

GENERAL NOTES:

1- THIS PRODUCT IS DESIGNED AND TESTED BASED ON SSTD 12-99 IN ACCORDANCE WITH THE THE FLORIDA BUILDING CODE 2004 EDITION. IT IS NOT APPLICABLE FOR USE IN HIGH VELOCITY HURRICANE ZONES (HVHZ).

2- PANELS SHALL BE PERMANENTLY LABELED WITH A MINIMUM OF ONE LABEL PER OPENING OR A CERTIFICATE OF COMPLIANCE SHALL BE PROVIDED BY THE MANUFACTURER AND INSTALLER. LABEL SHALL READ AS FOLLOWS:

FLORIDA POWDER COATING & SHUTTERS, INC.
ALUMINUM COLONIAL SHUTTER
LARGE MISSILE IMPACT RESISTANT

3- MATERIALS:

ALL ALUMINUM EXTRUSIONS SHALL BE 6063-T6 OR AS NOTED.

ALL BOLTS, NUTS AND WASHERS SHALL BE STAINLESS STEEL OR ALUMINUM ALLOY 2024-T4 OR PLATED STEEL.

MATERIALS, INCLUDING BUT NOT LIMITED TO STEEL, THAT COME IN CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF 2004 FLORIDA BUILDING CODE SECTION 2003.8.4.

4- ANCHORS SHALL BE AS SHOWN ON THIS APPROVAL. ANCHOR EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND WALL DRESSING.

5- A LICENSED ENGINEER OR ARCHITECT SHALL PROVIDE A SITE SPECIFIC WIND LOAD FOR A PROJECT AS PER ASCE 7-98 OR LATEST. THE CONTRACTOR, ENGINEER OR ARCHITECT SHALL VERIFY THE ADEQUACY OF THIS PRODUCT WITH THE PROJECT WIND LOADS.

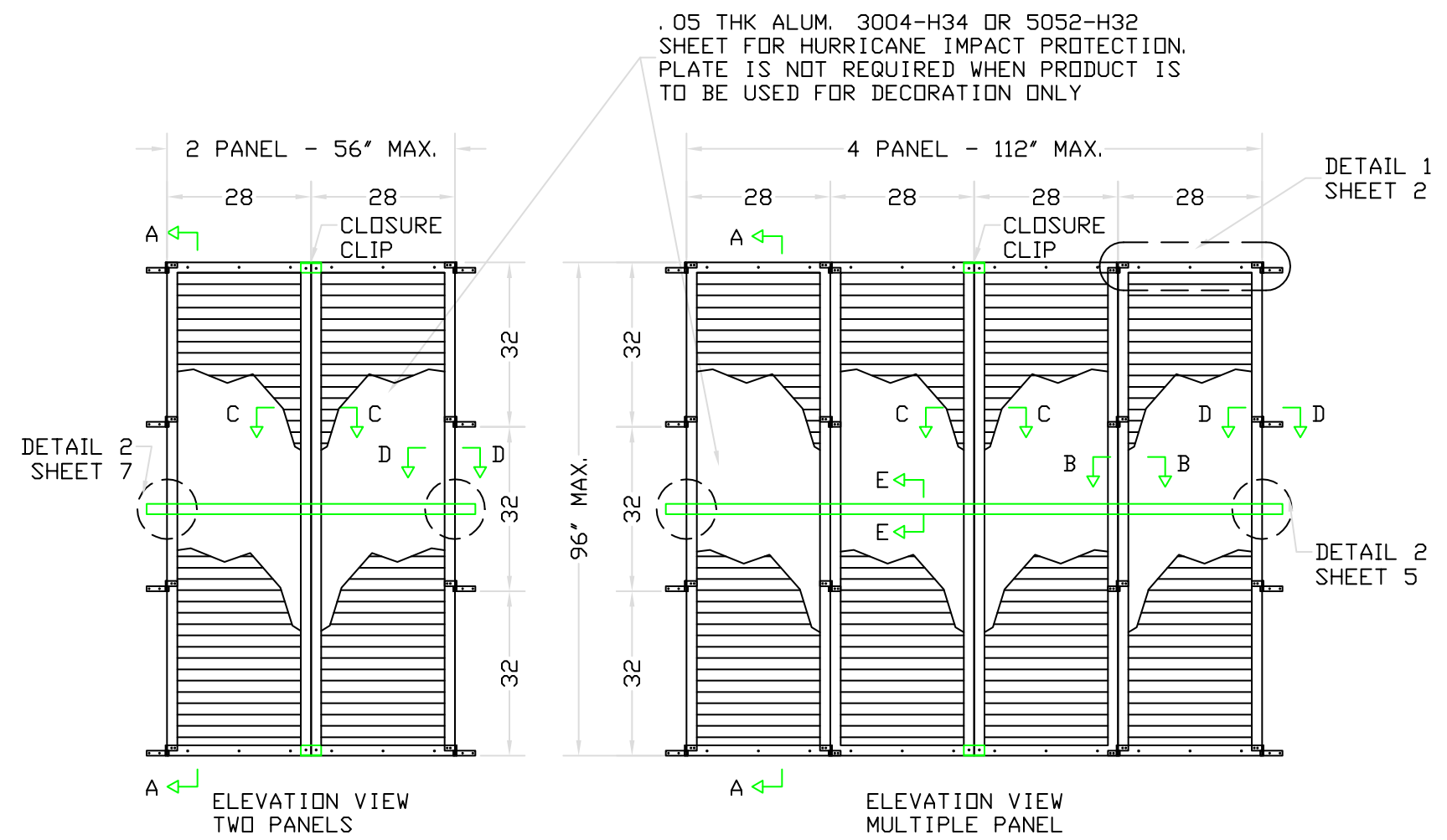
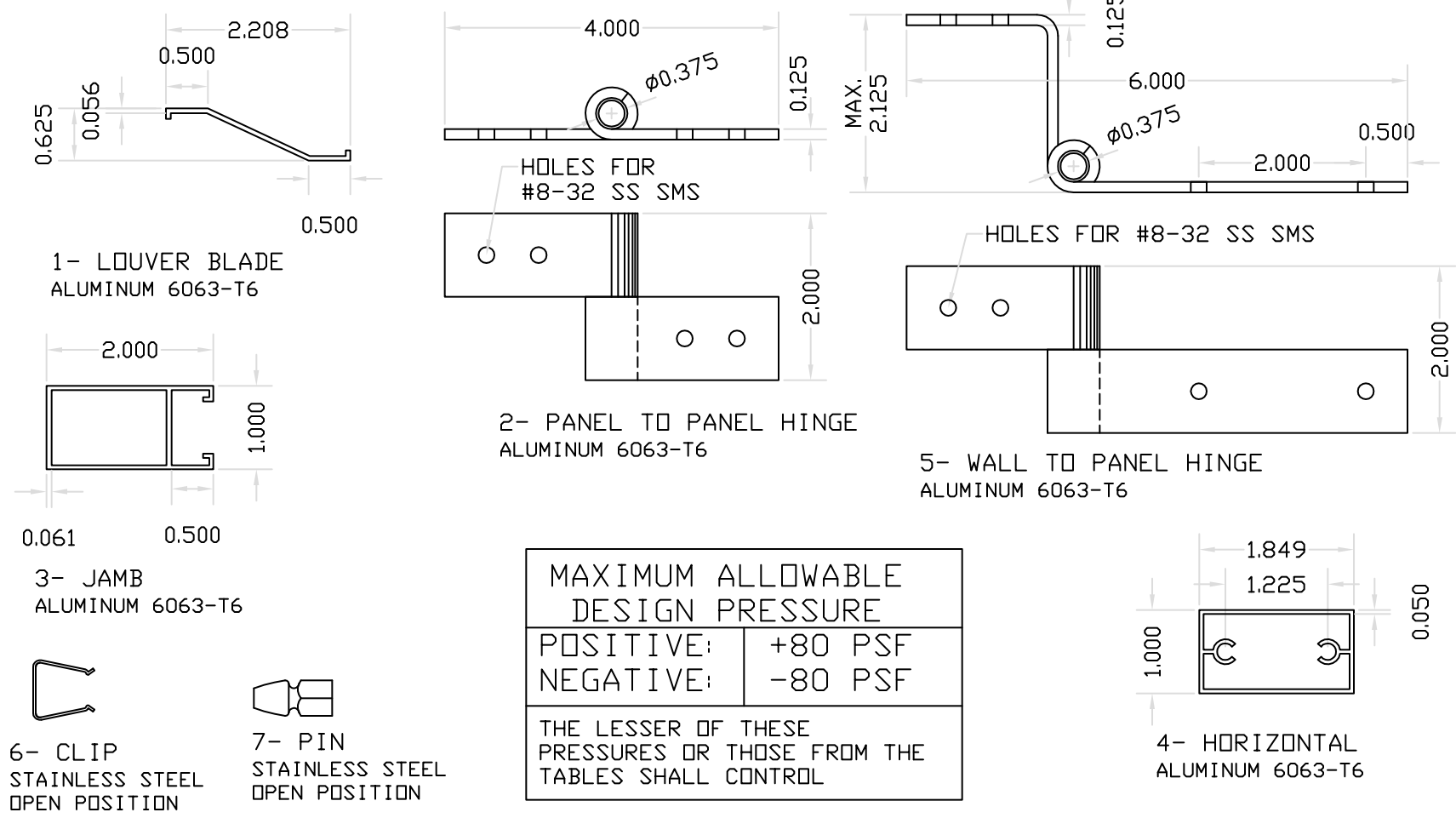
6- THE CONTRACTOR MUST VERIFY THE ADEQUACY OF THE EXISTING STRUCTURE IN SUSTAINING THE SHUTTER IMPOSED LOADS.

7- 0.05 THICK ALUMINUM SHEETS AS SHOWN ON ELEVATIONS ARE PART OF THE SHUTTER AND MUST BE INSTALLED FOR THIS SHUTTER TO BE CONSIDERED HURRICANE IMPACT RESISTANT. INSTALLATION WITHOUT 0.05 SHEETS IS ACCEPTABLE ONLY FOR DECATIVE APPLICATION

8- ANCHORING OR LOADING CONDITIONS OTHER THAN THOSE SHOWN IN THESE DETAIL ARE TO BE ENGINEERED SEPARATELY.

INDEX:

- SHEET 1 - GENERAL NOTES, TYPICAL ELEVATIONS, COMPONENTS
- SHEET 2 - TYPICAL SECTIONS
- SHEET 3 - PANEL DESIGN TABLES
- SHEET 4 - STORM BARS DESIGN TABLES
- SHEET 5 - STORM BAR ANCHORAGE, JAMB STRIP DETAIL



Manufacturer:
Florida Powder Coating & Shutters, Inc.
854 N. DIXIE HWY
LANTANA, FL 33462
Tel.: (561) 588-2410
Fax.: (561) 582-1785

Product:
ALUMINUM COLONIAL SHUTTER

Engineering:
EngCo Inc.
CA 8116
6971 W. Sunrise Blvd. 104
Plantation, Fl. 33313
Tel.: (954) 585-0304
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PEDRO DE FIGUEIREDDO, PE
PE 52609

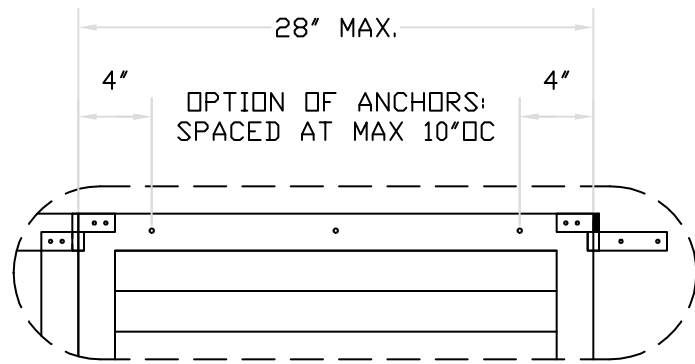
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Design by: PPMF

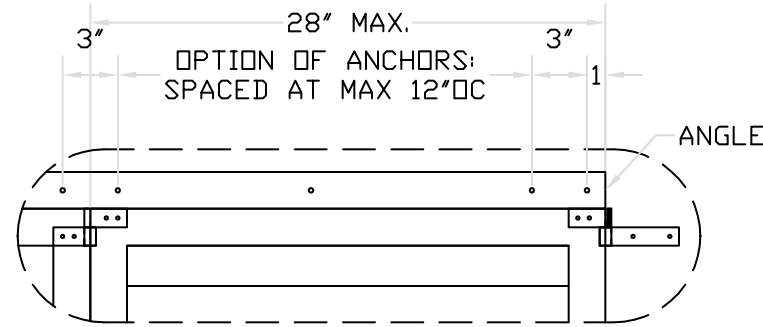
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05-352

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SECTION DETAILS



DETAIL 1
HEADER/SILL ANCHORAGE



ALTERNATE DETAIL 1
HEADER/SILL ANCHORAGE

ALTERNATE DETAIL 1
WITH ANGLE BUILT-OUT

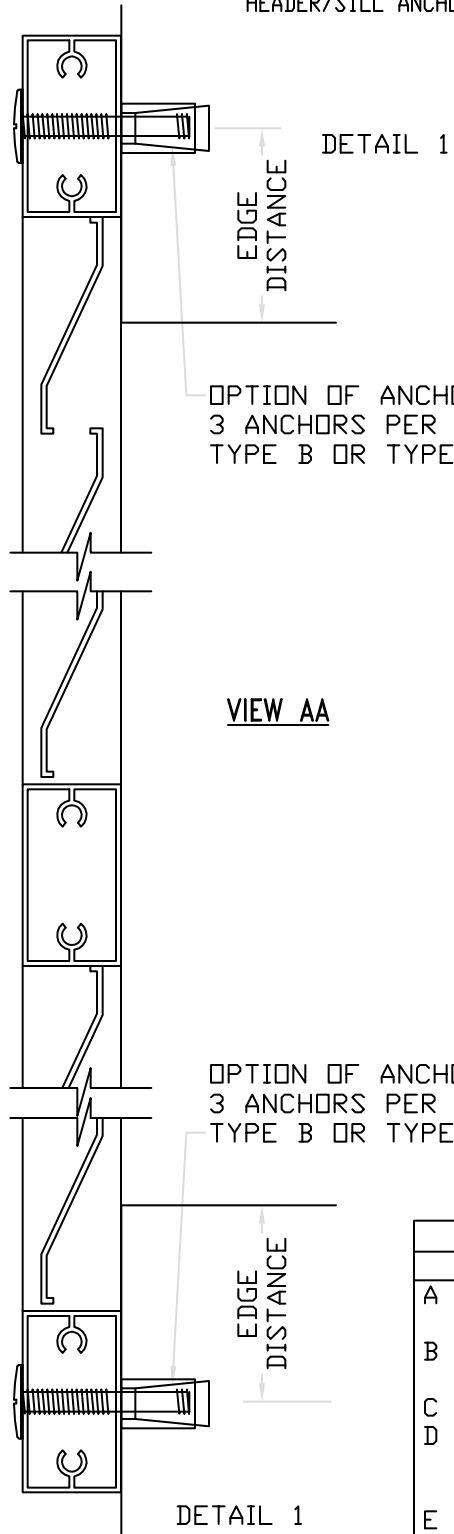
L 2X2X1/4 - 6063-T6
L 2X2X1/8 - 6063-T6

OPTION TO USE:
1/4"-20 MOLLY JACK-NUTS AT 6" oc
#8-18 SS SMS AT 12" oc
3/16" ALUMINUM RIVET AT 4" oc.

OPTION TO USE ANCHOR:

TYPE	MAT	SPACING
B	CMU	5" oc
B	CONC.	13" oc
D	CMU	4" oc
D	CONC.	15" oc
D	WOOD	10" oc
F	WOOD	6" oc

ALTERNATE
VIEW AA



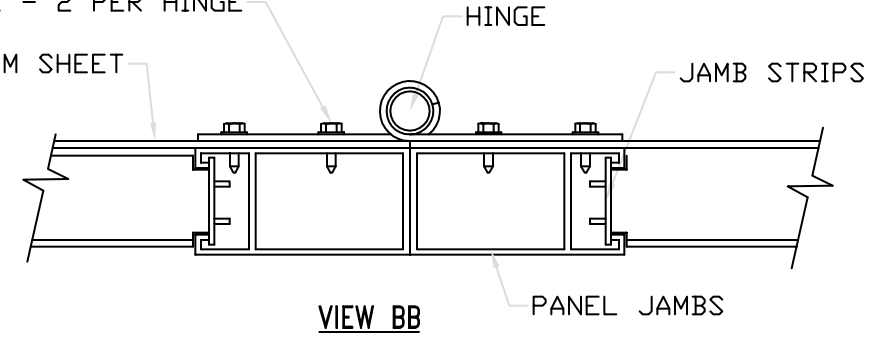
VIEW AA

OPTION OF ANCHORS:
3 ANCHORS PER PANEL
TYPE B OR TYPE F

DESCRIPTION	FASTENER SCHEDULE	ED. DIST.
A - 1/4" TAPCON W/ 1 1/4" EMBED INTO BLOCK.		3"
1/4" TAPCON W/ 1 3/4" EMBED INTO CONCRETE.		3"
B - 1/4"-20 RAWL CAULK-IN W/ 7/8" EMBED. INTO BLOCK		3"
1/4"-20 RAWL CAULK-IN W/ 7/8" EMBED. INTO CONCRETE		3"
C - 5/16-18 RAWL CAULK-IN W/ 1" EMBED. INTO BLOCK		4"
D - 1/4-20 PANELMATE (MALE, FEMALE OR PLUS) 1 1/4" INTO BLOCK		3"
1/4-20 PANELMATE (MALE, FEMALE OR PLUS) 1 3/4" INTO CONCRETE		3"
1/4-20 PANELMATE (MALE, FEMALE OR PLUS) 1 1/2" INTO WOOD		1"
E - #14 WOOD OR 1/4" LAG SCREWS W/ 1 1/2" EMBED. INTO WOOD		1"
F - 1/4-20 BRASS SHIELD INTO WOOD INSERTED WITH FULL EMBED.		1"

#8 SS SMS OR
3/16" 6061-T6 ALUMINUM
RIVET THROUGH HINGE &
0.05 SHEET & INTO SHUTTER
FRAME - 2 PER HINGE

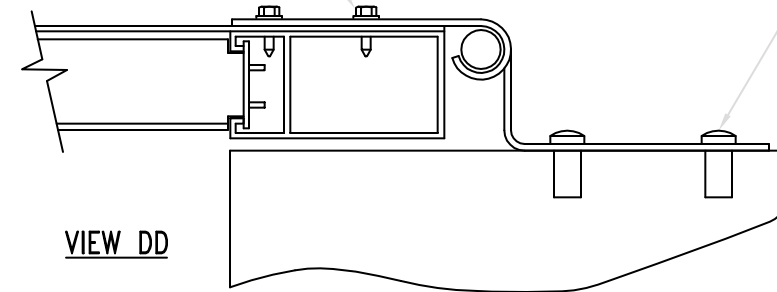
0.05 ALUMINUM SHEET



VIEW BB

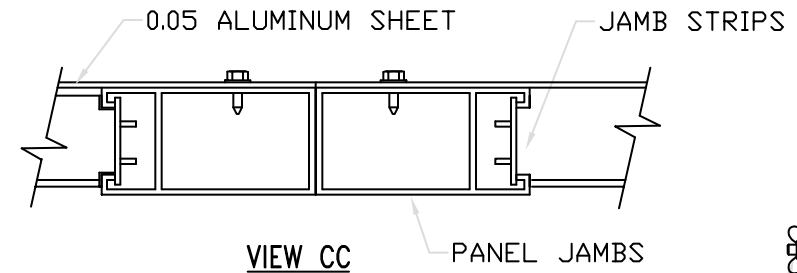
#8 SS SMS OR
3/16" 6061-T6 ALUMINUM
RIVET THROUGH HINGE &
0.05 SHEET & INTO SHUTTER
FRAME - 2 PER HINGE

USE FASTENERS A OR B
FOR CONCRETE & BLOCK
USE FASTENERS E OR F
FOR WOOD - 2 PER HINGE



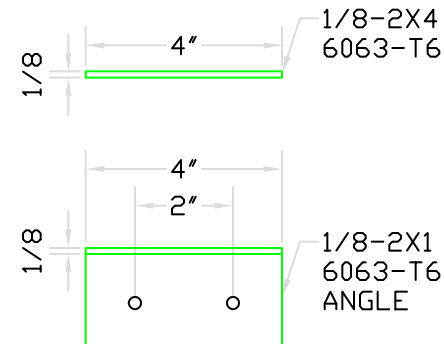
VIEW DD

0.05 ALUMINUM SHEET

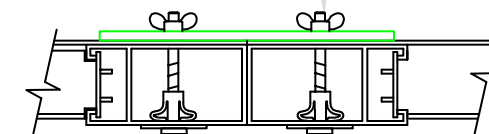


VIEW CC

CLOSURE CLIPS AT VIEW CC
TOP & BOTTOM - ALL CASES
MIDDLE - ONE SPAN >48"



2 PER CLIP
1/4-20 SS THRU BOLT
W/ FLAT WASHER
AND SS WING NUT



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PANEL DESIGN TABLES

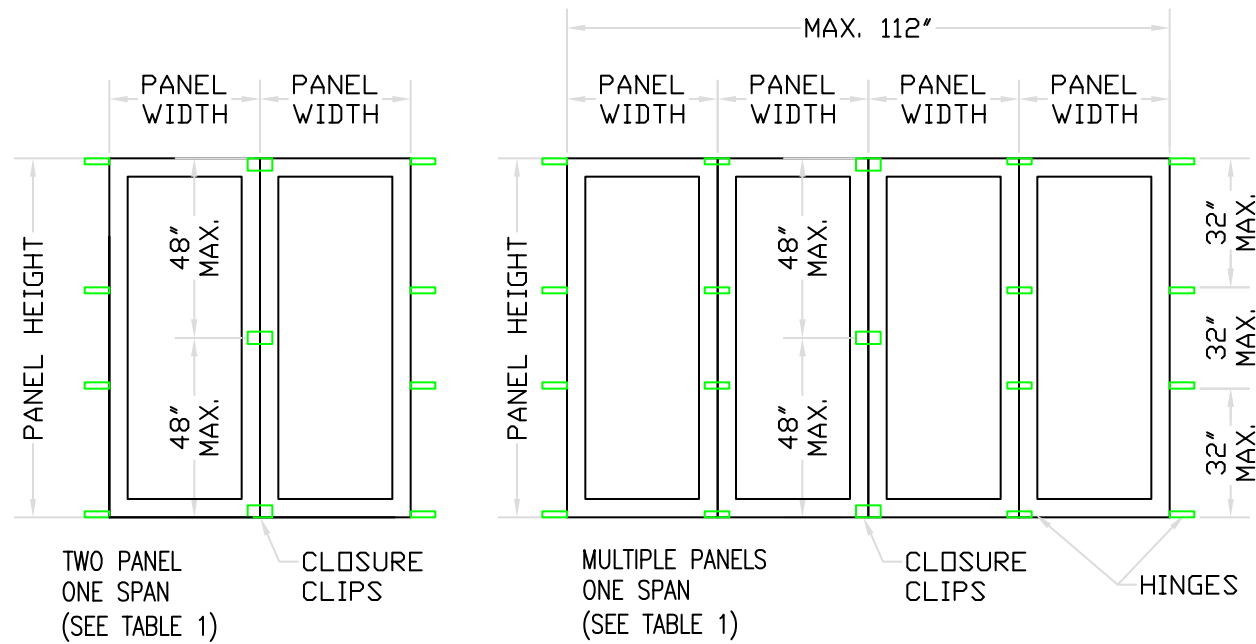


TABLE 1
ALLOWABLE DESIGNED PRESSURE IN PSF
TWO OR MORE PANELS - ONE SPAN

PANEL HEIGHT (INCHES)	PANEL WIDTH (INCHES)	DESIGNED PRESSURE (\pm PSF)
48	10	80
48	16	70
48	22	51
48	28	40
60	10	71
60	16	45
60	22	32
60	28	26
72	10	50
72	16	31
72	22	23
72	28	18
84	10	36
84	16	23
84	22	17
84	28	13
96	10	25
96	16	16
96	22	11
96	28	-

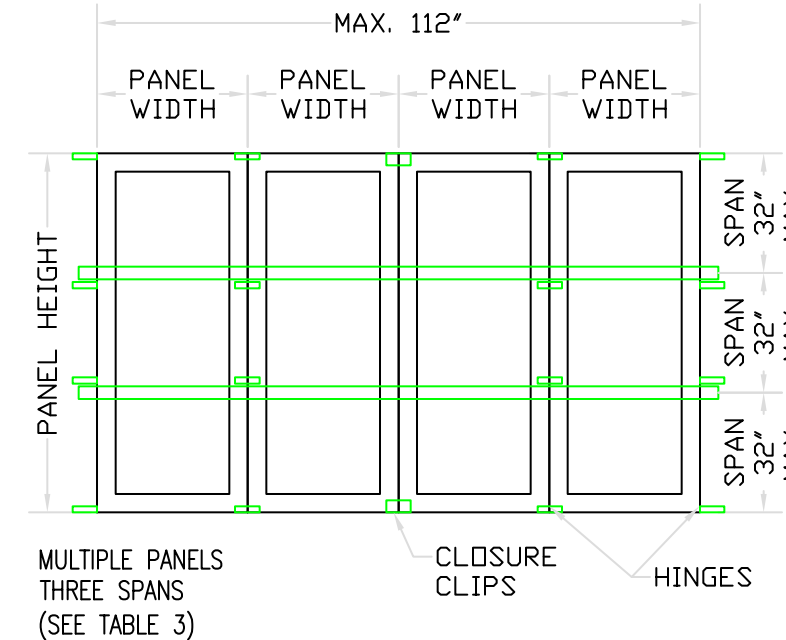
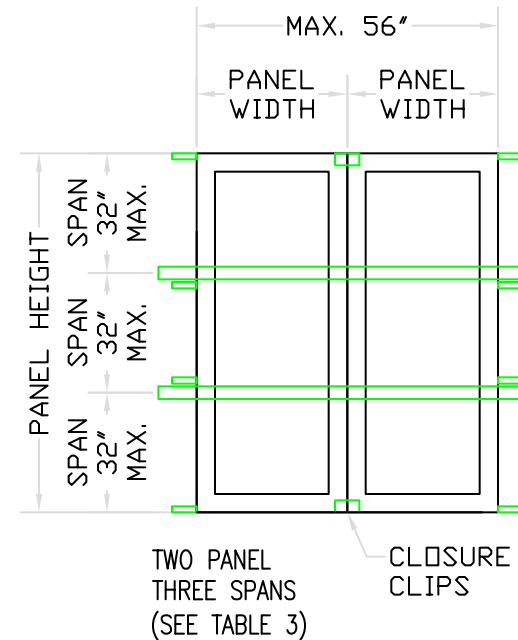
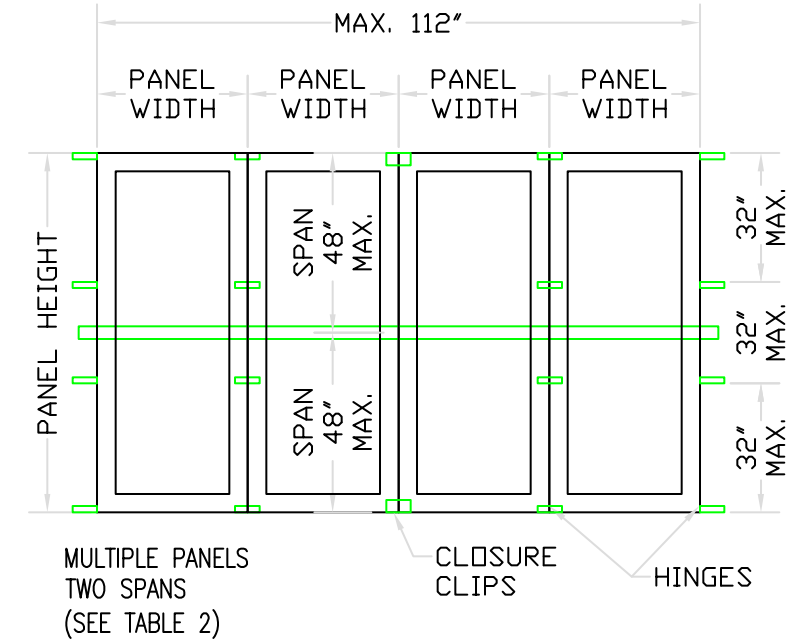
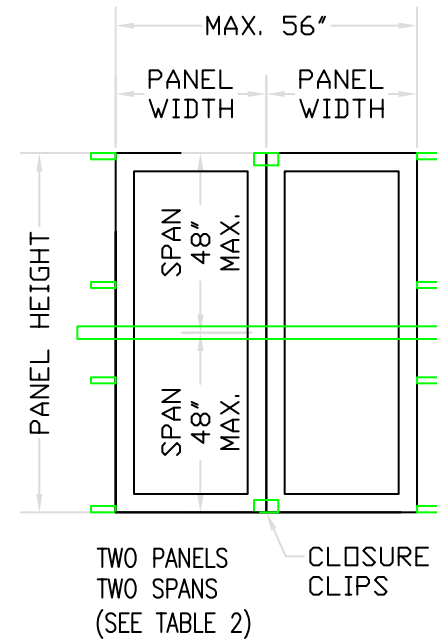


TABLE 2
ALLOWABLE DESIGNED PRESSURE IN PSF
SINGLE OR MULTIPLE PANELS - TWO SPANS

PANEL SPAN (INCHES)	PANEL WIDTH (INCHES)	DESIGNED PRESSURE (\pm PSF)
48	10	80
48	16	70
48	22	51
48	28	40

TABLE 3
ALLOWABLE DESIGNED PRESSURE IN PSF
SINGLE OR MULTIPLE PANEL - THREE SPANS

PANEL SPAN (INCHES)	PANEL WIDTH (INCHES)	DESIGNED PRESSURE (\pm PSF)
32	10	80
32	16	80
32	22	80
32	28	80

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STORM BAR DESIGN TABLES

Manufacturer:
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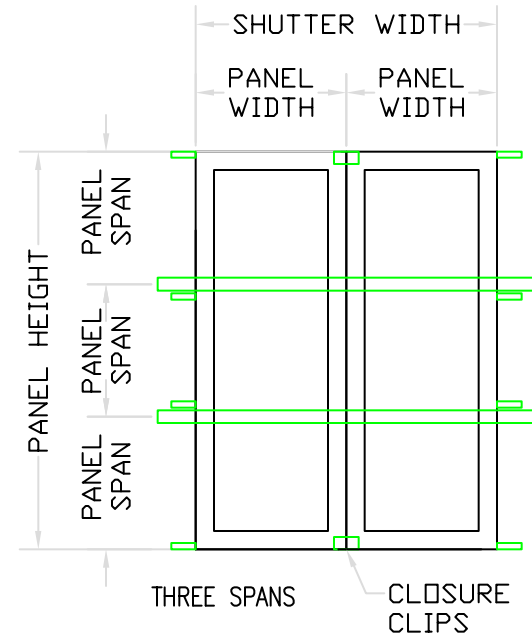
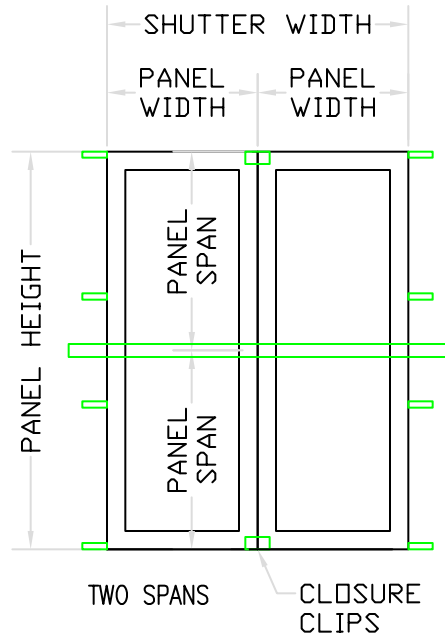


TABLE 5
 ALLOWABLE DESIGNED PRESSURE IN PSF
 1/8" -2X2 6063-T5 STORM BAR

SHUTTER WIDTH	PANEL SPAN	Pd (PSF)
36	30	80
36	40	80
36	50	65
48	30	61
48	40	45
48	50	36
60	30	36
60	40	27
60	50	21
72	30	21
72	40	15
72	50	12
78	30	16
78	40	12
78	50	10

TABLE 6
 ALLOWABLE DESIGNED PRESSURE IN PSF
 1/8" -2X3 6063-T5 STORM BAR

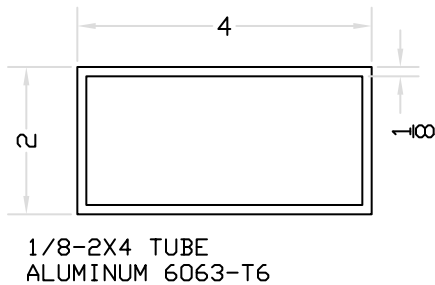
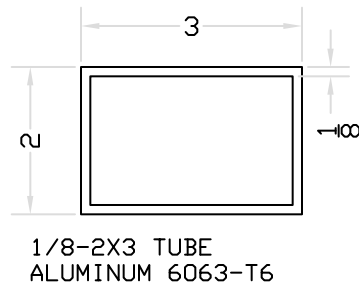
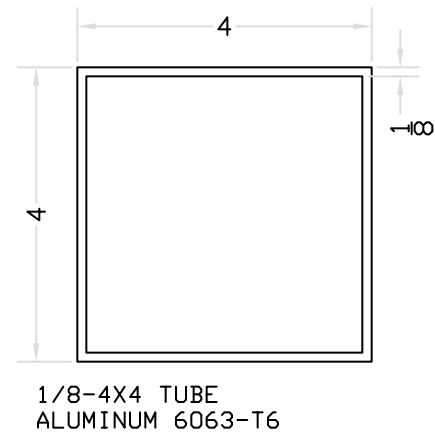
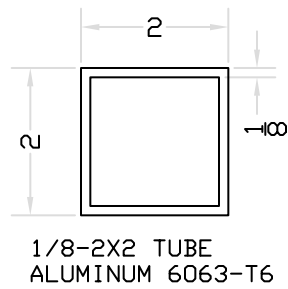
SHUTTER WIDTH	PANEL SPAN	Pd (PSF)
60	30	70
60	40	52
60	50	42
72	30	48
72	40	36
72	50	29
84	30	35
84	40	26
84	50	21
96	30	24
96	40	18
96	50	14
108	30	16
108	40	12
108	50	10

TABLE 7
 ALLOWABLE DESIGNED PRESSURE IN PSF
 1/8" -2X4 6063-T5 STORM BAR

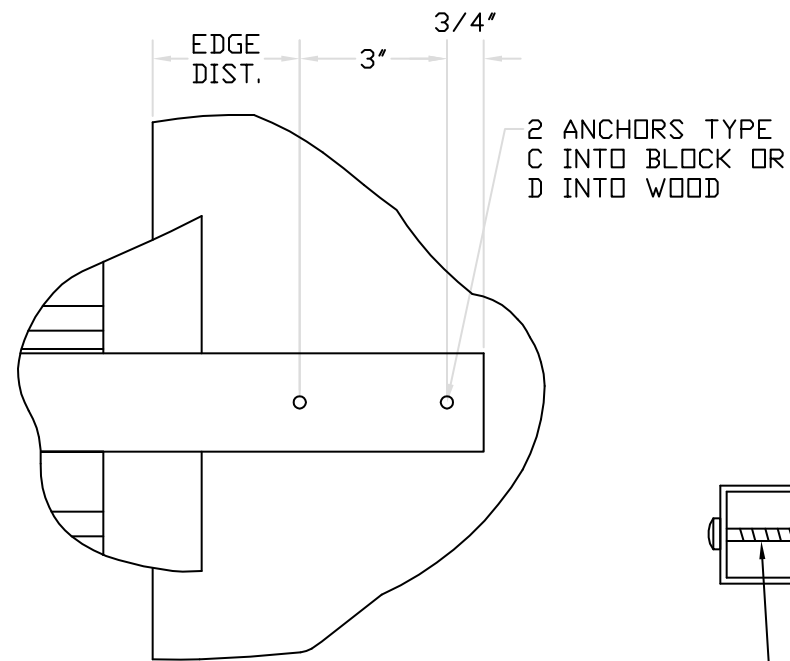
SHUTTER WIDTH	PANEL SPAN	Pd (PSF)
72	30	73
72	40	55
72	50	44
84	30	55
84	40	41
84	50	33
96	30	42
96	40	31
96	50	25
108	30	33
108	40	24
108	50	19
112	30	30
112	40	23
112	50	18

TABLE 6
 ALLOWABLE DESIGNED PRESSURE IN PSF
 1/8" -4X4 6063-T5 STORM BAR

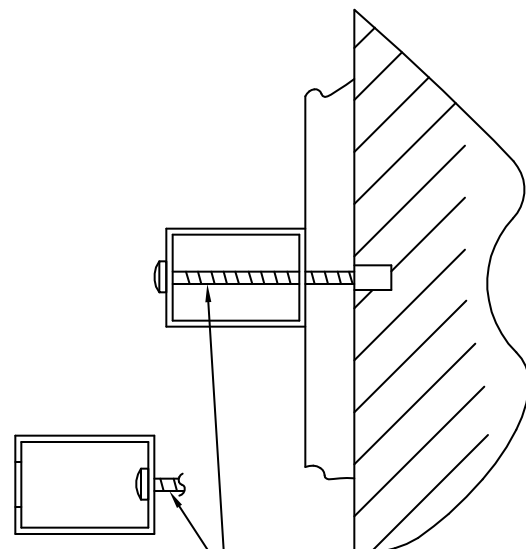
SHUTTER WIDTH	PANEL SPAN	Pd (PSF)
72	30	73
72	40	55
72	50	44
84	30	62
84	40	47
84	50	37
96	30	55
96	40	41
96	50	33
108	30	48
108	40	36
108	50	29
112	30	47
112	40	35
112	50	28



STORM BAR ANCHORAGE



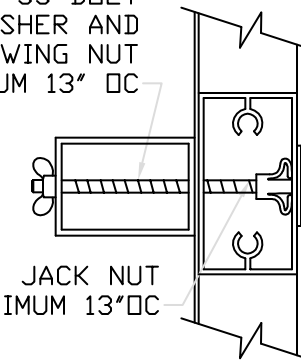
DETAIL 2
OPTION 1
STORM BAR ANCHORAGE



OPTION TO ENLARGE HOLE @
OUTER FACE OF TUBE TO
ALLOW FASTENER HEAD TO BE
AT INNER FACE & SHORTEN
FASTENER LENGTH

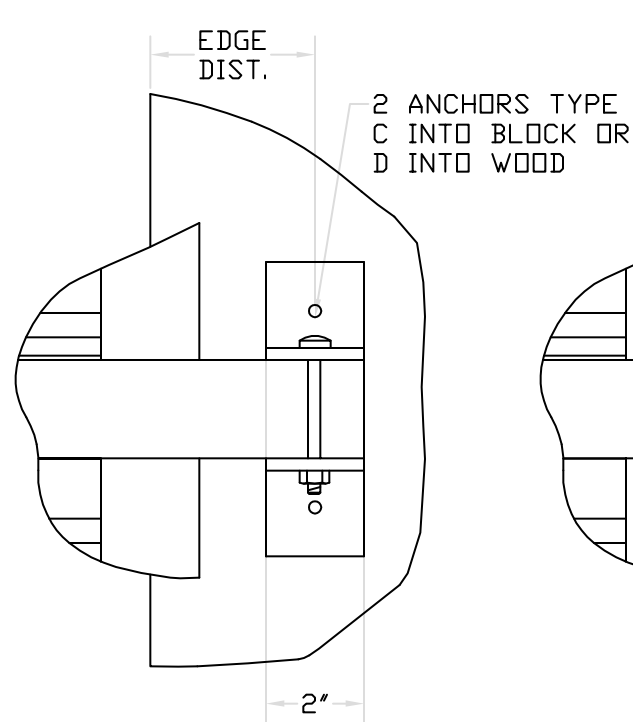
FASTENER SCHEDULE	
DESCRIPTION	ED. DIST.
A - 1/4" TAPCON W/ 1 1/4" EMBED INTO BLOCK.	3"
1/4" TAPCON W/ 1 3/4" EMBED INTO CONCRETE.	3"
B - 1/4"-20 RAWL CAULK-IN W/ 7/8" EMBED. INTO BLOCK	3"
1/4"-20 RAWL CAULK-IN W/ 7/8" EMBED. INTO CONCRETE	3"
C - 5/16-18 RAWL CAULK-IN W/ 1" EMBED. INTO BLOCK	4"
D - 1/4-20 PANELMATE (MALE, FEMALE OR PLUS) 1 1/4" INTO BLOCK	3"
1/4-20 PANELMATE (MALE, FEMALE OR PLUS) 1 3/4" INTO CONCRETE	3"
1/4-20 PANELMATE (MALE, FEMALE OR PLUS) 1 1/2" INTO WOOD	1"
E - #14 WOOD OR 1/4" LAG SCREWS W/ 1 1/2" EMBED. INTO WOOD	1"
F - 1/4-20 BRASS SHIELD INTO WOOD INSERTED WITH FULL EMBED.	1"

1/4-20 ZINC PLATED OR
1/4-20 SS BOLT
W/ FLAT WASHER AND
1/4-20 SS WING NUT
SPACED AT MAXIMUM 13" OC



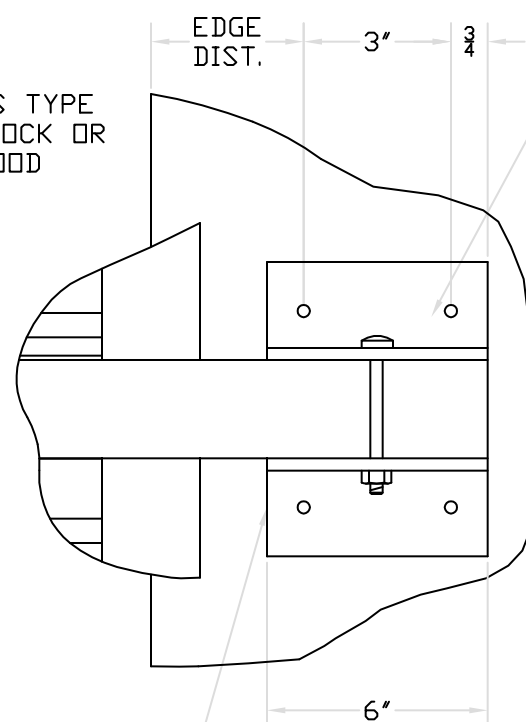
1/4-20 MOLLY JACK NUT
SPACED AT MAXIMUM 13" OC

VIEW EE
AT EACH JAMB/BAR CROSSING

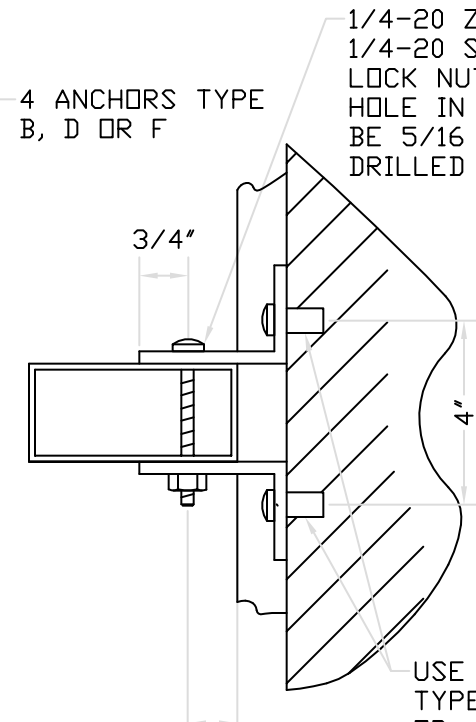


DETAIL 2
OPTION 2
STORM BAR ANCHORAGE

L2x3 OR 2x4 OR 2x5
6063-T6 ALUMINUM ANGLE



DETAIL 2
OPTION 3
STORM BAR ANCHORAGE

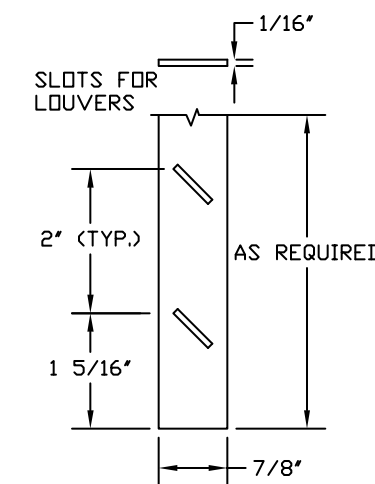


± 1 3/8" AT ALL
BAR SIZES

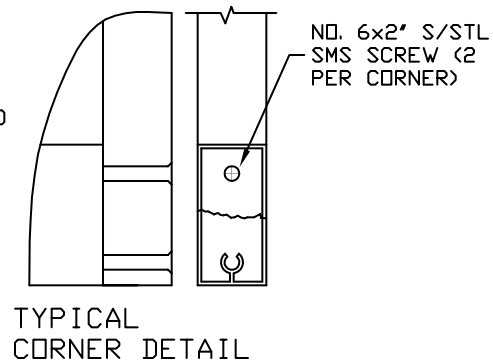
USE 4 ANCHORS
TYPE B, D OR F
OR
USE 2 ANCHORS TYPE
C INTO BLOCK OR
D INTO WOOD

1/4-20 ZINC PLATED OR
1/4-20 SS THRU BOLT W/
LOCK NUT OR WING NUT
HOLE IN ANGLE & TUBE TO
BE 5/16 DIAMETER FIELD
DRILLED TO INSURE ALIGNMENT

JAMB STRP DETAIL



JAMB STRIP DETAIL



TYPICAL
CORNER DETAIL

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