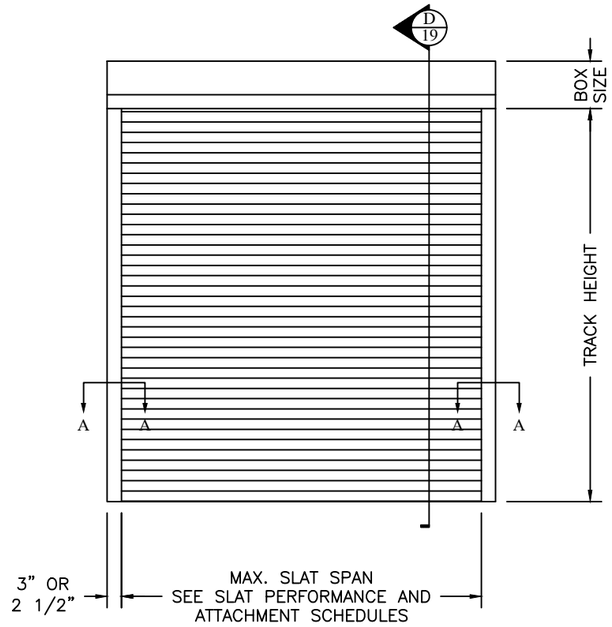
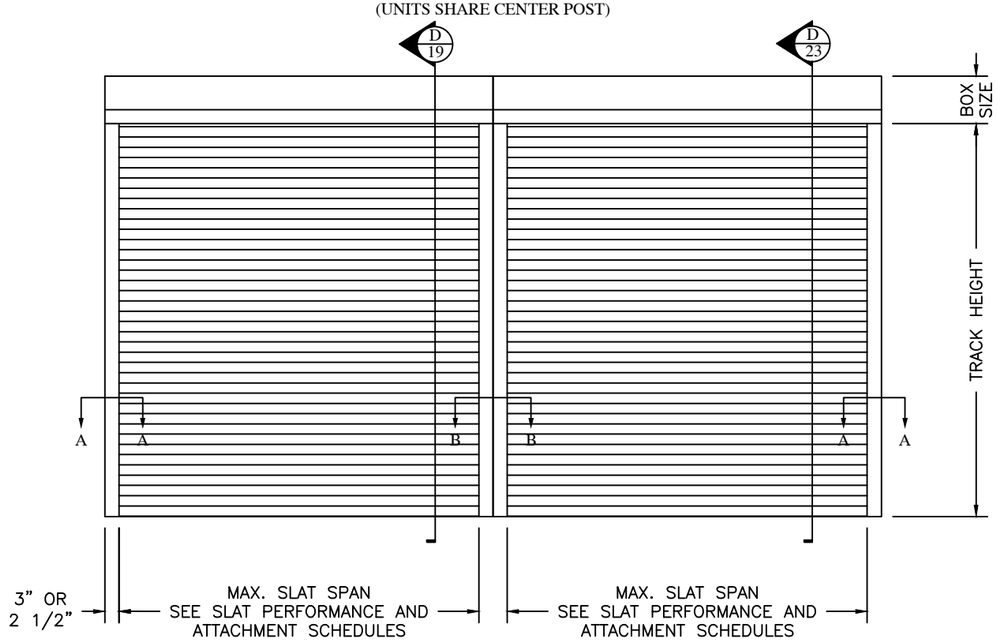
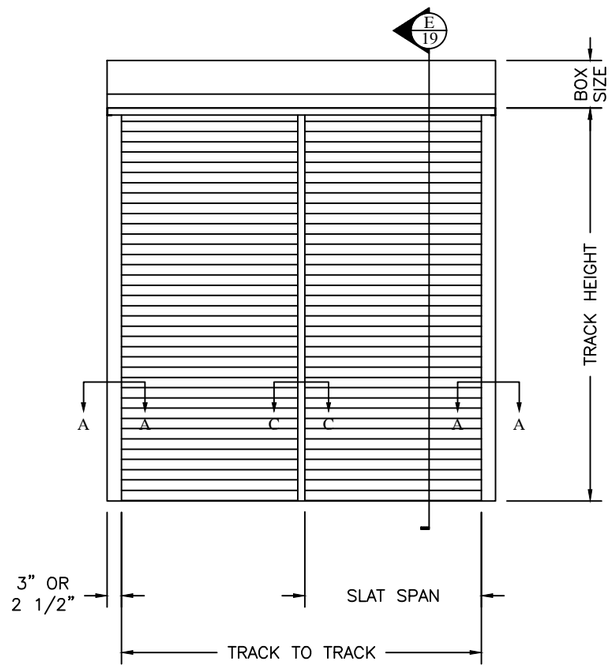
TYPICAL SINGLE UNIT
ELEVATION
(NO STORM BARS REQUIRED)




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

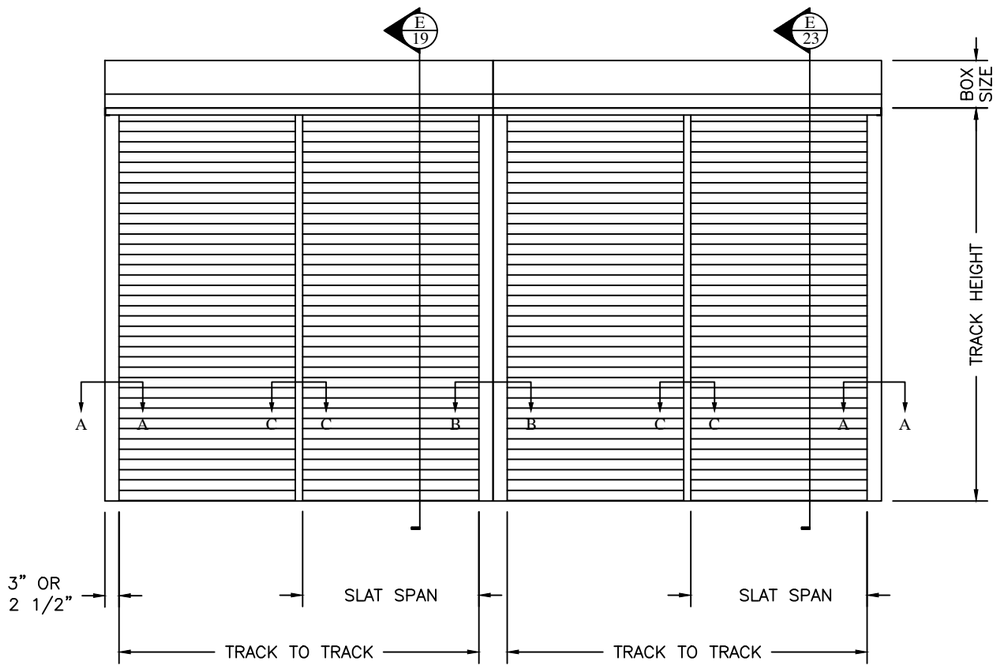



TYPICAL SINGLE UNIT
ELEVATION
(STORM BARS REQUIRED)




MAX. SLAT SPAN
SEE SLAT PERFORMANCE AND
ATTACHMENT SCHEDULES

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




Roll-a-way™ By QMI

BY

QMI


Roll-a-way By QMI
1661 GLENLAKE AVENUE
ITASCA, IL 60143


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DRAWING TITLE:

# NOTICE OF ACCEPTANCE
# END RETENTION
# PRODUCT APPROVAL

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

DONALD LYNN FOWLER
LICENSE
No 50458
STATE OF
FLORIDA
PROFESSIONAL ENGINEER


SEE GENERAL
NOTES PAGE 2


| | |
|---|---|
| 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 1¾ " 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.

DETAIL LETTER → A
DETAIL SHEET → 3

SECTION LETTER → A
SECTION SHEET → 3

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ITASCA, IL 60143
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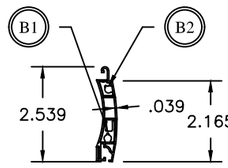
DRAWING TITLE:
NOTICE OF ACCEPTANCE
END RETENTION
PRODUCT APPROVAL

D.L. Fowler
Professional Engineer
License No. 50458

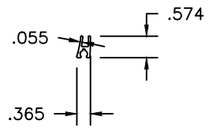
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DN: CN = Fowler, Donald OU = Colleagues, VeriClaim, O365 Users
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DONALD LYNN FOWLER
LICENSE
No 50458
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

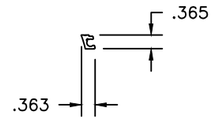
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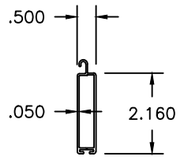

A1 P55 SLAT
P55DER SLAT ASSEMBLY SHOWN
POLYVINYL CHLORIDE



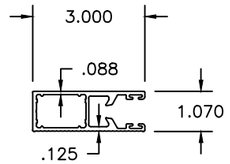

B1 LOWER SLAT REBAR
ALUMINUM 6005-T5



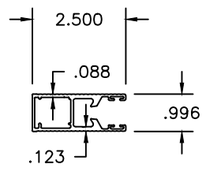

B2 UPPER SLAT REBAR
ALUMINUM 6063-T6



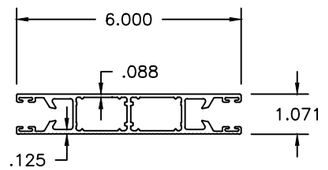

C BOTTOM SLAT
ALUMINUM 6063-T6



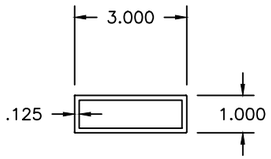

D SYSTEM I TRACK
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ALUMINUM 6063-T6



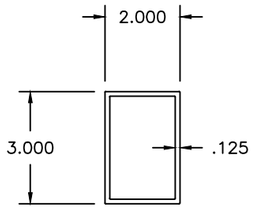

E SYSTEM II TRACK
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ALUMINUM 6063-T6



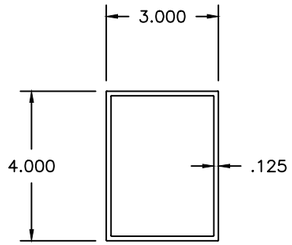

F SYSTEM I DOUBLE TRACK
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ALUMINUM 6063-T6



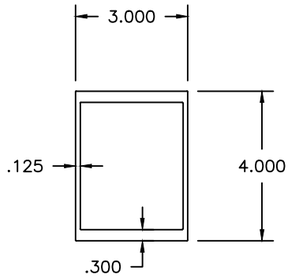

G TUBE 1" x 3" x .125"
ALUMINUM 6063-T6



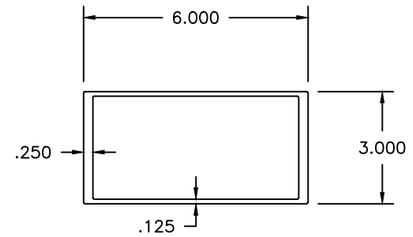

H TUBE 2" x 3" x 1/8"
ALUMINUM 6005-T5



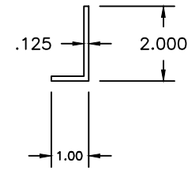

I TUBE 3" x 4" x 1/8"
ALUMINUM 6063-T6



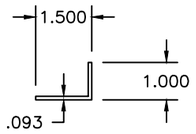

J MULLION 3" x 4" HEAVY DUTY
ALUMINUM 6005-T5



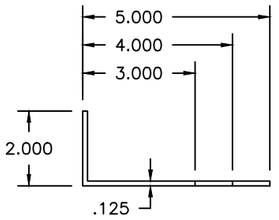

K MULLION 3" x 6" HEAVY DUTY
ALUMINUM 6005-T5



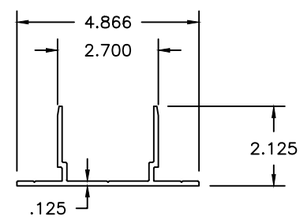

L ANGLE 1" x 2" x .125"
ALUMINUM 6063-T5



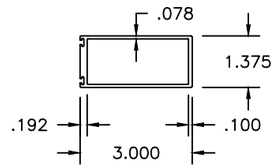

M ANGLE 1" x 1 1/2" x 3/32"
ALUMINUM 6063-T5



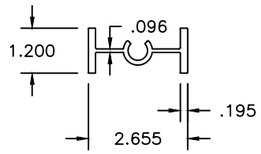

N ANGLE
2" x 3", 4" OR 5" x 1/8"
ALUMINUM 6063-T6



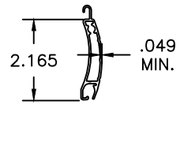

O MULLION BASE 3" x 4" (L=3 3/8")
MULLION BASE 3" x 6" (L=5 7/16")
ALUMINUM 6005-T5



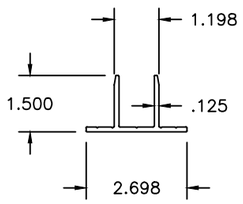

P 3" STORM BAR
ALUMINUM 6005-T5



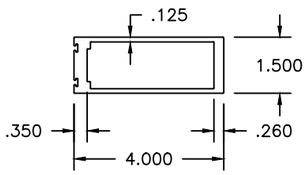

Q 3" STORM BAR INSERT
ALUMINUM 6005-T5



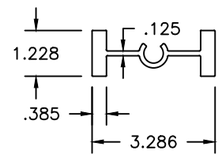

A2 US60 SLAT
ALUMINUM 6063-T6



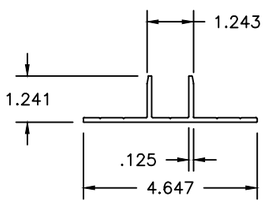

R 3" FIXED STORM BAR BASE,
STANDARD
(LENGTH = 2 5/8")
ALUMINUM 6063-T6



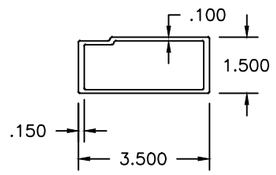

S 4" STORM BAR
ALUMINUM 6005-T5



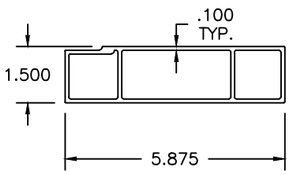

T 4" STORM BAR INSERT
ALUMINUM 6063-T6




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

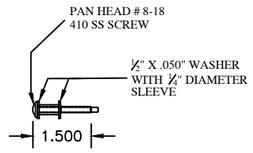
Roll-a-way By OMI
1661 GLENLAKE AVENUE
ITASCA, IL 60143
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DRAWING TITLE:
NOTICE OF ACCEPTANCE
END RETENTION
PRODUCT APPROVAL

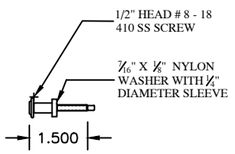
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DONALD LYNN FOWLER LICENSE No 50458 STATE OF FLORIDA PROFESSIONAL ENGINEER

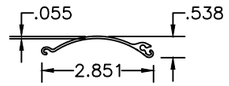
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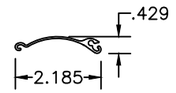

AE RETAIN SCREW ASSEBLY




AE ALTERNATE RETAIN SCREW ASSEBLY



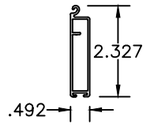

A1 AL7-E SINGLE WALL SLAT
QMI- 395
ALUMINUM 6063-T6



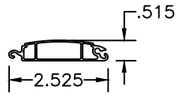

A2 AL7-E SINGLE WALL STARTER SLAT
QMI- 477
ALUMINUM 6063-T6



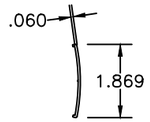
2 PC. RAIL ASSEMBLY SCREW
#8-18 x 3/4 PHILLIPS PAN SDS 410 S.S.



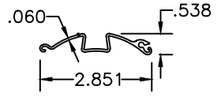

C BASE SLAT
QMI- 408
ALUMINUM 6005-T5



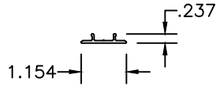

B2 LOCK SLAT
QMI- 409
ALUMINUM 6063-T6



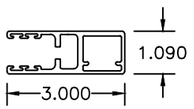

B3 LOCK SLAT COVER
QMI-331
ALUMINUM 6005-T5



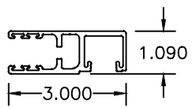

B4 FINGER PULL SLAT
QMI- 410
ALUMINUM 6063-T6



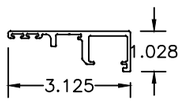

B5 RAIL SNAP COVER
QMI-351
ALUMINUM 6063-T5



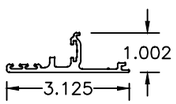

D RETAIN RAIL
QMI- 491
ALUMINUM 6005-T5



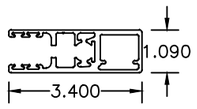

D SNAP COVER RETAIN RAIL
QMI- 492
ALUMINUM 6005-T5



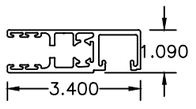

D1 2 PIECE INNER HALF RETAIN RAIL
QMI- 493
ALUMINUM 6005-T5



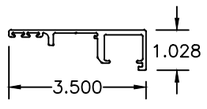

D2 2 PC. OUTER HALF RETAIN RAIL
QMI- 494
ALUMINUM 6005-T5



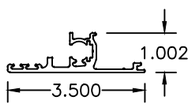

E SPRING STOP RETAIN RAIL
QMI- 479
ALUMINUM 6005-T5



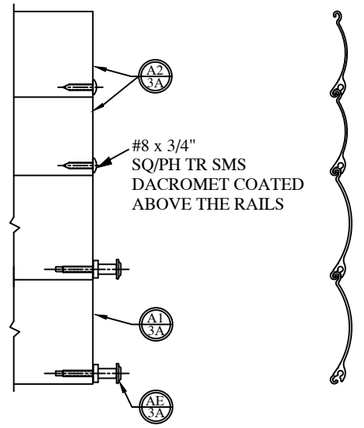

E SPRING STOP SNAP COVER RETAIN RAIL
QMI- 487
ALUMINUM 6005-T5




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



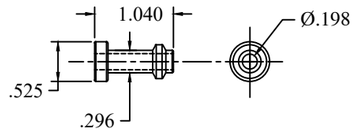

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ITASCA, IL 60143
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DRAWING TITLE:
# NOTICE OF ACCEPTANCE END RETENTION PRODUCT APPROVAL

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DN: CN = Fowler, Donald OU = Colleagues, VeriClaim, O365 Users
Date: 2020.12.31 15:51:27 -04'00'

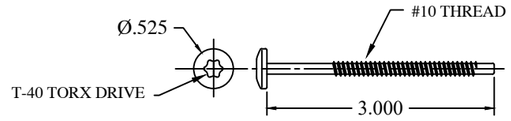
DONALD LYNN FOWLER LICENSE No 50458 STATE OF FLORIDA PROFESSIONAL ENGINEER

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| SHEET: | 3A OF 26 |



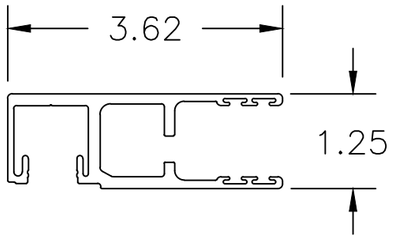

Q1

QOMPACT SCREW BUSHING
ACETEL



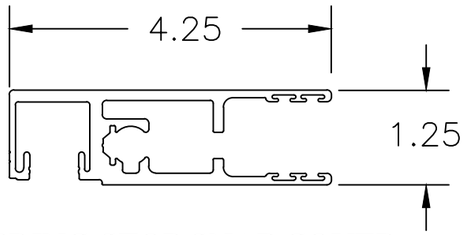

Q2

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



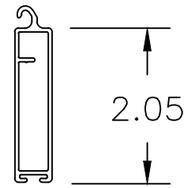

D3

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



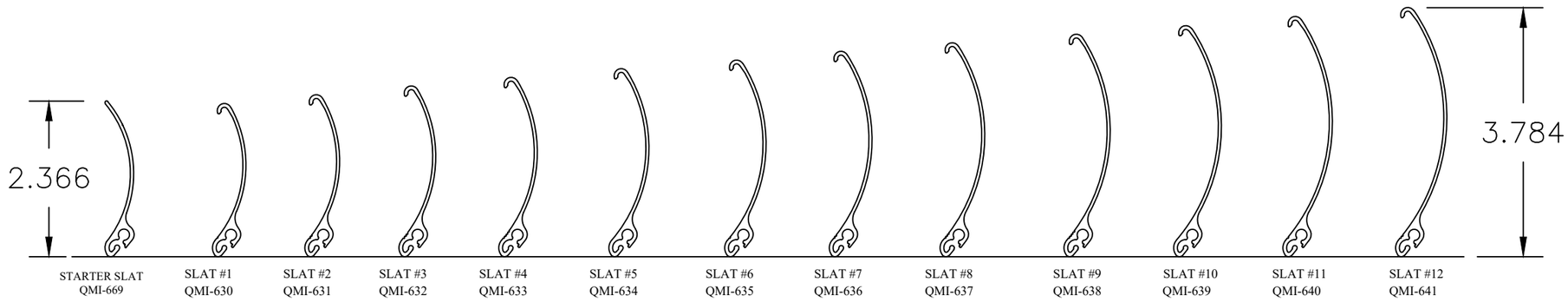

D4

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.

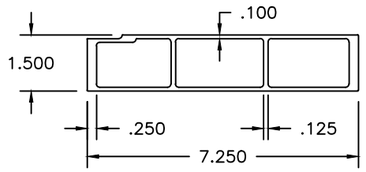
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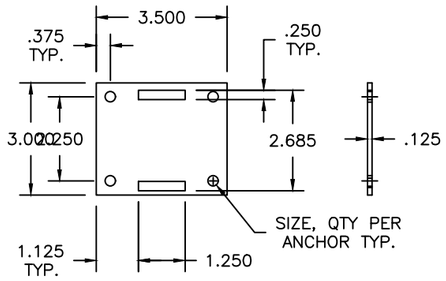
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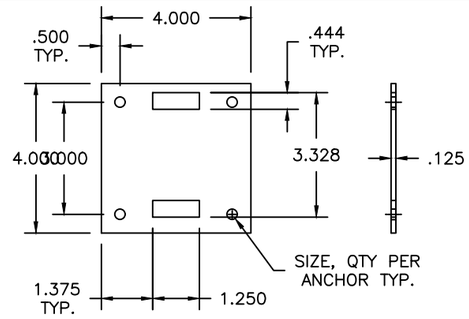
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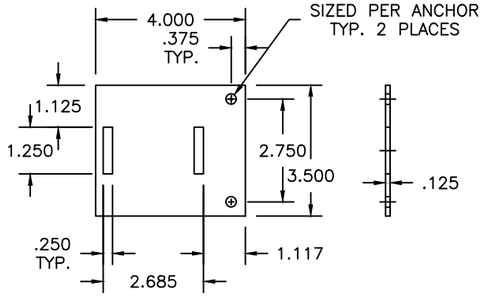

X HEADER 7 1/4"
ALUMINUM 6005-T5



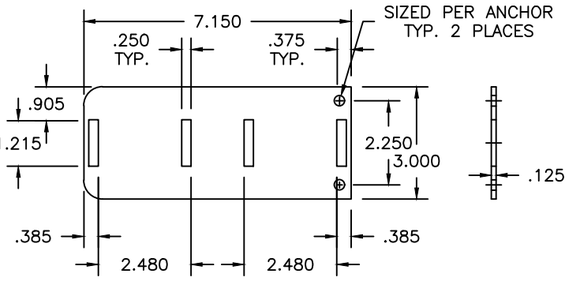

Y 3" REMOVABLE STORM BAR BASE,
STANDARD
ALUMINUM 6061-T6 OR 6005-T5



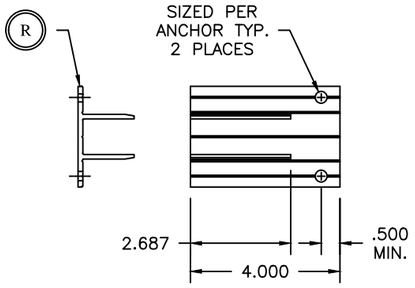

Z 4" REMOVABLE STORM BAR BASE,
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ALUMINUM 6061-T6 OR 6005-T5



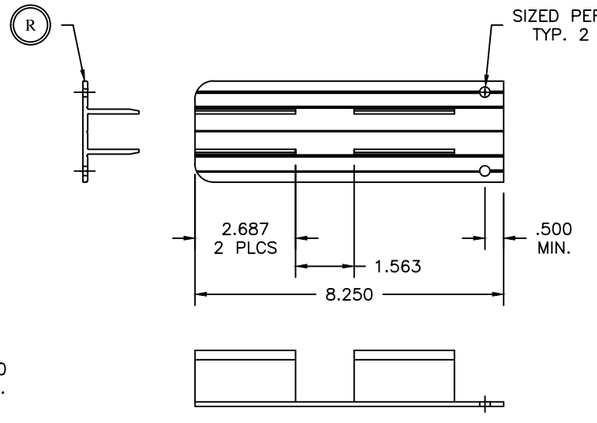

AA 3" REMOVABLE STORM BAR BASE,
EXTENDED
ALUMINUM 6061-T6 OR 6005-T5



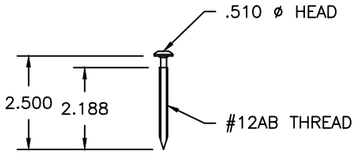

AB 3" REMOVABLE STORM BAR BASE,
EXTENDED
ALUMINUM 6061-T6 OR 6005-T5



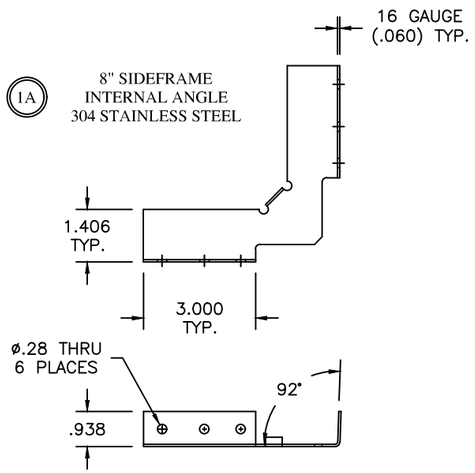

AC 3" FIXED STORM BAR BASE,
EXTENDED
ALUMINUM 6061-T6 OR 6005-T5



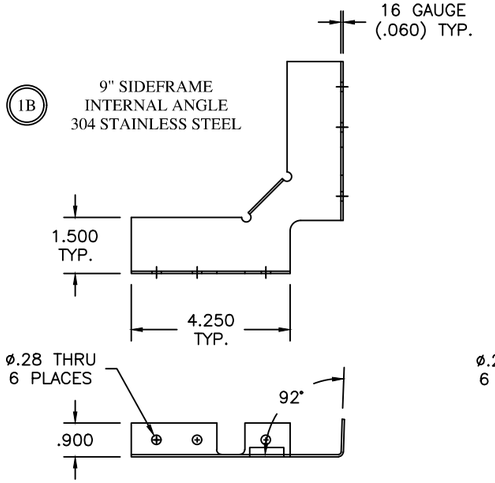

AD 3" FIXED STORM BAR BASE,
DOUBLE
ALUMINUM 6061-T6 OR 6005-T5



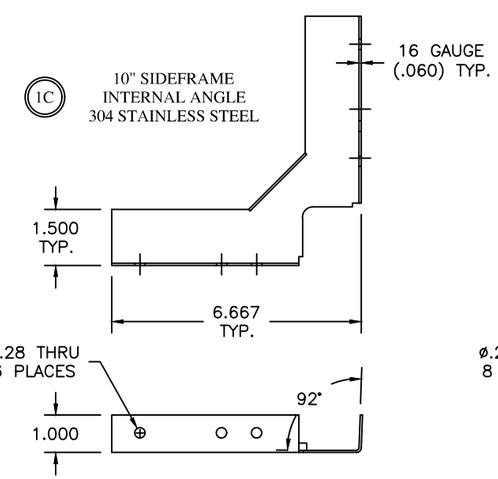

AE END RETENTION SCREW
302 HQ STAINLESS STEEL



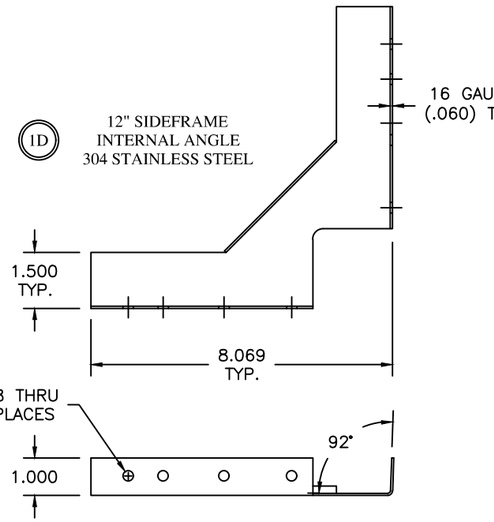

1A 8" SIDEFRAME
INTERNAL ANGLE
304 STAINLESS STEEL




1B 9" SIDEFRAME
INTERNAL ANGLE
304 STAINLESS STEEL




1C 10" SIDEFRAME
INTERNAL ANGLE
304 STAINLESS STEEL




1D 12" SIDEFRAME
INTERNAL ANGLE
304 STAINLESS STEEL

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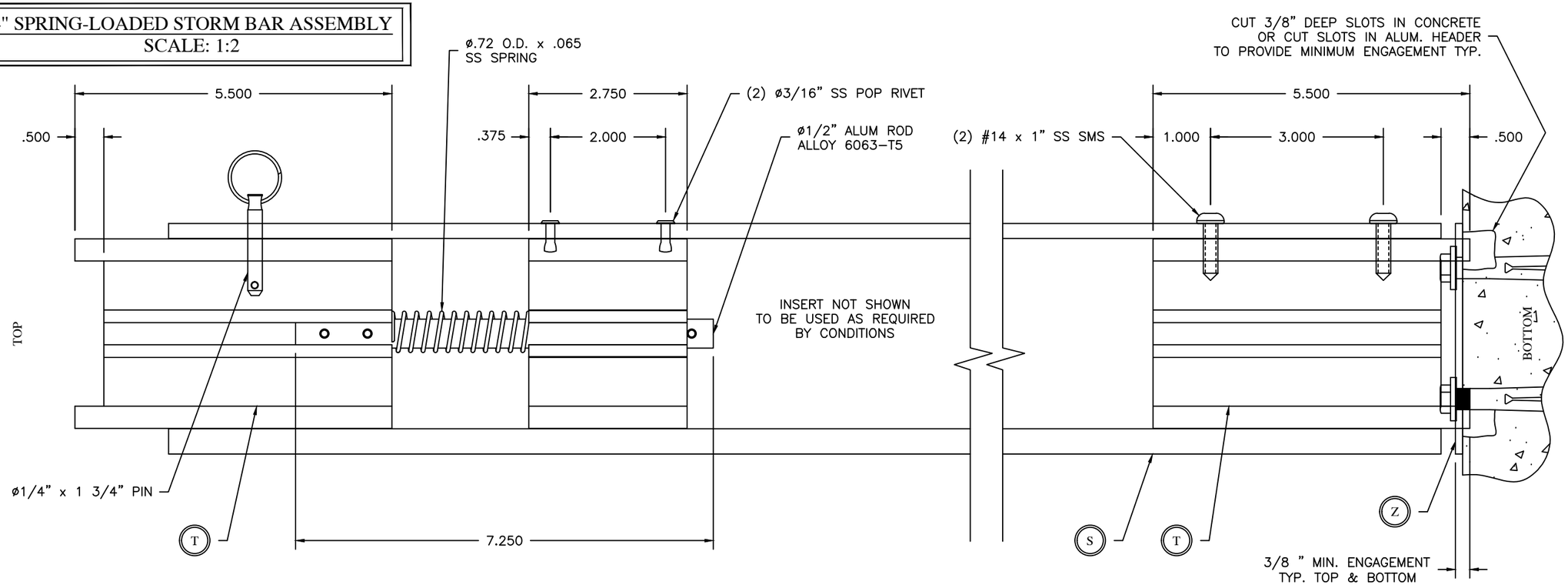
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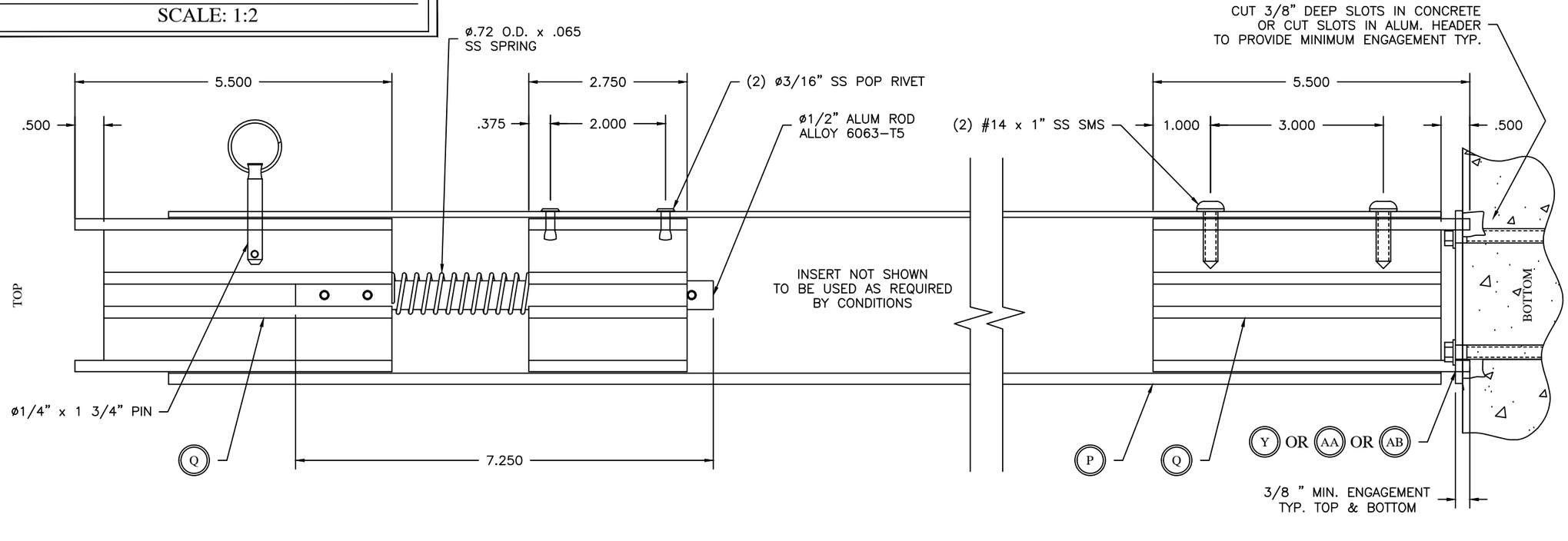
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| DATE: | 10-28-08 |
| DRAWING NO: | 3-01-031 |
| SIZE: B | REV: A |
| SCALE: | 1 : 4 |
| SHEET: | 4 OF 26 |

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




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





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ITASCA, IL 60143

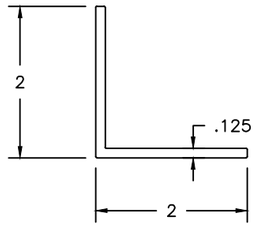

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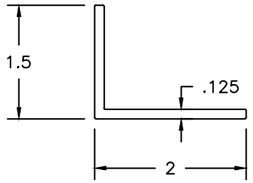
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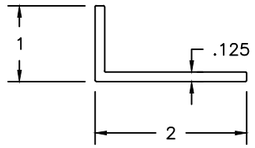
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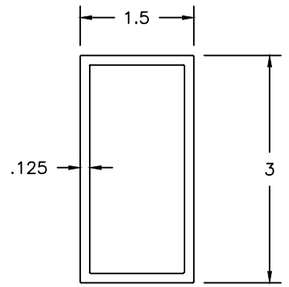

N1 2" x 2" x 1/8" ANGLE
6063-T5 ALLOY



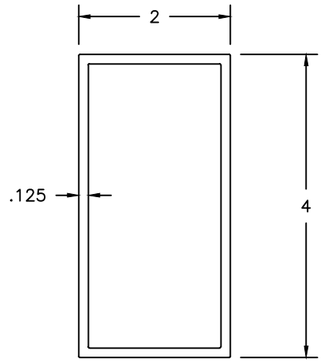

M1 1 1/2" x 2" x 1/8" ANGLE
6063-T5 ALLOY



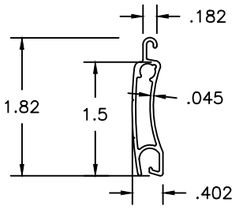

M2 1" x 2" x 1/8" ANGLE
6063-T5 ALLOY



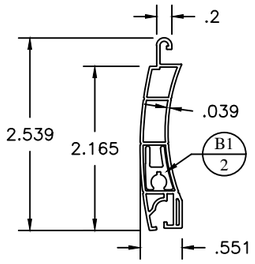

G2 1 1/2" x 3" POST
6063-T5 ALLOY



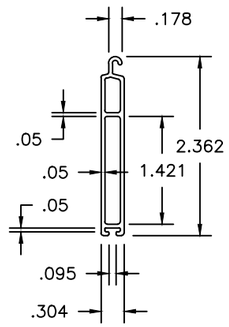

G1 2" x 4" POST
6063-T5 ALLOY



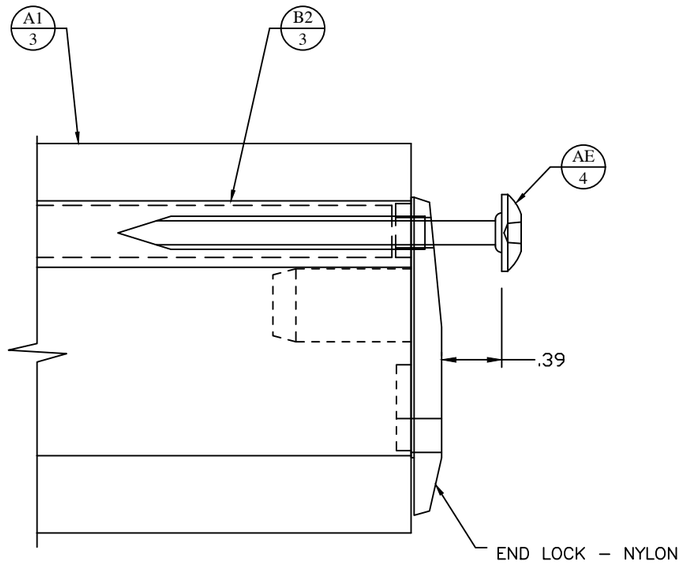

A4 1138ER SLAT
6063-T6 ALLOY



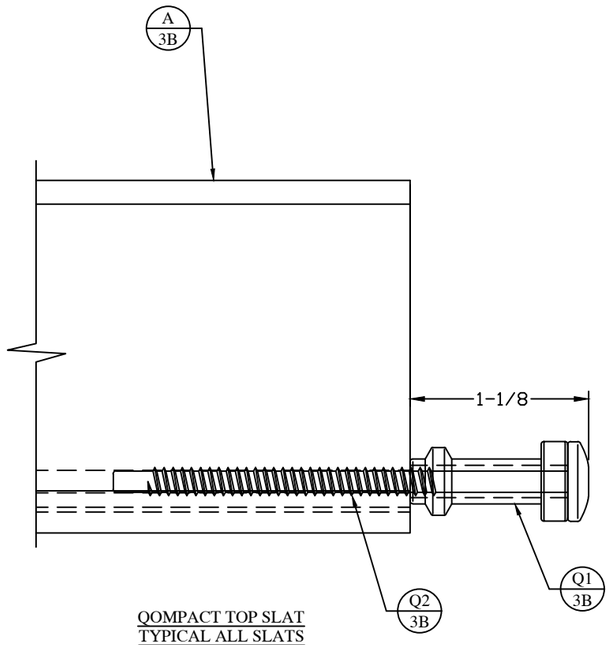

A5 P55 ER SLAT
PVC




C1 BOTTOM SLAT MINI
6063-T6 ALLOY




P55 TOP END RETENTION DETAIL
(SCALE FULL)




QOMPACT TOP SLAT
TYPICAL ALL SLATS
(SCALE FULL)

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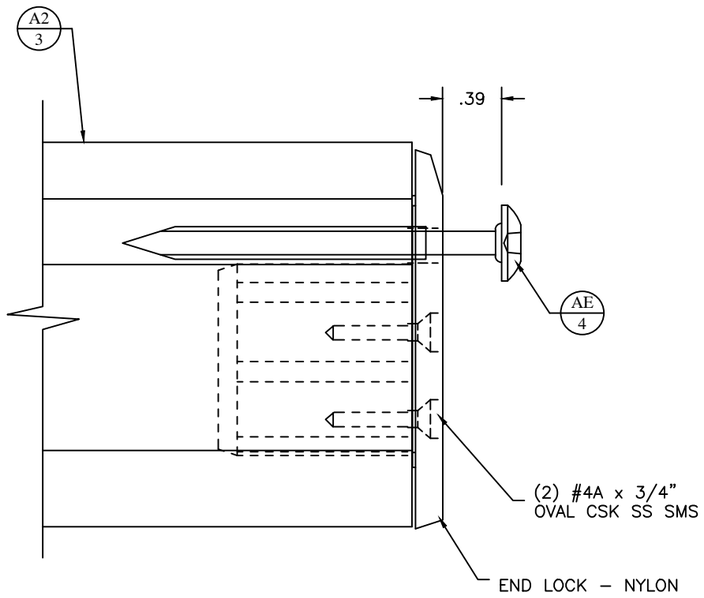
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# PRODUCT APPROVAL

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DN: CN = Fowler, Donald, OU = Colleagues, VeriClaim, O365 Users
Date: 2020.10.31 15:53:13 -04'00'

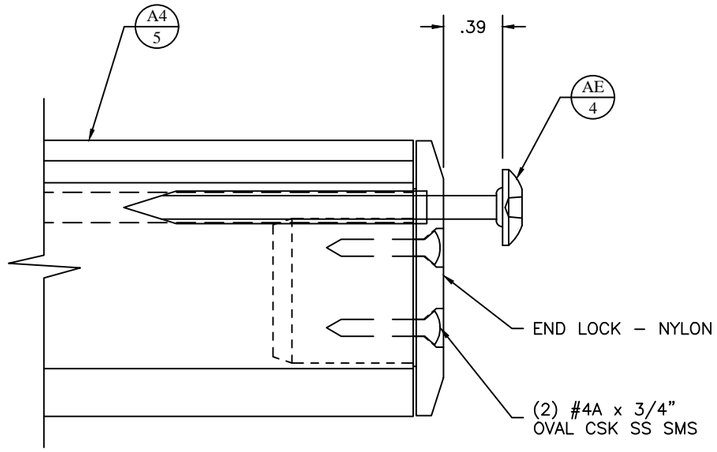
DONALD LYNN FOWLER LICENSE No 50458 STATE OF FLORIDA PROFESSIONAL ENGINEER

D.L. Fowler Registered Engineer

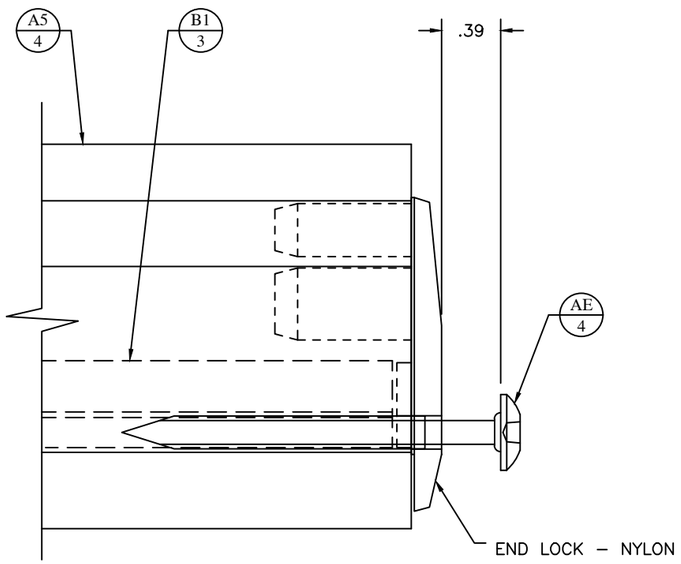
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| DRAWN: | DLF |
| DATE: | 4-01-04 |
| APPROVED: | DLF |
| DATE: | 04-02-12 |
| DRAWING NO: | 3-01-031 |
| SIZE: B | REV: D |
| SCALE: | 1 : 2 |
| SHEET: | 5 OF 26 |



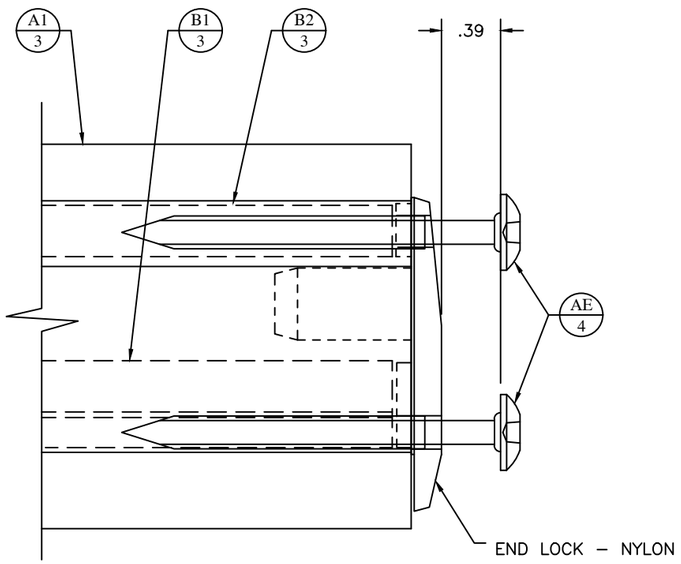

US60 END RETENTION DETAIL
(EVERY SLAT)




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)

Roll-a-way By OMI
1661 GLENLAKE AVENUE
ITASCA, IL 60143
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QUALITAS MANUFACTURING INC.

DRAWING TITLE:
NOTICE OF ACCEPTANCE
END RETENTION
PRODUCT APPROVAL

Digitally signed by: Fowler, Donald
DN: CN = Fowler, Donald OU = Colleagues, VeriClaim, O365 Users
Date: 2020.10.31 15:53:40 -04'00'

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PROFESSIONAL ENGINEER

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

## 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 MISSLE 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.

Roll-a-way By QMI
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ITASCA, IL 60143
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DRAWING TITLE:
NOTICE OF ACCEPTANCE
END RETENTION
PRODUCT APPROVAL

Digitally signed by: Fowler, Donald
DN: CN = Fowler, Donald OU = Colleagues, VeriClaim, O365 Users
Date: 2020.10.31 15:54:03 -04'00'

DONALD LYNN FOWLER LICENSE No 50458 STATE OF FLORIDA PROFESSIONAL ENGINEER

| | |
|---|---|
| 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 |

## RECOMMENDED GLASS CLEARANCE (INCHES)

| PSF\SLAT SPAN | 48 | | | | 60 | | | | 72" | | | | 84" | | | | 96" | | | | 108" | | | | 120" | | | | 132" | | | | 144" | | | | 156" | | | | 168" | | | | 180" | | | | 192" | | | | 204" | | | | 216" | | | | 228" | | | | 240" | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | SLAT TYPE | | | | SLAT TYPE | | | | SLAT TYPE | | | | SLAT TYPE | | | | SLAT TYPE | | | | SLAT TYPE | | | | SLAT TYPE | | | | SLAT TYPE | | | | SLAT TYPE | | | | SLAT TYPE | | | | SLAT TYPE | | | | SLAT TYPE | | | | SLAT TYPE | | | | SLAT TYPE | | | | SLAT TYPE | | | | SLAT TYPE | | | | SLAT TYPE | | | |
| | A | B | C | D | A | B | C | D | A | B | C | D | A | B | C | D | A | B | C | D | A | B | C | D | A | B | C | D | A | B | C | D | A | B | C | D | A | B | C | D | A | B | C | D | A | B | C | D | A | B | C | D | A | B | C | D | A | B | C | D | A | B | C | D | A | B | C | D |
| 10 | 1.2 | 1.2 | 1.7 | 4.0 | 2.4 | 1.4 | 2.9 | 4.0 | 3.5 | 1.6 | 4.0 | 5.0 | 3.8 | 2.9 | 4.3 | 5.4 | 4.1 | 4.3 | 4.6 | 5.8 | 4.4 | 4.7 | 4.9 | 6.0 | 4.7 | 5.0 | 5.2 | 7.0 | 5.0 | 5.1 | 5.5 | 8.0 | 5.3 | 5.2 | 5.8 | 8.5 | 5.6 | 5.3 | 6.1 | 9.0 | - | 5.4 | - | 9.5 | - | 5.5 | - | 10.0 | - | 5.5 | - | 10.5 | - | 5.6 | - | 11.0 | - | 5.6 | - | 11.5 | - | 5.6 | - | 12.0 | - | 7.8 | - | 13.0 |
| 15 | 1.3 | 1.3 | 1.8 | 4.0 | 2.5 | 1.7 | 3.0 | 4.0 | 3.5 | 2.4 | 4.0 | 5.0 | 3.8 | 3.6 | 4.3 | 5.5 | 4.1 | 4.4 | 4.6 | 5.8 | 4.4 | 4.9 | 4.9 | 6.2 | 4.7 | 5.3 | 5.2 | 7.1 | 5.0 | 5.8 | 5.5 | 8.2 | 5.3 | 5.6 | 5.8 | 8.7 | 5.6 | 5.7 | 6.1 | 9.3 | - | 5.8 | - | 9.8 | - | 5.9 | - | 10.3 | - | 6.0 | - | 11.0 | - | 6.1 | - | 11.5 | - | 6.1 | - | 12.3 | - | 6.1 | - | 13.0 | - | 8.4 | - | 15.0 |
| 20 | 1.4 | 1.4 | 1.9 | 4.0 | 2.6 | 1.9 | 3.1 | 4.1 | 3.6 | 3.2 | 4.1 | 5.1 | 3.9 | 4.1 | 4.4 | 5.6 | 4.2 | 4.6 | 4.7 | 5.8 | 4.5 | 5.1 | 5.0 | 6.4 | 4.8 | 5.5 | 5.3 | 7.2 | 5.1 | 6.3 | 5.6 | 8.3 | 5.4 | 5.9 | 5.9 | 8.8 | 5.7 | 6.1 | 6.2 | 9.6 | - | 6.3 | - | 10.1 | - | 6.4 | - | 10.6 | - | 6.5 | - | 11.4 | - | 6.6 | - | 12.0 | - | 6.6 | - | 13.0 | - | 6.6 | - | 14.0 | - | 8.9 | - | 17.0 |
| 25 | 1.5 | 1.5 | 2.0 | 4.0 | 2.7 | 1.9 | 3.2 | 4.1 | 3.6 | 3.8 | 4.1 | 5.1 | 3.9 | 4.2 | 4.4 | 5.6 | 4.2 | 4.7 | 4.7 | 5.8 | 4.5 | 5.3 | 5.0 | 6.6 | 4.8 | 5.7 | 5.3 | 7.3 | 5.1 | 6.7 | 5.6 | 8.5 | 5.4 | 6.3 | 5.9 | 9.0 | - | 6.5 | - | 9.8 | - | 6.7 | - | 10.4 | - | 6.9 | - | 10.9 | - | 7.0 | - | 11.8 | - | 7.1 | - | 12.5 | - | 7.1 | - | 13.7 | - | 7.1 | - | 15.0 | - | 9.5 | - | 18.0 |
| 30 | 1.6 | 1.6 | 2.1 | 4.0 | 2.8 | 2.3 | 3.3 | 4.2 | 3.6 | 3.9 | 4.1 | 5.2 | 3.9 | 4.4 | 4.4 | 5.7 | 4.2 | 4.9 | 4.7 | 5.8 | 4.5 | 5.6 | 5.0 | 6.8 | 4.8 | 6.0 | 5.3 | 7.4 | 5.1 | 7.1 | 5.6 | 8.6 | 5.4 | 6.6 | 5.9 | 9.2 | - | 6.9 | - | 10.1 | - | 7.1 | - | 10.7 | - | 7.3 | - | 11.2 | - | 7.5 | - | 12.2 | - | 7.6 | - | 13.1 | - | 7.6 | - | 14.4 | - | 7.6 | - | 16.0 | - | 10.0 | - | 19.0 |
| 35 | 1.7 | 1.7 | 2.2 | 4.0 | 2.9 | 2.7 | 3.4 | 4.2 | 3.7 | 3.9 | 4.2 | 5.2 | 4.0 | 4.5 | 4.5 | 5.8 | 4.3 | 5.1 | 4.8 | 5.8 | 4.6 | 5.8 | 5.1 | 7.0 | 4.9 | 6.2 | 5.4 | 7.5 | 5.2 | 7.6 | 5.7 | 8.8 | 5.5 | 7.0 | 6.0 | 9.4 | - | 7.3 | - | 10.4 | - | 7.5 | - | 11.0 | - | 7.8 | - | 11.5 | - | 8.0 | - | 12.6 | - | 8.1 | - | 13.6 | - | 8.2 | - | 15.1 | - | 8.1 | - | 17.0 | - | 10.6 | - | 19.0 |
| 40 | 1.8 | 1.8 | 2.3 | 4.0 | 3.0 | 3.0 | 3.5 | 4.3 | 3.7 | 4.0 | 4.2 | 5.2 | 4.0 | 4.6 | 4.5 | 5.9 | 4.3 | 5.2 | 4.8 | 5.8 | 4.6 | 6.0 | 5.1 | 7.2 | 4.9 | 6.5 | 5.4 | 7.6 | 5.2 | 8.0 | 5.7 | 9.0 | - | 7.3 | - | 9.6 | - | 7.7 | - | 10.7 | - | 8.0 | - | 11.3 | - | 8.3 | - | 11.8 | - | 8.5 | - | 13.0 | - | 8.6 | - | 14.2 | - | 8.7 | - | 15.8 | - | 8.6 | - | 18.0 | - | - | - | 20.0 |
| 45 | 1.9 | 1.9 | 2.4 | 4.0 | 3.1 | 3.4 | 3.6 | 4.3 | 3.7 | 4.1 | 4.2 | 5.3 | 4.0 | 4.7 | 4.5 | 5.9 | 4.3 | 5.4 | 4.8 | 5.8 | 4.6 | 6.2 | 5.1 | 7.3 | 4.9 | 6.7 | 5.4 | 7.8 | 5.2 | 8.5 | 5.7 | 9.1 | - | 7.7 | - | 9.8 | - | 8.1 | - | 10.9 | - | 8.4 | - | 11.6 | - | 8.7 | - | 12.1 | - | 9.0 | - | 13.4 | - | 9.1 | - | 14.8 | - | 9.2 | - | 16.6 | - | 9.1 | - | 19.0 | - | - | - | - |
| 50 | 2.0 | 2.0 | 2.5 | 4.0 | 3.2 | 3.5 | 3.7 | 4.4 | 3.7 | 4.2 | 4.2 | 5.3 | 4.0 | 4.9 | 4.5 | 6.0 | 4.3 | 5.5 | 4.8 | 5.8 | 4.7 | 6.4 | 5.2 | 7.5 | 5.1 | 7.0 | 5.6 | 7.9 | 5.5 | 8.9 | 6.0 | 9.2 | - | 8.0 | - | 10.0 | - | 8.4 | - | 11.1 | - | 8.8 | - | 11.9 | - | 9.2 | - | 12.4 | - | 9.5 | - | 13.8 | - | 9.7 | - | 15.3 | - | 9.7 | - | 17.2 | - | - | - | - | - | - | - | - |
| 55 | 2.1 | 2.1 | 2.6 | 4.0 | 3.2 | 3.5 | 3.7 | 4.4 | 3.8 | 4.3 | 4.3 | 5.4 | 4.1 | 5.0 | 4.6 | 6.1 | 4.4 | 5.7 | 4.9 | 5.8 | 4.8 | 6.6 | 5.3 | 7.6 | 5.2 | 7.2 | 5.7 | 8.1 | 5.6 | 9.3 | - | 9.3 | - | 8.4 | - | 10.2 | - | 8.8 | - | 11.3 | - | 9.3 | - | 12.2 | - | 9.7 | - | 12.9 | - | 10.0 | - | 14.1 | - | 10.2 | - | 15.8 | - | - | - | 18.0 | - | - | - | - | - | - | - | - |
| 60 | 2.2 | 2.2 | 2.7 | 4.0 | 3.3 | 3.6 | 3.8 | 4.5 | 3.8 | 4.4 | 4.3 | 5.4 | 4.1 | 5.1 | 4.6 | 6.2 | 4.5 | 5.8 | 5.0 | 5.9 | 4.9 | 6.8 | 5.4 | 7.7 | 5.3 | 7.5 | 5.8 | 8.2 | - | 9.8 | - | 9.4 | - | 8.7 | - | 10.4 | - | 9.2 | - | 11.5 | - | 9.7 | - | 12.5 | - | 10.1 | - | 13.4 | - | 10.5 | - | 14.5 | - | 10.7 | - | 16.4 | - | - | - | - | - | - | - | - | - | - | - | - |
| 65 | 2.3 | 2.3 | 2.8 | 4.0 | 3.3 | 3.7 | 3.8 | 4.5 | 3.8 | 4.5 | 4.3 | 5.4 | 4.2 | 5.2 | 4.7 | 6.3 | 4.5 | 6.0 | 5.0 | 6.1 | 4.9 | 7.0 | 5.4 | 7.8 | 5.3 | 7.7 | 5.8 | 8.4 | - | 10.2 | - | 9.5 | - | 9.1 | - | 10.6 | - | 9.6 | - | 11.7 | - | 10.1 | - | 12.8 | - | 10.6 | - | 13.7 | - | 10.9 | - | 15.0 | - | - | - | 17.0 | - | - | - | - | - | - | - | - | - | - | - | - |
| 70 | 2.5 | 2.4 | 3.0 | 4.0 | 3.4 | 3.7 | 3.9 | 4.6 | 3.9 | 4.6 | 4.4 | 5.5 | 4.2 | 5.3 | 4.7 | 6.4 | 4.6 | 6.2 | 5.1 | 6.3 | 5.0 | 7.2 | 5.5 | 7.9 | 5.4 | 7.9 | - | 8.6 | - | 10.6 | - | 9.6 | - | 9.4 | - | 10.8 | - | 10.0 | - | 11.9 | - | 10.6 | - | 13.2 | - | 11.0 | - | 14.1 | - | - | - | 15.5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 75 | 2.6 | 2.5 | 3.1 | 4.0 | 3.4 | 3.8 | 3.9 | 4.6 | 3.9 | 4.7 | 4.4 | 5.5 | 4.3 | 5.5 | 4.8 | 6.5 | 4.7 | 6.3 | 5.2 | 6.4 | 5.1 | 7.4 | 5.6 | 8.0 | - | 8.2 | - | 8.7 | - | 11.1 | - | 9.8 | - | 9.8 | - | 11.0 | - | 10.4 | - | 12.1 | - | 11.0 | - | 13.5 | - | - | - | 14.4 | - | - | - | 16.0 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 80 | 2.7 | 2.6 | 3.2 | 4.0 | 3.2 | 3.8 | 3.7 | 4.7 | 4.0 | 4.7 | 4.5 | 5.6 | 4.4 | 5.6 | 4.9 | 6.6 | 4.7 | 6.5 | 5.2 | 6.6 | 5.1 | 7.6 | 5.6 | 8.1 | - | 8.4 | - | 8.8 | - | 11.5 | - | 10.0 | - | 10.1 | - | 11.2 | - | 10.8 | - | 12.3 | - | - | - | 13.8 | - | - | - | 14.7 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 85 | 2.8 | 2.7 | 3.3 | 4.0 | 3.3 | 3.9 | 3.8 | 4.7 | 4.0 | 4.8 | 4.5 | 5.6 | 4.4 | 5.7 | 4.9 | 6.7 | 4.8 | 6.6 | - | 6.7 | 5.2 | 7.8 | - | 8.3 | - | 8.7 | - | 9.0 | - | 11.9 | - | 10.2 | - | 10.5 | - | 11.5 | - | - | - | 12.6 | - | - | - | 14.0 | - | - | - | 15.0 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 90 | 2.9 | 2.8 | 3.4 | 4.0 | 3.4 | 4.0 | 3.9 | 4.8 | 4.0 | 4.9 | 4.5 | 5.7 | 4.5 | 5.8 | 5.0 | 6.7 | 4.9 | 6.8 | - | 6.9 | - | 8.0 | - | 8.4 | - | 8.9 | - | 9.2 | - | 12.4 | - | 10.4 | - | 10.8 | - | 11.7 | - | - | - | 12.8 | - | - | - | 14.1 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 95 | 3.0 | 3.0 | 3.5 | 4.0 | 3.5 | 4.0 | 4.0 | 4.8 | 4.1 | 5.0 | 4.6 | 5.8 | 4.5 | 6.0 | 5.0 | 6.8 | 5.0 | 6.9 | - | 7.0 | - | 8.2 | - | 8.6 | - | 9.2 | - | 9.3 | - | 12.8 | - | 10.6 | - | - | - | 12.0 | - | - | - | 13.0 | - | - | - | 14.2 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 100 | 3.1 | 3.1 | 3.6 | 4.0 | 3.6 | 4.1 | 4.1 | 4.9 | 4.1 | 5.1 | 4.6 | 5.8 | 4.6 | 6.1 | 5.1 | 6.8 | 5.1 | 7.1 | - | 7.2 | - | 8.4 | - | 8.8 | - | 9.4 | - | 9.5 | - | - | - | 10.8 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 120 | 3.3 | - | 3.8 | 4.0 | 3.8 | - | 4.3 | 4.9 | 4.3 | - | - | 5.9 | 4.8 | - | - | 6.9 | 5.3 | 7.7 | - | 7.8 | - | 9.2 | - | 8.9 | - | - | - | 9.7 | - | - | - | 11.0 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 140 | 3.5 | - | 4.0 | 4.0 | 4.0 | - | 4.5 | 5.0 | 4.5 | - | - | 5.9 | 5.0 | - | - | 6.9 | - | - | - | 8.3 | - | - | - | 9.0 | - | - | - | 10.0 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 160 | 3.7 | - | 4.2 | 4.0 | 4.2 | - | - | 5.0 | 4.7 | - | - | 6.0 | - | - | - | 7.0 | - | - | - | 8.5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 180 | 3.8 | - | 4.3 | - | 4.3 | - | - | - | 4.8 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 200 | 3.9 | - | - | - | 4.4 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 220 | 3.9 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 240 | 4.0 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 260 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 280 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |

| | SLAT TYPE |
|---|---|
| A | P55TER, US60ER, AND P55DER |
| B | AL7-E |
| C | P55ER, P55ER 2ND, & 1138ER |
| D | QOMPACT |

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ITASCA, IL 60143

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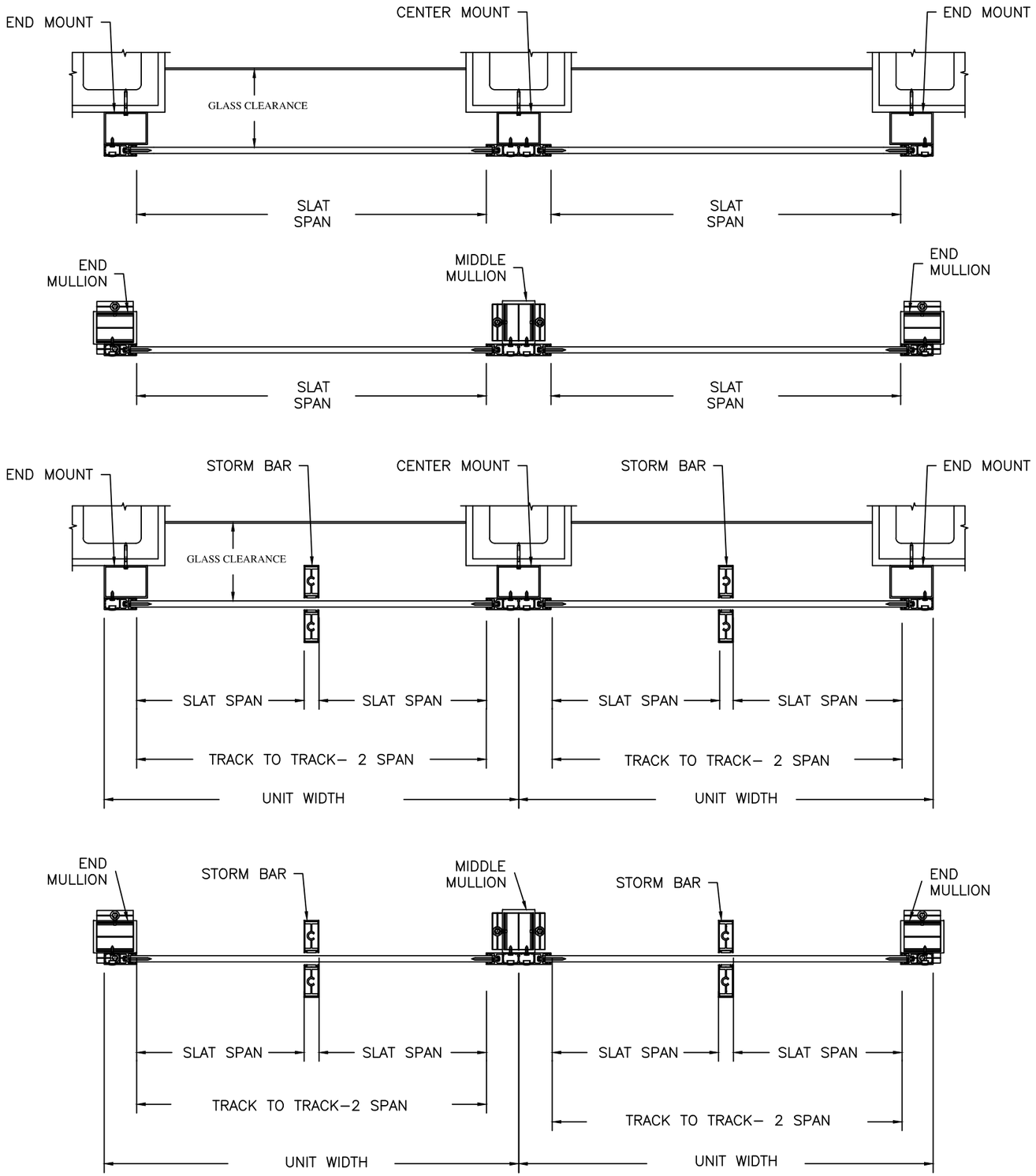
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NOTICE OF ACCEPTANCE
END RETENTION
PRODUCT APPROVAL

Digitally signed by: Fowler, Donald
DN: CN = Fowler, Donald, OU = Colleagues, VeriClaim, O365 O.U., Project: Users
Date: 2020.10.31 15:54:32 -04'00'

DONALD LYNN FOWLER LICENSE No 50458 STATE OF FLORIDA PROFESSIONAL ENGINEER

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| SIZE: | B |
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| SCALE: | 1/2" = 1'-0" |
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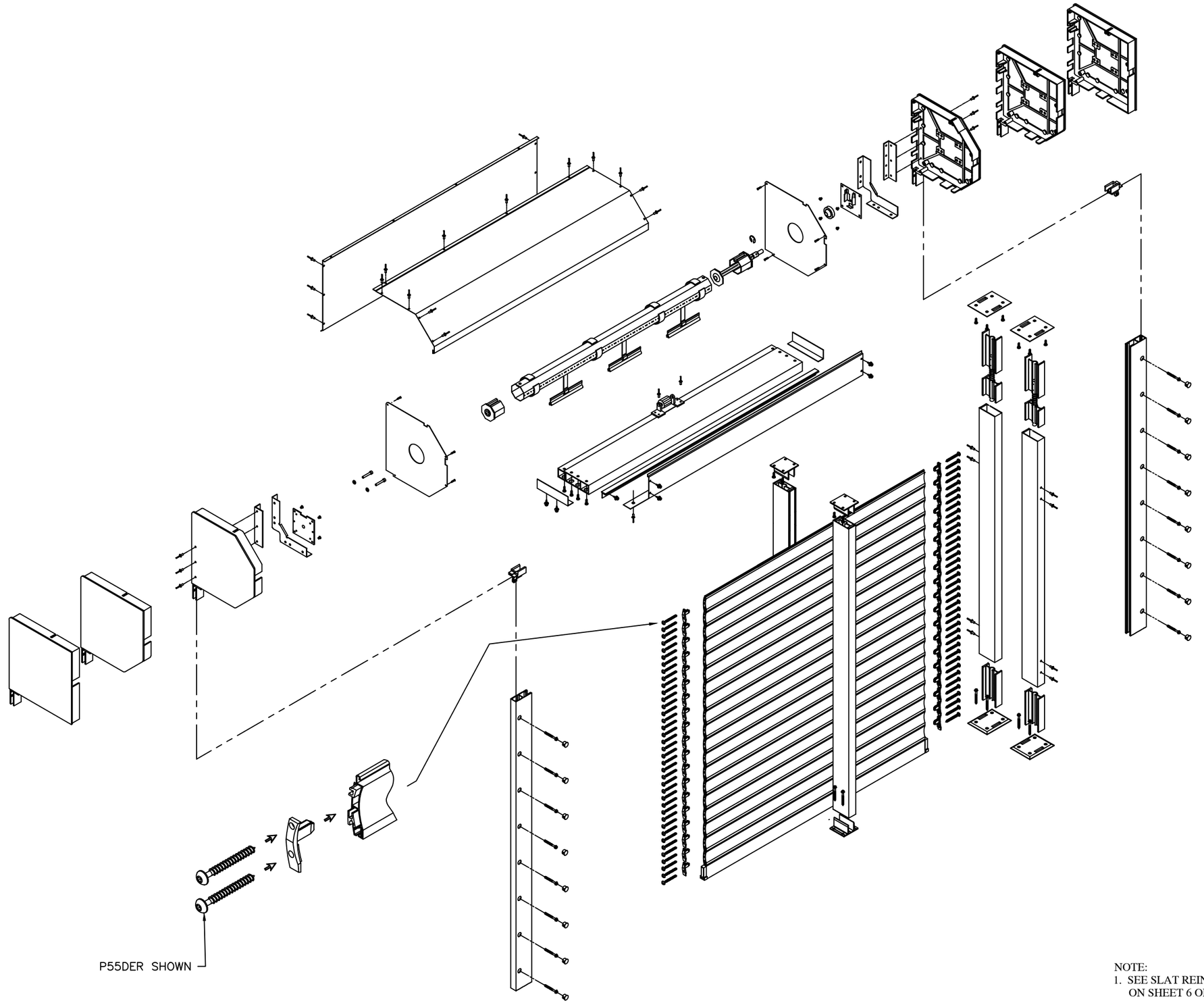
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| SCALE: | 1/2" = 1'-0" |
| SHEET: | 8 OF 26 |




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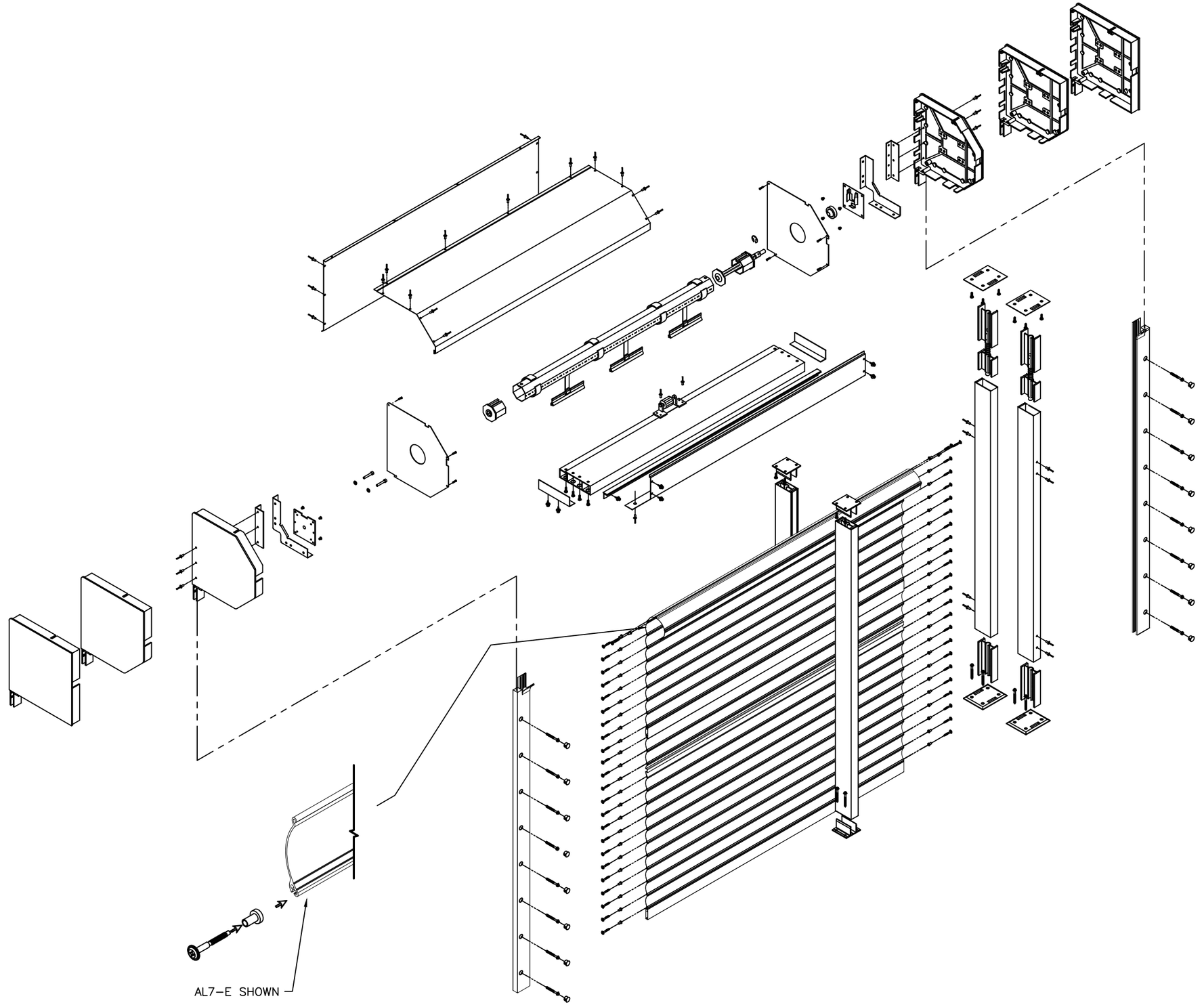
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DN: CN = Fowler, Donald OU = Colleagues, VeriClaim, O365 Users, C
Date: 2020.10.31 15:55:34 -04'00'

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

| | |
|---|---|
| DRAWN: | DLF |
| DATE: | 10-21-09 |
| APPROVED: | DLF |
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| SHEET: | 9 OF 26 |




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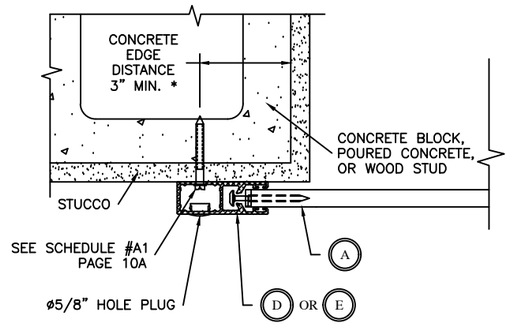
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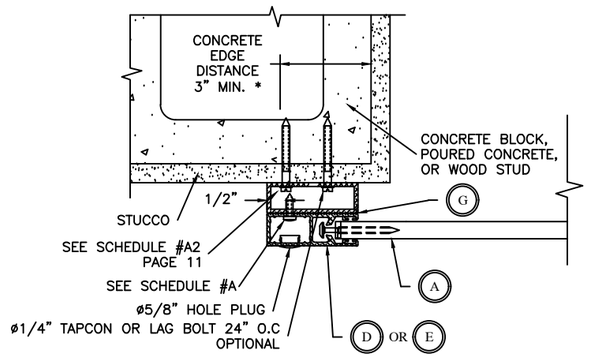
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| SHEET: | 9A OF 26 |

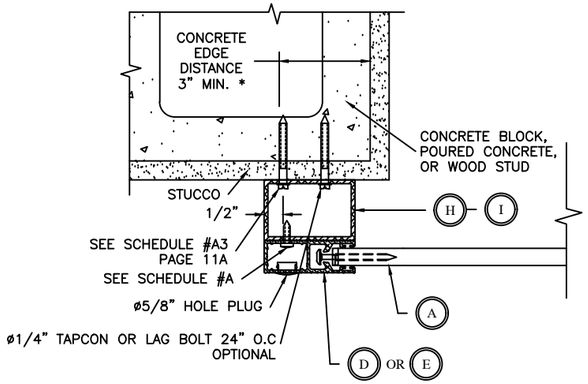
SECTION "A-A" (1)




SECTION "A-A" (2)




SECTION "A-A" (3)




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

| HOLE SPACING O.C. SCHEDULE # A * | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PSF\SLAT SPAN | 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 | 4 | 3 | 3 | 3 | 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 | 3 | 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) | | | | | | | | | | | | | | | | | | | | |


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DN: CN = Fowler, Donald OU = Colleagues, VeriClaim, O365 Users
Date: 2020.10.31 15:56:35 -04'00'

DONALD LYNN FOWLER LICENSE No 50458 STATE OF FLORIDA PROFESSIONAL ENGINEER

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| 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 |

# FASTENER DRILLING O.C. (INCHES) SCHEDULE A1

| PSF\SLAT SPAN | 48" | | | | | | 60" | | | | | | 72" | | | | | | 84" | | | | | | 96" | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Fastener | | | | | | Fastener | | | | | | Fastener | | | | | | Fastener | | | | | | Fastener | | | | | |
| | A | B | C | D | E | F | A | B | C | D | E | F | A | B | C | D | E | F | A | B | C | D | E | F | A | B | C | D | E | F |
| 10 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 21 | 24 | 24 | 24 | 24 | 12 | 17 | 23 | 24 | 24 | 24 |
| 15 | 24 | 21 | 24 | 24 | 24 | 24 | 24 | 28 | 24 | 24 | 24 | 24 | 21 | 16 | 24 | 24 | 24 | 24 | 10 | 13 | 19 | 24 | 24 | 24 | 7 | 11 | 14 | 17 | 24 | 24 |
| 20 | 24 | 18 | 24 | 24 | 24 | 24 | 24 | 13 | 24 | 24 | 24 | 24 | 12 | 12 | 20 | 24 | 24 | 24 | 7 | 10 | 13 | 16 | 24 | 24 | 5 | 8 | 10 | 12 | 22 | 24 |
| 25 | 24 | 13 | 24 | 24 | 24 | 24 | 18 | 11 | 23 | 24 | 24 | 24 | 8 | 9 | 14 | 18 | 24 | 24 | 5 | 8 | 10 | 12 | 23 | 24 | 4 | 6 | 8 | 10 | 17 | 24 |
| 30 | 21 | 11 | 24 | 24 | 24 | 24 | 12 | 10 | 18 | 24 | 24 | 24 | 6 | 8 | 11 | 14 | 24 | 24 | 4 | 6 | 8 | 10 | 18 | 24 | 3 | 5 | 7 | 8 | 14 | 23 |
| 35 | 18 | 10 | 21 | 24 | 24 | 24 | 10 | 8 | 15 | 22 | 24 | 24 | 5 | 7 | 9 | 12 | 21 | 24 | 4 | 5 | 7 | 8 | 15 | 24 | 3 | 4 | 6 | 7 | 12 | 20 |
| 40 | 16 | 8 | 18 | 24 | 24 | 24 | 8 | 7 | 12 | 17 | 24 | 24 | 4 | 6 | 8 | 10 | 18 | 24 | 3 | 5 | 6 | 8 | 14 | 22 | 3 | 4 | 5 | 6 | 11 | 17 |
| 45 | 14 | 7 | 16 | 24 | 24 | 24 | 7 | 6 | 11 | 14 | 24 | 24 | 4 | 5 | 7 | 9 | 16 | 24 | 3 | 4 | 6 | 7 | 12 | 19 | - | 3 | 4 | 5 | 10 | 15 |
| 50 | 12 | 7 | 14 | 24 | 24 | 24 | 6 | 6 | 9 | 12 | 23 | 24 | 3 | 5 | 6 | 8 | 14 | 23 | 3 | 4 | 5 | 6 | 11 | 17 | - | 3 | 4 | 5 | 9 | 14 |
| 55 | 11 | 6 | 13 | 23 | 24 | 24 | 5 | 5 | 8 | 11 | 20 | 24 | 3 | 4 | 6 | 7 | 13 | 21 | - | 3 | 5 | 5 | 10 | 16 | - | 3 | 4 | 4 | 8 | 13 |
| 60 | 9 | 6 | 11 | 18 | 24 | 24 | 4 | 5 | 7 | 10 | 18 | 24 | 3 | 4 | 5 | 6 | 12 | 19 | - | 3 | 4 | 5 | 9 | 14 | - | 3 | 3 | 4 | 7 | 12 |
| 65 | 8 | 5 | 11 | 17 | 24 | 24 | 4 | 4 | 7 | 9 | 16 | 24 | 3 | 3 | 5 | 6 | 11 | 17 | - | 3 | 4 | 5 | 8 | 13 | - | - | 3 | 4 | 7 | 11 |
| 70 | 7 | 5 | 10 | 15 | 24 | 24 | 4 | 4 | 6 | 8 | 15 | 23 | - | 3 | 4 | 5 | 10 | 16 | - | 3 | 4 | 4 | 8 | 12 | - | - | 3 | 4 | 7 | 10 |
| 75 | 6 | 5 | 9 | 13 | 24 | 24 | 3 | 4 | 6 | 7 | 14 | 21 | - | 3 | 4 | 5 | 9 | 15 | - | 3 | 3 | 4 | 8 | 12 | - | - | 3 | 3 | 6 | 10 |
| 80 | 6 | 4 | 8 | 12 | 23 | 24 | 3 | 4 | 5 | 7 | 12 | 19 | - | 3 | 4 | 5 | 9 | 14 | - | - | 3 | 4 | 7 | 11 | - | - | 3 | 3 | 6 | 9 |
| 85 | 5 | 4 | 7 | 11 | 21 | 24 | 3 | 3 | 5 | 6 | 12 | 18 | - | 3 | 4 | 5 | 8 | 13 | - | - | 3 | 4 | 7 | 11 | - | - | 3 | 3 | 6 | 9 |
| 90 | 5 | 4 | 7 | 10 | 19 | 24 | 3 | 3 | 5 | 6 | 11 | 17 | - | 3 | 4 | 4 | 8 | 13 | - | - | 3 | 4 | 6 | 10 | - | - | - | 3 | 5 | 8 |
| 95 | 5 | 4 | 7 | 10 | 18 | 24 | 3 | 3 | 4 | 6 | 10 | 16 | - | - | 3 | 4 | 7 | 12 | - | - | 3 | 3 | 6 | 10 | - | - | - | 3 | 5 | 8 |
| 100 | 4 | 4 | 6 | 9 | 16 | 24 | - | 3 | 4 | 5 | 10 | 15 | - | - | 3 | 4 | 7 | 11 | - | - | 3 | 3 | 6 | 9 | - | - | - | 3 | 5 | 8 |
| 120 | 3 | 3 | 5 | 7 | 14 | 20 | - | - | 3 | 4 | 8 | 13 | - | - | 3 | 3 | 6 | 10 | - | - | - | 3 | 5 | 8 | - | - | - | - | - | 7 |
| 140 | 3 | 3 | 4 | 6 | 11 | 16 | - | - | 3 | 4 | 7 | 11 | - | - | - | 3 | 5 | 8 | - | - | - | - | - | 7 | - | - | - | - | - | 6 |
| 160 | - | - | 4 | 5 | 9 | 14 | - | - | 3 | 3 | 6 | 10 | - | - | - | 3 | 5 | 8 | - | - | - | - | - | 6 | - | - | - | - | - | 5 |
| 180 | - | - | 3 | 4 | 8 | 12 | - | - | - | 3 | 6 | 9 | - | - | - | - | - | 7 | - | - | - | - | - | 6 | - | - | - | - | - | 5 |
| 200 | - | - | - | 4 | 7 | 11 | - | - | - | 3 | 5 | 8 | - | - | - | - | - | 6 | - | - | - | - | - | 5 | - | - | - | - | - | 5 |
| 220 | - | - | - | 4 | 7 | 10 | - | - | - | 3 | 5 | 7 | - | - | - | - | - | 6 | - | - | - | - | - | 5 | - | - | - | - | - | - |
| 240 | - | - | - | 3 | 6 | 9 | - | - | - | - | - | 7 | - | - | - | - | - | 5 | - | - | - | - | - | 5 | - | - | - | - | - | - |
| 260 | - | - | - | 3 | 6 | 9 | - | - | - | - | - | 6 | - | - | - | - | - | 5 | - | - | - | - | - | - | - | - | - | - | - | - |
| 280 | - | - | - | 3 | 5 | 8 | - | - | - | - | - | 6 | - | - | - | - | - | 5 | - | - | - | - | - | - | - | - | - | - | - | - |

| PSF\SLAT SPAN | 108" | | | | | | 120" | | | | | | 132" | | | | | | 144" | | | | | | 156" | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Fastener | | | | | | Fastener | | | | | | Fastener | | | | | | Fastener | | | | | | Fastener | | | | | |
| | A | B | C | D | E | F | A | B | C | D | E | F | A | B | C | D | E | F | A | B | C | D | E | F | A | B | C | D | E | F |
| 10 | 9 | 14 | 18 | 21 | 24 | 24 | 7 | 12 | 14 | 17 | 24 | 24 | 6 | 10 | 12 | 14 | 24 | 24 | 5 | 9 | 10 | 12 | 22 | 24 | 4 | 7 | 9 | 10 | 19 | 24 |
| 15 | 6 | 9 | 11 | 13 | 24 | 24 | 5 | 7 | 9 | 11 | 19 | 24 | 4 | 6 | 8 | 9 | 16 | 24 | 3 | 6 | 7 | 8 | 14 | 23 | 3 | 5 | 6 | 7 | 13 | 21 |
| 20 | 4 | 7 | 8 | 10 | 17 | 24 | 3 | 6 | 7 | 8 | 14 | 23 | 3 | 5 | 6 | 7 | 13 | 20 | 3 | 4 | 5 | 6 | 11 | 18 | - | 4 | 5 | 6 | 10 | 16 |
| 25 | 3 | 5 | 7 | 8 | 14 | 22 | 3 | 5 | 6 | 7 | 12 | 19 | - | 4 | 5 | 6 | 10 | 17 | - | 4 | 4 | 5 | 9 | 15 | - | 3 | 4 | 5 | 8 | 13 |
| 30 | 3 | 4 | 6 | 7 | 12 | 19 | - | 4 | 5 | 6 | 10 | 16 | - | 3 | 4 | 5 | 9 | 14 | - | 3 | 4 | 4 | 8 | 13 | - | 3 | 3 | 4 | 7 | 11 |
| 35 | - | 4 | 5 | 6 | 10 | 16 | - | 3 | 4 | 5 | 9 | 14 | - | 3 | 4 | 4 | 8 | 12 | - | 3 | 3 | 4 | 7 | 11 | - | - | 3 | 3 | 6 | 10 |
| 40 | - | 3 | 4 | 5 | 9 | 14 | - | 3 | 4 | 4 | 8 | 13 | - | 3 | 3 | 4 | 7 | 11 | - | - | 3 | 3 | 6 | 10 | - | - | 3 | 3 | 6 | 9 |
| 45 | - | 3 | 4 | 4 | 8 | 13 | - | 3 | 3 | 4 | 7 | 11 | - | - | 3 | 3 | 6 | 10 | - | - | 3 | 3 | 6 | 9 | - | - | - | 3 | 5 | 8 |
| 50 | - | 3 | 3 | 4 | 7 | 12 | - | - | 3 | 4 | 6 | 10 | - | - | 3 | 3 | 6 | 9 | - | - | - | 3 | 5 | 8 | - | - | - | 3 | 5 | 8 |
| 55 | - | - | 3 | 4 | 7 | 11 | - | - | 3 | 3 | 6 | 10 | - | - | 3 | 3 | 5 | 9 | - | - | - | 3 | 5 | 8 | - | - | - | - | - | 7 |
| 60 | - | - | 3 | 4 | 6 | 10 | - | - | 3 | 3 | 6 | 9 | - | - | - | 3 | 5 | 8 | - | - | - | 3 | 5 | 7 | - | - | - | - | - | 7 |
| 65 | - | - | 3 | 3 | 6 | 10 | - | - | - | 3 | 5 | 8 | - | - | - | 3 | 5 | 8 | - | - | - | - | - | 7 | - | - | - | - | - | 6 |
| 70 | - | - | 3 | 3 | 6 | 9 | - | - | - | 3 | 5 | 8 | - | - | - | - | - | 7 | - | - | - | - | - | 6 | - | - | - | - | - | 6 |
| 75 | - | - | - | 3 | 5 | 9 | - | - | - | 3 | 5 | 8 | - | - | - | - | - | 7 | - | - | - | - | - | 6 | - | - | - | - | - | 6 |
| 80 | - | - | - | - | 5 | 8 | - | - | - | - | 5 | 7 | - | - | - | - | - | 6 | - | - | - | - | - | 6 | - | - | - | - | - | 5 |
| 85 | - | - | - | - | - | 8 | - | - | - | - | - | 7 | - | - | - | - | - | 6 | - | - | - | - | - | 6 | - | - | - | - | - | 5 |
| 90 | - | - | - | - | - | 7 | - | - | - | - | - | 7 | - | - | - | - | - | 6 | - | - | - | - | - | 5 | - | - | - | - | - | 5 |
| 95 | - | - | - | - | - | 7 | - | - | - | - | - | 6 | - | - | - | - | - | 6 | - | - | - | - | - | 5 | - | - | - | - | - | 5 |
| 100 | - | - | - | - | - | 7 | - | - | - | - | - | 6 | - | - | - | - | - | 5 | - | - | - | - | - | 5 | - | - | - | - | - | 5 |
| 120 | - | - | - | - | - | 6 | - | - | - | - | - | 5 | - | - | - | - | - | 5 | - | - | - | - | - | - | - | - | - | - | - | - |
| 140 | - | - | - | - | - | 5 | - | - | - | - | - | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 160 | - | - | - | - | - | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 180 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 200 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 220 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 240 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 260 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 280 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |

| PSF\SLAT SPAN | 168" | | | | | | 180" | | | | | | 192" | | | | | | 204" | | | | | | 216" | | | | | | 228" | | | | | | 240" | | | | | |
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| | Fastener | | | | | | Fastener | | | | | | Fastener | | | | | | Fastener | | | | | | Fastener | | | | | | Fastener | | | | | | Fastener | | | | | |
| | A | B | C | D | E | F | A | B | C | D | E | F | A | B | C | D | E | F | A | B | C | D | E | F | A | B | C | D | E | F | A | B | C | D | E | F | A | B | C | D | E | F |
| 10 | 4 | 7 | 8 | 9 | 17 | 24 | 4 | 6 | 7 | 9 | 15 | 24 | 3 | 6 | 7 | 8 | 14 | 22 | 3 | 5 | 6 | 7 | 13 | 21 | 3 | 5 | 6 | 7 | 12 | 19 | 3 | 4 | 5 | 6 | 11 | 18 | - | 4 | 5 | 6 | 10 | 17 |
| 15 | 3 | 5 | 6 | 8 | 12 | 19 | 3 | 4 | 5 | 6 | 11 | 17 | - | 4 | 5 | 5 | 10 | 16 | - | 4 | 4 | 5 | 9 | 15 | - | 3 | 4 | 5 | 8 | 13 | - | 3 | 4 | 4 | 8 | 13 | - | 3 | 4 | 4 | 7 | 12 |
| 20 | - | 4 | 5 | 6 | 10 | 16 | - | 4 | 4 | 5 | 9 | 15 | - | 3 | 4 | 4 | 8 | 12 | - | 3 | 3 | 4 | 7 | 11 | - | 3 | 3 | 4 | 7 | 11 | - | - | 3 | 3 | 6 | 10 | - | - | 3 | 3 | 6 | 9 |
| 25 | - | 3 | 4 | 5 | 8 | 13 | - | 3 | 4 | 4 | 8 | 12 | - | 3 | 3 | 4 | 6 | 10 | - | - | 3 | 3 | 6 | 10 | - | - | 3 | 3 | 6 | 9 | - | - | 3 | 3 | 5 | 8 | - | - | - | 3 | 5 | 8 |
| 30 | - | 3 | 3 | 4 | 7 | 11 | - | 3 | 3 | 4 | 6 | 10 | - | - | 3 | 3 | 6 | 10 | - | - | - | 3 | 6 | 9 | - | - | - | 3 | 5 | 8 | - | - | - | 3 | 5 | 8 | - | - | - | 3 | 5 | 7 |
| 35 | - | - | 3 | 3 | 6 | 10 | - | - | 3 | 3 | 6 | 9 | - | - | - | 3 | 5 | 8 | - | - | - | 3 | 5 | 7 | - | - | - | - | - | 7 | - | - | - | - | - | 7 | - | - | - | - | - | 6 |
| 40 | - | - | 3 | 3 | 6 | 9 | - | - | - | 3 | 5 | 8 | - | - | - | - | - | 7 | - | - | - | - | - | 7 | - | - | - | - | - | 6 | - | - | - | - | - | 6 | - | - | - | - | - | 6 |
| 45 | - | - | - | 3 | 5 | 8 | - | - | - | 3 | 5 | 8 | - | - | - | - | - | 7 | - | - | - | - | - | 7 | - | - | - | - | - | 5 | - | - | - | - | - | 5 | - | - | - | - | - | 5 |
| 50 | - | - | - | 3 | 5 | 8 | - | - | - | - | - | 7 | - | - | - | - | - | 6 | - | - | - | - | - | 6 | - | - | - | - | - | 5 | - | - | - | - | - | 5 | - | - | - | - | - | 5 |
| 55 | - | - | - | - | - | 7 | - | - | - | - | - | 7 | - | - | - | - | - | 6 | - | - | - | - | - | 6 | - | - | - | - | - | 5 | - | - | - | - | - | 5 | - | - | - | - | - | - |
| 60 | - | - | - | - | - | 7 | - | - | - | - | - | 6 | - | - | - | - | - | 6 | - | - | - | - | - | 5 | - | - | - | - | - | 5 | - | - | - | - | - | - | - | - | - | - | - | - |
| 65 | - | - | - | - | - | 6 | - | - | - | - | - | 6 | - | - | - | - | - | 5 | - | - | - | - | - | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 70 | - | - | - | - | - | 6 | - | - | - | - | - | 5 | - | - | - | - | - | 5 | - | - | - | - | - | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 75 | - | - | - | - | - | 6 | - | - | - | - | - | 5 | - | - | - | - | - | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 80 | - | - | - | - | - | 5 | - | - | - | - | - | 5 | - | - | - | - | - | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 85 | - | - | - | - | - | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 90 | - | - | - | - | - | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 95 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 100 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 120 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 140 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 160 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 180 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 200 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 220 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 240 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 260 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 280 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |

| # | Fastener | Edge Distance | Min. Embedment | Substrate |
|---|---|---|---|---|
| A | 1/4" Tapcon | 1-1/2" | 1-1/2" | Wood (fastener in center of stud) |
| B | 1/4" Tapcon | 3" | 1-1/4" | CMU Hollow |
| C | 1/4" Tapcon | 3" | 1-3/4" | 4000 PSI Concrete or Cell Filled CMU |
| D | 1/4" Wedge Bolt | 4.25" | 3" | 4000 PSI Concrete or Cell Filled CMU |
| E | 3/8" Wedge Bolt | 4.25" | 4.5" | 4000 PSI Concrete or Cell Filled CMU |
| F | 3/8" Wedge Bolt | 5.25" | 4.5" | 4000 PSI Concrete or Cell Filled CMU |


Roll-a-way By QMI
1661 GLENLAKE AVENUE
ITASCA, IL 60143


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QUALITAS MANUFACTURING INC.


DRAWING TITLE:

NOTICE OF ACCEPTANCE
END RETENTION
PRODUCT APPROVAL

Digitally signed by: Fowler, Donald
DN: CN = Fowler, Donald OU = Colleagues, VeriClaim, O365 Users
Date: 2020.10.31 15:57:08 -04'00'

DONALD LYNN FOWLER LICENSE No 50458 STATE OF FLORIDA PROFESSIONAL ENGINEER

Engineer of Record

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

# FASTENER DRILLING O.C. (INCHES) SCHEDULE A2

| PSF\SLAT SPAN | 48" | | | | | | 60" | | | | | | 72" | | | | | | 84" | | | | | | 96" | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Fastener | | | | | | Fastener | | | | | | Fastener | | | | | | Fastener | | | | | | Fastener | | | | | |
| | A | B | C | D | E | F | A | B | C | D | E | F | A | B | C | D | E | F | A | B | C | D | E | F | A | B | C | D | E | F |
| 10 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 12 | 14 | 21 | 24 | 24 | 24 |
| 15 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 10 | 12 | 18 | 23 | 24 | 24 | 7 | 8 | 12 | 16 | 24 | 24 |
| 20 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 12 | 14 | 21 | 24 | 24 | 24 | 7 | 8 | 12 | 16 | 24 | 24 | 5 | 6 | 9 | 11 | 21 | 24 |
| 25 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 8 | 9 | 14 | 18 | 24 | 24 | 5 | 6 | 9 | 12 | 22 | 24 | 4 | 5 | 7 | 9 | 17 | 24 |
| 30 | 24 | 24 | 24 | 24 | 24 | 24 | 14 | 14 | 23 | 24 | 24 | 24 | 6 | 7 | 10 | 14 | 24 | 24 | 4 | 5 | 7 | 9 | 18 | 24 | 3 | 4 | 6 | 8 | 14 | 22 |
| 35 | 24 | 24 | 24 | 24 | 24 | 24 | 11 | 12 | 19 | 25 | 24 | 24 | 5 | 6 | 9 | 11 | 21 | 24 | 4 | 4 | 6 | 8 | 15 | 24 | - | 3 | 5 | 7 | 12 | 19 |
| 40 | 24 | 24 | 24 | 24 | 24 | 24 | 8 | 9 | 14 | 18 | 24 | 24 | 4 | 5 | 7 | 10 | 18 | 24 | 3 | 4 | 6 | 7 | 13 | 21 | - | - | 4 | 6 | 10 | 16 |
| 45 | 24 | 24 | 24 | 24 | 24 | 24 | 7 | 7 | 11 | 15 | 24 | 24 | 4 | 4 | 7 | 9 | 16 | 24 | - | 3 | 5 | 6 | 12 | 18 | - | - | 4 | 5 | 9 | 15 |
| 50 | 22 | 20 | 24 | 24 | 24 | 24 | 6 | 6 | 9 | 12 | 23 | 24 | 3 | 4 | 6 | 8 | 14 | 22 | - | - | 4 | 6 | 11 | 17 | - | - | 4 | 5 | 9 | 13 |
| 55 | 19 | 18 | 24 | 24 | 24 | 24 | 5 | 5 | 8 | 11 | 21 | 24 | 3 | 4 | 5 | 7 | 13 | 20 | - | - | 4 | 5 | 10 | 15 | - | - | 3 | 4 | 8 | 12 |
| 60 | 11 | 11 | 17 | 24 | 24 | 24 | 4 | 5 | 8 | 10 | 19 | 24 | - | 3 | 5 | 6 | 12 | 18 | - | - | 4 | 5 | 9 | 14 | - | - | 3 | 4 | 7 | 11 |
| 65 | 9 | 10 | 16 | 21 | 24 | 24 | 4 | 4 | 7 | 9 | 16 | 24 | - | - | 4 | 6 | 11 | 17 | - | - | 3 | 4 | 8 | 13 | - | - | - | 4 | 7 | 11 |
| 70 | 9 | 9 | 14 | 19 | 24 | 24 | 4 | 4 | 6 | 8 | 15 | 24 | - | - | 4 | 5 | 10 | 15 | - | - | 3 | 4 | 8 | 12 | - | - | - | 3 | 6 | 10 |
| 75 | 7 | 7 | 11 | 14 | 24 | 24 | 3 | 4 | 6 | 7 | 14 | 21 | - | - | 4 | 5 | 9 | 14 | - | - | 3 | 4 | 7 | 12 | - | - | - | 3 | 6 | 9 |
| 80 | 6 | 6 | 10 | 13 | 24 | 24 | - | 3 | 5 | 7 | 12 | 19 | - | - | 4 | 5 | 9 | 14 | - | - | - | 4 | 7 | 11 | - | - | - | 3 | 6 | 9 |
| 85 | 5 | 6 | 9 | 12 | 22 | 24 | - | 3 | 5 | 6 | 12 | 18 | - | - | 3 | 4 | 8 | 13 | - | - | - | 4 | 7 | 10 | - | - | - | 3 | 6 | 9 |
| 90 | 5 | 5 | 8 | 11 | 20 | 24 | - | - | 4 | 6 | 11 | 17 | - | - | 3 | 4 | 8 | 12 | - | - | - | 3 | 6 | 10 | - | - | - | 3 | 5 | 8 |
| 95 | 5 | 5 | 8 | 11 | 20 | 24 | - | - | 4 | 6 | 11 | 16 | - | - | 3 | 4 | 7 | 12 | - | - | - | 3 | 6 | 9 | - | - | - | 3 | 5 | 8 |
| 100 | 4 | 5 | 7 | 9 | 18 | 24 | - | - | 4 | 5 | 10 | 16 | - | - | - | 4 | 7 | 11 | - | - | - | 3 | 6 | 9 | - | - | - | 3 | - | 8 |
| 120 | 3 | 4 | 6 | 8 | 14 | 22 | - | - | 3 | 4 | 8 | 13 | - | - | - | 3 | 6 | 10 | - | - | - | 3 | 5 | 8 | - | - | - | - | - | 7 |
| 140 | - | - | 4 | 6 | 11 | 17 | - | - | - | 4 | 7 | 11 | - | - | - | 3 | 5 | 8 | - | - | - | - | - | 7 | - | - | - | - | - | 6 |
| 160 | - | - | 4 | 5 | 9 | 15 | - | - | - | 3 | 6 | 10 | - | - | - | 3 | - | 8 | - | - | - | - | - | 6 | - | - | - | - | - | 5 |
| 180 | - | - | 3 | 4 | 8 | 13 | - | - | - | 3 | 6 | 9 | - | - | - | - | - | 7 | - | - | - | - | - | 6 | - | - | - | - | - | - |
| 200 | - | - | 3 | 4 | 7 | 12 | - | - | - | 3 | 5 | 8 | - | - | - | - | - | 6 | - | - | - | - | - | 5 | - | - | - | - | - | - |
| 220 | - | - | - | 4 | 7 | 11 | - | - | - | 3 | - | 8 | - | - | - | - | - | 6 | - | - | - | - | - | 5 | - | - | - | - | - | - |
| 240 | - | - | - | 3 | 6 | 10 | - | - | - | - | - | 7 | - | - | - | - | - | 6 | - | - | - | - | - | - | - | - | - | - | - | - |
| 260 | - | - | - | 3 | 6 | 9 | - | - | - | - | - | 7 | - | - | - | - | - | 5 | - | - | - | - | - | - | - | - | - | - | - | - |
| 280 | - | - | - | 3 | 6 | 9 | - | - | - | - | - | 6 | - | - | - | - | - | 5 | - | - | - | - | - | - | - | - | - | - | - | - |

| PSF\SLAT SPAN | 108" | | | | | | 120" | | | | | | 132" | | | | | | 144" | | | | | | 156" | | | | | | 168" | | | | | |
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| | Fastener | | | | | | Fastener | | | | | | Fastener | | | | | | Fastener | | | | | | Fastener | | | | | | Fastener | | | | | |
| | A | B | C | D | E | F | A | B | C | D | E | F | A | B | C | D | E | F | A | B | C | D | E | F | A | B | C | D | E | F | A | B | C | D | E | F |
| 10 | 9 | 10 | 15 | 20 | 24 | 24 | 7 | 8 | 12 | 16 | 24 | 24 | 6 | 7 | 10 | 13 | 24 | 24 | 5 | 6 | 9 | 11 | 21 | 24 | 4 | 5 | 7 | 10 | 18 | 24 | 4 | 5 | 7 | 9 | 16 | 25 |
| 15 | 6 | 6 | 10 | 13 | 23 | 24 | 5 | 5 | 8 | 10 | 19 | 24 | 4 | 4 | 7 | 9 | 16 | 24 | 3 | 4 | 6 | 8 | 14 | 22 | - | 3 | 5 | 7 | 12 | 19 | - | 3 | 5 | 6 | 11 | 17 |
| 20 | 4 | 5 | 7 | 9 | 17 | 24 | 3 | 4 | 6 | 8 | 14 | 22 | - | 3 | 5 | 7 | 12 | 19 | - | 3 | 4 | 6 | 11 | 17 | - | - | 4 | 5 | 10 | 15 | - | - | 4 | 5 | 9 | 14 |
| 25 | 3 | 4 | 6 | 7 | 14 | 21 | - | 3 | 5 | 6 | 12 | 18 | - | - | 4 | 5 | 10 | 16 | - | - | 4 | 5 | 9 | 14 | - | - | 3 | 4 | 8 | 12 | - | - | 3 | 4 | 7 | 11 |
| 30 | - | 3 | 5 | 6 | 12 | 18 | - | - | 4 | 5 | 10 | 15 | - | - | 4 | 5 | 9 | 13 | - | - | 3 | 4 | 8 | 12 | - | - | - | 4 | 7 | 11 | - | - | - | 3 | 6 | 10 |
| 35 | - | - | 4 | 5 | 10 | 16 | - | - | 4 | 5 | 9 | 13 | - | - | 3 | 4 | 8 | 12 | - | - | - | 4 | 7 | 10 | - | - | - | 3 | 6 | 9 | - | - | - | 3 | 6 | 9 |
| 40 | - | - | 4 | 5 | 9 | 14 | - | - | 3 | 4 | 8 | 12 | - | - | - | 4 | 7 | 10 | - | - | - | 3 | 6 | 9 | - | - | - | 3 | 5 | 9 | - | - | - | 3 | 5 | 8 |
| 45 | - | - | 3 | 4 | 8 | 12 | - | - | - | 4 | 7 | 11 | - | - | - | 3 | 6 | 10 | - | - | - | 3 | 6 | 9 | - | - | - | 3 | 5 | 8 | - | - | - | - | - | 7 |
| 50 | - | - | - | 4 | 7 | 11 | - | - | - | 3 | 6 | 10 | - | - | - | 3 | 6 | 9 | - | - | - | 3 | 5 | 8 | - | - | - | - | - | 7 | - | - | - | - | - | 7 |
| 55 | - | - | - | 4 | 7 | 10 | - | - | - | 3 | 6 | 9 | - | - | - | 3 | 5 | 8 | - | - | - | 3 | - | 7 | - | - | - | - | - | 7 | - | - | - | - | - | 6 |
| 60 | - | - | - | 3 | 6 | 10 | - | - | - | 3 | 5 | 8 | - | - | - | 3 | - | 8 | - | - | - | - | - | 7 | - | - | - | - | - | 6 | - | - | - | - | - | 6 |
| 65 | - | - | - | 3 | 6 | 9 | - | - | - | 3 | 5 | 8 | - | - | - | - | - | 7 | - | - | - | - | - | 6 | - | - | - | - | - | 6 | - | - | - | - | - | 5 |
| 70 | - | - | - | 3 | 6 | 9 | - | - | - | 3 | - | 8 | - | - | - | - | - | 7 | - | - | - | - | - | 6 | - | - | - | - | - | 6 | - | - | - | - | - | 5 |
| 75 | - | - | - | 3 | 5 | 8 | - | - | - | - | - | 7 | - | - | - | - | - | 6 | - | - | - | - | - | 6 | - | - | - | - | - | 5 | - | - | - | - | - | - |
| 80 | - | - | - | 3 | 5 | 8 | - | - | - | - | - | 7 | - | - | - | - | - | 6 | - | - | - | - | - | 6 | - | - | - | - | - | 5 | - | - | - | - | - | - |
| 85 | - | - | - | 3 | - | 7 | - | - | - | - | - | 7 | - | - | - | - | - | 6 | - | - | - | - | - | 5 | - | - | - | - | - | - | - | - | - | - | - | - |
| 90 | - | - | - | - | - | 7 | - | - | - | - | - | 6 | - | - | - | - | - | 6 | - | - | - | - | - | 5 | - | - | - | - | - | - | - | - | - | - | - | - |
| 95 | - | - | - | - | - | 7 | - | - | - | - | - | 6 | - | - | - | - | - | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 100 | - | - | - | - | - | 7 | - | - | - | - | - | 6 | - | - | - | - | - | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 120 | - | - | - | - | - | 6 | - | - | - | - | - | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 140 | - | - | - | - | - | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 160 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 180 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 200 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 220 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 240 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 260 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 280 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |

| PSF\SLAT SPAN | 180" | | | | | | 192" | | | | | | 204" | | | | | | 216" | | | | | | 228" | | | | | | 240" | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Fastener | | | | | | Fastener | | | | | | Fastener | | | | | | Fastener | | | | | | Fastener | | | | | | Fastener | | | | | |
| | A | B | C | D | E | F | A | B | C | D | E | F | A | B | C | D | E | F | A | B | C | D | E | F | A | B | C | D | E | F | A | B | C | D | E | F |
| 10 | 4 | 4 | 6 | 8 | 15 | 23 | 3 | 4 | 6 | 7 | 13 | 21 | - | 3 | 5 | 7 | 12 | 19 | - | 3 | 5 | 6 | 11 | 18 | - | - | 4 | 6 | 11 | 17 | - | - | 4 | 5 | 10 | 16 |
| 15 | - | - | 4 | 6 | 10 | 16 | - | - | 4 | 5 | 9 | 15 | - | - | 4 | 5 | 9 | 14 | - | - | 3 | 4 | 8 | 13 | - | - | 3 | 4 | 8 | 12 | - | - | - | 4 | 7 | 11 |
| 20 | - | - | 3 | 4 | 8 | 12 | - | - | 3 | 4 | 7 | 12 | - | - | - | 4 | 7 | 11 | - | - | - | 3 | 6 | 10 | - | - | - | 3 | 6 | 9 | - | - | - | 3 | 6 | 9 |
| 25 | - | - | - | 4 | 7 | 10 | - | - | - | 3 | 6 | 10 | - | - | - | 3 | 6 | 9 | - | - | - | 3 | 5 | 8 | - | - | - | 3 | 5 | 8 | - | - | - | 3 | - | 7 |
| 30 | - | - | - | 3 | 6 | 9 | - | - | - | 3 | 5 | 8 | - | - | - | 3 | 5 | 8 | - | - | - | 3 | - | 7 | - | - | - | - | - | 7 | - | - | - | - | - | 7 |
| 35 | - | - | - | 3 | 5 | 8 | - | - | - | 3 | - | 7 | - | - | - | - | - | 7 | - | - | - | - | - | 7 | - | - | - | - | - | 6 | - | - | - | - | - | 6 |
| 40 | - | - | - | 3 | - | 7 | - | - | - | - | - | 7 | - | - | - | - | - | 6 | - | - | - | - | - | 6 | - | - | - | - | - | 6 | - | - | - | - | - | 5 |
| 45 | - | - | - | - | - | 7 | - | - | - | - | - | 6 | - | - | - | - | - | 6 | - | - | - | - | - | 5 | - | - | - | - | - | 5 | - | - | - | - | - | - |
| 50 | - | - | - | - | - | 6 | - | - | - | - | - | 6 | - | - | - | - | - | 5 | - | - | - | - | - | 5 | - | - | - | - | - | - | - | - | - | - | - | - |
| 55 | - | - | - | - | - | 6 | - | - | - | - | - | 5 | - | - | - | - | - | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 60 | - | - | - | - | - | 5 | - | - | - | - | - | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 65 | - | - | - | - | - | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 70 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 75 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 80 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 85 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 90 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 95 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 100 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 120 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 140 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 160 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 180 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 200 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 220 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 240 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 260 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 280 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |

| # | Fastener | Edge Distance | Min. Embedment | Substrate |
|---|---|---|---|---|
| A | 1/4" Tapcon | 1-1/2" | 1-1/2" | Wood (fastener in center of stud) |
| B | 1/4" Tapcon | 3" | 1-1/4" | CMU Hollow |
| C | 1/4" Tapcon | 3" | 1-3/4" | 4000 PSI Concrete or Cell Filled CMU |
| D | 1/4" Wedge Bolt | 4.25" | 3" | 4000 PSI Concrete or Cell Filled CMU |
| E | 3/8" Wedge Bolt | 4.25" | 4.5" | 4000 PSI Concrete or Cell Filled CMU |
| F | 3/8" Wedge Bolt | 5.25" | 4.5" | 4000 PSI Concrete or Cell Filled CMU |

Roll-a-way By QMI

1661 GLENLAKE AVENUE
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 OU = Colleagues, VeriClaim, O365 Users
Date: 2020.10.31 15:57:43 -04'00'

DONALD LYNN FOWLER
LICENSE No 50458
STATE OF FLORIDA
PROFESSIONAL ENGINEER

DRAWN: DLF
DATE: 09-23-09
APPROVED: DLF
DATE: 09-23-09
DRAWING NO: 3-01-031
SIZE: B
REV:
SCALE: 1 : 4
SHEET: 11 OF 26

# FASTENER DRILLING O.C. (INCHES) SCHEDULE A3

| PSF\SLAT SPAN | 48" | | | | | | 60" | | | | | | 72" | | | | | | 84" | | | | | | 96" | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Fastener | | | | | | Fastener | | | | | | Fastener | | | | | | Fastener | | | | | | Fastener | | | | | |
| | A | B | C | D | E | F | A | B | C | D | E | F | A | B | C | D | E | F | A | B | C | D | E | F | A | B | C | D | E | F |
| 10 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 11 | 24 | 21 | 24 | 24 | 24 |
| 15 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 23 | 24 | 24 | 24 | 24 | 24 | 10 | 11 | 18 | 23 | 24 | 24 | 7 | 8 | 12 | 16 | 24 | 24 |
| 20 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 12 | 13 | 21 | 24 | 24 | 24 | 7 | 8 | 12 | 16 | 24 | 24 | 5 | 5 | 9 | 11 | 19 | 24 |
| 25 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 8 | 9 | 14 | 18 | 24 | 24 | 5 | 6 | 9 | 12 | 20 | 24 | 4 | 4 | 7 | 9 | 16 | 23 |
| 30 | 24 | 24 | 24 | 24 | 24 | 24 | 13 | 15 | 23 | 24 | 24 | 24 | 6 | 7 | 11 | 14 | 24 | 24 | 4 | 5 | 7 | 9 | 16 | 24 | 3 | 4 | 6 | 8 | 13 | 19 |
| 35 | 24 | 24 | 24 | 24 | 24 | 24 | 11 | 12 | 20 | 25 | 24 | 24 | 5 | 5 | 9 | 11 | 19 | 24 | 3 | 4 | 6 | 8 | 14 | 20 | 3 | 3 | 5 | 7 | 11 | 16 |
| 40 | 24 | 24 | 24 | 24 | 24 | 24 | 8 | 9 | 14 | 18 | 24 | 24 | 4 | 5 | 7 | 10 | 16 | 24 | 3 | 3 | 6 | 7 | 12 | 18 | - | 3 | 4 | 6 | 10 | 14 |
| 45 | 24 | 24 | 24 | 24 | 24 | 24 | 6 | 7 | 12 | 15 | 24 | 24 | 4 | 4 | 7 | 9 | 15 | 22 | 3 | 3 | 5 | 6 | 11 | 16 | . | - | 4 | 5 | 9 | 13 |
| 50 | 21 | 23 | 24 | 24 | 24 | 24 | 5 | 6 | 10 | 12 | 21 | 24 | 3 | 4 | 6 | 8 | 13 | 19 | - | 3 | 4 | 6 | 10 | 14 | . | - | 4 | 5 | 8 | 12 |
| 55 | 18 | 20 | 24 | 24 | 24 | 24 | 5 | 5 | 9 | 11 | 19 | 24 | 3 | 3 | 5 | 7 | 12 | 18 | . | - | 4 | 5 | 9 | 13 | . | - | 3 | 4 | 7 | 10 |
| 60 | 10 | 11 | 18 | 24 | 24 | 24 | 4 | 5 | 8 | 10 | 17 | 24 | 3 | 3 | 5 | 6 | 11 | 16 | . | - | 4 | 5 | 8 | 12 | . | - | 3 | 4 | 7 | 10 |
| 65 | 9 | 10 | 16 | 21 | 24 | 24 | 4 | 4 | 7 | 9 | 15 | 22 | - | 3 | 4 | 6 | 10 | 14 | . | - | 3 | 4 | 8 | 11 | . | - | 3 | 4 | 6 | 9 |
| 70 | 8 | 9 | 15 | 19 | 24 | 24 | 3 | 4 | 6 | 8 | 14 | 20 | . | 3 | 4 | 5 | 9 | 13 | . | - | 3 | 4 | 7 | 10 | . | - | 3 | 3 | 6 | 9 |
| 75 | 6 | 7 | 11 | 14 | 24 | 24 | 3 | 4 | 6 | 7 | 13 | 18 | . | - | 4 | 5 | 9 | 12 | . | - | 3 | 4 | 7 | 10 | . | - | 3 | 3 | 6 | 8 |
| 80 | 6 | 6 | 10 | 13 | 23 | 24 | 3 | 3 | 5 | 7 | 11 | 17 | . | - | 4 | 5 | 8 | 12 | . | - | 3 | 4 | 6 | 9 | . | - | - | 3 | 5 | 8 |
| 85 | 5 | 6 | 9 | 12 | 21 | 24 | 3 | 3 | 5 | 6 | 11 | 16 | . | - | 3 | 4 | 8 | 11 | . | - | 3 | 4 | 6 | 9 | . | - | - | 3 | 5 | 7 |
| 90 | 5 | 5 | 8 | 11 | 18 | 24 | - | 3 | 4 | 6 | 10 | 15 | . | - | 3 | 4 | 7 | 11 | . | - | 3 | 3 | 6 | 8 | . | - | - | 3 | - | 7 |
| 95 | 5 | 5 | 8 | 11 | 19 | 24 | - | 3 | 4 | 6 | 10 | 14 | . | - | 3 | 4 | 7 | 10 | . | - | - | 3 | 6 | 8 | . | - | - | 3 | - | 7 |
| 100 | 4 | 5 | 7 | 9 | 16 | 23 | . | - | 4 | 5 | 9 | 13 | . | - | 3 | 4 | 7 | 10 | . | - | - | 3 | 5 | 8 | . | - | - | 3 | - | 6 |
| 120 | 3 | 4 | 6 | 8 | 13 | 19 | . | - | 3 | 4 | 7 | 11 | . | - | 3 | 3 | 6 | 8 | . | - | - | 3 | - | 7 | . | - | - | - | - | 6 |
| 140 | - | 3 | 5 | 6 | 10 | 15 | . | - | 3 | 4 | 7 | 10 | . | - | - | 3 | - | 7 | . | - | - | - | - | 6 | . | - | - | - | - | 5 |
| 160 | - | - | 4 | 5 | 9 | 13 | . | - | 3 | 3 | 6 | 8 | . | - | - | 3 | - | 7 | . | - | - | - | - | 5 | . | - | - | - | - | - |
| 180 | - | - | 3 | 4 | 8 | 11 | . | - | - | 3 | 5 | 8 | . | - | - | - | - | 6 | . | - | - | - | - | - | . | - | - | - | - | - |
| 200 | . | . | 3 | 4 | 7 | 10 | . | - | - | 3 | - | 7 | . | - | - | - | - | 5 | . | - | - | - | - | - | . | - | - | - | - | - |
| 220 | . | . | - | 4 | 6 | 9 | . | - | - | 3 | - | 7 | . | - | - | - | - | 5 | . | - | - | - | - | - | . | - | - | - | - | - |
| 240 | . | . | - | 3 | 6 | 8 | . | - | - | - | - | 6 | . | - | - | - | - | - | . | - | - | - | - | - | . | - | - | - | - | - |
| 260 | . | . | . | 3 | 6 | 8 | . | - | - | - | - | 6 | . | - | - | - | - | - | . | - | - | - | - | - | . | - | - | - | - | - |
| 280 | . | . | . | 3 | 5 | 7 | . | - | - | - | - | 5 | . | - | - | - | - | - | . | - | - | - | - | - | . | - | - | - | - | - |

| PSF\SLAT SPAN | 108" | | | | | | 120" | | | | | | 132" | | | | | | 144" | | | | | | 156" | | | | | |
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| | Fastener | | | | | | Fastener | | | | | | Fastener | | | | | | Fastener | | | | | | Fastener | | | | | |
| | A | B | C | D | E | F | A | B | C | D | E | F | A | B | C | D | E | F | A | B | C | D | E | F | A | B | C | D | E | F |
| 10 | 8 | 10 | 15 | 20 | 24 | 24 | 7 | 8 | 12 | 16 | 24 | 24 | 5 | 6 | 10 | 13 | 22 | 24 | 5 | 5 | 9 | 11 | 19 | 24 | 4 | 5 | 7 | 10 | 17 | 24 |
| 15 | 5 | 6 | 10 | 13 | 21 | 24 | 4 | 5 | 8 | 10 | 17 | 24 | 4 | 4 | 7 | 9 | 15 | 21 | 3 | 4 | 6 | 8 | 13 | 19 | 3 | 3 | 5 | 7 | 11 | 17 |
| 20 | 4 | 4 | 7 | 9 | 16 | 23 | 3 | 4 | 6 | 8 | 13 | 19 | 3 | 3 | 5 | 7 | 11 | 17 | - | 3 | 4 | 6 | 10 | 15 | . | 3 | 4 | 5 | 9 | 13 |
| 25 | 3 | 4 | 6 | 7 | 12 | 18 | 3 | 3 | 5 | 6 | 11 | 16 | . | 3 | 4 | 5 | 9 | 13 | - | - | 4 | 5 | 8 | 12 | . | - | 3 | 4 | 7 | 11 |
| 30 | 3 | 3 | 5 | 6 | 11 | 15 | . | 3 | 4 | 5 | 9 | 13 | . | - | 4 | 5 | 8 | 11 | . | - | 3 | 4 | 7 | 10 | . | - | 3 | 4 | 6 | 9 |
| 35 | . | 3 | 4 | 5 | 9 | 13 | . | - | 4 | 5 | 8 | 11 | . | - | 3 | 4 | 7 | 10 | . | - | 3 | 4 | 6 | 9 | . | - | 3 | 3 | 6 | 8 |
| 40 | . | - | 4 | 5 | 8 | 12 | . | - | 3 | 4 | 7 | 10 | . | - | 3 | 4 | 6 | 9 | . | - | - | 3 | 6 | 8 | . | - | - | 3 | 5 | 7 |
| 45 | . | - | 3 | 4 | 7 | 11 | . | - | 3 | 4 | 6 | 9 | . | - | 3 | 3 | 6 | 8 | . | - | - | 3 | 5 | 7 | . | - | - | 3 | - | 7 |
| 50 | . | - | 3 | 4 | 7 | 10 | . | - | 3 | 3 | 6 | 8 | . | - | - | 3 | 5 | 8 | . | - | - | 3 | - | 7 | . | - | - | - | - | 6 |
| 55 | . | - | 3 | 4 | 6 | 9 | . | - | 3 | 5 | 8 | . | - | - | 3 | - | 7 | . | - | - | 3 | - | 6 | . | - | - | - | - | 6 |
| 60 | . | - | 3 | 3 | 6 | 8 | . | - | 3 | 5 | 7 | . | - | - | 3 | - | 7 | . | - | - | - | - | 6 | . | - | - | - | - | 5 |
| 65 | . | - | - | 3 | 5 | 8 | . | - | 3 | - | 7 | . | - | - | - | - | 6 | . | - | - | - | - | 6 | . | - | - | - | - | 5 | . |
| 70 | . | - | - | 3 | 5 | 7 | . | - | 3 | - | 6 | . | - | - | - | - | 6 | . | - | - | - | - | 5 | . | - | - | - | - | - | . |
| 75 | . | - | - | 3 | - | 7 | . | - | - | - | 6 | . | - | - | - | - | 6 | . | - | - | - | - | 5 | . | - | - | - | - | - | . |
| 80 | . | - | - | 3 | - | 7 | . | - | - | - | 6 | . | - | - | - | - | 5 | . | - | - | - | - | - | . | - | - | - | - | - | . |
| 85 | . | - | - | 3 | - | 6 | . | - | - | - | 6 | . | - | - | - | - | 5 | . | - | - | - | - | - | . | - | - | - | - | - | . |
| 90 | . | - | - | - | - | 6 | . | - | - | - | 5 | . | - | - | - | - | - | . | - | - | - | - | - | . | - | - | - | - | - | . |
| 95 | . | - | - | 3 | - | 7 | . | - | - | - | 5 | . | - | - | - | - | - | . | - | - | - | - | - | . | - | - | - | - | - | . |
| 100 | . | - | - | 3 | - | 6 | . | - | - | - | 5 | . | - | - | - | - | - | . | - | - | - | - | - | . | - | - | - | - | - | . |
| 120 | . | - | - | - | - | 6 | . | - | - | - | - | . | - | - | - | - | - | . | - | - | - | - | - | . | - | - | - | - | - | . |
| 140 | . | - | - | - | - | 5 | . | - | - | - | - | . | - | - | - | - | - | . | - | - | - | - | - | . | - | - | - | - | - | . |
| 160 | . | - | - | - | - | - | . | - | - | - | - | . | - | - | - | - | - | . | - | - | - | - | - | . | - | - | - | - | - | . |
| 180 | . | - | - | - | - | - | . | - | - | - | - | . | - | - | - | - | - | . | - | - | - | - | - | . | - | - | - | - | - | . |
| 200 | . | - | - | - | - | - | . | - | - | - | - | . | - | - | - | - | - | . | - | - | - | - | - | . | - | - | - | - | - | . |
| 220 | . | - | - | - | - | - | . | - | - | - | - | . | - | - | - | - | - | . | - | - | - | - | - | . | - | - | - | - | - | . |
| 240 | . | - | - | - | - | - | . | - | - | - | - | . | - | - | - | - | - | . | - | - | - | - | - | . | - | - | - | - | - | . |
| 260 | . | - | - | - | - | - | . | - | - | - | - | . | - | - | - | - | - | . | - | - | - | - | - | . | - | - | - | - | - | . |
| 280 | . | - | - | - | - | - | . | - | - | - | - | . | - | - | - | - | - | . | - | - | - | - | - | . | - | - | - | - | - | . |

| PSF\SLAT SPAN | 168" | | | | | | 180" | | | | | | 192" | | | | | | 204" | | | | | | 216" | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Fastener | | | | | | Fastener | | | | | | Fastener | | | | | | Fastener | | | | | | Fastener | | | | | |
| | A | B | C | D | E | F | A | B | C | D | E | F | A | B | C | D | E | F | A | B | C | D | E | F | A | B | C | D | E | F |
| 10 | 4 | 4 | 7 | 9 | 15 | 22 | 3 | 4 | 6 | 8 | 14 | 20 | 3 | 3 | 6 | 7 | 12 | 18 | - | 3 | 5 | 7 | 11 | 16 | - | 3 | 5 | 6 | 10 | 15 |
| 15 | 3 | 3 | 5 | 6 | 10 | 15 | - | 3 | 4 | 6 | 9 | 14 | - | - | 4 | 5 | 9 | 13 | - | - | 4 | 5 | 8 | 12 | - | - | 3 | 4 | 7 | 11 |
| 20 | - | 3 | 4 | 5 | 9 | 13 | . | - | 4 | 5 | 8 | 12 | . | - | 3 | 4 | 7 | 10 | . | - | 3 | 4 | 6 | 9 | . | - | 3 | 3 | 6 | 9 |
| 25 | . | - | 3 | 4 | 7 | 11 | . | - | 3 | 4 | 7 | 10 | . | - | 3 | 3 | 6 | 8 | . | - | - | 3 | 5 | 8 | . | - | - | 3 | - | 7 |
| 30 | . | - | 3 | 4 | 6 | 9 | . | - | 3 | 3 | 6 | 8 | . | - | - | 3 | 5 | 8 | . | - | - | 3 | - | 7 | . | - | - | 3 | - | 6 |
| 35 | . | - | 3 | 3 | 6 | 8 | . | - | - | 3 | 5 | 7 | . | - | - | 3 | - | 7 | . | - | - | 3 | - | 6 | . | - | - | - | - | 6 |
| 40 | . | - | - | 3 | 5 | 7 | . | - | - | 3 | - | 7 | . | - | - | 3 | - | 6 | . | - | - | - | - | 6 | . | - | - | - | - | 5 |
| 45 | . | - | - | 3 | - | 7 | . | - | - | - | - | 6 | . | - | - | - | - | 5 | . | - | - | - | - | 5 | . | - | - | - | - | - |
| 50 | . | - | - | - | - | 6 | . | - | - | - | - | 6 | . | - | - | - | - | 5 | . | - | - | - | - | - | . | - | - | - | - | - |
| 55 | . | - | - | - | - | 6 | . | - | - | - | - | 5 | . | - | - | - | - | - | . | - | - | - | - | - | . | - | - | - | - | - |
| 60 | . | - | - | - | - | 5 | . | - | - | - | - | 5 | . | - | - | - | - | - | . | - | - | - | - | - | . | - | - | - | - | - |
| 65 | . | - | - | - | - | 6 | . | - | - | - | - | 5 | . | - | - | - | - | - | . | - | - | - | - | - | . | - | - | - | - | - |
| 70 | . | - | - | - | - | 5 | . | - | - | - | - | - | . | - | - | - | - | - | . | - | - | - | - | - | . | - | - | - | - | - |
| 75 | . | - | - | - | - | 5 | . | - | - | - | - | - | . | - | - | - | - | - | . | - | - | - | - | - | . | - | - | - | - | - |
| 80 | . | - | - | - | - | - | . | - | - | - | - | - | . | - | - | - | - | - | . | - | - | - | - | - | . | - | - | - | - | - |
| 85 | . | - | - | - | - | - | . | - | - | - | - | - | . | - | - | - | - | - | . | - | - | - | - | - | . | - | - | - | - | - |
| 90 | . | - | - | - | - | - | . | - | - | - | - | - | . | - | - | - | - | - | . | - | - | - | - | - | . | - | - | - | - | - |
| 95 | . | - | - | - | - | - | . | - | - | - | - | - | . | - | - | - | - | - | . | - | - | - | - | - | . | - | - | - | - | - |
| 100 | . | - | - | - | - | - | . | - | - | - | - | - | . | - | - | - | - | - | . | - | - | - | - | - | . | - | - | - | - | - |
| 120 | . | - | - | - | - | - | . | - | - | - | - | - | . | - | - | - | - | - | . | - | - | - | - | - | . | - | - | - | - | - |
| 140 | . | - | - | - | - | - | . | - | - | - | - | - | . | - | - | - | - | - | . | - | - | - | - | - | . | - | - | - | - | - |
| 160 | . | - | - | - | - | - | . | - | - | - | - | - | . | - | - | - | - | - | . | - | - | - | - | - | . | - | - | - | - | - |
| 180 | . | - | - | - | - | - | . | - | - | - | - | - | . | - | - | - | - | - | . | - | - | - | - | - | . | - | - | - | - | - |
| 200 | . | - | - | - | - | - | . | - | - | - | - | - | . | - | - | - | - | - | . | - | - | - | - | - | . | - | - | - | - | - |
| 220 | . | - | - | - | - | - | . | - | - | - | - | - | . | - | - | - | - | - | . | - | - | - | - | - | . | - | - | - | - | - |
| 240 | . | - | - | - | - | - | . | - | - | - | - | - | . | - | - | - | - | - | . | - | - | - | - | - | . | - | - | - | - | - |
| 260 | . | - | - | - | - | - | . | - | - | - | - | - | . | - | - | - | - | - | . | - | - | - | - | - | . | - | - | - | - | - |
| 280 | . | - | - | - | - | - | . | - | - | - | - | - | . | - | - | - | - | - | . | - | - | - | - | - | . | - | - | - | - | - |

| PSF\SLAT SPAN | 228" | | | | | | 240" | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Fastener | | | | | | Fastener | | | | | |
| | A | B | C | D | E | F | A | B | C | D | E | F |
| 10 | - | - | 4 | 6 | 10 | 14 | . | - | 4 | 5 | 9 | 13 |
| 15 | - | - | 3 | 4 | 7 | 10 | . | - | 3 | 4 | 7 | 10 |
| 20 | - | - | 3 | 3 | 6 | 8 | . | - | - | 3 | 5 | 8 |
| 25 | - | - | - | 3 | 6 | 8 | . | - | - | 3 | - | 6 |
| 30 | - | - | - | 3 | - | 7 | . | - | - | 3 | - | 6 |
| 35 | - | - | - | 3 | - | 6 | . | - | - | - | - | 5 |
| 40 | - | - | - | - | - | 6 | . | - | - | - | - | 5 |
| 45 | - | - | - | - | - | 5 | . | - | - | - | - | - |
| 50 | - | - | - | - | - | - | . | - | - | - | - | - |
| 55 | - | - | - | - | - | - | . | - | - | - | - | - |
| 60 | - | - | - | - | - | - | . | - | - | - | - | - |
| 65 | - | - | - | - | - | - | . | - | - | - | - | - |
| 70 | - | - | - | - | - | - | . | - | - | - | - | - |
| 75 | - | - | - | - | - | - | . | - | - | - | - | - |
| 80 | - | - | - | - | - | - | . | - | - | - | - | - |
| 85 | - | - | - | - | - | - | . | - | - | - | - | - |
| 90 | - | - | - | - | - | - | . | - | - | - | - | - |
| 95 | - | - | - | - | - | - | . | - | - | - | - | - |
| 100 | - | - | - | - | - | - | . | - | - | - | - | - |
| 120 | - | - | - | - | - | - | . | - | - | - | - | - |
| 140 | - | - | - | - | - | - | . | - | - | - | - | - |
| 160 | - | - | - | - | - | - | . | - | - | - | - | - |
| 180 | - | - | - | - | - | - | . | - | - | - | - | - |
| 200 | - | - | - | - | - | - | . | - | - | - | - | - |
| 220 | - | - | - | - | - | - | . | - | - | - | - | - |
| 240 | - | - | - | - | - | - | . | - | - | - | - | - |
| 260 | - | - | - | - | - | - | . | - | - | - | - | - |
| 280 | - | - | - | - | - | - | . | - | - | - | - | - |

| # | Fastener | Edge Distance | Min. Embedment | Substrate |
|---|---|---|---|---|
| A | 1/4" Tapcon | 1-1/2" | 1-1/2" | Wood (fastener in center of stud) |
| B | 1/4" Tapcon | 3" | 1-1/4" | CMU Hollow |
| C | 1/4" Tapcon | 3" | 1-3/4" | 4000 PSI Concrete or Cell Filled CMU |
| D | 1/4" Wedge Bolt | 4.25" | 3" | 4000 PSI Concrete or Cell Filled CMU |
| E | 3/8" Wedge Bolt | 4.25" | 4.5" | 4000 PSI Concrete or Cell Filled CMU |
| F | 3/8" Wedge Bolt | 5.25" | 4.5" | 4000 PSI Concrete or Cell Filled CMU |


Roll-a-way By QMI
1661 GLENLAKE AVENUE
ITASCA, IL 60143


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DRAWING TITLE:

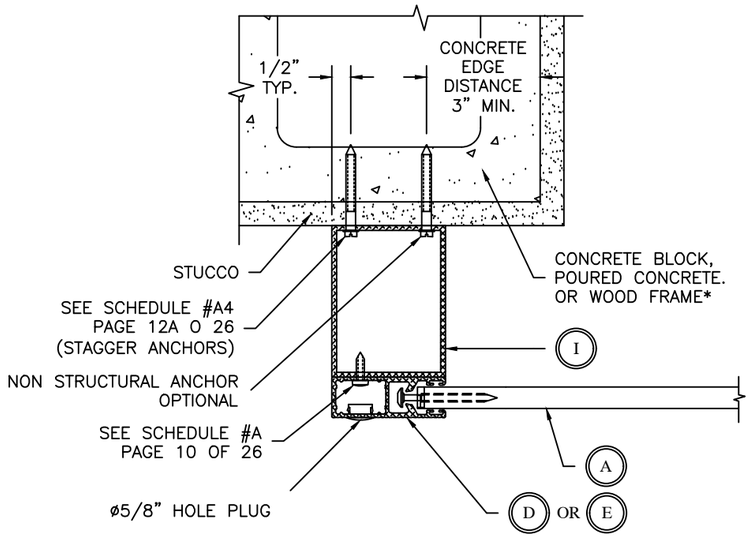
NOTICE OF ACCEPTANCE
END RETENTION
PRODUCT APPROVAL

Digitally signed by: Fowler, Donald
DN: CN = Fowler, Donald OU = Colleagues, VeriClaim, O365 Users
Date: 2020.10.31 15:58:16 -04'00'

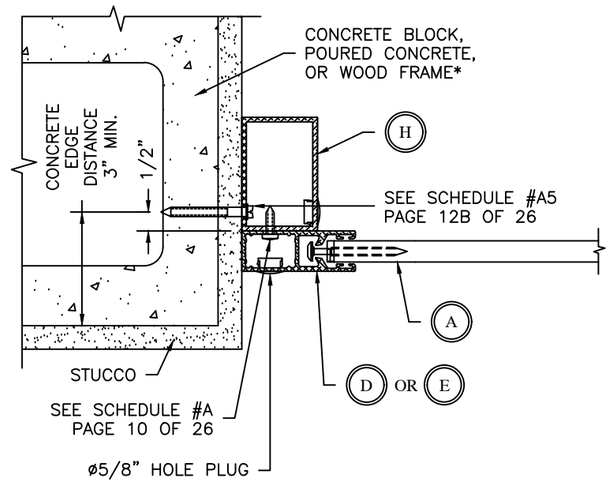
DONALD LYNN FOWLER LICENSE No 50458 STATE OF FLORIDA PROFESSIONAL ENGINEER

| | |
|---|---|
| DRAWN: | DLF |
| DATE: | 09-23-09 |
| APPROVED: | DLF |
| DATE: | 09-23-09 |
| DRAWING NO: | 3-01-031 |
| SIZE: | B |
| REV: | |
| SCALE: | 1 : 4 |
| SHEET: | 11A OF 26 |

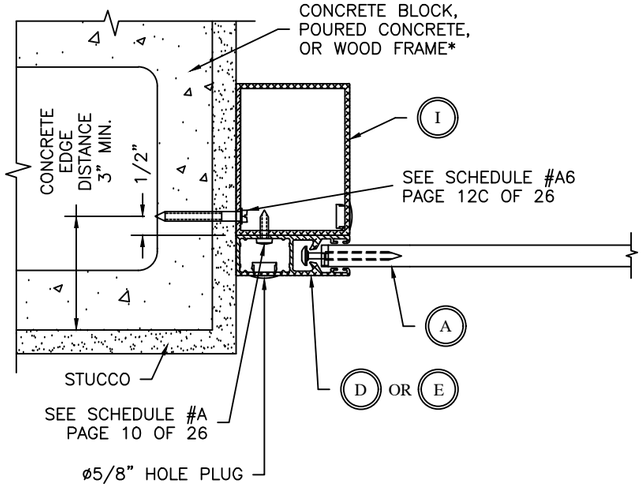
SECTION "A-A" (4)




SECTION "A-A" (5)




SECTION "A-A" (6)




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


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1661 GLENLAKE AVENUE
ITASCA, IL 60143


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DRAWING TITLE:

# NOTICE OF ACCEPTANCE END RETENTION PRODUCT APPROVAL

Digitally signed by: Fowler, Donald
DN: CN = Fowler, Donald OU = Colleagues, VeriClaim, O365 Users C
Date: 2020.10.31 15:58:45 -04'00'

DONALD LYNN FOWLER LICENSE No 50458 STATE OF FLORIDA PROFESSIONAL ENGINEER

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

# FASTENER DRILLING O.C. (INCHES) SCHEDULE A4

| PSF\SLAT SPAN | 48" | | | | | | 60" | | | | | | 72" | | | | | | 84" | | | | | | 96" | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Fastener | | | | | | Fastener | | | | | | Fastener | | | | | | Fastener | | | | | | Fastener | | | | | |
| | A | B | C | D | E | F | A | B | C | D | E | F | A | B | C | D | E | F | A | B | C | D | E | F | A | B | C | D | E | F |
| 10 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 20 | 18 | 24 | 24 | 24 | 24 | 9 | 9 | 14 | 20 | 24 | 24 |
| 15 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 19 | 17 | 24 | 24 | 24 | 24 | 8 | 7 | 12 | 16 | 24 | 24 | 5 | 5 | 8 | 12 | 24 | 24 |
| 20 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 9 | 9 | 14 | 20 | 24 | 24 | 5 | 5 | 8 | 11 | 23 | 24 | 4 | 4 | 6 | 8 | 16 | 22 |
| 25 | 24 | 24 | 24 | 24 | 24 | 24 | 20 | 19 | 24 | 24 | 24 | 24 | 6 | 6 | 9 | 13 | 24 | 24 | 4 | 4 | 6 | 8 | 17 | 23 | 3 | - | 5 | 6 | 13 | 18 |
| 30 | 24 | 24 | 24 | 24 | 24 | 24 | 10 | 10 | 15 | 22 | 24 | 24 | 5 | 4 | 7 | 10 | 20 | 24 | 3 | 3 | 5 | 7 | 14 | 18 | - | - | 4 | 5 | 11 | 15 |
| 35 | 24 | 24 | 24 | 24 | 24 | 24 | 9 | 8 | 13 | 18 | 24 | 24 | 4 | 4 | 6 | 8 | 17 | 22 | - | - | 4 | 6 | 12 | 16 | - | - | 3 | 5 | 9 | 13 |
| 40 | 24 | 24 | 24 | 24 | 24 | 24 | 6 | 6 | 9 | 13 | 24 | 24 | 3 | 3 | 5 | 7 | 14 | 19 | - | - | 4 | 5 | 11 | 14 | - | - | - | 4 | 8 | 11 |
| 45 | 24 | 24 | 24 | 24 | 24 | 24 | 5 | 5 | 8 | 11 | 22 | 24 | - | - | 4 | 6 | 13 | 17 | - | - | 3 | 5 | 9 | 12 | - | - | - | 4 | 7 | 10 |
| 50 | 17 | 15 | 24 | 24 | 24 | 24 | 4 | 4 | 6 | 9 | 18 | 24 | - | - | 4 | 5 | 11 | 15 | - | - | - | 4 | 8 | 11 | - | - | - | 3 | 7 | 9 |
| 55 | 14 | 13 | 21 | 24 | 24 | 24 | 4 | 4 | 6 | 8 | 16 | 22 | - | - | 3 | 5 | 10 | 14 | - | - | - | 4 | 8 | 10 | - | - | - | 3 | 6 | 8 |
| 60 | 8 | 7 | 12 | 17 | 24 | 24 | 3 | 3 | 5 | 7 | 15 | 19 | - | - | 3 | 4 | 9 | 12 | - | - | - | 3 | 7 | 9 | - | - | - | - | 6 | 8 |
| 65 | 7 | 7 | 11 | 15 | 24 | 24 | - | - | 4 | 6 | 13 | 17 | - | - | - | 4 | 8 | 11 | - | - | - | 3 | 7 | 9 | - | - | - | - | 5 | 7 |
| 70 | 7 | 6 | 10 | 14 | 24 | 24 | - | - | 4 | 6 | 12 | 16 | - | - | - | 4 | 8 | 10 | - | - | - | - | 6 | 8 | - | - | - | - | 5 | 7 |
| 75 | 5 | 5 | 7 | 10 | 21 | 24 | - | - | 4 | 5 | 11 | 14 | - | - | - | 4 | 7 | 10 | - | - | - | - | 6 | 8 | - | - | - | - | 5 | 6 |
| 80 | 5 | 4 | 7 | 9 | 20 | 24 | - | - | 3 | 5 | 10 | 13 | - | - | - | 3 | 7 | 9 | - | - | - | - | 5 | 7 | - | - | - | - | 5 | 6 |
| 85 | 4 | 4 | 6 | 9 | 18 | 23 | - | - | 3 | 4 | 9 | 12 | - | - | - | 3 | 6 | 9 | - | - | - | - | 5 | 7 | - | - | - | - | 5 | 6 |
| 90 | 4 | 3 | 5 | 8 | 16 | 21 | - | - | - | 4 | 9 | 11 | - | - | - | 3 | 6 | 8 | - | - | - | - | - | 7 | - | - | - | - | 5 | 6 |
| 95 | 4 | 3 | 5 | 8 | 16 | 21 | - | - | - | 4 | 8 | 11 | - | - | - | - | 6 | 8 | - | - | - | - | - | 6 | - | - | - | - | 5 | 6 |
| 100 | 3 | - | 5 | 7 | 14 | 18 | - | - | - | 4 | 8 | 10 | - | - | - | - | 6 | 8 | - | - | - | - | - | 6 | - | - | - | - | 5 | 6 |
| 120 | - | - | 4 | 5 | 11 | 15 | - | - | - | 3 | 6 | 8 | - | - | - | - | - | 6 | - | - | - | - | - | 5 | - | - | - | - | - | 5 |
| 140 | - | - | - | 4 | 9 | 11 | - | - | - | - | 6 | 8 | - | - | - | - | - | 6 | - | - | - | - | - | - | - | - | - | - | - | 5 |
| 160 | - | - | - | 4 | 7 | 10 | - | - | - | - | - | 7 | - | - | - | - | 5 | - | - | - | - | - | - | - | - | - | - | - | - | 5 |
| 180 | - | - | - | 3 | 6 | 9 | - | - | - | - | - | 6 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 5 |
| 200 | - | - | - | - | 6 | 8 | - | - | - | - | - | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 5 |
| 220 | - | - | - | - | 5 | 7 | - | - | - | - | - | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 5 |
| 240 | - | - | - | - | 5 | 7 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 5 |
| 260 | - | - | - | - | - | 6 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 5 |
| 280 | - | - | - | - | - | 6 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 5 |

| PSF\SLAT SPAN | 108" | | | | | | 120" | | | | | | 132" | | | | | | 144" | | | | | | 156" | | | | | | 168" | | | | | | 180" | | | | | | 192" | | | | | | 204" | | | | | | 216" | | | | | | 228" | | | | | | 240" | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Fastener | | | | | | Fastener | | | | | | Fastener | | | | | | Fastener | | | | | | Fastener | | | | | | Fastener | | | | | | Fastener | | | | | | Fastener | | | | | | Fastener | | | | | | Fastener | | | | | | Fastener | | | | | | Fastener | | | | | |
| | A | B | C | D | E | F | A | B | C | D | E | F | A | B | C | D | E | F | A | B | C | D | E | F | A | B | C | D | E | F | A | B | C | D | E | F | A | B | C | D | E | F | A | B | C | D | E | F | A | B | C | D | E | F | A | B | C | D | E | F | A | B | C | D | E | F |
| 10 | 7 | 6 | 10 | 14 | 24 | 24 | 5 | 5 | 8 | 11 | 23 | 24 | 4 | 4 | 6 | 9 | 19 | 24 | 4 | 4 | 6 | 8 | 16 | 22 | 3 | 3 | 5 | 7 | 14 | 19 | - | - | 4 | 6 | 13 | 17 | - | - | 4 | 6 | 12 | 15 | - | - | 4 | 5 | 11 | 14 | - | - | 3 | 5 | 10 | 13 | - | - | 3 | 4 | 9 | 12 | - | - | - | 4 | 8 | 11 | - | - | - | 4 | 8 | 10 |
| 15 | 4 | 4 | 6 | 9 | 18 | 24 | 3 | 3 | 5 | 7 | 15 | 20 | - | - | 4 | 6 | 13 | 17 | - | - | 4 | 5 | 11 | 14 | - | - | 3 | 5 | 10 | 13 | - | - | 3 | 4 | 9 | 12 | - | - | - | 4 | 8 | 11 | - | - | - | 4 | 7 | 10 | - | - | - | 3 | 7 | 9 | - | - | - | 3 | 6 | 8 | - | - | - | - | 6 | 8 | - | - | - | - | 6 | 7 |
| 20 | 3 | - | 5 | 6 | 13 | 18 | - | - | 4 | 5 | 11 | 15 | - | - | 3 | 5 | 10 | 13 | - | - | - | 4 | 9 | 11 | - | - | - | 4 | 8 | 10 | - | - | - | 3 | 7 | 9 | - | - | - | 4 | 6 | 8 | - | - | - | - | 6 | 8 | - | - | - | - | 5 | 7 | - | - | - | - | 5 | 7 | - | - | - | - | - | 6 | - | - | - | - | - | 6 |
| 25 | - | - | 4 | 5 | 11 | 14 | - | - | 3 | 4 | 9 | 12 | - | - | - | 4 | 8 | 10 | - | - | - | 3 | 7 | 9 | - | - | - | 3 | 6 | 8 | - | - | - | - | 6 | 8 | - | - | - | - | 5 | 7 | - | - | - | - | 6 | - | - | - | - | - | 6 | - | - | - | - | - | 6 | - | - | - | - | - | 6 | - | - | - | - | - | 5 |
| 30 | - | - | 3 | 4 | 9 | 12 | - | - | - | 4 | 8 | 10 | - | - | - | 3 | 7 | 9 | - | - | - | - | 6 | 8 | - | - | - | - | 5 | 7 | - | - | - | - | - | 7 | - | - | - | - | 6 | - | - | - | - | - | 6 | - | - | - | - | - | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 35 | - | - | - | 3 | 7 | 9 | - | - | - | - | 6 | 8 | - | - | - | - | 6 | 8 | - | - | - | - | 5 | 7 | - | - | - | - | - | 6 | - | - | - | - | - | 6 | - | - | - | - | 5 | - | - | - | - | - | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 40 | - | - | - | - | 6 | 8 | - | - | - | - | 5 | 7 | - | - | - | - | 6 | 8 | - | - | - | - | - | 6 | - | - | - | - | - | 6 | - | - | - | - | - | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 45 | - | - | - | - | 5 | 7 | - | - | - | - | - | 6 | - | - | - | - | - | 6 | - | - | - | - | - | 6 | - | - | - | - | - | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 50 | - | - | - | - | 7 | - | - | - | - | - | - | 6 | - | - | - | - | - | 6 | - | - | - | - | - | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 55 | - | - | - | - | 6 | - | - | - | - | - | - | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 60 | - | - | - | - | 6 | - | - | - | - | - | - | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 65 | - | - | - | - | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 70 | - | - | - | - | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 75 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 80 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 85 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 90 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 95 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 100 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 120 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 140 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 160 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 180 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 200 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 220 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 240 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 260 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 280 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |

| # | Fastener | Edge Distance | Min. Embedment | Substrate |
|---|---|---|---|---|
| A | 1/4" Tapcon | 1-1/2" | 1-1/2" | Wood (fastener in center of stud) |
| B | 1/4" Tapcon | 3" | 1-1/4" | CMU Hollow |
| C | 1/4" Tapcon | 3" | 1-3/4" | 4000 PSI Concrete or Cell Filled CMU |
| D | 1/4" Wedge Bolt | 4.25" | 3" | 4000 PSI Concrete or Cell Filled CMU |
| E | 3/8" Wedge Bolt | 4.25" | 4.5" | 4000 PSI Concrete or Cell Filled CMU |
| F | 3/8" Wedge Bolt | 5.25" | 4.5" | 4000 PSI Concrete or Cell Filled CMU |


Roll-a-way By QMI
1661 GLENLAKE AVENUE
ITASCA, IL 60143


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DRAWING TITLE:
NOTICE OF ACCEPTANCE
END RETENTION
PRODUCT APPROVAL

Digitally signed by: Fowler, Donald
DN: CN = Fowler, Donald OU = Colleagues, VeriClaim, O365 Users
Date: 2020.10.31 15:59:15 -04'00'

DONALD LYNN FOWLER LICENSE No 50458 STATE OF FLORIDA PROFESSIONAL ENGINEER

D.L. Fowler, P.E. Florida License No. 50458

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

# FASTENER DRILLING O.C. (INCHES) SCHEDULE A5

| PSF\SLAT SPAN | 48" | | | | | | 60" | | | | | | 72" | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Fastener | | | | | | Fastener | | | | | | Fastener | | | | | |
| | A | B | C | D | E | F | A | B | C | D | E | F | A | B | C | D | E | F |
| 10 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 |
| 15 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 21 | 17 | 24 | 24 | 24 | 24 |
| 20 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 12 | 10 | 16 | 19 | 24 | 24 |
| 25 | 24 | 24 | 24 | 24 | 24 | 24 | 20 | 16 | 24 | 24 | 24 | 24 | 8 | 7 | 11 | 13 | 24 | 24 |
| 30 | 24 | 24 | 24 | 24 | 24 | 24 | 12 | 10 | 16 | 21 | 24 | 24 | 6 | 5 | 8 | 10 | 20 | 24 |
| 35 | 24 | 24 | 24 | 24 | 24 | 24 | 10 | 8 | 14 | 17 | 24 | 24 | 5 | 4 | 7 | 8 | 17 | 22 |
| 40 | 24 | 24 | 24 | 24 | 24 | 24 | 8 | 6 | 10 | 13 | 24 | 24 | 5 | 4 | 6 | 7 | 14 | 19 |
| 45 | 22 | 21 | 24 | 24 | 24 | 24 | 7 | 5 | 9 | 11 | 22 | 24 | 4 | 3 | 5 | 6 | 13 | 17 |
| 50 | 14 | 12 | 20 | 24 | 24 | 24 | 5 | 4 | 7 | 9 | 18 | 24 | 4 | - | 5 | 6 | 11 | 15 |
| 55 | 12 | 10 | 17 | 24 | 24 | 24 | 5 | 4 | 7 | 8 | 16 | 22 | 3 | - | 4 | 5 | 10 | 14 |
| 60 | 9 | 7 | 12 | 16 | 24 | 24 | 4 | 3 | 6 | 7 | 15 | 19 | - | - | 4 | 5 | 9 | 12 |
| 65 | 8 | 6 | 11 | 14 | 24 | 24 | 4 | 3 | 5 | 6 | 13 | 17 | - | - | 4 | 4 | 9 | 11 |
| 70 | 7 | 6 | 10 | 13 | 24 | 24 | 4 | - | 5 | 6 | 12 | 16 | - | - | 3 | 4 | 8 | 10 |
| 75 | 6 | 5 | 8 | 10 | 21 | 24 | 3 | - | 4 | 5 | 11 | 14 | - | - | 3 | 4 | 7 | 10 |
| 80 | 5 | 4 | 7 | 9 | 19 | 25 | 3 | - | 4 | 5 | 10 | 13 | - | - | - | 3 | 7 | 9 |
| 85 | 5 | 4 | 7 | 8 | 17 | 22 | - | - | 4 | 4 | 9 | 12 | - | - | - | 3 | 7 | 9 |
| 90 | 4 | 4 | 6 | 7 | 15 | 20 | - | - | 4 | 4 | 9 | 11 | - | - | - | 3 | 6 | 8 |
| 95 | 4 | 4 | 6 | 7 | 15 | 20 | - | - | 3 | 4 | 8 | 11 | - | - | - | - | 6 | 8 |
| 100 | 4 | 3 | 5 | 6 | 13 | 18 | - | - | 3 | 4 | 8 | 10 | - | - | - | - | 6 | 8 |
| 120 | 3 | - | 4 | 5 | 11 | 14 | - | - | - | 3 | 6 | 9 | - | - | - | - | - | 7 |
| 140 | - | - | 3 | 4 | 9 | 11 | - | - | - | - | 6 | 8 | - | - | - | - | - | 6 |
| 160 | - | - | - | 4 | 7 | 10 | - | - | - | - | - | 7 | - | - | - | - | - | 5 |
| 180 | - | - | - | 3 | 6 | 8 | - | - | - | - | - | 6 | - | - | - | - | - | - |
| 200 | - | - | - | - | 6 | 8 | - | - | - | - | - | 5 | - | - | - | - | - | - |
| 220 | - | - | - | - | 5 | 7 | - | - | - | - | - | 5 | - | - | - | - | - | - |
| 240 | - | - | - | - | - | 6 | - | - | - | - | - | - | - | - | - | - | - | - |
| 260 | - | - | - | - | - | 6 | - | - | - | - | - | - | - | - | - | - | - | - |
| 280 | - | - | - | - | - | 6 | - | - | - | - | - | - | - | - | - | - | - | - |

| PSF\SLAT SPAN | 84" | | | | | | 96" | | | | | | 108" | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Fastener | | | | | | Fastener | | | | | | Fastener | | | | | |
| | A | B | C | D | E | F | A | B | C | D | E | F | A | B | C | D | E | F |
| 10 | 24 | 19 | 24 | 24 | 24 | 24 | 13 | 10 | 17 | 20 | 24 | 24 | 10 | 8 | 13 | 14 | 24 | 24 |
| 15 | 11 | 8 | 14 | 17 | 24 | 24 | 8 | 6 | 10 | 12 | 24 | 24 | 6 | 5 | 8 | 9 | 19 | 24 |
| 20 | 7 | 6 | 10 | 12 | 24 | 24 | 5 | 4 | 7 | 8 | 17 | 23 | 4 | 3 | 6 | 7 | 14 | 18 |
| 25 | 6 | 4 | 8 | 9 | 18 | 24 | 4 | 3 | 6 | 7 | 14 | 18 | 4 | - | 5 | 5 | 11 | 15 |
| 30 | 5 | 4 | 6 | 7 | 14 | 19 | 4 | - | 5 | 6 | 11 | 15 | 3 | - | 4 | 5 | 9 | 12 |
| 35 | 4 | 3 | 5 | 6 | 12 | 16 | 3 | - | 4 | 5 | 10 | 13 | - | - | 4 | 4 | 8 | 11 |
| 40 | 3 | - | 5 | 5 | 11 | 14 | - | - | 4 | 4 | 8 | 11 | - | - | 3 | 3 | 7 | 9 |
| 45 | 3 | - | 4 | 5 | 9 | 13 | - | - | 3 | 4 | 8 | 10 | - | - | - | 3 | 6 | 9 |
| 50 | - | - | 4 | 4 | 8 | 11 | - | - | 3 | 3 | 7 | 9 | - | - | - | - | 6 | 8 |
| 55 | - | - | 3 | 4 | 8 | 10 | - | - | - | 3 | 6 | 8 | - | - | - | - | 5 | 7 |
| 60 | - | - | 3 | 3 | 7 | 10 | - | - | - | - | 6 | 8 | - | - | - | - | 5 | 7 |
| 65 | - | - | - | 3 | 7 | 9 | - | - | - | - | 5 | 7 | - | - | - | - | - | 6 |
| 70 | - | - | - | 3 | 6 | 8 | - | - | - | - | 5 | 7 | - | - | - | - | - | 6 |
| 75 | - | - | - | - | 6 | 8 | - | - | - | - | - | 7 | - | - | - | - | - | 6 |
| 80 | - | - | - | - | 6 | 7 | - | - | - | - | - | 6 | - | - | - | - | - | 5 |
| 85 | - | - | - | - | 5 | 7 | - | - | - | - | - | 6 | - | - | - | - | - | 5 |
| 90 | - | - | - | - | 5 | 7 | - | - | - | - | - | 6 | - | - | - | - | - | - |
| 95 | - | - | - | - | - | 6 | - | - | - | - | - | 5 | - | - | - | - | - | - |
| 100 | - | - | - | - | - | 6 | - | - | - | - | - | 5 | - | - | - | - | - | - |
| 120 | - | - | - | - | - | 5 | - | - | - | - | - | - | - | - | - | - | - | - |
| 140 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 160 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 180 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 200 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 220 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 240 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 260 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 280 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |

| PSF\SLAT SPAN | 120" | | | | | | 132" | | | | | | 144" | | | | | |
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| | Fastener | | | | | | Fastener | | | | | | Fastener | | | | | |
| | A | B | C | D | E | F | A | B | C | D | E | F | A | B | C | D | E | F |
| 10 | 8 | 6 | 10 | 12 | 24 | 24 | 6 | 5 | 9 | 9 | 19 | 24 | 6 | 4 | 7 | 8 | 17 | 23 |
| 15 | 5 | 4 | 7 | 7 | 15 | 20 | 4 | 3 | 6 | 6 | 13 | 17 | 4 | - | 5 | 6 | 11 | 15 |
| 20 | 4 | - | 5 | 6 | 11 | 15 | 3 | - | 4 | 5 | 10 | 13 | - | - | 4 | 4 | 9 | 12 |
| 25 | 3 | - | 4 | 5 | 9 | 13 | - | - | 4 | 4 | 8 | 11 | - | - | 3 | 4 | 7 | 10 |
| 30 | - | - | 3 | 4 | 8 | 11 | - | - | 3 | 3 | 7 | 9 | - | - | - | 3 | 6 | 8 |
| 35 | - | - | 3 | 3 | 7 | 9 | - | - | - | 3 | 6 | 8 | - | - | - | - | 5 | 7 |
| 40 | - | - | - | 3 | 6 | 8 | - | - | - | - | 5 | 7 | - | - | - | - | - | 7 |
| 45 | - | - | - | - | 6 | 7 | - | - | - | - | - | 7 | - | - | - | - | - | 6 |
| 50 | - | - | - | - | 5 | 7 | - | - | - | - | - | 6 | - | - | - | - | - | 5 |
| 55 | - | - | - | - | - | 6 | - | - | - | - | - | 6 | - | - | - | - | - | 5 |
| 60 | - | - | - | - | - | 6 | - | - | - | - | - | 5 | - | - | - | - | - | - |
| 65 | - | - | - | - | - | 6 | - | - | - | - | - | - | - | - | - | - | - | - |
| 70 | - | - | - | - | - | 5 | - | - | - | - | - | - | - | - | - | - | - | - |
| 75 | - | - | - | - | - | 5 | - | - | - | - | - | - | - | - | - | - | - | - |
| 80 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 85 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 90 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 95 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 100 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 120 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 140 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 160 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 180 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 200 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 220 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 240 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 260 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 280 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |

| PSF\SLAT SPAN | 156" | | | | | | 168" | | | | | | 180" | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Fastener | | | | | | Fastener | | | | | | Fastener | | | | | |
| | A | B | C | D | E | F | A | B | C | D | E | F | A | B | C | D | E | F |
| 10 | 5 | 4 | 7 | 7 | 15 | 20 | 4 | 3 | 6 | 6 | 13 | 18 | 4 | 3 | 5 | 6 | 12 | 16 |
| 15 | 3 | - | 4 | 5 | 10 | 14 | 3 | - | 4 | 4 | 9 | 12 | - | - | 4 | 4 | 8 | 11 |
| 20 | - | - | 3 | 4 | 8 | 11 | - | - | 3 | 3 | 7 | 10 | - | - | - | 3 | 6 | 9 |
| 25 | - | - | - | 3 | 6 | 9 | - | - | - | - | 6 | 8 | - | - | - | - | 5 | 7 |
| 30 | - | - | - | - | 6 | 8 | - | - | - | - | 5 | 7 | - | - | - | - | - | 6 |
| 35 | - | - | - | - | - | 7 | - | - | - | - | - | 6 | - | - | - | - | - | 6 |
| 40 | - | - | - | - | - | 6 | - | - | - | - | - | 5 | - | - | - | - | - | 5 |
| 45 | - | - | - | - | - | 5 | - | - | - | - | - | 5 | - | - | - | - | - | - |
| 50 | - | - | - | - | - | 5 | - | - | - | - | - | - | - | - | - | - | - | - |
| 55 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 60 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 65 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 70 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 75 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 80 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 85 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 90 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 95 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 100 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 120 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 140 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 160 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 180 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 200 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 220 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 240 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 260 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 280 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |

| PSF\SLAT SPAN | 192" | | | | | | 204" | | | | | | 216" | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Fastener | | | | | | Fastener | | | | | | Fastener | | | | | |
| | A | B | C | D | E | F | A | B | C | D | E | F | A | B | C | D | E | F |
| 10 | 4 | - | 5 | 5 | 11 | 15 | 3 | - | 5 | 5 | 10 | 14 | 3 | - | 4 | 5 | 9 | 13 |
| 15 | - | - | 3 | 4 | 8 | 10 | - | - | 3 | 3 | 7 | 10 | - | - | - | 3 | 7 | 9 |
| 20 | - | - | - | - | 6 | 8 | - | - | - | - | 6 | 7 | - | - | - | - | 5 | 7 |
| 25 | - | - | - | - | 5 | 7 | - | - | - | - | - | 6 | - | - | - | - | - | 6 |
| 30 | - | - | - | - | - | 6 | - | - | - | - | - | 5 | - | - | - | - | - | 5 |
| 35 | - | - | - | - | - | 5 | - | - | - | - | - | - | - | - | - | - | - | - |
| 40 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 45 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 50 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 55 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 60 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 65 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 70 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 75 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 80 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 85 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 90 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 95 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 100 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 120 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 140 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 160 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 180 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 200 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 220 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 240 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 260 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 280 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |

| PSF\SLAT SPAN | 228" | | | | | | 240" | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Fastener | | | | | | Fastener | | | | | |
| | A | B | C | D | E | F | A | B | C | D | E | F |
| 10 | - | - | 4 | 4 | 9 | 12 | - | - | 4 | 4 | 8 | 11 |
| 15 | - | - | - | 3 | 6 | 8 | - | - | - | - | 6 | 8 |
| 20 | - | - | - | - | - | 7 | - | - | - | - | - | 6 |
| 25 | - | - | - | - | - | 6 | - | - | - | - | - | 5 |
| 30 | - | - | - | - | - | - | - | - | - | - | - | - |
| 35 | - | - | - | - | - | - | - | - | - | - | - | - |
| 40 | - | - | - | - | - | - | - | - | - | - | - | - |
| 45 | - | - | - | - | - | - | - | - | - | - | - | - |
| 50 | - | - | - | - | - | - | - | - | - | - | - | - |
| 55 | - | - | - | - | - | - | - | - | - | - | - | - |
| 60 | - | - | - | - | - | - | - | - | - | - | - | - |
| 65 | - | - | - | - | - | - | - | - | - | - | - | - |
| 70 | - | - | - | - | - | - | - | - | - | - | - | - |
| 75 | - | - | - | - | - | - | - | - | - | - | - | - |
| 80 | - | - | - | - | - | - | - | - | - | - | - | - |
| 85 | - | - | - | - | - | - | - | - | - | - | - | - |
| 90 | - | - | - | - | - | - | - | - | - | - | - | - |
| 95 | - | - | - | - | - | - | - | - | - | - | - | - |
| 100 | - | - | - | - | - | - | - | - | - | - | - | - |
| 120 | - | - | - | - | - | - | - | - | - | - | - | - |
| 140 | - | - | - | - | - | - | - | - | - | - | - | - |
| 160 | - | - | - | - | - | - | - | - | - | - | - | - |
| 180 | - | - | - | - | - | - | - | - | - | - | - | - |
| 200 | - | - | - | - | - | - | - | - | - | - | - | - |
| 220 | - | - | - | - | - | - | - | - | - | - | - | - |
| 240 | - | - | - | - | - | - | - | - | - | - | - | - |
| 260 | - | - | - | - | - | - | - | - | - | - | - | - |
| 280 | - | - | - | - | - | - | - | - | - | - | - | - |

| # | Fastener | Edge Distance | Min. Embedment | Substrate |
|---|---|---|---|---|
| A | 1/4" Tapcon | 1-1/2" | 1-1/2" | Wood (fastener in center of stud) |
| B | 1/4" Tapcon | 3" | 1-1/4" | CMU Hollow |
| C | 1/4" Tapcon | 3" | 1-3/4" | 4000 PSI Concrete or Cell Filled CMU |
| D | 1/4" Wedge Bolt | 4.25" | 3" | 4000 PSI Concrete or Cell Filled CMU |
| E | 3/8" Wedge Bolt | 4.25" | 4.5" | 4000 PSI Concrete or Cell Filled CMU |
| F | 3/8" Wedge Bolt | 5.25" | 4.5" | 4000 PSI Concrete or Cell Filled CMU |


Roll-a-way By QMI
1661 GLENLAKE AVENUE
ITASCA, IL 60143


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DRAWING TITLE:
NOTICE OF ACCEPTANCE
END RETENTION
PRODUCT APPROVAL

Digitally signed by: Fowler, Donald
DN: CN = Fowler, Donald OU = Colleagues, VeriClaim, O365 Users
Date: 2020.10.31 15:59:49 -04'00'

DONALD LYNN FOWLER
LICENSE
No 50458
STATE OF FLORIDA
PROFESSIONAL ENGINEER

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

# FASTENER DRILLING O.C. (INCHES) SCHEDULE A6

| PSF\SLAT SPAN | 48" | | | | | | 60" | | | | | | 72" | | | | | | 84" | | | | | | 96" | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Fastener | | | | | | Fastener | | | | | | Fastener | | | | | | Fastener | | | | | | Fastener | | | | | |
| | A | B | C | D | E | F | A | B | C | D | E | F | A | B | C | D | E | F | A | B | C | D | E | F | A | B | C | D | E | F |
| 10 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 22 | 24 | 24 | 24 | 24 | 14 | 11 | 19 | 24 | 24 | 24 |
| 15 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 20 | 20 | 24 | 24 | 24 | 24 | 12 | 9 | 16 | 24 | 24 | 24 | 9 | 7 | 12 | 20 | 24 | 24 |
| 20 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 14 | 11 | 18 | 24 | 24 | 24 | 8 | 7 | 11 | 19 | 24 | 24 | 6 | 5 | 8 | 14 | 24 | 24 |
| 25 | 24 | 24 | 24 | 24 | 24 | 24 | 22 | 19 | 24 | 24 | 24 | 24 | 9 | 7 | 12 | 21 | 24 | 24 | 6 | 5 | 8 | 14 | 24 | 24 | 5 | 4 | 7 | 11 | 24 | 24 |
| 30 | 24 | 24 | 24 | 24 | 24 | 24 | 14 | 11 | 19 | 24 | 24 | 24 | 7 | 6 | 10 | 16 | 24 | 24 | 5 | 4 | 7 | 12 | 24 | 24 | 4 | 3 | 5 | 9 | 23 | 24 |
| 35 | 24 | 24 | 24 | 24 | 24 | 24 | 12 | 9 | 16 | 24 | 24 | 24 | 6 | 5 | 8 | 13 | 24 | 24 | 4 | 3 | 6 | 10 | 24 | 24 | 4 | - | 5 | 8 | 19 | 21 |
| 40 | 24 | 24 | 24 | 24 | 24 | 24 | 9 | 7 | 12 | 19 | 24 | 24 | 5 | 4 | 7 | 11 | 24 | 24 | 4 | 3 | 5 | 9 | 21 | 23 | 3 | - | 4 | 7 | 17 | 18 |
| 45 | 24 | 24 | 24 | 24 | 24 | 24 | 7 | 6 | 10 | 16 | 24 | 24 | 5 | 4 | 6 | 10 | 24 | 24 | 3 | - | 5 | 8 | 19 | 20 | . | - | 4 | 6 | 15 | 16 |
| 50 | 16 | 14 | 23 | 24 | 24 | 24 | 6 | 5 | 8 | 14 | 24 | 24 | 4 | 3 | 5 | 9 | 22 | 24 | 3 | - | 4 | 7 | 17 | 18 | . | - | 3 | 6 | 14 | 15 |
| 55 | 14 | 12 | 20 | 24 | 24 | 24 | 6 | 4 | 7 | 12 | 24 | 24 | 4 | - | 5 | 8 | 20 | 22 | . | - | 4 | 6 | 15 | 16 | . | - | 3 | 5 | 12 | 14 |
| 60 | 10 | 8 | 14 | 22 | 24 | 24 | 5 | 4 | 7 | 11 | 24 | 24 | 3 | - | 4 | 7 | 18 | 20 | . | - | 3 | 6 | 14 | 15 | . | - | - | 5 | 12 | 13 |
| 65 | 9 | 7 | 12 | 20 | 24 | 24 | 4 | 3 | 6 | 10 | 23 | 24 | 3 | - | 4 | 7 | 17 | 18 | . | - | 3 | 5 | 13 | 14 | . | - | - | 5 | 11 | 12 |
| 70 | 8 | 7 | 11 | 18 | 24 | 24 | 4 | 3 | 5 | 9 | 22 | 24 | . | - | 4 | 6 | 15 | 17 | . | - | - | 5 | 12 | 13 | . | - | - | 4 | 10 | 11 |
| 75 | 7 | 5 | 9 | 15 | 24 | 24 | 4 | 3 | 5 | 8 | 20 | 22 | . | - | 3 | 6 | 14 | 16 | . | - | - | 5 | 11 | 13 | . | - | - | 4 | 10 | 10 |
| 80 | 6 | 5 | 8 | 14 | 24 | 24 | 3 | - | 5 | 8 | 18 | 20 | . | - | 3 | 6 | 13 | 15 | . | - | - | 5 | 11 | 12 | . | - | - | 4 | 9 | 10 |
| 85 | 6 | 4 | 8 | 12 | 24 | 24 | 3 | - | 4 | 7 | 17 | 19 | . | - | 3 | 5 | 13 | 14 | . | - | - | 4 | 10 | 11 | . | - | - | 4 | 9 | 9 |
| 90 | 5 | 4 | 7 | 11 | 24 | 24 | 3 | - | 4 | 7 | 16 | 18 | . | - | 3 | 5 | 12 | 13 | . | - | - | 4 | 10 | 11 | . | - | - | 3 | 8 | 9 |
| 95 | 5 | 4 | 7 | 11 | 24 | 24 | - | - | 4 | 6 | 15 | 17 | . | - | - | 5 | 11 | 12 | . | - | - | 4 | 9 | 10 | . | - | - | 3 | 8 | 9 |
| 100 | 4 | 4 | 6 | 10 | 23 | 24 | . | - | 4 | 6 | 15 | 16 | . | - | - | 5 | 11 | 12 | . | - | - | 4 | 9 | 10 | . | - | - | 3 | 8 | 8 |
| 120 | 4 | - | 5 | 8 | 19 | 21 | . | - | 3 | 5 | 12 | 13 | . | - | - | 4 | 9 | 10 | . | - | - | 3 | 8 | 8 | . | - | - | . | 7 | |
| 140 | - | - | 4 | 6 | 15 | 17 | . | - | - | 4 | 11 | 12 | . | - | - | 3 | 8 | 9 | . | - | - | . | 7 | | . | - | - | . | 6 | |
| 160 | - | - | 3 | 6 | 13 | 15 | . | - | - | 4 | 9 | 10 | . | - | - | 3 | 7 | 8 | . | - | - | . | 7 | | . | - | - | . | 6 | |
| 180 | - | - | - | 5 | 12 | 13 | . | - | - | 3 | 8 | 9 | . | - | - | . | - | 7 | . | - | - | . | 6 | | . | - | - | . | 5 | |
| 200 | . | . | - | 4 | 10 | 12 | . | - | - | 3 | 7 | 8 | . | - | - | . | - | 7 | . | - | - | . | 6 | | . | - | - | . | - | |
| 220 | . | . | - | 4 | 10 | 11 | . | - | - | 3 | 7 | 8 | . | - | - | . | - | 6 | . | - | - | . | 5 | | . | - | - | . | - | |
| 240 | . | . | - | 4 | 9 | 10 | . | - | - | - | - | 7 | . | - | - | . | - | 6 | . | - | - | . | - | | . | - | - | . | - | |
| 260 | . | . | . | 4 | 8 | 9 | . | - | - | - | - | 7 | . | - | - | . | - | 5 | . | - | - | . | - | | . | - | - | . | - | |
| 280 | . | . | . | 3 | 8 | 9 | . | - | - | - | - | 6 | . | - | - | . | - | 5 | . | - | - | . | - | | . | - | - | . | - | |

| PSF\SLAT SPAN | 108" | | | | | | 120" | | | | | | 132" | | | | | | 144" | | | | | | 156" | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Fastener | | | | | | Fastener | | | | | | Fastener | | | | | | Fastener | | | | | | Fastener | | | | | |
| | A | B | C | D | E | F | A | B | C | D | E | F | A | B | C | D | E | F | A | B | C | D | E | F | A | B | C | D | E | F |
| 10 | 11 | 8 | 14 | 24 | 24 | 24 | 9 | 7 | 12 | 20 | 24 | 24 | 7 | 6 | 9 | 16 | 24 | 24 | 6 | 5 | 8 | 14 | 24 | 24 | 5 | 4 | 7 | 13 | 24 | 24 |
| 15 | 7 | 5 | 9 | 16 | 24 | 24 | 6 | 4 | 7 | 13 | 24 | 24 | 5 | 4 | 6 | 11 | 24 | 24 | 4 | 3 | 6 | 10 | 23 | 24 | 4 | - | 5 | 9 | 21 | 22 |
| 20 | 5 | 4 | 7 | 11 | 24 | 24 | 4 | 3 | 6 | 10 | 23 | 24 | 4 | - | 5 | 8 | 20 | 22 | 3 | - | 4 | 7 | 18 | 19 | . | - | 4 | 7 | 16 | 17 |
| 25 | 4 | 3 | 5 | 9 | 22 | 24 | 3 | - | 5 | 8 | 19 | 20 | . | - | 4 | 7 | 16 | 18 | - | - | 4 | 6 | 15 | 16 | . | - | 3 | 5 | 13 | 14 |
| 30 | 3 | - | 5 | 8 | 19 | 20 | . | - | 4 | 7 | 16 | 17 | . | - | 3 | 6 | 14 | 15 | . | - | 3 | 5 | 13 | 13 | . | - | - | 5 | 11 | 12 |
| 35 | . | - | 4 | 7 | 16 | 17 | . | - | 3 | 6 | 14 | 15 | . | - | 3 | 5 | 12 | 13 | . | - | - | 5 | 11 | 12 | . | - | - | 4 | 10 | 11 |
| 40 | . | - | 3 | 6 | 14 | 15 | . | - | 3 | 5 | 12 | 13 | . | - | - | 5 | 11 | 12 | . | - | - | 4 | 10 | 11 | . | - | - | 4 | 9 | 10 |
| 45 | . | - | 3 | 5 | 13 | 14 | . | - | - | 5 | 11 | 12 | . | - | - | 4 | 10 | 11 | . | - | - | 4 | 9 | 10 | . | - | - | 3 | 8 | 9 |
| 50 | . | - | - | 5 | 12 | 13 | . | - | - | 4 | 10 | 11 | . | - | - | 4 | 9 | 10 | . | - | - | 3 | 8 | 9 | . | - | - | 3 | 8 | 8 |
| 55 | . | - | - | 4 | 11 | 12 | . | - | - | 4 | 9 | 10 | . | - | - | 3 | 8 | 9 | . | - | - | 3 | 8 | 8 | . | - | - | . | 7 | 8 |
| 60 | . | - | - | 4 | 10 | 11 | . | - | - | 4 | 9 | 9 | . | - | - | 3 | 8 | 9 | . | - | - | 3 | 7 | 8 | . | - | - | . | - | 7 |
| 65 | . | - | - | 3 | 8 | 9 | . | - | - | 3 | 8 | 9 | . | - | - | 3 | 7 | 8 | . | - | - | . | - | 7 | . | - | - | . | - | 7 |
| 70 | . | - | - | 3 | 8 | 8 | . | - | - | . | - | 8 | . | - | - | . | - | 8 | . | - | - | . | - | 7 | . | - | - | . | - | 6 |
| 75 | . | - | - | 3 | 7 | 8 | . | - | - | . | - | 7 | . | - | - | . | - | 7 | . | - | - | . | - | 7 | . | - | - | . | - | 6 |
| 80 | . | - | - | . | 7 | 8 | . | - | - | . | - | 7 | . | - | - | . | - | 7 | . | - | - | . | - | 6 | . | - | - | . | - | 6 |
| 85 | . | - | - | . | - | 7 | . | - | - | . | - | 7 | . | - | - | . | - | 6 | . | - | - | . | - | 6 | . | - | - | . | - | 5 |
| 90 | . | - | - | . | - | 7 | . | - | - | . | - | 7 | . | - | - | . | - | 6 | . | - | - | . | - | 6 | . | - | - | . | - | 5 |
| 95 | . | - | - | . | - | 7 | . | - | - | . | - | 7 | . | - | - | . | - | 6 | . | - | - | . | - | 5 | . | - | - | . | - | 5 |
| 100 | . | - | - | . | - | 7 | . | - | - | . | - | 6 | . | - | - | . | - | 6 | . | - | - | . | - | 5 | . | - | - | . | - | - |
| 120 | . | - | - | . | - | 6 | . | - | - | . | - | 6 | . | - | - | . | - | 5 | . | - | - | . | - | - | . | - | - | . | - | - |
| 140 | . | - | - | . | - | 5 | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - |
| 160 | . | - | - | . | - | 5 | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - |
| 180 | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - |
| 200 | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - |
| 220 | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - |
| 240 | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - |
| 260 | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - |
| 280 | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - |

| PSF\SLAT SPAN | 168" | | | | | | 180" | | | | | | 192" | | | | | | 204" | | | | | | 216" | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Fastener | | | | | | Fastener | | | | | | Fastener | | | | | | Fastener | | | | | | Fastener | | | | | |
| | A | B | C | D | E | F | A | B | C | D | E | F | A | B | C | D | E | F | A | B | C | D | E | F | A | B | C | D | E | F |
| 10 | 5 | 4 | 6 | 11 | 24 | 24 | 4 | 3 | 6 | 10 | 24 | 24 | 4 | 3 | 5 | 9 | 23 | 24 | 4 | - | 5 | 9 | 21 | 22 | 3 | - | 5 | 8 | 19 | 21 |
| 15 | 3 | - | 4 | 8 | 19 | 20 | 3 | - | 4 | 7 | 17 | 18 | . | - | 4 | 7 | 16 | 17 | . | - | 4 | 6 | 15 | 16 | . | - | 3 | 6 | 14 | 15 |
| 20 | . | - | 3 | 6 | 15 | 16 | . | - | 3 | 6 | 13 | 14 | . | - | 3 | 5 | 12 | 13 | . | - | - | 5 | 12 | 12 | . | - | - | 4 | 11 | 12 |
| 25 | . | - | - | 5 | 12 | 13 | . | - | - | 5 | 11 | 12 | . | - | - | 4 | 10 | 11 | . | - | - | 4 | 10 | 10 | . | - | - | 4 | 9 | 10 |
| 30 | . | - | - | 4 | 10 | 11 | . | - | - | 4 | 10 | 10 | . | - | - | 4 | 9 | 10 | . | - | - | 3 | 8 | 9 | . | - | - | 3 | 8 | 8 |
| 35 | . | - | - | 4 | 9 | 10 | . | - | - | 4 | 8 | 9 | . | - | - | 3 | 8 | 8 | . | - | - | 3 | 7 | 8 | . | - | - | . | - | 7 |
| 40 | . | - | - | 3 | 8 | 9 | . | - | - | 3 | 8 | 8 | . | - | - | . | - | 8 | . | - | - | . | - | 7 | . | - | - | . | - | 7 |
| 45 | . | - | - | 3 | 8 | 8 | . | - | - | . | - | 8 | . | - | - | . | - | 7 | . | - | - | . | - | 7 | . | - | - | . | - | 6 |
| 50 | . | - | - | . | 7 | 7 | . | - | - | . | - | 7 | . | - | - | . | - | 6 | . | - | - | . | - | 6 | . | - | - | . | - | 6 |
| 55 | . | - | - | . | - | 7 | . | - | - | . | - | 6 | . | - | - | . | - | 6 | . | - | - | . | - | 6 | . | - | - | . | - | 5 |
| 60 | . | - | - | . | - | 6 | . | - | - | . | - | 6 | . | - | - | . | - | 6 | . | - | - | . | - | 5 | . | - | - | . | - | 5 |
| 65 | . | - | - | . | - | 6 | . | - | - | . | - | 6 | . | - | - | . | - | 5 | . | - | - | . | - | 5 | . | - | - | . | - | - |
| 70 | . | - | - | . | - | 6 | . | - | - | . | - | 5 | . | - | - | . | - | 5 | . | - | - | . | - | - | . | - | - | . | - | - |
| 75 | . | - | - | . | - | 5 | . | - | - | . | - | 5 | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - |
| 80 | . | - | - | . | - | 5 | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - |
| 85 | . | - | - | . | - | 5 | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - |
| 90 | . | - | - | . | - | 5 | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - |
| 95 | . | - | - | . | - | 5 | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - |
| 100 | . | - | - | . | - | 5 | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - |
| 120 | . | - | - | . | - | 5 | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - |
| 140 | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - |
| 160 | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - |
| 180 | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - |
| 200 | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - |
| 220 | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - |
| 240 | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - |
| 260 | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - |
| 280 | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - | . | - | - |

| PSF\SLAT SPAN | 228" | | | | | | 240" | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Fastener | | | | | | Fastener | | | | | |
| | A | B | C | D | E | F | A | B | C | D | E | F |
| 10 | 3 | - | 4 | 7 | 18 | 19 | . | - | 4 | 7 | 17 | 18 |
| 15 | . | - | 4 | 7 | 16 | 17 | . | - | 4 | 6 | 15 | 16 |
| 20 | . | - | - | 4 | 10 | 11 | . | - | - | 4 | 10 | 10 |
| 25 | . | - | - | 4 | 9 | 9 | . | - | - | 3 | 8 | 9 |
| 30 | . | - | - | 3 | 7 | 8 | . | - | - | . | - | 7 |
| 35 | . | - | - | . | - | 7 | . | - | - | . | - | 7 |
| 40 | . | - | - | . | - | 6 | . | - | - | . | - | 6 |
| 45 | . | - | - | . | - | 6 | . | - | - | . | - | 5 |
| 50 | . | - | - | . | - | 5 | . | - | - | . | - | 5 |
| 55 | . | - | - | . | - | 5 | . | - | - | . | - | - |
| 60 | . | - | - | . | - | - | . | - | - | . | - | - |
| 65 | . | - | - | . | - | - | . | - | - | . | - | - |
| 70 | . | - | - | . | - | - | . | - | - | . | - | - |
| 75 | . | - | - | . | - | - | . | - | - | . | - | - |
| 80 | . | - | - | . | - | - | . | - | - | . | - | - |
| 85 | . | - | - | . | - | - | . | - | - | . | - | - |
| 90 | . | - | - | . | - | - | . | - | - | . | - | - |
| 95 | . | - | - | . | - | - | . | - | - | . | - | - |
| 100 | . | - | - | . | - | - | . | - | - | . | - | - |
| 120 | . | - | - | . | - | - | . | - | - | . | - | - |
| 140 | . | - | - | . | - | - | . | - | - | . | - | - |
| 160 | . | - | - | . | - | - | . | - | - | . | - | - |
| 180 | . | - | - | . | - | - | . | - | - | . | - | - |
| 200 | . | - | - | . | - | - | . | - | - | . | - | - |
| 220 | . | - | - | . | - | - | . | - | - | . | - | - |
| 240 | . | - | - | . | - | - | . | - | - | . | - | - |
| 260 | . | - | - | . | - | - | . | - | - | . | - | - |
| 280 | . | - | - | . | - | - | . | - | - | . | - | - |

| # | Fastener | Edge Distance | Min. Embedment | Substrate |
|---|---|---|---|---|
| A | 1/4" Tapcon | 1-1/2" | 1-1/2" | Wood (fastener in center of stud) |
| B | 1/4" Tapcon | 3" | 1-1/4" | CMU Hollow |
| C | 1/4" Tapcon | 3" | 1-3/4" | 4000 PSI Concrete or Cell Filled CMU |
| D | 1/4" Wedge Bolt | 4.25" | 3" | 4000 PSI Concrete or Cell Filled CMU |
| E | 3/8" Wedge Bolt | 4.25" | 4.5" | 4000 PSI Concrete or Cell Filled CMU |
| F | 3/8" Wedge Bolt | 5.25" | 4.5" | 4000 PSI Concrete or Cell Filled CMU |


Roll-a-way By QMI
1661 GLENLAKE AVENUE
ITASCA, IL 60143


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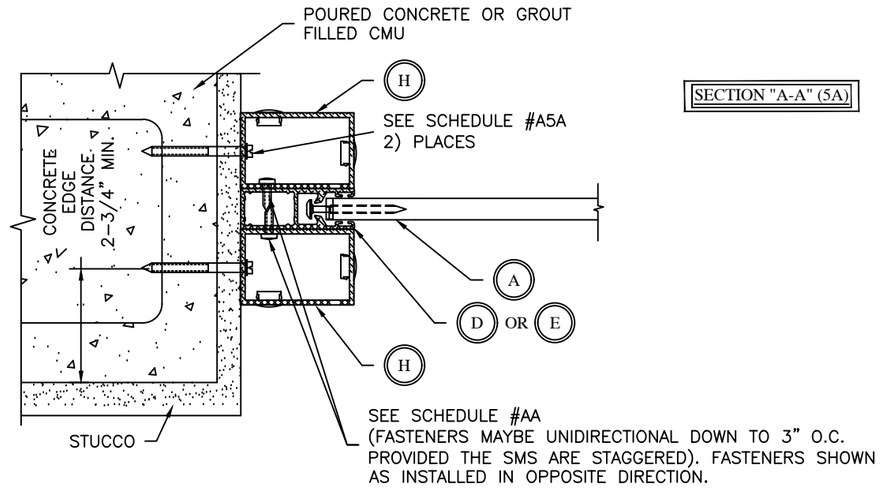

DRAWING TITLE:
NOTICE OF ACCEPTANCE
END RETENTION
PRODUCT APPROVAL

Digitally signed by: Fowler, Donald
DN: CN = Fowler, Donald OU = Colleagues, VeriClaim, O365 Users
Date: 2020.10.31 16:00:23 -04'00'

DONALD LYNN FOWLER LICENSE No 50458 STATE OF FLORIDA PROFESSIONAL ENGINEER

Professional Engineer

| | |
|---|---|
| DRAWN: | DLF |
| DATE: | 09-24-09 |
| APPROVED: | DLF |
| DATE: | 09-24-09 |
| DRAWING NO: | 3-01-031 |
| SIZE: | B |
| REV: | |
| SCALE: | 1 : 5 |
| SHEET: | 12C OF 26 |




SECTION "A-A" (5A)

HOLE SPACING O.C. SCHEDULE # AA *

| PSF\SLAT SPAN | 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 | 5 | 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 | 5 | 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

HOLE SPACING O.C. SCHEDULE # A5A *

| PSF\SLAT SPAN | 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 | 3 | 2.5 | 2.5 |
| 60 | 18 | 18 | 18 | 12 | 9 | 7 | 6 | 5 | 4 | 3 | 2.5 | 4 | 4 | 3 | 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 | N/A |
| 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


Roll-a-way By AMI
1661 GLENLAKE AVENUE
ITASCA, IL 60143


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NOTICE OF ACCEPTANCE
END RETENTION
PRODUCT APPROVAL

DRAWING TITLE:

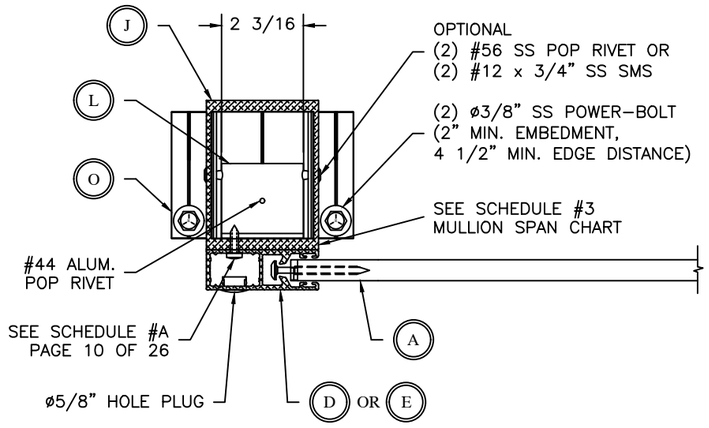
D.L. Fowler Professional Engineer

Digitally signed by: Fowler, Donald
DN: CN = Fowler, Donald OU = Colleagues, VeriClaim, O365 Users
Date: 2020.10.31 16:01:04 -04'00'

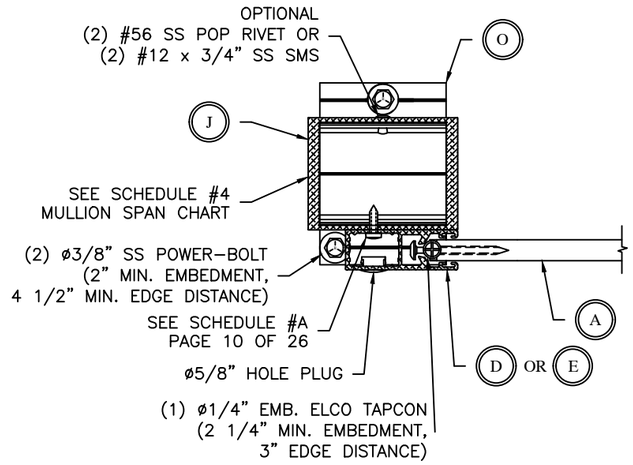
DONALD LYNN FOWLER LICENSE No 50458 STATE OF FLORIDA PROFESSIONAL ENGINEER

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

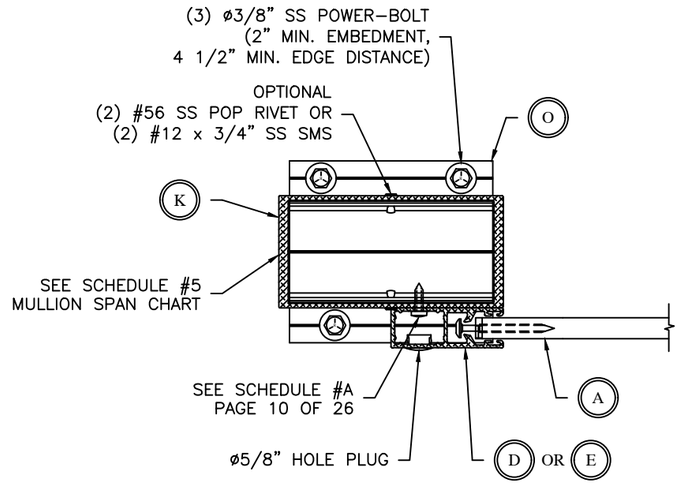
SECTION "A-A" (7)




SECTION "A-A" (8)




SECTION "A-A" (9)




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

## 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 | 135.0 | 124.4 | 117.0 | 103.4 | 93.2 | 84.4 | 78.4 | 73.4 | 69.3 | 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 |

## 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 | 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 |


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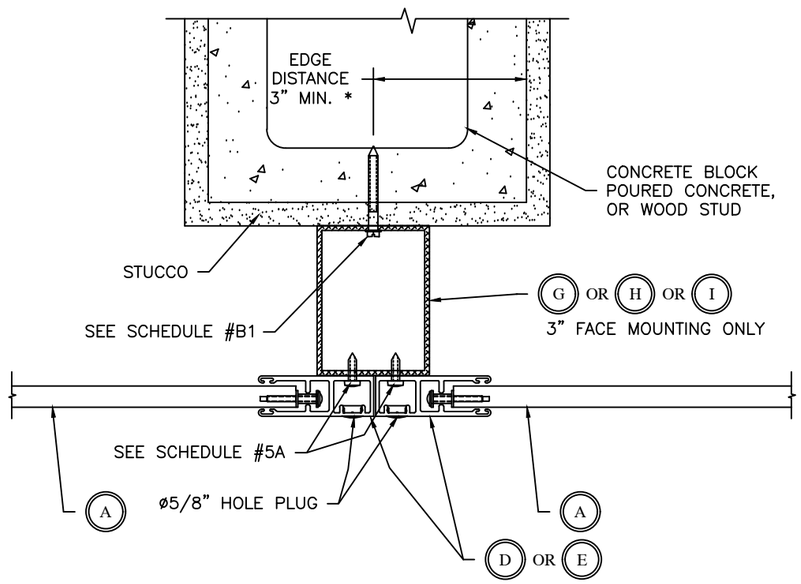
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DN = Fowler, Donald
OU = Colleagues, VeriClaim, O365 Users
Date: 2020.10.31 16:01:44 -04'00'

D.Lynn Fowler, P.E. (Professional Engineer)

DONALD LYNN FOWLER LICENSE No 50458 STATE OF FLORIDA PROFESSIONAL ENGINEER

| | |
|---|---|
| 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 |

SECTION "B-B" (1)**




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

# 3320 PSI CONCRETE OR CELL FILLED CMU, 1/4" DIA. TAPCON, 1-3/4" EMBEDMENT

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

## WOOD, 1/4" DIA. TAPCON, LAG SCREW, OR #14 SS SMS 1 1/2" EMBEDMENT

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

**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


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Date: 2020.10.31 16:02:18 -04'00'

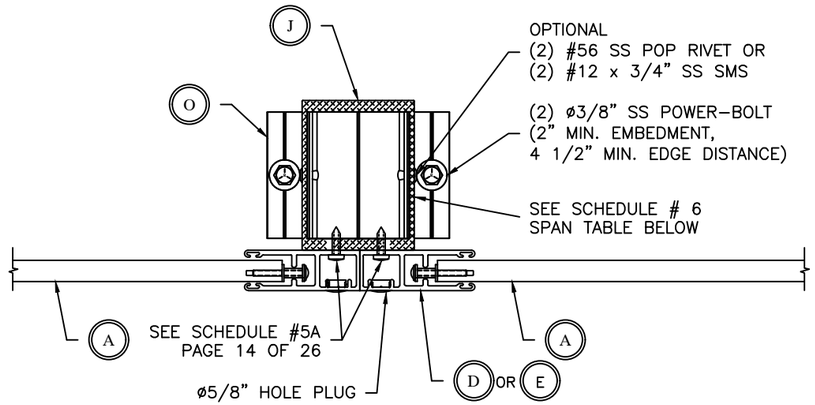
DONALD LYNN FOWLER LICENSE No 50458 STATE OF FLORIDA PROFESSIONAL ENGINEER

D.L. Fowler, P.E. Florida No. 50458

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

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

SECTION "B-B" (2)**




**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 |


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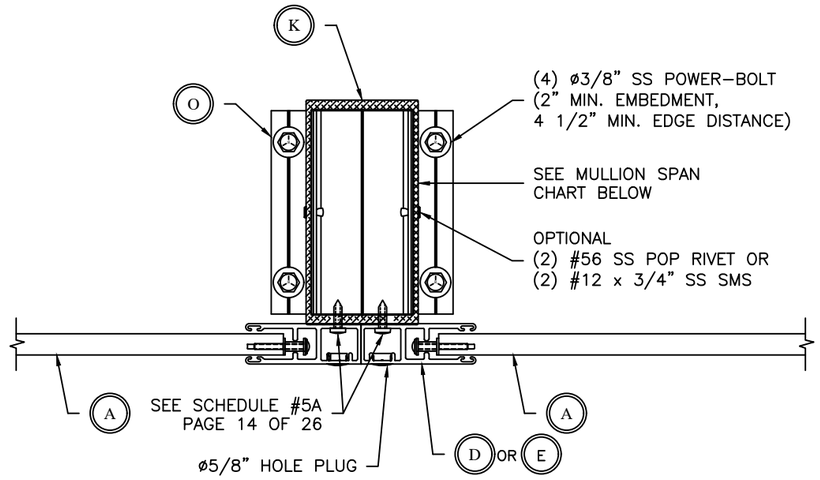

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DN: CN = Fowler, Donald OU = Colleagues, VeriClaim, O365 Users
Date: 2020.10.31 16:02:51 -04'00'

DONALD LYNN FOWLER LICENSE No 50458 STATE OF FLORIDA PROFESSIONAL ENGINEER

| | |
|---|---|
| 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 |

SECTION "B-B"(3)**




**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

## B-B(3) 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 | 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"


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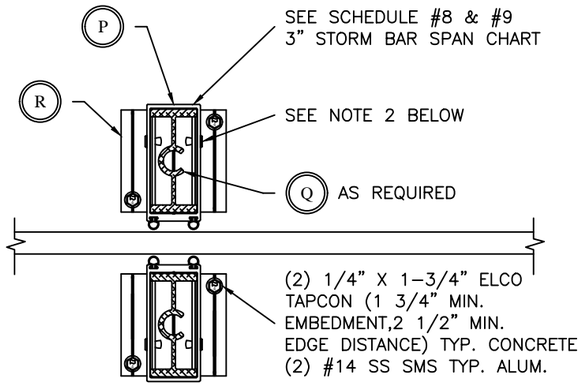
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| SHEET: | 16 OF 26 |

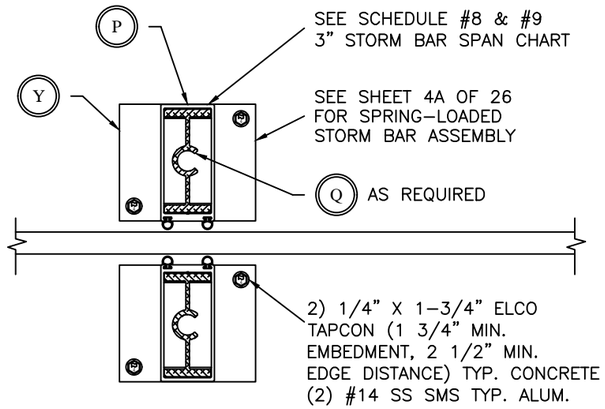
SECTION "C-C" (1)

FIXED STORM BAR



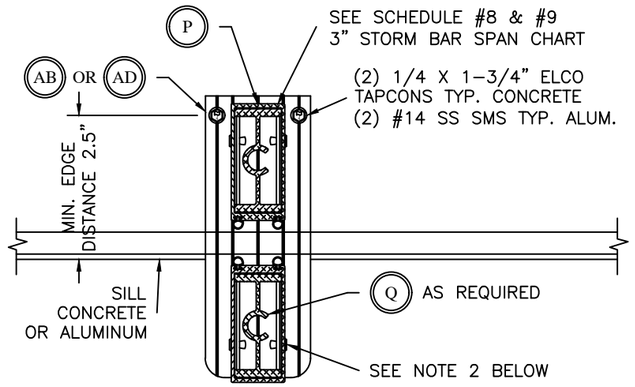

SECTION "C-C" (2)

REMOVABLE STORM BAR



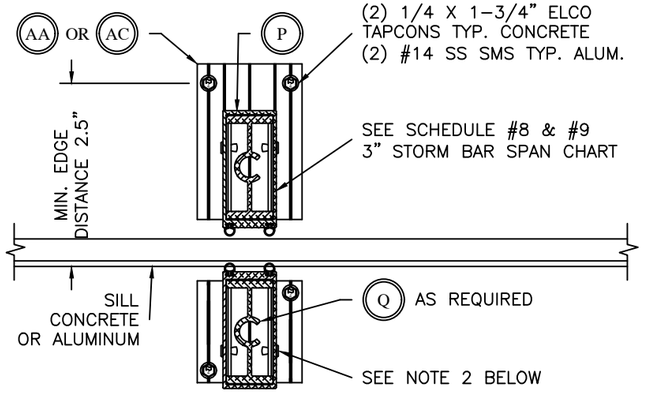

SECTION "C-C" (5)

FIXED OR REMOVABLE STORM BAR




SECTION "C-C" (6)

FIXED OR REMOVABLE STORM BAR




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 | | MAXIMUM STORM BAR HEIGHT (INCHES) | | | | | | | | | | |
| SECTION "C-C" (1), (2), (5), & (6) | | | | | | | | | | | | |
| 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 | 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 | | MAXIMUM STORM BAR HEIGHT (INCHES) | | | | | | | | | | |
| SECTION "C-C" (1), (2), (5), & (6) | | | | | | | | | | | | |
| 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 | 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 |


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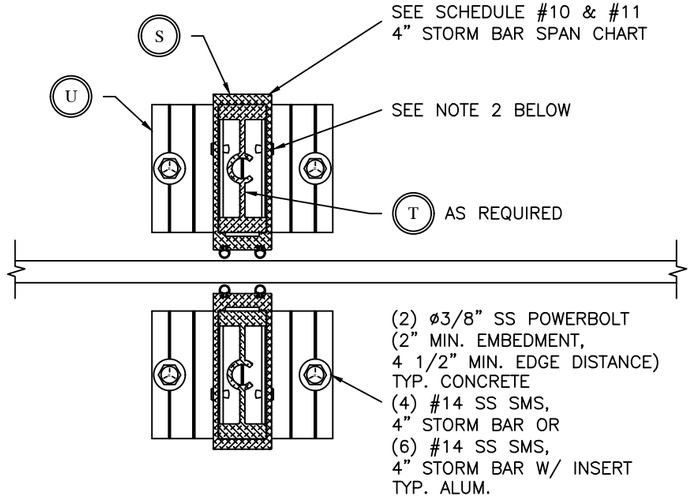
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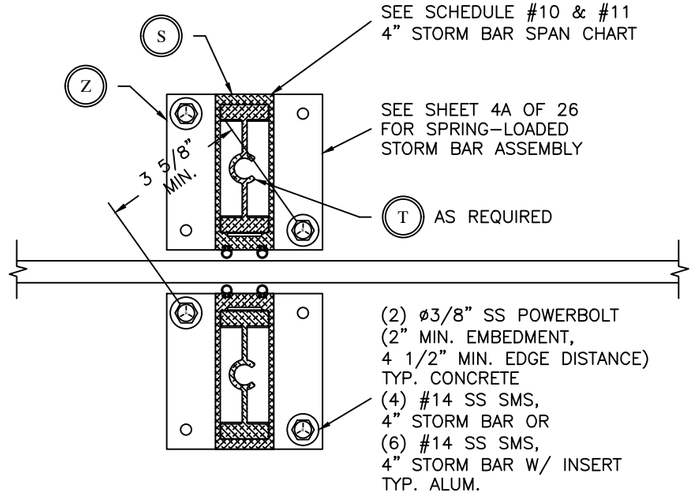
## SECTION "C-C" (3)

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 3 SPAN | PSF 2 SPAN | SPAN WIDTH IN INCHES (BETWEEN RAILS) 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 3 SPAN | PSF 2 SPAN | SPAN WIDTH IN INCHES (BETWEEN RAILS) 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 | 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.


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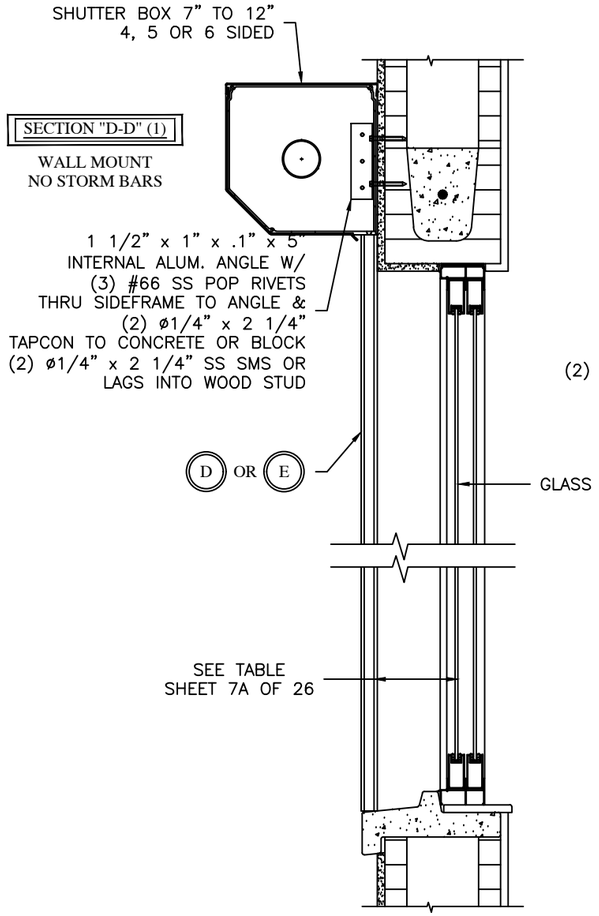

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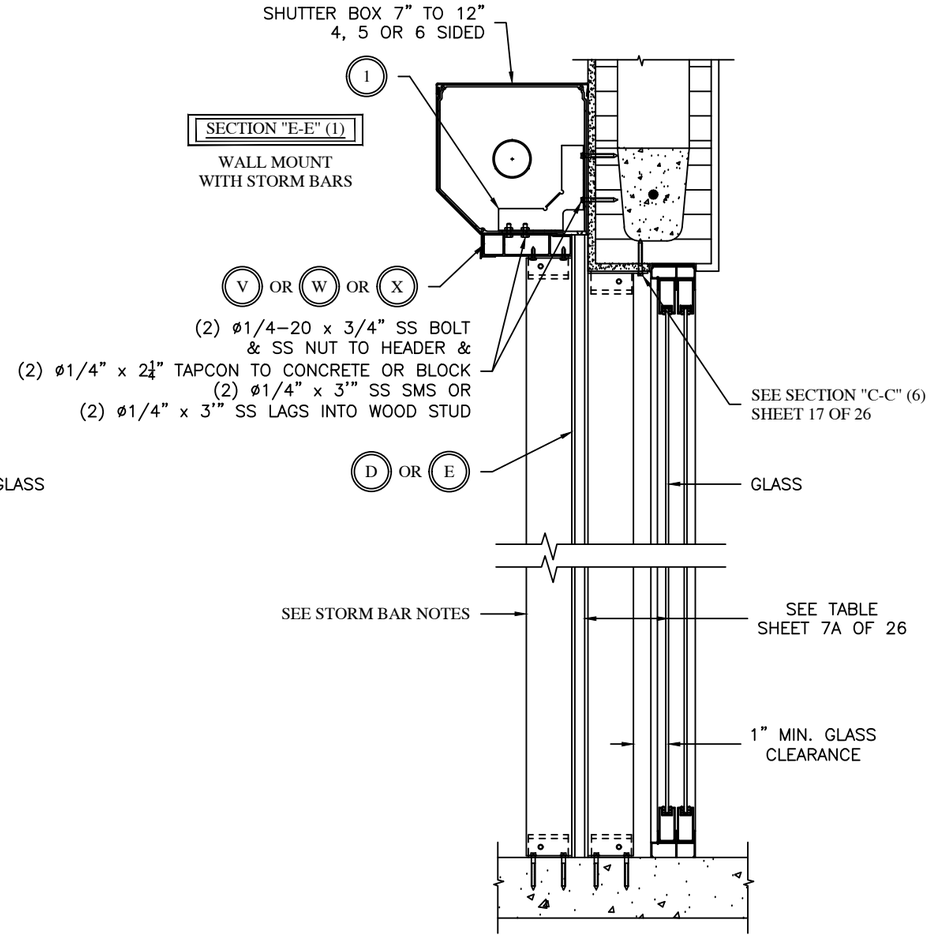
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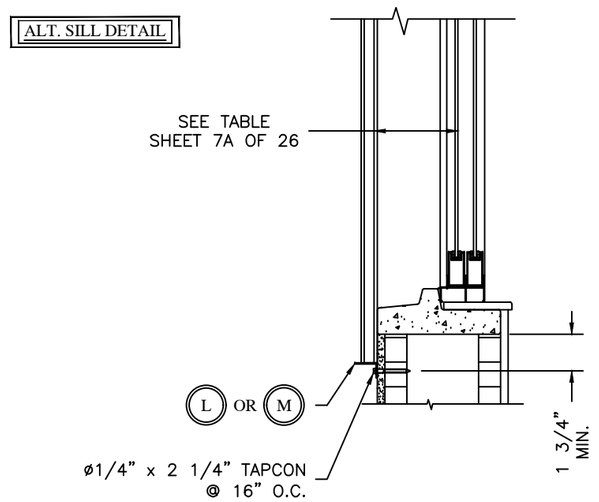
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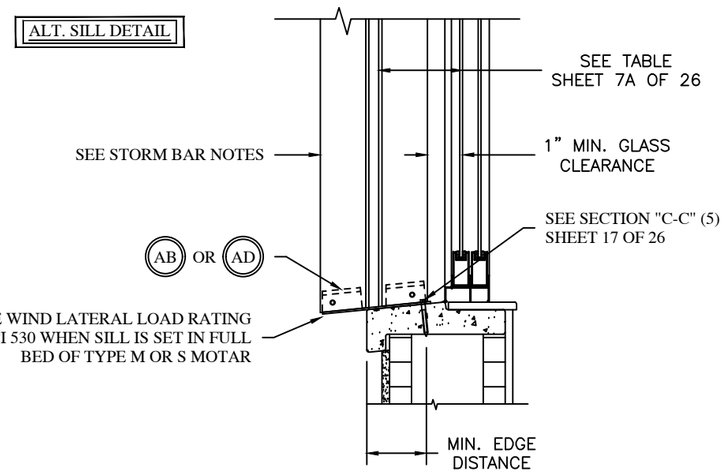
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| DATE: | 11-05-09 |
| DRAWING NO: | 3-01-031 |
| SIZE: | B |
| REV: | C |
| SCALE: | 1 : 4 |
| SHEET: | 18 OF 26 |




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 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.

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| 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

| | STORM BAR HEIGHT UNDER HEADER | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PSF | 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 13

MAXIMUM ALLOWABLE 3 SPAN 5.875" HEADER WIDTH (TRACK TO TRACK) E-E (1) ATTACHMENT TO WOOD

| | STORM BAR HEIGHT UNDER HEADER | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PSF | 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 | 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 | 191.3 | 185.7 | 180.7 | 176.0 | 168.0 | 159.6 | 152.0 | 145.1 |
| 35 | 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 |
| 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 | 126.0 | 119.7 | 114.0 | 108.8 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 14

MAXIMUM ALLOWABLE 2 SPAN 5.875" HEADER WIDTH (TRACK TO TRACK) E-E (1) ATTACHMENT TO BLOCK

| | STORM BAR HEIGHT UNDER HEADER | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PSF | 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 15

MAXIMUM ALLOWABLE 3 SPAN 5.875" HEADER WIDTH (TRACK TO TRACK) E-E (1) ATTACHMENT TO BLOCK

| | STORM BAR HEIGHT UNDER HEADER | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PSF | 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 | 187.5 | 177.6 | 168.7 | 160.7 | 153.4 |
| 30 | 192.0 | 192.0 | 192.0 | 192.0 | 192.0 | 192.0 | 192.0 | 192.0 | 187.5 | 175.8 | 165.4 | 156.2 | 148.0 | 140.6 | 133.9 | 127.8 |
| 35 | 192.0 | 192.0 | 192.0 | 192.0 | 192.0 | 192.0 | 185.4 | 172.2 | 160.7 | 150.7 | 141.8 | 133.9 | 126.9 | 120.5 | 114.8 | 109.6 |
| 40 | 192.0 | 192.0 | 192.0 | 192.0 | 191.7 | 175.8 | 162.2 | 150.7 | 140.6 | 131.8 | 124.1 | 117.2 | 111.0 | 105.5 | 100.4 | 95.9 |
| 45 | 192.0 | 192.0 | 192.0 | 187.5 | 170.4 | 156.2 | 144.2 | 133.9 | 125.0 | 117.2 | 110.3 | 104.2 | 98.7 | 93.7 | 89.3 | 85.2 |
| 50 | 192.0 | 192.0 | 187.5 | 168.7 | 153.4 | 140.6 | 129.8 | 120.5 | 112.5 | 105.5 | 99.3 | 93.7 | 88.8 | 84.4 | 80.3 | 76.7 |
| 55 | 192.0 | 191.7 | 170.4 | 153.4 | 139.4 | 127.8 | 118.0 | 109.6 | 102.3 | 95.9 | 90.2 | 85.2 | 80.7 | 76.7 | 73.0 | 69.7 |
| 60 | 192.0 | 175.8 | 156.2 | 140.6 | 127.8 | 117.2 | 108.2 | 100.4 | 93.7 | 87.9 | 82.7 | 78.1 | 74.0 | 70.3 | 67.0 | 63.9 |
| 65 | 185.4 | 162.2 | 144.2 | 129.8 | 118.0 | 108.2 | 99.8 | 92.7 | 86.5 | 81.1 | 76.3 | 72.1 | 68.3 | 64.9 | 61.8 | 59.0 |
| 70 | 172.2 | 150.7 | 133.9 | 120.5 | 109.6 | 100.4 | 92.7 | 86.1 | 80.3 | 75.3 | 70.9 | 67.0 | 63.4 | 60.3 | 57.4 | 54.8 |
| 75 | 160.7 | 140.6 | 125.0 | 112.5 | 102.3 | 93.7 | 86.5 | 80.3 | 75.0 | 70.3 | 66.2 | 62.5 | 59.2 | 56.2 | 53.6 | 51.1 |
| 80 | 150.7 | 131.8 | 117.2 | 105.5 | 95.9 | 87.9 | 81.1 | 75.3 | 70.3 | 65.9 | 62.0 | 58.6 | 55.5 | 52.7 | 50.2 | 47.9 |
| 85 | 141.8 | 124.1 | 110.3 | 99.3 | 90.2 | 82.7 | 76.3 | 70.9 | 66.2 | 62.0 | 58.4 | 55.1 | 52.2 | 49.6 | 47.3 | 45.1 |
| 90 | 133.9 | 117.2 | 104.2 | 93.7 | 85.2 | 78.1 | 72.1 | 67.0 | 62.5 | 58.6 | 55.1 | 52.1 | 49.3 | 46.9 | 44.6 | 42.6 |
| 95 | 126.9 | 111.0 | 98.7 | 88.8 | 80.7 | 74.0 | 68.3 | 63.4 | 59.2 | 55.5 | 52.2 | 49.3 | 46.7 | 44.4 | 42.3 | 40.4 |
| 100 | 120.5 | 105.5 | 93.7 | 84.4 | 76.7 | 70.3 | 64.9 | 60.3 | 56.2 | 52.7 | 49.6 | 46.9 | 44.4 | 42.2 | 40.2 | 38.3 |
| 125 | 96.4 | 84.4 | 75.0 | 67.5 | 61.4 | 56.2 | 51.9 | 48.2 | 45.0 | 42.2 | 39.7 | 37.5 | 35.5 | 33.7 | 32.1 | 30.7 |
| 150 | 80.3 | 70.3 | 62.5 | 56.2 | 51.1 | 46.9 | 43.3 | 40.2 | 37.5 | 35.2 | 33.1 | 31.2 | 29.6 | 28.1 | 26.8 | 25.6 |
| 175 | 68.9 | 60.3 | 53.6 | 48.2 | 43.8 | 40.2 | 37.1 | 34.4 | 32.1 | 30.1 | 28.4 | 26.8 | 25.4 | 24.1 | 23.0 | 21.9 |
| 200 | 60.3 | 52.7 | 46.9 | 42.2 | 38.3 | 35.2 | 32.4 | 30.1 | 28.1 | 26.4 | 24.8 | 23.4 | 22.2 | 21.1 | 20.1 | 19.2 |
| 225 | 53.6 | 46.9 | 41.7 | 37.5 | 34.1 | 31.2 | 28.8 | 26.8 | 25.0 | 23.4 | 22.1 | 20.8 | 19.7 | 18.7 | 17.9 | 17.0 |
| 250 | 48.2 | 42.2 | 37.5 | 33.7 | 30.7 | 28.1 | 26.0 | 24.1 | 22.5 | 21.1 | 19.9 | 18.7 | 17.8 | 16.9 | 16.1 | 15.3 |
| 275 | 43.8 | 38.3 | 34.1 | 30.7 | 27.9 | 25.6 | 23.6 | 21.9 | 20.5 | 19.2 | 18.0 | 17.0 | 16.1 | 15.3 | 14.6 | 13.9 |


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| SCALE: | 1 : 10 |
| SHEET: | 20 OF 26 |

## 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

| | STORM BAR HEIGHT UNDER HEADER | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PSF | 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

| | STORM BAR HEIGHT UNDER HEADER | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PSF | 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 | 111.6 | 106.6 |
| 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 |

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| | |
|---|---|
| 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

| | STORM BAR HEIGHT UNDER HEADER | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PSF | 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 | 53.5 | 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

| | STORM BAR HEIGHT UNDER HEADER | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PSF | 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 14A

MAXIMUM ALLOWABLE 2 SPAN 3.5" HEADER WIDTH (TRACK TO TRACK) E-E (1) ATTACHMENT TO BLOCK

| | STORM BAR HEIGHT UNDER HEADER | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PSF | 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 | 64.3 |
| 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 | 61.9 | 59.0 | 56.3 |
| 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 | 61.3 | 58.3 | 55.5 | 53.0 |
| 90 | 99.4 | 93.3 | 88.2 | 83.9 | 80.1 | 76.8 | 73.9 | 71.4 | 69.0 | 66.9 | 64.8 | 61.2 | 57.9 | 55.0 | 52.4 | 50.0 |
| 95 | 96.9 | 90.9 | 85.9 | 81.7 | 78.1 | 74.9 | 72.0 | 69.5 | 67.2 | 65.2 | 61.3 | 57.9 | 54.9 | 52.1 | 49.7 | 47.4 |
| 100 | 94.5 | 88.7 | 83.8 | 79.7 | 76.1 | 73.0 | 70.3 | 67.8 | 65.6 | 61.9 | 58.3 | 55.0 | 52.1 | 49.5 | 47.2 | 45.0 |
| 125 | 85.0 | 79.7 | 75.3 | 71.6 | 68.4 | 65.6 | 61.0 | 56.6 | 52.8 | 49.5 | 46.6 | 44.0 | 41.7 | 39.6 | 37.7 | 36.0 |
| 150 | 77.8 | 73.0 | 69.0 | 65.6 | 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 | 72.3 | 67.8 | 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 | 67.7 | 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 15A

MAXIMUM ALLOWABLE 3 SPAN 3.5" HEADER WIDTH (TRACK TO TRACK) E-E (1) ATTACHMENT TO BLOCK

| | STORM BAR HEIGHT UNDER HEADER | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PSF | 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 | 93.7 | 89.3 | 85.2 |
| 50 | 146.5 | 138.5 | 131.0 | 124.7 | 119.2 | 114.4 | 110.1 | 106.3 | 102.9 | 99.8 | 96.9 | 93.7 | 88.8 | 84.4 | 80.3 | 76.7 |
| 55 | 141.0 | 132.4 | 125.3 | 119.2 | 113.9 | 109.3 | 105.2 | 101.6 | 98.3 | 95.3 | 90.2 | 85.2 | 80.7 | 76.7 | 73.0 | 69.7 |
| 60 | 135.3 | 127.1 | 120.2 | 114.3 | 109.3 | 104.9 | 100.9 | 97.4 | 93.7 | 87.9 | 82.7 | 78.1 | 74.0 | 70.3 | 67.0 | 63.9 |
| 65 | 130.3 | 122.4 | 115.7 | 110.1 | 105.2 | 100.9 | 97.2 | 92.7 | 86.5 | 81.1 | 76.3 | 72.1 | 68.3 | 64.9 | 61.8 | 59.0 |
| 70 | 125.8 | 118.1 | 111.7 | 106.3 | 101.5 | 97.4 | 92.7 | 86.1 | 80.3 | 75.3 | 70.9 | 67.0 | 63.4 | 60.3 | 57.4 | 54.8 |
| 75 | 121.8 | 114.3 | 108.1 | 102.8 | 98.3 | 93.7 | 86.5 | 80.3 | 75.0 | 70.3 | 66.2 | 62.5 | 59.2 | 56.2 | 53.6 | 51.1 |
| 80 | 118.1 | 110.8 | 104.8 | 99.7 | 95.3 | 87.9 | 81.1 | 75.3 | 70.3 | 65.9 | 62.0 | 58.6 | 55.5 | 52.7 | 50.2 | 47.9 |
| 85 | 114.7 | 107.7 | 101.8 | 96.9 | 90.2 | 82.7 | 76.3 | 70.9 | 66.2 | 62.0 | 58.4 | 55.1 | 52.2 | 49.6 | 47.3 | 45.1 |
| 90 | 111.7 | 104.8 | 99.1 | 93.7 | 85.2 | 78.1 | 72.1 | 67.0 | 62.5 | 58.6 | 55.1 | 52.1 | 49.3 | 46.9 | 44.6 | 42.6 |
| 95 | 108.8 | 102.1 | 96.6 | 88.8 | 80.7 | 74.0 | 68.3 | 63.4 | 59.2 | 55.5 | 52.2 | 49.3 | 46.7 | 44.4 | 42.3 | 40.4 |
| 100 | 106.2 | 99.7 | 93.7 | 84.4 | 76.7 | 70.3 | 64.9 | 60.3 | 56.2 | 52.7 | 49.6 | 46.9 | 44.4 | 42.2 | 40.2 | 38.3 |
| 125 | 95.5 | 84.4 | 75.0 | 67.5 | 61.4 | 56.2 | 51.9 | 48.2 | 45.0 | 42.2 | 39.7 | 37.5 | 35.5 | 33.7 | 32.1 | 30.7 |
| 150 | 80.3 | 70.3 | 62.5 | 56.2 | 51.1 | 46.9 | 43.3 | 40.2 | 37.5 | 35.2 | 33.1 | 31.2 | 29.6 | 28.1 | 26.8 | 25.6 |
| 175 | 68.9 | 60.3 | 53.6 | 48.2 | 43.8 | 40.2 | 37.1 | 34.4 | 32.1 | 30.1 | 28.4 | 26.8 | 25.4 | 24.1 | 23.0 | 21.9 |
| 200 | 60.3 | 52.7 | 46.9 | 42.2 | 38.3 | 35.2 | 32.4 | 30.1 | 28.1 | 26.4 | 24.8 | 23.4 | 22.2 | 21.1 | 20.1 | 19.2 |
| 225 | 53.6 | 46.9 | 41.7 | 37.5 | 34.1 | 31.2 | 28.8 | 26.8 | 25.0 | 23.4 | 22.1 | 20.8 | 19.7 | 18.7 | 17.9 | 17.0 |
| 250 | 48.2 | 42.2 | 37.5 | 33.7 | 30.7 | 28.1 | 26.0 | 24.1 | 22.5 | 21.1 | 19.9 | 18.7 | 17.8 | 16.9 | 16.1 | 15.3 |
| 275 | 43.8 | 38.3 | 34.1 | 30.7 | 27.9 | 25.6 | 23.6 | 21.9 | 20.5 | 19.2 | 18.0 | 17.0 | 16.1 | 15.3 | 14.6 | 13.9 |


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D.L. Fowler, P.E. No. 50458

DONALD LYNN FOWLER LICENSE No 50458 STATE OF FLORIDA PROFESSIONAL ENGINEER

| | |
|---|---|
| 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: | 20B OF 26 |

## SCHEDULE 16A

MAXIMUM ALLOWABLE 2 SPAN 3.5 HEADER WIDTH (TRACK TO TRACK) E-E (1), (2) AND (3) ATTACHMENT TO CONCRETE OR BUILD OUT

| | STORM BAR HEIGHT UNDER HEADER | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PSF | 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 |

## SCHEDULE 17A

MAXIMUM ALLOWABLE 3 SPAN 3.5 HEADER WIDTH (TRACK TO TRACK) E-E (1), (2) AND (3) ATTACHMENT TO CONCRETE OR BUILD OUT

| | STORM BAR HEIGHT UNDER HEADER | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PSF | 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 | 76.1 | 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 |

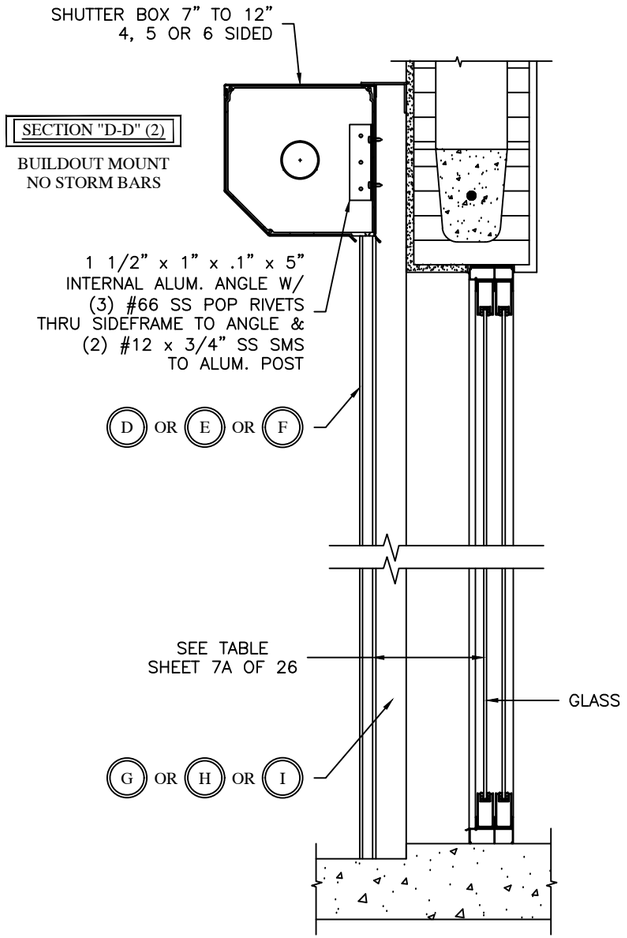
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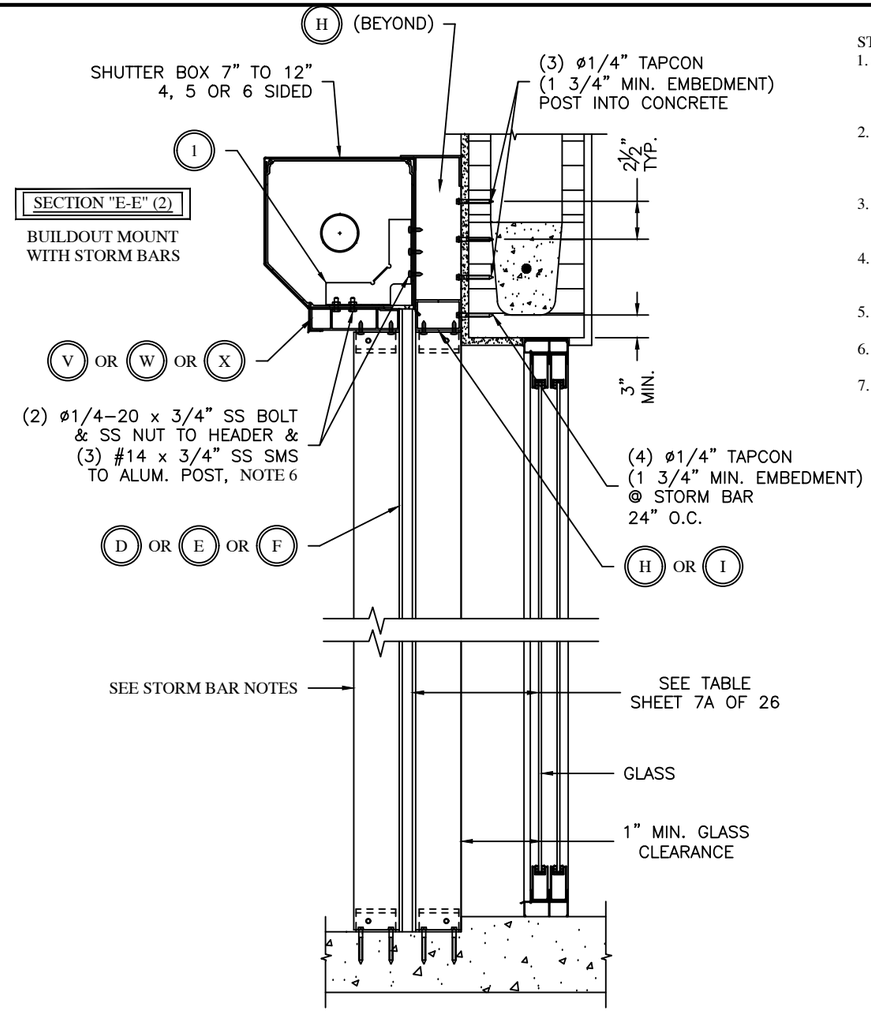
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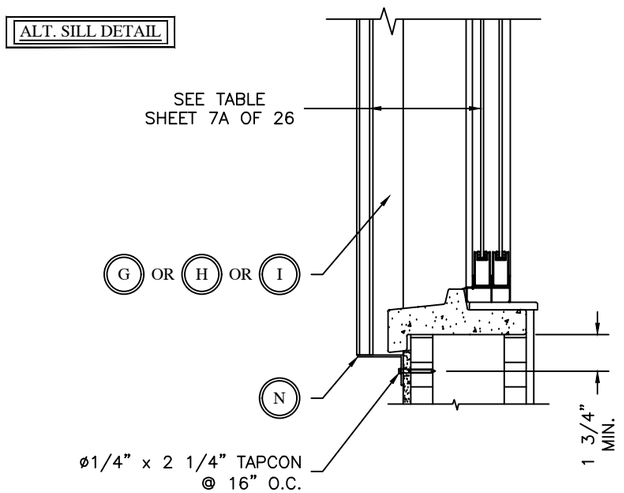
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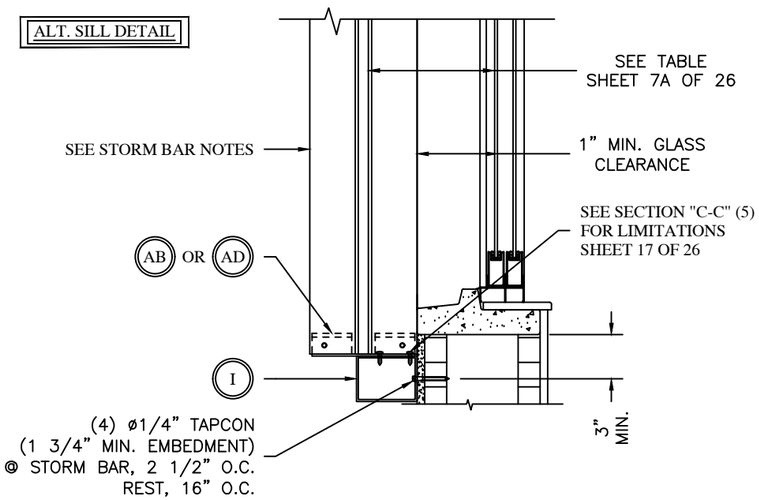
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| DRAWN: | DF |
| DATE: | 08-10-04 |
| APPROVED: | DLF |
| DATE: | 10-28-08 |
| DRAWING NO: | 3-01-031 |
| SIZE: B | REV: - |
| SCALE: | 1 : 10 |
| SHEET: | 20C OF 26 |




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.

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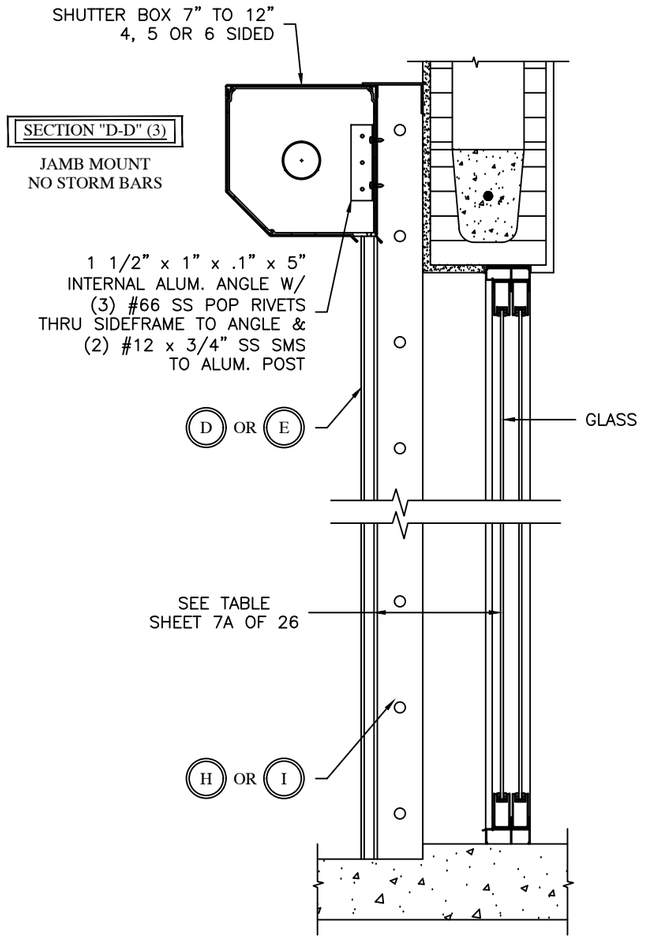
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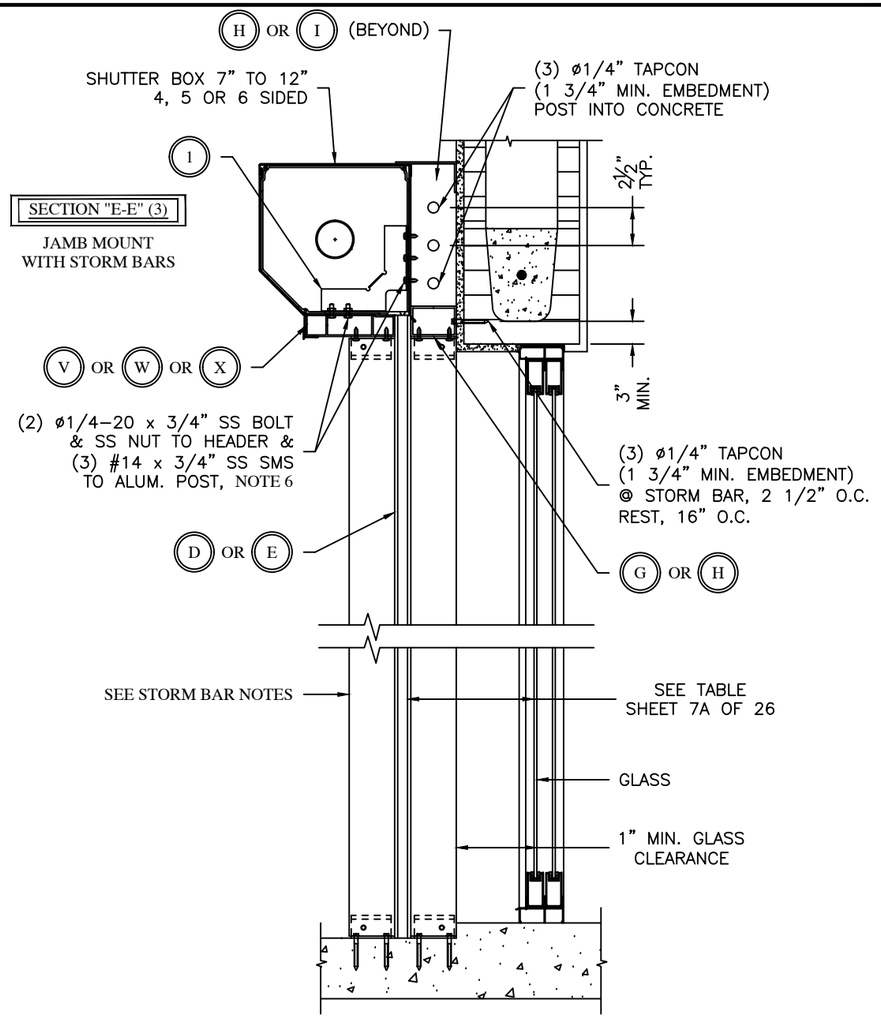
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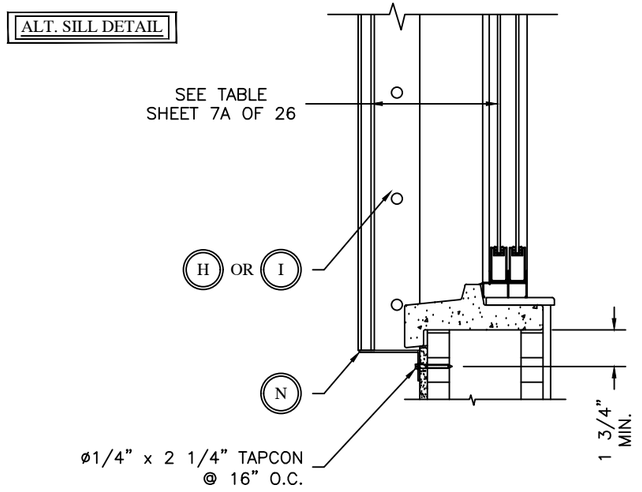
Engineer

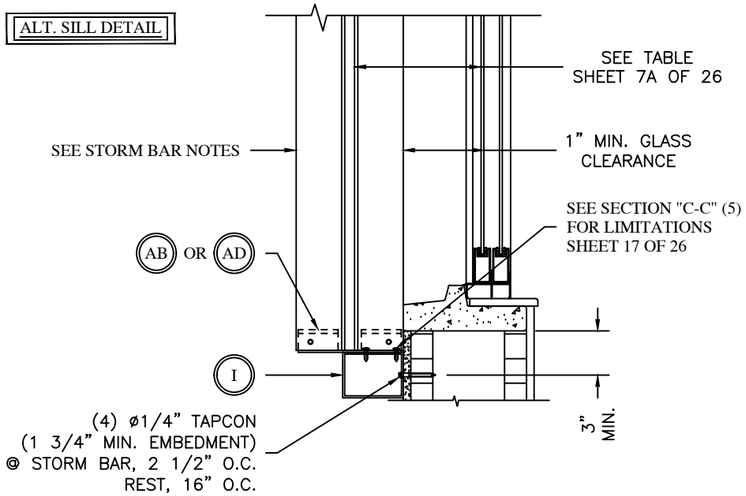
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| DRAWN: | DF |
| DATE: | 08-10-04 |
| APPROVED: | DLF |
| DATE: | 10-28-08 |
| DRAWING NO: | 3-01-031 |
| SIZE: B | REV: C |
| SCALE: | 1 : 10 |
| SHEET: | 21 OF 26 |




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 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.

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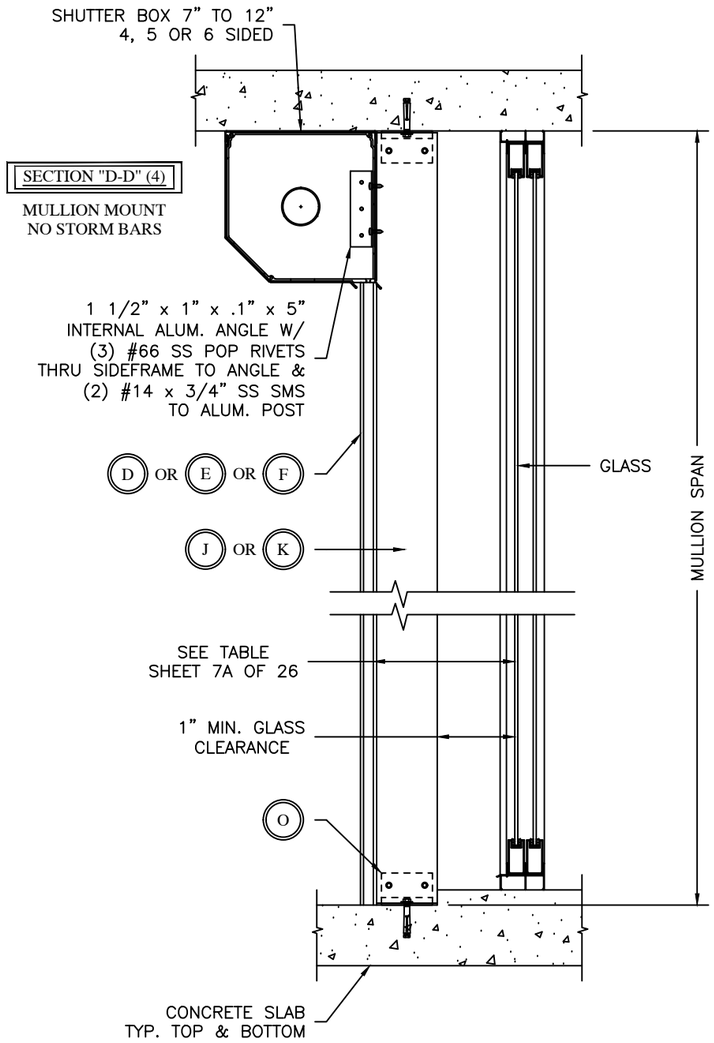
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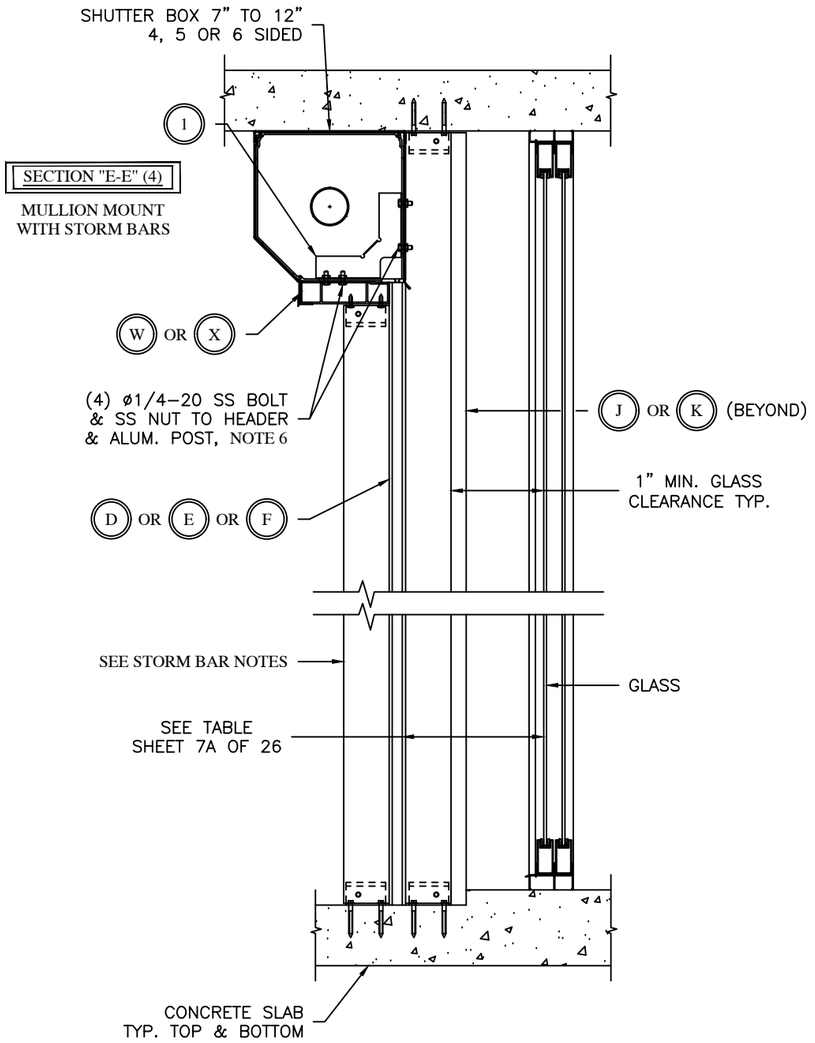
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D. Fowler Professional Engineer

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| 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. 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.

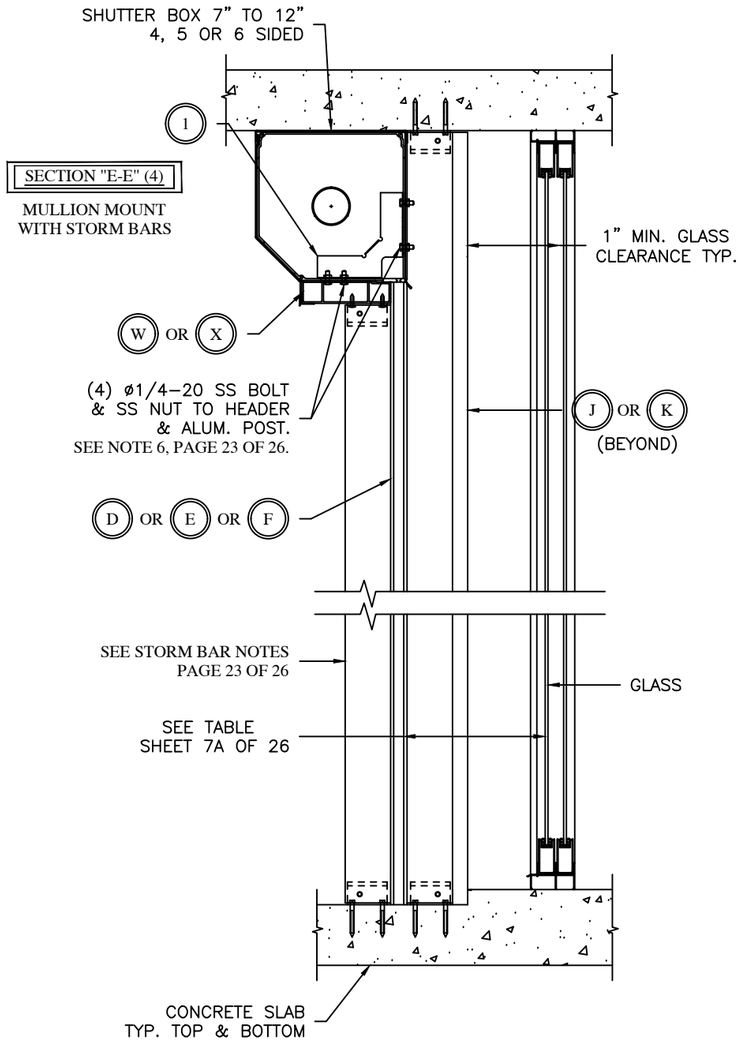
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| | |
|---|---|
| DRAWN: | DF |
| DATE: | 08-10-04 |
| APPROVED: | DLF |
| DATE: | 10-28-08 |
| DRAWING NO: | 3-01-031 |
| SIZE: B | REV: B |
| SCALE: | 1 : 10 |
| SHEET: | 23 OF 26 |




MAXIMUM ALLOWABLE 2 SPAN HEADER WIDTH (TRACK TO TRACK) E-E (4) BUILDOUT WITH BOLTED CONNECTION - **SCHEDULE 18** *

| | STORM BAR HEIGHT UNDER HEADER | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PSF | 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 | 148.5 | 145.2 | 142.1 |
| 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 | 145.4 | 142.1 | 138.9 | 136.0 |
| 60 | 176.6 | 166.1 | 157.4 | 149.9 | 143.4 | 137.8 | 132.7 | 128.2 | 124.2 | 120.5 | 147.0 | 143.2 | 139.7 | 136.4 | 133.4 | 130.6 |
| 65 | 170.2 | 160.1 | 151.6 | 144.4 | 138.2 | 132.7 | 127.9 | 123.5 | 119.6 | 145.6 | 141.6 | 138.0 | 134.6 | 131.5 | 128.6 | 125.9 |
| 70 | 164.5 | 154.7 | 146.5 | 139.5 | 133.5 | 128.2 | 123.5 | 119.3 | 144.9 | 140.7 | 136.9 | 133.3 | 130.1 | 127.1 | 124.2 | 121.6 |
| 75 | 159.3 | 149.8 | 141.9 | 135.1 | 129.2 | 124.1 | 119.6 | 144.9 | 140.4 | 136.3 | 132.6 | 129.2 | 126.0 | 123.0 | 120.3 | 117.8 |
| 80 | 154.6 | 145.4 | 137.6 | 131.1 | 125.4 | 120.4 | 145.5 | 140.6 | 136.3 | 132.3 | 128.7 | 125.3 | 122.3 | 119.4 | 116.7 | 114.3 |
| 85 | 150.3 | 141.3 | 133.8 | 127.4 | 121.9 | 146.7 | 141.5 | 136.8 | 132.5 | 128.6 | 125.1 | 121.9 | 118.9 | 116.1 | 113.5 | 111.1 |
| 90 | 146.4 | 137.6 | 130.3 | 124.1 | 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 | 142.7 | 134.2 | 127.0 | 120.9 | 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 | 139.4 | 131.0 | 124.0 | 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 | 125.6 | 118.0 | 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 | 63.8 | 60.9 |

* 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** *

| | STORM BAR HEIGHT UNDER HEADER | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PSF | 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 | 165.7 | 162.0 | 158.7 |
| 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 | 162.3 | 158.6 | 155.2 | 151.9 |
| 60 | 197.2 | 185.6 | 175.9 | 167.7 | 160.5 | 154.2 | 148.6 | 143.6 | 139.1 | 135.0 | 164.1 | 159.9 | 156.0 | 152.4 | 149.1 | 146.0 |
| 65 | 190.2 | 179.0 | 169.6 | 161.6 | 154.6 | 148.6 | 143.2 | 138.3 | 134.0 | 162.6 | 158.2 | 154.1 | 150.4 | 146.9 | 143.7 | 140.7 |
| 70 | 183.8 | 173.0 | 163.9 | 156.1 | 149.4 | 143.5 | 138.3 | 133.6 | 161.8 | 157.2 | 152.9 | 149.0 | 145.4 | 142.0 | 138.9 | 136.0 |
| 75 | 178.1 | 167.5 | 158.7 | 151.2 | 144.7 | 139.0 | 133.9 | 161.8 | 156.8 | 152.3 | 148.2 | 144.4 | 140.8 | 137.6 | 134.5 | 131.7 |
| 80 | 172.9 | 162.6 | 154.0 | 146.7 | 140.4 | 134.9 | 162.4 | 157.1 | 152.2 | 147.8 | 143.8 | 140.1 | 136.7 | 133.5 | 130.6 | 127.8 |
| 85 | 168.1 | 158.1 | 149.8 | 142.7 | 136.5 | 163.8 | 158.0 | 152.8 | 148.1 | 143.8 | 139.9 | 136.3 | 132.9 | 129.9 | 127.0 | 124.3 |
| 90 | 163.7 | 154.0 | 145.9 | 138.9 | 166.0 | 159.6 | 153.9 | 148.9 | 144.3 | 140.1 | 136.3 | 132.7 | 129.5 | 126.5 | 123.7 | 121.1 |
| 95 | 159.7 | 150.2 | 142.2 | 135.5 | 161.9 | 155.7 | 150.2 | 145.2 | 140.7 | 136.6 | 132.9 | 129.5 | 126.3 | 123.3 | 120.6 | 118.0 |
| 100 | 155.9 | 146.6 | 138.9 | 165.1 | 158.2 | 152.1 | 146.7 | 141.8 | 137.4 | 133.4 | 129.8 | 126.4 | 123.3 | 120.4 | 117.7 | 115.2 |
| 125 | 140.6 | 165.0 | 156.5 | 149.2 | 142.9 | 137.3 | 132.4 | 128.0 | 124.0 | 120.4 | 117.0 | 114.0 | 111.2 | 108.6 | 106.1 | 103.9 |
| 150 | 161.2 | 151.8 | 143.9 | 137.2 | 131.3 | 126.2 | 121.6 | 117.6 | 113.9 | 110.5 | 107.5 | 104.7 | 102.1 | 99.7 | 97.4 | 95.1 |
| 175 | 150.2 | 141.4 | 134.0 | 127.7 | 122.2 | 117.5 | 113.2 | 109.4 | 106.0 | 102.8 | 100.0 | 97.4 | 94.4 | 89.7 | 85.4 | 81.5 |
| 200 | 141.3 | 132.9 | 126.0 | 120.0 | 114.9 | 110.4 | 106.4 | 102.8 | 99.5 | 96.7 | 92.3 | 87.2 | 82.6 | 78.5 | 74.7 | 71.3 |
| 225 | 133.8 | 125.9 | 119.3 | 113.7 | 108.8 | 104.5 | 100.7 | 97.3 | 93.0 | 87.2 | 82.1 | 77.5 | 73.4 | 69.8 | 66.4 | 63.4 |
| 250 | 127.5 | 119.9 | 113.6 | 108.2 | 103.6 | 99.5 | 96.0 | 89.7 | 83.7 | 78.5 | 73.9 | 69.8 | 66.1 | 62.8 | 59.8 | 57.1 |
| 275 | 122.0 | 114.7 | 108.7 | 103.5 | 99.0 | 95.1 | 87.8 | 81.5 | 76.1 | 71.3 | 67.1 | 63.4 | 60.1 | 57.1 | 54.4 | 51.9 |

* 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.

Roll-a-way By QMI
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ITASCA, IL 60143
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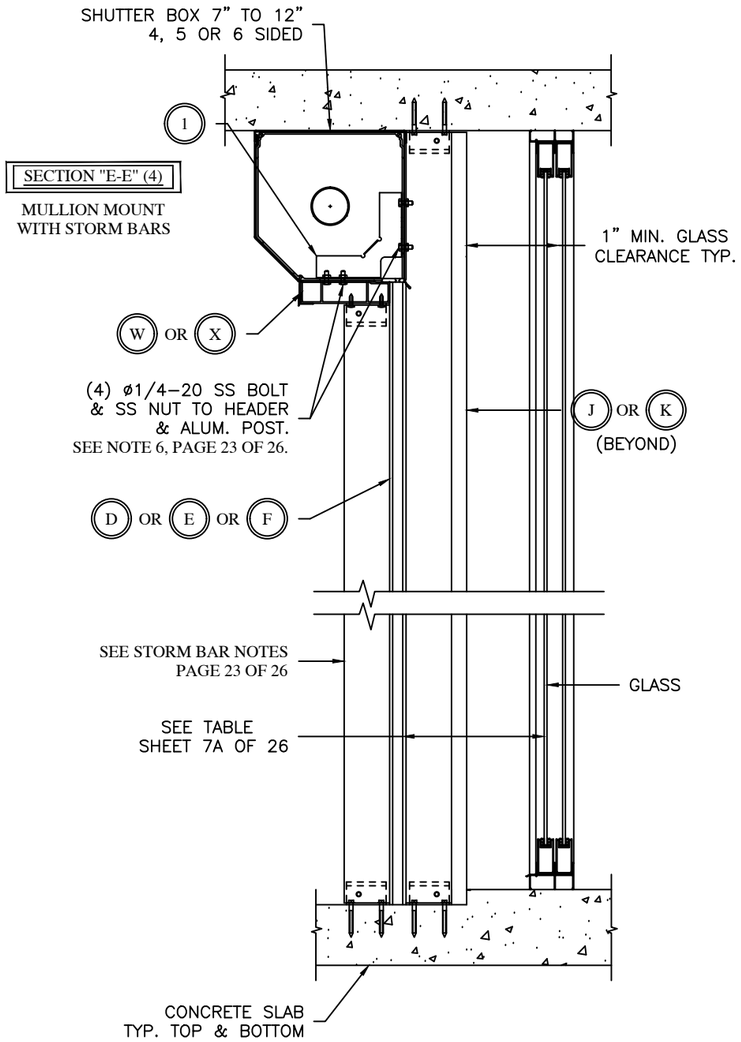
DRAWING TITLE:

Digitally signed by: Fowler, Donald
DN: CN = Fowler, Donald OU = Colleagues, VeriClaim, O365 Users
Date: 2020.10.31 16:10:56 -04'00'

Donald L. Fowler, P.E.
Professional Engineer

DONALD LYNN FOWLER LICENSE No 50458 STATE OF FLORIDA PROFESSIONAL ENGINEER

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




MAXIMUM ALLOWABLE 2 SPAN HEADER WIDTH (TRACK TO TRACK) E-E (4) BUILDOUT WITH BOLTED CONNECTION - **SCHEDULE 18A** *

**3.5" HEADER**

| | STORM BAR HEIGHT UNDER HEADER | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PSF | 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** *

**3.5" HEADER**

| | STORM BAR HEIGHT UNDER HEADER | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PSF | 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 |

Roll-a-way By QMI
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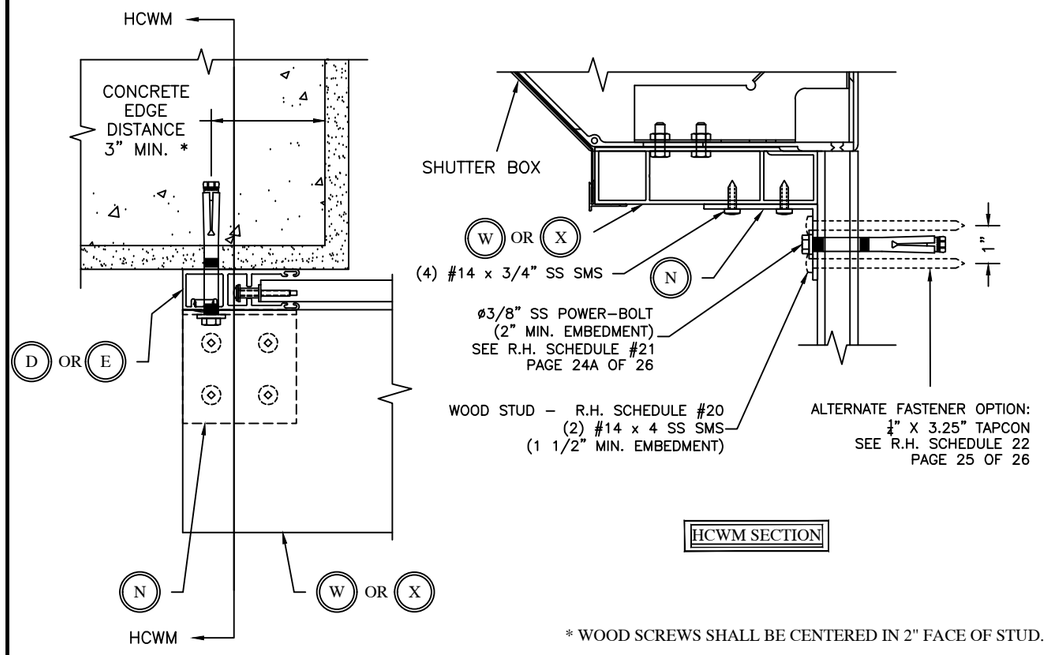
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Date: 2020.10.31 16:11:41 -04'00'

DONALD LYNN FOWLER LICENSE No 50458 STATE OF FLORIDA PROFESSIONAL ENGINEER

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

WALL MOUNT
SECTION A-A(1)

REINFORCED HEADER
CONNECTION

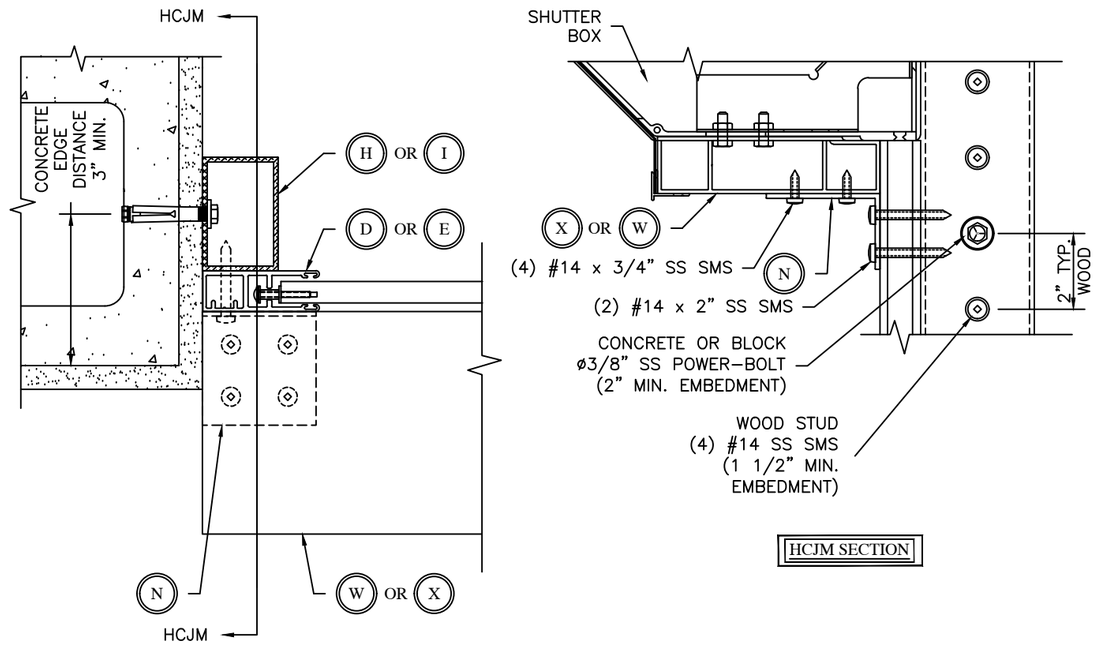



HCWM SECTION

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

JAMB MOUNT

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




HCJM SECTION

MAXIMUM ALLOWABLE 2 SPAN 5.875" HEADER WIDTH (TRACK TO TRACK) - **REINFORCED HEADER SCHEDULE 20**

| | STORM BAR HEIGHT UNDER HEADER | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PSF | 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**

| | STORM BAR HEIGHT UNDER HEADER | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PSF | 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 | 121.7 | 116.2 |
| 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 | 119.3 | 113.6 | 108.5 |
| 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 | 117.7 | 111.8 | 106.5 | 101.7 |
| 85 | 187.0 | 176.2 | 167.1 | 159.4 | 152.6 | 146.7 | 141.5 | 136.8 | 132.5 | 128.6 | 123.8 | 117.0 | 110.8 | 105.3 | 100.2 | 95.7 |
| 90 | 182.3 | 171.7 | 162.8 | 155.2 | 148.7 | 142.9 | 137.8 | 133.2 | 129.0 | 124.3 | 117.0 | 110.5 | 104.6 | 99.4 | 94.7 | 90.4 |
| 95 | 177.8 | 167.5 | 158.8 | 151.4 | 145.0 | 139.4 | 134.4 | 129.9 | 125.6 | 117.7 | 110.8 | 104.6 | 99.1 | 94.2 | 89.7 | 85.6 |
| 100 | 173.7 | 163.6 | 155.1 | 147.9 | 141.6 | 136.1 | 131.2 | 126.8 | 119.3 | 111.8 | 105.3 | 99.4 | 94.2 | 89.5 | 85.2 | 81.3 |
| 125 | 157.1 | 147.8 | 140.1 | 133.5 | 127.8 | 119.3 | 110.1 | 102.3 | 95.4 | 89.5 | 84.2 | 79.5 | 75.3 | 71.6 | 68.2 | 65.1 |
| 150 | 144.5 | 136.0 | 128.8 | 119.3 | 108.5 | 99.4 | 91.8 | 85.2 | 79.5 | 74.6 | 70.2 | 66.3 | 62.8 | 59.6 | 56.8 | 54.2 |
| 175 | 134.6 | 126.7 | 113.6 | 102.3 | 93.0 | 85.2 | 78.7 | 73.0 | 68.2 | 63.9 | 60.1 | 56.8 | 53.8 | 51.1 | 48.7 | 46.5 |
| 200 | 126.7 | 111.8 | 99.4 | 89.5 | 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 | 113.6 | 99.4 | 88.4 | 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 | 102.3 | 89.5 | 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 | 93.0 | 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


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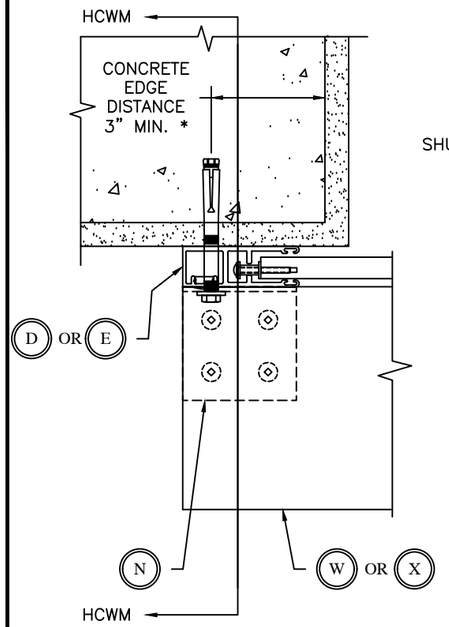
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DN: CN = Fowler, Donald, OU = Colleagues, VeriClaim, O365 Users
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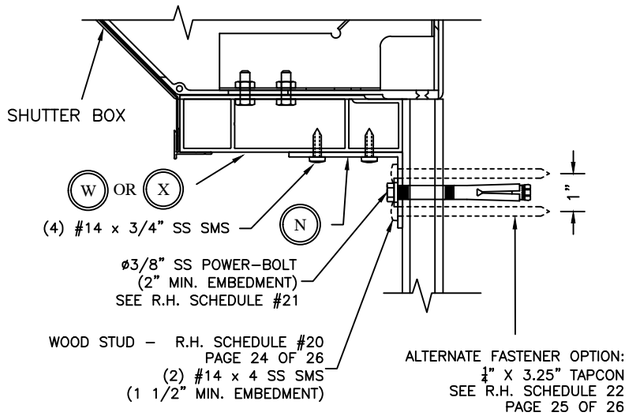
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| | |
|---|---|
| DRAWN: | DF |
| DATE: | 11-05-09 |
| APPROVED: | DLF |
| DATE: | 11-05-09 |
| DRAWING NO: | 3-01-031 |
| SIZE: B | REV: D |
| SCALE: | 1 : 4 |
| SHEET: | 24 OF 26 |

WALL MOUNT
SECTION A-A(1)

REINFORCED HEADER
CONNECTION

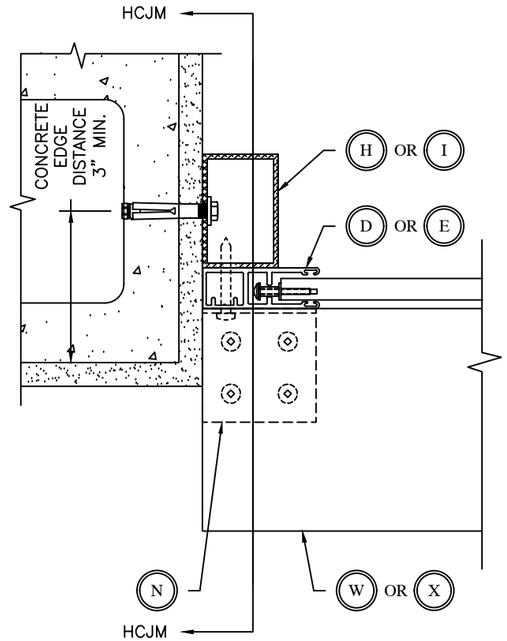



HCWM SECTION

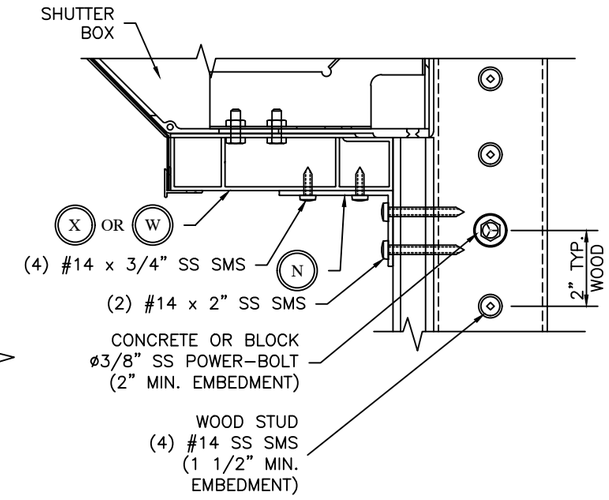
* WOOD SCREWS SHALL BE CENTERED IN 2" FACE OF STUD.

**NOTE: USE 3 SPAN SCHEDULE 19, PAGE 23A WITH SCH. 21**




JAMB MOUNT

REINFORCED HEADER
CONNECTION
SEE R.H. SCHEDULE#22




HCJM SECTION

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

| | STORM BAR HEIGHT UNDER HEADER | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PSF | 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 Reinforcment Angle

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

| | STORM BAR HEIGHT UNDER HEADER | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PSF | 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 | 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 | 63.8 | 60.9 |

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


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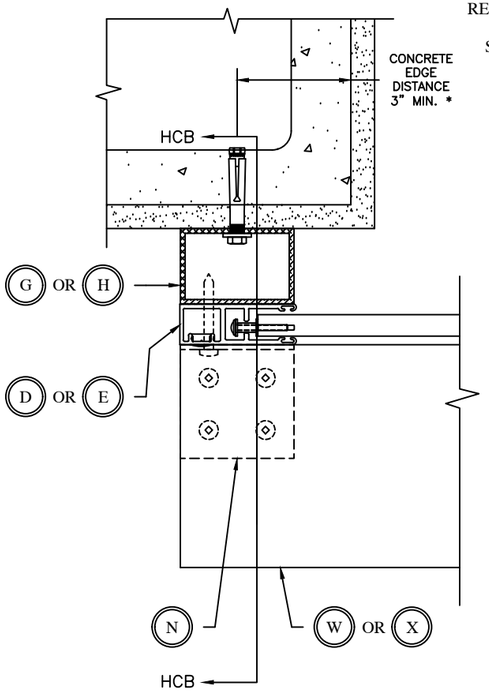
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| REV: | - |
| SCALE: | 1 : 4 |
| SHEET: | 24A OF 26 |

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

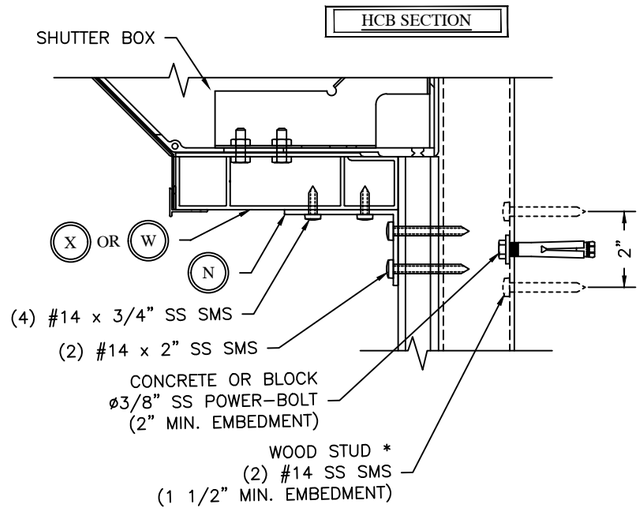
**NOTE: USE 3 SPAN SCHEDULE 17, PAGE 20A, AS NEEDED.**

## BUILDOUT MOUNT

REINFORCED HEADER CONNECTION
SEE SCHEDULE 22




## HCB SECTION



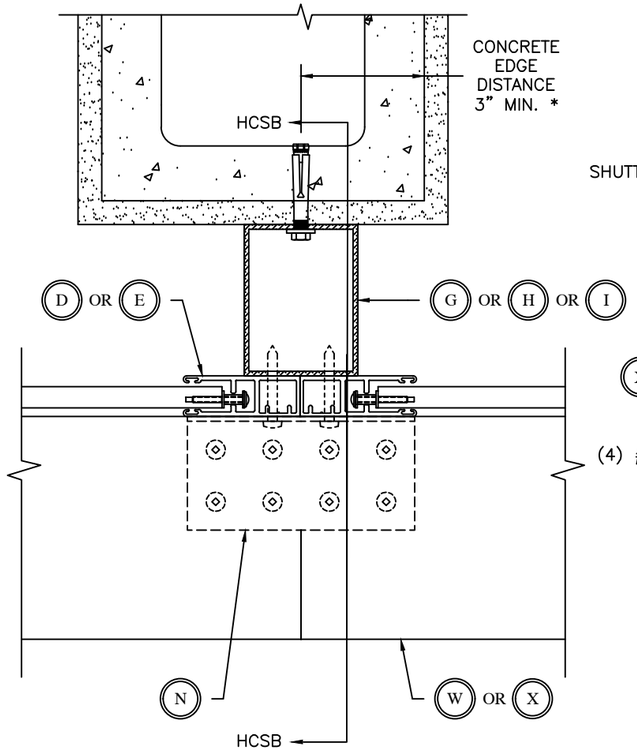

MAXIMUM ALLOWABLE 2 SPAN 7.25" HEADER WIDTH (TRACK TO TRACK) - **REINFORCED HEADER SCHEDULE 22 ***

| | STORM BAR HEIGHT UNDER HEADER | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PSF | 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 |

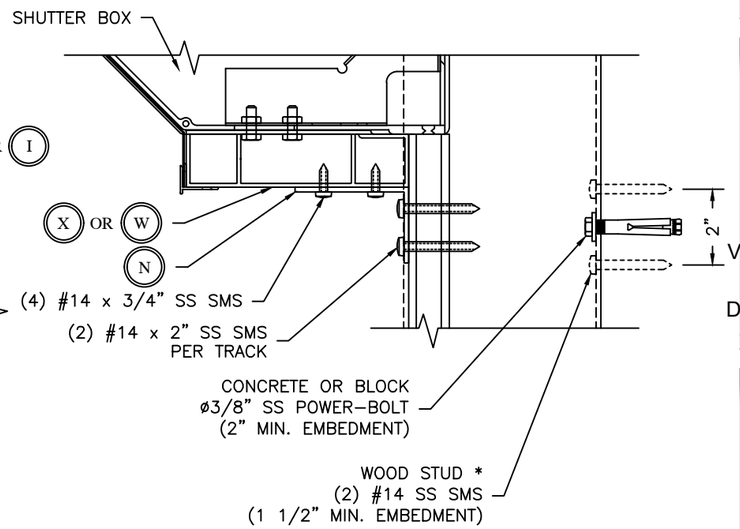
* BUILDOUT AND MULLION MOUNT WITH REINFORCEMENT ANGLE

## SPLIT BUILDOUT MOUNT

REINFORCED HEADER CONNECTION
SEE SCHEDULE 22




## HCSB SECTION




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

| | STORM BAR HEIGHT UNDER HEADER | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PSF | 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 |

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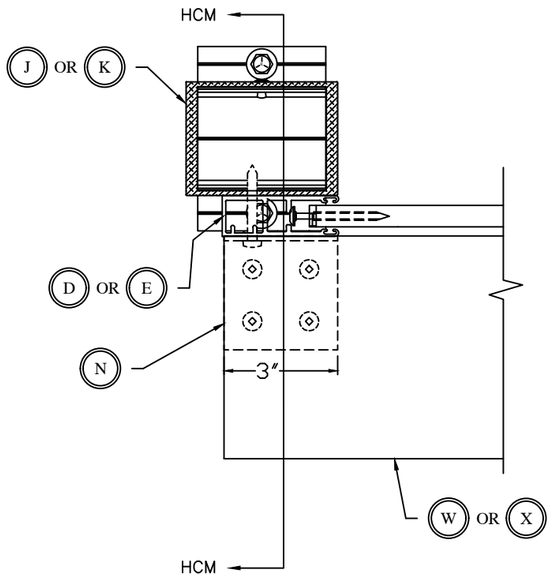
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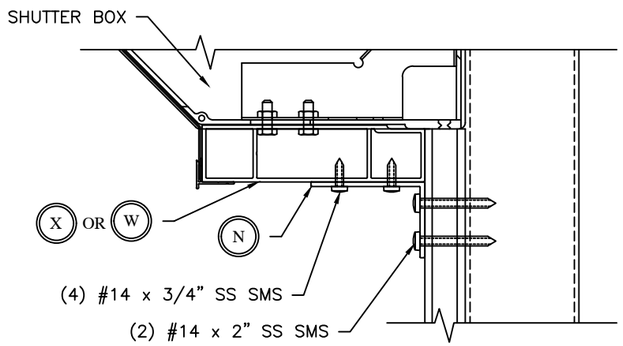
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| REV: | C |
| SCALE: | 1 : 4 |
| SHEET: | 25 OF 26 |

MULLION MOUNT

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

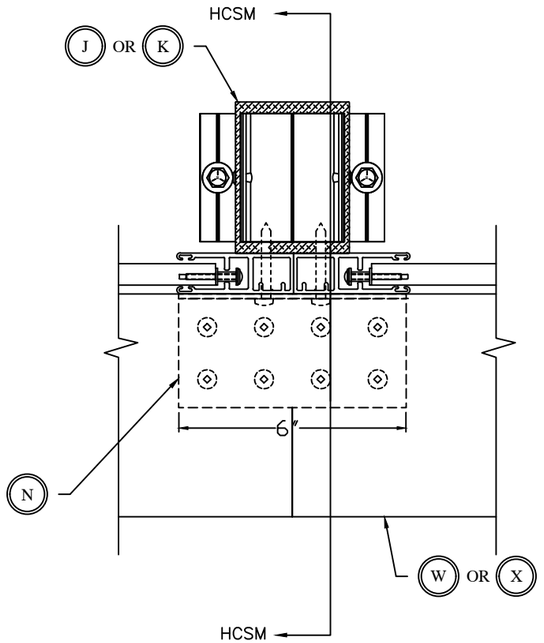


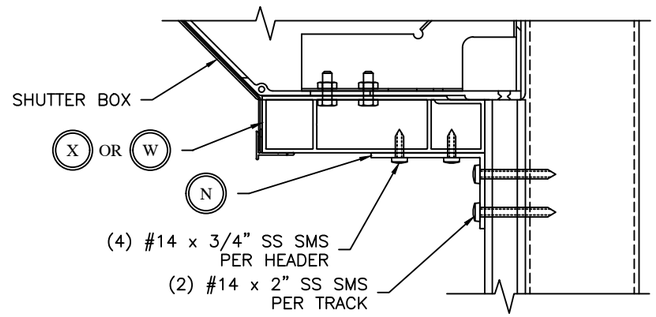




HCM SECTION

SPLIT MULLION MOUNT

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




HCSM SECTION


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