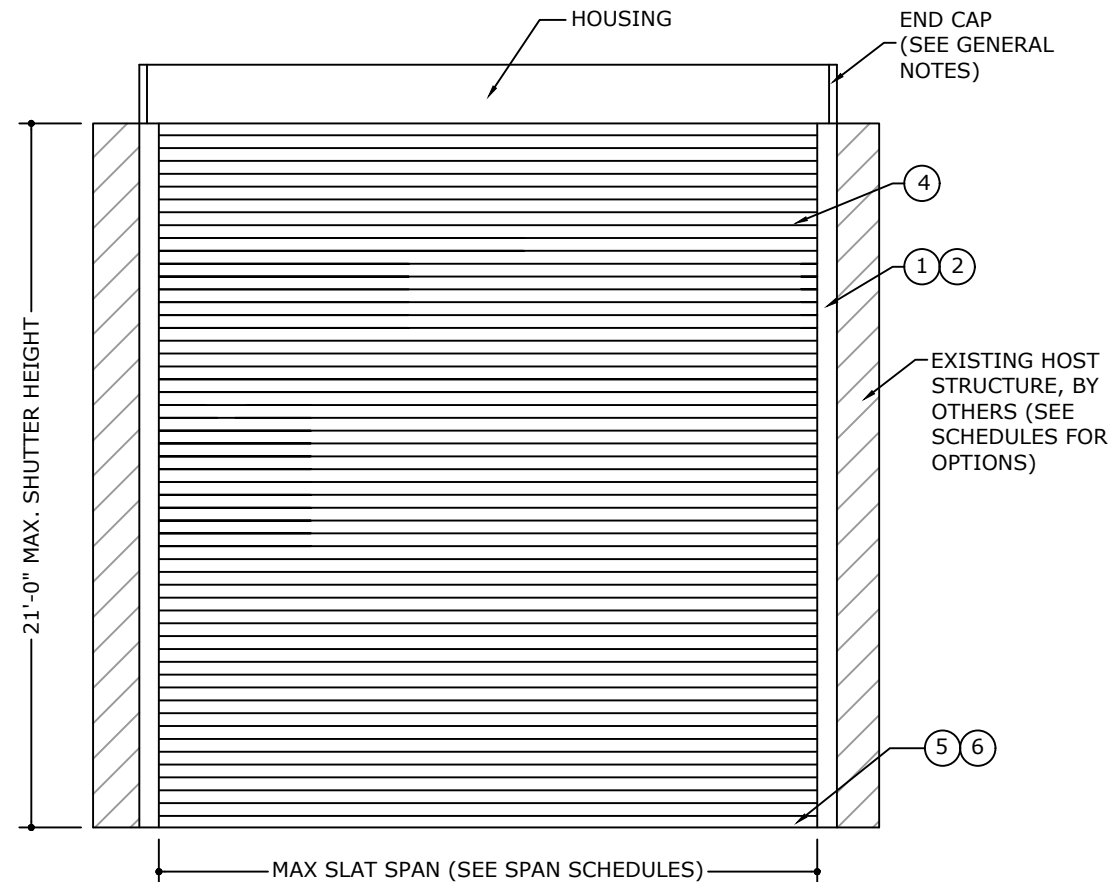


QOM3 - AL8 ROLL-UP HURRICANE SHUTTER

FRANK BENNARDO, P.E.
PE# 96064 CA# F-11383

FEBRUARY 23, 2022



1 TYPICAL ROLL-UP SHUTTER
1 N.T.S. EXTERIOR ELEV
SEE REMAINING SHEETS FOR COMPLETE ELEVATION OPTIONS

GENERAL NOTES

- THE SYSTEM DESCRIBED HEREIN HAS BEEN DESIGNED AND TESTED IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE (IBC) 2018 EDITION, AND THE INTERNATIONAL RESIDENTIAL CODE (IRC) 2018 EDITION FOR USE IN ACCORDANCE WITH THE TEXAS DEPARTMENT OF INSURANCE (TDI) REQUIREMENTS, PER ASTM E330, E1886, AND E1996 AND TAS 201, 202 & 203 STANDARDS. SEE PRODUCT APPROVAL EVALUATION FOR ADDITIONAL INFORMATION.
- NO 33-1/3% INCREASE IN ALLOWABLE STRESS HAS BEEN USED IN THE DESIGN OF THIS SYSTEM. WIND LOAD DURATION FACTOR Cd=1.6 HAS BEEN USED FOR WOOD ANCHOR DESIGN.
- POSITIVE AND NEGATIVE DESIGN PRESSURES CALCULATED FOR USE WITH THIS SYSTEM SHALL BE DETERMINED PER SEPARATE ENGINEERING IN ACCORDANCE WITH THE GOVERNING CODE. PRESSURE REQUIREMENTS AS DETERMINED IN ACCORDANCE WITH ASCE 7 AND CHAPTER 16 OF THE IBC OR CHAPTER 3 OF THE IRC (AS APPLICABLE) SHALL BE LESS THAN OR EQUAL TO THE POSITIVE OR NEGATIVE ASD DESIGN PRESSURE CAPACITY VALUES LISTED HEREIN FOR ANY ASSEMBLY AS SHOWN.
- DESIGN PRESSURES NOTED HEREIN ARE BASED ON MAXIMUM TESTED PRESSURES DIVIDED BY A 1.5 SAFETY FACTOR.
- THE SYSTEM DETAILED HEREIN IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SPECIFIC SITE. FOR SITE CONDITIONS DIFFERENT FROM THE CONDITIONS DETAILED HEREIN, A LICENSED ENGINEER OR REGISTERED ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE IN CONJUNCTION WITH THIS DOCUMENT.
- ROLL-UP MECHANISM, END CAP, AND HOOD ASSEMBLY ARE NOT PART OF THIS APPROVAL.
- THIS DOCUMENT CONTAINS INFORMATION RELEVANT TO THE NECESSARY STRUCTURAL REQUIREMENTS OF THE SYSTEM INSTALLATION. COMPONENTS AND FASTENERS NOT REFERENCED WHICH ARE PART OF THE INTERNAL FABRICATION OF THE SPECIFIED SYSTEMS OR ASSEMBLIES SHALL BE PER MANUFACTURER PUBLISHED SPECIFICATIONS.
- THE STRUCTURAL ADEQUACY OF THE EXISTING STRUCTURE TO WITHSTAND SUPERIMPOSED LOADS BY THIS SYSTEM SHALL BE VERIFIED BY OTHERS.
- ALL EXTRUSIONS SHALL BE MINIMUM 6063-T6 ALUMINUM ALLOY, UNLESS NOTED OTHERWISE.
- "QOM3" IS AN ABBREVIATION FOR "QOMPACT3" AS USED IN THIS PRODUCT APPROVAL; BOTH TERMS REFER TO THE SAME PRODUCT.
- EACH SHUTTER ASSEMBLY SHALL BEAR A PERMANENT LABEL ON THE BOTTOM OF THE HOOD FACING THE EXTERIOR, OR ANYWHERE ELSE ALLOWED PER PER SECTIONS 1703.5.3 & 1703.5.4 OF THE INTERNATIONAL BUILDING CODE 2018 EDITION (IF APPLICABLE), TYP. LABEL SHALL PROVIDE THE REQUIRED PRODUCT INFORMATION AS DEFINED BY THE TEXAS DEPARTMENT OF INSURANCE (TDI), TYP.
- ALL BOLTS & WASHERS SHALL BE ZINC COATED STEEL, GALVANIZED STEEL, OR STAINLESS STEEL WITH A MINIMUM TENSILE YIELD STRENGTH OF 60 KSI. ALL ALUMINUM 3/16"Ø OR 1/4"Ø POP RIVETS SHALL BE 7075-T6 OR STRONGER.
- ALL STEEL IN CONTACT WITH ALUMINUM SHALL BE PAINTED OR PLATED AS PRESCRIBED IN THE ABOVE-NOTED BUILDING CODE.
- ALTERATIONS, ADDITIONS, HIGHLIGHTING, OR OTHER MARKINGS TO THIS DOCUMENT ARE ONLY PERMITTED TO SHOW SITE-SPECIFIC CONDITIONS, HOWEVER ANY CHANGES, ALTERATIONS OR ADDITIONS MADE TO THE CONTENT OF THIS DOCUMENT WILL INVALIDATE THIS CERTIFICATION.

VISIT ECALC.IO/32431

FOR SITE-SPECIFIC DEVIATIONS & MORE INFORMATION ABOUT THIS DOCUMENT OR SCAN THIS QR CODE

VISIT ENGINEERINGEXPRESS.COM/STORE FOR ADDITIONAL PLANS, REPORTS & RESOURCES



SPAN SCHEDULE	
SLAT SPAN	ALLOWABLE DESIGN PRESSURE
48"	± 246.7 PSF
54"	± 229.5 PSF
60"	± 214.3 PSF
66"	± 212.4 PSF
72"	± 213.3 PSF
78"	± 198.3 PSF
84"	± 187.0 PSF
90"	± 178.2 PSF
96"	± 171.0 PSF
102"	± 165.1 PSF
108"	± 160.1 PSF
114"	± 155.8 PSF
120"	± 152.0 PSF
126"	± 148.5 PSF
132"	± 145.4 PSF
138"	± 142.6 PSF
144"	± 140.0 PSF
150"	± 131.9 PSF
156"	± 124.7 PSF
162"	± 118.1 PSF
168"	± 112.1 PSF
174"	± 106.7 PSF
180"	± 101.7 PSF
186"	± 97.1 PSF
192"	± 92.9 PSF
198"	± 89.0 PSF
204"	± 85.4 PSF
210"	± 82.1 PSF
216"	± 79.0 PSF
222"	± 76.1 PSF
228"	± 73.4 PSF
236"	± 70.0 PSF

GLASS SEPARATION SCHEDULE		
SLAT SPAN	INSTALLATIONS ≤ 30' ABOVE	INSTALLATIONS > 30' ABOVE
48"	4.50"	4.50"
54"	6.00"	6.00"
60"	6.00"	6.00"
66"	7.00"	7.00"
72"	8.00"	8.00"
78"	8.00"	8.00"
84"	8.50"	8.50"
90"	8.50"	8.50"
96"	9.00"	9.00"
102"	9.00"	9.00"
108"	9.00"	9.00"
114"	9.50"	9.50"
120"	9.50"	9.50"
126"	9.50"	9.50"
132"	10.00"	10.00"
138"	10.00"	10.00"
144"	10.00"	10.00"
150"	14.00"	10.50"
156"	14.00"	10.50"
162"	14.00"	10.50"
168"	14.00"	11.00"
174"	14.00"	11.00"
180"	14.00"	11.50"
186"	14.00"	11.50"
192"	14.00"	12.00"
198"	14.00"	12.00"
204"	14.00"	12.00"
210"	14.00"	12.50"
216"	14.00"	12.50"
222"	14.00"	12.50"
228"	14.00"	13.00"
236"	14.00"	13.00"

SPAN SCHEDULE NOTES:

- SLAT SPAN IS DEFINED AS THE DISTANCE BETWEEN RAILS FOR SINGLE SPAN ASSEMBLIES.
- LINEAR INTERPOLATION BETWEEN SHUTTER SPANS IS PERMITTED.

GLASS SEPARATION NOTES:

- FOR BASIC PROTECTION, GLASS SEPARATION IS NOT REQUIRED.
- SHUTTERS MAY BE USED IN ESSENTIAL FACILITIES AT HEIGHTS ABOVE 30 FEET ABOVE GRADE IN WIND ZONE 3 AND SHALL ADHERE TO THE GLASS SEPARATION REQUIREMENTS IN THIS SCHEDULE.
- SHUTTERS MAY BE USED IN ESSENTIAL FACILITIES AT ANY HEIGHT IN WIND ZONE 2 AND SHALL ADHERE TO THE GLASS SEPARATION REQUIREMENTS IN THIS SCHEDULE.
- SLAT SPAN IS DEFINED AS THE DISTANCE BETWEEN RAILS FOR SINGLE SPAN ASSEMBLIES.
- SEPARATION FROM GLAZING IS REQUIRED FOR ALL INSTALLATIONS THAT ARE REQUIRED TO MAINTAIN A MINIMUM SEPARATION BETWEEN THE SHUTTER AND ANY GLAZING, AS REQUIRED BY THE BUILDING DEPARTMENT OR AUTHORITY HAVING JURISDICTION.
- LINEAR INTERPOLATION BETWEEN SHUTTER SPANS IS NOT PERMITTED. FOR SPANS BETWEEN THOSE INDICATED ABOVE, THE SEPARATION FROM GLASS FOR THE NEXT HIGHER SPAN SHALL BE USED.



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QOM3 - AL8 ROLL-UP HURRICANE SHUTTER
IBC 2018 EDITION & IRC 2018 EDITION
TEXAS DEPARTMENT OF INSURANCE (TDI)

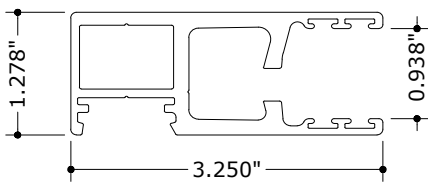
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REV - ADDTL OPTIONS	RWN	RWN	10/14/21
TDI SUBMITTAL	EPR	RWN	11/12/21
REV - TDI COMMENTS	EPR	RWN	02/22/22

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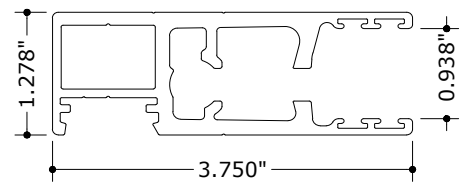
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01 OF 30



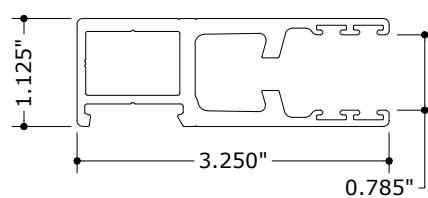
RETAIN ONLY RAIL
PQ010218
QOM3 RAIL #1

1A N.T.S. 6063-T6



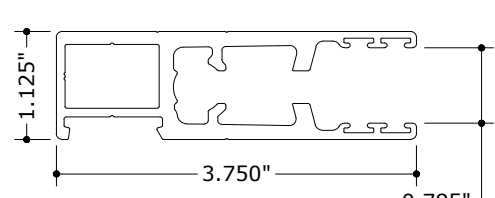
RETAIN AND STOP RAIL
PQ010219
QOM3 RAIL #2

1B N.T.S. 6063-T6



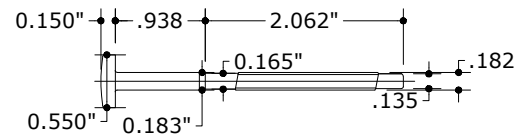
RETAIN ONLY RAIL
PQ010220
AL8 RAIL #1

2A N.T.S. 6063-T6



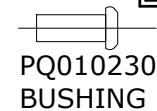
RETAIN AND STOP RAIL
PQ010221
AL8 RAIL #2

2B N.T.S. 6063-T6

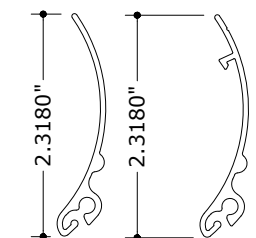


PQ010229
RETAINING
SCREW

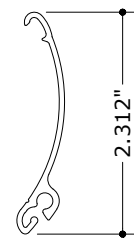
3 N.T.S. 6063-T6



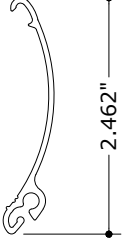
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BUSHING



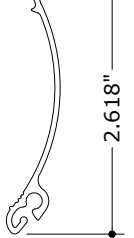
PQ010212 PQ010213
STARTER SLATS



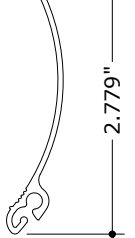
SLAT #1
QOM3 - AL8
PQ010200



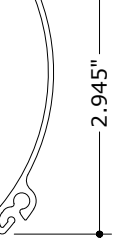
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QOM3 - AL8
PQ010201



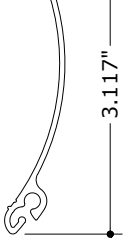
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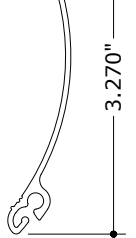
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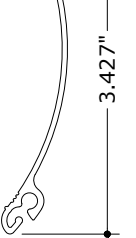
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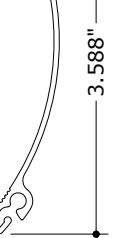
SLAT #6
QOM3
PQ010205



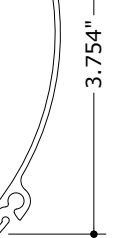
SLAT #7
QOM3
PQ010206



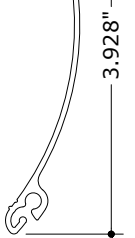
SLAT #8
QOM3
PQ010207



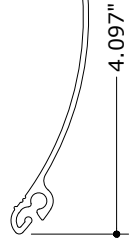
SLAT #9
QOM3
PQ010208



SLAT #10
QOM3
PQ010209



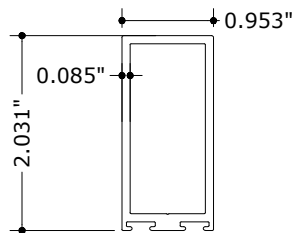
SLAT #11
QOM3
PQ010210



SLAT #12
QOM3
PQ010211

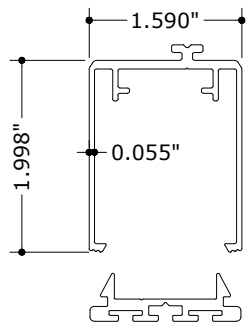
4 SINGLE WALL SLATS
N.T.S. 0.055" THICK, TYP. 6063-T6

PQ010242
COUPLER



PQ010231
THUMB TURN
HOUSING

5A N.T.S. 6063-T6

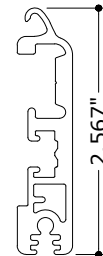


PQ010243
BODY

THUMB TURN
BASE SLAT ASSEMBLY

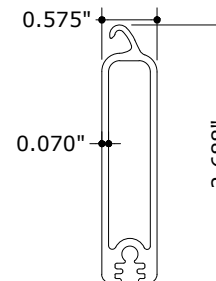
5B N.T.S. 6063-T6

PQ010244
BASE



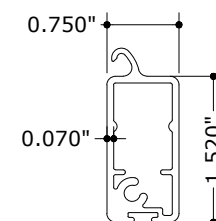
PQ010222
SLIDE LOCK
BASE SLAT

6A N.T.S. 6063-T6



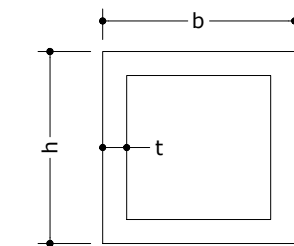
PQ010223
STANDARD
BASE SLAT

6B N.T.S. 6063-T6



PQ010224
SMALL
LOW PROFILE
BASE SLAT

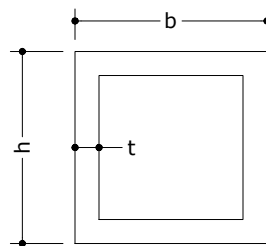
6C N.T.S. 6063-T6



BO/TRAP TUBE	b	h	t
7A	2"	2"	1/4"
7B	4"	4"	1/4"

BUILD OUT / TRAP
MOUNTED TUBES

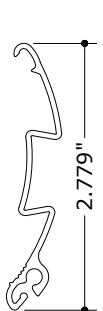
7 N.T.S. 6063-T6



MULLIONS	b	h	t
8A	4	4"	1/4"
8B	4"	4"	1/4"
8C	4"	6"	1/4"
8D	4"	8"	1/4"

BUILD OUT / TRAP
MOUNTED TUBES

8 N.T.S. 6063-T6



(SLAT 4)
PQ010214

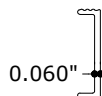
9 N.T.S. 6063-T6



(SLAT 6)
PQ010215

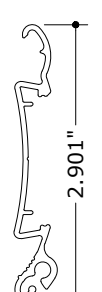
FINGER PULL SLATS

PQ010225
COUPLER



PQ010226
RAIL SNAP COVER

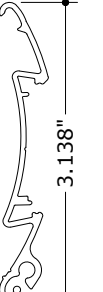
11 N.T.S. 6063-T6



(SLAT 4)
PQ010216

UTILITY SLATS

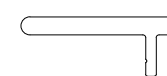
12 N.T.S. 6063-T6



(SLAT 6)
PQ010217

PQ010227
UTILITY SLAT SNAP COVER

13 N.T.S. 6063-T6



PQ010228
HANDLE

14 N.T.S. 6063-T6

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IBC 2018 EDITION & IRC 2018 EDITION
TEXAS DEPARTMENT OF INSURANCE (TDI)

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	CSL	RWN	06/11/21
REV - ADDTL OPTIONS	RWN	RWN	08/15/21
REV - ADDTL OPTIONS	RWN	RWN	10/14/21
TDI SUBMITTAL	EPR	RWN	11/12/21
REV - TDI COMMENTS	EPR	RWN	02/22/22

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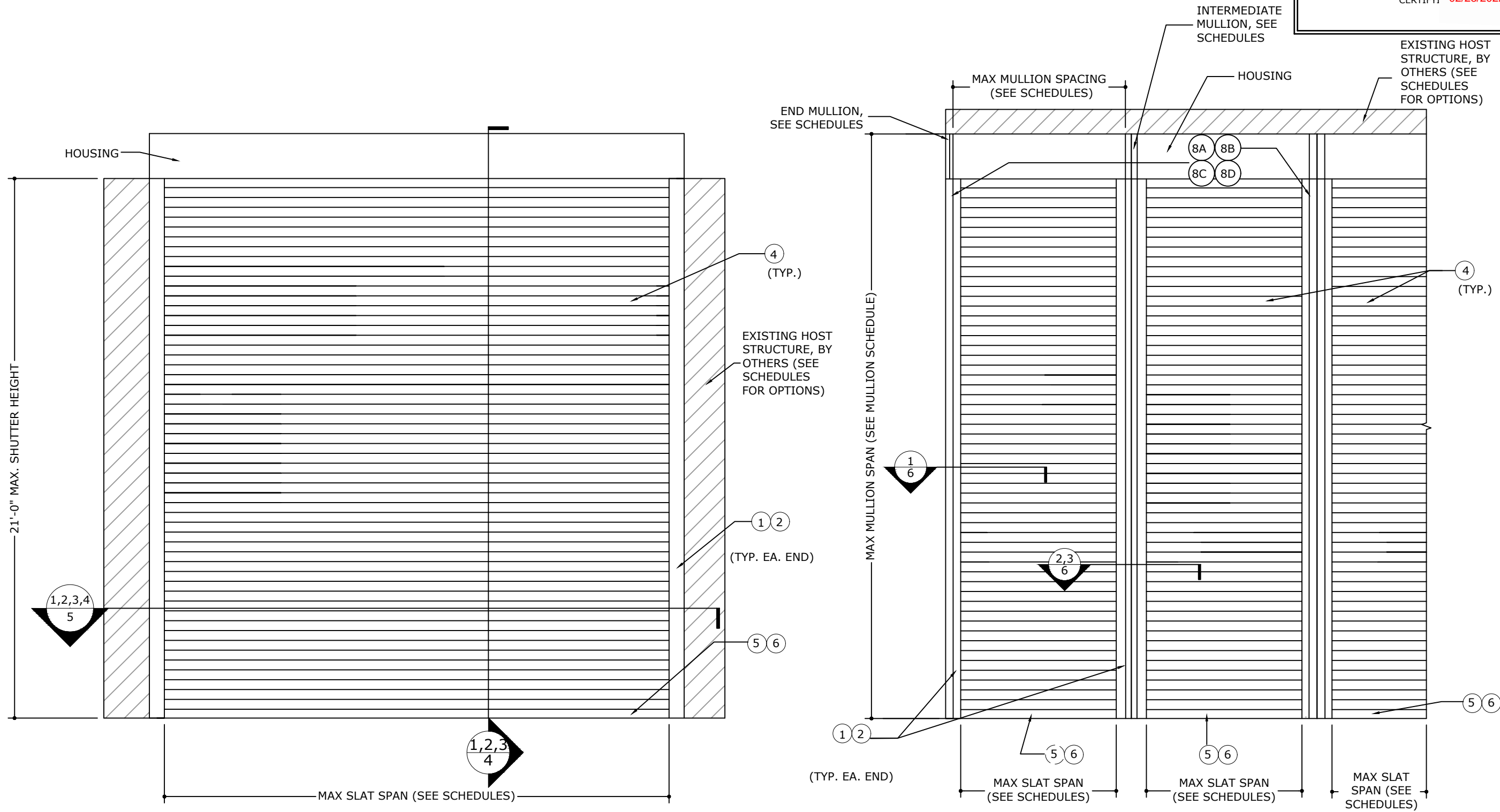
02

OF 30

FRANK BENNARDO, P.E.
PE# 96064 CA# F-11383



CERTIFY! 02/23/2022



1
3
N.T.S. EXTERIOR ELEV

TYPICAL SINGLE UNIT ELEVATION W/O MULLIONS

2
3
N.T.S. EXTERIOR ELEV

TYPICAL CONSECUTIVE SINGLE UNIT ELEVATION WITH MULLIONS

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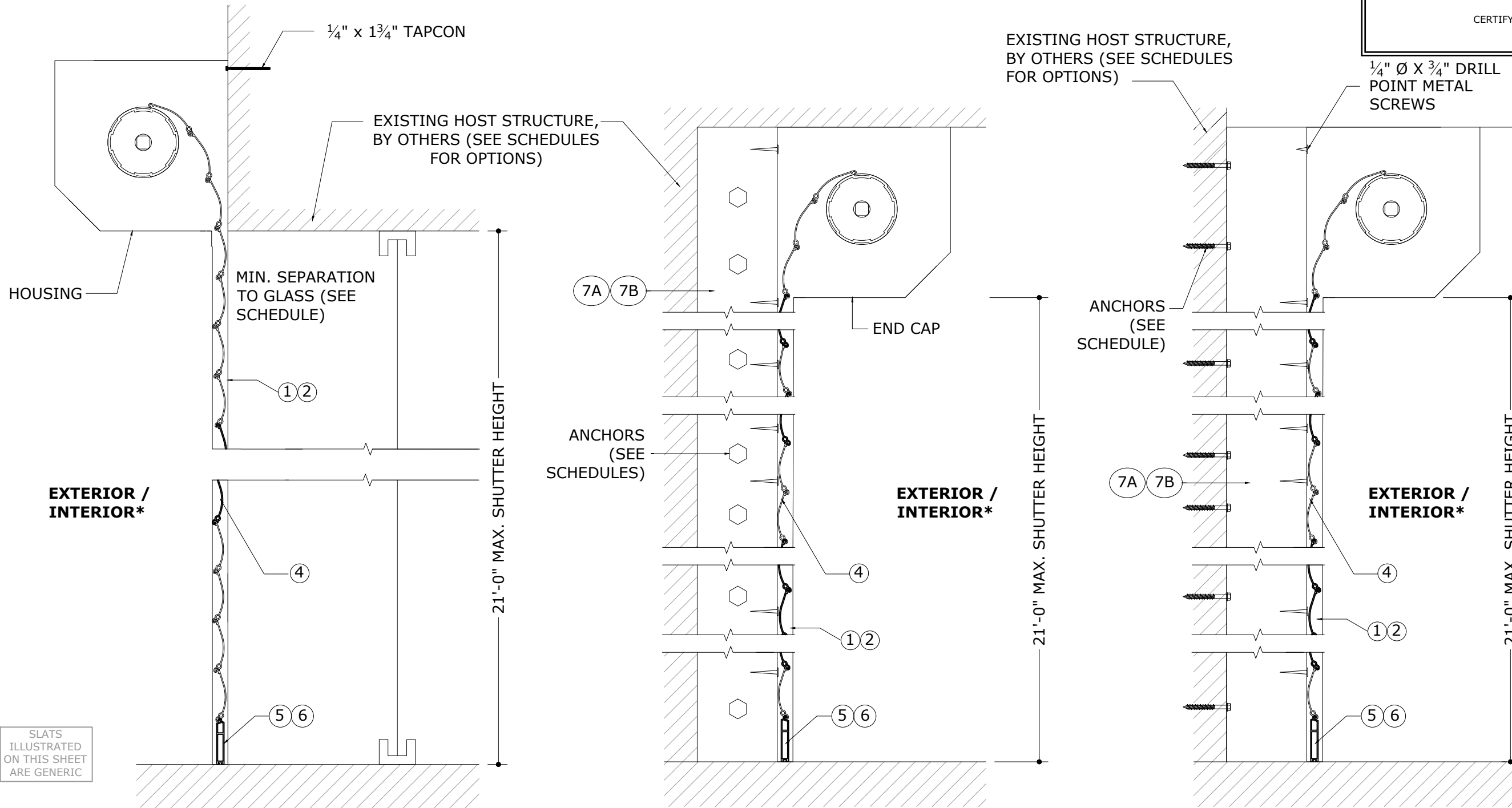
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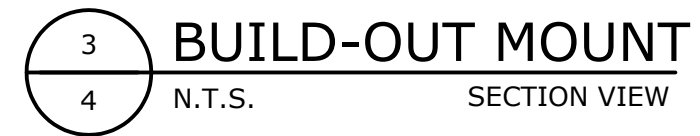
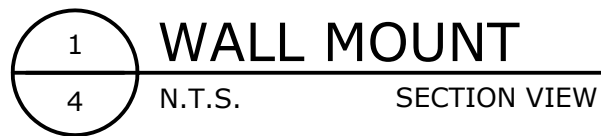
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SHUTTER ATTACHMENT TO HOST

FRANK BENNARDO, P.E.
PE# 96064 CA# F-11383



* WHEN REVERSE MOUNTED ADD 1" OF GLASS SEPARATION PER "GLASS SEPARATION SCHEDULE" ON SHEET 1



HOUSING NOTES:

1. HOUSING (0.034" THICK ALUM, 3105-H14 MIN)
2. END CAP (CAST ALUM, SHALL BE CAPABLE OF SUPPORTING SLAT AND LIFT MECHANISM WEIGHT)
3. HOOD HAS BEEN TESTED FOR IMPACT / CYCLING AND MAY BE INSTALLED WITHIN OPENING
4. EXTRUSIONS SHOWN HEREIN ARE GENERIC AND DO NOT REPRESENT THE ACTUAL SYSTEM

SLATS ILLUSTRATED ON THIS SHEET ARE GENERIC

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 IBC 2018 EDITION & IRC 2018 EDITION
 TEXAS DEPARTMENT OF INSURANCE (TDI)

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	CSL	RWN	06/11/21
REV - ADDTL OPTIONS	RWN	RWN	08/15/21
REV - ADDTL OPTIONS	RWN	RWN	10/14/21
TDI SUBMITTAL	EPR	RWN	11/12/21
REV - TDI COMMENTS	EPR	RWN	02/22/22

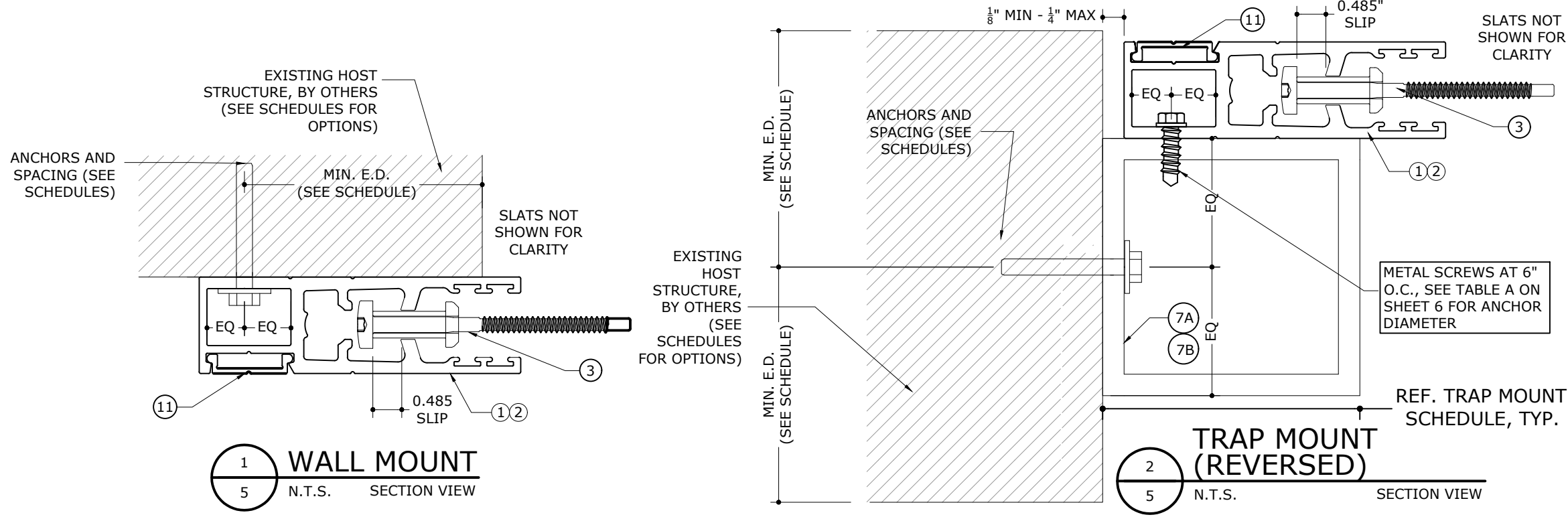
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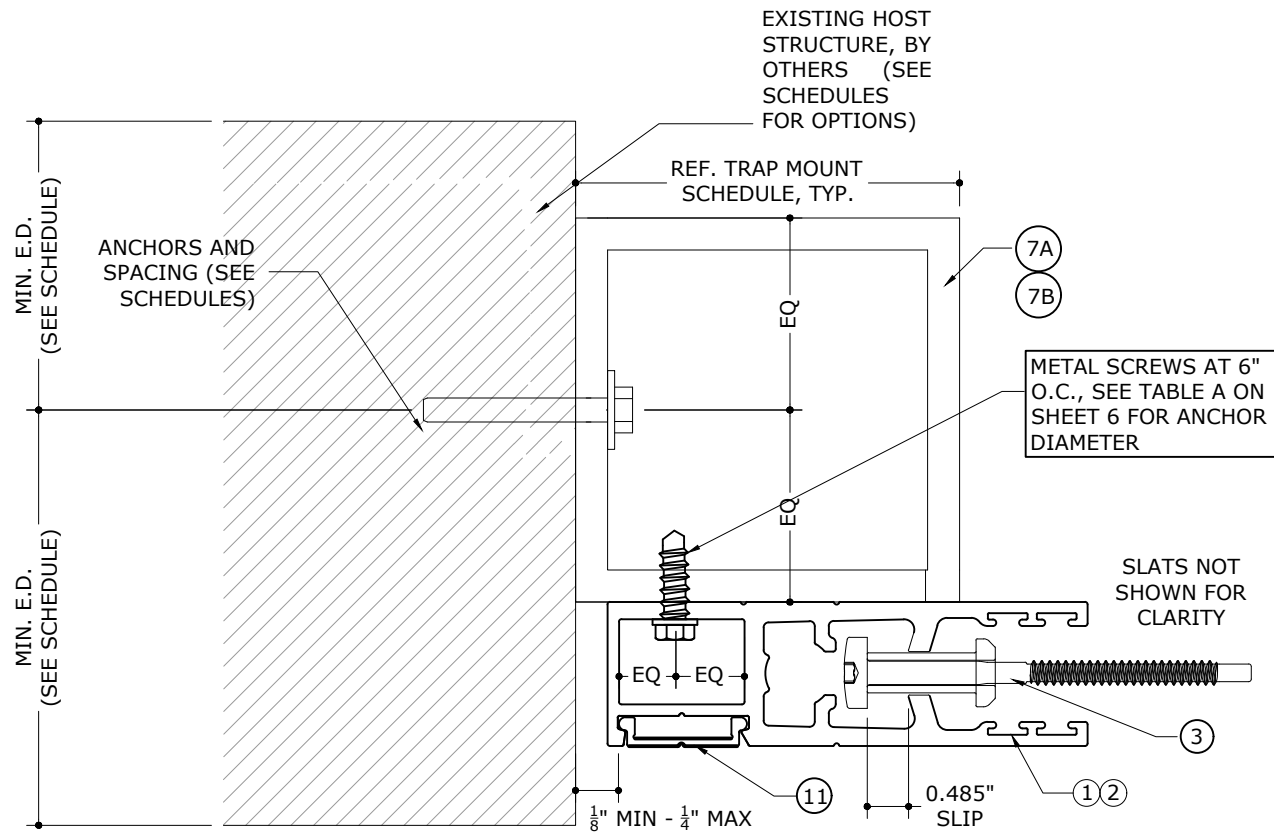
SHUTTER ATTACHMENT TO HOST

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PE# 96064 CA# F-11383

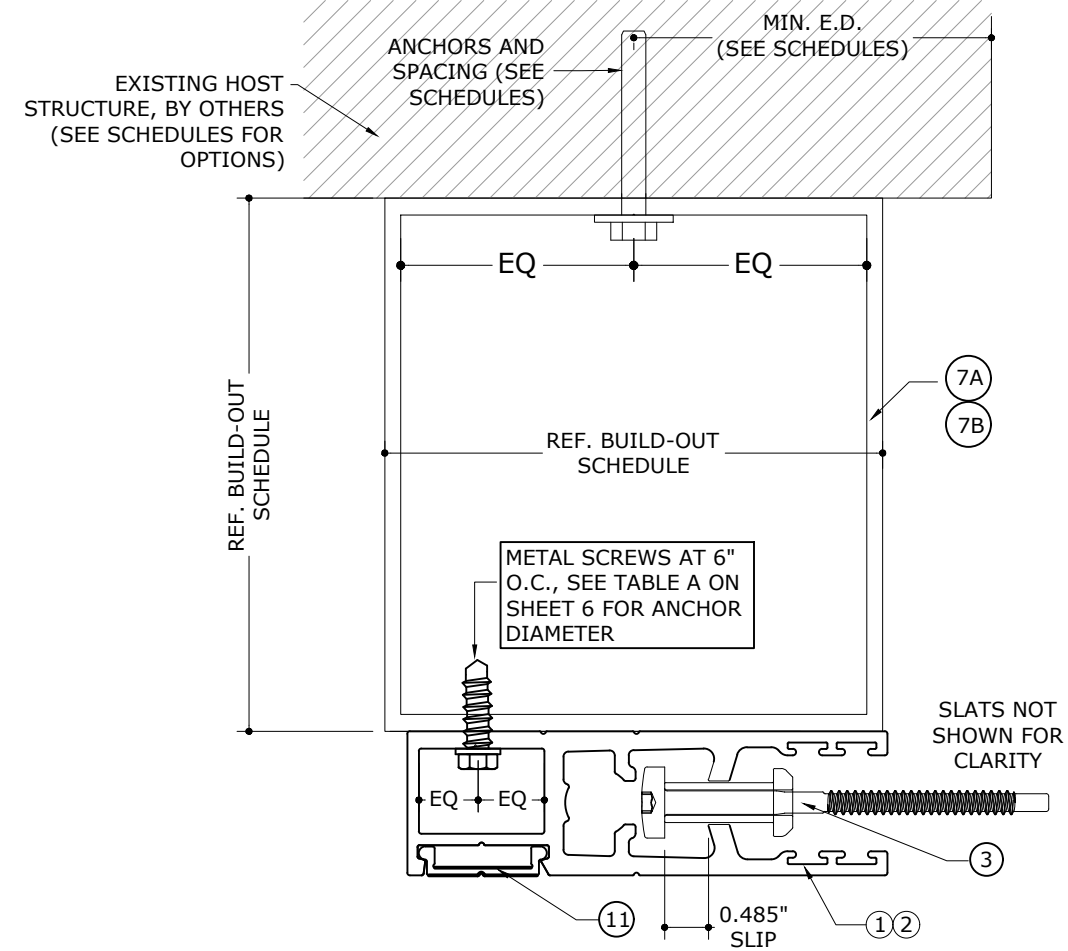


1 WALL MOUNT
5 N.T.S. SECTION VIEW

2 TRAP MOUNT (REVERSED)
5 N.T.S. SECTION VIEW



3 TRAP MOUNT
5 N.T.S. SECTION VIEW



4 BUILD-OUT MOUNT
5 N.T.S. SECTION VIEW

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QOM3 - AL8 ROLL-UP HURRICANE SHUTTER
IBC 2018 EDITION & IRC 2018 EDITION
TEXAS DEPARTMENT OF INSURANCE (TDI)

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	CSL	RWN	06/11/21
REV - ADDTL OPTIONS	RWN	RWN	08/15/21
REV - ADDTL OPTIONS	RWN	RWN	10/14/21
TDI SUBMITTAL	EPR	RWN	11/12/21
REV - TDI COMMENTS	EPR	RWN	02/22/22

20-32431

SCALE: NTS UNLESS NOTED

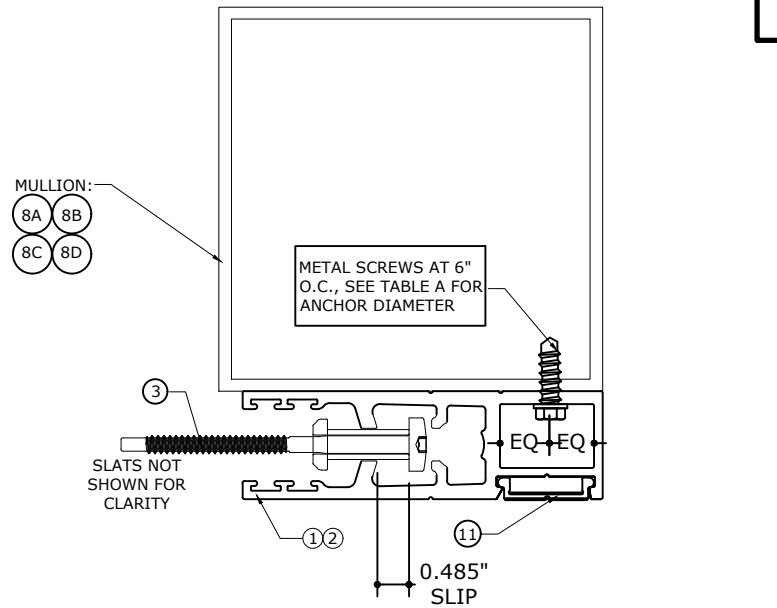
05 OF 30

SHUTTER ATTACHMENT OPTION TO TUBES & MULLIONS

FRANK BENNARDO, P.E.
PE# 96064 CA# F-11383

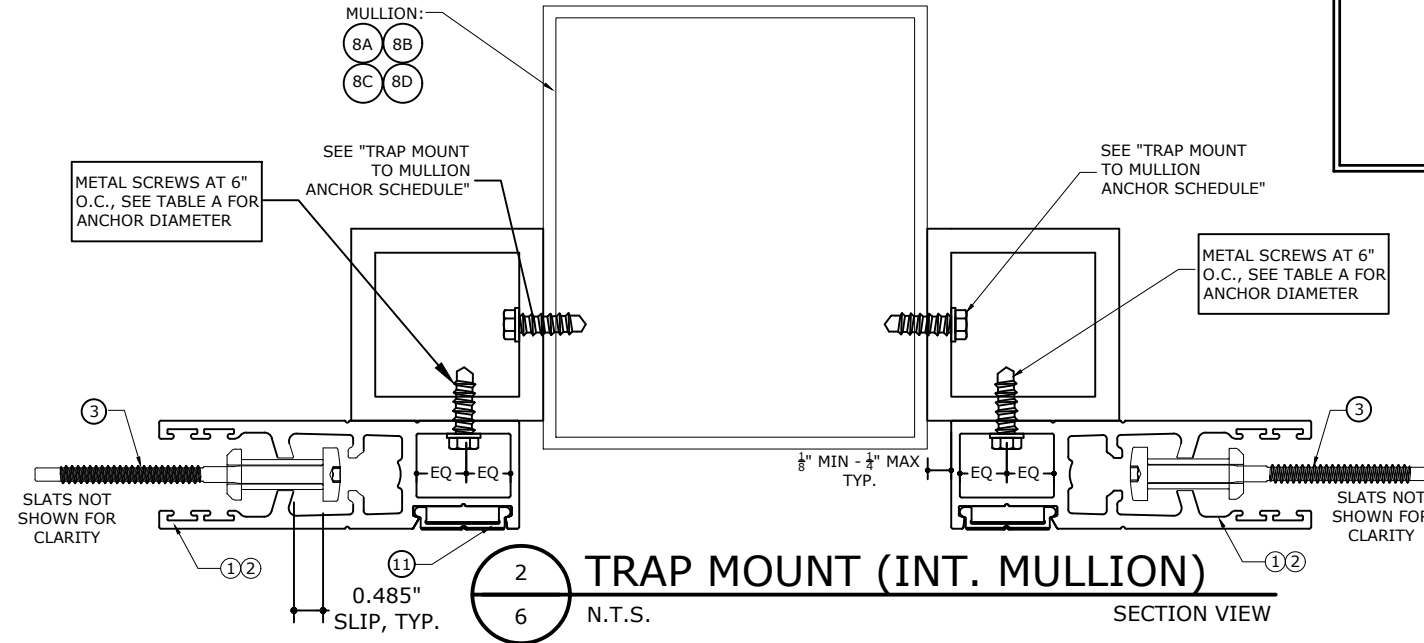


CERTIFY! 02/23/2022



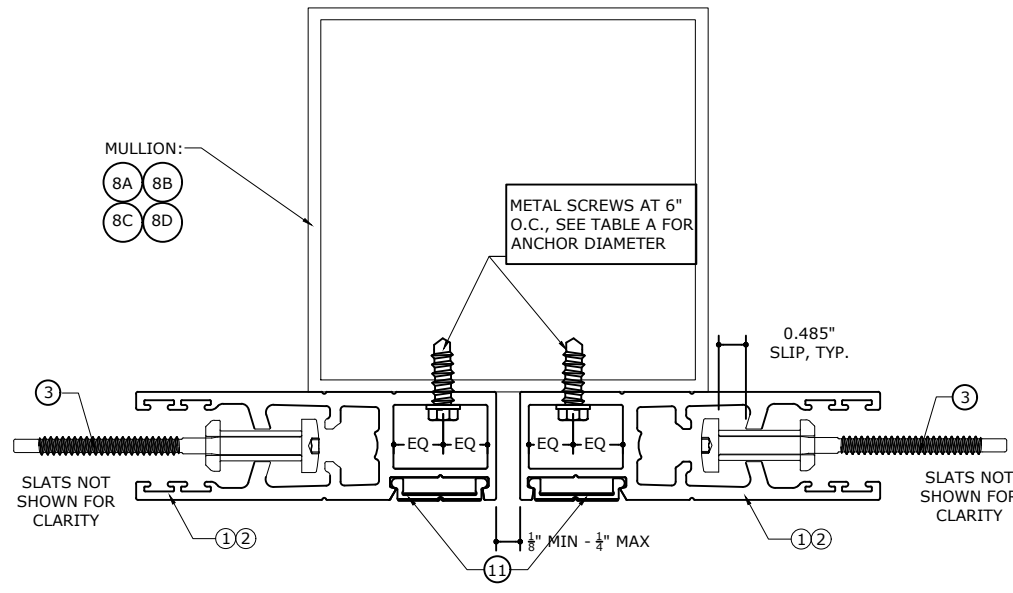
1 FACE MOUNT (END MULLION)
6 N.T.S. SECTION VIEW

ORIENTATION #2 FACE MOUNT END MULLION



2 TRAP MOUNT (INT. MULLION)
6 N.T.S. SECTION VIEW

TRAP MOUNT TO MULLION ANCHOR SCHEDULE



3 FACE MOUNT (INT. MULLION)
6 N.T.S. SECTION VIEW

TABLE A:

FASTENER NOTE:

- USE 5/16"Øx1 1/2" HEX HEAD METAL SCREWS (w/DRILL POINT) AT 6" O.C., FOR THE FOLLOWING SCENARIOS:
 - ALL SHUTTER SPANS > 144"
 - ALL SHUTTER SPANS w/ DESIGN PRESSURES EQUAL TO (OR GREATER THAN) THE LISTED PRESSURE:

SPAN	DP
48"	≥ 246.7 PSF
60"	≥ 214.3 PSF
72"	≥ 213.3 PSF
84"	≥ 187.0 PSF
96"	≥ 171.0 PSF
108"	≥ 160.1 PSF
120"	≥ 152.0 PSF
132"	≥ 145.4 PSF
144"	≥ 140.0 PSF

ALL OTHER SCENARIOS ARE PERMITTED TO USE 1/2"Øx1 1/2" HEX HEAD METAL SCREWS (w/DRILL POINT) AT 6" O.C.

SLAT SPAN	DESIGN PRESSURE	MAXIMUM SPACING (O.C.)				
		#14 410 SS (DRILL POINT SCREW) W/ FULL THREAD PENETRATION; TO 0.1875" MIN. 6061-T6 ALUM	5/16" 410 SS (DRILL POINT SCREW) W/ FULL THREAD PENETRATION; TO 0.1875" MIN. 6061-T6 ALUM	#14 410 SS (DRILL POINT SCREW) W/ FULL THREAD PENETRATION; TO 0.25" MIN. 6061-T6 ALUM	5/16" 410 SS (DRILL POINT SCREW) W/ FULL THREAD PENETRATION; TO 0.25" MIN. 6061-T6 ALUM	3/8" ELCO TAPFLEX W/ FULL THREAD PENETRATION; TO 0.25" MIN. 6061-T6 ALUM
48"	+/- 40 PSF	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 90 PSF	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 140 PSF	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 190 PSF	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 246.7 PSF	6.0"	6.0"	6.0"	6.0"	6.0"
60"	+/- 40 PSF	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 80 PSF	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 120 PSF	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 170 PSF	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 214.3 PSF	6.0"	6.0"	6.0"	6.0"	6.0"
72"	+/- 40 PSF	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 80 PSF	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 120 PSF	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 160 PSF	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 213.3 PSF	6.0"	4.6"	5.5"	6.0"	6.0"
84"	+/- 40 PSF	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 70 PSF	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 110 PSF	4.7"	6.0"	5.0"	6.0"	6.0"
	+/- 150 PSF	5.2"	6.0"	6.0"	6.0"	6.0"
	+/- 187.0 PSF	4.0"	6.0"	4.7"	6.0"	6.0"
96"	+/- 30 PSF	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 60 PSF	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 100 PSF	4.0"	6.0"	4.2"	6.0"	6.0"
	+/- 130 PSF	4.8"	6.0"	5.6"	6.0"	6.0"
	+/- 171.0 PSF	3.5"	6.0"	4.1"	5.6"	6.0"
108"	+/- 30 PSF	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 60 PSF	5.7"	6.0"	6.0"	6.0"	6.0"
	+/- 90 PSF	3.6"	5.9"	3.7"	6.0"	6.0"
	+/- 120 PSF	4.3"	4.9"	4.9"	6.0"	6.0"
	+/- 160.0 PSF	3.2"	3.6"	5.0"	6.0"	6.0"
120"	+/- 30 PSF	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 60 PSF	4.6"	6.0"	4.8"	6.0"	6.0"
	+/- 90 PSF	6.0"	4.9"	5.6"	6.0"	6.0"
	+/- 120 PSF	3.6"	4.1"	5.7"	6.0"	6.0"
	+/- 152.0 PSF	6.0"	3.2"	4.5"	6.0"	6.0"
132"	+/- 30 PSF	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 50 PSF	4.8"	6.0"	5.0"	6.0"	6.0"
	+/- 80 PSF	4.8"	4.8"	5.5"	6.0"	6.0"
	+/- 110 PSF	3.4"	3.4"	3.9"	5.4"	6.0"
	+/- 145.4 PSF	6.0"	6.0"	6.0"	4.1"	6.0"
144"	+/- 20 PSF	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 50 PSF	4.1"	6.0"	4.2"	6.0"	6.0"
	+/- 80 PSF	4.1"	6.0"	4.7"	6.0"	6.0"
	+/- 110 PSF	3.0"	3.0"	3.4"	4.8"	6.0"
	+/- 140.0 PSF	6.0"	6.0"	6.0"	3.7"	6.0"

SLAT SPAN	DESIGN PRESSURE	MAXIMUM SPACING (O.C.)		
		5/16" 410 (DRILL POINT SCREW) SMS W/ FULL THREAD PENETRATION; TO 0.1875" MIN. 6061-T6 ALUM	5/16" 410 (DRILL POINT SCREW) SMS W/ FULL THREAD PENETRATION; TO 0.25" MIN. 6061-T6 ALUM	3/8" ELCO TAPFLEX W/ FULL THREAD PENETRATION; TO 0.25" MIN. 6061-T6 ALUM
156"	+/- 20 PSF	6.0"	6.0"	6.0"
	+/- 40 PSF	6.0"	6.0"	6.0"
	+/- 70 PSF	4.3"	4.8"	6.0"
	+/- 90 PSF	3.3"	3.7"	5.2"
	+/- 124.7 PSF	6.0"	6.0"	3.7"
168"	+/- 20 PSF	6.0"	6.0"	6.0"
	+/- 40 PSF	6.0"	6.0"	6.0"
	+/- 60 PSF	4.5"	5.0"	6.0"
	+/- 80 PSF	3.3"	3.7"	5.3"
	+/- 112.1 PSF	6.0"	6.0"	3.7"
180"	+/- 20 PSF	6.0"	6.0"	6.0"
	+/- 40 PSF	6.0"	6.0"	6.0"
	+/- 60 PSF	4.1"	4.5"	6.0"
	+/- 80 PSF	3.0"	3.4"	4.8"
	+/- 101.7 PSF	6.0"	6.0"	3.7"
192"	+/- 20 PSF	6.0"	6.0"	6.0"
	+/- 30 PSF	6.0"	6.0"	6.0"
	+/- 50 PSF	4.5"	4.9"	6.0"
	+/- 70 PSF	3.2"	3.5"	5.0"
	+/- 92.9 PSF	6.0"	6.0"	3.7"
204"	+/- 20 PSF	6.0"	6.0"	6.0"
	+/- 30 PSF	6.0"	6.0"	6.0"
	+/- 50 PSF	4.1"	4.5"	6.0"
	+/- 60 PSF	3.4"	3.7"	5.3"
	+/- 85.4 PSF	6.0"	6.0"	3.7"
216"	+/- 20 PSF	6.0"	6.0"	6.0"
	+/- 30 PSF	6.0"	6.0"	6.0"
	+/- 40 PSF	4.7"	5.2"	6.0"
	+/- 60 PSF	3.1"	3.4"	4.9"
	+/- 79.0 PSF	6.0"	6.0"	3.7"
228"	+/- 20 PSF	6.0"	6.0"	6.0"
	+/- 30 PSF	5.8"	6.0"	6.0"
	+/- 40 PSF	4.4"	4.8"	6.0"
	+/- 60 PSF	3.2"	3.2"	4.5"
	+/- 73.4 PSF	6.0"	6.0"	3.7"
236"	+/- 20 PSF	6.0"	6.0"	6.0"
	+/- 30 PSF	5.6"	6.0"	6.0"
	+/- 40 PSF	4.1"	4.6"	6.0"
	+/- 50 PSF	3.3"	3.6"	5.2"
	+/- 70.0 PSF	6.0"	6.0"	3.7"

1. [Hatched Box] DESIGNATES ANCHOR CONDITIONS WHICH ARE NOT ACCEPTABLE FOR USE.

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IBC 2018 EDITION & IRC 2018 EDITION
TEXAS DEPARTMENT OF INSURANCE (TDI)

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REV - ADDTL OPTIONS	RWN	RWN	10/14/21
TDI SUBMITTAL	EPR	RWN	11/12/21
REV - TDI COMMENTS	EPR	RWN	02/22/22

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ANCHOR SCHEDULE: WALL MOUNT, SPANS 156"-236", 1/4"Ø FASTENERS

FRANK BENNARDO, P.E.
PE# 96064 CA# F-11383



CERTIFY 02/23/2022

SLAT SPAN	DESIGN PRESSURE	Rx	Ry	1/4" HILTI KH-EZ	1/4" ALL-POINTS SOLID-SET	1/4" DEWALT ULTRACON+	1/4" SS ITW TAPCON	1/4" DEWALT ULTRACON+ SS4	1/4" DEWALT POWER-BOLT	1/4" DEWALT SCREW BOLT+	1/4" DEWALT AGGREGATOR	1/4" DEWALT AGGREGATOR	1/4" DEWALT ULTRACON+	1/4" ALL-POINTS SOLID-SET	1/4" DEWALT AGGREGATOR	1/4" DEWALT AGGREGATOR	#14 WOOD SCREW	#14 (410 SS) DRILL POINT SCREW OR 1/4-20 (410 SS) THRU-BOLT	#14 (410 SS) DRILL POINT SCREW OR 1/4-20 (410 SS) THRU-BOLT		
				CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	GFB	GFB	GFB	GFB OR HOLLOW BLOCK	HOLLOW BLOCK	HOLLOW BLOCK	HOLLOW BLOCK	WOOD	STEEL	ALUM.
				3000 PSI	3000 PSI	3000 PSI	3192 PSI	3000	3000 PSI	ASTM C90	ASTM C90	ASTM C90	ASTM C90	ASTM C90	ASTM C90	ASTM C90	ASTM C90	ASTM C90	ASTM C90	G=0.55	A36
				EMBED: 2.50" EDGE= 3.00"	EMBED: 0.88" EDGE= 3.00"	EMBED: 1.75" EDGE= 2.50"	EMBED: 1.75" EDGE= 2.50"	EMBED: 1.75" EDGE= 2.50"	EMBED: 2.50" EDGE= 3.00"	EMBED: 2.50" EDGE= 3.00"	EMBED: 2.00" EDGE= 4.00"	EMBED: 2.00" EDGE= 2.00"	EMBED: 2.00" EDGE= 2.00"	EMBED: 1.25" EDGE= 2.00"	EMBED: 0.88" EDGE= 3.00"	EMBED: 1.25" EDGE= 4.00"	EMBED: 1.25" EDGE= 2.00"	EMBED: 3.00"	-	-	
156"	+/- 20 PSF	538 LB/FT	130 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	4.6"	5.7"	3.6"	3.5"	6.0"	6.0"	6.0"	
	+/- 30 PSF	871 LB/FT	195 LB/FT	6.0"	6.0"	5.0"	5.2"	6.0"	5.7"	4.8"	5.2"	4.9"		3.6"				4.5"	6.0"	5.6"	
	+/- 40 PSF	1205 LB/FT	260 LB/FT	5.1"	4.6"	3.7"	3.8"	4.4"		3.5"	3.8"	3.6"						3.3"	4.6"	4.1"	
	+/- 50 PSF	1538 LB/FT	325 LB/FT	3.7"	3.6"	2.9"		3.5"		2.7"	3.0"							2.6"	3.6"	3.2"	
168"	+/- 20 PSF	635 LB/FT	140 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	4.0"	4.9"	3.1"	3.0"	6.0"	6.0"	6.0"		
	+/- 30 PSF	1007 LB/FT	210 LB/FT	6.0"	5.5"	4.4"	4.6"	5.3"	5.0"	4.2"	4.5"	4.3"		3.1"			4.0"	5.5"	4.9"		
	+/- 40 PSF	1380 LB/FT	280 LB/FT	4.4"	4.1"	3.2"	3.4"	3.9"		3.1"	3.3"	3.2"					2.9"	4.0"	3.6"		
	+/- 46 PSF	1604 LB/FT	322 LB/FT	3.6"	3.5"	2.8"		3.4"		2.6"	2.9"						2.5"	3.5"	3.1"		
180"	+/- 10 PSF	317 LB/FT	75 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	
	+/- 20 PSF	731 LB/FT	150 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	5.8"	6.0"	6.0"	6.0"	3.6"	4.3"		5.5"	6.0"	6.0"		
	+/- 30 PSF	1144 LB/FT	225 LB/FT	5.4"	4.9"	3.9"	4.1"	4.7"		3.7"	4.0"	3.8"					3.5"	4.9"	4.4"		
	+/- 40 PSF	1558 LB/FT	300 LB/FT	3.7"	3.6"	2.9"	3.0"	3.5"		2.7"	3.0"						2.6"	3.6"	3.2"		
192"	+/- 43 PSF	1682 LB/FT	323 LB/FT	3.4"	3.4"	2.7"		3.2"		2.5"	2.8"						2.4"	3.3"	3.0"		
	+/- 10 PSF	371 LB/FT	80 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	5.4"	5.2"	6.0"	6.0"	6.0"	
	+/- 20 PSF	827 LB/FT	160 LB/FT	6.0"	6.0"	5.4"	5.7"	6.0"	6.0"	5.1"	5.6"	5.3"	3.2"	3.9"			4.9"	6.0"	6.0"		
	+/- 30 PSF	1283 LB/FT	240 LB/FT	4.8"	4.4"	3.5"	3.7"	4.3"		3.3"	3.6"	3.5"					3.1"	4.4"	4.0"		
204"	+/- 40 PSF	1739 LB/FT	320 LB/FT	3.3"	3.3"	2.6"		3.2"		2.5"	2.7"						2.3"	3.3"	2.9"		
	+/- 10 PSF	424 LB/FT	85 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	4.8"	4.6"	6.0"	6.0"		
	+/- 20 PSF	924 LB/FT	170 LB/FT	6.0"	6.0"	4.9"	5.1"	6.0"	5.6"	4.6"	5.1"	4.8"		3.5"			4.4"	6.0"	5.5"		
	+/- 30 PSF	1423 LB/FT	255 LB/FT	4.4"	4.0"	3.2"	3.3"	3.9"		3.0"	3.3"	3.1"					2.9"	4.0"	3.6"		
216"	+/- 38 PSF	1823 LB/FT	323 LB/FT	3.2"	3.1"	2.5"		3.0"		2.4"	2.6"						2.2"	3.1"	2.8"		
	+/- 10 PSF	477 LB/FT	90 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	5.6"	6.0"	4.3"	4.2"	6.0"	6.0"	6.0"		
	+/- 20 PSF	1022 LB/FT	180 LB/FT	6.0"	5.6"	4.4"	4.6"	5.4"	5.1"	4.2"	4.6"	4.4"		3.2"			4.0"	5.6"	5.1"		
	+/- 30 PSF	1566 LB/FT	270 LB/FT	3.7"	3.7"	2.9"	3.0"	3.6"		2.7"	3.0"						2.6"	3.7"	3.3"		
228"	+/- 36 PSF	1893 LB/FT	324 LB/FT	3.1"	3.0"	2.4"		3.2"		2.3"	2.5"						2.2"	3.0"	2.8"		
	+/- 10 PSF	530 LB/FT	95 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	5.1"	6.0"	3.9"	3.8"	6.0"	6.0"	6.0"		
	+/- 20 PSF	1121 LB/FT	190 LB/FT	5.6"	5.1"	4.1"	4.3"	5.0"		3.8"	4.2"	4.0"					3.6"	5.1"	4.7"		
	+/- 30 PSF	1712 LB/FT	285 LB/FT	3.4"	3.4"	2.7"		3.3"		2.5"	2.8"						2.4"	3.4"	3.1"		
236"	+/- 34 PSF	1948 LB/FT	323 LB/FT	3.0"		2.3"				2.2"	2.4"						2.1"	3.0"	2.7"		
	+/- 10 PSF	566 LB/FT	98 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	4.8"	5.7"	3.7"	3.6"	6.0"	6.0"	6.0"		
	+/- 20 PSF	1188 LB/FT	197 LB/FT	5.3"	4.9"	3.8"	4.0"	4.7"		3.6"	4.0"	3.8"					3.4"	4.9"	4.4"		
	+/- 30 PSF	1810 LB/FT	295 LB/FT	3.2"	3.2"	2.5"		3.1"		2.4"	2.6"						2.3"	3.2"	2.9"		
236"	+/- 33 PSF	1997 LB/FT	325 LB/FT			2.3"				2.2"	2.4"						2.1"	2.9"	2.6"		

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08 OF 30

SEE PAGE 22 FOR ANCHOR SCHEDULE NOTES

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ANCHOR SCHEDULE: WALL MOUNT, SPANS 48"-108", ≥5/16"Ø FASTENERS

FRANK BENNARDO, P.E.
PE# 96064 CA# F-11383



CERTIFY 02/23/2022

SLAT SPAN	DESIGN PRESSURE	Rx	Ry	3/8" ELCO / DEWALT CONFLX	3/8" DEWALT SCREW BOLT+	3/8" ELCO / DEWALT CONFLX	3/8" DEWALT SCREW BOLT+	3/8" HILTI KH-EZ	3/8" HILTI KH-EZ	5/16" DEWALT ULTRACON	3/8" DEWALT SCREW BOLT+	5/16" ITW TAPCON XL	5/16" ITW TAPCON XL	3/8" ELCO TAPFLEX	5/16" ELCO DRIL-FLEX	5/16" (410 SS) DRILL POINT SCREW	5/16" (410 SS) DRILL POINT SCREW	#20 (0.32") WOOD SCREW	
				CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	GFB	GFB	HOLLOW BLOCK	1/4" ALUM. OR STEEL	1/4" STEEL	1/4" STEEL	1/4" ALUM.	WOOD	
				4510 PSI EMBED: 3.50" EDGE= 3.75"	3000 PSI EMBED: 3.25" EDGE= 5.00"	1819 PSI EMBED: 3.50" EDGE= 3.75"	3000 PSI EMBED: 3.25" EDGE= 4.00"	3000 PSI EMBED: 3.25" EDGE= 5.00"	3000 PSI EMBED: 3.25" EDGE= 4.00"	3500 PSI EMBED: 2.00" EDGE= 3.13"	ASTM C90 EMBED: 3.25" EDGE= 5.00"	ASTM C90 EMBED: 2.25" EDGE= 4.00"	ASTM C90 EMBED: 1.75" EDGE= 4.00"	6061-T6 OR A36 EDGE= 0.75"	A36 EDGE= 0.75"	A36 EDGE= 0.75"	A36 EDGE= 0.75"	6063-T6 EDGE= 0.63"	G=0.55 EMBED: 4.00" EDGE= 1.50"
48"	+/- 246.7 PSF	53 LB/FT	493 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	
	+/- 140 PSF	244 LB/FT	350 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	
	+/- 150 PSF	322 LB/FT	375 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	
	+/- 160 PSF	400 LB/FT	400 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	5.4"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	
	+/- 170 PSF	479 LB/FT	425 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	4.9"	6.0"	6.0"	6.0"	6.0"	6.0"	
	+/- 180 PSF	557 LB/FT	450 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	4.4"	6.0"	6.0"	6.0"	6.0"	6.0"	
	+/- 190 PSF	635 LB/FT	475 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	4.1"	6.0"	6.0"	6.0"	6.0"	5.3"	
	+/- 200 PSF	714 LB/FT	500 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	5.7"	6.0"	6.0"	3.8"	6.0"	6.0"	6.0"	4.8"	
	+/- 210.0 PSF	792 LB/FT	525 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	5.3"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	4.3"	
+/- 214.3 PSF	826 LB/FT	536 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	5.1"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	4.2"		
60"	+/- 100 PSF	438 LB/FT	300 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	
	+/- 110 PSF	542 LB/FT	330 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	5.4"	6.0"	6.0"	6.0"	6.0"	6.0"	
	+/- 120 PSF	645 LB/FT	360 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	4.8"	6.0"	6.0"	6.0"	6.0"	5.5"	
	+/- 130 PSF	749 LB/FT	390 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	4.3"	6.0"	6.0"	6.0"	6.0"	4.8"	
	+/- 140 PSF	852 LB/FT	420 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	5.7"	6.0"	6.0"	3.9"	6.0"	6.0"	6.0"	6.0"	4.2"	
	+/- 150 PSF	955 LB/FT	450 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	5.1"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	3.8"	
	+/- 160 PSF	1059 LB/FT	480 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	4.7"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	3.4"	
	+/- 170 PSF	1162 LB/FT	510 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	4.4"	6.0"	5.9"	6.0"	6.0"	6.0"	6.0"	6.0"	3.1"	
	+/- 180 PSF	1266 LB/FT	540 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	4.0"	5.6"	5.5"	6.0"	6.0"	6.0"	6.0"	6.0"	2.9"	
	+/- 190 PSF	1369 LB/FT	570 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	3.8"	5.2"	5.1"	6.0"	6.0"	6.0"	6.0"	6.0"	2.7"	
	+/- 200 PSF	1472 LB/FT	600 LB/FT	6.0"	6.0"	6.0"	5.9"	6.0"	6.0"	6.0"	4.9"	4.8"	6.0"	6.0"	6.0"	6.0"	6.0"	2.5"	
	+/- 210.0 PSF	1576 LB/FT	630 LB/FT	6.0"	6.0"	6.0"	5.5"	6.0"	5.8"	6.0"	4.6"	4.5"	6.0"	6.0"	6.0"	6.0"	6.0"	2.3"	
	+/- 213.3 PSF	1610 LB/FT	640 LB/FT	6.0"	6.0"	6.0"	5.4"	6.0"	5.7"	6.0"	4.5"	4.4"	6.0"	6.0"	6.0"	6.0"	6.0"	2.3"	
	84"	+/- 70 PSF	475 LB/FT	245 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
		+/- 80 PSF	606 LB/FT	280 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	5.6"	6.0"	6.0"	6.0"	6.0"	6.0"
+/- 90 PSF		737 LB/FT	315 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	4.8"	6.0"	6.0"	6.0"	6.0"	5.0"	
+/- 100 PSF		867 LB/FT	350 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	4.2"	6.0"	6.0"	6.0"	6.0"	4.2"	
+/- 110 PSF		998 LB/FT	385 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	5.3"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	3.7"	
+/- 120 PSF		1129 LB/FT	420 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	4.8"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	3.3"	
+/- 130 PSF		1259 LB/FT	455 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	4.3"	5.8"	5.7"	6.0"	6.0"	6.0"	6.0"	6.0"	2.9"	
+/- 140 PSF		1390 LB/FT	490 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	4.0"	5.3"	5.2"	6.0"	6.0"	6.0"	6.0"	6.0"	2.7"	
+/- 150 PSF		1521 LB/FT	525 LB/FT	6.0"	6.0"	6.0"	5.9"	6.0"	6.0"	6.0"	4.9"	4.8"	6.0"	6.0"	6.0"	6.0"	6.0"	2.5"	
+/- 160 PSF		1652 LB/FT	560 LB/FT	6.0"	6.0"	6.0"	5.4"	6.0"	6.0"	5.7"	4.5"	4.4"	6.0"	6.0"	6.0"	6.0"	6.0"	2.3"	
+/- 170 PSF		1782 LB/FT	595 LB/FT	6.0"	6.0"	6.0"	5.1"	6.0"	5.3"	6.0"	4.2"	4.1"	6.0"	6.0"	6.0"	6.0"	6.0"	2.3"	
+/- 180 PSF		1913 LB/FT	630 LB/FT	6.0"	5.7"	6.0"	4.7"	6.0"	5.0"	6.0"	3.9"	3.9"	6.0"	6.0"	6.0"	6.0"	6.0"	2.5"	
+/- 187 PSF		2004 LB/FT	655 LB/FT	6.0"	5.4"	6.0"	4.5"	6.0"	4.8"	6.0"	3.7"	3.7"	6.0"	6.0"	6.0"	6.0"	6.0"	2.3"	
96"	+/- 50 PSF	463 LB/FT	200 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	
	+/- 60 PSF	623 LB/FT	240 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	5.9"	
	+/- 70 PSF	783 LB/FT	280 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	4.9"	6.0"	6.0"	6.0"	6.0"	4.7"	
	+/- 80 PSF	943 LB/FT	320 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	5.9"	6.0"	6.0"	4.2"	6.0"	6.0"	6.0"	6.0"	4.0"	
	+/- 90 PSF	1103 LB/FT	360 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	5.1"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	3.4"	
	+/- 100 PSF	1263 LB/FT	400 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	4.5"	6.0"	5.9"	6.0"	6.0"	6.0"	6.0"	6.0"	3.0"	
	+/- 110 PSF	1423 LB/FT	440 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	4.0"	5.3"	5.3"	6.0"	6.0"	6.0"	6.0"	6.0"	2.6"	
	+/- 120 PSF	1583 LB/FT	480 LB/FT	6.0"	6.0"	6.0"	5.8"	6.0"	6.0"	6.0"	4.8"	4.8"	6.0"	6.0"	6.0"	6.0"	6.0"	2.4"	
	+/- 130 PSF	1743 LB/FT	520 LB/FT	6.0"	6.0"	6.0"	5.3"	6.0"	5.5"	6.0"	4.4"	4.3"	6.0"	6.0"	6.0"	6.0"	6.0"	5.9"	
	+/- 140 PSF	1903 LB/FT	560 LB/FT	6.0"	5.8"	6.0"	4.8"	6.0"	5.1"	6.0"	4.0"	4.0"	6.0"	6.0"	6.0"	6.0"	6.0"	5.4"	
	+/- 150 PSF	2063 LB/FT	600 LB/FT	6.0"	5.4"	6.0"	4.5"	6.0"	4.7"	6.0"	3.7"	3.7"	6.0"	6.0"	6.0"	6.0"	6.0"	5.0"	
+/- 160 PSF	2223 LB/FT	640 LB/FT	6.0"	5.0"	6.0"	4.2"	6.0"	4.4"	6.0"	3.5"	3.5"	6.0"	6.0"	6.0"	6.0"	6.0"	4.7"		
+/- 171 PSF	2399 LB/FT	684 LB/FT	6.0"	4.7"	6.0"	3.6"	6.0"	5.4"	6.0"	3.2"	3.2"	6.0"	6.0"	6.0"	6.0"	6.0"	4.3"		
108"	+/- 40 PSF	498 LB/FT	180 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	
	+/- 50 PSF	689 LB/FT	225 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	5.8"	6.0"	6.0"	6.0"	6.0"	5.4"	
	+/- 60 PSF	880 LB/FT	270 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	4.7"	6.0"	6.0"	6.0"	6.0"	4.3"	
	+/- 70.0 PSF	1072 LB/FT	315 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	5.5"	6.0"	6.0"	3.9"	6.0"	6.0"	6.0"	6.0"	3.5"	
	+/- 80.0 PSF	1263 LB/FT	360 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	4.7"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	3.0"	
	+/- 90.0 PSF	1454 LB/FT	405 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	4.1"	5.3"	5.3"	6.0"	6.0"	6.0"	6.0"	6.0"	2.6"	
	+/- 100.0 PSF	1645 LB/FT	450 LB/FT	6.0"	6.0"	6.0"	5.7"	6.0"	6.0"	6.0"	4.7"	4.7"	6.0"	6.0"	6.0"	6.0"	6.0"	2.3"	
	+/- 110.0 PSF	1837 LB/FT	495 LB/FT	6.0"	6.0"	6.0"	5.1"	6.0"	5.3"	6.0"	4.2"	4.2"	6.0"	6.0"	6.0"	6.0"	6.0"	5.7"	
	+/- 120.0 PSF	2028 LB/FT	540 LB/FT	6.0"	5.6"	6.0"	4.6"	6.0"	4.8"	6.0"	3.8"	3.8"	6.0"	6.0"	6.0"	6.0"	6.0"	5.2"	
	+/- 130.0 PSF	2219 LB/FT	585 LB/FT	6.0"	5.1"	6.0"	4.2"	6.0"	4.4"	6.0"	3.5"	3.5"	6.0"	6.0"	6.0"	6.0"	6.0"	4.8"	
	+/- 140.0 PSF	2410 LB/FT	630 LB/FT	6.0"	4.7"	6.0"	3.6"	6.0"	5.5"	6.0"	3.2"	3.2"	6.0"	6.0"	6.0"	6.0"	6.0"	4.4"	
	+/- 150.0 PSF	2602 LB/FT	675 LB/FT	6.0"	4.4"	6.0"	3.4"	6.0"	5.1"	6.0"	3.0"	3.0"	6.0"	6.0"	6.0"	6.0"	6.0"	4.1"	
	+/- 160.0 PSF	2793 LB/FT	720 LB/FT	6.0"	4.1"	6.0"	3.1"	6.0"	4.8"	6.0"	3.3"	3.3"	6.0"	6.0"	6.0"	6.0			

ANCHOR SCHEDULE: WALL MOUNT, SPANS 120"-144", ≥5/16"Ø FASTENERS

FRANK BENNARDO, P.E.
PE# 96064 CA# F-11383



CERTIFY 02/23/2022

SLAT SPAN	DESIGN PRESSURE	Rx	Ry	3/8" ELCO / DEWALT CONFLEX	3/8" DEWALT SCREW BOLT+	3/8" ELCO / DEWALT CONFLEX	3/8" DEWALT SCREW BOLT+	3/8" HILTI KH-EZ	3/8" HILTI KH-EZ	5/16" DEWALT ULTRACON	3/8" DEWALT SCREW BOLT+	5/16" ITW TAPCON XL	5/16" ITW TAPCON XL	3/8" ELCO TAPFLEX	5/16" ELCO DRIL-FLEX	5/16" (410 SS) DRILL POINT SCREW	5/16" (410 SS) DRILL POINT SCREW	#20 (0.32") WOOD SCREW	
				CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	GFB	GFB	HOLLOW BLOCK	1/4" ALUM. OR STEEL	1/4" STEEL	1/4" STEEL	1/4" ALUM.	WOOD		
				4510 PSI	3000 PSI	1819 PSI	3000 PSI	3000 PSI	3000 PSI	3500 PSI	ASTM C90	ASTM C90	ASTM C90	6061-T6 OR A36	A36	A36	6063-T6	G=0.55	
				EMBED: 3.50" EDGE = 3.75"	EMBED: 3.25" EDGE = 5.00"	EMBED: 3.50" EDGE = 3.75"	EMBED: 3.25" EDGE = 4.00"	EMBED: 3.25" EDGE = 5.00"	EMBED: 3.25" EDGE = 4.00"	EMBED: 2.00" EDGE = 3.13"	EMBED: 3.25" EDGE = 5.00"	EMBED: 2.25" EDGE = 4.00"	EMBED: 1.75" EDGE = 4.00"					EMBED: 4.00" EDGE = 1.50"	
120"	+/- 30 PSF	456 LB/FT	150 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	
	+/- 40 PSF	680 LB/FT	200 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	
	+/- 50 PSF	905 LB/FT	250 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	
	+/- 60 PSF	1129 LB/FT	300 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	
	+/- 70.0 PSF	1353 LB/FT	350 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	
	+/- 80.0 PSF	1578 LB/FT	400 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 90.0 PSF	1802 LB/FT	450 LB/FT	6.0"	6.0"	6.0"	5.2"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 100.0 PSF	2026 LB/FT	500 LB/FT	6.0"	5.6"	6.0"	4.7"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 110.0 PSF	2250 LB/FT	550 LB/FT	6.0"	5.1"	6.0"	4.2"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 120.0 PSF	2475 LB/FT	600 LB/FT	6.0"	4.6"	6.0"	3.6"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 130.0 PSF	2699 LB/FT	650 LB/FT	6.0"	4.2"	6.0"	3.3"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 140.0 PSF	2923 LB/FT	700 LB/FT	6.0"	3.7"	6.0"	3.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
+/- 150.0 PSF	3148 LB/FT	750 LB/FT	6.0"	3.4"	6.0"	4.3"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	
+/- 152.0 PSF	3192 LB/FT	760 LB/FT	6.0"	3.4"	6.0"	4.2"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	
132"	+/- 30 PSF	598 LB/FT	165 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	
	+/- 40 PSF	857 LB/FT	220 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	
	+/- 50 PSF	1116 LB/FT	275 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	
	+/- 60 PSF	1375 LB/FT	330 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	
	+/- 70 PSF	1634 LB/FT	385 LB/FT	6.0"	6.0"	6.0"	5.8"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	
	+/- 80 PSF	1893 LB/FT	440 LB/FT	6.0"	6.0"	6.0"	5.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	
	+/- 90 PSF	2152 LB/FT	495 LB/FT	6.0"	5.4"	6.0"	4.4"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	
	+/- 100 PSF	2411 LB/FT	550 LB/FT	6.0"	4.8"	6.0"	3.7"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	
	+/- 110 PSF	2670 LB/FT	605 LB/FT	6.0"	4.3"	6.0"	3.3"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	
	+/- 120 PSF	2929 LB/FT	660 LB/FT	6.0"	3.7"	6.0"	3.1"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	
	+/- 130 PSF	3188 LB/FT	715 LB/FT	6.0"	3.4"	6.0"	4.3"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	
	+/- 140 PSF	3447 LB/FT	770 LB/FT	6.0"	3.1"	6.0"	3.7"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	
	+/- 145 PSF	3587 LB/FT	800 LB/FT	6.0"	3.0"	6.0"	3.6"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	
	144"	+/- 20 PSF	440 LB/FT	120 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
+/- 30 PSF		735 LB/FT	180 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	
+/- 40 PSF		1031 LB/FT	240 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	
+/- 50 PSF		1326 LB/FT	300 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	
+/- 60 PSF		1622 LB/FT	360 LB/FT	6.0"	6.0"	6.0"	5.9"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	
+/- 70 PSF		1917 LB/FT	420 LB/FT	6.0"	6.0"	6.0"	5.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	
+/- 80 PSF		2213 LB/FT	480 LB/FT	6.0"	5.2"	6.0"	4.3"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	
+/- 90 PSF		2508 LB/FT	540 LB/FT	6.0"	4.6"	6.0"	3.6"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	
+/- 100 PSF		2803 LB/FT	600 LB/FT	6.0"	4.1"	6.0"	3.2"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	
+/- 110 PSF		3099 LB/FT	660 LB/FT	6.0"	3.5"	6.0"	4.4"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	
+/- 120 PSF		3394 LB/FT	720 LB/FT	6.0"	3.2"	6.0"	4.1"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	
+/- 130 PSF	3690 LB/FT	780 LB/FT	6.0"	3.5"	6.0"	3.5"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"		
+/- 140.0 PSF	3985 LB/FT	840 LB/FT	6.0"	3.3"	6.0"	3.3"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"		

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REMARKS	DRWN	CHKD	DATE
INIT ISSUE	CSL	RWN	06/11/21
REV - ADDTL OPTIONS	RWN	RWN	08/15/21
REV - ADDTL OPTIONS	RWN	RWN	10/14/21
TDI SUBMITTAL	EPR	RWN	11/12/21
REV - TDI COMMENTS	EPR	RWN	02/22/22

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SCALE: NTS UNLESS NOTED

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SEE PAGE 22 FOR ANCHOR SCHEDULE NOTES

c:\users\eric\engineering\express\production - documents\projects\20-32431.qmi.dwg 3-a18 family drawing.wp 2020.tdi - 20-32431k - tdi - dwg.dwg

ANCHOR SCHEDULE: WALL MOUNT, SPANS 156"-180", ≥5/16"Ø FASTENERS

FRANK BENNARDO, P.E.
PE# 96064 CA# F-11383



CERTIFY! 02/23/2022

SLAT SPAN	DESIGN PRESSURE	Rx	Ry	3/8" ELCO / DEWALT CONPLEX	3/8" DEWALT SCREW BOLT+	3/8" ELCO / DEWALT CONPLEX	3/8" DEWALT SCREW BOLT+	3/8" HILTI KH-EZ	3/8" HILTI KH-EZ	5/16" DEWALT ULTRACON	3/8" DEWALT SCREW BOLT+	5/16" ITW TAPCON XL	5/16" ITW TAPCON XL	3/8" ELCO TAPFLEX	5/16" ELCO DRIL-FLEX	5/16" (410 SS) DRILL POINT SCREW	5/16" (410 SS) DRILL POINT SCREW	#20 (0.32") WOOD SCREW
				CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	GFB	GFB	HOLLOW BLOCK	1/4" ALUM. OR STEEL	1/4" STEEL	1/4" STEEL	1/4" ALUM.	WOOD
				4510 PSI	3000 PSI	1819 PSI	3000 PSI	3000 PSI	3000 PSI	3500 PSI	ASTM C90	ASTM C90	ASTM C90	6061-T6 OR A36	A36	A36	6063-T6	G=0.55
				EMBED: 3.50"	EMBED: 3.25"	EMBED: 3.50"	EMBED: 3.25"	EMBED: 3.25"	EMBED: 3.25"	EMBED: 2.00"	EMBED: 3.25"	EMBED: 2.25"	EMBED: 1.75"	-	-	-	-	EMBED: 4.00"
				EDGE= 3.75"	EDGE= 5.00"	EDGE= 3.75"	EDGE= 4.00"	EDGE= 5.00"	EDGE= 4.00"	EDGE= 3.13"	EDGE= 5.00"	EDGE= 4.00"	EDGE= 4.00"	EDGE= 0.75"	EDGE= 0.75"	EDGE= 0.75"	EDGE= 0.63"	EDGE= 1.50"
156"	+/- 20 PSF	538 LB/FT	130 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 30 PSF	871 LB/FT	195 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 40 PSF	1205 LB/FT	260 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	5.3"	6.0"	6.0"	3.9"	6.0"	6.0"	6.0"	6.0"	4.4"
	+/- 50 PSF	1538 LB/FT	325 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	4.2"	5.3"	5.2"		6.0"	6.0"	6.0"	6.0"	2.5"
	+/- 60 PSF	1872 LB/FT	390 LB/FT	6.0"	6.0"	6.0"	5.2"	6.0"	5.4"		4.3"	4.3"		6.0"	6.0"	6.0"	5.9"	
	+/- 70 PSF	2205 LB/FT	455 LB/FT	6.0"	5.3"	6.0"	4.4"	6.0"	4.6"		3.7"			6.0"	5.5"	5.5"	5.0"	
	+/- 75 PSF	2372 LB/FT	488 LB/FT	6.0"	4.9"	6.0"	4.1"	5.8"	4.3"		3.4"			6.0"	5.1"	5.1"	4.7"	
	+/- 80 PSF	2538 LB/FT	520 LB/FT	6.0"	4.6"	6.0"	3.6"	5.4"	4.0"		3.2"			6.0"	4.8"	4.8"	4.4"	
	+/- 90 PSF	2872 LB/FT	585 LB/FT	6.0"	4.1"	6.0"	3.2"	4.8"	3.3"					5.8"	4.2"	4.2"	3.9"	
	+/- 100 PSF	3205 LB/FT	650 LB/FT	6.0"	3.4"			4.3"						5.2"	3.8"	3.8"	3.5"	
	+/- 105 PSF	3372 LB/FT	683 LB/FT	6.0"	3.3"			4.1"						5.0"	3.6"	3.6"	3.3"	
	+/- 110 PSF	3539 LB/FT	715 LB/FT	6.0"	3.1"			3.7"						4.7"	3.4"	3.5"	3.1"	
+/- 120 PSF	3872 LB/FT	780 LB/FT					3.4"						4.3"	3.1"	3.2"			
+/- 124.7 PSF	4029 LB/FT	811 LB/FT					3.2"						4.2"	3.0"	3.0"			
168"	+/- 20 PSF	635 LB/FT	140 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 30 PSF	1007 LB/FT	210 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	4.7"	6.0"	6.0"	6.0"	6.0"	3.8"
	+/- 40 PSF	1380 LB/FT	280 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	4.7"	5.9"	5.8"		6.0"	6.0"	6.0"	6.0"	2.8"
	+/- 50 PSF	1753 LB/FT	350 LB/FT	6.0"	6.0"	6.0"	5.5"	6.0"	5.8"		4.6"	4.6"		6.0"	6.0"	6.0"	6.0"	
	+/- 60 PSF	2126 LB/FT	420 LB/FT	6.0"	5.5"	6.0"	4.6"	6.0"	4.8"		3.8"	3.8"		6.0"	5.7"	5.8"	5.2"	
	+/- 65 PSF	2312 LB/FT	455 LB/FT	6.0"	5.1"	6.0"	4.2"	6.0"	4.4"		3.5"			6.0"	5.3"	5.3"	4.8"	
	+/- 70 PSF	2499 LB/FT	490 LB/FT	6.0"	4.7"	6.0"	3.6"	5.6"	4.1"		3.3"			6.0"	4.9"	4.9"	4.5"	
	+/- 80 PSF	2872 LB/FT	560 LB/FT	6.0"	4.1"	6.0"	3.2"	4.9"	3.4"					5.9"	4.2"	4.3"	3.9"	
	+/- 90 PSF	3244 LB/FT	630 LB/FT	6.0"	3.4"			4.3"						5.2"	3.8"	3.8"	3.4"	
	+/- 95 PSF	3431 LB/FT	665 LB/FT	6.0"	3.2"			4.1"						4.9"	3.6"	3.6"	3.3"	
	+/- 100 PSF	3617 LB/FT	700 LB/FT		3.0"			3.6"						4.7"	3.4"	3.4"	3.1"	
	+/- 110 PSF	3990 LB/FT	770 LB/FT					3.3"						4.2"	3.1"	3.1"		
+/- 112.1 PSF	4068 LB/FT	785 LB/FT					3.2"						4.2"	3.0"	3.0"			
180"	+/- 10 PSF	317 LB/FT	75 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 20 PSF	731 LB/FT	150 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	5.3"
	+/- 30 PSF	1144 LB/FT	225 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	5.7"	6.0"	6.0"	4.2"	6.0"	6.0"	6.0"	6.0"	3.4"
	+/- 40 PSF	1558 LB/FT	300 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	4.2"	5.3"	5.2"		6.0"	6.0"	6.0"	6.0"	2.5"
	+/- 50 PSF	1972 LB/FT	375 LB/FT	6.0"	6.0"	6.0"	4.9"	6.0"	5.2"		4.2"	4.1"		6.0"	6.0"	6.0"	5.7"	
	+/- 54 PSF	2137 LB/FT	405 LB/FT	6.0"	5.5"	6.0"	4.6"	6.0"	4.8"		3.8"	3.8"		6.0"	5.7"	5.8"	5.2"	
	+/- 60 PSF	2386 LB/FT	450 LB/FT	6.0"	4.9"	6.0"	4.1"	5.9"	4.3"		3.4"			6.0"	5.1"	5.2"	4.7"	
	+/- 70 PSF	2799 LB/FT	525 LB/FT	6.0"	4.2"	6.0"	3.3"	5.0"	3.5"					6.0"	4.4"	4.4"	4.0"	
	+/- 80 PSF	3213 LB/FT	600 LB/FT	6.0"	3.4"			4.4"	3.0"					5.3"	3.8"	3.8"	3.5"	
	+/- 85 PSF	3420 LB/FT	638 LB/FT	6.0"	3.2"			4.1"						5.0"	3.6"	3.6"	3.3"	
	+/- 90 PSF	3627 LB/FT	675 LB/FT		3.1"			3.6"						4.7"	3.4"	3.4"	3.1"	
	+/- 100 PSF	4040 LB/FT	750 LB/FT					3.3"						4.2"	3.0"	3.1"		
+/- 101.7 PSF	4111 LB/FT	763 LB/FT					3.2"						4.1"		3.0"			

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REMARKS	DRWN	CHKD	DATE
INIT ISSUE	CSL	RWN	06/11/21
REV - ADDTL OPTIONS	RWN	RWN	08/15/21
REV - ADDTL OPTIONS	RWN	RWN	10/14/21
TDI SUBMITTAL	EPR	RWN	11/12/21
REV - TDI COMMENTS	EPR	RWN	02/22/22

20-32431

SCALE: NTS UNLESS NOTED

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SEE PAGE 22 FOR ANCHOR SCHEDULE NOTES

ANCHOR SCHEDULE: WALL MOUNT, SPANS 192"-236", ≥5/16"Ø FASTENERS

FRANK BENNARDO, P.E.
PE# 96064 CA# F-11383



CERTIFY! 02/23/2022

SLAT SPAN	DESIGN PRESSURE	Rx	Ry	3/8" ELCO / DEWALT CONFLEX	3/8" DEWALT SCREW BOLT+	3/8" ELCO / DEWALT CONFLEX	3/8" DEWALT SCREW BOLT+	3/8" HILTI KH-EZ	3/8" HILTI KH-EZ	5/16" DEWALT ULTRACON	3/8" DEWALT SCREW BOLT+	5/16" ITW TAPCON XL	5/16" ITW TAPCON XL	3/8" ELCO TAPFLEX	5/16" ELCO DRIL-FLEX	5/16" (410 SS) DRILL POINT SCREW	5/16" (410 SS) DRILL POINT SCREW	#20 (0.32") WOOD SCREW	
				CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	GFB	GFB	HOLLOW BLOCK	1/4" ALUM. OR STEEL	1/4" STEEL	1/4" STEEL	1/4" STEEL	1/4" ALUM.	WOOD
				4510 PSI	3000 PSI	1819 PSI	3000 PSI	3000 PSI	3000 PSI	3500 PSI	ASTM C90	ASTM C90	ASTM C90	6061-T6 OR A36	A36	A36	A36	6063-T6	G=0.55
				EMBED: 3.50" EDGE= 3.75"	EMBED: 3.25" EDGE= 5.00"	EMBED: 3.50" EDGE= 3.75"	EMBED: 3.25" EDGE= 4.00"	EMBED: 3.25" EDGE= 5.00"	EMBED: 3.25" EDGE= 4.00"	EMBED: 2.00" EDGE= 3.13"	EMBED: 3.25" EDGE= 5.00"	EMBED: 2.25" EDGE= 4.00"	EMBED: 1.75" EDGE= 4.00"	-	-	-	-	-	EMBED: 4.00" EDGE= 1.50"
192"	+/- 10 PSF	371 LB/FT	80 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	
	+/- 20 PSF	827 LB/FT	160 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	5.8"	6.0"	6.0"	6.0"	6.0"	4.7"	
	+/- 30 PSF	1283 LB/FT	240 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	5.1"	6.0"	6.0"	3.8"	6.0"	6.0"	6.0"	6.0"	3.0"	
	+/- 40 PSF	1739 LB/FT	320 LB/FT	6.0"	6.0"	6.0"	5.6"	6.0"	5.9"	3.8"	4.7"	4.7"		6.0"	6.0"	6.0"	6.0"	2.2"	
	+/- 50 PSF	2195 LB/FT	400 LB/FT	6.0"	5.4"	6.0"	4.5"	6.0"	4.7"					6.0"	5.6"	5.7"	5.1"		
	+/- 55 PSF	2423 LB/FT	440 LB/FT	6.0"	4.9"	6.0"	4.0"	5.8"	4.2"		3.4"			6.0"	5.1"	5.1"	4.7"		
	+/- 60 PSF	2651 LB/FT	480 LB/FT	6.0"	4.5"	6.0"	3.5"	5.3"	3.7"		3.1"			6.0"	4.6"	4.7"	4.3"		
	+/- 70 PSF	3107 LB/FT	560 LB/FT	6.0"	3.6"			4.5"	3.1"					5.5"	4.0"	4.0"	3.6"		
	+/- 75 PSF	3335 LB/FT	600 LB/FT	6.0"	3.3"			4.2"						5.1"	3.7"	3.7"	3.4"		
	+/- 80 PSF	3563 LB/FT	640 LB/FT	6.0"	3.1"			3.7"						4.8"	3.5"	3.5"	3.2"		
+/- 90 PSF	4019 LB/FT	720 LB/FT					3.3"						4.3"	3.1"	3.1"				
+/- 92.9 PSF	4151 LB/FT	743 LB/FT					3.2"						4.1"						
204"	+/- 10 PSF	424 LB/FT	85 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	
	+/- 20 PSF	924 LB/FT	170 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	5.3"	6.0"	6.0"	6.0"	6.0"	4.2"	
	+/- 30 PSF	1423 LB/FT	255 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	4.7"	5.8"	5.8"		6.0"	6.0"	6.0"	6.0"	2.7"	
	+/- 40 PSF	1923 LB/FT	340 LB/FT	6.0"	6.0"	6.0"	5.1"	6.0"	5.4"		4.3"	4.3"		6.0"	6.0"	6.0"	5.9"		
	+/- 50 PSF	2423 LB/FT	425 LB/FT	6.0"	4.9"	6.0"	4.1"	5.8"	4.3"		3.4"			6.0"	5.1"	5.2"	4.7"		
	+/- 55 PSF	2673 LB/FT	468 LB/FT	6.0"	4.5"	6.0"	3.4"	5.3"	3.7"		3.1"			6.0"	4.6"	4.7"	4.2"		
	+/- 60 PSF	2922 LB/FT	510 LB/FT	6.0"	4.1"	6.0"	3.2"	4.8"	3.3"					5.9"	4.2"	4.3"	3.9"		
	+/- 70 PSF	3422 LB/FT	595 LB/FT	6.0"	3.3"			4.1"						5.0"	3.6"	3.7"	3.3"		
	+/- 75 PSF	3672 LB/FT	638 LB/FT		3.0"			3.6"						4.7"	3.4"	3.4"	3.1"		
	+/- 80 PSF	3922 LB/FT	680 LB/FT					3.4"						4.4"	3.2"	3.2"			
+/- 85.4 PSF	4192 LB/FT	726 LB/FT					3.2"						4.1"						
216"	+/- 10 PSF	477 LB/FT	90 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	
	+/- 20 PSF	1022 LB/FT	180 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	4.8"	6.0"	6.0"	6.0"	6.0"	3.8"	
	+/- 30 PSF	1566 LB/FT	270 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	4.3"	5.3"	5.3"		6.0"	6.0"	6.0"	6.0"	2.5"	
	+/- 40 PSF	2111 LB/FT	360 LB/FT	6.0"	5.7"	6.0"	4.7"	6.0"	4.9"		3.9"	3.9"		6.0"	5.9"	5.9"	5.4"		
	+/- 41 PSF	2165 LB/FT	369 LB/FT	6.0"	5.5"	6.0"	4.6"	6.0"	4.8"		3.8"	3.8"		6.0"	5.7"	5.8"	5.3"		
	+/- 50 PSF	2656 LB/FT	450 LB/FT	6.0"	4.5"	6.0"	3.5"	5.3"	3.7"		3.1"			6.0"	4.7"	4.7"	4.3"		
	+/- 60 PSF	3200 LB/FT	540 LB/FT	6.0"	3.5"			4.4"	3.1"					5.4"	3.9"	3.9"	3.6"		
	+/- 70 PSF	3745 LB/FT	630 LB/FT					3.6"						4.6"	3.3"	3.4"	3.0"		
	+/- 75 PSF	4017 LB/FT	675 LB/FT					3.3"						4.3"	3.1"	3.1"			
	+/- 79 PSF	4235 LB/FT	711 LB/FT					3.2"						4.1"					
228"	+/- 10 PSF	530 LB/FT	95 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	
	+/- 20 PSF	1121 LB/FT	190 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	4.5"	6.0"	6.0"	6.0"	6.0"	3.5"	
	+/- 30 PSF	1712 LB/FT	285 LB/FT	6.0"	6.0"	6.0"	5.8"	6.0"	6.0"	4.0"	4.9"	4.8"		6.0"	6.0"	6.0"	6.0"	2.3"	
	+/- 40 PSF	2303 LB/FT	380 LB/FT	6.0"	5.2"	6.0"	4.3"	6.0"	4.5"		3.6"			6.0"	5.4"	5.5"	5.0"		
	+/- 45 PSF	2598 LB/FT	428 LB/FT	6.0"	4.6"	6.0"	3.6"	5.5"	3.8"		3.2"			6.0"	4.8"	4.8"	4.4"		
	+/- 50 PSF	2894 LB/FT	475 LB/FT	6.0"	4.1"	6.0"	3.2"	4.9"	3.4"					6.0"	4.3"	4.4"	4.0"		
	+/- 60 PSF	3484 LB/FT	570 LB/FT	6.0"	3.2"			4.1"						5.0"	3.6"	3.6"	3.3"		
	+/- 65 PSF	3780 LB/FT	618 LB/FT					3.6"						4.6"	3.3"	3.3"	3.0"		
	+/- 70 PSF	4075 LB/FT	665 LB/FT					3.3"						4.3"	3.1"	3.1"			
	+/- 73 PSF	4276 LB/FT	697 LB/FT					3.2"						4.1"					
236"	+/- 10 PSF	566 LB/FT	98 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	
	+/- 20 PSF	1188 LB/FT	197 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	5.7"	6.0"	6.0"	4.2"	6.0"	6.0"	6.0"	6.0"	3.3"	
	+/- 30 PSF	1810 LB/FT	295 LB/FT	6.0"	6.0"	6.0"	5.5"	6.0"	5.7"	3.8"	4.6"	4.6"		6.0"	6.0"	6.0"	6.0"		
	+/- 40 PSF	2433 LB/FT	393 LB/FT	6.0"	4.9"	6.0"	4.1"	5.9"	4.3"		3.4"			6.0"	5.1"	5.2"	4.7"		
	+/- 45 PSF	2744 LB/FT	443 LB/FT	6.0"	4.4"	6.0"	3.4"	5.2"	3.6"		3.0"			6.0"	4.6"	4.6"	4.2"		
	+/- 50 PSF	3055 LB/FT	492 LB/FT	6.0"	3.7"			4.7"	3.2"					5.7"	4.1"	4.1"	3.8"		
	+/- 60 PSF	3677 LB/FT	590 LB/FT		3.1"			3.7"						4.7"	3.4"	3.4"	3.1"		
	+/- 65 PSF	3989 LB/FT	639 LB/FT					3.4"						4.4"	3.1"	3.2"			
	+/- 70.0 PSF	4300 LB/FT	688 LB/FT					3.1"						4.1"					

SEE PAGE 22 FOR ANCHOR SCHEDULE NOTES

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 IBC 2018 EDITION & IRC 2018 EDITION
 TEXAS DEPARTMENT OF INSURANCE (TDI)

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	CSL	RWN	06/11/21
REV - ADDTL OPTIONS	RWN	RWN	08/15/21
REV - ADDTL OPTIONS	RWN	RWN	10/14/21
TDI SUBMITTAL	EPR	RWN	11/12/21
REV - TDI COMMENTS	EPR	RWN	02/22/22

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20-32431
 SCALE: NTS UNLESS NOTED

c:\users\eric\engineering\express\production - documents\projects\20-32431.qmi\dom 3-a18 family drawing wp\2020 tdi\2 - 20-32431.k - tdi - dwg.dwg

ANCHOR SCHEDULE: BUILD-OUT MOUNT, SPANS 156"-236", 1/4"Ø FASTENERS

FRANK BENNARDO, P.E.
PE# 96064 CA# F-11383



CERTIFY! 02/23/2022

SLAT SPAN	DESIGN PRESSURE	Rx	Ry	1/4" HILTI KH-EZ	1/4" ALL-POINTS SOLID-SET	1/4" DEWALT ULTRACON+	1/4" SS ITW TAPCON	1/4" DEWALT ULTRACON+ SS4	1/4" DEWALT POWER-BOLT	1/4" DEWALT SCREW BOLT+	1/4" DEWALT AGGREGATOR	1/4" DEWALT AGGREGATOR	1/4" DEWALT ULTRACON+	1/4" ALL-POINTS SOLID-SET	1/4" DEWALT AGGREGATOR	1/4" DEWALT AGGREGATOR	#14 WOOD SCREW	#14 (410 SS) DRILL POINT SCREW OR 1/4-20 (410 SS) THRU-BOLT	#14 (410 SS) DRILL POINT SCREW OR 1/4-20 (410 SS) THRU-BOLT	
				CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	GFB	GFB	GFB	GFB OR HOLLOW BLOCK	HOLLOW BLOCK	HOLLOW BLOCK	HOLLOW BLOCK	WOOD	STEEL	ALUM.
				3000 PSI EMBED: 2.50" EDGE= 3.00"	3000 PSI EMBED: 0.88" EDGE= 3.00"	3000 PSI EMBED: 1.75" EDGE= 2.50"	3192 PSI EMBED: 1.75" EDGE= 2.50"	3000 EMBED: 1.75" EDGE= 2.50"	3000 PSI EMBED: 2.50" EDGE= 3.00"	ASTM C90 EMBED: 2.50" EDGE= 3.00"	ASTM C90 EMBED: 2.00" EDGE= 4.00"	ASTM C90 EMBED: 2.00" EDGE= 2.00"	ASTM C90 EMBED: 2.00" EDGE= 2.00"	ASTM C90 EMBED: 1.25" EDGE= 2.00"	ASTM C90 EMBED: 0.88" EDGE= 3.00"	ASTM C90 EMBED: 1.25" EDGE= 4.00"	ASTM C90 EMBED: 1.25" EDGE= 2.00"	G=0.55 EMBED: 3.00" EDGE= 1.00"	A36 EDGE= 0.50"	6063-T6 EDGE= 0.50"
156"	+/- 20 PSF	538 LB/FT	130 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	3.9"	5.1"	3.2"	3.1"	6.0"	6.0"	6.0"	
	+/- 30 PSF	871 LB/FT	195 LB/FT	6.0"	5.6"	4.6"	4.7"	5.3"	4.4"	4.6"	4.2"	4.2"	3.2"	3.2"			4.1"	5.6"	4.7"	
	+/- 40 PSF	1205 LB/FT	260 LB/FT	4.7"	4.1"	3.4"	3.4"	3.8"	3.2"	3.3"	3.1"						3.0"	4.1"	3.5"	
	+/- 50 PSF	1538 LB/FT	325 LB/FT	3.4"	3.2"	2.7"	3.0"	3.0"	2.5"	2.6"							2.4"	3.2"		
168"	+/- 20 PSF	635 LB/FT	140 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	5.9"	3.4"	4.4"			5.7"	6.0"	6.0"	
	+/- 30 PSF	1007 LB/FT	210 LB/FT	5.6"	5.0"	4.1"	4.1"	4.7"	3.8"	4.0"	3.8"						3.6"	4.9"	4.2"	
	+/- 40 PSF	1380 LB/FT	280 LB/FT	4.1"	3.7"	3.0"	3.0"	3.4"	2.8"	3.0"							2.7"	3.6"	3.1"	
	+/- 46 PSF	1604 LB/FT	322 LB/FT	3.3"	3.2"	2.6"			2.4"	2.6"							2.3"	3.1"		
180"	+/- 10 PSF	317 LB/FT	75 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	5.4"	5.3"	6.0"	6.0"	6.0"	
	+/- 20 PSF	731 LB/FT	150 LB/FT	6.0"	6.0"	5.6"	5.7"	6.0"	6.0"	5.3"	5.6"	5.2"	3.1"	3.9"			5.0"	6.0"	5.8"	
	+/- 30 PSF	1144 LB/FT	225 LB/FT	5.0"	4.4"	3.6"	3.7"	4.2"	3.4"	3.6"	3.4"						3.2"	4.4"	3.8"	
	+/- 40 PSF	1558 LB/FT	300 LB/FT	3.4"	3.3"	2.7"		3.1"	2.5"	2.7"							2.4"	3.3"		
	+/- 43 PSF	1682 LB/FT	323 LB/FT	3.2"	3.0"	2.5"			2.3"	2.5"							2.2"	3.0"		
192"	+/- 10 PSF	371 LB/FT	80 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	5.9"	6.0"	4.8"	4.6"	6.0"	6.0"	6.0"	
	+/- 20 PSF	827 LB/FT	160 LB/FT	6.0"	6.0"	5.0"	5.1"	5.8"	4.8"	5.0"	4.7"			3.5"			4.5"	6.0"	5.3"	
	+/- 30 PSF	1283 LB/FT	240 LB/FT	4.5"	4.0"	3.3"	3.3"	3.8"	3.1"	3.3"	3.1"						2.9"	4.0"	3.4"	
	+/- 40 PSF	1739 LB/FT	320 LB/FT	3.1"		2.4"			2.3"	2.4"							2.2"			
204"	+/- 10 PSF	424 LB/FT	85 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	5.3"	6.0"	4.3"	4.1"	6.0"	6.0"	6.0"	
	+/- 20 PSF	924 LB/FT	170 LB/FT	6.0"	5.6"	4.5"	4.6"	5.3"	4.3"	4.6"	4.3"			3.2"			4.1"	5.6"	4.8"	
	+/- 30 PSF	1423 LB/FT	255 LB/FT	4.1"	3.7"	3.0"	3.0"	3.5"	2.8"	3.0"							2.7"	3.6"	3.1"	
	+/- 38 PSF	1823 LB/FT	323 LB/FT			2.3"			2.2"	2.3"							2.1"			
216"	+/- 10 PSF	477 LB/FT	90 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	4.8"	6.0"	3.9"	3.7"	6.0"	6.0"	6.0"	
	+/- 20 PSF	1022 LB/FT	180 LB/FT	5.7"	5.1"	4.1"	4.2"	4.8"	3.9"	4.2"	3.9"						3.7"	5.1"	4.4"	
	+/- 30 PSF	1566 LB/FT	270 LB/FT	3.5"	3.4"	2.7"		3.2"	2.6"	2.7"							2.4"	3.3"		
	+/- 36 PSF	1893 LB/FT	324 LB/FT			2.2"			2.1"	2.3"							2.0"			
228"	+/- 10 PSF	530 LB/FT	95 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	4.4"	5.6"	3.5"	3.4"	6.0"	6.0"	6.0"	
	+/- 20 PSF	1121 LB/FT	190 LB/FT	5.2"	4.7"	3.8"	3.9"	4.5"	3.6"	3.8"	3.6"						3.4"	4.7"	4.1"	
	+/- 30 PSF	1712 LB/FT	285 LB/FT	3.2"	3.1"	2.5"			2.4"	2.5"							2.2"	3.1"		
	+/- 34 PSF	1948 LB/FT	323 LB/FT			2.2"			2.1"	2.2"							2.0"			
236"	+/- 10 PSF	566 LB/FT	98 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	4.2"	5.2"	3.3"	3.2"	6.0"	6.0"	6.0"	
	+/- 20 PSF	1188 LB/FT	197 LB/FT	5.0"	4.5"	3.6"	3.7"	4.2"	3.4"	3.6"	3.4"						3.2"	4.4"	3.9"	
	+/- 30 PSF	1810 LB/FT	295 LB/FT	3.0"		2.4"			2.2"	2.4"							2.1"			
	+/- 33 PSF	1997 LB/FT	325 LB/FT			2.1"			2.0"	2.2"							1.9"			

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 QOM3 - AL8 ROLL-UP HURRICANE SHUTTER
 IBC 2018 EDITION & IRC 2018 EDITION
 TEXAS DEPARTMENT OF INSURANCE (TDI)

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	CSL	RWN	06/11/21
REV - ADDTL OPTIONS	RWN	RWN	08/15/21
REV - ADDTL OPTIONS	RWN	RWN	10/14/21
TDI SUBMITTAL	EPR	RWN	11/12/21
REV - TDI COMMENTS	EPR	RWN	02/22/22

20-32431

SCALE: NTS UNLESS NOTED

14 OF 30

SEE PAGE 22 FOR ANCHOR SCHEDULE NOTES

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ANCHOR SCHEDULE: BUILD-OUT MOUNT, SPANS 48"-96", ≥5/16"Ø FASTENERS

FRANK BENNARDO, P.E.
PE# 96064 CA# F-11383



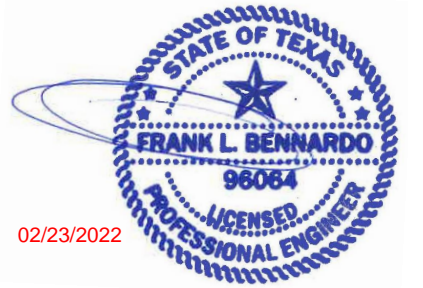
CERTIFY 02/23/2022

SLAT SPAN	DESIGN PRESSURE	Rx	Ry	3/8" ELCO / DEWALT CONPLEX	3/8" DEWALT SCREW BOLT+	3/8" ELCO / DEWALT CONPLEX	3/8" DEWALT SCREW BOLT+	3/8" HILTI KH-EZ	3/8" HILTI KH-EZ	5/16" DEWALT ULTRACON	3/8" DEWALT SCREW BOLT+	5/16" ITW TAPCON XL	5/16" ITW TAPCON XL	3/8" ELCO TAPFLEX	5/16" ELCO DRIL-FLEX	5/16" (410 SS) DRILL POINT SCREW	5/16" (410 SS) DRILL POINT SCREW	#20 (0.32") WOOD SCREW	
				CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	GFB	GFB	HOLLOW BLOCK	1/4" ALUM. OR STEEL	1/4" STEEL	1/4" STEEL	1/4" ALUM.	WOOD		
				4510 PSI	3000 PSI	1819 PSI	3000 PSI	3000 PSI	3000 PSI	3500 PSI	ASTM C90	ASTM C90	ASTM C90	6061-T6 OR A36	A36	A36	6063-T6	G=0.55	
				EMBED: 3.50"	EMBED: 3.25"	EMBED: 3.50"	EMBED: 3.25"	EMBED: 3.25"	EMBED: 3.25"	EMBED: 2.00"	EMBED: 3.25"	EMBED: 2.25"	EMBED: 1.75"					EMBED: 4.00"	
				EDGE= 3.75"	EDGE= 5.00"	EDGE= 3.75"	EDGE= 4.00"	EDGE= 5.00"	EDGE= 4.00"	EDGE= 3.13"	EDGE= 5.00"	EDGE= 4.00"	EDGE= 4.00"	EDGE= 0.75"	EDGE= 0.75"	EDGE= 0.75"	EDGE= 0.63"	EDGE= 1.50"	
48"	+/- 160 PSF	0 LB/FT	320 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 170 PSF	0 LB/FT	340 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 180 PSF	0 LB/FT	360 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 190 PSF	0 LB/FT	380 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 200 PSF	0 LB/FT	400 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 210 PSF	0 LB/FT	420 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 220 PSF	0 LB/FT	440 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 230 PSF	0 LB/FT	460 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 240 PSF	15 LB/FT	480 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
+/- 246.7 PSF	53 LB/FT	493 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	
60"	+/- 110 PSF	9 LB/FT	275 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 120 PSF	87 LB/FT	300 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 130 PSF	165 LB/FT	325 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 140 PSF	244 LB/FT	350 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 150 PSF	322 LB/FT	375 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 160 PSF	400 LB/FT	400 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 170 PSF	479 LB/FT	425 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 180 PSF	557 LB/FT	450 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 190 PSF	635 LB/FT	475 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 200 PSF	714 LB/FT	500 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
+/- 210.0 PSF	792 LB/FT	525 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	
+/- 214.3 PSF	826 LB/FT	536 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	
72"	+/- 80 PSF	232 LB/FT	240 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 90 PSF	335 LB/FT	270 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 100 PSF	438 LB/FT	300 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 110 PSF	542 LB/FT	330 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 120 PSF	645 LB/FT	360 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 130 PSF	749 LB/FT	390 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 140 PSF	852 LB/FT	420 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 150 PSF	955 LB/FT	450 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 160 PSF	1059 LB/FT	480 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 170 PSF	1162 LB/FT	510 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 180 PSF	1266 LB/FT	540 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 190 PSF	1369 LB/FT	570 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 200 PSF	1472 LB/FT	600 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
+/- 210.0 PSF	1576 LB/FT	630 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	
+/- 213.3 PSF	1610 LB/FT	640 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	
84"	+/- 60 PSF	345 LB/FT	210 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 70 PSF	475 LB/FT	245 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 80 PSF	606 LB/FT	280 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 90 PSF	737 LB/FT	315 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 100 PSF	867 LB/FT	350 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 110 PSF	998 LB/FT	385 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 120 PSF	1129 LB/FT	420 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 130 PSF	1259 LB/FT	455 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 140 PSF	1390 LB/FT	490 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 150 PSF	1521 LB/FT	525 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 160 PSF	1652 LB/FT	560 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 170 PSF	1782 LB/FT	595 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 180 PSF	1913 LB/FT	630 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 187 PSF	2004 LB/FT	655 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
96"	+/- 40 PSF	303 LB/FT	160 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 50 PSF	463 LB/FT	200 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 60 PSF	623 LB/FT	240 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 70 PSF	783 LB/FT	280 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 80 PSF	943 LB/FT	320 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 90 PSF	1103 LB/FT	360 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 100 PSF	1263 LB/FT	400 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 110 PSF	1423 LB/FT	440 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 120 PSF	1583 LB/FT	480 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 130 PSF	1743 LB/FT	520 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 140 PSF	1903 LB/FT	560 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 150 PSF	2063 LB/FT	600 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
+/- 160 PSF	2223 LB/FT	640 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	
+/- 171 PSF	2399 LB/FT	684 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	

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SLAT SPAN	DESIGN PRESSURE	Rx	Ry	3/8" ELCO / DEWALT CONFLX	3/8" DEWALT SCREW BOLT+	3/8" ELCO / DEWALT CONFLX	3/8" DEWALT SCREW BOLT+	3/8" HILTI KH-EZ	3/8" HILTI KH-EZ	5/16" DEWALT ULTRACON	3/8" DEWALT SCREW BOLT+	5/16" ITW TAPCON XL	5/16" ITW TAPCON XL	3/8" ELCO TAPFLEX	5/16" ELCO DRIL-FLEX	5/16" (410 SS) DRILL POINT SCREW	5/16" (410 SS) DRILL POINT SCREW	#20 (0.32") WOOD SCREW		
				CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	GFB	GFB	HOLLOW BLOCK	1/4" ALUM. OR STEEL	1/4" STEEL	1/4" STEEL	1/4" STEEL	1/4" ALUM.	WOOD	
				4510 PSI EMBED: 3.50" EDGE= 3.75"	3000 PSI EMBED: 3.25" EDGE= 5.00"	1819 PSI EMBED: 3.50" EDGE= 3.75"	3000 PSI EMBED: 3.25" EDGE= 4.00"	3000 PSI EMBED: 3.25" EDGE= 5.00"	3000 PSI EMBED: 3.25" EDGE= 4.00"	3500 PSI EMBED: 2.00" EDGE= 3.13"	ASTM C90 EMBED: 3.25" EDGE= 5.00"	ASTM C90 EMBED: 2.25" EDGE= 4.00"	ASTM C90 EMBED: 1.75" EDGE= 4.00"	6061-T6 OR A36 EDGE= 0.75"	A36 EDGE= 0.75"	A36 EDGE= 0.75"	A36 EDGE= 0.63"	G=0.55 EMBED: 4.00" EDGE= 1.50"		
108"	+/- 40 PSF	498 LB/FT	180 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	
	+/- 50 PSF	689 LB/FT	225 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	4.6"	6.0"	6.0"	6.0"	6.0"	6.0"	5.2"	
	+/- 60 PSF	880 LB/FT	270 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	4.1"
	+/- 70.0 PSF	1072 LB/FT	315 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	3.4"
	+/- 80.0 PSF	1263 LB/FT	360 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	2.9"
	+/- 90.0 PSF	1454 LB/FT	405 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	2.5"
	+/- 100.0 PSF	1645 LB/FT	450 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 110.0 PSF	1837 LB/FT	495 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 120.0 PSF	2028 LB/FT	540 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 130.0 PSF	2219 LB/FT	585 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 140.0 PSF	2410 LB/FT	630 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 150.0 PSF	2602 LB/FT	675 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 160.0 PSF	2793 LB/FT	720 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	120"	+/- 30 PSF	456 LB/FT	150 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
+/- 40 PSF		680 LB/FT	200 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
+/- 50 PSF		905 LB/FT	250 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
+/- 60 PSF		1129 LB/FT	300 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
+/- 70.0 PSF		1353 LB/FT	350 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
+/- 80.0 PSF		1578 LB/FT	400 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
+/- 90.0 PSF		1802 LB/FT	450 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
+/- 100.0 PSF		2026 LB/FT	500 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
+/- 110.0 PSF		2250 LB/FT	550 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
+/- 120.0 PSF		2475 LB/FT	600 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
+/- 130.0 PSF		2699 LB/FT	650 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
+/- 140.0 PSF		2923 LB/FT	700 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
+/- 150.0 PSF		3148 LB/FT	750 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
+/- 152.0 PSF		3192 LB/FT	760 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
132"	+/- 30 PSF	598 LB/FT	165 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 40 PSF	857 LB/FT	220 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 50 PSF	1116 LB/FT	275 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 60 PSF	1375 LB/FT	330 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 70 PSF	1634 LB/FT	385 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 80 PSF	1893 LB/FT	440 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 90 PSF	2152 LB/FT	495 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 100 PSF	2411 LB/FT	550 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 110 PSF	2670 LB/FT	605 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 120 PSF	2929 LB/FT	660 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 130 PSF	3188 LB/FT	715 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 140 PSF	3447 LB/FT	770 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 145 PSF	3587 LB/FT	800 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	144"	+/- 20 PSF	440 LB/FT	120 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
+/- 30 PSF		735 LB/FT	180 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
+/- 40 PSF		1031 LB/FT	240 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
+/- 50 PSF		1326 LB/FT	300 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
+/- 60 PSF		1622 LB/FT	360 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
+/- 70 PSF		1917 LB/FT	420 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
+/- 80 PSF		2213 LB/FT	480 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
+/- 90 PSF		2508 LB/FT	540 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
+/- 100 PSF		2803 LB/FT	600 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
+/- 110 PSF		3099 LB/FT	660 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
+/- 120 PSF		3394 LB/FT	720 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
+/- 130 PSF		3690 LB/FT	780 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
+/- 140.0 PSF		3985 LB/FT	840 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"



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TEXAS DEPARTMENT OF INSURANCE (TDI)

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	CSL	RWN	06/11/21
REV - ADDTL OPTIONS	RWN	RWN	08/15/21
REV - ADDTL OPTIONS	RWN	RWN	

ANCHOR SCHEDULE: BUILD-OUT MOUNT, SPANS 156"-236", ≥5/16"Ø FASTENERS

FRANK BENNARDO, P.E.
PE# 96064 CA# F-11383



CERTIFY! 02/23/2022

SLAT SPAN	DESIGN PRESSURE	Rx	Ry	3/8" ELCO / DEWALT CONFLX	3/8" DEWALT SCREW BOLT+	3/8" ELCO / DEWALT CONFLX	3/8" DEWALT SCREW BOLT+	3/8" HILTI KH-EZ	3/8" HILTI KH-EZ	5/16" DEWALT ULTRACON	3/8" DEWALT SCREW BOLT+	5/16" ITW TAPCON XL	5/16" ITW TAPCON XL	3/8" ELCO TAPFLEX	5/16" ELCO DRIL-FLEX	5/16" (410 SS) DRILL POINT SCREW	5/16" (410 SS) DRILL POINT SCREW	#20 (0.32") WOOD SCREW								
				CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	GFB	GFB	HOLLOW BLOCK	1/4" ALUM. OR STEEL	1/4" STEEL	1/4" STEEL	1/4" ALUM.	WOOD							
156"	+/- 20 PSF	538 LB/FT	130 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"							
	168"	+/- 20 PSF	635 LB/FT	140 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	5.9"						
		180"	+/- 10 PSF	317 LB/FT	75 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"					
			192"	+/- 10 PSF	371 LB/FT	80 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"				
				204"	+/- 10 PSF	424 LB/FT	85 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"			
					216"	+/- 10 PSF	477 LB/FT	90 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"		
						228"	+/- 10 PSF	530 LB/FT	95 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	
							236"	+/- 10 PSF	566 LB/FT	98 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"

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 IBC 2018 EDITION & IRC 2018 EDITION
 TEXAS DEPARTMENT OF INSURANCE (TDI)

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	CSL	RWN	06/11/21
REV - ADDTL OPTIONS	RWN	RWN	08/15/21
REV - ADDTL OPTIONS	RWN	RWN	10/14/21
TDI SUBMITTAL	EPR	RWN	11/12/21
REV - TDI COMMENTS	EPR	RWN	02/22/22

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SCALE: NTS UNLESS NOTED

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SEE PAGE 22 FOR ANCHOR SCHEDULE NOTES

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2/23/2022 11:41 AM ERIC

ANCHOR SCHEDULE: TRAP MOUNT, SPANS 48"-144", 1/4"Ø FASTENERS

FRANK BENNARDO, P.E.
PE# 96064 CA# F-11383



CERTIFY! 02/23/2022

SLAT SPAN	DESIGN PRESSURE	Rx	Ry	1/4" HILTI KH-EZ	1/4" ALL-POINTS SOLID-SET	1/4" DEWALT ULTRACON+	1/4" DEWALT ULTRACON+ SS4	1/4" DEWALT POWER-BOLT	1/4" DEWALT SCREW BOLT+	1/4" DEWALT AGGREGATOR	1/4" DEWALT AGGREGATOR	1/4" DEWALT ULTRACON+	1/4" ALL-POINTS SOLID-SET	1/4" DEWALT ULTRACON+	1/4" DEWALT AGGREGATOR	1/4" DEWALT AGGREGATOR	#14 WOOD SCREW	#14 (410 SS) DRILL POINT SCREW OR 1/4-20 (410 SS) THRU-BOLT†	#14 (410 SS) DRILL POINT SCREW OR 1/4-20 (410 SS) THRU-BOLT†			
				CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	GFB	GFB	GFB	GFB	HOLLOW BLOCK	HOLLOW BLOCK	HOLLOW BLOCK	HOLLOW BLOCK	WOOD	1/8" STEEL	1/8" ALUM.			
				3000 PSI	3000 PSI	3000 PSI	3000	3000 PSI	ASTM C90	ASTM C90	ASTM C90	ASTM C90	ASTM C90	ASTM C90	ASTM C90	ASTM C90	ASTM C90	ASTM C90	ASTM C90	G=0.55	A36	6063-T6
				EMBED: 2.50"	EMBED: 0.88"	EMBED: 1.75"	EMBED: 1.75"	EMBED: 2.50"	EMBED: 2.50"	EMBED: 2.00"	EMBED: 2.00"	EMBED: 2.00"	EMBED: 1.25"	EMBED: 0.875"	EMBED: 1.25"	EMBED: 1.25"	EMBED: 1.25"	EMBED: 1.25"	EMBED: 1.25"	EMBED: 3.00"	-	-
48"	+/- 200 PSF	0 LB/FT	400 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"			
	+/- 210 PSF	0 LB/FT	420 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"			
60"	+/- 120 PSF	87 LB/FT	300 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"			
	+/- 130 PSF	165 LB/FT	325 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"			
	+/- 140 PSF	244 LB/FT	350 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"			
	+/- 150 PSF	322 LB/FT	375 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"			
	+/- 160 PSF	400 LB/FT	400 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"			
72"	+/- 70 PSF	128 LB/FT	210 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"			
	+/- 80 PSF	232 LB/FT	240 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"			
	+/- 90 PSF	335 LB/FT	270 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"			
	+/- 100 PSF	438 LB/FT	300 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"			
	+/- 110 PSF	542 LB/FT	330 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"			
	+/- 120 PSF	645 LB/FT	360 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"			
84"	+/- 40 PSF	83 LB/FT	140 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"			
	+/- 50 PSF	214 LB/FT	175 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"			
	+/- 60 PSF	345 LB/FT	210 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"			
	+/- 70 PSF	475 LB/FT	245 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"			
	+/- 80 PSF	606 LB/FT	280 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"			
	+/- 90 PSF	737 LB/FT	315 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"			
	+/- 100 PSF	867 LB/FT	350 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"			
	+/- 110 PSF	998 LB/FT	385 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"			
96"	+/- 30 PSF	143 LB/FT	120 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"			
	+/- 40 PSF	303 LB/FT	160 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"			
	+/- 50 PSF	463 LB/FT	200 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"			
	+/- 60 PSF	623 LB/FT	240 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"			
	+/- 70 PSF	783 LB/FT	280 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"			
	+/- 80 PSF	943 LB/FT	320 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"			
	+/- 90 PSF	1103 LB/FT	360 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"			
108"	+/- 30 PSF	307 LB/FT	135 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"			
	+/- 40 PSF	498 LB/FT	180 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"			
	+/- 50 PSF	689 LB/FT	225 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"			
	+/- 60 PSF	880 LB/FT	270 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"			
	+/- 70.0 PSF	1072 LB/FT	315 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"			
120"	+/- 30 PSF	456 LB/FT	150 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"			
	+/- 40 PSF	680 LB/FT	200 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"			
	+/- 50 PSF	905 LB/FT	250 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"			
	+/- 60 PSF	1129 LB/FT	300 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"			
132"	+/- 30 PSF	598 LB/FT	165 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"			
	+/- 40 PSF	857 LB/FT	220 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"			
	+/- 50 PSF	1116 LB/FT	275 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"			
	+/- 60 PSF	1375 LB/FT	330 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"			
144"	+/- 20 PSF	440 LB/FT	120 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"			
	+/- 30 PSF	735 LB/FT	180 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"			
	+/- 40 PSF	1031 LB/FT	240 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"			
	+/- 50 PSF	1326 LB/FT	300 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"			
	+/- 60 PSF	1622 LB/FT	360 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"			

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REMARKS	DRWN	CHKD	DATE
INIT ISSUE	CSL	RWN	06/11/21
REV - ADDTL OPTIONS	RWN	RWN	08/15/21
REV - ADDTL OPTIONS	RWN	RWN	10/14/21
TDI SUBMITTAL	EPR	RWN	11/12/21
REV - TDI COMMENTS	EPR	RWN	02/22/22

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SEE PAGE 22 FOR ANCHOR SCHEDULE NOTES

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ANCHOR SCHEDULE: TRAP MOUNT, SPANS 156"-236", 1/4"Ø FASTENERS

FRANK BENNARDO, P.E.
PE# 96064 CA# F-11383



CERTIFY! 02/23/2022

SLAT SPAN	DESIGN PRESSURE	Rx	Ry	1/4" HILTI KH-EZ	1/4" ALL-POINTS SOLID-SET	1/4" DEWALT ULTRAACON+	1/4" SS ITW TAPCON	1/4" DEWALT ULTRAACON+ SS4	1/4" DEWALT POWER-BOLT	1/4" DEWALT SCREW BOLT+	1/4" DEWALT AGGREGATOR	1/4" DEWALT AGGREGATOR	1/4" DEWALT ULTRAACON+	1/4" ALL-POINTS SOLID-SET	1/4" DEWALT AGGREGATOR	1/4" DEWALT AGGREGATOR	3/8" ELCO TAPFLEX	#14 (410 SS) DRILL POINT SCREW OR 1/4-20 (410 SS) THRU-BOLT	#14 (410 SS) DRILL POINT SCREW OR 1/4-20 (410 SS) THRU-BOLT		
				CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	GFB	GFB	GFB	GFB OR HOLLOW BLOCK	HOLLOW BLOCK	HOLLOW BLOCK	HOLLOW BLOCK	1/4" ALUM. OR STEEL	STEEL	ALUM.		
				3000 PSI	3000 PSI	3000 PSI	3192 PSI	3000	3000 PSI	ASTM C90	ASTM C90	ASTM C90	ASTM C90	ASTM C90	ASTM C90	ASTM C90	ASTM C90	ASTM C90	6061-T6 OR A36	A36	6063-T6
				EMBED: 2.50"	EMBED: 0.88"	EMBED: 1.75"	EMBED: 1.75"	EMBED: 1.75"	EMBED: 2.50"	EMBED: 2.50"	EMBED: 2.00"	EMBED: 2.00"	EMBED: 2.00"	EMBED: 1.25"	EMBED: 0.88"	EMBED: 1.25"	EMBED: 1.25"	-	-	-	
				EDGE= 3.00"	EDGE= 3.00"	EDGE= 2.50"	EDGE= 2.50"	EDGE= 2.50"	EDGE= 3.00"	EDGE= 3.00"	EDGE= 4.00"	EDGE= 2.00"	EDGE= 2.00"	EDGE= 3.00"	EDGE= 4.00"	EDGE= 2.00"	EDGE= 0.75"	EDGE= 0.50"	EDGE= 0.50"		
156"	+/- 20 PSF	538 LB/FT	130 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	3.4"	5.7"	3.2"	3.1"	6.0"	6.0"	6.0"		
	+/- 30 PSF	871 LB/FT	195 LB/FT	6.0"	6.0"	6.0"	4.9"	4.8"		5.7"	4.6"	3.9"		3.6"			6.0"	5.9"	3.8"		
	+/- 40 PSF	1205 LB/FT	260 LB/FT	6.0"	4.5"	4.5"	3.6"	3.5"		4.1"	3.4"						6.0"	4.3"			
	+/- 50 PSF	1538 LB/FT	325 LB/FT	5.1"	3.5"	3.6"				3.3"	2.6"						6.0"	3.4"			
168"	+/- 20 PSF	635 LB/FT	140 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	5.3"		4.9"			6.0"	6.0"	5.3"		
	+/- 30 PSF	1007 LB/FT	210 LB/FT	6.0"	5.4"	5.5"	4.3"	4.2"		5.0"	4.1"	3.4"		3.1"			6.0"	5.2"	3.3"		
	+/- 40 PSF	1380 LB/FT	280 LB/FT	5.7"	4.0"	4.0"	3.2"	3.1"		3.7"	3.0"						6.0"	3.8"			
	+/- 46 PSF	1604 LB/FT	322 LB/FT	4.9"	3.4"	3.5"				3.2"	2.6"						6.0"	3.3"			
180"	+/- 10 PSF	317 LB/FT	75 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	5.8"	6.0"	5.5"	5.2"	6.0"	6.0"	6.0"		
	+/- 20 PSF	731 LB/FT	150 LB/FT	6.0"	6.0"	6.0"	6.0"	5.8"	5.6"	6.0"	5.6"	4.7"		4.3"			6.0"	6.0"	4.6"		
	+/- 30 PSF	1144 LB/FT	225 LB/FT	6.0"	4.8"	4.9"	3.8"	3.7"		4.4"	3.6"	3.0"					6.0"	4.6"			
	+/- 40 PSF	1558 LB/FT	300 LB/FT	5.1"	3.5"	3.6"				3.3"	2.7"						6.0"	3.4"			
192"	+/- 10 PSF	371 LB/FT	80 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	5.0"	6.0"	4.8"	4.5"	6.0"	6.0"	6.0"		
	+/- 20 PSF	827 LB/FT	160 LB/FT	6.0"	6.0"	6.0"	5.3"	5.2"		6.0"	5.0"	4.2"		3.8"			6.0"	6.0"	4.1"		
	+/- 30 PSF	1283 LB/FT	240 LB/FT	6.0"	4.3"	4.4"	3.5"	3.4"		4.0"	3.2"						6.0"	4.1"			
	+/- 40 PSF	1739 LB/FT	320 LB/FT	4.6"	3.2"	3.2"				3.0"	2.4"						6.0"	3.0"			
204"	+/- 10 PSF	424 LB/FT	85 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	4.4"	6.0"	4.2"	4.0"	6.0"	6.0"	6.0"		
	+/- 20 PSF	924 LB/FT	170 LB/FT	6.0"	6.0"	6.0"	4.8"	4.7"		5.6"	4.5"	3.7"		3.5"			6.0"	5.7"	3.7"		
	+/- 30 PSF	1423 LB/FT	255 LB/FT	5.7"	3.9"	4.0"	3.1"	3.0"		3.6"	2.9"						6.0"	3.7"			
	+/- 38 PSF	1823 LB/FT	323 LB/FT	4.5"	3.1"	3.1"				2.8"	2.3"						6.0"				
216"	+/- 10 PSF	477 LB/FT	90 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	4.0"	6.0"	3.8"	3.6"	6.0"	6.0"	6.0"		
	+/- 20 PSF	1022 LB/FT	180 LB/FT	6.0"	5.5"	5.6"	4.4"	4.2"		5.1"	4.1"	3.4"		3.2"			6.0"	5.2"	3.4"		
	+/- 30 PSF	1566 LB/FT	270 LB/FT	5.2"	3.6"	3.6"				3.3"	2.7"						6.0"	3.4"			
	+/- 36 PSF	1893 LB/FT	324 LB/FT	4.3"		3.0"				2.8"	2.2"						6.0"				
228"	+/- 10 PSF	530 LB/FT	95 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	3.6"	6.0"	3.4"	3.3"	6.0"	6.0"	6.0"		
	+/- 20 PSF	1121 LB/FT	190 LB/FT	6.0"	5.0"	5.1"	4.0"	3.9"		4.7"	3.7"	3.1"					6.0"	4.8"	3.1"		
	+/- 30 PSF	1712 LB/FT	285 LB/FT	4.8"	3.3"	3.4"				3.1"	2.5"						6.0"	3.1"			
	+/- 34 PSF	1948 LB/FT	323 LB/FT	4.2"		3.0"				2.7"	2.2"						6.0"				
236"	+/- 10 PSF	566 LB/FT	98 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	3.4"	5.7"	3.2"	3.1"	6.0"	6.0"	6.0"		
	+/- 20 PSF	1188 LB/FT	197 LB/FT	6.0"	4.7"	4.8"	3.8"	3.7"		4.4"	3.5"						6.0"	4.5"			
	+/- 30 PSF	1810 LB/FT	295 LB/FT	4.6"	3.1"	3.2"				2.9"	2.3"						6.0"				
	+/- 33 PSF	1997 LB/FT	325 LB/FT	4.1"		2.9"				2.6"	2.1"						6.0"				

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REMARKS	DRWN	CHKD	DATE
INIT ISSUE	CSL	RWN	06/11/21
REV - ADDTL OPTIONS	RWN	RWN	08/15/21
REV - ADDTL OPTIONS	RWN	RWN	10/14/21
TDI SUBMITTAL	EPR	RWN	11/12/21
REV - TDI COMMENTS	EPR	RWN	02/22/22

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ANCHOR SCHEDULE: TRAP MOUNT, SPANS 48"-96", ≥5/16"Ø FASTENERS

FRANK BENNARDO, P.E.
PE# 96064 CA# F-11383



CERTIFY! 02/23/2022

SLAT SPAN	DESIGN PRESSURE	Rx	Ry	3/8" ELCO / DEWALT CONFLEX		3/8" DEWALT SCREW BOLT+		3/8" HILTI KH-EZ		5/16" DEWALT ULTRACON		3/8" DEWALT SCREW BOLT+		5/16" ITW TAPCON XL		3/8" ELCO TAPFLEX		5/16" (410 SS) DRILL POINT SCREW		5/16" (410 SS) DRILL POINT SCREW		#20 (0.32") WOOD SCREW
				CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	GFB	GFB	HOLLOW BLOCK	1/4" ALUM. OR STEEL	1/4" STEEL	1/4" STEEL	1/4" STEEL	1/4" ALUM.	WOOD			
				4510 PSI	3000 PSI	1819 PSI	3000 PSI	3000 PSI	3000 PSI	3500 PSI	ASTM C90	ASTM C90	ASTM C90	6061-T6 OR A36	A36	A36	A36	6063-T6	G=0.55			
				EMBED: 3.50" EDGE= 3.75"	EMBED: 3.25" EDGE= 5.00"	EMBED: 3.50" EDGE= 3.75"	EMBED: 3.25" EDGE= 4.00"	EMBED: 3.25" EDGE= 5.00"	EMBED: 3.25" EDGE= 4.00"	EMBED: 2.00" EDGE= 3.13"	EMBED: 3.25" EDGE= 5.00"	EMBED: 2.25" EDGE= 4.00"	EMBED: 1.75" EDGE= 4.00"	-	-	-	-	-	EMBED: 4.00" EDGE= 1.50"			
48"	+/- 246.7 PSF	53 LB/FT	493 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
60"	+/- 150 PSF	322 LB/FT	375 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 160 PSF	400 LB/FT	400 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 170 PSF	479 LB/FT	425 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 180 PSF	557 LB/FT	450 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 190 PSF	635 LB/FT	475 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 200 PSF	714 LB/FT	500 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 210.0 PSF	792 LB/FT	525 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
+/- 214.3 PSF	826 LB/FT	536 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	
72"	+/- 90 PSF	335 LB/FT	270 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 100 PSF	438 LB/FT	300 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 110 PSF	542 LB/FT	330 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 120 PSF	645 LB/FT	360 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 130 PSF	749 LB/FT	390 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 140 PSF	852 LB/FT	420 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 150 PSF	955 LB/FT	450 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 160 PSF	1059 LB/FT	480 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 170 PSF	1162 LB/FT	510 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 180 PSF	1266 LB/FT	540 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 190 PSF	1369 LB/FT	570 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
+/- 200 PSF	1472 LB/FT	600 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	
+/- 210.0 PSF	1576 LB/FT	630 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	
+/- 213.3 PSF	1610 LB/FT	640 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	
84"	+/- 60 PSF	345 LB/FT	210 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 70 PSF	475 LB/FT	245 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 80 PSF	606 LB/FT	280 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 90 PSF	737 LB/FT	315 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 100 PSF	867 LB/FT	350 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 110 PSF	998 LB/FT	385 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 120 PSF	1129 LB/FT	420 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 130 PSF	1259 LB/FT	455 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 140 PSF	1390 LB/FT	490 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 150 PSF	1521 LB/FT	525 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 160 PSF	1652 LB/FT	560 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 170 PSF	1782 LB/FT	595 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 180 PSF	1913 LB/FT	630 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 187 PSF	2004 LB/FT	655 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
96"	+/- 30 PSF	143 LB/FT	120 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 40 PSF	303 LB/FT	160 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 50 PSF	463 LB/FT	200 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 60 PSF	623 LB/FT	240 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 70 PSF	783 LB/FT	280 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 80 PSF	943 LB/FT	320 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 90 PSF	1103 LB/FT	360 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 100 PSF	1263 LB/FT	400 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 110 PSF	1423 LB/FT	440 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 120 PSF	1583 LB/FT	480 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 130 PSF	1743 LB/FT	520 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 140 PSF	1903 LB/FT	560 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 150 PSF	2063 LB/FT	600 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 160 PSF	2223 LB/FT	640 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
+/- 171 PSF	2399 LB/FT	684 LB/FT	6.0"	5.7"	6.0"	4.9"	5.9"	5.3"	6.0"	5.7"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	



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QOM3 - AL8 ROLL-UP HURRICANE SHUTTER
IBC 2018 EDITION & IRC 2018 EDITION
TEXAS DEPARTMENT OF INSURANCE (TDI)

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	CSL	RWN	06/11/21
REV - ADDTL OPTIONS	RWN	RWN	08/15/21
REV - ADDTL OPTIONS	RWN	RWN	10/14/21
TDI SUBMITTAL	EPR	RWN	11/12/21
REV - TDI COMMENTS	EPR	RWN	02/22/22

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SEE PAGE 22 FOR ANCHOR SCHEDULE NOTES

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ANCHOR SCHEDULE: TRAP MOUNT, SPANS 108"-144", ≥5/16"Ø FASTENERS

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QOM3 - AL8 ROLL-UP HURRICANE SHUTTER
IBC 2018 EDITION & IRC 2018 EDITION
TEXAS DEPARTMENT OF INSURANCE (TDI)

SLAT SPAN	DESIGN PRESSURE	Rx	Ry	3/8" ELCO / DEWALT CONFLEX	3/8" DEWALT SCREW BOLT+	3/8" ELCO / DEWALT CONFLEX	3/8" DEWALT SCREW BOLT+	3/8" HILTI KH-EZ	3/8" HILTI KH-EZ	5/16" DEWALT ULTRACON	3/8" DEWALT SCREW BOLT+	5/16" ITW TAPCON XL	5/16" ITW TAPCON XL	3/8" ELCO TAPFLEX	5/16" ELCO DRIL-FLEX	5/16" (410 SS) DRILL POINT SCREW	5/16" (410 SS) DRILL POINT SCREW	#20 (0.32") WOOD SCREW
				CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	GFB	GFB	HOLLOW BLOCK	1/4" ALUM. OR STEEL	1/4" STEEL	1/4" STEEL	1/4" ALUM.	WOOD
				4510 PSI EMBED: 3.50" EDGE= 3.75"	3000 PSI EMBED: 3.25" EDGE= 5.00"	1819 PSI EMBED: 3.50" EDGE= 3.75"	3000 PSI EMBED: 3.25" EDGE= 4.00"	3000 PSI EMBED: 3.25" EDGE= 5.00"	3000 PSI EMBED: 3.25" EDGE= 4.00"	3500 PSI EMBED: 2.00" EDGE= 3.13"	ASTM C90 EMBED: 3.25" EDGE= 5.00"	ASTM C90 EMBED: 2.25" EDGE= 4.00"	ASTM C90 EMBED: 1.75" EDGE= 4.00"	6061-T6 OR A36 EDGE= 0.75"	A36 EDGE= 0.75"	A36 EDGE= 0.75"	A36 EDGE= 0.75"	6063-T6 EDGE= 0.63"
108"	+/- 30 PSF	307 LB/FT	135 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 40 PSF	498 LB/FT	180 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	5.4"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 50 PSF	689 LB/FT	225 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	4.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 60 PSF	880 LB/FT	270 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	5.2"	6.0"	6.0"		6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 70.0 PSF	1072 LB/FT	315 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	4.3"	6.0"	6.0"		6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 80.0 PSF	1263 LB/FT	360 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"		6.0"	6.0"		6.0"	6.0"	6.0"	6.0"	5.6"
	+/- 90.0 PSF	1454 LB/FT	405 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"		6.0"	5.8"		6.0"	6.0"	6.0"	6.0"	5.0"
	+/- 100.0 PSF	1645 LB/FT	450 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"		5.5"	5.2"		6.0"	6.0"	6.0"	6.0"	4.4"
	+/- 110.0 PSF	1837 LB/FT	495 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"		4.9"	4.7"		6.0"	6.0"	6.0"	5.7"	4.0"
	+/- 120.0 PSF	2028 LB/FT	540 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"		4.5"	4.2"		6.0"	6.0"	5.9"	5.2"	3.6"
	+/- 130.0 PSF	2219 LB/FT	585 LB/FT	6.0"	6.0"	6.0"	5.5"	6.0"	5.9"		4.1"	3.9"		6.0"	5.6"	5.4"	4.7"	3.3"
	+/- 140.0 PSF	2410 LB/FT	630 LB/FT	6.0"	5.9"	6.0"	5.1"	6.0"	5.4"		3.8"			6.0"	5.2"	5.0"	4.4"	3.1"
	+/- 150.0 PSF	2602 LB/FT	675 LB/FT	6.0"	5.4"	6.0"	4.7"	5.5"	5.0"		3.5"			6.0"	4.8"	4.6"	4.1"	2.9"
	+/- 160.0 PSF	2793 LB/FT	720 LB/FT	6.0"	5.1"	6.0"	4.4"	5.2"	4.7"		3.3"			6.0"	4.5"	4.3"	3.8"	2.7"
120"	+/- 30 PSF	456 LB/FT	150 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 40 PSF	680 LB/FT	200 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	4.1"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 50 PSF	905 LB/FT	250 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	5.1"	6.0"	6.0"		6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 60 PSF	1129 LB/FT	300 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	4.1"	6.0"	6.0"		6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 70.0 PSF	1353 LB/FT	350 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"		6.0"	6.0"		6.0"	6.0"	6.0"	6.0"	5.5"
	+/- 80.0 PSF	1578 LB/FT	400 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"		5.8"	5.5"		6.0"	6.0"	6.0"	6.0"	4.8"
	+/- 90.0 PSF	1802 LB/FT	450 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"		5.1"	4.8"		6.0"	6.0"	6.0"	5.9"	4.2"
	+/- 100.0 PSF	2026 LB/FT	500 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"		4.5"	4.3"		6.0"	6.0"	6.0"	5.3"	3.8"
	+/- 110.0 PSF	2250 LB/FT	550 LB/FT	6.0"	6.0"	6.0"	5.5"	6.0"	5.9"		4.1"	3.9"		6.0"	5.7"	5.4"	4.8"	3.4"
	+/- 120.0 PSF	2475 LB/FT	600 LB/FT	6.0"	5.8"	6.0"	5.0"	5.9"	5.4"		3.7"			6.0"	5.2"	5.0"	4.3"	3.1"
	+/- 130.0 PSF	2699 LB/FT	650 LB/FT	6.0"	5.3"	6.0"	4.6"	5.4"	5.0"		3.4"			6.0"	4.7"	4.5"	4.0"	2.9"
	+/- 140.0 PSF	2923 LB/FT	700 LB/FT	6.0"	4.9"	6.0"	4.3"	5.0"	4.6"		3.2"			6.0"	4.4"	4.2"	3.7"	2.6"
	+/- 150.0 PSF	3148 LB/FT	750 LB/FT	6.0"	4.6"	6.0"	3.7"	4.7"	4.3"					6.0"	4.1"	3.9"	3.4"	2.5"
	+/- 152.0 PSF	3192 LB/FT	760 LB/FT	6.0"	4.5"	6.0"	3.6"	4.6"	4.2"					6.0"	4.0"	3.9"	3.4"	2.4"
132"	+/- 30 PSF	598 LB/FT	165 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	4.7"	6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 40 PSF	857 LB/FT	220 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	5.5"	6.0"	6.0"		6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 50 PSF	1116 LB/FT	275 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	4.2"	6.0"	6.0"		6.0"	6.0"	6.0"	6.0"	6.0"
	+/- 60 PSF	1375 LB/FT	330 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"		6.0"	6.0"		6.0"	6.0"	6.0"	6.0"	5.6"
	+/- 70 PSF	1634 LB/FT	385 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"		5.7"	5.4"		6.0"	6.0"	6.0"	6.0"	4.8"
	+/- 80 PSF	1893 LB/FT	440 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"		4.9"	4.7"		6.0"	6.0"	6.0"	5.7"	4.1"
	+/- 90 PSF	2152 LB/FT	495 LB/FT	6.0"	6.0"	6.0"	5.9"	6.0"	6.0"		4.4"	4.1"		6.0"	6.0"	5.8"	5.0"	3.7"
	+/- 100 PSF	2411 LB/FT	550 LB/FT	6.0"	6.0"	6.0"	5.2"	6.0"	5.6"		3.9"			6.0"	5.4"	5.1"	4.5"	3.3"
	+/- 110 PSF	2670 LB/FT	605 LB/FT	6.0"	5.5"	6.0"	4.7"	5.6"	5.1"		3.5"			6.0"	4.8"	4.7"	4.1"	3.0"
	+/- 120 PSF	2929 LB/FT	660 LB/FT	6.0"	5.0"	6.0"	4.3"	5.1"	4.7"		3.2"			6.0"	4.4"	4.2"	3.7"	2.7"
	+/- 130 PSF	3188 LB/FT	715 LB/FT	6.0"	4.6"	6.0"	3.7"	4.7"	4.3"					6.0"	4.1"	3.9"	3.4"	2.5"
	+/- 140 PSF	3447 LB/FT	770 LB/FT	6.0"	4.3"	6.0"	3.4"	4.3"	3.7"					6.0"	3.8"	3.6"	3.2"	2.3"
	+/- 145 PSF	3587 LB/FT	800 LB/FT	6.0"	4.1"	6.0"	3.3"	4.2"	3.5"					6.0"	3.6"	3.5"	3.0"	
	144"	+/- 20 PSF	440 LB/FT	120 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"
+/- 30 PSF		735 LB/FT	180 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	3.8"	6.0"	6.0"	6.0"	6.0"	6.0"
+/- 40 PSF		1031 LB/FT	240 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	4.6"	6.0"	6.0"		6.0"	6.0"	6.0"	6.0"	6.0"
+/- 50 PSF		1326 LB/FT	300 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"		6.0"	6.0"		6.0"	6.0"	6.0"	6.0"	6.0"
+/- 60 PSF		1622 LB/FT	360 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"		5.8"	5.5"		6.0"	6.0"	6.0"	6.0"	4.9"
+/- 70 PSF		1917 LB/FT	420 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"		4.9"	4.7"		6.0"	6.0"	6.0"	5.7"	4.2"
+/- 80 PSF		2213 LB/FT	480 LB/FT	6.0"	6.0"	6.0"	5.8"	6.0"	6.0"		4.3"	4.1"		6.0"	5.9"	5.7"	4.9"	3.7"
+/- 90 PSF		2508 LB/FT	540 LB/FT	6.0"	5.9"	6.0"	5.1"	6.0"	5.5"		3.8"			6.0"	5.2"	5.0"	4.4"	3.2"
+/- 100 PSF		2803 LB/FT	600 LB/FT	6.0"	5.3"	6.0"	4.6"	5.4"	4.9"		3.4"			6.0"	4.7"	4.5"	3.9"	2.9"
+/- 110 PSF		3099 LB/FT	660 LB/FT	6.0"	4.8"	6.0"	4.2"	4.9"	4.5"		3.1"			6.0"	4.2"	4.1"	3.5"	2.6"
+/- 120 PSF		3394 LB/FT	720 LB/FT	6.0"	4.4"	6.0"	3.5"	4.4"	4.1"					6.0"	3.9"	3.7"	3.2"	2.4"
+/- 130 PSF		3690 LB/FT	780 LB/FT	6.0"	4.0"	6.0"	3.2"	4.1"	3.5"					6.0"	3.6"	3.4"		
+/- 140.0 PSF		3985 LB/FT	840 LB/FT	6.0"	3.5"	6.0"	3.0"	3.5"	3.2"					6.0"	3.3"	3.2"		

SEE PAGE 22 FOR ANCHOR
SCHEDULE NOTES

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	CSL	RWN	06/11/21
REV - ADDTL OPTIONS	RWN	RWN	08/15/21
REV - ADDTL OPTIONS	RWN	RWN	10/14/21
TDI SUBMITTAL	EPR	RWN	11/12/21
REV - TDI COMMENTS	EPR	RWN	02/22/22

20-32431

SCALE: NTS UNLESS NOTED

21

OF 30

ANCHOR SCHEDULE: TRAP MOUNT, SPANS 156"-236", ≥5/16"Ø FASTENERS

FRANK BENNARDO, P.E.
PE# 96064 CA# F-11383



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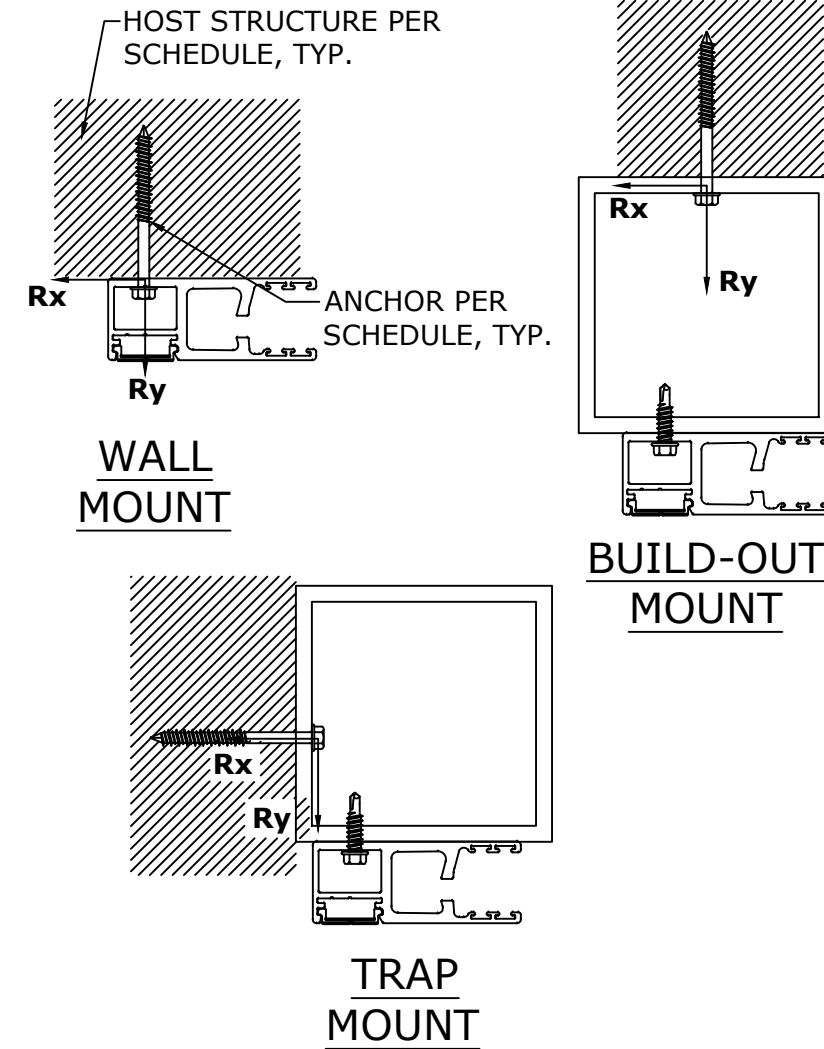
REMARKS	DRWN	CHKD	DATE
INIT ISSUE	RWN	RWN	06/11/21
REV - ADDTL OPTIONS	RWN	RWN	08/15/21
REV - ADDTL OPTIONS	RWN	RWN	10/14/21
TDI SUBMITTAL	RWN	RWN	11/12/21
REV - TDI COMMENTS	EPR	RWN	02/22/22

20-32431

SCALE: NTS UNLESS NOTED

22 OF 30

WALL/ BUILD-OUT/ TRAP MOUNT REACTION KEY & ANCHOR SCHEDULE NOTES:



ANCHOR NOTES:

- ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS' RECOMMENDATIONS.
- MINIMUM EMBEDMENT SHALL BE AS NOTED IN ANCHOR SCHEDULE. MINIMUM EMBEDMENT AND EDGE DISTANCE EXCLUDES STUCCO, FOAM, BRICK, AND OTHER WALL FINISHES.
- ANCHOR SCHEDULE APPLIES TO ALL PRODUCTS CERTIFIED HEREIN, BUT ONLY PROVIDES MAXIMUM ALLOWABLE ANCHOR SPACING. MAXIMUM ALLOWABLE SPANS AND PRESSURES INDICATED IN SPAN SCHEDULE SHALL APPLY.
- WHERE EXISTING STRUCTURE IS WOOD FRAMING, EXISTING CONDITIONS MAY VARY. FIELD VERIFY THAT FASTENERS ARE INTO ADEQUATE WOOD FRAMING MEMBERS, NOT INTO PLYWOOD.
- WOOD BUCKS (BY OTHERS) SHALL BE ANCHORED PROPERLY TO TRANSFER LOADS TO THE EXISTING STRUCTURE.
- MACHINE SCREWS SHALL HAVE MINIMUM OF 1/2" ENGAGEMENT OF THREADS IN BASE ANCHOR AND MAY HAVE EITHER A PAN HEAD, TRUSS HEAD, OR WAFFER HEAD ("SIDEWALK BOLT") U.N.O.
- SHEET METAL SCREWS SHALL BE INSTALLED WITH FULL ENGAGEMENT OF THREADS INTO METAL HOST STRUCTURE.
- DESIGNATES ANCHOR CONDITIONS WHICH ARE NOT ACCEPTABLE FOR USE.
- ANCHORS TO GROUT-FILLED BLOCK SHALL PENETRATE THROUGH FACE SHELL INTO GROUTED CELL.
- + - #14 FASTENERS MAY BE SUBSTITUTED WITH 1/4" ELCO DRIL-FLEX FASTENERS.

SLAT SPAN	DESIGN PRESSURE	Rx	Ry	3/8" ELCO / DEWALT CONFLX	3/8" DEWALT SCREW BOLT+	3/8" ELCO / DEWALT CONFLX	3/8" DEWALT SCREW BOLT+	3/8" HILTI KH-EZ	3/8" HILTI KH-EZ	5/16" DEWALT ULTRACON	3/8" DEWALT SCREW BOLT+	5/16" ITW TAPCON XL	5/16" ITW TAPCON XL	3/8" ELCO TAPFLEX	5/16" ELCO DRIL-FLEX	5/16" (410 SS) DRILL POINT SCREW	5/16" (410 SS) DRILL POINT SCREW	#20 (0.32") WOOD SCREW	
				CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	CONCRETE	GFB	GFB	HOLLOW BLOCK	1/4" ALUM. OR STEEL	1/4" STEEL	1/4" STEEL	1/4" ALUM.	WOOD
156"	+/- 20 PSF	538 LB/FT	130 LB/FT	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"	5.2"	6.0"	6.0"	6.0"	6.0"	6.0"	6.0"

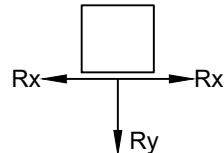
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INTERMEDIATE MULLION SCHEDULES

MULLION
SCHEDULE:
INTERMEDIATE
MULLIONS



SLAT SPAN	DESIGN PRESSURE	4"x4"x0.1875" ALUM TUBE		4"x4"x0.25" ALUM TUBE		4"x6"x0.25" ALUM TUBE		4"x8"x0.25" ALUM TUBE	
		MAX MULLION LENGTH	END REACTION Rt	MAX MULLION LENGTH	END REACTION Rt	MAX MULLION LENGTH	END REACTION Rt	MAX MULLION LENGTH	END REACTION Rt
48"	+/- 40 PSF	131"	873 LB	142"	946 LB	144"	960 LB	144"	960 LB
	+/- 50 PSF	122"	1013 LB	132"	1097 LB	144"	1200 LB	144"	1200 LB
	+/- 60 PSF	114"	1144 LB	124"	1239 LB	144"	1440 LB	144"	1440 LB
	+/- 70 PSF	109"	1267 LB	118"	1373 LB	144"	1680 LB	144"	1680 LB
	+/- 80 PSF	104"	1385 LB	113"	1501 LB	144"	1920 LB	144"	1920 LB
	+/- 90 PSF	100"	1498 LB	108"	1624 LB	144"	2160 LB	144"	2160 LB
	+/- 100 PSF	96"	1607 LB	105"	1742 LB	144"	2400 LB	144"	2400 LB
	+/- 110 PSF	93"	1713 LB	101"	1856 LB	140"	2571 LB	144"	2640 LB
	+/- 120 PSF	91"	1815 LB	98"	1967 LB	136"	2725 LB	144"	2880 LB
	+/- 130 PSF	88"	1915 LB	96"	2075 LB	133"	2874 LB	144"	3120 LB
	+/- 140 PSF	86"	2012 LB	93"	2180 LB	129"	3020 LB	144"	3360 LB
	+/- 190 PSF	78"	2466 LB	84"	2672 LB	117"	3701 LB	144"	4560 LB
+/- 246.7 PSF	71"	2935 LB	77"	3180 LB	107"	4405 LB	136"	5577 LB	
60"	+/- 40 PSF	122"	1013 LB	132"	1097 LB	144"	1200 LB	144"	1200 LB
	+/- 50 PSF	113"	1175 LB	122"	1273 LB	144"	1500 LB	144"	1500 LB
	+/- 60 PSF	106"	1327 LB	115"	1438 LB	144"	1800 LB	144"	1800 LB
	+/- 70 PSF	101"	1471 LB	109"	1593 LB	144"	2100 LB	144"	2100 LB
	+/- 80 PSF	96"	1607 LB	105"	1742 LB	144"	2400 LB	144"	2400 LB
	+/- 90 PSF	93"	1739 LB	100"	1884 LB	139"	2610 LB	144"	2700 LB
	+/- 100 PSF	90"	1865 LB	97"	2021 LB	134"	2800 LB	144"	3000 LB
	+/- 110 PSF	87"	1988 LB	94"	2154 LB	130"	2984 LB	144"	3300 LB
	+/- 120 PSF	84"	2106 LB	91"	2282 LB	126"	3162 LB	144"	3600 LB
	+/- 130 PSF	82"	2222 LB	89"	2408 LB	123"	3335 LB	144"	3900 LB
	+/- 140 PSF	80"	2334 LB	87"	2530 LB	120"	3504 LB	144"	4200 LB
	+/- 170 PSF	75"	2657 LB	81"	2879 LB	113"	3988 LB	143"	5049 LB
	+/- 214.3 PSF	69"	3101 LB	75"	3360 LB	104"	4654 LB	132"	5892 LB
	+/- 40 PSF	114"	1144 LB	124"	1239 LB	144"	1440 LB	144"	1440 LB
+/- 50 PSF	106"	1327 LB	115"	1438 LB	144"	1800 LB	144"	1800 LB	
+/- 60 PSF	100"	1498 LB	108"	1624 LB	144"	2160 LB	144"	2160 LB	
+/- 70 PSF	95"	1661 LB	103"	1799 LB	142"	2493 LB	144"	2520 LB	
+/- 80 PSF	91"	1815 LB	98"	1967 LB	136"	2725 LB	144"	2880 LB	
+/- 90 PSF	87"	1964 LB	95"	2128 LB	131"	2947 LB	144"	3240 LB	
+/- 100 PSF	84"	2106 LB	91"	2282 LB	126"	3162 LB	144"	3600 LB	
+/- 110 PSF	82"	2245 LB	88"	2432 LB	123"	3369 LB	144"	3960 LB	
+/- 120 PSF	79"	2379 LB	86"	2577 LB	119"	3570 LB	144"	4320 LB	
+/- 130 PSF	77"	2509 LB	84"	2719 LB	116"	3766 LB	144"	4680 LB	
+/- 140 PSF	75"	2636 LB	82"	2856 LB	113"	3957 LB	143"	5009 LB	
+/- 160 PSF	72"	2882 LB	78"	3122 LB	108"	4325 LB	137"	5476 LB	
+/- 213.3 PSF	65"	3491 LB	71"	3782 LB	98"	5240 LB	124"	6633 LB	
72"	+/- 40 PSF	109"	1267 LB	118"	1373 LB	144"	1680 LB	144"	1680 LB
	+/- 50 PSF	101"	1471 LB	109"	1593 LB	144"	2100 LB	144"	2100 LB
	+/- 60 PSF	95"	1661 LB	103"	1799 LB	142"	2493 LB	144"	2520 LB
	+/- 70 PSF	90"	1840 LB	98"	1994 LB	135"	2762 LB	144"	2940 LB
	+/- 80 PSF	86"	2012 LB	93"	2180 LB	129"	3020 LB	144"	3360 LB
	+/- 90 PSF	83"	2176 LB	90"	2358 LB	124"	3266 LB	144"	3780 LB
	+/- 100 PSF	80"	2334 LB	87"	2530 LB	120"	3504 LB	144"	4200 LB
	+/- 110 PSF	78"	2488 LB	84"	2695 LB	116"	3734 LB	144"	4620 LB
	+/- 120 PSF	75"	2636 LB	82"	2856 LB	113"	3957 LB	143"	5009 LB
	+/- 140 PSF	73"	2781 LB	79"	3013 LB	110"	4174 LB	139"	5284 LB
	+/- 150 PSF	70"	3059 LB	76"	3315 LB	105"	4591 LB	133"	5813 LB
	+/- 187.0 PSF	65"	3543 LB	70"	3839 LB	98"	5318 LB	123"	6733 LB
	+/- 30 PSF	114"	1144 LB	124"	1239 LB	144"	1440 LB	144"	1440 LB
	+/- 40 PSF	104"	1385 LB	113"	1501 LB	144"	1920 LB	144"	1920 LB
	+/- 50 PSF	96"	1607 LB	105"	1742 LB	144"	2400 LB	144"	2400 LB
+/- 60 PSF	91"	1815 LB	98"	1967 LB	136"	2725 LB	144"	2880 LB	
+/- 70 PSF	86"	2012 LB	93"	2180 LB	129"	3020 LB	144"	3360 LB	
+/- 80 PSF	82"	2199 LB	89"	2383 LB	124"	3301 LB	144"	3840 LB	
+/- 90 PSF	79"	2379 LB	86"	2577 LB	119"	3570 LB	144"	4320 LB	
+/- 100 PSF	77"	2552 LB	83"	2765 LB	115"	3830 LB	144"	4800 LB	
+/- 110 PSF	74"	2719 LB	80"	2946 LB	111"	4081 LB	141"	5167 LB	
+/- 120 PSF	72"	2882 LB	78"	3122 LB	108"	4325 LB	137"	5476 LB	
+/- 130 PSF	70"	3039 LB	76"	3294 LB	105"	4562 LB	133"	5776 LB	
+/- 140 PSF	68"	3193 LB	74"	3460 LB	103"	4793 LB	130"	6068 LB	
+/- 171.0 PSF	64"	3649 LB	69"	3954 LB	96"	5477 LB	122"	6934 LB	

MULLION SCHEDULE NOTES:

- VALUES SHOWN IN MULLION SCHEDULES ARE MAXIMUM ALLOWABLE MULLION LENGTHS AT EACH RESPECTIVE SLAT SPAN AND DESIGN PRESSURE.
- "INTERMEDIATE MULLIONS" ARE AS DEFINED IN ELEVATION 2/3.
- "END MULLIONS" ARE AS DEFINED IN ELEVATION 2/3.
- ALL MULLIONS SHALL BE 6061-T6 ALUMINUM OR EQUIVALENT.
- ALLOWABLE DESIGN PRESSURES AND SLAT SPANS INDICATED ARE FOR DETERMINING PERMISSIBLE MULLION LENGTHS ONLY. ACTUAL SLAT SPANS AND DESIGN PRESSURES SHALL NOT EXCEED THOSE INDICATED IN SPAN SCHEDULES.
- "END REACTIONS" ARE LISTED FOR EACH COMBINATION OF DESIGN LOAD, MULLION TYPE, SLAT TYPE (OPEN OR CLOSED) & SLAT SPAN. CHOOSE MOUNTING CONNECTIONS (PER APPLICABLE CONNECTION DETAILS HEREIN) THAT PROVIDES "CONNECTION CAPACITY" GREATER THAN OR EQUAL TO "END REACTIONS" GIVEN ABOVE.
- "INTERMEDIATE MULLIONS" SHALL HAVE EQUAL SLAT SPANS (+/- 12") ON ADJACENT SIDES OF MULLION. OTHERWISE, USE "END MULLION" TABLES.

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REMARKS	DRWN	CHKD	DATE
INIT ISSUE	CSL	RWN	06/11/21
REV - ADDTL OPTIONS	RWN	RWN	08/15/21
REV - ADDTL OPTIONS	RWN	RWN	10/14/21
TDI SUBMITTAL	EPR	RWN	11/12/21
REV - TDI COMMENTS	EPR	RWN	02/22/22

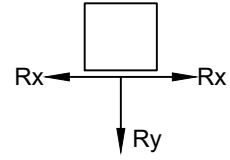
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23 OF 30

MULLION
SCHEDULE:
INTERMEDIATE
MULLIONS



INTERMEDIATE MULLION SCHEDULES

FRANK BENNARDO, P.E.
PE# 96064 CA# F-11383



CERTIFY! 02/23/2022

SLAT SPAN	DESIGN PRESSURE	4"x4"x0.1875" ALUM TUBE		4"x4"x0.25" ALUM TUBE		4"x6"x0.25" ALUM TUBE		4"x8"x0.25" ALUM TUBE	
		MAX MULLION LENGTH	END REACTION Rt	MAX MULLION LENGTH	END REACTION Rt	MAX MULLION LENGTH	END REACTION Rt	MAX MULLION LENGTH	END REACTION Rt
108"	+/- 30 PSF	110"	1237 LB	119"	1340 LB	144"	1620 LB	144"	1620 LB
	+/- 40 PSF	100"	1498 LB	108"	1624 LB	144"	2160 LB	144"	2160 LB
	+/- 50 PSF	93"	1739 LB	100"	1884 LB	139"	2610 LB	144"	2700 LB
	+/- 60 PSF	87"	1964 LB	95"	2128 LB	131"	2947 LB	144"	3240 LB
	+/- 70 PSF	83"	2176 LB	90"	2358 LB	124"	3266 LB	144"	3780 LB
	+/- 80 PSF	79"	2379 LB	86"	2577 LB	119"	3570 LB	144"	4320 LB
	+/- 90 PSF	76"	2573 LB	83"	2788 LB	114"	3862 LB	144"	4860 LB
	+/- 100 PSF	74"	2760 LB	80"	2991 LB	110"	4143 LB	140"	5245 LB
	+/- 110 PSF	71"	2941 LB	77"	3187 LB	107"	4415 LB	135"	5589 LB
	+/- 120 PSF	69"	3117 LB	75"	3377 LB	104"	4678 LB	132"	5923 LB
	+/- 130 PSF	67"	3288 LB	73"	3563 LB	101"	4935 LB	128"	6247 LB
	+/- 140 PSF	66"	3454 LB	71"	3743 LB	99"	5185 LB	125"	6564 LB
	+/- 160.0 PSF	63"	3776 LB	68"	4091 LB	94"	5668 LB	120"	7175 LB
120"	+/- 30 PSF	106"	1327 LB	115"	1438 LB	144"	1800 LB	144"	1800 LB
	+/- 40 PSF	96"	1607 LB	105"	1742 LB	144"	2400 LB	144"	2400 LB
	+/- 50 PSF	90"	1865 LB	97"	2021 LB	134"	2800 LB	144"	3000 LB
	+/- 60 PSF	84"	2106 LB	91"	2282 LB	126"	3162 LB	144"	3600 LB
	+/- 70 PSF	80"	2334 LB	87"	2530 LB	120"	3504 LB	144"	4200 LB
	+/- 80 PSF	77"	2552 LB	83"	2765 LB	115"	3830 LB	144"	4800 LB
	+/- 90 PSF	74"	2760 LB	80"	2991 LB	110"	4143 LB	140"	5245 LB
	+/- 100 PSF	71"	2961 LB	77"	3209 LB	107"	4445 LB	135"	5627 LB
	+/- 110 PSF	69"	3155 LB	75"	3419 LB	103"	4736 LB	131"	5996 LB
	+/- 120 PSF	67"	3344 LB	72"	3623 LB	100"	5019 LB	127"	6354 LB
	+/- 130 PSF	65"	3527 LB	71"	3822 LB	98"	5294 LB	124"	6702 LB
	+/- 140 PSF	64"	3706 LB	69"	4015 LB	95"	5562 LB	121"	7042 LB
	+/- 152.0 PSF	62"	3914 LB	67"	4242 LB	93"	5876 LB	117"	7438 LB
132"	+/- 30 PSF	103"	1414 LB	111"	1532 LB	144"	1980 LB	144"	1980 LB
	+/- 40 PSF	93"	1713 LB	101"	1856 LB	140"	2571 LB	144"	2640 LB
	+/- 50 PSF	87"	1988 LB	94"	2154 LB	130"	2984 LB	144"	3300 LB
	+/- 60 PSF	82"	2245 LB	88"	2432 LB	123"	3369 LB	144"	3960 LB
	+/- 70 PSF	78"	2488 LB	84"	2695 LB	116"	3734 LB	144"	4620 LB
	+/- 80 PSF	74"	2719 LB	80"	2946 LB	111"	4081 LB	141"	5167 LB
	+/- 90 PSF	71"	2941 LB	77"	3187 LB	107"	4415 LB	135"	5589 LB
	+/- 100 PSF	69"	3155 LB	75"	3419 LB	103"	4736 LB	131"	5996 LB
	+/- 110 PSF	67"	3362 LB	72"	3643 LB	100"	5047 LB	127"	6389 LB
	+/- 120 PSF	65"	3563 LB	70"	3861 LB	97"	5348 LB	123"	6771 LB
	+/- 130 PSF	63"	3758 LB	68"	4073 LB	95"	5641 LB	120"	7142 LB
	+/- 145.4 PSF	61"	4050 LB	66"	4388 LB	91"	6078 LB	115"	7695 LB
	144"	+/- 20 PSF	114"	1144 LB	124"	1239 LB	144"	1440 LB	144"
+/- 30 PSF		100"	1498 LB	108"	1624 LB	144"	2160 LB	144"	2160 LB
+/- 40 PSF		91"	1815 LB	98"	1967 LB	136"	2725 LB	144"	2880 LB
+/- 50 PSF		84"	2106 LB	91"	2282 LB	126"	3162 LB	144"	3600 LB
+/- 60 PSF		79"	2379 LB	86"	2577 LB	119"	3570 LB	144"	4320 LB
+/- 70 PSF		75"	2636 LB	82"	2856 LB	113"	3957 LB	143"	5009 LB
+/- 80 PSF		72"	2882 LB	78"	3122 LB	108"	4325 LB	137"	5476 LB
+/- 90 PSF		69"	3117 LB	75"	3377 LB	104"	4678 LB	132"	5923 LB
+/- 100 PSF		67"	3344 LB	72"	3623 LB	100"	5019 LB	127"	6354 LB
+/- 110 PSF		65"	3563 LB	70"	3861 LB	97"	5348 LB	123"	6771 LB
+/- 120 PSF		63"	3776 LB	68"	4091 LB	94"	5668 LB	120"	7175 LB
+/- 130 PSF		61"	3983 LB	66"	4316 LB	92"	5978 LB	116"	7568 LB
+/- 140.0 PSF		60"	4185 LB	65"	4534 LB	90"	6281 LB	114"	7952 LB



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QOM3 - AL8 ROLL-UP HURRICANE SHUTTER
IBC 2018 EDITION & IRC 2018 EDITION
TEXAS DEPARTMENT OF INSURANCE (TDI)

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REV - ADDTL OPTIONS	RWN	RWN	10/14/21
TDI SUBMITTAL	EPR	RWN	11/12/21
REV - TDI COMMENTS	EPR	RWN	02/22/22

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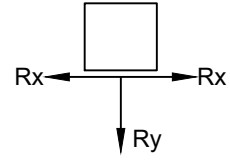
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24 OF 30

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MULLION
SCHEDULE:
INTERMEDIATE
MULLIONS



INTERMEDIATE MULLION SCHEDULES

SLAT SPAN	DESIGN PRESSURE	4"x4"x0.125" ALUM TUBE		4"x4"x0.25" ALUM TUBE		4"x6"x0.25" ALUM TUBE		4"x8"x0.25" ALUM TUBE		
		MAX MULLION LENGTH	END REACTION Rt	MAX MULLION LENGTH	END REACTION Rt	MAX MULLION LENGTH	END REACTION Rt	MAX MULLION LENGTH	END REACTION Rt	
156"	+/- 20 PSF	111"	1206 LB	121"	1307 LB	144"	1560 LB	144"	1560 LB	
	+/- 30 PSF	97"	1581 LB	105"	1713 LB	144"	2340 LB	144"	2340 LB	
	+/- 40 PSF	88"	1915 LB	96"	2075 LB	133"	2874 LB	144"	3120 LB	
	+/- 50 PSF	82"	2222 LB	89"	2408 LB	123"	3335 LB	144"	3900 LB	
	+/- 60 PSF	77"	2509 LB	84"	2719 LB	116"	3766 LB	144"	4680 LB	
	+/- 70 PSF	73"	2781 LB	79"	3013 LB	110"	4174 LB	139"	5284 LB	
	+/- 80 PSF	70"	3039 LB	76"	3294 LB	105"	4562 LB	133"	5776 LB	
	+/- 90 PSF	67"	3288 LB	73"	3563 LB	101"	4935 LB	128"	6247 LB	
	+/- 100 PSF	65"	3527 LB	71"	3822 LB	98"	5294 LB	124"	6702 LB	
	+/- 110 PSF	63"	3758 LB	68"	4073 LB	95"	5641 LB	120"	7142 LB	
+/- 124.7 PSF	60"	4086 LB	66"	4428 LB	91"	6133 LB	115"	7765 LB		
168"	+/- 20 PSF	109"	1267 LB	118"	1373 LB	144"	1680 LB	144"	1680 LB	
	+/- 30 PSF	95"	1661 LB	103"	1799 LB	142"	2493 LB	144"	2520 LB	
	+/- 40 PSF	86"	2012 LB	93"	2180 LB	129"	3020 LB	144"	3360 LB	
	+/- 50 PSF	80"	2334 LB	87"	2530 LB	120"	3504 LB	144"	4200 LB	
	+/- 60 PSF	75"	2636 LB	82"	2856 LB	113"	3957 LB	143"	5009 LB	
	+/- 70 PSF	72"	2921 LB	78"	3166 LB	107"	4385 LB	136"	5551 LB	
	+/- 80 PSF	68"	3193 LB	74"	3460 LB	103"	4793 LB	130"	6068 LB	
	+/- 90 PSF	66"	3454 LB	71"	3743 LB	99"	5185 LB	125"	6564 LB	
	+/- 100 PSF	64"	3706 LB	69"	4015 LB	95"	5562 LB	121"	7042 LB	
	+/- 112.1 PSF	61"	3999 LB	66"	4333 LB	92"	6002 LB	116"	7599 LB	
180"	+/- 20 PSF	106"	1327 LB	115"	1438 LB	144"	1800 LB	144"	1800 LB	
	+/- 30 PSF	93"	1739 LB	100"	1884 LB	139"	2610 LB	144"	2700 LB	
	+/- 40 PSF	84"	2106 LB	91"	2282 LB	126"	3162 LB	144"	3600 LB	
	+/- 50 PSF	78"	2444 LB	85"	2649 LB	117"	3669 LB	144"	4500 LB	
	+/- 60 PSF	74"	2760 LB	80"	2991 LB	110"	4143 LB	140"	5245 LB	
	+/- 70 PSF	70"	3059 LB	76"	3315 LB	105"	4591 LB	133"	5813 LB	
	+/- 80 PSF	67"	3344 LB	72"	3623 LB	100"	5019 LB	127"	6354 LB	
	+/- 90 PSF	64"	3617 LB	70"	3919 LB	97"	5429 LB	122"	6873 LB	
	+/- 101.7 PSF	62"	3924 LB	67"	4252 LB	93"	5890 LB	117"	7456 LB	
	192"	+/- 20 PSF	104"	1385 LB	113"	1501 LB	144"	1920 LB	144"	1920 LB
+/- 30 PSF		91"	1815 LB	98"	1967 LB	136"	2725 LB	144"	2880 LB	
+/- 40 PSF		82"	2199 LB	89"	2383 LB	124"	3301 LB	144"	3840 LB	
+/- 50 PSF		77"	2552 LB	83"	2765 LB	115"	3830 LB	144"	4800 LB	
+/- 60 PSF		72"	2882 LB	78"	3122 LB	108"	4325 LB	137"	5476 LB	
+/- 70 PSF		68"	3193 LB	74"	3460 LB	103"	4793 LB	130"	6068 LB	
+/- 80 PSF		65"	3491 LB	71"	3783 LB	98"	5240 LB	124"	6633 LB	
+/- 92.9 PSF		62"	3857 LB	67"	4179 LB	93"	5789 LB	118"	7328 LB	
204"		+/- 20 PSF	102"	1442 LB	110"	1563 LB	144"	2040 LB	144"	2040 LB
		+/- 30 PSF	89"	1890 LB	96"	2048 LB	134"	2837 LB	144"	3060 LB
	+/- 40 PSF	81"	2290 LB	88"	2481 LB	121"	3437 LB	144"	4080 LB	
	+/- 50 PSF	75"	2657 LB	81"	2879 LB	113"	3988 LB	143"	5049 LB	
	+/- 60 PSF	71"	3000 LB	76"	3251 LB	106"	4504 LB	134"	5701 LB	
	+/- 70 PSF	67"	3325 LB	73"	3603 LB	101"	4991 LB	127"	6318 LB	
	+/- 85.4 PSF	63"	3796 LB	68"	4114 LB	94"	5699 LB	119"	7214 LB	
	216"	+/- 20 PSF	100"	1498 LB	108"	1624 LB	144"	2160 LB	144"	2160 LB
		+/- 30 PSF	87"	1964 LB	95"	2128 LB	131"	2947 LB	144"	3240 LB
		+/- 40 PSF	79"	2379 LB	86"	2577 LB	119"	3570 LB	144"	4320 LB
+/- 50 PSF		74"	2760 LB	80"	2991 LB	110"	4143 LB	140"	5245 LB	
+/- 60 PSF		69"	3117 LB	75"	3377 LB	104"	4678 LB	132"	5923 LB	
+/- 70 PSF		63"	3744 LB	68"	4057 LB	95"	5620 LB	120"	7115 LB	
+/- 79.0 PSF		63"	3744 LB	68"	4057 LB	95"	5620 LB	120"	7115 LB	
228"		+/- 20 PSF	98"	1553 LB	106"	1683 LB	144"	2280 LB	144"	2280 LB
		+/- 30 PSF	86"	2036 LB	93"	2206 LB	129"	3055 LB	144"	3420 LB
		+/- 40 PSF	78"	2466 LB	84"	2672 LB	117"	3701 LB	144"	4560 LB
	+/- 50 PSF	72"	2861 LB	78"	3101 LB	109"	4295 LB	137"	5437 LB	
	+/- 60 PSF	68"	3231 LB	74"	3501 LB	102"	4850 LB	129"	6140 LB	
	+/- 73.4 PSF	64"	3696 LB	69"	4005 LB	95"	5548 LB	121"	7023 LB	
	236"	+/- 20 PSF	97"	1590 LB	105"	1722 LB	144"	2360 LB	144"	2360 LB
		+/- 30 PSF	85"	2083 LB	92"	2257 LB	127"	3126 LB	144"	3540 LB
		+/- 40 PSF	77"	2523 LB	83"	2734 LB	116"	3787 LB	144"	4720 LB
		+/- 50 PSF	71"	2928 LB	77"	3173 LB	107"	4395 LB	136"	5564 LB
+/- 60 PSF		67"	3306 LB	73"	3583 LB	101"	4963 LB	128"	6283 LB	
+/- 70.0 PSF		64"	3664 LB	69"	3971 LB	96"	5500 LB	121"	6963 LB	

FRANK BENNARDO, P.E.
PE# 96064 CA# F-11383



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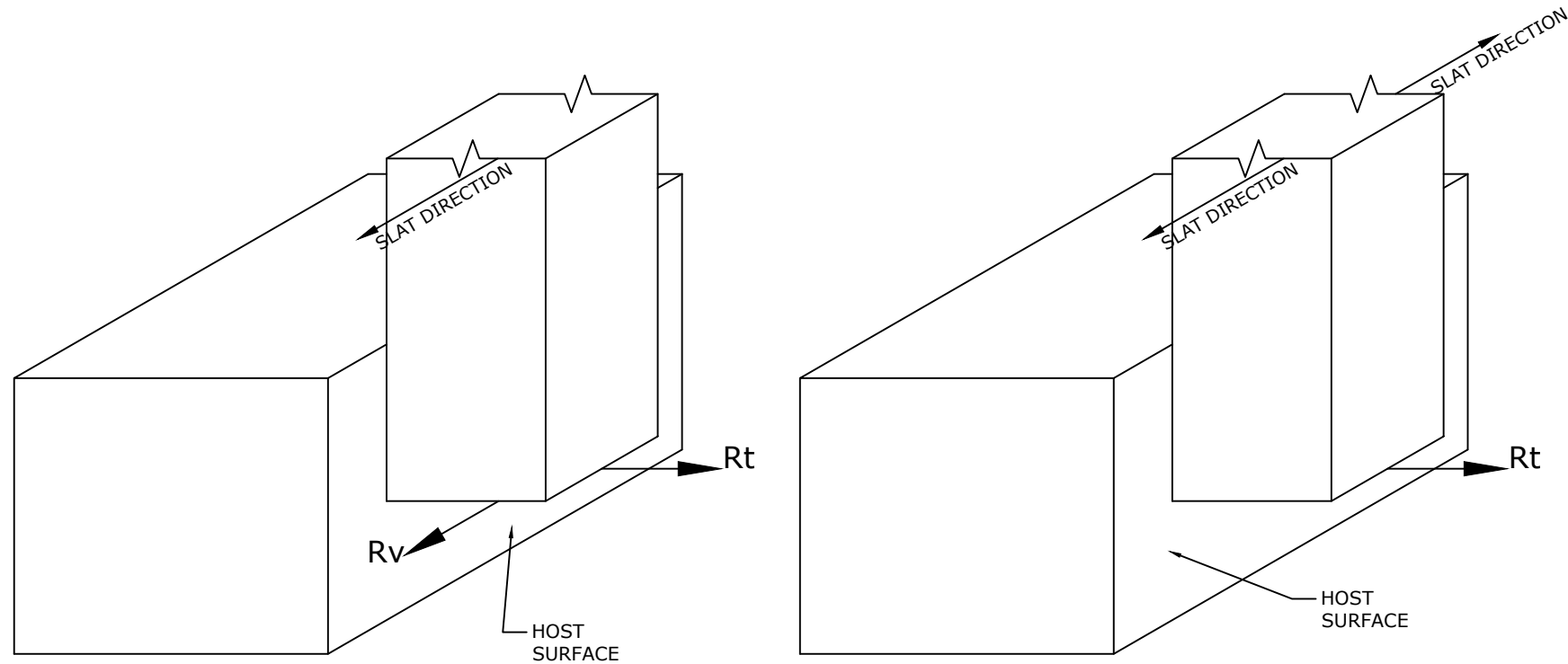
OF 30

MULLION END ATTACHMENTS

FRANK BENNARDO, P.E.
PE# 96064 CA# F-11383



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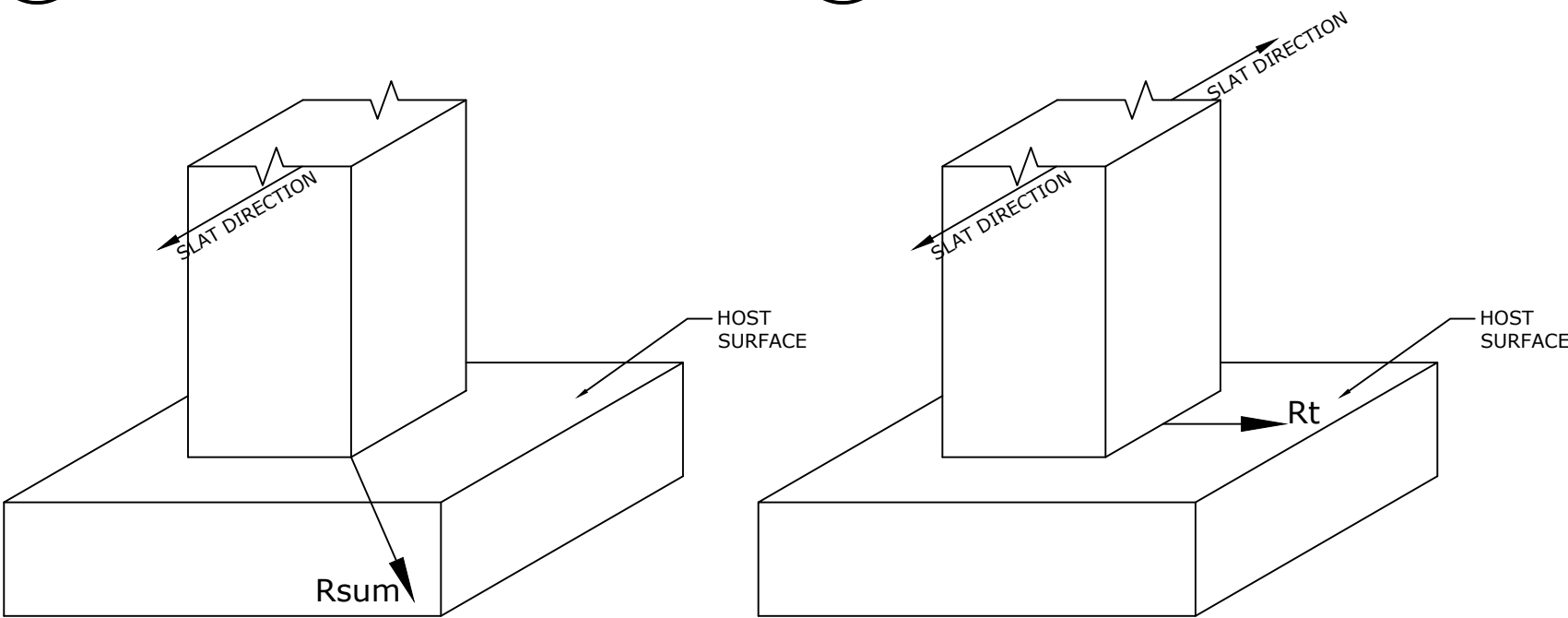


1 END MULLION "FACE MOUNT" DIAGRAM

29 N.T.S. ISOMETRIC

2 INTERIOR MULLION "FACE MOUNT" DIAGRAM

29 N.T.S. ISOMETRIC



3 END MULLION "TRAPPED MOUNT" DIAGRAM

29 N.T.S. ISOMETRIC

4 INTERIOR MULLION "TRAPPED MOUNT" DIAGRAM

29 N.T.S. ISOMETRIC

MULLION ANCHOR SCHEDULE

ANCHOR TYPE	MINIMUM SPACING	MINIMUM EDGE DISTANCE	CONNECTION DETAIL	CONNECTION CAPACITY	
				Tcap	Vcap
1/2" DEWALT CONFLX W/ 3-1/2" EMBED TO 3.0KSI MIN CONCRETE	6.0"	3.5"	1A, 1B	Tcap	3534 LB
	4.0"	3.5"	2A, 2B	Vcap	3441 LB
				Tcap	4948 LB
4.0"	3.5"	3A, 3B	Vcap	4818 LB	
			Tcap	9897 LB	
3/8" DEWALT CONFLX W/ 3-1/2" EMBED TO 3.0KSI MIN CONCRETE	6.0"	3.5"	1A, 1B	Vcap	9636 LB
	4.0"	3.75"	1A, 1B	Tcap	3246 LB
				Vcap	3523 LB
	4.0"	3.75"	2A, 2B	Tcap	4869 LB
				Vcap	5285 LB
	4.0"	3.75"	3A, 3B	Tcap	9739 LB
Vcap				10570 LB	
1/2" DEWALT 316SS WEDGE BOLT W/ 2-3/4" EMBED TO 3.0KSI MIN CONCRETE	6.0"	4.5"	1A, 1B	Tcap	1640 LB
	4.0"	4.5"	2A, 2B	Vcap	2560 LB
				Tcap	3280 LB
	4.0"	4.5"	3A, 3B	Vcap	3584 LB
				Tcap	6560 LB
	4.0"	4.5"	3A, 3B	Vcap	7168 LB
Tcap				1930 LB	
3/8" DEWALT 316SS WEDGE BOLT W/ 3-1/2" EMBED TO 3.0KSI MIN CONCRETE	6.0"	3.0"	1A, 1B	Vcap	828LB
	4.0"	3.0"	2A, 2B	Tcap	3860LB
				Vcap	1656 LB
	4.0"	3.0"	3A, 3B	Tcap	7720 LB
				Vcap	3312 LB
	1/2" HILTI KH-EZ W/ 4-1/2" EMBED TO 3.0KSI MIN CONCRETE	6.0"	3.0"	1A, 1B	Tcap
4.0"		3.0"	2A, 2B	Vcap	1461LB
				Tcap	6234LB
4.0"	3.0"	3A, 3B	Vcap	2777 LB	
4.0"	3.0"	3A, 3B	Tcap	12469 LB	
			Vcap	5554 LB	

TABLE CONTINUES ON NEXT SHEET

MULLION ANCHOR SCHEDULE NOTES:

- FOR "TRAPPED MOUNT" CONDITIONS WITH END MULLIONS, 'Rsum' VALUES IN MULLION SCHEDULE SHALL NOT EXCEED MAX 'Vcap' VALUES NOTED IN THIS SCHEDULE.
- FOR "FACE MOUNT" CONDITIONS WITH END MULLIONS, **Rv/Vcap + Rt/Tcap SHALL BE LESS THAN OR EQUAL TO 1.0**, WHERE 'Rv' AND 'Rt' ARE PER MULLION SCHEDULES, AND 'Tcap' AND 'Vcap' ARE PER THIS SCHEDULE.
- FOR "TRAPPED MOUNT" CONDITIONS WITH INTERMEDIATE MULLIONS, 'Rt' VALUES IN MULLION SCHEDULES SHALL NOT EXCEED 'Vcap' VALUES NOTED IN THIS SCHEDULE.
- FOR "FACE MOUNT" CONDITIONS WITH INTERMEDIATE MULLIONS, 'Rt' VALUES IN MULLION SCHEDULES SHALL NOT EXCEED 'Tcap' VALUES NOTED IN THIS SCHEDULE
- * ANCHORS SHALL PENETRATE THROUGH FACE SHELL INTO GROUTED CELL.
- ALTERNATE ANCHORS AND OR END CONNECTION CONFIGURATIONS MAY BE DESIGNED/CERTIFIED ON A SITE SPECIFIC BASIS BASED ON THE END LOADINGS LISTED IN THE MULLION SCHEDULES.
- 1/2" UNC THRU BOLTS MAY BE USED IN LEIU OF 1/4" SMS PER THE FOLLOWING DIRECTIVE
 - (4) SMS PER SIDE = (2) 1/2" UNC THRU BOLTS / (6) SMS PER SIDE = (3) 1/2" UNC THRU BOLTS



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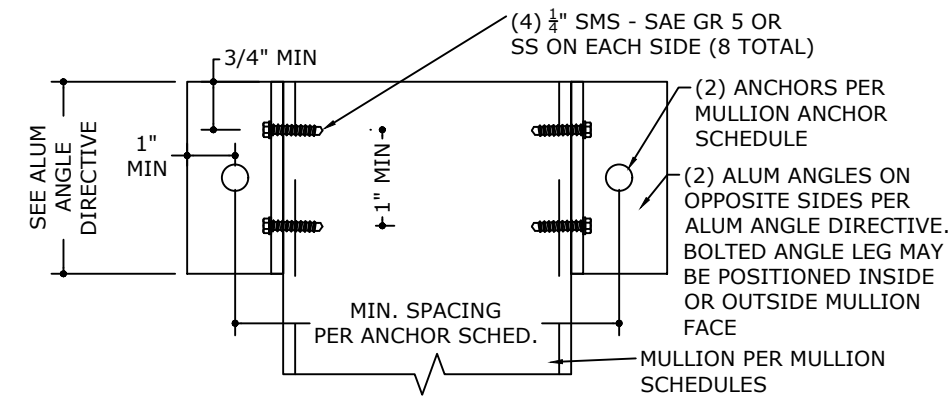
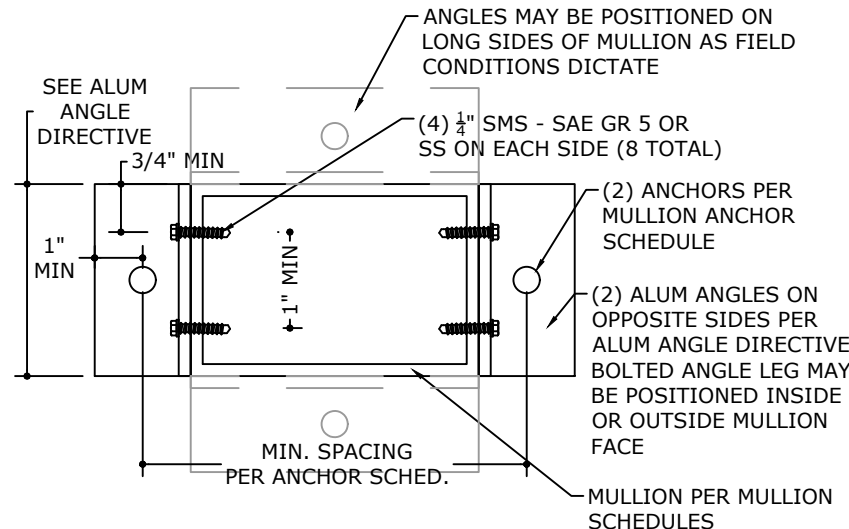
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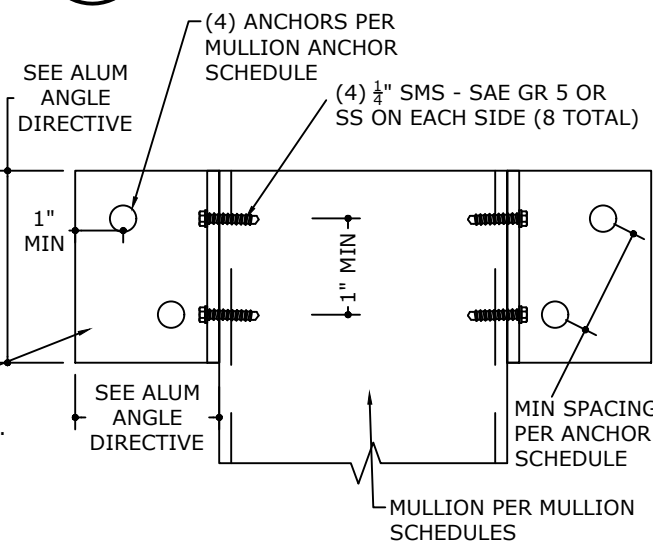
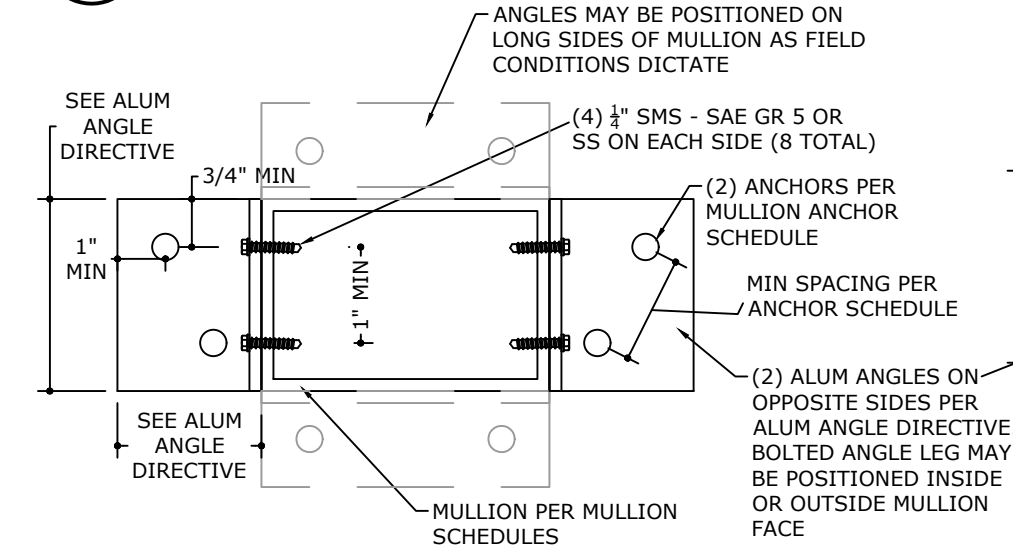


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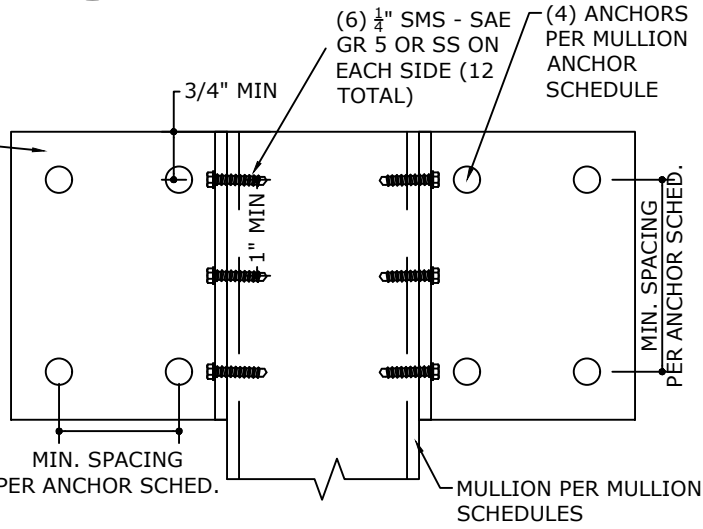
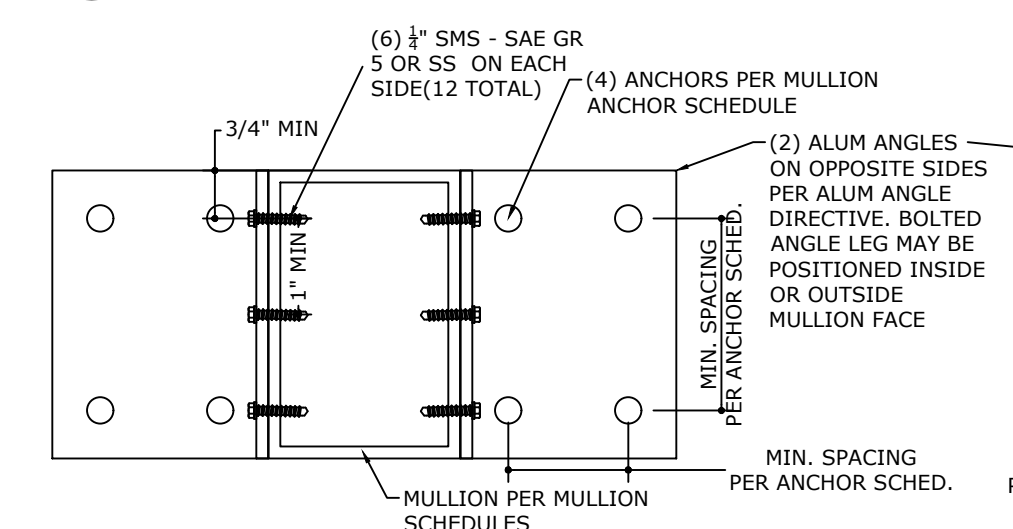
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30 N.T.S.

1B FACE MOUNT OPTION 1
30 N.T.S.



2A TRAPPED MOUNT OPTION 2
30 N.T.S.

2B FACE MOUNT OPTION 2
30 N.T.S.



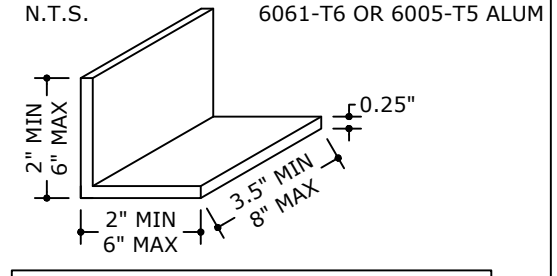
3A TRAPPED MOUNT OPTION 3
30 N.T.S.

3B FACE MOUNT OPTION 3
30 N.T.S.

MULLION ANCHOR SCHEDULE (CONT'D)

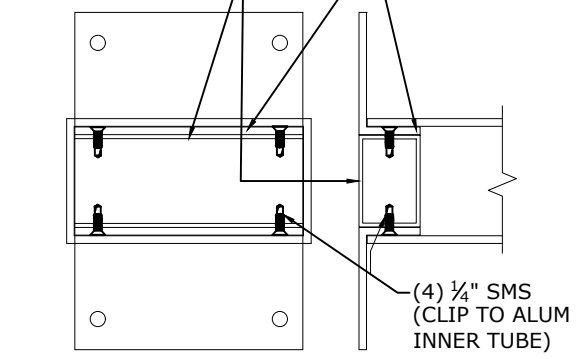
ANCHOR TYPE	MINIMUM SPACING	MINIMUM EDGE DISTANCE	CONNECTION DETAIL	CONNECTION CAPACITY	
				Tcap	Vcap
1/2" DEWALT SCREW BOLTS (OR EQUIV.) W/ 2-1/2" EMBED TO 3KSI MIN. CONCRETE	6"	4.5"	1A, 1B	Tcap	3660 LB
	4.0"	4.5"	2A, 2B	Tcap	6442 LB
			3A, 3B	Tcap	12883 LB
3/8" DEWALT SCREW BOLTS (OR EQUIV.) W/ 2" EMBED TO 3KSI MIN. CONCRETE	6.0"	2.5"	1A, 1B	Tcap	1905 LB
	3.0"	2.5"	2A, 2B	Tcap	3801 LB
			3A, 3B	Tcap	7622 LB
3/8" DEWALT SCREW BOLTS (OR EQUIV.) W/ 3-1/4" EMBED TO GROUT-FILLED CONCRETE BLOCK*	6.0"	4.5"	1A, 1B	Tcap	1953 LB
	3.0"	4.5"	2A, 2B	Tcap	3906 LB
			3A, 3B	Tcap	7812 LB
5/16" LAG SCREW W/ 2" MIN. THREAD PENETRATION TO G=0.42 MIN WOOD	2.0"	1.25"	1A, 1B	Tcap	1310 LB
	2.0"	1.25"	2A, 2B	Tcap	2620 LB
			3A, 3B	Tcap	3930 LB
5/16" DEWALT ULTRACON (OR EQUIV.) W/ 2" EMBED TO 3.5KSI MIN CONCRETE	5.0"	3.125"	1A, 1B	Tcap	1670 LB
	3.75"	3.125"	2A, 2B	Tcap	1820 LB
			3A, 3B	Tcap	3640 LB
5/16" DEWALT ULTRACON (OR EQUIV.) W/ 2-1/4" EMBED TO GROUT-FILLED CONCRETE BLOCK	5.0"	2.5"	1A, 1B	Tcap	580 LB
	5.0"	2.5"	2A, 2B	Tcap	1160 LB
			3A, 3B	Tcap	2320 LB

ALUM ANGLE DIRECTIVE



ANGLE DIMENSION NOTE: MINIMUM REQUIRED ANGLE LEG SIZES AND LENGTH SHALL BE DETERMINED BASED ON THE ANCHOR REQUIREMENTS IN THE MULLION ANCHOR SCHEDULE AND THE MULLION ATTACHMENT DETAILS HEREIN

PROVIDE 1/8" THICK ALUM INNER TUBE FULL WIDTH OF MULLION
VERTICAL CLIP LEG MAY SIT INSIDE MULLION



4 ALT. TRAPPED MOUNT OPTION
30 N.T.S.

ENGINEERING EXPRESS
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DELRAY BEACH, FL 33444
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QMI SECURITY SOLUTIONS
1661 GLENLAKE AVE
ITASCA, IL 60143
PHONE: (866) 980-1750
QOM3 - AL8 ROLL-UP HURRICANE SHUTTER
IBC 2018 EDITION & IRC 2018 EDITION
TEXAS DEPARTMENT OF INSURANCE (TDI)

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	CSL	RWN	06/11/21
REV - ADDTL OPTIONS	RWN	RWN	08/15/21
REV - ADDTL OPTIONS	RWN	RWN	10/14/21
TDI SUBMITTAL	EPR	RWN	11/12/21
REV - TDI COMMENTS	EPR	RWN	02/22/22

20-32431

SCALE: NTS UNLESS NOTED

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