

GENERAL NOTES:

(FLORIDA BUILDING CODE 2017 - 6TH EDITION HVHZ & non HVHZ)

- 1- DEFINITION: THIS PRODUCT IS A ROLLING WIND ABATEMENT SYSTEM; DESIGNED, CONSTRUCTED AND ERECTED TO EASILY ENCLOSE AN AREA, PROVIDING PROTECTION FROM HURRICANE FORCE WINDS AND WIND BORNE DEBRIS WITHIN THE ALLOWABLE DESIGNED PRESSURES AND LIMITATIONS STATED IN THIS APPROVAL.
- 2- POSTING: A PERMANENT LABEL SHALL BE PROVIDED AS PER FBC. IT SHALL BE LOCATED ON THE BOTTOM OF THE HOOD FACING THE EXTERIOR OR OUTSIDE OR THE BOTTOM SLAT FACING THE EXTERIOR OR OUTSIDE AND A MINIMUM OF ONE LABEL PER OPENING. INFORMATION TO STATE THE FOLLOWING:
- *ADVANCED HURRICANE TECHNOLOGIES
NAPLES - FLORIDA
LARGE & SMALL MISSILE IMPACT RESISTANT*
- 3- LIMITATION: PRODUCT MUST BE SET AWAY, A DISTANCE AS SPECIFIED ON TABLE 2, FROM GLAZING AREAS TO BE PROTECTED
- 4- LOADS: DESIGNED LOAD CALCULATED BASED ON THE ASCE 7-10 AND PROVIDED BY A PROFESSIONAL ARCHITECT OR ENGINEER FOR EACH SPECIFIC PROJECT. THE CALCULATED DESIGNED PRESSURE MUST NOT EXCEED THE ALLOWABLE PRESSURES FOR EACH COMPONENT TO BE USED. THE DESIGN PRESSURES ARE PERMITTED TO BE MULTIPLIED BY 0.6
- 5- MATERIAL: ALL EXTRUDED ALUMINUM SHAPES SHALL BE MADE OF 6063-T6 OR AS NOTED.
- 6- FASTENERS: ASSEMBLY SCREWS AND ANCHORS SHALL BE AS SPECIFIED IN THE CURRENT SET OF DRAWINGS, INSTALLATION AND LOADS AS PER THIS APPROVAL.
- 7- USE: IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, ARCHITECT OR ENGINEER OF RECORD TO VERIFY THE FOLLOWING:
- 7.1- THE STABILITY OF THE STRUCTURE WHERE THE PRODUCT IS TO BE ATTACHED INSURING PROPER ANCHORAGE.
- 7.2- THE SITE SPECIFIC PROJECT CRITERIA, SUCH AS BUT NOT LIMITED TO, WIND LOADS, LOCAL CODE REQUIREMENTS, DESIGNED PRESSURES ETC.
- 7.3- THAT THIS APPROVAL IS ADEQUATE TO THE SPECIFIC PROJECT.

DESIGN SCHEDULE	
COMPONENT	SHEET
SLAT ALLOWABLE PRESSURE - TABLE 1	I
GLASS SEPARATION - TABLE 2	I
TRACK REACTION - TABLE 3	I
TRACK ANCHORAGE	5, 6, 7 & 8
MULLION DESIGN	9, 10 & 11

- NOTES:
- 1- ALLOWABLE DESIGNED PRESSURE ARE FUNCTION OF THE LOWEST ALLOWABLE DESIGNED LOAD FOR EACH COMPONENT (SLATS, ANCHORAGE, STORM BARS & MULLIONS)
- 2- DESIGNED PRESSURES MUST NOT EXCEED 200 PSF.
- 3- FINISHED WIDTH (FW) MUST NOT EXCEED 292-1/2".

TABLE 1
ALLOWABLE DESIGNED PRESSURE

FW MAXIMUM (IN)	TT MAXIMUM (IN)	DESIGN RATING (PSF)
292 1/2	286	30
282 1/2	276	35
270 1/2	264	41
258 1/2	252	47
246 1/2	240	53
234 1/2	228	59
222 1/2	216	65
210 1/2	204	71
198 1/2	192	77
186 1/2	180	83
174 1/2	168	89
162 1/2	156	95
150 1/2	144	101
138 1/2	132	107
126 1/2	120	113
114 1/2	108	119
102 1/2	96	138
90 1/2	84	159
78 1/2	72	179
66 1/2	60	200

LINEAR INTERPOLATION BETWEEN ABOVE TABLE VALUES ARE ACCEPTABLE

CODE AND STANDARD COMPLIANCE:
FLORIDA BUILDING CODE 2017 - 6TH EDITION
(HVHZ & non HVHZ)
TAS 201, 202, 203 (LARGE & SMALL MISSILE)

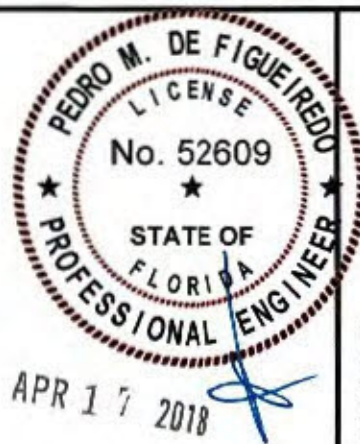
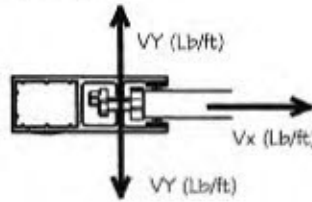
TABLE 2 GLASS SEPARATION (INCHES)

PD PSF	TRACK TO TRACK (TT) - INCHES										
	60 Sep	72 Sep	84 Sep	96 Sep	108 Sep	120 Sep	144 Sep	168 Sep	216 Sep	264 Sep	286 Sep
30	3	3	4	5	6	6	8	9	11	13	14
40	3	4	5	6	7	7	9	10	13	15	17
50	3	4	5	6	7	8	10	11	14	17	18
60	3	4	6	7	8	9	11	12	16	19	21
70	4	5	6	7	8	9	11	13	18	22	
80	4	5	6	7	9	10	12	14	19		
90	4	5	7	8	9	10	13	16			
100	4	6	7	9	10	11	14	17			
110	5	6	7	9	10	12	15				
120	5	6	8	9	11	12					
130	5	7	9	10							
140	6	7	9	10							
150	6	8	9	11							
160	7	8	10								
170	7	9	10								
180	8	9									
190	8										
200	9										

GLASS SEPARATION (GS):
PRODUCT IS QUALIFIED AS "NON POROUS", THEREFORE GLAZING SEPARATION IS NOT REQUIRED WITH EXCEPTION FOR THE FOLLOWING LOCATIONS:
1- HIGH VELOCITY HURRICANE ZONES (HVHZ MIAMI-DADE & BROWARD COUNTIES)
2- WIND ZONE 4 AS DEFINED IN ASTM E 1996
3- ESSENTIAL FACILITIES AS DEFINED IN ASCE 7

TABLE 3 TRACK REACTIONS (LB/FT)

PD PSF	TRACK TO TRACK (TT) - INCHES																			
	60		72		84		96		108		120		144		168		216		264	
	Vy	Vx	Vy	Vx	Vy	Vx	Vy	Vx	Vy	Vx	Vy	Vx	Vy	Vx	Vy	Vx	Vy	Vx	Vy	Vx
20	50	0	60	0	70	0	80	0	90	0	90	0	120	0	140	14	180	65	220	843
30	75	0	90	0	105	0	120	0	135	4	135	4	180	20	210	434	270	563	330	1289
40	100	0	120	0	140	0	160	143	180	246	180	246	240	325	280	714	360	924	440	1594
50	125	0	150	0	175	51	200	332	225	431	225	431	300	563	350	953	450	1227	550	1914
60	150	0	180	0	210	235	240	494	270	593	270	593	360	749	420	1121	540	1415	660	2067
70	175	0	210	0	245	391	280	639	315	741	315	741	420	908	490	1265	630	1569	770	2193
80	200	0	240	94	280	535	320	784	360	894	360	894	480	1058	560	1400	720	1707		
90	225	0	270	236	315	652	360	896	405	1010	405	1010	540	1174	630	1502				
100	250	0	300	343	350	710	400	929	450	1037	450	1037	600	1227	700	1549				
110	275	53	330	451	385	820	440	1053	495	1173	495	1173	660	1341						
120	300	162	360	529	420	879	480	1107	540	1229	540	1229								
130	325	251	390	581	455	898	520	1106												
140	350	323	420	644	490	964	560	1184												
150	375	380	450	698	525	1023	600	1255												
160	400	425	480	743	560	1075														
170	425	460	510	779	595	1120														
180	450	486	540	809																
190	475	504																		
200	500	516																		



PPMF Inc.
ENGINEERING SERVICES - CA 32459
9715 W. BROWARD BLVD.
PLANTATION, FL 33324
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PRODUCT NAME:
WIND ABATEMENT
SYSTEM - LARGE MISSILE
56 MM ROLLING DOOR SYSTEM

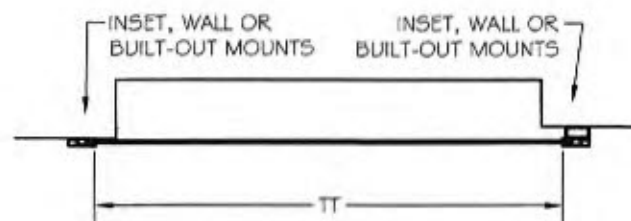
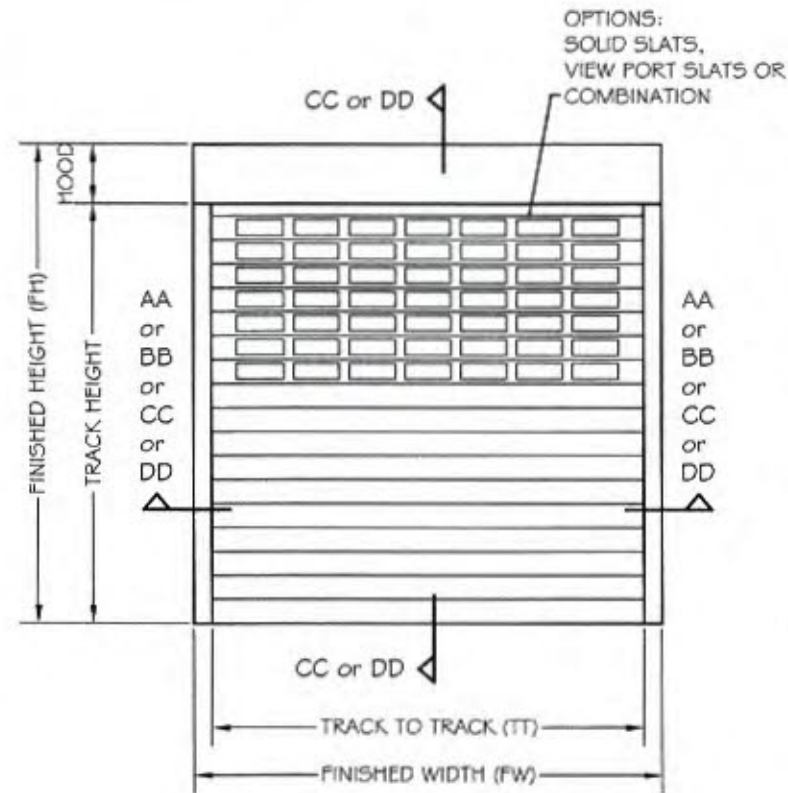
MANUFACTURER:
ADVANCED HURRICANE
TECHNOLOGIES
6063 JAMES LANE
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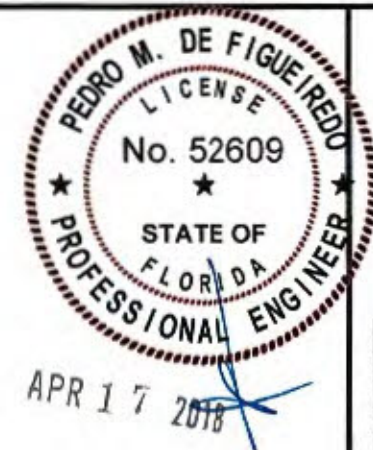
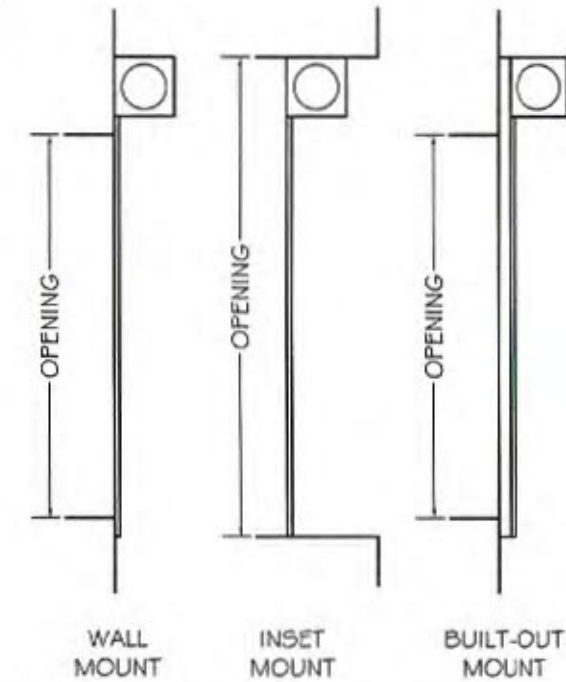
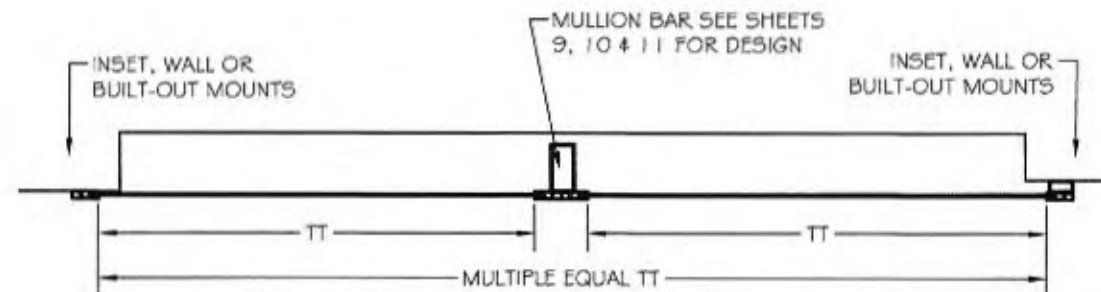
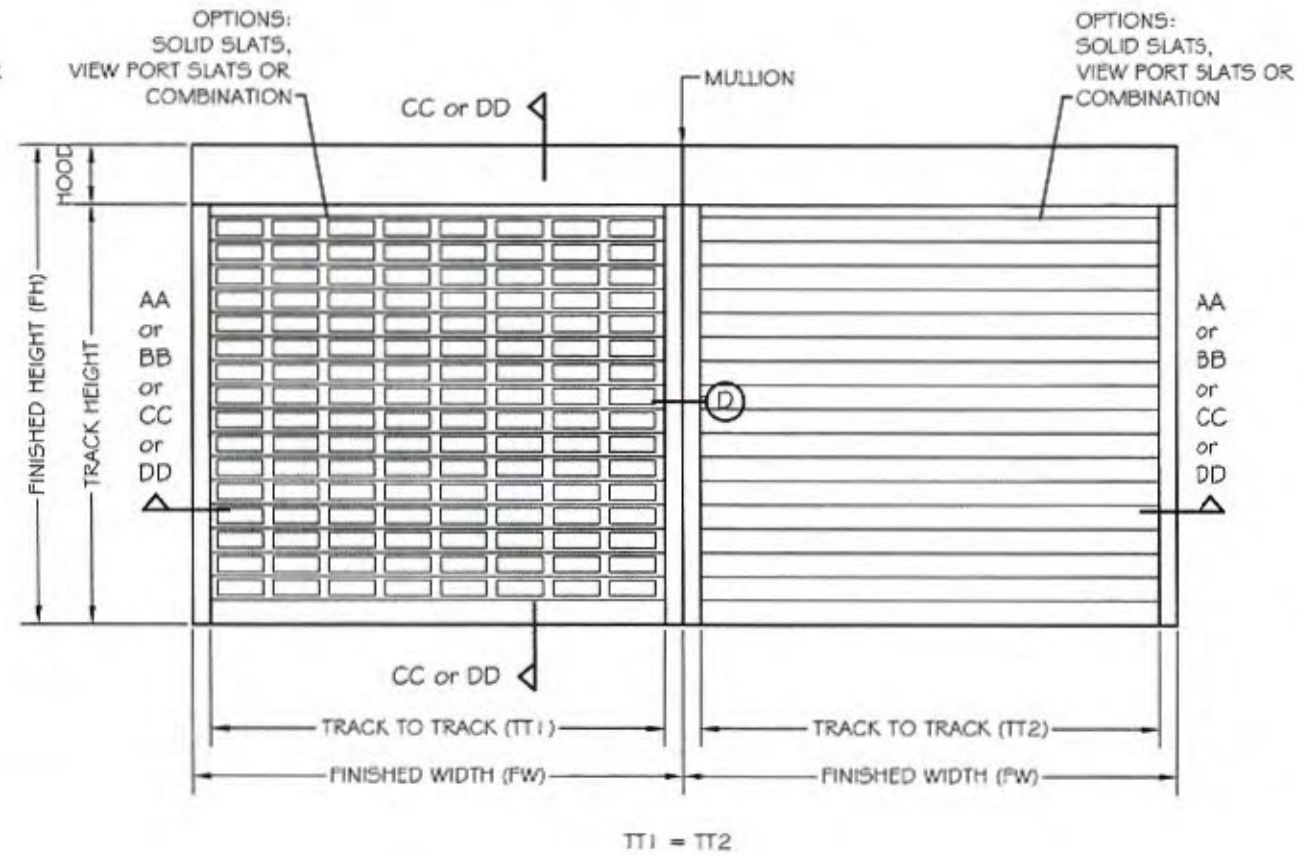
SCALE:
NA
DATE:
02/25/18
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18-103
SHEET
1 OF 12

TYPICAL ELEVATIONS

TYPICAL SINGLE UNIT ELEVATION



TYPICAL MULTIPLE UNITS ELEVATION



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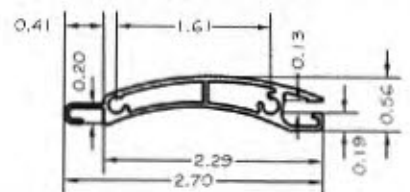
PRODUCT NAME:
WIND ABATEMENT
SYSTEM - LARGE MISSILE
58 MM ROLLING DOOR SYSTEM

MANUFACTURER:
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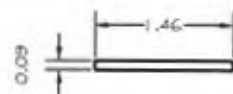
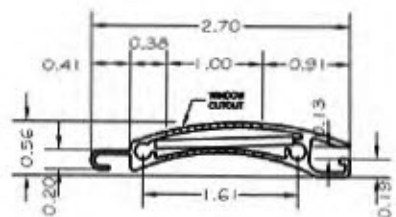


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A- 58 mm SLATS (VENTED OR SOLID)
5050-T6 EXTRUDED ALUMINUM
6063-T6 EXTRUDED ALUMINUM



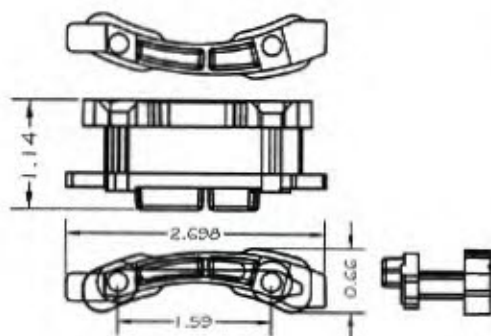
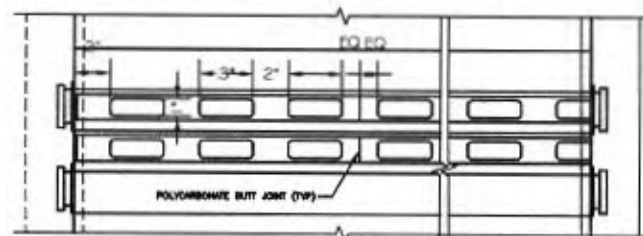
A1 - 58 mm VIEW PORT SLATS (VENTED OR SOLID)
6063-T6 EXTRUDED ALUMINUM



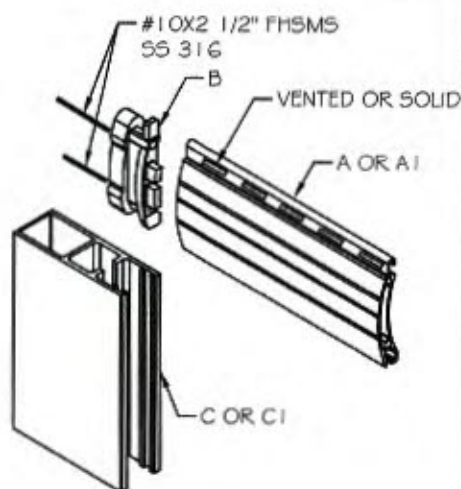
A2- POLYCARBONATE VIEWPORT WINDOW
10" MINIMUM 48" MAXIMUM

NOTES:
TENSILE YIELD STRENGTH
FLEXURAL STRENGTH AT YIELD
FLEXURAL MODULUS
NOTCHED IZOD
SMOKE DENSITY
RATE OF BURNING
SELF IGNITION
TENSILE STRENGTH AFTER WEAR
TENSILE STRENGTH BEFORE WEAR
SPECIFIC GRAVITY

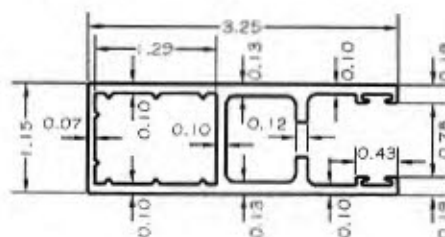
ASTM D638	9,500 PSI
ASTM D790	13,400 PSI
ASTM D790	345,000 PSI
ASTM D256	17 FT-LB/IN
ASTM D2843	64.5% MAX
ASTM D635	C-1 CLASS
ASTM D1929	980° F
ASTM D638	8,840 PSI
ASTM D638	8,880 PSI
ASTM D792	0.043 LB/IN ³



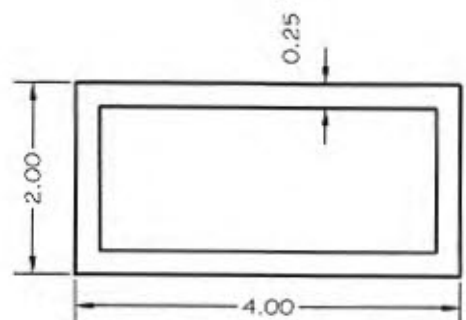
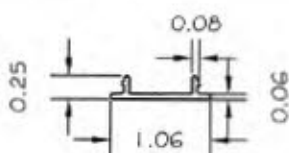
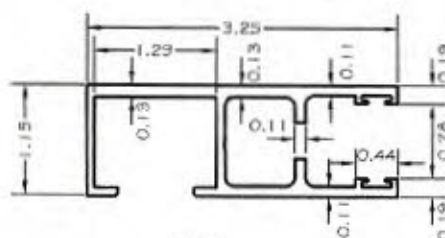
B- SLAT END LOCK
ACETAL



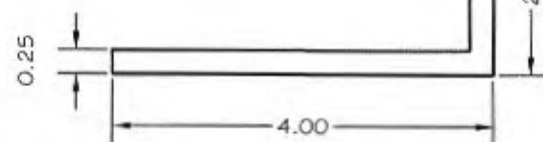
C- ROLLING WALL GUIDE RAIL
6063-T6 EXTRUDED ALUMINUM



C1 - ROLLING WALL GUIDE RAIL
WITH SNAP COVER
6063-T6 EXTRUDED ALUMINUM



F-TUBE
EXTRUDED ALUMINUM
6061-T6 or 6005-T5



E- INSET SUPPORT ANGLE
EXTRUDED ALUMINUM
6061-T6 or 6005-T5

(1) #10x3/4" HHSDS

3-13/16"x7-3/8"
STRAP CLIP
AT 24"OC

REEL

A, A I

B

A, A I

A, A I

B

A, A I

A, A I

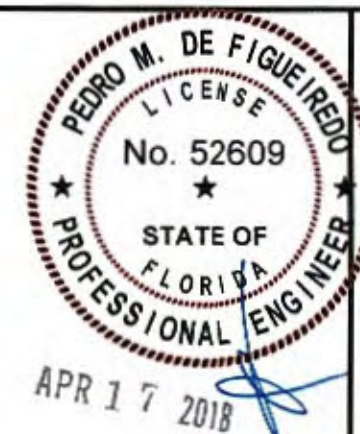
B

A, A I

24"OC

A, A I

STA
FLC
PROFESSIONAL
APR 17 2000

**PPMF Inc.**

ENGINEER SEAL
PEDRO DE FIGUEIREDO
PE 52609

PRODUCT NAME:
WIND ABATEMENT
SYSTEM - LARGE MISSILE
58 MM ROLLING DOOR SYSTEM

MANUFACTURER:
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6063 JAMES LANE
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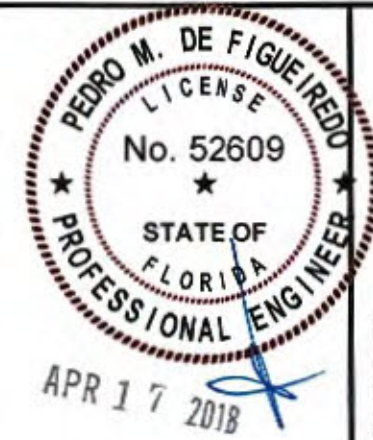
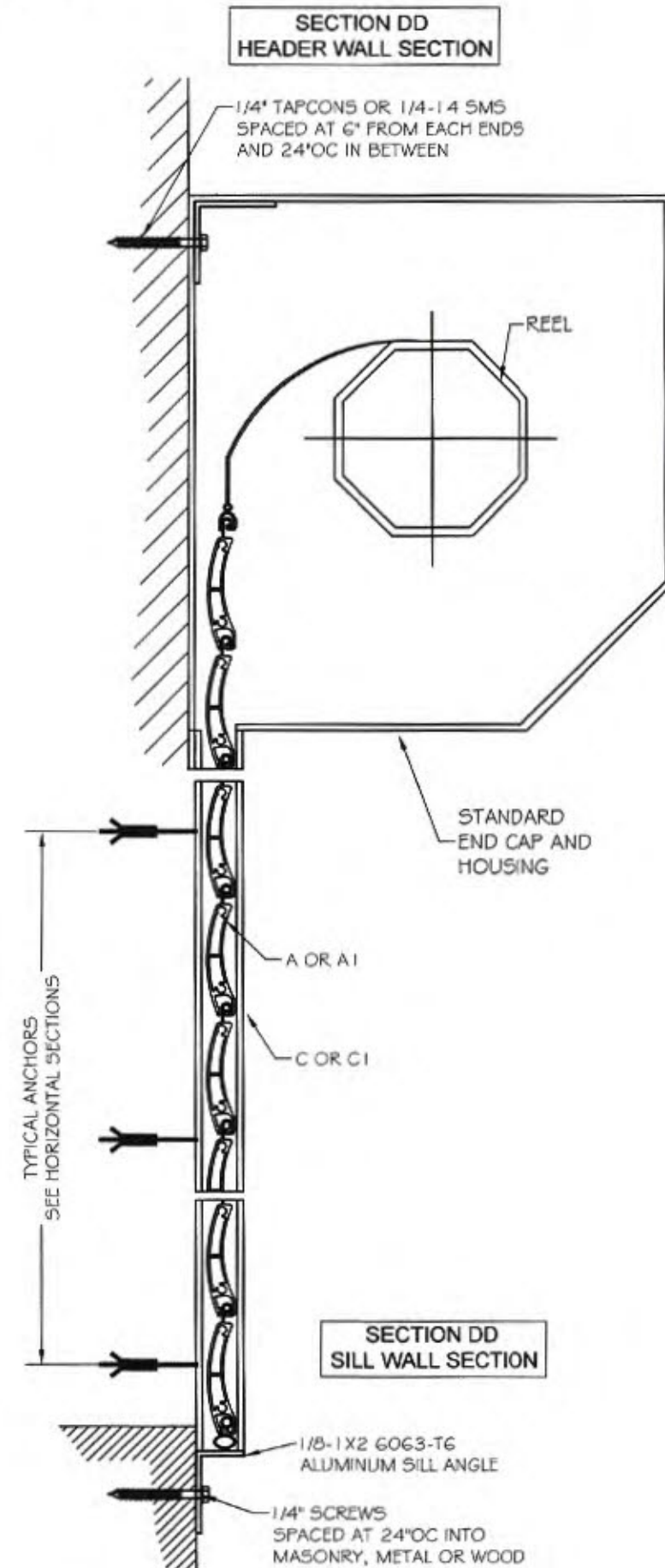
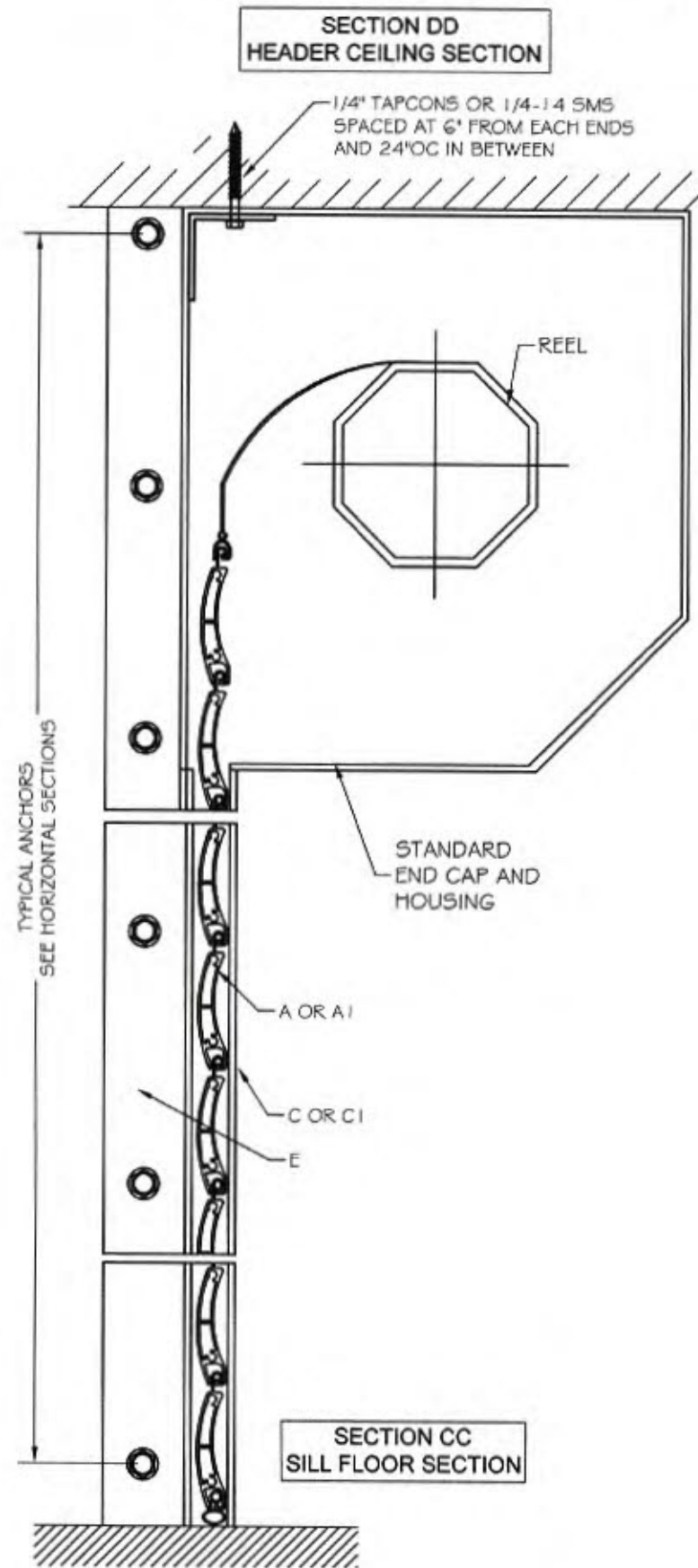
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SHEET
3 OF 12

TYPICAL VERTICAL SECTIONS



PPMF Inc.
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58 MM ROLLING DOOR SYSTEM**

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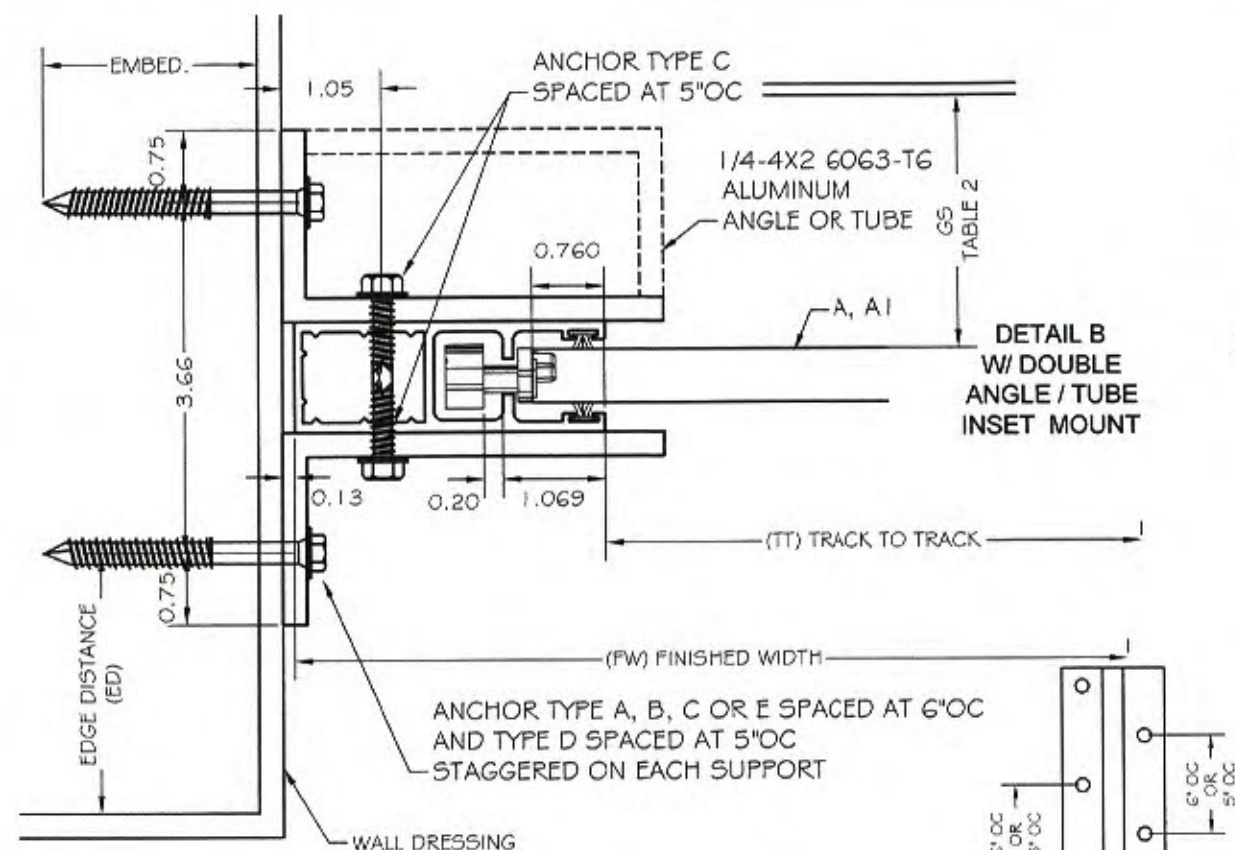
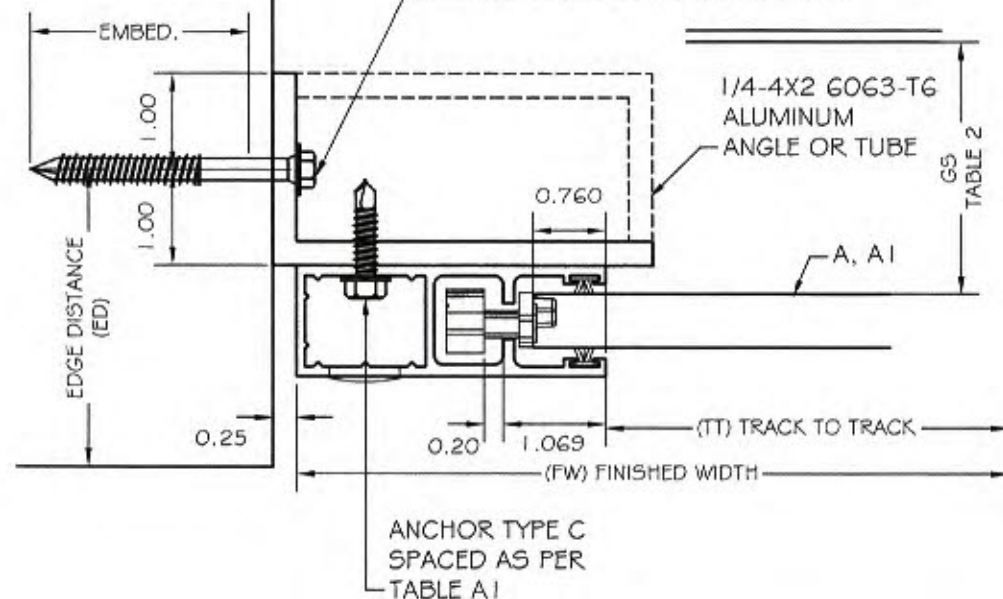


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18-103

SHEET
4 OF 12



PPME Inc.

ENGINEERING SERVICES - CA 32459
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PPMF@AOL.COM

SYSTEM - LARGE MISSILE
558 MM ROLLING DOOR SYSTEM

SYSTEM - LARGE MIS
58 MM ROLLING DOOR SYSTEM

6063 JAMES LANE
NAPLES, FLORIDA 34109
TEL: (239) 260-0020

MANUFACTURER:

АИТ

SCALE:
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DATE: _____

02/25/18

DRAWING #
18-103

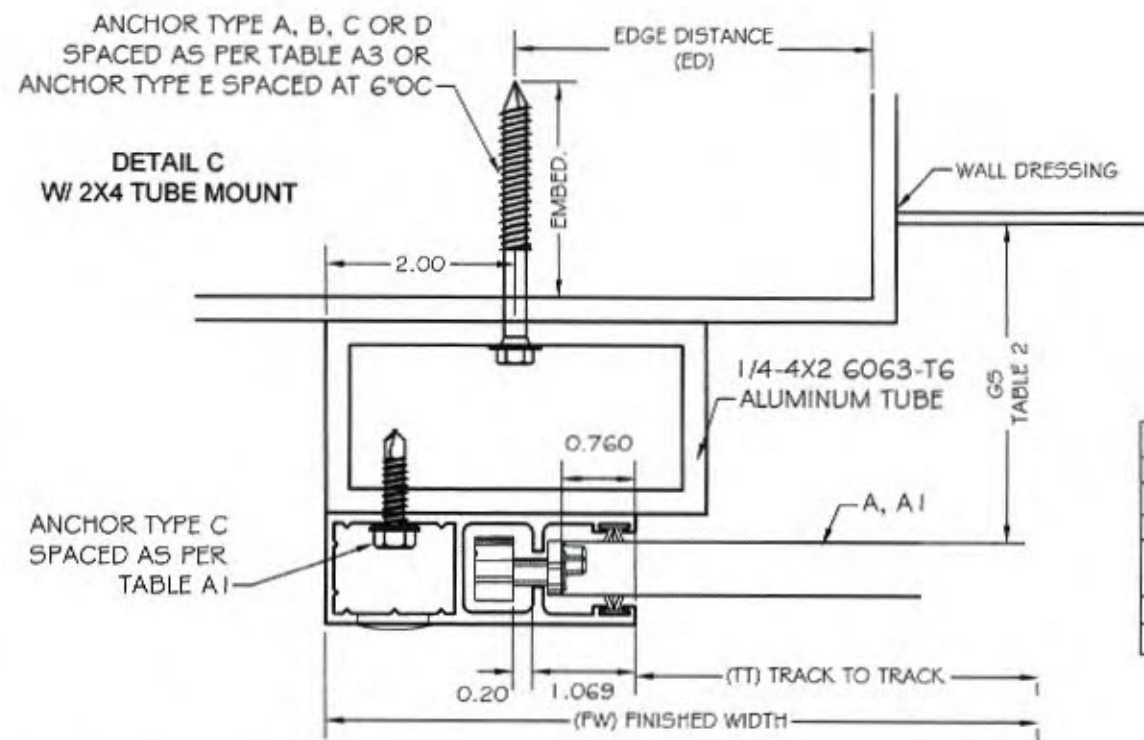
SHEET
6 OF 12

TRACK TO TRACK (INCHES)

[illegible]

ANCHOR SCHEDULE:

ANCHOR	DESCRIPTION	MATERIAL	EMBEDMENT	EDGE DISTANCE
A	5/16" ITW TAPCONS XL	MIN. 3000 PSI CONCRETE	2 1/4"	2 3/16"
B	5/16" ITW TAPCONS XL	GROUT FILLED C-90 BLOCK	2 1/4"	4"
C	1/4"-14X1" GRADE 5	MIN. 1/4" 6063-T6 ALUM.		1/2"
	SELF DRILLING SCREWS	OR A36 3/16" STEEL		3/8"
D	5/16"X3" TAPCONS	WOOD WITH G>=.55	2 1/4"	1-1/4"
E	3/8" POWERS WEDGE BOLT	MIN. 3000 psi CONCRETE	3 1/2"	4-1/2"



ANCHOR SCHEDULE:				
ANCHOR	DESCRIPTION	MATERIAL	EMBEDMENT	EDGE DISTANCE
A	5/16" ITW TAPCONS XL	MIN. 3000 PSI CONCRETE	2 1/4"	2 3/16"
B	5/16" ITW TAPCONS XL	GROUT FILLED C-90 BLOCK	2 1/4"	4"
C	1/4"-14X1" GRADE 5 SELF DRILLING SCREWS	MIN. 1/4" 6063-T6 ALUM. OR A36 3/16" STEEL		1/2"
D	5/16"X3" TAPCONS	WOOD WITH G>=.55	2 1/4"	1-1/4"
E	3/8" POWERS WEDGE BOLT	MIN. 3000 psi CONCRET	3 1/2"	4-1/2"

TABLE A3
SPACING ON CENTER FOR 2X BUILT-OUT MOUNT INSTALLATION

LOAD (PSF)	TRACK TO TRACK (INCHES)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
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	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
20	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0



PPMF Inc.
ENGINEERING SERVICES - CA 32459
9715 W. BROWARD BLVD.
PLANTATION, FL 33324
PPMF@AOL.COM

PRODUCT NAME:
**WIND ABATEMENT
SYSTEM - LARGE MISSILE**
58 MM ROLLING DOOR SYSTEM

MANUFACTURER:
**ADVANCED HURRICANE
TECHNOLOGIES**
6063 JAMES LANE
NAPLES, FLORIDA 34109
TEL: (239) 260-0020



SCALE:
NA
DATE:
02/25/18
DRAWING #
18-103
SHEET
7 OF 12

ANCHOR SCHEDULE:				
ANCHOR	DESCRIPTION	MATERIAL	EMBEDMENT	EDGE DISTANCE
A	5/16" ITW TAPCONS XL	MIN. 3000 PSI CONCRETE	2 1/4"	2 3/16"
B	5/16" ITW TAPCONS XL	GROUT FILLED C-90 BLOCK	2 1/4"	4"
C	1/4"-14X1" GRADE 5 SELF DRILLING SCREWS	MIN. 1/4" 6063-T6 ALUM. OR A36 3/16" STEEL		1/2" 3/8"
D	5/16" X3" TAPCONS	WOOD WITH G>=.55	2 1/4"	1-1/4"
E	3/8" POWERS WEDGE BOLT	MIN. 3000 psi CONCRET	3 1/2"	4-1/2"

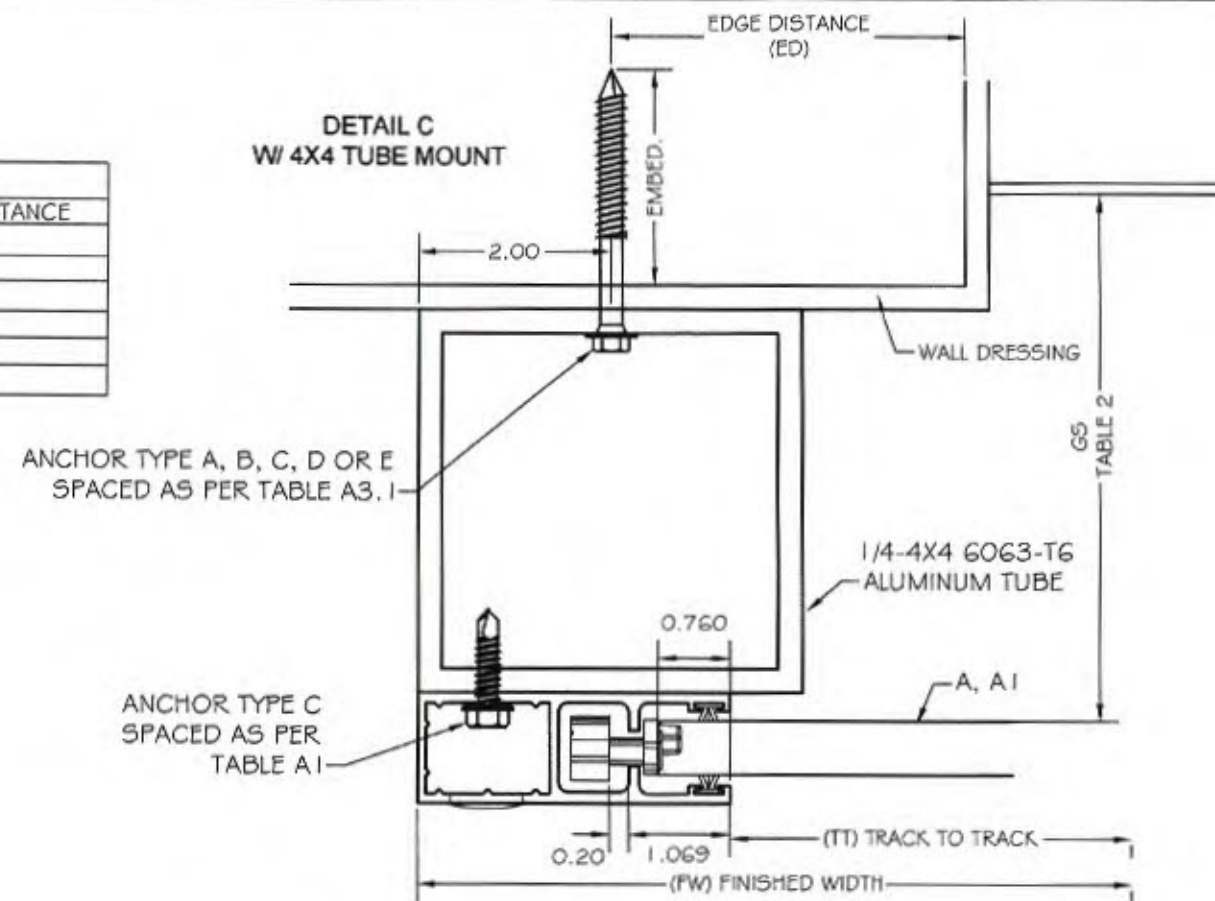


TABLE A3.1
SPACING ON CENTER FOR 4X BUILT-OUT MOUNT INSTALLATION

[illegible]

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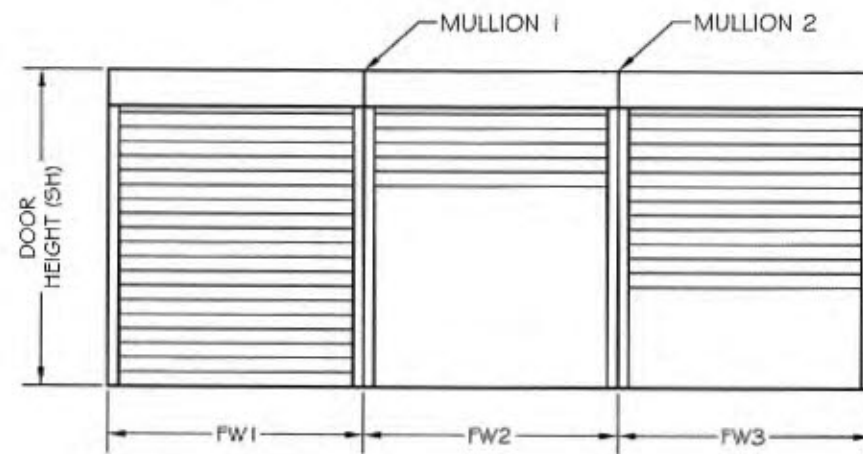
SCALE:
NA

DATE:
02/25/18

DRAWING #
18-103

SHEET
8 OF 12

EQUALLY SPACED MULLIONS SELECTION



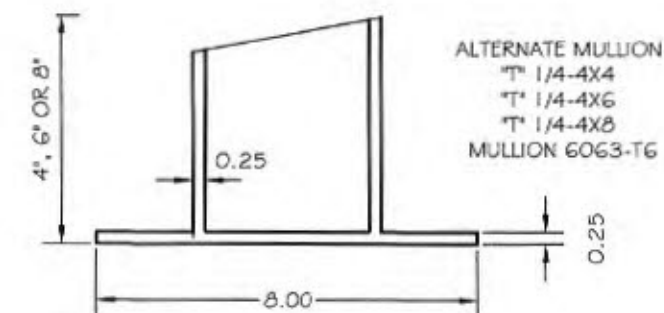
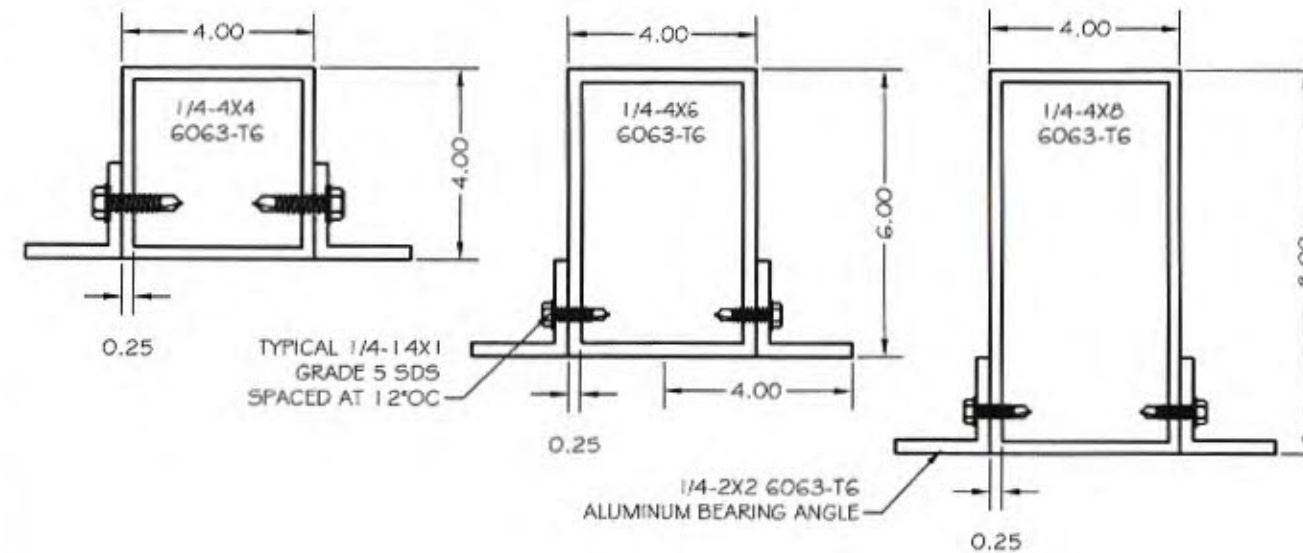
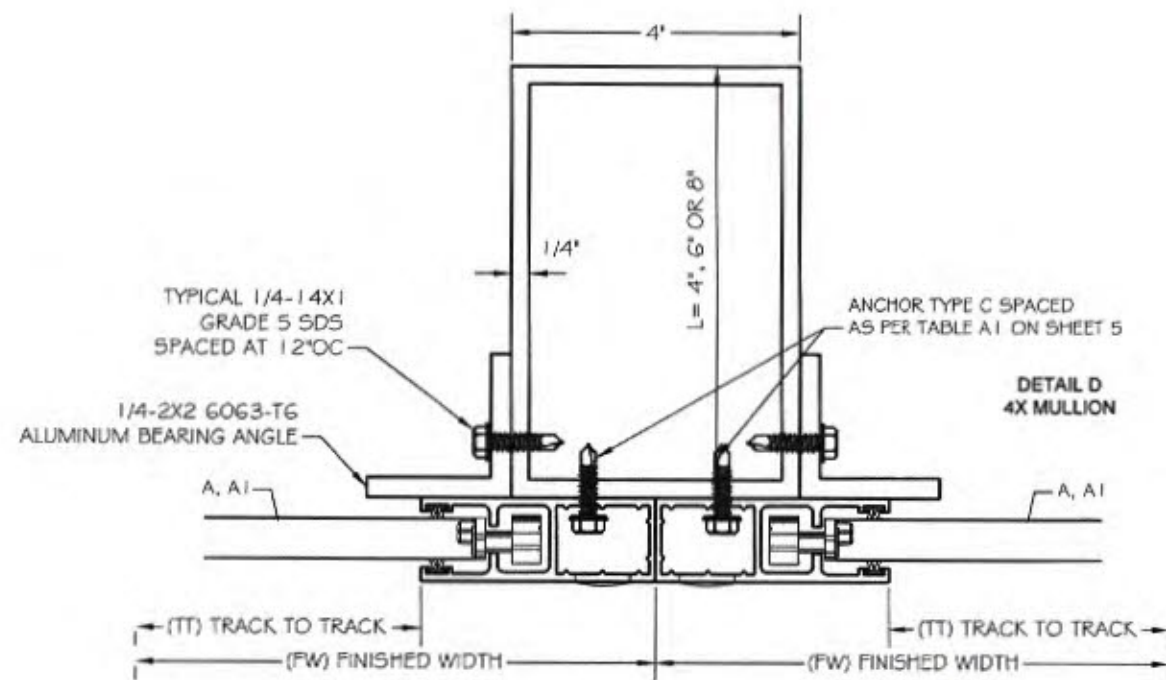
MULLION 1: $TM1 = (FW1 + FW2) / 2$
MULLION 2: $TM2 = (FW2 + FW3) / 2$
TM: TRIBUTARY MODULE

TABLE 4 - MULLION BARS MAXIMUM DESIGNED PRESSURES (PSF)

DOOR MODULE	1/4-4x8 mullion span			1/4-4x6 mullion span			1/4-4x4 mullion span		
	144	132	120	120	108	96	96	84	72
293	27	30	30	23	30	30	17	26	30
271	29	38	41	25	35	41	18	28	41
247	32	42	53	27	38	53	20	30	48
223	36	46	62	30	42	59	22	34	53
199	40	52	69	34	47	67	25	38	59
175	45	59	79	39	53	76	28	43	67
151	52	69	92	45	62	88	32	50	78
127	62	82	109	53	74	104	39	59	93
103	77	101	134	66	91	129	48	73	115
79	100	131	175	86	118	168	62	95	149
67	118	155	200	101	140	198	73	112	176

- NOTES:
- 1- MULLIONS WERE DESIGNED BY RATIONAL ANALYSIS BASED ON THE ALUMINUM DESIGN MANUAL 2015 ED. AND THE FLORIDA BUILDING CODE.
 - 2- DEFLECTION CRITERIA: MAXIMUM SPAN / 180
 - 3- VALUES ABOVE IS APPLICABLE ONLY FOR EQUAL MODULES $FW1 = FW2 = FW3$.
 - 4- UNEQUAL MODULES ARE TO BE DESIGNED BY RATIONAL ANALYSIS IN A CASE BY CASE BASIS.

MULLIONS SECTIONS



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58 MM ROLLING DOOR SYSTEM

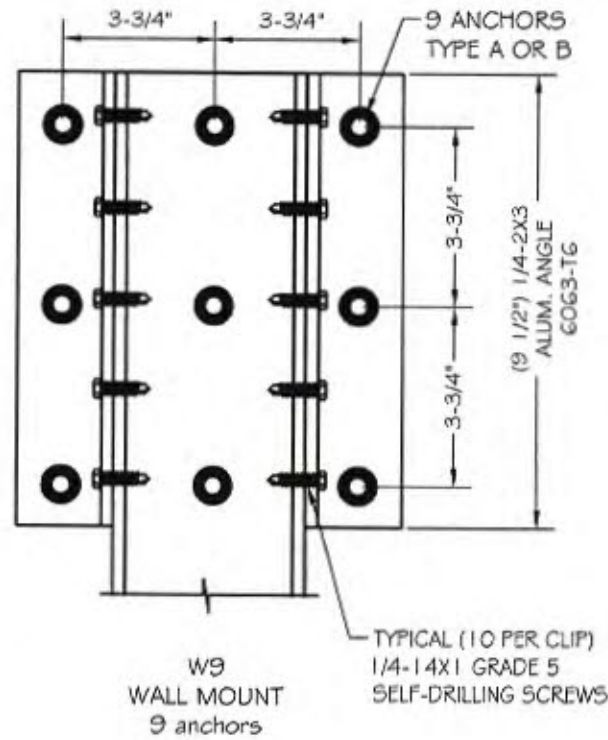
MANUFACTURER:
ADVANCED HURRICANE
TECHNOLOGIES
6063 JAMES LANE
NAPLES, FLORIDA 34109
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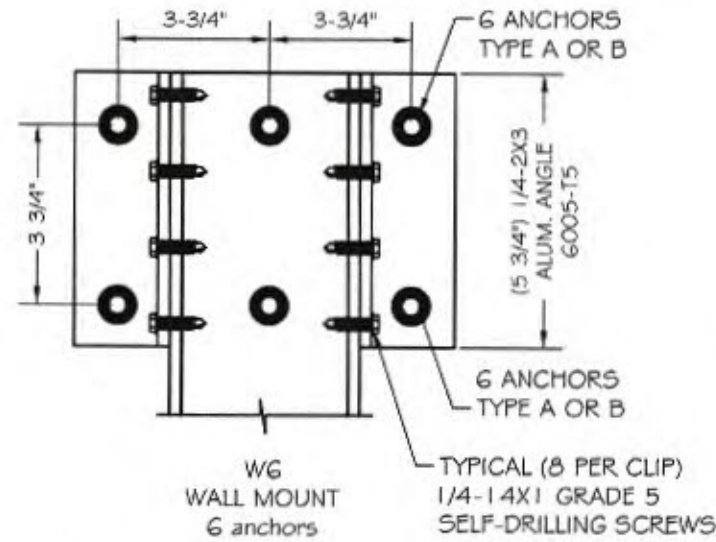
SCALE:
NA
DATE:
02/25/18
DRAWING #
18-103
SHEET
9 OF 12

EQUALLY SPACED MULLIONS WALL CONNECTIONS

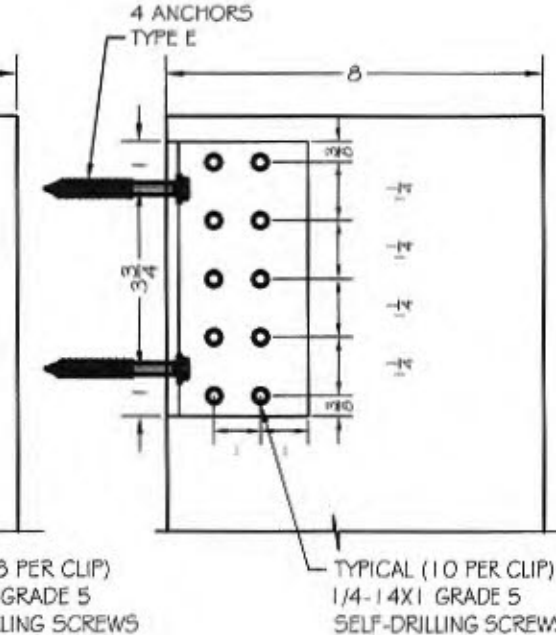
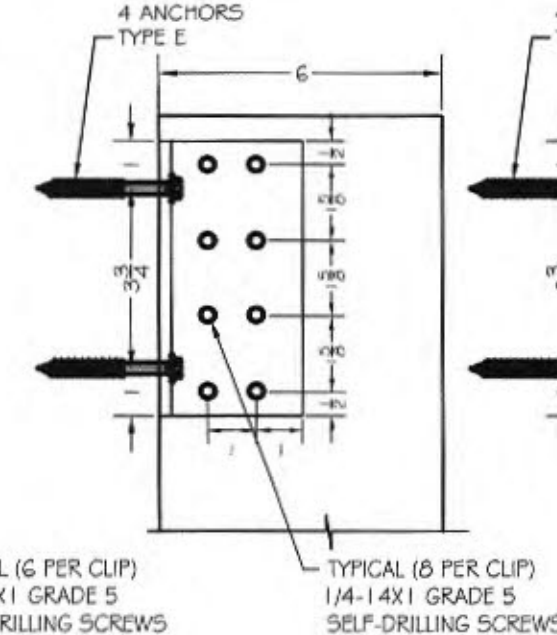
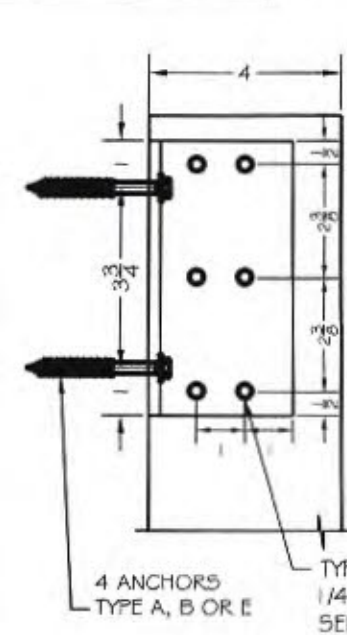
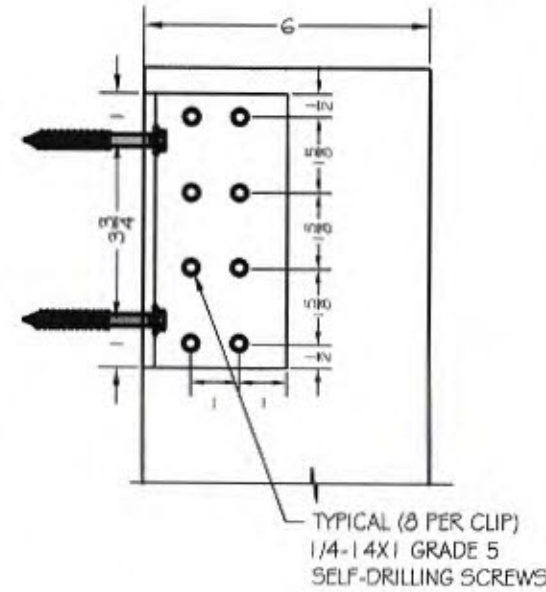
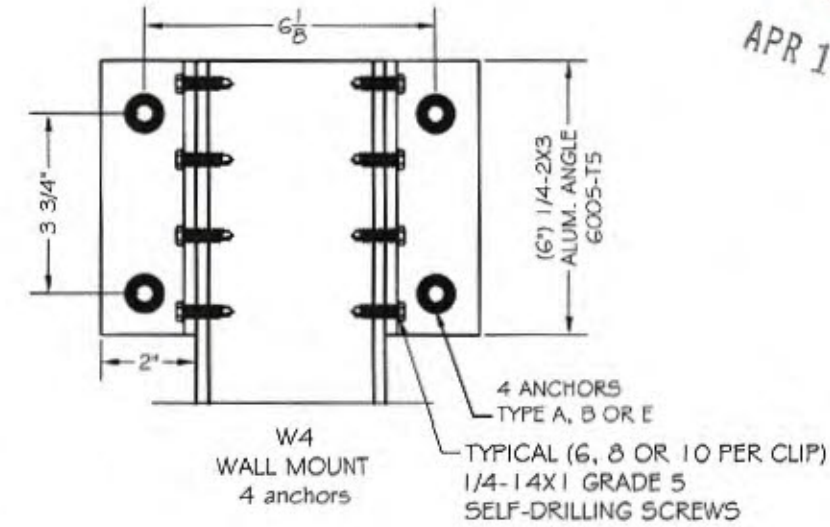
W9 - 1/4-4X8 MULLION
WALL MOUNT MOUNT
WITH ANCHOR TYPE A OR B



W6 - 1/4-4X6 MULLION
WALL MOUNT MOUNT
WITH ANCHOR TYPE A OR B



W4 - WALL MOUNT MOUNT
1/4-4X4 WITH ANCHOR TYPE A, B OR E
1/4-4X6 WITH ANCHOR TYPE E
1/4-4X8 WITH ANCHOR TYPE E



ANCHOR SCHEDULE:				
ANCHOR	DESCRIPTION	SUBSTRATE	EMBEDMENT	EDGE DISTANCE
A	5/16"X3" TAPCONS	MIN. 2899 PSI CONCRETE	2 1/4"	3 1/8"
B	5/16"X3" TAPCONS	GROUT FILLED C-90 BLOCK	2 1/4"	4"
E	3/8"X4" WEDGE BOLTS	MIN. 3000 PSI CONCRETE	3"	4 1/2"

WALL MOUNT ANCHOR SELECTION

ANCHOR TYPE	MULLION TYPE	4X4	4X6	4X8
A		W4	W6	W9
B		W4	W6	W9
E		W4	W4	W4



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58 MM ROLLING DOOR SYSTEM

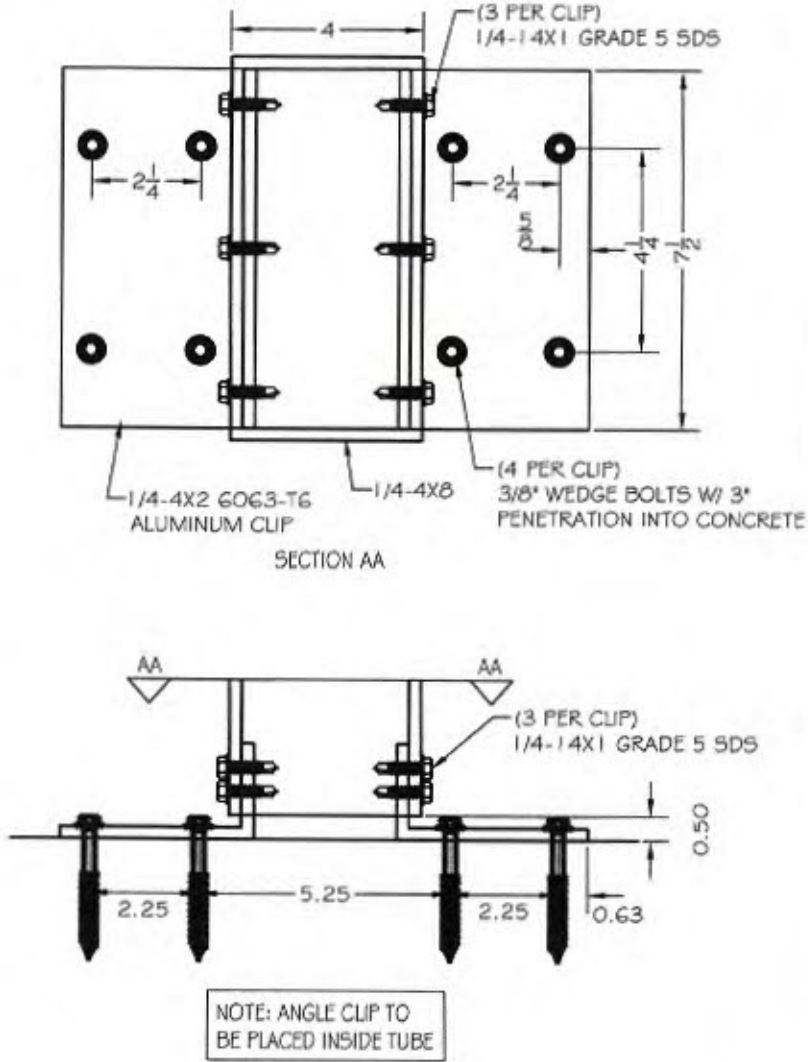
MANUFACTURER:
**ADVANCED HURRICANE
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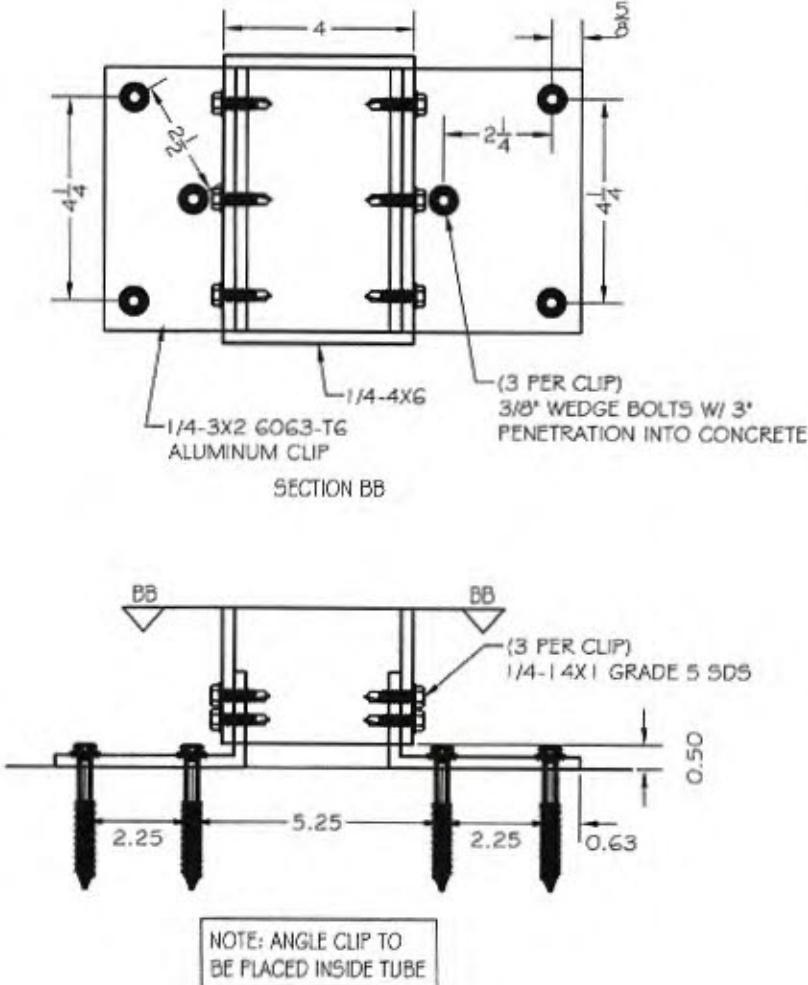
SCALE:
NA
DATE:
02/25/18
DRAWING #
18-103
SHEET
10 OF 12

EQUALLY SPACED MULLIONS FLOOR AND CEILING CONNECTIONS

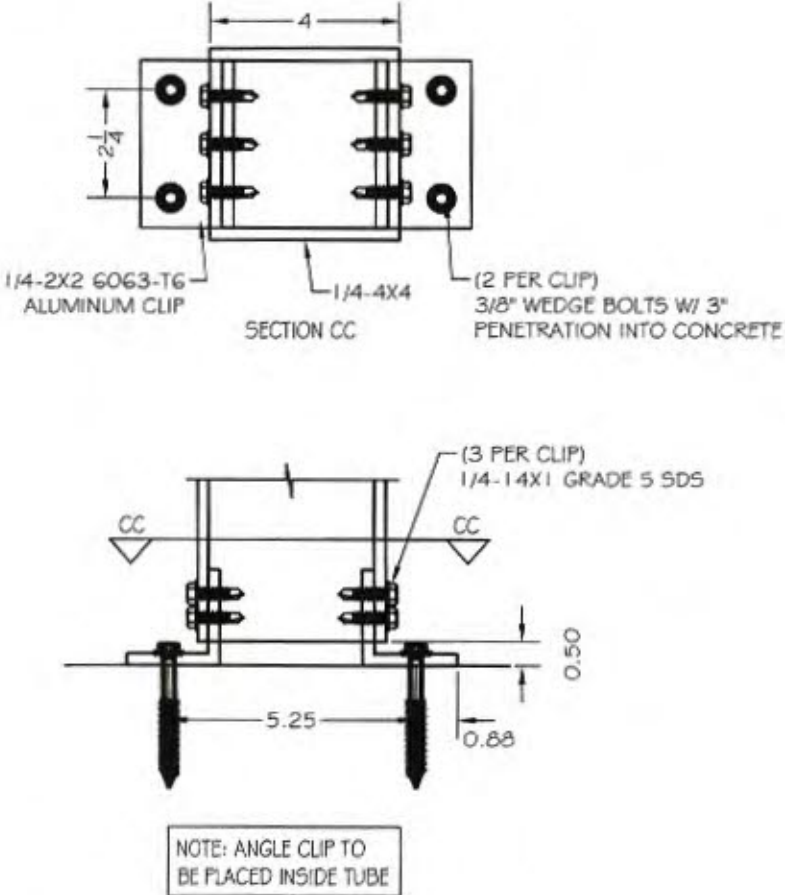
1/4-4X8 MULLION
FLOOR/CEILING MOUNT



1/4-4X6 MULLION
FLOOR/CEILING MOUNT



1/4-4X4 MULLION
FLOOR/CEILING MOUNT



FLOOR / CEILING CONNECTION CAPACITY FUNCTION OF DESIGNED PRESSURES ON TABLE 4



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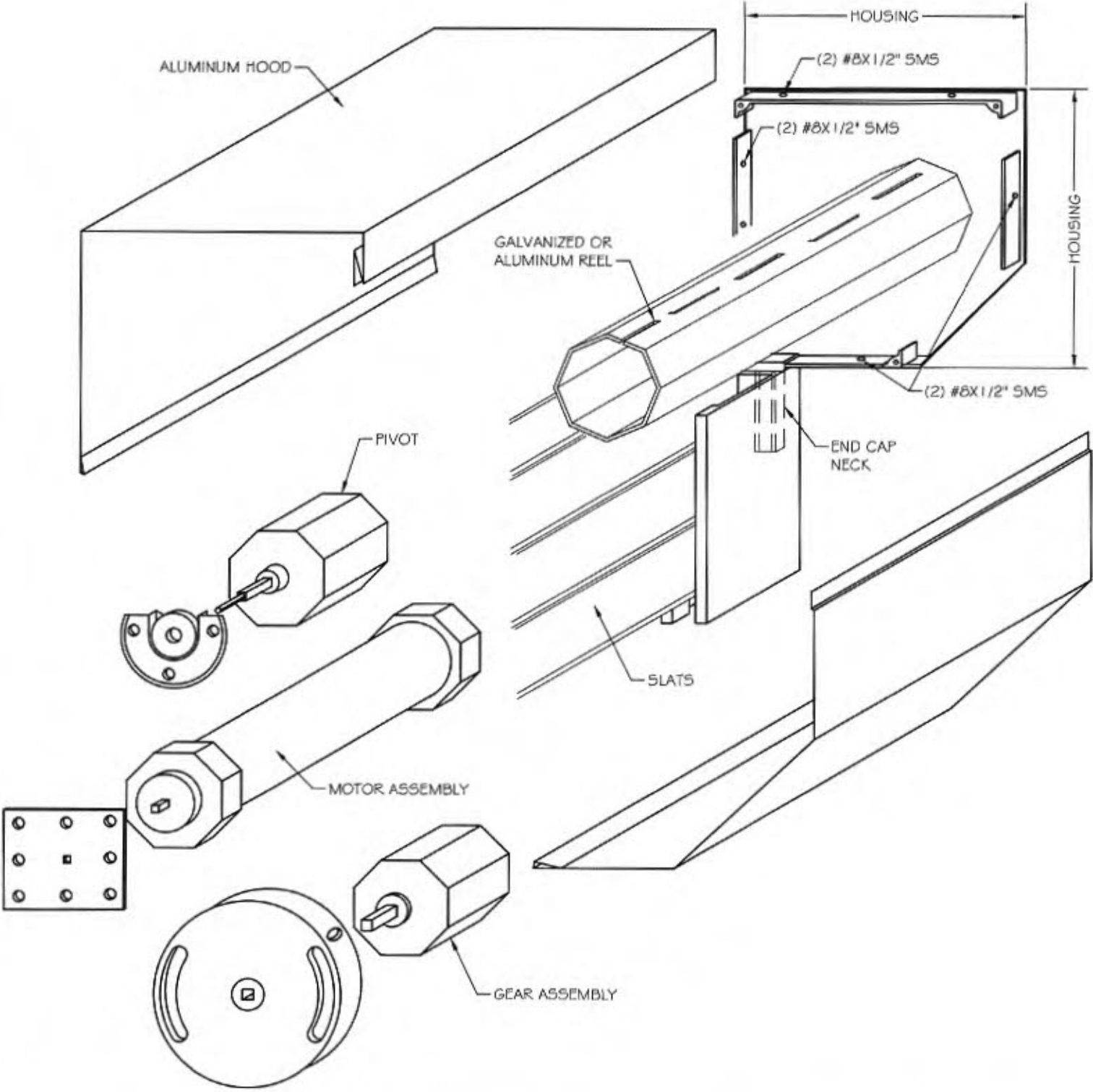
PRODUCT NAME:
**WIND ABATEMENT
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58 MM ROLLING DOOR SYSTEM**

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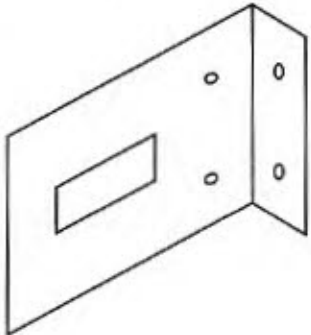


SCALE:
NA
DATE:
02/25/18
DRAWING #
18-103
SHEET
11 OF 12

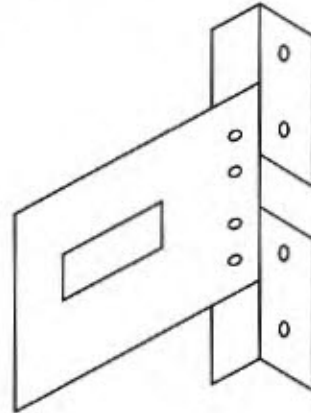
HOOD ASSEMBLY



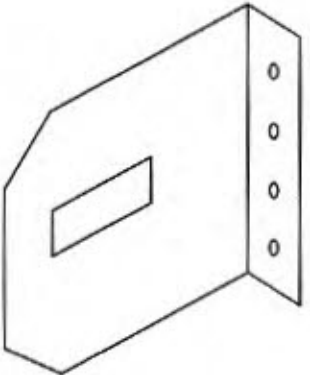
OPTIONAL STEEL BRACKET



UP TO 100 LBS SHUTTER WEIGHT
(2) 5/16" TAPCON OR
(3) 1/4"Øx1" SMS

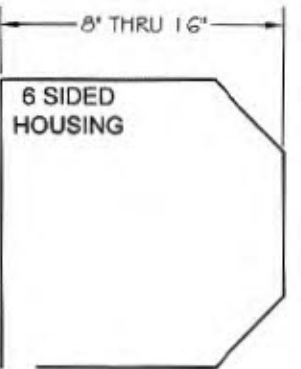
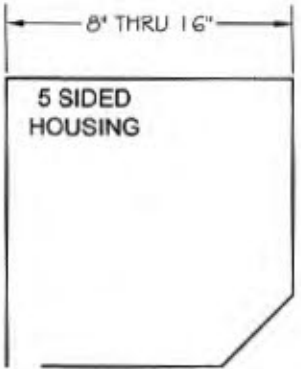


UP TO 200 LBS SHUTTER WEIGHT
(3) 5/16"Ø TAPCONS OR
(4) 1/4"Øx1" SMS



UP TO 350 LBS SHUTTER WEIGHT
(4) 5/16" TAPCON OR
(6) 1/4"Øx1" SMS

NOTE: THE ROLL-UP MECHANISM (GEARS, MOTORS, SUPPORTING END PLATES) ARE NOT PART OF THIS APPROVAL. MANUFACTURER IS RESPONSIBLE TO SPECIFY THESE COMPONENTS FOR PROPER SHUTTER OPERATION.



PPMF Inc.
ENGINEERING SERVICES - CA 32459
9715 W. BROWARD BLVD.
PLANTATION, FL 33324
PPMF@AOL.COM

PRODUCT NAME:
WIND ABATEMENT
SYSTEM - LARGE MISSILE
58 MM ROLLING DOOR SYSTEM

MANUFACTURER:
ADVANCED HURRICANE
TECHNOLOGIES
6063 JAMES LANE
NAPLES, FLORIDA 34109
TEL: (239) 260-0020



SCALE:
NA
DATE:
02/25/18
DRAWING #
18-103
SHEET
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