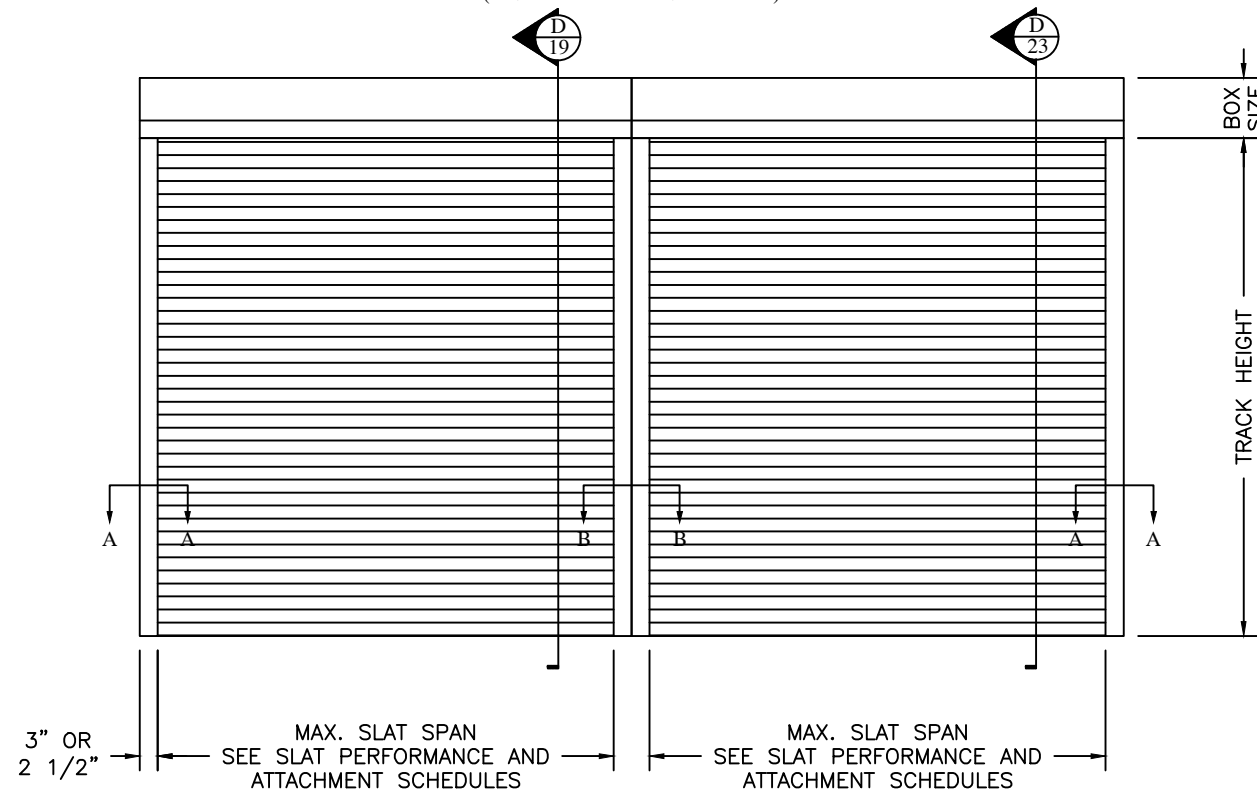
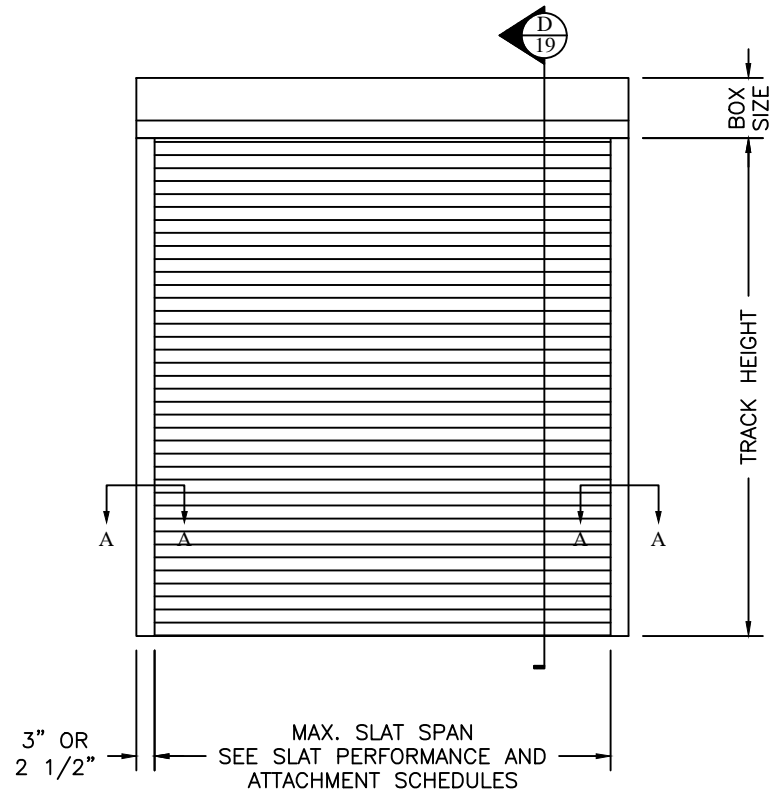


TYPICAL SINGLE UNIT
ELEVATION
(NO STORM BARS REQUIRED)

TYPICAL MULTIPLE UNIT
ELEVATION
(NO STORM BARS REQUIRED)
(UNITS SHARE CENTER POST)



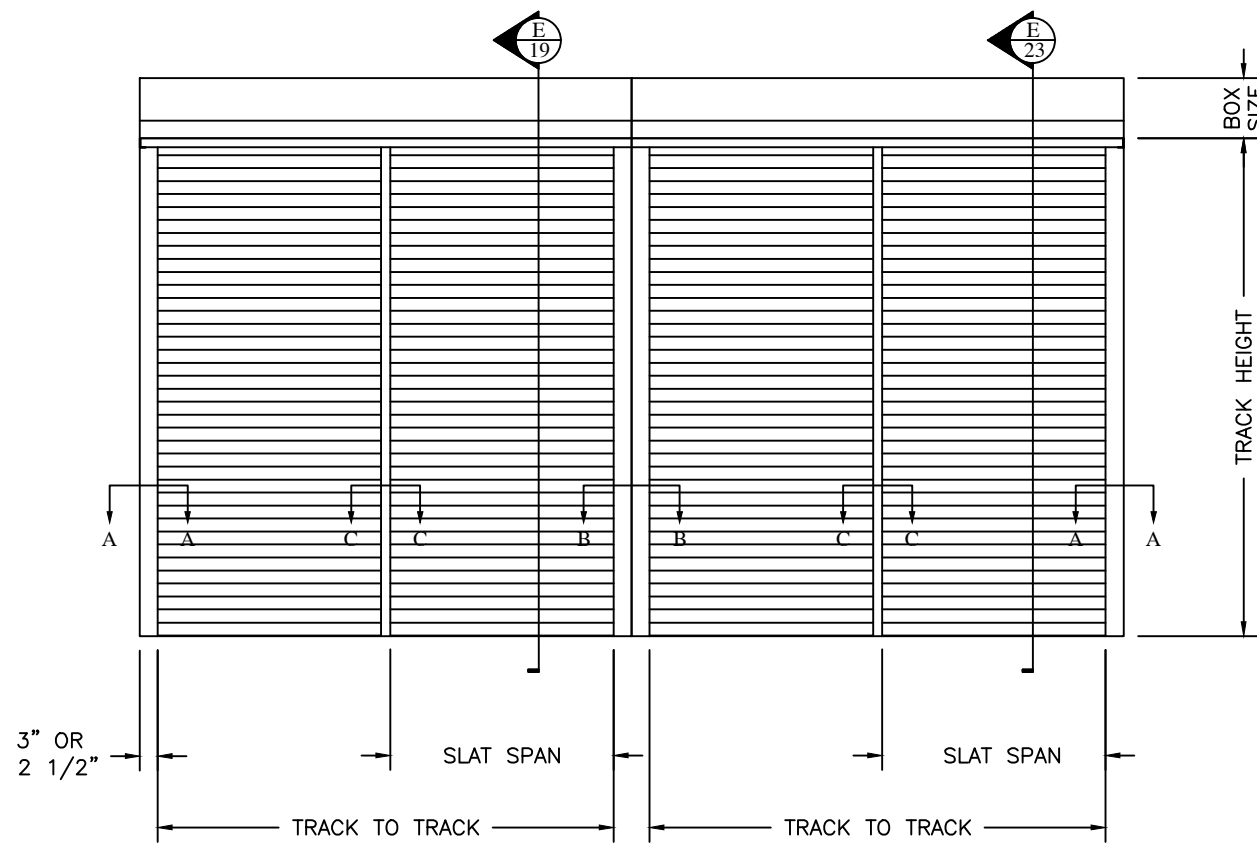
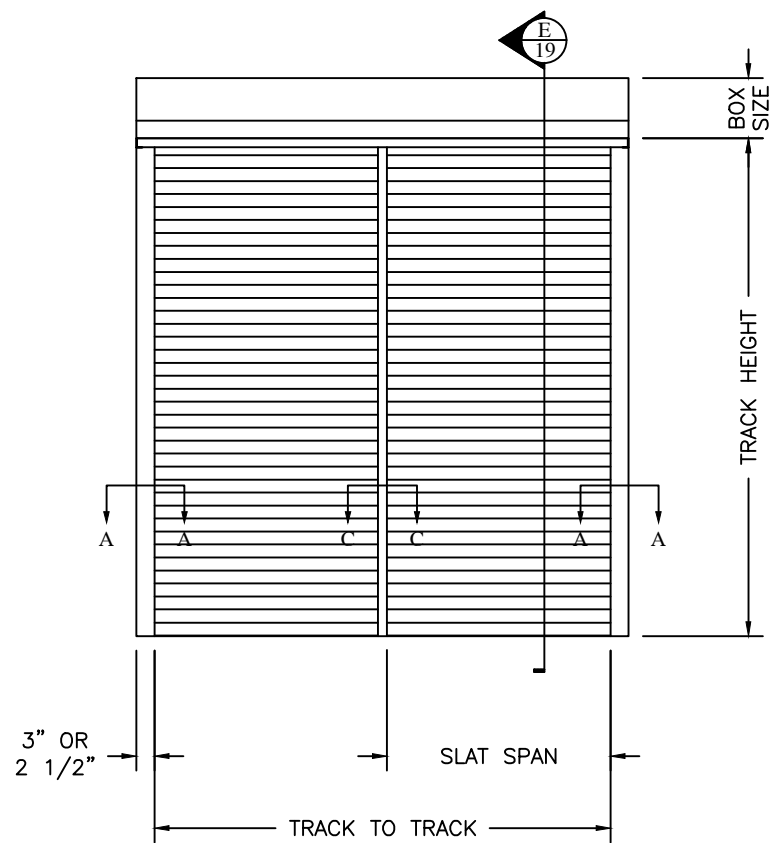
BY



TYPICAL SINGLE UNIT
ELEVATION
(STORM BARS REQUIRED)

MAX. SLAT SPAN
SEE SLAT PERFORMANCE AND
ATTACHMENT SCHEDULES

TYPICAL MULTIPLE UNIT
ELEVATION
(STORM BARS REQUIRED)
(UNITS SHARE CENTER POST)



SEE GENERAL
NOTES PAGE 2

NOTICE OF ACCEPTANCE
END RETENTION
PRODUCT APPROVAL

Digitally signed by:
Fowler, Donald
DN: CN = Fowler,
Donald OJ =
Colleagues,
VeriClaim, O365
Users
Date: 2020.10.31
15:49:35 -04'00'



DRAWN:	DLF	
DATE:	4-01-04	
APPROVED:	DLF	
DATE:	11-01-08	
DRAWING NO:	3-01-031	
SIZE:	B	REV: A
SCALE:	3/8" = 1'-0"	
SHEET:	1 OF 26	

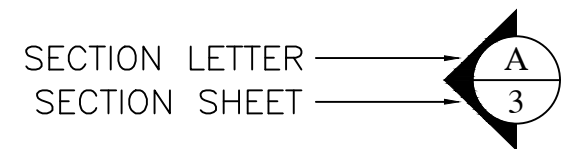
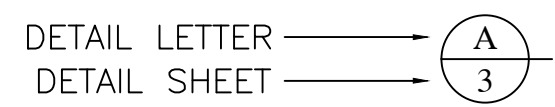
GENERAL NOTES:

1. THIS PRODUCT EVALUATION DOCUMENT (P.E.D.) FOR END RETENTION ROLL SHUTTER PRODUCTS IS DESIGNED IN ACCORDANCE WITH THE 2020 (7TH EDITION) OF THE FLORIDA BUILDING CODE (FBC), OUTSIDE HIGH VELOCITY HURRICANE ZONE . PRODUCT TESTING RECORDS AND REPORTS PER ATL 0126.01-00, ATL 0316.01-05, HTL 006-0106-03, HTL 006-0224-03, HTL 006-0104-05, AT 91850.01-401-44-RO, HETI 99-830-A, HETI 99-830-B, HETI 99-830-C, CTLA 2017W, CTLA 2017W-1, AND FTL LAB. NUMBER 6869. PRODUCT DESIGN AND TESTING ALSO COMPLIES WITH THE INTERNATIONAL BUILDING CODE (IBC) 2018.
2. DESIGN WIND LOADS SHALL BE DETERMINED AS PER SECTION 1609 OF THE ABOVE MENTIONED CODE USING ASCE 7-16 FOR INSTALLATIONS UNDER THE 2020 FBC.
3. NO 33-1/3% INCREASE IN ALLOWABLE STRESS HAS BEEN USED IN THE DESIGN OF THIS PRODUCT.
4. DESIGN PRESSURES NOTED HEREIN ARE BASED ON MAXIMUM TESTED PRESSURES DIVIDED BY A 1.5 SAFETY FACTOR.
5. ALL ALUMINUM EXTRUSIONS SHALL BE SPECIFIED HERE-IN. ANY SUBSTITUTIONS SHALL BE APPROVED BY A LICENSED PROFESSIONAL ENGINEER.
6. ALL SCREWS TO BE STAINLESS STEEL 304 OR 316 SERIES WITH MINIMUM 50 KSI YIELD POINT AND MINIMUM 85 KSI TENSILE STRENGTH, ALUMINUM, DACROMET COATED STEEL, OR GALVANIZED STEEL.
(SS SMS = STAINLESS STEEL SHEET METAL SCREW)
7. ANCHORS TO WALL SHALL BE AS FOLLOWS (UNLESS OTHERWISE NOTED):
 - (A) TO EXISTING 4000 PSI MIN. CONCRETE, OR AS SPECIFIED HEREIN:
 - Ø1/4" TAPCON ANCHORS, AS MANUFACTURED BY ELCO INDUSTRIES
 - #14 CRETEFLEX SS4 ANCHORS, AS MANUFACTURED BY ELCO INDUSTRIES
 - Ø3/8" POWER BOLTS, AS MANUFACTURED BY POWERS FASTENING, INC (3/8" POWER WEDGE BOLT MAYBE SUBSTITUTED).
 NOTES:
 - A.1) MINIMUM EMBEDMENT OF TAPCON ANCHORS OR EQUAL AND CRETE FLEX ANCHORS ANCHORS INTO CONCRETE SHALL BE 1¼ " UNLESS OTHERWISE SPECIFIED HEREIN.
 - A.2) MINIMUM EMBEDMENT OF POWER BOLT ANCHORS SHALL BE 2".
 - A.3) IN CASE THAT PRECAST STONE, PRECAST CONCRETE PANELS ARE FOUND ON THE EXISTING WALL, ANCHORS SHALL BE LONG ENOUGH TO REACH THE MAIN STRUCTURE BEHIND SUCH PANELS. ANCHORAGE EMBEDMENT SHALL BE PER THE PUBLISHED MINIMUMS.
 - (B) TO EXISTING CONCRETE BLOCK WALL:
 - Ø1/4" TAPCON ANCHORS
 - #14 CRETEFLEX SS4 ANCHORS
 NOTES:
 - B.1) MINIMUM EMBEDMENT OF TAPCON ANCHORS INTO THE CONCRETE BLOCK UNIT SHALL BE 1 1/4" UNLESS OTHERWISE SPECIFIED HEREIN.
 - B.2) MINIMUM EMBEDMENT OF CRETEFLEX ANCHORS INTO THE CONCRETE BLOCK UNIT SHALL BE 1 1/4" UNLESS OTHERWISE SPECIFIED HEREIN.
 - B.3) IN CASE THAT PRECAST STONE, PRECAST CONCRETE PANELS, ARE FOUND ON THE EXISTING WALL, ANCHORS SHALL BE LONG ENOUGH TO REACH THE MAIN STRUCTURE BEHIND SUCH PANELS. ANCHORAGE SHALL BE 1 1/4" MINIMUM.
 - (C) ANCHORS SHALL BE INSTALLED FOLLOWING ALL OF THE RECOMMENDATIONS AND SPECIFICATIONS OF THE ANCHOR'S MANUFACTURER.
 - (D) ANCHORAGE TO WOOD FRAME BUILDINGS IS SPECIFIED IN THIS DRAWING.
 - (E) ANCHOR MINIMUM EMBEDMENT DOES NOT INCLUDE EXTERIOR FINISH.
 - (F) ANCHORAGE SHALL BE INSTALLED INTO THE BUILDING'S MAIN WIND-FORCE RESISTANT STRUCTURAL COMPONENTS TO ENSURE A LOAD PATH INTO THE BUILDING'S FOUNDATION.
8. IT SHALL BE THE RESPONSIBILITY OF THE INSTALLATION CONTRACTOR TO VERIFY THE SOUNDNESS OF THE STRUCTURE WHERE SHUTTER IS TO BE STRUCTURALLY ATTACHED TO ENSURE PROPER ANCHORAGE PER NOTE 7.
9. THIS APPROVAL DOES NOT INCLUDE NOR COVER ANY SHUTTER ROLL-UP MECHANISMS, ANY ELECTRICAL INSTALLATIONS, OR MODIFICATIONS NECESSARY TO FACILITATE THEM.
10. TRACK MOUNTING CONDITIONS ARE DEPICTED ON PAGES 8 THRU 26. SECTION "A-A"(WALL MOUNT, JAMB MOUNT, BUILD OUT MOUNT AND MULLION MOUNT) ARE DEPICTED ON PAGES 10 THRU 13. SHARED MIDDLE MULLION TRACK MOUNTING CONDITIONS ARE FOUND ON PAGES 14 THRU 16 PER SECTION "B-B". ANY OTHER TRACK MOUNTING CONDITIONS SHALL BE ENGINEERED ON A CASE BY CASE BASIS. END CONDITIONS MAY BE MIXED/COMBINED.
11. LINEAR INTERPOLATION IS ALLOWED FOR ALL GRAPHS, CHARTS, SCHEDULES, AND TABLES.
12. ALTERATIONS OR ADDITIONS TO THE DOCUMENT ARE NOT PERMITTED. DOCUMENT SHALL BEAR THE ORIGINAL SEAL, SIGNATURE, AND DATE OF THE PROFESSIONAL ENGINEER LISTED.
13. THIS PRODUCT APPROVAL IS SUITABLE FOR USE ONLY AS SPECIFICALLY STATED ON THE COMBINED PAGES OF THE ENTIRE DOCUMENT. ANY DEVIATIONS SHALL BE REVIEWED AND APPROVED BY A PROFESSIONAL ENGINEER SEPARATELY.
14. A PERMANENT QMI PRODUCT LABEL WILL BE LOCATED AT THE BOTTOM LOCKING BAR, READILY VISIBLE STATING THE MANUFACTURER'S ADDRESS, APPLICABLE TEST METHODS, AND FLORIDA PRODUCT APPROVED IN ACCORDANCE WITH SECTION 1709.9.2 AND 1709.9.3 OF THE FLORIDA BUILDING CODE. ONE LABEL FOR EACH OPENING.

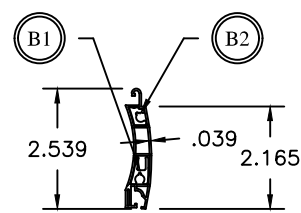


DRAWING TITLE:
NOTICE OF ACCEPTANCE
END RETENTION
PRODUCT APPROVAL

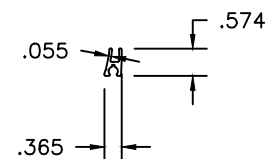
Digitally signed by:
Fowler, Donald
DN: CN = Fowler,
Donald O J =
Colleagues,
VeriClaim, O365
Users
Date: 2020.10.31
15:49:35 -04'00'



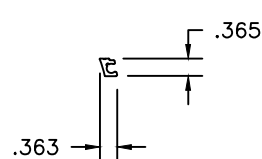
DRAWN: WSY	
DATE: 08-26-20	
APPROVED: WSY	
DATE: 10-02-20	
DRAWING NO: 3-01-031	
SIZE: B	REV: 09
SCALE: NONE	
SHEET: 2 OF 26	



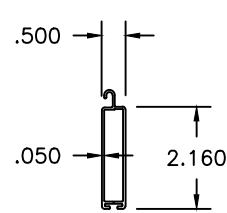
(A1) P55DER SLAT ASSEMBLY SHOWN POLYVINYL CHLORIDE



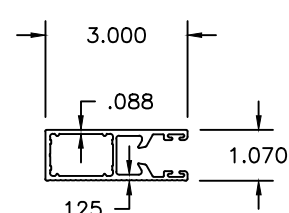
(B1) LOWER SLAT REBAR ALUMINUM 6005-T5



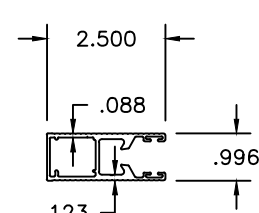
(B2) UPPER SLAT REBAR ALUMINUM 6063-T6



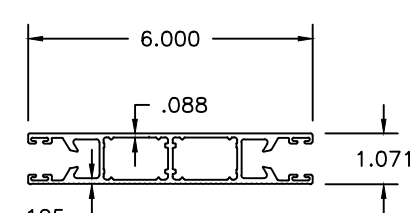
(C) BOTTOM SLAT ALUMINUM 6063-T6



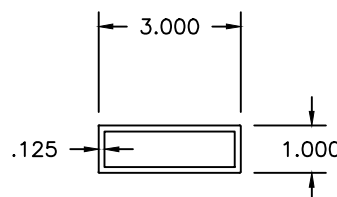
(D) SYSTEM I TRACK END RETENTION ALUMINUM 6063-T6



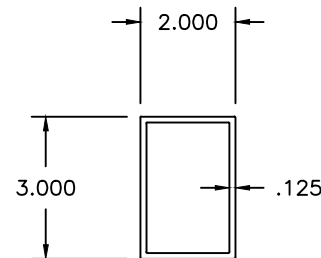
(E) SYSTEM II TRACK END RETENTION ALUMINUM 6063-T6



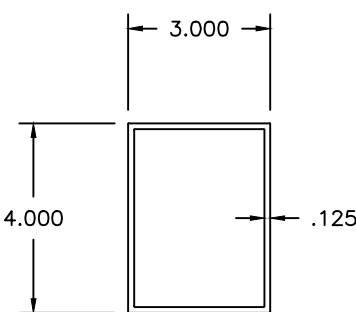
(F) SYSTEM I DOUBLE TRACK END RETENTION ALUMINUM 6063-T6



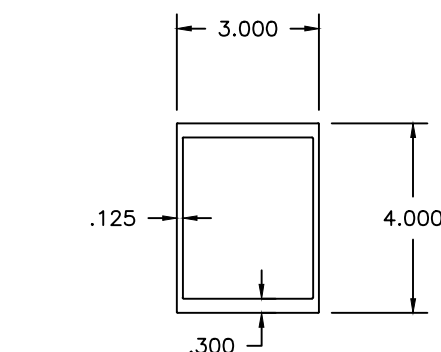
(G) TUBE 1" x 3" x .125" ALUMINUM 6063-T6



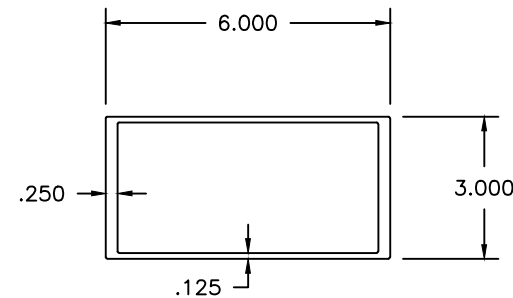
(H) TUBE 2" x 3" x 1/8" ALUMINUM 6005-T5



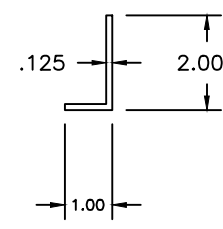
(I) TUBE 3" x 4" x 1/8" ALUMINUM 6063-T6



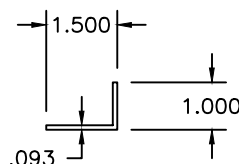
(J) MULLION 3" x 4" HEAVY DUTY ALUMINUM 6005-T5



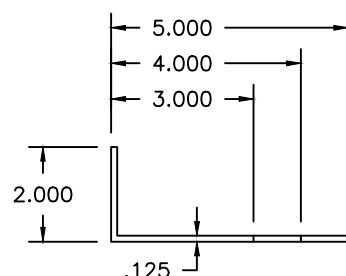
(K) MULLION 3" x 6" HEAVY DUTY ALUMINUM 6005-T5



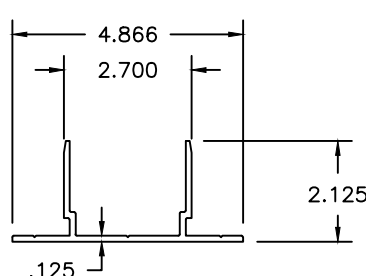
(L) ANGLE 1" x 2" x .125" ALUMINUM 6063-T5



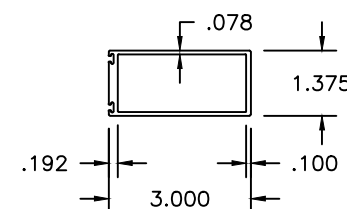
(M) ANGLE 1" x 1 1/2" x 3/32" ALUMINUM 6063-T5



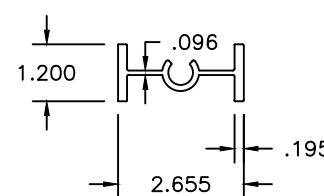
(N) ANGLE 2" x 3", 4" OR 5" x 1/8" ALUMINUM 6063-T5



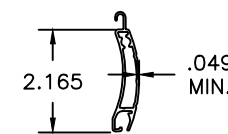
(O) MULLION BASE 3" x 4" (L=3 3/8") ALUMINUM 6005-T5



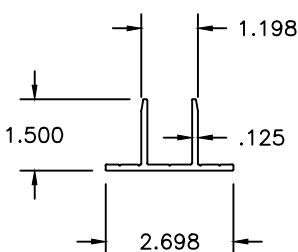
(P) 3" STORM BAR ALUMINUM 6005-T5



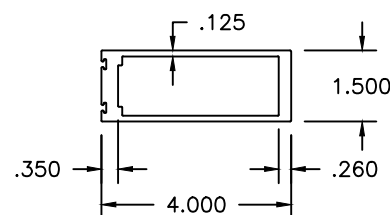
(Q) 3" STORM BAR INSERT ALUMINUM 6005-T5



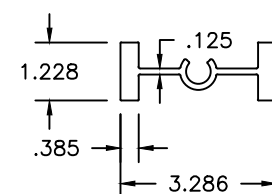
(A2) US60 SLAT ALUMINUM 6063-T6



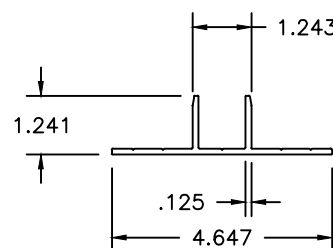
(R) 3" FIXED STORM BAR BASE, STANDARD (LENGTH = 2 5/8") ALUMINUM 6063-T6



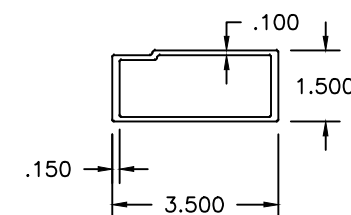
(S) 4" STORM BAR ALUMINUM 6005-T5



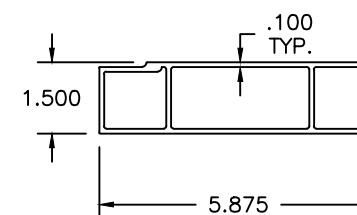
(T) 4" STORM BAR INSERT ALUMINUM 6063-T6



(U) 4" FIXED STORM BAR BASE, STANDARD (LENGTH = 3 9/32") ALUMINUM 6005-T5



(V) 3 1/2" HEADER ALLOY 6005-T5



(W) HEADER 5 7/8" ALUMINUM 6005-T5

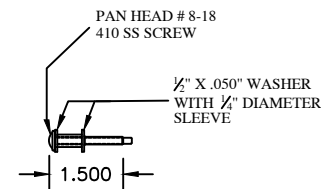


NOTICE OF ACCEPTANCE
 END RETENTION
 PRODUCT APPROVAL

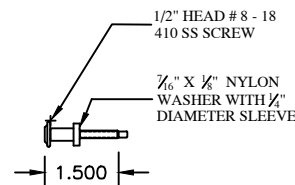
Digitally signed by:
 Fowler, Donald
 DN: CN = Fowler,
 Donald OJ =
 Colleagues,
 VeriClaim, O365
 Users
 Date: 2020.10.31
 15:49:35 -04'00'



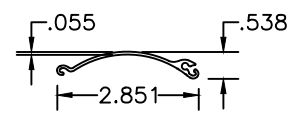
DRAWN: DLF	
DATE: 4-05-04	
APPROVED: DLF	
DATE: 10-28-08	
DRAWING NO: 3-01-031	
SIZE: B	REV: A
SCALE: 1 : 4	
SHEET: 3 OF 26	



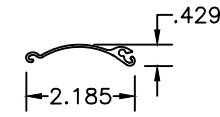
(AE) RETAIN SCREW ASSEMBLY



(AE) ALTERNATE RETAIN SCREW ASSEMBLY



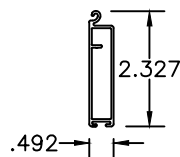
(A1) AL7-E SINGLE WALL SLAT
QMI-395
ALUMINUM 6063-T6



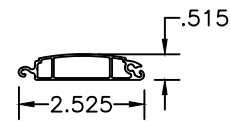
(A2) AL7-E SINGLE WALL STARTER SLAT
QMI-477
ALUMINUM 6063-T6



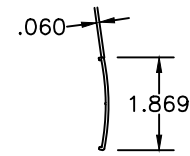
2 PC. RAIL ASSEMBLY SCREW
#8-18 x 3/4 PHILLIPS PAN SDS 410 S.S.



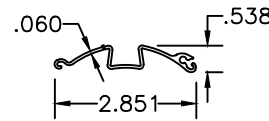
(C) BASE SLAT
QMI-408
ALUMINUM 6005-T5



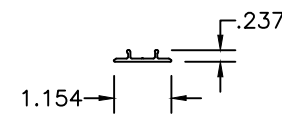
(B2) LOCK SLAT
QMI-409
ALUMINUM 6063-T6



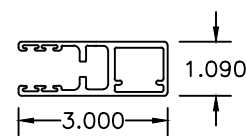
(B3) LOCK SLAT COVER
QMI-331
ALUMINUM 6005-T5



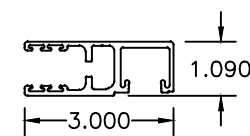
(B4) FINGER PULL SLAT
QMI-410
ALUMINUM 6063-T6



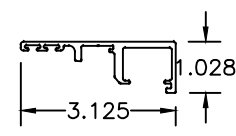
(B5) RAIL SNAP COVER
QMI-351
ALUMINUM 6063-T5



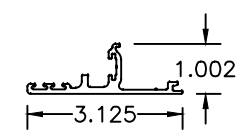
(D) RETAIN RAIL
QMI-491
ALUMINUM 6005-T5



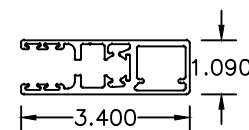
(D) SNAP COVER RETAIN RAIL
QMI-492
ALUMINUM 6005-T5



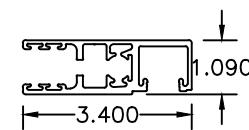
(D1) 2 PIECE INNER HALF RETAIN RAIL
QMI-493
ALUMINUM 6005-T5



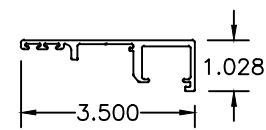
(D2) 2 PC. OUTER HALF RETAIN RAIL
QMI-494
ALUMINUM 6005-T5



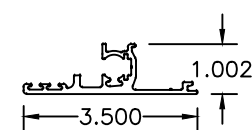
(E) SPRING STOP RETAIN RAIL
QMI-479
ALUMINUM 6005-T5



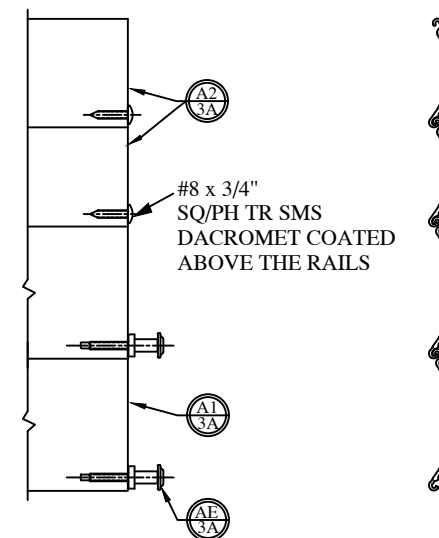
(E) SPRING STOP SNAP COVER RETAIN RAIL
QMI-487
ALUMINUM 6005-T5



(E1) 2 PC. INNER HALF SPRING STOP RETAIN RAIL
QMI-488
ALUMINUM 6005-T5



(E2) 2 PC. OUTER HALF SPRING STOP RETAIN RAIL
QMI-489
ALUMINUM 6005-T5



DRAWING TITLE:

NOTICE OF ACCEPTANCE
END RETENTION
PRODUCT APPROVAL

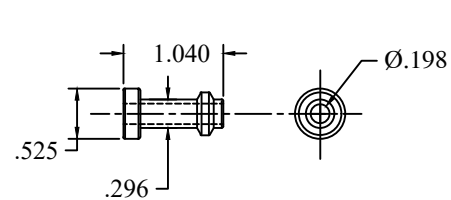
Digitally signed by:
Fowler, Donald
DN: CN = Fowler,
Donald OJ =
Colleagues,
VeriClaim, O365
Users
Date: 2020.10.31
15:49:35 -04'00'



DRAWN:	DLF	
DATE:	11-02-09	
APPROVED:	DLF	
DATE:	11-02-09	
DRAWING NO:	3-01-031	
SIZE:	B	REV:
SCALE:	1 : 4	
SHEET:	3A	OF 26

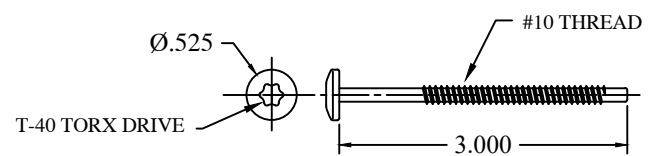


ITASCA, IL 60143
COPYRIGHT © 2008
QUALITAS MANUFACTURING INC.



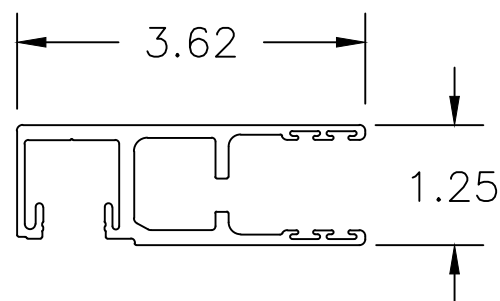
Q1

QOMPACT SCREW BUSHING
ACETEL



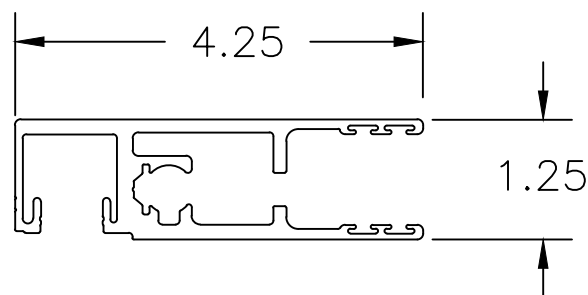
Q2

QOMPACT SCREW
410HT SS
XYAN 5000 COATING
180,000 PSI ULTIMATE
TESILE STRENGTH



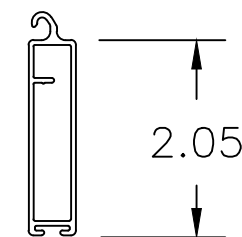
D3

SNAP COVER RETAIN RAIL **
QMI- 664
ALUMINUM 6063-T6



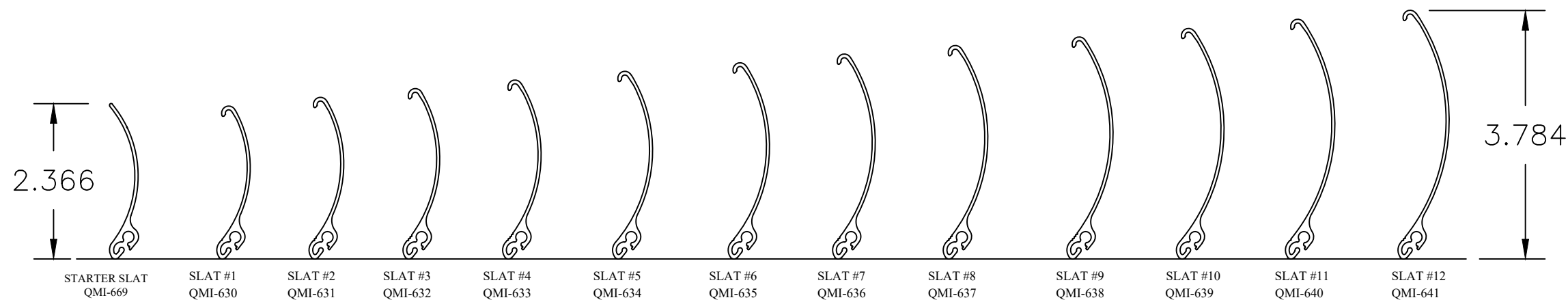
D4

SPRING STOP SNAP COVER
RETAIN RAIL**
QMI- 671
ALUMINUM 6063-T6



C

QOMPACT BASE SLAT
ALUMINUM 6005-T5



A

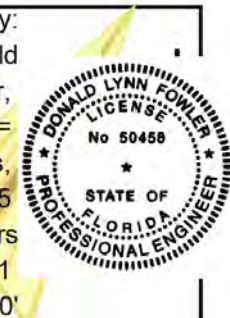
QOMPACT SLATS 1 - 12
& STARTER SLAT *
ALUMINUM 6063-T6

* SLATS CAN ONLY BE USED WITH THE RAILS ON THIS PAGE.
** CAN ONLY BE USED WITH QOMPACT SLATS.

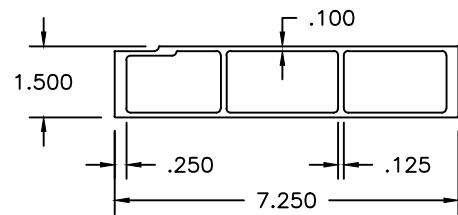


NOTICE OF ACCEPTANCE
END RETENTION
PRODUCT APPROVAL

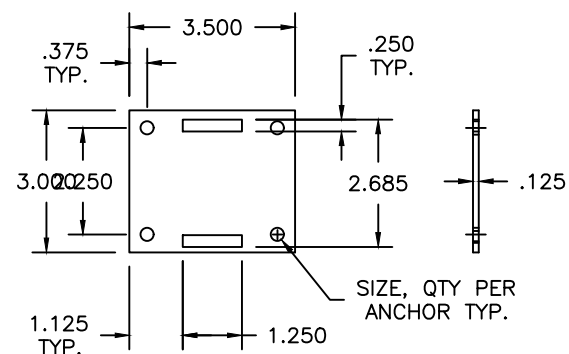
Digitally signed by:
Fowler, Donald
DN: CN = Fowler,
Donald OJ =
Colleagues,
VeriClaim, O365
Users
Date: 2020.10.31
15:49:35 -04'00'



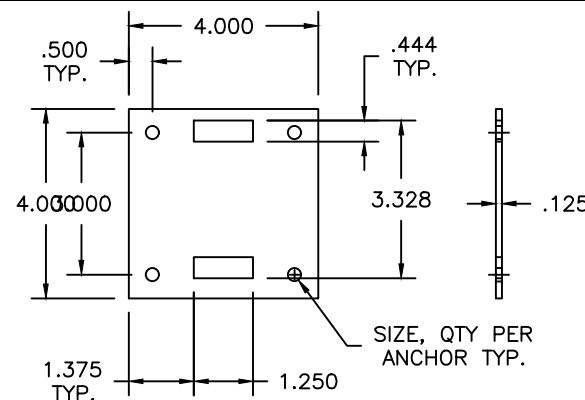
DRAWN: DLF	
DATE: 03-26-12	
APPROVED: DLF	
DATE: 03-26-12	
DRAWING NO: 3-01-031	
SIZE: B	REV: -
SCALE: 1 : 2	
SHEET: 3B OF 26	



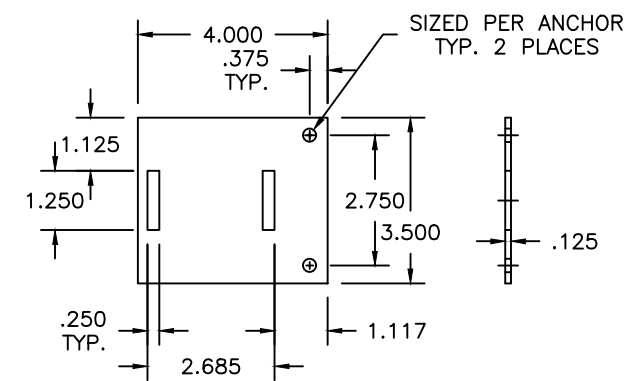
(X) HEADER 7 1/4"
ALUMINUM 6005-T5



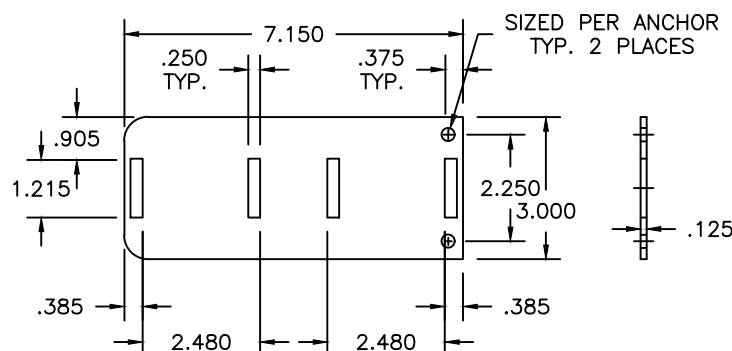
(Y) 3" REMOVABLE STORM BAR BASE,
STANDARD
ALUMINUM 6061-T6 OR 6005-T5



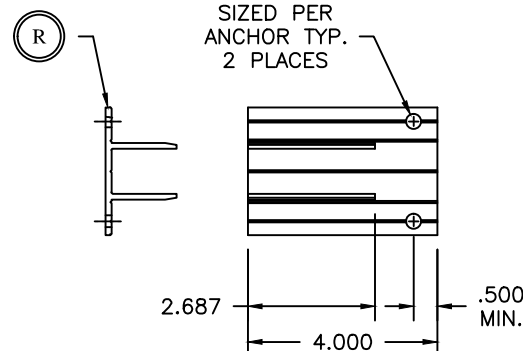
(Z) 4" REMOVABLE STORM BAR BASE,
STANDARD
ALUMINUM 6061-T6 OR 6005-T5



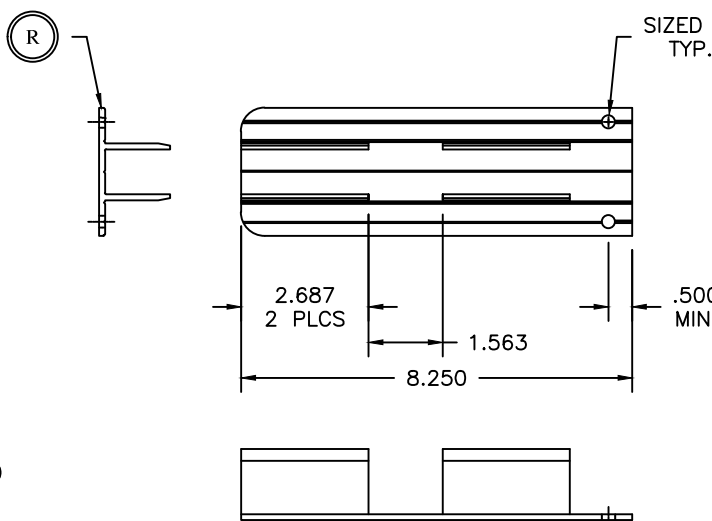
(AA) 3" REMOVABLE STORM BAR BASE,
EXTENDED
ALUMINUM 6061-T6 OR 6005-T5



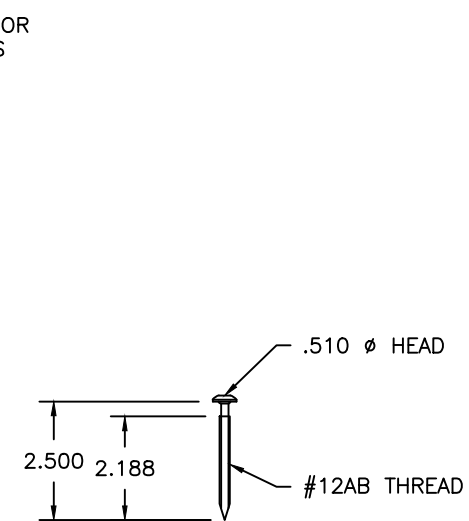
(AB) 3" REMOVABLE STORM BAR BASE,
EXTENDED
ALUMINUM 6061-T6 OR 6005-T5



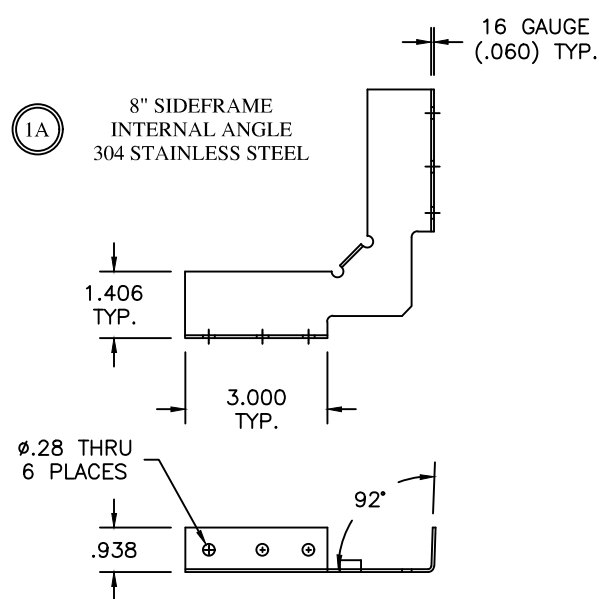
(AC) 3" FIXED STORM BAR BASE,
EXTENDED
ALUMINUM 6061-T6 OR 6005-T5



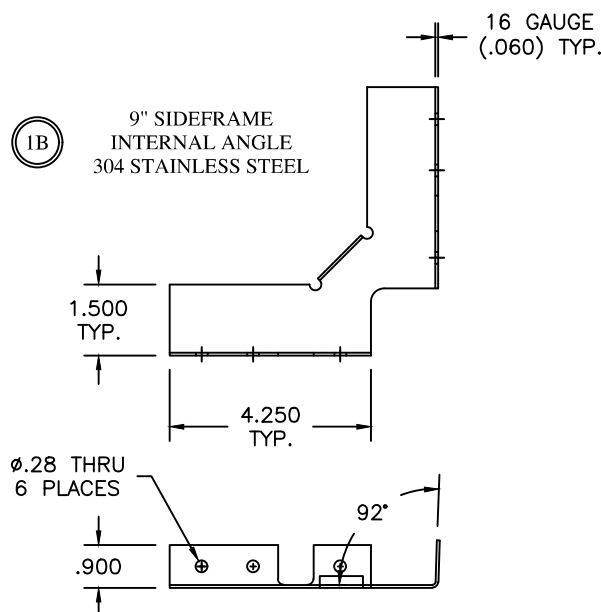
(AD) 3" FIXED STORM BAR BASE,
DOUBLE
ALUMINUM 6061-T6 OR 6005-T5



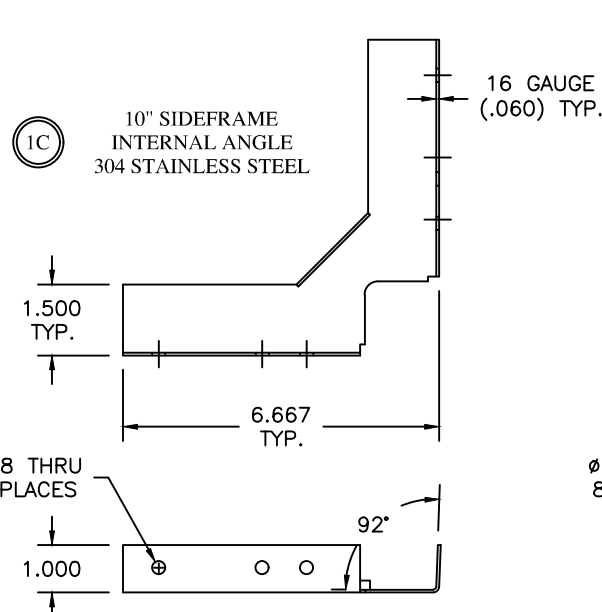
(AE) END RETENTION SCREW
302 HQ STAINLESS STEEL



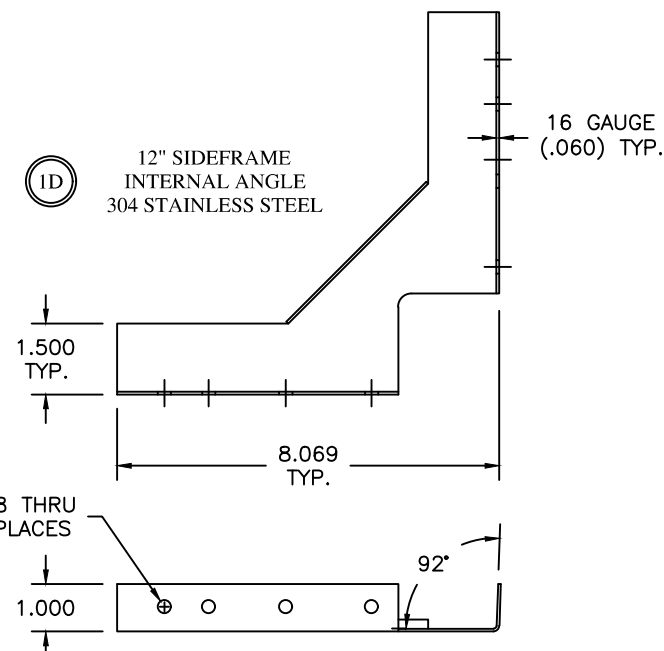
(IA) 8" SIDEFRA
INTERNAL ANGLE
304 STAINLESS STEEL



(IB) 9" SIDEFRA
INTERNAL ANGLE
304 STAINLESS STEEL



(IC) 10" SIDEFRA
INTERNAL ANGLE
304 STAINLESS STEEL



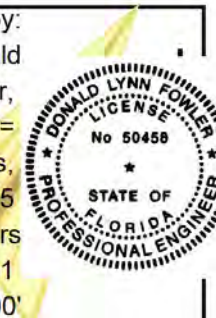
(ID) 12" SIDEFRA
INTERNAL ANGLE
304 STAINLESS STEEL



ITASCA, IL 60143
COPYRIGHT © 2008
QUALITAS MANUFACTURING INC.

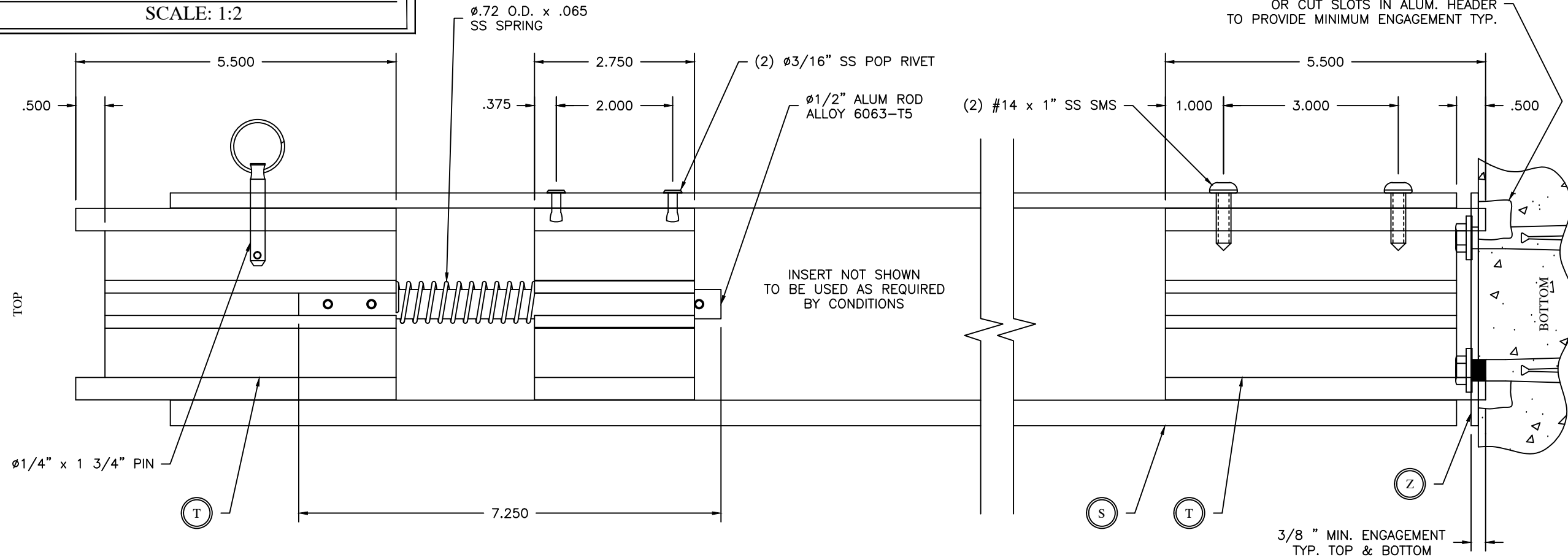
NOTICE OF ACCEPTANCE
END RETENTION
PRODUCT APPROVAL

Digitally signed by:
Fowler, Donald
DN: CN = Fowler,
Donald OJ =
Colleagues,
VeriClaim, O365
Users
Date: 2020.10.31
15:49:35 -04'00'

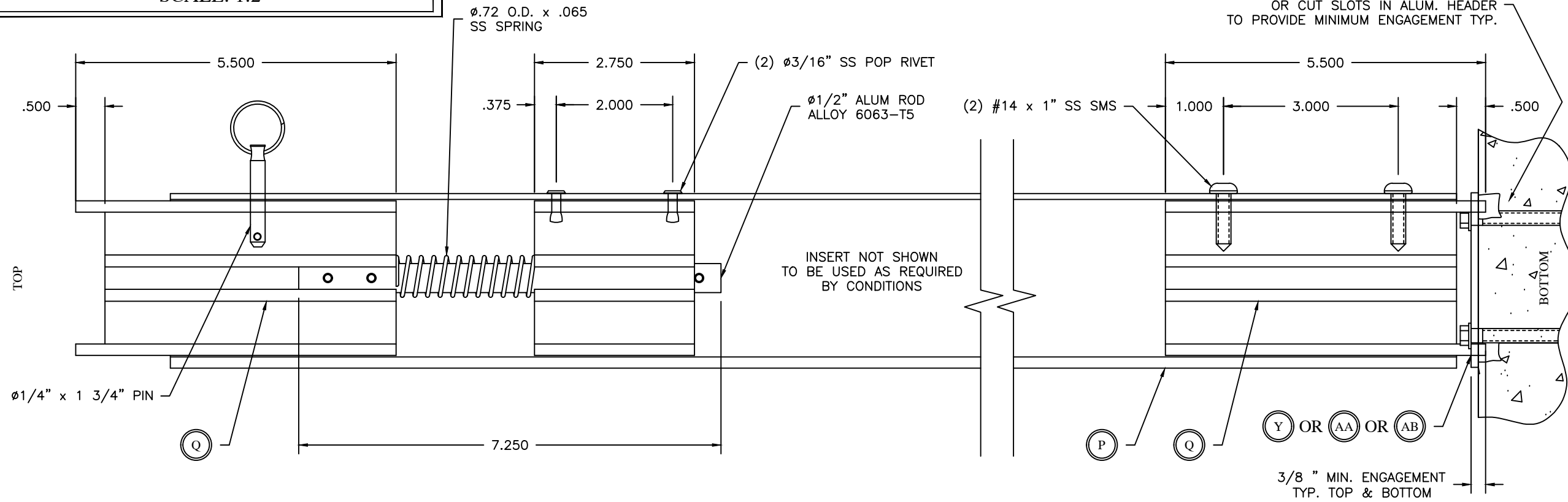


DRAWN: DLF	
DATE: 4-05-04	
APPROVED: DLF	
DATE: 10-28-08	
DRAWING NO: 3-01-031	
SIZE: B	REV: A
SCALE: 1 : 4	
SHEET: 4 OF 26	

4" SPRING-LOADED STORM BAR ASSEMBLY
SCALE: 1:2



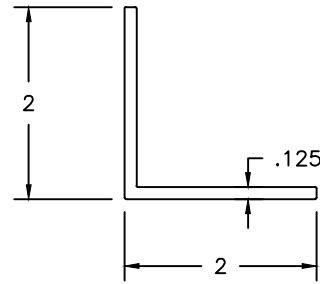
3" SPRING-LOADED STORM BAR ASSEMBLY
SCALE: 1:2



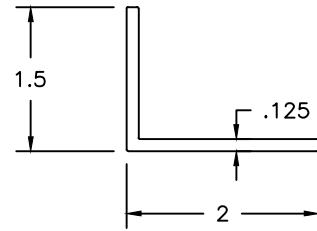
DRAWING TITLE:
**NOTICE OF ACCEPTANCE
END RETENTION
PRODUCT APPROVAL**

Digitally signed by:
Fowler, Donald
DN: CN = Fowler,
Donald OJ =
Colleagues,
VeriClaim, O365
Users
Date: 2020.10.31
15:49:35 -04'00'

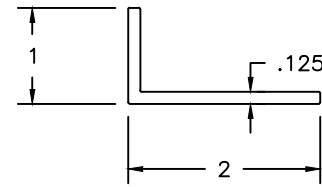
DRAWN: DF	
DATE: 08-10-04	
APPROVED: DF	
DATE: 10-28-08	
DRAWING NO: 3-01-031	
SIZE: B	REV: -
SCALE: 1 : 4	
SHEET: 4A OF 26	



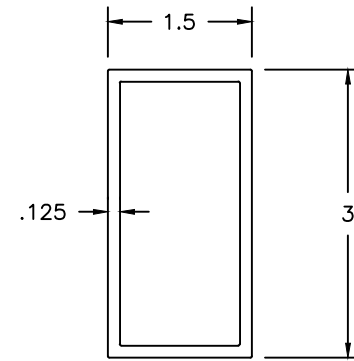
(N1) 2" x 2" x 1/8" ANGLE
6063-T5 ALLOY



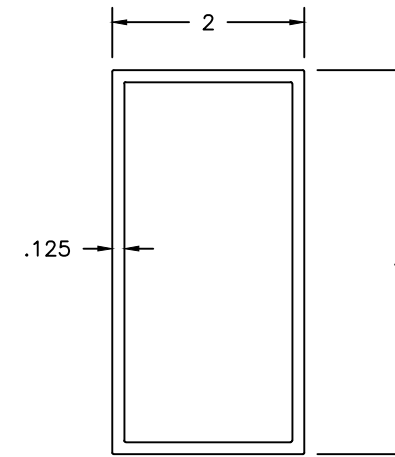
(M1) 1 1/2" x 2" x 1/8" ANGLE
6063-T5 ALLOY



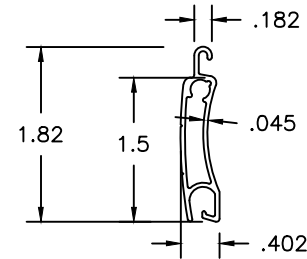
(M2) 1" x 2" x 1/8" ANGLE
6063-T5 ALLOY



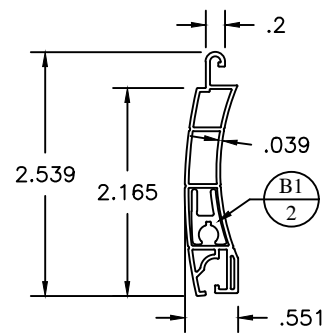
(G2) 1 1/2" x 3" POST
6063-T5 ALLOY



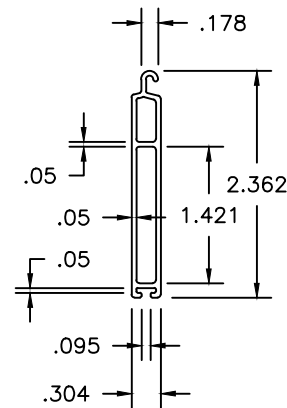
(G1) 2" x 4" POST
6063-T5 ALLOY



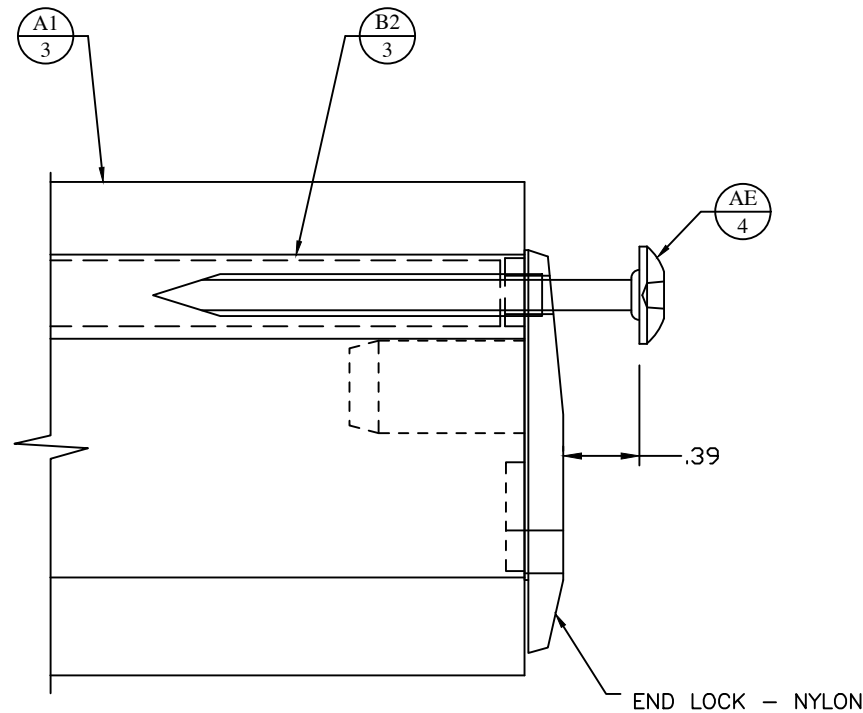
(A4) 1138ER SLAT
6063-T6 ALLOY



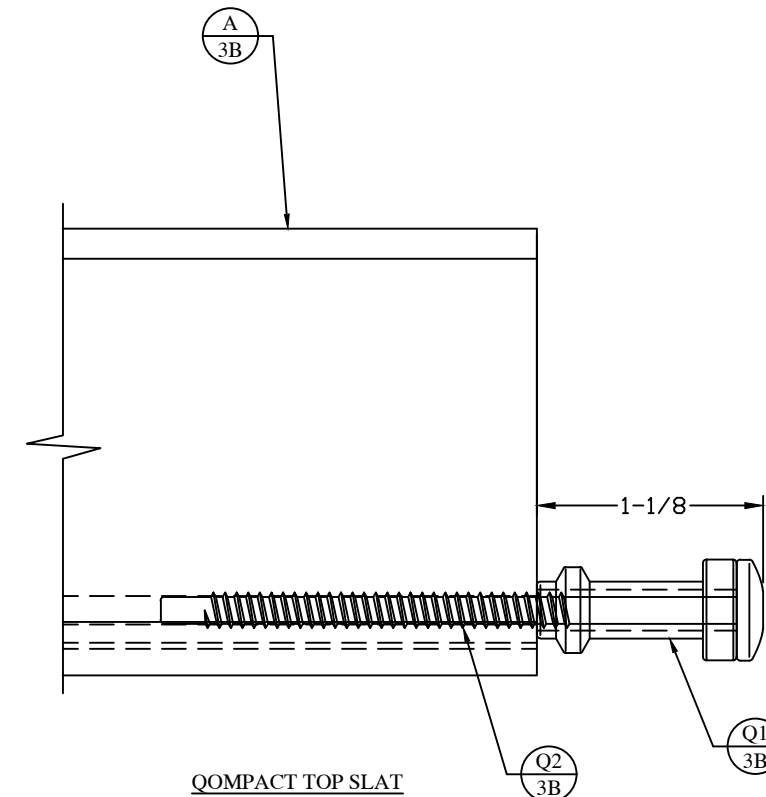
(A5) P55 ER SLAT
PVC



(C1) BOTTOM SLAT MINI
6063-T6 ALLOY



P55 TOP END RETENTION DETAIL
(SCALE FULL)



COMPACT TOP SLAT
TYPICAL ALL SLATS
(SCALE FULL)



DRAWING TITLE:
**NOTICE OF ACCEPTANCE
END RETENTION
PRODUCT APPROVAL**

Digitally signed by:
Fowler, Donald
DN: CN = Fowler,
Donald OJ =
Colleagues,
VeriClaim, O365
Users
Date: 2020.10.31
15:49:35 -04'00'

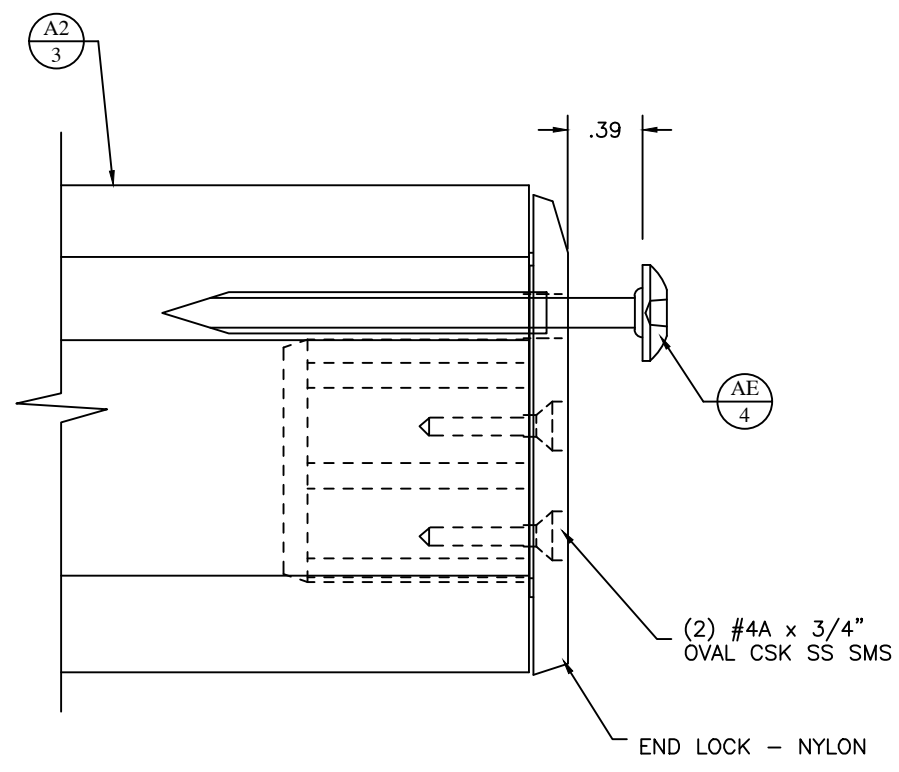


DRAWN: DLF	
DATE: 4-01-04	
APPROVED: DLF	
DATE: 04-02-12	
DRAWING NO: 3-01-031	
SIZE: B	REV: D
SCALE: 1 : 2	
SHEET: 5 OF 26	

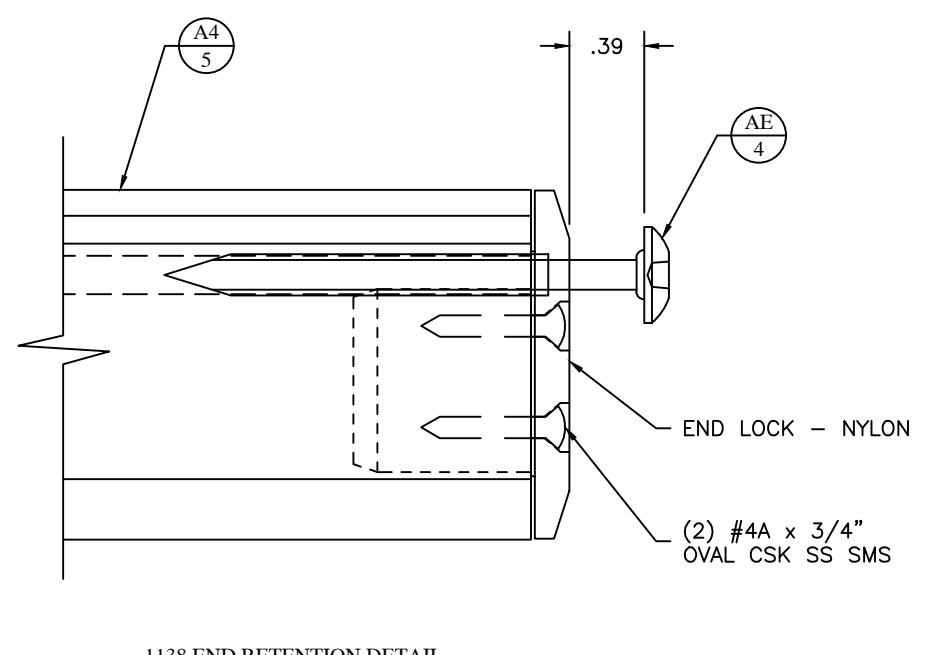


By **ZOMI**
ITASCA, IL 60143
COPYRIGHT © 2008
QUALITAS MANUFACTURING INC.

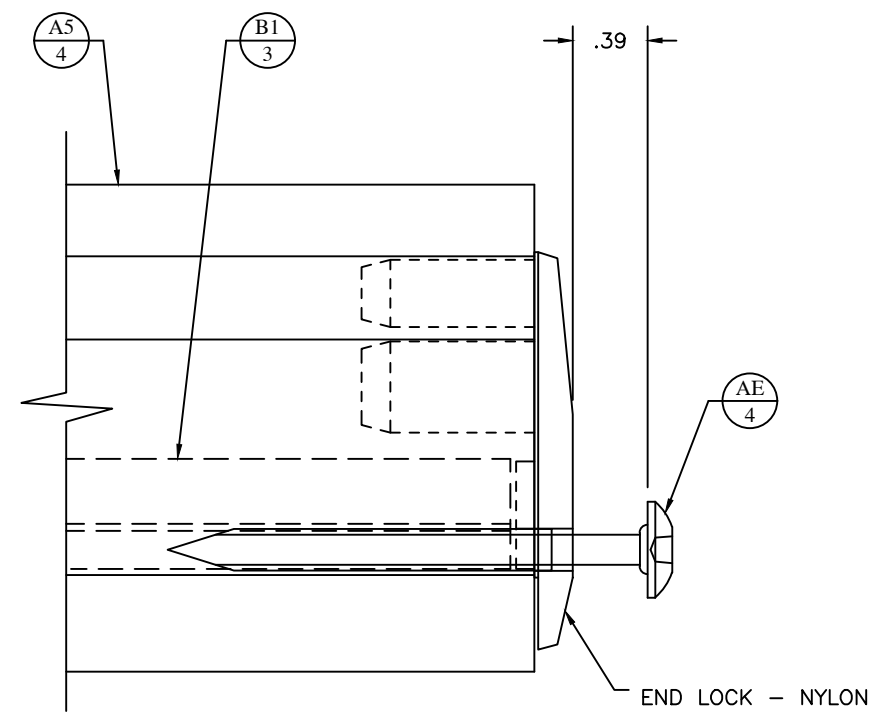
NOTICE OF ACCEPTANCE
END RETENTION
PRODUCT APPROVAL



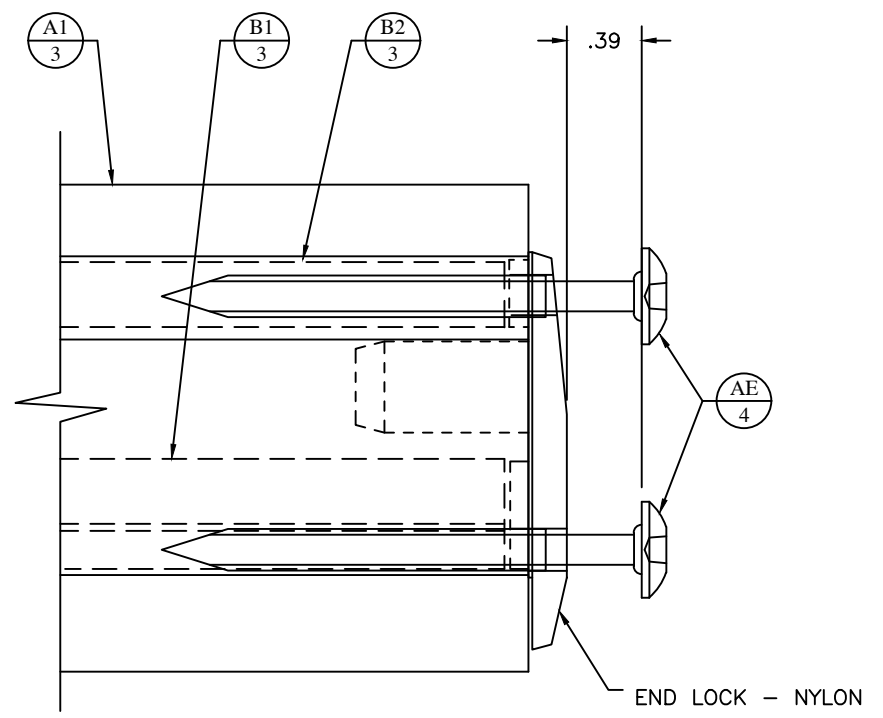
US60 END RETENTION DETAIL
(EVERY SLAT)



1138 END RETENTION DETAIL
(EVERY OTHER SLAT)



P55 & P55 2ND END RETENTION DETAIL
(P55ER EVERY SLAT)
(P55ER 2ND EVERY OTHER SLAT)



P55 DOUBLE END RETENTION DETAIL
(EVERY SLAT)

Digitally signed by:
Fowler, Donald
DN: CN = Fowler,
Donald OJ =
Colleagues,
VeriClaim, O365
Users
Date: 2020.10.31
15:49:35 -04'00'



DRAWN:	DLF	
DATE:	4-05-04	
APPROVED:	DLF	
DATE:	10-28-08	
DRAWING NO:	3-01-031	
SIZE:	B	A
SCALE:	FULL	
SHEET:	6 OF 26	



ITASCA, IL 60143
 COPYRIGHT © 2008
 QUALITAS MANUFACTURING INC.

ALLOWABLE SLAT SPAN TABLE

	***** LARGE MISSILE IMPACT SLATS *****						SMALL MISSILE > 30 FT	
P.S.F.	AL7-E	Qcompact	US60ER	P55DER	1138ER	P55TER	P55ER	P55ER 2ND
10	233"	236"	156"	164"	156"	144"	164"	132"
15	233"	236"	156"	161"	156"	144"	161"	132"
20	233"	236"	156"	156"	156"	144"	156"	125"
25	233"	236"	156"	152"	156"	144"	152"	119"
30	233"	236"	156"	149"	156"	144"	149"	114"
35	233"	236"	146"	145"	146"	144"	145"	110"
40	223"	236"	134"	141"	134"	144"	141"	107"
45	212"	230"	128"	137"	128"	131"	137"	102"
50	202"	224"	121"	134"	121"	118"	134"	99"
55	192"	218"	114"	130"	114"	104"	130"	95"
60	182"	212"	108"	127"	108"	91"	127"	91"
65	172"	206"	105"	123"	105"	78"	123"	88"
70	162"	201"	102"	119"	102"	66"	119"	85"
75	152"	195"	99"	115"	99"	54"	115"	82"
80	142"	189"	96"	112"	96"	42"	112"	79"
85	132"	183"	93"	108"	93"	N/A	108"	77"
90	122"	177"	90"	105"	90"	N/A	105"	74"
95	112"	172"	87"	104"	87"	N/A	N/A	72"
100	102"	166"	84"	102"	84"	N/A	N/A	69"
120	N/A	142"	74"	95"	74"	N/A	N/A	60"
140	N/A	119"	68"	88"	68"	N/A	N/A	54"
160	N/A	96"	58"	81"	58"	N/A	N/A	48"
180	N/A	N/A	48"	72"	48"	N/A	N/A	N/A
200	N/A	N/A	N/A	65"	N/A	N/A	N/A	N/A
220	N/A	N/A	N/A	58"	N/A	N/A	N/A	N/A
240	N/A	N/A	N/A	51"	N/A	N/A	N/A	N/A
260	N/A	N/A	N/A	44"	N/A	N/A	N/A	N/A
280	N/A	N/A	N/A	37"	N/A	N/A	N/A	N/A

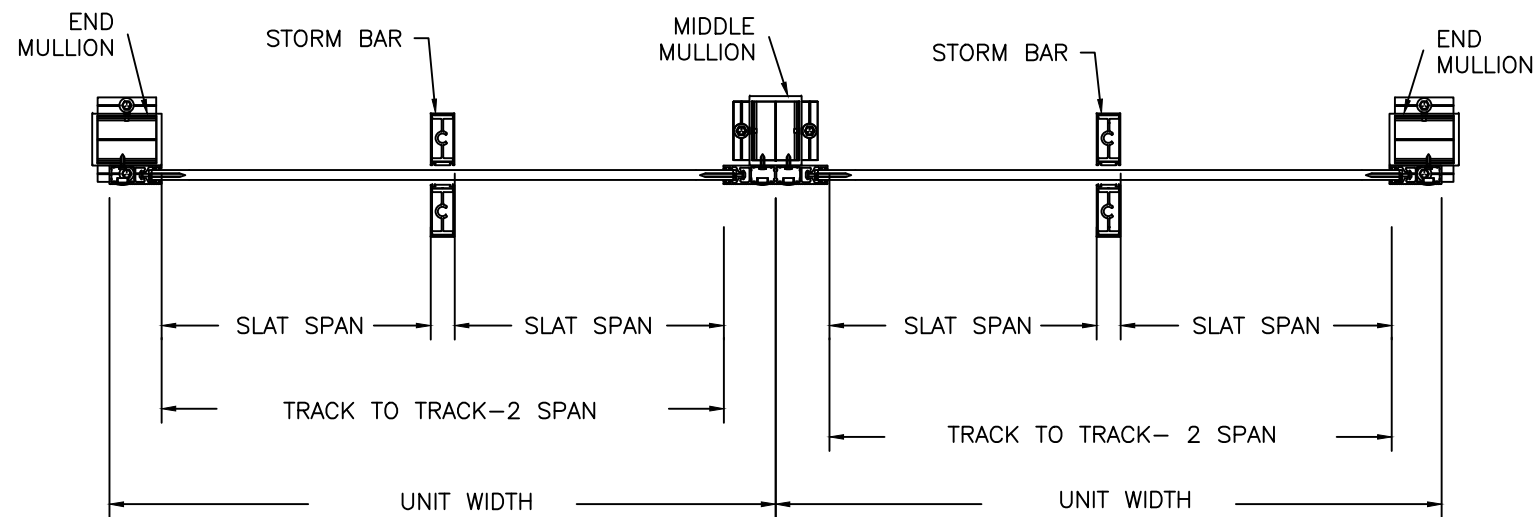
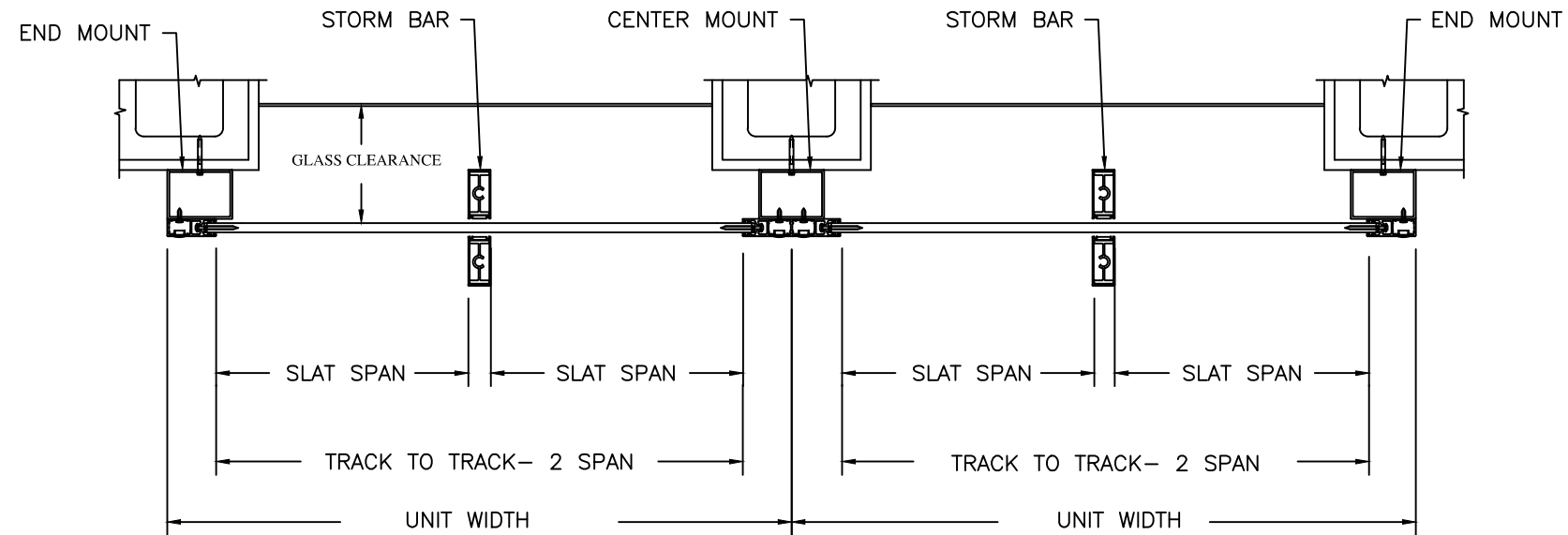
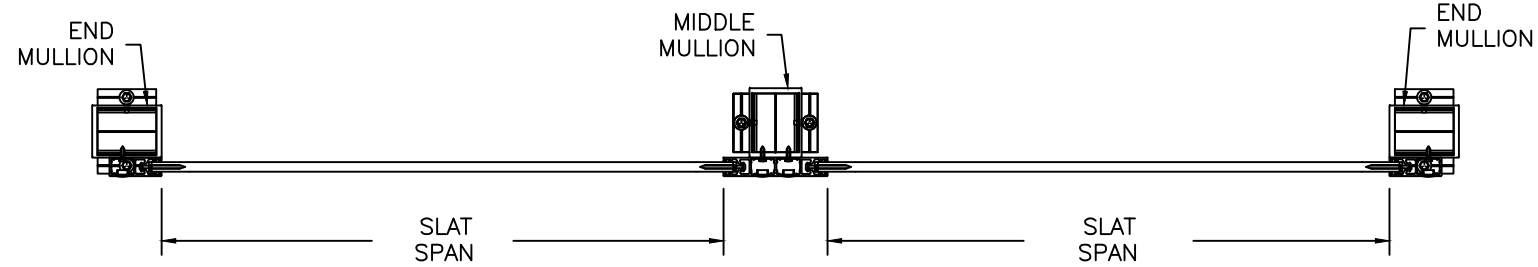
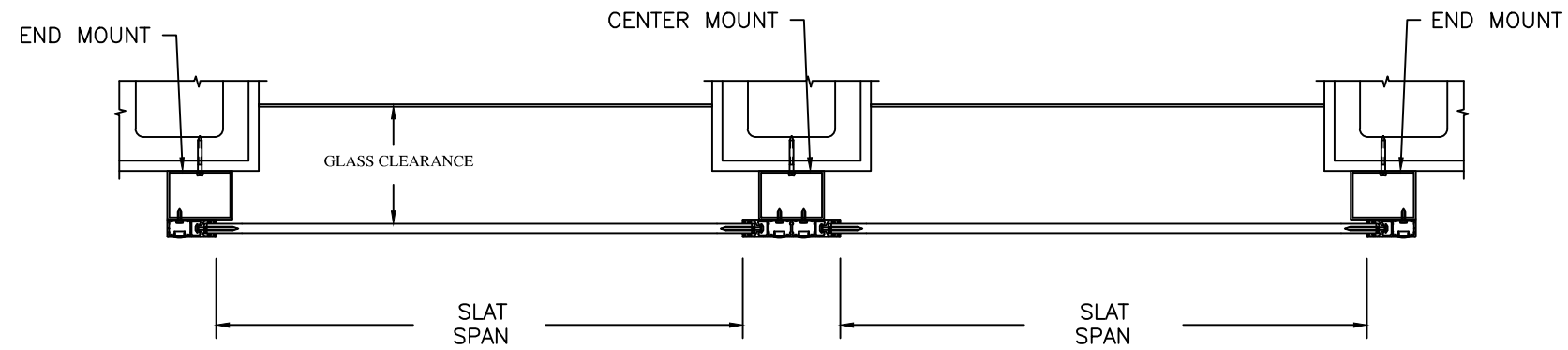
NOTES:

1. THESE PERFORMANCE SPAN CHARTS DO NOT GUARANTEE USAGE. TRACK ATTACHMENTS, BUILD-OUT, AND MULLIONS MUST BE VERIFIED PER INDIVIDUAL ALLOWABLE USAGE CHARTS.
2. "P55ER" AND "P55ER 2ND"(REBAR EVERY 2ND SLAT) SLAT TYPES ARE SMALL MISSILE IMPACT COMPLIANT AND MUST NOT TO BE USED AS A LARGE MISSILE IMPACT HURRICANE SHUTTER SYSTEMS IN WIND BORNE DEBRIS REGIONS.
3. THE P55DER SLAT TYPE IS RESTRICTED TO A 37" MINIMUM SPAN.

DRAWING TITLE:
 NOTICE OF ACCEPTANCE
 END RETENTION
 PRODUCT APPROVAL

Digitally signed by:
 Fowler, Donald
 DN: CN = Fowler,
 Donald O J =
 Colleagues,
 VeriClaim, O365
 Users
 Date: 2020.10.31
 15:49:35 -04'00'

DRAWN:	DLF
DATE:	10-21-09
APPROVED:	DLF
DATE:	12-15-09
DRAWING NO:	3-01-031
SIZE:	B
REV:	B
SCALE:	1/2" = 1'-0"
SHEET:	7 OF 26



DRAWING TITLE:
NOTICE OF ACCEPTANCE
END RETENTION
PRODUCT APPROVAL

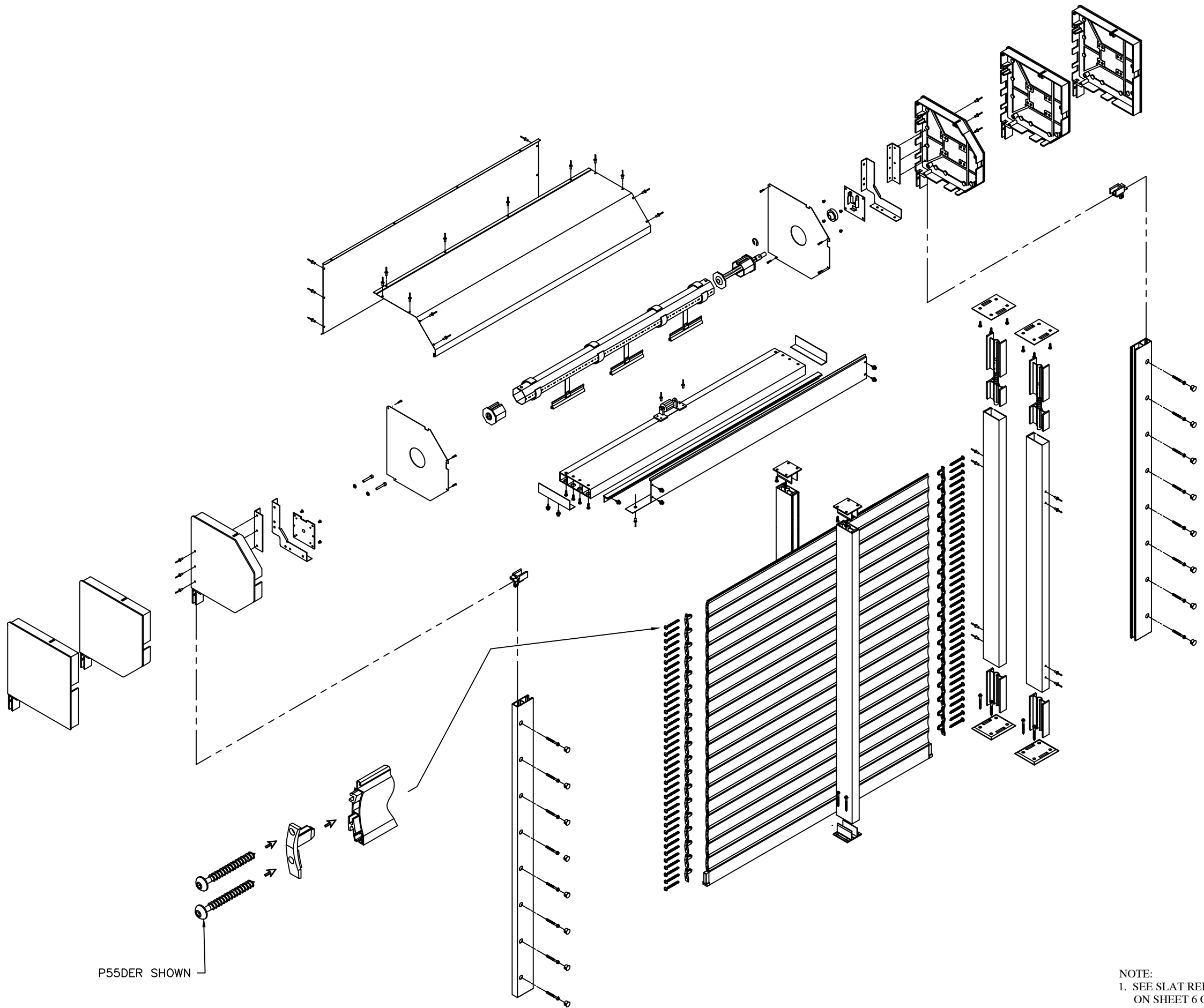
Digitally signed by:
Fowler, Donald
DN: CN = Fowler,
Donald OJ =
Colleagues,
VeriClaim, O365
Users
Date: 2020.10.31
15:49:35 -04'00'



DRAWN:	DLF	
DATE:	10-21-09	
APPROVED:	DLF	
DATE:	10-21-09	
DRAWING NO:	3-01-031	
SIZE:	B	REV: -
SCALE:	1/2" = 1'-0"	
SHEET:	8	OF 26



By **QMI**
ITASCA, IL 60143
COPYRIGHT © 2008
QUALITAS MANUFACTURING INC.



P55DER SHOWN

NOTE:
1. SEE SLAT REINFORCEMENT DETAILS
ON SHEET 6 OF 26.

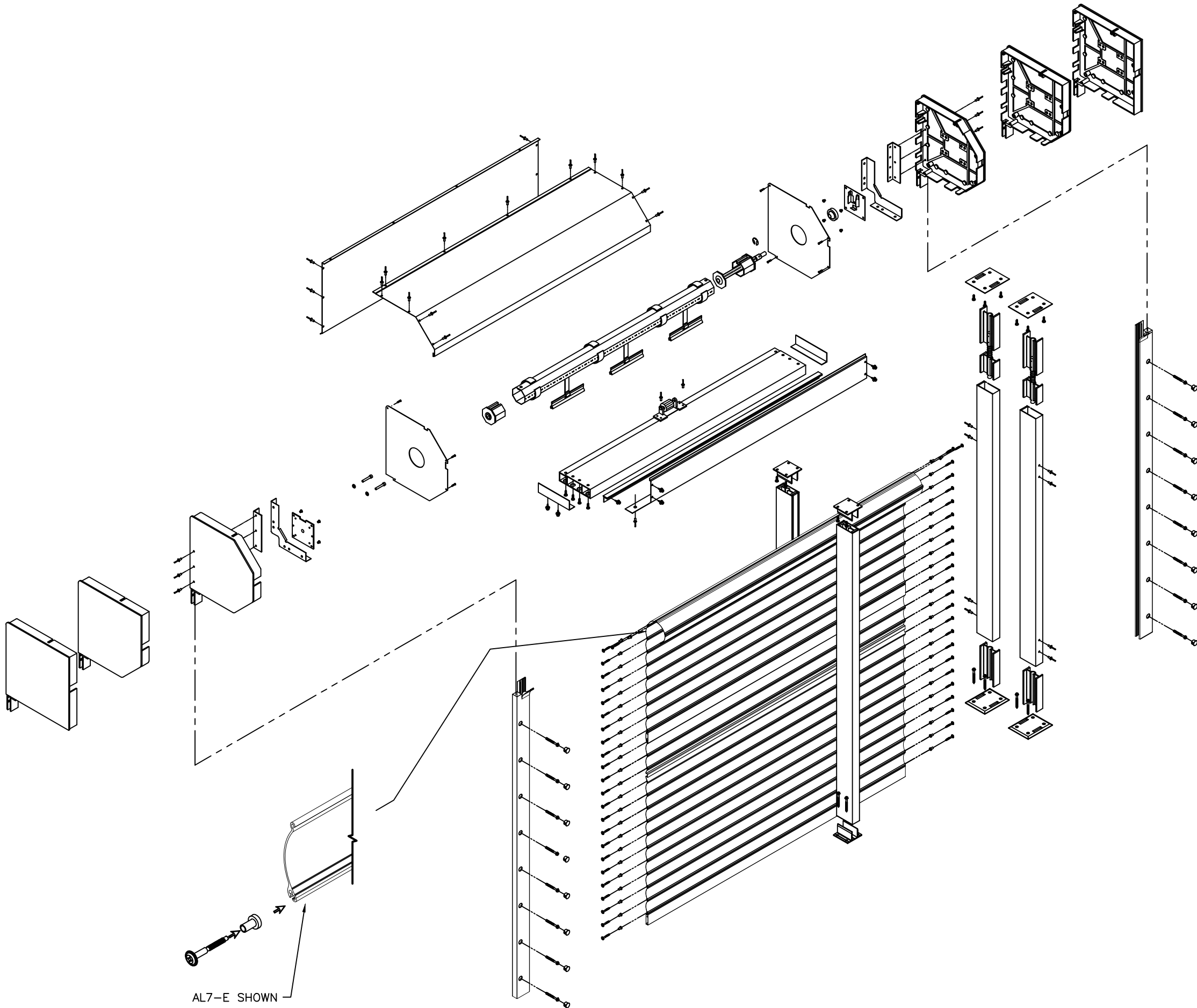
NOTICE OF ACCEPTANCE
END RETENTION
PRODUCT APPROVAL

DRAWING TITLE:

Digitally signed by:
Fowler, Donald
DN: CN = Fowler,
Donald OJ =
Colleagues,
VeriClaim, O365
Users
Date: 2020.10.31
15:49:35 -04'00'



DRAWN:	DLF	
DATE:	10-21-09	
APPROVED:	DLF	
DATE:	10-21-09	
DRAWING NO:	3-01-031	
SIZE:	B	-
SCALE:	N.T.S.	
SHEET:	9	OF 26



AL7-E SHOWN

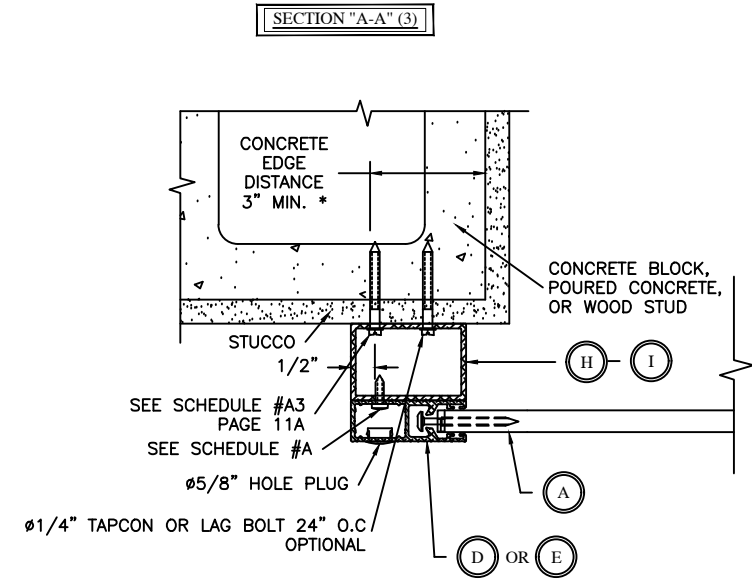
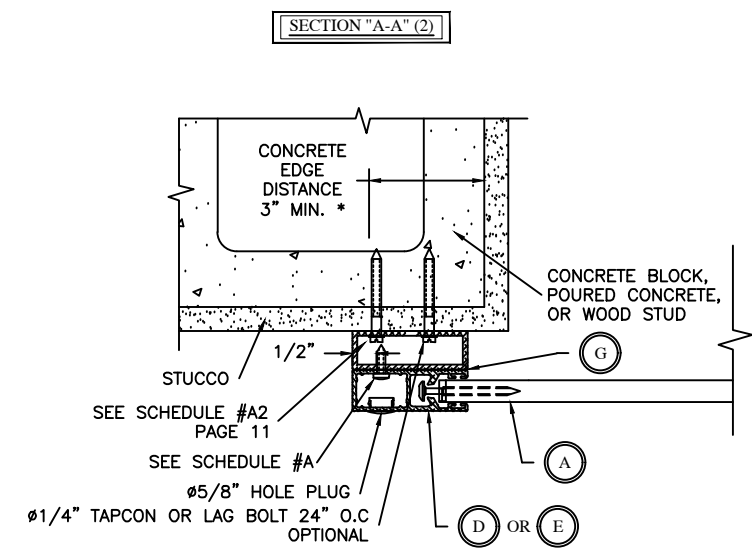
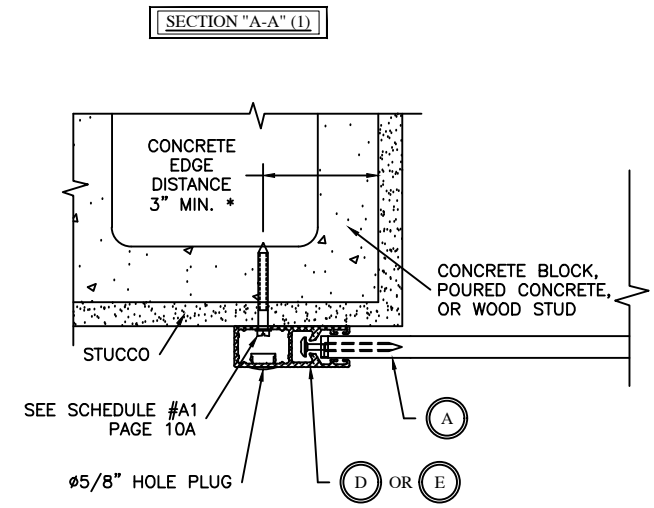


DRAWING TITLE:
**NOTICE OF ACCEPTANCE
 END RETENTION
 PRODUCT APPROVAL**

Digitally signed by:
 Fowler, Donald
 DN: CN = Fowler,
 Donald OJ =
 Colleagues,
 VeriClaim, O365
 Users
 Date: 2020.10.31
 15:49:35 -04'00'



DRAWN: DLF	
DATE: 11-04-09	
APPROVED: DLF	
DATE: 11-04-09	
DRAWING NO: 3-01-031	
SIZE: B	REV: -
SCALE: N.T.S.	
SHEET: 9A OF 26	



*WOOD SCREWS SHALL BE CENTERED IN 2" FACE OF STUD.

PSF\SLAT SPAN	HOLE SPACING O.C. SCHEDULE # A *																			
	36"	42"	48"	54"	60"	66"	72"	84"	96"	108"	120"	144"	156"	168"	180"	192"	204"	216"	228"	240"
10	18	18	18	18	18	18	18	18	18	18	15	10	9	8	7	6	6	5	5	5
15	18	18	18	18	18	18	18	18	15	12	9	7	6	6	5	4	4	4	3	3
20	18	18	18	18	18	18	18	14	11	8	7	5	5	4	4	3	3	3	2	2
25	18	18	18	18	18	18	16	11	8	7	6	4	4	4	3	3	3	3	2	2
30	18	18	18	18	18	16	13	9	7	6	5	4	3	3	3	2	2	2	2	2
35	18	18	18	18	17	13	10	7	6	5	4	3	3	3	2	2	2	1.5	1.5	1.5
40	18	18	18	18	13	10	8	6	5	4	4	3	3	2	2	2	1.5	1.5	1.5	1.5
45	18	18	18	16	12	9	7	6	5	4	3	3	2	2	2	1.5	1.5	1.5	1.5	1.5
50	18	18	18	14	10	8	7	5	4	3	3	2	2	2	1.5	1.5	1.5	1.5	1	1
55	18	18	17	11	9	7	6	5	4	3	3	2	2	1.5	1.5	1.5	1.5	1	1	1
60	18	18	15	10	8	6	5	4	3	3	3	2	1.5	1.5	1.5	1.5	1	1	1	1
65	18	18	13	9	7	6	5	4	3	3	2	2	1.5	1.5	1.5	1	1	1	1	1
70	18	17	12	8	7	5	5	4	3	3	2	1.5	1.5	1.5	1	1	1	1	1	1
75	18	15	11	8	6	5	4	3	3	2	2	1.5	1.5	1.5	1	1	1	1	1	1
80	18	14	10	7	6	5	4	3	3	2	2	1.5	1.5	1	1	1	1	1	1	N/A
85	18	13	9	7	5	4	4	3	3	2	1.5	1.5	1.5	1	1	1	1	1	N/A	N/A
90	18	12	8	6	5	4	4	3	2	2	1.5	1.5	1	1	1	1	1	1	N/A	N/A
95	18	11	8	6	5	4	3	3	2	2	1.5	1.5	1	1	1	1	1	1	N/A	N/A
100	18	10	7	5	4	4	3	3	2	1.5	1.5	1	1	1	1	1	N/A	N/A	N/A	N/A
120	12	8	5	4	4	3	3	2	1.5	1.5	1.5	1	1	1	N/A	N/A	N/A	N/A	N/A	N/A
140	10	6	5	4	3	3	2	2	1.5	1.5	1	1	1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
160	8	5	4	3	3	2	2	1.5	1.5	1	1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
180	7	4	4	3	2	2	2	1.5	1	1	1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
200	6	4	3	3	2	2	1.5	1.5	1	1	1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
220	5	4	3	2	2	2	1.5	1	1	1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
240	4	3	3	2	1.5	1.5	1.5	1	1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
260	4	3	2	2	1.5	1.5	1	1	1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
280	4	3	2	1.5	1.5	1.5	1	1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

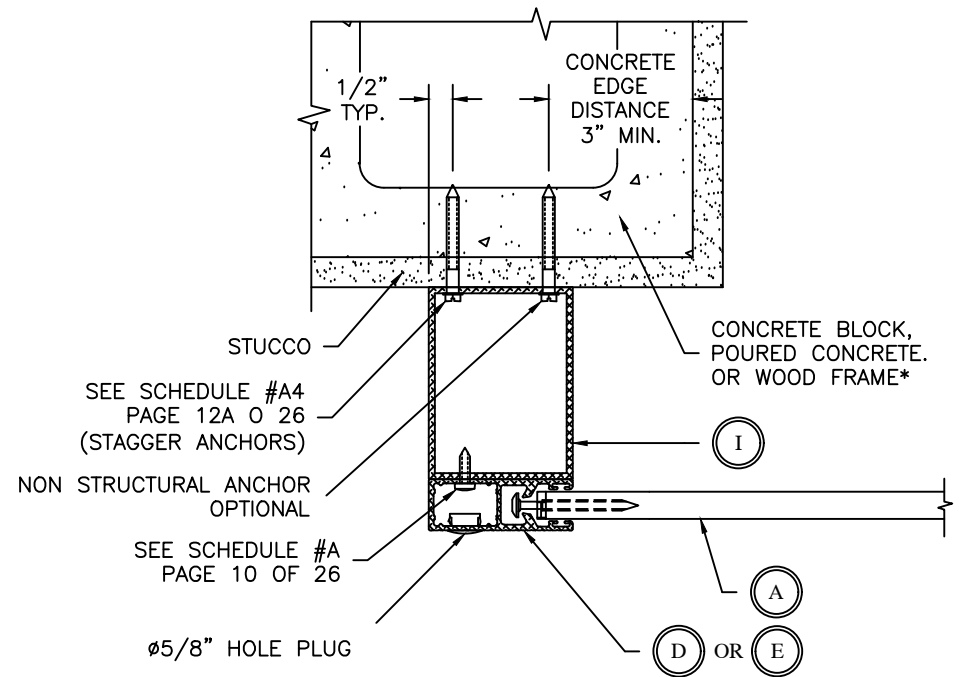
*1/8" ALUM 6063-T6 ALLOY, # 14 X 3/4" SS SMS (MINIMUM 2" O.C. FOR HOLLOW CAVITY RAILS)

DRAWING TITLE:
**NOTICE OF ACCEPTANCE
END RETENTION
PRODUCT APPROVAL**

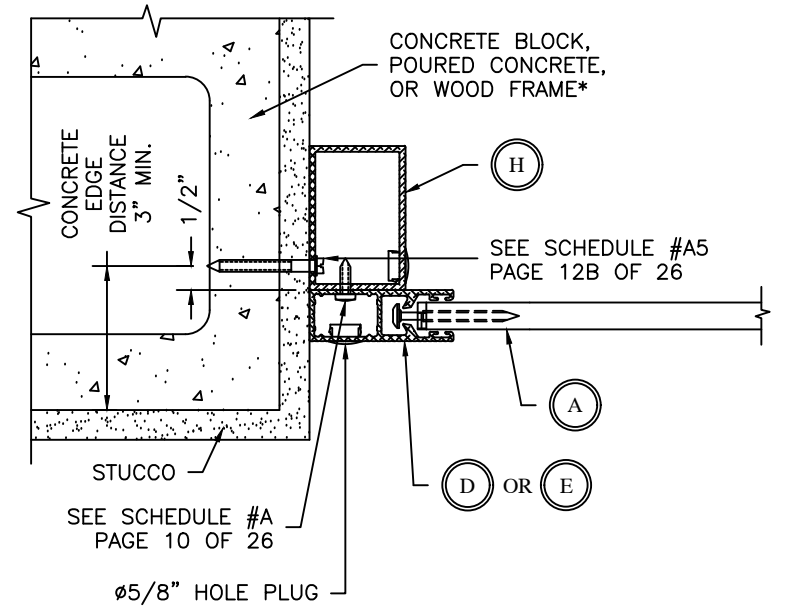
Digitally signed by:
Fowler, Donald
DN: CN = Fowler,
Donald OJ =
Colleagues,
VeriClaim, O365
Users
Date: 2020.10.31
15:49:35 -04'00'

DRAWN:	DLF
DATE:	10-21-09
APPROVED:	DLF
DATE:	10-21-09
DRAWING NO:	3-01-031
SIZE:	B
REV:	-
SCALE:	1 : 4
SHEET:	10 OF 26

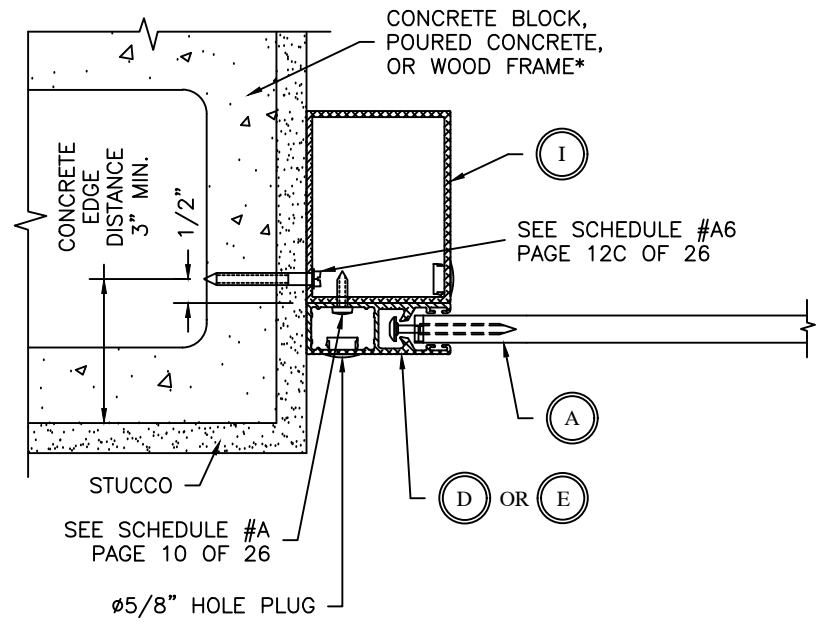
SECTION "A-A" (4)



SECTION "A-A" (5)



SECTION "A-A" (6)

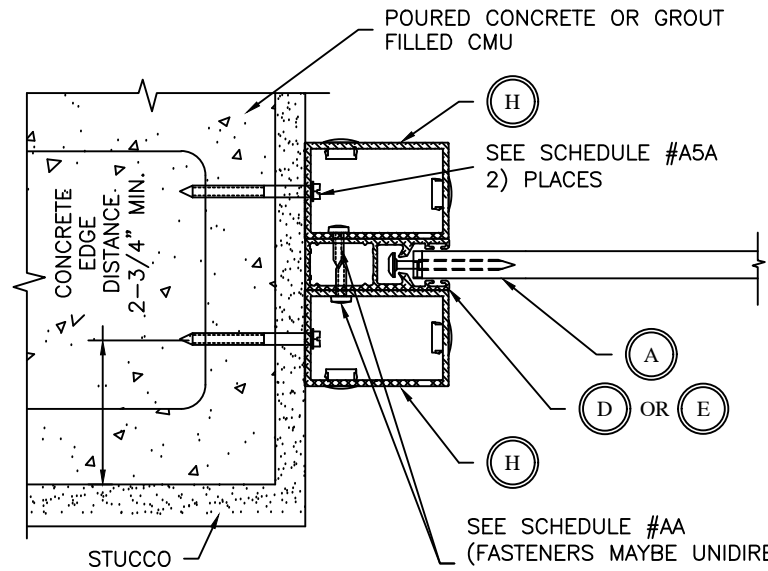


DRAWING TITLE:
**NOTICE OF ACCEPTANCE
END RETENTION
PRODUCT APPROVAL**

Digitally signed by:
Fowler, Donald
DN: CN = Fowler,
Donald OJ =
Colleagues,
VeriClaim, O365
Users
Date: 2020.10.31
15:49:35 -04'00'

DRAWN:	DLF	
DATE:	04-26-04	
APPROVED:	DLF	
DATE:	09-24-09	
DRAWING NO:	3-01-031	
SIZE:	B	C
SCALE:	1 : 4	
SHEET:	12 OF 26	

* WOOD SCREWS SHALL BE CENTERED IN 2" FACE OF STUD.



SECTION "A-A" (5A)

SEE SCHEDULE #AA
(FASTENERS MAYBE UNIDIRECTIONAL DOWN TO 3" O.C. PROVIDED THE SMS ARE STAGGERED). FASTENERS SHOWN AS INSTALLED IN OPPOSITE DIRECTION.

PSF/SLAT SPAN	HOLE SPACING O.C. SCHEDULE #AA*																			
	36"	42"	48"	54"	60"	66"	72"	84"	96"	108"	120"	144"	156"	168"	180"	192"	204"	216"	228"	240"
10	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18
15	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	16	15	14
20	18	18	18	18	18	18	18	18	18	18	18	18	18	18	16	15	14	13	12	11
25	18	18	18	18	18	18	18	18	18	18	18	18	16	15	13	12	12	11	10	10
30	18	18	18	18	18	18	18	18	18	18	18	15	14	13	12	11	10	9	9	8
35	18	18	18	18	18	18	18	18	18	18	17	14	12	11	10	10	9	8	8	7
40	18	18	18	18	18	18	18	18	18	18	15	12	11	10	9	9	8	8	7	7
45	18	18	18	18	18	18	18	18	18	16	14	11	10	9	8	8	7	7	6	6
50	18	18	18	18	18	18	18	18	17	15	13	10	9	8	8	7	7	6	6	6
55	18	18	18	18	18	18	18	18	16	14	12	9	9	8	7	7	6	6	6	5
60	18	18	18	18	18	18	18	18	15	13	11	9	8	7	7	6	6	6	5	5
65	18	18	18	18	18	18	18	17	14	12	10	8	7	7	6	6	6	5	5	5
70	18	18	18	18	18	18	18	15	13	11	10	8	7	7	6	6	5	5	5	4
75	18	18	18	18	18	18	18	15	12	10	9	7	7	6	6	5	5	5	4	4
80	18	18	18	18	18	18	18	14	11	10	9	7	6	6	5	5	5	4	4	4
85	18	18	18	18	18	18	17	13	11	9	8	7	6	6	5	5	5	4	4	4
90	18	18	18	18	18	18	16	12	10	9	8	6	6	5	5	5	4	4	4	3
95	18	18	18	18	18	17	15	12	10	9	8	6	6	5	5	5	4	4	3	3
100	18	18	18	18	18	16	14	11	10	8	7	6	5	5	4	4	4	3	3	3
120	18	18	18	18	16	14	12	10	8	7	6	5	5	4	4	4	3	3	3	3
140	18	18	18	17	14	12	10	9	7	6	6	5	4	4	3	3	3	3	2.5	2.5
160	18	18	18	14	12	11	9	8	7	6	5	4	4	3	3	3	3	2.5	2.5	2
180	18	18	17	13	11	10	9	7	6	5	5	4	4	3	3	3	2.5	2.5	2	2
200	18	18	15	12	10	9	8	7	6	5	4	4	3	3	3	2.5	2.5	2	2	2
220	18	17	13	11	9	8	7	6	5	5	4	3	3	3	2.5	2.5	2	2	2	2
240	18	16	12	10	9	8	7	6	5	4	4	3	3	2.5	2.5	2	2	2	2	1.5
260	18	15	11	9	8	7	6	5	5	4	3	3	2.5	2.5	2	2	2	2	1.5	1.5
280	18	14	11	9	8	7	6	5	4	4	3	2.5	2.5	2.5	2	2	2	1.5	1.5	1.5

*1/8" ALUM 6063-T6 ALLOY, #14 X 3/4" SS SMS

PSF/SLAT SPAN	HOLE SPACING O.C. SCHEDULE #ASA*																			
	36"	42"	48"	54"	60"	66"	72"	84"	96"	108"	120"	144"	156"	168"	180"	192"	204"	216"	228"	240"
10	18	18	18	18	18	18	18	18	18	18	16	12	10	9	8	7	7	6	6	6
15	18	18	18	18	18	18	18	18	17	13	10	8	7	6	6	5	5	4	4	4
20	18	18	18	18	18	18	18	16	12	9	8	6	5	5	4	4	4	3	3	3
25	18	18	18	18	18	18	18	12	9	7	6	5	4	4	4	3	3	3	3	3
30	18	18	18	18	18	18	15	10	8	6	5	4	4	3	3	2.5	2.5	2.5	4	4
35	18	18	18	18	18	15	12	8	6	5	5	4	3	3	2.5	2.5	4	4	4	4
40	18	18	18	18	16	12	10	7	6	5	4	3	3	2.5	5	4	4	4	3	3
45	18	18	18	18	14	10	8	6	5	4	4	3	2.5	5	4	4	3	3	3	3
50	18	18	18	18	11	9	7	6	5	4	3	2.5	4	4	4	3	3	3	3	3
55	18	18	18	14	10	8	7	5	4	4	3	4	4	4	3	3	3	2.5	2.5	
60	18	18	18	12	9	7	6	5	4	3	2.5	4	4	3	3	3	2.5	2.5	2.5	
65	18	18	18	11	8	7	6	4	4	3	2.5	4	3	3	3	3	2.5	2.5	2.5	
70	18	18	16	10	8	6	5	4	3	2.5	2.5	4	3	3	3	2.5	2.5	2.5	N/A	N/A
75	18	18	14	9	7	6	5	4	3	2.5	4	3	3	3	3	2.5	2.5	N/A	N/A	N/A
80	18	18	13	8	6	5	5	4	3	2.5	4	3	3	3	2.5	2.5	N/A	N/A	N/A	N/A
85	18	18	12	8	6	5	4	3	2.5	4	4	3	3	3	2.5	2.5	N/A	N/A	N/A	N/A
90	18	18	10	7	6	5	4	3	2.5	4	4	3	3	2.5	2.5	N/A	N/A	N/A	N/A	N/A
95	18	18	9	7	5	4	4	3	2.5	4	3	3	2.5	2.5	2.5	N/A	N/A	N/A	N/A	N/A
100	18	14	9	6	5	4	4	2.5	2.5	4	3	3	2.5	2.5	N/A	N/A	N/A	N/A	N/A	N/A
120	18	10	7	5	4	4	3	2.5	4	3	3	2.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
140	18	8	5	4	4	3	2.5	4	3	3	2.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
160	14	7	5	4	3	2.5	4	3	3	2.5	2.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
180	10	6	4	3	2.5	4	4	3	3	2.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
200	8	5	4	3	2.5	4	3	3	2.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
220	7	4	3	2.5	4	4	3	3	2.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
240	6	4	3	2.5	4	3	3	2.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
260	5	4	2.5	4	3	3	3	2.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
280	5	4	2.5	4	3	3	2.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

3320 PSI CONCRETE OR CELL FILLED CMU, 1/4" DIA. TAPCON, 2" EMBEDMENT, 3" EDGE DISTANCE
HIGHLIGHTED AREA CONCRETE OR CELL FILLED CMU, 1/4" DIA. WEDGE BOLT 3" EMBEDMENT, 2.75" EDGE DISTANCE

DRAWING TITLE:
**NOTICE OF ACCEPTANCE
END RETENTION
PRODUCT APPROVAL**

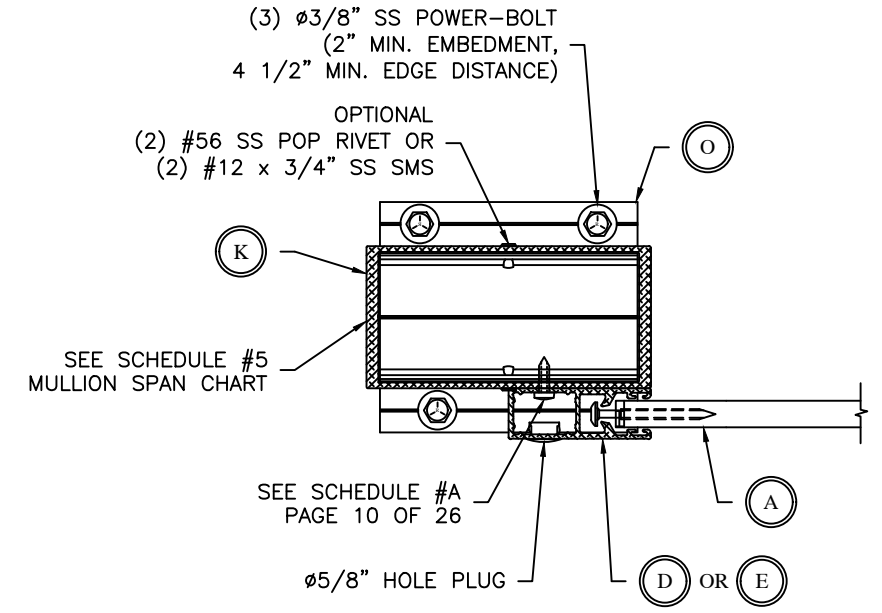
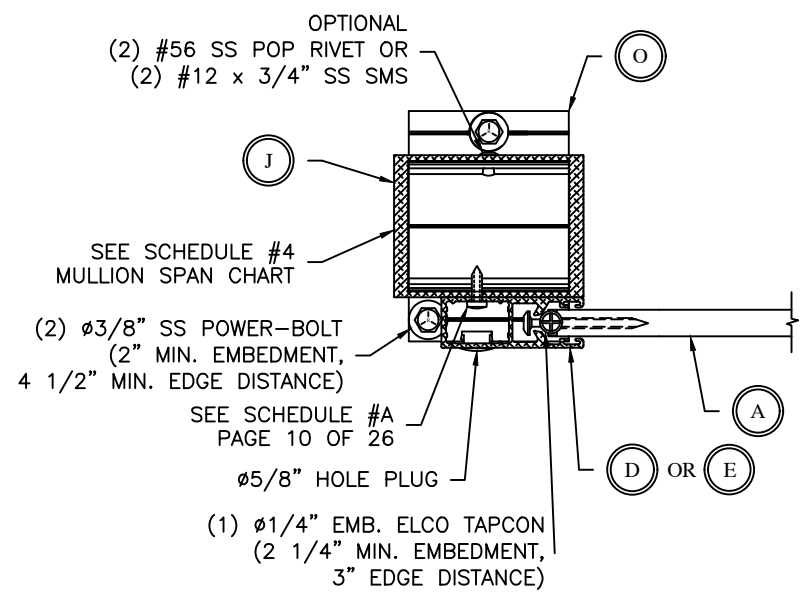
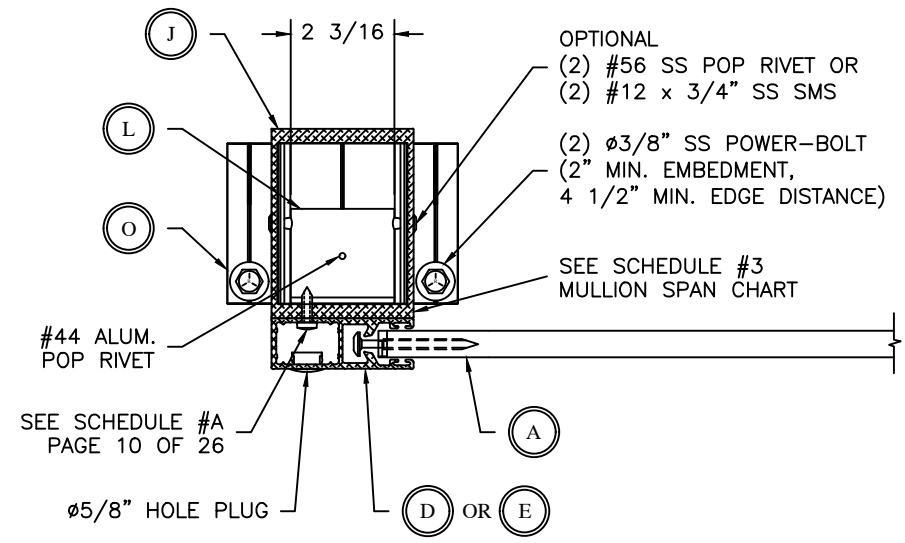
Digitally signed by:
Fowler, Donald
DN: CN = Fowler,
Donald OJ =
Colleagues,
VeriClaim, O365
Users
Date: 2020.10.31
15:49:35 -04'00'

DRAWN:	DLF
DATE:	09-24-09
APPROVED:	DLF
DATE:	09-24-09
DRAWING NO:	3-01-031
SIZE:	B
SCALE:	1 : 4
SHEET:	12D OF 26

SECTION "A-A" (7)

SECTION "A-A" (8)

SECTION "A-A" (9)



SCHEDULE # 3

		A-A (7) MULLION MAXIMUM HEIGHT (IN)															
		SLAT SPAN (IN) - CLEAR SPAN (NO STORM BARS) - SEE PAGE 8															
PSF		48	54	60	66	72	78	84	90	96	108	120	132	144	156	168	180
10		240.0	240.0	240.0	240.0	240.0	219.6	175.1	153.1	139.1	124.1	116.0	106.3	97.7	91.0	85.5	80.8
15		240.0	240.0	219.1	191.9	174.9	150.0	124.4	117.0	103.4	93.2	84.4	78.4	73.4	69.3	65.8	65.8
20		240.0	214.0	173.0	152.0	139.0	126.1	117.0	107.4	98.5	87.1	78.7	72.5	67.5	63.4	59.9	56.9
25		240.0	192.0	145.0	133.0	122.1	112.4	101.9	92.9	86.5	76.7	69.8	64.5	60.2	56.6	53.6	50.1
30		240.0	175.0	134.0	122.0	108.5	99.0	89.8	83.0	77.2	69.3	63.3	58.7	54.8	51.3	46.2	42.0
35		240.0	160.0	125.0	111.8	99.0	88.5	81.2	75.7	71.0	63.6	58.4	54.2	49.5	44.1	39.8	36.1
40		240.0	150.0	120.0	103.3	90.4	82.0	74.6	70.0	65.6	59.5	54.4	49.4	43.5	38.8	35.0	31.9
45		193.0	134.0	111.0	93.8	82.9	75.7	70.2	65.5	61.6	55.8	50.7	43.9	38.8	34.6	31.2	28.5
50		155.5	121.0	100.7	87.0	77.8	70.7	65.8	61.7	58.3	52.9	45.6	39.5	34.9	31.3	28.3	25.8
60		136.0	110.8	88.2	77.4	69.0	63.6	59.5	55.7	52.7	44.5	38.0	33.1	29.3	26.3	23.8	21.8
70		121.0	93.2	79.2	69.5	63.1	58.3	54.3	51.0	45.6	38.1	32.6	28.5	25.3	22.7	20.7	18.9
80		108.8	83.9	72.5	63.7	58.5	54.1	49.3	44.0	39.8	33.3	28.5	25.0	22.3	20.1	18.3	16.8
90		95.2	76.9	66.2	59.7	54.7	49.5	43.5	39.0	35.2	29.6	25.5	22.4	20.0	18.0	16.4	15.1
100		87.1	71.4	62.1	55.9	50.5	44.1	38.9	35.1	31.8	26.7	23.0	20.3	18.1	16.4	14.9	13.8
110		80.7	66.9	58.7	53.1	45.6	39.8	35.5	31.8	28.8	24.3	21.0	18.5	16.6	15.0	13.7	12.6
120		75.6	62.2	55.2	48.7	41.5	36.5	32.3	29.1	26.4	22.3	19.3	17.1	15.3	13.9	12.7	11.7
130		69.6	59.2	52.7	44.2	38.1	33.5	29.7	26.8	24.4	20.7	17.9	15.9	14.2	12.9	11.8	10.9
140		66.2	56.6	49.2	41.0	35.1	30.9	27.6	25.0	22.7	19.3	16.7	14.8	13.3	12.1	11.1	10.3

SCHEDULE # 4

		A-A(8) MULLION MAXIMUM HEIGHT (IN)															
		SLAT SPAN (IN) - CLEAR SPAN (NO STORM BARS) - SEE PAGE 8															
PSF		48.0	54.0	60.0	66.0	72.0	78.0	84.0	90.0	96.0	108.0	120.0	132.0	144.0	156	168	180
10.0		240.0	240.0	240.0	240.0	240.0	240.0	216.4	191.5	174.7	140.0	123.4	111.2	102.3	95.3	89.6	84.8
15.0		240.0	240.0	240.0	222.4	194.8	173.2	161.4	137.2	125.3	108.0	97.4	88.4	82.1	77.0	72.7	69.0
20.0		240.0	240.0	201.9	183.3	168.8	145.3	125.4	112.0	102.8	91.1	82.4	75.9	70.7	66.5	62.8	59.7
25.0		240.0	222.6	185.5	156.5	135.5	118.9	106.1	96.9	90.3	80.2	73.1	67.6	63.1	59.3	56.2	53.5
30.0		240.0	205.4	169.1	140.0	118.8	103.0	93.6	86.6	80.7	72.4	66.3	61.5	57.4	54.1	50.0	45.3
35.0		235.7	193.7	153.0	120.3	104.3	92.2	84.7	79.0	74.2	66.6	61.1	56.7	53.2	47.7	43.0	39.0
40.0		222.2	184.0	132.7	107.1	94.0	85.4	77.9	73.1	68.5	62.2	57.0	53.1	47.1	42.0	37.9	34.4
45.0		202.7	163.3	118.7	97.4	86.3	78.9	73.2	68.4	64.4	58.4	53.7	47.6	42.0	37.5	33.8	30.8
50.0		180.7	140.2	108.4	92.0	81.5	73.7	68.7	64.4	61.0	55.4	49.6	42.8	37.8	33.9	30.6	27.9
60.0		160.8	114.9	91.4	80.5	71.9	66.4	62.1	58.2	55.1	48.4	41.3	35.9	31.8	28.4	25.8	23.6
70.0		133.8	96.4	82.2	72.4	65.8	60.8	56.8	53.8	49.7	41.5	35.3	30.9	27.4	24.6	22.4	20.5
80.0		114.9	86.9	75.3	66.3	61.0	56.5	52.9	48.0	43.3	36.3	31.0	27.1	24.1	21.8	19.8	18.2
90.0		98.0	79.7	68.8	62.2	57.1	52.9	47.5	42.6	38.3	32.2	27.7	24.3	21.6	19.5	17.8	16.3
100.0		89.8	74.1	64.6	58.2	53.5	48.2	42.5	38.2	34.6	29.0	25.0	22.0	19.6	17.7	16.2	14.9
110.0		83.3	69.5	61.1	55.4	49.9	43.5	38.7	34.7	31.3	26.4	22.8	20.1	18.0	16.3	14.9	13.7
120.0		78.1	64.6	57.5	52.5	45.4	39.9	35.3	31.7	28.8	24.3	21.0	18.5	16.6	15.0	13.8	12.7
130.0		72.1	61.5	54.9	48.5	41.7	36.6	32.4	29.2	26.6	22.5	19.5	17.2	15.4	14.0	12.8	11.8
140.0		68.6	58.8	52.7	45.0	38.5	33.8	30.2	27.2	24.7	20.9	18.2	16.1	14.4	13.1	12.0	11.1

NOTE: MAXIMUM GAP BETWEEN CUT END OF POST AND POST BASE IS 1/4"

SCHEDULE # 5

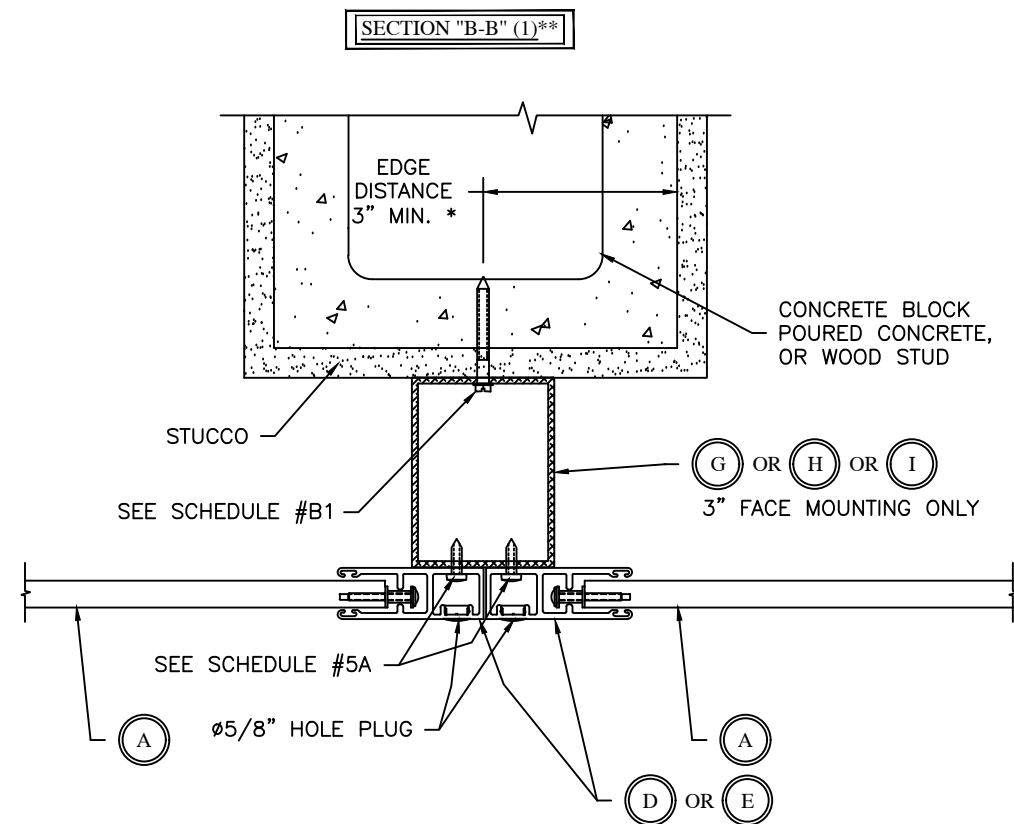
		A-A(9) MULLION MAXIMUM HEIGHT (IN)															
		SLAT SPAN (IN) - CLEAR SPAN (NO STORM BARS) - SEE PAGE 8															
PSF		48.0	54.0	60.0	66.0	72.0	78.0	84.0	90.0	96.0	108.0	120.0	132.0	144.0	156	168	180
10.0		240.0	240.0	240.0	240.0	240.0	240.0	240.0	221.6	190.9	172.8	156.7	144.3	134.9	128.8	121.4	
15.0		240.0	240.0	240.0	240.0	240.0	224.8	204.5	184.0	172.0	153.1	138.6	128.0	119.4	112.8	107.7	101.8
20.0		240.0	240.0	240.0	224.0	204.4	183.8	166.7	153.7	143.9	130.3	119.0	111.1	104.2	99.0	94.1	89.8
25.0		240.0	240.0	224.0	197.2	171.3	156.6	144.3	134.7	127.3	115.3	106.4	99.3	93.4	88.3	84.2	80.4
30.0		240.0	224.0	197.4	169.9	153.0	138.7	129.0	121.3	114.5	104.5	96.7	90.4	85.1	80.7	74.8	67.8
35.0		231.6	218.8	174.0	151.5	137.5	125.8	117.7	111.2	105.6	96.3	89.3	83.5	78.8	71.4	64.4	58.4
40.0		225.4	196.0	163.7	143.6	131.0	121.7	113.3	107.5	101.9	93.6	86.7	80.1	70.5	62.8	56.7	51.5
45.0		211.8	179.1	150.0	132.3	121.1	112.9	106.3	100.4	95.5	87.7	81.5	71.2	62.8	56.1	50.5	46.2
50.0		199.6	160.4	138.7	124.4	113.8	105.4	99.4	94.2	89.8	82.6	74.1	64.0	56.6	50.7	45.8	41.8
60.0		162.1	135.8	118.0	107.5	98.8	92.6	87.6	83.0	79.2	72.4	61.7	53.7	47.5	42.5	38.6	35.3
70.0		142.9	119.8	107.5	97.9	90.8	85.2	80.4	76.7	73.2	62.0	52.9	46.2	41.0	36.8	33.5	30.7
80.0		129.3	110.0	99.3	90.4	84.5	79.3	75.0	71.4	64.7	54.2	46.4	40.6	36.1	32.6	29.6	27.2
90.0		116.6	102.2	92.0	85.0	79.3	74.5	70.5	63.6	57.3	48.1	41.4	36.4	32.4	29.2	26.6	24.5
100.0		108.8	95.8	86.7	80.0	74.6	70.4	63.4	57.1	51.7	43.4	37.4	32.9	29.4	26.5	24.2	22.3
110.0		102.4	90.6	82.3	76.1	71.0	64.9	57.8	51.8	46.8	39.5	34.1	30.1	26.9	24.3	22.2	20.5
120.0		100.9	88.8	81.1	75.3	67.7	59.6	52.7	47.4	43.0	36.3	31.4	27.7	24.8	22.5	20.6	19.0
130.0		94.6	84.5	77.4	71.8	62.1	54.6	48.4	43.6	39.7	33.6	29.2	25.8	23.1	20.9	19.2	17.7
140.0		90.0	80.5	73.9	67.0	57.4	50.4	45.1	40.6	36.9	31.3	27.2	24.1	21.6	19.6	18.0	16.6



NOTICE OF ACCEPTANCE
 END RETENTION
 PRODUCT APPROVAL

Digitally signed by:
 Fowler, Donald
 DN: CN = Fowler, Donald OJ = Colleagues, VeriClaim, O365 Users
 Date: 2020.10.31 15:49:35 -04'00'

DRAWN:	DLF		
DATE:	08-10-04		
APPROVED:	DLF		
DATE:	12-14-09		
DRAWING NO:	3-01-031		
SIZE:	B	REV:	D
SCALE:	1 : 4		
SHEET:	13 OF 26		



HOLE SPACING O.C. SCHEDULE # B1 (CONC.) #							HOLE SPACING O.C. SCHEDULE # B1 (WOOD) # #							HOLE SPACING O.C. SCHEDULE # B1 (CMU H.)**						
PSF\SLAT SPAN	48"	60"	72"	96"	120"	144"	PSF\SLAT SPAN	48"	60"	72"	96"	120"	144"	PSF\SLAT SPAN	48"	60"	72"	96"	120"	144"
10	16"	16"	16"	16"	16"	16"	10	16"	16"	16"	16"	16"	16"	10	16"	14"	13"	12"	12"	10"
15	16"	16"	16"	16"	16"	16"	15	16"	16"	16"	14"	14"	14"	15	16"	14"	13"	12"	12"	10"
20	16"	16"	16"	16"	14"	14"	20	16"	16"	16"	14"	14"	14"	20	14"	14"	13"	12"	12"	10"
25	16"	16"	16"	16"	14"	14"	25	16"	16"	14"	14"	14"	12"	25	14"	14"	13"	12"	10"	9"
30	16"	14"	14"	14"	14"	14"	30	16"	14"	14"	12"	12"	12"	30	14"	12"	10"	9"	8"	7"
35	16"	14"	14"	14"	14"	14"	35	14"	14"	14"	12"	12"	10"	35	14"	12"	10"	8"	7"	6"
40	16"	14"	14"	14"	12"	12"	40	14"	14"	14"	12"	10"	10"	40	14"	12"	10"	8"	6"	5"
45	14"	14"	14"	14"	12"	10"	45	14"	12"	12"	12"	10"	9"	45	10"	10"	8"	7"	6"	4"
50	14"	14"	14"	14"	11"	9"	50	14"	12"	12"	10"	9"	8"	50	10"	9"	8"	7"	5"	4"
55	14"	12"	12"	12"	10"	8"	55	12"	12"	12"	10"	8"	8"	55	10"	9"	7"	6"	5"	3"
60	14"	12"	12"	11"	9"	8"	60	12"	12"	12"	8"	8"	7"	60	9"	8"	7"	6"	5"	3"
65	14"	12"	11"	10"	8"	7"	65	12"	12"	10"	8"	7"	7"	65	9"	7"	6"	5"	4"	3"
70	14"	12"	10"	9"	8"	6"	70	12"	12"	10"	7"	7"	7"	70	8"	7"	6"	5"	4"	3"
75	14"	12"	10"	8"	7"	6"	75	12"	12"	10"	7"	7"	6"	75	8"	7"	6"	5"	4"	2.5"
80	14"	12"	10"	8"	7"	5"	80	12"	10"	10"	7"	6"	6"	80	7"	6"	6"	5"	4"	2.5"
85	14"	12"	9"	7"	6"	5"	85	12"	10"	9"	6"	6"	6"	85	7"	6"	5"	4"	4"	2.5"
90	12"	12"	9"	7"	6"	5"	90	10"	10"	9"	6"	6"	5"	90	7"	6"	5"	4"	3"	N/A
95	12"	12"	9"	7"	6"	4"	95	10"	10"	9"	6"	5"	4"	95	7"	6"	5"	4"	3"	N/A
100	12"	10"	8"	7"	5"	4"	100	10"	9"	7"	5"	4"	3"	100	6"	5"	4"	3"	2.5"	N/A
120	12"	9"	7"	6"	5"	3"	120	N/A	N/A	N/A	N/A	N/A	N/A	120	6"	5"	3"	2.5"	N/A	N/A

3320 PSI CONCRETE OR CELL FILLED CMU, 1/4" DIA. TAPCON, 1-3/4" EMBEDMENT ## WOOD, 1/4" DIA. TAPCON, LAG SCREW, OR #14 SS SMS 1 1/2" EMBEDMENT **CMU HOLLOW, 1/4" DIA. TAPCON, 1 1/4" EMBEDMENT

HOLE SPACING O.C. SCHEDULE 5A *						
PSF\SLAT SPAN	48"	60"	72"	96"	120"	144"
10	16"	16"	16"	12"	10"	7"
15	16"	16"	16"	10"	7"	5"
20	16"	16"	14"	8"	5"	3"
25	16"	16"	12"	7"	4"	3"
30	16"	14"	10"	6"	3"	2"
35	16"	14"	7"	5"	3"	2"
40	16"	14"	6"	3"	2"	2"
45	16"	12"	6"	3"	2"	N/A
50	16"	10"	5"	3"	2"	N/A
55	16"	8"	5"	2"	N/A	N/A
60	15"	7"	4"	2"	N/A	N/A
65	15"	6"	4"	2"	N/A	N/A
70	14"	5"	3"	2"	N/A	N/A
75	13"	5"	3"	2"	N/A	N/A
80	11"	4"	3"	N/A	N/A	N/A
85	10"	4"	2"	N/A	N/A	N/A
90	9"	4"	2"	N/A	N/A	N/A
95	8"	4"	2"	N/A	N/A	N/A
100	7"	3"	2"	N/A	N/A	N/A
120	5"	3"	2"	N/A	N/A	N/A
140	4"	2"	2"	N/A	N/A	N/A
160	3"	2"	N/A	N/A	N/A	N/A
180	3"	2"	N/A	N/A	N/A	N/A
200	2"	N/A	N/A	N/A	N/A	N/A
220	2"	N/A	N/A	N/A	N/A	N/A
240	2"	N/A	N/A	N/A	N/A	N/A
260	2"	N/A	N/A	N/A	N/A	N/A
280	2"	N/A	N/A	N/A	N/A	N/A

14 X 3/4" SS SMS into .125" ALUM. ALLOY 6005-T5



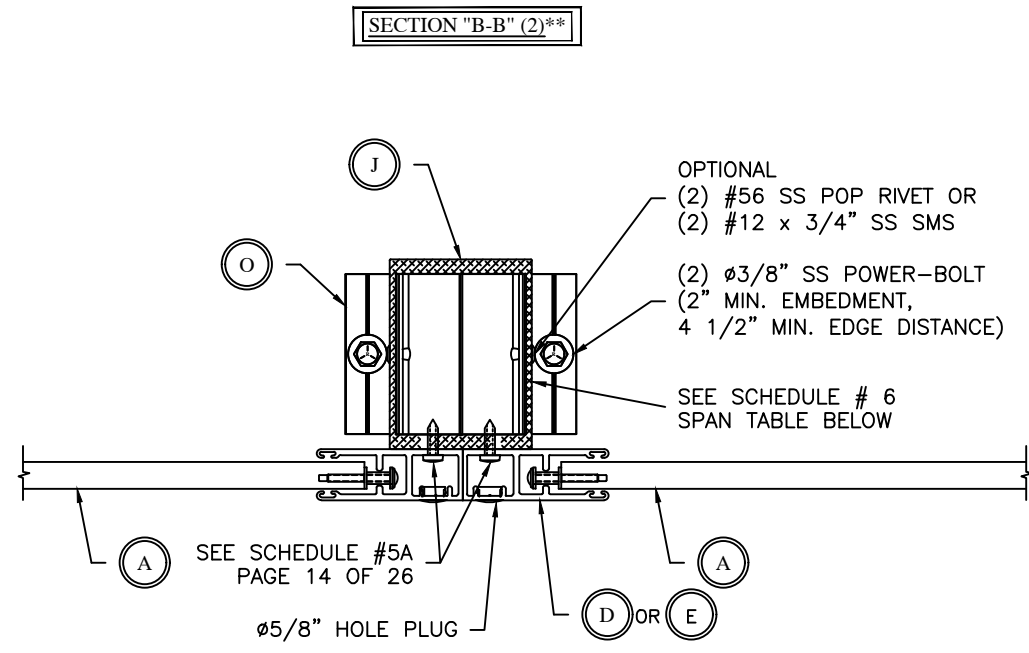
NOTICE OF ACCEPTANCE
 END RETENTION
 PRODUCT APPROVAL

Digitally signed by:
 Fowler, Donald
 DN: CN = Fowler,
 Donald OJ =
 Colleagues,
 VeriClaim, O365
 Users
 Date: 2020.10.31
 15:49:35 -04'00'



DRAWN:	DLF
DATE:	11-04-09
APPROVED:	DLF
DATE:	12-15-09
DRAWING NO:	3-01-031
SIZE:	B C
SCALE:	1 : 4
SHEET:	14 OF 26

NOTE: MAXIMUM GAP BETWEEN CUT END OF POST AND POST BASE IS 1/4"



DRAWING TITLE:
NOTICE OF ACCEPTANCE
END RETENTION
PRODUCT APPROVAL

**SCHEDULE 6 BASED ON EQUAL SPANS.

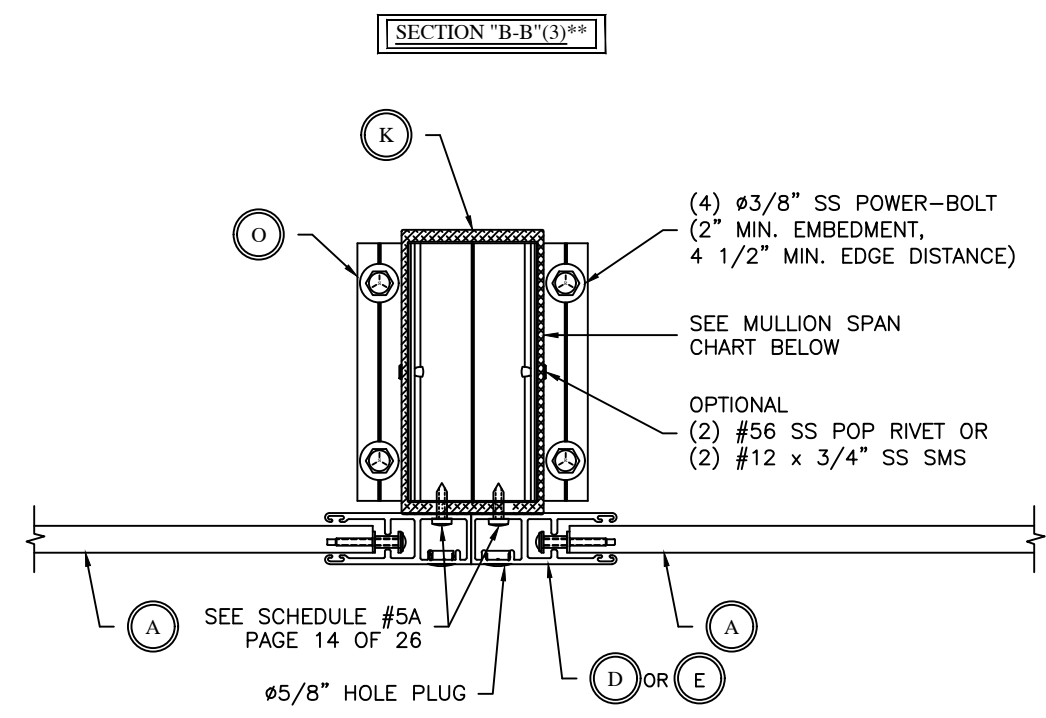
IF SPANS ARE NOT EQUAL THE DIFFERENCE BETWEEN SPANS (SPAN1 - SPAN2) SHALL BE USED TO EVALUATE THE FREE STANDING MULLION AS AN END MULLION USING SCHEDULE 3, PAGE 13 OF 26. THE EVALUATION SHALL BE AT THE SLAT SPAN DIFFERENCE

SCHEDULE # 6

B-B(2) MAXIMUM MULLION HEIGHT (IN)																
SLAT WIDTH (IN) - CLEAR SPAN (NO STORM BARS) - SEE PAGE 8																
PSF	48	54	60	66	72	78	84	90	96	108	120	132	144	156	168	180
10	240.0	240.0	240.0	240.0	240.0	240.0	240.0	240.0	240.0	240.0	240.0	240.0	240.0	240.0	240.0	240.0
15	240.0	240.0	240.0	240.0	240.0	240.0	240.0	240.0	240.0	240.0	240.0	235.5	228.9	222.9	217.5	212.6
20	240.0	240.0	240.0	240.0	240.0	240.0	240.0	240.0	237.6	228.6	220.8	214.0	208.0	200.2	193.0	186.5
25	240.0	240.0	240.0	240.0	240.0	236.1	230.5	225.3	220.6	212.2	203.9	194.5	186.3	179.1	172.6	166.8
30	240.0	240.0	240.0	234.7	228.1	222.2	216.9	212.0	207.6	196.1	186.1	177.6	170.1	163.5	157.6	152.3
35	240.0	237.9	229.9	222.9	216.7	211.1	205.4	198.6	192.4	181.5	172.3	164.4	157.5	151.4	145.9	141.0
40	236.4	227.6	219.9	213.2	207.2	199.3	192.1	185.7	179.9	169.8	161.2	153.8	147.3	141.6	136.5	131.9
45	227.3	218.8	211.4	203.9	195.4	187.9	181.2	175.1	169.6	160.1	152.0	145.0	138.9	133.5	128.7	124.4
50	219.5	211.3	202.6	193.4	185.4	178.2	171.9	166.1	160.9	151.9	144.2	137.5	131.8	126.6	122.1	117.5
60	206.2	194.7	185.0	176.6	169.2	162.7	156.9	151.7	146.9	138.6	126.9	115.5	106.0	97.9	91.0	84.9
70	190.9	180.3	171.3	163.5	156.7	150.6	145.3	140.4	135.5	120.7	108.8	99.0	90.8	83.9	78.0	72.8
80	178.5	168.6	160.2	152.9	146.5	140.9	135.2	126.3	118.6	105.6	95.2	86.6	79.5	73.4	68.2	63.7
90	168.3	159.0	151.0	144.2	138.2	129.3	120.2	112.3	105.4	93.9	84.6	77.0	70.6	65.3	60.6	56.6
100	159.7	150.8	143.3	136.8	125.8	116.3	108.2	101.1	94.9	84.5	76.1	69.3	63.6	58.7	54.6	51.0
110	152.3	143.8	136.6	124.5	114.4	105.8	98.3	91.9	86.2	76.8	69.2	63.0	57.8	53.4	49.6	46.3
120	145.8	137.7	125.3	114.2	104.9	96.9	90.1	84.2	79.1	70.4	63.4	57.7	53.0	48.9	45.5	42.5
130	140.1	128.2	115.7	105.4	96.8	89.5	83.2	77.8	73.0	65.0	58.6	53.3	48.9	45.2	42.0	39.2
140	133.4	119.0	107.4	97.9	89.9	83.1	77.3	72.2	67.8	60.3	54.4	49.5	45.4	42.0	39.0	36.4

Digitally signed by:
Fowler, Donald
DN: CN = Fowler,
Donald OJ =
Colleagues,
VeriClaim, O365
Users
Date: 2020.10.31
15:49:35 -04'00'

DRAWN:	DLF	
DATE:	11-05-09	
APPROVED:	DF	
DATE:	12-15-09	
DRAWING NO:	3-01-031	
SIZE:	B	REV: D
SCALE:	1 : 4	
SHEET:	15 OF 26	



**SCHEDULE 7 BASED ON EQUAL SPANS.
IF SPANS ARE NOT EQUAL THE DIFFERENCE
BETWEEN SPANS (SPAN1 - SPAN2) SHALL BE
USED TO EVALUATE THE FREE STANDING MULLION
AS AN END MULLION USING SCHEDULE 3, PAGE 13 OF 26.
THE EVALUATION SHALL BE AT THE SLAT
SPAN DIFFERENCE

SCHEDULE 7

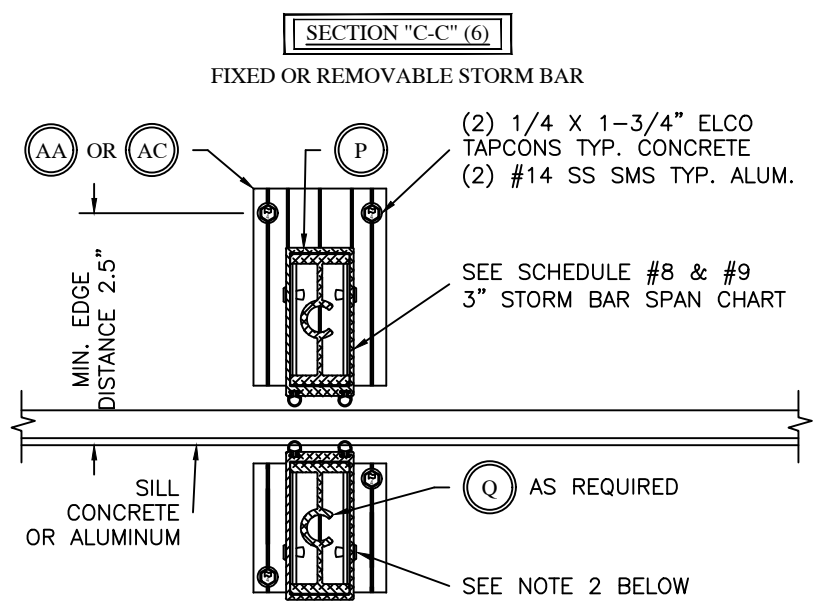
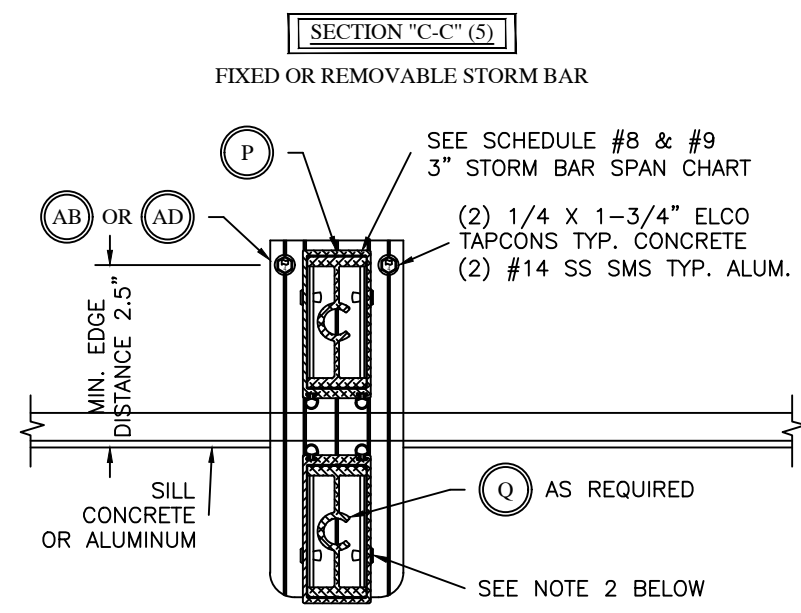
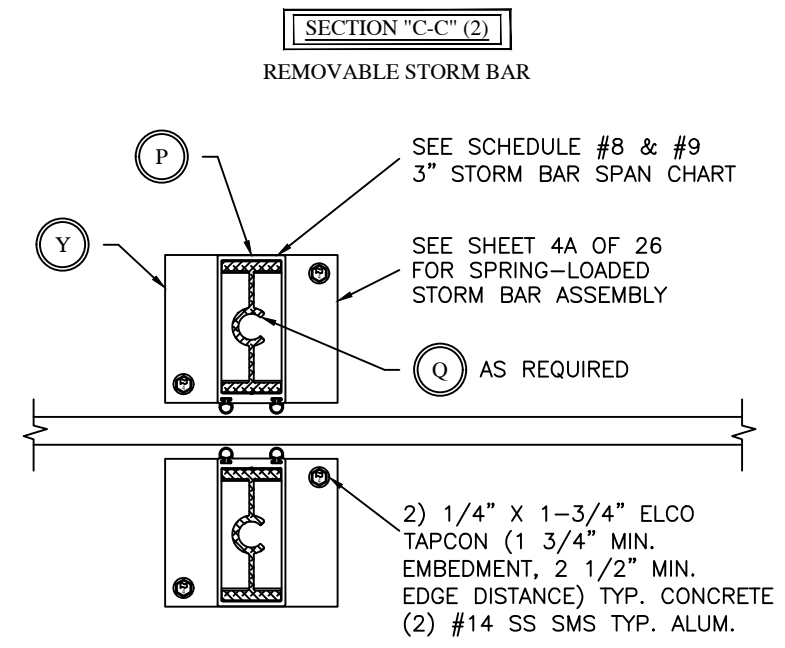
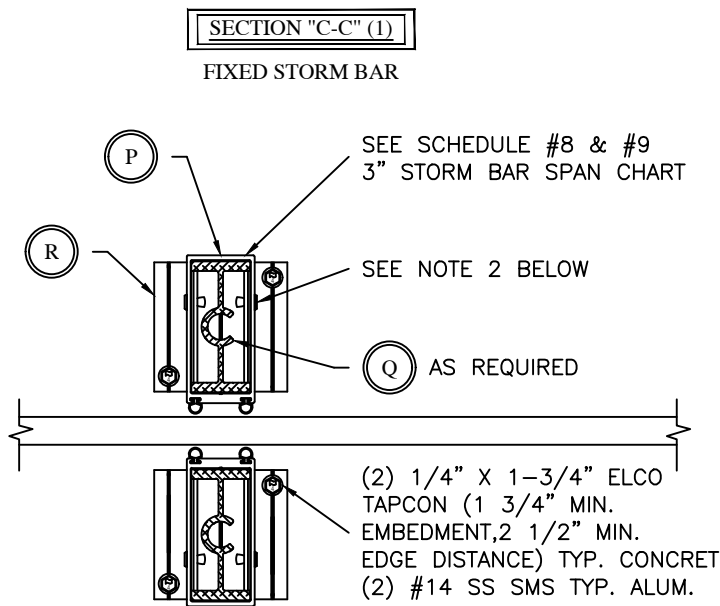
PSF	B-B(3) MAXIMUM MULLION HEIGHT (IN)															
	SLAT WIDTH (IN) - CLEAR SPAN (NO STORM BARS) - SEE PAGE 8															
	48	54	60	66	72	78	84	90	96	108	120	132	144	156	168	180
10	240.0	240.0	240.0	240.0	240.0	240.0	240.0	240.0	240.0	240.0	240.0	240.0	240.0	240.0	240.0	240.0
15	240.0	240.0	240.0	240.0	240.0	240.0	240.0	240.0	240.0	240.0	240.0	240.0	240.0	240.0	240.0	240.0
20	240.0	240.0	240.0	240.0	240.0	240.0	240.0	240.0	240.0	240.0	240.0	240.0	240.0	240.0	233.5	225.7
25	240.0	240.0	240.0	240.0	240.0	240.0	240.0	240.0	240.0	240.0	240.0	235.4	225.4	216.7	208.9	201.9
30	240.0	240.0	240.0	240.0	240.0	240.0	240.0	240.0	240.0	237.2	225.2	214.8	205.8	197.8	190.7	184.3
35	240.0	240.0	240.0	240.0	240.0	240.0	240.0	240.0	232.7	219.6	208.5	198.9	190.5	183.1	176.5	170.6
40	240.0	240.0	240.0	240.0	240.0	240.0	232.5	224.7	217.7	205.4	195.0	186.1	178.2	171.3	165.1	159.6
45	240.0	240.0	240.0	240.0	236.4	227.3	219.2	211.9	205.3	193.7	183.9	175.4	168.0	161.5	155.7	150.5
50	240.0	240.0	240.0	233.6	223.8	215.2	207.5	200.6	194.3	183.4	174.1	166.1	159.1	152.9	147.4	142.5
60	240.0	235.6	223.8	213.6	204.7	196.8	189.8	183.5	177.8	167.7	159.2	151.9	145.5	139.9	134.8	130.3
70	230.9	218.1	207.2	197.8	189.5	182.2	175.7	169.9	164.6	155.3	147.4	140.6	134.7	129.5	124.8	120.6
80	216.0	204.0	193.8	185.0	177.3	170.5	164.4	158.9	153.9	145.3	137.9	131.6	126.0	121.1	116.8	112.8
90	203.7	192.3	182.7	174.4	167.2	160.7	155.0	149.8	145.1	137.0	130.0	124.0	118.8	114.2	110.1	106.4
100	193.2	182.5	173.4	165.5	158.6	152.5	147.0	142.1	137.7	129.9	123.3	117.7	112.7	108.3	104.4	100.9
110	184.2	174.0	165.3	157.8	151.2	145.4	140.2	135.5	131.3	123.9	117.6	112.2	107.5	103.3	99.2	92.7
120	176.4	166.6	158.2	151.1	144.8	139.2	134.2	129.7	125.7	118.6	112.6	107.4	102.9	97.9	91.0	84.9
130	169.5	160.0	152.0	145.1	139.1	133.7	129.0	124.7	120.8	114.0	108.2	103.2	97.8	90.4	84.0	78.4
140	163.0	153.9	146.2	139.6	133.8	128.6	124.0	119.9	116.1	109.6	104.0	99.0	90.8	83.9	78.0	72.8

** MAXIMUM GAP BETWEEN CUT END
OF POST AND POST BASE IS 1/4"

DRAWING TITLE:
**NOTICE OF ACCEPTANCE
END RETENTION
PRODUCT APPROVAL**

Digitally signed by:
Fowler, Donald
DN: CN = Fowler,
Donald OJ =
Colleagues,
VeriClaim, O365
Users
Date: 2020.10.31
15:49:35 -04'00'

DRAWN:	DF		
DATE:	11-05-09		
APPROVED:	DF		
DATE:	11-05-09		
DRAWING NO:	3-01-031		
SIZE:	B	REV:	C
SCALE:	1 : 4		
SHEET:	16 OF 26		



NOTES:
1. ALL PERFORMANCE CHARTS ARE DRAWING SECTION SPECIFIC AND ARE BASED ON ANCHORAGE, BENDING STRESS, AND DEFLECTION LIMITS.
2. OPTIONAL (2) #56 SS POP RIVET OR (2) #12 x 3/4" SS SMS THRU STORM BAR INTO STORM BAR BASE PLATE. NON STRUCTURAL FASTENER TO KEEP ALUMINUM FROM VIBRATING.

3" STORM BAR PERFORMANCE

SCHEDULE #8

FIXED OR REMOVABLE

SECTION "C-C" (1), (2), (5), & (6)

3 SPAN	2 SPAN	SPAN WIDTH IN INCHES (BETWEEN RAILS)										
		48	60	72	84	96	108	120	132	144	156	168
17	10	183.0	169.8	159.8	151.8	145.2	139.6	134.4	128.5	123.3	118.7	114.6
26	15	159.8	148.4	139.6	131.3	123.3	116.6	110.9	106.0	101.7	97.9	94.5
35	20	145.2	134.4	123.3	114.6	107.6	101.7	96.7	92.4	88.7	85.3	82.4
43	25	134.4	120.9	110.9	103.1	96.7	91.4	87.0	83.1	79.7	76.7	74.0
52	30	123.3	110.9	101.7	94.5	88.6	83.8	79.7	76.1	73.0	70.2	67.8
61	35	114.6	103.0	94.5	87.8	82.3	77.8	74.0	70.7	67.8	65.2	62.9
70	40	107.5	96.7	88.6	82.3	77.2	73.0	69.4	66.3	63.5	61.1	59.0
78	45	101.6	91.4	83.7	77.8	72.9	68.9	65.5	62.6	60.0	57.7	55.7
87	50	96.6	86.9	79.6	73.9	69.3	65.5	62.3	59.5	57.0	54.9	52.1
105	60	88.5	79.6	72.9	67.7	63.5	60.0	57.0	54.4	50.7	46.8	43.4
122	70	82.2	73.9	67.7	62.9	58.9	55.7	52.1	47.4	43.4	40.1	37.2
140	80	77.1	69.3	63.5	58.9	55.2	50.7	45.6	41.5	38.0	35.1	32.6
157	90	72.9	65.5	60.0	55.7	50.7	45.0	40.5	36.8	33.8	31.2	29.0
175	100	69.3	62.2	57.0	52.1	45.6	40.5	36.5	33.2	30.4	28.1	26.1

3" WITH INSERT STORM BAR

SCHEDULE #9

FIXED OR REMOVABLE

SECTION "C-C" (1), (2), (5), & (6)

3 SPAN	2 SPAN	SPAN WIDTH IN INCHES (BETWEEN RAILS)										
		48	60	72	84	96	108	120	132	144	156	168
17	10	223.9	207.9	195.6	185.8	177.7	170.9	165.0	159.8	155.2	151.2	147.5
26	15	195.6	181.6	170.9	162.3	155.2	149.3	144.1	139.6	135.6	130.8	126.4
35	20	177.7	165.0	155.2	147.5	141.1	135.6	129.3	123.7	118.8	114.4	110.5
43	25	165.0	153.2	144.1	136.9	129.3	122.4	116.5	111.4	107.0	103.0	99.5
52	30	155.2	144.1	135.6	126.3	118.7	112.4	107.0	102.3	98.2	93.5	86.9
61	35	147.5	136.9	126.3	117.6	110.5	104.5	99.5	94.8	86.9	80.2	74.4
70	40	141.1	129.2	118.7	110.4	103.7	98.2	91.2	82.9	76.0	70.2	65.1
78	45	135.6	122.3	112.3	104.5	98.1	90.1	81.1	73.7	67.6	62.4	57.9
87	50	129.1	116.4	106.9	99.4	91.2	81.1	73.0	66.3	60.8	56.1	52.1
105	60	118.5	106.8	98.1	86.9	76.0	67.6	60.8	55.3	50.7	46.8	43.4
122	70	110.3	99.3	86.9	74.4	65.1	57.9	52.1	47.4	43.4	40.1	37.2
140	80	103.5	91.2	76.0	65.1	57.0	50.7	45.6	41.5	38.0	35.1	32.6
157	90	97.9	81.1	67.6	57.9	50.7	45.0	40.5	36.8	33.8	31.2	29.0
175	100	91.2	73.0	60.8	52.1	45.6	40.5	36.5	33.2	30.4	28.1	26.1



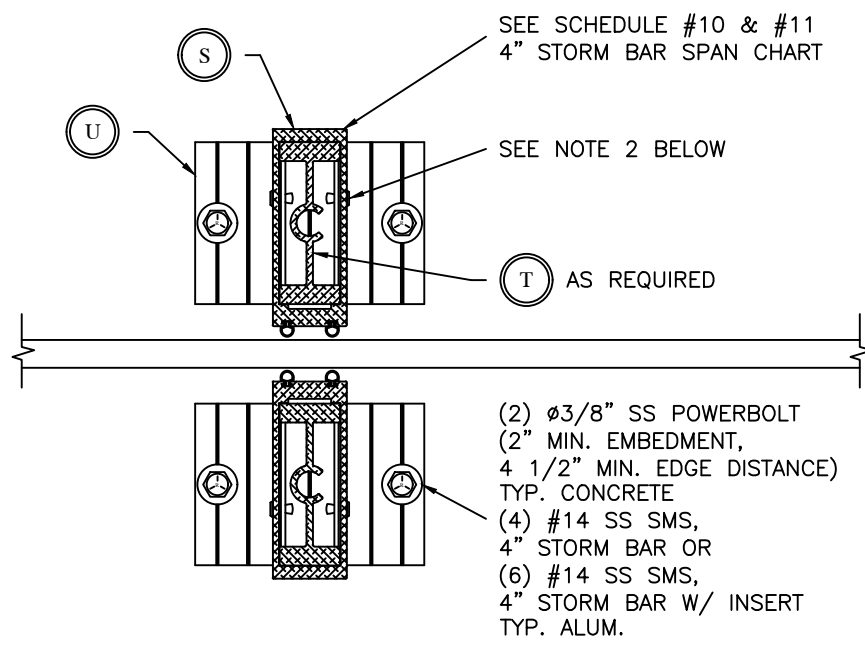
NOTICE OF ACCEPTANCE
 END RETENTION
 PRODUCT APPROVAL

Digitally signed by:
Fowler, Donald
DN: CN = Fowler,
Donald OJ =
Colleagues,
VeriClaim, O365
Users
Date: 2020.10.31
15:49:35 -04'00'

DRAWN:	DF
DATE:	11-05-09
APPROVED:	DF
DATE:	11-05-09
DRAWING NO:	3-01-031
SIZE:	B C
SCALE:	1 : 4
SHEET:	17 OF 26

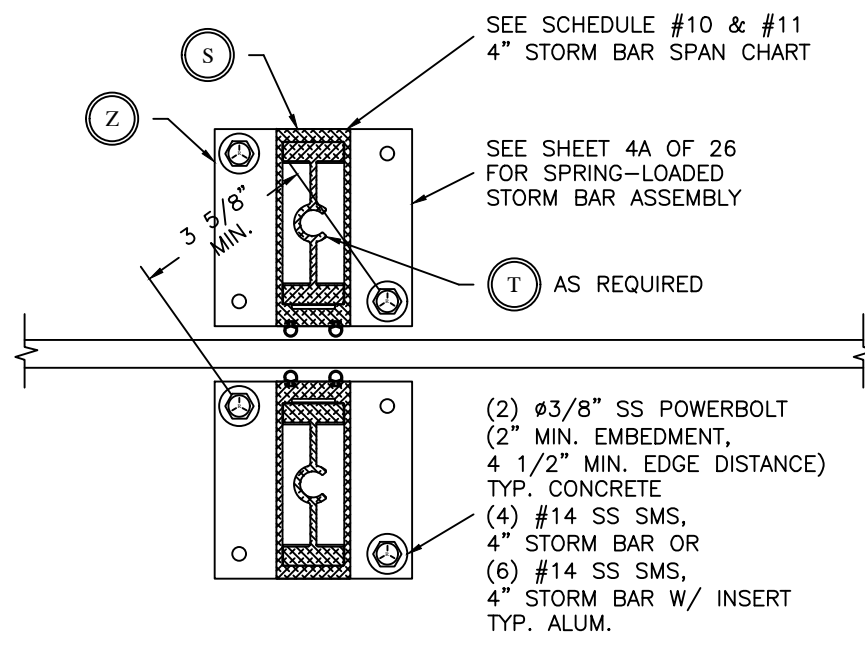
SECTION "C-C" (3)

FIXED STORM BAR



SECTION "C-C" (4)

REMOVABLE STORM BAR



4" STORM BAR PERFORMANCE		SCHEDULE # 10											
FIXED OR REMOVABLE		MAXIMUM STORM BAR HEIGHT (INCHES)											
SECTION "C-C" (3) & (4)													
PSF	PSF	SPAN WIDTH IN INCHES (BETWEEN RAILS)											
3 SPAN	2 SPAN	48	60	72	84	96	108	120	132	144	156	168	
17	10	240.0	240.0	240.0	239.5	229.1	220.3	212.6	206.0	200.1	194.8	190.1	
26	15	240.0	234.1	220.3	209.2	200.1	192.4	184.7	176.8	169.8	163.6	158.1	
35	20	229.1	212.6	200.1	190.1	179.3	169.8	161.7	154.7	148.6	143.1	138.3	
43	25	212.6	197.4	184.7	172.0	161.7	153.1	145.8	139.4	133.9	128.9	124.5	
52	30	200.1	184.6	169.7	158.0	148.5	140.6	133.8	128.0	122.9	118.3	114.3	
61	35	190.1	171.9	158.0	147.1	138.2	130.8	124.5	119.0	114.3	110.0	106.2	
70	40	179.1	161.6	148.5	138.2	129.8	122.8	116.9	111.8	107.3	103.3	99.7	
78	45	169.6	153.0	140.5	130.7	122.8	116.2	110.6	105.7	101.4	97.7	94.3	
87	50	161.5	145.6	133.7	124.4	116.9	110.6	105.2	100.6	96.5	92.9	89.7	
105	60	148.4	133.7	122.8	114.2	107.2	101.4	96.5	92.2	88.5	85.2	82.2	
122	70	138.1	124.4	114.2	106.2	99.7	94.3	89.7	85.7	82.2	79.1	76.4	
140	80	129.7	116.8	107.2	99.6	93.5	88.4	84.1	80.4	77.1	74.2	71.7	
157	90	122.7	110.4	101.3	94.2	88.4	83.6	79.5	76.0	72.9	70.2	67.7	
175	100	116.7	105.1	96.4	89.6	84.1	79.5	75.6	72.2	69.3	66.7	64.4	

4" W INSERT STORM BAR PERFORMANCE		SCHEDULE # 11											
FIXED OR REMOVABLE		MAXIMUM STORM BAR HEIGHT (INCHES)											
SECTION "C-C" (3) & (4)													
PSF	PSF	SPAN WIDTH IN INCHES (BETWEEN RAILS)											
3 SPAN	2 SPAN	48	60	72	84	96	108	120	132	144	156	168	
17	10	240.0	240.0	240.0	240.0	240.0	240.0	240.0	240.0	239.3	232.5	226.4	220.9
26	15	240.0	240.0	240.0	240.0	232.5	223.5	215.8	209.1	203.1	197.8	192.9	
35	20	240.0	240.0	232.5	220.9	211.2	203.1	196.1	189.3	182.0	175.6	169.7	
43	25	240.0	229.4	215.8	205.0	196.1	187.4	178.7	171.1	164.5	158.6	153.3	
52	30	232.5	215.8	203.1	192.9	182.0	172.6	164.5	157.5	151.4	145.9	141.0	
61	35	220.9	205.0	192.9	180.3	169.7	160.9	153.3	146.8	141.0	135.9	131.3	
70	40	211.2	196.1	182.0	169.7	159.7	151.4	144.2	138.0	132.6	127.8	123.5	
78	45	203.1	187.4	172.6	160.9	151.4	143.4	136.6	130.7	125.6	121.0	116.9	
87	50	196.1	178.6	164.5	153.3	144.2	136.6	130.1	124.5	119.5	115.2	111.3	
105	60	181.9	164.4	151.3	140.9	132.5	125.5	119.5	114.3	109.8	105.8	102.2	
122	70	169.6	153.2	140.9	131.3	123.4	116.8	111.2	106.4	102.2	98.4	95.0	
140	80	159.6	144.1	132.5	123.4	116.0	109.8	104.5	99.9	95.9	92.4	89.2	
157	90	151.2	136.5	125.4	116.8	109.7	103.9	98.9	94.6	90.8	87.4	84.4	
175	100	144.0	130.0	119.4	111.2	104.5	98.9	94.1	90.0	86.4	83.2	80.3	

NOTES:
 1. ALL PERFORMANCE CHARTS ARE DRAWING SECTION SPECIFIC AND ARE BASED ON ANCHORAGE, BENDING STRESS, AND DEFLECTION LIMITS.
 2. OPTIONAL (2) #56 SS POP RIVET OR (2) #12 x 3/4" SS SMS THRU STORM BAR INTO STORM BAR BASE PLATE. NON STRUCTURAL FASTENER TO KEEP ALUMINUM FROM VIBRATING.



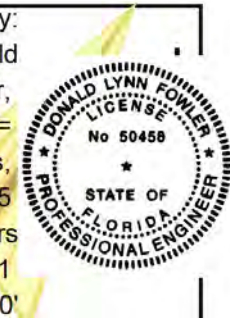
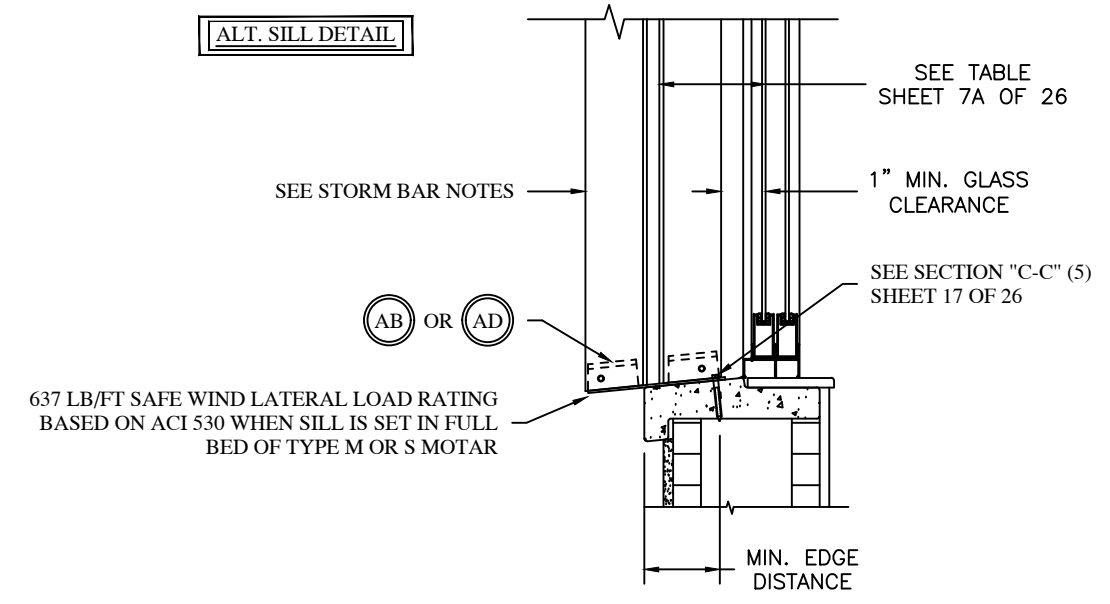
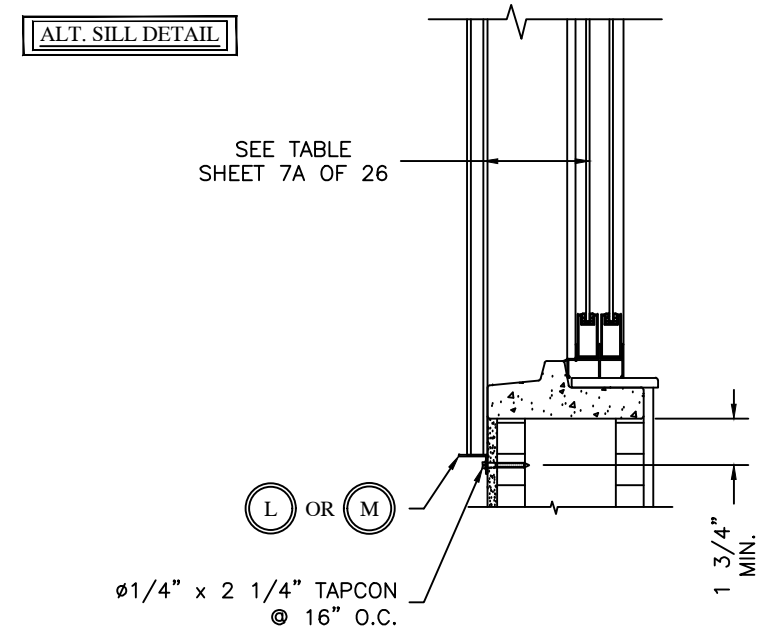
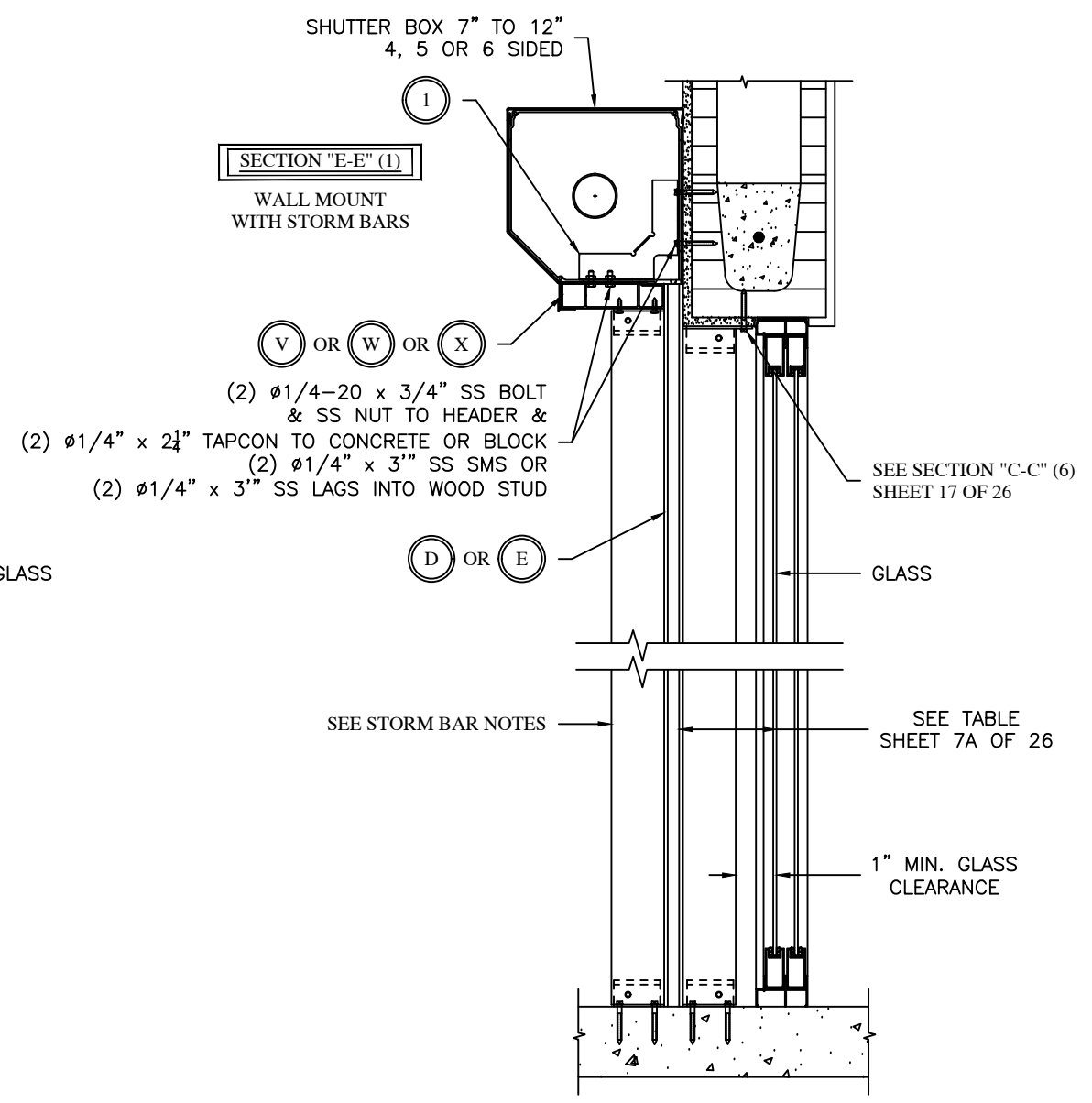
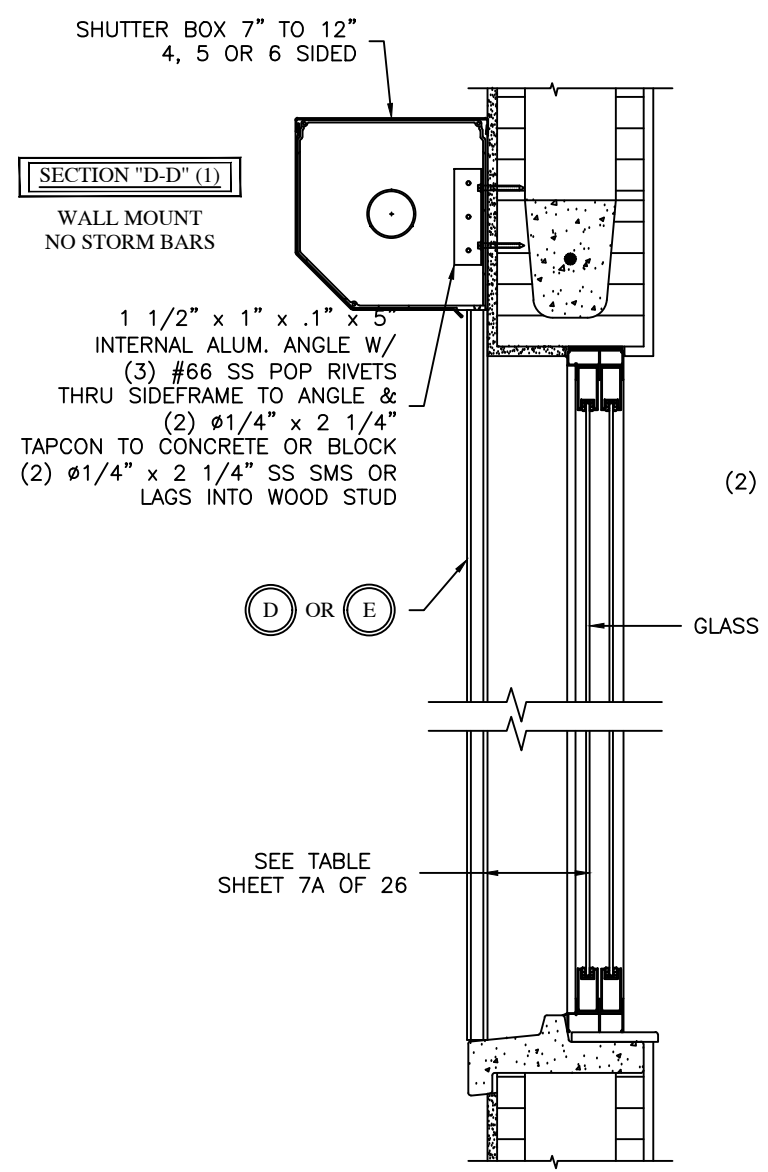
NOTICE OF ACCEPTANCE
 END RETENTION
 PRODUCT APPROVAL

Digitally signed by:
 Fowler, Donald
 DN: CN = Fowler,
 Donald OJ =
 Colleagues,
 VeriClaim, O365
 Users
 Date: 2020.10.31
 15:49:35 -04'00'

DRAWN:	DF		
DATE:	11-05-09		
APPROVED:	DF		
DATE:	11-05-09		
DRAWING NO:	3-01-031		
SIZE:	B	REV:	C
SCALE:	1 : 4		
SHEET:	18	OF	26

DRAWING TITLE:
**NOTICE OF ACCEPTANCE
END RETENTION
PRODUCT APPROVAL**

Digitally signed by:
Fowler, Donald
DN: CN = Fowler,
Donald OJ =
Colleagues,
VeriClaim, O365
Users
Date: 2020.10.31
15:49:35 -04'00'

- STORM BAR NOTES:
1. SHUTTER SECTIONS ARE SHOWN WITH FIXED STORM BARS. STORM BARS CAN BE FIXED OR REMOVABLE, REMOVABLE (SPRING-LOADED) STORM BAR ASSEMBLIES & MOUNTING ARE SHOWN ON SHEET 17, 18, & 4A OF 26.
 2. SHUTTER(S) SHOULD NOT BE ROLLED DOWN DURING WIND EVENTS WITHOUT REMOVABLE STORM BARS IN PLACE. ROLL-A-WAY IS NOT RESPONSIBLE FOR SUBSEQUENT DAMAGE.
 3. REMOVING SPRING-LOADED STORM BARS: REMOVE PIN, LIFT UP ON STORM BAR, WHEN BOTTOM FEET CLEAR THE STORM BAR BASE PLATE, ROTATE STORM BAR OUT OF OPENING.
 4. SHUTTERS WITH NO STORM BARS OVER 72" WIDE SHOULD USE SOME FORM OF HOOD SUPPORT, HEADER, TUBING OR EXTERNAL SUPPORT.
 5. SEE ALLOWABLE HEADER SPAN TABLES ON PAGE 20 THRU 20C OF 26.
 6. FOR ALLOWABLE HEADER SPANS USING EXTERIOR REINFORCEMENT BRACKETS SEE SHEET 24 OF 26.

DRAWN: DF	
DATE: 08-10-04	
APPROVED: DLF	
DATE: 10-28-08	
DRAWING NO: 3-01-031	
SIZE: B	REV: A
SCALE: 1 : 10	
SHEET: 19 OF 26	

SCHEDULE 12

MAXIMUM ALLOWABLE 2 SPAN 5.875" HEADER WIDTH (TRACK TO TRACK) E-E (1) ATTACHMENT TO WOOD																
PSF	STORM BAR HEIGHT UNDER HEADER															
	42	48	54	60	66	72	78	84	90	96	102	108	114	120	126	132
25	192.0	192.0	192.0	192.0	192.0	192.0	192.0	192.0	186.1	180.7	175.7	171.2	167.0	163.1	159.5	156.1
30	192.0	192.0	192.0	192.0	192.0	189.5	182.8	176.7	171.2	166.2	161.6	157.4	153.6	150.0	146.6	143.5
35	192.0	192.0	192.0	192.0	183.8	176.7	170.3	164.6	159.5	154.8	150.5	146.6	143.0	139.6	136.5	133.6
40	192.0	192.0	189.5	180.7	173.0	166.2	160.2	154.8	150.0	145.6	141.5	137.8	134.4	131.2	128.3	125.5
45	192.0	189.5	179.6	171.2	163.9	157.4	151.7	146.6	142.0	137.8	134.0	130.5	127.2	124.2	119.0	113.6
50	192.0	180.7	171.2	163.1	156.1	150.0	144.5	139.6	135.2	131.2	127.6	124.2	118.4	112.4	107.1	102.2
55	183.8	172.9	163.8	156.1	149.4	143.5	138.2	133.6	129.3	125.5	120.3	113.6	107.6	102.2	97.3	92.9
60	176.6	166.1	157.4	149.9	143.4	137.8	132.7	128.2	124.2	117.1	110.2	104.1	98.6	93.7	89.2	85.2
65	170.2	160.1	151.6	144.4	138.2	132.7	127.9	123.5	115.3	108.1	101.8	96.1	91.0	86.5	82.4	78.6
70	164.5	154.7	146.5	139.5	133.5	128.2	123.5	114.7	107.1	100.4	94.5	89.2	84.5	80.3	76.5	73.0
75	159.3	149.8	141.9	135.1	129.2	124.1	115.3	107.1	99.9	93.7	88.2	83.3	78.9	75.0	71.4	68.1
80	154.6	145.4	137.6	131.1	125.4	117.1	108.1	100.4	93.7	87.8	82.7	78.1	74.0	70.3	66.9	63.9
85	150.3	141.3	133.8	127.4	120.3	110.2	101.8	94.5	88.2	82.7	77.8	73.5	69.6	66.1	63.0	60.1
90	146.4	137.6	130.3	124.1	113.6	104.1	96.1	89.2	83.3	78.1	73.5	69.4	65.8	62.5	59.5	56.8
95	142.7	134.2	127.0	118.4	107.6	98.6	91.0	84.5	78.9	74.0	69.6	65.8	62.3	59.2	56.4	53.8
100	139.4	131.0	124.0	112.4	102.2	93.7	86.5	80.3	75.0	70.3	66.1	62.5	59.2	56.2	53.5	51.1
125	125.6	112.4	99.9	89.9	81.8	75.0	69.2	64.2	60.0	56.2	52.9	50.0	47.3	45.0	42.8	40.9
150	107.1	93.7	83.3	75.0	68.1	62.5	57.7	53.5	50.0	46.8	44.1	41.6	39.5	37.5	35.7	34.1
175	91.8	80.3	71.4	64.2	58.4	53.5	49.4	45.9	42.8	40.2	37.8	35.7	33.8	32.1	30.6	29.2
200	80.3	70.3	62.5	56.2	51.1	46.8	43.2	40.2	37.5	35.1	33.1	31.2	29.6	28.1	26.8	25.6
225	71.4	62.5	55.5	50.0	45.4	41.6	38.4	35.7	33.3	31.2	29.4	27.8	26.3	25.0	23.8	22.7
250	64.2	56.2	50.0	45.0	40.9	37.5	34.6	32.1	30.0	28.1	26.5	25.0	23.7	22.5	21.4	20.4
275	58.4	51.1	45.4	40.9	37.2	34.1	31.5	29.2	27.3	25.6	24.1	22.7	21.5	20.4	19.5	18.6

SCHEDULE 14

MAXIMUM ALLOWABLE 2 SPAN 5.875" HEADER WIDTH (TRACK TO TRACK) E-E (1) ATTACHMENT TO BLOCK																
PSF	STORM BAR HEIGHT UNDER HEADER															
	42	48	54	60	66	72	78	84	90	96	102	108	114	120	126	132
25	192.0	192.0	192.0	192.0	192.0	192.0	192.0	192.0	186.1	180.7	175.7	171.2	167.0	163.1	159.5	156.1
30	192.0	192.0	192.0	192.0	192.0	189.5	182.8	176.7	171.2	166.2	161.6	157.4	153.6	150.0	146.6	143.5
35	192.0	192.0	192.0	192.0	183.8	176.7	170.3	164.6	159.5	154.8	150.5	146.6	143.0	139.6	134.8	128.7
40	192.0	192.0	189.5	180.7	173.0	166.2	160.2	154.8	150.0	145.6	141.5	137.6	130.4	123.8	117.9	112.6
45	192.0	189.5	179.6	171.2	163.9	157.4	151.7	146.6	142.0	137.6	129.5	122.3	115.9	110.1	104.8	100.1
50	192.0	180.7	171.2	163.1	156.1	150.0	144.5	139.6	132.1	123.8	116.6	110.1	104.3	99.1	94.4	90.1
55	183.8	172.9	163.8	156.1	149.4	143.5	138.2	128.7	120.1	112.6	106.0	100.1	94.8	90.1	85.8	81.9
60	176.6	166.1	157.4	149.9	143.4	137.6	127.0	117.9	110.1	103.2	97.1	91.7	86.9	82.6	78.6	75.1
65	170.2	160.1	151.6	144.4	138.2	127.0	117.2	108.9	101.6	95.3	89.7	84.7	80.2	76.2	72.6	69.3
70	164.5	154.7	146.5	139.5	128.7	117.9	108.9	101.1	94.4	88.5	83.3	78.6	74.5	70.8	67.4	64.3
75	159.3	149.8	141.9	132.1	120.1	110.1	101.6	94.4	88.1	82.6	77.7	73.4	69.5	66.0	62.9	60.0
80	154.6	145.4	137.6	123.8	112.6	103.2	95.3	88.5	82.6	77.4	72.8	68.8	65.2	61.9	59.0	56.3
85	150.3	141.3	129.5	116.6	106.0	97.1	89.7	83.3	77.7	72.8	68.6	64.8	61.3	58.3	55.5	53.0
90	146.4	137.6	122.3	110.1	100.1	91.7	84.7	78.6	73.4	68.8	64.8	61.2	57.9	55.0	52.4	50.0
95	142.7	130.4	115.9	104.3	94.8	86.9	80.2	74.5	69.5	65.2	61.3	57.9	54.9	52.1	49.7	47.4
100	139.4	123.8	110.1	99.1	90.1	82.6	76.2	70.8	66.0	61.9	58.3	55.0	52.1	49.5	47.2	45.0
125	113.2	99.1	88.1	79.3	72.1	66.0	61.0	56.6	52.8	49.5	46.6	44.0	41.7	39.6	37.7	36.0
150	94.4	82.6	73.4	66.0	60.0	55.0	50.8	47.2	44.0	41.3	38.9	36.7	34.8	33.0	31.5	30.0
175	80.9	70.8	62.9	56.6	51.5	47.2	43.5	40.4	37.7	35.4	33.3	31.5	29.8	28.3	27.0	25.7
200	70.8	61.9	55.0	49.5	45.0	41.3	38.1	35.4	33.0	31.0	29.1	27.5	26.1	24.8	23.6	22.5
225	62.9	55.0	48.9	44.0	40.0	36.7	33.9	31.5	29.4	27.5	25.9	24.5	23.2	22.0	21.0	20.0
250	56.6	49.5	44.0	39.6	36.0	33.0	30.5	28.3	26.4	24.8	23.3	22.0	20.9	19.8	18.9	18.0
275	51.5	45.0	40.0	36.0	32.8	30.0	27.7	25.7	24.0	22.5	21.2	20.0	19.0	18.0	17.2	16.4

SCHEDULE 13

MAXIMUM ALLOWABLE 3 SPAN 5.875" HEADER WIDTH (TRACK TO TRACK) E-E (1) ATTACHMENT TO WOOD																		
PSF	STORM BAR HEIGHT UNDER HEADER																	
	42	48	54	60	66	72	78	84	90	96	102	108	114	120	126	132		
25	192.0	192.0	192.0	192.0	192.0	192.0	192.0	192.0	192.0	192.0	192.0	192.0	192.0	191.3	186.6	182.3	178.3	174.1
30	192.0	192.0	192.0	192.0	192.0	192.0	192.0	192.0	192.0	191.3	185.7	180.7	176.0	168.0	159.6	152.0	145.1	141.1
35	192.0	192.0	192.0	192.0	192.0	192.0	192.0	190.3	184.0	178.3	171.0	160.9	152.0	144.0	136.8	130.3	124.3	120.3
40	192.0	192.0	192.0	192.0	192.0	185.7	179.1	171.0	159.6	149.6	140.8	133.0	125.2	118.2	112.0	106.4	101.3	96.7
45	192.0	192.0	192.0	191.3	183.2	176.0	163.7	152.0	141.8	133.0	125.2	118.2	112.0	106.4	101.3	96.7	92.0	87.0
50	192.0	192.0	191.3	182.3	174.1	159.6	147.3	136.8	127.7	119.7	112.6	106.4	100.8	95.7	91.2	87.0	82.9	79.1
55	192.0	192.0	183.1	174.1	158.3	145.1	133.9	124.3	116.1	108.8	102.4	96.7	91.6	87.0	82.9	79.1	75.4	71.7
60	192.0	185.6	176.0	159.6	145.1	133.0	122.8	114.0	106.4	99.7	93.9	88.7	84.0	79.8	76.0	72.5	69.0	65.5
65	190.2	179.0	163.7	147.3	133.9	122.8	113.3	105.2	98.2	92.1	86.6	81.8	77.5	73.7	70.1	67.0	64.0	61.0
70	183.8	171.0	152.0	136.8	124.3	114.0	105.2	97.7	91.2	85.5	80.5	76.0	72.0	68.4	65.1	62.2	59.3	56.4
75	178.1	159.6	141.8	127.7	116.1	106.4	98.2	91.2	85.1	79.8	75.1	70.9	67.2	63.8	60.8	58.0	55.2	52.4
80	171.0	149.6	133.0	119.7	108.8	99.7	92.1	85.5	79.8	74.8	70.4	66.5	63.0	59.8	57.0	54.4	51.8	49.2
85	160.9	140.8	125.2	112.6	102.4	93.9	86.6	80.5	75.1	70.4	66.3	62.6	59.3	56.3	53.6	51.2	48.8	46.4
90	152.0	133.0	118.2	106.4	96.7	88.7	81.8	76.0	70.9	66.5	62.6	59.1	56.0	53.2	50.7	48.4	46.1	43.8
95	144.0	126.0	112.0	100.8	91.6	84.0	77.5	72.0	67.2	63.0	59.3	56.0	53.0	50.4	48.0	45.8	43.6	41.4
100	136.8	119.7	106.4	95.7	87.0	79.8	73.7	68.4	63.8	59.8	56.3	53.2	50.4	47.9	45.6	43.5	41.4	39.3
125	109.4	95.7	85.1	76.6	69.6	63.8	58.9	54.7	51.1	47.9	45.1	42.6	40.3	38.3	36.5	34.8	33.1	31.4
150	91.2	79.8	70.9	63.8	58.0	53.2	49.1	45.6	42.6	39.9	37.5	35.5	33.6	31.9	30.4	29.0	27.6	26.2
175	78.2	68.4	60.8	54.7	49.7	45.6	42.1	39.1	36.5	34.2	32.2	30.4	28.8	27.4	26.1	24.9	23.7	22.5
200	68.4	59.8	53.2	47.9	43.5	39.9	36.8	34.2	31.9	29.9	28.2	26.6	25.2	23.9	22.8	21.8	20.8	19.8
225	60.8	53.2	47.3	42.6	38.7	35.5	32.7	30.4	28.4	26.6	25.0	23.6	22.4	21.3	20.3	19.3	18.4	17.4
250	54.7	47.9	42.6	38.3	34.8	31.9	29.5	27.4	25.5	23.9	2							

SCHEDULE 16

MAXIMUM ALLOWABLE 2 SPAN 5.875" HEADER WIDTH (TRACK TO TRACK) E-E (1), (2) AND (3) ATTACHMENT TO CONCRETE OR BUILD OUT

PSF	STORM BAR HEIGHT UNDER HEADER															
	42	48	54	60	66	72	78	84	90	96	102	108	114	120	126	132
25	240.0	240.0	234.3	223.5	214.1	205.9	198.6	192.0	186.1	180.7	175.7	171.2	167.0	163.1	159.5	156.1
30	240.0	227.6	215.9	205.9	197.2	189.5	182.8	176.7	171.2	166.2	161.6	157.4	153.6	150.0	146.6	143.5
35	225.5	212.4	201.4	192.0	183.8	176.7	170.3	164.6	159.5	154.8	150.5	146.6	143.0	139.6	136.5	133.6
40	212.4	200.0	189.5	180.7	173.0	166.2	160.2	154.8	150.0	145.6	141.5	137.8	134.4	131.2	128.3	125.5
45	201.4	189.5	179.6	171.2	163.9	157.4	151.7	146.6	142.0	137.8	134.0	130.5	127.2	124.2	121.4	118.8
50	192.0	180.7	171.2	163.1	156.1	150.0	144.5	139.6	135.2	131.2	127.6	124.2	121.1	118.3	115.6	113.1
55	183.8	172.9	163.8	156.1	149.4	143.5	138.2	133.6	129.3	125.5	122.0	118.8	115.8	113.1	110.5	108.1
60	176.6	166.1	157.4	149.9	143.4	137.8	132.7	128.2	124.2	120.5	117.1	114.0	111.2	108.5	106.1	103.8
65	170.2	160.1	151.6	144.4	138.2	132.7	127.9	123.5	119.6	116.0	112.8	109.8	107.1	104.5	102.1	99.9
70	164.5	154.7	146.5	139.5	133.5	128.2	123.5	119.3	115.5	112.1	108.9	106.0	103.4	100.9	98.6	96.5
75	159.3	149.8	141.9	135.1	129.2	124.1	119.6	115.5	111.8	108.5	105.4	102.6	100.1	97.7	95.5	93.4
80	154.6	145.4	137.6	131.1	125.4	120.4	116.0	112.0	108.5	105.2	102.3	99.6	97.0	94.7	92.6	90.6
85	150.3	141.3	133.8	127.4	121.9	117.0	112.7	108.9	105.4	102.3	99.4	96.7	94.3	92.1	90.0	88.0
90	146.4	137.6	130.3	124.0	118.6	113.9	109.7	106.0	102.6	99.5	96.7	94.1	91.8	89.6	87.5	85.6
95	142.7	134.2	127.0	120.9	115.7	111.0	107.0	103.3	100.0	97.0	94.3	91.8	89.4	87.3	85.3	83.5
100	139.4	131.0	124.0	118.1	112.9	108.4	104.4	100.8	97.6	94.7	92.0	89.6	87.3	85.2	83.3	81.3
125	125.6	118.0	111.7	106.3	101.6	97.6	94.0	90.7	87.8	85.2	82.8	79.5	75.3	71.6	68.2	65.1
150	115.3	108.3	102.5	97.5	93.2	89.5	86.2	83.2	79.5	74.6	70.2	66.3	62.8	59.6	56.8	54.2
175	107.2	100.7	95.3	90.7	86.7	83.2	78.7	73.0	68.2	63.9	60.1	56.8	53.8	51.1	48.7	46.5
200	100.7	94.6	89.5	85.1	81.3	74.6	68.8	63.9	59.6	55.9	52.6	49.7	47.1	44.7	42.6	40.7
225	95.3	89.4	84.6	79.5	72.3	66.3	61.2	56.8	53.0	49.7	46.8	44.2	41.9	39.8	37.9	36.2
250	90.6	85.1	79.5	71.6	65.1	59.6	55.1	51.1	47.7	44.7	42.1	39.8	37.7	35.8	34.1	32.5
275	86.6	81.3	72.3	65.1	59.2	54.2	50.1	46.5	43.4	40.7	38.3	36.2	34.2	32.5	31.0	29.6

SCHEDULE 17

MAXIMUM ALLOWABLE 3 SPAN 5.875" HEADER WIDTH (TRACK TO TRACK) E-E (1), (2) AND (3) ATTACHMENT TO CONCRETE OR BUILD OUT

PSF	STORM BAR HEIGHT UNDER HEADER															
	42	48	54	60	66	72	78	84	90	96	102	108	114	120	126	132
25	240.0	240.0	240.0	240.0	239.5	230.0	221.6	214.3	207.7	201.8	196.3	191.3	186.6	182.3	178.3	174.6
30	240.0	240.0	240.0	230.0	220.1	211.6	204.1	197.4	191.3	185.7	180.7	176.0	171.7	167.7	164.0	160.6
35	240.0	237.5	224.9	214.3	205.3	197.4	190.3	184.0	178.3	173.1	168.4	164.0	160.0	156.3	152.8	149.6
40	237.5	223.2	211.6	201.8	193.2	185.7	179.1	173.1	167.7	162.8	158.4	154.3	150.5	146.9	143.7	140.6
45	224.9	211.6	200.6	191.3	183.2	176.0	169.7	164.0	158.9	154.3	150.0	146.1	142.5	139.1	136.0	133.1
50	214.3	201.8	191.3	182.3	174.6	167.7	161.7	156.3	151.4	146.9	142.9	139.1	135.7	132.5	129.5	126.8
55	205.2	193.2	183.1	174.5	167.1	160.5	154.7	149.5	144.8	140.6	136.7	133.1	129.8	126.7	123.9	121.2
60	197.2	185.6	175.9	167.7	160.5	154.2	148.6	143.6	139.1	135.0	131.2	127.8	124.6	121.7	118.9	115.4
65	190.2	179.0	169.6	161.6	154.6	148.6	143.2	138.3	134.0	130.0	126.4	123.1	120.0	117.2	114.6	111.6
70	183.8	173.0	163.9	156.1	149.4	143.5	138.3	133.6	129.4	125.6	122.1	118.9	114.6	108.8	103.7	98.9
75	178.1	167.5	158.7	151.2	144.7	139.0	133.9	129.4	125.3	121.6	118.2	112.9	106.9	101.6	96.8	92.4
80	172.9	162.6	154.0	146.7	140.4	134.9	129.9	125.5	121.6	118.0	112.0	105.8	100.3	95.2	90.7	86.6
85	168.1	158.1	149.8	142.7	136.5	131.1	126.3	122.0	118.2	112.0	105.5	99.6	94.4	89.6	85.4	81.5
90	163.7	154.0	145.9	138.9	132.9	127.7	123.0	118.8	112.9	105.8	99.6	94.1	89.1	84.7	80.6	77.0
95	159.7	150.2	142.2	135.5	129.6	124.5	119.9	114.6	106.9	100.3	94.4	89.1	84.4	80.2	76.4	72.9
100	155.9	146.6	138.9	132.2	126.5	121.5	117.0	108.8	101.6	95.2	89.6	84.7	80.2	76.2	72.6	69.3
125	140.6	132.2	125.1	119.1	110.8	101.6	93.8	87.1	81.3	76.2	71.7	67.7	64.2	61.0	58.1	55.4
150	129.1	121.4	112.9	101.6	92.4	84.7	78.1	72.6	67.7	63.5	59.8	56.4	53.5	50.8	48.4	46.2
175	120.1	108.8	96.8	87.1	79.2	72.6	67.0	62.2	58.1	54.4	51.2	48.4	45.8	43.5	41.5	39.6
200	108.8	95.2	84.7	76.2	69.3	63.5	58.6	54.4	50.8	47.6	44.8	42.3	40.1	38.1	36.3	34.6
225	96.8	84.7	75.3	67.7	61.6	56.4	52.1	48.4	45.2	42.3	39.8	37.6	35.6	33.9	32.3	30.8
250	87.1	76.2	67.7	61.0	55.4	50.8	46.9	43.5	40.6	38.1	35.9	33.9	32.1	30.5	29.0	27.7
275	79.2	69.3	61.6	55.4	50.4	46.2	42.6	39.6	36.9	34.6	32.6	30.8	29.2	27.7	26.4	25.2



DRAWING TITLE:
NOTICE OF ACCEPTANCE
END RETENTION
PRODUCT APPROVAL

Digitally signed by:
Fowler, Donald
DN: CN = Fowler,
Donald OJ =
Colleagues,
VeriClaim, O365
Users
Date: 2020.10.31
15:49:35 -04'00'

DRAWN:	DF
DATE:	08-10-04
APPROVED:	DLF
DATE:	10-28-08
DRAWING NO:	3-01-031
SIZE:	B
REV:	B
SCALE:	1 : 10
SHEET:	20A OF 26

SCHEDULE 12A

MAXIMUM ALLOWABLE 2 SPAN 3.5" HEADER WIDTH (TRACK TO TRACK) E-E (1) ATTACHMENT TO WOOD																
PSF	STORM BAR HEIGHT UNDER HEADER															
	42	48	54	60	66	72	78	84	90	96	102	108	114	120	126	132
25	182.0	171.0	161.8	154.0	147.3	141.4	136.2	131.5	127.3	123.5	120.0	116.8	113.8	111.1	108.5	106.1
30	167.1	157.0	148.6	141.4	135.2	129.8	124.9	120.6	116.8	113.2	110.0	107.1	104.4	101.8	99.5	97.3
35	155.5	146.1	138.2	131.5	125.7	120.6	116.1	112.1	108.5	105.2	102.2	99.5	97.0	94.6	92.4	90.4
40	146.1	137.2	129.8	123.5	118.0	113.2	109.0	105.2	101.8	98.8	95.9	93.4	91.0	88.8	86.7	84.8
45	138.2	129.8	122.7	116.8	111.6	107.1	103.1	99.5	96.3	93.4	90.7	88.3	86.0	83.9	82.0	80.2
50	131.5	123.5	116.8	111.1	106.1	101.8	98.0	94.6	91.6	88.8	86.2	83.9	81.8	79.8	77.9	76.2
55	125.7	118.0	111.6	106.1	101.4	97.3	93.7	90.4	87.5	84.8	82.4	80.2	78.1	76.2	74.4	72.8
60	120.6	113.2	107.1	101.8	97.3	93.3	89.8	86.7	83.9	81.3	79.0	76.9	74.9	73.1	71.4	69.8
65	116.1	109.0	103.0	98.0	93.6	89.8	86.5	83.4	80.7	78.3	76.0	74.0	72.1	70.3	68.7	67.2
70	112.1	105.2	99.5	94.6	90.4	86.7	83.4	80.5	77.9	75.5	73.4	71.4	69.5	67.8	66.3	64.8
75	108.5	101.8	96.2	91.5	87.4	83.9	80.7	77.9	75.4	73.1	71.0	69.0	67.3	65.6	64.1	62.7
80	105.2	98.7	93.3	88.7	84.8	81.3	78.2	75.5	73.1	70.8	68.8	66.9	65.2	63.6	62.1	60.8
85	102.2	95.9	90.6	86.2	82.3	79.0	76.0	73.3	71.0	68.8	66.8	65.0	63.3	61.8	60.3	59.0
90	99.4	93.3	88.2	83.9	80.1	76.8	73.9	71.4	69.0	66.9	65.0	63.2	61.6	60.1	58.7	56.8
95	96.9	90.9	85.9	81.7	78.1	74.9	72.0	69.5	67.2	65.2	63.3	61.6	60.0	58.5	56.4	53.8
100	94.5	88.7	83.8	79.7	76.1	73.0	70.3	67.8	65.6	63.6	61.8	60.1	58.5	56.2	53.5	51.1
125	85.0	79.7	75.3	71.6	68.4	65.6	63.1	60.9	58.9	56.2	52.9	50.0	47.3	45.0	42.8	40.9
150	77.8	73.0	69.0	65.6	62.6	60.1	57.7	55.5	50.0	46.8	44.1	41.6	39.5	37.5	35.7	34.1
175	72.3	67.8	64.0	60.9	58.1	53.5	49.4	45.9	42.8	40.2	37.8	35.7	33.8	32.1	30.6	29.2
200	67.7	63.5	60.0	56.2	51.1	46.8	43.2	40.2	37.5	35.1	33.1	31.2	29.6	28.1	26.8	25.6
225	64.0	60.0	55.5	50.0	45.4	41.6	38.4	35.7	33.3	31.2	29.4	27.8	26.3	25.0	23.8	22.7
250	60.8	56.2	50.0	45.0	40.9	37.5	34.6	32.1	30.0	28.1	26.5	25.0	23.7	22.5	21.4	20.4
275	58.1	51.1	45.4	40.9	37.2	34.1	31.5	29.2	27.3	25.6	24.1	22.7	21.5	20.4	19.5	18.6

SCHEDULE 14A

MAXIMUM ALLOWABLE 2 SPAN 3.5" HEADER WIDTH (TRACK TO TRACK) E-E (1) ATTACHMENT TO BLOCK																
PSF	STORM BAR HEIGHT UNDER HEADER															
	42	48	54	60	66	72	78	84	90	96	102	108	114	120	126	132
25	182.0	171.0	161.8	154.0	147.3	141.4	136.2	131.5	127.3	123.5	120.0	116.8	113.8	111.1	108.5	106.1
30	167.1	157.0	148.6	141.4	135.2	129.8	124.9	120.6	116.8	113.2	110.0	107.1	104.4	101.8	99.5	97.3
35	155.5	146.1	138.2	131.5	125.7	120.6	116.1	112.1	108.5	105.2	102.2	99.5	97.0	94.6	92.4	90.4
40	146.1	137.2	129.8	123.5	118.0	113.2	109.0	105.2	101.8	98.8	95.9	93.4	91.0	88.8	86.7	84.8
45	138.2	129.8	122.7	116.8	111.6	107.1	103.1	99.5	96.3	93.4	90.7	88.3	86.0	83.9	82.0	80.2
50	131.5	123.5	116.8	111.1	106.1	101.8	98.0	94.6	91.6	88.8	86.2	83.9	81.8	79.8	77.9	76.2
55	125.7	118.0	111.6	106.1	101.4	97.3	93.7	90.4	87.5	84.8	82.4	80.2	78.1	76.2	74.4	72.8
60	120.6	113.2	107.1	101.8	97.3	93.3	89.8	86.7	83.9	81.3	79.0	76.9	74.9	73.1	71.4	69.8
65	116.1	109.0	103.0	98.0	93.6	89.8	86.5	83.4	80.7	78.3	76.0	74.0	72.1	70.3	68.7	67.2
70	112.1	105.2	99.5	94.6	90.4	86.7	83.4	80.5	77.9	75.5	73.4	71.4	69.5	67.8	66.3	64.8
75	108.5	101.8	96.2	91.5	87.4	83.9	80.7	77.9	75.4	73.1	71.0	69.0	67.3	65.6	62.9	60.0
80	105.2	98.7	93.3	88.7	84.8	81.3	78.2	75.5	73.1	70.8	68.8	66.9	65.2	63.6	62.1	60.8
85	102.2	95.9	90.6	86.2	82.3	79.0	76.0	73.3	71.0	68.8	66.8	64.8	63.3	61.8	60.3	59.0
90	99.4	93.3	88.2	83.9	80.1	76.8	73.9	71.4	69.0	66.9	64.8	62.1	59.9	57.9	55.0	50.0
95	96.9	90.9	85.9	81.7	78.1	74.9	72.0	69.5	67.2	65.2	63.3	61.6	60.0	58.5	56.4	53.8
100	94.5	88.7	83.8	79.7	76.1	73.0	70.3	67.8	65.6	63.6	61.8	60.1	58.5	56.2	53.5	51.1
125	85.0	79.7	75.3	71.6	68.4	65.6	63.1	61.0	58.9	56.2	52.9	50.0	47.3	45.0	42.8	40.9
150	77.8	73.0	69.0	65.6	62.6	60.1	57.7	55.5	50.0	46.8	44.1	41.6	39.5	37.5	35.7	34.1
175	72.3	67.8	64.0	60.9	58.1	53.5	49.4	45.9	42.8	40.2	37.8	35.7	33.8	32.1	30.6	29.2
200	67.7	63.5	60.0	56.2	51.1	46.8	43.2	40.2	37.5	35.1	33.1	31.2	29.6	28.1	26.8	25.6
225	64.0	60.0	55.5	50.0	45.4	41.6	38.4	35.7	33.3	31.2	29.4	27.8	26.3	25.0	23.8	22.7
250	60.8	56.2	50.0	45.0	40.9	37.5	34.6	32.1	30.0	28.1	26.5	25.0	23.7	22.5	21.4	20.4
275	58.1	51.1	45.4	40.9	37.2	34.1	31.5	29.2	27.3	25.6	24.1	22.7	21.5	20.4	19.5	18.6

SCHEDULE 13A

MAXIMUM ALLOWABLE 3 SPAN 3.5" HEADER WIDTH (TRACK TO TRACK) E-E (1) ATTACHMENT TO WOOD																
PSF	STORM BAR HEIGHT UNDER HEADER															
	42	48	54	60	66	72	78	84	90	96	102	108	114	120	126	132
25	184.6	176.6	169.8	163.9	158.8	154.3	150.2	146.5	142.8	138.5	134.6	131.0	127.7	124.7	121.8	119.2
30	173.7	166.2	159.8	154.3	149.4	145.2	140.2	135.4	131.0	127.1	123.5	120.2	117.2	114.4	111.8	109.3
35	165.0	157.8	151.8	146.5	141.0	135.4	130.4	125.9	121.8	118.2	114.8	111.8	108.9	106.3	103.9	101.6
40	157.8	151.0	145.2	138.5	132.4	127.1	122.4	118.2	114.4	110.9	107.8	104.9	102.2	99.8	97.5	95.3
45	151.8	145.2	137.7	131.0	125.3	120.2	115.8	111.8	108.2	104.9	101.9	99.2	96.6	94.3	92.1	90.1
50	146.5	138.5	131.0	124.7	119.2	114.4	110.1	106.3	102.9	99.8	96.9	94.3	91.9	89.7	87.6	85.7
55	141.0	132.4	125.3	119.2	113.9	109.3	105.2	101.6	98.3	95.3	92.6	90.1	87.8	85.7	82.9	79.1
60	135.3	127.1	120.2	114.3	109.3	104.9	100.9	97.4	94.3	91.4	88.8	86.4	84.0	79.8	76.0	72.5
65	130.3	122.4	115.7	110.1	105.2	100.9	97.2	93.8	90.8	88.0	85.5	81.8	77.5	73.7	70.1	67.0
70	125.8	118.1	111.7	106.3	101.5	97.4	93.8	90.5	87.6	84.9	80.5	76.0	72.0	68.4	65.1	62.2
75	121.8	114.3	108.1	102.8	98.3	94.3	90.7	87.6	84.7	79.8	75.1	70.9	67.2	63.8	60.8	58.0
80	118.1	110.8	104.8	99.7	95.3	91.4	88.0	84.9	79.8	74.8	70.4	66.5	63.0	59.8	57.0	54.4
85	114.7	107.7	101.8	96.9	92.5	88.8	85.4	80.5	75.1	70.4	66.3	62.6	59.3	56.3	53.6	51.2
90	111.7	104.8	99.1	94.2	90.1	86.4	81.8	76.0	70.9	66.5	62.6	59.1	56.0	53.2	50.7	48.4
95	108.8	102.1	96.6	91.8	87.7	84.0	77.5	72.0	67.2	63.0	59.3	56.0	53.0	50.4	48.0	45.8
100	106.2	99.7	94.2	89.6	85.6	79.8	73.7	68.4	63.8	59.8	56.3	53.2	50.4	47.9	45.6	43.5
125	95.5	89.6	84.7	76.6	69.6	63.8	58.9	54.7	51.1	47.9	45.1	42.6	40.3	38.3	36.5	34.8
150	87.5	79.8	70.9	63.8	58.0	53.2	49.1	45.6	42.6	39.9	37.5	35.5	33.6	31.9	30.4	29.0
175	78.2	68.4	60.8	54.7	49.7	45.6	42.1	39.1	36.5	34.2	32.2	30.4	28.8	27.4	26.1	24.9
200	68.4	59.8	53.2	47.9	43.5	39.9	36.8	34.2	31.9	29.9	28.2	26.6	25.2	23.9	22.8	21.8
225	60.8	53.2	47.3	42.6	38.7	35.5	32.7	30.4	28.4	26.6	25.0	23.6	22.4	21.3	20.3	19.3
250	54.7	47.9	42.6	38.3	34.8	31.9	29.5	27.4	25.5	23.9	22.5	21.3	20.2	19.1	18.2	17.4
275	49.7	43.5	38.7	34.8	31.7	29.0	26.8	24.9	23.2	21.8	20.5	19.3	18.3	17.4	16.6	15.8

SCHEDULE 15A

MAXIMUM ALLOWABLE 3 SPAN 3.5" HEADER WIDTH (TRACK TO TRACK) E-E (1) ATTACHMENT TO BLOCK															
PSF	STORM BAR HEIGHT UNDER HEADER														
	42	48	54	60	66	72	78	84	90	96	102	108	114	120	126
25	184.6	176.6	169.8	163.9	158.8	154.3	150.2	146.5	142						



SCHEDULE 16A

SCHEDULE 17A

MAXIMUM ALLOWABLE 2 SPAN 3.5 HEADER WIDTH (TRACK TO TRACK) E-E (1), (2) AND (3) ATTACHMENT TO CONCRETE OR BUILD OUT																
PSF	STORM BAR HEIGHT UNDER HEADER															
	42	48	54	60	66	72	78	84	90	96	102	108	114	120	126	132
25	182.0	171.0	161.8	154.0	147.3	141.4	136.2	131.5	127.3	123.5	120.0	116.8	113.8	111.1	108.5	106.1
30	167.1	157.0	148.6	141.4	135.2	129.8	124.9	120.6	116.8	113.2	110.0	107.1	104.4	101.8	99.5	97.3
35	155.5	146.1	138.2	131.5	125.7	120.6	116.1	112.1	108.5	105.2	102.2	99.5	97.0	94.6	92.4	90.4
40	146.1	137.2	129.8	123.5	118.0	113.2	109.0	105.2	101.8	98.8	95.9	93.4	91.0	88.8	86.7	84.8
45	138.2	129.8	122.7	116.8	111.6	107.1	103.1	99.5	96.3	93.4	90.7	88.3	86.0	83.9	82.0	80.2
50	131.5	123.5	116.8	111.1	106.1	101.8	98.0	94.6	91.6	88.8	86.2	83.9	81.8	79.8	77.9	76.2
55	125.7	118.0	111.6	106.1	101.4	97.3	93.7	90.4	87.5	84.8	82.4	80.2	78.1	76.2	74.4	72.8
60	120.6	113.2	107.1	101.8	97.3	93.3	89.8	86.7	83.9	81.3	79.0	76.9	74.9	73.1	71.4	69.8
65	116.1	109.0	103.0	98.0	93.6	89.8	86.5	83.4	80.7	78.3	76.0	74.0	72.1	70.3	68.7	67.2
70	112.1	105.2	99.5	94.6	90.4	86.7	83.4	80.5	77.9	75.5	73.4	71.4	69.5	67.8	66.3	64.8
75	108.5	101.8	96.2	91.5	87.4	83.9	80.7	77.9	75.4	73.1	71.0	69.0	67.3	65.6	64.1	62.7
80	105.2	98.7	93.3	88.7	84.8	81.3	78.2	75.5	73.1	70.8	68.8	66.9	65.2	63.6	62.1	60.8
85	102.2	95.9	90.6	86.2	82.3	79.0	76.0	73.3	71.0	68.8	66.8	65.0	63.3	61.8	60.3	59.0
90	99.4	93.3	88.2	83.8	80.1	76.8	73.9	71.3	69.0	66.9	65.0	63.2	61.6	60.1	58.7	57.4
95	96.9	90.9	85.9	81.7	78.0	74.9	72.0	69.5	67.2	65.2	63.3	61.6	60.0	58.5	57.2	55.9
100	94.5	88.7	83.8	79.7	76.1	73.0	70.3	67.8	65.6	63.6	61.8	60.1	58.5	57.1	55.8	54.5
125	85.0	79.7	75.3	71.6	68.4	65.6	63.1	60.9	58.9	57.1	55.4	53.9	52.5	51.3	50.1	48.9
150	77.8	73.0	69.0	65.6	62.6	60.1	57.8	55.8	53.9	52.3	50.8	49.4	48.1	46.9	45.7	44.7
175	72.3	67.8	64.0	60.9	58.1	55.7	53.6	51.7	50.0	48.5	47.1	45.7	44.5	43.4	42.3	41.4
200	67.8	63.6	60.0	57.1	54.5	52.3	50.3	48.5	46.9	45.4	44.0	42.8	41.6	40.6	39.6	38.7
225	64.0	60.0	56.7	53.9	51.5	49.4	47.5	45.7	44.2	42.8	41.5	40.3	39.3	38.3	37.3	36.2
250	60.9	57.1	53.9	51.2	48.9	46.9	45.0	43.4	41.9	40.6	39.4	38.3	37.2	35.8	34.1	32.5
275	58.1	54.5	51.5	48.9	46.7	44.7	42.9	41.4	40.0	38.7	37.5	36.2	34.2	32.5	31.0	29.6

MAXIMUM ALLOWABLE 3 SPAN 3.5 HEADER WIDTH (TRACK TO TRACK) E-E (1), (2) AND (3) ATTACHMENT TO CONCRETE OR BUILD OUT																
PSF	STORM BAR HEIGHT UNDER HEADER															
	42	48	54	60	66	72	78	84	90	96	102	108	114	120	126	132
25	185.0	177.0	170.0	163.0	157.0	152.0	147.0	144.0	141.0	139.0	138.0	135.0	132.6	129.2	126.1	123.2
30	173.0	166.0	160.0	154.0	148.0	145.0	142.0	138.0	134.0	131.9	127.9	124.3	121.0	118.0	115.1	112.5
35	164.0	158.0	152.0	146.0	142.0	138.0	133.0	130.5	126.1	122.1	118.4	115.1	112.0	109.2	106.6	104.1
40	158.0	151.0	145.0	140.0	135.0	131.9	126.7	122.1	118.0	114.2	110.8	107.7	104.8	102.1	99.7	97.4
45	151.0	145.0	140.0	134.0	129.9	124.3	119.5	115.1	111.2	107.7	104.5	101.5	98.8	96.3	94.0	91.8
50	147.0	140.0	135.0	129.2	123.2	118.0	113.3	109.2	105.5	102.1	99.1	96.3	93.7	91.4	89.2	87.1
55	142.0	136.0	129.9	123.2	117.5	112.5	108.0	104.1	100.6	97.4	94.5	91.8	89.4	87.1	85.0	83.1
60	138.0	131.9	124.3	118.0	112.5	107.7	103.4	99.7	96.3	93.2	90.5	87.9	85.6	83.4	81.4	79.5
65	133.0	126.7	119.5	113.3	108.0	103.4	99.4	95.8	92.5	89.6	86.9	84.5	82.2	80.1	78.2	76.4
70	130.5	122.1	115.1	109.2	104.1	99.7	95.8	92.3	89.2	86.3	83.8	81.4	79.2	77.2	75.4	73.6
75	126.1	118.0	111.2	105.5	100.6	96.3	92.5	89.2	86.1	83.4	80.9	78.6	76.5	74.6	72.8	71.1
80	122.1	114.2	107.7	102.1	97.4	93.2	89.6	86.3	83.4	80.8	78.3	76.0	74.1	72.2	70.5	68.9
85	118.4	110.8	104.5	99.1	94.5	90.5	86.9	83.8	80.9	78.3	76.0	73.9	71.9	70.1	68.4	66.8
90	115.1	107.7	101.5	96.3	91.8	87.9	84.5	81.4	78.6	76.1	73.9	71.8	69.9	68.1	66.5	64.9
95	112.0	104.8	98.8	93.7	89.4	85.6	82.2	79.2	76.5	74.1	71.9	69.9	68.0	66.3	64.7	63.2
100	109.2	102.1	96.3	91.4	87.1	83.4	80.1	77.2	74.6	72.2	70.1	68.1	66.3	64.6	63.0	61.6
125	97.7	91.4	86.1	81.7	77.9	74.6	71.7	69.1	66.7	64.6	62.7	60.9	59.3	57.8	56.4	55.1
150	89.2	83.4	78.6	74.6	71.1	68.1	65.4	63.0	60.9	59.0	57.2	55.6	53.5	50.8	48.4	46.2
175	82.5	77.2	72.8	69.1	65.9	63.0	60.6	58.4	56.4	54.4	51.2	48.4	45.8	43.5	41.5	39.6
200	77.2	72.2	68.1	64.6	61.6	59.0	56.7	54.4	50.8	47.6	44.8	42.3	40.1	38.1	36.3	34.6
225	72.8	68.1	64.2	60.9	58.1	55.6	52.1	48.4	45.1	42.3	39.8	37.6	35.6	33.9	32.2	30.8
250	69.1	64.6	60.9	57.8	55.1	50.8	46.9	43.5	40.6	38.1	35.9	33.9	32.1	30.5	29.0	27.7
275	65.9	61.6	58.1	55.1	50.4	46.2	42.6	39.6	36.9	34.6	32.6	30.8	29.2	27.7	26.4	25.2


DRAWING TITLE:
**NOTICE OF ACCEPTANCE
END RETENTION
PRODUCT APPROVAL**

Digitally signed by:
Fowler, Donald
DN: CN = Fowler,
Donald OJ =
Colleagues,
VeriClaim, O365
Users
Date: 2020.10.31
15:49:35 -04'00'

DRAWN:	DF
DATE:	08-10-04
APPROVED:	DLF
DATE:	10-28-08
DRAWING NO:	3-01-031
SIZE:	B
REV:	-
SCALE:	1 : 10
SHEET:	20C OF 26

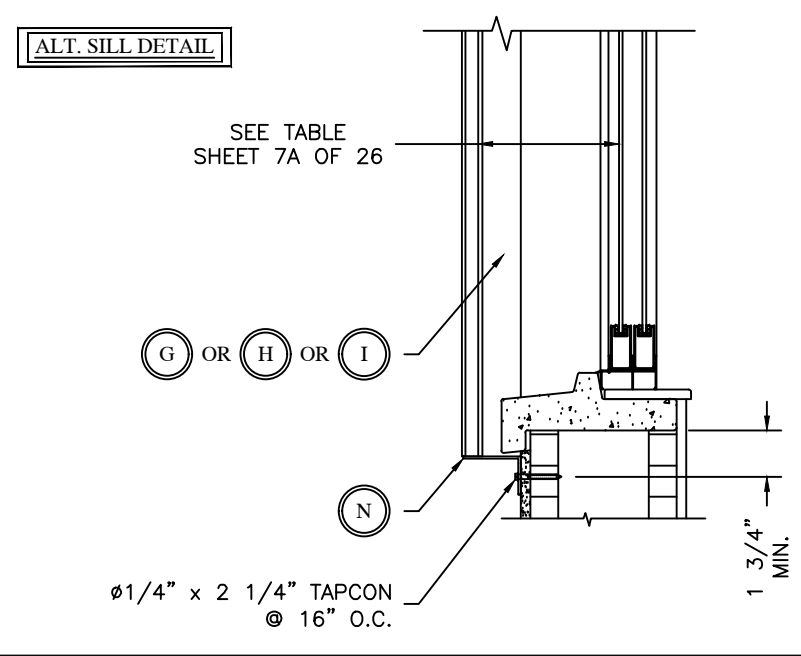
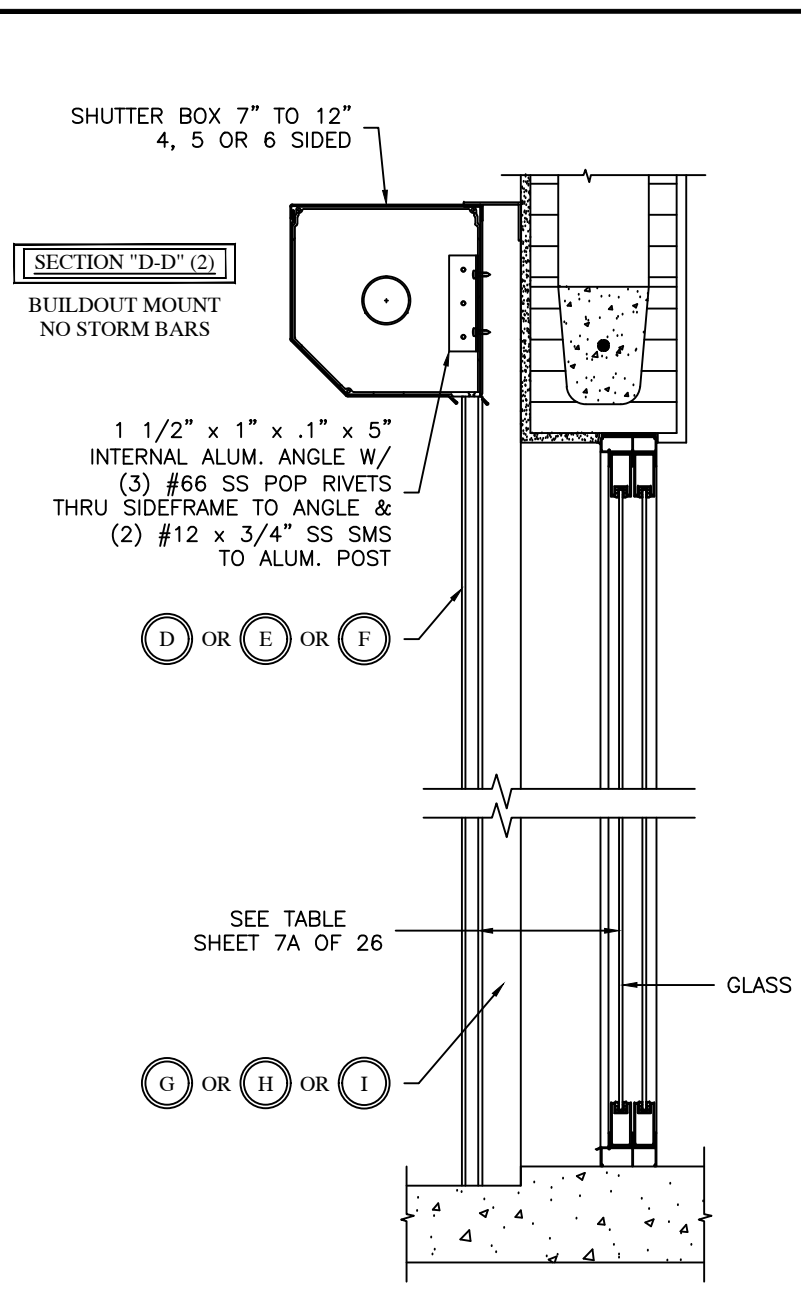
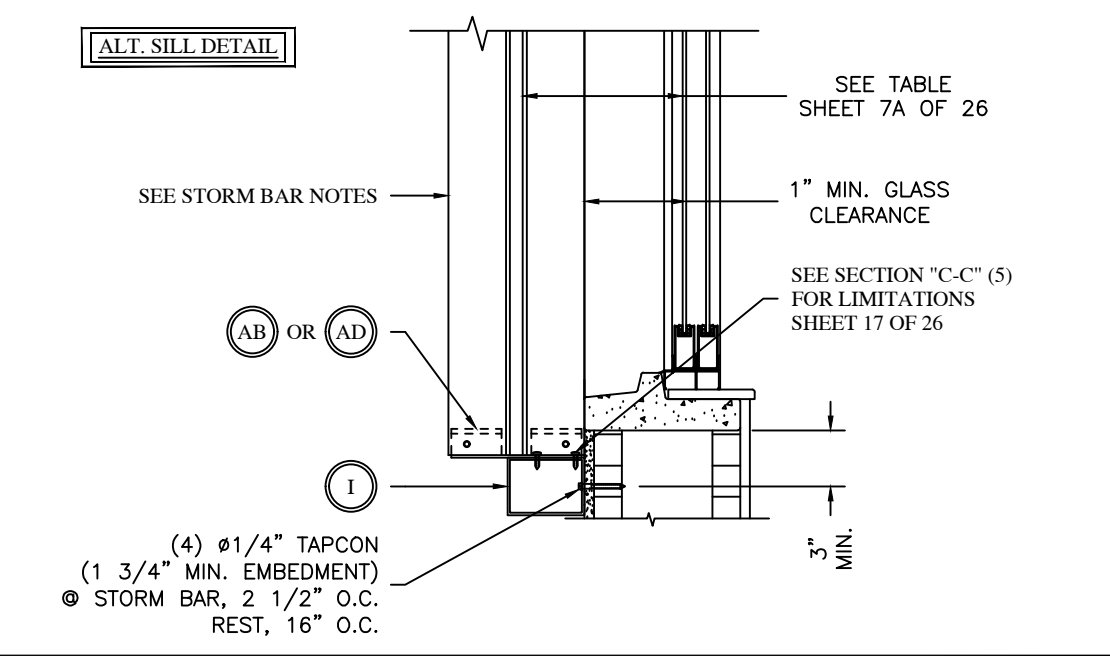
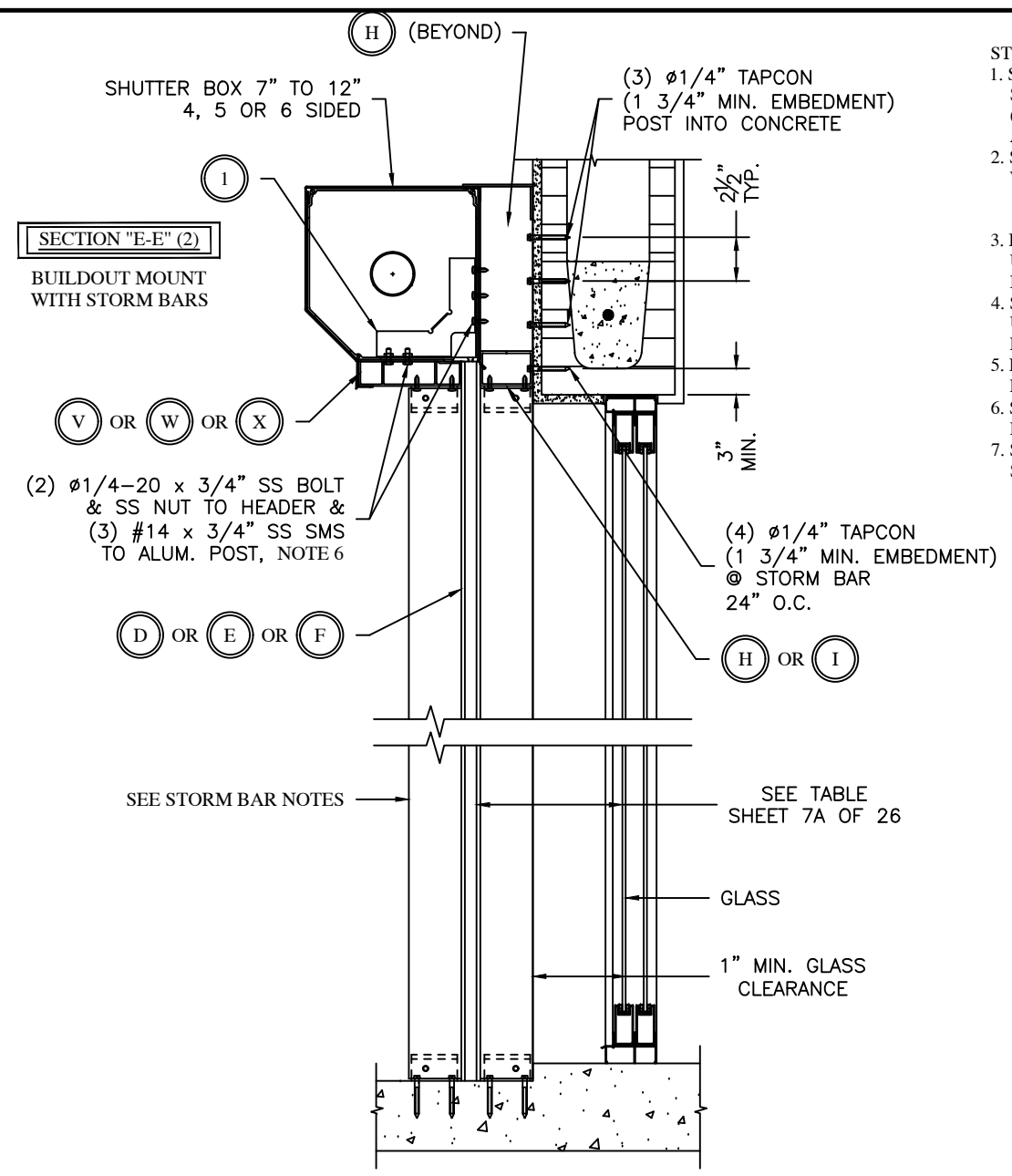
DRAWING TITLE:
**NOTICE OF ACCEPTANCE
END RETENTION
PRODUCT APPROVAL**

Digitally signed by:
Fowler, Donald
DN: CN = Fowler,
Donald OJ =
Colleagues,
VeriClaim, O365
Users
Date: 2020.10.31
15:49:35 -04'00'



DRAWN: <i>DF</i>	
DATE: <i>08-10-04</i>	
APPROVED: <i>DLF</i>	
DATE: <i>10-28-08</i>	
DRAWING NO: 3-01-031	
SIZE: B	REV: C
SCALE: 1 : 10	
SHEET: 21 OF 26	

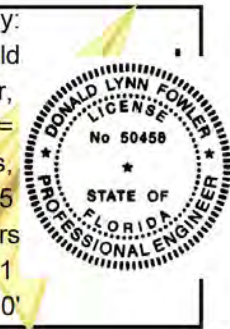
- STORM BAR NOTES:**
1. SHUTTER SECTIONS ARE SHOWN WITH FIXED STORM BARS. STORM BARS CAN BE FIXED OR REMOVABLE, REMOVABLE (SPRING-LOADED) STORM BAR ASSEMBLIES & MOUNTING ARE SHOWN ON SHEET 17, 18, & 4A OF 26.
 2. SHUTTER(S) SHOULD NOT BE ROLLED DOWN DURING WIND EVENTS WITHOUT REMOVABLE STORM BARS IN PLACE. ROLL-A-WAY IS NOT RESPONSIBLE FOR SUBSEQUENT DAMAGE.
 3. REMOVING SPRING-LOADED STORM BARS: REMOVE PIN, LIFT UP ON STORM BAR, WHEN BOTTOM FEET CLEAR THE STORM BAR BASE PLATE, ROTATE STORM BAR OUT OF OPENING.
 4. SHUTTERS WITH NO STORM BARS, OVER 72" WIDE SHOULD USE SOME FORM OF HOOD SUPPORT, HEADER, TUBING OR EXTERNAL SUPPORT.
 5. FOR LARGER ALLOWABLE HEADER SPANS USE EXTERIOR REINFORCEMENT BRACKET SHOWN ON SHEET 25 OF 26.
 6. SEE ALTERNATE SPANS USING Ø1/4-20 BOLT & NUT PER DETAIL "E-E" (4) SHEET 23 OF 26.
 7. SEE 2 SPAN AND 3 SPAN MAXIMUM ALLOWABLE HEADER SPANS E-E(2) ON PAGES 20A & 20C OF 26.



NOTICE OF ACCEPTANCE
END RETENTION
PRODUCT APPROVAL

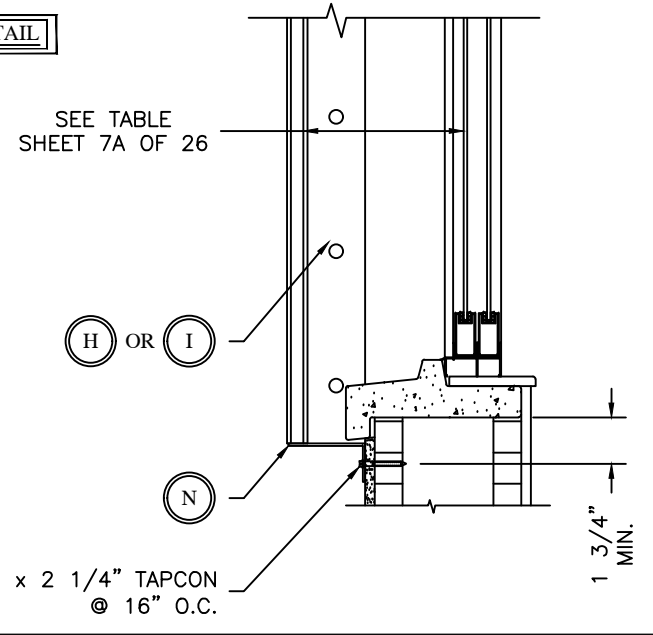
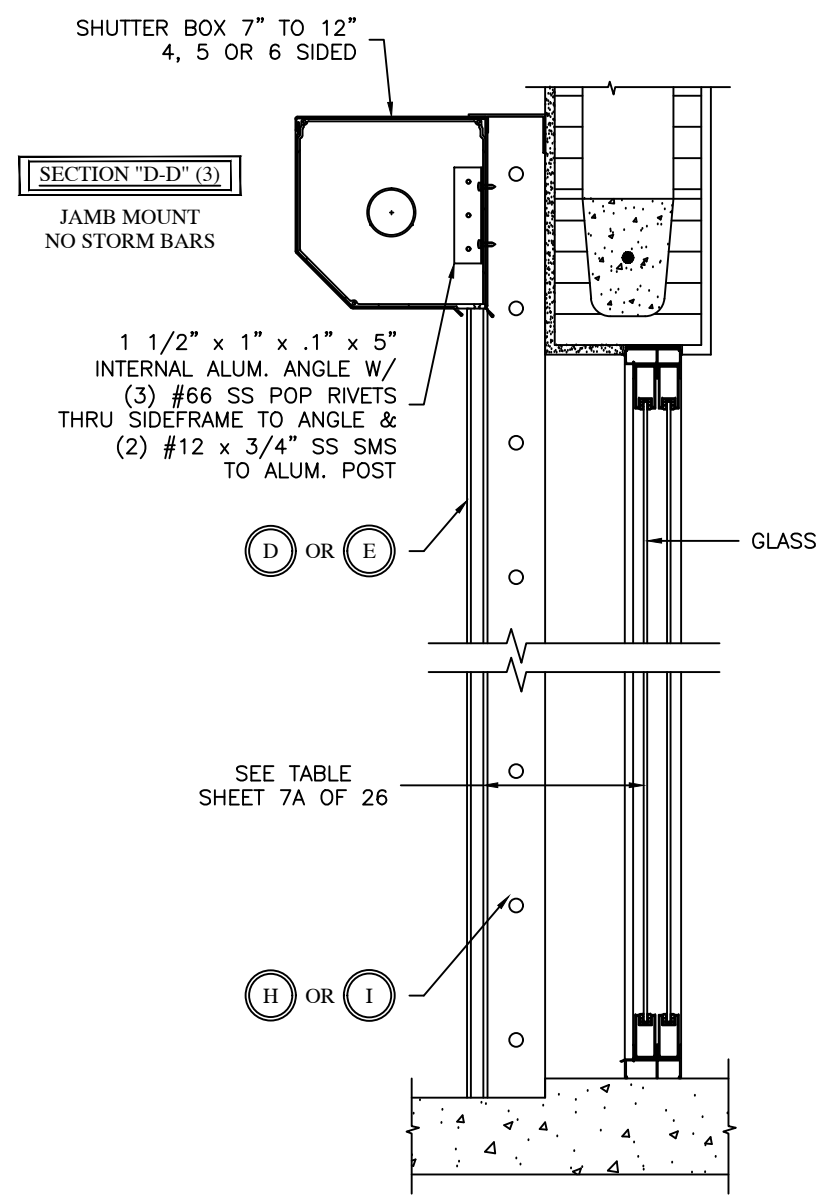
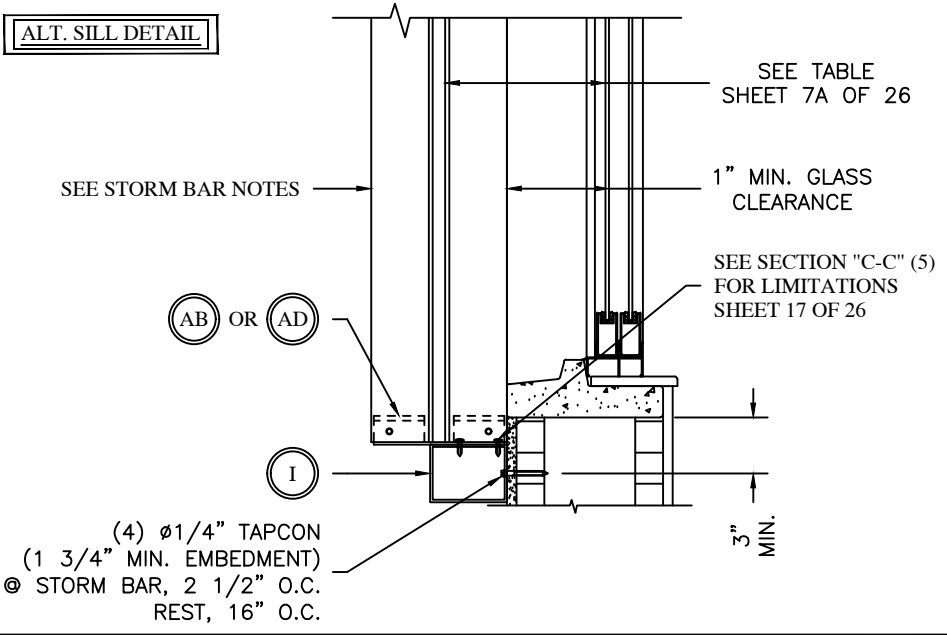
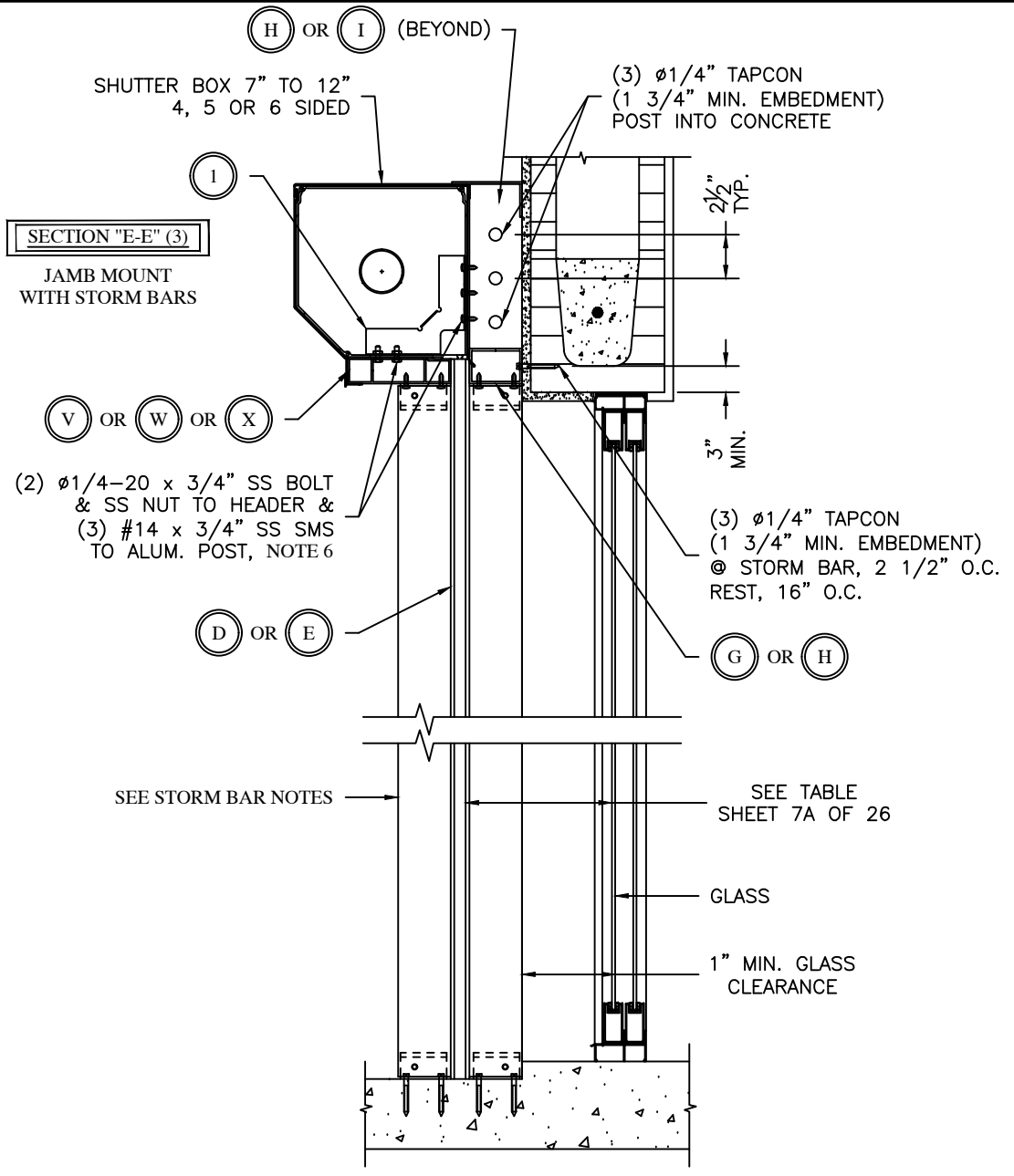
DRAWING TITLE:

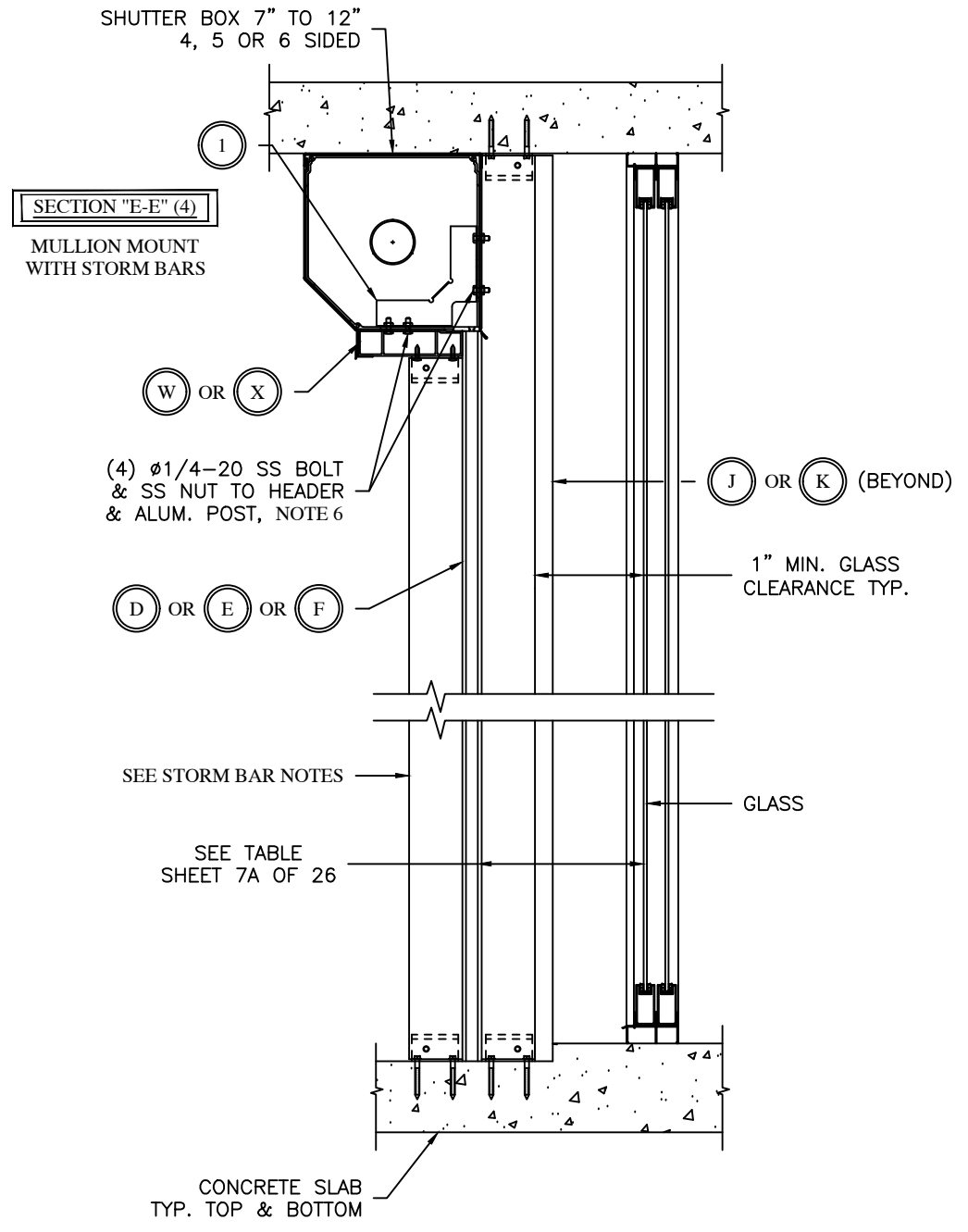
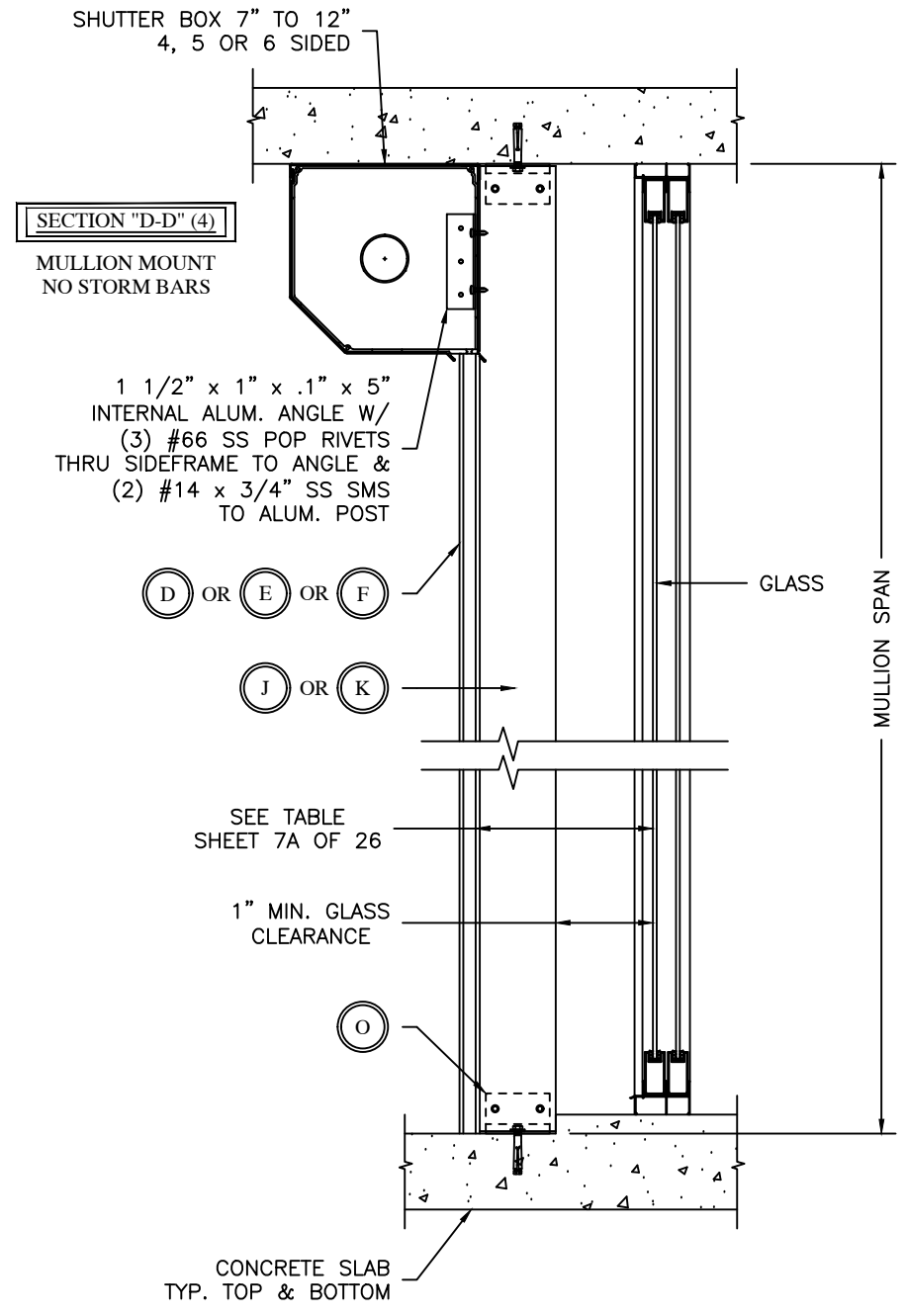
Digitally signed by:
Fowler, Donald
DN: CN = Fowler,
Donald OJ =
Colleagues,
VeriClaim, O365
Users
Date: 2020.10.31
15:49:35 -04'00'



DRAWN: DF	
DATE: 08-10-04	
APPROVED: DLF	
DATE: 10-28-08	
DRAWING NO: 3-01-031	
SIZE: B	REV: C
SCALE: 1 : 10	
SHEET: 22 OF 26	

- STORM BAR NOTES:**
1. SHUTTER SECTIONS ARE SHOWN WITH FIXED STORM BARS. STORM BARS CAN BE FIXED OR REMOVABLE, REMOVABLE (SPRING-LOADED) STORM BAR ASSEMBLIES & MOUNTING ARE SHOWN ON SHEET 17, 18, & 4A OF 26.
 2. SHUTTER(S) SHOULD NOT BE ROLLED DOWN DURING WIND EVENTS WITHOUT REMOVABLE STORM BARS IN PLACE. ROLL-A-WAY IS NOT RESPONSIBLE FOR SUBSEQUENT DAMAGE.
 3. REMOVING SPRING-LOADED STORM BARS: REMOVE PIN, LIFT UP ON STORM BAR, WHEN BOTTOM FEET CLEAR THE STORM BAR BASE PLATE, ROTATE STORM BAR OUT OF OPENING.
 4. SHUTTERS WITH NO STORM BARS OVER 72" WIDE SHOULD USE SOME FORM OF HOOD SUPPORT, HEADER, TUBING OR EXTERNAL SUPPORT.
 5. FOR LARGER ALLOWABLE HEADER SPANS USE EXTERIOR REINFORCEMENT BRACKET SHOWN ON SHEET 24 OF 26.
 6. SEE ALTERNATE SPANS USING Ø1/4-20 BOLT & NUT PER DETAIL "E-E" (4) SHEET 23 OF 26 ("W" AND "X" HEADERS ONLY)
 7. SEE 2 SPAN AND 3 SPAN MAXIMUM ALLOWABLE HEADER SPANS E-E (3) ON PAGES 20A & 20C OF 26.





STORM BAR NOTES:

1. SHUTTER SECTIONS ARE SHOWN WITH FIXED STORM BARS. STORM BARS CAN BE FIXED OR REMOVABLE. REMOVABLE (SPRING-LOADED) STORM BAR ASSEMBLIES & MOUNTING ARE SHOWN ON SHEET 17, 18, & 4A OF 26.
2. SHUTTER(S) SHOULD NOT BE ROLLED DOWN DURING WIND EVENTS WITHOUT REMOVABLE STORM BARS IN PLACE. ROLL-A-WAY IS NOT RESPONSIBLE FOR SUBSEQUENT DAMAGE.
3. REMOVING SPRING-LOADED STORM BARS: REMOVE PIN, LIFT UP ON STORM BAR, WHEN BOTTOM FEET CLEAR THE STORM BAR BASE PLATE, ROTATE STORM BAR OUT OF OPENING.
4. SHUTTERS WITH NO STORM BARS OVER 72" WIDE SHOULD USE SOME FORM OF HOOD SUPPORT, HEADER, TUBING OR EXTERNAL SUPPORT.
5. SEE 2 SPAN (SCHEDULE 18) AND 3 SPAN (SCHEDULE 19) MAXIMUM ALLOWABLE HEADER SPANS PER PAGE 23A OF 26.
6. SEE SHEET 24 OF 26 FOR ALLOWABLE HEADER SPANS USING EXTERIOR REINFORCEMENT BRACKETS WITH SMS (BUILD OUT SECTION E-E(3)) IN LIEU OF BOLTING OR USE SCHEDULES 16 AND 17 FOR THE SMS ATTACHMENT WITHOUT REINFORCEMENT.

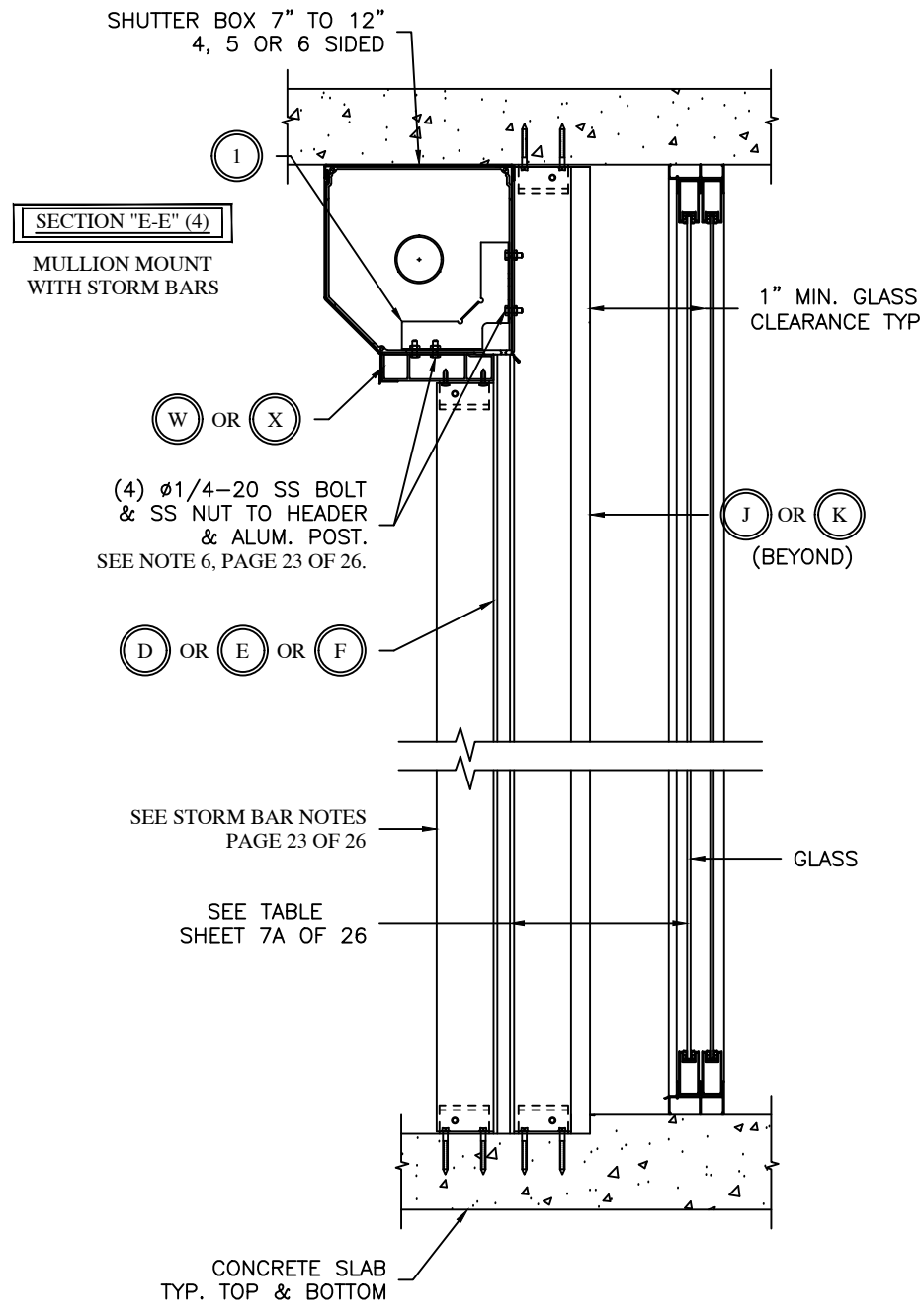


DRAWING TITLE:
**NOTICE OF ACCEPTANCE
 END RETENTION
 PRODUCT APPROVAL**

Digitally signed by:
 Fowler, Donald
 DN: CN = Fowler,
 Donald OJ =
 Colleagues,
 VeriClaim, O365
 Users
 Date: 2020.10.31
 15:49:35 -04'00'



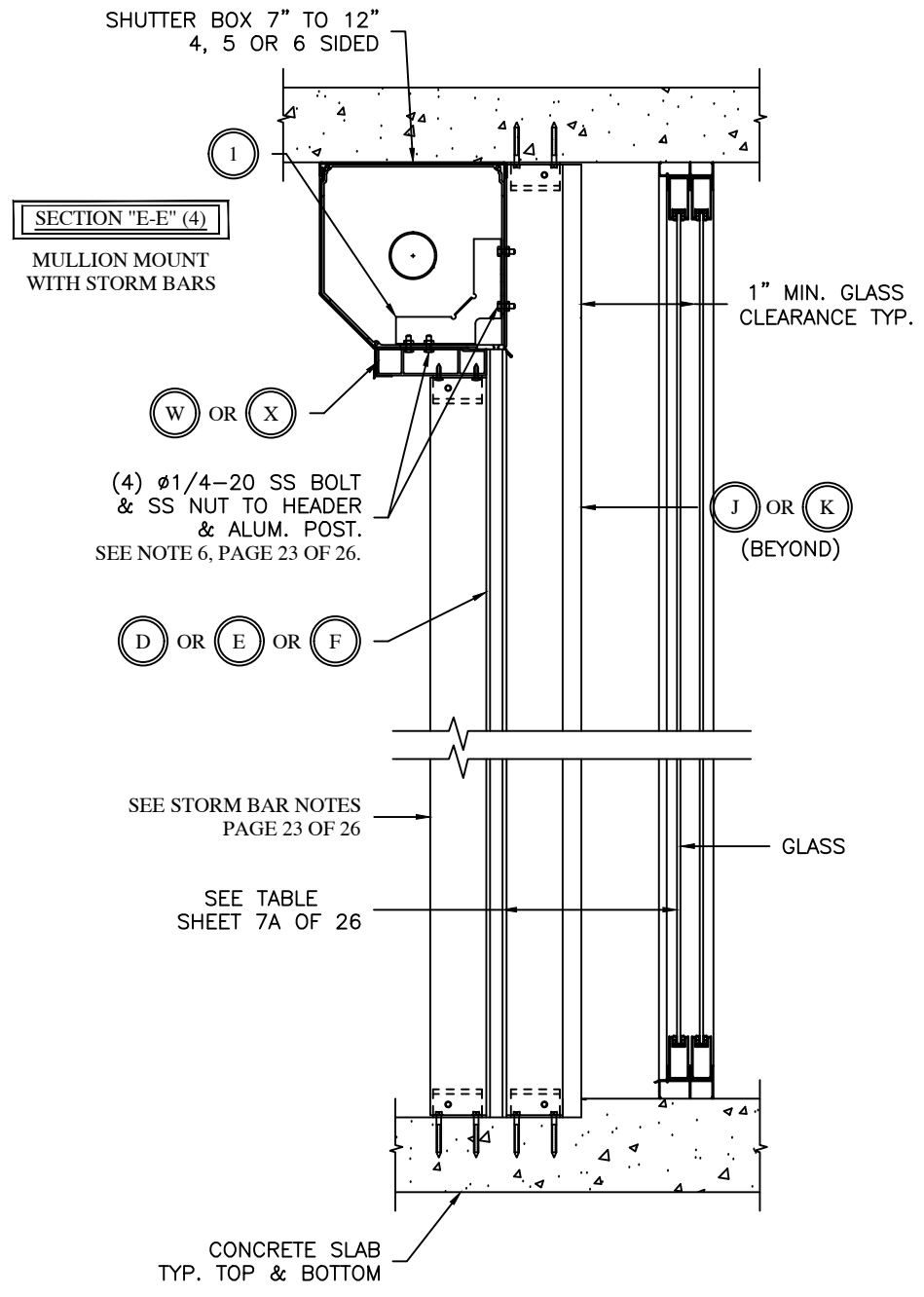
DRAWN: <i>DF</i>	
DATE: <i>08-10-04</i>	
APPROVED: <i>DLF</i>	
DATE: <i>10-28-08</i>	
DRAWING NO: 3-01-031	
SIZE: B	REV: B
SCALE: 1 : 10	
SHEET: 23 OF 26	



MAXIMUM ALLOWABLE 2 SPAN HEADER WIDTH (TRACK TO TRACK) E-E (4) BUILDOUT WITH BOLTED CONNECTION - SCHEDULE 18*																
PSF	STORM BAR HEIGHT UNDER HEADER															
	42	48	54	60	66	72	78	84	90	96	102	108	114	120	126	132
25	240.0	240.0	234.8	224.0	214.6	206.3	199.0	192.4	186.4	181.0	176.1	171.5	167.3	163.4	159.8	156.4
30	240.0	228.0	216.3	206.2	197.5	189.8	183.0	176.9	171.4	166.4	161.8	157.6	153.8	150.2	146.8	143.7
35	225.8	212.6	201.6	192.2	184.0	176.8	170.5	164.8	159.6	155.0	150.7	146.7	143.1	139.7	136.6	133.7
40	212.6	200.1	189.7	180.8	173.1	166.3	160.3	154.9	150.1	145.6	141.6	137.9	134.5	131.3	128.4	125.6
45	201.5	189.6	179.7	171.3	163.9	157.5	151.8	146.7	142.1	137.9	134.0	130.5	127.3	124.3	121.5	118.9
50	192.0	180.7	171.2	163.1	156.1	150.0	144.5	139.6	135.2	131.2	127.6	124.2	121.1	118.5	115.2	112.1
55	183.8	172.9	163.8	156.1	149.4	143.5	138.2	133.6	129.3	125.5	122.0	118.8	115.4	112.1	108.9	106.0
60	176.6	166.1	157.4	149.9	143.4	137.8	132.7	128.2	124.2	120.5	117.0	113.2	109.7	106.4	103.4	100.6
65	170.2	160.1	151.6	144.4	138.2	132.7	127.9	123.5	119.6	116.6	113.6	110.2	107.1	104.1	101.2	98.4
70	164.5	154.7	146.5	139.5	133.5	128.2	123.5	119.3	115.9	112.9	109.9	106.9	104.1	101.4	98.7	96.1
75	159.3	149.8	141.9	135.1	129.2	124.1	119.6	115.9	112.9	109.9	107.1	104.1	101.4	98.7	96.1	93.6
80	154.6	145.4	137.6	131.1	125.4	120.4	116.6	113.6	110.9	108.1	105.4	102.7	100.1	97.5	95.0	92.5
85	150.3	141.3	133.8	127.4	121.9	117.7	114.5	111.9	109.3	106.7	104.1	101.5	98.9	96.4	93.9	91.5
90	146.4	137.6	130.3	124.1	118.7	114.9	112.3	109.7	107.1	104.5	101.9	99.3	96.7	94.2	91.7	89.3
95	142.7	134.2	127.0	120.9	115.6	111.9	109.3	106.7	104.1	101.5	98.9	96.3	93.7	91.2	88.7	86.3
100	139.4	131.0	124.0	117.9	112.6	108.9	106.3	103.7	101.1	98.5	95.9	93.3	90.7	88.1	85.6	83.1
105	136.1	127.8	121.7	115.6	110.3	106.6	104.0	101.4	98.8	96.2	93.6	91.0	88.4	85.8	83.2	80.7
110	132.8	124.5	118.4	112.3	107.0	103.3	100.7	98.1	95.5	92.9	90.3	87.7	85.1	82.5	80.0	77.4
115	129.5	121.2	115.1	109.0	103.7	100.0	97.4	94.8	92.2	89.6	87.0	84.4	81.8	79.2	76.6	74.1
120	126.2	117.9	111.8	105.7	100.4	96.7	94.1	91.5	88.9	86.3	83.7	81.1	78.5	75.9	73.3	70.8
125	122.9	114.6	108.5	102.4	97.1	93.4	90.8	88.2	85.6	83.0	80.4	77.8	75.2	72.6	70.0	67.5
130	119.6	111.3	105.2	99.1	93.8	90.1	87.5	84.9	82.3	79.7	77.1	74.5	71.9	69.3	66.7	64.2
135	116.3	108.0	101.9	95.8	90.5	86.8	84.2	81.6	79.0	76.4	73.8	71.2	68.6	66.0	63.4	60.9
140	113.0	104.7	98.6	92.5	87.2	83.5	80.9	78.3	75.7	73.1	70.5	67.9	65.3	62.7	60.1	57.6
145	109.7	101.4	95.3	89.2	83.9	80.2	77.6	75.0	72.4	69.8	67.2	64.6	62.0	59.4	56.8	54.3
150	106.4	98.1	92.0	85.9	80.6	76.9	74.3	71.7	69.1	66.5	63.9	61.3	58.7	56.1	53.5	51.0
155	103.1	94.8	88.7	82.6	77.3	73.6	71.0	68.4	65.8	63.2	60.6	58.0	55.4	52.8	50.2	47.7
160	99.8	91.5	85.4	79.3	74.0	70.3	67.7	65.1	62.5	60.0	57.4	54.8	52.2	49.6	47.0	44.5
165	96.5	88.2	82.1	76.0	70.7	67.0	64.4	61.8	59.2	56.6	54.0	51.4	48.8	46.2	43.6	41.1
170	93.2	84.9	78.8	72.7	67.4	63.7	61.1	58.5	55.9	53.3	50.7	48.1	45.5	42.9	40.3	37.8
175	89.9	81.6	75.5	69.4	64.1	60.4	57.8	55.2	52.6	50.0	47.4	44.8	42.2	39.6	37.0	34.5
180	86.6	78.3	72.2	66.1	60.8	57.1	54.5	51.9	49.3	46.7	44.1	41.5	38.9	36.3	33.7	31.2
185	83.3	75.0	68.9	62.8	57.5	53.8	51.2	48.6	46.0	43.4	40.8	38.2	35.6	33.0	30.4	27.9
190	80.0	71.7	65.6	59.5	54.2	50.5	47.9	45.3	42.7	40.1	37.5	34.9	32.3	29.7	27.1	24.6
195	76.7	68.4	62.3	56.2	50.9	47.2	44.6	42.0	39.4	36.8	34.2	31.6	29.0	26.4	23.8	21.3
200	73.4	65.1	59.0	52.9	47.6	43.9	41.3	38.7	36.1	33.5	30.9	28.3	25.7	23.1	20.5	18.0
205	70.1	61.8	55.7	49.6	44.3	40.6	38.0	35.4	32.8	30.2	27.6	25.0	22.4	19.8	17.2	14.7
210	66.8	58.5	52.4	46.3	41.0	37.3	34.7	32.1	29.5	26.9	24.3	21.7	19.1	16.5	13.9	11.4
215	63.5	55.2	49.1	43.0	37.7	34.0	31.4	28.8	26.2	23.6	21.0	18.4	15.8	13.2	10.6	8.1
220	60.2	51.9	45.8	39.7	34.4	30.7	28.1	25.5	22.9	20.3	17.7	15.1	12.5	9.9	7.3	4.8
225	56.9	48.6	42.5	36.4	31.1	27.4	24.8	22.2	19.6	17.0	14.4	11.8	9.2	6.6	4.0	1.5
230	53.6	45.3	39.2	33.1	27.8	24.1	21.5	18.9	16.3	13.7	11.1	8.5	5.9	3.3	0.7	-1.8
235	50.3	42.0	35.9	29.8	24.5	20.8	18.2	15.6	13.0	10.4	7.8	5.2	2.6	0.0	-2.6	-5.1
240	47.0	38.7	32.6	26.5	21.2	17.5	14.9	12.3	9.7	7.1	4.5	1.9	-0.7	-3.1	-5.6	-8.1
245	43.7	35.4	29.3	23.2	17.9	14.2	11.6	9.0	6.4	3.8	1.2	-1.4	-3.8	-6.2	-8.7	-11.2
250	40.4	32.1	26.0	19.9	14.6	10.9	8.3	5.7	3.1	0.5	-2.1	-4.5	-6.9	-9.3	-11.8	-14.3
255	37.1	28.8	22.7	16.6	11.3	7.6	5.0	2.4	-0.2	-2.6	-5.0	-7.4	-9.8	-12.2	-14.6	-17.1
260	33.8	25.5	19.4	13.3	8.0	4.3	1.7	-0.9	-3.3	-5.7	-8.1	-10.5	-12.9	-15.3	-17.7	-20.2
265	30.5	22.2	16.1	10.0	4.7	1.0	-1.6	-4.0	-6.4	-8.8	-11.2	-13.6	-16.0	-18.4	-20.8	-23.2
270	27.2	18.9	12.8	6.7	1.4	-2.2	-4.6	-7.0	-9.4	-11.8	-14.2	-16.6	-19.0	-21.4	-23.8	-26.2
275	23.9	15.6	9.5	3.4	-1.9	-4.3	-6.7	-9.1	-11.5	-13.9	-16.3	-18.7	-21.1	-23.5	-25.9	-28.3

* SHADED REGIONS PROVIDE FOR A MAXIMUM HEADER SPAN FOR THE 7-1/4" HEADER ONLY. A 5-7/8" HEADER IS ALLOWABLE AT A REDUCED SPAN.

MAXIMUM ALLOWABLE 3 SPAN HEADER WIDTH (TRACK TO TRACK) E-E (4) BUILDOUT WITH BOLTED CONNECTION - SCHEDULE 19*																
PSF	STORM BAR HEIGHT UNDER HEADER															
	42	48	54	60	66	72	78	84	90	96	102	108	114	120	126	132
25	240.0	240.0	240.0	240.0	239.5	230.0	221.6	214.3	207.7	201.8	196.3	191.3	186.6	182.3	178.3	174.6
30	240.0	240.0	240.0	230.0	220.1	211.6	204.1	197.4	191.3	185.7	180.7	176.0	171.7	167.7	164.0	160.6
35	240.0	237.5	224.9	214.3	205.3	197.4	190.3	184.0	178.3	173.1	168.4	164.0	160.0	156.3	152.8	149.6
40	237.5	223.2	211.6	201.8	193.2	185.7	179.1	173.1	167.7	162.8	158.4	154.3	150.5	146.9	143.7	140.6
45	224.9	211.6	200.6	191.3	183.2	176.0	169.7	164.0	158.9	154.3	150.0	146.1	142.5	139.1	136.0	133.1
50	214.3	201.8	191.3	182.3	174.6	167.7	161.7	156.3	151.4	146.9	142.9	139.1	135.7	132.5	129.4	126.4
55	205.2	193.2	183.1	174.5	167.1	160.5	154.7	149.5	144.8	140.6	136.7	133.1	129.7	126.4	123.1	119.9
60	197.2	185.6	175.9	167.7	160.5	154.2	148.6	143.6	139.1	135.0	131.1	127.3	123.6	120.0	116.4	112.9
65	190.2	179.0	169.6	161.6	154.6	148.6	143.2	138.3	134.0	130.0	126.2	122.5	118.9	115.4	111.9	108.4
70	183.8	173.0	163.9	156.1	149.4	143.5	138.3	133.6	129.3	125.2	121.3	117.5	113.8	110.2	106.6	103.0
75	178.1	167.5	158.7	151.2	144.7	139.0	133.9	129.6	125.5	121.5	117.6	113.7	109.9	106.2	102.5	98.8
80	172.9	162.6	154.0	146.7	140.4	134.9	129.9	125.6	121.6	117.7	113.8	109.9	106.1	102.3	98.5	94.7
85	168.1	158.1	149.8	142.7	136.5	130.3	125.3	121.0	117.0	113.1	109.2	105.3	101.4	97.5	93.6	89.7
90	163.7	154.0	145.9	138.9	132.7	126.5	121.5	117.2	113.2	109.3	105.4	101.5	97.6	93.7	89.8	85.9
95	159.7	150.2	142.2	135.5	129.3	123.1	118.1	114.0	110.0	106.1	102.2	98.3	94.4	90.5	86.6	82.7
100	155.9	146.6	138.9	132.1	125.9	119.7	114.7	110.6	106.6	102.7	98.8	94.9	91.0	87.1	83.2	79.3
105	152.2	143.0	135.3	128.5	122.3	116.1	111.1	107.0	103.0	99.1	95.2	91.3	87.4	83.5	79.6	75.7
110	148.5	139.3	131.6	124.8	118.6	112.4	107.4	103.3	99.4	95.5	91.6	87.7	83.8	79.9	76.0	72.1
115	144.8	135.6	127.9	121.1	114.9	108.7	103.7	99.6	95.7	91.8	87.9	84.0	80.1	76.2	72.3	68.4
120	141.1	131.9	124.2	117.4	111.2	105.0	100.0	95.9	92.0	88.1	84.2	80.3	76.4	72.5	68.6	64.7
125	137.4	128.2	120.5	113.7	107.5	101.3	96.3	92.2	88.3	84.4	80.5	76.6	72.7	68.8	64.	



MAXIMUM ALLOWABLE 2 SPAN HEADER WIDTH (TRACK TO TRACK) E-E (4) BUILDOUT WITH BOLTED CONNECTION - SCHEDULE 18A *																
PSF	3.5" HEADER															
	STORM BAR HEIGHT UNDER HEADER															
	42	48	54	60	66	72	78	84	90	96	102	108	114	120	126	132
25	182.2	171.2	162.0	154.2	147.5	141.5	136.3	131.6	127.4	123.6	120.1	116.9	113.9	111.2	108.6	106.2
30	167.3	157.2	148.7	141.5	135.3	129.8	125.0	120.7	116.8	113.3	110.1	107.1	104.4	101.9	99.6	97.4
35	155.6	146.1	138.3	131.6	125.8	120.7	116.2	112.2	108.6	105.3	102.3	99.5	97.0	94.7	92.5	90.4
40	146.1	137.2	129.8	123.5	118.0	113.3	109.0	105.3	101.9	98.8	96.0	93.4	91.0	88.8	86.8	84.8
45	138.2	129.8	122.8	116.8	111.6	107.1	103.1	99.5	96.3	93.4	90.7	88.3	86.0	83.9	82.0	80.2
50	131.5	123.5	116.8	111.1	106.1	101.8	98.0	94.6	91.6	88.8	86.2	83.9	81.8	79.8	77.9	76.2
55	125.7	118.0	111.6	106.1	101.4	97.3	93.7	90.4	87.5	84.8	82.4	80.2	78.1	76.2	74.4	72.8
60	120.6	113.2	107.1	101.8	97.3	93.3	89.8	86.7	83.9	81.3	79.0	76.9	74.9	73.1	71.4	69.8
65	116.1	109.0	103.0	98.0	93.6	89.8	86.5	83.4	80.7	78.3	76.0	74.0	72.1	70.3	68.7	67.2
70	112.1	105.2	99.5	94.6	90.4	86.7	83.4	80.5	77.9	75.5	73.4	71.4	69.5	67.8	66.3	64.8
75	108.5	101.8	96.2	91.5	87.4	83.9	80.7	77.9	75.4	73.1	71.0	69.0	67.3	65.6	64.1	62.7
80	105.2	98.7	93.3	88.7	84.8	81.3	78.2	75.5	73.1	70.8	68.8	66.9	65.2	63.6	62.1	60.8
85	102.2	95.9	90.6	86.2	82.3	79.0	76.0	73.3	71.0	68.8	66.8	65.0	63.3	61.8	60.3	59.0
90	99.4	93.3	88.2	83.9	80.1	76.8	73.9	71.4	69.0	66.9	65.0	63.2	61.6	60.1	58.7	57.4
95	96.9	90.9	85.9	81.7	78.1	74.9	72.0	69.5	67.2	65.2	63.3	61.6	60.0	58.5	57.2	55.9
100	94.5	88.7	83.8	79.7	76.1	73.0	70.3	67.8	65.6	63.6	61.8	60.1	58.5	57.1	55.8	54.5
125	85.0	79.7	75.3	71.6	68.4	65.6	63.1	60.9	58.9	57.1	55.4	53.9	52.5	51.3	50.1	48.9
150	77.8	73.0	69.0	65.6	62.6	60.1	57.8	55.8	53.9	52.3	50.8	49.4	48.1	46.9	45.7	44.7
175	72.3	67.8	64.0	60.9	58.1	55.7	53.6	51.7	50.0	48.5	47.1	45.7	44.5	43.4	42.3	41.4
200	67.8	63.6	60.0	57.1	54.5	52.3	50.3	48.5	46.9	45.4	44.0	42.8	41.6	40.6	39.6	38.7
225	64.0	60.0	56.7	53.9	51.5	49.4	47.5	45.7	44.2	42.8	41.5	40.3	39.3	38.3	37.3	36.5
250	60.9	57.1	53.9	51.2	48.9	46.9	45.0	43.4	41.9	40.6	39.4	38.3	37.2	36.3	35.4	34.6
275	58.1	54.5	51.5	48.9	46.7	44.7	42.9	41.4	40.0	38.7	37.5	36.5	35.5	34.6	33.8	33.0

MAXIMUM ALLOWABLE 2 SPAN HEADER WIDTH (TRACK TO TRACK) E-E (4) BUILDOUT WITH BOLTED CONNECTION - SCHEDULE 19A *																
PSF	3.5" HEADER															
	STORM BAR HEIGHT UNDER HEADER															
	42	48	54	60	66	72	78	84	90	96	102	108	114	120	126	132
25	184.6	176.6	169.8	163.9	158.8	154.3	150.2	146.5	142.8	138.5	134.6	131.0	127.7	124.7	121.8	119.2
30	173.7	166.2	159.8	154.3	149.4	145.2	140.2	135.4	131.0	127.1	123.5	120.2	117.2	114.4	111.8	109.3
35	165.0	157.8	151.8	146.5	141.0	135.4	130.4	125.9	121.8	118.2	114.8	111.8	108.9	106.3	103.9	101.6
40	157.8	151.0	145.2	138.5	132.4	127.1	122.4	118.2	114.4	110.9	107.8	104.9	102.2	99.8	97.5	95.3
45	151.8	145.2	137.7	131.0	125.3	120.2	115.8	111.8	108.2	104.9	101.9	99.2	96.6	94.3	92.1	90.1
50	146.5	138.5	131.0	124.7	119.2	114.4	110.1	106.3	102.9	99.8	96.9	94.3	91.9	89.7	87.6	85.7
55	141.0	132.4	125.3	119.2	113.9	109.3	105.2	101.6	98.3	95.3	92.6	90.1	87.8	85.7	83.7	81.9
60	135.3	127.1	120.2	114.3	109.3	104.9	100.9	97.4	94.3	91.4	88.8	86.4	84.2	82.2	80.3	78.5
65	130.3	122.4	115.7	110.1	105.2	100.9	97.2	93.8	90.8	88.0	85.5	83.2	81.0	79.1	77.3	75.5
70	125.8	118.1	111.7	106.3	101.5	97.4	93.8	90.5	87.6	84.9	82.5	80.3	78.2	76.3	74.5	72.9
75	121.8	114.3	108.1	102.8	98.3	94.3	90.7	87.6	84.7	82.2	79.8	77.6	75.7	73.8	72.1	70.5
80	118.1	110.8	104.8	99.7	95.3	91.4	88.0	84.9	82.1	79.6	77.4	75.3	73.3	71.6	69.9	68.4
85	114.7	107.7	101.8	96.9	92.5	88.8	85.4	82.5	79.8	77.4	75.1	73.1	71.2	69.5	67.9	66.4
90	111.7	104.8	99.1	94.2	90.1	86.4	83.1	80.2	77.6	75.3	73.1	71.1	69.3	67.6	66.0	64.6
95	108.8	102.1	96.6	91.8	87.7	84.2	81.0	78.2	75.6	73.3	71.2	69.3	67.5	65.9	64.3	62.9
100	106.2	99.7	94.2	89.6	85.6	82.1	79.0	76.3	73.8	71.5	69.5	67.6	65.9	64.3	62.8	61.4
125	95.5	89.6	84.7	80.5	76.9	73.8	71.0	68.5	66.3	64.2	62.4	60.7	59.1	57.7	56.3	55.1
150	87.5	82.1	77.6	73.8	70.5	67.6	65.0	62.7	60.7	58.8	57.1	55.6	54.1	52.8	51.6	50.4
175	81.2	76.2	72.0	68.5	65.4	62.7	60.3	58.2	56.3	54.6	53.0	51.6	50.2	49.0	47.9	46.8
200	76.2	71.5	67.5	64.2	61.3	58.8	56.6	54.6	52.8	51.2	49.7	48.3	47.1	45.9	44.8	43.8
225	72.0	67.5	63.8	60.6	57.9	55.5	53.4	51.6	49.9	48.3	46.9	45.6	44.4	43.3	42.2	41.2
250	68.4	64.2	60.6	57.6	55.0	52.8	50.8	49.0	47.4	45.9	44.5	43.3	42.1	41.0	40.1	39.1
275	65.4	61.3	57.9	55.0	52.6	50.4	48.5	46.8	45.2	43.8	42.4	41.2	40.1	39.1	38.2	37.3

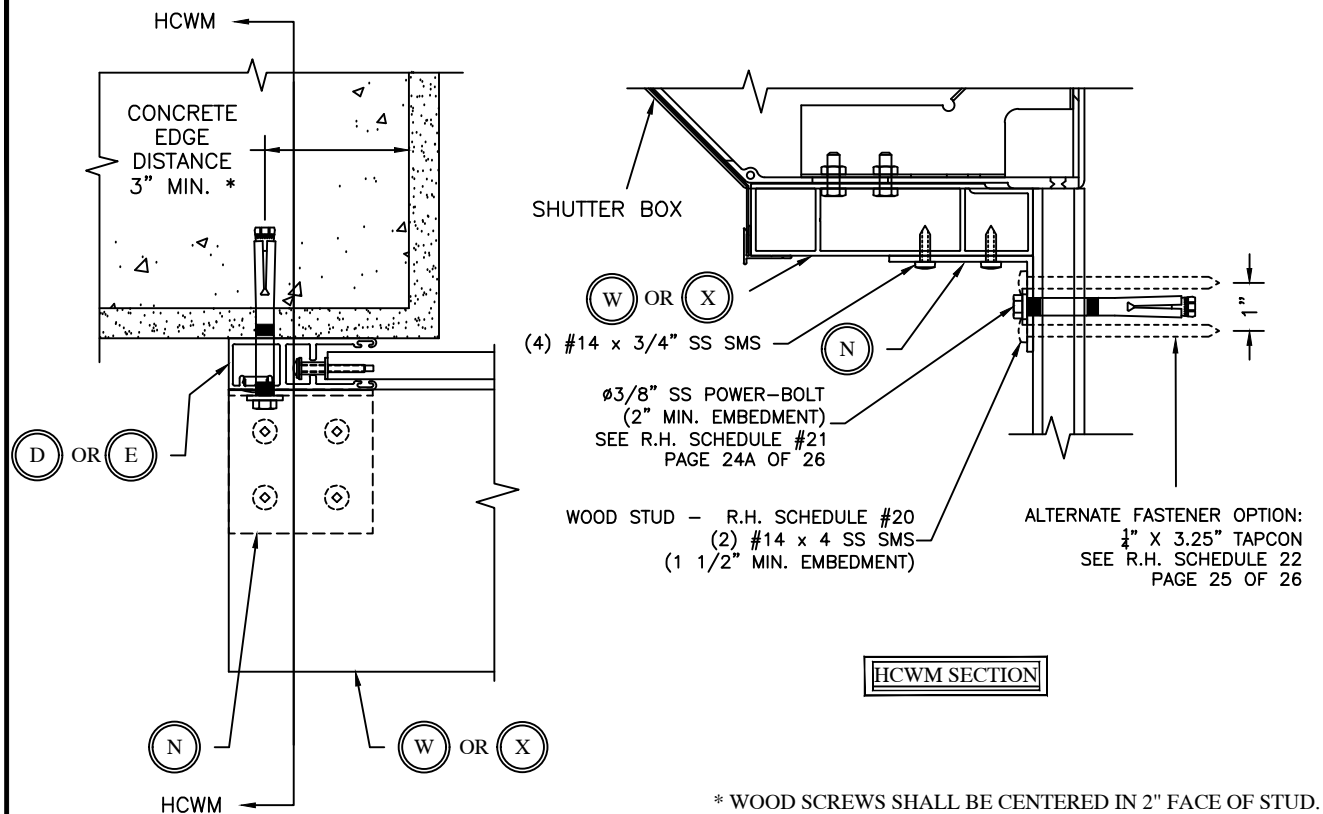


NOTICE OF ACCEPTANCE
 END RETENTION
 PRODUCT APPROVAL

Digitally signed by:
 Fowler, Donald
 DN: CN = Fowler,
 Donald OJ =
 Colleagues,
 VeriClaim, O365
 Users
 Date: 2020.10.31
 15:49:35 -04'00'

DRAWN:	DF
DATE:	09-23-09
APPROVED:	DLF
DATE:	09-23-09
DRAWING NO:	3-01-031
SIZE:	B
SCALE:	1 : 10
SHEET:	23B OF 26

WALL MOUNT SECTION A-A(1)
REINFORCED HEADER CONNECTION



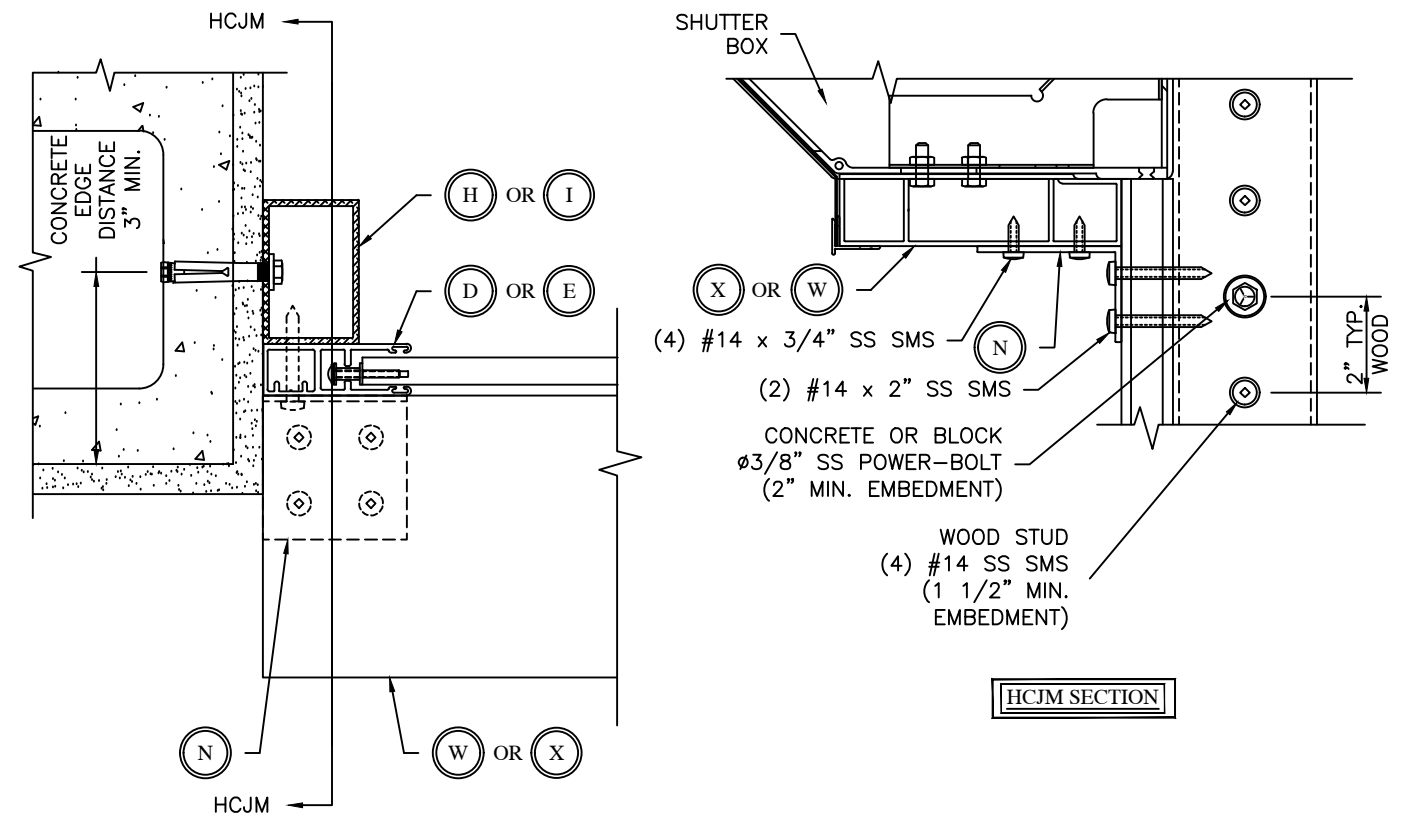
- (4) #14 x 3/4" SS SMS
- Ø3/8" SS POWER-BOLT (2" MIN. EMBEDMENT) SEE R.H. SCHEDULE #21 PAGE 24A OF 26
- WOOD STUD - R.H. SCHEDULE #20 (2) #14 x 4 SS SMS (1 1/2" MIN. EMBEDMENT)
- ALTERNATE FASTENER OPTION: 1/2" x 3.25" TAPCON SEE R.H. SCHEDULE 22 PAGE 25 OF 26

HCWM SECTION

* WOOD SCREWS SHALL BE CENTERED IN 2" FACE OF STUD.

JAMB MOUNT

REINFORCED HEADER CONNECTION
 SEE R.H. SCHEDULE#22
 PAGE 25 OF 26



- (4) #14 x 3/4" SS SMS
- (2) #14 x 2" SS SMS
- CONCRETE OR BLOCK Ø3/8" SS POWER-BOLT (2" MIN. EMBEDMENT)
- WOOD STUD (4) #14 SS SMS (1 1/2" MIN. EMBEDMENT)

HCJM SECTION



DRAWING TITLE:
NOTICE OF ACCEPTANCE
END RETENTION
PRODUCT APPROVAL

MAXIMUM ALLOWABLE 2 SPAN 5.875" HEADER WIDTH (TRACK TO TRACK) - REINFORCED HEADER SCHEDULE 20																
PSF	STORM BAR HEIGHT UNDER HEADER															
	42	48	54	60	66	72	78	84	90	96	102	108	114	120	126	132
25	240.0	240.0	234.8	224.0	214.6	206.3	199.0	192.4	186.4	181.0	176.1	171.5	167.3	163.4	159.8	156.4
30	240.0	228.0	216.3	206.2	197.5	189.8	183.0	176.9	171.4	166.4	161.8	157.6	153.8	150.2	146.8	143.7
35	225.8	212.6	201.6	192.2	184.0	176.8	170.5	164.8	159.6	155.0	150.7	146.7	143.1	139.7	136.6	133.7
40	212.6	200.1	189.7	180.8	173.1	166.3	160.3	154.9	150.1	145.6	141.6	137.9	134.5	131.3	128.4	125.6
45	201.5	189.6	179.7	171.3	163.9	157.5	151.8	146.7	142.1	137.9	134.0	130.5	127.3	124.3	121.5	118.9
50	192.0	180.7	171.2	163.1	156.1	150.0	144.5	139.6	135.2	131.2	127.6	124.2	121.1	118.3	115.6	113.1
55	183.8	172.9	163.8	156.1	149.4	143.5	138.2	133.6	129.3	125.5	122.0	118.8	115.8	113.1	110.5	108.1
60	176.6	166.1	157.4	149.9	143.4	137.8	132.7	128.2	124.2	120.5	117.1	114.0	111.2	108.5	106.1	103.8
65	170.2	160.1	151.6	144.4	138.2	132.7	127.9	123.5	119.6	116.0	112.8	109.8	107.1	104.5	102.1	99.9
70	164.5	154.7	146.5	139.5	133.5	128.2	123.5	119.3	115.5	112.1	108.9	106.0	103.4	100.9	98.6	96.5
75	159.3	149.8	141.9	135.1	129.2	124.1	119.6	115.5	111.8	108.5	105.4	102.6	100.1	97.7	95.5	93.4
80	154.6	145.4	137.6	131.1	125.4	120.4	116.0	112.0	108.5	105.2	102.3	99.6	97.0	94.7	92.6	90.6
85	150.3	141.3	133.8	127.4	121.9	117.0	112.7	108.9	105.4	102.3	99.4	96.7	94.3	92.1	90.0	88.0
90	146.4	137.6	130.3	124.1	118.7	113.9	109.7	106.0	102.6	99.5	96.7	94.2	91.8	89.6	87.5	85.6
95	142.7	134.2	127.0	120.9	115.7	111.1	107.0	103.3	100.0	97.0	94.3	91.8	89.5	87.3	85.3	83.5
100	139.4	131.0	124.0	118.1	112.9	108.4	104.4	100.8	97.6	94.7	92.0	89.6	87.3	85.2	83.3	81.3
125	125.6	118.0	111.7	106.3	101.6	97.6	94.0	90.7	87.8	85.2	82.8	79.5	75.3	71.6	68.2	65.1
150	115.3	108.3	102.5	97.5	93.2	89.5	86.2	83.2	79.5	74.6	70.2	66.3	62.8	59.6	56.8	54.2
175	107.2	100.7	95.3	90.7	86.7	83.2	78.7	73.0	68.2	63.9	60.1	56.8	53.8	51.1	48.7	46.5
200	100.7	94.6	89.5	85.1	81.3	74.6	68.8	63.9	59.6	55.9	52.6	49.7	47.1	44.7	42.6	40.7
225	95.3	89.4	84.6	79.5	72.3	66.3	61.2	56.8	53.0	49.7	46.8	44.2	41.9	39.8	37.9	36.2
250	90.6	85.1	79.5	71.6	65.1	59.6	55.1	51.1	47.7	44.7	42.1	39.8	37.7	35.8	34.1	32.5
275	86.6	81.3	72.3	65.1	59.2	54.2	50.1	46.5	43.4	40.7	38.3	36.2	34.2	32.5	31.0	29.6

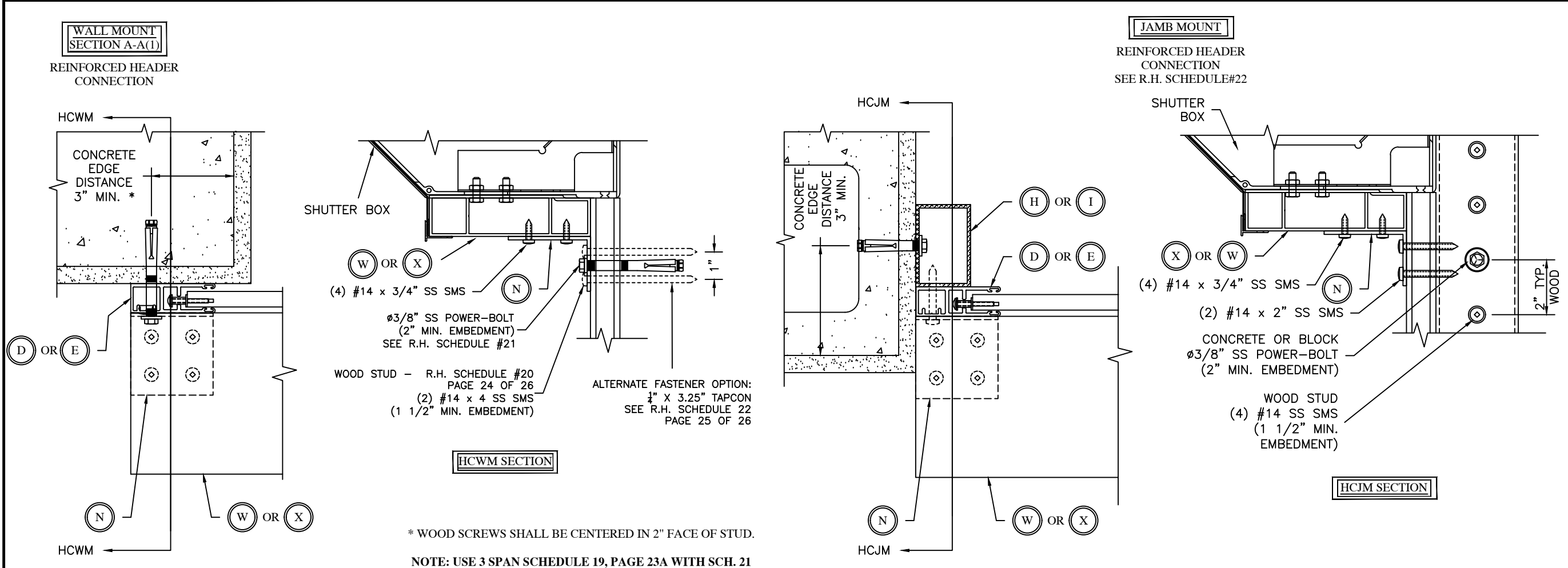
* WALL MOUNT A-A(1) ON WOOD WITH REINFORCEMENT ANGLE

MAXIMUM ALLOWABLE 2 SPAN 7.25" HEADER WIDTH (TRACK TO TRACK) - REINFORCED HEADER SCHEDULE 20																
PSF	STORM BAR HEIGHT UNDER HEADER															
	42	48	54	60	66	72	78	84	90	96	102	108	114	120	126	132
25	240.0	240.0	240.0	240.0	240.0	240.0	240.0	237.8	230.7	224.3	218.4	212.9	207.9	203.2	198.9	194.8
30	240.0	240.0	240.0	240.0	240.0	234.9	226.8	219.5	212.9	206.9	201.4	196.4	191.7	187.4	183.3	179.5
35	240.0	240.0	240.0	237.6	227.9	219.4	211.7	204.9	198.7	193.1	187.9	183.2	178.8	174.7	170.9	167.4
40	240.0	240.0	234.6	224.0	214.8	206.7	199.5	193.0	187.2	181.8	176.9	172.5	168.3	164.4	160.9	157.5
45	240.0	234.5	222.7	212.6	203.8	196.1	189.2	183.1	177.5	172.4	167.7	163.5	159.5	155.8	152.4	149.2
50	237.2	223.7	212.5	202.8	194.4	187.0	180.4	174.5	169.1	164.3	159.8	155.8	152.0	148.5	145.2	142.1
55	227.3	214.4	203.5	194.2	186.1	179.0	172.7	167.0	161.9	157.2	153.0	149.1	145.4	142.1	138.9	136.0
60	218.6	206.2	195.7	186.7	178.9	172.1	166.0	160.5	155.6	151.1	147.0	143.2	139.7	136.4	133.4	130.6
65	211.0	198.9	188.7	180.1	172.5	165.9	160.0	154.7	150.0	145.6	141.6	138.0	134.6	131.5	128.6	125.1
70	204.1	192.4	182.5	174.1	166.8	160.4	154.7	149.6	144.9	140.7	136.9	133.3	130.1	127.1	124.1	121.2
75	197.9	186.5	176.9	168.7	161.6	155.4	149.9	144.9	140.4	136.3	132.6	129.2	125.6	122.1	118.6	115.2
80	192.2	181.1	171.8	163.8	156.9	150.9	145.5	140.6	136.3	132.3	128.7	124.3	121.7	118.8	116.5	114.1
85	187.0	176.2	167.1	159.4	152.6	146.7	141.5	136.8	132.5	128.6	124.8	121.0	117.0	113.8	110.8	108.0
90	182.3	171.7	162.8	155.2	148.7	142.9	137.8	133.2	129.0	124.3	120.0	117.0	113.5	110.6	107.4	104.4
95	177.8	167.5	158.8	151.4	145.0	139.4	134.4	129.9	125.6	121.7	118.0	114.6	111.4	108.2	105.2	102.3
100	173.7	163.6	155.1	147.9	141.6	136.1	131.2	126.8	122.6	118.7	115.0	111.5	108.2	105.0	101.9	99.0
125	157.1	147.8	140.1	133.5	127.8	122.8	118.3	114.1	110.1	106.3	102.6	99.1	95.7	92.4	89.2	86.1
150	144.5	136.0	128.8	123.6	119.3	115.5	111.8	108.5	105.2	102.0	98.8	95.6	92.4	89.2	86.1	83.1
175	134.6	126.7	120.6	116.6	113.6	110.6	107.6	104.6	101.6	98.6	95.6	92.6	89.6	86.6	83.6	80.6
200	126.7	118.8	113.8	110.8	107.8	104.8	101.8	98.8	95.8	92.8	89.8	86.8	83.8	80.8	77.8	74.8
225	113.6	106.4	102.4	99.4	96.4	93.4	90.4	87.4	84.4	81.4	78.4	75.4	72.4	69.4	66.4	63.4
250	102.3	95.1	91.1	88.1	85.1	82.1	79.1	76.1	73.1	70.1	67.1	64.1	61.1	58.1	55.1	52.1
275	93.0	85.8	81.8	78.8	75.8	72.8	69.8	66.8	63.8	60.8	57.8	54.8	51.8	48.8	45.8	42.8

* WALL MOUNT A-A(1) ON WOOD WITH REINFORCEMENT ANGLE

Digitally signed by:
 Fowler, Donald
 DN: CN = Fowler,
 Donald OJ =
 Colleagues,
 VeriClaim, O365
 Users
 Date: 2020.10.31
 15:49:35 -04'00'

DRAWN:	DF		
DATE:	11-05-09		
APPROVED:	DLF		
DATE:	11-05-09		
DRAWING NO:	3-01-031		
SIZE:	B	REV:	D
SCALE:	1 : 4		
SHEET:	24	OF	26



NOTICE OF ACCEPTANCE
 END RETENTION
 PRODUCT APPROVAL

MAXIMUM ALLOWABLE 2 SPAN 5.875" HEADER WIDTH (TRACK TO TRACK) REINFORCED HEADER SCHEDULE #21*

PSF	STORM BAR HEIGHT UNDER HEADER															
	42	48	54	60	66	72	78	84	90	96	102	108	114	120	126	132
25	240.0	240.0	234.8	224.0	214.6	206.3	199.0	192.4	186.4	181.0	176.1	171.5	167.3	163.4	159.8	156.4
30	240.0	228.0	216.3	206.2	197.5	189.8	183.0	176.9	171.4	166.4	161.8	157.6	153.8	150.2	146.8	143.7
35	225.8	212.6	201.6	192.2	184.0	176.8	170.5	164.8	159.6	155.0	150.7	146.7	143.1	139.7	136.6	133.7
40	212.6	200.1	189.7	180.8	173.1	166.3	160.3	154.9	150.1	145.6	141.6	137.9	134.5	131.3	128.4	125.6
45	201.5	189.6	179.7	171.3	163.9	157.5	151.8	146.7	142.1	137.9	134.0	130.5	127.3	124.3	121.5	118.9
50	192.0	180.7	171.2	163.1	156.1	150.0	144.5	139.6	135.2	131.2	127.6	124.2	121.1	118.3	115.6	113.1
55	183.8	172.9	163.8	156.1	149.4	143.5	138.2	133.6	129.3	125.5	122.0	118.8	115.8	113.1	110.5	108.1
60	176.6	166.1	157.4	149.9	143.4	137.8	132.7	128.2	124.2	120.5	117.1	114.0	111.2	108.5	106.1	103.8
65	170.2	160.1	151.6	144.4	138.2	132.7	127.9	123.5	119.6	116.0	112.8	109.8	107.1	104.5	102.1	99.9
70	164.5	154.7	146.5	139.5	133.5	128.2	123.5	119.3	115.5	112.1	108.9	106.0	103.4	100.9	98.6	96.5
75	159.3	149.8	141.9	135.1	129.2	124.1	119.6	115.5	111.8	108.5	105.4	102.6	100.1	97.7	95.5	93.4
80	154.6	145.4	137.6	131.1	125.4	120.4	116.0	112.0	108.5	105.2	102.3	99.6	97.0	94.7	92.6	90.6
85	150.3	141.3	133.8	127.4	121.9	117.0	112.7	108.9	105.4	102.3	99.4	96.7	94.3	92.1	90.0	88.0
90	146.4	137.6	130.3	124.1	118.7	113.9	109.7	106.0	102.6	99.5	96.7	94.2	91.8	89.6	87.5	85.6
95	142.7	134.2	127.0	120.9	115.7	111.1	107.0	103.3	100.0	97.0	94.3	91.8	89.5	87.3	85.3	83.5
100	139.4	131.0	124.0	118.1	112.9	108.4	104.4	100.8	97.6	94.7	92.0	89.6	87.3	85.2	83.3	81.4
125	125.6	118.0	111.7	106.3	101.6	97.6	94.0	90.7	87.8	85.2	82.8	80.6	78.5	76.6	74.9	73.2
150	115.3	108.3	102.5	97.5	93.2	89.5	86.2	83.2	80.5	78.1	75.9	73.8	72.0	70.2	68.6	67.1
175	107.2	100.7	95.3	90.7	86.7	83.2	80.1	77.3	74.8	72.6	70.5	68.6	66.9	65.2	63.7	62.3
200	100.7	94.6	89.5	85.1	81.4	78.1	75.2	72.6	70.2	68.1	66.1	64.4	62.7	61.2	59.8	58.5
225	95.3	89.4	84.6	80.5	76.9	73.8	71.1	68.6	66.4	64.4	62.5	60.8	59.3	57.8	56.5	55.3
250	90.6	85.1	80.5	76.5	73.2	70.2	67.6	65.2	63.1	61.2	59.4	57.8	56.4	55.0	53.7	52.5
275	86.6	81.3	76.9	73.1	69.9	67.1	64.5	62.3	60.3	58.4	56.8	55.2	53.8	52.5	51.3	50.2

*Wall Mount A-A (1) on Concrete with Reinforcement Angle

MAXIMUM ALLOWABLE 2 SPAN 7.25" HEADER WIDTH (TRACK TO TRACK) - REINFORCED HEADER SCHEDULE 21*

PSF	STORM BAR HEIGHT UNDER HEADER															
	42	48	54	60	66	72	78	84	90	96	102	108	114	120	126	132
25	240.0	240.0	240.0	240.0	240.0	240.0	240.0	237.8	230.7	224.3	218.4	212.9	207.9	203.2	198.9	194.8
30	240.0	240.0	240.0	240.0	240.0	240.0	234.9	226.8	219.5	212.9	206.9	201.4	196.4	191.7	187.4	183.3
35	240.0	240.0	240.0	237.6	227.9	219.4	211.7	204.9	198.7	193.1	187.9	183.2	178.8	174.7	170.9	167.4
40	240.0	240.0	234.6	224.0	214.8	206.7	199.5	193.0	187.2	181.8	176.9	172.5	168.3	164.4	160.9	157.5
45	240.0	234.5	222.7	212.6	203.8	196.1	189.2	183.1	177.5	172.4	167.7	163.5	159.5	155.8	152.4	149.2
50	237.2	223.7	212.5	202.8	194.4	187.0	180.4	174.5	169.1	164.3	159.8	155.8	152.0	148.5	145.2	142.1
55	227.3	214.4	203.5	194.2	186.1	179.0	172.7	167.0	161.9	157.2	153.0	149.1	145.4	142.1	138.9	136.0
60	218.6	206.2	195.7	186.7	178.9	172.1	166.0	160.5	155.6	151.1	147.0	143.2	139.7	136.4	133.4	130.6
65	211.0	198.9	188.7	180.1	172.5	165.9	160.0	154.7	150.0	145.6	141.6	138.0	134.6	131.5	128.6	125.9
70	204.1	192.4	182.5	174.1	166.8	160.4	154.7	149.6	144.9	140.7	136.9	133.3	130.1	127.1	124.2	121.6
75	197.9	186.5	176.9	168.7	161.6	155.4	149.9	144.9	140.4	136.3	132.6	129.2	126.0	123.0	120.3	117.8
80	192.2	181.1	171.8	163.8	156.9	150.9	145.5	140.6	136.3	132.3	128.7	125.3	122.3	119.4	116.7	114.3
85	187.0	176.2	167.1	159.4	152.6	146.7	141.5	136.8	132.5	128.6	125.1	121.9	118.9	116.1	113.5	111.1
90	182.3	171.7	162.8	155.2	148.7	142.9	137.8	133.2	129.0	125.3	121.8	118.7	115.7	113.0	110.5	108.1
95	177.8	167.5	158.8	151.4	145.0	139.4	134.4	129.9	125.8	122.2	118.8	115.7	112.8	110.2	107.7	105.4
100	173.7	163.6	155.1	147.9	141.6	136.1	131.2	126.8	122.9	119.3	116.0	113.0	110.2	107.6	105.2	102.9
125	157.1	147.8	140.1	133.5	127.8	122.8	118.4	114.4	110.8	107.5	104.6	101.8	99.3	97.0	94.8	92.7
150	144.5	136.0	128.8	122.8	117.5	112.9	108.8	105.1	101.8	98.8	96.0	93.5	91.2	89.0	87.0	85.1
175	134.6	126.7	120.0	114.3	109.4	105.1	101.2	97.8	94.7	91.9	89.3	87.0	84.8	82.8	80.9	79.1
200	126.6	119.1	112.8	107.4	102.8	98.7	95.1	91.9	88.9	86.3	83.9	81.7	79.6	77.7	76.0	74.3
225	119.9	112.8	106.8	101.7	97.3	93.4	90.0	86.9	84.2	81.6	79.4	77.2	75.3	73.5	71.8	70.3
250	114.3	107.5	101.8	96.9	92.7	89.0	85.7	82.8	80.2	77.8	75.6	73.6	71.7	70.0	68.4	66.9
275	109.4	102.8	97.3	92.7	88.6	85.1	82.0	79.1	76.6	74.3	72.2	70.3	68.5	66.9	65.3	63.8

*Wall Mount A-A (1) on Concrete with Reinforcement Angle

Digitally signed by:
 Fowler, Donald
 DN: CN = Fowler,
 Donald OJ =
 Colleagues,
 VeriClaim, O365
 Users
 Date: 2020.10.31
 15:49:35 -04'00'

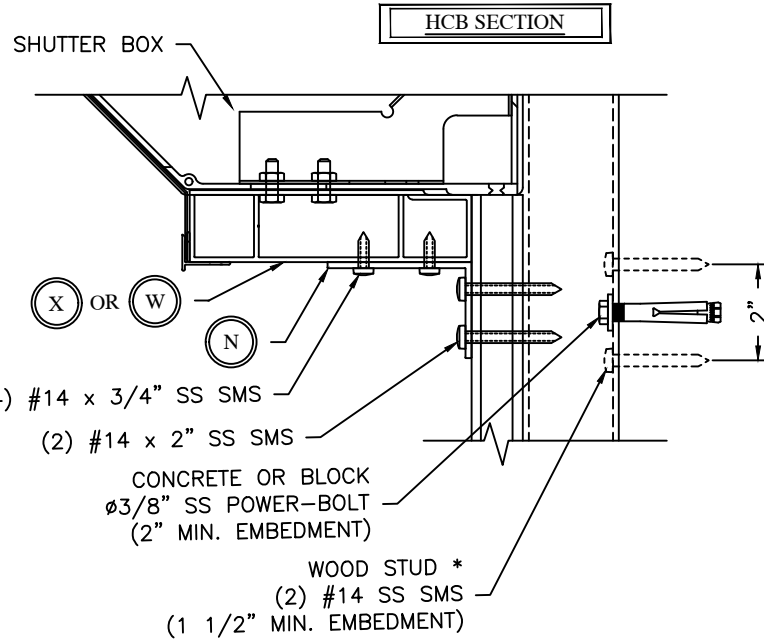
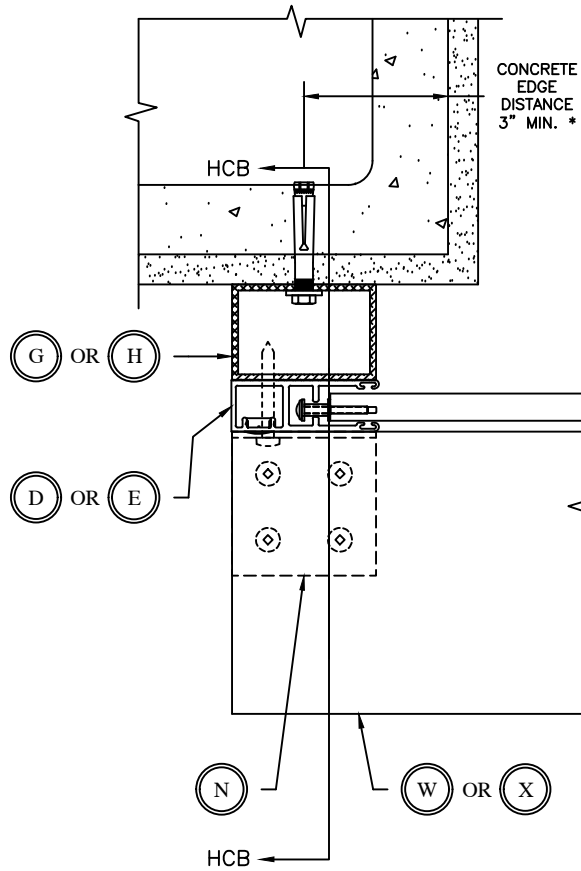
DRAWN:	DF
DATE:	11-05-09
APPROVED:	DLF
DATE:	11-05-09
DRAWING NO:	3-01-031
SIZE:	B
REV:	-
SCALE:	1 : 4
SHEET:	24A OF 26

* WOOD SCREWS SHALL BE CENTERED IN 2" FACE OF STUD.

NOTE: USE 3 SPAN SCHEDULE 17, PAGE 20A, AS NEEDED.

BUILDOUT MOUNT

REINFORCED HEADER CONNECTION SEE SCHEDULE 22



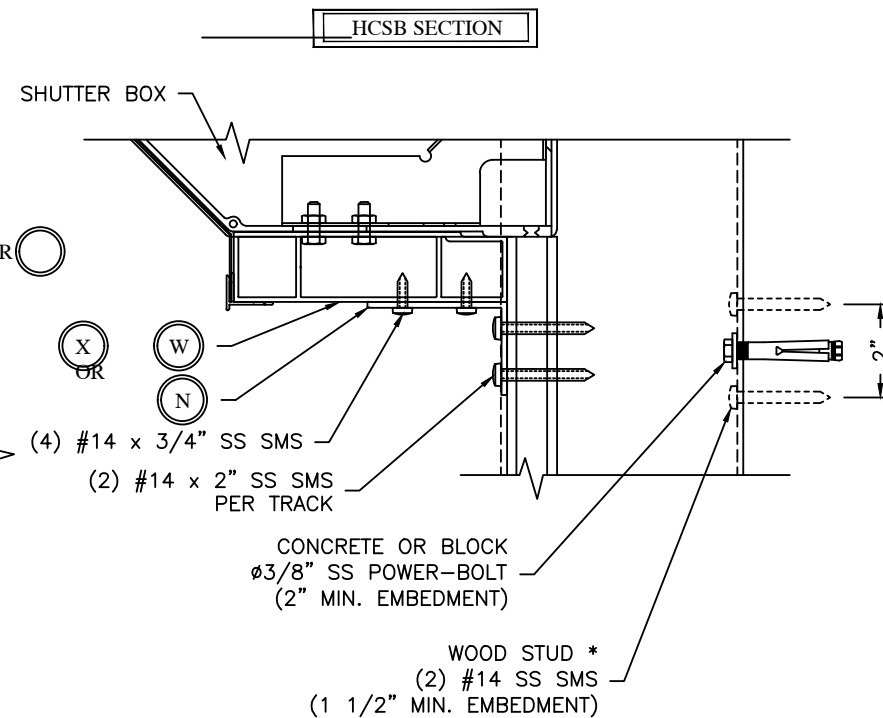
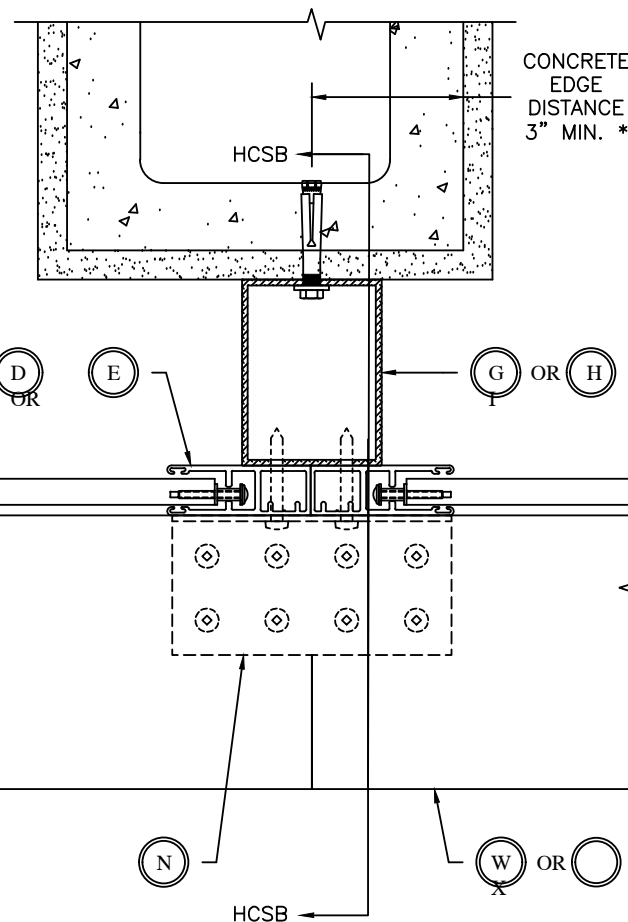
MAXIMUM ALLOWABLE 2 SPAN 7.25" HEADER WIDTH (TRACK TO TRACK) - REINFORCED HEADER SCHEDULE 22 *

PSF	STORM BAR HEIGHT UNDER HEADER															
	42	48	54	60	66	72	78	84	90	96	102	108	114	120	126	132
25	240.0	240.0	240.0	240.0	240.0	240.0	240.0	237.8	230.7	224.3	218.4	212.9	207.9	203.2	198.9	194.8
30	240.0	240.0	240.0	240.0	240.0	234.9	226.8	219.5	212.9	206.9	201.4	196.4	191.7	187.4	183.3	179.5
35	240.0	240.0	240.0	237.6	227.9	219.4	211.7	204.9	198.7	193.1	187.9	183.2	178.8	174.7	170.9	167.4
40	240.0	240.0	234.6	224.0	214.8	206.7	199.5	193.0	187.2	181.8	176.9	172.5	168.3	164.4	160.9	157.5
45	240.0	234.5	222.7	212.6	203.8	196.1	189.2	183.1	177.5	172.4	167.7	163.5	159.5	155.8	152.4	149.2
50	237.2	223.7	212.5	202.8	194.4	187.0	180.4	174.5	169.1	164.3	159.8	155.8	152.0	148.5	145.2	142.1
55	227.3	214.4	203.5	194.2	186.1	179.0	172.7	167.0	161.9	157.2	153.0	149.1	145.4	142.1	138.9	136.0
60	218.6	206.2	195.7	186.7	178.9	172.1	166.0	160.5	155.6	151.1	147.0	143.2	139.7	136.4	133.4	130.6
65	211.0	198.9	188.7	180.1	172.5	165.9	160.0	154.7	150.0	145.6	141.6	138.0	134.6	131.5	128.6	125.9
70	204.1	192.4	182.5	174.1	166.8	160.4	154.7	149.6	144.9	140.7	136.9	133.3	130.1	127.1	124.2	121.6
75	197.9	186.5	176.9	168.7	161.6	155.4	149.9	144.9	140.4	136.3	132.6	129.2	126.0	123.0	120.3	117.8
80	192.2	181.1	171.8	163.8	156.9	150.9	145.5	140.6	136.3	132.3	128.7	125.3	122.3	119.4	116.7	114.3
85	187.0	176.2	167.1	159.4	152.6	146.7	141.5	136.8	132.5	128.6	125.1	121.9	118.9	116.1	113.5	111.1
90	182.3	171.7	162.8	155.2	148.7	142.9	137.8	133.2	129.0	125.3	121.8	118.7	115.7	113.0	110.5	108.1
95	177.8	167.5	158.8	151.4	145.0	139.4	134.4	129.9	125.8	122.2	118.8	115.7	112.8	110.2	107.7	105.4
100	173.7	163.6	155.1	147.9	141.6	136.1	131.2	126.8	122.9	119.3	116.0	113.0	110.2	107.6	105.2	102.9
125	157.1	147.8	140.1	133.5	127.8	122.8	118.4	114.4	110.8	107.5	104.6	101.8	99.3	97.0	94.8	92.7
150	144.5	136.0	128.8	122.8	117.5	112.9	108.8	105.1	101.8	98.8	96.0	93.5	91.2	89.0	86.1	82.2
175	134.6	126.7	120.0	114.3	109.4	105.1	101.2	97.8	94.7	91.9	89.3	86.1	81.5	77.5	73.8	70.4
200	126.6	119.1	112.8	107.4	102.8	98.7	95.1	91.9	88.9	84.7	79.7	75.3	71.3	67.8	64.5	61.6
225	119.9	112.8	106.8	101.7	97.3	93.4	90.0	86.1	80.3	75.3	70.9	66.9	63.4	60.2	57.4	54.8
250	114.3	107.5	101.8	96.9	92.7	89.0	83.4	77.5	72.3	67.8	63.8	60.2	57.1	54.2	51.6	49.3
275	109.4	102.8	97.3	92.7	88.6	82.2	75.8	70.4	65.7	61.6	58.0	54.8	51.9	49.3	46.9	44.8

* BUILDOUT AND MULLION MOUNT WITH REINFORCEMENT ANGLE

SPLIT BUILDOUT MOUNT

REINFORCED HEADER CONNECTION SEE SCHEDULE 22



MAXIMUM ALLOWABLE 2 SPAN 5.875" HEADER WIDTH (TRACK TO TRACK) - REINFORCED HEADER SCHEDULE 22 *

PSF	STORM BAR HEIGHT UNDER HEADER															
	42	48	54	60	66	72	78	84	90	96	102	108	114	120	126	132
25	240.0	240.0	234.8	224.0	214.6	206.3	199.0	192.4	186.4	181.0	176.1	171.5	167.3	163.4	159.8	156.4
30	240.0	228.0	216.3	206.2	197.5	189.8	183.0	176.9	171.4	166.4	161.8	157.6	153.8	150.2	146.8	143.7
35	225.8	212.6	201.6	192.2	184.0	176.8	170.5	164.8	159.6	155.0	150.7	146.7	143.1	139.7	136.6	133.7
40	212.6	200.1	189.7	180.8	173.1	166.3	160.3	154.9	150.1	145.6	141.6	137.9	134.5	131.3	128.4	125.6
45	201.5	189.6	179.7	171.3	163.9	157.5	151.8	146.7	142.1	137.9	134.0	130.5	127.3	124.3	121.5	118.9
50	192.0	180.7	171.2	163.1	156.1	150.0	144.5	139.6	135.2	131.2	127.6	124.2	121.1	118.3	115.6	113.1
55	183.8	172.9	163.8	156.1	149.4	143.5	138.2	133.6	129.3	125.5	122.0	118.8	115.8	113.1	110.5	108.1
60	176.6	166.1	157.4	149.9	143.4	137.8	132.7	128.2	124.2	120.5	117.1	114.0	111.2	108.5	106.1	103.8
65	170.2	160.1	151.6	144.4	138.2	132.7	127.9	123.5	119.6	116.0	112.8	109.8	107.1	104.5	102.1	99.9
70	164.5	154.7	146.5	139.5	133.5	128.2	123.5	119.3	115.5	112.1	108.9	106.0	103.4	100.9	98.6	96.5
75	159.3	149.8	141.9	135.1	129.2	124.1	119.6	115.5	111.8	108.5	105.4	102.6	100.1	97.7	95.5	93.4
80	154.6	145.4	137.6	131.1	125.4	120.4	116.0	112.0	108.5	105.2	102.3	99.6	97.0	94.7	92.6	90.6
85	150.3	141.3	133.8	127.4	121.9	117.0	112.7	108.9	105.4	102.3	99.4	96.7	94.3	92.1	90.0	88.0
90	146.4	137.6	130.3	124.1	118.7	113.9	109.7	106.0	102.6	99.5	96.7	94.2	91.8	89.6	87.5	85.6
95	142.7	134.2	127.0	120.9	115.7	111.1	107.0	103.3	100.0	97.0	94.3	91.8	89.5	87.3	85.3	83.5
100	139.4	131.0	124.0	118.1	112.9	108.4	104.4	100.8	97.6	94.7	92.0	89.6	87.3	85.2	83.3	81.4
125	125.6	118.0	111.7	106.3	101.6	97.6	94.0	90.7	87.8	85.2	82.8	80.6	78.5	76.6	74.9	73.2
150	115.3	108.3	102.5	97.5	93.2	89.5	86.2	83.2	80.5	78.1	75.9	73.8	72.0	70.2	68.6	67.1
175	107.2	100.7	95.3	90.7	86.7	83.2	80.1	77.3	74.8	72.6	70.5	68.6	66.9	65.2	63.7	62.3
200	100.7	94.6	89.5	85.1	81.4	78.1	75.2	72.6	70.2	68.1	66.1	64.4	62.7	61.2	59.8	58.5
225	95.3	89.4	84.6	80.5	76.9	73.8	71.1	68.6	66.4	64.4	62.5	60.8	59.3	57.8	56.5	54.8
250	90.6	85.1	80.5	76.5	73.2	70.2	67.6	65.2	63.1	61.2	59.4	57.8	56.4	54.2	51.6	49.3
275	86.6	81.3	76.9	73.1	69.9	67.1	64.5	62.3	60.3	58.4	56.8	54.8	51.9	49.3	46.9	44.8

* BUILDOUT AND MULLION MOUNT WITH REINFORCEMENT ANGLE



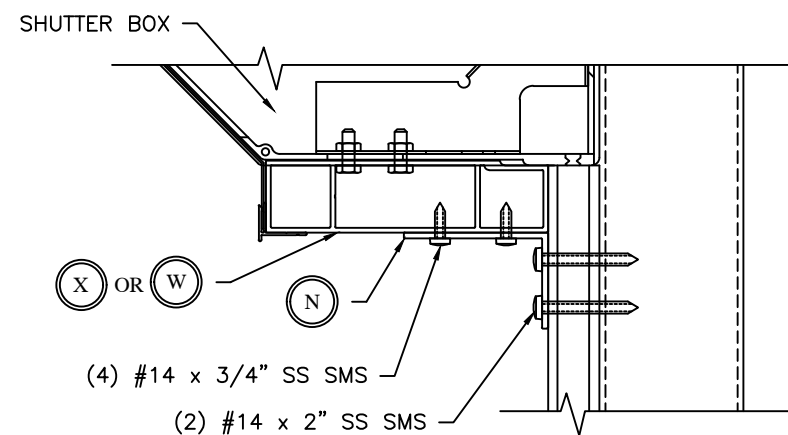
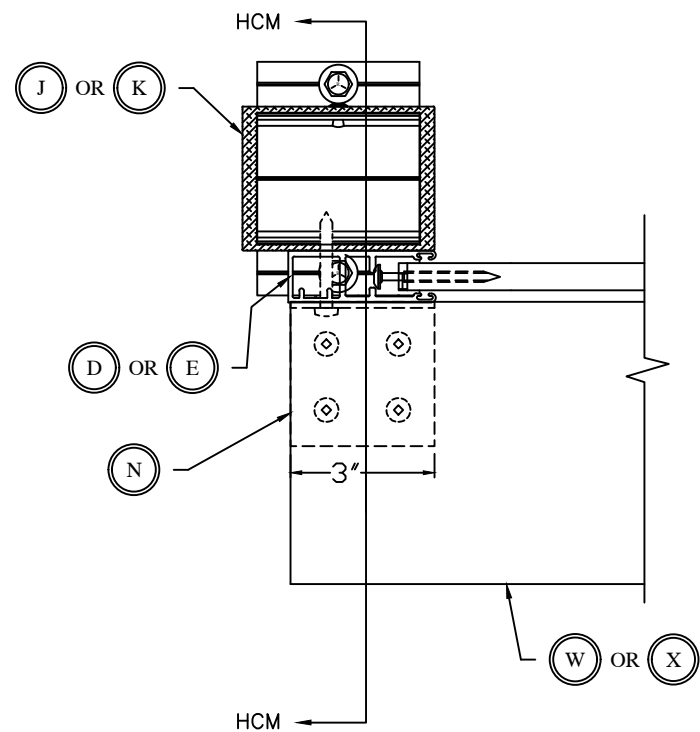
DRAWING TITLE:
NOTICE OF ACCEPTANCE
END RETENTION
PRODUCT APPROVAL

Digitally signed by:
Fowler, Donald
DN: CN = Fowler,
Donald OJ =
Colleagues,
VeriClaim, O365
Users
Date: 2020.10.31
15:49:35 -04'00'

DRAWN:	DF
DATE:	11-04-09
APPROVED:	DLF
DATE:	11-04-09
DRAWING NO:	3-01-031
SIZE:	B C
SCALE:	1 : 4
SHEET:	25 OF 26

MULLION MOUNT

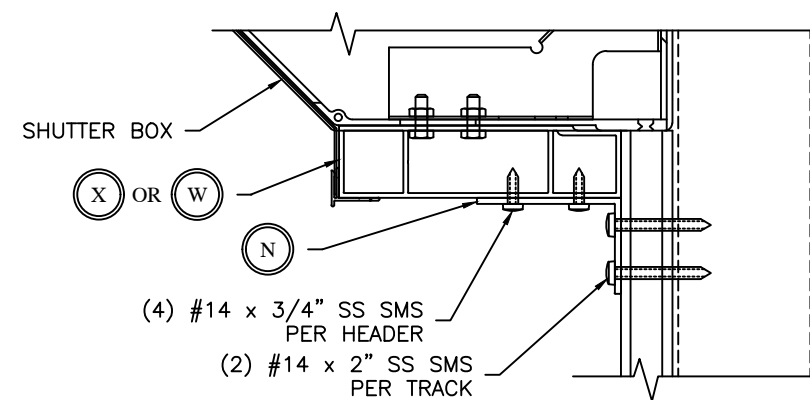
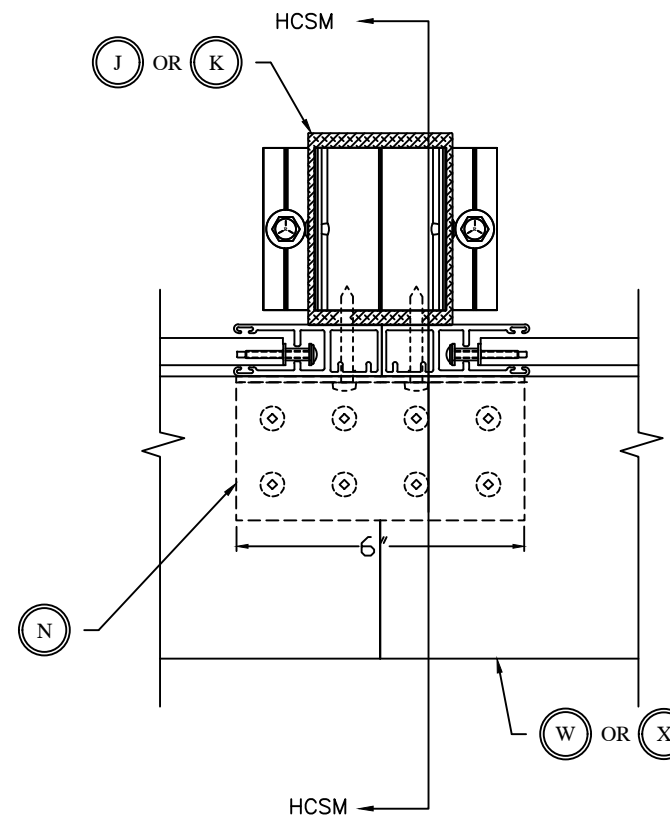
REINFORCED HEADER
CONNECTION
SEE R.H.SCHEDULE 22
PAGE 25 OF 26



HCM SECTION

SPLIT MULLION MOUNT

REINFORCED HEADER
CONNECTION
SEE R.H.SCHEDULE 22
PAGE 25 OF 26



HCSM SECTION



By **ZOMI**

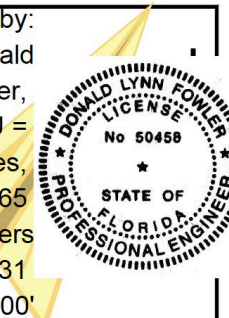
ITASCA, IL 60143
COPYRIGHT © 2008
QUALITAS MANUFACTURING INC.

DRAWING TITLE:

NOTICE OF ACCEPTANCE
END RETENTION
PRODUCT APPROVAL

Digitally signed by:
Fowler, Donald
DN: CN = Fowler,
Donald OJ =
Colleagues,
VeriClaim, O365
Users

Date: 2020.10.31
15:49:35 -04'00'



DRAWN:	DF	
DATE:	11-04-09	
APPROVED:	DF	
DATE:	11-04-09	
DRAWING NO:	3-01-031	
SIZE:	B	C
SCALE:	1 : 4	
SHEET:	26	OF 26