

6.8 ACCORDION SHUTTER
FOR USE WITHIN AND OUTSIDE THE HVHZ

TABLE 1
ALLOWABLE SPAN SCHEDULE
FOR USE WITHIN THE HVHZ

| DESIGN WIND LOAD (PSF) | HVHZ POSITIVE WIND LOAD WITH UNIMATE (30) | HVHZ POSITIVE WIND LOAD WITH CENTERMATES (29) OR (31) & (32) OR (33) & (34) | HVHZ NEGATIVE WIND LOAD ALL MOUNTING CONDITIONS** |
|------------------------|-------------------------------------------|-----------------------------------------------------------------------------|---------------------------------------------------|
| 23.9                   | 156"                                      | 156"                                                                        | 156"                                              |
| 25.0                   | 154"                                      | 156"                                                                        | 156"                                              |
| 30.0                   | 147"                                      | 156"                                                                        | 156"                                              |
| 35.0                   | 142"                                      | 150"                                                                        | 156"                                              |
| 40.0                   | 137"                                      | 145"                                                                        | 156"                                              |
| 45.0                   | 133"                                      | 141"                                                                        | 156"                                              |
| 50.0                   | 129"                                      | 137"                                                                        | 156"                                              |
| 55.0                   | 126"                                      | 134"                                                                        | 155"                                              |
| 60.0                   | 124"                                      | 131"                                                                        | 148"                                              |
| 65.0                   | 121"                                      | 129"                                                                        | 143"                                              |
| 70.0                   | 119"                                      | 126"                                                                        | 137"                                              |
| 75.0                   | 117"                                      | 124"                                                                        | 133"                                              |
| 80.0                   | 115"                                      | 122"                                                                        | 128"                                              |
| 85.0                   | 113"                                      | 120"                                                                        | 125"                                              |
| 90.0                   | 112"                                      | 118"                                                                        | 121"                                              |
| 95.0                   | 110"                                      | 117"                                                                        | 118"                                              |
| 100.0                  | 109"                                      | 115"                                                                        | 115"                                              |
| 105.0                  | 107"                                      | 112"                                                                        | 112"                                              |
| 110.0                  | 106"                                      | 110"                                                                        | 110"                                              |
| 115.0                  | 105"                                      | 107"                                                                        | 107"                                              |
| 120.0                  | 104"                                      | 105"                                                                        | 105"                                              |
| 125.0                  | -                                         | -                                                                           | 103"                                              |
| 130.0                  | -                                         | -                                                                           | 101"                                              |
| 135.0                  | -                                         | -                                                                           | 99"                                               |
| 140.0                  | -                                         | -                                                                           | 95"                                               |
| 145.0                  | -                                         | -                                                                           | 92"                                               |
| 150.0                  | -                                         | -                                                                           | 89"                                               |
| 155.0                  | -                                         | -                                                                           | 86"                                               |
| 160.0                  | -                                         | -                                                                           | 83"                                               |
| 165.0                  | -                                         | -                                                                           | 81"                                               |
| 170.0                  | -                                         | -                                                                           | 78"                                               |
| 175.0                  | -                                         | -                                                                           | 76"                                               |
| 180.0                  | -                                         | -                                                                           | 74"                                               |
| 185.0                  | -                                         | -                                                                           | 72"                                               |
| 190.0                  | -                                         | -                                                                           | 70"                                               |
| 195.0                  | -                                         | -                                                                           | 68"                                               |
| 200.0                  | -                                         | -                                                                           | 66"                                               |

- TABLE 1 AND 2 NOTES:
- 1. HVHZ: DEFINED AS MIAMI-DADE COUNTY AND BROWARD COUNTY FLORIDA.
  - 2. DESIGN PRESSURES SHOWN IN "ACCORDION SHUTTER SPAN SCHEDULE" ABOVE ARE MAXIMUM ALLOWABLE DESIGN PRESSURES AT EACH RESPECTIVE SHUTTER SPAN.
  - 3. THE 6.8 SYSTEM MAY BE MOUNTED WITH THE INSIDE AND OUTSIDE OF THE SHUTTER BEING REVERSED. FOR EXAMPLE: IT IS PERMISSIBLE TO MOUNT TO A WOOD OR CONCRETE BEAM WITH THE BACK OF THE SLAT FACING OUTWARD. FOR THIS CONDITION POSITIVE ALLOWABLE DESIGN PRESSURES AS NOTED IN TABLE 1 ARE IN THE DIRECTION TOWARDS THE HOST STRUCTURE AND NEGATIVE ALLOWABLE DESIGN PRESSURES ARE AWAY FROM THE HOST STRUCTURE.
  - 4. LINEAR INTERPOLATION BETWEEN SHUTTER SPANS IS NOT PERMITTED. FOR SPANS BETWEEN THOSE INDICATED ABOVE, THE DESIGN PRESSURES FOR THE NEXT HIGHER SPAN SHALL BE USED.

TABLE 2
MINIMUM SEPARATION FROM GLASS
FOR USE WITHIN THE HVHZ

| POSITIVE DESIGN PRESSURE (PSF) | SHUTTER SPAN | MINIMUM SEPARATION FROM GLASS | INSTALLATIONS ≤ 30' ABOVE GRADE (IN.) | INSTALLATIONS > 30' ABOVE GRADE (IN.) |
|--------------------------------|--------------|-------------------------------|---------------------------------------|---------------------------------------|
| 29.3                           | 156"         | 5.7"                          | 5.7"                                  | 3.5"                                  |
| 30                             | 60"          | 3.0"                          | 3.0"                                  | 1.1"                                  |
|                                | 99"          | 3.0"                          | 3.0"                                  | 1.5"                                  |
|                                | 120"         | 3.0"                          | 3.0"                                  | 1.9"                                  |
|                                | 156"         | 5.7"                          | 3.5"                                  | 3.5"                                  |
|                                | 60"          | 3.0"                          | 3.0"                                  | 1.1"                                  |
| 40                             | 99"          | 3.0"                          | 3.0"                                  | 1.6"                                  |
|                                | 108"         | 3.0"                          | 3.0"                                  | 1.8"                                  |
|                                | 120"         | 3.0"                          | 3.0"                                  | 2.2"                                  |
|                                | 132"         | 5.7"                          | 2.8"                                  | 2.8"                                  |
|                                | 145"         | 5.7"                          | 3.5"                                  | 3.5"                                  |
| 50                             | 60"          | 3.0"                          | 3.0"                                  | 1.1"                                  |
|                                | 99"          | 3.0"                          | 3.0"                                  | 1.7"                                  |
|                                | 108"         | 3.0"                          | 3.0"                                  | 2.0"                                  |
|                                | 120"         | 3.0"                          | 3.0"                                  | 2.5"                                  |
|                                | 137"         | 5.7"                          | 3.5"                                  | 3.5"                                  |
| 60                             | 60"          | 3.0"                          | 3.0"                                  | 1.2"                                  |
|                                | 99"          | 3.0"                          | 3.0"                                  | 1.9"                                  |
|                                | 108"         | 3.0"                          | 3.0"                                  | 2.2"                                  |
|                                | 131"         | 5.7"                          | 3.5"                                  | 3.5"                                  |
| 70                             | 60"          | 3.0"                          | 3.0"                                  | 1.2"                                  |
|                                | 84"          | 3.0"                          | 3.0"                                  | 1.5"                                  |
|                                | 99"          | 3.0"                          | 3.0"                                  | 2.0"                                  |
|                                | 126"         | 5.7"                          | 3.5"                                  | 3.5"                                  |
| 90                             | 60"          | 3.0"                          | 3.0"                                  | 1.2"                                  |
|                                | 84"          | 3.0"                          | 3.0"                                  | 1.7"                                  |
|                                | 99"          | 3.0"                          | 3.0"                                  | 2.3"                                  |
|                                | 118"         | 3.5"                          | 3.5"                                  | 3.5"                                  |
| 110                            | 60"          | 3.0"                          | 3.0"                                  | 1.3"                                  |
|                                | 84"          | 3.0"                          | 3.0"                                  | 1.8"                                  |
|                                | 99"          | 3.0"                          | 3.0"                                  | 2.5"                                  |
|                                | 110"         | 3.3"                          | 3.3"                                  | 3.3"                                  |
| 120                            | 60"          | 3.0"                          | 3.0"                                  | 1.3"                                  |
|                                | 84"          | 3.0"                          | 3.0"                                  | 1.9"                                  |
|                                | 105"         | 3.1"                          | 3.1"                                  | 3.1"                                  |

\*\* FOR BUILDOUT MOUNT MAXIMUM SPANS AND PRESSURES, SEE TABLE C ON SHEET 6/13

TABLE 3
ALLOWABLE SPAN SCHEDULE
NON-HVHZ

| DESIGN WIND LOAD (PSF) | POSITIVE AND NEGATIVE WIND LOAD ALL MOUNTING CONDITIONS** |
|------------------------|-----------------------------------------------------------|
| 50.0                   | 156"                                                      |
| 55.0                   | 155"                                                      |
| 60.0                   | 148"                                                      |
| 65.0                   | 143"                                                      |
| 70.0                   | 137"                                                      |
| 75.0                   | 133"                                                      |
| 80.0                   | 128"                                                      |
| 85.0                   | 125"                                                      |
| 90.0                   | 121"                                                      |
| 95.0                   | 118"                                                      |
| 100.0                  | 115"                                                      |
| 105.0                  | 112"                                                      |
| 110.0                  | 110"                                                      |
| 115.0                  | 107"                                                      |
| 120.0                  | 105"                                                      |
| 125.0                  | 103"                                                      |
| 130.0                  | 101"                                                      |
| 135.0                  | 99"                                                       |
| 140.0                  | 95"                                                       |
| 145.0                  | 92"                                                       |
| 150.0                  | 89"                                                       |
| 155.0                  | 86"                                                       |
| 160.0                  | 83"                                                       |
| 165.0                  | 81"                                                       |
| 170.0                  | 78"                                                       |
| 175.0                  | 76"                                                       |
| 180.0                  | 74"                                                       |
| 185.0                  | 72"                                                       |
| 190.0                  | 70"                                                       |
| 195.0                  | 68"                                                       |
| 200.0                  | 66"                                                       |

\*\* FOR BUILDOUT MOUNT MAXIMUM SPANS AND PRESSURES, SEE TABLE C ON SHEET 6/13

TABLE 4
MINIMUM SEPARATION FROM GLASS
NON-HVHZ
SEE NOTE 3 BELOW

| POSITIVE DESIGN PRESSURE (PSF) | SHUTTER SPAN | MINIMUM SEPARATION FROM GLASS | INSTALLATIONS ≤ 30' ABOVE GRADE (IN.) | INSTALLATIONS > 30' ABOVE GRADE (IN.) |
|--------------------------------|--------------|-------------------------------|---------------------------------------|---------------------------------------|
| 30                             | 60"          | 3.1"                          | 3.1"                                  | 1.1"                                  |
|                                | 99"          | 3.1"                          | 3.1"                                  | 1.4"                                  |
|                                | 120"         | 3.1"                          | 3.1"                                  | 1.9"                                  |
|                                | 156"         | 5.8"                          | 3.5"                                  | 3.5"                                  |
| 40                             | 60"          | 3.1"                          | 3.1"                                  | 1.1"                                  |
|                                | 99"          | 3.1"                          | 3.1"                                  | 1.5"                                  |
|                                | 108"         | 3.1"                          | 3.1"                                  | 1.8"                                  |
|                                | 120"         | 3.1"                          | 3.1"                                  | 2.2"                                  |
|                                | 132"         | 5.8"                          | 2.7"                                  | 2.7"                                  |
| 50                             | 156"         | 5.8"                          | 4.3"                                  | 4.3"                                  |
|                                | 60"          | 3.1"                          | 3.1"                                  | 1.1"                                  |
|                                | 99"          | 3.1"                          | 3.1"                                  | 1.7"                                  |
|                                | 108"         | 3.1"                          | 3.1"                                  | 2.0"                                  |
|                                | 120"         | 3.1"                          | 3.1"                                  | 2.5"                                  |
| 60                             | 132"         | 5.8"                          | 3.1"                                  | 3.1"                                  |
|                                | 156"         | 5.8"                          | 5.2"                                  | 5.2"                                  |
|                                | 60"          | 3.1"                          | 3.1"                                  | 1.1"                                  |
|                                | 99"          | 3.1"                          | 3.1"                                  | 1.8"                                  |
|                                | 108"         | 3.1"                          | 3.1"                                  | 2.1"                                  |
| 70                             | 120"         | 3.1"                          | 2.7"                                  | 2.7"                                  |
|                                | 148"         | 5.8"                          | 5.0"                                  | 5.0"                                  |
|                                | 60"          | 3.1"                          | 3.1"                                  | 1.1"                                  |
|                                | 84"          | 3.1"                          | 3.1"                                  | 1.5"                                  |
|                                | 99"          | 3.1"                          | 3.1"                                  | 1.9"                                  |
| 90                             | 120"         | 3.1"                          | 3.0"                                  | 3.0"                                  |
|                                | 137"         | 5.8"                          | 4.5"                                  | 4.5"                                  |
|                                | 60"          | 3.1"                          | 3.1"                                  | 1.2"                                  |
|                                | 84"          | 3.1"                          | 3.1"                                  | 1.6"                                  |
|                                | 99"          | 3.1"                          | 3.1"                                  | 2.2"                                  |
| 110                            | 120"         | 3.7"                          | 3.6"                                  | 3.6"                                  |
|                                | 121"         | 5.8"                          | 3.7"                                  | 3.7"                                  |
|                                | 60"          | 3.1"                          | 3.1"                                  | 1.2"                                  |
|                                | 84"          | 3.1"                          | 3.1"                                  | 1.8"                                  |
|                                | 99"          | 3.1"                          | 3.1"                                  | 2.5"                                  |
| 120                            | 110"         | 3.3"                          | 3.3"                                  | 3.3"                                  |
|                                | 60"          | 3.1"                          | 3.1"                                  | 1.2"                                  |
|                                | 84"          | 3.1"                          | 3.1"                                  | 1.8"                                  |
|                                | 99"          | 3.1"                          | 3.1"                                  | 2.6"                                  |
|                                | 105"         | 3.1"                          | 3.0"                                  | 3.0"                                  |

- TABLE 3 AND 4 NOTES:
- 1. NON-HVHZ: DEFINED AS ALL LOCATIONS OTHER THAN MIAMI-DADE COUNTY AND BROWARD COUNTY FLORIDA.
  - 2. DESIGN PRESSURES SHOWN IN "ACCORDION SHUTTER SPAN SCHEDULE" ABOVE ARE MAXIMUM ALLOWABLE DESIGN PRESSURES AT EACH RESPECTIVE SHUTTER SPAN.
  - 3. SEPARATION FROM GLAZING IS NOT REQUIRED IN WIND ZONES 1-3 UNLESS LOCAL MUNICIPALITY ADOPTS ADDITIONAL CRITERIA.
  - 4. THE 6.8 SYSTEM MAY BE MOUNTED WITH THE INSIDE AND OUTSIDE OF THE SHUTTER BEING REVERSED. FOR EXAMPLE: IT IS PERMISSIBLE TO MOUNT TO A WOOD OR CONCRETE BEAM WITH THE BACK OF THE SLAT FACING OUTWARD.
  - 5. LINEAR INTERPOLATION BETWEEN SHUTTER SPANS IS NOT PERMITTED. FOR SPANS BETWEEN THOSE INDICATED ABOVE, THE DESIGN PRESSURES FOR THE NEXT HIGHER SPAN SHALL BE USED.

VISIT ECALC.IO/26156
FOR SITE SPECIFIC DEVIATIONS & MORE INFORMATION ABOUT THIS DOCUMENT OR SCAN THIS QR CODE
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FL13757.1

Table with 4 columns: REMARKS, DRWN, CHKD, DATE. It contains revision history and a 2020 FBC UPDATE section.

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20-26156

SCALE: -
PAGE DESCRIPTION:

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rickn

GENERAL NOTES:

1.

THIS SYSTEM HAS BEEN TESTED AND EVALUATED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE SEVENTH EDITION (2020), FOR USE WITHIN AND OUTSIDE THE HIGH VELOCITY HURRICANE ZONE, AND THE INTERNATIONAL BUILDING CODE (IBC) AND INTERNATIONAL RESIDENTIAL CODE (IRC). THIS SYSTEM MEETS MISSILE LEVEL "D". SEE PRODUCT EVALUATION REPORT FOR MORE INFORMATION.
2.

POSITIVE AND NEGATIVE DESIGN PRESSURES CALCULATED FOR USE WITH THIS SYSTEM SHALL BE DETERMINED PER SEPARATE ENGINEERING IN ACCORDANCE WITH THE GOVERNING CODE. PRESSURE REQUIREMENTS AS DETERMINED IN ACCORDANCE WITH ASCE 7 AND CHAPTER 1609 OF THE FLORIDA BUILDING CODE SHALL BE LESS THAN OR EQUAL TO THE POSITIVE OR NEGATIVE DESIGN PRESSURE CAPACITY VALUES LISTED HEREIN FOR ANY ASSEMBLY AS SHOWN.
3.

TESTING WAS CONDUCTED IN ACCORDANCE WITH TAS 201/202/203 AND ASTM E1886/E1996/E330.
4.

DESIGN PRESSURES NOTED HEREIN ARE BASED ON MAXIMUM TESTED PRESSURES DIVIDED BY A 1.5 SAFETY FACTOR.
5.

THIS SYSTEM HAS BEEN DESIGNED WITH NO SEPARATION FROM GLAZING REQUIRED FOR ALL WIND ZONES, IN ACCORDANCE WITH ASTM E1996. IT IS ACCEPTABLE BY CODE UNLESS OPTIONAL CRITERIA IS INDEPENDENTLY ADOPTED BY THE AUTHORITY HAVING JURISDICTION.
6.

NO INCREASE IN ALLOWABLE STRESS HAS BEEN USED IN THE DESIGN OF THESE PRODUCTS. WIND LOAD DURATION FACTOR  $C_d = 1.6$  WAS USED FOR WOOD ANCHOR DESIGN.
7.

DETERMINE THE POSITIVE AND NEGATIVE DESIGN LOADS TO USE WHEN REFERENCING THESE DOCUMENTS IN ACCORDANCE WITH THE GOVERNING CODE AND GOVERNING WIND VELOCITY. FOR WIND LOAD CALCULATIONS IN ACCORDANCE WITH ASCE 7-16, A DIRECTIONALITY FACTOR OF  $K_d = 0.85$  SHALL BE USED.
8.

THE SYSTEM DETAILED HEREIN IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SPECIFIC SITE.
9.

THESE INSTALLATION INSTRUCTIONS ARE PART OF A PRODUCT APPROVAL EVALUATION AND SHALL ONLY BE USED IN CONJUNCTION WITH THE EVALUATION REPORT SUBMITTED FOR THE SAME PRODUCT APPROVAL. USE OF THESE APPROVAL DOCUMENTS SHALL COMPLY WITH CHAPTER 61G15 OF THE FLORIDA ADMINISTRATIVE CODE.
10.

THESE APPROVAL DOCUMENTS ARE SUITABLE TO BE APPLIED BY THE CONTRACTOR PROVIDED THE CONTRACTOR DOES NOT DEVIATE FROM THE CONDITIONS DETAILED HEREIN AND THE CONTRACTOR VERIFIES THAT THE EXISTING STRUCTURE DOES NOT DEVIATE IN EITHER FORM OR MATERIAL FROM THE STRUCTURAL SUBSTRATES DETAILED HEREIN.
11.

WHEN THE SITE CONDITIONS DEVIATE FROM THESE APPROVAL DOCUMENTS, THE BUILDING OFFICIAL MAY REQUIRE THAT SITE SPECIFIC DOCUMENTS BE PREPARED, SIGNED, DATED AND SEALED BY A LICENSED ENGINEER OR REGISTERED ARCHITECT, WHICH DETAIL AND JUSTIFY THE DEVIATION,. AS A CONDITION TO THE BUILDING OFFICIAL GRANTING HIS/HER APPROVAL.
12.

EACH SHUTTER ASSEMBLY SHALL BE PERMANENTLY LABELED WITH THE FOLLOWING MINIMUM INFORMATION:

TOWN & COUNTRY INDUSTRIES

FORT LAUDERDALE, FL

9LB MISSILE LEVEL D - ASTM E1886, E1996 & E330

TAS 201, 202 & 203

FLORIDA PRODUCT APPROVAL NUMBER
13.

ALL EXTRUSIONS SHOWN SHALL BE 6063-T6 ALUMINUM ALLOY, U.O.N., WITH A MINIMUM  $F_y$  OF 25 K.S.I.
14.

ALL BOLTS AND WASHERS (EXCLUDING INSTALLATION) SHALL BE STAINLESS STEEL WITH A MINIMUM TENSILE STRENGTH OF 60 K.S.I., U.O.N. POP RIVETS SHALL BE 1/4"Ø OR 3/16"Ø 5052 ALUM. ALLOY.
15.

ALL SHUTTERS SHALL HAVE A LOCKING MECHANISM CONSISTING OF THUMBSCREW, PUSH LOCK OR BOX LOCK AT CENTER OR SIDE CLOSURE.
16.

TOP AND BOTTOM DETAILS MAY BE INTERCHANGED AS FIELD CONDITIONS REQUIRE.
17.

FLOOR TRACKS MAY BE REMOVABLE AT NON-STACKING LOCATIONS. USE REMOVABLE ANCHORS.
18.

MOUNTING EXTRUSIONS MAY BE BENT TO FORM A CURVE WITH A MIN. RADIUS OF 10".
19.

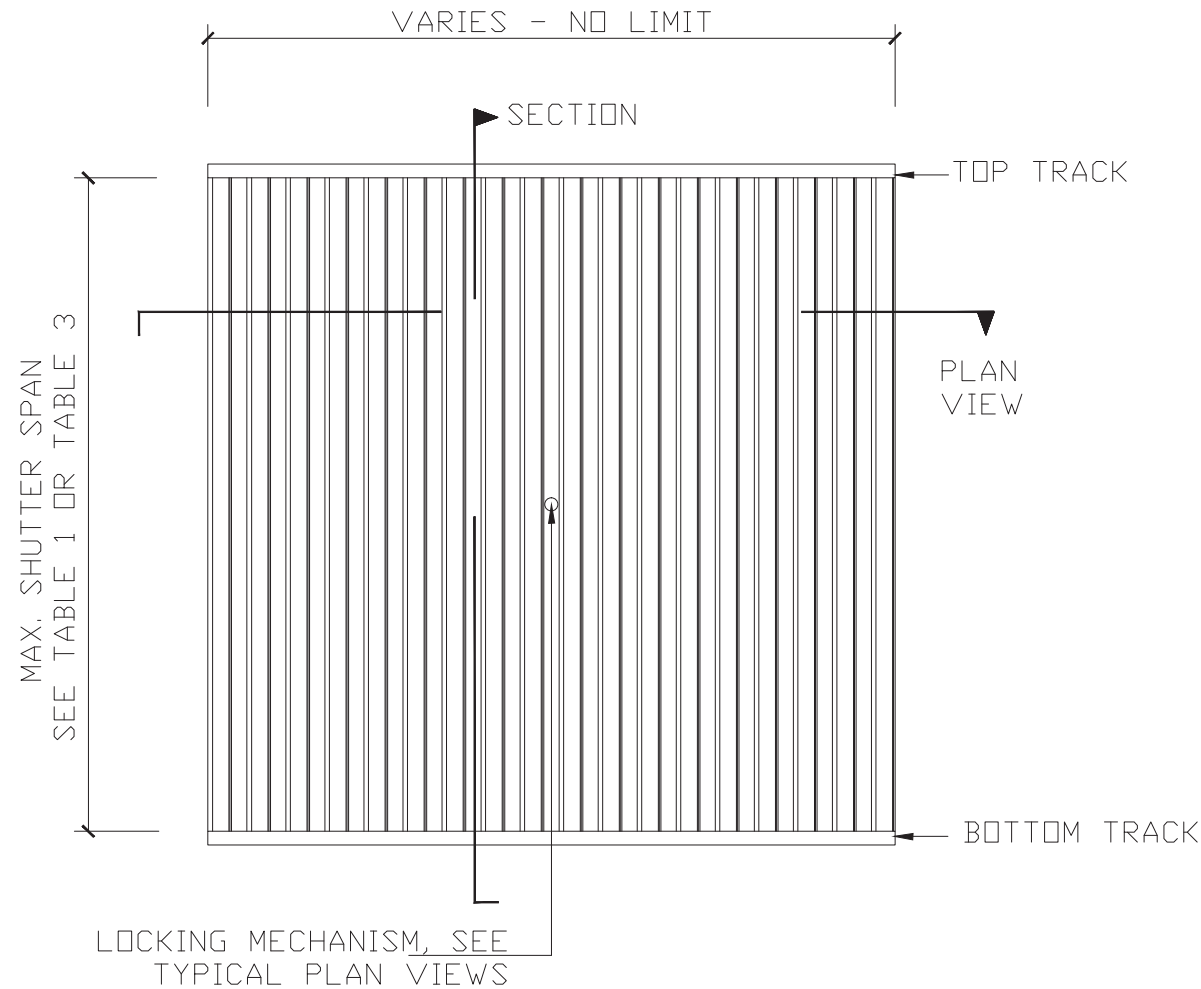
ALL DIMENSIONS SHOWN INCLUDE POWDER COATING FINISH.
20.

SEALANT SHALL BE USED ON ANCHORS OR TRACKS WHEREVER WATER SEEPAGE IS POSSIBLE.
21.

ALL STEEL IN CONTACT WITH ALUMINUM SHALL BE PAINTED OR PLATED AS PRESCRIBED IN THE ABOVE-NOTED BUILDING CODE
22.

THE 6.8 SYSTEM MAY BE MOUNTED WITH THE INSIDE AND OUTSIDE OF THE SHUTTER BEING REVERSED. FOR EXAMPLE: IT IS PERMISSIBLE TO MOUNT TO A WOOD OR CONCRETE BEAM WITH THE BACK OF THE SLAT FACING OUTWARD. FOR THIS CONDITION POSITIVE ALLOWABLE DESIGN PRESSURES AS NOTED IN TABLE 1 ARE IN THE DIRECTION TOWARDS THE HOST STRUCTURE AND NEGATIVE ALLOWABLE DESIGN PRESSURES ARE AWAY FROM THE HOST STRUCTURE.
23.

SHUTTER MAY BE INSTALLED WITH UP TO (2) ADDITIONAL BLADES OF SLACK



TYPICAL ACCORDION  
SHUTTER ELEVATION

N.T.S.

FRANK BENNARDO, PE  
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FL13757.1

| REMARKS          | DRWN | CHKD | DATE     |
|------------------|------|------|----------|
| INIT ISSUE       | KL   | FLB  | 12/20/11 |
| CLIENT REVISIONS | KL   | FLB  | 2/22/12  |
| CLIENT REVISIONS | KL   | FLB  | 10/25/13 |
| 2014 FBC         | RWN  | CSL  | 4/01/15  |
| 2017 FBC         | RWN  | FLB  | 8/04/17  |
| 2020 FBC UPDATE  | CB   | RWN  | 6/17/20  |

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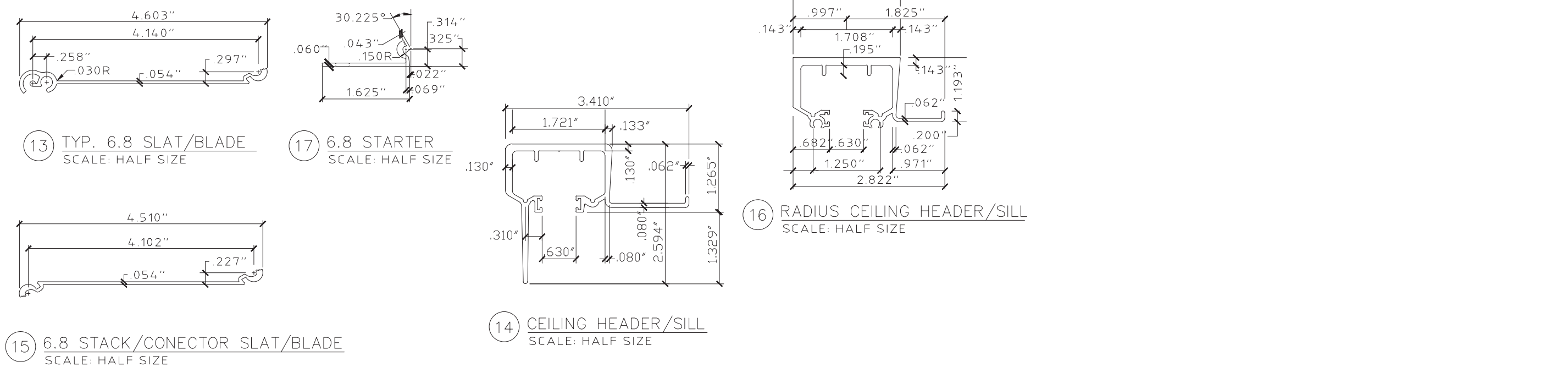
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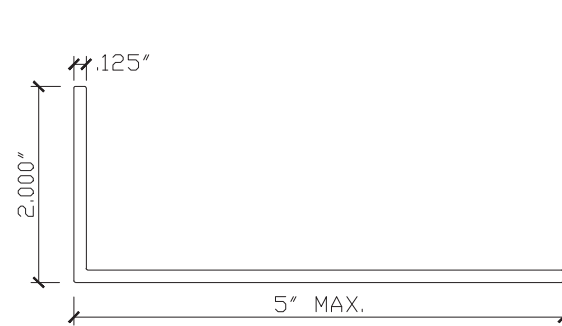
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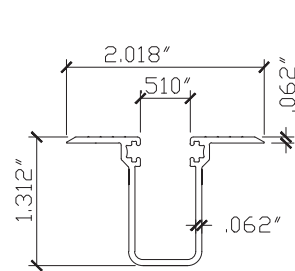
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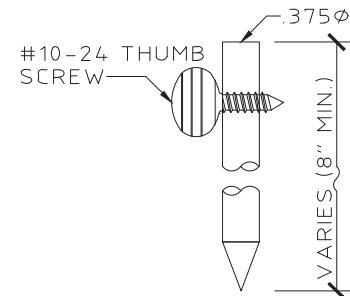
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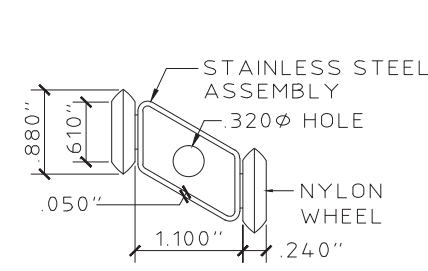
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SCALE: HALF SIZE



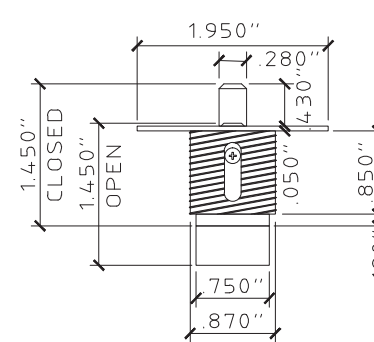
20 RECESS SILL  
SCALE: HALF SIZE



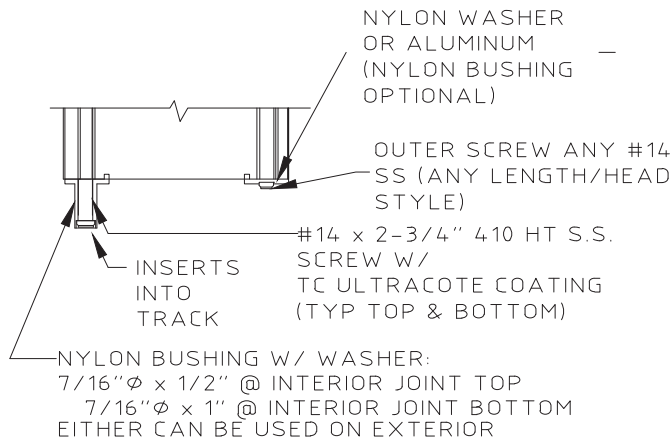
21 SLIDE ROD  
SCALE: HALF SIZE  
FOR USE WITH  
33 AND 34 ONLY



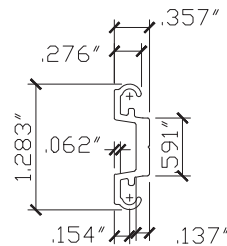
22 ROLLER ASSEMBLY  
SCALE: HALF SIZE  
TYP. AT EVERY OTHER  
INSIDE JOINT AT TOP.



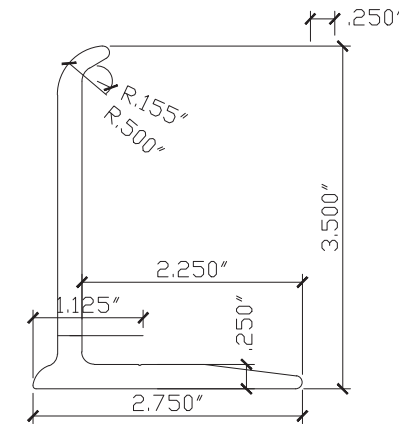
23 BRASS PUSH LOCK  
SCALE: HALF SIZE  
CYLINDER-SOLID BRASS, NICKEL PLATED  
HOUSING-ZINC DICAST, POWDER COATED  
NOTE: MAY BE KEY OPERATED OUTSIDE OR THUMB  
TURN OPERATED INSIDE.



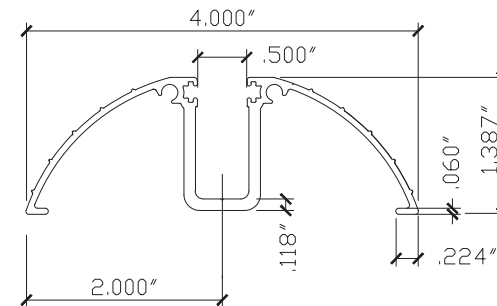
24 BUSHING ASSEMBLY DETAIL  
SCALE: HALF SIZE



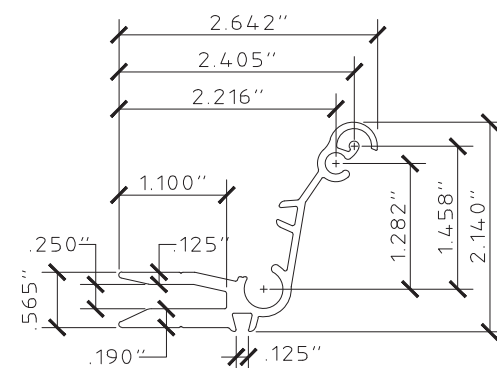
26 BOX CENTER INSERT  
SCALE: HALF SIZE



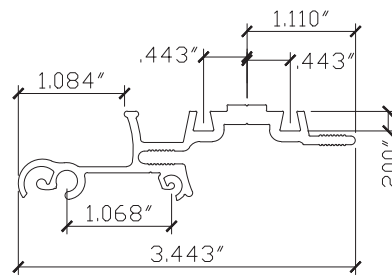
27 RAINGUARD  
SCALE: HALF SIZE



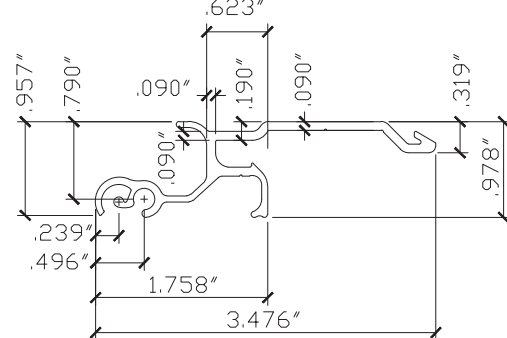
28 DECORATIVE FLOOR TRACK  
SCALE: HALF SIZE



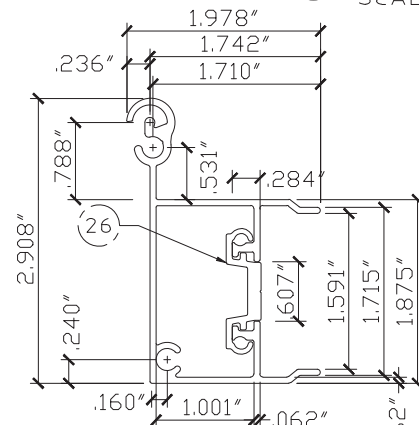
34 INSIDE CENTER MATE  
SCALE: HALF SIZE



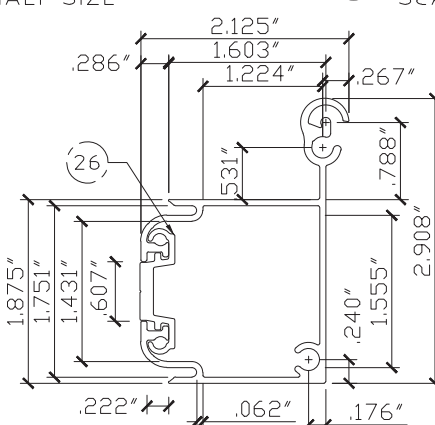
29 2003 6.8 CENTER MATE  
SCALE: HALF SIZE



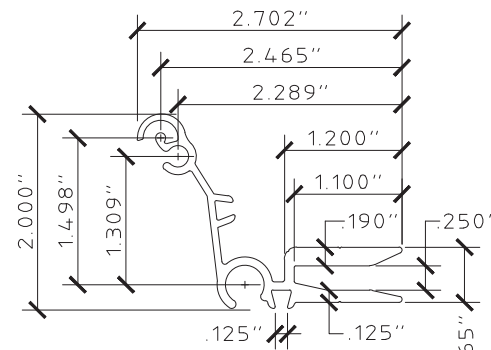
30 UNIMATE LOCK  
SCALE: HALF SIZE



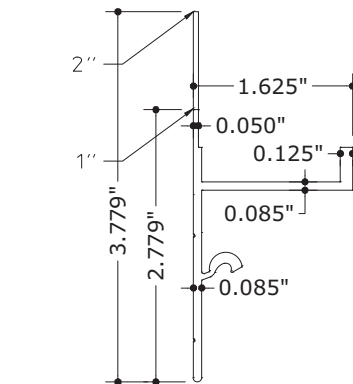
31 MALE BOX CENTER  
SCALE: HALF SIZE



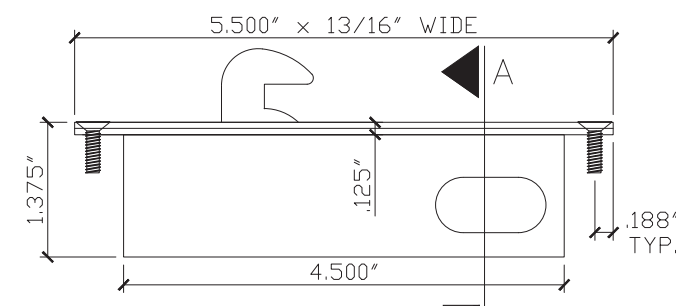
32 FEMALE BOX CENTER  
SCALE: HALF SIZE



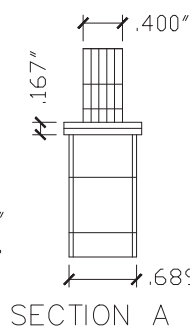
33 OUTSIDE CENTER MATE  
SCALE: HALF SIZE



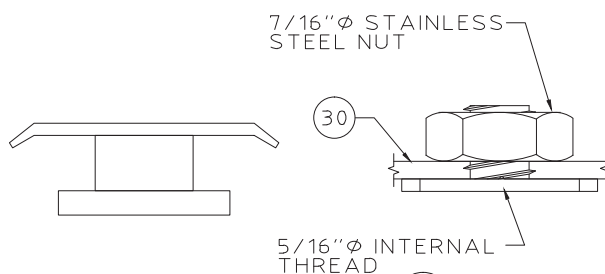
40d ALT. 1" OR 2" END STRIP  
SCALE: HALF SIZE



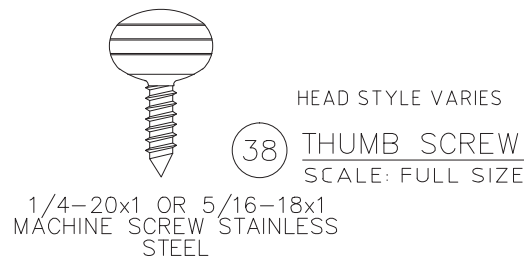
35 BOX LOCK  
SCALE: HALF SIZE  
DELTA MODEL 2022  
INDUSTRIAL SYSTEMS



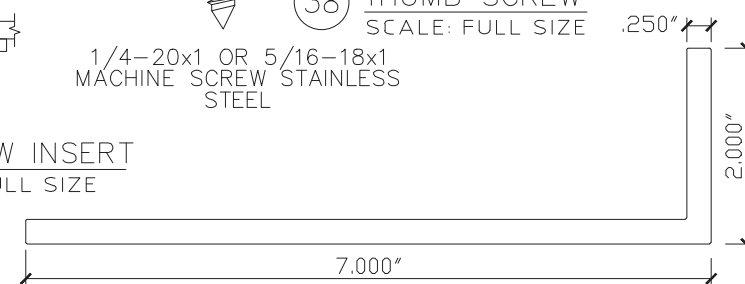
36 T-LOCK ADAPTER  
(OPTIONAL)  
SCALE: HALF SIZE  
POWDER COATED, ZINC DIE-CAST



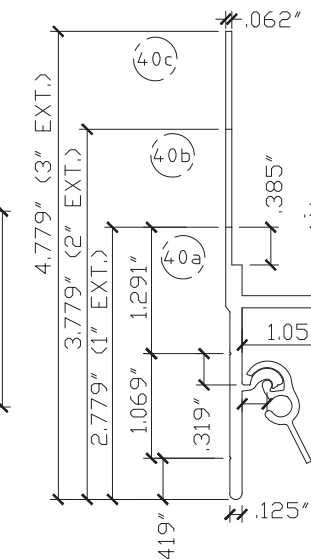
37 T-SCREW INSERT  
SCALE: FULL SIZE



38 THUMB SCREW  
SCALE: FULL SIZE



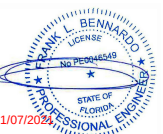
39 2X7 ANGLE  
SCALE: HALF SIZE



NOTE: ATTACHMENT SCREWS FOR  
END STRIPS SHALL BE #10 TORX  
OR PHILLIPS DRIVE SCREWS,  
HAND-TIGHTENED ONLY.

40a 40b 40c  
END STRIP 1"  
2" & 3" EXT  
SCALE: HALF SIZE

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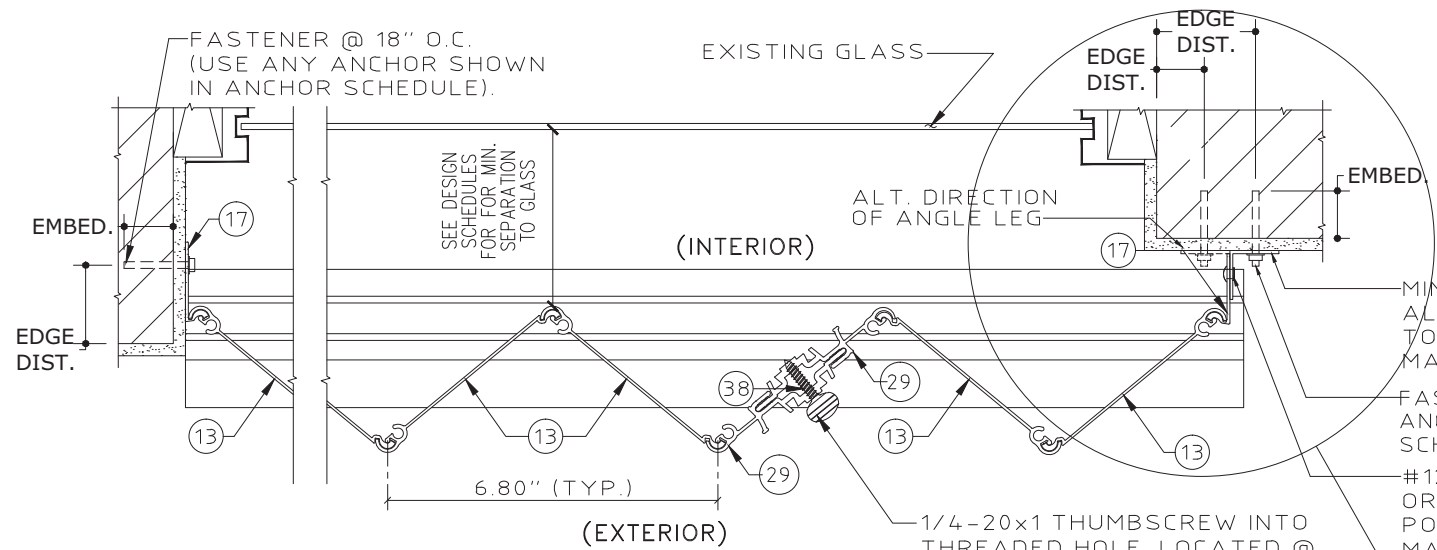
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|------------------|------|------|----------|
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| CLIENT REVISIONS | KL   | FLB  | 2/22/12  |
| CLIENT REVISIONS | KL   | FLB  | 10/25/13 |
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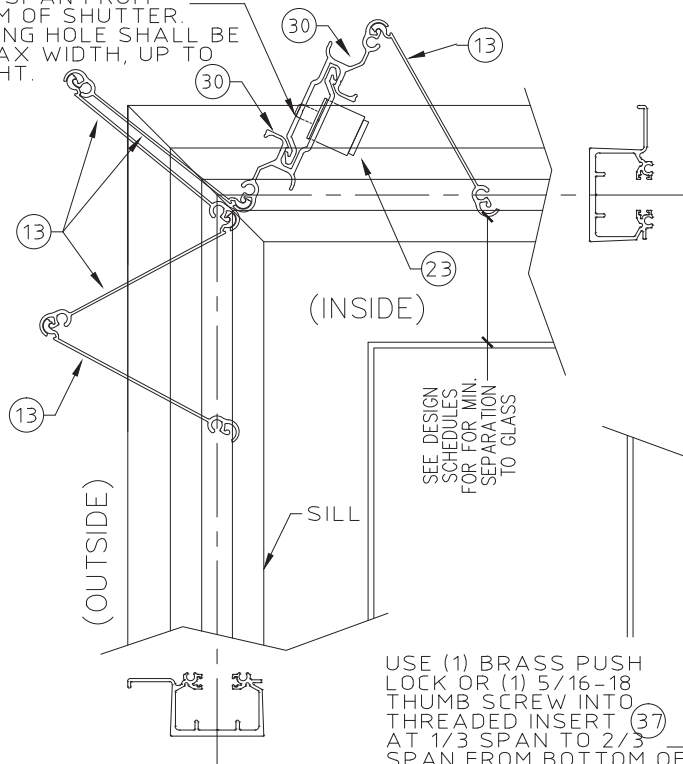
20-26156

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PAGE DESCRIPTION: -



TYPICAL PLAN VIEW  
SCALE: 3" = 1'-0"

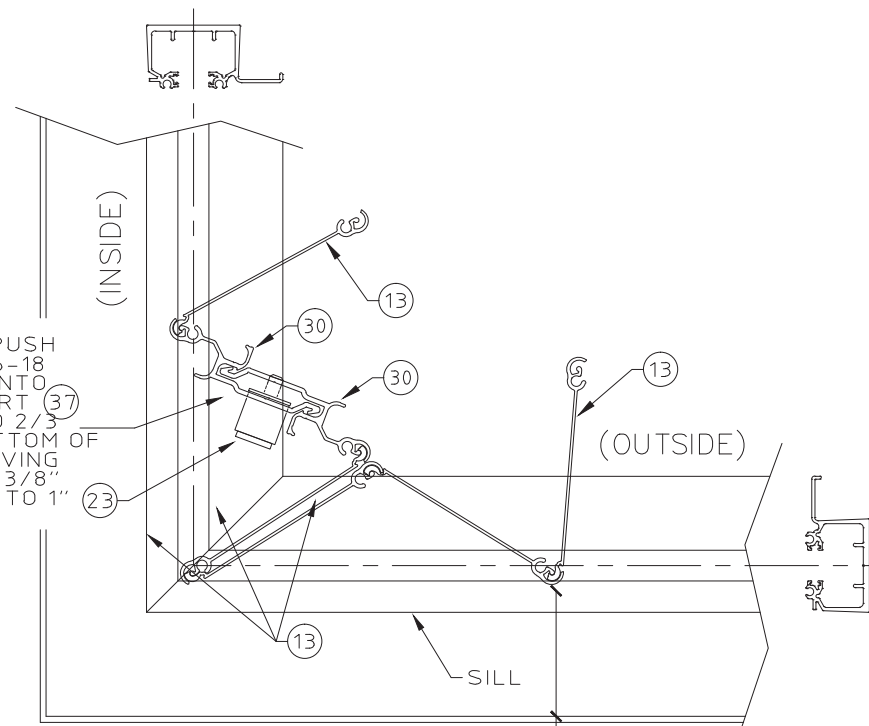
USE (1) BRASS PUSH LOCK OR (1) 5/16-18 THUMB SCREW INTO THREADED INSERT (37) AT 1/3 SPAN TO 2/3 SPAN FROM BOTTOM OF SHUTTER. RECEIVING HOLE SHALL BE 3/8" MAX WIDTH, UP TO 1" HEIGHT.



CC1 TYPICAL OUTSIDE CORNER CLOSURE  
DETAILS WO/CORNER POST  
NTS

USE (1) BRASS PUSH LOCK OR (1) 5/16-18 THUMB SCREW INTO THREADED INSERT (37) AT 1/3 SPAN TO 2/3 SPAN FROM BOTTOM OF SHUTTER. RECEIVING HOLE SHALL BE 3/8" MAX WIDTH, UP TO 1" HEIGHT.

CC2 TYPICAL INSIDE CORNER CLOSURE  
DETAILS WO/CORNER POST  
NTS



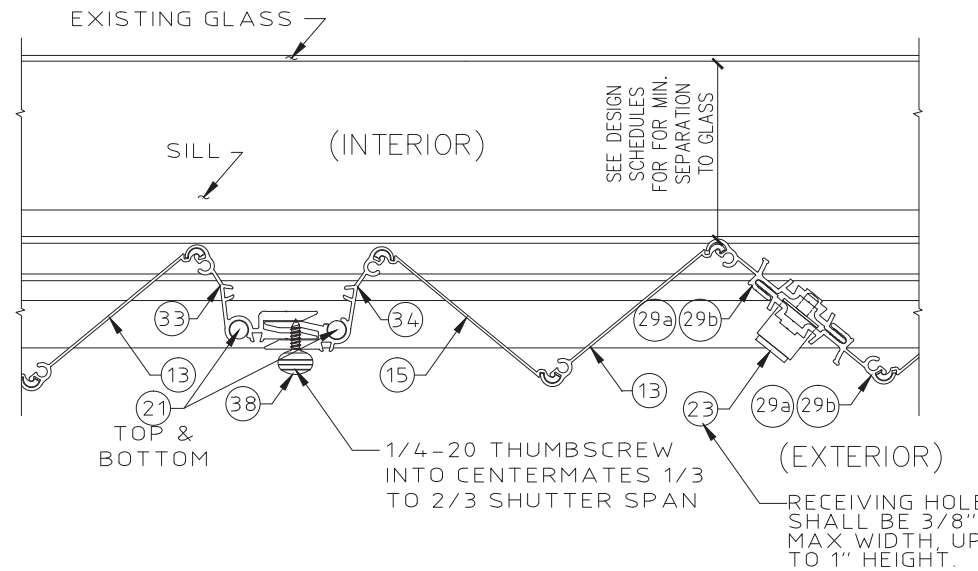
SEE DESIGN SCHEDULES FOR MIN. SEPARATION TO GLASS

LOCKING DETAILS FOR  
CENTER MATES  
SHOWN ON RANDOM  
DETAILS

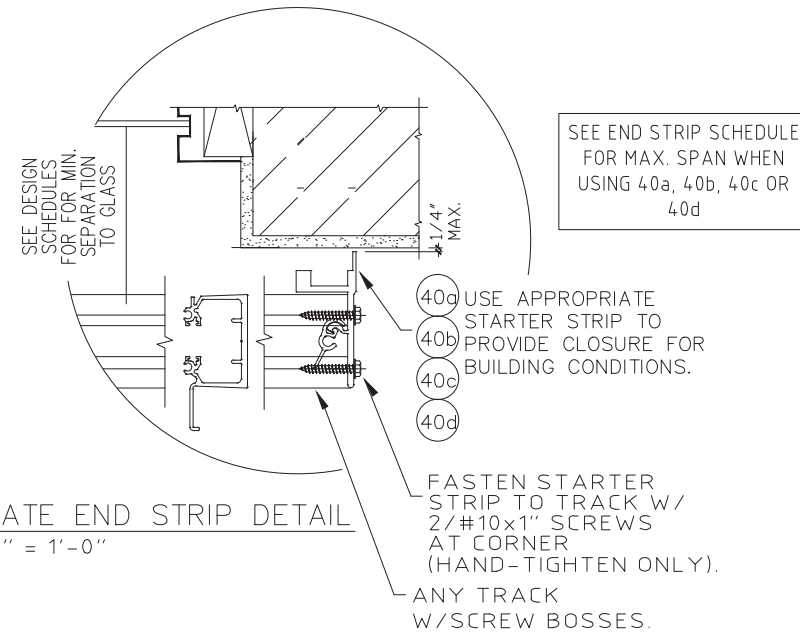
#### END STRIP SCHEDULE

|                             | PSF | SPAN |
|-----------------------------|-----|------|
| 1" B/O (2.7")<br>(40a)      | 62  | 108" |
|                             | 72  | 100" |
|                             | 82  | 94"  |
|                             | 112 | 80"  |
|                             | 132 | 75"  |
| 2" B/O (3.7")<br>(40b)      | 62  | 95"  |
|                             | 72  | 88"  |
|                             | 82  | 83"  |
|                             | 112 | 70"  |
|                             | 132 | 65"  |
| 3" B/O (4.7")<br>(40c)      | 62  | 86"  |
|                             | 72  | 79"  |
|                             | 82  | 74"  |
|                             | 112 | 61"  |
|                             | 132 | 56"  |
| ALT. B/O<br>(40d)           | 62  | 110" |
|                             | 72  | 102" |
|                             | 82  | 95"  |
|                             | 112 | 81"  |
|                             | 132 | 75"  |
| 1.5"x3"<br>x0.093"<br>ANGLE | 45  | 93"  |
|                             | 52  | 87"  |
|                             | 57  | 83"  |
|                             | 60  | 81"  |
|                             | 64  | 78"  |
| 2"x3"<br>x0.125"<br>ANGLE   | 45  | 139" |
|                             | 52  | 129" |
|                             | 57  | 123" |
|                             | 60  | 120" |
|                             | 64  | 116" |
| 2"x4"<br>x0.125"<br>ANGLE   | 45  | 145" |
|                             | 52  | 135" |
|                             | 57  | 129" |
|                             | 60  | 125" |
|                             | 64  | 121" |
|                             | 70  | 116" |
|                             | 73  | 114" |

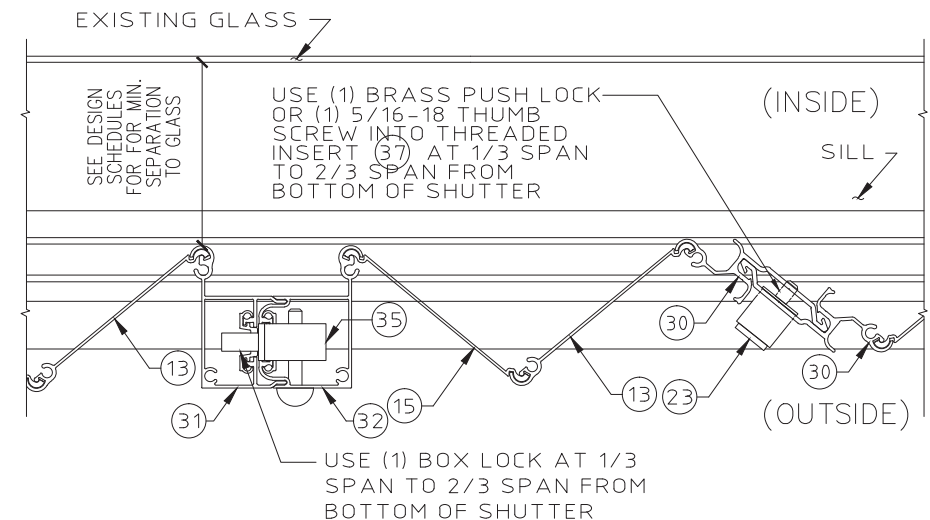
FOR GREATER SPANS OR LOADS THAN SHOWN IN END STRIP SCHEDULE, END STRIPS REQUIRE A 1"x1" .090" CLIP ANGLE MID SPAN USING ANY ANCHOR ON THE ANCHOR SCHEDULE & #14x3/4" TEK SCREW OR 1/4-20 BOLT TO END STRIP.



MULTIPLE SHUTTER ASSEMBLY  
SCALE: 3" = 1'-0"



ALTERNATE END STRIP DETAIL  
SCALE: 3" = 1'-0"



MULTIPLE SHUTTER ASSEMBLY  
SCALE: 3" = 1'-0"



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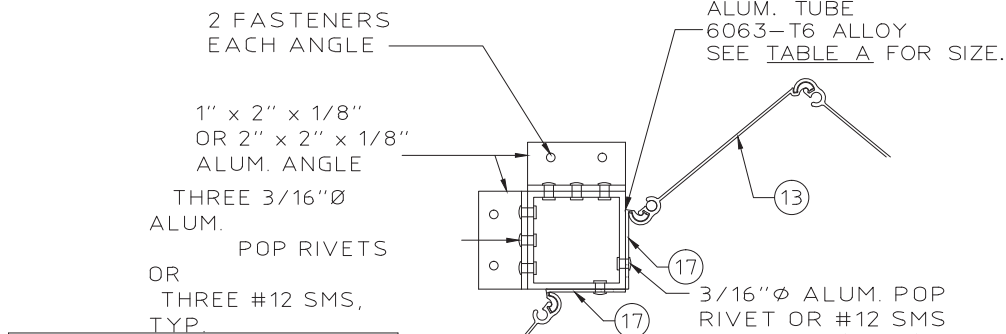
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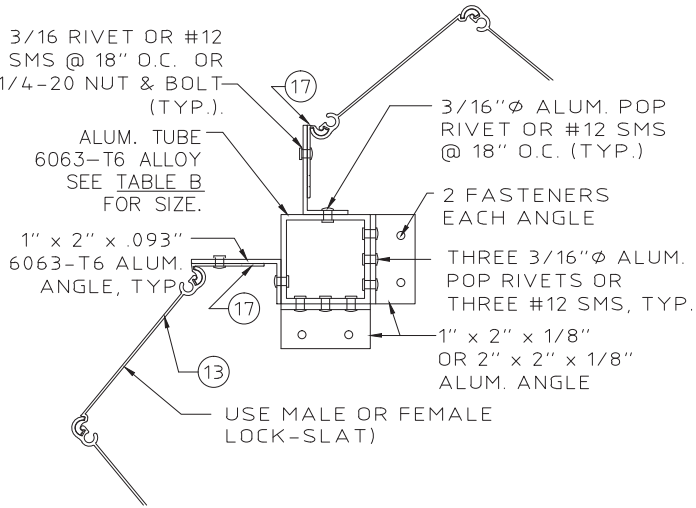
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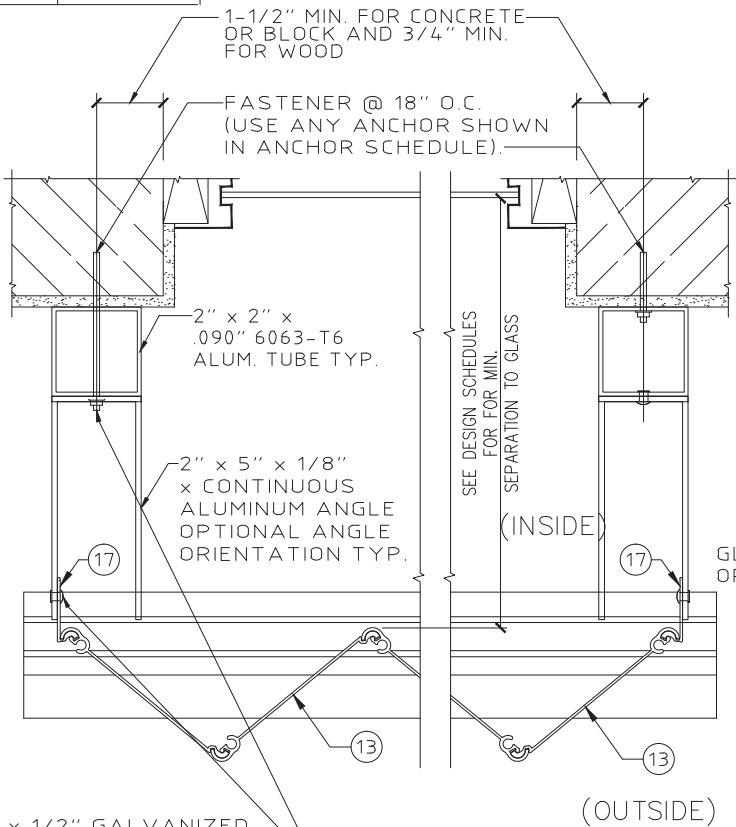
| TABLE A (CC3)                |                   |                   |
|------------------------------|-------------------|-------------------|
| PRESSURE VS ALLOWABLE LENGTH |                   |                   |
| PSF                          | 2"x2"x1/8" No B/O | 3"x3"x1/8" No B/O |
| 62                           | 130"              | 188"              |
| 72                           | 124"              | 179"              |
| 82                           | 119"              | 172"              |
| 92                           | 114"              | 165"              |
| 102                          | 110"              | 160"              |
| 120                          | 104"              | 147"              |
| 150                          | 97"               | 131"              |
| 200                          | 88"               | 114"              |

| TABLE B (CC4)                |                     |                     |
|------------------------------|---------------------|---------------------|
| PRESSURE VS ALLOWABLE LENGTH |                     |                     |
| PSF                          | 2"x2"x1/8" WITH B/O | 3"x3"x1/8" WITH B/O |
| 62                           | 113"                | 166"                |
| 72                           | 107"                | 157"                |
| 82                           | 101"                | 147"                |
| 92                           | 95"                 | 139"                |
| 102                          | 90"                 | 132"                |
| 120                          | 83"                 | 122"                |
| 150                          | 74"                 | 109"                |
| 200                          | 64"                 | 94"                 |



CC4 TYPICAL CORNER CLOSURE DETAILS  
NTS

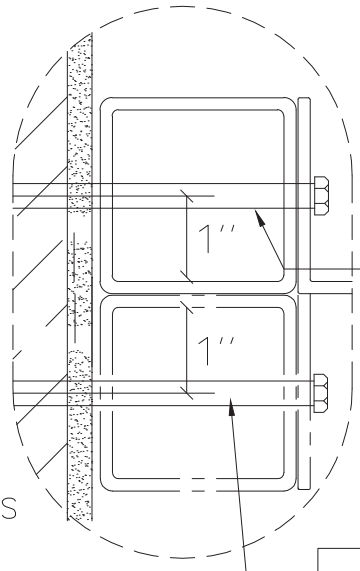
CC3 TYPICAL CORNER CLOSURE DETAILS  
NTS



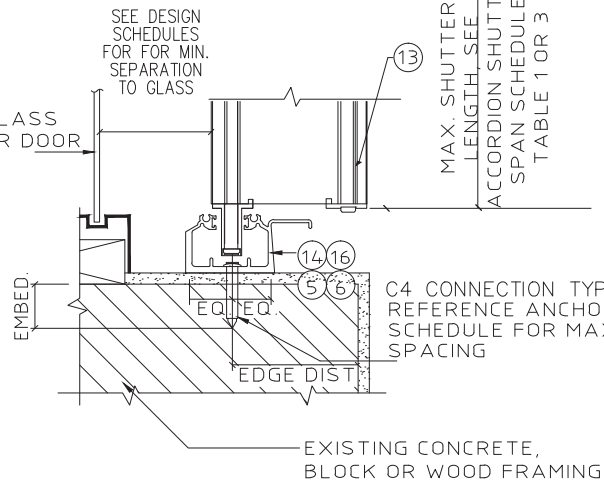
#12 x 1/2" GALVANIZED OR S.S. SMS, 3/16" Ø ALUM. POP RIVET, OR 1/4-20 MACHINE BOLT & NUT @ 18" O.C.

SIDE CLOSURE OPTIONS  
SCALE: 3" = 1'-0"

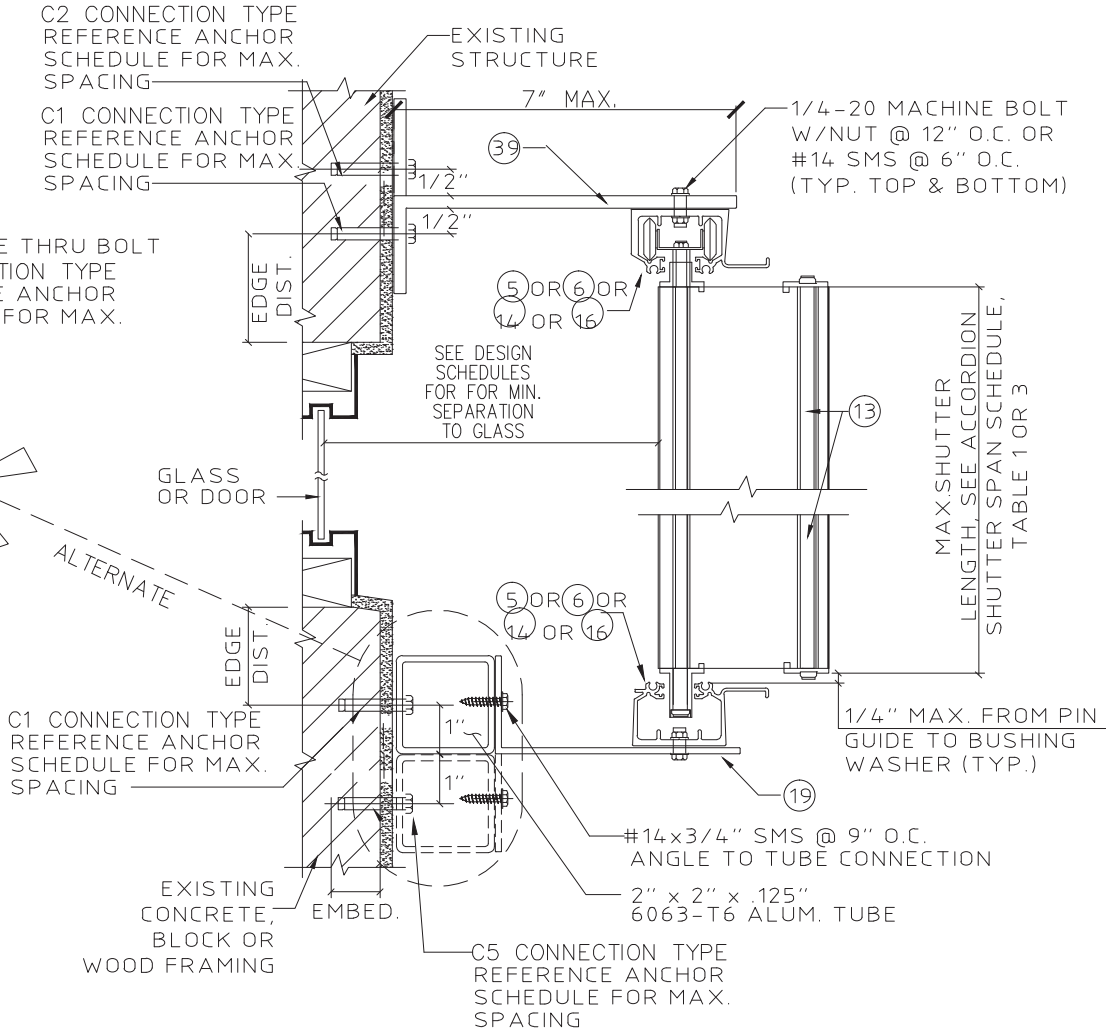
ALTERNATE THRU BOLT C5 CONNECTION TYPE REFERENCE ANCHOR SCHEDULE FOR MAX. SPACING



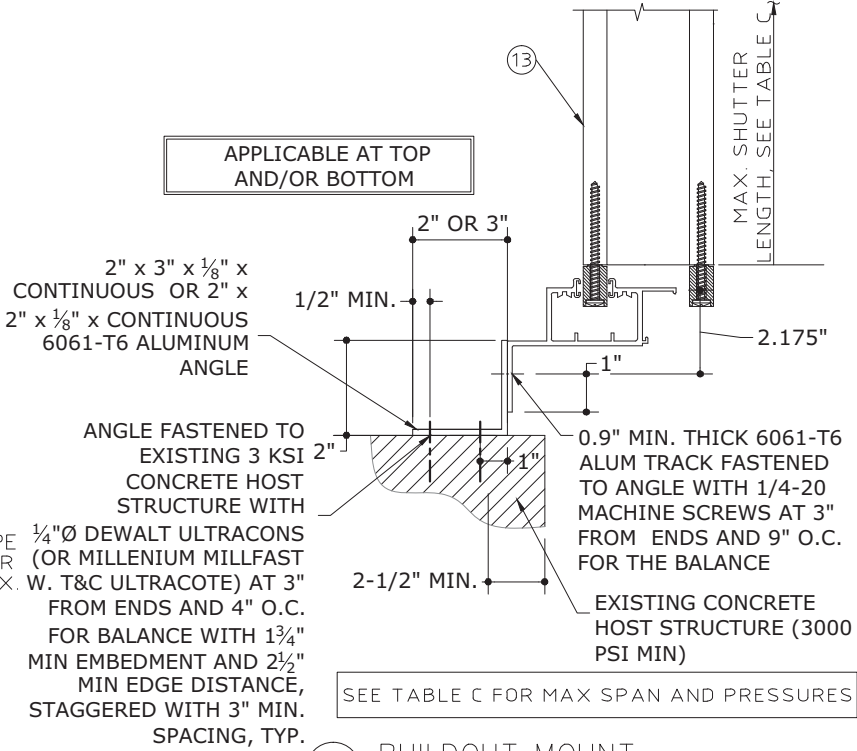
| TABLE C: ALLOWABLE SPAN SCHEDULE FOR BUILDOUT MOUNT (DETAIL F) |                     |
|----------------------------------------------------------------|---------------------|
| MAX SHUTTER SPAN                                               | MAX DESIGN PRESSURE |
| 125 IN.                                                        | +/-30.1 PSF         |
| 121 IN.                                                        | +/-31.1 PSF         |
| 118 IN.                                                        | +/-31.9 PSF         |
| 115 IN.                                                        | +/-32.7 PSF         |
| 112 IN.                                                        | +/-33.6 PSF         |
| 110 IN.                                                        | +/-34.2 PSF         |
| 107 IN.                                                        | +/-35.2 PSF         |
| 105 IN.                                                        | +/-35.9 PSF         |
| 103 IN.                                                        | +/-36.5 PSF         |
| 101 IN.                                                        | +/-37.3 PSF         |
| 99 IN.                                                         | +/-38.0 PSF         |
| 95 IN.                                                         | +/-39.6 PSF         |
| 92 IN.                                                         | +/-40.9 PSF         |
| 89 IN.                                                         | +/-42.3 PSF         |
| 86 IN.                                                         | +/-43.8 PSF         |
| 83 IN.                                                         | +/-45.4 PSF         |
| 81 IN.                                                         | +/-46.5 PSF         |
| 78 IN.                                                         | +/-48.3 PSF         |
| 76 IN.                                                         | +/-49.5 PSF         |
| 74 IN.                                                         | +/-50.9 PSF         |
| 72 IN.                                                         | +/-52.3 PSF         |
| 70 IN.                                                         | +/-53.8 PSF         |
| 68 IN.                                                         | +/-55.4 PSF         |
| 66 IN.                                                         | +/-57.0 PSF         |



EE INSIDE SILL MOUNT SECTION  
SCALE: 3" = 1'-0"



Cb ALTERNATE BUILD OUT MOUNT SECTION  
SCALE: 3" = 1'-0"



F BUILDOUT MOUNT  
SCALE: NTS

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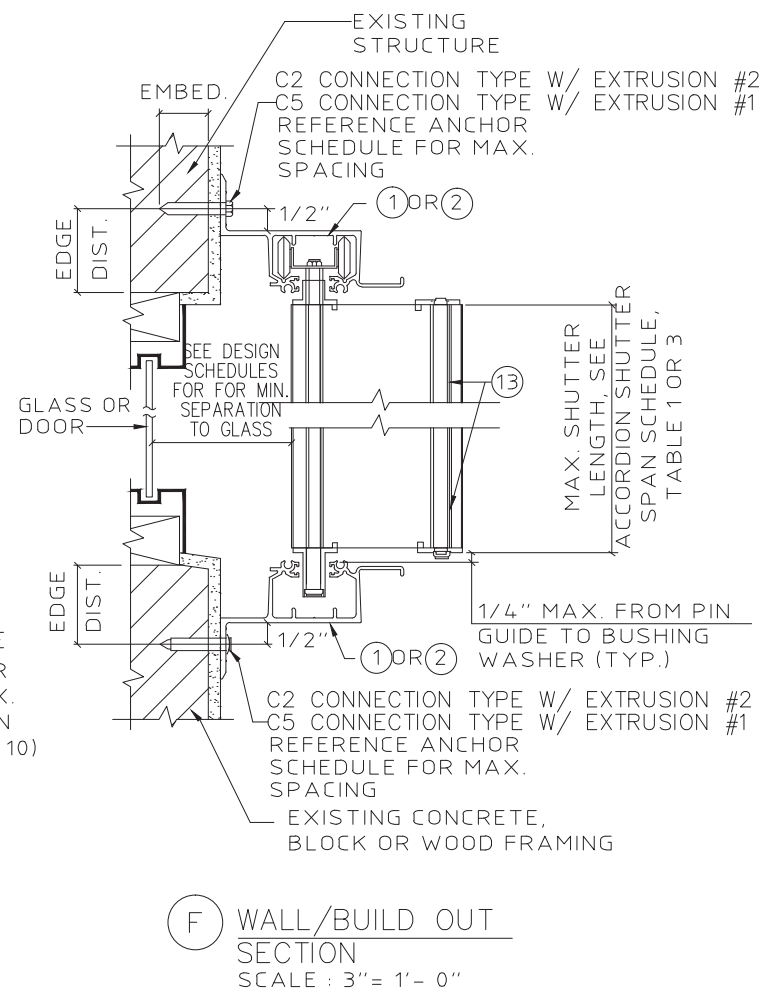
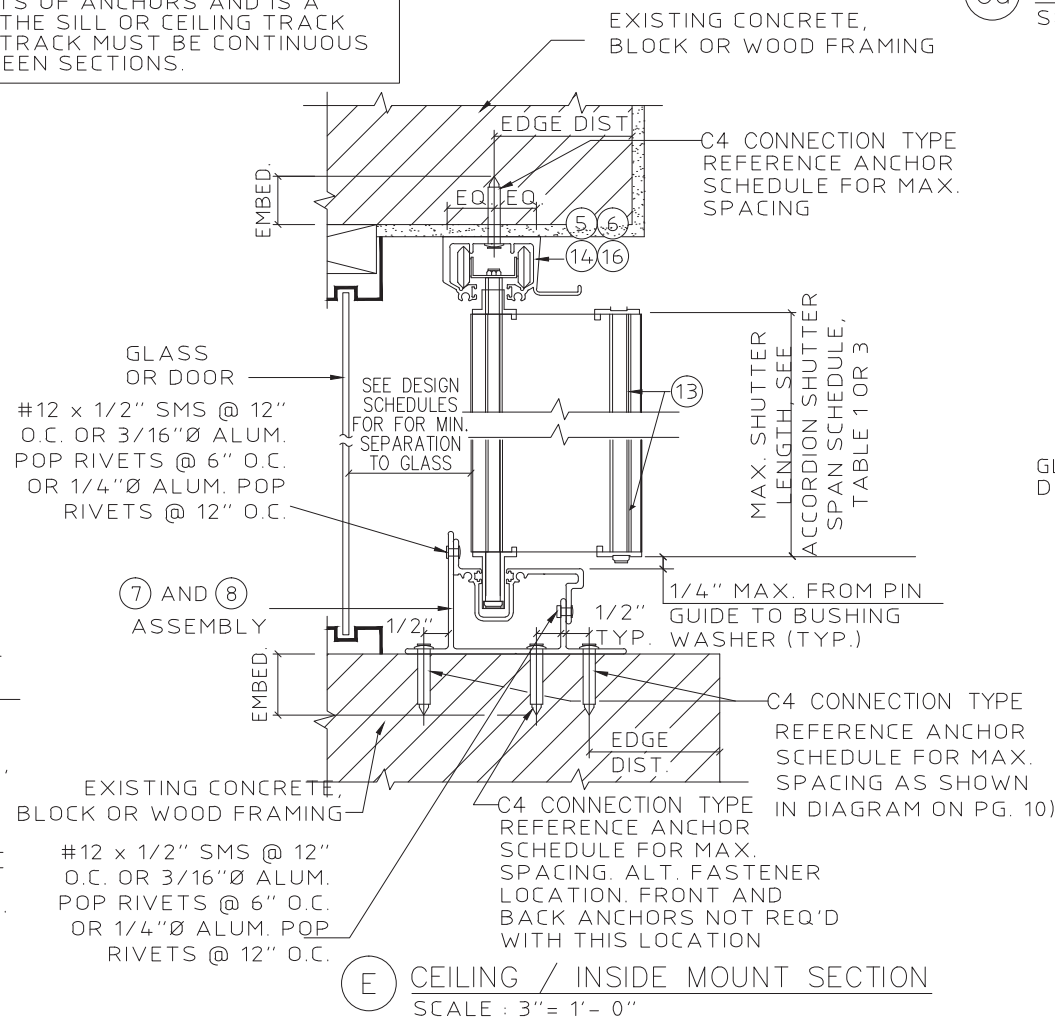
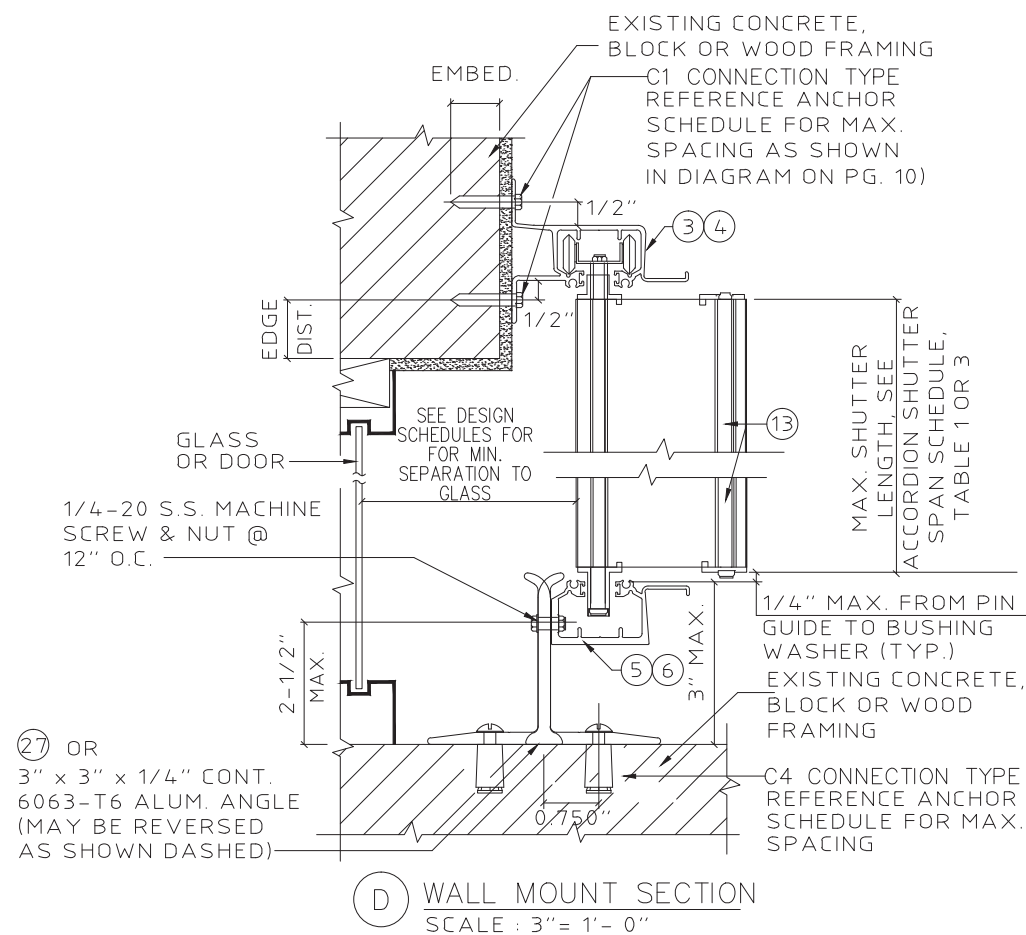
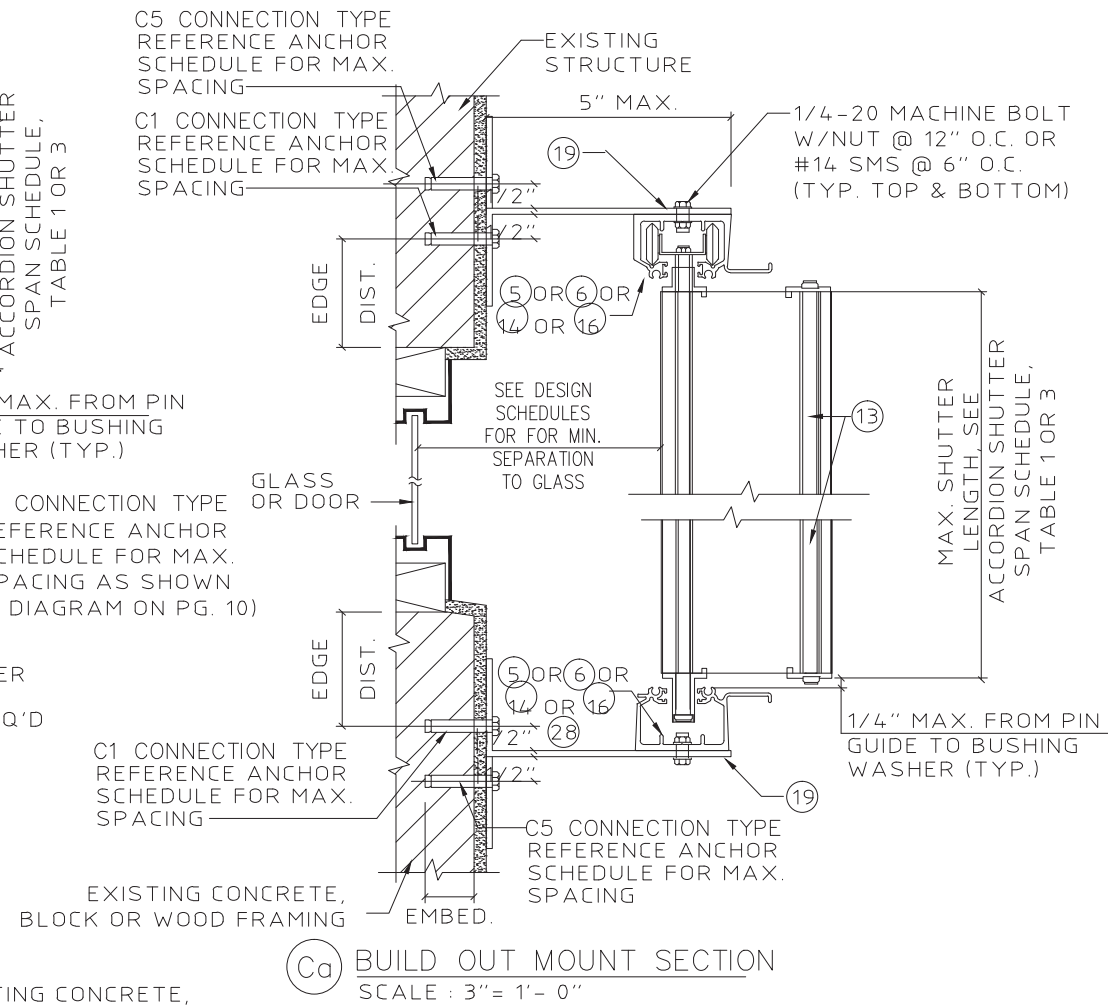
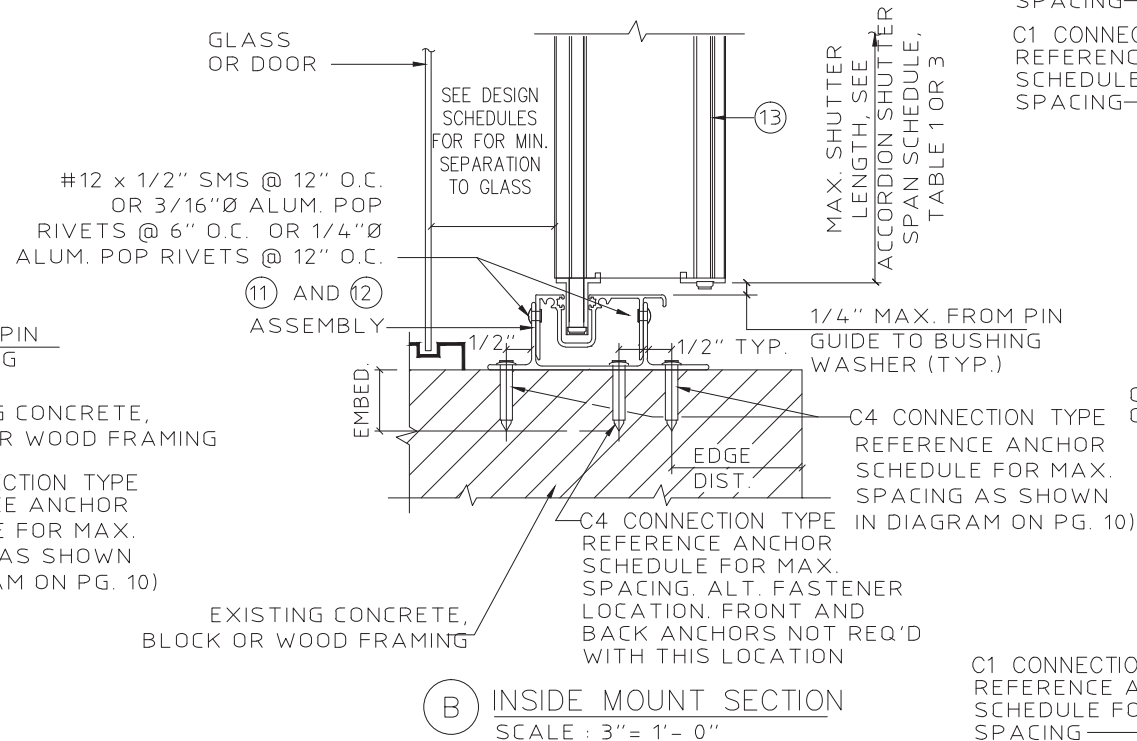
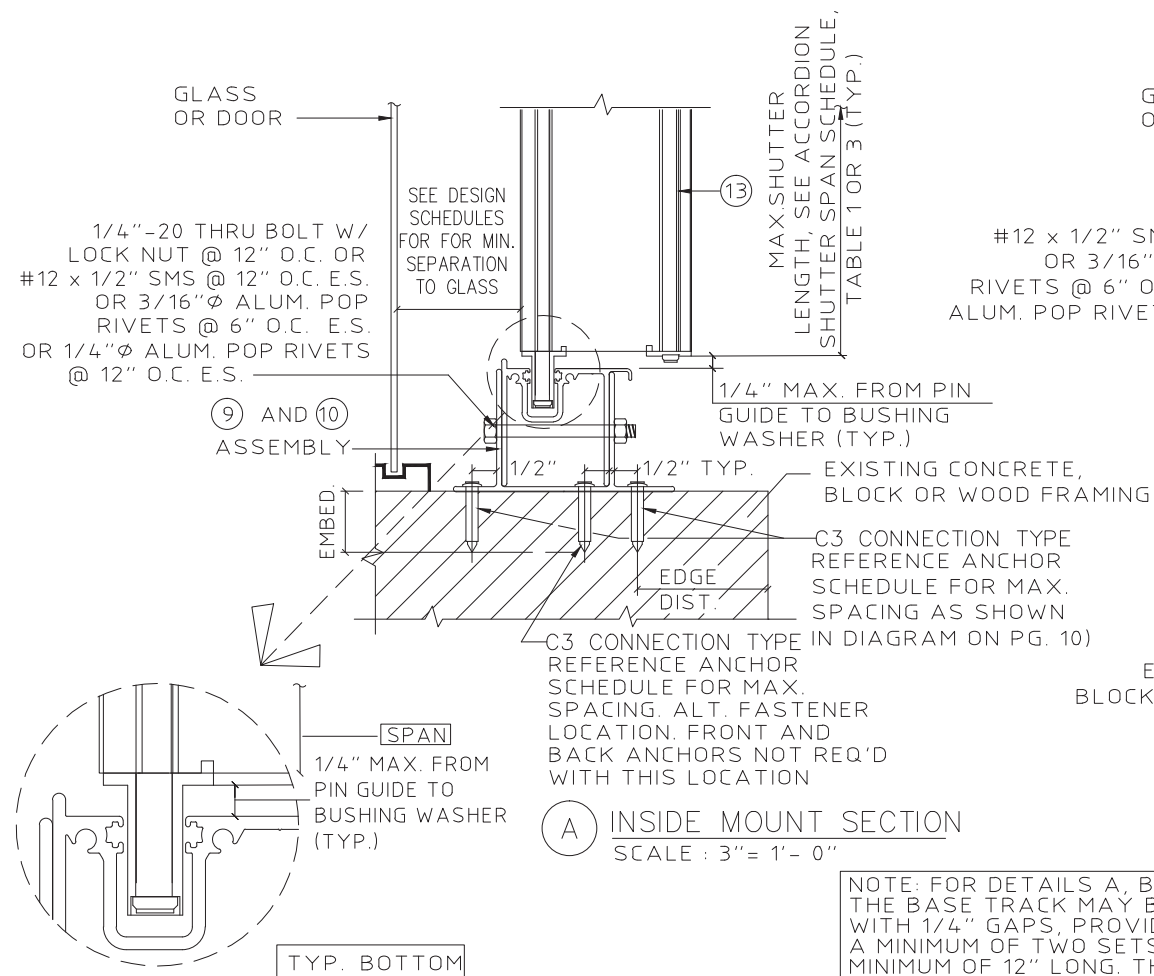
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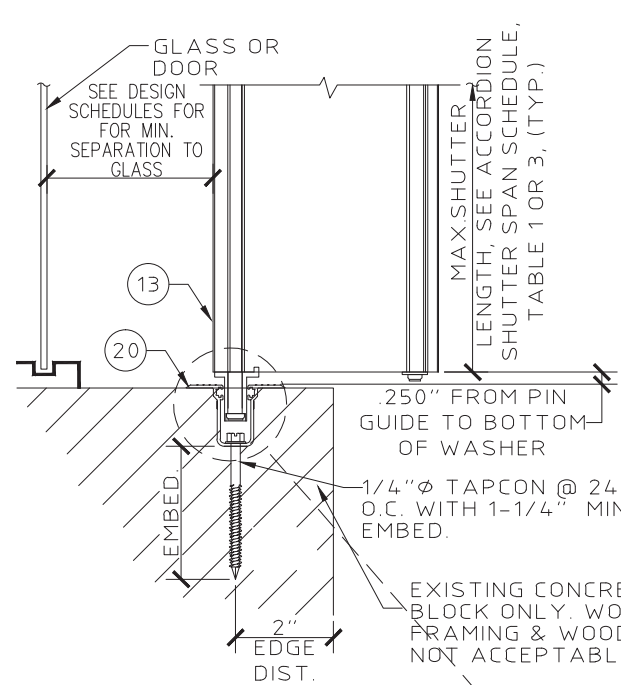
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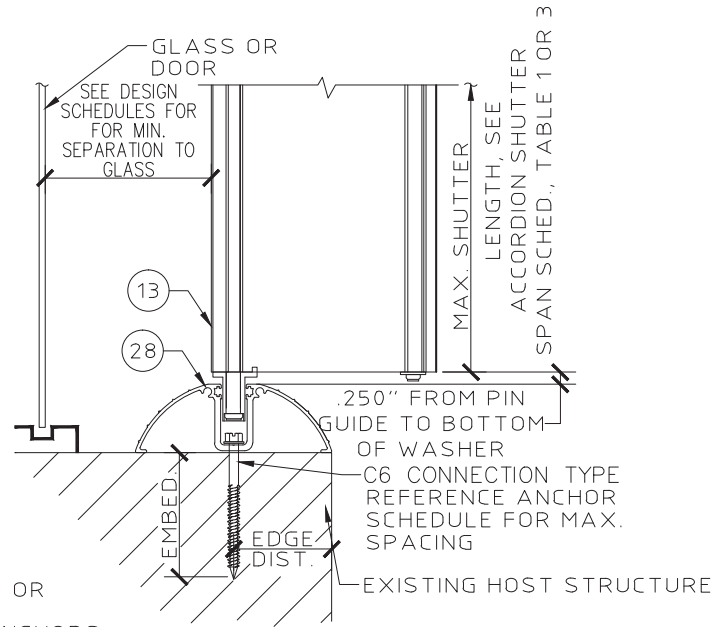
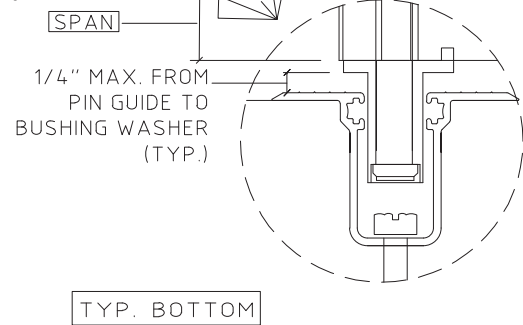




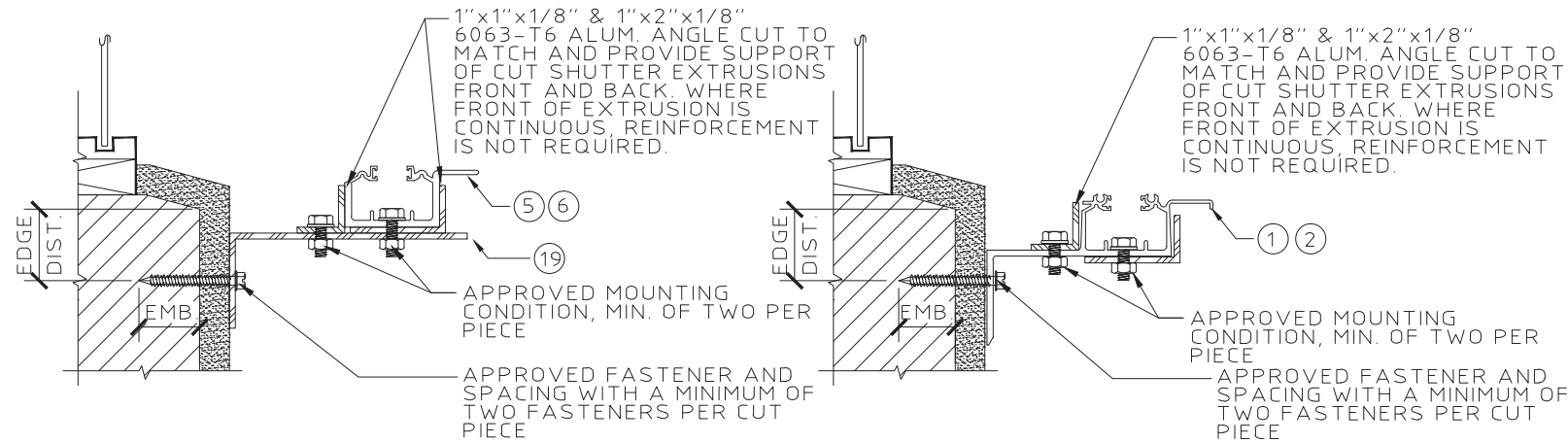
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(M) RECESS SILL DETAIL  
SCALE : 3" = 1'- 0"

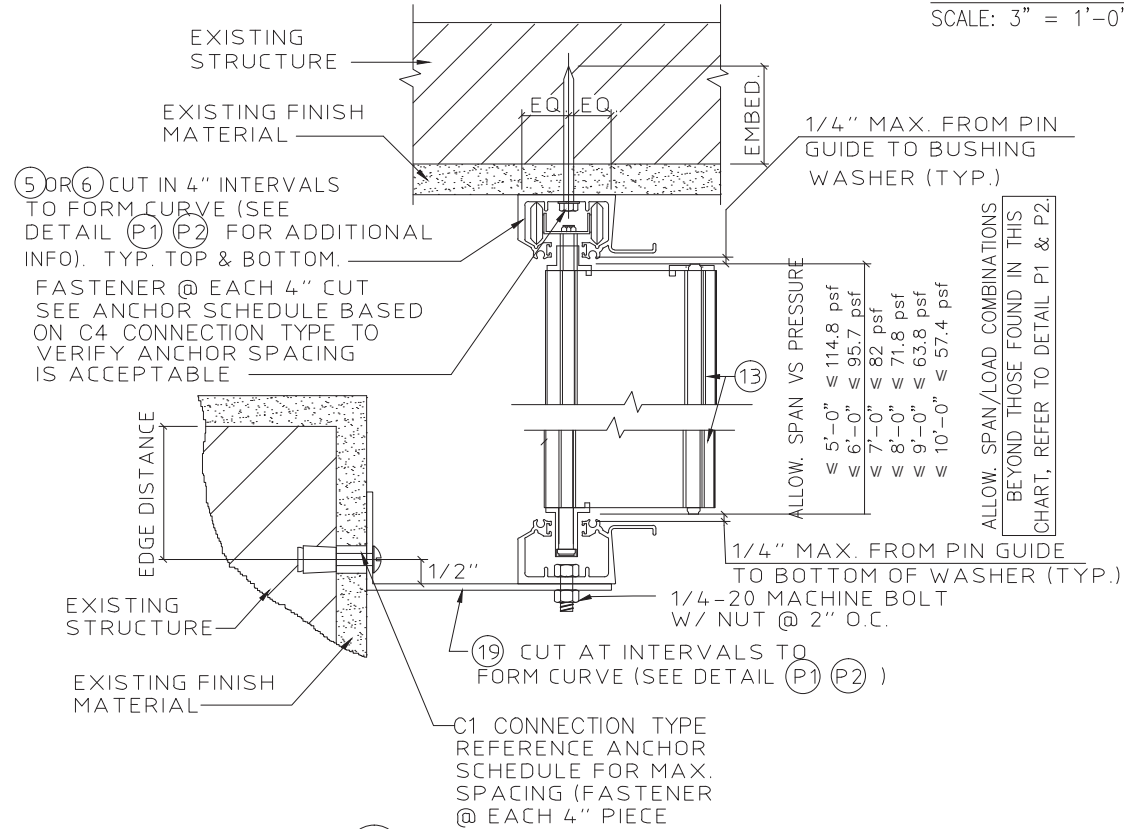


(N) DECORATIVE FLOOR TRACK DETAIL  
SCALE : 3" = 1'- 0"

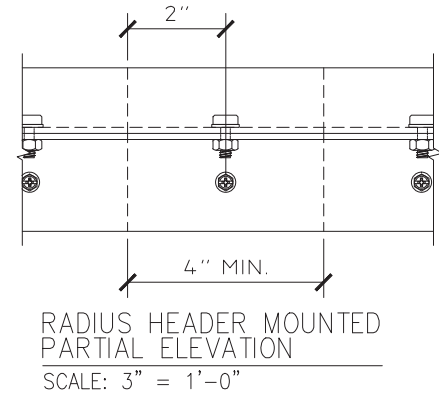


(P1) TYP. SECTION FOR SHUTTERS  
SCALE: 3" = 1'-0"

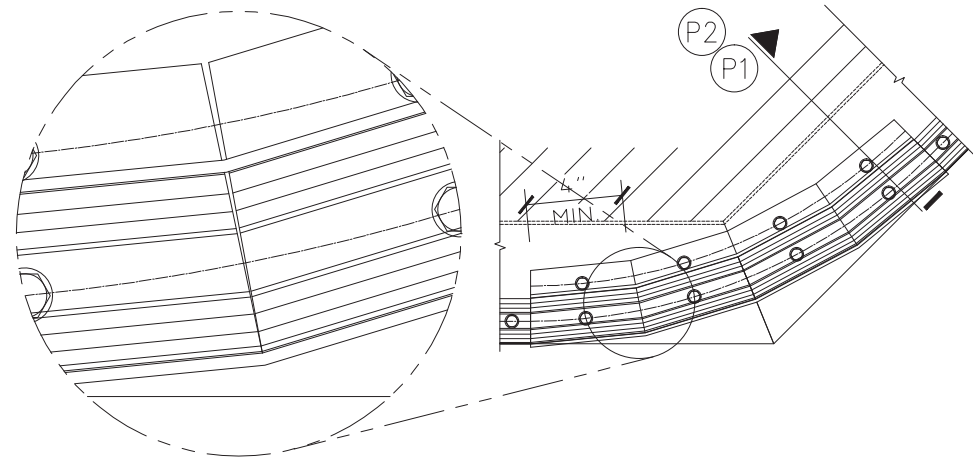
(P2) TYP. ALTERNATE SECTION FOR SHUTTERS  
SCALE: 3" = 1'-0"



(P) CURVED TRACK SECTION DETAIL  
SCALE : 3" = 1'- 0"



RADIUS HEADER MOUNTED  
PARTIAL ELEVATION  
SCALE: 3" = 1'-0"



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| REMARKS          | DRWN | CHKD | DATE     |
|------------------|------|------|----------|
| INIT ISSUE       | KL   | FLB  | 12/20/11 |
| CLIENT REVISIONS | KL   | FLB  | 2/22/12  |
| CLIENT REVISIONS | KL   | FLB  | 10/25/13 |
| 2014 FBC         | RWN  | CSL  | 4/01/15  |
| 2017 FBC         | RWN  | FLB  | 8/04/17  |
| 2020 FBC UPDATE  | CB   | RWN  | 6/17/20  |

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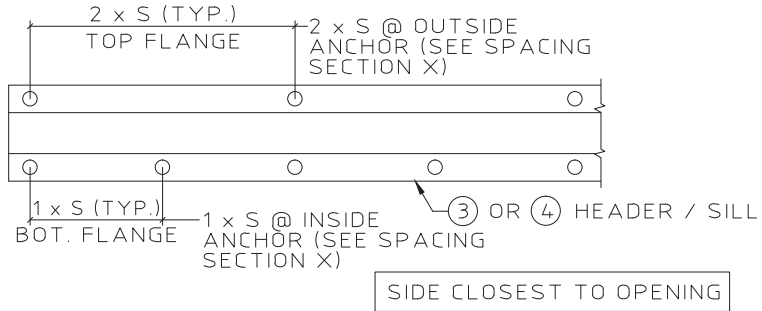
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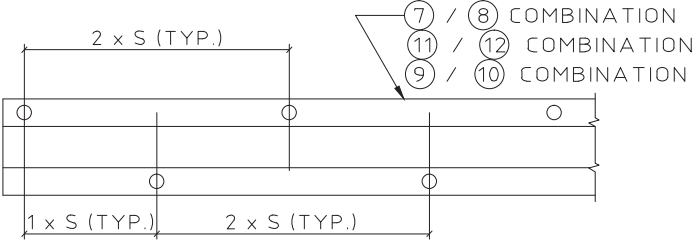
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ANCHOR SCHEDULE: CONCRETE

| HOST<br>STRUCT.                                                           | ANCHOR                                                                                               | LOAD<br>(psf) | 2.5" MIN EDGE DISTANCE   |       |       |       |       |       |                   |       |       |       |       |       |                    |       |       |       |       |       |       |
|---------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|---------------|--------------------------|-------|-------|-------|-------|-------|-------------------|-------|-------|-------|-------|-------|--------------------|-------|-------|-------|-------|-------|-------|
|                                                                           |                                                                                                      |               | Spans Up To 6'-0"        |       |       |       |       |       | Spans Up To 8'-8" |       |       |       |       |       | Spans Up To 13'-0" |       |       |       |       |       |       |
|                                                                           |                                                                                                      |               | CONN TYPE                |       |       |       |       |       | CONN TYPE         |       |       |       |       |       | CONN TYPE          |       |       |       |       |       |       |
| CONCRETE                                                                  | 1/4" ITW TAPCON OR DEWALT<br>ULTRACON WITH 1-3/4" EMBED (3192psi MIN CONC)                           | 48            | 16.0"                    | 16.0" | 16.0" | 16.0" | 16.0" | 16.0" | 16.0"             | 16.0" | 10.5" | 10.0" | 16.0" | 13.0" | 15.5"              | 16.0" | 6.5"  | 6.0"  | 9.5"  | 9.0"  |       |
|                                                                           |                                                                                                      | 62            | 16.0"                    | 16.0" | 12.5" | 12.0" | 16.0" | 14.5" | 16.0"             | 16.0" | 8.0"  | 7.0"  | 13.0" | 10.0" | 11.0"              | 10.0" | 5.0"  | 4.0"  | 6.0"  | 7.0"  |       |
|                                                                           |                                                                                                      | 72            | 16.0"                    | 16.0" | 10.0" | 9.5"  | 16.0" | 12.5" | 15.5"             | 16.0" | 6.5"  | 6.0"  | 9.5"  | 9.0"  | 9.0"               | 8.0"  | 4.0"  |       | 5.0"  | 6.0"  |       |
|                                                                           |                                                                                                      | 110           | 14.5"                    | 14.5" | 6.0"  | 5.5"  | 8.5"  | 8.5"  | 9.0"              | 7.5"  | 4.0"  |       | 4.5"  | 6.0"  | 7.5"               | 6.0"  |       |       |       | 5.0"  |       |
|                                                                           |                                                                                                      | 200           | 7.5"                     | 6.0"  |       |       |       | 5.0"  | 7.5"              | 6.0"  |       |       | 5.0"  | 7.5"  | 6.0"               |       |       |       |       | 5.0"  |       |
|                                                                           | 1/4" MILLENIUM MILLFAST<br>WITH 1-3/4" EMBED (3275psi MIN CONCRETE)                                  | 48            | 16.0"                    | 16.0" | 16.0" | 16.0" | 16.0" | 16.0" | 16.0"             | 16.0" | 11.0" | 10.5" | 16.0" | 14.0" | 14.5"              | 14.5" | 6.5"  | 6.0"  | 9.0"  | 9.5"  |       |
|                                                                           |                                                                                                      | 62            | 16.0"                    | 16.0" | 13.0" | 12.0" | 16.0" | 15.5" | 16.0"             | 16.0" | 8.0"  | 7.0"  | 12.0" | 11.0" | 10.0"              | 9.0"  | 5.0"  | 4.0"  | 5.5"  | 7.5"  |       |
|                                                                           |                                                                                                      | 72            | 16.0"                    | 16.0" | 10.5" | 9.5"  | 16.0" | 13.5" | 14.5"             | 14.5" | 6.5"  | 6.0"  | 9.0"  | 9.5"  | 8.5"               | 7.0"  | 4.0"  |       | 4.5"  | 6.5"  |       |
|                                                                           |                                                                                                      | 110           | 13.0"                    | 13.0" | 6.0"  | 5.5"  | 8.0"  | 9.0"  | 8.0"              | 7.0"  | 4.0"  |       | 4.5"  | 6.0"  | 6.5"               | 5.5"  |       |       |       | 5.5"  |       |
|                                                                           |                                                                                                      | 200           | 6.5"                     | 5.5"  |       |       |       | 5.5"  | 6.5"              | 5.5"  |       |       | 5.5"  | 6.5"  | 5.5"               |       |       |       |       | 5.5"  |       |
|                                                                           | 1/4" DEWALT CRETEFLEX<br>SS4 W/ 2" EMBED (3350psi MIN CONC)                                          | 48            | 16.0"                    | 16.0" | 16.0" | 16.0" | 16.0" | 16.0" | 16.0"             | 16.0" | 16.0" | 15.0" | 16.0" | 16.0" | 16.0"              | 16.0" | 16.0" | 10.0" | 8.5"  | 12.5" | 14.0" |
|                                                                           |                                                                                                      | 62            | 16.0"                    | 16.0" | 16.0" | 16.0" | 16.0" | 16.0" | 16.0"             | 16.0" | 12.0" | 10.5" | 16.0" | 16.0" | 14.5"              | 13.5" | 7.0"  | 6.5"  | 8.0"  | 11.0" |       |
|                                                                           |                                                                                                      | 72            | 16.0"                    | 16.0" | 15.5" | 14.5" | 16.0" | 16.0" | 16.0"             | 16.0" | 10.0" | 8.5"  | 12.5" | 14.0" | 12.0"              | 10.5" | 6.0"  | 5.0"  | 6.5"  | 9.5"  |       |
|                                                                           |                                                                                                      | 110           | 16.0"                    | 16.0" | 9.0"  | 8.0"  | 11.5" | 13.0" | 12.0"             | 10.0" | 6.0"  | 5.0"  | 6.0"  | 9.0"  | 10.0"              | 8.0"  | 5.0"  | 4.0"  | 5.0"  | 8.0"  |       |
|                                                                           |                                                                                                      | 200           | 10.0"                    | 8.0"  | 5.0"  | 4.0"  | 5.0"  | 8.0"  | 10.0"             | 8.0"  | 5.0"  | 4.0"  | 5.0"  | 8.0"  | 10.0"              | 8.0"  | 5.0"  | 4.0"  | 5.0"  | 8.0"  |       |
|                                                                           | 1/4" ITW TAPCON OR DEWALT<br>ULTRACON WITH 1-3/4" EMBED (3192psi MIN CONC)<br>BED (3192psi MIN CONC) |               | 1" MIN EDGE DISTANCE     |       |       |       |       |       |                   |       |       |       |       |       |                    |       |       |       |       |       |       |
|                                                                           |                                                                                                      | 48            | 16.0"                    | 16.0" | 7.5"  | 7.5"  | 16.0" | 7.5"  | 16.0"             | 16.0" | 5.0"  | 4.5"  | 16.0" | 5.5"  | 15.0"              | 15.5" |       |       | 9.5"  |       |       |
|                                                                           |                                                                                                      | 62            | 16.0"                    | 16.0" | 5.5"  | 5.5"  | 16.0" | 6.0"  | 16.0"             | 16.0" |       |       | 12.5" | 4.0"  | 10.5"              | 9.5"  |       |       | 6.0"  |       |       |
|                                                                           |                                                                                                      | 72            | 16.0"                    | 16.0" | 4.5"  | 4.5"  | 16.0" | 5.0"  | 15.0"             | 15.5" |       |       | 9.5"  |       | 9.0"               | 7.5"  |       |       | 4.5"  |       |       |
|                                                                           |                                                                                                      | 110           | 14.0"                    | 14.0" |       |       | 8.5"  |       | 8.5"              | 7.5"  |       |       | 4.5"  |       | 7.0"               | 6.0"  |       |       |       |       |       |
|                                                                           | 1/4" MILLENIUM MILLFAST<br>WITH 1-3/4" EMBED (3275psi MIN CONCRETE)                                  | 48            | 16.0"                    | 16.0" | 13.0" | 13.0" | 16.0" | 13.5" | 16.0"             | 16.0" | 8.0"  | 7.5"  | 16.0" | 9.5"  | 11.5"              | 11.5" | 4.5"  | 4.0"  | 7.0"  | 6.5"  |       |
|                                                                           |                                                                                                      | 62            | 16.0"                    | 16.0" | 9.0"  | 8.5"  | 16.0" | 10.5" | 14.0"             | 15.0" | 5.5"  | 5.0"  | 9.5"  | 7.5"  | 8.0"               | 7.5"  |       |       | 4.5"  | 5.0"  |       |
|                                                                           |                                                                                                      | 72            | 16.0"                    | 16.0" | 7.5"  | 7.0"  | 16.0" | 9.5"  | 11.5"             | 11.5" | 4.5"  | 4.0"  | 7.0"  | 6.5"  | 6.5"               | 5.5"  |       |       |       | 4.5"  |       |
|                                                                           |                                                                                                      | 110           | 10.5"                    | 10.5" | 4.5"  | 4.0"  | 6.0"  | 6.0"  | 6.5"              | 5.5"  |       |       |       | 4.0"  | 5.5"               | 4.5"  |       |       |       |       |       |
|                                                                           |                                                                                                      | 200           | 5.5"                     | 4.5"  |       |       |       |       | 5.5"              | 4.5"  |       |       |       |       | 5.5"               | 4.5"  |       |       |       |       |       |
|                                                                           | 1/4" ALL-POINTS SOLID-SET<br>ANCHOR W/ 7/8" EMBED &<br>1/4-20 SS MACHINE SCREW (3000psi MIN CONC)    |               | 1-1/4" MIN EDGE DISTANCE |       |       |       |       |       |                   |       |       |       |       |       |                    |       |       |       |       |       |       |
|                                                                           |                                                                                                      | 48            | 16.0"                    | 16.0" | 9.5"  | 9.5"  | 16.0" | 10.0" | 16.0"             | 16.0" | 6.0"  | 5.5"  | 16.0" | 7.0"  | 10.5"              | 11.0" | 3.5"  | 3.5"  | 6.5"  | 4.5"  |       |
|                                                                           |                                                                                                      | 62            | 16.0"                    | 16.0" | 7.0"  | 6.5"  | 16.0" | 8.0"  | 13.5"             | 14.5" | 4.5"  | 4.0"  | 9.0"  | 5.5"  | 7.5"               | 7.0"  |       |       | 4.0"  | 3.5"  |       |
|                                                                           |                                                                                                      | 72            | 16.0"                    | 16.0" | 5.5"  | 5.5"  | 16.0" | 7.0"  | 10.5"             | 11.0" | 3.5"  | 3.5"  | 6.5"  | 4.5"  | 6.0"               | 5.5"  |       |       | 3.0"  | 3.0"  |       |
|                                                                           |                                                                                                      | 110           | 10.0"                    | 10.0" | 3.5"  | 3.0"  | 6.0"  | 4.5"  | 6.0"              | 5.0"  |       |       | 3.0"  | 3.0"  | 5.0"               | 4.0"  |       |       |       |       |       |
|                                                                           | 1/4" ALL-POINTS SOLID-SET<br>ANCHOR W/ 7/8" EMBED &<br>1/4-20 SS MACHINE SCREW (3000psi MIN CONC)    | 200           | 5.0"                     | 4.0"  |       |       |       |       | 5.0"              | 4.0"  |       |       |       |       | 5.0"               | 4.0"  |       |       |       |       |       |
|                                                                           |                                                                                                      |               | 3" MIN EDGE DISTANCE     |       |       |       |       |       |                   |       |       |       |       |       |                    |       |       |       |       |       |       |
|                                                                           |                                                                                                      | 48            | 16.0"                    | 16.0" | 16.0" | 16.0" | 16.0" | 16.0" | 16.0"             | 16.0" | 14.0" | 13.0" | 16.0" | 16.0" | 16.0"              | 16.0" | 8.5"  | 7.5"  | 11.0" | 12.0" |       |
|                                                                           |                                                                                                      | 62            | 16.0"                    | 16.0" | 16.0" | 15.0" | 16.0" | 16.0" | 16.0"             | 16.0" | 10.0" | 9.0"  | 15.0" | 13.5" | 12.5"              | 11.5" | 6.0"  | 5.5"  | 7.0"  | 9.0"  |       |
|                                                                           |                                                                                                      | 72            | 16.0"                    | 16.0" | 13.0" | 12.0" | 16.0" | 16.0" | 16.0"             | 16.0" | 8.5"  | 7.5"  | 11.0" | 12.0" | 10.5"              | 9.0"  | 5.0"  | 4.5"  | 5.5"  | 8.0"  |       |
|                                                                           | 1/4" DEWALT SS DROP-IN<br>W/ 1/4-20 SS BOLT AND 1" EMBED (3000psi MIN CONC)                          | 110           | 16.0"                    | 16.0" | 8.0"  | 7.0"  | 10.0" | 11.0" | 10.5"             | 9.0"  | 5.0"  | 4.5"  | 5.5"  | 8.0"  | 8.5"               | 7.0"  | 4.0"  | 3.5"  | 4.5"  | 6.5"  |       |
|                                                                           |                                                                                                      | 200           | 8.5"                     | 7.0"  | 4.0"  | 3.5"  | 4.5"  | 6.5"  | 8.5"              | 7.0"  | 4.0"  | 3.5"  | 4.5"  | 6.5"  | 8.5"               | 7.0"  | 4.0"  | 3.5"  | 4.5"  | 6.5"  |       |
|                                                                           |                                                                                                      |               | 2-5/8" MIN EDGE DISTANCE |       |       |       |       |       |                   |       |       |       |       |       |                    |       |       |       |       |       |       |
|                                                                           |                                                                                                      | 48            | 16.0"                    | 16.0" | 16.0" | 16.0" | 16.0" | 16.0" | 16.0"             | 16.0" | 10.0" | 9.5"  | 16.0" | 13.0" | 12.0"              | 12.5" | 6.0"  | 5.5"  | 7.5"  | 9.0"  |       |
|                                                                           |                                                                                                      | 62            | 16.0"                    | 16.0" | 12.0" | 11.0" | 16.0" | 14.5" | 15.0"             | 16.0" | 7.5"  | 6.5"  | 10.0" | 10.5" | 8.5"               | 8.0"  |       |       |       | 7.0"  |       |
|                                                                           | 1/4" DEWALT SS DROP-IN<br>W/ 1/4-20 SS BOLT AND 1" EMBED (3000psi MIN CONC)                          | 72            | 16.0"                    | 16.0" | 9.5"  | 9.0"  | 16.0" | 12.5" | 12.0"             | 12.5" | 6.0"  | 5.5"  | 7.5"  | 9.0"  | 7.0"               | 6.0"  |       |       |       | 6.0"  |       |
|                                                                           |                                                                                                      | 110           | 11.0"                    | 11.0" | 5.5"  | 5.0"  | 6.5"  | 8.5"  | 7.0"              | 6.0"  |       |       |       | 6.0"  | 5.5"               |       |       |       |       | 5.0"  |       |
|                                                                           |                                                                                                      | 200           | 5.5"                     |       |       |       |       | 5.0"  | 5.5"              |       |       |       |       | 5.0"  | 5.5"               |       |       |       |       | 5.0"  |       |
|                                                                           |                                                                                                      |               | 3-1/2" MIN EDGE DISTANCE |       |       |       |       |       |                   |       |       |       |       |       |                    |       |       |       |       |       |       |
|                                                                           |                                                                                                      | 48            | 16.0"                    | 16.0" | 16.0" | 16.0" | 16.0" | 16.0" | 16.0"             | 16.0" | 11.0" | 10.0" | 16.0" | 14.0" | 13.0"              | 13.0" | 6.5"  | 5.5"  | 8.0"  | 9.5"  |       |
|                                                                           | #12 SMS W/ 2" EYEWALL<br>ARMOR INSERT W/ 2" EMBED (2000psi MIN CONC)                                 | 62            | 16.0"                    | 16.0" | 13.0" | 12.0" | 16.0" | 15.5" | 16.0"             | 16.0" | 8.0"  | 7.0"  | 10.5" | 11.0" | 9.0"               | 8.0"  | 5.0"  |       | 5.0"  | 7.5"  |       |
|                                                                           |                                                                                                      | 72            | 16.0"                    | 16.0" | 10.5" | 9.5"  | 16.0" | 13.5" | 13.0"             | 13.0" | 6.5"  | 5.5"  | 8.0"  | 9.5"  | 7.5"               | 6.5"  |       |       |       | 6.5"  |       |
|                                                                           |                                                                                                      | 110           | 12.0"                    | 11.5" | 6.0"  | 5.5"  | 7.0"  | 9.0"  | 7.5"              | 6.5"  |       |       |       | 6.5"  | 6.0"               | 5.0"  |       |       |       | 5.5"  |       |
|                                                                           |                                                                                                      | 200           | 6.0"                     | 5.0"  |       |       |       | 5.5"  | 6.0"              | 5.0"  |       |       |       | 5.5"  | 6.0"               | 5.0"  |       |       |       | 5.5"  |       |
|                                                                           |                                                                                                      |               | 2" MIN EDGE DISTANCE     |       |       |       |       |       |                   |       |       |       |       |       |                    |       |       |       |       |       |       |
|                                                                           | #12 SMS W/ 2.75" EYEWALL<br>ARMOR INSERT W/ 2.5" EMBED (2000psi MIN CONC)                            | 48            | 16.0"                    | 16.0" | 13.0" | 13.0" | 16.0" | 13.5" | 16.0"             | 16.0" | 8.0"  | 7.5"  | 16.0" | 9.5"  | 14.5"              | 15.0" | 5.0"  | 4.5"  | 9.0"  | 6.5"  |       |
|                                                                           |                                                                                                      | 62            | 16.0"                    | 16.0" | 9.5"  | 9.0"  | 16.0" | 10.5" | 16.0"             | 16.0" | 6.0"  | 5.5"  | 12.5" | 7.5"  | 10.5"              | 9.5"  | 3.5"  | 3.5"  | 5.5"  | 5.0"  |       |
|                                                                           |                                                                                                      | 72            | 16.0"                    | 16.0" | 8.0"  | 7.5"  | 16.0" | 9.5"  | 14.5"             | 15.0" | 5.0"  | 4.5"  | 9.0"  | 6.5"  | 8.5"               | 7.5"  | 3.0"  |       | 4.5"  | 4.5"  |       |
|                                                                           |                                                                                                      | 110           | 13.5"                    | 13.5" | 4.5"  | 4.0"  | 8.0"  | 6.0"  | 8.5"              | 7.0"  | 3.0"  |       | 4.5"  | 4.0"  | 7.0"               | 5.5"  |       |       | 3.5"  | 3.5"  |       |
| 200                                                                       |                                                                                                      | 7.0"          | 5.5"                     |       |       | 3.5"  | 3.5"  | 7.0"  | 5.5"              |       |       | 3.5"  | 3.5"  | 7.0"  | 5.5"               |       |       | 3.5"  | 3.5"  |       |       |
| #12 SMS W/ 2.75" EYEWALL<br>ARMOR INSERT W/ 2.5" EMBED (2000psi MIN CONC) | 48                                                                                                   | 16.0"         | 16.0"                    | 16.0" | 16.0" | 16.0" | 16.0" | 16.0" | 16.0"             | 11.5" | 11.0" | 16.0" | 14.0" | 16.0" | 16.0"              | 7.0"  | 6.5"  | 11.5" | 9.5"  |       |       |
|                                                                           | 62                                                                                                   | 16.0"         | 16.0"                    | 13.5" | 13.0" | 16.0" | 15.5" | 16.0" | 16.0"             | 8.5"  | 8.0"  | 16.0" | 11.0" | 13.5" | 12.0"              | 5.5"  | 4.5"  | 7.5"  | 7.5"  |       |       |
|                                                                           | 72                                                                                                   | 16.0"         | 16.0"                    | 11.0" | 10.5" | 16.0" | 13.5" | 16.0" | 16.0"             | 7.0"  | 6.5"  | 11.5" | 9.5"  | 11.0" | 9.5"               | 4.5"  | 4.0"  | 6.0"  | 6.0"  |       |       |
|                                                                           | 110                                                                                                  | 16.0"         | 16.0"                    | 6.5"  | 6.0"  | 10.5" | 9.0"  | 11.0" | 9.5"              | 4.5"  | 4.0"  | 5.5"  | 6.0"  | 9.0"  | 7.5"               | 3.5"  | 3.0"  | 4.5"  | 5.0"  |       |       |
|                                                                           | 200                                                                                                  | 9.0"          | 7.5"                     | 3.5"  | 3.0"  | 4.5"  | 5.0"  | 9.0"  | 7.5"              | 3.5"  | 3.0"  | 4.5"  | 5.0"  | 9.0"  | 7.5"               | 3.5"  | 3.0"  | 4.5"  | 5.0"  |       |       |



NOTE: "S" INDICATES ANCHOR SCHEDULE SPACING.  
SPACING DIAGRAM FOR C1 CONNECTION TYPE:  
- C1 CONNECTION TYPE USING PIECE 3 OR 4



NOTE: "S" INDICATES ANCHOR SCHEDULE SPACING.  
SPACING DIAGRAM FOR C3 & C4 CONNECTION TYPE:  
- C3 CONNECTION TYPE USING PIECE 10 WITH OUTSIDE ANCHORS ONLY  
- C4 CONNECTION TYPE USING PIECE 8 OR 12 WITH OUTSIDE ANCHORS ONLY

ANCHOR NOTES:

- SPANS AND LOADS SHOWN HERE ARE FOR DETERMINING ANCHOR SPACING ONLY. ALLOWABLE STORM SHUTTER SPANS FOR SPECIFIC LOADS MUST BE LIMITED TO THOSE SHOWN IN TABLE 1 OR 3 AS APPLICABLE (Pg 1).
- ENTER ANCHOR SCHEDULE BASED ON THE EXISTING STRUCTURE MATERIAL, ANCHOR TYPE AND EDGE DISTANCE. SELECT DESIGN LOAD GREATER THAN OR EQUAL TO NEGATIVE DESIGN LOAD ON SHUTTER AND SELECT SPAN GREATER THAN OR EQUAL TO SHUTTER SPAN.
- SEE MOUNTING SECTION DETAILS FOR IDENTIFICATION OF CONNECTION TYPE.
- EXISTING STRUCTURE MAY BE CONCRETE, ASTM C-90 HOLLOW CONCRETE BLOCK OR WOOD FRAMING. REFERENCE ANCHOR SCHEDULE FOR PROPER ANCHOR TYPE BASED ON TYPE OF EXISTING STRUCTURE AND APPROPRIATE CONNECTION TYPE. SEE CONNECTION DETAILS FOR IDENTIFICATION OF CONNECTION TYPE.
- ALL CONCRETE ANCHORS SHALL BE INSTALLED TO NON-CRACKED CONCRETE ONLY.
- THE CONTRACTOR IS RESPONSIBLE TO ENSURE THE ANCHORS ARE INSTALLED IN ACCORDANCE WITH MANUFACTURERS' RECOMMENDATIONS. EMBEDMENT LENGTHS SHALL BE AS NOTED AND DO NOT INCLUDE STUCCO OR OTHER FINISHES.
- WHERE EXISTING STRUCTURE IS WOOD FRAMING, WOOD FRAMING CONDITIONS VARY. FIELD VERIFY THAT FASTENERS ARE INTO ADEQUATE WOOD FRAMING MEMBERS, NOT PLYWOOD. FASTENING TO PLYWOOD IS ACCEPTABLE ONLY FOR SIDE CLOSURE PIECES.
- WHERE LAG SCREWS FASTEN TO NARROW FACE OF STUD FRAMING, FASTENER SHALL BE LOCATED IN CENTER OF NOMINAL 2" x 4" (MIN.) WOOD STUD. 3/4" EDGE DISTANCE IS ACCEPTABLE FOR WOOD FRAMING. LAG SCREWS SHALL HAVE PHILLIPS PAN HEAD OR HEX HEAD.
- MACHINE SCREWS SHALL HAVE MINIMUM OF 1/2" ENGAGEMENT OF THREADS IN BASE ANCHOR AND MAY HAVE EITHER A PAN HEAD, TRUSS HEAD, OR WAFER HEAD (SIDEWALK BOLT), U.O.N.
- DESIGNATES ANCHOR CONDITIONS WHICH ARE NOT ACCEPTABLE USES.
- DESIGNATES ANCHORS WHICH ARE REMOVABLE BY REMOVING MACHINE SCREW, NUT OR WASHER WINGNUT.
- MINIMUM CONCRETE STRENGTHS ARE AS INDICATED IN ANCHOR SCHEDULE.
- WHEN ANCHORING TO HOLLOW BLOCK, SDS DRILLS SHOULD NOT BE USED TO DRILL INTO HOLLOW BLOCK, NOR SHOULD IMPACT DRILLS BE USED TO INSTALL CONCRETE SCREWS TO HOLLOW BLOCK.
- ALL MILLENIUM MILLFAST CONCRETE SCREWS SHALL HAVE T&C ULTRACOTE.

FRANK BENNARDO, PE  
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| REMARKS          | DRWN | CHKD | DATE     |
|------------------|------|------|----------|
| INIT ISSUE       | KL   | FLB  | 12/20/11 |
| CLIENT REVISIONS | KL   | FLB  | 2/22/12  |
| CLIENT REVISIONS | KL   | FLB  | 10/25/13 |
| 2014 FBC         | RWN  | CSL  | 4/01/15  |
| 2017 FBC         | RWN  | FLB  | 8/04/17  |

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ANCHOR SCHEDULE: CONCRETE (CONT.)

| HOST<br>STRUCT. | ANCHOR                                                                                                                                                | LOAD<br>(psf) | 2-3/16" MIN EDGE DISTANCE |       |       |       |       |       |                   |       |       |       |       |       |                    |       |       | 3-1/8" MIN EDGE DISTANCE |       |       |                   |       |       |       |       |       |                   |       |       |       |       |       |                    |       |       |       |       |       |       |
|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|---------------------------|-------|-------|-------|-------|-------|-------------------|-------|-------|-------|-------|-------|--------------------|-------|-------|--------------------------|-------|-------|-------------------|-------|-------|-------|-------|-------|-------------------|-------|-------|-------|-------|-------|--------------------|-------|-------|-------|-------|-------|-------|
|                 |                                                                                                                                                       |               | Spans Up To 6'-0"         |       |       |       |       |       | Spans Up To 8'-8" |       |       |       |       |       | Spans Up To 13'-0" |       |       |                          |       |       | Spans Up To 6'-0" |       |       |       |       |       | Spans Up To 8'-8" |       |       |       |       |       | Spans Up To 13'-0" |       |       |       |       |       |       |
|                 |                                                                                                                                                       |               | CONN TYPE                 |       |       |       |       |       | CONN TYPE         |       |       |       |       |       | CONN TYPE          |       |       |                          |       |       | CONN TYPE         |       |       |       |       |       | CONN TYPE         |       |       |       |       |       | CONN TYPE          |       |       |       |       |       |       |
| C1              | C2                                                                                                                                                    | C3            | C4                        | C5    | C6    | C1    | C2    | C3    | C4                | C5    | C6    | C1    | C2    | C3    | C4                 | C5    | C6    | C1                       | C2    | C3    | C4                | C5    | C6    | C1    | C2    | C3    | C4                | C5    | C6    | C1    | C2    | C3    | C4                 | C5    | C6    |       |       |       |       |
| CONCRETE        | 5/16" ITW TAPCON XL WITH<br>1-3/4" EMBED (2899psi MIN<br>CONC)<br>   | 48            | 16.0"                     | 16.0" | 16.0" | 16.0" | 16.0" | 16.0" | 16.0"             | 15.0" | 13.5" | 16.0" | 16.0" | 16.0" | 16.0"              | 9.0"  | 8.0"  | 11.5"                    | 12.5" | 16.0" | 16.0"             | 16.0" | 16.0" | 16.0" | 16.0" | 16.0" | 16.0"             | 15.0" | 14.0" | 16.0" | 16.0" | 16.0" | 16.0"              | 16.0" | 16.0" | 16.0" | 16.0" |       |       |
|                 |                                                                                                                                                       | 62            | 16.0"                     | 16.0" | 16.0" | 16.0" | 16.0" | 16.0" | 16.0"             | 16.0" | 10.5" | 9.5"  | 15.5" | 14.5" | 13.0"              | 12.0" | 6.5"  | 5.5"                     | 7.5"  | 10.0" | 16.0"             | 16.0" | 16.0" | 16.0" | 16.0" | 16.0" | 16.0"             | 16.0" | 11.0" | 9.5"  | 16.0" | 15.0" | 13.5"              | 12.5" | 6.5"  | 6.0"  | 7.5"  | 10.0" |       |
|                 |                                                                                                                                                       | 72            | 16.0"                     | 16.0" | 14.0" | 13.0" | 16.0" | 16.0" | 16.0"             | 16.0" | 9.0"  | 8.0"  | 11.5" | 12.5" | 11.0"              | 9.5"  | 5.5"  | 4.5"                     | 5.5"  | 8.5"  | 16.0"             | 16.0" | 14.5" | 13.0" | 16.0" | 16.0" | 16.0"             | 16.0" | 9.0"  | 8.0"  | 12.0" | 13.0" | 11.5"              | 10.0" | 5.5"  | 5.0"  | 6.0"  | 8.5"  |       |
|                 |                                                                                                                                                       | 110           | 16.0"                     | 16.0" | 8.5"  | 7.5"  | 10.5" | 12.0" | 10.5"             | 9.0"  | 5.5"  | 4.5"  | 5.5"  | 8.5"  | 9.0"               | 7.5"  | 4.5"  | 4.0"                     | 4.5"  | 7.0"  | 16.0"             | 16.0" | 8.5"  | 7.5"  | 10.5" | 12.0" | 11.0"             | 9.5"  | 5.5"  | 4.5"  | 6.0"  | 8.5"  | 9.0"               | 7.5"  | 4.5"  | 4.0"  | 4.5"  | 7.5"  |       |
|                 |                                                                                                                                                       | 200           | 9.0"                      | 7.5"  | 4.5"  | 4.0"  | 4.5"  | 7.0"  | 9.0"              | 7.5"  | 4.5"  | 4.0"  | 4.5"  | 7.0"  | 9.0"               | 7.5"  | 4.5"  | 4.0"                     | 4.5"  | 7.0"  | 9.0"              | 7.5"  | 4.5"  | 4.0"  | 4.5"  | 7.5"  | 9.0"              | 7.5"  | 4.5"  | 4.0"  | 4.5"  | 7.5"  | 9.0"               | 7.5"  | 4.5"  | 4.0"  | 4.5"  | 7.5"  |       |
|                 | 5/16" DEWALT ULTRACON<br>WITH 1-3/4" EMBED (3500psi<br>MIN CONC)<br> | 48            | 16.0"                     | 16.0" | 16.0" | 16.0" | 16.0" | 16.0" | 16.0"             | 16.0" | 16.0" | 15.5" | 16.0" | 16.0" | 16.0"              | 16.0" | 10.0" | 9.0"                     | 12.0" | 15.0" | 16.0"             | 16.0" | 16.0" | 16.0" | 16.0" | 16.0" | 16.0"             | 16.0" | 16.0" | 16.0" | 16.0" | 16.0" | 16.0"              | 16.0" | 16.0" | 16.0" | 16.0" |       |       |
|                 |                                                                                                                                                       | 62            | 16.0"                     | 16.0" | 16.0" | 16.0" | 16.0" | 16.0" | 16.0"             | 16.0" | 12.0" | 11.0" | 16.0" | 16.0" | 14.0"              | 13.0" | 7.5"  | 6.5"                     | 8.0"  | 11.5" | 16.0"             | 16.0" | 16.0" | 16.0" | 16.0" | 16.0" | 16.0"             | 16.0" | 16.0" | 13.0" | 12.0" | 16.0" | 16.0"              | 15.5" | 14.0" | 8.0"  | 7.0"  | 8.5"  | 12.5" |
|                 |                                                                                                                                                       | 72            | 16.0"                     | 16.0" | 16.0" | 15.0" | 16.0" | 16.0" | 16.0"             | 16.0" | 10.0" | 9.0"  | 12.0" | 15.0" | 11.5"              | 10.0" | 6.5"  | 5.5"                     | 6.0"  | 10.0" | 16.0"             | 16.0" | 16.0" | 16.0" | 16.0" | 16.0" | 16.0"             | 16.0" | 16.0" | 11.0" | 9.5"  | 13.5" | 16.0"              | 13.0" | 11.0" | 7.0"  | 6.0"  | 7.0"  | 11.0" |
|                 |                                                                                                                                                       | 110           | 16.0"                     | 16.0" | 9.5"  | 8.0"  | 11.0" | 14.0" | 11.5"             | 10.0" | 6.0"  | 5.0"  | 6.0"  | 10.0" | 9.5"               | 8.0"  | 5.0"  |                          | 5.0"  | 8.5"  | 16.0"             | 16.0" | 10.5" | 9.0"  | 12.0" | 15.5" | 12.5"             | 11.0" | 6.5"  | 5.5"  | 6.5"  | 10.5" | 10.5"              | 8.5"  | 5.5"  |       | 5.0"  | 9.0"  |       |
|                 |                                                                                                                                                       | 200           | 9.5"                      | 8.0"  | 5.0"  |       | 5.0"  | 8.5"  | 9.5"              | 8.0"  | 5.0"  |       | 5.0"  | 8.5"  | 9.5"               | 8.0"  | 5.0"  |                          | 5.0"  | 8.5"  | 10.5"             | 8.5"  | 5.5"  |       | 5.0"  | 9.0"  | 10.5"             | 8.5"  | 5.5"  |       | 5.0"  | 9.0"  | 10.5"              | 8.5"  | 5.5"  |       | 5.0"  | 9.0"  |       |
|                 | 1/4" DEWALT TAPPER+ W/<br>1-3/4" EMBED (3000psi MIN<br>CONC)<br>     |               | 1-1/2" MIN EDGE DISTANCE  |       |       |       |       |       |                   |       |       |       |       |       |                    |       |       | 3" MIN EDGE DISTANCE     |       |       |                   |       |       |       |       |       |                   |       |       |       |       |       |                    |       |       |       |       |       |       |
|                 |                                                                                                                                                       |               | C1                        | C2    | C3    | C4    | C5    | C6    | C1                | C2    | C3    | C4    | C5    | C6    | C1                 | C2    | C3    | C4                       | C5    | C6    | C1                | C2    | C3    | C4    | C5    | C6    | C1                | C2    | C3    | C4    | C5    | C6    | C1                 | C2    | C3    | C4    | C5    | C6    |       |
|                 |                                                                                                                                                       | 48            | 16.0"                     | 16.0" | 10.0" | 10.0" | 16.0" | 10.5" | 16.0"             | 16.0" | 6.0"  | 6.0"  | 16.0" | 7.0"  | 11.0"              | 11.0" |       |                          | 6.5"  | 5.0"  | 16.0"             | 16.0" | 16.0" | 16.0" | 16.0" | 16.0" | 16.0"             | 16.0" | 11.0" | 10.0" | 16.0" | 13.0" | 16.0"              | 16.0" | 16.0" | 16.0" | 16.0" |       |       |
|                 |                                                                                                                                                       | 62            | 16.0"                     | 16.0" | 7.0"  | 7.0"  | 16.0" | 8.0"  | 13.5"             | 14.5" | 4.5"  | 4.0"  | 9.0"  | 5.5"  | 7.5"               | 7.0"  |       |                          |       |       | 16.0"             | 16.0" | 12.5" | 12.0" | 16.0" | 14.5" | 16.0"             | 16.0" | 8.0"  | 7.0"  | 13.5" | 10.0" | 11.5"              | 10.5" | 5.0"  | 4.5"  | 6.5"  | 7.0"  |       |
|                 |                                                                                                                                                       | 72            | 16.0"                     | 16.0" | 6.0"  | 5.5"  | 16.0" | 7.0"  | 11.0"             | 11.0" |       |       | 6.5"  | 5.0"  | 6.5"               | 5.5"  |       |                          |       |       | 16.0"             | 16.0" | 10.5" | 9.5"  | 16.0" | 12.5" | 16.0"             | 16.0" | 6.5"  | 6.0"  | 10.0" | 9.0"  | 9.5"               | 8.5"  | 4.0"  |       | 5.0"  | 6.0"  |       |
|                 | 110                                                                                                                                                   | 10.0"         | 10.0"                     |       |       | 6.0"  | 4.5"  | 6.0"  | 5.5"              |       |       |       |       | 5.0"  | 4.0"               |       |       |                          |       | 15.0" | 15.0"             | 6.0"  | 5.5"  | 9.0"  | 8.5"  | 9.5"  | 8.0"              | 4.0"  |       | 5.0"  | 6.0"  | 7.5"  | 6.5"               |       |       | 4.0"  | 5.0"  |       |       |
|                 | 200                                                                                                                                                   | 5.0"          | 4.0"                      |       |       |       |       | 5.0"  | 4.0"              |       |       |       |       | 5.0"  | 4.0"               |       |       |                          |       | 7.5"  | 6.5"              |       |       | 4.0"  | 5.0"  | 7.5"  | 6.5"              |       |       | 4.0"  | 5.0"  | 7.5"  | 6.5"               |       |       | 4.0"  | 5.0"  |       |       |

ANCHOR SCHEDULE: HOLLOW CONCRETE BLOCK

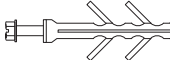
| HOST<br>STRUCT.                                                                                                                   | ANCHOR                                                                                                                                                                | LOAD<br>(psf)             | 1" MIN EDGE DISTANCE           |       |      |       |       |                                |      |      |      |      |                                 |      |    |      |                          | 2-1/2" MIN EDGE DISTANCE       |       |       |       |       |                                |       |      |       |       |                                 |      |      |      |      |  |      |  |
|-----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|--------------------------------|-------|------|-------|-------|--------------------------------|------|------|------|------|---------------------------------|------|----|------|--------------------------|--------------------------------|-------|-------|-------|-------|--------------------------------|-------|------|-------|-------|---------------------------------|------|------|------|------|--|------|--|
|                                                                                                                                   |                                                                                                                                                                       |                           | Spans Up To 6'-0"<br>CONN TYPE |       |      |       |       | Spans Up To 8'-8"<br>CONN TYPE |      |      |      |      | Spans Up To 13'-0"<br>CONN TYPE |      |    |      |                          | Spans Up To 6'-0"<br>CONN TYPE |       |       |       |       | Spans Up To 8'-8"<br>CONN TYPE |       |      |       |       | Spans Up To 13'-0"<br>CONN TYPE |      |      |      |      |  |      |  |
|                                                                                                                                   |                                                                                                                                                                       |                           | C1                             | C2    | C3   | C4    | C5    | C1                             | C2   | C3   | C4   | C5   | C1                              | C2   | C3 | C4   | C5                       | C1                             | C2    | C3    | C4    | C5    | C1                             | C2    | C3   | C4    | C5    | C1                              | C2   | C3   | C4   | C5   |  |      |  |
| HOLLOW<br>CONCRETE BLOCK                                                                                                          | 1/4" ITW TAPCON WITH<br>1-1/4" EMBED<br>                                             | 48                        | 7.5"                           | 7.5"  | 3.0" | 3.0"  | 7.5"  | 5.0"                           | 5.0" |      |      | 5.0" | 3.0"                            | 3.0" |    |      |                          | 10.5"                          | 10.5" | 6.5"  | 6.5"  | 10.5" | 7.0"                           | 7.0"  | 3.5" | 3.5"  | 7.0"  | 4.0"                            | 4.0" |      |      |      |  |      |  |
|                                                                                                                                   |                                                                                                                                                                       | 62                        | 6.0"                           | 6.0"  |      |       | 6.0"  | 3.5"                           | 4.0" |      |      |      |                                 |      |    |      |                          |                                | 8.0"  | 8.0"  | 4.5"  | 4.0"  | 8.0"                           | 5.0"  | 5.5" |       |       | 3.5"                            | 3.0" |      |      |      |  |      |  |
|                                                                                                                                   |                                                                                                                                                                       | 72                        | 5.0"                           | 5.0"  |      |       | 4.5"  | 3.0"                           | 3.0" |      |      |      |                                 |      |    |      |                          |                                | 7.0"  | 7.0"  | 3.5"  | 3.0"  | 6.0"                           | 4.0"  | 4.0" |       |       |                                 |      |      |      |      |  |      |  |
|                                                                                                                                   |                                                                                                                                                                       | 110                       |                                |       |      |       |       |                                |      |      |      |      |                                 |      |    |      |                          |                                | 3.5"  | 3.5"  |       |       |                                |       |      |       |       |                                 |      |      |      |      |  |      |  |
|                                                                                                                                   |                                                                                                                                                                       | 200                       |                                |       |      |       |       |                                |      |      |      |      |                                 |      |    |      |                          |                                |       |       |       |       |                                |       |      |       |       |                                 |      |      |      |      |  |      |  |
|                                                                                                                                   | 1/4" DEWALT ULTRACON<br>WITH 1-1/4" EMBED<br>                                      | 48                        | 11.5"                          | 11.5" | 6.5" | 6.5"  | 11.5" | 8.0"                           | 8.0" |      |      | 7.5" | 4.5"                            | 4.5" |    |      |                          | 11.5"                          | 11.5" | 6.0"  | 6.0"  | 11.5" | 8.0"                           | 8.0"  |      |       | 7.5"  | 4.5"                            | 4.5" |      |      |      |  |      |  |
|                                                                                                                                   |                                                                                                                                                                       | 62                        | 9.0"                           | 9.0"  | 4.5" | 4.0"  | 9.0"  | 5.5"                           | 6.0" |      |      |      |                                 |      |    |      |                          | 9.0"                           | 9.0"  | 4.0"  | 4.0"  | 9.0"  | 5.5"                           | 6.0"  |      |       |       |                                 |      |      |      |      |  |      |  |
|                                                                                                                                   |                                                                                                                                                                       | 72                        | 7.5"                           | 7.5"  |      |       | 6.5"  | 4.5"                           | 4.5" |      |      |      |                                 |      |    |      |                          | 7.5"                           | 7.5"  |       |       | 6.5"  | 4.5"                           | 4.5"  |      |       |       |                                 |      |      |      |      |  |      |  |
|                                                                                                                                   |                                                                                                                                                                       | 110                       | 4.0"                           | 4.0"  |      |       |       |                                |      |      |      |      |                                 |      |    |      |                          | 4.0"                           | 4.0"  |       |       |       |                                |       |      |       |       |                                 |      |      |      |      |  |      |  |
|                                                                                                                                   |                                                                                                                                                                       | 200                       |                                |       |      |       |       |                                |      |      |      |      |                                 |      |    |      |                          |                                |       |       |       |       |                                |       |      |       |       |                                 |      |      |      |      |  |      |  |
|                                                                                                                                   | 1/4" MILLENNIUM MILLFAST<br>ANCHOR W/ 1-1/4" EMBED<br>                             | 48                        | 14.0"                          | 14.0" | 6.0" | 6.0"  | 14.0" | 9.5"                           | 9.5" |      |      | 9.0" | 5.5"                            | 5.5" |    |      |                          | 15.0"                          | 15.0" | 9.0"  | 9.0"  | 15.0" | 10.5"                          | 10.5" | 5.0" | 5.0"  | 10.0" | 6.0"                            | 6.0" |      |      |      |  |      |  |
|                                                                                                                                   |                                                                                                                                                                       | 62                        | 10.5"                          | 10.5" | 4.0" | 4.0"  | 10.5" | 6.5"                           | 7.5" |      |      | 4.5" | 4.0"                            |      |    |      |                          | 11.5"                          | 11.5" | 6.0"  | 5.5"  | 11.5" | 7.5"                           | 8.0"  |      |       | 5.0"  | 4.0"                            | 4.0" |      |      |      |  |      |  |
|                                                                                                                                   |                                                                                                                                                                       | 72                        | 9.0"                           | 9.0"  |      |       | 8.0"  | 5.5"                           | 5.5" |      |      |      |                                 |      |    |      |                          | 10.0"                          | 10.0" | 5.0"  | 4.5"  | 9.0"  | 6.0"                           | 6.0"  |      |       |       |                                 |      |      |      |      |  |      |  |
|                                                                                                                                   |                                                                                                                                                                       | 110                       | 5.0"                           | 5.0"  |      |       |       |                                |      |      |      |      |                                 |      |    |      |                          | 5.5"                           | 5.5"  |       |       |       |                                |       |      |       |       |                                 |      |      |      |      |  |      |  |
|                                                                                                                                   |                                                                                                                                                                       | 200                       |                                |       |      |       |       |                                |      |      |      |      |                                 |      |    |      |                          |                                |       |       |       |       |                                |       |      |       |       |                                 |      |      |      |      |  |      |  |
|                                                                                                                                   | 1/4" ALL-POINTS SOLID-SET<br>ANCHOR W/ 7/8" EMBED &<br>1/4-20 SS MACHINE SCREW<br> |                           | 1-1/4" MIN EDGE DISTANCE       |       |      |       |       |                                |      |      |      |      |                                 |      |    |      |                          | 2" MIN EDGE DISTANCE           |       |       |       |       |                                |       |      |       |       |                                 |      |      |      |      |  |      |  |
|                                                                                                                                   |                                                                                                                                                                       | 48                        | 13.5"                          | 13.5" | 5.5" | 5.5"  | 13.5" | 9.5"                           | 9.5" | 3.5" | 3.0" | 9.0" | 5.5"                            | 5.5" |    |      | 3.0"                     | 16.0"                          | 16.0" | 9.5"  | 9.5"  | 16.0" | 16.0"                          | 16.0" | 6.0" | 5.5"  | 16.0" | 9.5"                            | 9.5" | 3.5" | 3.0" | 5.5" |  |      |  |
|                                                                                                                                   |                                                                                                                                                                       | 62                        | 10.5"                          | 10.5" | 4.0" | 4.0"  | 10.5" | 6.5"                           | 7.0" |      |      | 4.5" | 3.5"                            | 3.5" |    |      |                          | 16.0"                          | 16.0" | 7.0"  | 6.5"  | 16.0" | 11.5"                          | 12.5" | 4.0" | 4.0"  | 8.0"  | 6.5"                            | 6.0" |      |      |      |  | 3.5" |  |
|                                                                                                                                   |                                                                                                                                                                       | 72                        | 9.0"                           | 9.0"  | 3.0" | 3.0"  | 8.0"  | 5.5"                           | 5.5" |      |      | 3.0" | 3.0"                            |      |    |      |                          | 15.5"                          | 15.5" | 5.5"  | 5.0"  | 14.0" | 9.5"                           | 9.5"  | 3.5" | 3.0"  | 5.5"  | 5.5"                            | 4.5" |      |      |      |  | 3.0" |  |
|                                                                                                                                   |                                                                                                                                                                       | 110                       | 5.0"                           | 5.0"  |      |       | 3.0"  | 3.0"                           |      |      |      |      |                                 |      |    |      |                          | 8.5"                           | 8.5"  | 3.5"  | 3.0"  | 5.0"  | 5.5"                           | 4.5"  |      |       |       | 4.5"                            | 3.5" |      |      |      |  |      |  |
| 200                                                                                                                               |                                                                                                                                                                       |                           |                                |       |      |       |       |                                |      |      |      |      |                                 |      |    | 4.5" | 3.5"                     |                                |       |       | 4.5"  | 3.5"  |                                |       |      |       | 4.5"  | 3.5"                            |      |      |      |      |  |      |  |
| 5/16" ITW TAPCON XL WITH<br>1-3/4" EMBED<br>   |                                                                                                                                                                       | 3" MIN EDGE DISTANCE      |                                |       |      |       |       |                                |      |      |      |      |                                 |      |    |      | 4" MIN EDGE DISTANCE     |                                |       |       |       |       |                                |       |      |       |       |                                 |      |      |      |      |  |      |  |
|                                                                                                                                   | 48                                                                                                                                                                    |                           |                                |       |      |       |       |                                |      |      |      |      |                                 |      |    |      | 16.0"                    | 16.0"                          | 11.5" | 11.5" | 16.0" | 12.0" | 12.0"                          | 6.5"  | 6.0" | 11.5" | 6.5"  | 7.0"                            | 4.0" |      |      | 4.0" |  |      |  |
|                                                                                                                                   | 62                                                                                                                                                                    |                           |                                |       |      |       |       |                                |      |      |      |      |                                 |      |    |      | 13.0"                    | 13.0"                          | 8.0"  | 7.5"  | 13.0" | 8.5"  | 9.0"                           | 4.5"  | 4.0" | 5.5"  | 4.5"  | 4.5"                            |      |      |      |      |  |      |  |
|                                                                                                                                   | 72                                                                                                                                                                    |                           |                                |       |      |       |       |                                |      |      |      |      |                                 |      |    |      | 11.5"                    | 11.5"                          | 6.5"  | 5.5"  | 10.0" | 6.5"  | 7.0"                           | 4.0"  |      | 4.0"  | 4.0"  |                                 |      |      |      |      |  |      |  |
|                                                                                                                                   | 110                                                                                                                                                                   |                           |                                |       |      |       |       |                                |      |      |      |      |                                 |      |    |      | 6.0"                     | 6.0"                           |       |       |       | 4.0"  |                                |       |      |       |       |                                 |      |      |      |      |  |      |  |
| 200                                                                                                                               |                                                                                                                                                                       |                           |                                |       |      |       |       |                                |      |      |      |      |                                 |      |    |      |                          |                                |       |       |       |       |                                |       |      |       |       |                                 |      |      |      |      |  |      |  |
| 5/16" DEWALT ULTRACON<br>WITH 1-1/4" EMBED<br> |                                                                                                                                                                       | 1-9/16" MIN EDGE DISTANCE |                                |       |      |       |       |                                |      |      |      |      |                                 |      |    |      | 3-1/8" MIN EDGE DISTANCE |                                |       |       |       |       |                                |       |      |       |       |                                 |      |      |      |      |  |      |  |
|                                                                                                                                   | 48                                                                                                                                                                    | 10.5"                     | 10.5"                          | 5.5"  | 5.5" | 10.5" | 7.5"  | 7.5"                           |      |      | 7.0" |      |                                 |      |    |      | 16.0"                    | 16.0"                          | 10.5" | 10.5" | 16.0" | 12.5" | 12.5"                          | 6.0"  | 5.5" | 12.5" | 7.5"  | 7.5"                            |      |      |      |      |  |      |  |
|                                                                                                                                   | 62                                                                                                                                                                    | 8.0"                      | 8.0"                           |       |      | 8.0"  | 5.0"  | 5.5"                           |      |      |      |      |                                 |      |    |      | 14.5"                    | 14.5"                          | 7.0"  | 6.5"  | 14.5" | 9.0"  | 10.0"                          |       |      | 6.0"  | 5.0"  |                                 |      |      |      |      |  |      |  |
|                                                                                                                                   | 72                                                                                                                                                                    | 7.0"                      | 7.0"                           |       |      | 6.0"  |       |                                |      |      |      |      |                                 |      |    |      | 12.5"                    | 12.5"                          | 6.0"  | 5.5"  | 11.0" | 7.5"  | 7.5"                           |       |      |       |       |                                 |      |      |      |      |  |      |  |
|                                                                                                                                   | 110                                                                                                                                                                   |                           |                                |       |      |       |       |                                |      |      |      |      |                                 |      |    |      | 6.5"                     | 6.5"                           |       |       |       |       |                                |       |      |       |       |                                 |      |      |      |      |  |      |  |
| 200                                                                                                                               |                                                                                                                                                                       |                           |                                |       |      |       |       |                                |      |      |      |      |                                 |      |    |      |                          |                                |       |       |       |       |                                |       |      |       |       |                                 |      |      |      |      |  |      |  |

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ANCHOR SCHEDULE: HOLLOW CONCRETE BLOCK (CONT.)

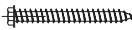
| HOST<br>STRUCT.          | ANCHOR                                                                                                                                     | LOAD<br>(psf) | 2" MIN EDGE DISTANCE |       |      |      |       |                   |       |      |      |       |                    |      |      |      |      |  |
|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|---------------|----------------------|-------|------|------|-------|-------------------|-------|------|------|-------|--------------------|------|------|------|------|--|
|                          |                                                                                                                                            |               | Spans Up To 6'-0"    |       |      |      |       | Spans Up To 8'-8" |       |      |      |       | Spans Up To 13'-0" |      |      |      |      |  |
|                          |                                                                                                                                            |               | CONN TYPE            |       |      |      |       | CONN TYPE         |       |      |      |       | CONN TYPE          |      |      |      |      |  |
|                          |                                                                                                                                            |               | C1                   | C2    | C3   | C4   | C5    | C1                | C2    | C3   | C4   | C5    | C1                 | C2   | C3   | C4   | C5   |  |
| HOLLOW CONCRETE<br>BLOCK | 1/4" DEWALT TAPPER+ W/<br>1-1/4" EMBED<br>                | 48            | 15.5"                | 15.5" | 6.5" | 6.5" | 15.5" | 10.5"             | 10.5" | 4.0" | 4.0" | 10.5" | 6.0"               | 6.0" |      |      |      |  |
|                          |                                                                                                                                            | 62            | 12.0"                | 12.0" | 4.5" | 4.5" | 12.0" | 7.5"              | 8.0"  |      |      | 5.0"  | 4.5"               | 4.0" |      |      |      |  |
|                          |                                                                                                                                            | 72            | 10.5"                | 10.5" | 4.0" |      | 9.0"  | 6.0"              | 6.0"  |      |      |       |                    |      |      |      |      |  |
|                          |                                                                                                                                            | 110           | 5.5"                 | 5.5"  |      |      |       |                   |       |      |      |       |                    |      |      |      |      |  |
|                          |                                                                                                                                            | 200           |                      |       |      |      |       |                   |       |      |      |       |                    |      |      |      |      |  |
|                          | #12 SMS W/ 2" EYEWALL<br>ARMOR INSERT W/ 1-1/4" EMBED<br> | 48            | 16.0"                | 16.0" | 8.5" | 8.5" | 16.0" | 13.0"             | 13.0" | 5.0" | 5.0" | 12.5" | 7.5"               | 7.5" | 3.0" | 3.0" | 4.5" |  |
|                          |                                                                                                                                            | 62            | 14.5"                | 14.5" | 6.0" | 6.0" | 14.5" | 9.5"              | 10.0" | 4.0" | 3.5" | 6.0"  | 5.0"               | 4.5" |      |      | 3.0" |  |
|                          |                                                                                                                                            | 72            | 12.5"                | 12.5" | 5.0" | 4.5" | 11.0" | 7.5"              | 7.5"  | 3.0" | 3.0" | 4.5"  | 4.5"               | 3.5" |      |      |      |  |
|                          |                                                                                                                                            | 110           | 7.0"                 | 7.0"  | 3.0" |      | 4.0"  | 4.0"              | 3.5"  |      |      | 3.5"  | 3.0"               |      |      |      |      |  |
|                          |                                                                                                                                            | 200           | 3.5"                 | 3.0"  |      |      |       | 3.5"              | 3.0"  |      |      |       | 3.5"               | 3.0" |      |      |      |  |

ANCHOR SCHEDULE: GROUT-FILLED CONCRETE BLOCK

| HOST<br>STRUCT.                | ANCHOR                                                                                                                                   | LOAD<br>(psf) | 4" MIN EDGE DISTANCE |                      |       |       |       |                   |       |       |       |       |                    |       |       |       |      |       |
|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|---------------|----------------------|----------------------|-------|-------|-------|-------------------|-------|-------|-------|-------|--------------------|-------|-------|-------|------|-------|
|                                |                                                                                                                                          |               | Spans Up To 6'-0"    |                      |       |       |       | Spans Up To 8'-8" |       |       |       |       | Spans Up To 13'-0" |       |       |       |      |       |
|                                |                                                                                                                                          |               | CONN TYPE            |                      |       |       |       | CONN TYPE         |       |       |       |       | CONN TYPE          |       |       |       |      |       |
|                                |                                                                                                                                          |               | C1                   | C2                   | C3    | C4    | C5    | C1                | C2    | C3    | C4    | C5    | C1                 | C2    | C3    | C4    | C5   |       |
| GROUT-FILLED<br>CONCRETE BLOCK | 5/16" ITW TAPCON XL W/<br>2-1/4" MIN. EMBED<br>       | 48            | 16.0"                | 16.0"                | 16.0" | 16.0" | 16.0" | 16.0"             | 16.0" | 16.0" | 16.0" | 16.0" | 16.0"              | 16.0" | 16.0" | 10.5" | 9.5" | 15.5" |
|                                |                                                                                                                                          | 62            | 16.0"                | 16.0"                | 16.0" | 16.0" | 16.0" | 16.0"             | 16.0" | 12.5" | 11.5" | 16.0" | 16.0"              | 16.0" | 16.0" | 8.0"  | 7.0" | 10.0" |
|                                |                                                                                                                                          | 72            | 16.0"                | 16.0"                | 16.0" | 15.5" | 16.0" | 16.0"             | 16.0" | 10.5" | 9.5"  | 15.5" | 14.5"              | 12.5" | 6.5"  | 5.5"  | 8.0" |       |
|                                |                                                                                                                                          | 110           | 16.0"                | 16.0"                | 10.0" | 9.0"  | 14.0" | 14.5"             | 12.5" | 6.5"  | 5.5"  | 7.5"  | 12.0"              | 10.0" | 5.5"  | 4.5"  | 6.0" |       |
|                                |                                                                                                                                          | 200           | 12.0"                | 10.0"                | 5.5"  | 4.5"  | 6.0"  | 12.0"             | 10.0" | 5.5"  | 4.5"  | 6.0"  | 12.0"              | 10.0" | 5.5"  | 4.5"  | 6.0" |       |
|                                | 5/16" DEWALT ULTRACON<br>W/ 2-1/4" MIN. EMBED<br>     | 48            | 16.0"                | 16.0"                | 13.5" | 13.5" | 16.0" | 16.0"             | 16.0" | 8.0"  | 7.5"  | 16.0" | 9.5"               | 9.5"  |       |       |      | 6.0"  |
|                                |                                                                                                                                          | 62            | 16.0"                | 16.0"                | 9.5"  | 8.5"  | 16.0" | 12.0"             | 12.5" | 5.5"  | 5.0"  | 8.0"  | 6.5"               | 6.0"  |       |       |      |       |
|                                |                                                                                                                                          | 72            | 16.0"                | 16.0"                | 7.5"  | 7.0"  | 14.0" | 9.5"              | 9.5"  |       |       | 6.0"  | 5.5"               |       |       |       |      |       |
|                                |                                                                                                                                          | 110           | 8.5"                 | 8.5"                 |       |       | 5.0"  | 5.5"              |       |       |       |       |                    |       |       |       |      |       |
|                                |                                                                                                                                          | 200           |                      |                      |       |       |       |                   |       |       |       |       |                    |       |       |       |      |       |
|                                | #12 SMS W/ 2" EYEWALL<br>ARMOR INSERT W/ 2" EMBED<br> |               |                      | 2" MIN EDGE DISTANCE |       |       |       |                   |       |       |       |       |                    |       |       |       |      |       |
|                                |                                                                                                                                          |               |                      | C1                   | C2    | C3    | C4    | C5                | C1    | C2    | C3    | C4    | C5                 | C1    | C2    | C3    | C4   | C5    |
|                                |                                                                                                                                          | 48            | 16.0"                | 16.0"                | 10.5" | 10.5" | 16.0" | 16.0"             | 16.0" | 6.5"  | 6.5"  | 16.0" | 12.5"              | 12.5" | 4.0"  | 3.5"  | 7.5" |       |
|                                |                                                                                                                                          | 62            | 16.0"                | 16.0"                | 7.5"  | 7.5"  | 16.0" | 15.5"             | 16.0" | 5.0"  | 4.5"  | 10.5" | 9.0"               | 8.0"  | 3.0"  |       |      | 5.0"  |
| 72                             |                                                                                                                                          | 16.0"         | 16.0"                | 6.5"                 | 6.0"  | 16.0" | 12.5" | 12.5"             | 4.0"  | 3.5"  | 7.5"  | 7.0"  | 6.5"               |       |       |       | 4.0" |       |
| 110                            |                                                                                                                                          | 11.5"         | 11.5"                | 4.0"                 | 3.5"  | 7.0"  | 7.0"  | 6.0"              |       |       | 3.5"  | 6.0"  | 5.0"               |       |       |       | 3.0" |       |
| 200                            |                                                                                                                                          | 6.0"          | 5.0"                 |                      |       | 3.0"  | 6.0"  | 5.0"              |       |       | 3.0"  | 6.0"  | 5.0"               |       |       |       | 3.0" |       |

ANCHOR NOTES: SEE SHEET  
10 FOR ANCHOR NOTES.

ANCHOR SCHEDULE: WOOD (G=0.55)

| HOST<br>STRUCT. | ANCHOR                                                                                                                                                                            | LOAD<br>(psf) | 3/4" MIN EDGE DISTANCE |       |       |       |       |                   |       |      |      |       |                    |       |      |      |       |
|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|------------------------|-------|-------|-------|-------|-------------------|-------|------|------|-------|--------------------|-------|------|------|-------|
|                 |                                                                                                                                                                                   |               | Spans Up To 6'-0"      |       |       |       |       | Spans Up To 8'-8" |       |      |      |       | Spans Up To 13'-0" |       |      |      |       |
|                 |                                                                                                                                                                                   |               | CONN TYPE              |       |       |       |       | CONN TYPE         |       |      |      |       | CONN TYPE          |       |      |      |       |
|                 |                                                                                                                                                                                   |               | C1                     | C2    | C3    | C4    | C5    | C1                | C2    | C3   | C4   | C5    | C1                 | C2    | C3   | C4   | C5    |
| WOOD (G=0.55)   | 1/4" LAG SCREW WITH 1-3/4"<br>MIN THREAD PENETRATION<br>                                       | 48            | 16.0"                  | 16.0" | 11.5" | 11.5" | 16.0" | 16.0"             | 16.0" | 7.5" | 7.0" | 16.0" | 16.0"              | 16.0" | 4.5" | 4.5" | 15.0" |
|                 |                                                                                                                                                                                   | 62            | 16.0"                  | 16.0" | 8.5"  | 8.5"  | 16.0" | 16.0"             | 16.0" | 5.5" | 5.5" | 16.0" | 16.0"              | 15.5" | 3.5" | 3.5" | 9.5"  |
|                 |                                                                                                                                                                                   | 72            | 16.0"                  | 16.0" | 7.0"  | 7.0"  | 16.0" | 16.0"             | 16.0" | 4.5" | 4.5" | 15.0" | 14.0"              | 12.5" | 3.0" | 3.0" | 7.5"  |
|                 |                                                                                                                                                                                   | 110           | 16.0"                  | 16.0" | 4.5"  | 4.0"  | 13.5" | 14.0"             | 12.0" | 3.0" | 2.5" | 7.5"  | 11.5"              | 9.5"  | 2.5" | 2.0" | 6.0"  |
|                 |                                                                                                                                                                                   | 200           | 11.5"                  | 9.5"  | 2.5"  | 2.0"  | 6.0"  | 11.5"             | 9.5"  | 2.5" | 2.0" | 6.0"  | 11.5"              | 9.5"  | 2.5" | 2.0" | 6.0"  |
|                 | 7/16" WOOD BUSHING WITH<br>1.13" MIN EMBED & 1/4-20<br>SS MACHINE SCREW<br>                    | 48            | 16.0"                  | 16.0" | 9.5"  | 9.5"  | 16.0" | 13.0"             | 13.0" | 5.5" | 5.0" | 13.0" | 7.5"               | 7.5"  | 3.5" | 3.0" | 4.5"  |
|                 |                                                                                                                                                                                   | 62            | 14.5"                  | 14.5" | 6.5"  | 6.0"  | 14.5" | 9.5"              | 10.0" | 4.0" | 3.5" | 6.5"  | 5.5"               | 5.0"  | 2.5" | 2.0" | 3.0"  |
|                 |                                                                                                                                                                                   | 72            | 12.5"                  | 12.5" | 5.5"  | 5.0"  | 11.0" | 7.5"              | 7.5"  | 3.5" | 3.0" | 4.5"  | 4.5"               | 3.5"  | 2.0" |      | 2.0"  |
|                 |                                                                                                                                                                                   | 110           | 7.0"                   | 7.0"  | 3.0"  | 2.5"  | 4.0"  | 4.0"              | 3.5"  | 2.0" |      | 2.0"  | 3.5"               | 3.0"  |      |      |       |
|                 |                                                                                                                                                                                   | 200           | 3.5"                   | 3.0"  |       |       |       | 3.5"              | 3.0"  |      |      |       | 3.5"               | 3.0"  |      |      |       |
|                 | #14 SMS, #14 WOOD SCREW<br>OR 1/4" DEWALT TAPPER+<br>WITH 1-3/4" MIN THREAD<br>PENETRATION<br> | 48            | 16.0"                  | 16.0" | 13.0" | 13.0" | 16.0" | 16.0"             | 16.0" | 8.5" | 8.0" | 16.0" | 16.0"              | 16.0" | 5.0" | 5.0" | 12.0" |
|                 |                                                                                                                                                                                   | 62            | 16.0"                  | 16.0" | 9.5"  | 9.5"  | 16.0" | 16.0"             | 16.0" | 6.0" | 6.0" | 16.0" | 13.5"              | 12.5" | 4.0" | 3.5" | 7.5"  |
|                 |                                                                                                                                                                                   | 72            | 16.0"                  | 16.0" | 8.0"  | 7.5"  | 16.0" | 16.0"             | 16.0" | 5.0" | 5.0" | 12.0" | 11.5"              | 10.0" | 3.5" | 3.0" | 6.0"  |
|                 |                                                                                                                                                                                   | 110           | 16.0"                  | 16.0" | 5.0"  | 4.5"  | 10.5" | 11.0"             | 9.5"  | 3.0" | 3.0" | 6.0"  | 9.0"               | 7.5"  | 2.5" | 2.5" | 4.5"  |
|                 |                                                                                                                                                                                   | 200           | 9.0"                   | 7.5"  | 2.5"  | 2.5"  | 4.5"  | 9.0"              | 7.5"  | 2.5" | 2.5" | 4.5"  | 9.0"               | 7.5"  | 2.5" | 2.5" | 4.5"  |

ANCHOR SCHEDULE: WOOD (G=0.42)

| HOST<br>STRUCT. | ANCHOR                                                                                                                                                                              | LOAD<br>(psf) | 3/4" MIN EDGE DISTANCE         |       |      |      |       |                                |       |      |      |       |                                 |       |      |      |       |
|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|--------------------------------|-------|------|------|-------|--------------------------------|-------|------|------|-------|---------------------------------|-------|------|------|-------|
|                 |                                                                                                                                                                                     |               | Spans Up To 6'-0"<br>CONN TYPE |       |      |      |       | Spans Up To 8'-8"<br>CONN TYPE |       |      |      |       | Spans Up To 13'-0"<br>CONN TYPE |       |      |      |       |
|                 |                                                                                                                                                                                     |               | C1                             | C2    | C3   | C4   | C5    | C1                             | C2    | C3   | C4   | C5    | C1                              | C2    | C3   | C4   | C5    |
| WOOD (G=0.42)   | 1/4" LAG SCREW WITH 1-3/4"<br>MIN THREAD PENETRATION<br>                                       | 48            | 16.0"                          | 16.0" | 9.0" | 9.0" | 16.0" | 16.0"                          | 16.0" | 6.0" | 5.5" | 16.0" | 16.0"                           | 16.0" | 3.5" | 3.5" | 10.0" |
|                 |                                                                                                                                                                                     | 62            | 16.0"                          | 16.0" | 6.5" | 6.5" | 16.0" | 16.0"                          | 16.0" | 4.5" | 4.0" | 13.5" | 11.5"                           | 10.5" | 2.5" | 2.5" | 6.0"  |
|                 |                                                                                                                                                                                     | 72            | 16.0"                          | 16.0" | 5.5" | 5.5" | 16.0" | 16.0"                          | 16.0" | 3.5" | 3.5" | 10.0" | 9.5"                            | 8.0"  | 2.5" | 2.0" | 5.0"  |
|                 |                                                                                                                                                                                     | 110           | 15.0"                          | 14.5" | 3.5" | 3.0" | 9.0"  | 9.0"                           | 8.0"  | 2.0" | 2.0" | 5.0"  | 7.5"                            | 6.0"  | 2.0" |      | 4.0"  |
|                 |                                                                                                                                                                                     | 200           | 7.5"                           | 6.0"  | 2.0" |      | 4.0"  | 7.5"                           | 6.0"  | 2.0" |      | 4.0"  | 7.5"                            | 6.0"  | 2.0" |      | 4.0"  |
|                 | #14 SMS, #14 WOOD SCREW<br>OR 1/4" DEWALT TAPPER+<br>WITH 1-3/4" MIN THREAD<br>PENETRATION<br> | 48            | 16.0"                          | 16.0" | 9.5" | 9.5" | 16.0" | 16.0"                          | 16.0" | 6.0" | 5.5" | 16.0" | 11.0"                           | 11.5" | 3.5" | 3.5" | 7.0"  |
|                 |                                                                                                                                                                                     | 62            | 16.0"                          | 16.0" | 7.0" | 6.5" | 16.0" | 14.0"                          | 15.0" | 4.5" | 4.0" | 9.5"  | 8.0"                            | 7.0"  | 2.5" | 2.5" | 4.5"  |
|                 |                                                                                                                                                                                     | 72            | 16.0"                          | 16.0" | 5.5" | 5.5" | 16.0" | 11.0"                          | 11.5" | 3.5" | 3.5" | 7.0"  | 6.5"                            | 5.5"  | 2.0" | 2.0" | 3.5"  |
|                 |                                                                                                                                                                                     | 110           | 10.5"                          | 10.0" | 3.5" | 3.0" | 6.0"  | 6.5"                           | 5.5"  | 2.0" | 2.0" | 3.5"  | 5.0"                            | 4.5"  | 2.0" |      | 2.5"  |
|                 |                                                                                                                                                                                     | 200           | 5.0"                           | 4.5"  | 2.0" |      | 2.5"  | 5.0"                           | 4.5"  | 2.0" |      | 2.5"  | 5.0"                            | 4.5"  | 2.0" |      | 2.5"  |

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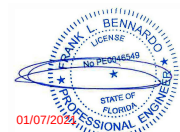
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| REMARKS                                                                                                                                                                                                                                                                                                                                                                                                                                  | DRWN | CHKD | DATE     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|------|----------|
| INIT ISSUE                                                                                                                                                                                                                                                                                                                                                                                                                               | KL   | FLB  | 12/20/11 |
| CLIENT REVISIONS                                                                                                                                                                                                                                                                                                                                                                                                                         | KL   | FLB  | 2/22/12  |
| CLIENT REVISIONS                                                                                                                                                                                                                                                                                                                                                                                                                         | KL   | FLB  | 10/25/13 |
| 2014 FBC                                                                                                                                                                                                                                                                                                                                                                                                                                 | RWN  | CSL  | 4/01/15  |
| 2017 FBC                                                                                                                                                                                                                                                                                                                                                                                                                                 | RWN  | FLB  | 8/04/17  |
| 2020 FBC UPDATE                                                                                                                                                                                                                                                                                                                                                                                                                          | CB   | RWN  | 6/17/20  |
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| 2017 FBC         | RWN  | FLB  | 8/04/17  |
| 2020 FBC UPDATE  | CB   | RWN  | 6/17/20  |

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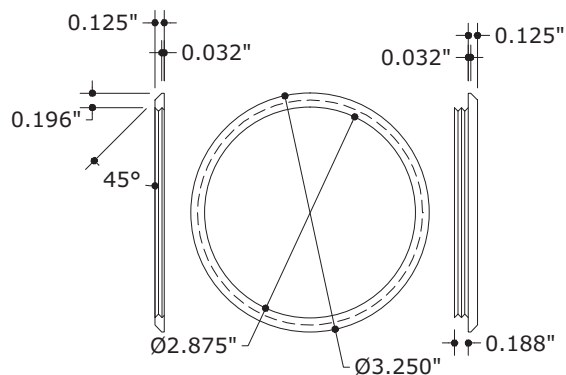
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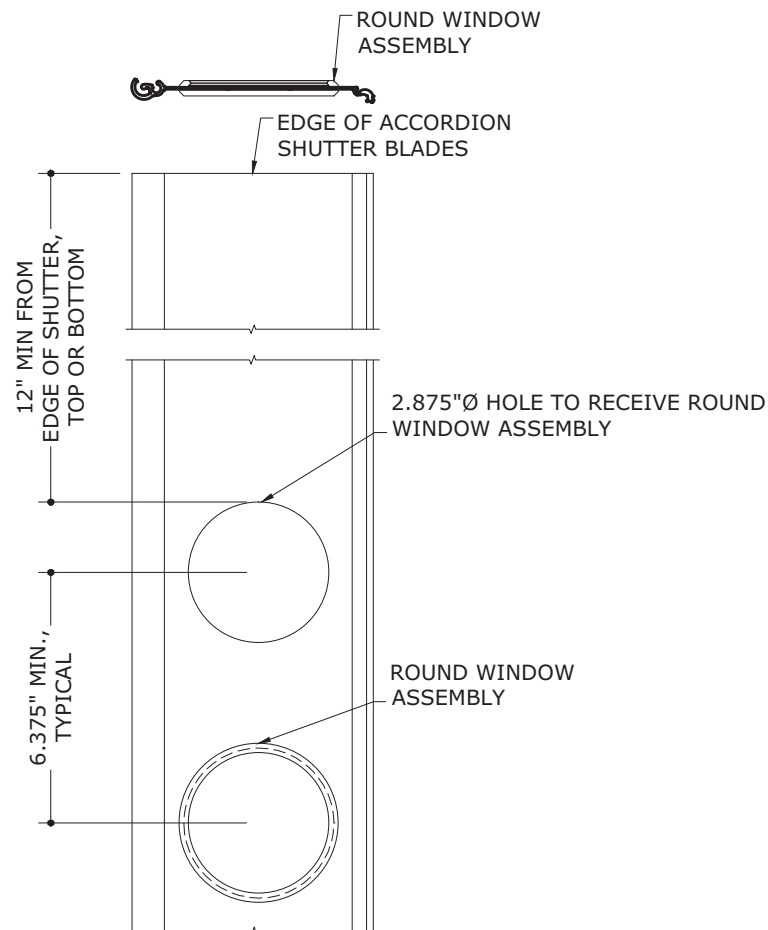
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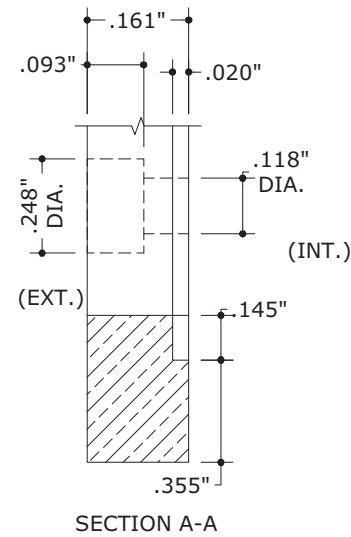
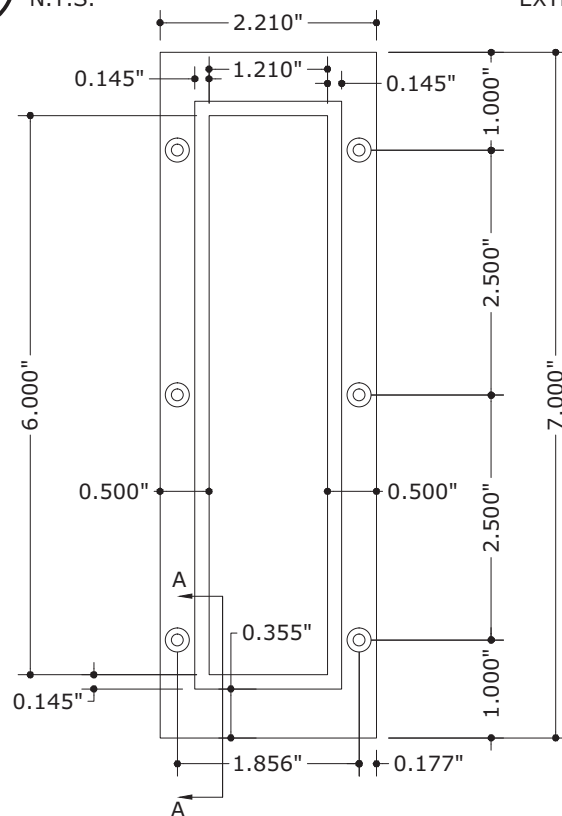
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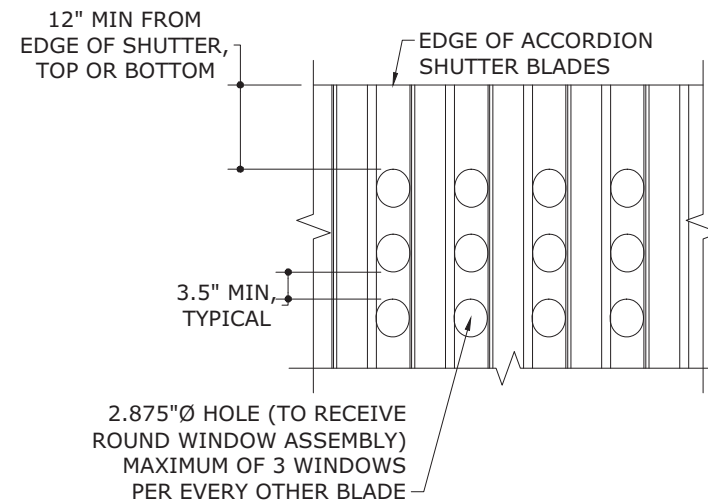
**A LIGHT-N-VIEW WINDOW**  
N.T.S. SABIC PLASTICS SLX1431T-UL-94HB



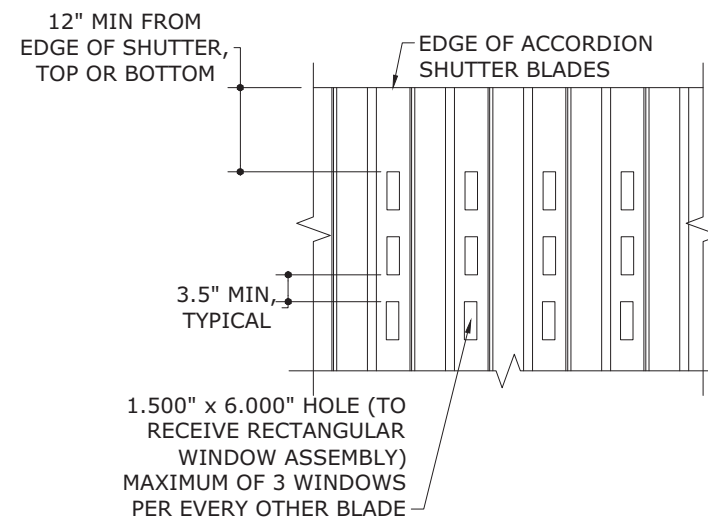
**1 BLADE W/ ROUND WINDOW**  
13 N.T.S. EXTERIOR ELEV



**5 RECTANGULAR WINDOW**  
13 N.T.S. EXTERIOR ELEV



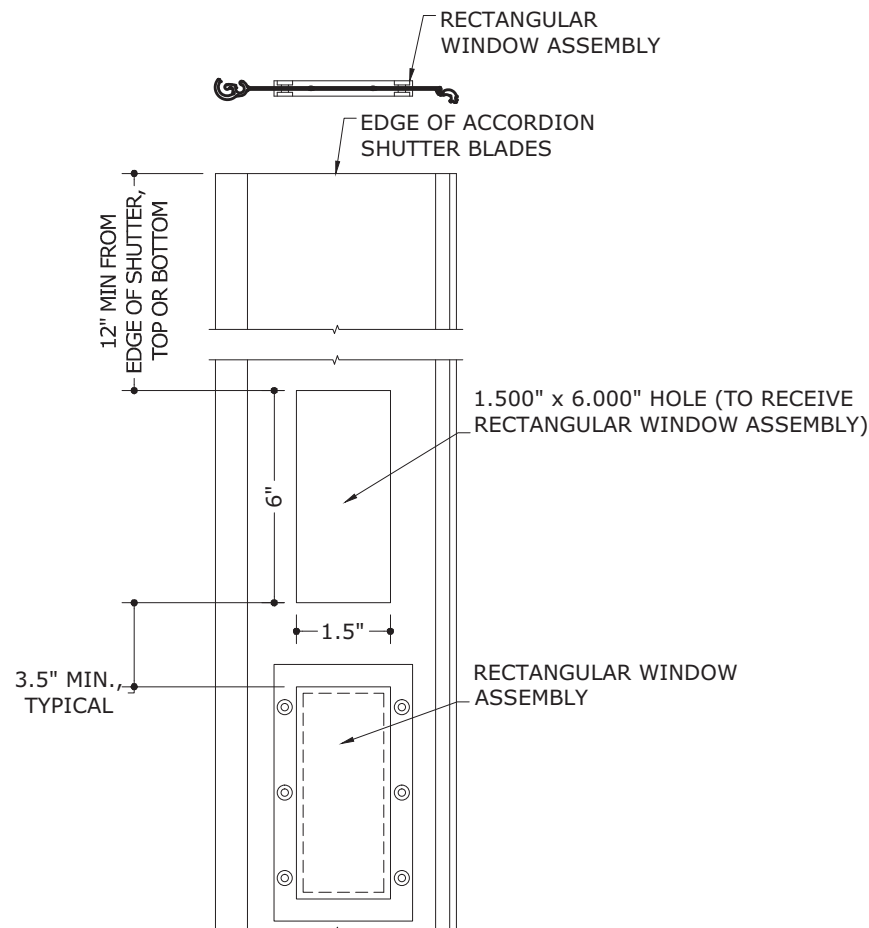
**2 LIGHT-N-VIEW WINDOW**  
13 N.T.S. EXTERIOR ELEV



**3 RECTANGULAR WINDOW**  
13 N.T.S. EXTERIOR ELEV

RECTANGULAR WINDOW NOTES:

1. THE RECTANGULAR WINDOW SHOWN IN 5/13 IS MADE FROM GE XL10 LEXAN WITH 0.075" MINIMUM THICKNESS.
2. FRAME FOR RECTANGULAR WINDOW MAY BE NYLON 6 OR POLYCARBONATE WITH A MINIMUM THICKNESS OF 0.161". ATTACH TO BLADE WITH (6) #4 SS SCREWS OR BOLTS WITH NUTS.



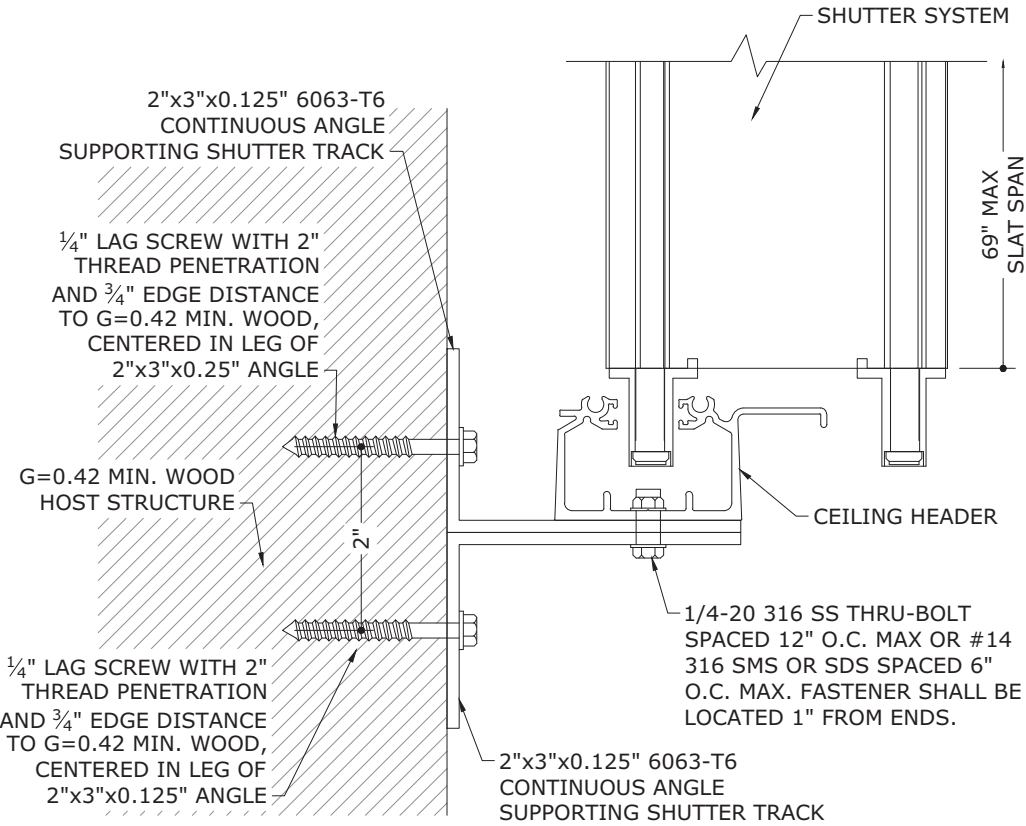
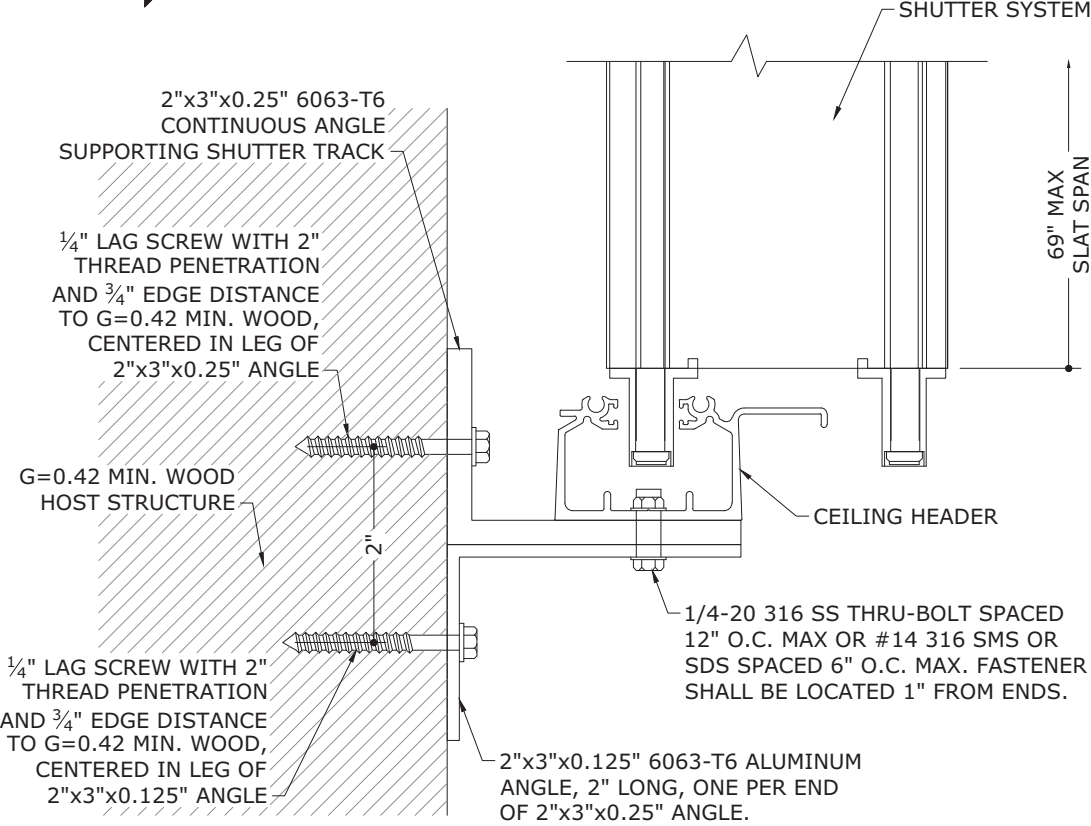
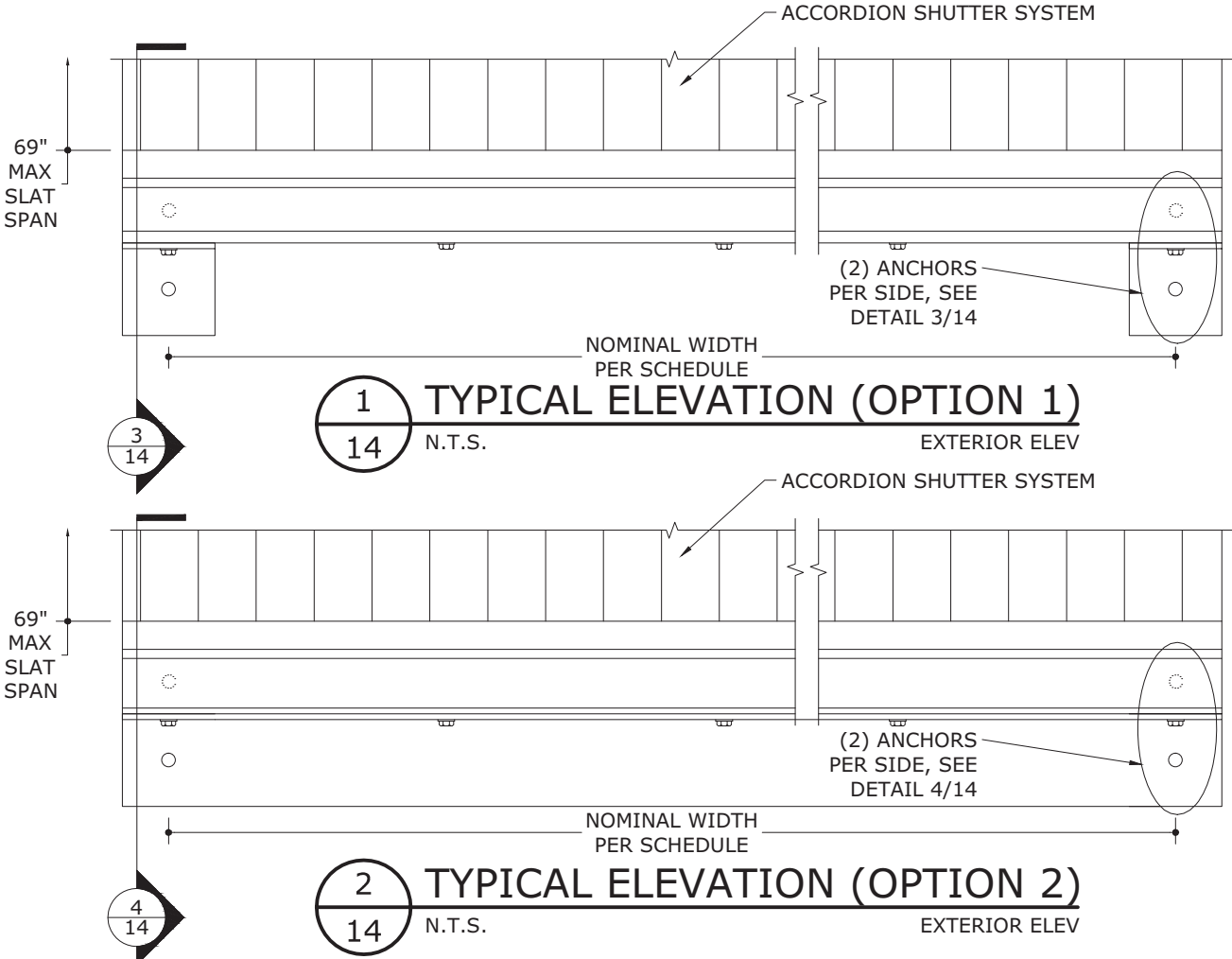
**4 BLADE W/ RECT. WINDOW**  
13 N.T.S. EXTERIOR ELEV

ALTERNATE MOUNTING OPTION

DESIGN SCHEDULES

| OPTION 1                     |                           |              | OPTION 2                       |                           |              |
|------------------------------|---------------------------|--------------|--------------------------------|---------------------------|--------------|
| (1) 2x3x0.25 ANGLE (6063-T6) |                           |              | (2) 2x3x0.125 ANGLES (6063-T6) |                           |              |
| NOMINAL WIDTH                | ALLOWABLE DESIGN PRESSURE |              | NOMINAL WIDTH                  | ALLOWABLE DESIGN PRESSURE |              |
|                              | POSITIVE (+)              | NEGATIVE (-) |                                | POSITIVE (+)              | NEGATIVE (-) |
| 42"                          | 151 psf                   | 200 psf      | 42"                            | 80 psf                    | 173 psf      |
| 45"                          | 131 psf                   | 200 psf      | 45"                            | 69 psf                    | 151 psf      |
| 48"                          | 116 psf                   | 177 psf      | 48"                            | 61 psf                    | 132 psf      |
| 51"                          | 102 psf                   | 147 psf      | 51"                            | 54 psf                    | 117 psf      |
| 54"                          | 91 psf                    | 124 psf      | 54"                            | 48 psf                    | 105 psf      |
| 57"                          | 82 psf                    | 106 psf      | 57"                            | 43 psf                    | 94 psf       |
| 60"                          | 74 psf                    | 91 psf       | 60"                            | 39 psf                    | 85 psf       |
| 63"                          | 67 psf                    | 78 psf       | 63"                            | 35 psf                    | 77 psf       |
| 66"                          | 61 psf                    | 68 psf       | 66"                            | 32 psf                    | 70 psf       |
| 69"                          | 56 psf                    | 60 psf       | 69"                            | 30 psf                    | 63 psf       |
| 72"                          | 51 psf                    | 52 psf       | 72"                            | 27 psf                    | 56 psf       |
| 75"                          | 46 psf                    | 46 psf       | 75"                            | 25 psf                    | 49 psf       |
| 78"                          | 41 psf                    | 41 psf       | 78"                            | 23 psf                    | 44 psf       |
| 81"                          | 37 psf                    | 37 psf       | 81"                            | 21 psf                    | 39 psf       |

NOTE: DESIGN PRESSURES SHOWN IN DESIGN SCHEDULE ARE FOR DETERMINING MAXIMUM ALLOWABLE HORIZONTAL SUPPORT ANGLE SPAN. SHUTTER SPANS AND ALLOWABLE LOADS SHALL NOT EXCEED THOSE PERMITTED IN DESIGN SCHEDULES.



ANCHOR NOTE: 1/4" MILLENIUM MILLFAST SCREWS W/ T&C ULTRACOTE MAY BE USED IN LIEU OF THE LAG SCREWS CALLED OUT ON THIS SHEET UTILIZING THE SAME CRITERIA.

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