



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 ELF375DXD Aluminum Louver

APPROVAL DOCUMENT: Drawing No. **60-021902-00D**, titled "ELF375DXD Louver", sheets 1 through 11 of 11, dated 05/26/2006, with revision **D** dated 03/02/2018, prepared by Ruskin Company, signed and sealed by Melissa M. Massar, P.E., bearing the Miami-Dade County Product Control renewal stamp with the Notice of Acceptance number and expiration date by the Miami-Dade County Product Control Section.

MISSILE IMPACT RATING: Large and Small Missile Impact Resistant

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

LIMITATION: This louver is to be installed in a location where the room behind the louver is designed to drain water penetrating into the room, and the room will house water resistant/ water proof equipment, components or supplies.

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 # 22-1215.04** and consists of this page 1 and evidence pages E-1 and E-2, as well as approval document mentioned above.

The submitted documentation was reviewed by **Sifang Zhao, P.E.**



S.Z.
02/01/2024

NOA-No. 23-1116.11
Expiration Date: January 03, 2028
Approval Date: February 01, 2024
Page 1

Ruskin Company

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. Drawing No. **60-021902-00D**, titled “ELF375DXD Louver”, sheets 1 through 11 of 11, dated 05/26/2006, with revision **D** dated 03/02/2018, prepared by Ruskin Company, signed and sealed by Melissa M. Massar, P.E. *“Submitted under NOA # 18-0201.08”*

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
3) Cyclic Wind Pressure Loading per FBC, TAS 203-94
along with marked-up drawings and installation diagram of ELF375DXD Test Louver, prepared by National Certified Testing Laboratories, Inc., Test Report No. **NCTL-210-3377-1**, dated 03/19/2007, signed and sealed by Gerard J. Ferrara, P.E.
“Submitted under NOA # 07-0621.07”
2. Test reports on 1) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94
2) Large Missile Impact Test per FBC, TAS 201-94
3) Cyclic Wind Pressure Loading per FBC, TAS 203-94
along with marked-up drawings and installation diagram of ELF375DXD Test Louver, prepared by National Certified Testing Laboratories, Inc., Test Report No. **NCTL-210-4090-01**, dated 12/07/2017, signed and sealed by Douglas J. McDougall, P.E.
“Submitted under NOA # 18-0201.08”

C. CALCULATIONS

1. Louver and anchor calculations prepared by Ruskin Engineering, dated 09/08/2015, signed and sealed by Chelsea GQ Welch, P.E. *“Submitted under NOA # 15-0923.05”*
2. Louver and anchor calculations prepared by Ruskin Engineering, dated 05/14/2007 and 11/20/2007, signed and sealed by Daniel J. Rau, P.E.
“Submitted under NOA # 07-0621.07”
3. Louver wind load review prepared by Ruskin Company, dated 03/08/2018, signed and sealed by Melissa M. Massar, P.E. *“Submitted under NOA # 18-0201.08”*

D. QUALITY ASSURANCE

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

E. MATERIAL CERTIFICATIONS

1. None.



Sifang Zhao, P.E.
Product Control Examiner
NOA-No. 23-1116.11
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NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

F. STATEMENTS

1. Distributor agreement dated 09/22/2016. *“Submitted under NOA # 16-1110.03”*
2. Statement letter of code conformance to 2010 FBC, issued by Ruskin Company, dated 06/13/2012, signed and sealed by Daniel J. Rau, P.E. *“Submitted under NOA # 12-0816.02”*
3. Statement letter of code conformance to the 5th edition (2014) FBC, issued by Ruskin Company, dated 09/08/2015, signed and sealed by Chelsea GQ Welch, P.E. *“Submitted under NOA # 15-0923.05”*
4. No financial interest letter issued by Ruskin Company, dated 05/25/2007, signed and sealed by Daniel J. Rau, P.E. *“Submitted under NOA # 07-0621.07”*
5. Statement letter of code conformance to the 6th edition (2017) FBC and of no financial interest issued by Ruskin Company, dated 03/08/2018, signed and sealed by Melissa M. Massar, P.E. *“Submitted under NOA # 18-0201.08”*
6. Laboratory compliance letter for Test Report No. **NCTL-210-4090-01**, issued by National Certified Testing Laboratories, Inc., dated 12/07/2017, signed and sealed by Douglas J. McDougall, P.E. *“Submitted under NOA # 18-0201.08”*
7. Statement letter of code conformance to the **8th Edition** (2023) of the FBC and of no financial interest, issued by Ruskin Company, dated 10/30/2023, signed and sealed by Jeffrey Devon Smith, P.E.

G. OTHER

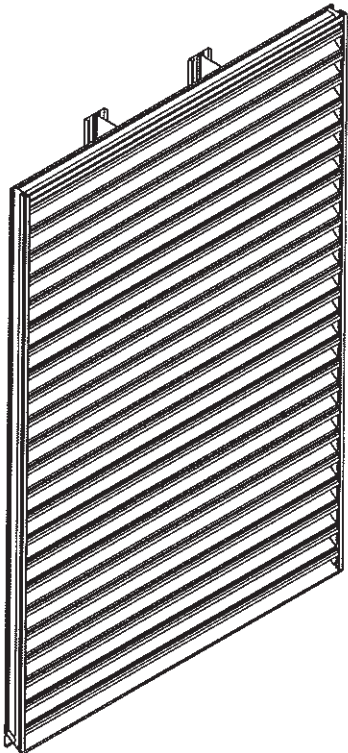
1. This NOA **revises NOA # 22-1215.04** for the 8th edition (2023) of the FBC update.



Sifang Zhao, P.E.
Product Control Examiner
NOA-No. 23-1116.11
Expiration Date: January 03, 2028
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| PARTS LIST FOR CHANNEL FRAME LOUVER | | | |
|--|--|--------------------------|----------------------|
| ITEM | DESCRIPTION | MATERIAL | ALLOY |
| 1 | HEAD FRAME | .080" THK EXTRUDED ALUM. | 6063-T6 |
| 2 | SILL FRAME | .125" THK EXTRUDED ALUM. | 6063-T6 |
| 3 | JAMB FRAME | .080" THK EXTRUDED ALUM. | 6063-T6 |
| 4 | BLADE | .080" THK EXTRUDED ALUM. | 6063-T6 |
| 5 | BLADE BRACE | .080" THK EXTRUDED ALUM. | 6063-T6 |
| 6 | 2 X .125 STRAP | .125" THK EXTRUDED ALUM. | 6063-T6 |
| 7 | H.V.B.S. | VARIES REF TABLE 1 | 6063-T6 |
| 7A | H.V.B.S. | VARIES REF TABLE 1 | 6063-T6 |
| MULTI SECTION CONNECTION PARTS | | | |
| 8 | MULLION SUPPORT | VARIES REF TABLE 2 | 6063-T6 |
| 8A | MULLION SUPPORT | VARIES REF TABLE 2 | 6063-T6 |
| 9 | 3/8-16 X 3.000" LG A307 GRADE A HHB W/ WASHER & LOCKNUT | ZINC PLATED | - |
| 10 | 1/4-20 X 1.500" LG A307 GRADE A HHB BOLT W/ WASHER & LOCKNUT | ZINC PLATED | - |
| STANDARD UNIVERSAL SLEEVE | | | |
| 11 | FRONT FLANGE UNIVERSAL SLEEVE | .188" THK FORMED ALUM. | 3003-H14 OR 5005-H34 |
| 12 | HEAD FRAME W/ INTEGRAL FLANGE | .080" THK EXTRUDED ALUM. | 6063-T6 |
| 13 | SILL FRAME W/ INTEGRAL FLANGE | .125" THK EXTRUDED ALUM. | 6063-T6 |
| 14 | JAMB FRAME W/ INTEGRAL FLANGE | .080" THK EXTRUDED ALUM. | 6063-T6 |
| 15 | CONT. RETAINING ANGLE | .250" THK EXTRUDED ALUM. | 6063-T6 |
| 16 | 1/4-14 SAE GRADE 2 "HWH" TYPE "SD" SCREW | ZINC PLATED | - |
| 17 | UNIVERSAL SLEEVE ATTACHMENT ANGLE | .250" THK EXTRUDED ALUM. | 6063-T6 |
| INSTALLATION PARTS | | | |
| 18 | ATTACHMENT CLIP ANGLE | .250" THK EXTRUDED ALUM. | 6063-T6 |
| 19 | #10-16 SAE GRADE 2 "HWH" "SD" SCREW W/ WASHER | ZINC PLATED | - |
| 20 | SUBSTRATE FASTENER (BY OTHERS) | VARIES REF TABLE 3/11 | - |

| TABLE 1 H.V.B.S. | | | |
|----------------------------|--------------|------------------|--------------------------|
| ITEM | LOUVER SIZE | SUPPORT | MATERIAL |
| 7 | HEIGHT > 60" | (2)70-021466-00B | .094" THK EXTRUDED ALUM. |
| 7A | HEIGHT ≤ 60" | (2)70-021468-00B | .080" THK EXTRUDED ALUM. |
| TABLE 2 MULLION SUPPORT | | | |
| 8 | HEIGHT > 60" | (2)70-021466-00B | .094" THK EXTRUDED ALUM. |
| 8A | HEIGHT ≤ 60" | (2)70-021468-00B | .080" THK EXTRUDED ALUM. |



RECTANGLE LOUVER
N.T.S.
CHANNEL FRAME REF. SHEETS 02 THRU 05
UNIVERSAL SLEEVE REF. SHEETS 06 THRU 08

ABBREVIATIONS:

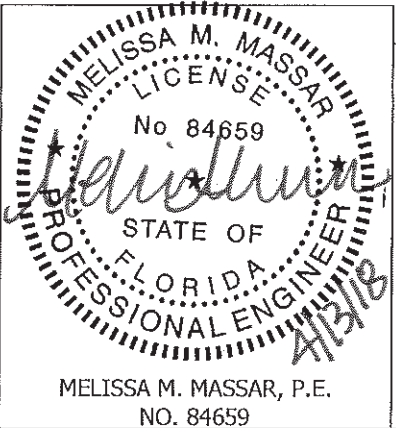
CONT. - CONTINUOUS
H.V.B.S.- HIDDEN VERTICAL BLADE SUPPORT
H.H.B.S.- HIDDEN HORIZONTAL BLADE SUPPORT
L.D. - LOUVER DIMENSION
MAX. - MAXIMUM
MIN. - MINIMUM
NOM. - NOMINAL
N.T.E. - NOT TO EXCEED
O/C - ON CENTER
OPP. - OPPOSITE
R.O. - ROUGH OPENING
SIM. - SIMILAR
S.S. - SHIP SECTION
S.S.D. - SHIP SECTION DIMENSION
TYP. - TYPICAL
U.N.C. - UNLESS NOTED OTHERWISE
DIM. - DIMENSION
FLG. - FLANGE
D - SUBSTRATE DEPTH
SUB. -SUBSTRATE


DRAWING INDEX:

SHEET 01 - NOTES, PARTS LIST & DRAWING INDEX
SHEET 02 - ASSEMBLY 'A' CHANNEL FRAME & DETAILS
SHEET 03 - ASSEMBLY 'A' CONNECTION DETAILS
SHEET 04 - ASSEMBLY 'A' ATTACHMENT DETAILS
SHEET 05 - ASSEMBLY 'A' ATTACHMENT DETAILS
SHEET 06 - ASSEMBLY 'B' UNIVERSAL SLEEVE & DETAILS
SHEET 07 - ASSEMBLY 'B' CONNECTION DETAILS
SHEET 08 - ASSEMBLY 'B' ATTACHMENT DETAILS
SHEET 09 - PARTS
SHEET 10 - PARTS
SHEET 11 - PARTS

NOTES:

- 1) THE ELF375DXD HAS BEEN TESTED IN ACCORDANCE WITH MIAMI-DADE COUNTY 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 +/- 130 PSF OR LESS. THIS LOUVER IS NON-BEARING AND IS NOT DESIGNED TO WITHSTAND BUILDING DEAD LOADS.
- 3) THIS LOUVER IS TO BE INSTALLED IN LOCATIONS WHERE THE ROOM BEHIND THE LOUVER IS DESIGNED TO DRAIN WATER THAT PENETRATES INTO THE ROOM AND THE ROOM WILL HOUSE WATER RESISTANT/ WATER PROOF EQUIPMENT, COMPONENTS, OR SUPPLIES.
- 4) RUSKIN DOES NOT DETERMINE THE STRUCTURAL INTEGRITY OF THE STRUCTURE. SUBSTRATE REQUIREMENTS GIVEN IN TABLE 3 ON SHEET 11 ARE AS NEEDED FOR ANCHORAGE ONLY.
- 5) MAXIMUM SINGLE SECTION SIZE: 90" WIDE X 120" HIGH. UNLIMITED WIDTH CAN BE ACCOMPLISHED BY PLACING SINGLE SECTIONS SIDE BY SIDE
- 6) SECTIONS OR ASSEMBLIES MAY BE STACKED VERTICALLY PROVIDING A SUITABLE STRUCTURAL SUPPORT IS DESIGNED AND INSTALLED BY OTHERS TO SUPPORT ALL LOADS TRANSFERRED FROM THE LOUVER.
- 7) ALL CMU BLOCK MUST BE GROUT FILLED. MIN. PRISM STRENGTH OF 1500 PSI AT TIME OF INSTALLATION. CMU BLOCKS MUST BE MN. TYPE 1, GRADE N, LIGHT, MEDIUM, OR NORMAL WEIGHT PER ASTM C90. GROUT AND MORTAR MUST COMPLY WITH FBC.
- 8) ALL WELDED ATTACHMENTS REQUIRE MIN. FILLER METAL OF 4043 ALUMINUM ALLOY WITH MIN. TENSILE STRENGTH OF 24 KSI.





PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 23-1116.11
Expiration Date 01/03/2028
By 
Miami-Dade Product Control

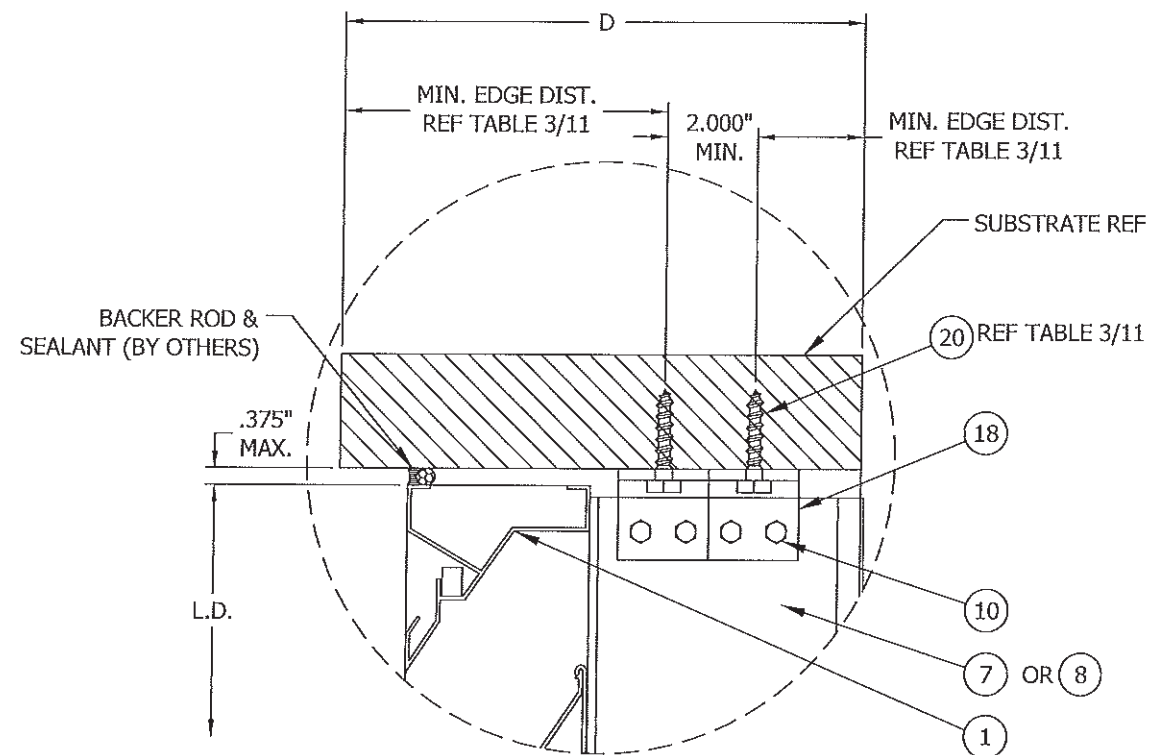
TOLERANCES
DECIMAL DIMENSIONS:
3 PLACE .XXX ±.010
2 PLACE .XX ±.020
FRACTION DIMENSIONS: ±1/16
ANGLE DIMENSIONS ±2°
USE WIG-007 & 008
UNLESS SPECIFIED OTHERWISE

| | | | |
|-----------------|-----------------|--------------------|----------------|
| DWN. BY: DJR | CHK. BY: DLC | APPV'D. BY: DLC | APPV'D. BY: |
| DATE: 3/15/06 | DATE: 5/26/06 | DATE: 5/26/06 | DATE: |

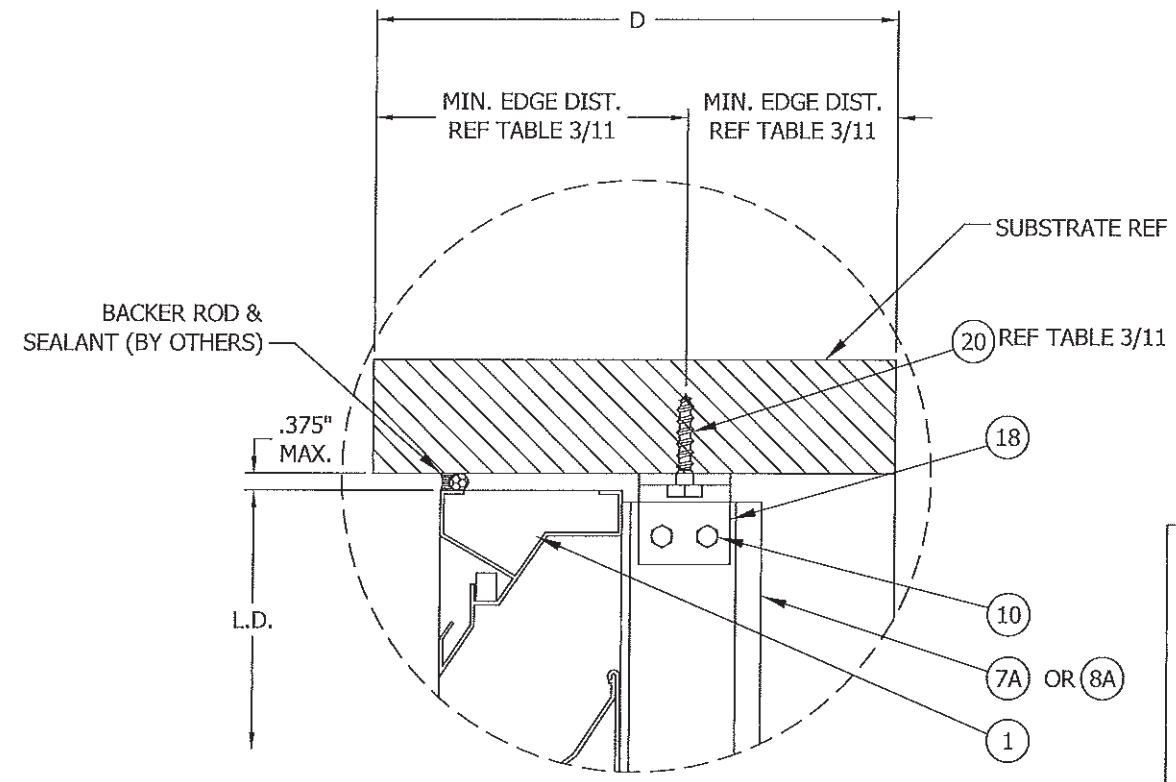
NOTES, PARTS LIST & ASSEMBLY VIEWS

| | | | | | | |
|---|----------------------|-------------|--------------|----------------|-----|--------|
| D | COMPLETE REVISION | CJD | SDL | MMM | | 3/2/18 |
| REV. LETTER | REVISION DESCRIPTION | DWN. BY: | CHK'D BY: | APPV'D. BY: | ECN | DATE |
|  | | PLOT SCALE | | | | |
| | | NONE | | ECN: | | |
| TITLE | | REV. D | | SHEET 1 OF 11 | | |
| ELF375DXD STANDARD INSTALLATION | | DWG. NO. | | 60-021902-00D | | |

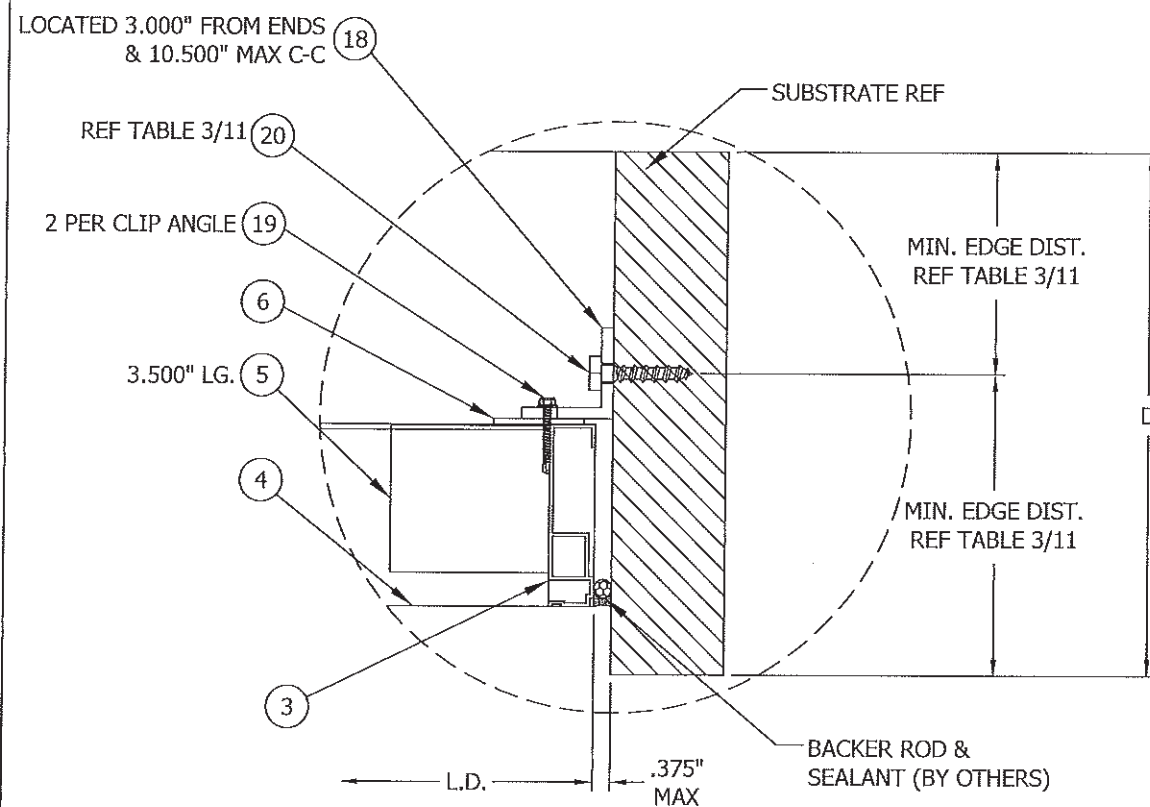
| | | | | | | | |
|---|------------------|------------------|--------------------|----------------|---|---------------------------|-------------------------|
| TOLERANCES DECIMAL DIMENSIONS: 3 PLACE .XXX ±.010 2 PLACE .XX ±.020 FRACTION DIMENSIONS ±1/16 ANGLE DIMENSIONS ±2° USE WIQ-007 & 008 UNLESS SPECIFIED OTHERWISE | DWN. BY: DJR | CHK. BY: DLC | APPV'D. BY: DLC | APPV'D. BY: |  3900 DR. GREAVES RD GRANDVIEW, MO 64030 AUTHORITY IN AIR CONTROL | DT. DT. PLOT SCALE | DT. DT. ECN: _____ |
| | DATE: 3/15/06 | DATE: 5/26/06 | DATE: 5/26/06 | DATE: | | NONE | REV. D SHEET 2 OF 11 |
| ASSEMBLY 'A' CHANNEL FRAME & DETAILS | | | | | TITLE ELF375DXD STANDARD INSTALLATION | DWG. NO. 60-021902-00D | |



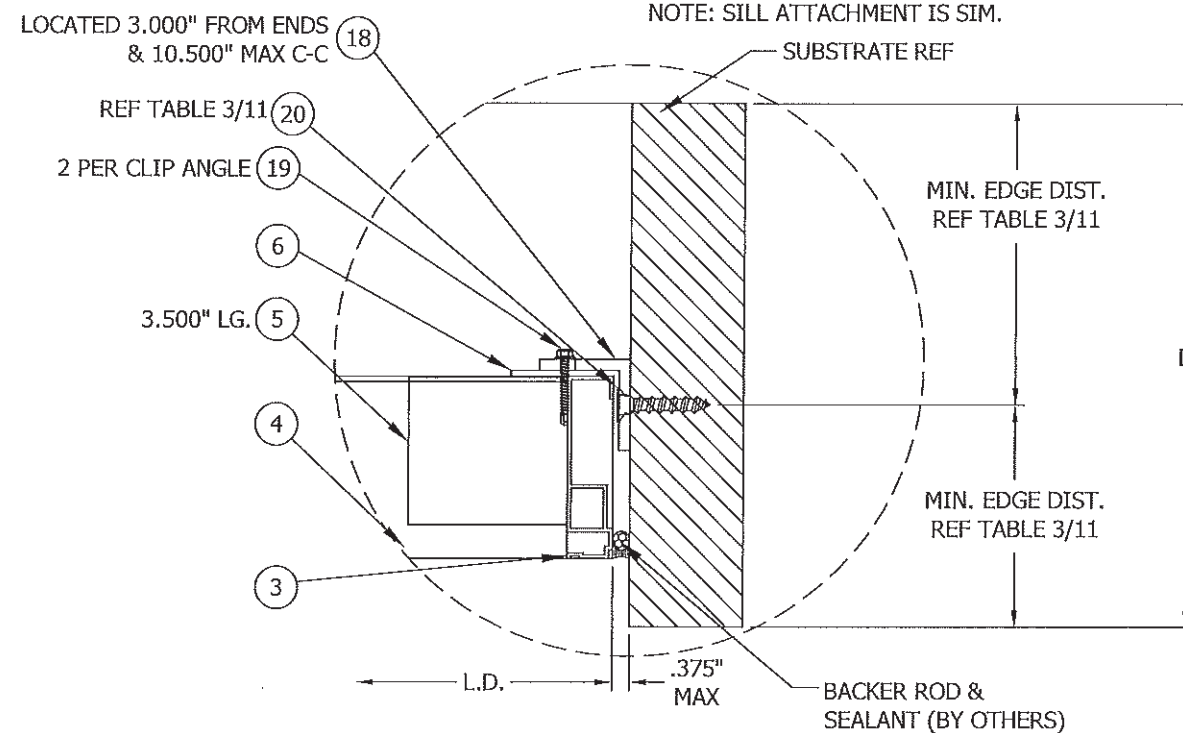
6 HEAD ATTACHMENT W/ 466 SUPPORT DETAIL
02 N.T.S.
WHEN HEIGHT > 60.000"
NOTE: SILL ATTACHMENT IS SIM.



7 HEAD ATTACHMENT W/ 468 SUPPORT DETAIL
02 N.T.S.
WHEN HEIGHT ≤ 60.000"
NOTE: SILL ATTACHMENT IS SIM.



8 JAMB ATTACHMENT DETAIL
02 N.T.S.



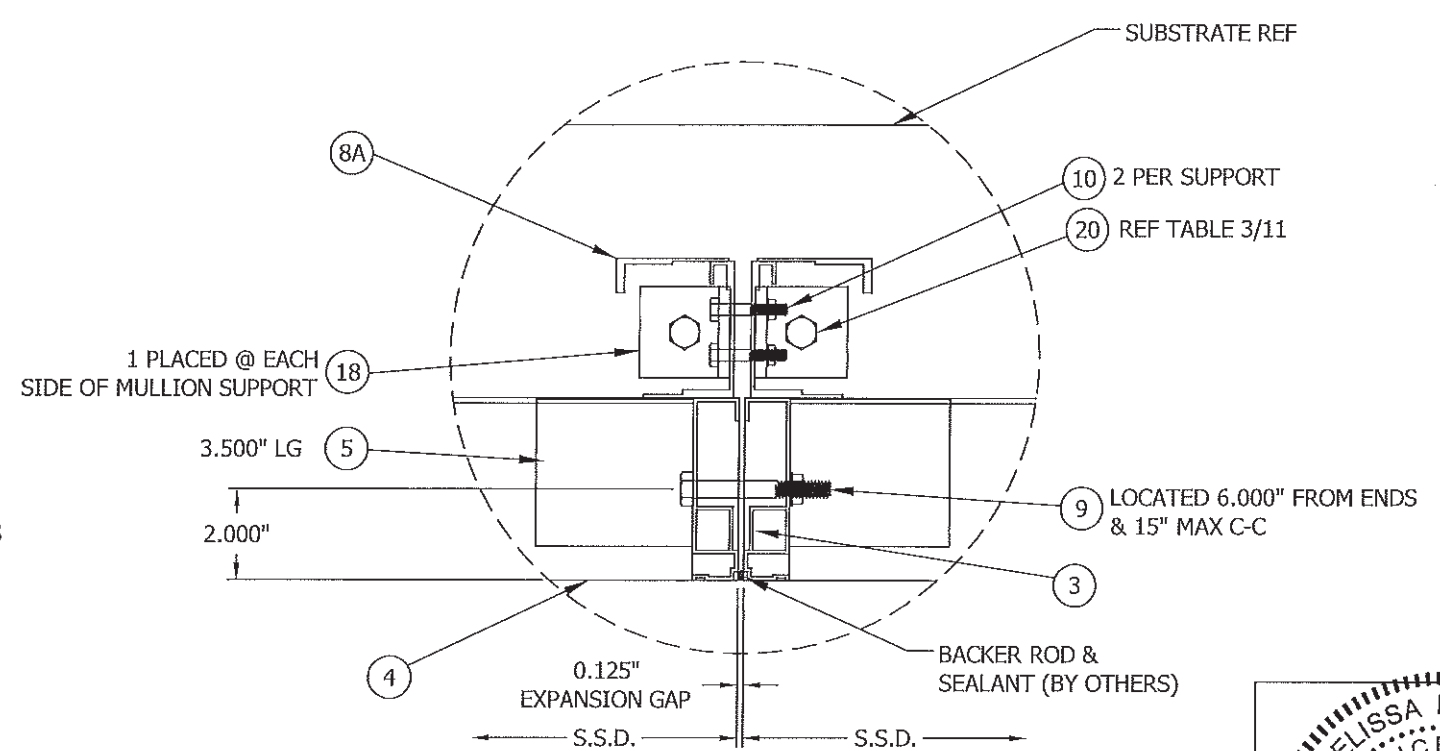
9 ALTERNATE JAMB ATTACHMENT DETAIL
02 N.T.S.

MELISSA M. MASSAR
LICENSE
No 84659
STATE OF
FLORIDA
PROFESSIONAL ENGINEER
4/13/18

MELISSA M. MASSAR, P.E.
NO. 84659

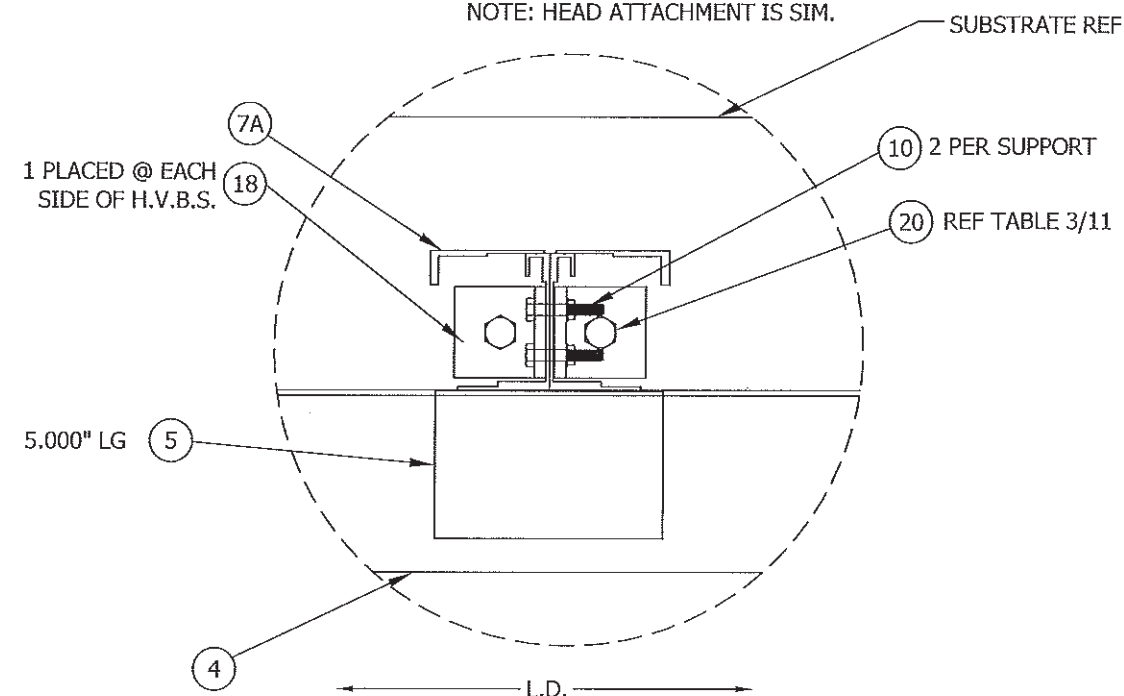
PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 23-1116.11
Expiration Date 01/03/2028
By *[Signature]*
Miami-Dade Product Control

| TOLERANCES | | DWN. | CHK. | APPV'D. | APPV'D. | RUSKIN | | PLOT SCALE | |
|----------------------------|--|---------------------------------|---------------|---------------|---------|---------------------|--|----------------------|--|
| DECIMAL DIMENSIONS: | | BY: DJR | BY: DLC | BY: DLC | BY: | 3900 DR. GREAVES RD | | NONE | |
| 3 PLACE .XXX ±.010 | | DATE: 3/15/06 | DATE: 5/26/06 | DATE: 5/26/06 | DATE: | GRANDVIEW, MO 64030 | | ECN: | |
| 2 PLACE .XX ±.020 | | ASSEMBLY 'A' ATTACHMENT DETAILS | | | | ELF375DXD STANDARD | | REV. D SHEET 4 OF 11 | |
| FRACTION DIMENSIONS ±1/16 | | | | | | INSTALLATION | | DWG. NO. | |
| ANGLE DIMENSIONS ±2° | | | | | | | | 60-021902-00D | |
| USE WIQ-007 & 008 | | | | | | | | | |
| UNLESS SPECIFIED OTHERWISE | | | | | | | | | |




11 468 MULLION ATTACHMENT DETAIL

02 N.T.S.
WHEN HEIGHT $\leq 60.000"$
NOTE: HEAD ATTACHMENT IS SIM.



13 468 H.V.B.S. ATTACHMENT DETAIL

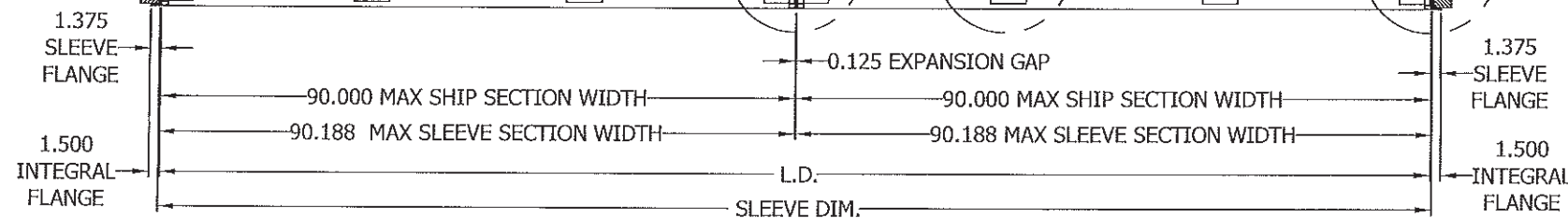
02 N.T.S.
WHEN HEIGHT $\leq 60.000''$
NOTE: HEAD ATTACHMENT IS SIM.

| | | | | | | |
|--|----------------------|------------|-----------|---------------|--------|------|
| D | COMPLETE REVISION | CJD | SDL | MMM | 3/2/18 | |
| REV. LETTER | REVISION DESCRIPTION | DWN. BY: | CHK'D BY: | APPV'D. BY: | ECN | DATE |
|  3900 DR, GREAVES RD GRANDVIEW, MO 64030 | | PLOT SCALE | | ECN: _____ | | |
| | | NONE | | | | |
| TITLE | | REV. D | | SHEET 5 OF 11 | | |
| ELF375DXD STANDARD INSTALLATION | | DWG. NO. | | 60-021902-00D | | |

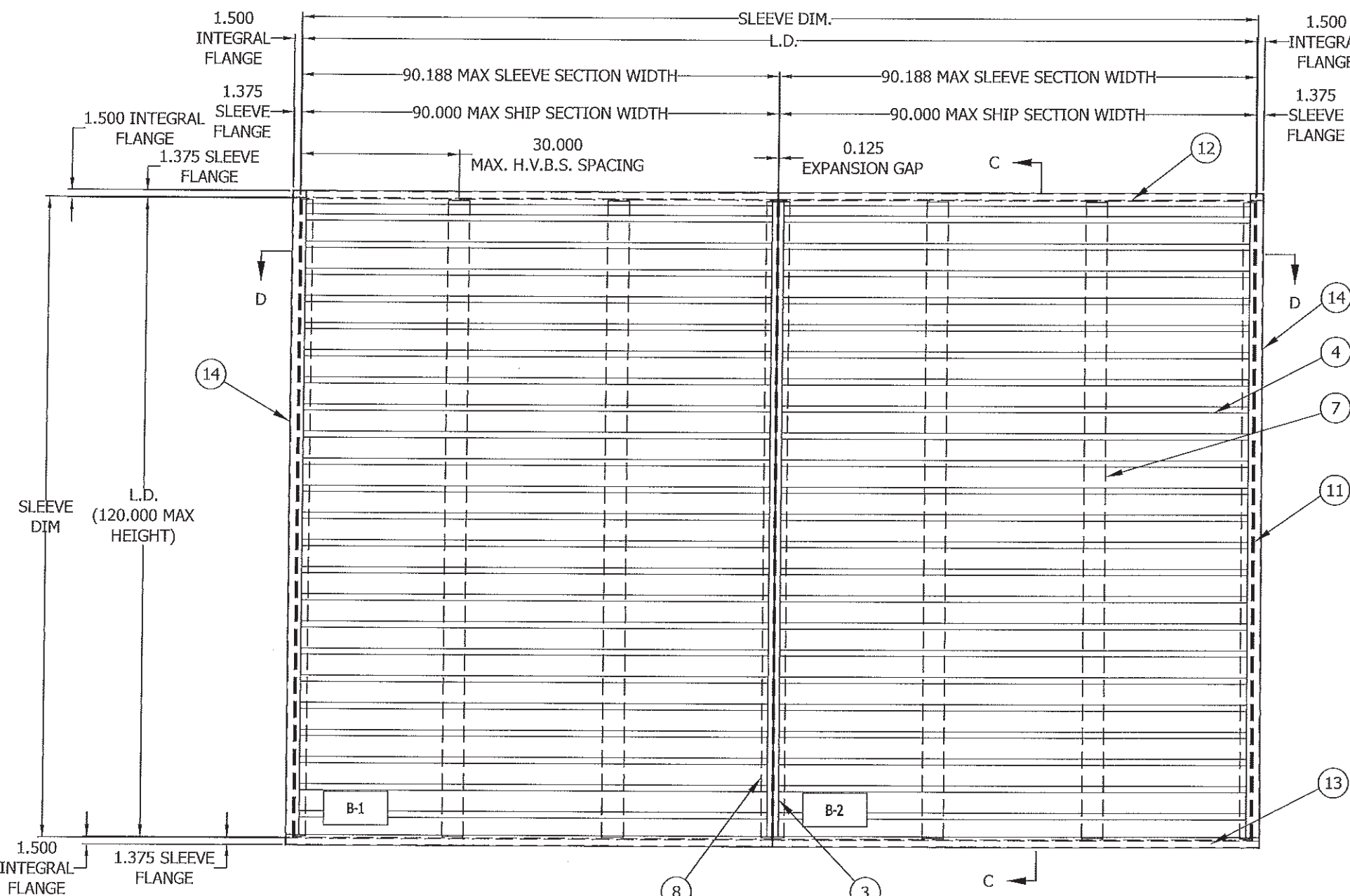
REF. DET. 18/08 FOR 466 MULLION CONNECTION
REF. DET.19/08 FOR 468 MULLION CONNECTION

REF. DET. 20/08 FOR 466 H.V.B.S. CONNECTION
REF. DET. 21/08 FOR 468 H.V.B.S. CONNECTION

REF. DET. 17/07 FOR ATTACHMENT DETAIL



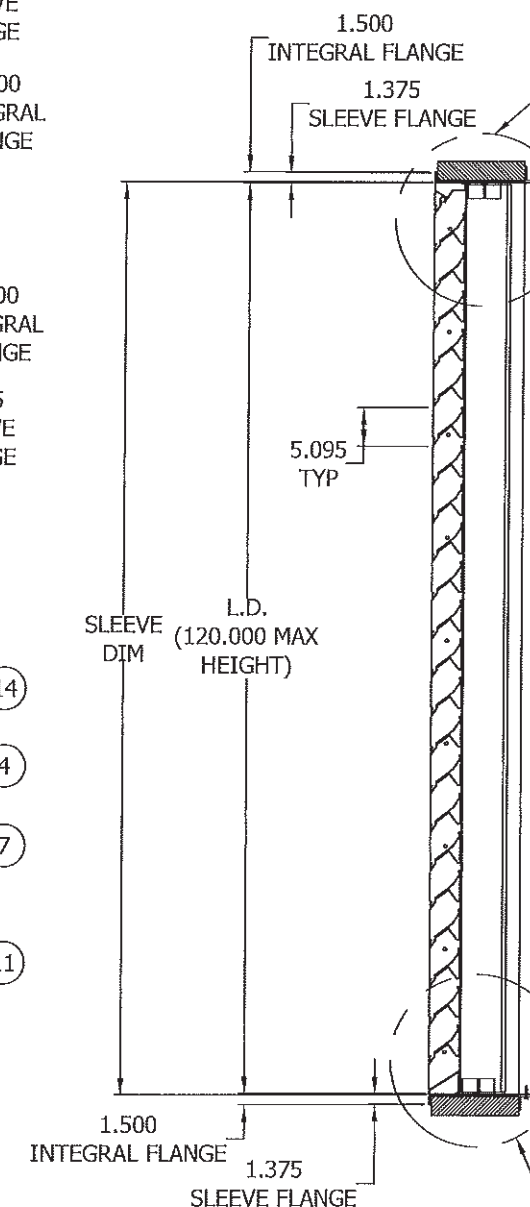
SECTION D-D
N.T.S.



ASSEMBLY 'B' UNIVERSAL SLEEVE

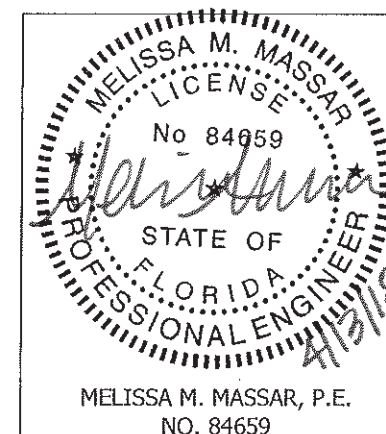
N.T.S.
MAX SHIP SECTION 90" X 120".
LOUVER CONSTRUCTION SIMILAR TO ASSEMBLY 'A'

FRONT VIEW



SECTION C-C
N.T.S.

REF DET. 14/07 FOR 466 SUPPORT CONNECTION
REF. DET. 15/07 FOR 468 SUPPORT CONNECTION
REF. DET. 16/07 FOR ATTACHMENT DETAIL



PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 23-1116.11

Expiration Date 01/03/2028

By *[Signature]*
Miami-Dade Product Control

REF DET. 14/07 FOR 466 SUPPORT CONNECTION (SIM)
REF. DET. 15/07 FOR 468 SUPPORT CONNECTION (SIM)
REF. DET. 16/07 FOR ATTACHMENT DETAIL (SIM)

TOLERANCES
DECIMAL DIMENSIONS:
3 PLACE .XXX ±0.010
2 PLACE .XX ±0.020
FRACTION DIMENSIONS: 1/16
ANGLE DIMENSIONS ±2°
USE WIQ-007 & 008
UNLESS SPECIFIED OTHERWISE


DWN. BY: DJR 3/15/06
CHK. BY: DLC 5/28/06
APP'D. BY: DLC 5/28/06
APP'D. BY: 5/28/06

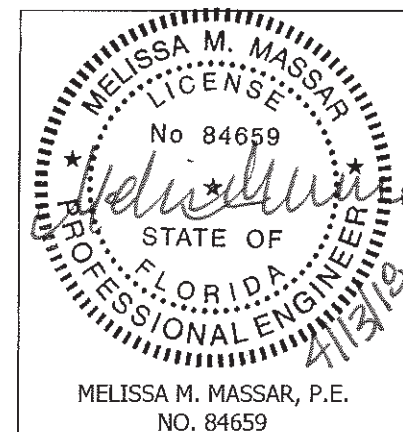
ASSEMBLY 'B' UNIVERSAL SLEEVE
& DETAILS

| | | | | | |
|--------------------------|----------------------|--|-----------|----------------------|--------|
| D | COMPLETE REVISION | CJD | SDL | MMM | 3/2/18 |
| REV. LETTER | REVISION DESCRIPTION | DWN. BY: | CHK'D BY: | APP'D. BY: | ECN |
| | | BY: | BY: | BY: | DATE |
| RUSKIN | | 3900 DR. GREAVES RD GRANDVIEW, MO 64030 | | PLOT SCALE | |
| AUTHORITY IN AIR CONTROL | | NONE | | ECN: _____ | |
| TITLE | | ELF375DXD STANDARD INSTALLATION | | REV. D SHEET 6 OF 11 | |
| | | | | DWG. NO. | |
| | | | | 60-021902-00D | |



| | | | | |
|--|----------------------------------|----------------------------------|-------------------------------------|-------------------------|
| 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 | DWN. BY: DJR DATE: 3/15/06 | CHK. BY: DLC DATE: 5/26/06 | APPV'D. BY: DLC DATE: 5/25/06 | APPV'D. BY: DATE: |
| | ASSEMBLY 'B' CONNECTION DETAILS | | | |

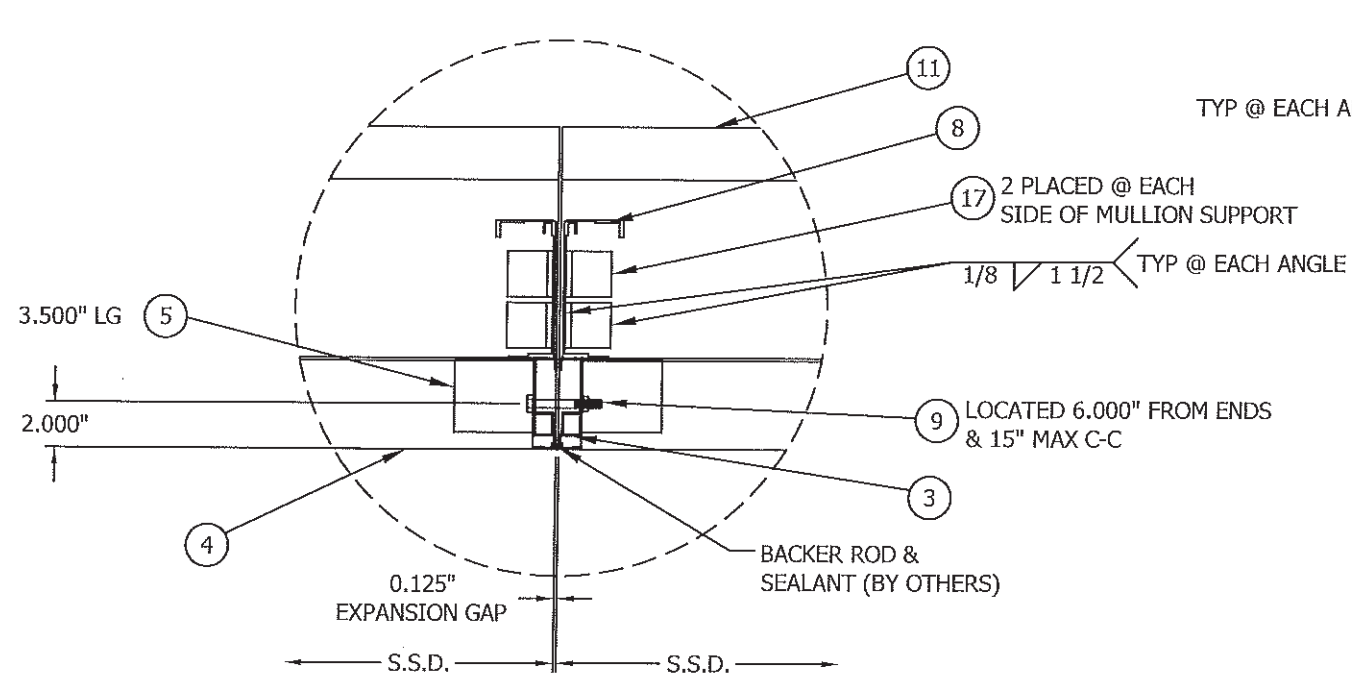
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| D | COMPLETE REVISION | CJD | SDL | MMM | 3/2/18 |
| REV. LETTER | REVISION DESCRIPTION | DWN. BY: | CHK'D BY: | APP'V'D. BY: | ECN DATE |
|  RUSKIN 3903 DR. GREAVES RD GRANDVIEW, MO 64030 <i>AUTHORITY IN AIR CONTROL</i> | | PLOT SCALE | | | |
| | | NONE | | ECN: _____ | |
| TITLE | | REV. | D | SHEET 7 OF 11 | |
| ELF375DXD STANDARD INSTALLATION | | DWG. NO. | | 60-021902-00D | |



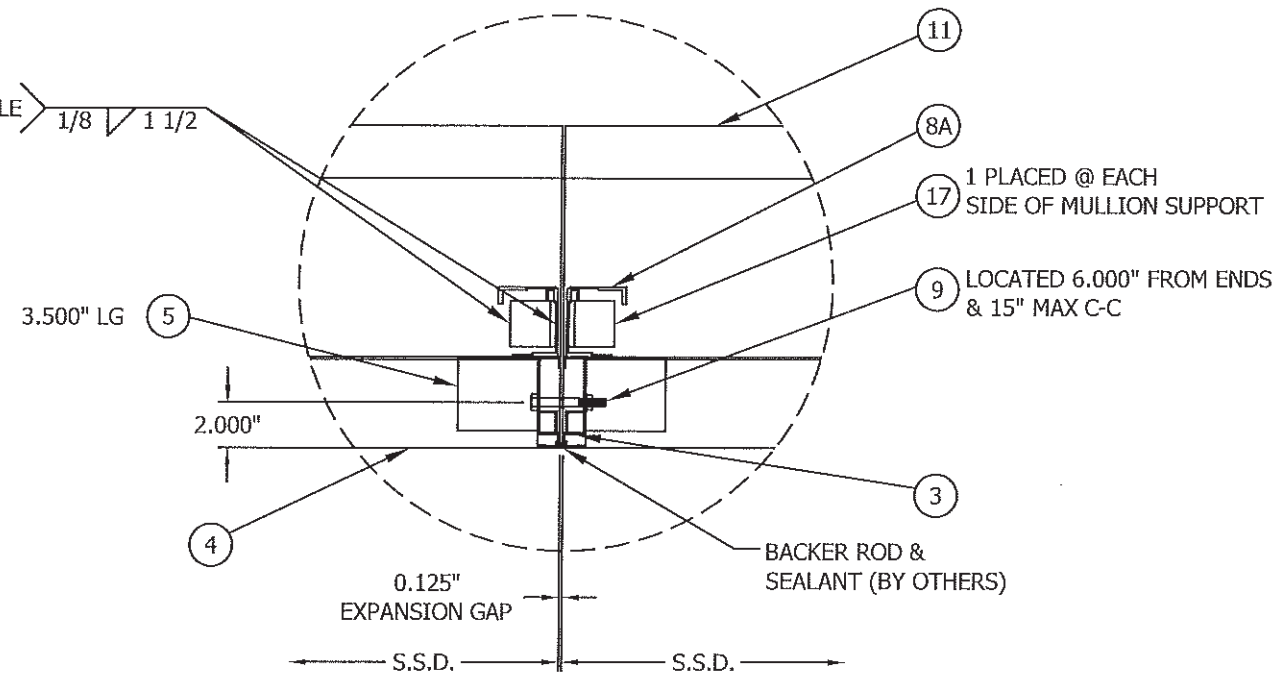
PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 23-1116.11

Expiration Date 01/03/2028

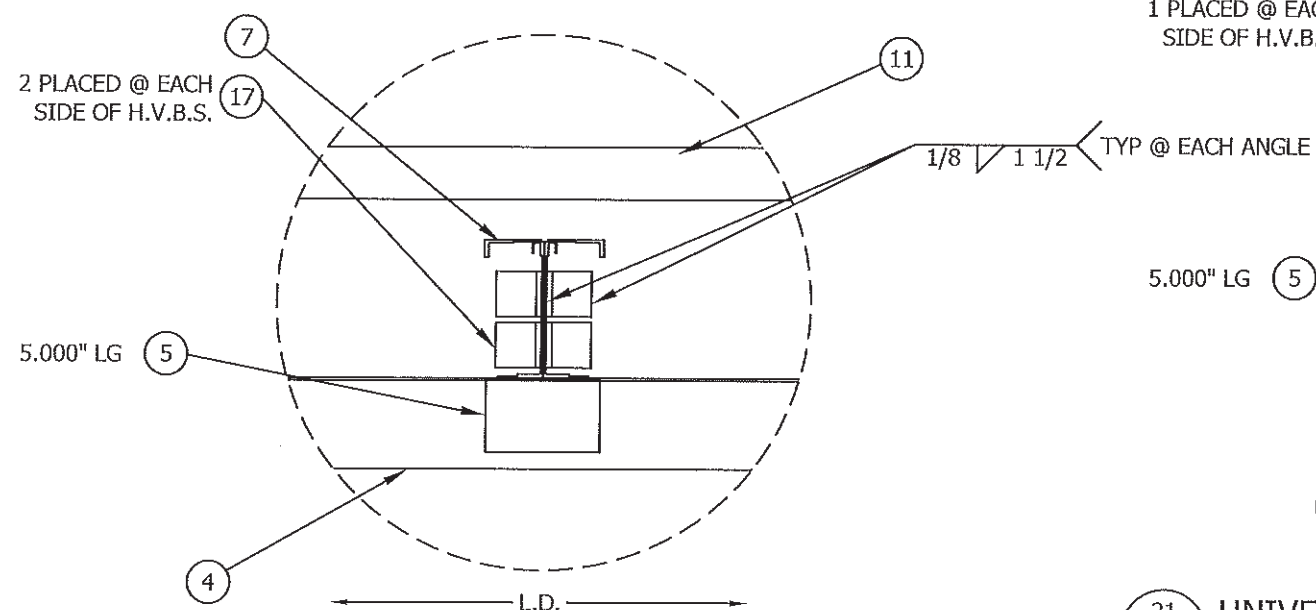
By
Miami-Dade Product Control



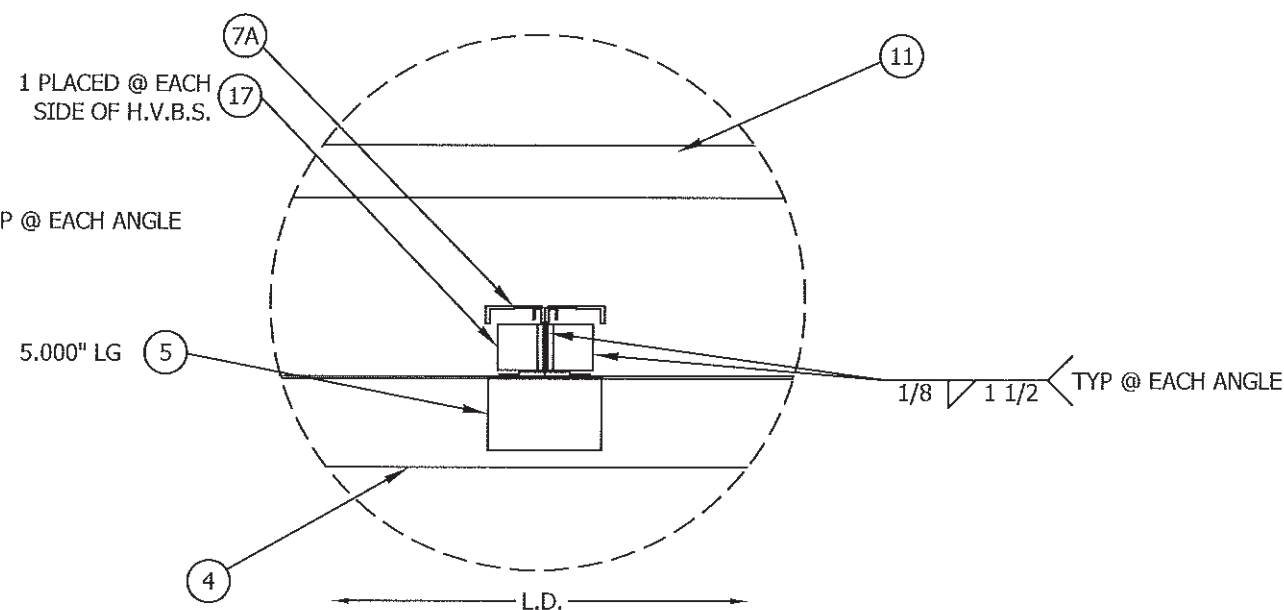
18
06 UNIVERSAL SLEEVE 466 MULLION ATTACHMENT DETAIL
N.T.S.
WHEN HEIGHT > 60.000"



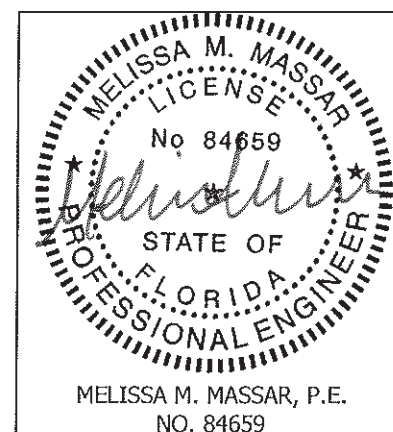
19
06 UNIVERSAL SLEEVE 468 MULLION ATTACHMENT DETAIL
N.T.S.
WHEN HEIGHT ≤ 60.000"



20
06 UNIVERSAL SLEEVE 466 HVBS ATTACHMENT DETAIL
N.T.S.
WHEN HEIGHT > 60.000"



21
06 UNIVERSAL SLEEVE 468 H.V.B.S. ATTACHMENT DETAIL
N.T.S.
WHEN HEIGHT ≤ 60.000"

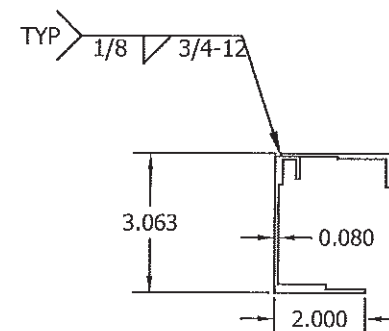
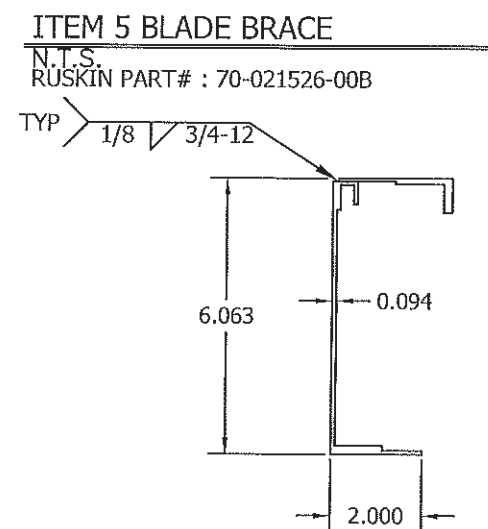
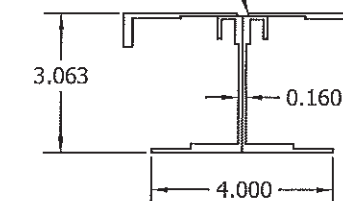
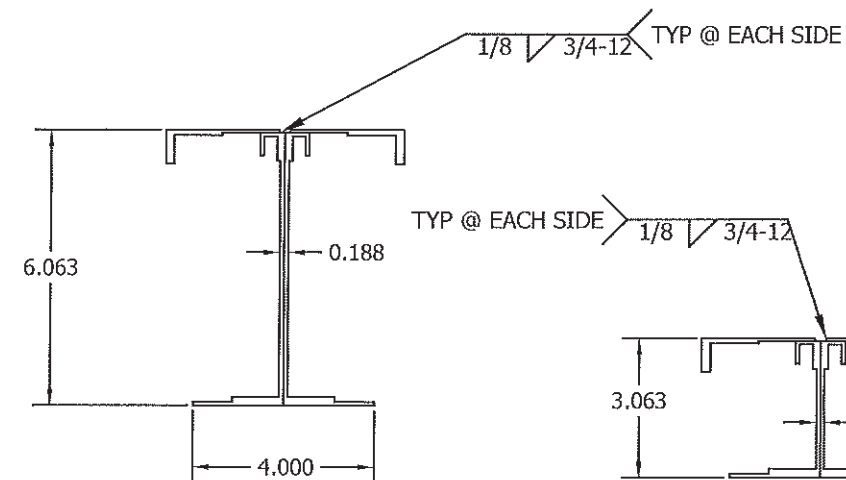
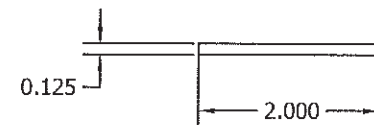
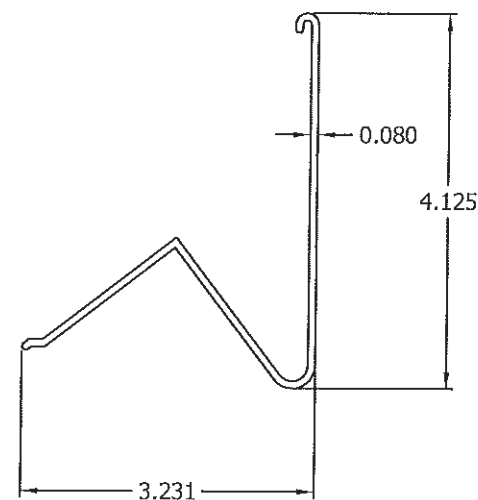
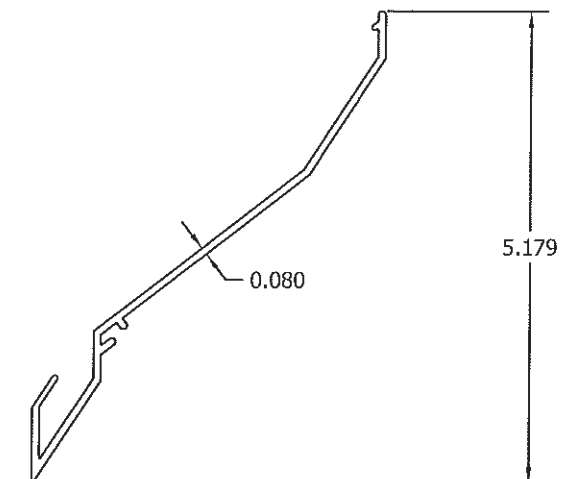
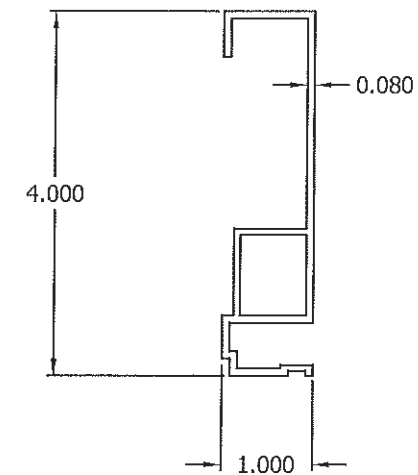
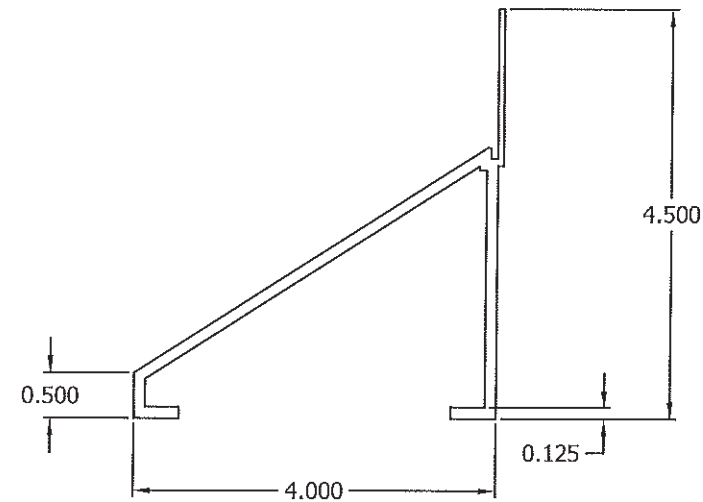
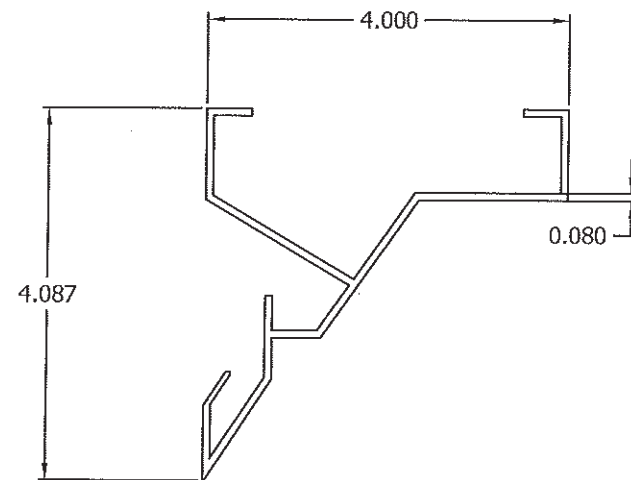


PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 23-1116.11
Expiration Date 01/03/2028
By *[Signature]*
Miami-Dade Product Control

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

| | | | |
|----------------------------------|----------------------------------|-------------------------------------|-------------------------|
| DWN. BY: DJR DATE: 3/15/06 | CHK. BY: DLC DATE: 5/26/06 | APPV'D. BY: DLC DATE: 5/26/06 | APPV'D. BY: DATE: |
| ASSEMBLY "B" ATTACHMENT DETAILS | | | |

| | | | | | |
|---|----------------------|--|--------------|--------------------|-------------|
| D | COMPLETE REVISION | CJD | SDL | MMM | 3/2/18 |
| REV. LETTER | REVISION DESCRIPTION | DWN. BY: | CHK'D BY: | APPV'D. BY: | ECN DATE |
| RUSKIN AUTHORITY IN AIR CONTROL | | 3900 DR. GREAVES RD GRANDVIEW, MO 64030 | | PLOT SCALE NONE | ECN: |
| TITLE ELF375DXD STANDARD INSTALLATION | | REV. D | | SHEET 8 OF 11 | |
| | | DWG. NO. | | 60-021902-00D | |




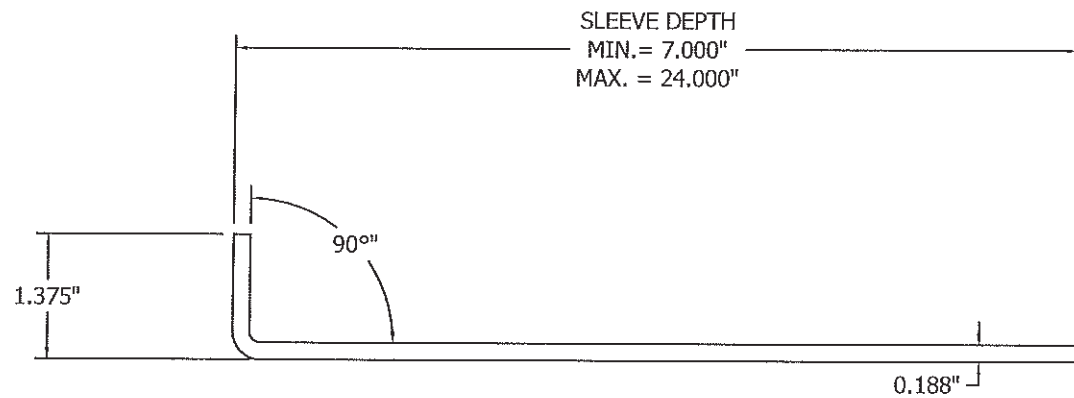
MELISSA M. MASSAR, P.E.
NO. 84659

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 23-1116.11

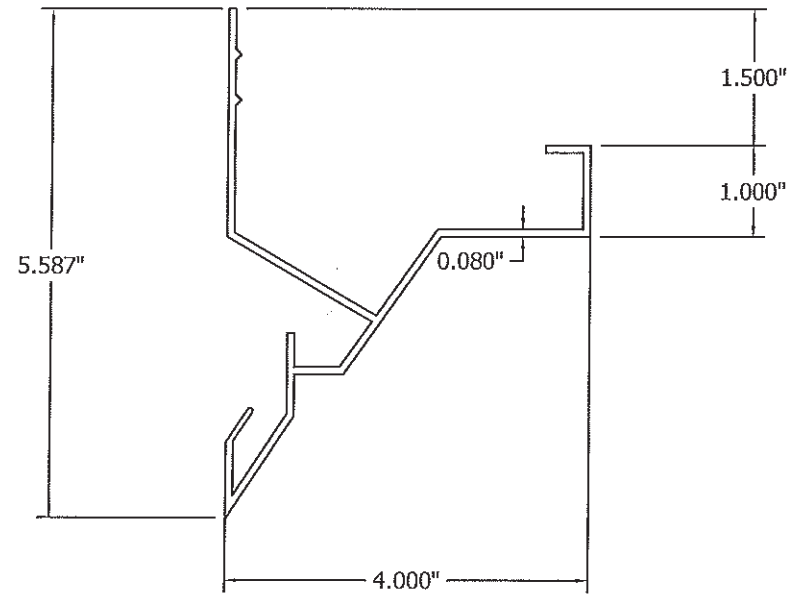
Expiration Date 01/03/2028

By
Miami-Dade Product Control

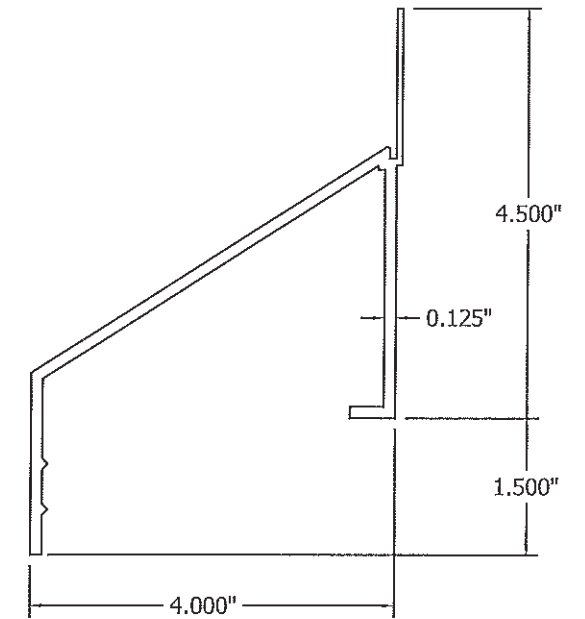
| | | | | | | | | |
|--|-----------------|-----------------|--------------------|----------------|--|---|----------------------------------|---------------|
| TOLERANCES DECIMAL DIMENSIONS: 3 PLACE .XXX ±.010 2 PLACE .XX ±.020 FRACTION DIMENSIONS: ±1/16 ANGLE DIMENSIONS ±2° USE WIQ-007 & 008 UNLESS SPECIFIED OTHERWISE | DWN. BY: DJR | CHK. BY: DLC | APPV'D. BY: DLC | APPV'D. BY: |  3900 DR. GREAVES RD GRANDVIEW, MO 64030 AUTHORITY IN AIR CONTROL | DT: BT: BY: | PLOT SCALE NONE | ECN: |
| | DATE: 3/15/06 | DATE: 5/26/06 | DATE: 5/26/06 | DATE: | | TITLE ELF375DXD STANDARD INSTALLATION | REV. D DWG. NO. 60-021902-00D | SHEET 9 OF 11 |



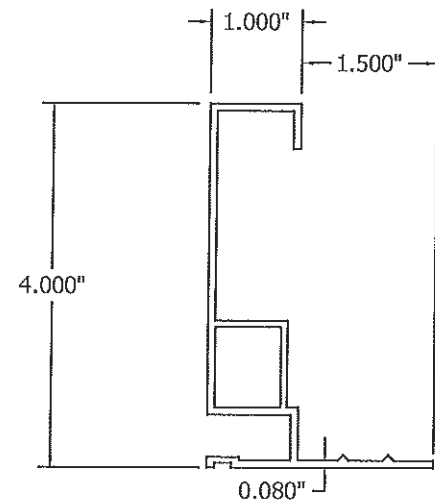
ITEM 11 FRONT FLANGE UNIVERSAL SLEEVE
N.T.S.



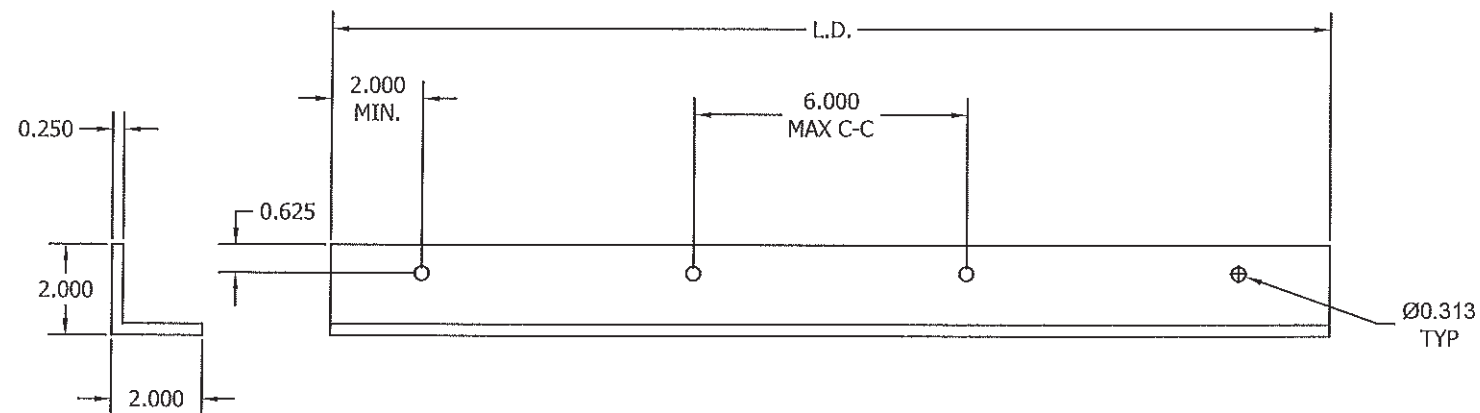
ITEM 12 LOUVER HEAD FRAME W/ INTEGRAL FLANGE
N.T.S.
RUSKIN PART # : 70-020641-00B
OPTIONAL



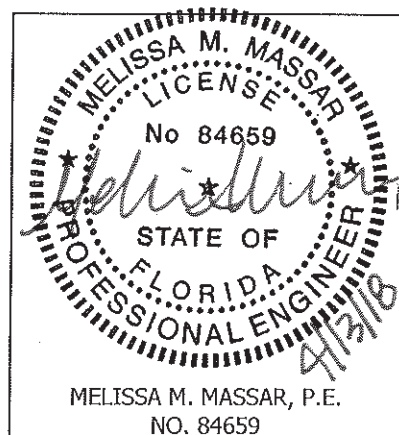
ITEM 13 LOUVER SILL FRAME W/ INTEGRAL FLANGE
N.T.S.
RUSKIN PART # : 70-020836-00B
OPTIONAL



ITEM 14 LOUVER JAMB FRAME W/ INTEGRAL FLANGE
N.T.S.
RUSKIN PART # : 70-020404-00B
OPTIONAL



ITEM 15 CONT. RETAINING ANGLE
N.T.S.



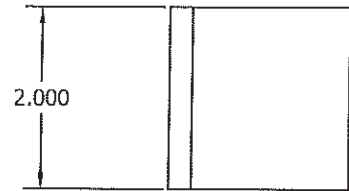
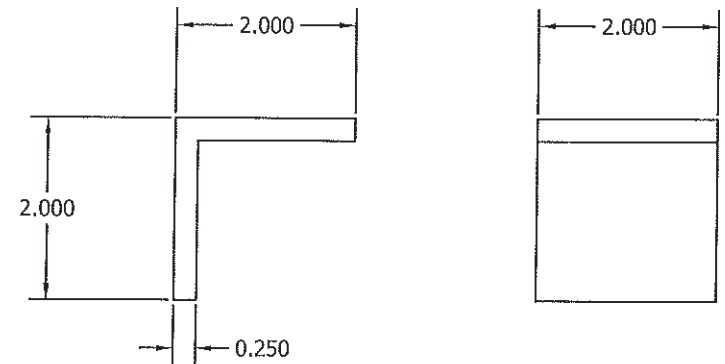
PRODUCT REVISED
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Expiration Date 01/03/2028
By *[Signature]*
Miami-Dade Product Control

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

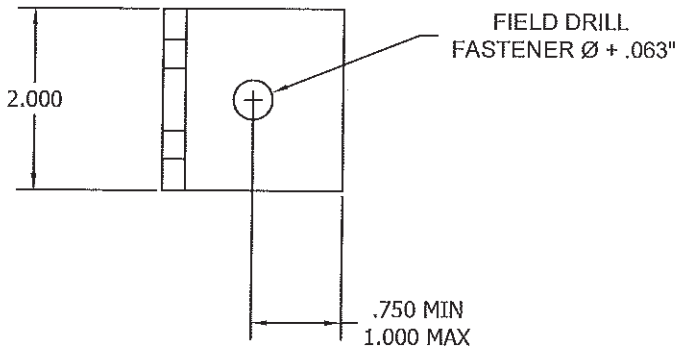
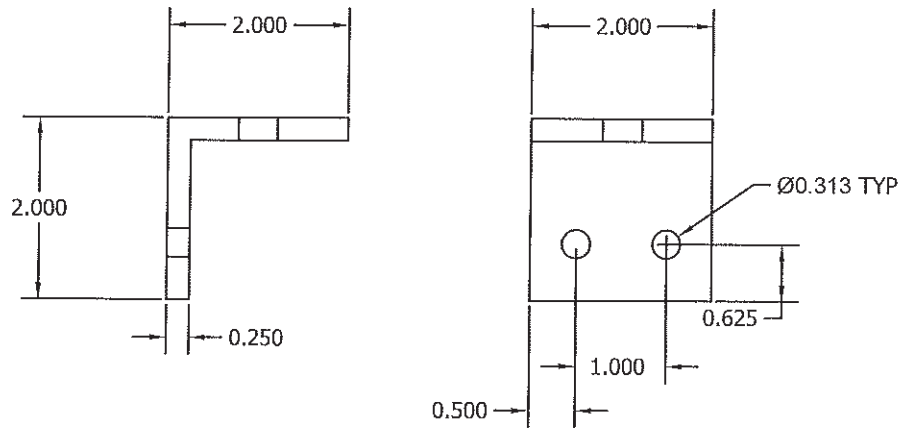
| | | | |
|-----------------|-----------------|--------------------|----------------|
| DWN. BY: DJR | CHK. BY: DLC | APPV'D. BY: DLC | APPV'D. BY: |
| DATE: 3/15/06 | DATE: 5/26/06 | DATE: 5/26/06 | DATE: |

PARTS

| | | | | | |
|---|----------------------|--------------------|-----------|----------------|--------|
| D | COMPLETE REVISION | CJD | SDL | MMM | 3/2/18 |
| REV. LETTER | REVISION DESCRIPTION | DWN. BY: | CHK'D BY: | APPV'D. BY: | ECN |
| | | | | | |
| RUSKIN AUTHORITY IN AIR CONTROL | | PLOT SCALE NONE | | ECN: _____ | |
| TITLE ELF375DXD STANDARD INSTALLATION | | REV. D | | SHEET 10 OF 11 | |
| | | DWG. NO. | | 60-021902-00D | |



ITEM 17 UNIVERSAL SLEEVE ATTACHMENT ANGLE
N.T.S.

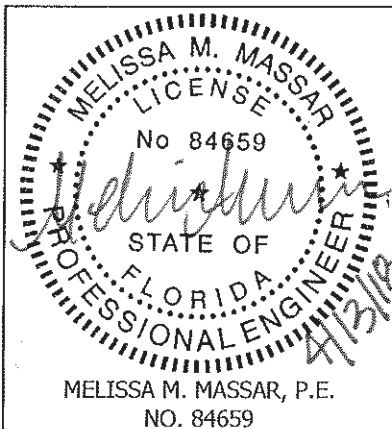


ITEM 18 ATTACHMENT CLIP ANGLE
N.T.S.

TABLE 3 SUBSTRATE FASTENER (BY OTHERS) (ITEM 20)

| SUBSTRATE TYPE | MIN. SUBSTRATE REQUIREMENTS | FASTENER TYPE | MIN. EMBEDMENT | MIN. EDGE DISTANCE | |
|------------------|--|---|---------------------------------|--------------------|----------------------------------|
| | | | | JAMB CLIP ANGLES | HVBS/MULLION SUPPORT CLIP ANGLES |
| WOOD | 3" THICK, 0.42 SPECIFIC GRAVITY | 3/8" DIA. BOLT W/ NUT, MIN. A307 GRADE A | 3 THREADS BEYOND NUT | 1 1/2" | 1 1/2" |
| | | 3/8" DIA. LAG SCREW, MIN. A307 GRADE A | 2 5/8" | 1 1/2" | 1 1/2" |
| STEEL | 18 GA, 45 KSI TENSILE STRENGTH, 33 KSI YIELD STRENGTH | 3/8" DIA. BOLT W/ NUT, MIN. A307 GRADE A | 3 THREADS BEYOND NUT | 3/4" | 3/4" |
| | 14 GA, 45 KSI TENSILE STRENGTH, 33 KSI YIELD STRENGTH | 1/4" DIA. SELF DRILLING SCREW, MIN. SAE GRADE 2* | 3 THREADS BEYOND SUB. THICKNESS | 1/2" | 1/2" |
| ALUMINUM | 0.060" THICK, 20 KSI TENSILE STRENGTH, 15 KSI YIELD STRENGTH | 3/8" DIA. BOLT W/ NUT, MIN. A307 GRADE A | 3 THREADS BEYOND NUT | 3/4" | 3/4" |
| | 0.125" THICK, 20 KSI TENSILE STRENGTH, 15 KSI YIELD STRENGTH | 5/16" DIA. SELF DRILLING SCREW, MIN. SAE GRADE 2* | 3 THREADS BEYOND SUB. THICKNESS | 5/8" | 5/8" |
| CONCRETE | CRACKED, 2500 PSI COMP. STRENGTH | 1/4" DIA. HILTI KWIK HUS EZ, CARBON STEEL | 2 1/2" | 1 5/8" | 5 1/2" |
| | | 3/8" DIA. DEWALT SCREW-BOLT+, CARBON STEEL | 3 1/4" | 1 1/2" | 4 7/8" |
| | UNCRAKED, 2500 PSI COMP. STRENGTH | 1/4" DIA. ELCO AGGRE-GATOR, 300 SERIES SS* | 1 3/8" | 3" | 3" |
| | | 3/8" DIA. ITW RED HEAD WEDGE ANCHOR, CARBON STEEL | 2 3/8" | 1 3/4" | 3 7/8" |
| GROUT FILLED CMU | ASTM C-90 BLOCK, 1500 PSI GROUT COMP. STRENGTH | 1/4" DIA. DEWALT SCREW-BOLT+, CARBON STEEL | 2 1/2" | 2 3/8" | 3" |
| | | 1/4" DIA. ELCO AGGRE-GATOR, 300 SERIES SS* | 2" | 4" | 4" |

NOTE: * COUNTER SUNK PHILLIPS FLAT HEAD ANCHORS MAY BE USED




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

| | | | |
|---------------|---------------|-----------------|-------------|
| DWN. BY: DJR | CHK. BY: DLC | APPV'D. BY: DLC | APPV'D. BY: |
| DATE: 3/15/06 | DATE: 5/26/06 | DATE: 5/26/06 | DATE: |

PARTS

| | | | | | | |
|---|----------------------|------------|-----------|----------------|-----|--------|
| D | COMPLETE REVISION | CJD | SDL | MMM | | 3/2/18 |
| REV. LETTER | REVISION DESCRIPTION | DWN. BY: | CHK'D BY: | APPV'D. BY: | ECN | DATE |
|  3900 DR. GREAVES RD GRANDVIEW, MO 64030 AUTHORITY IN AIR CONTROL | | PLOT SCALE | | | | |
| | | NONE | | ECN: _____ | | |
| TITLE | | REV. D | | SHEET 11 OF 11 | | |
| ELF375DXD STANDARD INSTALLATION | | DWG. NO. | | 60-021902-00D | | |