

AMERICAN SHUTTER SYSTEMS ASSOCIATION

55 MMER ROLL SHUTTER (WIND ZONE 3) (IMPACT)



4268 WESTROADS DRIVE
WEST PALM BEACH, FL 33407
PH: 1-800-432-2204
FAX: 561-841-0852

GENERAL NOTES:

- THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH THE CURRENT FLORIDA BUILDING CODE (FBC), EXCLUDING HVHZ AND HAS BEEN EVALUATED ACCORDING TO THE FOLLOWING:
 - ASTM E330-14
 - ASTM E1886-13a
 - ASTM E1996-14a
- ADEQUACY OF THE EXISTING STRUCTURAL CONCRETE/MASONRY AND 2X STUD FRAMING AS A MAIN WIND FORCE RESISTING SYSTEM CAPABLE OF WITHSTANDING AND TRANSFERRING APPLIED PRODUCT LOADS TO THE FOUNDATION IS THE RESPONSIBILITY OF THE ENGINEER OR ARCHITECT OF RECORD FOR THE PROJECT OF INSTALLATION.
- 2X BUCKS (WHEN USED) SHALL BE DESIGNED AND ANCHORED TO PROPERLY TRANSFER ALL LOADS TO THE STRUCTURE. BUCK DESIGN AND INSTALLATION IS THE RESPONSIBILITY OF THE ENGINEER OR ARCHITECT OF RECORD FOR THE PROJECT OF INSTALLATION.
- THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT.
- INSTALLATION OF ROLL DOWN MAY EITHER BE INSIDE OR OUTSIDE OF THE TIE BEAM.
- ALL EXTRUSION MATERIAL: 6063-T6 ALUMINUM ALLOY, UNLESS OTHERWISE NOTED.
- DESIGN AND OPERATION OF ROLL UP MECHANISM IS NOT PART OF THIS APPROVAL, MANUFACTURER SPECIFICATIONS SHOULD BE FOLLOWED. CARE SHOULD BE TAKEN WHEN SHUTTER IS IN MOTION ENSURING THAT PERSONAL INJURY OR DAMAGE TO THIS PRODUCT DOES NOT OCCUR.
- FOR DESIGN PRESSURES SEE SHEET 2. SEE SHEET 16, 18 AND 19 FOR DESIGN PRESSURES BASED ON MULLIONS.
- HOOD ASSEMBLY IS IMPACT RATED AND CAN BE PLACED INSIDE FRAME OPENING AS AN EXPOSED FEATURE.
- OPTIONAL BOTTOM LOCK IS NOT REQUIRED FOR STRUCTURAL OR FORCED ENTRY RESISTANCE PERFORMANCE. FOR USE ON MAXIMUM 20' WIDE UNIT.
- VENTED OR UNVENTED SLATS QUALIFIED.
- SHUTTER MANUFACTURER LABEL SHALL BE LOCATED IN A READILY VISIBLE LOCATION, PER FBC CHAPTER 17.

INSTALLATION NOTES:

- ONE (1) INSTALLATION ANCHOR IS REQUIRED AT EACH ANCHOR LOCATION SHOWN, UNLESS OTHERWISE STATED.
- THE NUMBER OF INSTALLATION ANCHORS DEPICTED IS THE MINIMUM NUMBER OF ANCHORS TO BE USED FOR PRODUCT INSTALLATION.
- INSTALL INDIVIDUAL INSTALLATION ANCHORS WITHIN A TOLERANCE OF ±1/2 INCH OF THE DEPICTED LOCATION IN THE ANCHOR LAYOUT DETAIL (I.E., WITHOUT CONSIDERATION OF TOLERANCES). TOLERANCES ARE NOT CUMULATIVE FROM ONE INSTALLATION ANCHOR TO THE NEXT.
- REFER TO ANCHOR SCHEDULE CHART ON SHEETS 5, 6, 7, 9, 11, 12, & 14 FOR ANCHOR TYPE, SUBSTRATE TYPE, EDGE DISTANCE AND MINIMUM EMBEDMENT.
- MINIMUM EMBEDMENT AND EDGE DISTANCE EXCLUDE WALL FINISHES, INCLUDING BUT NOT LIMITED TO STUCCO, FOAM, BRICK VENEER, AND SIDING.
- ASSEMBLY FASTENERS SHALL BE COATED WITH AN HV COATING SYSTEM AS MANUFACTURED BY AN APPROVED COATING APPLICATOR REGISTERED WITH THE AMERICAN SHUTTER SYSTEMS ASSOCIATION.
- EDGE DISTANCE IS MEASURED FROM FREE EDGE OF BLOCK OR EDGE OF MORTAR JOINT INTO FACE SHELL OF BLOCK.
- INSTALLATION ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH ANCHOR MANUFACTURER'S INSTALLATION INSTRUCTIONS, AND ANCHORS SHALL NOT BE USED IN SUBSTRATES WITH STRENGTHS LESS THAN THE MINIMUM STRENGTH SPECIFIED BY THE ANCHOR MANUFACTURER.
- INSTALLATION ANCHOR CAPACITIES FOR PRODUCTS HEREIN ARE BASED ON SUBSTRATE MATERIALS WITH THE FOLLOWING PROPERTIES:
 - WOOD - MINIMUM SPECIFIC GRAVITY OF 0.55.
 - CONCRETE - MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI. SEE ANCHOR SCHEDULES, SHEETS 5, 6, 8, 12, 14, 17 AND 20 FOR ADDITIONAL REQUIREMENTS.
 - MASONRY - STRENGTH CONFORMANCE TO ASTM C-90, MIN 2000 PSI.
 - STEEL - MINIMUM A36, 3/16" THICKNESS
 - ALUMINUM - MINIMUM 6063-T6 3/4" THICKNESS.

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TITLE: 55 MMER ROLL SHUTTERS
(WIND ZONE 3)(IMPACT)

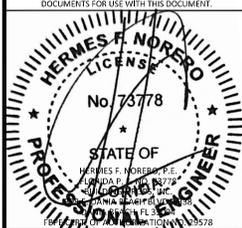
GENERAL & INSTALLATION NOTES

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REMARKS	BY	DATE

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DATE:	06.21.23
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CHK. BY:	HFN
SCALE:	NTS
DWG. #:	EMS008
SHEET:	1

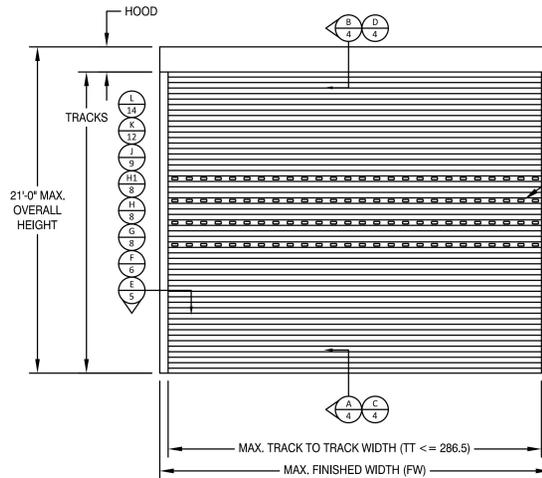
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Reason: I am approving this document
Date: 2023.06.22 20:12:05 -04'00'

DESIGN PRESSURE RATINGS

TABLE 1 - MAX ALLOWABLE DESIGN PRESSURE		
W/ END RETENTION		
TT MAX	POSITIVE	NEGATIVE
286.5	30	30
264	35	35
240	40	40
216	50	50
204	55	55
168	80	80
144	95	95
132	100	100
120	110	110
108	120	120
96	125	125
84	135	135
72	145	145

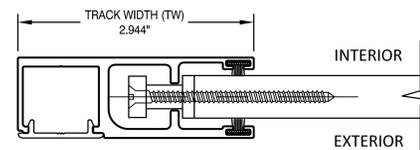
NOTES:
 1. DESIGN PRESSURES MUST NOT EXCEED 145 PSF FOR END RETENTION SYSTEM.
 2. SHUTTER SIZE (TT) MUST NOT EXCEED 286.5".

MULTIPLE SHUTTER NOTES:
 1. USE TABLE 1 TO VERIFY MAXIMUM ALLOWABLE PRESSURE.
 2. USE TABLE 2, 3 & 4 TO SELECT INTERMEDIATE AND END MULLIONS.
 3. SELECT PROPER MULLION ANCHORAGE.



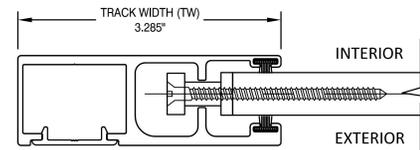
LOAD (PSF)	TABLE 2: GLASS SEPARATION (GS) INCHES												
	TRACK TO TRACK (IN)												
	72	84	96	108	120	132	144	168	204	216	240	264	286.5
30	5.13	6.31	6.31	6.31	6.31	6.31	6.31	6.31	6.31	8.75	8.75	8.75	11.25
35	5.13	6.31	6.31	6.31	6.31	6.31	6.31	6.31	6.31	8.75	8.75	10.25	-
40	5.13	6.31	6.31	6.31	6.31	6.31	6.31	6.31	7.00	8.75	9.25	-	-
50	5.13	6.31	6.31	6.31	6.31	6.31	6.31	6.31	8.50	9.25	-	-	-
55	5.13	6.31	6.31	6.31	6.31	6.31	6.31	6.31	9.25	-	-	-	-
80	5.13	6.31	6.31	6.31	6.31	6.50	7.25	8.75	-	-	-	-	-
95	5.25	6.31	6.31	6.50	7.00	7.75	8.50	-	-	-	-	-	-
100	5.50	6.31	6.31	6.75	7.50	8.00	-	-	-	-	-	-	-
110	6.00	6.50	7.00	7.50	8.00	-	-	-	-	-	-	-	-
120	6.50	7.00	7.50	8.00	-	-	-	-	-	-	-	-	-
125	6.75	7.25	7.75	-	-	-	-	-	-	-	-	-	-
135	7.25	7.75	-	-	-	-	-	-	-	-	-	-	-
145	7.50	-	-	-	-	-	-	-	-	-	-	-	-

- NOTES:
 1. GLASS SEPARATION REQUIREMENTS PER ABOVE TABLE SHALL ONLY APPLY FOR ESSENTIAL FACILITIES IN WIND ZONES 1, 2 AND 3 PER THE FLORIDA BUILDING CODE AND ASTM E1996 REQUIREMENTS. FOR NON-ESSENTIAL FACILITIES IN WIND ZONES 1, 2 OR 3, INSTALLATION SHALL PROVIDE MINIMUM 1" SEPARATION FROM GLASS IN COMPLIANCE WITH FBC REQUIREMENTS FOR NON POROUS IMPACT PROTECTIVE SYSTEMS
 2. MINIMUM GLASS SEPARATION BASED ON MAXIMUM DEFLECTION + 1".
 3. ANALYSIS IS LIMITED BY DEFLECTION UNDER STRUCTURAL LOADS AS WELL AS DEFLECTION DUE TO MISSILE LEVEL D LARGE MISSILE IMPACTS.
 4. APPROPRIATE INSTALLATION METHOD SHALL BE USED TO ACHIEVE THE REQUIRED SEPARATION IN THE ABOVE TABLE



SMALL GUIDE RAIL WITH END RETENTION

SECTION DETAILS ON FOLLOWING SHEETS SHOW LARGE GUIDE RAIL, SMALL GUIDE RAIL IS ALSO QUALIFIED FOR ANY MOUNTING CONDITION.



LARGE GUIDE RAIL WITH END RETENTION

DETAILS SHOWN HERE AND SECTION DETAILS ON FOLLOWING SHEETS SHOW OPEN GUIDE RAILS, ENCLOSED GUIDE RAILS ARE QUALIFIED FOR ANY APPROVED CONDITIONS. SEE B.O.M., SHEET 23 FOR DETAILS.



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TITLE: 55 MMER ROLL SHUTTERS (WIND ZONE 3)(IMPACT)

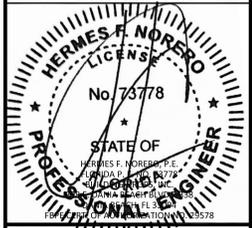
ELEVATION & DESIGN PRESSURE TABLE

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REMARKS	BY	DATE

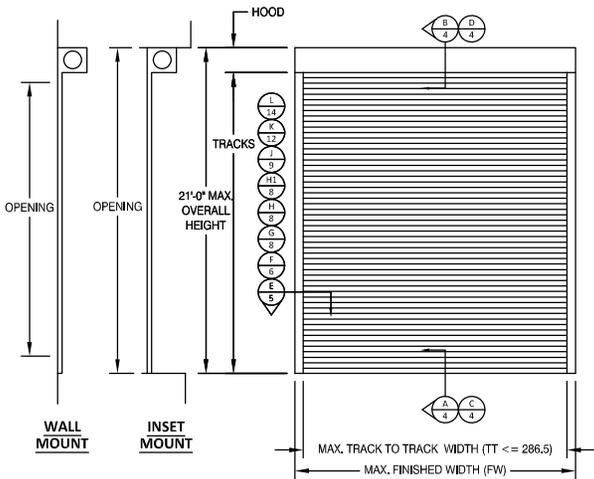
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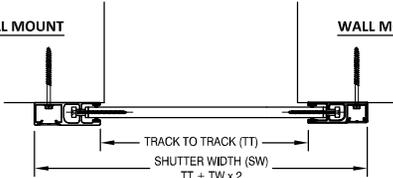
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TYPICAL SINGLE UNIT ELEVATION

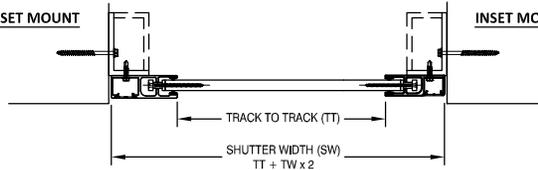


REVERSED INSTALLATION IS ACCEPTABLE

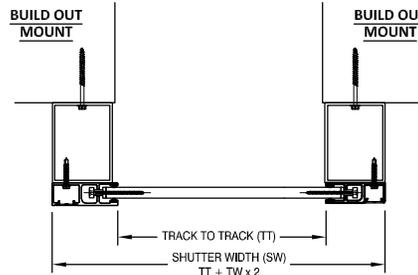
WALL MOUNT



INSET MOUNT

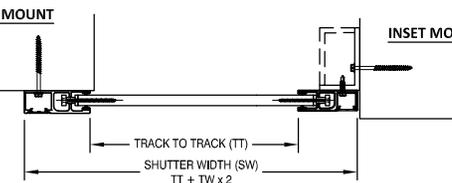


BUILD OUT MOUNT



BUILD OUT MOUNT

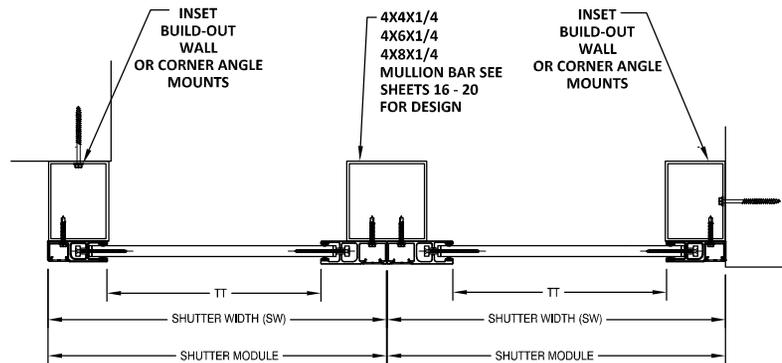
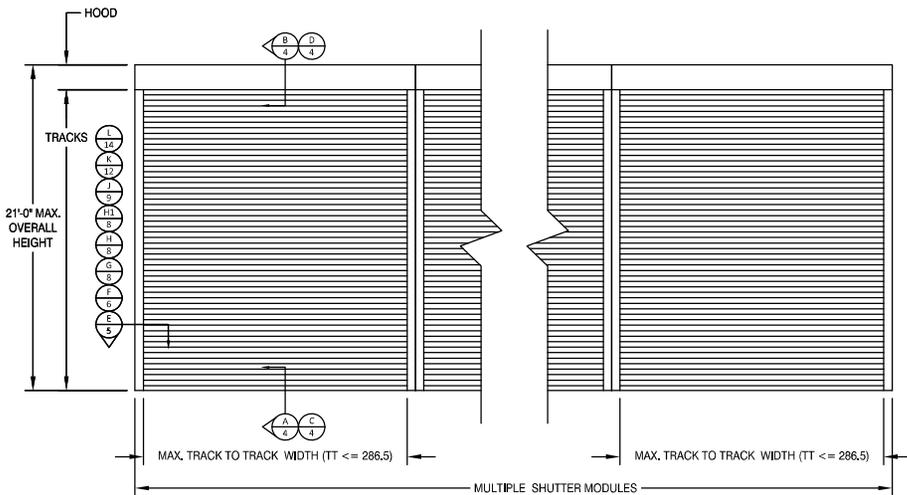
WALL MOUNT



INSET MOUNT

COMBINATION MOUNTED:
WALL, INSET, BUILD-OUT, AND CORNER ANGLE MOUNTS CAN BE INSTALLED BY MIXING ANY POSSIBLE COMBINATIONS. SEE PAGE 12 FOR FURTHER DETAILS OF OFFSET INSET MOUNT AND PAGE 14 FOR CORNER ANGLE MOUNTING.

TYPICAL MULTIPLE UNITS ELEVATION



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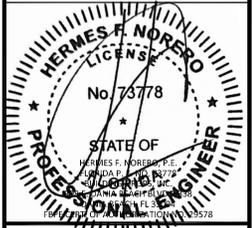
VERTICAL SECTIONS

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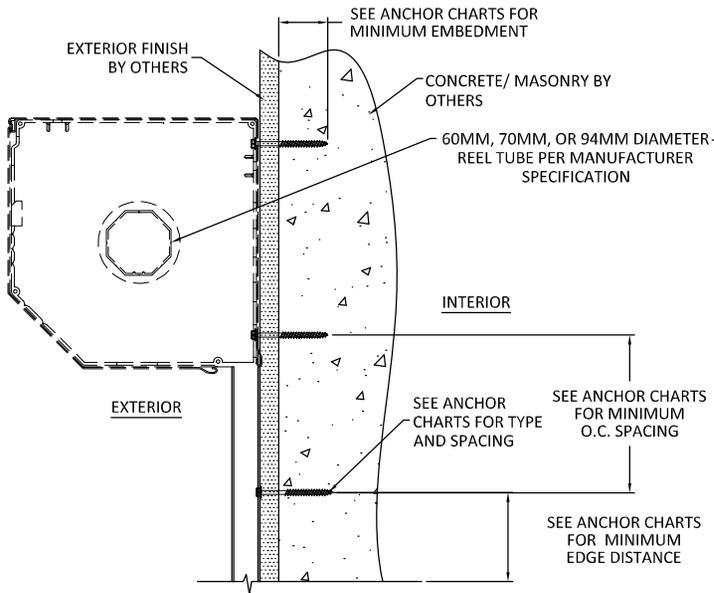


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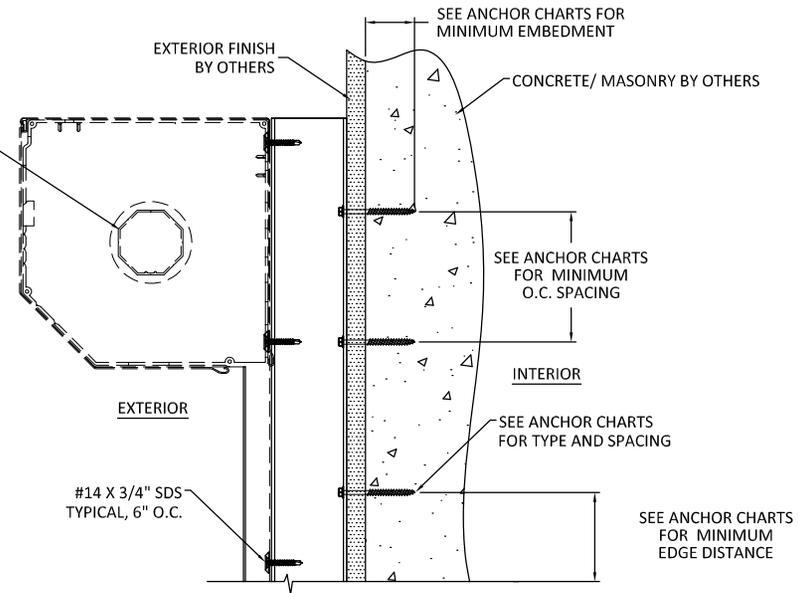
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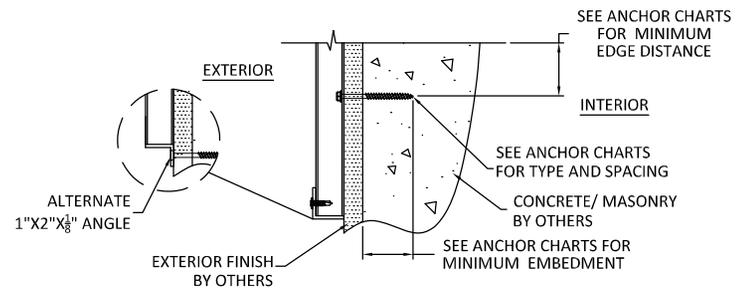
TYPICAL VERTICAL SECTIONS



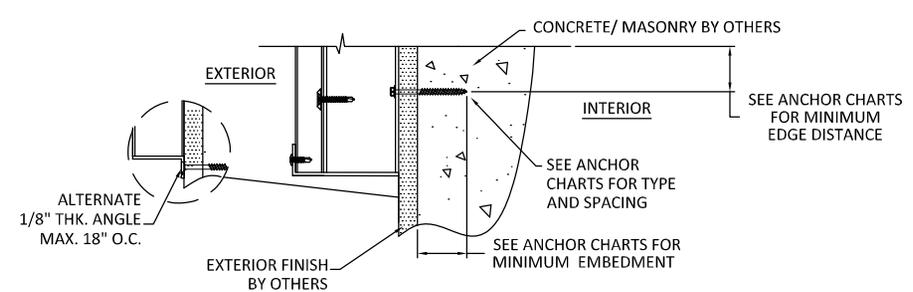
B
4 **VERTICAL SECTION**
MASONRY/CONCRETE SUBSTRATE - WALL MOUNT
SEE CHARTS ON SHEETS 5, 6, 8, 12 & 14
FOR OTHER SUBSTRATES



D
4 **VERTICAL SECTION**
MASONRY/CONCRETE SUBSTRATE - BUILDOUT
SEE CHARTS ON SHEETS 5, 6, 8, 12 & 14
FOR OTHER SUBSTRATES



A
4 **VERTICAL SECTION**
MASONRY/CONCRETE SUBSTRATE - WALL MOUNT
SEE CHARTS ON SHEETS 5, 6 & 8, 12 & 14
FOR OTHER SUBSTRATES



C
4 **VERTICAL SECTION**
MASONRY/CONCRETE SUBSTRATE - BUILDOUT
SEE CHARTS ON SHEETS 5, 6, 8, 12 & 14
FOR OTHER SUBSTRATES

- NOTES:**
1. SLATS NOT SHOWN FOR CLARITY
 2. REVERSED INSTALLATION IS ACCEPTABLE



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COMPONENTS & BILL OF MATERIALS

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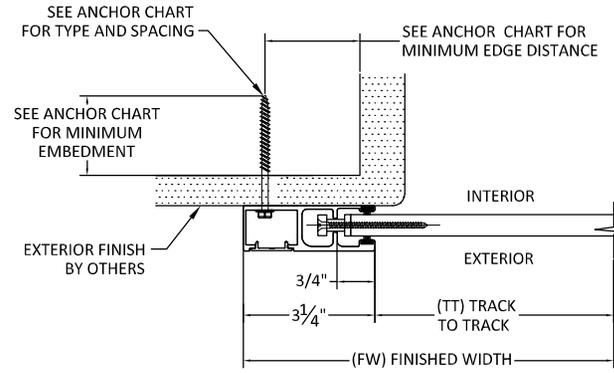


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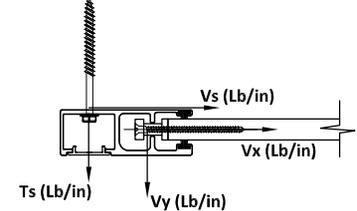
TYPICAL HORIZONTAL SECTIONS WALL MOUNT



E
5

HORIZONTAL SECTION

MOUNT TYPE 1
WALL MOUNT
*WITH END RETENTION



CONTRACTOR TO VERIFY ADEQUACY OF STRUCTURE
NOTE: LOADS Vy AND Vx ARE LOADS IMPOSED BY SLAT ON TRACK. LOADS Ts AND Vs ARE LOADS IMPOSED ON STRUCTURE BY ANCHORS.

ANCHOR SCHEDULE:

ANCHOR	DESCRIPTION	MATERIAL	EDGE DISTANCE	EMBEDMENT
A	3/8" DEWALT SCREW-BOLT+	MIN. 3000 PSI CONCRETE	3 3/4"	3 1/2"
B	5/16" ITW TAPCON	MIN. 3000 PSI CONCRETE	2 3/16"	2 1/4"
C	3/8" DEWALT SCREW-BOLT+	GROUT FILLED C-90 BLOCK f'm ≥ 1500 PSI	2"	2 1/2"
D	5/16" ITW TAPCON	GROUT FILLED C-90 BLOCK f'm ≥ 2000 PSI	4"	2 1/4"
E	#14 ELCO DRILL-FLEX SELF DRILLING SCREW	MIN 1/4" 6063-T6 ALUM. A36 3/16" STEEL	1/2" 3/8"	3 THREADS PENETRATION
F	5/16" DEWALT/ELCO ULTRACON	MIN. SG = 0.55 WOOD	1 1/2"	2"
G	5/16" DEWALT/ELCO ULTRACON	MIN. 3515 PSI CONCRETE	3 1/8"	2"
H	5/16" DEWALT/ELCO ULTRACON	GROUT FILLED C-90 BLOCK f'm ≥ 1500 PSI	2 1/2"	2 1/4"

TABLE 3 - ANCHOR SPACING				ANCHOR TYPE & SPACING WALL - MOUNT 1								ANCHOR TYPE & SPACING 1x3, 1x4, 2x4, 3x4, 3x3 OR 4x4 BO - MOUNT 2											
TT	PD	Vx	Vy	Vs	Ts	A	B	C	D	E	F	G	H	Vs	Ts	A	B	C	D	E	F	G	H
30	0.0	8.2	0.0	29.5	10	10	10	10	10	10	10	10	10	0.0	0.0	10	10	10	10	10	10	10	10
35	0.0	9.5	0.0	34.4	10	10	10	10	10	10	10	10	10	0.0	0.0	10	10	10	10	10	10	10	10
40	0.0	10.9	0.0	39.3	10	10	10	10	10	10	10	10	10	0.0	9.3	10	10	10	10	10	10	10	10
45	0.0	12.3	0.0	44.2	10	10	10	10	10	10	10	10	10	0.0	10.4	10	10	10	10	10	10	10	10
50	0.0	13.6	0.0	49.1	10	10	10	10	10	10	10	10	10	0.0	11.6	10	10	10	10	10	10	10	10
55	0.0	15.0	0.0	54.0	10	10	10	10	10	10	10	10	10	0.0	12.8	10	10	10	10	10	10	10	10
60	0.0	16.4	0.0	58.9	10	10	10	10	10	10	10	10	10	0.0	13.9	10	10	10	10	10	10	10	10
65	0.0	17.7	0.0	63.9	10	10	10	10	10	10	10	10	10	0.0	15.1	10	10	10	10	10	10	10	10
70	0.0	19.1	0.0	68.8	10	10	10	10	10	10	10	10	10	0.0	16.2	10	10	10	10	10	10	10	10
75	0.0	20.5	0.0	73.7	10	10	10	10	10	10	10	10	10	0.0	17.4	10	10	10	10	10	10	10	10
80	115.2	21.8	115.2	32.5	10	10	5	10	10	10	10	10	6	115.2	278.2	10	4	-	4	3	3	5	-
85	115.2	23.2	115.2	33.0	10	10	5	10	10	10	10	10	6	115.2	278.9	10	4	-	4	3	3	5	-
90	115.2	24.6	115.2	33.6	10	10	5	10	10	10	10	10	6	115.2	279.5	10	4	-	3	3	3	5	-
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100	115.2	27.3	115.2	34.7	10	10	5	10	10	10	10	10	6	115.2	280.8	10	4	-	3	3	3	5	-
105	115.2	28.6	115.2	35.3	10	10	5	10	10	10	10	10	6	115.2	281.4	10	4	-	3	3	3	5	-
110	115.2	30.0	115.2	35.8	10	10	5	10	10	10	10	10	5	115.2	282.1	10	4	-	3	3	3	5	-
115	115.2	31.4	115.2	36.4	10	10	5	10	10	10	10	10	5	115.2	282.7	10	4	-	3	3	3	4	-
120	115.2	32.7	115.2	37.0	10	10	5	10	10	10	10	10	5	115.2	283.3	10	4	-	3	3	3	4	-
125	115.2	34.1	115.2	37.5	10	10	5	10	10	10	10	10	5	115.2	284.0	10	4	-	3	3	3	4	-
130	115.2	35.5	115.2	38.1	10	10	5	10	10	10	10	10	5	115.2	284.6	10	4	-	3	3	3	4	-
135	115.2	36.8	115.2	38.7	10	10	5	10	10	10	10	10	5	115.2	285.3	10	4	-	3	3	3	4	-
140	115.2	38.2	115.2	39.2	10	10	5	10	10	10	10	10	5	115.2	285.9	10	4	-	3	3	3	4	-
145	115.2	39.6	115.2	39.8	10	10	5	10	10	10	10	10	5	115.2	286.5	10	4	-	3	3	3	4	-
30	0.0	9.4	0.0	34.0	10	10	10	10	10	10	10	10	10	0.0	0.0	10	10	10	10	10	10	10	10
35	0.0	11.0	0.0	39.6	10	10	10	10	10	10	10	10	10	0.0	0.0	10	10	10	10	10	10	10	10
40	0.0	12.6	0.0	45.3	10	10	10	10	10	10	10	10	10	0.0	10.7	10	10	10	10	10	10	10	10
45	0.0	14.2	0.0	51.0	10	10	10	10	10	10	10	10	10	0.0	12.0	10	10	10	10	10	10	10	10
50	0.0	15.7	0.0	56.6	10	10	10	10	10	10	10	10	10	0.0	13.4	10	10	10	10	10	10	10	10
55	0.0	17.3	0.0	62.3	10	10	10	10	10	10	10	10	10	0.0	14.7	10	10	10	10	10	10	10	10
60	0.0	18.9	0.0	67.9	10	10	10	10	10	10	10	10	10	0.0	16.1	10	10	10	10	10	10	10	10
65	0.0	20.4	0.0	73.6	10	10	10	10	10	10	10	10	10	0.0	17.4	10	10	10	10	10	10	10	10
70	0.0	22.0	0.0	79.3	10	10	10	10	10	10	10	10	10	0.0	18.7	10	10	10	10	10	10	10	10
75	0.0	23.6	0.0	84.9	10	10	10	10	10	10	10	10	9	0.0	20.1	10	10	10	10	10	10	10	10
80	141.4	25.2	141.4	39.2	10	10	4	10	10	10	10	4	141.4	340.9	10	3	-	-	-	-	3	-	-
85	141.4	26.7	141.4	39.9	10	10	4	10	10	10	10	4	141.4	341.6	10	3	-	-	-	-	3	-	-
90	141.4	28.3	141.4	40.5	10	10	4	10	10	10	10	4	141.4	342.3	10	3	-	-	-	-	3	-	-
95	141.4	29.9	141.4	41.2	10	10	4	10	10	10	10	4	141.4	343.1	10	3	-	-	-	-	3	-	-
100	141.4	31.4	141.4	41.8	10	10	4	10	10	10	10	4	141.4	343.8	10	3	-	-	-	-	3	-	-
105	141.4	33.0	141.4	42.4	10	10	4	10	10	10	10	4	141.4	344.5	10	3	-	-	-	-	3	-	-
110	141.4	34.6	141.4	43.1	10	10	4	10	10	9	10	4	141.4	345.3	10	3	-	-	-	-	3	-	-
115	141.4	36.2	141.4	43.7	10	10	4	10	10	9	10	4	141.4	346.0	10	3	-	-	-	-	3	-	-
120	141.4	37.7	141.4	44.4	10	10	4	10	10	9	10	4	141.4	346.8	10	3	-	-	-	-	3	-	-
125	141.4	39.3	141.4	45.0	10	10	4	10	10	9	10	4	141.4	347.5	10	3	-	-	-	-	3	-	-
130	141.4	40.9	141.4	45.7	10	10	4	10	10	9	10	4	141.4	348.2	10	3	-	-	-	-	3	-	-
135	141.4	42.5	141.4	46.3	10	10	4	10	10	9	10	4	141.4	349.0	10	3	-	-	-	-	3	-	-



4268 WESTROADS DRIVE
WEST PALM BEACH, FL 33407
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55 MMER ROLL SHUTTERS
(WIND ZONE 3 (IMPACT))

HORIZONTAL SECTIONS

PREPARED BY:
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REMARKS	BY	DATE

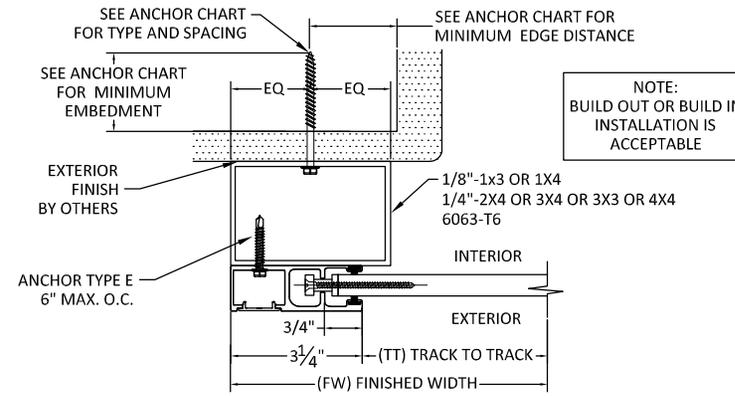
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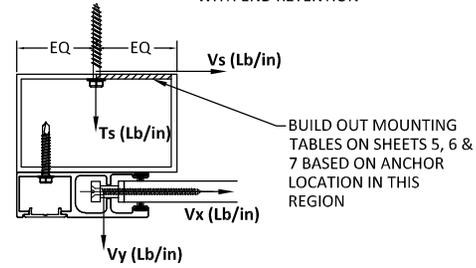
FL22558

DATE:	06.21.23		
DWG. BY:	DI	CHK. BY:	HFN
SCALE:	NTS		
DWG. #:	EMS008		
SHEET:	5		

TYPICAL HORIZONTAL SECTIONS BUILD OUT



F 6 HORIZONTAL SECTION MOUNT TYPE 2 BUILD-OUT MOUNT *WITH END RETENTION



CONTRACTOR TO VERIFY ADEQUACY OF STRUCTURE
NOTE: LOADS Vy AND Vx ARE LOADS IMPOSED BY
SLAT ON TRACK. LOADS Ts AND Vs ARE LOADS
IMPOSED ON STRUCTURE BY ANCHORS.

ANCHOR SCHEDULE:

ANCHOR	DESCRIPTION	MATERIAL	EDGE DISTANCE	EMBEDMENT
A	3/8" DEWALT SCREW-BOLT+	MIN. 3000 PSI CONCRETE	3 3/4"	3 1/2"
B	5/16" ITW TAPCON	MIN. 3000 PSI CONCRETE	2 3/16"	2 1/4"
C	3/8" DEWALT SCREW-BOLT+	GROUT FILLED C-90 BLOCK f'm ≥ 1500 PSI	2"	2 1/2"
D	5/16" ITW TAPCON	GROUT FILLED C-90 BLOCK f'm ≥ 2000 PSI	4"	2 1/4"
E	#14 ELCO DRIL-FLEX SELF DRILLING SCREW	MIN 1/4" 6063-T6 ALUM.	1/2"	3 THREADS PENETRATION
		A36 3/16" STEEL	3/8"	
F	5/16" DEWALT/ELCO ULTRACON	MIN. SG = 0.55 WOOD	1 1/2"	2"
G	5/16" DEWALT/ELCO ULTRACON	MIN. 3515 PSI CONCRETE	3 1/8"	2"
H	5/16" DEWALT/ELCO ULTRACON	GROUT FILLED C-90 BLOCK	2 1/2"	2 1/4"
		f'm > 1500 PSI		

TT	TABLE 3 - ANCHOR SPACING				ANCHOR TYPE & SPACING WALL - MOUNT 1								ANCHOR TYPE & SPACING 1x3, 1x4, 2X4, 3X4, 3X3 OR 4X4 BO - MOUNT 2											
	PD	Vx	Vy	Vs	Ts	A	B	C	D	E	F	G	H	Vs	Ts	A	B	C	D	E	F	G	H	
30	0.0	10.7	0.0	38.5	10	10	10	10	10	10	10	10	10	0.0	9.1	10	10	10	10	10	10	10	10	10
35	0.0	12.5	0.0	44.9	10	10	10	10	10	10	10	10	10	0.0	10.6	10	10	10	10	10	10	10	10	10
40	0.0	14.2	0.0	51.3	10	10	10	10	10	10	10	10	10	0.0	12.1	10	10	10	10	10	10	10	10	10
45	0.0	16.0	0.0	57.7	10	10	10	10	10	10	10	10	10	0.0	13.6	10	10	10	10	10	10	10	10	10
50	0.0	17.8	0.0	64.1	10	10	10	10	10	10	10	10	10	0.0	15.1	10	10	10	10	10	10	10	10	10
55	0.0	19.6	0.0	70.5	10	10	10	10	10	10	10	10	10	0.0	16.7	10	10	10	10	10	10	10	10	10
60	0.0	21.4	0.0	76.9	10	10	10	10	10	10	10	10	10	0.0	18.2	10	10	10	10	10	10	10	10	10
65	0.0	23.1	0.0	83.4	10	10	10	10	10	10	10	10	10	0.0	19.7	10	10	10	10	10	10	10	10	10
70	0.0	24.9	0.0	89.8	10	10	10	10	10	10	10	10	10	0.0	21.2	10	10	10	10	10	10	10	10	10
75	0.0	26.7	0.0	96.2	10	10	10	10	10	10	10	10	10	0.0	22.7	10	10	10	10	10	10	10	10	10
80	167.1	28.5	167.1	45.8	10	10	3	8	9	7	10	3	167.1	402.1	9	-	-	-	-	-	-	-	-	-
85	167.1	30.3	167.1	46.6	10	10	3	8	9	7	10	3	167.1	403.0	9	-	-	-	-	-	-	-	-	-
90	167.1	32.1	167.1	47.3	10	10	3	8	9	7	10	3	167.1	403.8	9	-	-	-	-	-	-	-	-	-
95	167.1	33.8	167.1	48.0	10	10	3	8	9	7	10	3	167.1	404.6	9	-	-	-	-	-	-	-	-	-
100	167.1	35.6	167.1	48.7	10	10	3	8	9	7	10	3	167.1	405.5	9	-	-	-	-	-	-	-	-	-
105	167.1	37.4	167.1	49.5	10	10	3	8	9	7	10	3	167.1	406.3	9	-	-	-	-	-	-	-	-	-
110	167.1	39.2	167.1	50.2	10	10	3	8	8	7	10	3	167.1	407.1	9	-	-	-	-	-	-	-	-	-
115	167.1	41.0	167.1	50.9	10	10	3	8	8	7	10	3	167.1	408.0	9	-	-	-	-	-	-	-	-	-
120	167.1	42.7	167.1	51.7	10	10	3	8	8	7	10	3	167.1	408.8	9	-	-	-	-	-	-	-	-	-
125	167.1	44.5	167.1	52.4	10	10	3	8	8	7	10	3	167.1	409.6	9	-	-	-	-	-	-	-	-	-
30	0.0	11.9	0.0	43.0	10	10	10	10	10	10	10	10	0.0	10.2	10	10	10	10	10	10	10	10	10	10
35	0.0	13.9	0.0	50.1	10	10	10	10	10	10	10	10	0.0	11.8	10	10	10	10	10	10	10	10	10	10
40	0.0	15.9	0.0	57.3	10	10	10	10	10	10	10	10	0.0	13.5	10	10	10	10	10	10	10	10	10	10
45	0.0	17.9	0.0	64.5	10	10	10	10	10	10	10	10	0.0	15.2	10	10	10	10	10	10	10	10	10	10
50	0.0	19.9	0.0	71.6	10	10	10	10	10	10	10	10	0.0	16.9	10	10	10	10	10	10	10	10	10	10
55	0.0	21.9	0.0	78.8	10	10	10	10	10	10	10	10	0.0	18.6	10	10	10	10	10	10	10	10	10	10
60	0.0	23.9	0.0	85.9	10	10	10	10	10	10	10	10	0.0	20.3	10	10	10	10	10	10	10	10	10	10
65	0.0	25.9	0.0	93.1	10	10	10	10	10	10	10	10	0.0	22.0	10	10	10	10	10	10	10	10	10	10
70	0.0	27.8	0.0	100.3	10	10	10	10	10	10	10	10	0.0	23.7	10	10	10	10	10	10	10	10	10	10
75	0.0	29.8	0.0	107.4	10	10	10	10	10	10	10	10	0.0	25.4	10	10	10	10	10	10	10	10	10	10
80	191.4	31.8	191.4	52.1	10	10	-	6	7	6	10	-	191.4	460.1	7	-	-	-	-	-	-	-	-	-
85	191.4	33.8	191.4	53.0	10	10	-	6	7	6	10	-	191.4	461.1	7	-	-	-	-	-	-	-	-	-
90	191.4	35.8	191.4	53.8	10	9	-	6	7	6	10	-	191.4	462.0	7	-	-	-	-	-	-	-	-	-
95	191.4	37.8	191.4	54.6	10	9	-	6	7	6	10	-	191.4	462.9	7	-	-	-	-	-	-	-	-	-
100	191.4	39.8	191.4	55.4	10	9	-	6	7	6	10	-	191.4	463.8	7	-	-	-	-	-	-	-	-	-
105	191.4	41.8	191.4	56.2	10	9	-	6	7	6	10	-	191.4	464.8	7	-	-	-	-	-	-	-	-	-
110	191.4	43.8	191.4	57.0	10	9	-	6	7	6	10	-	191.4	465.7	7	-	-	-	-	-	-	-	-	-
115	191.4	45.7	191.4	57.9	10	9	-	6	7	6	10	-	191.4	466.6	7	-	-	-	-	-	-	-	-	-
120	191.4	47.7	191.4	58.7	10	9	-	6	7	6	10	-	191.4	467.6	7	-	-	-	-	-	-	-	-	-

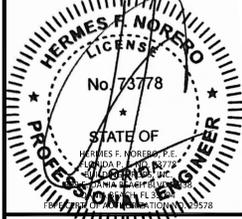


55 MMER ROLL SHUTTERS
(WIND ZONE 3(IMPACT))
WALL MOUNT & BUILD OUT
ANCHOR SPACING

PREPARED BY:
BUILDING DROPS, INC.
 3911 E. PALM BEACH BLVD. SUITE 338
 PALM BEACH, FL 33404
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 WEB: www.buildingdrops.com

REMARKS	BY	DATE

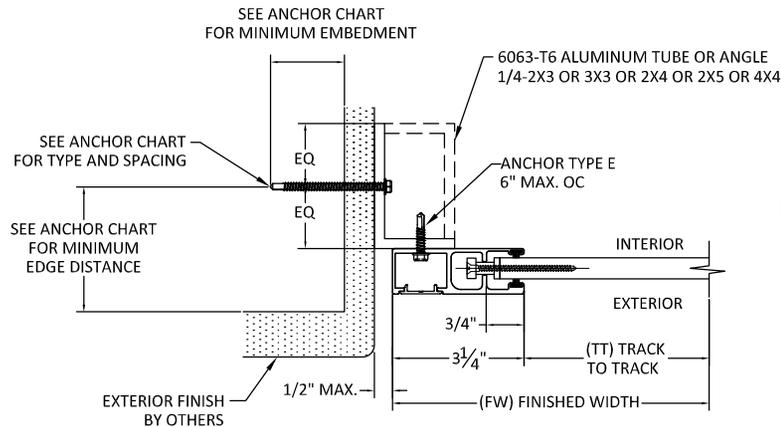
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DATE: 06.21.23
 DWG. BY: DI CHK. BY: HFN
 SCALE: NTS
 DWG. #: EMS008
 SHEET:

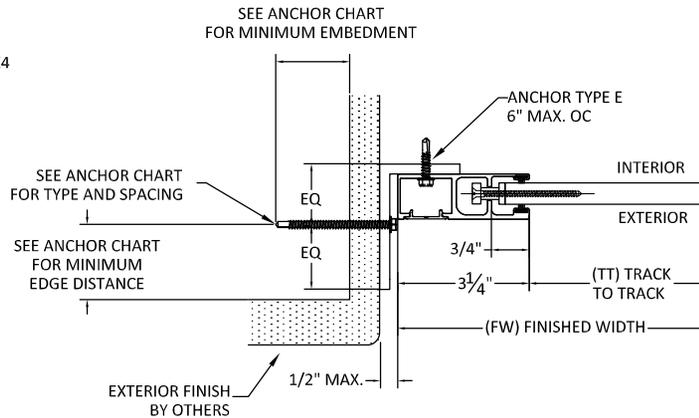
TYPICAL HORIZONTAL SECTIONS INSET MOUNT



H8 HORIZONTAL SECTION

MOUNT TYPE 3
INSET MOUNT

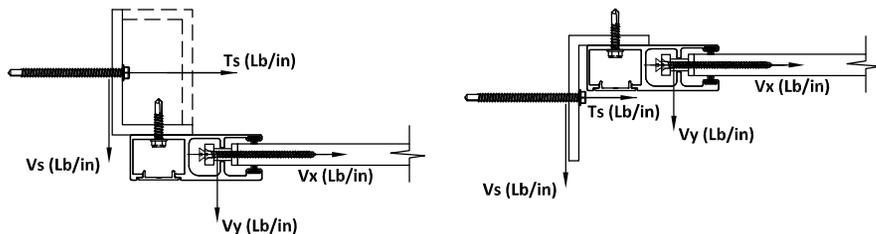
*WITH END RETENTION



H1 HORIZONTAL SECTION

MOUNT TYPE 3 - ALTERNATE
INSET MOUNT

*WITH END RETENTION



CONTRACTOR TO VERIFY ADEQUACY OF STRUCTURE
NOTE: LOADS V_y AND V_x ARE LOADS IMPOSED BY SLAT ON TRACK. LOADS T_s AND V_s ARE LOADS IMPOSED ON STRUCTURE BY ANCHORS.

SEE SHEETS 9, 10 & 11 FOR ANCHOR SPACING TABLES

ANCHOR SCHEDULE:

ANCHOR	DESCRIPTION	MATERIAL	EDGE DISTANCE	EMBEDMENT
A	3/8" DEWALT SCREW-BOLT+	MIN. 3000 PSI CONCRETE	3 3/4"	3 1/2"
B	5/16" ITW TAPCON	MIN. 3000 PSI CONCRETE	2 3/16"	2 1/4"
C	3/8" DEWALT SCREW-BOLT+	GROUT FILLED C-90 BLOCK $f_m \geq 1500$ PSI	2"	2 1/2"
D	5/16" ITW TAPCON	GROUT FILLED C-90 BLOCK $f_m \geq 2000$ PSI	4"	2 1/4"
E	#14 ELCO DRIL-FLEX SELF DRILLING SCREW	MIN 1/4" 6063-T6 ALUM. A36 3/16" STEEL	1/2" 3/8"	3 THREADS PENETRATION
F	5/16" DEWALT/ELCO ULTRACON	MIN. SG = 0.55 WOOD	1 1/2"	2"
G	5/16" DEWALT/ELCO ULTRACON	MIN. 3515 PSI CONCRETE	3 1/8"	2"
H	5/16" DEWALT/ELCO ULTRACON	GROUT FILLED C-90 BLOCK $f_m \geq 1500$ PSI	2 1/2"	2 1/4"

ASSA

4268 WESTROADS DRIVE
WEST PALM BEACH, FL 33407
PH: 1-800-432-2204
FAX: 561-841-0852

TITLE: 55 MMER ROLL SHUTTERS
(WIND ZONE 3)(IMPACT)

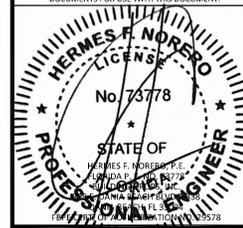
INSET MOUNT HORIZONTAL SECTION

PREPARED BY:
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BUILDING DROPS

REMARKS	BY	DATE

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CHK. BY: HFN

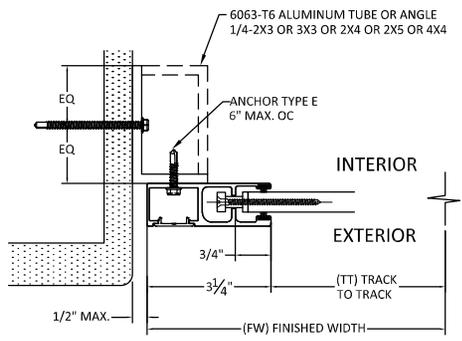
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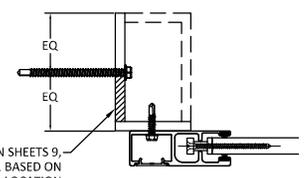
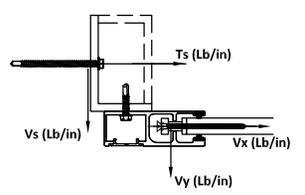
SHEET:

8

TYPICAL HORIZONTAL SECTIONS INSET MOUNT



**J
9**
HORIZONTAL SECTION
MOUNT TYPE 3
INSET MOUNT
*WITH END RETENTION



TABLES ON SHEETS 9,
10 & 11 BASED ON
ANCHOR LOCATION
IN THIS REGION

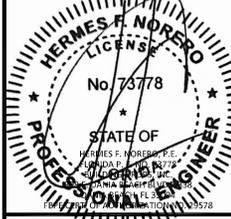
TABLE 4 - ANCHOR SPACING					ANCHOR TYPE & SPACING 2X3 OR 3X3 INSET - MOUNT 3								ANCHOR TYPE & SPACING 2X4 OR 4X4 INSET - MOUNT 3								ANCHOR TYPE & SPACING 2X5 INSET - MOUNT 3								
TT	PD	Vx	Vy	Vs	Ts	A	B	C	D	E	F	G	H	A	B	C	D	E	F	G	H	A	B	C	D	E	F	G	H
30	0	8.18	8.18	15.27	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
35	0	9.55	9.55	17.81	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
40	0	10.91	10.91	20.36	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
45	0	12.28	12.28	22.90	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
50	0	13.64	13.64	25.44	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
55	0	15.00	15.00	27.99	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
60	0	16.37	16.37	30.53	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
65	0	17.73	17.73	33.08	10	10	9	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
70	0	19.10	19.10	35.62	10	10	9	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
75	0	20.46	20.46	38.17	10	10	8	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
80	115.1956	21.83	21.83	308.72	6	-	-	-	-	-	-	5	-	10	5	3	4	4	4	5	-	10	5	4	5	4	4	6	-
85	115.1956	23.19	23.19	311.27	6	-	-	-	-	-	-	5	-	10	5	3	4	4	4	5	-	10	5	4	5	4	4	6	-
90	115.1956	24.55	24.55	313.81	6	-	-	-	-	-	-	5	-	10	5	3	4	4	4	5	-	10	5	4	5	4	4	6	-
95	115.1956	25.92	25.92	316.36	5	-	-	-	-	-	-	4	-	10	4	3	4	4	4	5	-	10	5	3	5	4	4	5	-
100	115.1956	27.28	27.28	318.90	5	-	-	-	-	-	-	4	-	10	4	3	4	4	4	5	-	10	5	3	4	4	4	5	-
105	115.1956	28.65	28.65	321.45	5	-	-	-	-	-	-	4	-	10	4	3	4	3	4	5	-	10	5	3	4	4	4	5	-
110	115.1956	30.01	30.01	323.99	5	-	-	-	-	-	-	4	-	10	4	3	4	3	4	5	-	10	5	3	4	4	4	5	-
115	115.1956	31.37	31.37	326.54	5	-	-	-	-	-	-	4	-	10	4	3	4	3	4	5	-	10	5	3	4	4	4	5	-
120	115.1956	32.74	32.74	329.08	5	-	-	-	-	-	-	4	-	10	4	3	4	3	4	5	-	10	5	3	4	4	4	5	-
125	115.1956	34.10	34.10	331.62	5	-	-	-	-	-	-	4	-	10	4	3	4	3	4	5	-	10	5	3	4	4	4	5	-
130	115.1956	35.47	35.47	334.17	5	-	-	-	-	-	-	4	-	10	4	3	4	3	4	5	-	10	5	3	4	4	4	5	-
135	115.1956	36.83	36.83	336.71	5	-	-	-	-	-	-	4	-	10	4	3	4	3	3	5	-	10	4	3	4	4	4	5	-
140	115.1956	38.19	38.19	339.26	5	-	-	-	-	-	-	4	-	10	4	3	4	3	3	5	-	10	4	3	4	3	4	5	-
145	115.1956	39.56	39.56	341.80	5	-	-	-	-	-	-	4	-	10	4	3	4	3	3	4	-	10	4	3	4	3	4	5	-
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35	0	11.01	11.01	20.53	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
40	0	12.58	12.58	23.46	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
45	0	14.15	14.15	26.40	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
50	0	15.72	15.72	29.33	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
55	0	17.30	17.30	32.26	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
60	0	18.87	18.87	35.20	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
65	0	20.44	20.44	38.13	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
70	0	22.01	22.01	41.06	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
75	0	23.59	23.59	44.00	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
80	141.4481	25.16	25.16	376.02	10	3	-	3	-	-	3	-	10	3	-	3	3	3	4	-	10	3	-	3	3	3	4	-	
85	141.4481	26.73	26.73	378.95	10	3	-	3	-	-	3	-	10	3	-	3	3	3	4	-	10	3	-	3	3	3	4	-	
90	141.4481	28.30	28.30	381.89	10	3	-	3	-	-	3	-	10	3	-	3	3	3	4	-	10	3	-	3	3	3	4	-	
95	141.4481	29.88	29.88	384.82	10	3	-	3	-	-	3	-	10	3	-	3	3	3	4	-	10	3	-	3	3	3	4	-	
100	141.4481	31.45	31.45	387.75	10	3	-	3	-	-	3	-	10	3	-	3	3	3	4	-	10	3	-	3	3	3	4	-	
105	141.4481	33.02	33.02	390.69	10	3	-	3	-	-	3	-	10	3	-	3	3	3	4	-	10	3	-	3	3	3	4	-	
110	141.4481	34.59	34.59	393.62	10	3	-	3	-	-	3	-	10	3	-	3	3	3	4	-	10	3	-	3	3	3	4	-	
115	141.4481	36.17	36.17	396.55	10	3	-	3	-	-	3	-	10	3	-	3	3	3	4	-	10	3	-	3	3	3	4	-	
120	141.4481	37.74	37.74	399.49	10	-	-	-	-	-	3	-	10	3	-	3	3	3	4	-	10	3	-	3	3	3	4	-	
125	141.4481	39.31	39.31	402.42	10	-	-	-	-	-	3	-	10	3	-	3	3	3	4	-	10	3	-	3	3	3	4	-	
130	141.4481	40.88	40.88	405.35	10	-	-	-	-	-	3	-	10	3	-	3	3	3	4	-	10	3	-	3	3	3	4	-	
135	141.4481	42.45	42.45	408.29	10	-	-	-	-	-	3	-	10	3	-	3	3	3	4	-	10	3	-	3	3	3	4	-	



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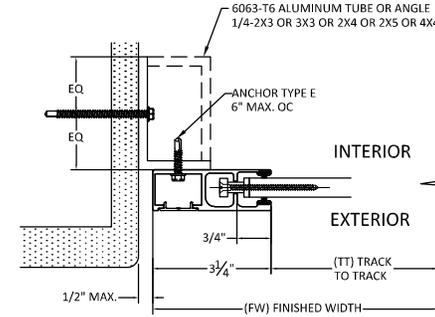
THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT.



FL22558

DATE: 06.21.23
DWG. BY: DI
CHK. BY: HFN
SCALE: NTS
DWG. #: EMS008
SHEET:

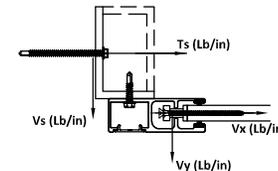
TYPICAL HORIZONTAL SECTIONS INSET MOUNT



J
10

HORIZONTAL SECTION

MOUNT TYPE 3
INSET MOUNT
*WITH END RETENTION



CONTRACTOR TO VERIFY ADEQUACY OF STRUCTURE
NOTE: LOADS Vy AND Vx ARE LOADS IMPOSED BY SLAT ON TRACK. LOADS Ts AND Vs ARE LOADS IMPOSED ON STRUCTURE BY ANCHORS.

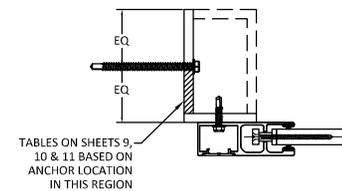


TABLE 4 - ANCHOR SPACING						ANCHOR TYPE & SPACING 2X3 OR 3X3 INSET - MOUNT 3								ANCHOR TYPE & SPACING 2X4 OR 4X4 INSET - MOUNT 3								ANCHOR TYPE & SPACING 2X5 INSET - MOUNT 3							
TT	PD	Vx	Vy	Vs	Ts	A	B	C	D	E	F	G	H	A	B	C	D	E	F	G	H	A	B	C	D	E	F	G	H
96	30	0	10.68	10.68	19.93	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
	35	0	12.47	12.47	23.25	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
	40	0	14.25	14.25	26.57	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
	45	0	16.03	16.03	29.89	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
	50	0	17.81	17.81	33.22	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
	55	0	19.59	19.59	36.54	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
	60	0	21.37	21.37	39.86	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
	65	0	23.15	23.15	43.18	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
	70	0	24.93	24.93	46.50	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
	75	0	26.71	26.71	49.82	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
	80	167.1109	28.49	28.49	441.95	10	-	-	-	-	-	-	-	-	10	-	-	-	-	-	-	3	-	10	3	-	-	3	-
	85	167.1109	30.27	30.27	445.27	10	-	-	-	-	-	-	-	-	10	-	-	-	-	-	-	3	-	10	-	-	-	3	-
	90	167.1109	32.05	32.05	448.59	10	-	-	-	-	-	-	-	-	10	-	-	-	-	-	-	3	-	10	-	-	-	3	-
	95	167.1109	33.83	33.83	451.91	10	-	-	-	-	-	-	-	-	10	-	-	-	-	-	-	3	-	10	-	-	-	3	-
100	167.1109	35.61	35.61	455.23	10	-	-	-	-	-	-	-	-	10	-	-	-	-	-	-	3	-	10	-	-	-	3	-	
105	167.1109	37.40	37.40	458.56	10	-	-	-	-	-	-	-	-	10	-	-	-	-	-	-	3	-	10	-	-	-	3	-	
110	167.1109	39.18	39.18	461.88	10	-	-	-	-	-	-	-	-	10	-	-	-	-	-	-	3	-	10	-	-	-	3	-	
115	167.1109	40.96	40.96	465.20	10	-	-	-	-	-	-	-	-	10	-	-	-	-	-	-	3	-	10	-	-	-	3	-	
120	167.1109	42.74	42.74	468.52	10	-	-	-	-	-	-	-	-	10	-	-	-	-	-	-	3	-	10	-	-	-	3	-	
125	167.1109	44.52	44.52	471.84	10	-	-	-	-	-	-	-	-	10	-	-	-	-	-	-	3	-	10	-	-	-	3	-	
108	30	0	11.93	11.93	22.26	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
	35	0	13.92	13.92	25.97	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
	40	0	15.91	15.91	29.68	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
	45	0	17.90	17.90	33.39	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
	50	0	19.89	19.89	37.10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
	55	0	21.88	21.88	40.81	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
	60	0	23.87	23.87	44.52	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
	65	0	25.86	25.86	48.23	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
	70	0	27.85	27.85	51.94	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
	75	0	29.84	29.84	55.65	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
	80	191.3637	31.83	31.83	504.59	10	-	-	-	-	-	-	-	-	10	-	-	-	-	-	-	-	-	10	-	-	-	-	-
	85	191.3637	33.81	33.81	508.30	10	-	-	-	-	-	-	-	-	10	-	-	-	-	-	-	-	-	10	-	-	-	-	-
	90	191.3637	35.80	35.80	512.01	10	-	-	-	-	-	-	-	-	10	-	-	-	-	-	-	-	-	10	-	-	-	-	-
	95	191.3637	37.79	37.79	515.72	10	-	-	-	-	-	-	-	-	10	-	-	-	-	-	-	-	-	10	-	-	-	-	-
100	191.3637	39.78	39.78	519.43	10	-	-	-	-	-	-	-	-	10	-	-	-	-	-	-	-	-	10	-	-	-	-	-	
105	191.3637	41.77	41.77	523.14	10	-	-	-	-	-	-	-	-	10	-	-	-	-	-	-	-	-	10	-	-	-	-	-	
110	191.3637	43.76	43.76	526.85	10	-	-	-	-	-	-	-	-	10	-	-	-	-	-	-	-	-	10	-	-	-	-	-	
115	191.3637	45.75	45.75	530.56	10	-	-	-	-	-	-	-	-	10	-	-	-	-	-	-	-	-	10	-	-	-	-	-	
120	191.3637	47.74	47.74	534.27	9	-	-	-	-	-	-	-	-	10	-	-	-	-	-	-	-	-	10	-	-	-	-	-	

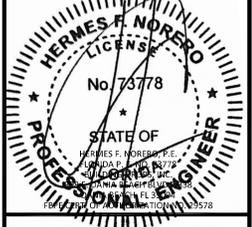
TITLE: 55 MMER ROLL SHUTTERS (WIND ZONE 3)(IMPACT)
INSET MOUNT ANCHOR SPACING

PREPARED BY:
BUILDING DROPS, INC.
391 E. PALM BEACH BLVD., SUITE 336
PALM BEACH, FL 33404
PH: (954)399-8478
FAX: (954)744-4738
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REMARKS	BY	DATE

THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT.



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CHK. BY:	HFN
SCALE:	NTS
DWG. #:	EMS008
SHEET:	10



4268 WESTROADS DRIVE
WEST PALM BEACH, FL 33407
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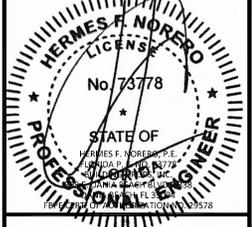
TITLE: 55 MMER ROLL SHUTTERS
(WIND ZONE 3/IMPACT)
OFFSET ANCHOR INSET MOUNT
ANCHOR SPACING

PREPARED BY:
BUILDING DROPS, INC.
391 E. PALM BEACH BLVD. SUITE 338
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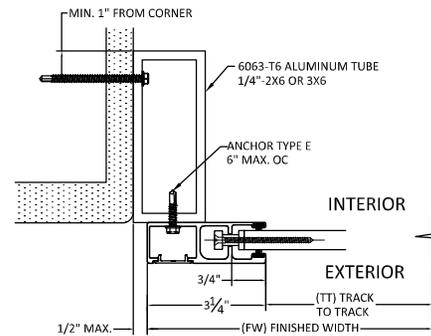
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SCALE: NTS
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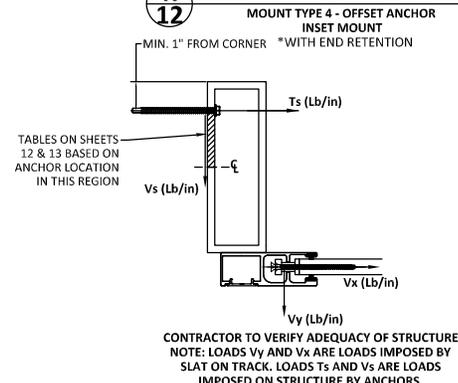
TT	TABLE 4 - ANCHOR SPACING					ANCHOR TYPE & SPACING 2X3 OR 3X3 INSET - MOUNT 3					ANCHOR TYPE & SPACING 2X4 OR 4X4 INSET - MOUNT 3					ANCHOR TYPE & SPACING 2X5 INSET - MOUNT 3													
	PD	Vx	Vy	Vs	Ts	A	B	C	D	E	F	G	H	A	B	C	D	E	F	G	H	A	B	C	D	E	F	G	H
30	0	13.18	13.18	24.59	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
35	0	15.38	15.38	28.69	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
40	0	17.58	17.58	32.79	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
45	0	19.78	19.78	36.89	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
50	0	21.97	21.97	40.99	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
55	0	24.17	24.17	45.09	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
60	0	26.37	26.37	49.19	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
65	0	28.57	28.57	53.29	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
70	0	30.76	30.76	57.38	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
75	213.4498	32.96	32.96	558.10	9	-	-	-	-	-	-	-	-	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
80	213.4498	35.16	35.16	562.19	9	-	-	-	-	-	-	-	-	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
85	213.4498	37.36	37.36	566.29	9	-	-	-	-	-	-	-	-	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
90	213.4498	39.55	39.55	570.39	9	-	-	-	-	-	-	-	-	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
95	213.4498	41.75	41.75	574.49	8	-	-	-	-	-	-	-	-	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
100	213.4498	43.95	43.95	578.59	8	-	-	-	-	-	-	-	-	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
105	213.4498	46.15	46.15	582.69	8	-	-	-	-	-	-	-	-	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
110	213.4498	48.34	48.34	586.79	8	-	-	-	-	-	-	-	-	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
30	0	14.43	14.43	26.92	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
35	0	16.84	16.84	31.41	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
40	0	19.25	19.25	35.90	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
45	0	21.65	21.65	40.39	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
50	0	24.06	24.06	44.87	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
55	0	26.46	26.46	49.36	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
60	0	28.87	28.87	53.85	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
65	0	31.27	31.27	58.34	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
70	232.6705	33.68	33.68	604.16	8	-	-	-	-	-	-	-	-	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
75	232.6705	36.09	36.09	608.64	8	-	-	-	-	-	-	-	-	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
80	232.6705	38.49	38.49	613.13	8	-	-	-	-	-	-	-	-	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
85	232.6705	40.90	40.90	617.62	8	-	-	-	-	-	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
90	232.6705	43.30	43.30	622.11	7	-	-	-	-	-	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
95	232.6705	45.71	45.71	626.59	7	-	-	-	-	-	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
100	232.6705	48.11	48.11	631.08	7	-	-	-	-	-	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
30	0	15.68	15.68	29.26	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
35	0	18.30	18.30	34.13	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
40	0	20.91	20.91	39.01	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
45	0	23.53	23.53	43.88	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
50	0	26.14	26.14	48.76	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
55	0	28.75	28.75	53.64	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
60	0	31.37	31.37	58.51	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
65	0	33.98	33.98	63.39	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
70	248.3793	36.60	36.60	646.14	7	-	-	-	-	-	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
75	248.3793	39.21	39.21	651.02	7	-	-	-	-	-	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
80	248.3793	41.83	41.83	655.90	7	-	-	-	-	-	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
85	248.3793	44.44	44.44	660.77	7	-	-	-	-	-	-	-	-	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
90	248.3793	47.05	47.05	665.65	7	-	-	-	-	-	-	-	-	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
95	248.3793	49.67	49.67	670.53	6	-	-	-	-	-	-	-	-	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
30	0	18.18	18.18	33.92	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
35	0	21.22	21.22	39.57	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
40	0	24.25	24.25	45.23	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
45	0	27.28	27.28	50.88	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
50	0	30.31	30.31	56.53	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
55	0	33.34	33.34	62.19	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
60	266.909	36.37	36.37	688.83	6	-	-	-	-	-	-	-	-	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
65	266.909	39.40	39.40	694.48	6	-	-	-	-	-	-	-	-	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
70	266.909	42.43	42.43	700.14	6	-	-	-																					

TABLE 5 - ANCHOR SPACING						ANCHOR TYPE & SPACING 2X6 OR 3X6 OFFSET ANCHOR INSET - MOUNT 4								
TT	PD	Vx	Vy	Vs	Ts	A	B	C	D	E	F	G	H	
72	30	0	8.18	8.18	22.90	10	10	10	10	10	10	10	10	
	35	0	9.55	9.55	26.72	10	10	10	10	10	10	10	10	
	40	0	10.91	10.91	30.53	10	10	10	10	10	10	10	10	
	45	0	12.28	12.28	34.35	10	10	10	10	10	10	10	10	
	50	0	13.64	13.64	38.17	10	10	10	10	10	10	10	10	
	55	0	15.00	15.00	41.98	10	10	10	10	10	10	10	10	
	60	0	16.37	16.37	45.80	10	10	10	10	10	10	10	10	
	65	0	17.73	17.73	49.62	10	10	10	10	10	10	10	10	
	70	0	19.10	19.10	53.43	10	10	10	10	10	10	10	10	
	75	0	20.46	20.46	57.25	10	10	10	10	10	10	10	10	
	80	115.1956	21.83	21.83	61.07	5	-	-	-	-	-	-	-	-
	85	115.1956	23.19	23.19	64.90	5	-	-	-	-	-	-	-	-
	90	115.1956	24.55	24.55	68.72	5	-	-	-	-	-	-	-	-
	95	115.1956	25.92	25.92	72.55	5	-	-	-	-	-	-	-	-
	100	115.1956	27.28	27.28	76.37	5	-	-	-	-	-	-	-	-
105	115.1956	28.65	28.65	80.20	5	-	-	-	-	-	-	-	-	
110	115.1956	30.01	30.01	84.03	5	-	-	-	-	-	-	-	-	
115	115.1956	31.37	31.37	87.86	4	-	-	-	-	-	-	-	-	
120	115.1956	32.74	32.74	91.69	4	-	-	-	-	-	-	-	-	
125	115.1956	34.10	34.10	95.52	4	-	-	-	-	-	-	-	-	
130	115.1956	35.47	35.47	99.35	4	-	-	-	-	-	-	-	-	
135	115.1956	36.83	36.83	103.18	4	-	-	-	-	-	-	-	-	
140	115.1956	38.19	38.19	107.01	4	-	-	-	-	-	-	-	-	
145	115.1956	39.56	39.56	110.84	4	-	-	-	-	-	-	-	-	
84	30	0	9.43	9.43	26.40	10	10	10	10	10	10	10	10	
	35	0	11.01	11.01	30.80	10	10	10	10	10	10	10	10	
	40	0	12.58	12.58	35.20	10	10	10	10	10	10	10	10	
	45	0	14.15	14.15	39.60	10	10	10	10	10	10	10	10	
	50	0	15.72	15.72	44.00	10	10	10	10	10	10	10	10	
	55	0	17.30	17.30	48.40	10	10	10	10	10	10	10	10	
	60	0	18.87	18.87	52.79	10	10	10	10	10	10	10	10	
	65	0	20.44	20.44	57.19	10	10	10	10	10	10	10	10	
	70	0	22.01	22.01	61.59	10	10	10	10	10	10	10	10	
	75	0	23.59	23.59	65.99	10	10	10	10	10	10	10	10	
	80	141.4481	25.16	25.16	70.38	3	-	-	-	-	-	-	-	-
	85	141.4481	26.73	26.73	74.78	3	-	-	-	-	-	-	-	-
	90	141.4481	28.30	28.30	79.18	3	-	-	-	-	-	-	-	-
	95	141.4481	29.88	29.88	83.58	3	-	-	-	-	-	-	-	-
	100	141.4481	31.45	31.45	87.98	3	-	-	-	-	-	-	-	-
105	141.4481	33.02	33.02	92.37	3	-	-	-	-	-	-	-	-	
110	141.4481	34.59	34.59	96.77	3	-	-	-	-	-	-	-	-	
115	141.4481	36.17	36.17	101.17	3	-	-	-	-	-	-	-	-	
120	141.4481	37.74	37.74	105.57	3	-	-	-	-	-	-	-	-	
125	141.4481	39.31	39.31	109.97	3	-	-	-	-	-	-	-	-	
130	141.4481	40.88	40.88	114.37	3	-	-	-	-	-	-	-	-	
135	141.4481	42.45	42.45	118.77	3	-	-	-	-	-	-	-	-	
96	30	0	10.68	10.68	29.89	10	10	10	10	10	10	10	10	
	35	0	12.47	12.47	34.88	10	10	10	10	10	10	10	10	
	40	0	14.25	14.25	39.86	10	10	10	10	10	10	10	10	
	45	0	16.03	16.03	44.84	10	10	10	10	10	10	10	10	
	50	0	17.81	17.81	49.82	10	10	10	10	10	10	10	10	
	55	0	19.59	19.59	54.81	10	10	10	10	10	10	10	10	
	60	0	21.37	21.37	59.79	10	10	10	10	10	10	10	10	
	65	0	23.15	23.15	64.77	10	10	10	10	10	10	10	10	
	70	0	24.93	24.93	69.75	10	10	10	10	10	10	10	9	
	75	0	26.71	26.71	74.74	10	10	10	10	10	10	10	8	
	80	167.1109	28.49	28.49	79.72	-	-	-	-	-	-	-	-	-
	85	167.1109	30.27	30.27	84.71	-	-	-	-	-	-	-	-	-
	90	167.1109	32.05	32.05	89.70	-	-	-	-	-	-	-	-	-
	95	167.1109	33.83	33.83	94.69	-	-	-	-	-	-	-	-	-
	100	167.1109	35.61	35.61	99.68	-	-	-	-	-	-	-	-	-
105	167.1109	37.40	37.40	104.67	-	-	-	-	-	-	-	-	-	
110	167.1109	39.18	39.18	109.66	-	-	-	-	-	-	-	-	-	
115	167.1109	40.96	40.96	114.65	-	-	-	-	-	-	-	-	-	
120	167.1109	42.74	42.74	119.64	-	-	-	-	-	-	-	-	-	
125	167.1109	44.52	44.52	124.63	-	-	-	-	-	-	-	-	-	

TYPICAL HORIZONTAL SECTIONS OFFSET ANCHOR INSET MOUNT



K 12 HORIZONTAL SECTION



ANCHOR SCHEDULE:

ANCHOR	DESCRIPTION	MATERIAL	EDGE DISTANCE	EMBEDMENT
A	3/8" DEWALT SCREW-BOLT+	MIN. 3000 PSI CONCRETE	3 3/4"	3 1/2"
B	5/16" ITW TAPCON	MIN. 3000 PSI CONCRETE	2 3/16"	2 1/4"
C	3/8" DEWALT SCREW-BOLT+	GROUT FILLED C-90 BLOCK f'm ≥ 1500 PSI	2"	2 1/2"
D	5/16" ITW TAPCON	GROUT FILLED C-90 BLOCK f'm ≥ 2000 PSI	4"	2 1/4"
E	#14 ELCO DRIL-FLEX SELF DRILLING SCREW	MIN 1/4" 6063-T6 ALUM. A36 3/16" STEEL	1/2" 3/8"	3 THREADS PENETRATION
F	5/16" DEWALT/ELCO ULTRA CON	MIN. SG = 0.55 WOOD	1 1/2"	2"
G	5/16" DEWALT/ELCO ULTRA CON	MIN. 3515 PSI CONCRETE	3 1/8"	2"
H	5/16" DEWALT/ELCO ULTRA CON	GROUT FILLED C-90 BLOCK f'm ≥ 1500 PSI	2 1/2"	2 1/4"

ASSA

4268 WESTROADS DRIVE
WEST PALM BEACH, FL 33407
PH: 1-800-432-2204
FAX: 561-841-0852

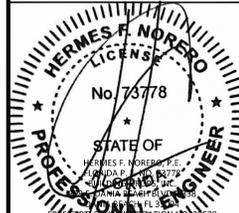
TITLE: 55 MMER ROLL SHUTTERS
(WIND ZONE 3 (IMPACT))
OFFSET ANCHOR INSET MOUNT
ANCHOR SPACING

PREPARED BY:
BUILDING DROPS, INC.
391 E. PALM BEACH BLVD. SUITE 338
PALM BEACH, FL 33404
PH: (561) 959-8478
FAX: (561) 744-4738
WEB: www.buildingdrops.com

BD
BUILDING DROPS

REMARKS	BY	DATE

THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT.



FL22558

DATE: 06.21.23

DWG. BY: DI

CHK. BY: HFN

SCALE: NTS

DWG. #: EMS008

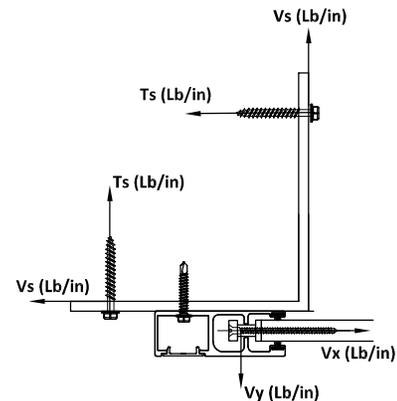
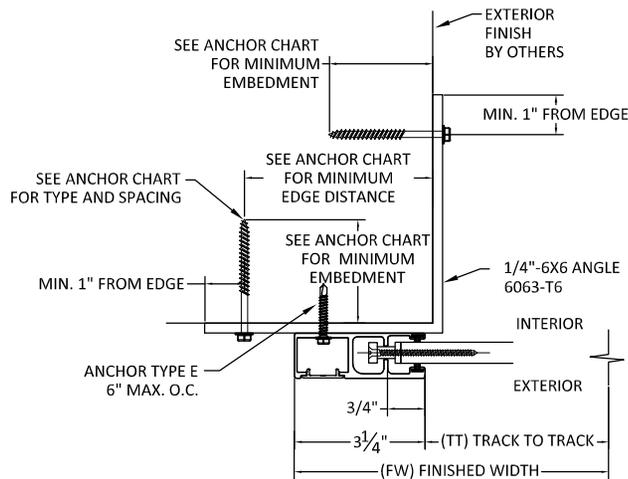
SHEET:

12

OF 23

TYPICAL HORIZONTAL SECTIONS CORNER ANGLE

TABLE 6 - ANCHOR SPACING						ANCHOR TYPE & SPACING 6X6 CORNER ANGLE ANCHOR - MOUNT 5							
TT	PD	Vx	Vy	Vs	Ts	A	B	C	D	E	F	G	H
72	30	0	8.18	0.00	8.18	10	10	10	10	10	10	10	10
	35	0	9.55	0.00	9.55	10	10	10	10	10	10	10	10
	40	0	10.91	0.00	10.91	10	10	10	10	10	10	10	10
	45	0	12.28	0.00	12.28	10	10	10	10	10	10	10	10
	50	0	13.64	0.00	13.64	10	10	10	10	10	10	10	10
	55	0	15.00	0.00	15.00	10	10	10	10	10	10	10	10
	60	0	16.37	0.00	16.37	10	10	10	10	10	10	10	10
	65	0	17.73	0.00	17.73	10	10	10	10	10	10	10	10
	70	0	19.10	0.00	19.10	10	10	10	10	10	10	10	10
	75	0	20.46	0.00	20.46	10	10	10	10	10	10	10	10
	80	115.1956	21.83	115.20	21.83	10	10	5	10	10	10	10	6
	85	115.1956	23.19	115.20	23.19	10	10	5	10	10	10	10	6
	90	115.1956	24.55	115.20	24.55	10	10	5	10	10	10	10	6
	95	115.1956	25.92	115.20	25.92	10	10	5	10	10	10	10	6
	100	115.1956	27.28	115.20	27.28	10	10	5	10	10	10	10	6
105	115.1956	28.65	115.20	28.65	10	10	5	10	10	10	10	6	
110	115.1956	30.01	115.20	30.01	10	10	5	10	10	10	10	6	
115	115.1956	31.37	115.20	31.37	10	10	5	10	10	10	10	6	
120	115.1956	32.74	115.20	32.74	10	10	5	10	10	10	10	6	
125	115.1956	34.10	115.20	34.10	10	10	5	10	10	10	10	5	
130	115.1956	35.47	115.20	35.47	10	10	5	10	10	10	10	5	
135	115.1956	36.83	115.20	36.83	10	10	5	10	10	10	10	5	
140	115.1956	38.19	115.20	38.19	10	10	5	10	10	10	10	5	
145	115.1956	39.56	115.20	39.56	10	10	5	10	10	10	10	5	
84	30	0	9.43	0.00	9.43	10	10	10	10	10	10	10	10
	35	0	11.01	0.00	11.01	10	10	10	10	10	10	10	10
	40	0	12.58	0.00	12.58	10	10	10	10	10	10	10	10
	45	0	14.15	0.00	14.15	10	10	10	10	10	10	10	10
	50	0	15.72	0.00	15.72	10	10	10	10	10	10	10	10
	55	0	17.30	0.00	17.30	10	10	10	10	10	10	10	10
	60	0	18.87	0.00	18.87	10	10	10	10	10	10	10	10
	65	0	20.44	0.00	20.44	10	10	10	10	10	10	10	10
	70	0	22.01	0.00	22.01	10	10	10	10	10	10	10	10
	75	0	23.59	0.00	23.59	10	10	10	10	10	10	10	10
	80	141.4481	25.16	141.45	25.16	10	10	4	10	10	10	10	4
	85	141.4481	26.73	141.45	26.73	10	10	4	10	10	10	10	4
	90	141.4481	28.30	141.45	28.30	10	10	4	10	10	10	10	4
	95	141.4481	29.88	141.45	29.88	10	10	4	10	10	10	10	4
	100	141.4481	31.45	141.45	31.45	10	10	4	10	10	10	10	4
105	141.4481	33.02	141.45	33.02	10	10	4	10	10	10	10	4	
110	141.4481	34.59	141.45	34.59	10	10	4	10	10	10	10	4	
115	141.4481	36.17	141.45	36.17	10	10	4	10	10	10	10	4	
120	141.4481	37.74	141.45	37.74	10	10	4	10	10	10	10	4	
125	141.4481	39.31	141.45	39.31	10	10	4	10	10	10	10	4	
130	141.4481	40.88	141.45	40.88	10	10	4	10	10	10	9	4	
135	141.4481	42.45	141.45	42.45	10	10	4	10	10	10	9	4	



CONTRACTOR TO VERIFY ADEQUACY OF STRUCTURE
NOTE: LOADS Vy AND Vx ARE LOADS IMPOSED BY SLAT ON TRACK. LOADS Ts AND Vs ARE LOADS IMPOSED ON STRUCTURE BY ANCHORS.

L 14 HORIZONTAL SECTION MOUNT TYPE 5 CORNER ANGLE MOUNT *WITH END RETENTION

ANCHOR SCHEDULE:

ANCHOR	DESCRIPTION	MATERIAL	EDGE DISTANCE	EMBEDMENT
A	3/8" DEWALT SCREW-BOLT+	MIN. 3000 PSI CONCRETE	3 3/4"	3 1/2"
B	5/16" ITW TAPCON	MIN. 3000 PSI CONCRETE	2 3/16"	2 1/4"
C	3/8" DEWALT SCREW-BOLT+	GROUT FILLED C-90 BLOCK f'm ≥ 1500 PSI	2"	2 1/2"
D	5/16" ITW TAPCON	GROUT FILLED C-90 BLOCK f'm ≥ 2000 PSI	4"	2 1/4"
E	#14 ELCO DRIL-FLEX SELF DRILLING SCREW	MIN 1/4" 6063-T6 ALUM. A36 3/16" STEEL	1/2" 3/8"	3 THREADS PENETRATION
F	5/16" DEWALT/ELCO ULTRACON	MIN. SG = 0.55 WOOD	1 1/2"	2"
G	5/16" DEWALT/ELCO ULTRACON	MIN. 3515 PSI CONCRETE	3 1/8"	2"
H	5/16" DEWALT/ELCO ULTRACON	GROUT FILLED C-90 BLOCK f'm ≥ 1500 PSI	2 1/2"	2 1/4"

ASSA

4268 WESTROADS DRIVE
WEST PALM BEACH, FL 33407
PH: 1-800-432-2204
FAX: 561-841-0852

TITLE: 55 MMER ROLL SHUTTERS (WIND ZONE 3 (IMPACT))

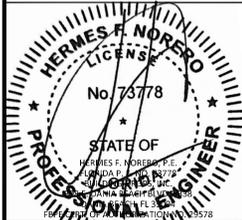
CORNER ANGLE MOUNT ANCHOR SPACING

PREPARED BY:
BUILDING DROPS, INC.
3916 E. DANIA BEACH BLVD., SUITE 338
DANIA BEACH, FL 33044
PH: (954) 959-8478
FAX: (954) 974-4738
WEB: www.buildingdrops.com



REMARKS	BY	DATE

THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT.



FL22558

DATE:	06.21.23	
DWG. BY:	DI	CHK. BY: HFN
SCALE:	NTS	
DWG. #:	EMS008	
SHEET:	14	



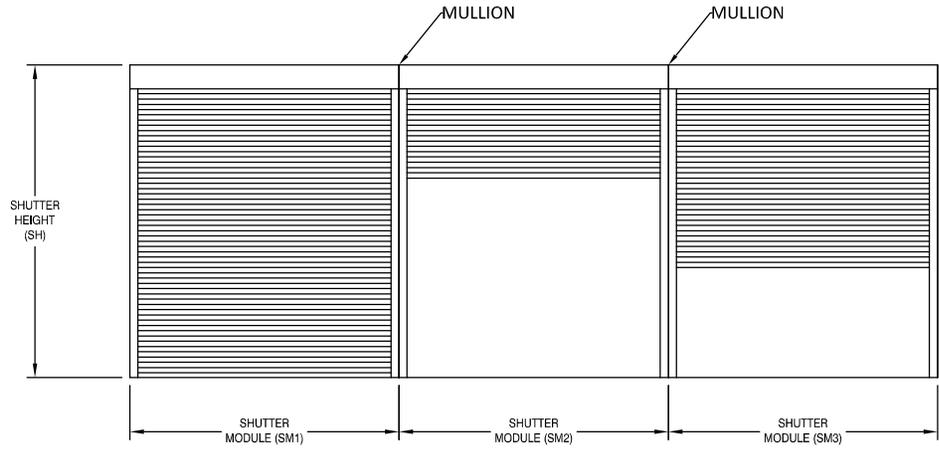
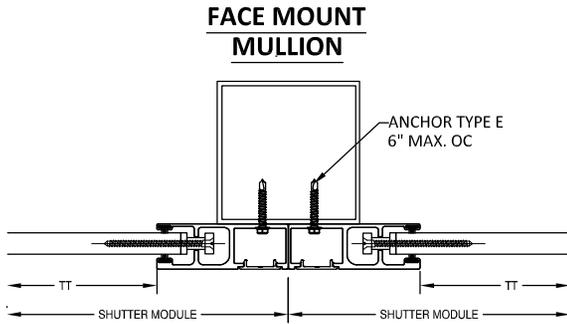
4268 WESTROADS DRIVE
WEST PALM BEACH, FL 33407
PH: 1-800-432-2204
FAX: 561-841-0852

TABLE 6 - ANCHOR SPACING						ANCHOR TYPE & SPACING 6X6 CORNER ANGLE ANCHOR - MOUNT 5							
TT	PD	Vx	Vy	Vs	Ts	A	B	C	D	E	F	G	H
96	30	0	10.68	0.00	10.68	10	10	10	10	10	10	10	10
	35	0	12.47	0.00	12.47	10	10	10	10	10	10	10	10
	40	0	14.25	0.00	14.25	10	10	10	10	10	10	10	10
	45	0	16.03	0.00	16.03	10	10	10	10	10	10	10	10
	50	0	17.81	0.00	17.81	10	10	10	10	10	10	10	10
	55	0	19.59	0.00	19.59	10	10	10	10	10	10	10	10
	60	0	21.37	0.00	21.37	10	10	10	10	10	10	10	10
	65	0	23.15	0.00	23.15	10	10	10	10	10	10	10	10
	70	0	24.93	0.00	24.93	10	10	10	10	10	10	10	10
	75	0	26.71	0.00	26.71	10	10	10	10	10	10	10	10
	80	167.1109	28.49	167.11	28.49	10	10	3	8	9	7	10	3
	85	167.1109	30.27	167.11	30.27	10	10	3	8	9	7	10	3
	90	167.1109	32.05	167.11	32.05	10	10	3	8	9	7	10	3
	95	167.1109	33.83	167.11	33.83	10	10	3	8	9	7	10	3
	100	167.1109	35.61	167.11	35.61	10	10	3	8	9	7	10	3
108	30	0	11.93	0.00	11.93	10	10	10	10	10	10	10	10
	35	0	13.92	0.00	13.92	10	10	10	10	10	10	10	10
	40	0	15.91	0.00	15.91	10	10	10	10	10	10	10	10
	45	0	17.90	0.00	17.90	10	10	10	10	10	10	10	10
	50	0	19.89	0.00	19.89	10	10	10	10	10	10	10	10
	55	0	21.88	0.00	21.88	10	10	10	10	10	10	10	10
	60	0	23.87	0.00	23.87	10	10	10	10	10	10	10	10
	65	0	25.86	0.00	25.86	10	10	10	10	10	10	10	10
	70	0	27.85	0.00	27.85	10	10	10	10	10	10	10	10
	75	0	29.84	0.00	29.84	10	10	10	10	10	10	10	10
	80	191.3637	31.83	191.36	31.83	10	10	-	6	7	6	10	-
	85	191.3637	33.81	191.36	33.81	10	10	-	6	7	6	10	-
	90	191.3637	35.80	191.36	35.80	10	10	-	6	7	6	10	-
	95	191.3637	37.79	191.36	37.79	10	10	-	6	7	6	10	-
	100	191.3637	39.78	191.36	39.78	10	10	-	6	7	6	10	-
105	191.3637	41.77	191.36	41.77	10	10	-	6	7	6	10	-	
110	191.3637	43.76	191.36	43.76	10	10	-	6	7	6	10	-	
115	191.3637	45.75	191.36	45.75	10	10	-	6	7	6	10	-	
120	191.3637	47.74	191.36	47.74	10	10	-	6	7	6	10	-	

TABLE 6 - ANCHOR SPACING						ANCHOR TYPE & SPACING 6X6 CORNER ANGLE ANCHOR - MOUNT 5							
TT	PD	Vx	Vy	Vs	Ts	A	B	C	D	E	F	G	H
120	30	0	13.18	0.00	13.18	10	10	10	10	10	10	10	10
	35	0	15.38	0.00	15.38	10	10	10	10	10	10	10	10
	40	0	17.58	0.00	17.58	10	10	10	10	10	10	10	10
	45	0	19.78	0.00	19.78	10	10	10	10	10	10	10	10
	50	0	21.97	0.00	21.97	10	10	10	10	10	10	10	10
	55	0	24.17	0.00	24.17	10	10	10	10	10	10	10	10
	60	0	26.37	0.00	26.37	10	10	10	10	10	10	10	10
	65	0	28.57	0.00	28.57	10	10	10	10	10	10	10	10
	70	0	30.76	0.00	30.76	10	10	10	10	10	10	10	10
	75	213.4498	32.96	213.45	32.96	10	8	-	5	6	5	9	-
	80	213.4498	35.16	213.45	35.16	10	8	-	5	6	5	9	-
	85	213.4498	37.36	213.45	37.36	10	8	-	5	6	5	9	-
	90	213.4498	39.55	213.45	39.55	10	8	-	5	6	5	9	-
	95	213.4498	41.75	213.45	41.75	10	8	-	5	6	5	9	-
	100	213.4498	43.95	213.45	43.95	10	8	-	5	6	5	9	-
105	213.4498	46.15	213.45	46.15	10	8	-	5	6	5	9	-	
110	213.4498	48.34	213.45	48.34	10	8	-	5	6	5	9	-	
132	30	0	14.43	0.00	14.43	10	10	10	10	10	10	10	10
	35	0	16.84	0.00	16.84	10	10	10	10	10	10	10	10
	40	0	19.25	0.00	19.25	10	10	10	10	10	10	10	10
	45	0	21.65	0.00	21.65	10	10	10	10	10	10	10	10
	50	0	24.06	0.00	24.06	10	10	10	10	10	10	10	10
	55	0	26.46	0.00	26.46	10	10	10	10	10	10	10	10
	60	0	28.87	0.00	28.87	10	10	10	10	10	10	10	10
	65	0	31.27	0.00	31.27	10	10	10	10	10	10	10	10
	70	232.6705	33.68	232.67	33.68	10	7	-	5	5	4	8	-
	75	232.6705	36.09	232.67	36.09	10	7	-	5	5	4	8	-
	80	232.6705	38.49	232.67	38.49	10	7	-	5	5	4	8	-
	85	232.6705	40.90	232.67	40.90	10	7	-	5	5	4	8	-
	90	232.6705	43.30	232.67	43.30	10	7	-	5	5	4	8	-
	95	232.6705	45.71	232.67	45.71	10	7	-	4	5	4	8	-
	100	232.6705	48.11	232.67	48.11	10	7	-	4	5	4	8	-

TABLE 6 - ANCHOR SPACING						ANCHOR TYPE & SPACING 6X6 CORNER ANGLE ANCHOR - MOUNT 5							
TT	PD	Vx	Vy	Vs	Ts	A	B	C	D	E	F	G	H
144	30	0	15.68	0.00	15.68	10	10	10	10	10	10	10	10
	35	0	18.30	0.00	18.30	10	10	10	10	10	10	10	10
	40	0	20.91	0.00	20.91	10	10	10	10	10	10	10	10
	45	0	23.53	0.00	23.53	10	10	10	10	10	10	10	10
	50	0	26.14	0.00	26.14	10	10	10	10	10	10	10	10
	55	0	28.75	0.00	28.75	10	10	10	10	10	10	10	10
	60	0	31.37	0.00	31.37	10	10	10	10	10	10	10	10
	65	0	33.98	0.00	33.98	10	10	10	10	10	10	10	10
	70	248.3793	36.60	248.38	36.60	10	6	-	4	4	4	7	-
	75	248.3793	39.21	248.38	39.21	10	6	-	4	4	4	7	-
	80	248.3793	41.83	248.38	41.83	10	6	-	4	4	4	7	-
	85	248.3793	44.44	248.38	44.44	10	6	-	4	4	4	7	-
	90	248.3793	47.05	248.38	47.05	10	6	-	4	4	4	7	-
	95	248.3793	49.67	248.38	49.67	10	6	-	4	4	4	7	-
	168	30	0	18.18	0.00	18.18	10	10	10	10	10	10	10
35		0	21.22	0.00	21.22	10	10	10	10	10	10	10	10
40		0	24.25	0.00	24.25	10	10	10	10	10	10	10	10
45		0	27.28	0.00	27.28	10	10	10	10	10	10	10	10
50		0	30.31	0.00	30.31	10	10	10	10	10	10	10	10
55		0	33.34	0.00	33.34	10	10	10	10	10	10	10	10
60		266.909	36.37	266.91	36.37	9	6	-	4	4	3	6	-
65		266.909	39.40	266.91	39.40	9	6	-	4	4	3	6	-
70		266.909	42.43	266.91	42.43	9	6	-	4	4	3	6	-
75		266.909	45.46	266.91	45.46	9	6	-	4	4	3	6	-
80		266.909	48.49	266.91	48.49	9	6	-	3	4	3	6	-
85		266.909	51.52	266.91	51.52	9	6	-	3	4	3	6	-
90		266.909	54.55	266.91	54.55	9	6	-	3	4	3	6	-
95		266.909	57.58	266.91	57.58	9	6	-	3	4	3	6	-
100		266.909	60.61	266.91	60.61	9	6	-	3	4	3	6	-
204	30	0	21.93	0.00	21.93	10	10	10	10	10	10	10	10
	35	0	25.59	0.00	25.59	10	10	10	10	10	10	10	10
	40	0	29.25	0.00	29.25	10	10	10	10	10	10	10	10
	45	254.7206	32.90	254.72	32.90	9	6	-	4	4	3	7	-
	50	254.7206	36.56	254.72	36.56	9	6	-	4	4	3	7	-
	55	254.7206	40.21	254.72	40.21	9	6	-	4	4	3	7	-
	60	0	23.18	0.00	23.18	10	10	10	10	10	10	10	10
	65	0	27.05	0.00	27.05	10	10	10	10	10	10	10	10
	70	256.9006	30.91	256.90	30.91	9	6	-	4	4	3	7	-
	75	256.9006	34.78	256.90	34.78	9	6	-	4	4	3	7	-
	80	256.9006	38.64	256.90	38.64	9	6	-	4	4	3	7	-
	85	256.9006	42.51	256.90	42.51	9	6	-	4	4	3	7	-
	90	256.9006	46.38	256.90	46.38	9	6	-	4	4	3	7	-
	95	256.9006	50.25	256.90	50.25	9	6	-	4	4	3	7	-
	100	256.9006	54.12	256.90	54.12	9	6	-	4	4	3	7	-
240	30	0	25.68	0.00	25.68	10	10	10	10	10	10	10	10
	35	253.7502	29.97	253.75	29.97	9	6	-	4				

EQUALLY SPACED MULLIONS SELECTION



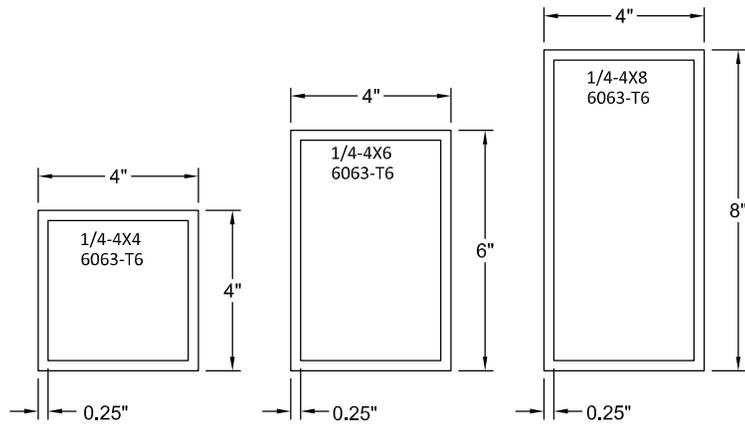
SM1 = SM2 = SM3

MAXIMUM MULLION DESIGN PRESSURE (PSF)

TT Max.	1/4-4x8 MULLION SPAN			1/4-4x6 MULLION SPAN			1/4-4x4 MULLION SPAN		
	144	120	96	144	120	96	144	120	96
286.5	30	30	30	N/A	30	30	N/A	N/A	22
264	35	35	35	N/A	32	35	N/A	N/A	24
240	40	40	40	20	36	40	N/A	N/A	26
216	47	50	50	23	40	50	N/A	N/A	29
204	49	55	55	24	42	55	N/A	N/A	31
168	60	80	80	29	51	80	N/A	N/A	37
144	70	95	95	34	60	95	N/A	22	44
132	77	100	100	38	65	100	N/A	24	48
120	84	110	110	41	72	110	N/A	27	53
108	94	120	120	46	80	120	N/A	30	58
96	106	125	125	52	90	125	N/A	33	66
84	121	135	135	59	103	135	22	38	75
72	141	145	145	69	120	145	26	45	88

NOTES:

- MULLIONS WERE DESIGNED BY RATIONAL ANALYSIS BASED ON THE ALUMINUM DESIGN MANUAL AND THE FLORIDA BUILDING CODE. ABOVE LOADS ARE ALSO LIMITED BY THE MAX. CAPACITY OF THE PRODUCT.
- DEFLECTION CRITERIA: MAX. SPAN/175
- VALUES ABOVE ARE APPLICABLE ONLY FOR EQUAL MODULES SM1=SM2=SM3
- UNEQUAL MODULES ARE TO BE DESIGNED BY RATIONAL ANALYSIS IN A CASE BY CASE BASIS.



4268 WESTROADS DRIVE
WEST PALM BEACH, FL 33407
PH: 1-800-432-2204
FAX: 561-841-0852

TITLE: 55 MMER ROLL SHUTTERS
(WIND ZONE 3 (IMPACT))
EQUALLY SPACED MULLION

PREPARED BY:
BUILDING DROPS, INC.
3911 E. DANIA BEACH BLVD., SUITE 338
DANIA BEACH, FL 33004
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FAX: (954) 744-4738
WEB: www.buildingdrops.com



REMARKS	BY	DATE

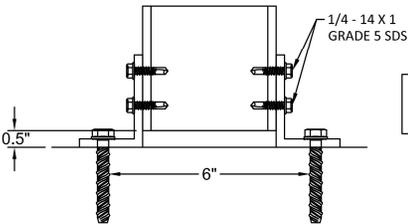
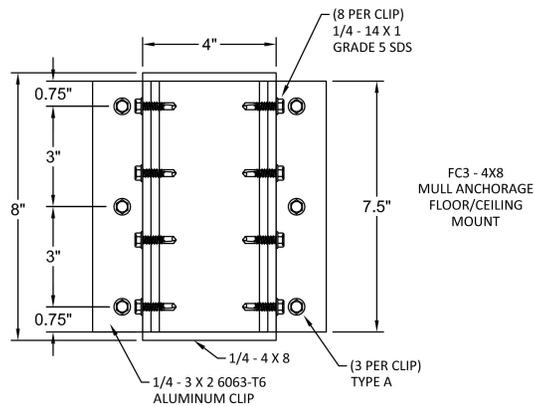
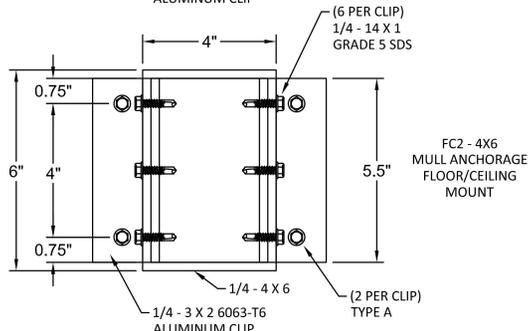
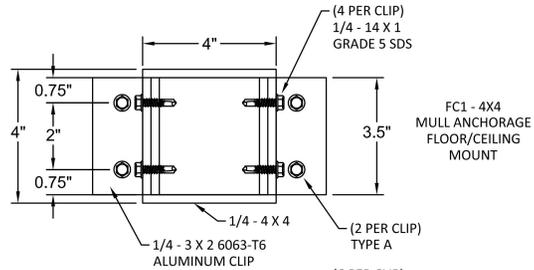
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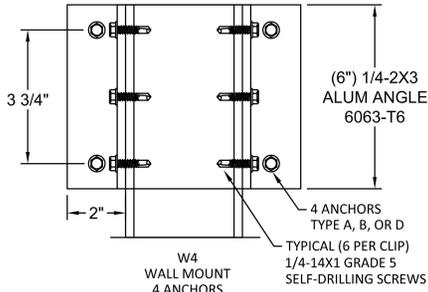
FL22558

DATE:	06.21.23
DWG. BY:	DI
CHK. BY:	HFN
SCALE:	NTS
DWG. #:	EMS008
SHEET:	16

EQUALLY SPACED MULLIONS WALL AND INSET CONNECTIONS



NOTE: ANGLE CLIP TO BE PLACED OUTSIDE OR INSIDE TUBE



ANCHOR TYPE	WALL MOUNT ANCHOR SELECTION		
	MULLION TYPE		
A	4X4	4X6	4X8
B	W4	W4	W4
D	W4	N/A	N/A
G	W4	N/A	N/A

ANCHOR TYPE	FLOOR/CEILING MOUNT ANCHOR SELECTION		
	MULLION TYPE		
A	4X4	4X6	4X8
	FC1	FC2	FC3

ANCHOR SCHEDULE:

ANCHOR	DESCRIPTION	MATERIAL	EDGE DISTANCE	EMBEDMENT
A	3/8" DEWALT SCREW-BOLT+	MIN. 3000 PSI CONCRETE	3 3/4"	3 1/2"
B	5/16" ITW TAPCON	MIN. 3000 PSI CONCRETE	2 3/16"	2 1/4"
D	5/16" ITW TAPCON	GROUT FILLED C-90 BLOCK f'm ≥ 2000 PSI	4"	2 1/4"
G	5/16" DEWALT/ELCO ULTRACON	MIN. 3515 PSI CONCRETE	3 1/8"	2"

ASSA

4268 WESTROADS DRIVE
WEST PALM BEACH, FL 33407
PH: 1-800-432-2204
FAX: 561-841-0852

TITLE: 55 MMER ROLL SHUTTERS (WIND ZONE 3)(IMPACT)

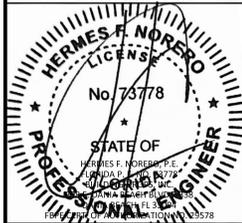
EQUALLY SPACED MULLION ANCHORS

PREPARED BY:
BUILDING DROPS, INC.
398 E. PALMA BEACH, FL 33404
PH: (954)399-8478
FAX: (954)744-4738
WEB: www.buildingdrops.com

BD
BUILDING DROPS

REMARKS	BY	DATE

THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT.



FL22558

DATE: 06.21.23

DWG. BY: DI CHK. BY: HFN

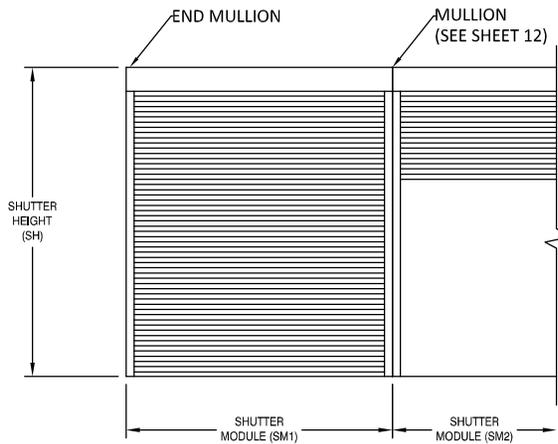
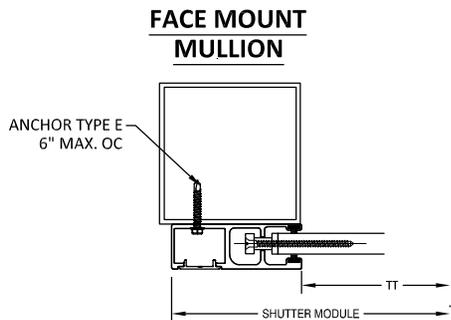
SCALE: NTS

DWG. #: EMS008

SHEET:

17

END MULLION SELECTION



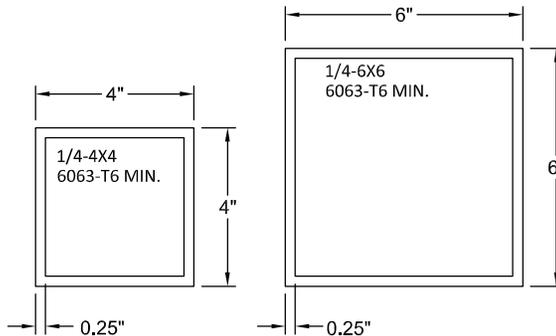
SM1 = SM2

MAXIMUM END MULLION SPANS AND DESIGN PRESSURES

TT MAX (in)	ALLOWABLE DP (PSF)	ALLOWABLE MULLION SPANS (FT)	
		4" x 4" X 0.25" 6063-T6 MIN.	6" x 6" X 0.25" 6063-T6 MIN.
72	145	12.00	12.00
84	135	12.00	12.00
96	125	11.72	12.00
108	120	11.20	12.00
120	110	10.80	12.00
132	100	10.49	12.00
144	95	10.27	12.00
168	80	10.03	12.00
204	55	10.18	12.00
216	50	10.15	12.00
240	40	10.20	12.00
264	35	10.38	12.00
286.5	30	10.73	12.00

NOTES:

1. MULLIONS WERE DESIGNED BY RATIONAL ANALYSIS BASED ON THE ALUMINUM DESIGN MANUAL AND THE FLORIDA BUILDING CODE. ABOVE LOADS ARE ALSO LIMITED BY THE MAX. CAPACITY OF THE PRODUCT.
2. VALUES ABOVE ARE APPLICABLE FOR END MULLIONS ONLY



ASSA

4268 WESTROADS DRIVE
WEST PALM BEACH, FL 33407
PH: 1-800-432-2204
FAX: 561-841-0852

TITLE: 55 MMER ROLL SHUTTERS
(WIND ZONE 3/(IMPACT))

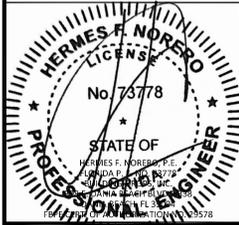
END MULLION

PREPARED BY:
BUILDING DROPS, INC.
391 E. PALM BEACH BLVD., SUITE 338
PALM BEACH, FL 33064
PH: (954) 959-8478
FAX: (954) 744-4738
WEB: www.buildingdrops.com



REMARKS	BY	DATE

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DATE: 06.21.23

DWG. BY: DI

CHK. BY: HFN

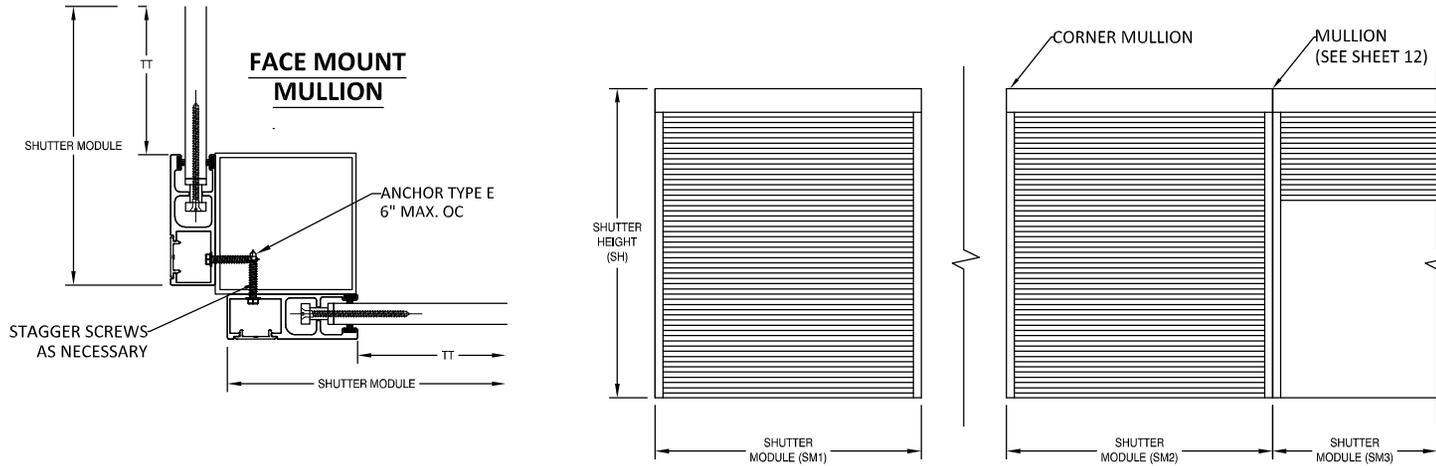
SCALE: NTS

DWG. #: EMS008

SHEET:

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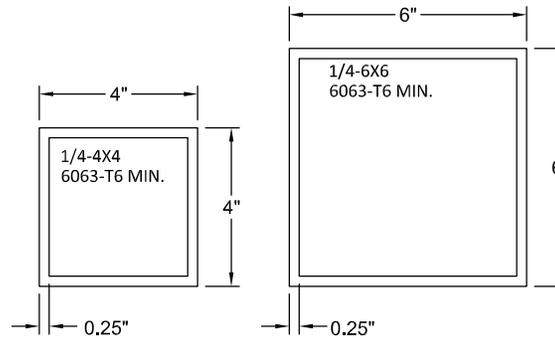
CORNER MULLION SELECTION



SM1 = SM2 = SM3

MAXIMUM CORNER MULLION SPANS AND DESIGN PRESSURES			
TT MAX (in)	ALLOWABLE DP (PSF)	ALLOWABLE MULLION SPANS (FT)	
		4" x 4" X 0.25" 6063-T6 MIN.	6" x 6" X 0.25" 6063-T6 MIN.
72	145	12.00	12.00
84	135	11.01	12.00
96	125	10.26	12.00
108	120	9.66	12.00
120	110	9.23	12.00
132	100	8.91	12.00
144	95	8.65	12.00
168	80	8.41	12.00
204	55	8.69	12.00
216	50	8.69	12.00
240	40	8.80	12.00
264	35	9.04	12.00
286.5	30	9.48	12.00

- NOTES:
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 - VALUES ABOVE ARE APPLICABLE FOR CORNER MULLIONS ONLY WITH EQUAL WIDTH SHUTTERS ON BOTH SIDES, UNEQUAL SHUTTERS SHALL BE EVALUATED ON A CASE BY CASE BASIS.



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PH: 1-800-432-2204
FAX: 561-841-0852

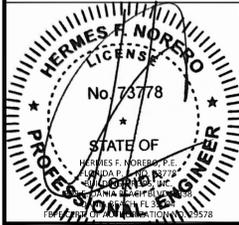
TITLE: 55 MMER ROLL SHUTTERS
(WIND ZONE 3)(IMPACT)
CORNER MULLION

PREPARED BY:
BUILDING DROPS, INC.
3911 E. DANIA BEACH BLVD., SUITE 338
DANIA BEACH, FL 33004
PH: (954) 952-8478
FAX: (954) 744-4738
WEB: www.buildingdrops.com



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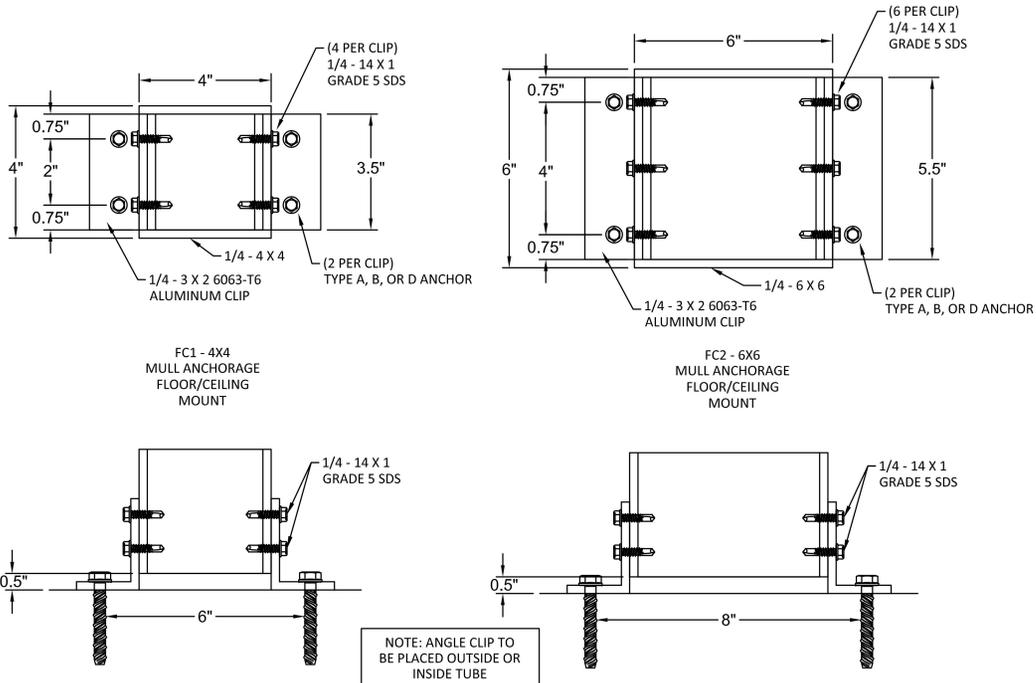


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DWG. #: EMS008	
SHEET:	

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END MULLION AND CORNER MULLION WALL AND INSET CONNECTIONS

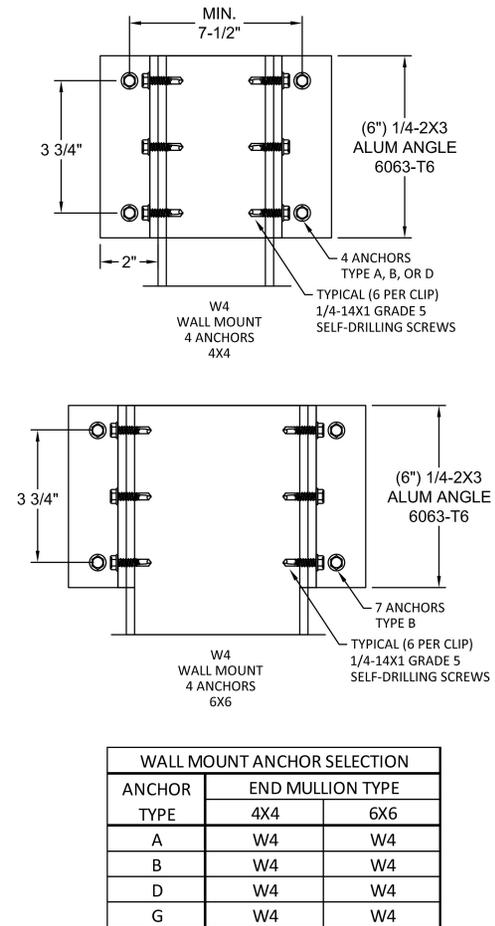


MULL FLOOR/CEILING MOUNT ANCHOR SELECTION				
ANCHOR TYPE	END MULLION TYPE		CORNER MULLION TYPE	
	4X4	6X6	4X4	6X6
A	FC1	FC2	FC1	FC2
B	N/A	FC2	N/A	N/A
D	N/A	FC2	N/A	N/A
G	N/A	FC2	N/A	N/A

ANCHOR SCHEDULE:

ANCHOR	DESCRIPTION	MATERIAL	EDGE DISTANCE	EMBEDMENT
A	3/8" DEWALT SCREW-BOLT+	MIN. 3000 PSI CONCRETE	3 3/4"	3 1/2"
B	5/16" ITW TAPCON	MIN. 3000 PSI CONCRETE	2 3/16"	2 1/4"
D	5/16" ITW TAPCON	GROUT FILLED C-90 BLOCK f'm ≥ 2000 PSI	4"	2 1/4"
G	5/16" DEWALT/ELCO ULTRACON	MIN. 3515 PSI CONCRETE	3 1/8"	2"

END MULLION WALL CONNECTIONS



WALL MOUNT ANCHOR SELECTION		
ANCHOR TYPE	END MULLION TYPE	
	4X4	6X6
A	W4	W4
B	W4	W4
D	W4	W4
G	W4	W4

ASSA

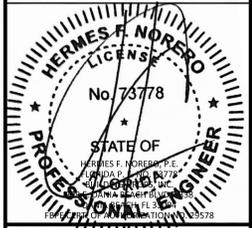
4268 WESTROADS DRIVE
WEST PALM BEACH, FL 33407
PH: 1-800-432-2204
FAX: 561-841-0852

TITLE: 55 MMER ROLL SHUTTERS (WIND ZONE 3)(IMPACT)
END MULLION ANCHORS

PREPARED BY:
BUILDING DROPS, INC.
398 E. PALMA BEACH, FL 33004
PH: (954)399-8478
FAX: (954)744-4738
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REMARKS	BY	DATE

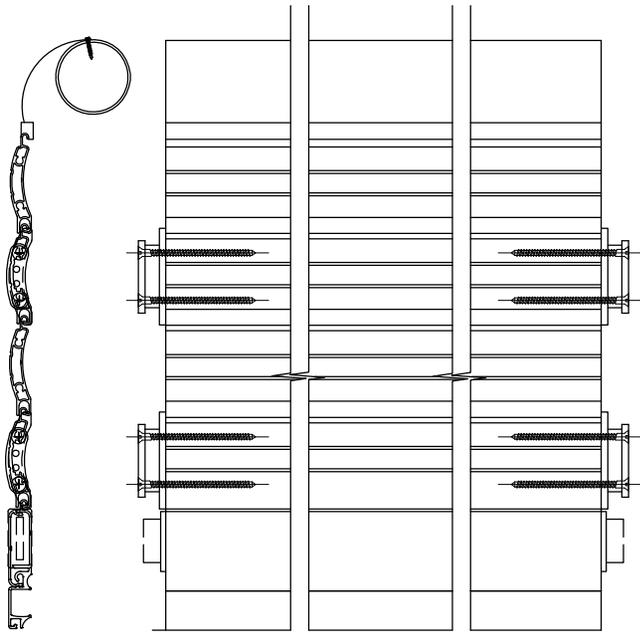
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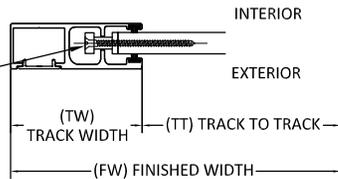
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DATE: 06.21.23
DWG. BY: DI
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SCALE: NTS
DWG. #: EMS008
SHEET:

SLAT END RETENTION LAY-OUT

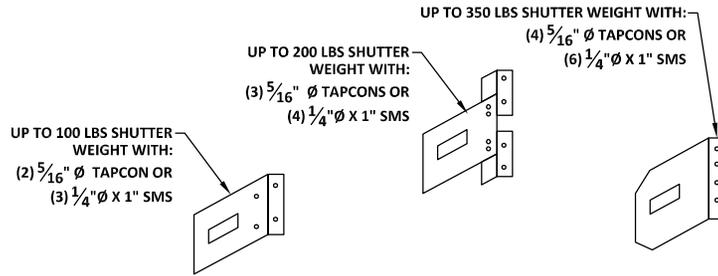


#10 X 2.5" PFH 18-8 S/S SMS , TWO (2) PER END RETENTION SLAT LOCK GUIDE, WITH A HV COATING SYSTEM AS MANUFACTURED BY AN APPROVED COATING APPLICATOR REGISTERED WITH THE AMERICAN SHUTTER SYSTEMS ASSOCIATION.

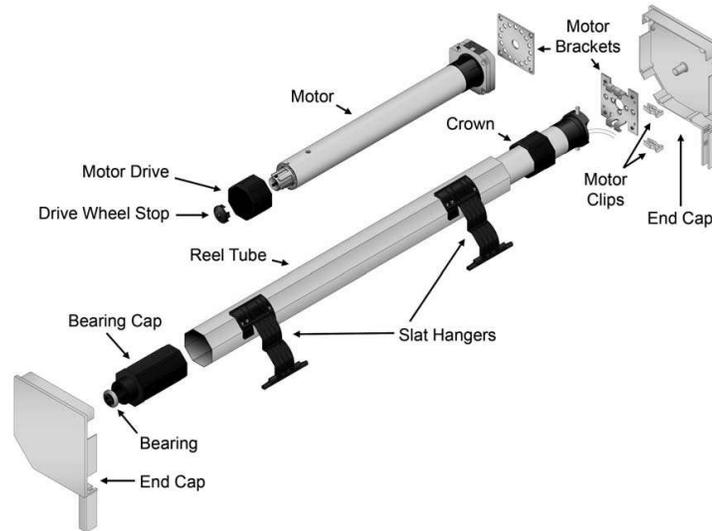


- NOTES:
1. SLAT END RETENTION LOCK TO BE AT EVERY OTHER SLAT
 2. INSTALLATION SCREWS SHALL BE COATED WITH A HV COATING SYSTEM AS MANUFACTURED BY AN APPROVED COATING APPLICATOR REGISTERED WITH THE AMERICAN SHUTTER SYSTEMS ASSOCIATION.

MOUNTING BRACKET



ROLL-UP MECHANISM EXPLODED



- NOTES:
1. THE ROLL-UP MECHANISM (GEARS, MOTOR, SUPPORTING END PLATES) ARE NOT A PART OF THIS APPROVAL AND SHALL BE SELECTED BASED ON MANUFACTURER'S SPECIFICATIONS.
 2. 60MM, 70MM, OR 94MM DIAMETER REEL TUBE PER MANUFACTURER SPECIFICATION
 3. TUBULAR MOTOR MAY BE REPLACED WITH GEAR FOR MANUAL OPERATION.
 4. OPTIONAL BOTTOM LOCK IS NOT REQUIRED FOR STRUCTURAL OR FORCED ENTRY RESISTANCE PERFORMANCE. FOR USE ON MAXIMUM 20' WIDE UNIT.
 5. BASE SLAT IS OPTIONAL AND IS NOT REQUIRED FOR STRUCTURAL OR FORCED ENTRY RESISTANCE PERFORMANCE. FOR USE ON MAXIMUM 20' WIDE UNIT.

ASSA

4268 WESTROADS DRIVE
WEST PALM BEACH, FL 33407
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FAX: 561-841-0852

TITLE: 55 MMER ROLL SHUTTERS
(WIND ZONE 3/IMPACT)

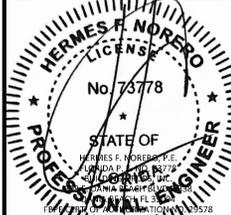
SLAT END RETENTION & HOOD
ASSEMBLY

PREPARED BY:
BUILDING DROPS, INC.
3915 E. DANIA BEACH BLVD., SUITE 338
DANIA BEACH, FL 33004
PH: (954) 959-8478
FAX: (954) 744-4738
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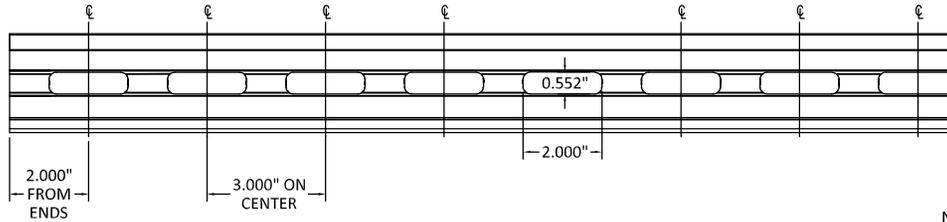
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SCALE:	NTS
DWG. #:	EMS008
SHEET:	21

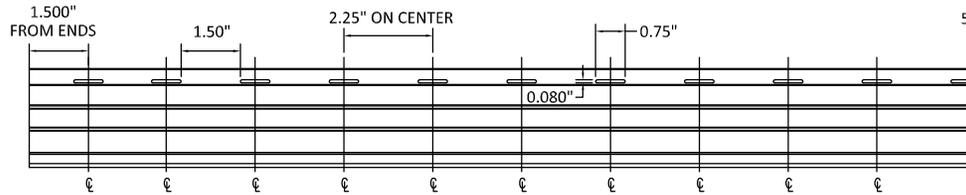


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FAX: 561-841-0852

VIEWPORT SLAT DETAIL



VENTED SLAT DETAIL



NOTES:

1. USE OF VIEWPORT SLATS SHALL BE LIMITED TO EVERY OTHER SLAT. MAY BE USED FOR FULL DOOR HEIGHT, EXCEPT FOR WITHIN 36" OF BOTTOM OF FRAME.
2. VIEWPORT SLATS MAY ONLY BE USED ON SLATS WITH END RETENTION.
3. VIEWPORTS USE PLASKOLITE TUFFAK POLYCARBONATE INSERT.
4. END RETENTION LOCKS ARE REQUIRED EVERY OTHER SLAT.
5. VENTED OR UN-VENTED SLATS QUALIFIED.

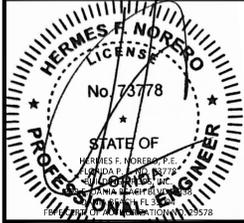
TITLE: 55 MMER ROLL SHUTTERS
(WIND ZONE 3)(IMPACT)
VIEWPORT AND VENT DETAILS

PREPARED BY:
BUILDING DROPS, INC.
3911 E. DANIA BEACH BLVD., # 338
DANIA BEACH, FL 33004
PH: (954)392-8478
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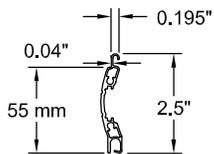
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DATE:	06.21.23
DWG. BY:	DI
CHK. BY:	HFN
SCALE:	NTS
DWG. #:	EMS008
SHEET:	22

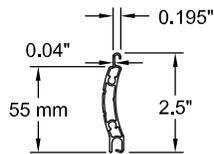
BILL OF MATERIALS

ITEM NO.	DESCRIPTION	MATERIAL
1	55 mm SLAT	6063-T6
2	LARGE GUIDE RAIL	6063-T6
2A	LARGE GUIDE RAIL - ENCLOSED	6063-T6
3	SMALL GUIDE RAIL	6063-T6
3A	SMALL GUIDE RAIL - ENCLOSED	6063-T6
4	COVER CAP	6063-T6
5	SLAT LOCK - 2 PIECE	POLYACETAL
5A	SLAT LOCK - 1 PIECE	POLYACETAL
6	BOTTOM SLAT COVER	6063-T6
7	BOTTOM SLAT	6063-T6

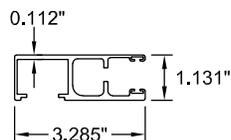
1 VIEW PORT SLAT
6063-T6



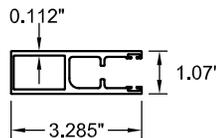
1A DOUBLE WALL SLAT
6063-T6



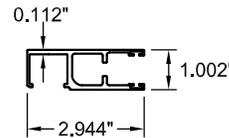
2 LARGE GUIDE RAIL
6063-T6



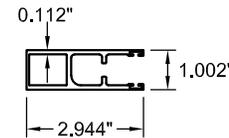
2A LARGE GUIDE RAIL
ENCLOSED
6063-T6



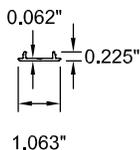
3 SMALL GUIDE RAIL
6063-T6



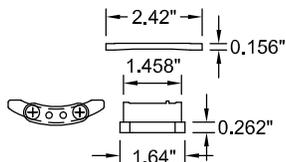
3A SMALL GUIDE RAIL
ENCLOSED
6063-T6



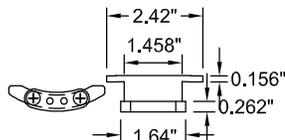
4 COVER CAP
6063-T6



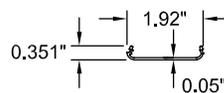
5 SLAT LOCK - 2 PIECE
POLYACETAL



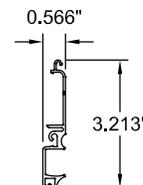
5A SLAT LOCK - 1 PIECE
POLYACETAL



6 BOTTOM SLAT COVER



7 BOTTOM SLAT



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TITLE: 55 MMER ROLL SHUTTERS
(WIND ZONE 3)(IMPACT)

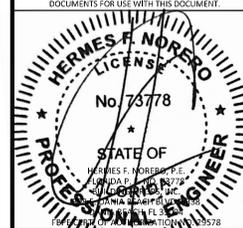
BOM & COMPONENTS

PREPARED BY:
BUILDING DROPS, INC.
391 E. DANIA BEACH BLVD., SUITE 338
DANIA BEACH, FL 33004
PH: (954) 959-8478
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