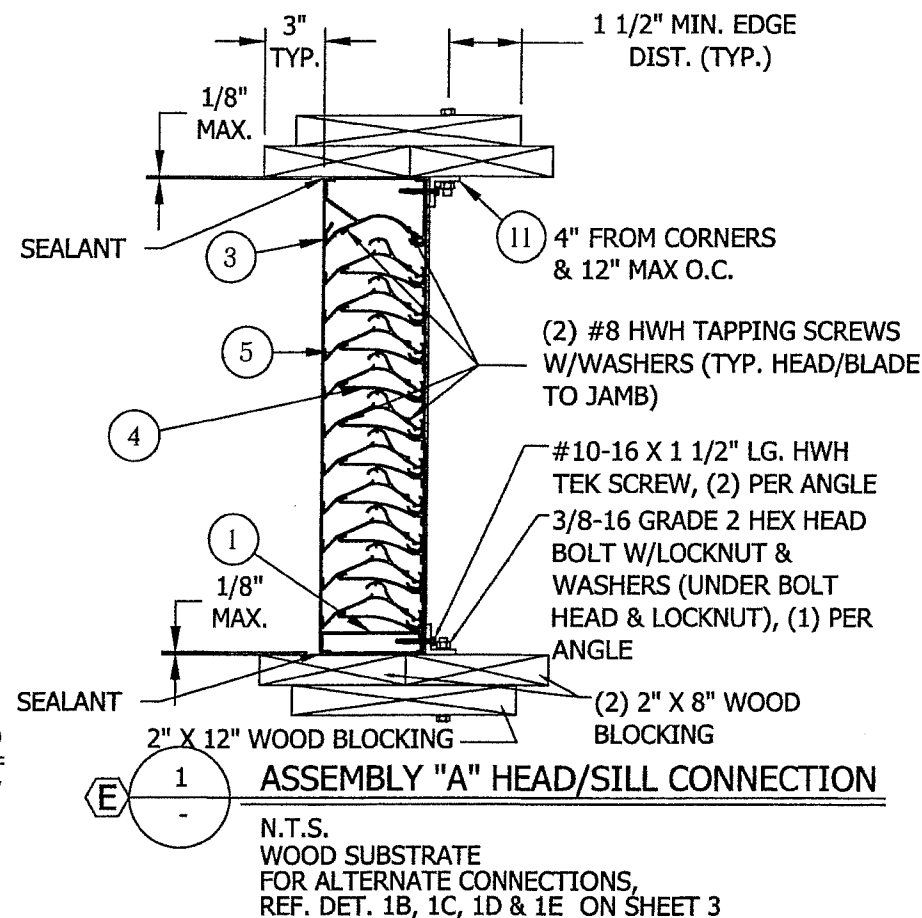
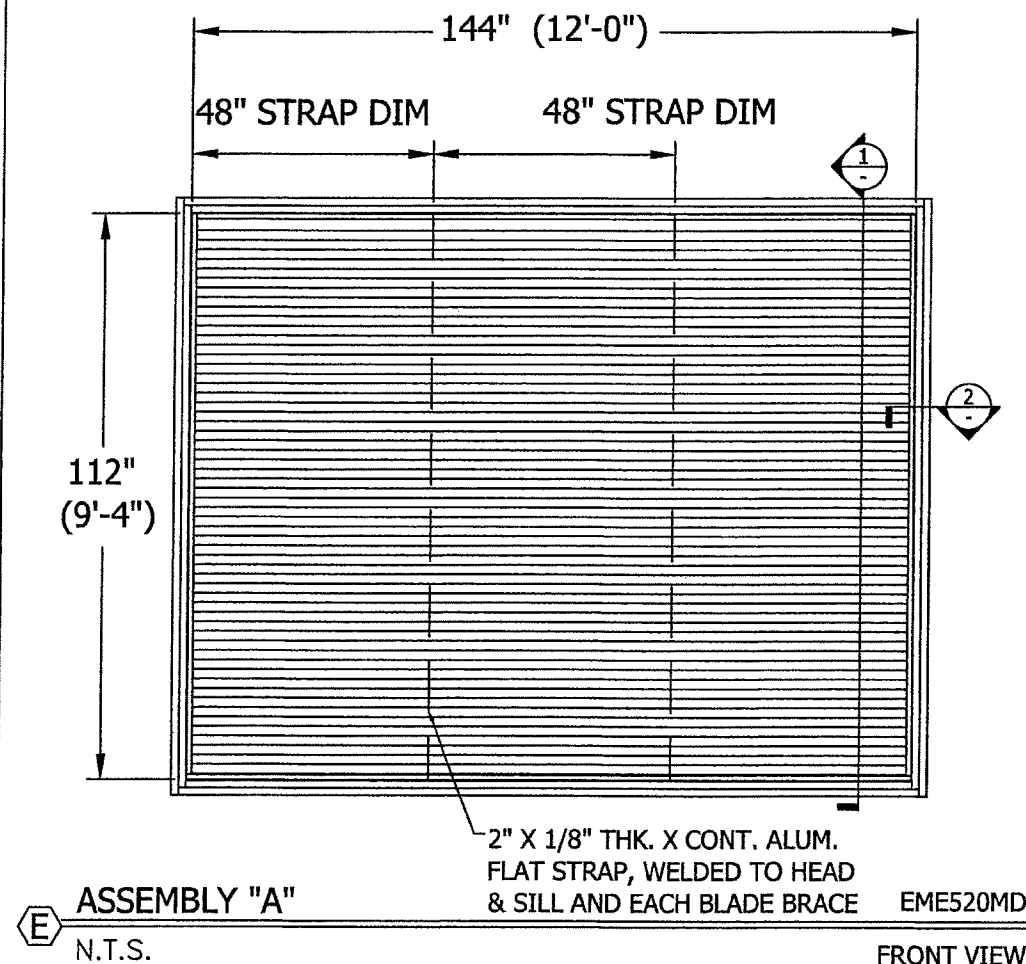
PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. **17-1214.18**
Expiration Date **02/23/2021**
By *[Signature]*
Miami-Dade Product Control

TOLERANCES
DECIMAL DIMENSIONS:
3 PLACE .XXX +.00L
2 PLACE .XX +.02L
FRACTION DIMENSIONS: + 1/16
ANGLE DIMENSIONS: + 2°
USE W1Q-007 & 008
UNLESS SPECIFIED OTHERWISE

DWN. BY:	DRP	CHK. BY:	DJR	APPV'D. BY:	DJR	APPV'D. BY:	
DATE:	5/16/12	DATE:	8/2/12	DATE:	8/2/12	DATE:	
SHEET 1 OF 21							

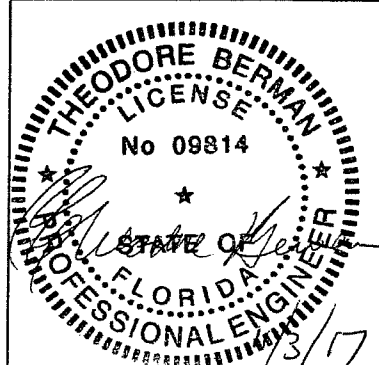
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<div>E</div>	REVISED ENGINEER OF RECORD, NOTES & DRAWING INDEX	RSM	NLT	CGW		12/22/15
CHANGE LETTER	REVISION DESCRIPTION	DWN. BY:	CHK'D. BY:	APPV'D. BY:	APPV'D. BY:	DATE
<div>RUSKIN</div> <div>Air & Sound Control</div>		PLOT SCALE <div>NONE</div>		ECN: <div>4733</div>		
TITLE <div>EME520MD LOUVER APPROVAL DRAWINGS</div>		DWG. NO. <div>60 - 022286 - 00B</div>				

E NOTE: (#) = ITEM NUMBER
SEE SHEETS 18-20



E F
ENGINEER OF RECORD
THEODORE BERMAN
ENGINEERING DISCIPLINE
CIVIL/STRUCTURAL
REGISTRATION NUMBER
FL# 09814

Ted Berman and Associates LLC
Certificate of Authorization # 27502
Miami Beach, FL 33141
(305) 868-4707
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ENGINEER OF RECORD SEAL

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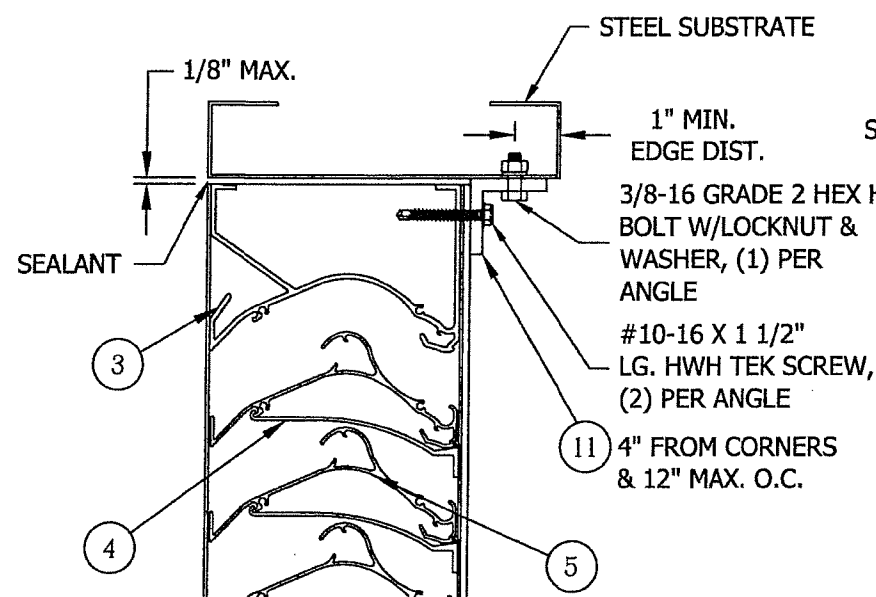
PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 17-1214.18
Expiration Date 02/23/2021
By Miami-Dade Product Control

TOLERANCES
DECIMAL DIMENSIONS:
3 PLACE .XXX + 0.01
2 PLACE .XX + 0.01
FRACTION DIMENSIONS: + 1/16
ANGLE DIMENSIONS: + 2°
USE W10-Q07 & 008
UNLESS SPECIFIED OTHERWISE

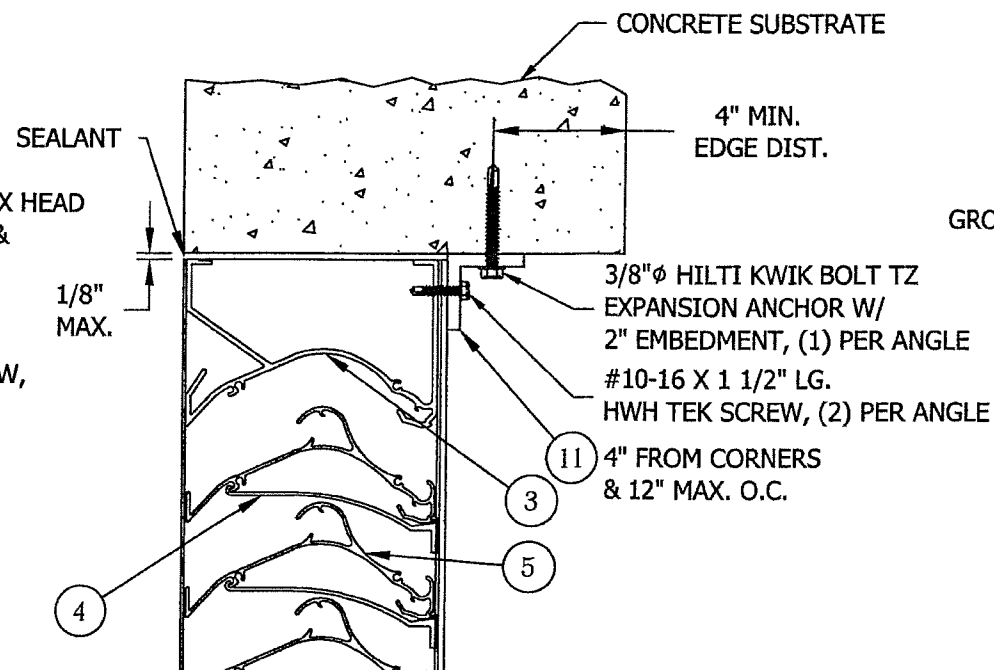
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DATE: 5/16/12	DATE: 8/2/12	DATE: 8/2/12	DATE:

SHEET 2 OF 21

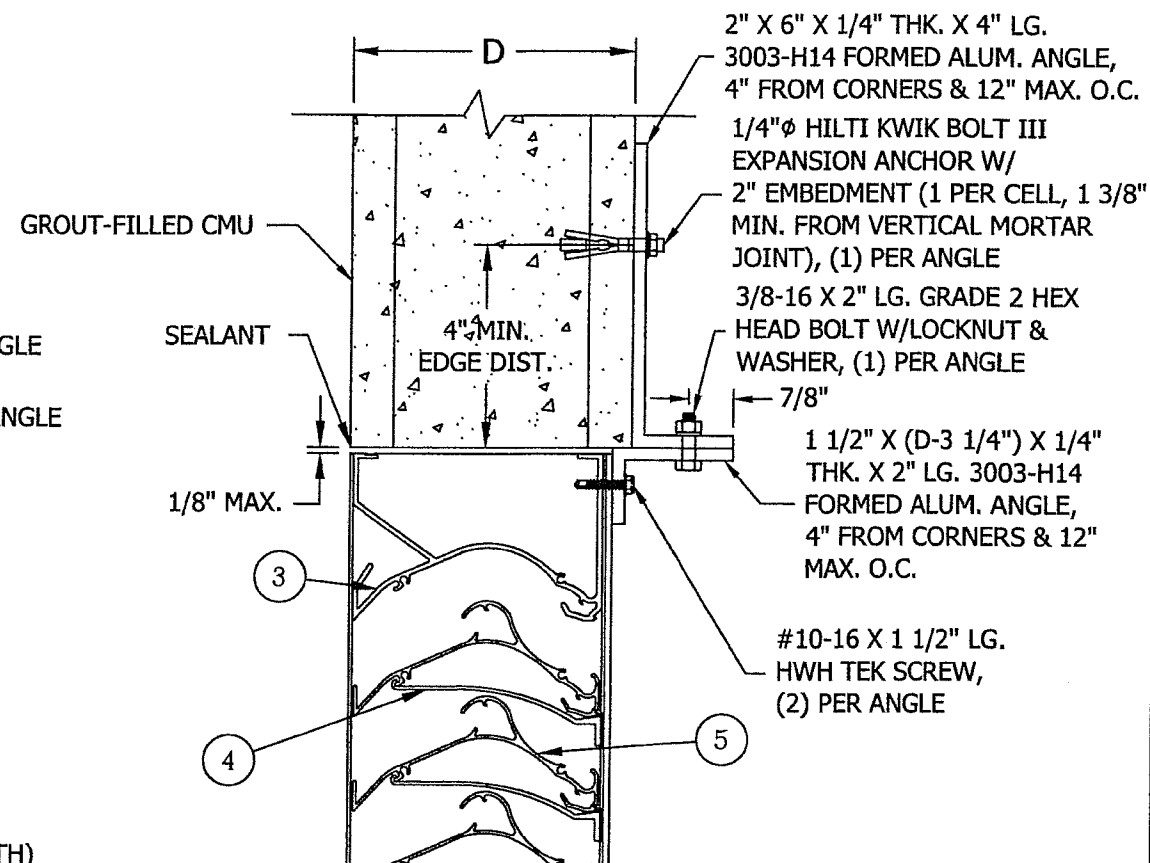
F	REVISED ENGINEER OF RECORD	CJD	MFV	MMM	10/24/17
E	REVISED ENGINEER OF RECORD & ANNOTATIONS	RSM	NLT	CGW	12/22/15
CHANGE LETTER	REVISION DESCRIPTION	DWN. BY:	CHK'D. BY:	APPV'D. BY:	APPV'D. BY:
	RUSKIN Air & Sound Control	PLOT SCALE B	ECN: 4733		
	3900 DR. GREAVES RD GRANDVIEW, MO 64030				
	EME520MD LOUVER ASSEMBLY "A" & CONNECTION DETAILS	DWG. NO. 60-022286-00B			



1B
2 **ASSEMBLY "A" ALTERNATE CONNECTION**
N.T.S.
STEEL SUBSTRATE (10 GA MIN. THICKNESS)
SILL SIMILAR

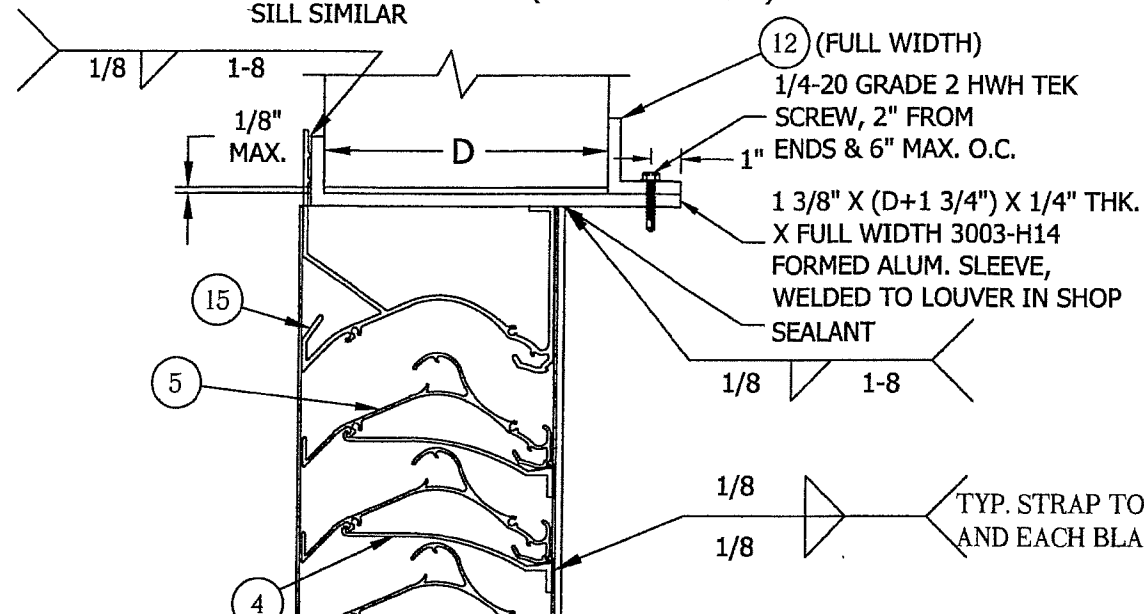


1C
2 **ASSEMBLY "A" ALTERNATE CONNECTION**
N.T.S.
CONCRETE SUBSTRATE (MIN. $f_c = 3000$ PSI)
SILL SIMILAR



1D
2 **ASSEMBLY "A" ALTERNATE CONNECTION**
N.T.S.
6", 8", 10", 12" CMU SUBSTRATE - REF. NOTE 9 ON SHEET 1
SILL SIMILAR

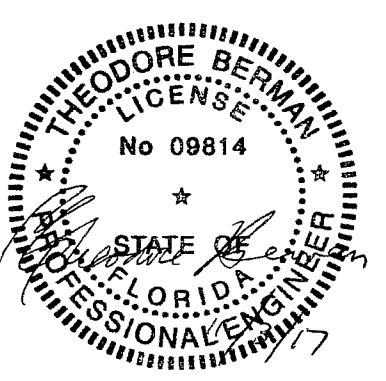
**NOTE: # = ITEM NUMBER
SEE SHEETS 18-20**



1E
2 **ASSEMBLY "A" ALTERNATE CONNECTION**
N.T.S.
FLANGE FRAME W/SLEEVE
SILL SIMILAR

EXF
ENGINEER OF RECORD
THEODORE BERMAN
ENGINEERING DISCIPLINE
CIVIL/STRUCTURAL
REGISTRATION NUMBER
FL# 09814

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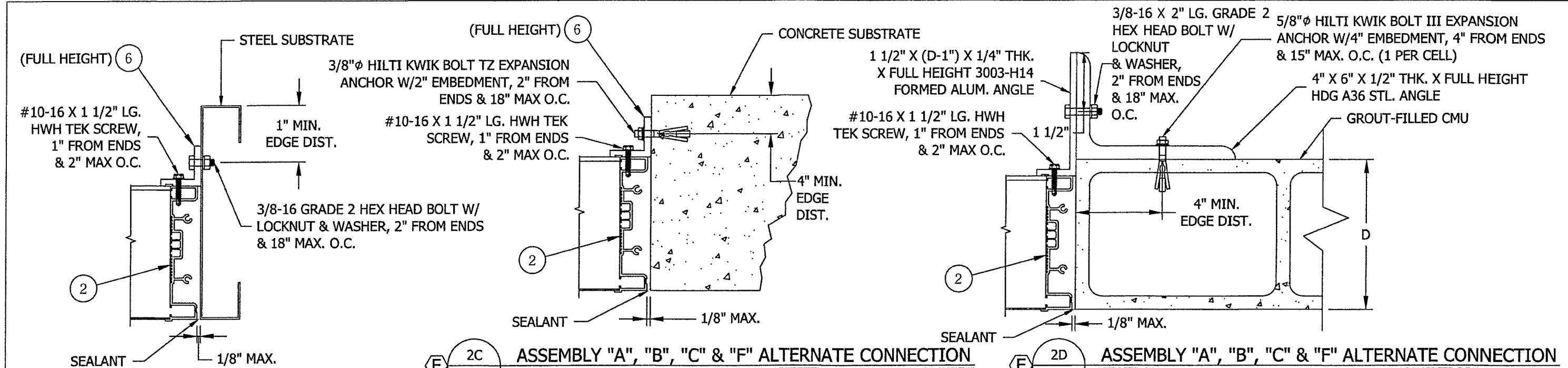
PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. **17-1214.18**
Expiration Date **02/23/2021**
By *[Signature]*
Miami-Dade Product Control

TOLERANCES:
DECIMAL DIMENSIONS:
3 PLACE .XXX ± 0.01
2 PLACE .XX ± 0.02
FRACTION DIMENSIONS: 1/16
ANGLE DIMENSIONS: ± 2°
USE W10-Q07 & Q08
UNLESS SPECIFIED OTHERWISE

DWN. BY: DRP	CHK. BY: DJR	APPVD. BY: DJR	APPVD. BY:
DATE: 5/16/12	DATE: 8/2/12	DATE: 8/2/12	DATE:

SHEET 3 OF 21

<div>F</div>	REVISED ENGINEER OF RECORD	CJD	MFV	MMM		10/24/17
<div>E</div>	REVISED ENGINEER OF RECORD & ANNOTATIONS	RSM	NLT	CGW		12/22/15
CHANGE LETTER	REVISION DESCRIPTION	DWN. BY:	CHK'D. BY:	APPV'D. BY:	APPV'D. BY:	DATE
<div>RUSKIN</div> <div>Air & Sound Control</div>		PLOT SCALE <div>B</div>		ECN: <div>4733</div>		
TITLE <div>EME520MD LOUVER ASSEMBLY "A" ALT. CONNECTION DETAILS</div>		DWG. NO. <div>60-022286-00B</div>				



ASSEMBLY "A", "B", "C" & "F" ALTERNATE CONNECTION

N.T.S.

STEEL SUBSTRATE (10 GA MIN. THICKNESS)

1 3/8" X (D+2 1/4") X 1/4" THK. X FULL HEIGHT 3003-H14 FORMED ALUM. SLEEVE, WELDED TO LOUVER IN SHOP

1/4-20 GRADE 2 HWH TEK SCREW, 2" FROM ENDS & 6" MAX. O.C.

SEALANT

1/8

1-8

D

1/8

1-8

1/8" MAX.

ASSEMBLY "A", "B", "C" & "F" ALTERNATE CONNECTION

N.T.S.

CONCRETE SUBSTRATE (MIN. f'c = 3000 PSI)

ASSEMBLY "A", "B", "C" & "F" ALTERNATE CONNECTION

N.T.S.

6", 8", 10", 12" CMU SUBSTRATE - REF. NOTE 9 ON SHEET 1

NOTE: # = ITEM NUMBER
SEE SHEETS 18-20

ENGINEER OF RECORD

THEODORE BERMAN

ENGINEERING DISCIPLINE

CIVIL/STRUCTURAL

REGISTRATION NUMBER

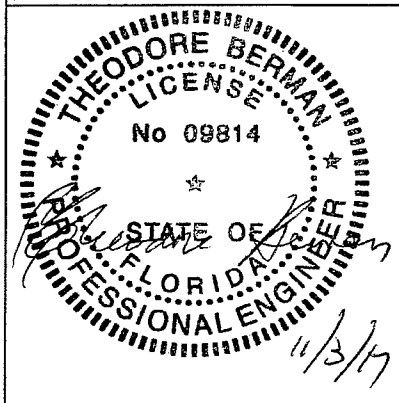
FL# 09814

Ted Berman and Associates LLC
Certificate of Authorization # 27502
Miami Beach, FL 33141
(305) 868-4707
www.flproductapproval.com

ASSEMBLY "A", "B", "C", "D" & "F" ALTERNATE CONNECTION

N.T.S.

FLANGE FRAME W/SLEEVE



ENGINEER OF RECORD SEAL

FOR OFFICE USE ONLY

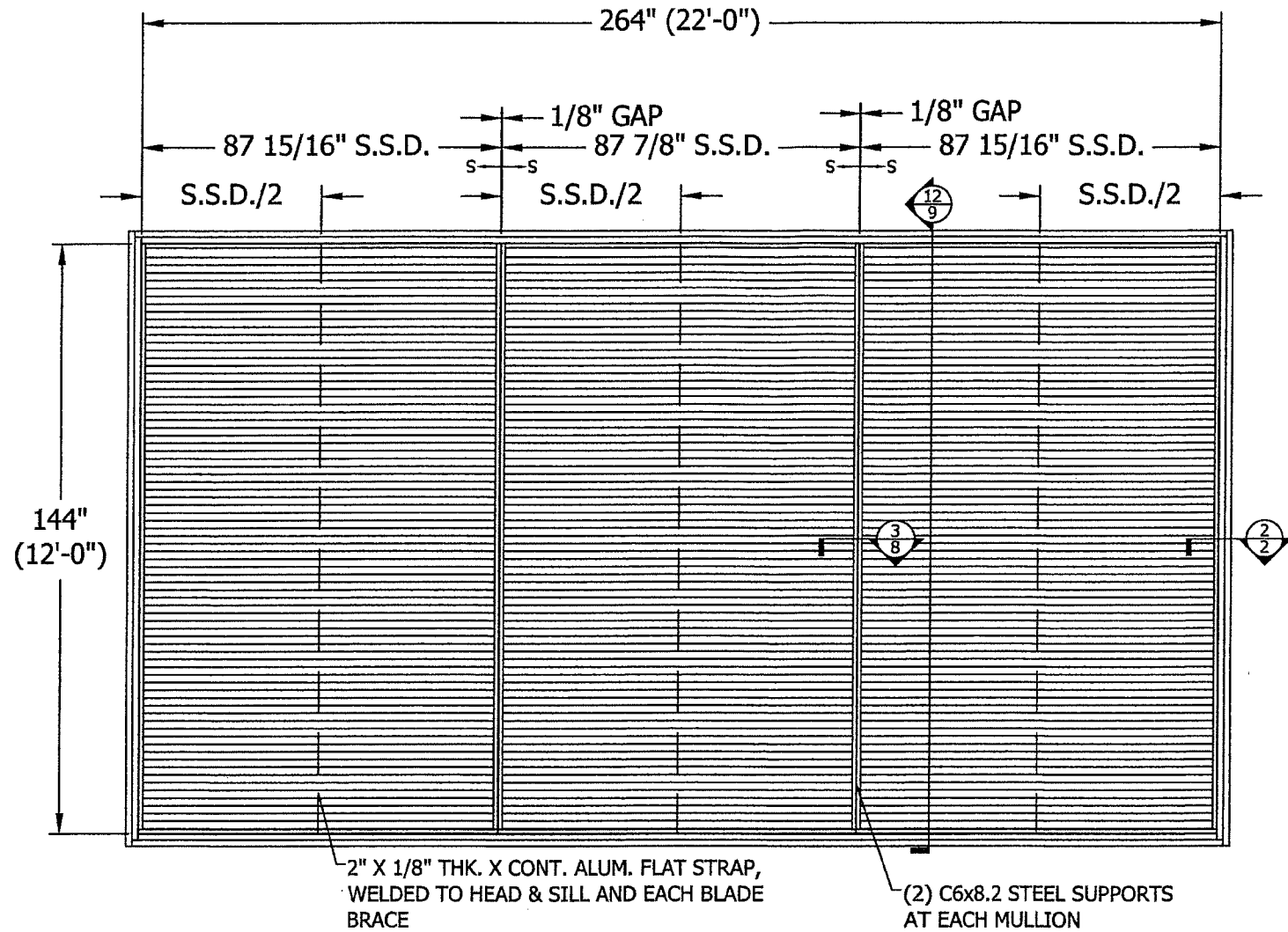
PRODUCT REVISED
as complying with the Florida Building Code
NOA-No. **17-1214.18**
Expiration Date **02/23/2021**
By *[Signature]*
Miami-Dade/Product Control

TOLERANCES
DECIMAL DIMENSIONS:
3 PLACE .XXX +.010.
2 PLACE .XX +.020.
FRACTION DIMENSIONS: + 1/16
ANGLE DIMENSIONS: + 2°
USE VISC-007 & 008
UNLESS SPECIFIED OTHERWISE

DWN. BY: DRP	CHK. BY: DJR	APPV'D. BY: DJR	APPV'D. BY:
DATE: 5/16/12	DATE: 8/2/12	DATE: 8/2/12	DATE:

SHEET 4 OF 21

<div>F</div>	REVISED ENGINEER OF RECORD	CJD	MFV	MMM		10/24/17
<div>E</div>	REVISED ENGINEER OF RECORD & ANNOTATIONS	RSM	NLT	CGW		12/22/15
CHANGE LETTER	REVISION DESCRIPTION	DWN. BY:	CHK'D. BY:	APPV'D. BY:	APPV'D. BY:	DATE
<div>RUSKIN</div> <div>Air & Sound Control</div>		PLOT SCALE <div>B</div>		ECN: <div>4723</div>		
TITLE <div>EME520MD LOUVER ASSEMBLY "A", "B", "C", "D" & "F" ALT. CONNECTION DETAILS</div>		DWG. NO. <div>60-022286-00B</div>				



ENGINEER OF RECORD
THEODORE BERMAN
ENGINEERING DISCIPLINE
CIVIL/STRUCTURAL
REGISTRATION NUMBER
FL# 09814

THEODORE BERMAN
LICENSE
No 09814
STATE OF FLORIDA
PROFESSIONAL ENGINEER
12/3/17

ENGINEER OF RECORD SEAL

ASSEMBLY "B"
N.T.S.

Ted Berman and Associates LLC
Certificate of Authorization # 27502
Miami Beach, FL 33141
(305) 868-4707
www.flproductapproval.com

FOR OFFICE USE ONLY

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. **17-1214.18**
Expiration Date **02/23/2021**
By *[Signature]*
Miami-Dade Product Control

TOLERANCES
UNLESS SPECIFIED OTHERWISE
FRACTIONAL DIMENSIONS:
3 PLACES XX.XXX
2 PLACES XX.XX
1 PLACE XX.X
ANGLE DIMENSIONS: +.1/8
USE W10-407 & 008

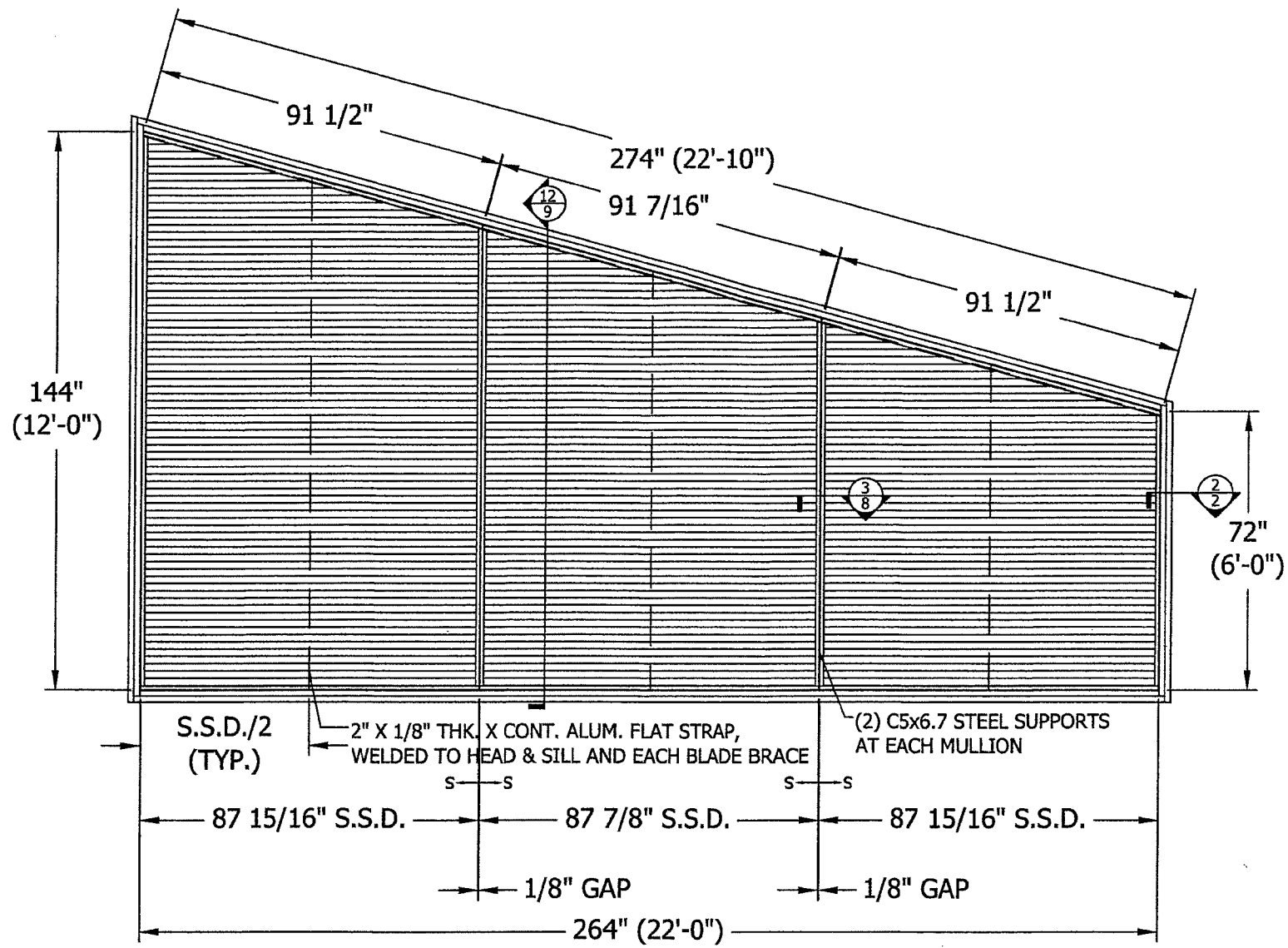
DWN. BY: DRP	CHK. BY: DJR	APPV'D. BY: DJR	APPV'D. BY:
DATE: 5/16/12	DATE: 8/2/12	DATE: 8/2/12	DATE:

SHEET 5 OF 21

EME520MD

FRONT VIEW

F	REVISED ENGINEER OF RECORD	CJD	MFV	MMM		10/24/17
E	REVISED ENGINEER OF RECORD & ANNOTATIONS	RSM	NLT	CGW		12/22/15
CHANGE LETTER	REVISION DESCRIPTION	DWN. BY:	CHK'D. BY:	APPV'D. BY:	APPV'D. BY:	DATE
	RUSKIN Air & Sound Control					
	3900 DR. GREAVES RD GRANDVIEW, MO 64030					
	PLOT SCALE B					
	ECN: 4723					
	TITLE EME520MD LOUVER ASSEMBLY "B"					
	DWG. NO. 60-022286-00B					



ASSEMBLY "C" EME520MD FRONT VIEW



ENGINEER OF RECORD
THEODORE BERMAN
 ENGINEERING DISCIPLINE
CIVIL/STRUCTURAL
 REGISTRATION NUMBER
FL# 09814

ENGINEER OF RECORD SEAL

Ted Berman and Associates LLC N.T.S.
 Certificate of Authorization # 27502
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 (305) 868-4707
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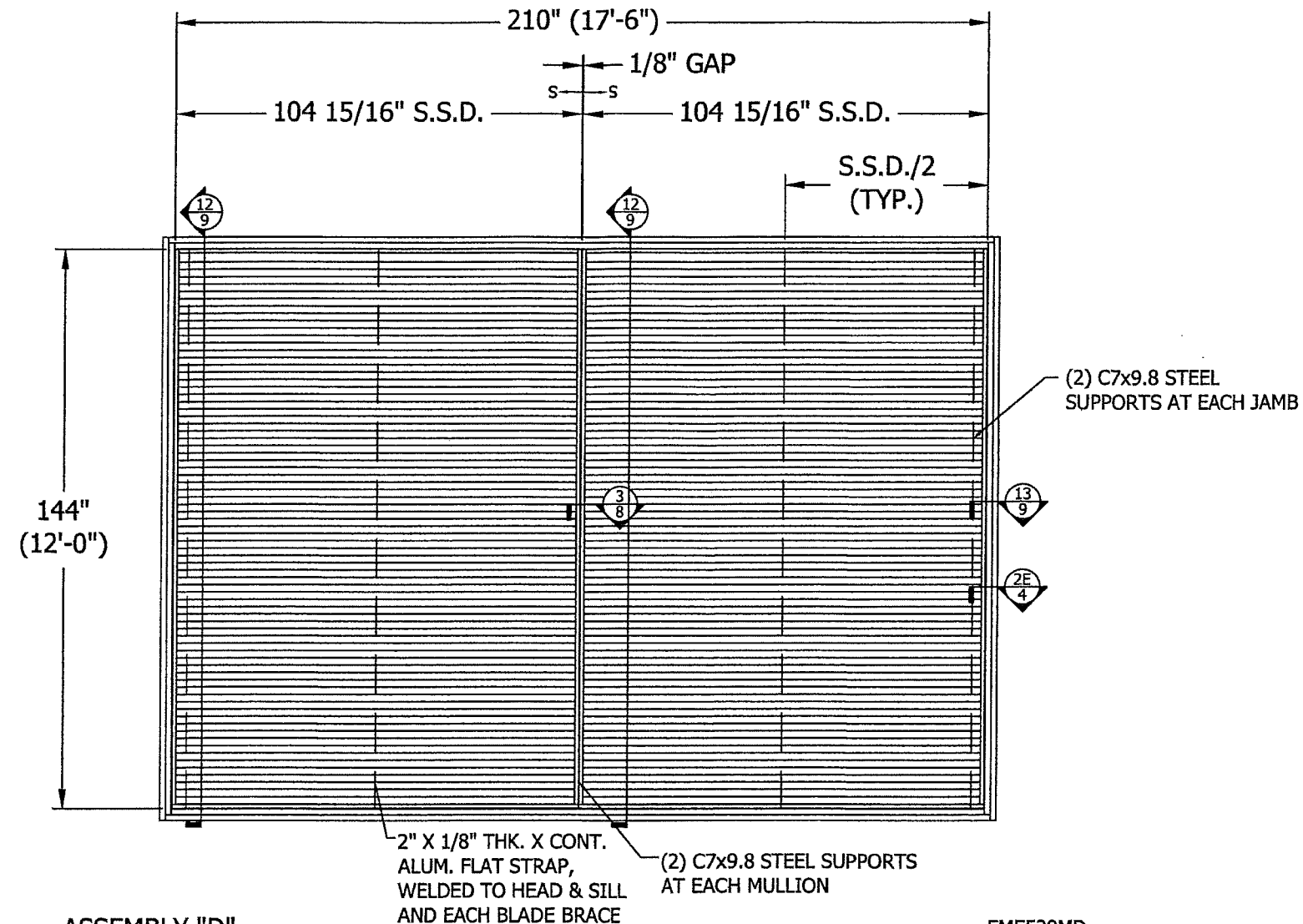
PRODUCT REVISED
 as complying with the Florida
 Building Code
 NOA-No. **17-1214.18**
 Expiration Date **02/23/2021**
 By *[Signature]*
 Miami-Dade Product Control

TOLERANCES
 UNLESS SPECIFIED OTHERWISE
 DIMENSIONS:
 3 PLACE XX + 0.01
 2 PLACE XX + 0.01
 FRACTION DIMENSIONS: + 1/16
 ANGLE DIMENSIONS: + 2°
 USE 90°/45° & 0°

DWN. BY: DRP	CHK. BY: DJR	APPV'D. BY: DJR	APPV'D. BY:
DATE: 5/16/12	DATE: 8/2/12	DATE: 8/2/12	DATE:

SHEET 6 of 21

(F)	REVISED ENGINEER OF RECORD	CJD	MFV	MMM		10/24/17
(E)	REVISED ENGINEER OF RECORD & ANNOTATIONS	RSM	NLT	CGW		12/22/15
CHANGE LETTER	REVISION DESCRIPTION	DWN. BY:	CHK'D. BY:	APPV'D. BY:	APPV'D. BY:	DATE
	RUSKIN Air & Sound Control					
	3900 DR. GREAVES RD GRANDVIEW, MO 64030					
	TITLE EME520MD LOUVER ASSEMBLY "C"	PLOT SCALE B	ECN: 4723			
		DWG. NO.	60-022286-00B			



EXF

E

ASSEMBLY "D"

N.T.S.

EME520MD

FRONT VIEW

ENGINEER OF RECORD

THEODORE BERMAN

ENGINEERING DISCIPLINE

CIVIL/STRUCTURAL

REGISTRATION NUMBER

FL# 09814

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as complying with the Florida
Building Code
NOA-No. **17-1214.18**
Expiration Date **02/23/2021**
By *[Signature]*
Miami-Dade Product Control

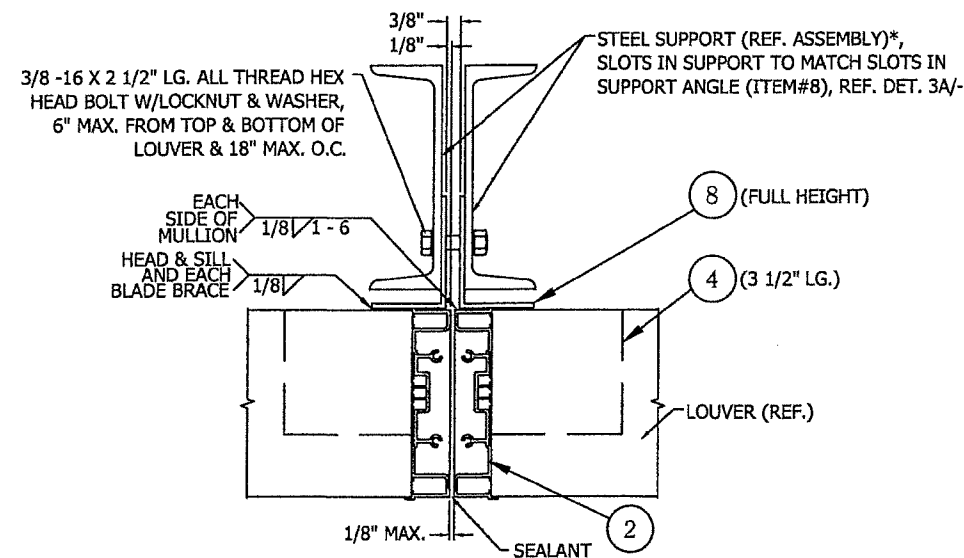
TOLERANCES
DECIMAL DIMENSIONS:
3 PLACE .XXX ±.010
2 PLACE .XX ±.020
FRACTION DIMENSIONS: + 1/16
ANGLE DIMENSIONS: + 2°
USE W10-007 & 008
UNLESS SPECIFIED OTHERWISE

DWN. BY: DRP	CHK. BY: DJR	APPV'D. BY: DJR	APPV'D. BY:
DATE: 6/11/12	DATE: 8/2/12	DATE: 8/2/12	DATE:

SHEET 7 of 21

F	REVISED ENGINEER OF RECORD	CJD	MFV	MMM		10/24/17
E	REVISED ENGINEER OF RECORD & ANNOTATIONS	RSM	NLT	CGW		12/22/15
CHANGE LETTER	REVISION DESCRIPTION	DWN. BY:	CHK'D. BY:	APPV'D. BY:	APPV'D. BY:	DATE
	RUSKIN Air & Sound Control					
	3900 DR. GREAVES RD GRANDVIEW, MO 64030	PLOT SCALE B	ECN: 4723			
	TITLE EME520MD LOUVER ASSEMBLY "D"	DWG. NO. 60-022286-00B				

E NOTE: # = ITEM NUMBER
SEE SHEETS 18-20

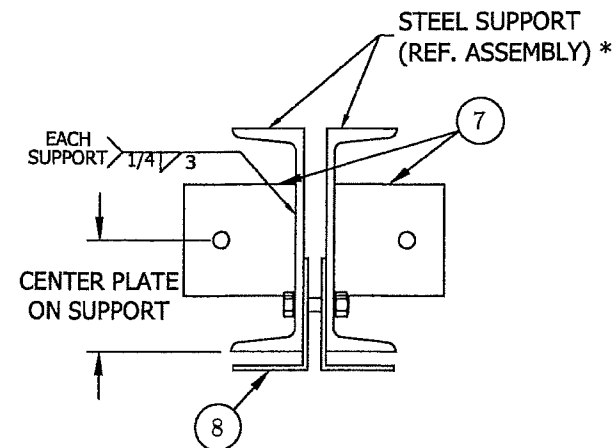


E 3
5,6,7 ASSEMBLY "B", "C" & "D" VISIBLE MULLION SUPPORT DETAIL
N.T.S.
MULLION SUPPORT ATTACHMENT PLATES NOT SHOWN FOR CLARITY

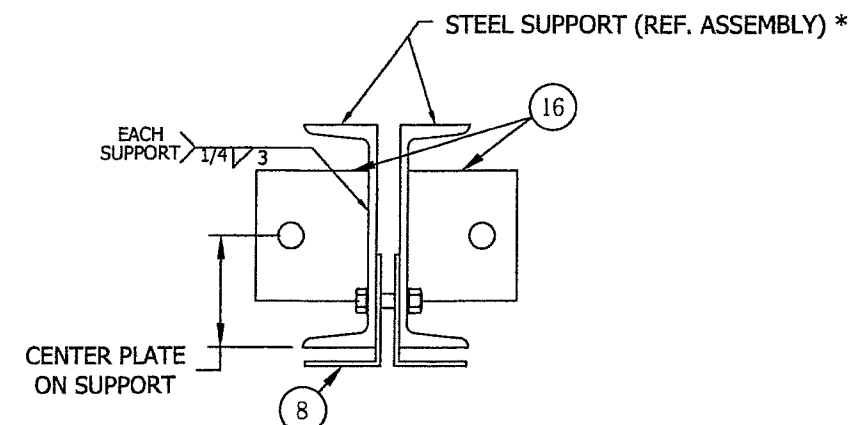


* FOR SMALLER ASSEMBLIES, REF. SUPPORT TABLES ON SHEET 21

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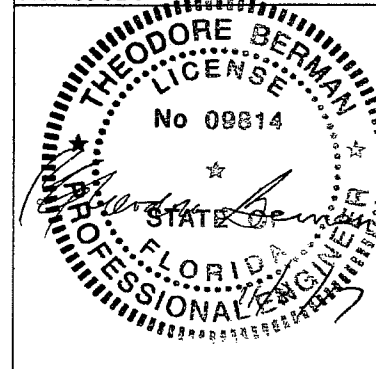
E 4
9 MULLION SUPPORT ATTACHMENT PLATE DETAIL
N.T.S.
WOOD SUBSTRATE



E 4A
10 MULLION SUPPORT ATTACHMENT PLATE DETAIL
N.T.S.
STEEL, CONCRETE, CMU SUBSTRATE

E F

ENGINEER OF RECORD
THEODORE BERMAN
ENGINEERING DISCIPLINE
CIVIL/STRUCTURAL
REGISTRATION NUMBER
FL# 09814



ENGINEER OF RECORD SEAL

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Building Code
NOA-No. **17-1214.18**
Expiration Date **02/23/2021**
By *[Signature]*
Miami-Dade Product Control

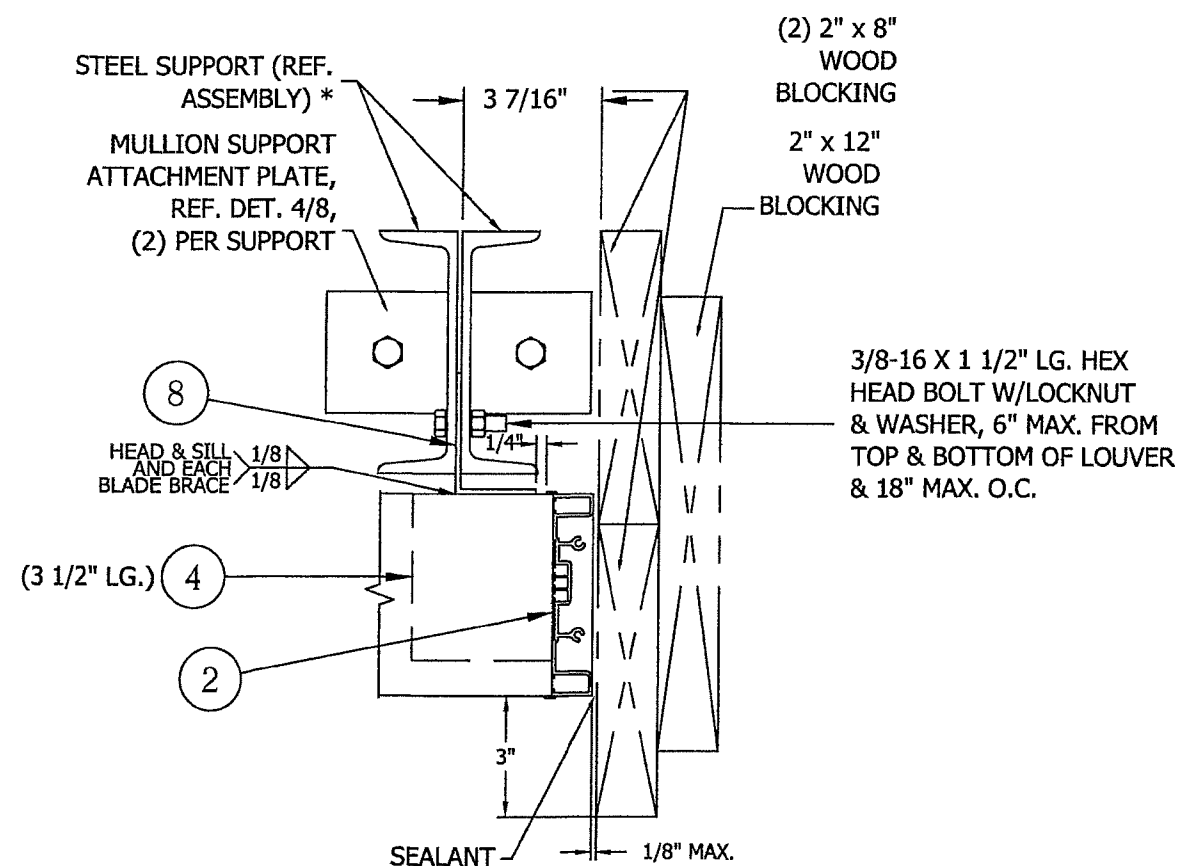
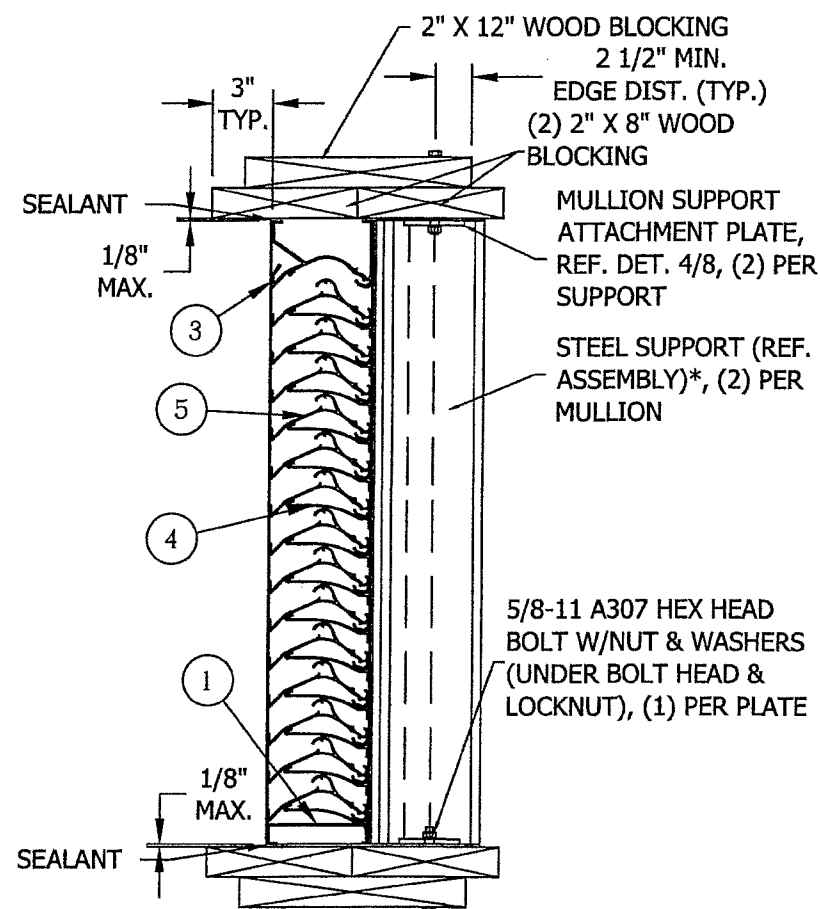
TOLERANCES
DECIMAL DIMENSIONS:
3 PLACE .XX +.010
2 PLACE .XX +.020
FRACTION DIMENSIONS: + 1/16
ANGLE DIMENSIONS: + 2'
USE W10-Q07 & Q08
UNLESS SPECIFIED OTHERWISE

DWN. BY: DRP	CHK. BY: DJR	APPV'D. BY: DJR	APPV'D. BY:
DATE: 5/16/12	DATE: 8/2/12	DATE: 8/2/12	DATE:

SHEET 8 OF 21

F	REVISED ENGINEER OF RECORD	CJD	MFV	MMM		10/24/17
E	REVISED ENGINEER OF RECORD & ANNOTATIONS	RSM	NLT	CGW		12/22/15
CHANGE LETTER	REVISION DESCRIPTION	DWN. BY:	CHK'D. BY:	APPV'D. BY:	APPV'D. BY:	DATE
	RUSKIN Air & Sound Control					
	3900 DR. GREAVES RD GRANDVIEW, MO 64030	PLOT SCALE B	ECN: 4723			
TITLE	EME520MD LOUVER ASSEMBLY "B", "C" & "D" DETAILS					DWG. NO. 60-022286-00B

E NOTE: # = ITEM NUMBER
SEE SHEETS 18-20



E 12 ASSEMBLY "B", "C" & "D" MULLION SUPPORT CONNECTION
5, 6, 7

N.T.S.
WOOD SUBSTRATE
FOR ALTERNATE CONNECTIONS,
REF. DET. 12A, 12B & 12C ON SHEET 10 AND DET. 12E ON SHEET 11

E 13 ASSEMBLY "D" JAMB SUPPORT CONNECTION
7

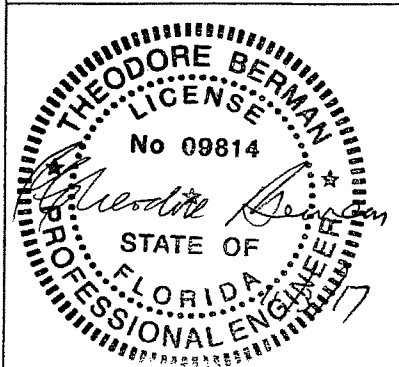
N.T.S.
WOOD SUBSTRATE
OPPOSITE JAMB SIMILAR
REF. DET. 12 ON THIS SHEET FOR ALTERNATE CONNECTIONS

* FOR SMALLER ASSEMBLIES, REF. SUPPORT TABLES ON SHEET 21

E F

ENGINEER OF RECORD
THEODORE BERMAN
ENGINEERING DISCIPLINE
CIVIL/STRUCTURAL
REGISTRATION NUMBER
FL# 09814

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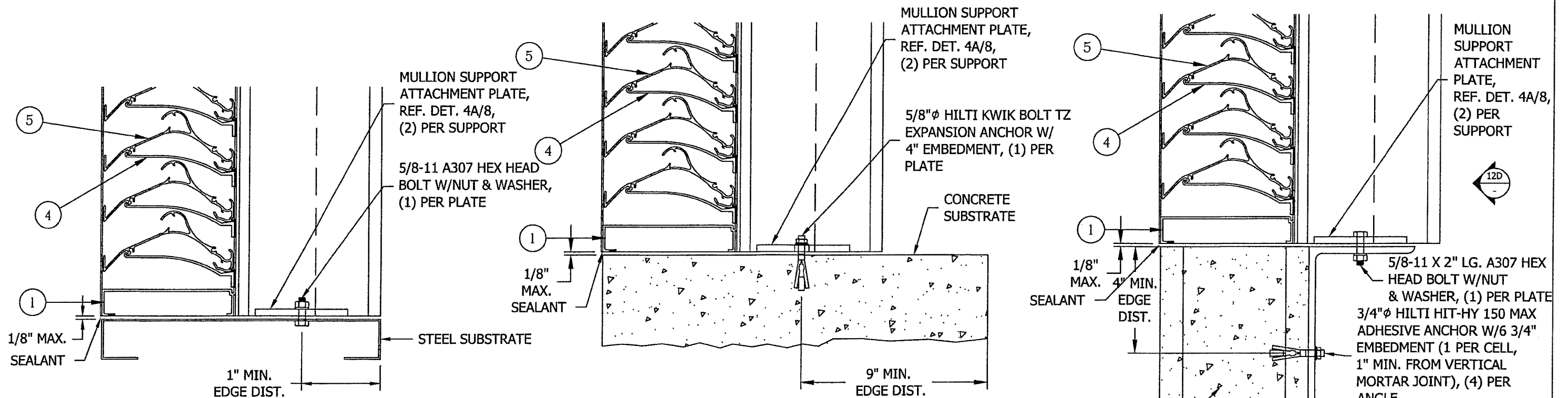
PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. **17-1214.18**
Expiration Date **02/23/2021**
By *[Signature]*
Miami-Dade Product Control

TOLERANCES
DECIMAL DIMENSIONS:
3 PLACE .XX + .010
2 PLACE .XX + .020
FRACTION DIMENSIONS: + 1/16
ANGLE DIMENSIONS: + 2°
USE WIC-007 & 008
UNLESS SPECIFIED OTHERWISE

DWN. BY: DRP	CHK. BY: DJR	APPV'D. BY: DJR	APPV'D. BY:
DATE: 5/16/12	DATE: 8/2/12	DATE: 8/2/12	DATE:

SHEET 9 OF 21

<div>F</div>	REVISED ENGINEER OF RECORD	CJD	MFV	MMM		10/24/17
<div>E</div>	REVISED ENGINEER OF RECORD & ANNOTATIONS	RSM	NLT	CGW		12/22/15
CHANGE LETTER	REVISION DESCRIPTION	DWN. BY:	CHK'D. BY:	APPV'D. BY:	APPV'D. BY:	DATE
<div>RUSKIN</div> <div>Air & Sound Control</div>		PLOT SCALE <div>B</div>		ECN: <div>4723</div>		
TITLE <div>EME520MD LOUVER ASSEMBLY "B", "C" & "D" CONNECTION DETAILS</div>		DWG. NO. <div>60-022286-00B</div>				



12A 9 ASSEMBLY "B", "C" & "D" ALTERNATE CONNECTION

N.T.S.
STEEL SUBSTRATE (10 GA MIN. THICKNESS)
HEAD SIMILAR

12B 9 ASSEMBLY "B", "C" & "D" ALTERNATE CONNECTION

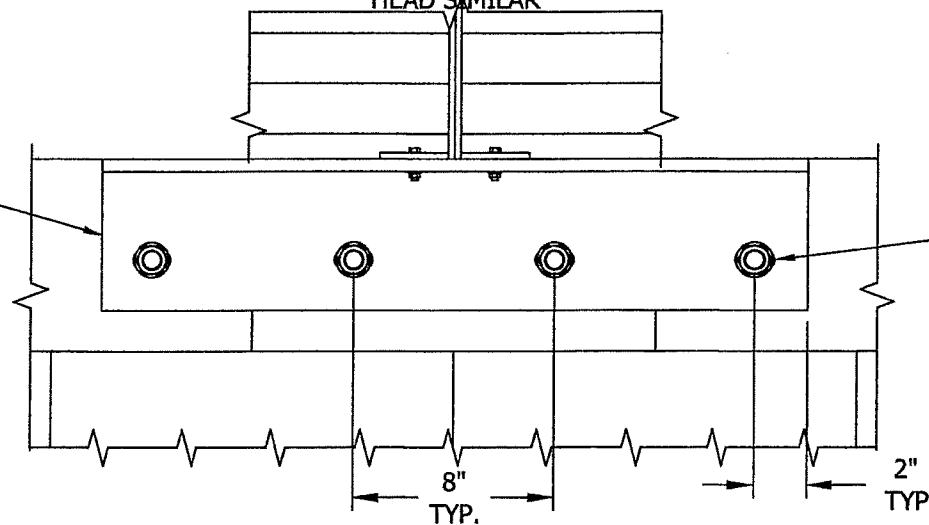
N.T.S.
CONCRETE SUBSTRATE (MIN. $f_c = 3000$ PSI)
HEAD SIMILAR

12C 9 ASSEMBLY "B", "C" & "D" ALTERNATE CONNECTION

N.T.S.
6", 8", 10", 12" CMU SUBSTRATE - REF. NOTE 9 ON SHEET 1
HEAD SIMILAR

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Miami Beach, FL 33141
(305) 868-4707
www.flproductapproval.com

4" X 6" X 5/8" THK. X 28" LG.
HDG A36 STEEL ANGLE



3/4" ϕ HILTI HIT-HY 150 MAX
ADHESIVE ANCHOR W/6 3/4"
EMBEDMENT (1 PER CELL,
1" MIN. FROM VERTICAL
MORTAR JOINT), (4) PER
ANGLE

**NOTE: # = ITEM NUMBER
SEE SHEETS 18-20**

12D - ASSEMBLY "B", "C" & "D" ALTERNATE CONNECTION EME520MD

N.T.S.
6", 8", 10", 12" CMU SUBSTRATE - REF. NOTE 9 ON SHEET 1

REAR VIEW

EXF

ENGINEER OF RECORD

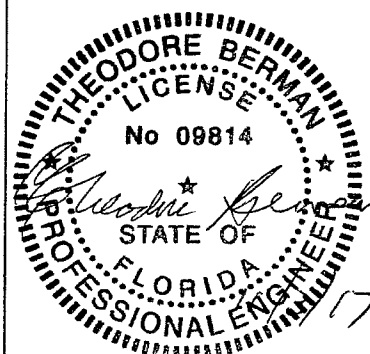
THEODORE BERMAN

ENGINEERING DISCIPLINE

CIVIL/STRUCTURAL

REGISTRATION NUMBER

FL# 09814



ENGINEER OF RECORD SEAL

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NOA-No. **17-1214.18**

Expiration Date **02/23/2021**

By *[Signature]*
Miami-Dade Product Control

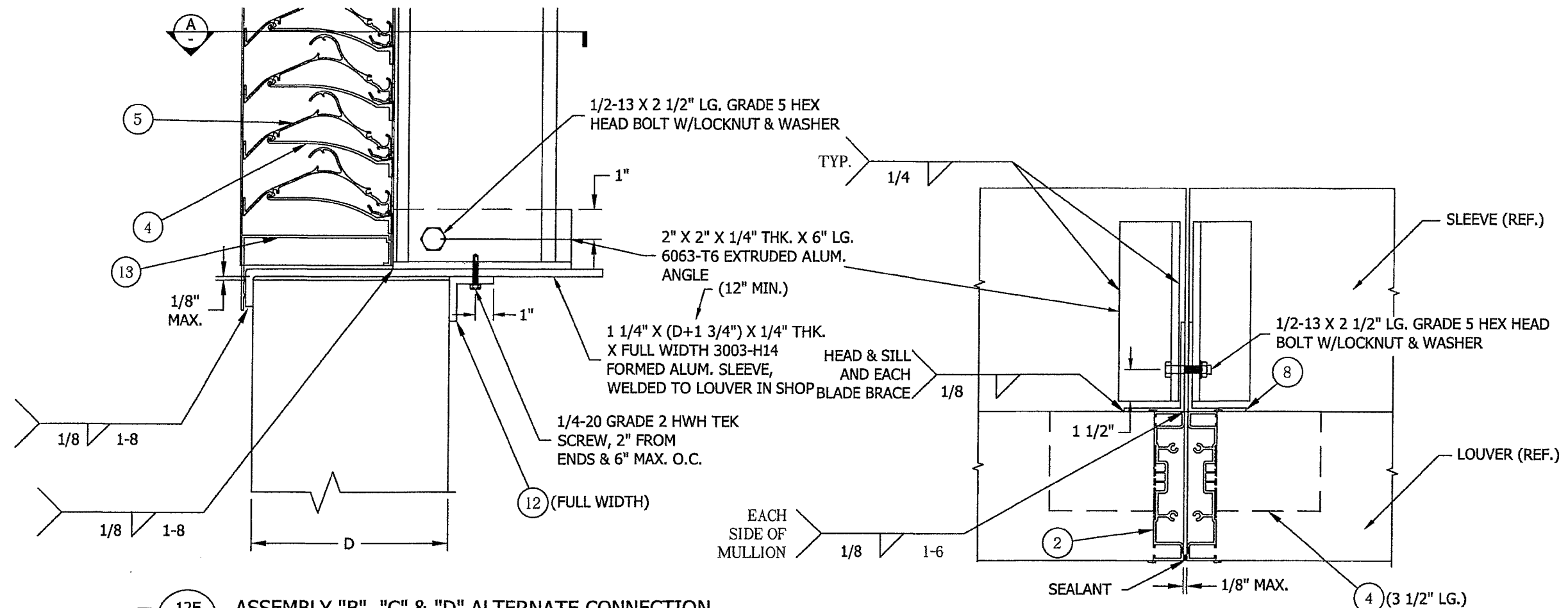
TOLERANCES:
DECIMAL DIMENSIONS:
3 PLACE XXX +.010
2 PLACE XX +.020
FRACTION DIMENSIONS: + 1/16
ANGLE DIMENSIONS: + 2°
USE W10-007 & 008
UNLESS SPECIFIED OTHERWISE

DWN. BY: DRP	CHK. BY: DJR	APPV'D. BY: DJR	APPV'D. BY:
DATE: 5/16/12	DATE: 8/2/12	DATE: 8/2/12	DATE:

SHEET 10 OF 21

<div>F</div>	REVISED ENGINEER OF RECORD	CJD	MFV	MMM		10/24/17
<div>E</div>	REVISED ENGINEER OF RECORD & ANNOTATIONS	RSM	NLT	CGW		12/22/15
CHANGE LETTER	REVISION DESCRIPTION	DWN. BY:	CHK'D. BY:	APPV'D. BY:	APPV'D. BY:	DATE
<div>RUSKIN</div> <div>Air & Sound Control</div>		PLOT SCALE <div>B</div>		ECN: <div>4723</div>		
TITLE <div>EME520MD LOUVER ASSEMBLY "B", "C" & "D" ALT. CONNECTION DETAILS</div>		DWG. NO. <div>60-022286-00B</div>				

NOTE: (#) = ITEM NUMBER
SEE SHEETS 18-20



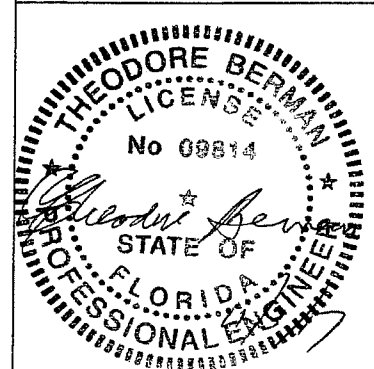
12E 9 ASSEMBLY "B", "C" & "D" ALTERNATE CONNECTION
N.T.S.
FLANGE FRAME W/SLEEVE
HEAD SIMILAR

A - ASSEMBLY "B", "C" & "D" ALTERNATE CONNECTION EME520MD
N.T.S.
FLANGE FRAME W/SLEEVE
STEEL SUPPORTS NOT SHOWN FOR CLARITY
TOP VIEW

EXF

ENGINEER OF RECORD
THEODORE BERMAN
ENGINEERING DISCIPLINE
CIVIL/STRUCTURAL
REGISTRATION NUMBER
FL# 09814

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Expiration Date **02/23/2021**
By *[Signature]*
Miami-Dade Product Control

TOLERANCES
DECIMAL DIMENSIONS:
3 PLACE .XXX ±.010
2 PLACE .XX ±.020
FRACTION DIMENSIONS: +1/16
ANGLE DIMENSIONS: ± 2°
USE UNLESS OTHERWISE
SPECIFIED

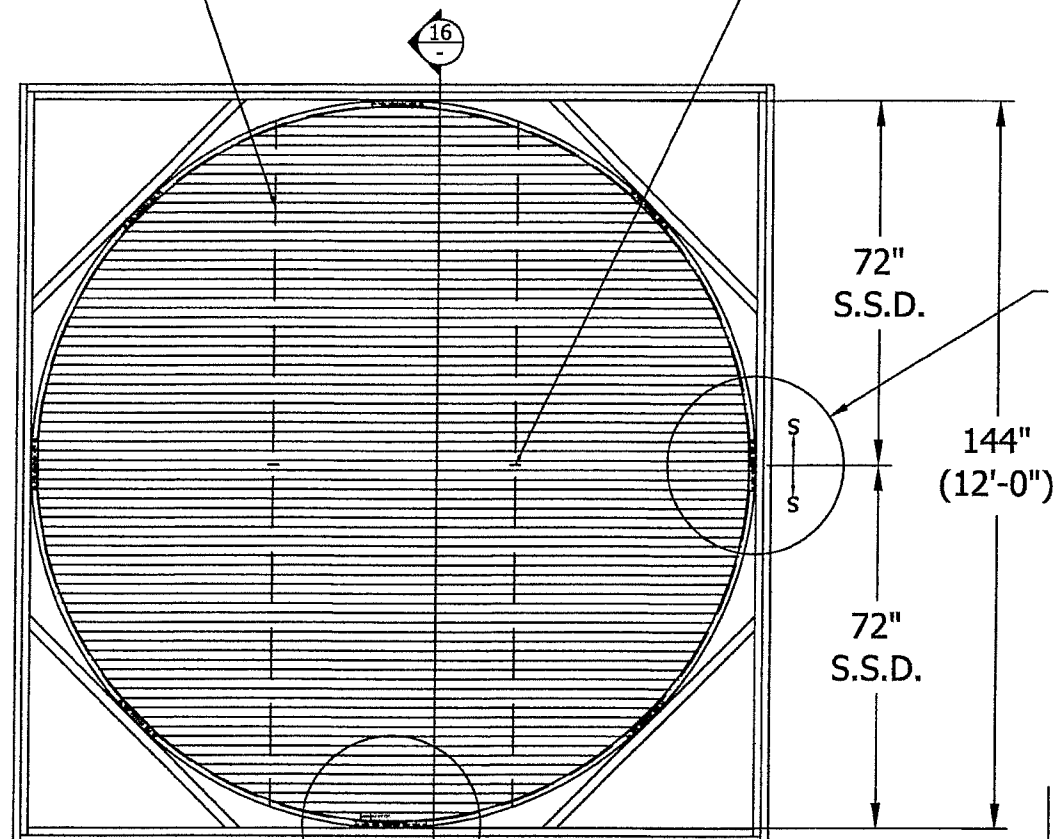
DWN. BY: DRP	CHK. BY: DJR	APP'D. BY: DJR	APP'D. BY:
DATE: 5/16/12	DATE: 8/2/12	DATE: 8/2/12	DATE:

SHEET 11 OF 21

	REVISED ENGINEER OF RECORD	CJD	MFV	MMM		10/24/17
	REVISED ENGINEER OF RECORD & ANNOTATIONS	RSM	NLT	CGW		12/22/15
CHANGE LETTER	REVISION DESCRIPTION	DWN. BY:	CHK'D. BY:	APPV'D. BY:	APPV'D. BY:	DATE
RUSKIN Air & Sound Control		PLOT SCALE B		ECN: 4723		
TITLE EME520MD LOUVER ASSEMBLY "B", "C" & "D" ALT. CONNECTION DETAILS		DWG. NO. 60-022286-00B				

2" X 1/8" THK. X CONT.
ALUM. ANTI-FLUTTER STRAP,
WELDED TO HEAD & SILL
AND EACH BLADE BRACE, (2)
PLACES, EQUALLY SPACED

ANTI-FLUTTER STRAP
SPLICE, REF. DET. 17/14



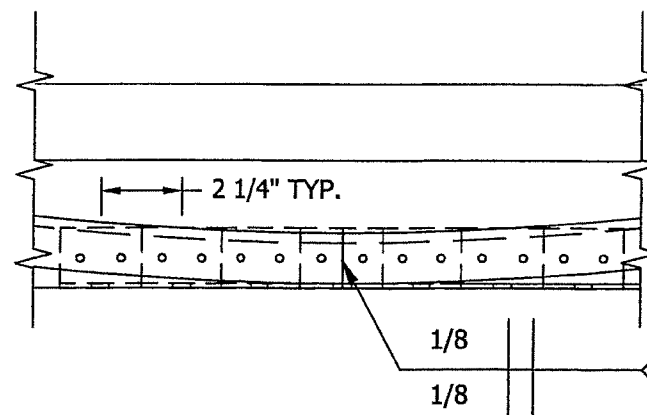
ASSEMBLY "E"
N.T.S.

EME520MD
FRONT VIEW

DET. 15/-

DET. 15/- OR
DET. 18/-

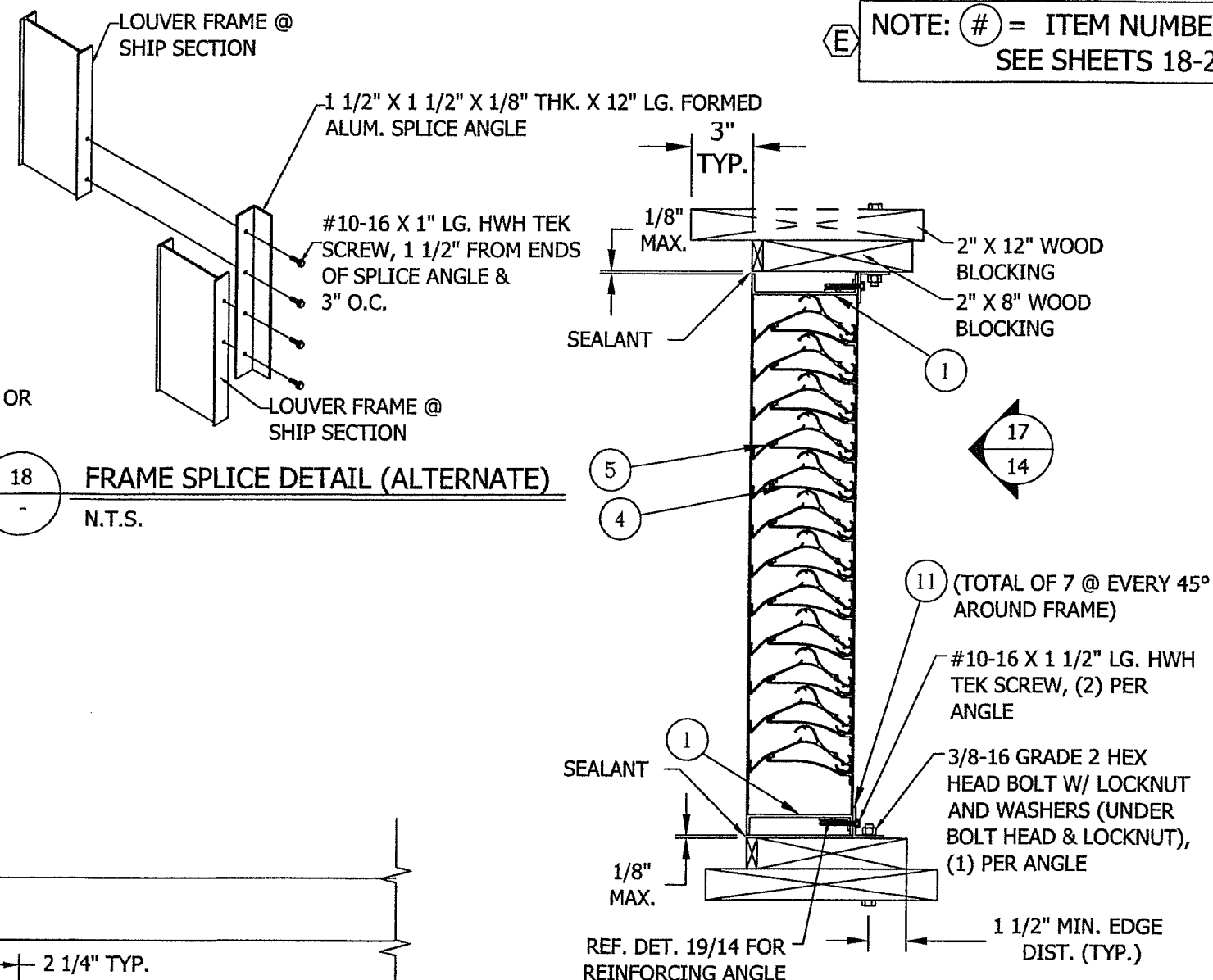
FRAME SPLICE DETAIL (ALTERNATE)
N.T.S.



ASSEMBLY "E" FRAME CONNECTION EME520MD
N.T.S.

FACE VIEW

**NOTE: # = ITEM NUMBER
SEE SHEETS 18-20**



ASSEMBLY "E" FRAME CONNECTION

N.T.S.
WOOD SUBSTRATE
FOR ALTERNATE CONNECTIONS,
REF. DET. 16A & 16B ON SHEET 13

ENGINEER OF RECORD
THEODORE BERMAN
ENGINEERING DISCIPLINE
CIVIL/STRUCTURAL
REGISTRATION NUMBER
FL# 09814

Ted Berman and Associates LLC
Certificate of Authorization # 27502
Miami Beach, FL 33141
(305) 868-4707
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ENGINEER OF RECORD SEAL

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NOA-No. **17-1214.18**
Expiration Date **02/23/2021**
By *[Signature]*
Miami-Dade Product Control

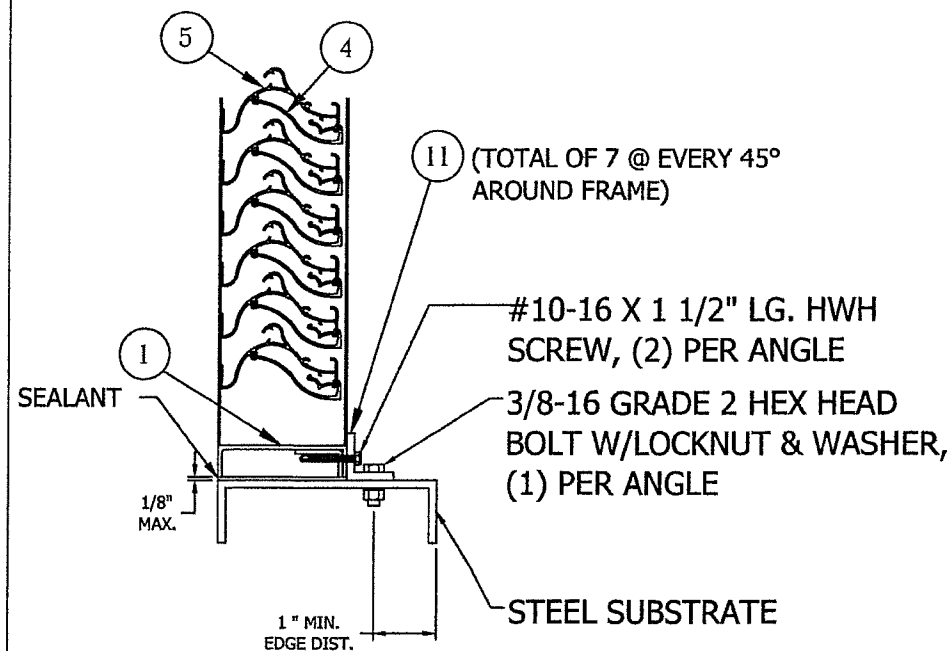
TOLERANCES
DECIMAL DIMENSIONS:
3 PLACE .XXX +.010
2 PLACE .XX +.020
FRACTION DIMENSIONS: + 1/16
ANGLE DIMENSIONS: + 2'
USE W1Q-007 & 008
UNLESS SPECIFIED OTHERWISE

DWN. BY: DRP	CHK. BY: DJR	APPV'D. BY: DJR	APPV'D. BY:
DATE: 5/16/12	DATE: 8/2/12	DATE: 8/2/12	DATE:

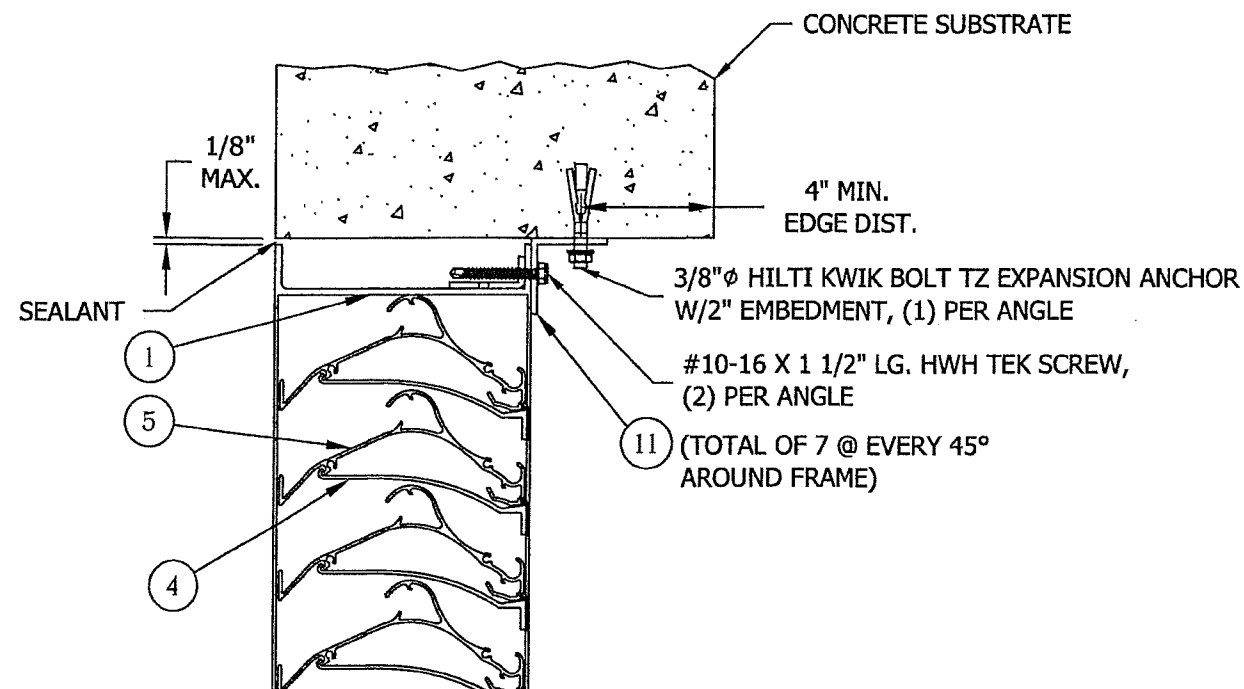
SHEET 12 OF 21

<div>F</div>	REVISED ENGINEER OF RECORD	CJD	MFV	MMM		10/24/17
CHANGE LETTER	REVISION DESCRIPTION	DWN. BY:	CHK'D. BY:	APPV'D. BY:	APPV'D. BY:	DATE
<div>RUSKIN</div> <div>Air & Sound Control</div>		PLOT SCALE <div>B</div>		ECN: <div>4733</div>		
TITLE <div>EME520MD LOUVER ASSEMBLY "E" & CONNECTION DETAILS</div>		DWG. NO. <div>60-022286-00B</div>				

E NOTE: # = ITEM NUMBER
SEE SHEETS 18-20



E 16A
12 ASSEMBLY "E" ALTERNATE CONNECTION
N.T.S.
STEEL SUBSTRATE (10 GA MIN. THICKNESS)



E 16B
12 ASSEMBLY "E" ALTERNATE CONNECTION
N.T.S.
CONCRETE SUBSTRATE (MIN. $f_c = 3000$ PSI)

E F

ENGINEER OF RECORD

THEODORE BERMAN

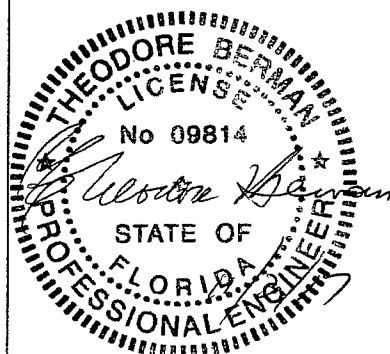
ENGINEERING DISCIPLINE

CIVIL/STRUCTURAL

REGISTRATION NUMBER

FL# 09814

Ted Berman and Associates LLC
Certificate of Authorization # 27502
Miami Beach, FL 33141
(305) 868-4707
www.flproductapproval.com



ENGINEER OF RECORD SEAL



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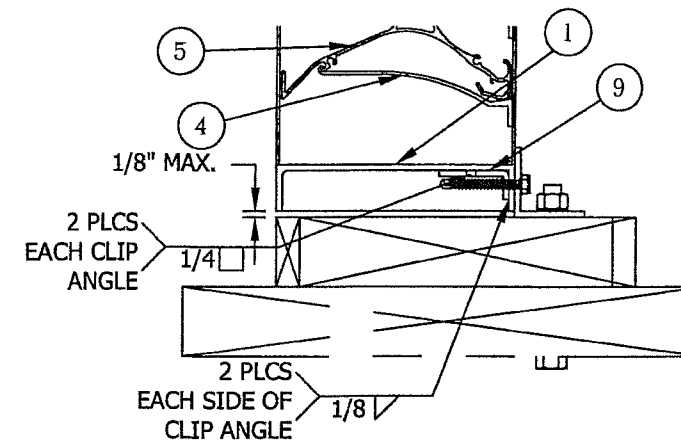
PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. **17-1214.18**
Expiration Date **02/23/2021**
By *[Signature]*
Miami-Dade Product Control

TOLERANCES
DECIMAL DIMENSIONS:
3 PLACE XXX +.010
2 PLACE XX +.020
FRACTION DIMENSIONS: + 1/16
ANGLE DIMENSIONS: + 2'
USE W10-007 & 008
UNLESS SPECIFIED OTHERWISE

DWN. BY: DRP	CHK. BY: DJR	APPV'D. BY: DJR	APPV'D. BY:
DATE: 5/16/12	DATE: 8/2/12	DATE: 8/2/12	DATE:

SHEET 13 OF 21

	REVISED ENGINEER OF RECORD	CJD	MFV	MMM		10/24/17
	REVISED ENGINEER OF RECORD & ANNOTATIONS	RSM	NLT	CGW		12/22/15
CHANGE LETTER	REVISION DESCRIPTION	DWN. BY:	CHK'D. BY:	APPV'D. BY:	APPV'D. BY:	DATE
RUSKIN Air & Sound Control		3900 DR. GREAVES RD GRANDVIEW, MO 64030		PLOT SCALE B		ECN: <u>4733</u>
TITLE EME520MD LOUVER ASSEMBLY "E" ALT. CONNECTION DETAILS		DWG. NO. 60 - 022286 - 00B				



E

19
12

N.T.S.

ENGINEER OF RECORD
THEODORE BERMAN
ENGINEERING DISCIPLINE
CIVIL/STRUCTURAL
REGISTRATION NUMBER
FL# 09814

ENGINEER OF RECORD SEAL

FOR OFFICE USE ONLY

TOLERANCES
DECIMAL DIMENSIONS:
 3 PLACE .XXX +.010
 2 PLACE .XX +.020
FRACTION DIMENSIONS: + 1/16
ANGLE DIMENSIONS: + 2°
 USE WIG-007 & 008
 UNLESS SPECIFIED OTHERWISE

SHEET 14 OF 21



REVISÉ ENGINEER OF RECORD

CJD

MFV

MMM

10/24/17

REVISD ENGINEER OF RECORD &
ANNOTATIONS

RSM

N I T

CGW

12/22/15

CHANGE
LETTER

REVISION DESCRIPTION

DWN,
RY.

CHK'

APPROVED
BY:

APPROVED

DATE

RUSKIN
Air & Sound Control

3900 DR. GREAVES RD
GRANDVIEW, MO 64030

	PLOT SCALE
--	------------

B

ECN:

4733

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EME520MD LOUVER
ASSEMBLY "E"
DETAILS

DWG. NO.

60-022286-00B

E NOTE: # = ITEM NUMBER
SEE SHEETS 18-20

E ASSEMBLY "F" - REMOVED
N.T.S.

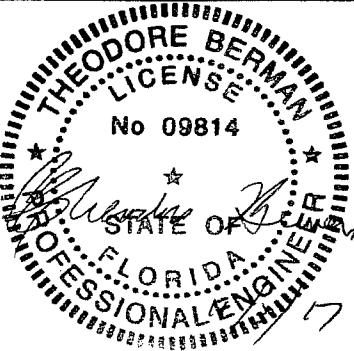
EMES20MD
FRONT VIEW

Ted Berman and Associates LLC
Certificate of Authorization # 27502
Miami Beach, FL 33141
(305) 868-4707
www.flproductapproval.com

E 5 - ASSEMBLY "F" MULLION CONNECTION - REMOVED
N.T.S.
WOOD SUBSTRATE
FOR ALTERNATE CONNECTIONS,
REF. DET. 5A, 5B & 5C ON SHEET 16 AND DET. 5E ON SHEET 17

E F

ENGINEER OF RECORD
THEODORE BERMAN
ENGINEERING DISCIPLINE
CIVIL/STRUCTURAL
REGISTRATION NUMBER
FL# 09814



ENGINEER OF RECORD SEAL

E 6 - ASSEMBLY "F" MULLION CONNECTION - REMOVED EMES20MD
N.T.S.
WOOD SUBSTRATE
REAR VIEW

FOR OFFICE USE ONLY

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. **17-1214.18**
Expiration Date **02/23/2021**
By *[Signature]*
Miami-Dade Product Control

TOLERANCES
DECIMAL DIMENSIONS:
3 PLACE .XX +.010
2 PLACE .XX +.020
FRACTION DIMENSIONS: + 1/16
ANGLE DIMENSIONS: + 2°
USE UNIFORM & OR
UNLESS SPECIFIED OTHERWISE

DWN. BY: DRP	CHK. BY: DJR	APPVD. BY: DJR	APPVD. BY:
DATE: 5/16/12	DATE: 8/2/12	DATE: 8/2/12	DATE:

SHEET 15 OF 21

<div>F</div>	REVISED ENGINEER OF RECORD	CJD	MFV	MMM		10/24/17
<div>E</div>	REVISED ENGINEER OF RECORD & ANNOTATIONS, REMOVED ASSY. "F" & CONNECTION DETAILS	RSM	NLT	CGW		12/22/15
CHANGE LETTER	REVISION DESCRIPTION	DWN. BY:	CHK'D. BY:	APPV'D. BY:	APPV'D. BY:	DATE
<div>RUSKIN</div> <div>Air & Sound Control</div>		PLOT SCALE B		ECN: 4733		
TITLE EME520MD LOUVER ASSEMBLY "F" & CONNECTION DETAILS		DWG. NO. 60 - 022286 - 00B				

NOTE: # = ITEM NUMBER
SEE SHEETS 18-20

5A
15
ASSEMBLY "F" ALTERNATE CONNECTION - REMOVED
N.T.S.
STEEL STRUCTURE (10 GA MIN. THICKNESS)
HEAD SIMILAR

5B
15
ASSEMBLY "F" ALTERNATE CONNECTION - REMOVED
N.T.S.
CONCRETE SUBSTRATE (MIN. $f_c = 3000$ PSI)
HEAD SIMILAR

5C
15
ASSEMBLY "F" ALTERNATE CONNECTION - REMOVED
N.T.S.
6", 8", 10", 12" CMU SUBSTRATE - REF. NOTE 9 ON SHEET 1
HEAD SIMILAR

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E F

ENGINEER OF RECORD
THEODORE BERMAN
ENGINEERING DISCIPLINE
CIVIL/STRUCTURAL
REGISTRATION NUMBER
FL# 09814



ENGINEER OF RECORD SEAL

FOR OFFICE USE ONLY

5D
-
ASSEMBLY "F" ALTERNATE CONNECTION - REMOVED EME520MD
N.T.S.
6", 8", 10", 12" CMU SUBSTRATE - REF. NOTE 9 ON SHEET 1
REAR VIEW

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. **17-1214.18**
Expiration Date **02/23/2021**
By *[Signature]*
Miami-Dade Product Control

TOLERANCES
UNLESS SPECIFIED OTHERWISE
FRACTION DIMENSIONS: +1/16
ANGLE DIMENSIONS: +2°
USE MIP-Q07 & Q08

DWN. BY: DRP	CHK. BY: DJR	APPV'D. BY: DJR	APPV'D. BY:
DATE: 5/16/12	DATE: 8/2/12	DATE: 8/2/12	DATE:

SHEET 16 OF 21

F	REVISED ENGINEER OF RECORD	CJD	MFV	MMM		10/24/17
E	REVISED ENGINEER OF RECORD & ANNOTATIONS, REMOVED CONNECTION DETAILS	RSM	NLT	CGW		12/22/15
CHANGE LETTER	REVISION DESCRIPTION	DWN. BY:	CHK'D. BY:	APPV'D. BY:	APPV'D. BY:	DATE
RUSKIN Air & Sound Control		PLOT SCALE B		ECN: 4733		
TITLE EME520MD LOUVER ASSEMBLY "F" ALT. CONNECTION DETAILS		DWG. NO. 60-022286-00B				

E NOTE: # = ITEM NUMBER
SEE SHEETS 18-20

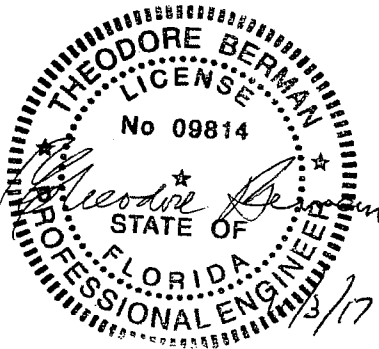
E 5E
15 ASSEMBLY "F" ALTERNATE CONNECTION - REMOVED
N.T.S.
FLANGE FRAME W/SLEEVE

E 5F
- ASSEMBLY "F" ALTERNATE CONNECTION - REMOVED EME520MD
N.T.S.
FLANGE FRAME W/ SLEEVE TOP VIEW

E F

ENGINEER OF RECORD
THEODORE BERMAN
ENGINEERING DISCIPLINE
CIVIL/STRUCTURAL
REGISTRATION NUMBER
FL# 09814

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Miami Beach, FL 33141
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ENGINEER OF RECORD SEAL



FOR OFFICE USE ONLY

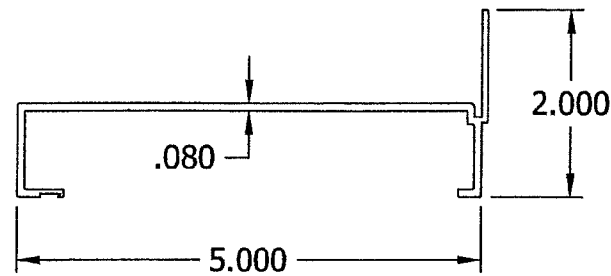
PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. **17-1214.18**
Expiration Date **02/23/2021**
By *[Signature]*
Miami-Dade Product Control

TOLERANCES
DECIMAL DIMENSIONS:
3 PLACE .XXX +.010
2 PLACE .XX +.020
FRACTION DIMENSIONS: + 1/16
ANGLE DIMENSIONS: + 2°
USE W10-007 & 008
UNLESS SPECIFIED OTHERWISE

DWN. BY: DRP	CHK. BY: DJR	APPV'D. BY: DJR	APPV'D. BY:
DATE: 5/16/12	DATE: 8/2/12	DATE: 8/2/12	DATE:

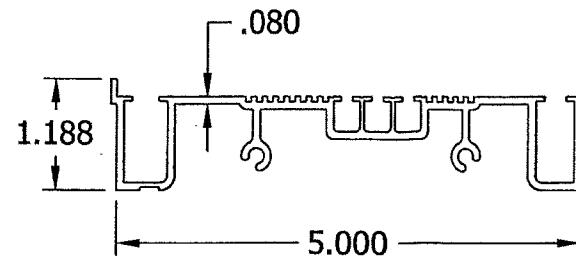
SHEET 17 OF 21

	REVISED ENGINEER OF RECORD	CJD	MFV	MMM		10/24/17
	REVISED ENGINEER OF RECORD & ANNOTATIONS, REMOVED CONNECTION DETAILS	RSM	NLT	CGW		12/22/15
CHANGE LETTER	REVISION DESCRIPTION	DWN. BY:	CHK'D. BY:	APPV'D. BY:	APPV'D. BY:	DATE
<div><div><i>RUSKIN</i></div><div>Air & Sound Control</div></div> <div>3900 DR. GREAVES RD GRANDVIEW, MO 64030</div>		PLOT SCALE B		ECN: <u>4733</u>		
TITLE EME520MD LOUVER ASSEMBLY "F" ALT. CONNECTION DETAILS		DWG. NO. 60 - 022286 - 00B				



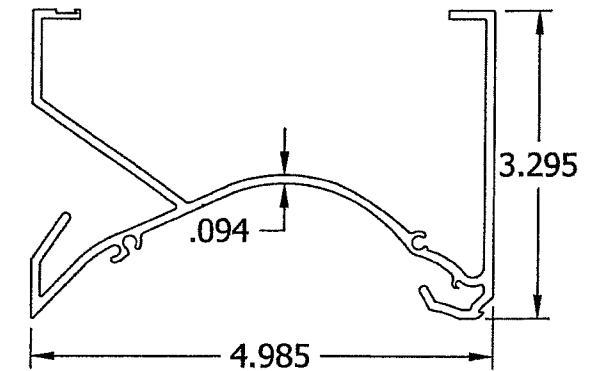
ITEM 1 - SILL FRAME

N.T.S.
RUSKIN #70-022498-00B
MATERIAL: 6063-T6 ALUM.



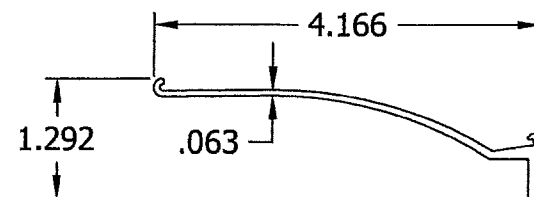
ITEM 2 - JAMB FRAME

N.T.S.
RUSKIN #70-022508-00B
MATERIAL: 6063-T6 ALUM.



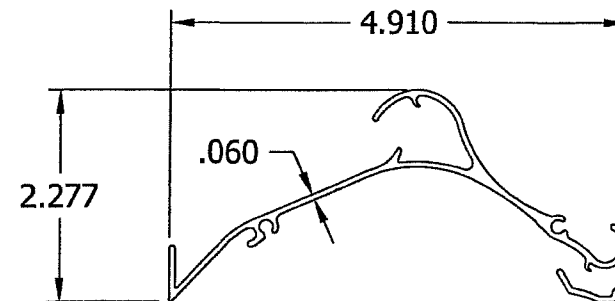
ITEM 3 - HEAD FRAME

N.T.S.
RUSKIN #70-022497-00B
MATERIAL: 6063-T6 ALUM.



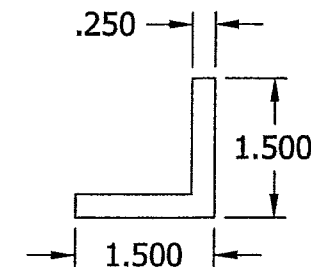
ITEM 4 - BLADE BRACE

N.T.S.
RUSKIN #70-022741-00B
MATERIAL: 6063-T6 ALUM.



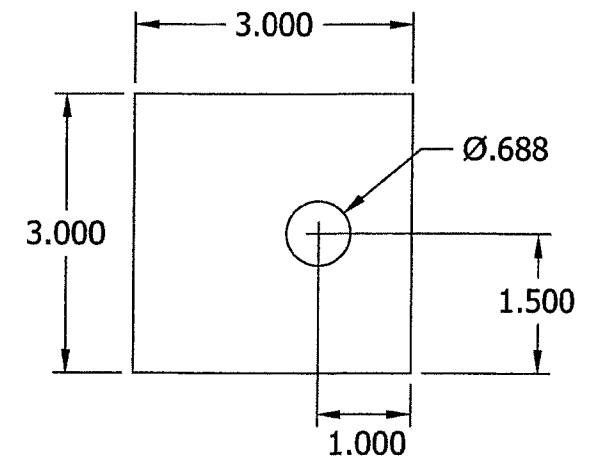
ITEM 5 - BLADE

N.T.S.
RUSKIN #70-022496-00B
MATERIAL: 6063-T6 ALUM.



ITEM 6 - CLIP ANGLE

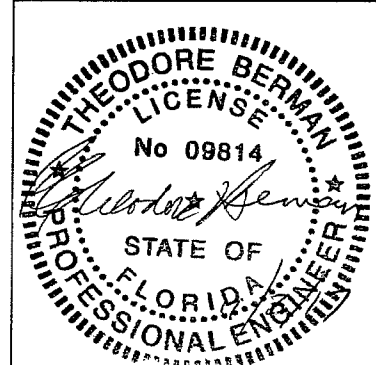
N.T.S.
RUSKIN #70-021175-00B
MATERIAL: 6063-T6 ALUM.



ITEM 7 - ATTACHMENT PLATE

N.T.S.
MATERIAL: 1/4" THK. A36 STEEL

ENGINEER OF RECORD
THEODORE BERMAN
ENGINEERING DISCIPLINE
CIVIL/STRUCTURAL
REGISTRATION NUMBER
FL# 09814



ENGINEER OF RECORD SEAL

Ted Berman and Associates LLC
Certificate of Authorization # 27502
Miami Beach, FL 33141
(305) 868-4707
www.flproductapproval.com



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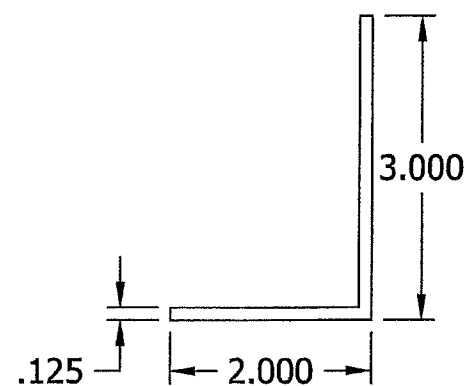
PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. **17-1214.18**
Expiration Date **02/23/2021**
By *[Signature]*
Miami-Dade Product Control

TOLERANCES
DECIMAL DIMENSIONS:
3 PLACE .XXX +.010
2 PLACE .XX +.001
FRACTION DIMENSIONS: + 1/16
ANGLE DIMENSIONS: + 2"
USE MTC-007 & 008
UNLESS SPECIFIED OTHERWISE

DWN. BY: DRP	CHK. BY: DJR	APPV'D. BY: DJR	APPV'D. BY:
DATE: 5/16/12	DATE: 8/2/12	DATE: 8/2/12	DATE:

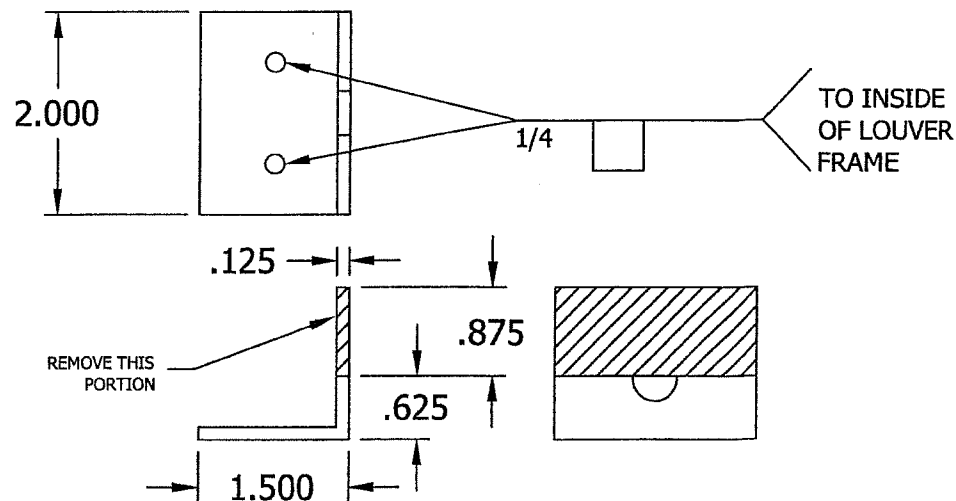
SHEET 18 OF 21

	REVISED ENGINEER OF RECORD	CJD	MFV	MMM		10/24/17
	REVISED ENGINEER OF RECORD, ANNOTATIONS & ITEM 4	RSM	NLT	CGW		12/22/15
CHANGE LETTER	REVISION DESCRIPTION	DWN. BY:	CHK'D. BY:	APPV'D. BY:	APPV'D. BY:	DATE
RUSKIN Air & Sound Control		PLOT SCALE B		ECN: 4733		
TITLE EME520MD LOUVER PARTS DETAILS		DWG. NO. 60-022286-00B				



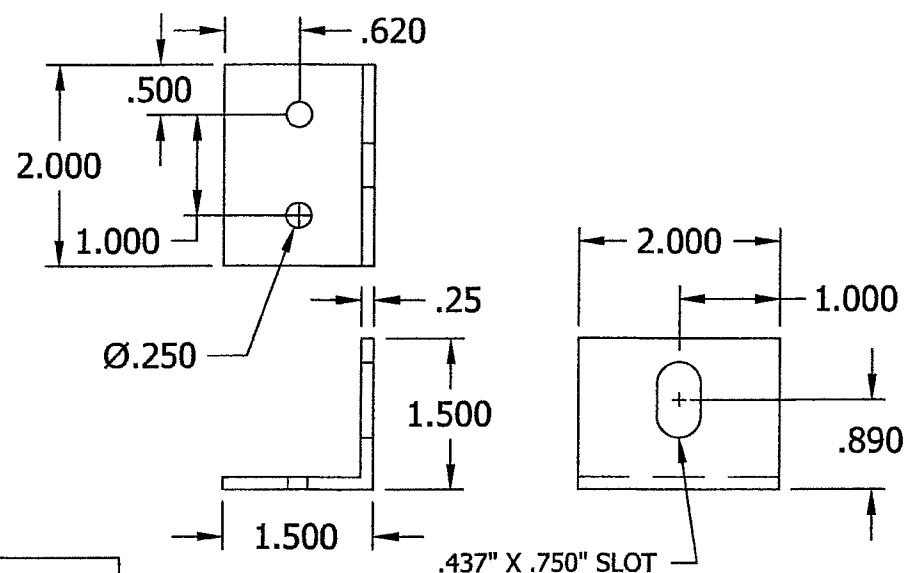
ITEM 8 - SUPPORT ANGLE

N.T.S.
MATERIAL: 6063-T6 ALUM.



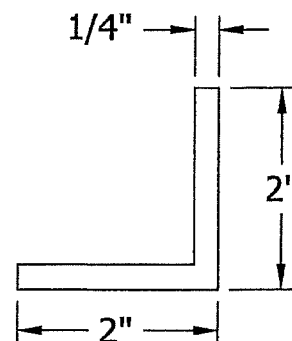
ITEM 9 - MODIFIED CLIP ANGLE

N.T.S.
MATERIAL: 5005-H34 ALUM.



ITEM 11 - CLIP ANGLE

N.T.S.
RUSKIN #85-021637-00B
MATERIAL: 6063-T6 ALUM.



ITEM 12 - ANGLE

N.T.S.
RUSKIN #85-021662-00B
MATERIAL: 6063-T6 ALUM.

ITEM 10 - ATTACHMENT ANGLE - REMOVED

N.T.S.
MATERIAL: 3003-H14 ALUM.

EF

ENGINEER OF RECORD

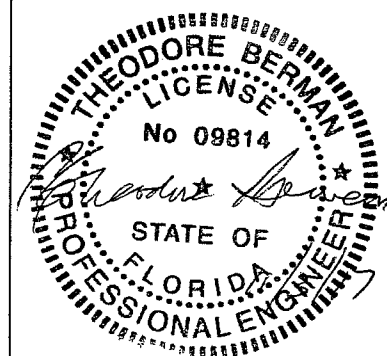
THEODORE BERMAN

ENGINEERING DISCIPLINE

CIVIL/STRUCTURAL

REGISTRATION NUMBER

FL# 09814



ENGINEER OF RECORD SEAL

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PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. **17-1214.18**
Expiration Date **02/23/2021**
By *[Signature]*
Miami-Date Product Control

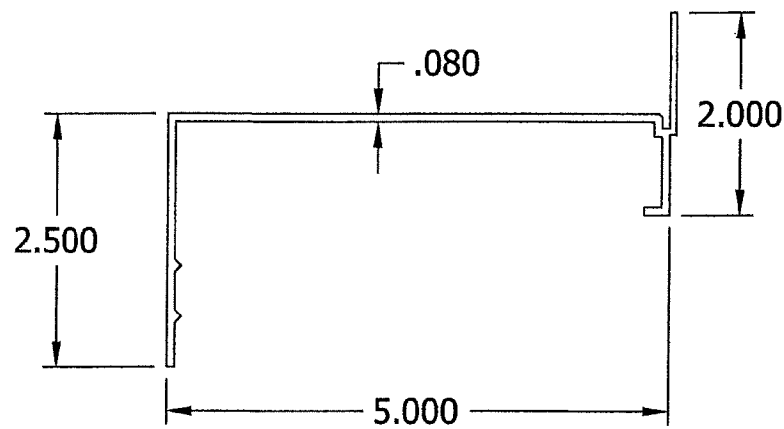
Ted Berman and Associates LLC
Certificate of Authorization # 27502
Miami Beach, FL 33141
(305) 868-4707
www.flproductapproval.com

TOLERANCES
DECIMAL DIMENSIONS:
3 PLACE .XXX +.010.
2 PLACE .XX +.020.
FRACTION DIMENSIONS: + 1/16
ANGLE DIMENSIONS: + 2°
USE W10-007 & 008
UNLESS SPECIFIED OTHERWISE

DWN. BY: DRP	CHK. BY: DJR	APPV'D. BY: DJR	APPV'D. BY:
DATE: 5/16/12	DATE: 8/2/12	DATE: 8/2/12	DATE:

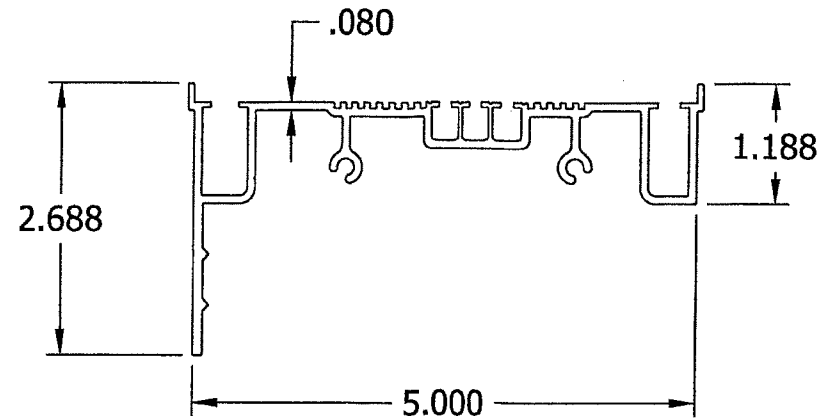
SHEET 19 OF 21

<div>F</div>	REVISED ENGINEER OF RECORD	CJD	MFV	MMM		10/24/1
<div>E</div>	REVISED ENGINEER OF RECORD & ANNOTATIONS	RSM	NLT	CGW		12/22/1
CHANGE LETTER	REVISION DESCRIPTION	DWN. BY:	CHK'D. BY:	APPV'D. BY:	APPV'D. BY:	DATE
<div>RUSKIN</div> <div>Air & Sound Control</div>		PLOT SCALE <div>B</div>		ECN: <div>4733</div>		
TITLE <div>EME520MD LOUVER PARTS DETAILS</div>		DWG. NO. <div>60-022286-00B</div>				



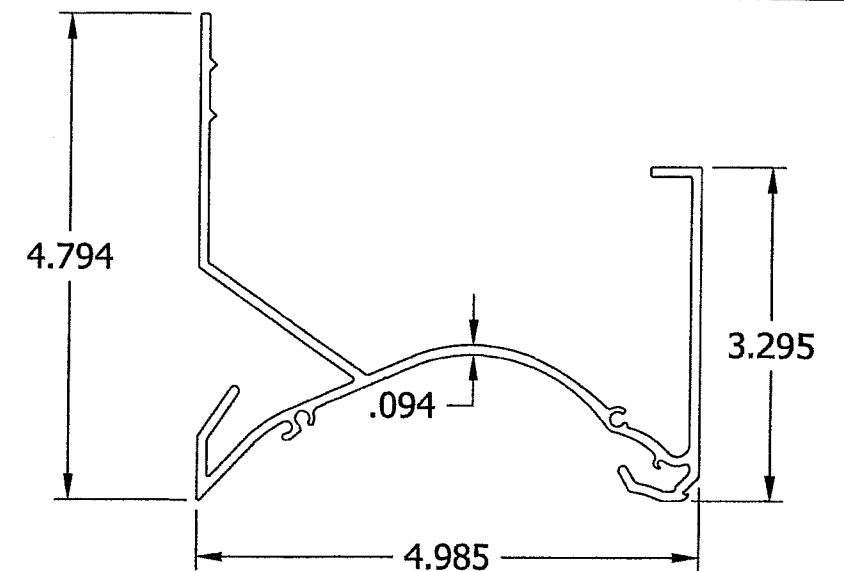
ITEM 13 - SILL FLANGE FRAME

N.T.S.
RUSKIN #70-020969-00B
MATERIAL: 6063-T6 ALUM.



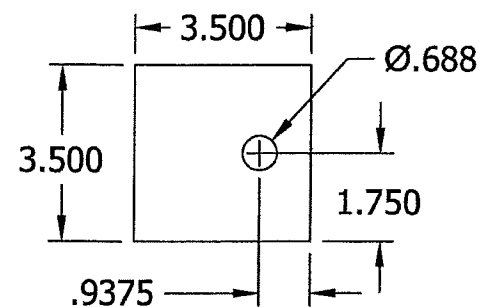
ITEM 14 - JAMB FLANGE FRAME

N.T.S.
RUSKIN #70-022509-00B
MATERIAL: 6063-T6 ALUM.



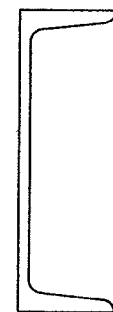
ITEM 15 - HEAD FLANGE FRAME

N.T.S.
RUSKIN #70-022499-00B
MATERIAL: 6063-T6 ALUM.



ITEM 16 - ATTACHMENT PLATE

N.T.S.
MATERIAL: 1/4" THK. A36 STEEL



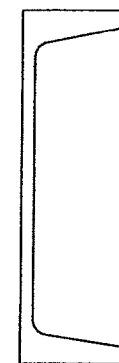
ITEM 17 - C6x8.2

N.T.S.
HDG A36 STL.



ITEM 18 - C5x6.7

N.T.S.
HDG A36 STL.



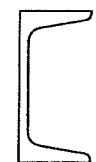
ITEM 19 - C7x9.8

N.T.S.
HDG A36 STL.



ITEM 20 - C4x5.4

N.T.S.
HDG A36 STL.

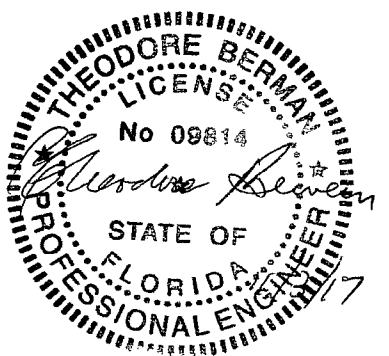


ITEM 21 - C3x4.1

N.T.S.
HDG A36 STL.

EXF

ENGINEER OF RECORD
THEODORE BERMAN
ENGINEERING DISCIPLINE
CIVIL/STRUCTURAL
REGISTRATION NUMBER
FL# 09814



ENGINEER OF RECORD SEAL

Ted Berman and Associates LLC
Certificate of Authorization # 27502
Miami Beach, FL 33141
(305) 868-4707
www.flproductapproval.com

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PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. **17-1214.18**
Expiration Date **02/23/2021**
By *[Signature]*
Miami-Dade Product Control

TOLERANCES
DECIMAL DIMENSIONS:
3 PLACE .XXX ±.010
2 PLACE .XX ±.005
FRACTION DIMENSIONS: + 1/16
ANGLE DIMENSIONS: + 2°
USE W10-007 & 008
UNLESS SPECIFIED OTHERWISE

DWN. BY: DRP	CHK. BY: DJR	APPV'D. BY: DJR	APPV'D. BY:
DATE: 5/16/12	DATE: 8/2/12	DATE: 8/2/12	DATE:

SHEET 20 OF 21

<div>F</div>	REVISED ENGINEER OF RECORD	CJD	MFV	MMM		10/24/17
<div>E</div>	REVISED ENGINEER OF RECORD, ANNOTATIONS AND ITEMS 14 & 15	RSM	NLT	CGW		12/22/15
CHANGE LETTER	REVISION DESCRIPTION	DWN. BY:	CHK'D. BY:	APPV'D. BY:	APPV'D. BY:	DATE
<div>RUSKIN</div> <div>Air & Sound Control</div>		PLOT SCALE <div>B</div>		ECN: <div>4733</div>		
TITLE <div>EME520MD LOUVER PARTS DETAILS</div>		DWG. NO. <div>60-022286-00B</div>				

ⓔ ASSEMBLY "B" & "C" SUPPORT TABLE					
MULLION HEIGHT	MULLION SUPPORT	MULLION TO WOOD ATTACHMENT	MULLION TO STEEL ATTACHMENT	MULLION TO CONCRETE ATTACHMENT	MULLION TO CMU ATTACHMENT
FROM 133" TO 144"	(2) C6x8.2	DETAIL 4, 12	DETAIL 4A, 12A	DETAIL 4A, 12B	DETAIL 4A, 12C
FROM 116" TO 133"	(2) C5x6.7	DETAIL 4, 12	DETAIL 4A, 12A	DETAIL 4A, 12B	DETAIL 4A, 12C
FROM 103" TO 116"	(2) C4x5.4	DETAIL 4, 12	DETAIL 4A, 12A	DETAIL 4A, 12B	DETAIL 4A, 12C
FROM 12" TO 103"	(2) C3x4.1	DETAIL 4, 12	DETAIL 4A, 12A	DETAIL 4A, 12B	DETAIL 4A, 12C

ⓔ ASSEMBLY "D" SUPPORT TABLE					
JAMB/MULLION HEIGHT	JAMB/MULLION SUPPORT	JAMB/MULLION TO WOOD ATTACHMENT	JAMB/MULLION TO STEEL ATTACHMENT	JAMB/MULLION TO CONCRETE ATTACHMENT	JAMB/MULLION TO CMU ATTACHMENT
FROM 140" TO 144"	(2) C7x9.8	DETAIL 4, 12, 13	DETAIL 4A, 12A	DETAIL 4A, 12B	DETAIL 4A, 12C
FROM 123" TO 140"	(2) C6x8.2	DETAIL 4, 12, 13	DETAIL 4A, 12A	DETAIL 4A, 12B	DETAIL 4A, 12C
FROM 108" TO 123"	(2) C5x6.7	DETAIL 4, 12, 13	DETAIL 4A, 12A	DETAIL 4A, 12B	DETAIL 4A, 12C
FROM 95" TO 108"	(2) C4x5.4	DETAIL 4, 12, 13	DETAIL 4A, 12A	DETAIL 4A, 12B	DETAIL 4A, 12C
FROM 12" TO 95"	(2) C3x4.1	DETAIL 4, 12, 13	DETAIL 4A, 12A	DETAIL 4A, 12B	DETAIL 4A, 12C



ENGINEER OF RECORD

THEODORE BERMAN

ENGINEERING DISCIPLINE

CIVIL/STRUCTURAL

REGISTRATION NUMBER

FL# 09814

ENGINEER OF RECORD SEAL

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Certificate of Authorization # 27502
Miami Beach, FL 33141
(305) 868-4707
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PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 17-1214.18
Expiration Date 02/23/2021
By Miami-Dade Product Control

TOLERANCES
DECIMAL DIMENSIONS:
3 PLACE .XXX ±.010
2 PLACE .XX ±.020
FRACTION DIMENSIONS: +1/16
ANGLE DIMENSIONS: ±2°
USE MFC-017 & 018
UNLESS SPECIFIED OTHERWISE

DWN. BY: DRP	CHK. BY: DJR	APPV'D. BY: DJR	APPV'D. BY:
DATE: 5/16/12	DATE: 8/2/12	DATE: 8/2/12	DATE:
SHEET 21 OF 21			

ⓔ	REVISED ENGINEER OF RECORD	CJD	MFV	MMM		10/24/17
ⓔ	REVISED ENGINEER OF RECORD & SUPPORT TABLES	RSM	NLT	CGW		12/22/15
CHANGE LETTER	REVISION DESCRIPTION	DWN. BY:	CHK'D. BY:	APPV'D. BY:	APPV'D. BY:	DATE
RUSKIN Air & Sound Control		PLOT SCALE B		ECN: 4733		
TITLE EME520MD LOUVER ASSEMBLY "B", "C" & "D" SUPPORT TABLES		DWG. NO. 60-022286-00B				