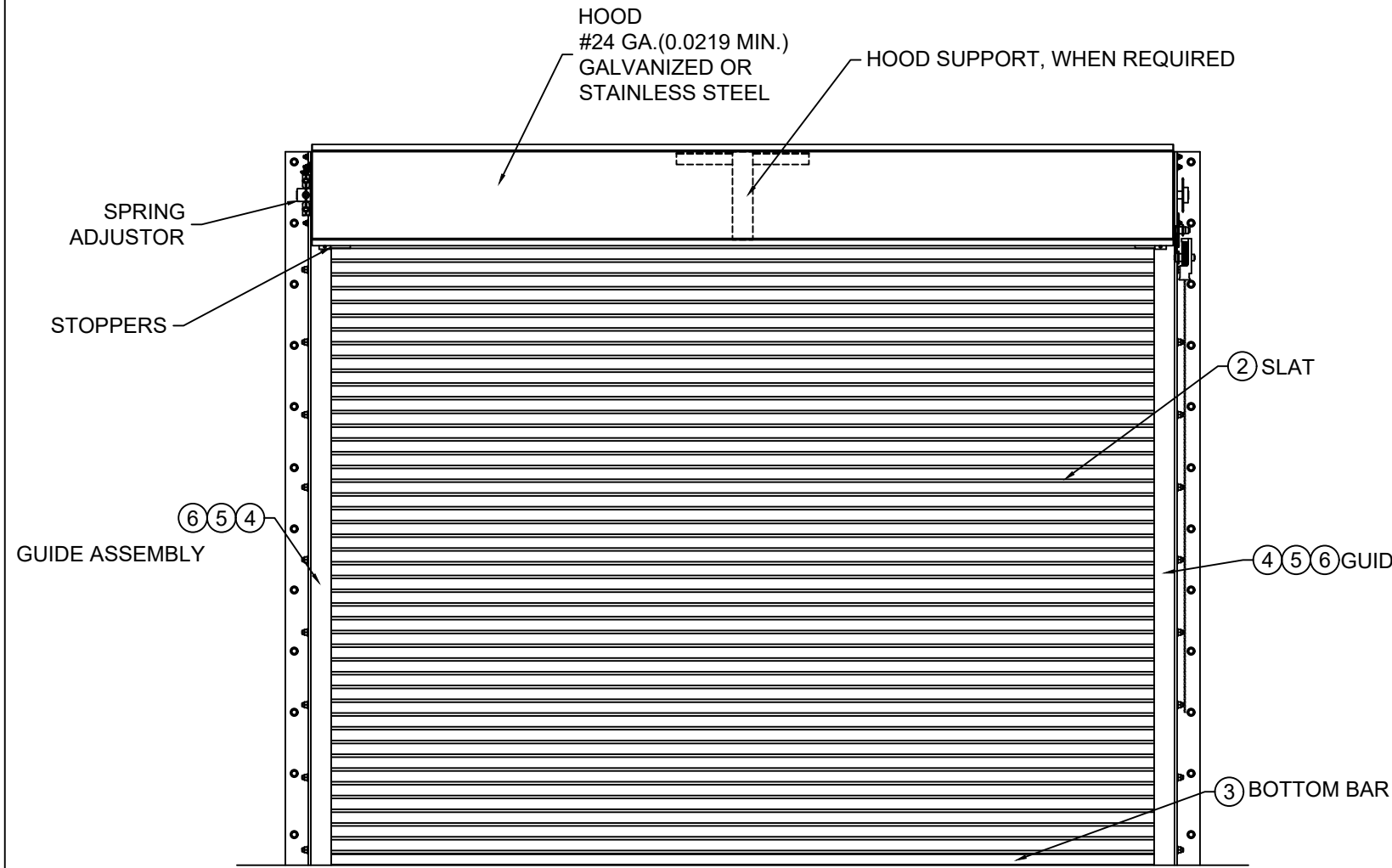
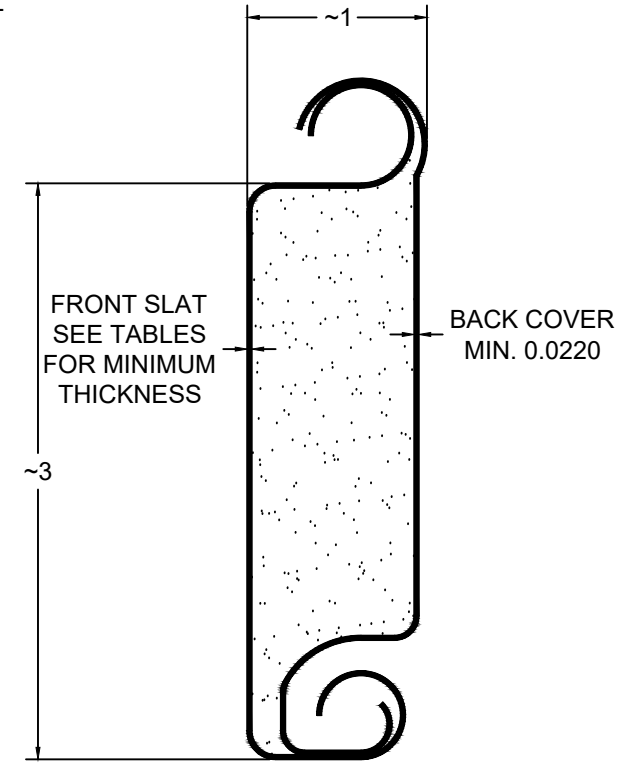
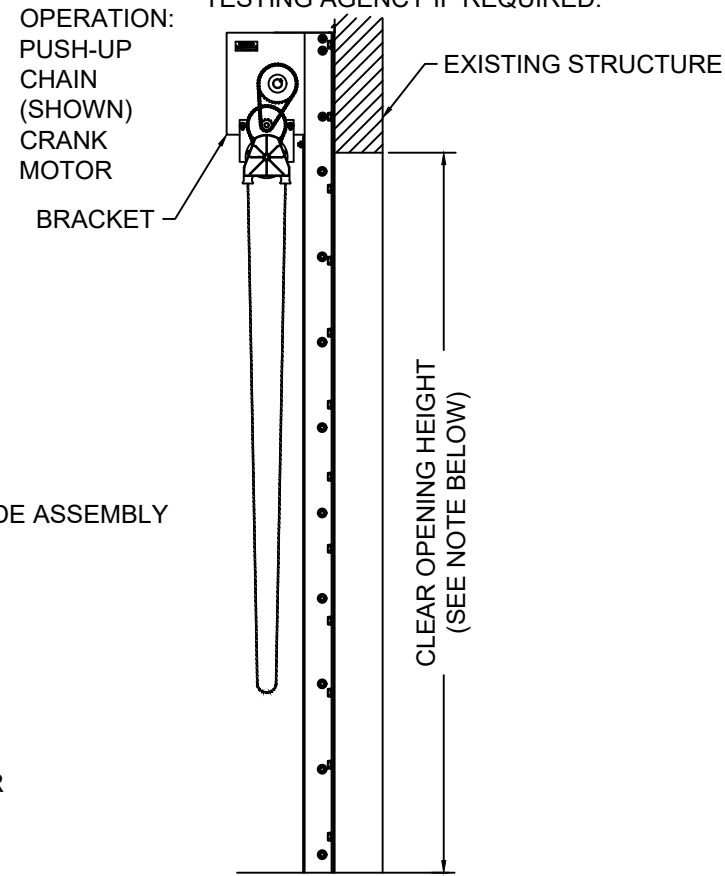


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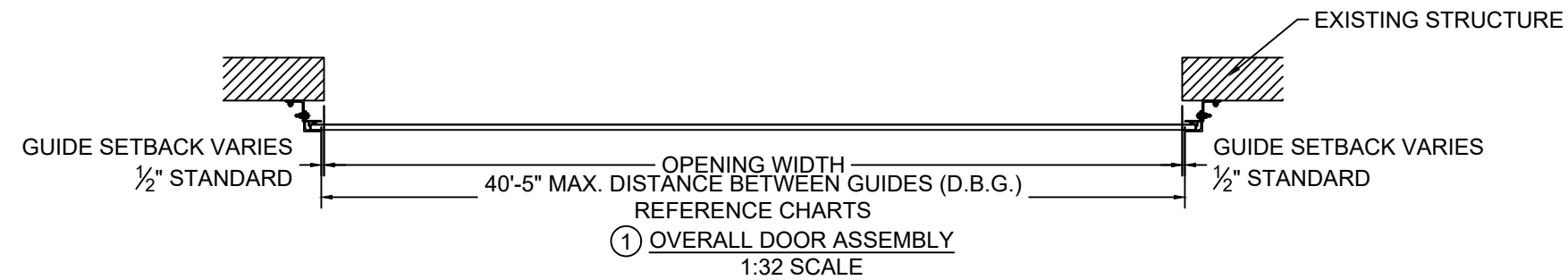
ROLL-UP MECHANISM NOT INCLUDED IN THIS APPROVAL. MUST BE CERTIFIED BY AN INDEPENDENT TESTING AGENCY IF REQUIRED.



② SLAT DETAIL
TYPICAL SECTION

ASTM A653 HSLAS TYPE B GRADE 40 G40 OR
ASTM A653 HSLAS TYPE A GRADE 40 G40 OR
ASTM A653 STRUCTURAL STEEL GRADE 40 G40
OR TYPE 304 STAINLESS STEEL (MIN. YIELD 40,000 psi)
OR TYPE 316 STAINLESS STEEL (MIN. YIELD 40,000 psi)
OR TYPE 430 STAINLESS STEEL (MIN. YIELD 40,000 psi)
OR TYPE 201 STAINLESS STEEL (MIN. YIELD 40,000 psi)
FULL SCALE

NOTE: WIND LOADS SPECIFIED IN TABLES ARE ACCEPTABLE FOR ANY C.O.H. UP TO 30'-0"

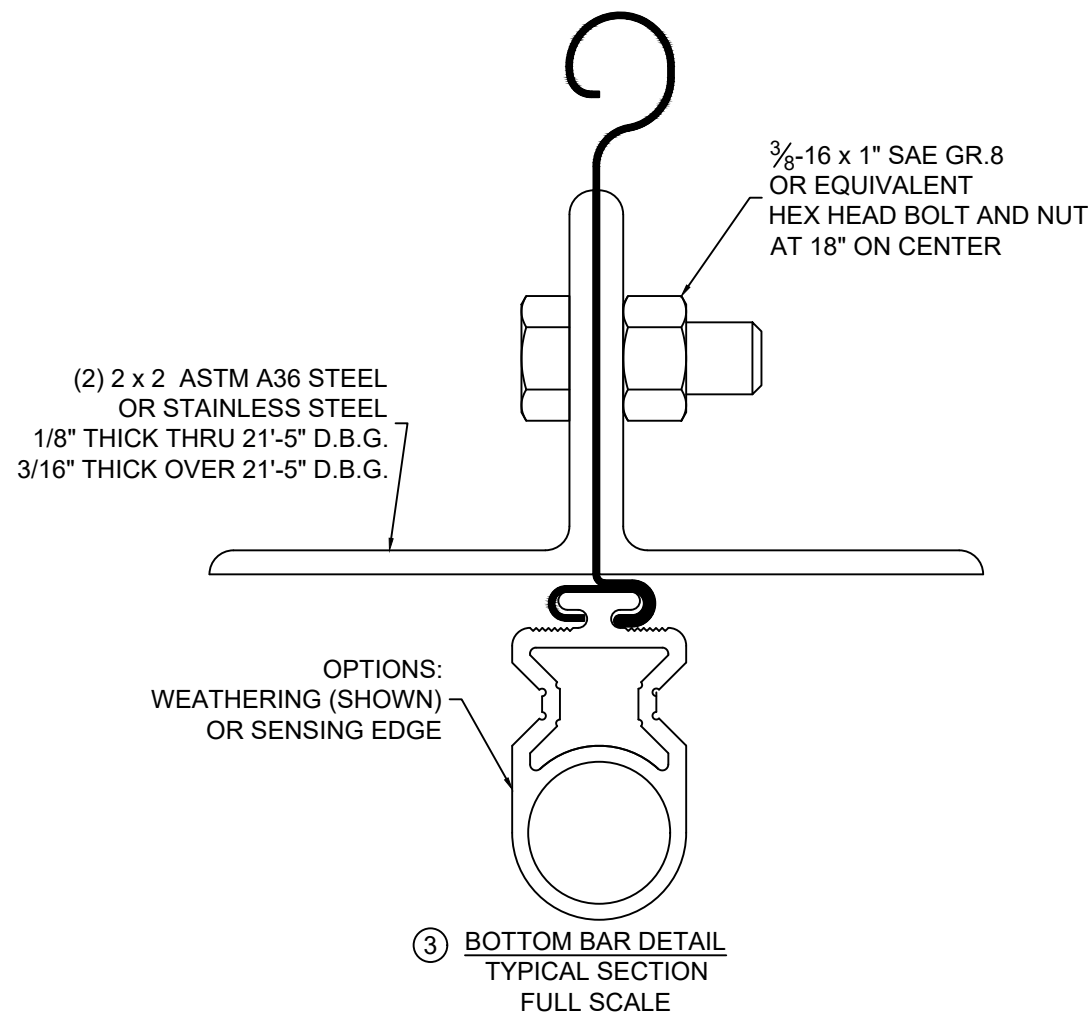


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| | TITLE: WIND LOAD CONFIGURATION INSULATED ROLLING STEEL DOOR CP0001/CP0651 SLAT NON-IMPACT RATED | DRAWN BY: TJE SIZE: B SCALE: AS NOTED SHEET: 1/8 |

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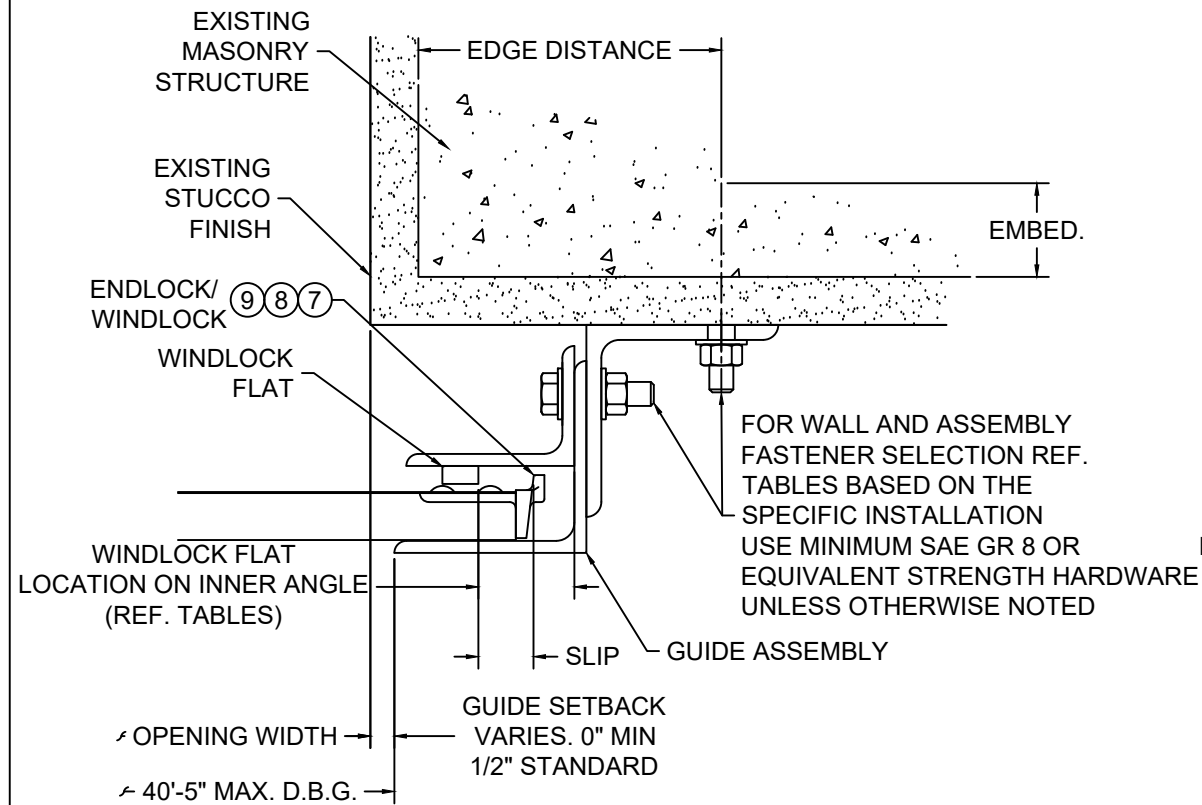
GENERAL NOTES:

1. THESE PRODUCT EVALUATION DOCUMENTS REPRESENT A ROLL-UP DOOR ASSEMBLY DESIGNED AND TESTED IN ACCORDANCE WITH THE STANDARD BUILDING CODE, THE 2018 INTERNATIONAL BUILDING CODE, AND THE FLORIDA BUILDING CODE.
2. THIS ROLL-UP DOOR HAS BEEN TESTED FOR UNIFORM STATIC PRESSURE IN ACCORDANCE WITH THE FBC TEST PROTOCOLS TAS 202.
3. A 33% INCREASE IN ALLOWABLE STRESS HAS NOT BEEN USED IN THE DESIGN OF THIS PRODUCT.
4. DETERMINE THE POSITIVE AND NEGATIVE DESIGN LOADS TO USE WHEN REFERENCING THESE DOCUMENTS IN ACCORDANCE WITH THE GOVERNING CODE AND GOVERNING WIND VELOCITY.
5. THESE PRODUCT EVALUATION DOCUMENTS ARE PREPARED BY THE PRODUCT ENGINEER AND ARE GENERIC. THEY DO NOT INCLUDE INFORMATION PREPARED FOR A SPECIFIC SITE.
6. THESE PRODUCT EVALUATION DOCUMENTS ARE NOT VALID FOR PERMIT WITHOUT ORIGINAL SIGNATURE, DATE AND EMBOSSED SEAL ON EACH PERMIT COPY, WHETHER OR NOT A MASTER APPROVAL DOCUMENT IS ON FILE WITH A MUNICIPALITY OR OTHER GOVERNING AGENCY.
7. THESE PRODUCT EVALUATION DOCUMENTS ARE SUITABLE TO BE APPLIED BY THE CONTRACTOR PROVIDED THE CONTRACTOR DOES NOT DEVIATE FROM THE CONDITIONS DETAILED HEREIN AND THE CONTRACTOR VERIFIES THE EXISTING STRUCTURE IS CAPABLE OF SUPPORTING THE SUPERIMPOSED LOADS V_x & V_y ON THE JAMBS OF THE DOOR.
8. ALTERATIONS OR ADDITIONS TO THIS DOCUMENT ARE NOT PERMITTED.
9. WHEN THE SITE CONDITIONS DEVIATE FROM THESE PRODUCT EVALUATION DOCUMENTS, SITE SPECIFIC DOCUMENTS SHALL BE PREPARED BY A DULY LICENSED AND REGISTERED ENGINEER OR ARCHITECT.
10. IF THE DEVIATING SITE SPECIFIC DOCUMENTS ARE PREPARED BY A DELEGATED REGISTERED ENGINEER OR ARCHITECT, SAID DOCUMENTS SHALL BEAR THE DATE, SIGNATURE, AND EMBOSSED SEAL OF THE DELEGATED ENGINEER OR ARCHITECT AND SHALL BE SUBMITTED TO THE PROJECT ENGINEER FOR REVIEW.
11. ALL BOLTS AND WASHERS SHALL BE GALVANIZED STEEL, PLATED STEEL, OR STAINLESS STEEL
12. ALL WINDLOCK RIVETS SHALL BE 1/4" STEEL RIVETS IFI GRADE 30 WITH A MINIMUM TENSILE STRENGTH OF 1,850 Lbs., AND SHEAR STRENGTH OF 2,400 Lbs., U.O.N.. RIVETS TO BE INSTALLED IN ALL WINDLOCK HOLES.
13. ENDLOCKS/WINDLOCKS SHALL BE CAST MALLEABLE IRON TYPE 32510 PER ASTM A47 OR CAST DUCTILE IRON PER ASTM A536 GRADE 65-45-12.
14. ALL WELDING SHALL BE PERFORMED BY QUALIFIED WELDERS IN ACCORDANCE WITH A.W.S. SPECIFICATIONS, LATEST EDITION. ALL WELDING ELECTRODES SHALL CONFORM TO A.W.S. A5.1 GRADE E-70. MINIMUM WELDING PROCESSES SHALL BE ARC WELDING A.W.S. E7014 OR MIG WELDING A.W.S. ER70S-6.
15. ANCHOR NOTES:
 A. EMBEDMENT LENGTH DOES NOT INCLUDE STUCCO FINISH.
 B. ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS.
 C. ANCHOR CAPACITY FOR THIS ROLL-UP DOOR IS BASED ON MIN. 3,000 P.S.I. CONCRETE EXCEPT WHERE NOTED..
 D. FOR MINIMUM EMBEDMENT AND MINIMUM EDGE DISTANCE, REFER TO TABLES.
16. DOOR MAY BE INSTALLED ON THE INSIDE OR OUTSIDE OF AN EXTERIOR WALL
17. ALL SHAPES USED FOR GUIDE ASSEMBLIES MUST CONFORM TO ASTM A36 FOR STEEL OR ASTM A276 FOR TYPES 304 OR 316 WITH A MINIMUM 36 KSI YIELD STRENGTH



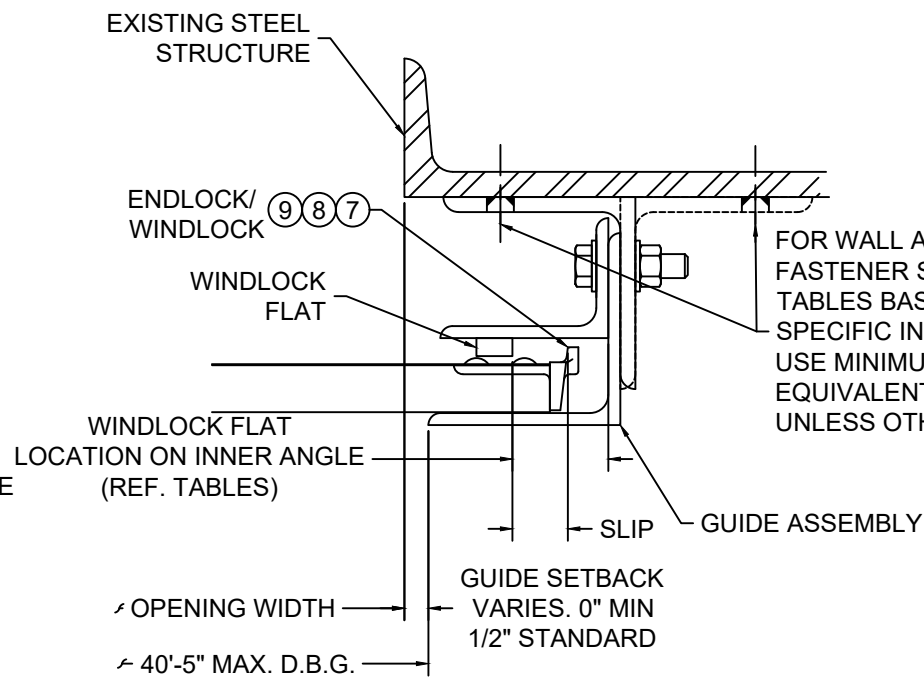
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| DWG NO: ES-16-71-AMARR | | | | | | |

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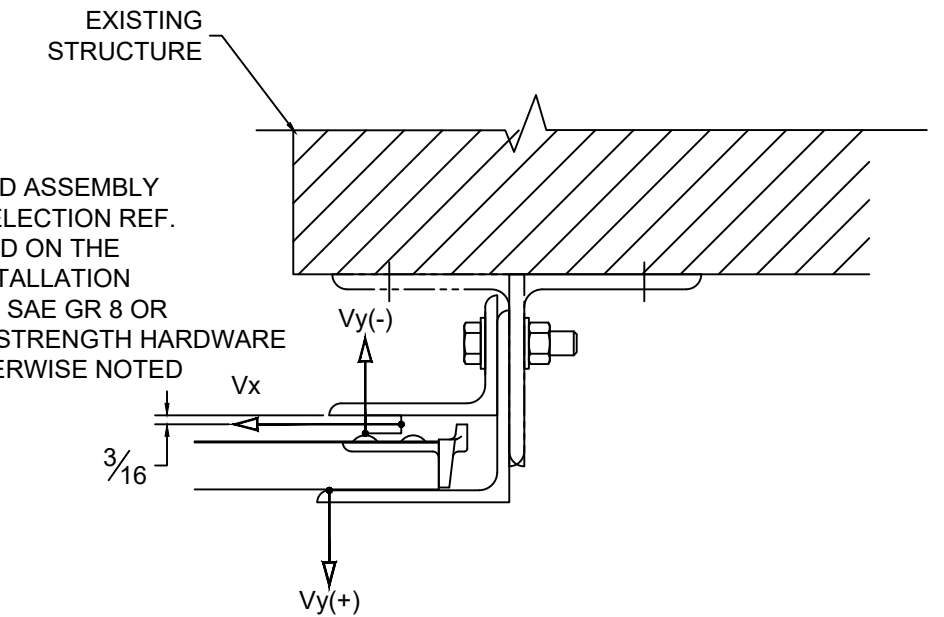


NOTE:
THROUGH BOLTING TO FILLED BLOCK REQUIRES THE USE OF 1/4" THICK STEEL OR STAINLESS STEEL CRUSH PLATE

⑤ GUIDE ASSEMBLY
CONCRETE & MASONRY STRUCTURE
(Z-GUIDE)



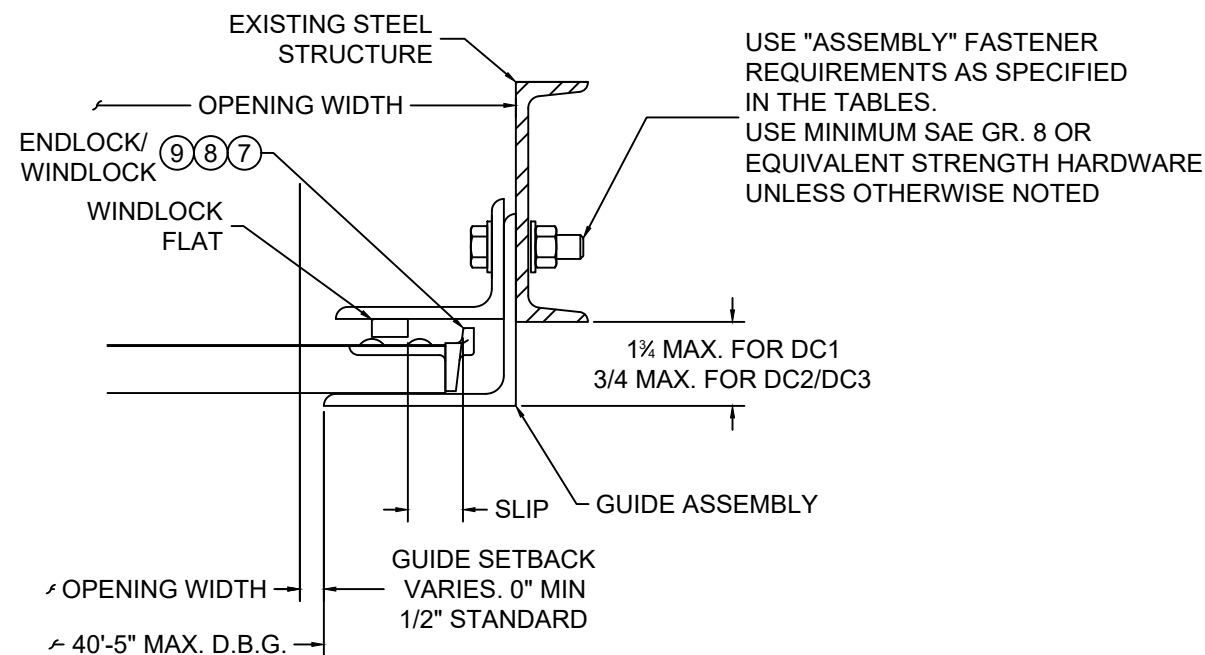
⑥ GUIDE ASSEMBLY
STEEL STRUCTURE
(Z-GUIDE OR E-GUIDE)



NOTE:

1. V_x & V_y ARE HORIZ. AND VERT. COMPONENTS OF THE REACTION, RESPECTIVELY, RESULTING FROM WIND LOADS ON THE ROLL-UP DOOR. THE EXISTING STRUCTURE SHALL BE CAPABLE OF RESISTING V_x & V_y FORCES SHOWN AND THE CORRESPONDING REACTIONS DUE TO THE ECCENTRICITIES OF THE FORCES.

⑦ SUPERIMPOSED LOAD DIAGRAM
SCALE: 3" = 1'-0"

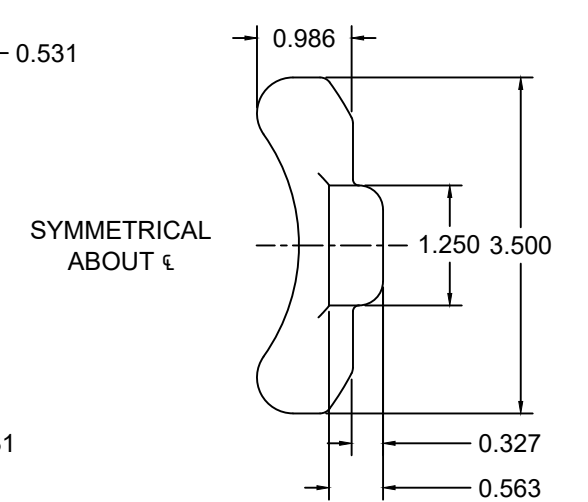
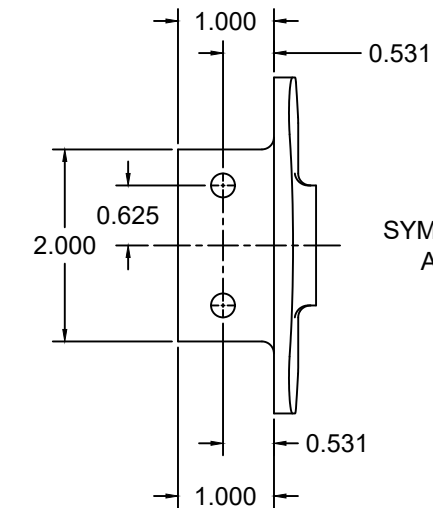
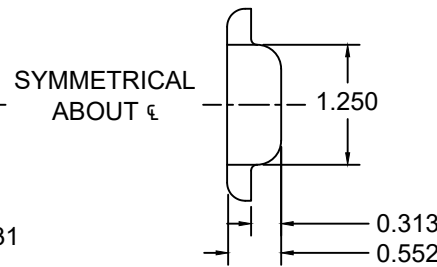
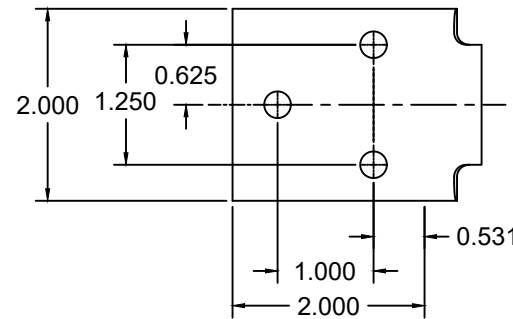
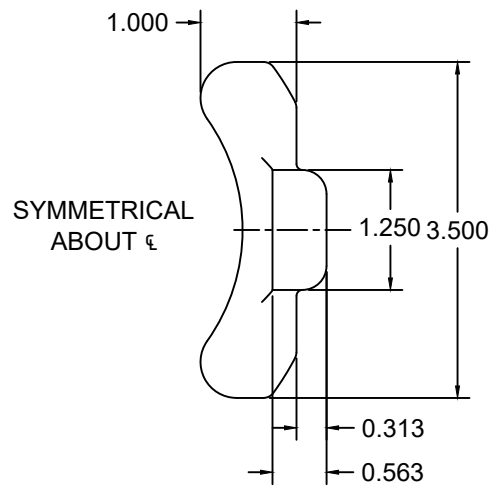
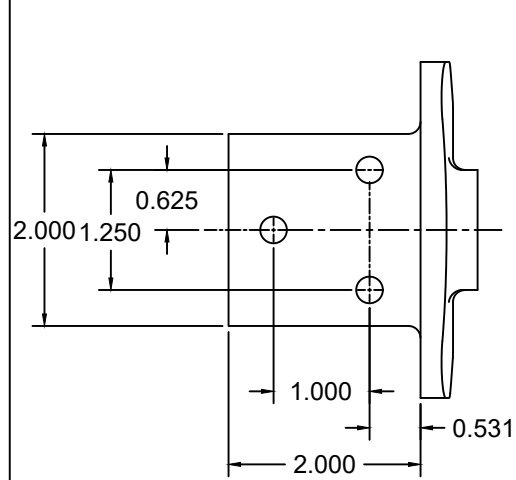
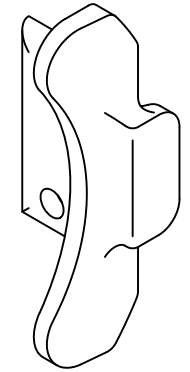
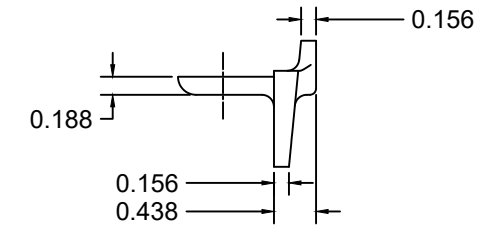
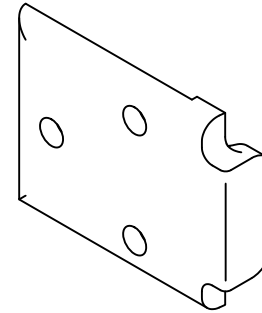
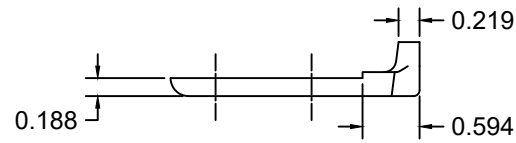
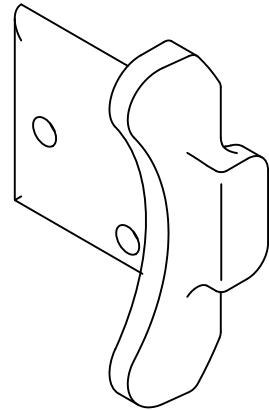
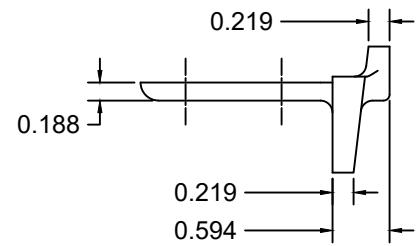


④ GUIDE ASSEMBLY
STEEL STRUCTURE
(BETWEEN JAMBS GUIDE)



| | | |
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⑦ CP0630 ENDLOCK / WINDLOCK DETAIL
 CAST MALLEABLE IRON ASTM A47, GRADE 32510, OR
 DUCTILE IRON PER ASTM A536 GRADE 65-45-12, GALVANIZED IN ACCORDANCE WITH
 ASTM A123, GRADE 85 ZINC-COATING
 1/2 SCALE

⑧ CP0647 WINDLOCK DETAIL
 CAST MALLEABLE IRON ASTM A47, GRADE 32510, OR
 DUCTILE IRON PER ASTM A536 GRADE 65-45-12, GALVANIZED IN
 ACCORDANCE WITH ASTM A123, GRADE 85 ZINC-COATING
 1/2 SCALE

⑨ CP0629 ENDLOCK / WINDLOCK DETAIL
 CAST MALLEABLE IRON ASTM A47, GRADE 32510, OR
 DUCTILE IRON PER ASTM A536 GRADE 65-45-12, GALVANIZED IN ACCORDANCE WITH
 ASTM A123, GRADE 85 ZINC-COATING
 1/2 SCALE



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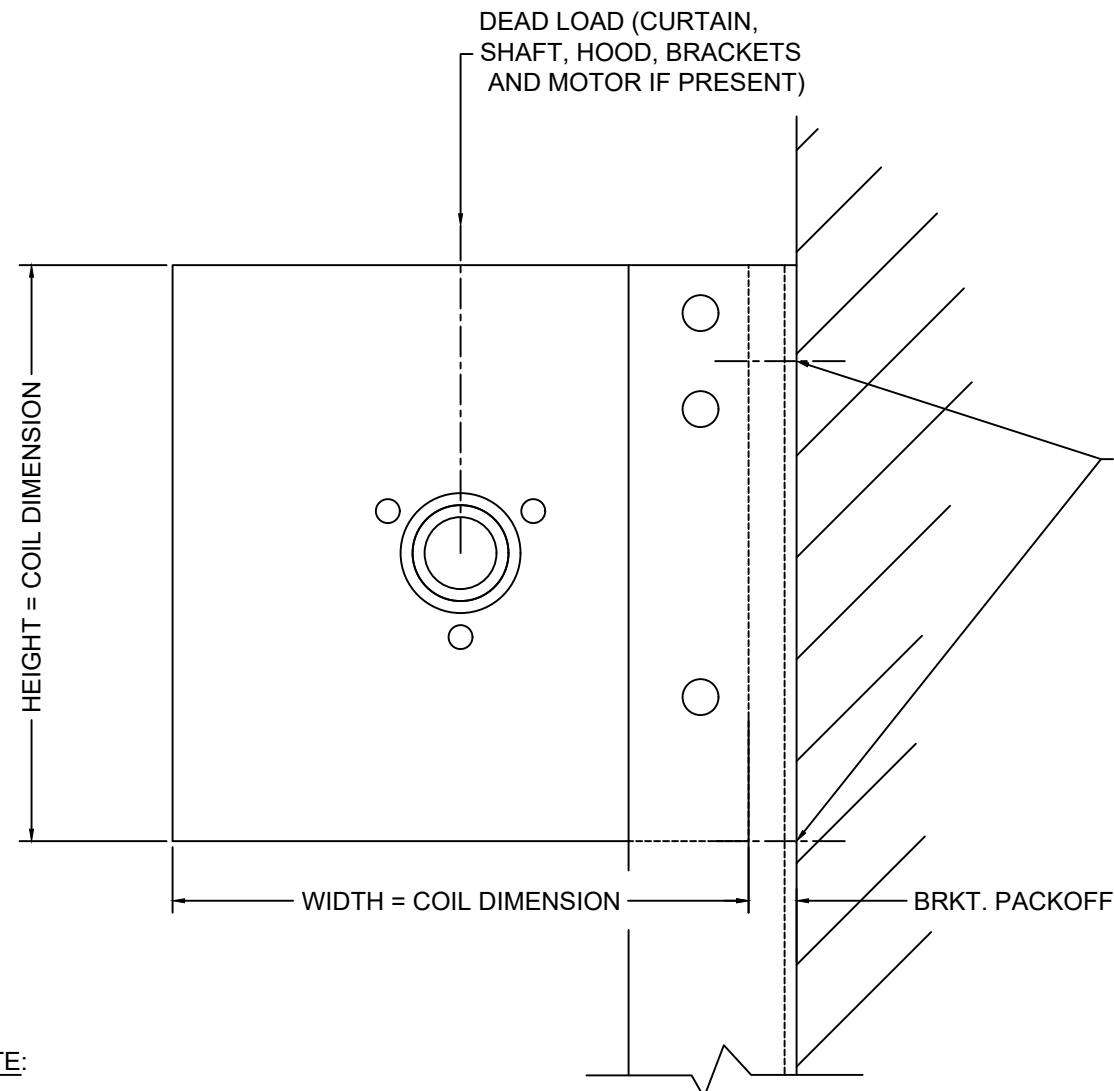
0.000 = +/- 0.031
 FRACTIONAL = +/- 1/32
 ANGLES = +/- 1/2 DEG

TITLE: WIND LOAD CONFIGURATION
 INSULATED ROLLING STEEL DOOR
 CP0001/CP0651 SLAT NON-IMPACT RATED

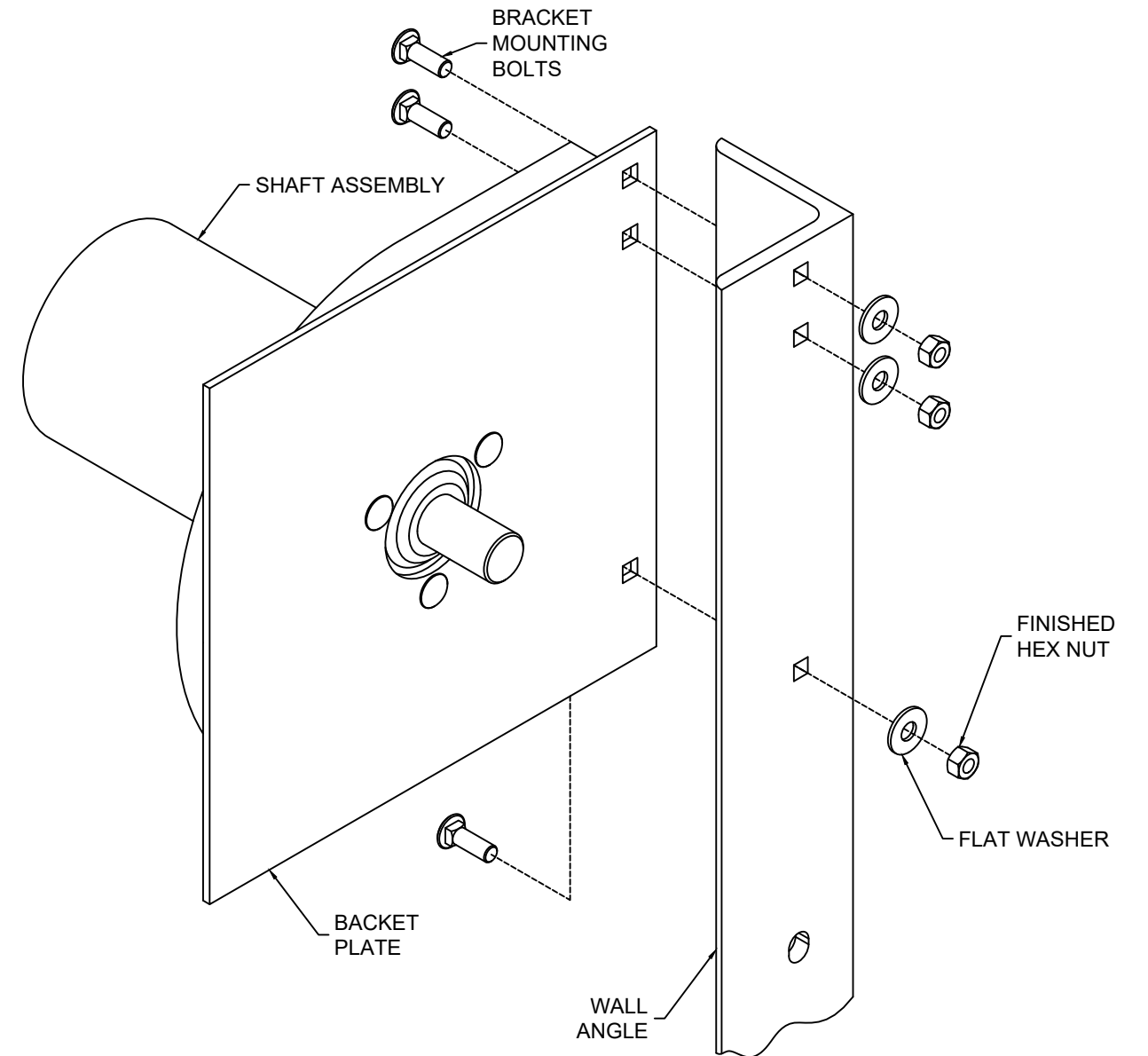
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 SIZE: B
 SCALE: AS NOTED
 SHEET: 4/8

DWG NO: ES-16-71-AMARR

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FOR "WALL ANGLE" TO WALL CONNECTION, REF. TABLE BASED ON THE SPECIFIC INSTALLATION. USE AT LEAST ONE FASTENER OR WELD AT THE INDICATED LOCATIONS.



NOTE:

1. WHEN MOTOR IS PROVIDED, HEIGHT OR WIDTH DIMENSION MAY INCREASE UP TO 2-1/2" BASED ON MOTOR LOCATION. WHEN AN 8" DIAMETER OR LARGER SHAFT ASSEMBLY IS PROVIDED, HEIGHT DIMENSION INCREASES BY 2".

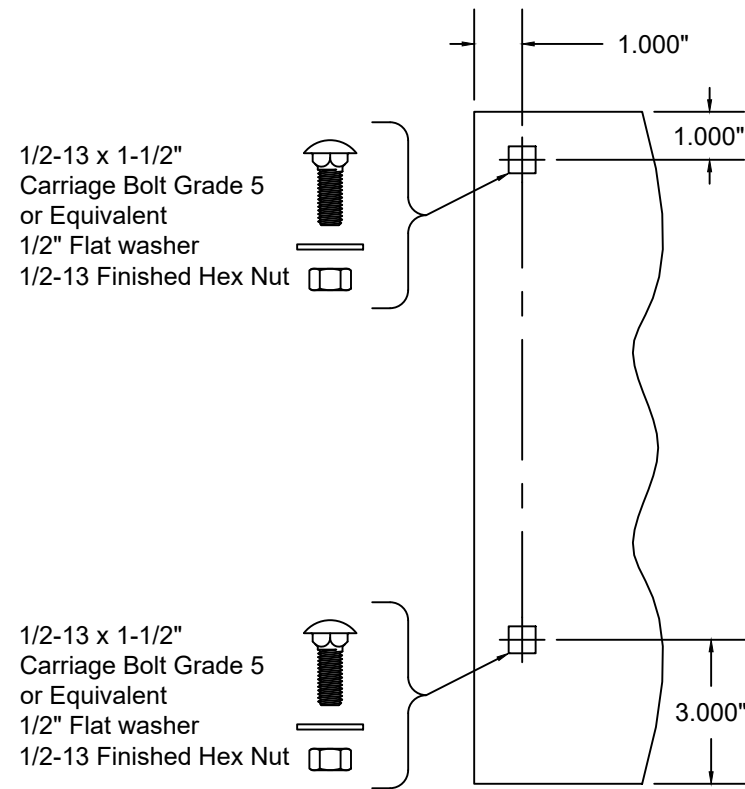
NOTE:

1. STANDARD BRACKET MOUNTING DETAIL IS DEPICTED, OTHER MOUNTINGS ARE AVAILABLE

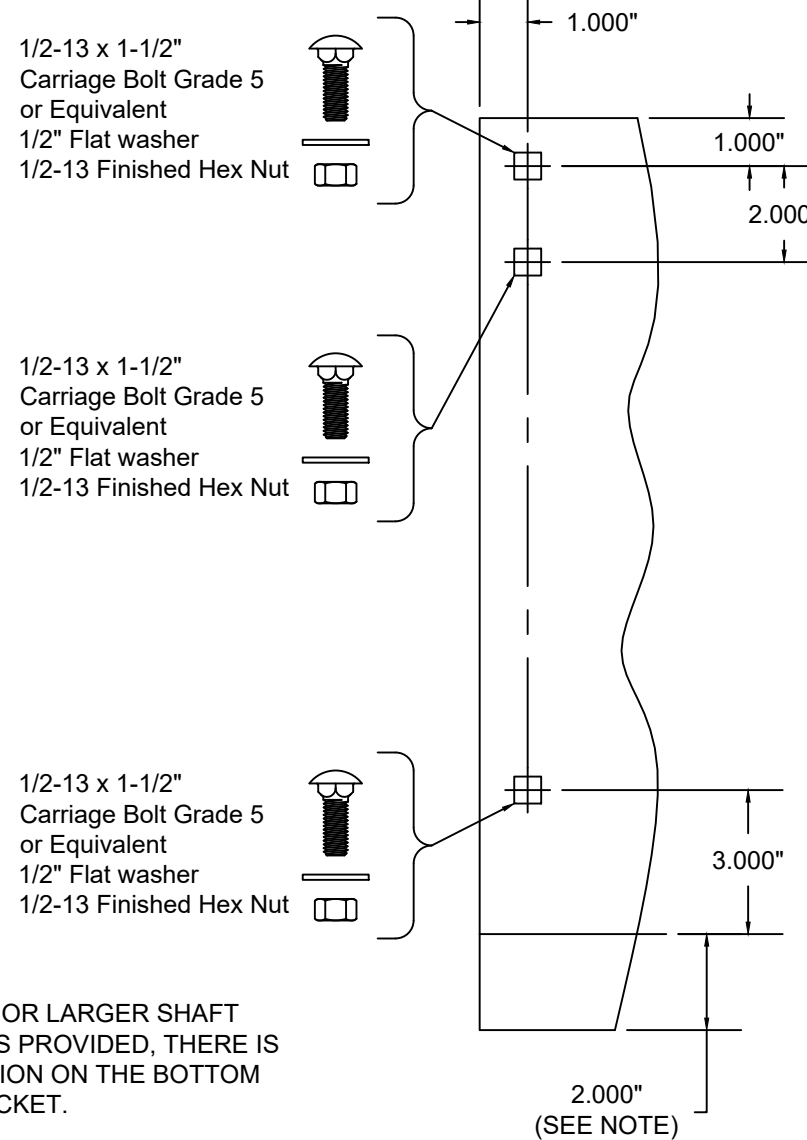


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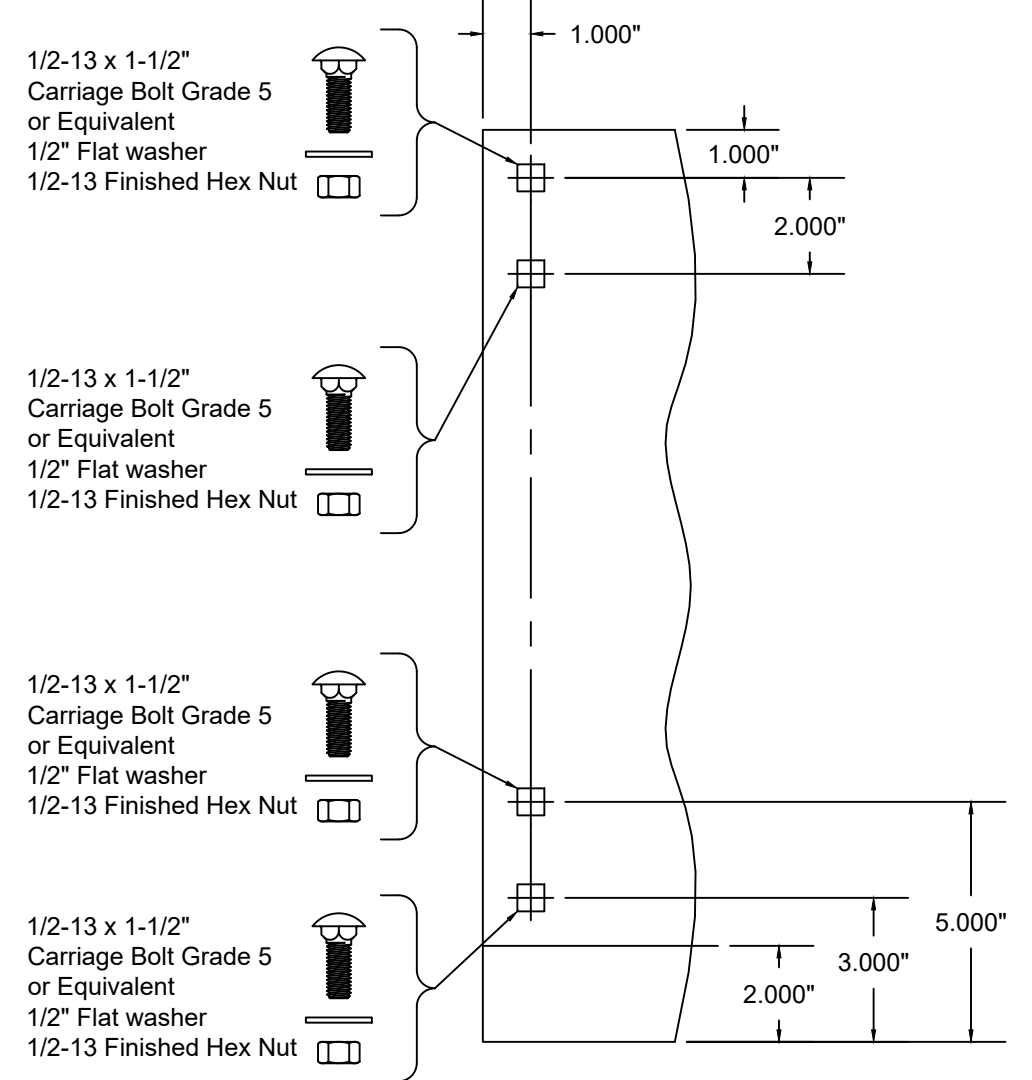


THRU 6"Ø SHAFT ASSEMBLY
14" THRU 16" COIL DIMENSION
MIN. THICKNESS 0.172" ASTM A36
OR ASTM A480 STAINLESS STEEL,
TYPES 304 OR 316, MINIMUM 36 KSI YIELD STRENGTH
 SCALE: 1-1/2" = 1'-0"



THRU 10"Ø SHAFT ASSEMBLY
17" AND LARGER COIL DIMENSION
MIN. THICKNESS 0.240" ASTM A36
OR ASTM A480 STAINLESS STEEL,
TYPES 304 OR 316, MINIMUM 36 KSI YIELD STRENGTH
 SCALE: 1-1/2" = 1'-0"

NOTE:
 WHEN A 8"Ø OR LARGER SHAFT
 ASSEMBLY IS PROVIDED, THERE IS
 A 2" EXTENSION ON THE BOTTOM
 OF THE BRACKET.



12"Ø SHAFT ASSEMBLY
17" AND LARGER COIL DIMENSION
MIN. THICKNESS 0.240" ASTM A36
OR ASTM A480 STAINLESS STEEL,
TYPES 304 OR 316, MINIMUM 36 KSI YIELD STRENGTH
 SCALE: 1-1/2" = 1'-0"



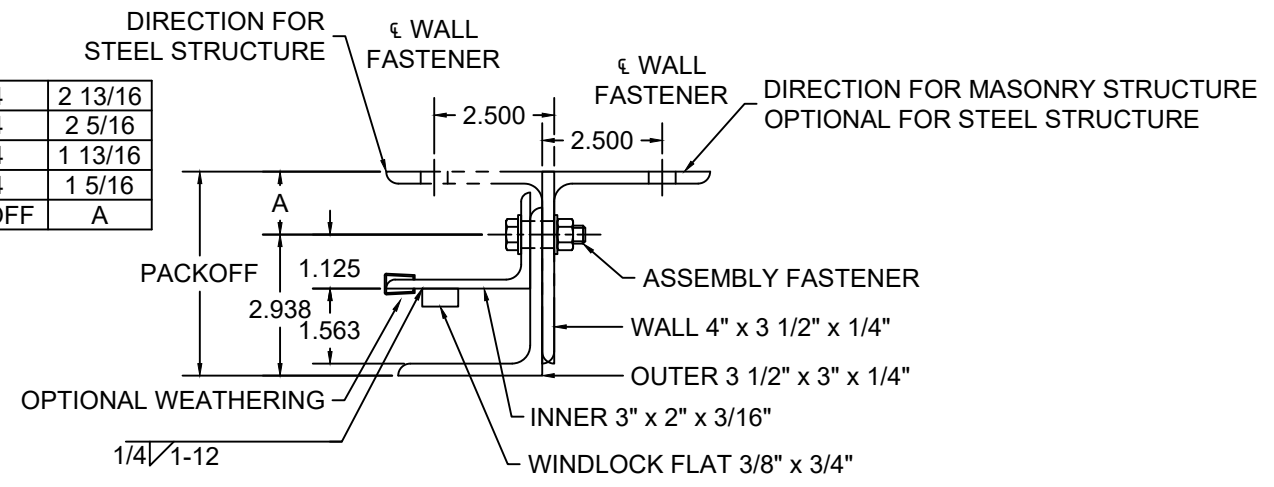
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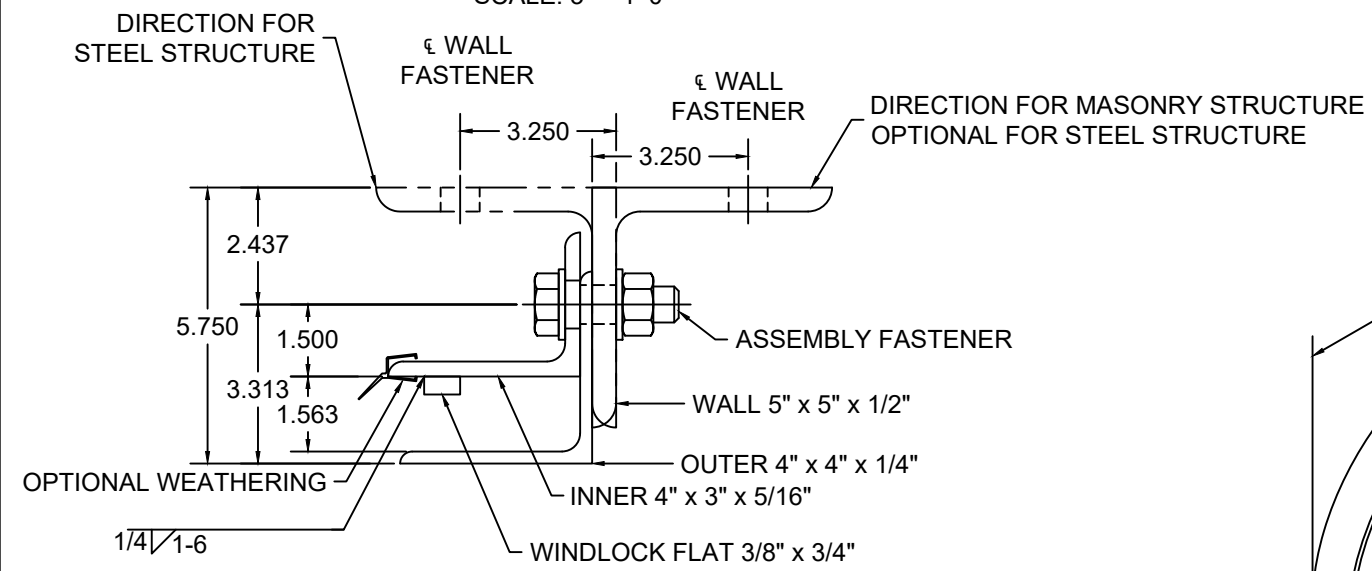
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| | DWG NO: ES-16-71-AMARR | | | |

| | |
|---------|---------|
| 5 3/4 | 2 13/16 |
| 5 1/4 | 2 5/16 |
| 4 3/4 | 1 13/16 |
| 4 1/4 | 1 5/16 |
| PACKOFF | A |

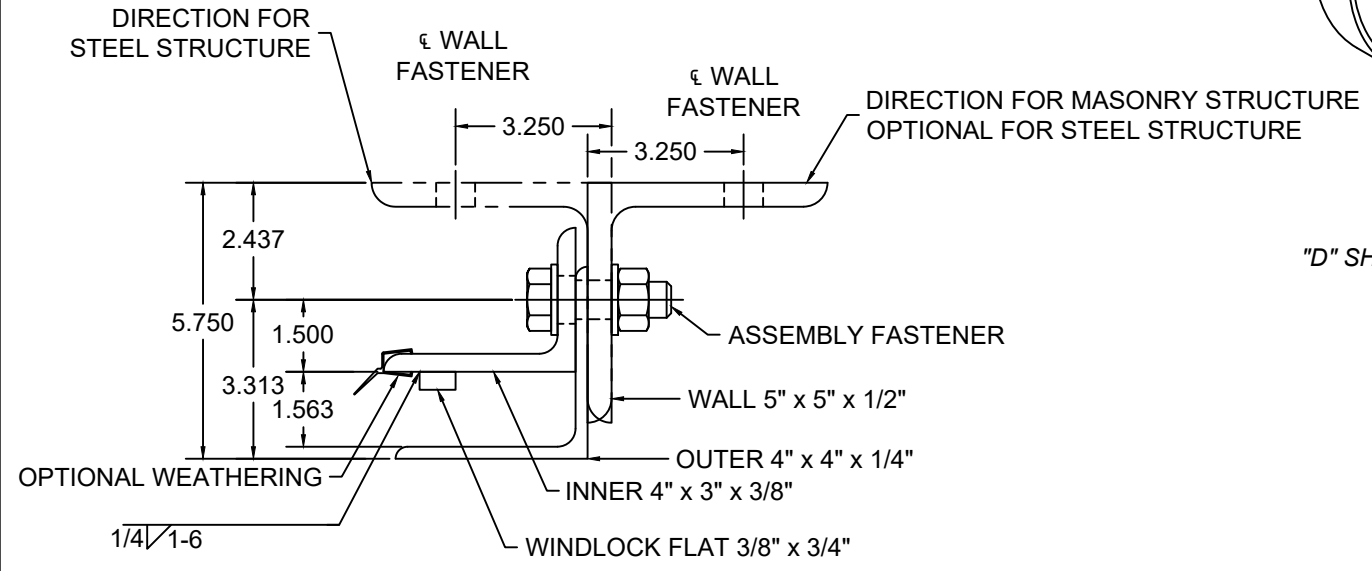
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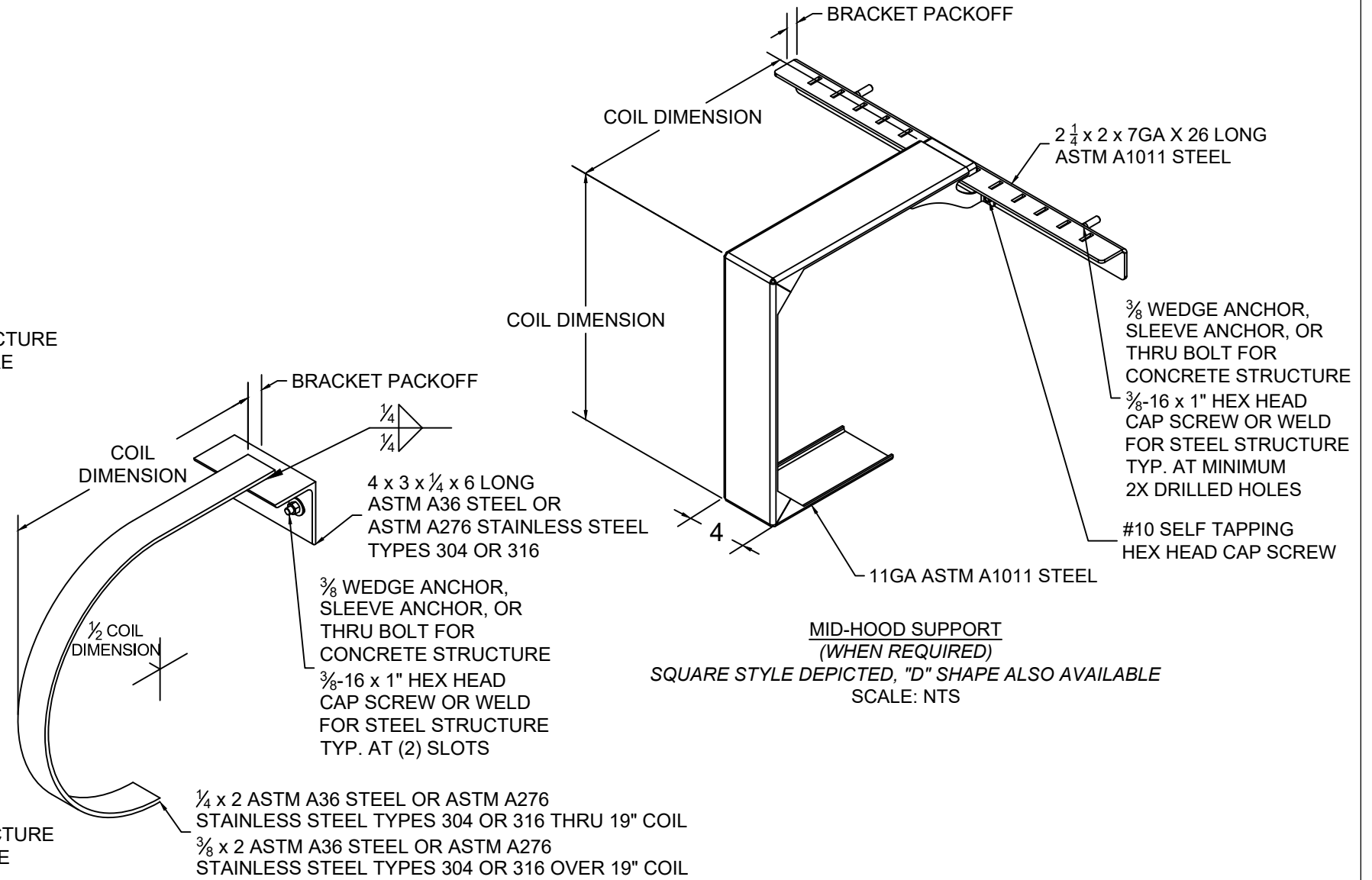
GUIDE ASSEMBLY TYPE DC1
SCALE: 3" = 1'-0"



GUIDE ASSEMBLY TYPE DC2
SCALE: 3" = 1'-0"



GUIDE ASSEMBLY TYPE DC3
SCALE: 3" = 1'-0"



MID-HOOD SUPPORT
(WHEN REQUIRED)
"D" SHAPE DEPICTED, SQUARE STYLE ALSO AVAILABLE
SCALE: NTS



| | | |
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CP0001/CP0651 - Galvanized or Stainless Steel

| | | | | | | | | | | Concrete Minimum 3,000 PSI Compressive Strength (Anchors are the same diameter as assembly fasteners) | | | | | | | |
|--------------------|------------------------------|------------------|------------------------|-------|-----------------|----------------|---------------------|----------------------------|---------------------------|---|-------|------------------|-----------|-------------------|-------|------------------|-----------|
| Door Configuration | Minimum Front Slat Thickness | Maximum Pressure | Windlock Flat Location | Slip | Windlock | Guide Assembly | Windlock Weld Pitch | Assembly Fastener Diameter | Assembly Fastener Spacing | Hilti Kwik Bolt 3 | | | | Simpson Wedge All | | | |
| | | | | | | | | | | Max O.C. | Embed | Min. Wall Thick. | Edge Dist | Max O.C. | Embed | Min. Wall Thick. | Edge Dist |
| DC 1 | 0.0296 | 65 PSF | 1 5/16 | 0.532 | CP0629 | DC1 | 12 | 1/2 | 18 | 16 | 3 1/2 | 5 1/4 | 5 3/4 | 16 | 4 1/2 | 6 3/4 | 5 3/4 |
| DC 2 | 0.0405 | 120 PSF | 1 1/2 | 0.656 | CP0630 & CP0647 | DC2 | 6 | 3/4 | 15 | 11 | 4 3/4 | 7 1/8 | 7 1/2 | 11 | 5 | 7 1/2 | 7 1/2 |
| DC 3 | 0.0405 | 65 PSF | 2 1/2 | 1.656 | CP0630 & CP0647 | DC3 | 6 | 3/4 | 15 | 11 | 4 3/4 | 7 1/8 | 7 1/2 | 11 | 5 | 7 1/2 | 7 1/2 |

CP0001/CP0651 - Galvanized or Stainless Steel, Cont.

| | | | | | | | | | | Filled CMU | | | | | | Steel (Wall anchors are the same diameter as assembly fasteners) | | | | | | Superimposed Loads (at Maximum Pressure) | | | |
|--------------------|-------------------|------|-------|-----------|-------------------|------|-------|-----------|--------------|------------|-----------|----------|------------|--------------|----------|--|--------|--------|--------|--------|--|--|--|--|--|
| Door Configuration | Hilti Kwik Bolt 3 | | | | Simpson Wedge-All | | | | Through Bolt | | | Welded | | Through Bolt | Tapped | | Vx (+) | Vy (+) | Vx (-) | Vy (-) | | | | | |
| | Max O.C. | Dia. | Embed | Edge Dist | Max O.C. | Dia. | Embed | Edge Dist | Max. O.C. | Dia. | Edge Dist | Max O.C. | Slot Size | Max O.C. | Max O.C. | Min. Thickness | | | | | | | | | |
| DC 1 | 8 | 1/2 | 3 1/2 | 5 3/4 | 8 | 1/2 | 4 1/2 | 5 3/4 | N/A | | | 18 | 9/16 X 3/4 | 18 | 18 | 1/4 | 566 | 406 | 517 | 404 | | | | | |
| DC 2 | N/A | | | | N/A | | | | 8 | 3/4 | 7 1/2 | 15 | 13/16 x 1 | 15 | 15 | 3/8 | 2956 | 871 | 2881 | 871 | | | | | |
| DC 3 | N/A | | | | N/A | | | | 8 | 3/4 | 7 1/2 | 15 | 13/16 x 1 | 15 | 15 | 3/8 | 2861 | 825 | 2844 | 826 | | | | | |


SEE CHARTS BELOW FOR MAXIMUM PRESSURE/WIDTH COMBINATIONS FOR EACH DOOR CONFIGURATION

| DC 1 Door Configuration | |
|-------------------------|------------------|
| DBG Up To | Maximum Pressure |
| 12'-5" | 65 PSF (Tested) |
| 13'-5" | 50 PSF |
| 14'-5" | 40 PSF |
| 15'-5" | 30 PSF |
| 18'-5" | 20 PSF |

| DC 2 Door Configuration | |
|-------------------------|------------------|
| DBG Up To | Maximum Pressure |
| 14'-5" | 120 PSF (Tested) |
| 15'-5" | 100 PSF |
| 16'-5" | 90 PSF |
| 17'-5" | 80 PSF |
| 18'-5" | 70 PSF |
| 20'-5" | 60 PSF |
| 22'-5" | 50 PSF |
| 25'-5" | 40 PSF |
| 30'-5" | 30 PSF |
| 39'-5" | 20 PSF |

| DC 3 Door Configuration | |
|-------------------------|------------------|
| DBG Up To | Maximum Pressure |
| 25'-5" | 65 PSF (Tested) |
| 26'-5" | 60 PSF |
| 29'-5" | 50 PSF |
| 33'-5" | 40 PSF |
| 40'-5" | 30 PSF |



| | | |
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|  ENTREMATIC | ENTREMATIC 165 CARRIAGE COURT WINSTON SALEM, NC 27105 P: 800.503.3667 W: AMARR.COM E: ASK.AMARR@ENTREMATIC.COM | Unless otherwise specified, dimensions are in inches & tolerances are: 0.000 = +/- 0.031 FRACTIONAL = +/- 1/32 ANGLES = +/- 1/2 DEG |
| | TITLE: WIND LOAD CONFIGURATION INSULATED ROLLING STEEL DOOR CP0001/CP0651 SLAT NON-IMPACT RATED | DRAWN BY: TJE DWG NO: ES-16-71-AMARR |