To: rmbpe01@gmail.com

steve@urichengrllc.com; jsada@diversitech.com; ProCodesProductApproval; Alex Padilla Cc:

RE: Public comment for August 2019 Approval cycle - FL22415-R1 Subject:

Please note that you should use ProCodesProductApproval ProCodesProductApproval@myfloridalicense.com email for any questions/requests to prevent any inconvenience since we all are linked to this email address and if one of us is not here, the others may assist you.

Thanks for your cooperation!



Mrs Zubeyde Binici | Management Analyst

T: 850.717.1837| M E: Zubeyde.Binici@myfloridalicense.com

FLORIDA DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION

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From: Randall M. Bachtel, P.E. (RMB) [mailto:rmbpe01@gmail.com]

Sent: Thursday, July 18, 2019 4:14 PM

To: Binici, Zubeyde

Cc: steve@urichengrllc.com; jsada@diversitech.com; ProCodesProductApproval; Alex Padilla Subject: Re: Public comment for August 2019 Approval cycle - FL22415-R1

Zubevde.

Below is the response to the public comments (A through E) regarding FL22415-1 / August 2019 Approval Cycle

This response meets the requested timeline of: NOON on Friday July 19th, 2019.

A. Design pressure test not listed or pound-force per FBC 1620.6

1620.6 Rooftop structures and equipment. The lateral force on rooftop structures and equipment with Af less than (0.18h) located on buildings of all heights shall be determined from Equation 29.5-1 of ASCE 7 in which the value of GCf shall be taken as 3.1. GCf shall be permitted to be reduced linearly from 3.1 to 1.1 as the value of Af is increased from (0.18h) to (Bh). The value of G from Section 26.9 of ASCE 7 shall not be used. Additionally, a simultaneous uplift force shall be applied, given by Equation 29.5-1 of ASCE 7 in which GCf = 1.5 and Af is replaced by the horizontal projected area, Ar, of the rooftop structure or equipment. For the uplift force GCf shall be permitted to be reduced linearly from 1.5 to 1.0 as the value of Ar is increased from (0.1BL) to (BL).

Randall M. Bachtel, P.E. FL 80017 / RMB Engineering Response to Comment "A"

The DESIGN PRESSURE is determined using a Maximum Wind Speed of 180 MPH Using ASCE equation Sec. 27.3.2 / eq. 27.3-1 qz = 0.00256 * Kz * Kzt * Kd * V2 = 63.45 psf where Kz = 0.85, Kzt = 1.00, Kd = 0.90

For rooftop structures and equipment with Af less than (0.1Bh). (LATERAL Direction) GCr = 3.1 For rooftop structures and equipment with Af less than (0.1Bh). (VERTICAL Direction) GCr = 1.5

(ASCE 7-10 Equation 29.5-2) Fh = qh(GCr)Af = 196.7 psfLateral Force due to Wind Load Only Vertical Force (UPLIFT) Wind Load Only (ASCE 7-10 Equation 29.5-3) Fh = qh(GCr)Af = 95.2 psf

B. No G-90 or corrosion test per FBC TAS 114 App. E

TESTING APPLICATION STANDARD (TAS) 114-95 APPENDIX E TEST PROCEDURE FOR CORROSION RESISTANCE OF FASTENERS, **BATTEN BARS AND STRESS DISTRIBUTION PLATES** 1.Scope:

^{1.1}The corrosion test procedure is designed to assess the potential damage to nails, metal fasteners, batten bars and stress distribution plates used for mechanically attached roof covers and/or attachment of insulation. There is no single test procedure that approximates all climactic conditions experienced by roofing components; however, tests are available that provide an indication of potential resistance to corrosion.

^{1.2}All nails and carbon steel fasteners shall be tested for corrosion resistance in compliance with ASTM Standard Practice G85 [(Modified Salt Spray (Fog) Testing)], Annex A5 (Dolute Electrolyte Cyclic Fog/Dry Testing) as modified for the Florida Building Code, Building and noted in Section 2, herein. 1.3All batten bars, stress distribution plates, and other metal fastener types shall be tested for corrosion resistance in compliance with DIN 50018 as noted in Section 3, herein.

Randall M. Bachtel, P.E. FL 80017 / RMB Engineering Response to Comment "B"

Below is the document that represents the SALT SPRAY TESTING that has been completed for all POWDER COATED STAND COMPONENTS (Including Batten Bars and Stress Distribution Plates)

	Physica	l Testing L	aboratory	Report	I - BASF Chemetall expect more •
Project Number:	188,819	Customer:	Bells Powder Coating	TSM:	B. Ward
Date Received:	23 March 2018	Location:	North Attleboro, MA	RSM:	D. Elvin
Report Date:	20 April 2018	Customer ID:	70601	P.O. Number:	
·This report shall not b	within this report relate onl e reproduced except in full ified, all tests are performed Customer supplied three sar	without written appro d and evaluated to the			
Sample Description:	Steel Panels.				

Test(s) Requested:

Specification	Specification	Specification	Specification
ASTM B117: Neutral Salt Spray			
ASTM D7091; Film Thickness			
ASTM D3359: Adhesion			

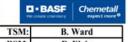
Process Information: Current

Disposition of Samples: Samples returned to TSM

	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6	Stage 7	Stage 8	Stage 9	Stage 10	Stage 11
Operation	Spray	Spray/Rinse	Spray								
Chemical-1	CC 2147	Water	GL D6871								
Parameters-1	2.75%, pH 4.8	500 ppm	1.15%								
Temperature	120°F		Ambient								
Time	90 seconds	i i									
Pressure	15 psi										

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Physical Testing Laboratory Report



	, 8										
Project Number:	188,819	Customer:	Bells Powder Coating	TSM:	B. Ward						
Date Received:	23 March 2018	Location:	North Attleboro, MA	RSM:	D. Elvin						
Report Date:	20 April 2018	Customer ID:	70601	P.O. Number:							

ASTM B117: Neutral Salt Spray

					504 1	lours				
Start Date:	29 March 20)18				Completion	Date: 19 A	pril 2018		
Sample ID Panels	SCRIBE MEA	N CREEPAGE O	Mean Arithmetic REEPAGE MEA CALCULATED FI AR MEASUREM D1654)	ROM ACROSS	ASTM D610/D714: Rust/Blister Field Rating	ASTM D7091: Film Thickness (mil's)				
					Steel	Panels				
1	0.0	2.6	0.3	9	10/10	2.6-3.4	5B			
2	0.0	2.9	0.2	9	9P/10	2.0-2.5	5B			
3	0.0	6.8	2.1	6	9P/10	1.7-2.1	5B			

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Physical Testing Laboratory Report

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Project Number:	188,819	Customer:	Bells Powder Coating	TSM:	B. Ward
Date Received:	23 March 2018	Location:	North Attleboro, MA	RSM:	D. Elvin
Report Date:	20 April 2018	Customer ID:	70601	P.O. Number:	

Reported By:

Eux E. Voron

Erik Vernon Physical Testing **Associate Chemist** Approved By:

Adam McMurray Team Leader **Physical Testing**

All Questions, Concerns, or Complaints regarding this report should be directed to the Approver named above.

Billing Information

-					
PO	#+	Y	VY	CX	X

Product Code	Cost	Type	Quantity	Hours	Subtotal	Total
SSTESTING_II	\$147.00	Per Set	1		\$147.00	
LAB_EXPOSURE_HOURS	\$0.05	Per Sample	3	504	\$75.60	
ADHESION_TEST	\$26.25	Per Sample	3		\$78.75	
	<u> </u>					\$301.35
				Total For This	Report:	N.C.

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Physical Testing Laboratory Repor

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TS	M:	В.	Ward
ne			

Destant Name barre	100 010	C	B-II- BI Cti	TOM	D Wand
Project Number:	188,819	Customer:	Bells Powder Coating	TSM:	B. Ward
Date Received:	23 March 2018	Location:	North Attleboro, MA	RSM:	D. Elvin
Report Date:	20 April 2018	Customer ID:	70601	P.O. Number:	

				Field Ratin	g Key-Blister and Rust Ratings				
	Blister	Density			Rust	Ratings			
ASTM	D714	ISO 4	628-2		ASTM D61	0			ISO 4628-3
Rating Letter	Rating	Rating Number	Rating	Rust Grade	Percent of Surface Rusted	1	isual Examp	les	Rust Grade
n/a	None	0	None	Rusi Graae	(Ranges)	Spot	General	Pinpoint	Rusi Graae
n/a	n/a	1	Very Few	10	≤ 0.01%	10	10	10	Ri 0
F	Few	2	Few	9	>0.01% to 0.03%	9S	9G	9P	Ri l
M	Medium	3	Moderate	8	>0.03% to 0.1%	8S	8G	8P	
MD	Medium Dense	4	Considerable	7	>0.1% to 0.3%	7S	7G	7P	Ri 2
D	Dense	5	Dense	6	>0.3% to 1.0%	6S	6G	6P	Ri 3
	Blister Size			5	>1.0% to 3.0%	5S	5G	5P	
ASTM D714	ISO 4628-2	D		4	>3.0% to 10.0%	4S	4G	4P	Ri 4
Rating Number	Rating Number	Rat	ing	3	>10.0% to 16.0%	38	3G	3P	
10	0	No Blistering	0 mm	2	>16.0% to 33.0%	2S	2G	2P	
n/a	S1	Requires M	agnification	1	>33.0% to 50.0%	1S	1G	1P	Ri 5
8	S2	Pinpoint	0-1 mm	0	> 50.0%	0	0	0	
6	S3	Small	1-2 mm		919				
4	S4	Medium	2-3 mm	Note: Key ser	ves only as a reference. When eval	luating for bl	istering and i	usting, samp	oles must be
2	C.F	Large	3-5 mm		compared to the photograph sta	andards provi	ided by each	method.	
0	S5	Very Large	>5mm	1					

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Physical Testing Laboratory Report

t	Section 2 in case of the last	BASF	Chemetall expect more 6
TSM	1:	B.	Ward
RSA	1.	n	Elvin

		8			
Project Number:	188,819	Customer:	Bells Powder Coating	TSM:	B. Ward
Date Received:	23 March 2018	Location:	North Attleboro, MA	RSM:	D. Elvin
Report Date:	20 April 2018	Customer ID:	70601	P.O. Number:	î

	Scribe	Rating Key		
Scribe Rating	gs Numbers	Representative Cre	epage From Scribe	
ASTM D1654	ISO 4628-8	"One-sided"		
Mean Rating Number	Corrosion Grade	Millimeters	Inches	
10	0-None	0	0	
9	1-Very Slight	Over 0 to 0.5	Over 0 to 1/64	
8	2-Moderate	Over 0.5 to 1.0	Over 1/64 to 1/32	
7	3-Moderate	Over 1.0 to 2.0	Over 1/32 to 1/16	
6	4-Considerable	Over 2.0 to 3.0	Over 1/16 to 1/8	
5	5-Severe	Over 3.0 to 5.0	Over 1/8 to 3/16	
4		Over 5.0 to 7.0	Over 3/16 to 1/4	
3		Over 7.0 to 10.0	Over 1/4 to 3/8	
2	>5	Over 10.0 to 13.0	Over 3/8 to 1/2	
1		Over 13.0 to 16.0	Over 1/2 to 5/8	
0		Greater Than 16.0	Greater Than 5/8	
S	Spot Creepage	Isolated Creepage that Encompasses Less The 25% of The Scribe		

		Adhesion Class	ifications
ASTM D3359		ISO 2409	Percent Area Removed
Method A	Method B	150 2409	Percent Area Removed
5A	5B	0	0%
4A	4B	1	Less Than 5%
3A	3B	2	5% to 15 %
2A	2B	3	15% to 35%
1A	1B	4	35% to 65%
0A	0B	5	Greater than 65%

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In addition to ALL of the Physical Members of the Quick Sling Stands which are powder coated and tested to the SALT SPRAY - SPECIFICATION **ABOVE**

All hardware provided with QuickSling Stands are Hot Dip Galvanized (HDP) and are deemed to be corrosion resistant.

In the three (3) PDF documents provided as part of FL22415-1, it is stated in each one that any all additional hardware that is supplied by the customer must be STAINLESS STEEL or Hot Dip Galvanized (HDP) to meet the corrosion resistance requirements. This includes hardware used to anchor the QuickSling Stand to the roof as well as hardware used to mount the equipment to the QuickSling Stand.

C. No unit-stand connection detail and roof-deck anchorage provided FBC 1522.2 and 2204

1522.2 Rooftop mounted equipment

All rooftop equipment and supports shall be secured to the structure in compliance with the loading requirements of Chapter 16 (High-Velocity Hurricane Zones). The use of wood "sleepers" shall not be permitted.

Section 2204 Connections

2204.1 Welding

The details of design, workmanship and technique for welding and qualification of welding personnel shall be in accordance with the specifications listed in Sections 2205, 2206, 2207, 2208, 2210 and 2211 (see Section 2222 for HVHZ) and 2211 (see Section 2222 for HVHZ).

2204.2 Bolting

The design, installation and inspection of bolts shall be in accordance with the requirements of Sections <u>2205</u>, <u>2206</u>, <u>2207</u>, <u>2210</u> and <u>2211</u>.

2204.3 Anchor rods

Anchor rods shall be set in accordance with the approved <u>construction documents</u>. The protrusion of the threaded ends through the connected material shall fully engage the threads of the nuts but shall not be greater than the length of the threads on the bolts.

Randall M. Bachtel, P.E. FL 80017 / RMB Engineering Response to Comment "C"

The connection between the equipment and the stand is made using 3/8-16 hardware Stainless Steel or HDP coated (0.2% Yield Strength = 30ksi) in a minimum of four places to the stand.

If mounting hardware supplied by (or recommended by) the equipment vendor is corrosion resistant and more robust than above, then the equipment vendor hardware shall be used.

Anchorage hardware shall be corrosion resistant (Stainless Steel or HDP) and shall meet the following minimum specifications:

THE QSMS3001 AND ITS VARIANTS ARE DESIGNED TO SUPPORT GENERAL CONDENSER SYSTEMS IN H.V.H.Z. (180 M.P.H.)
THESE STANDS ARE DESIGNED TO SUPPORT MULTIPLE CONDENSERS EACH. CONDENSER UNITS SUPPORTED CAN VARY BY MODEL, BY SIZE. AND BY WEIGHT.

MAX. WEIGHT OF ANY SPECIFIC CONDENSER EQUIPMENT SUPPORTED ON THIS STAND IS 500 LBS.

EACH OF THESE STANDS REQUIRES 2 CORROSION RESISTANT ANCHOR POINTS PER FOOT INTO THE ROOF OR CURB STRUCTURE.

(PER IBC Eq.16-15) EACH OF THESE ANCHOR POINTS MUST HAVE:

- 1. A MINIMUM TENSION RATED CAPACITY OF 1600 lbs.
- 2. A MINIMUM SHEAR RATED CAPACITY OF 400 lbs.

MAXIMUM DOWNWARD FOOT REACTION (PER FOOT) ON SUPPORTING ROOF OR CURB IS 300 LBS. OR LESS (IBC Eq. 16-12) H OR HT OR HMD HURRICANE PADS FROM DIVERSITECH CAN BE USED AS A CURB STRUCTURE TO AVOID ROOF PENETRATION. A REGISTERED PROFESSIONAL ENGINEER MUST PROVIDE ALL THE SUPPORTING CALCULATIONS FOR THIS FORM OF STAND SUPPORT.

THE QSSB48 / 62 / 74 AND ITS QSSB48 / 62 / 74 EXTENSION VARIANTS ARE DESIGNED TO SUPPORT GENERAL CONDENSER SYSTEMS IN H.V.H.Z. (180 M.P.H.)

THESE STANDS ARE DESIGNED TO SUPPORT MULTIPLE CONDENSERS EACH. CONDENSER UNITS SUPPORTED CAN VARY BY MODEL, BY SIZE, AND BY WEIGHT.

MAX. WEIGHT OF ANY SPECIFIC CONDENSER EQUIPMENT SUPPORTED ON THIS STAND IS 500 LBS

EACH OF THESE STANDS REQUIRES 2 CORROSION RESISTANT ANCHOR POINTS PER FOOT INTO THE ROOF OR CURB STRUCTURE.

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MAXIMUM DOWNWARD FOOT REACTION (PER FOOT) ON SUPPORTING ROOF OR CURB IS 300 LBS. OR LESS (IBC Eq. 16-12) H OR HT OR HMD HURRICANE PADS FROM DIVERSITECH CAN BE USED AS A CURB STRUCTURE TO AVOID ROOF PENETRATION. A REGISTERED PROFESSIONAL ENGINEER MUST PROVIDE ALL THE SUPPORTING CALCULATIONS FOR THIS FORM OF STAND SUPPORT.

THE QSMS1200/1201/1202/1800/1801/1802/2400/2401/2402 AND THEIR VARIANTS ARE TO SUPPORT GENERAL CONDENSER SYSTEMS IN H.V.H.Z. (180 M.P.H.)

THESE STANDS ARÉ DESIGNED TO SUPPORT ONE CONDENSER EACH. CONDENSER UNITS SUPPORTED CAN VARY BY MODEL, BY SIZE, AND BY WEIGHT.

MAX. WEIGHT OF CONDENSER EQUIPMENT SUPPORTED ON ANY INDIVIDUAL STAND IS 500 LBS.

EACH OF THESE STANDS REQUIRES 16 CORROSION RESISTANT ANCHOR POINTS (4 PER FOOT) INTO THE ROOF OR CURB STRUCTURE.

(PER IBC Eq.16-15) EACH OF THESE ANCHOR POINTS MUST HAVE:

- 1. A MINIMUM TENSION RATED CAPACITY OF 900 lbs.
- 2. A MINIMUM SHEAR RATED CAPACITY OF 100 lbs.

MAXIMUM DOWNWARD FOOT REACTION (PER FOOT) ON SUPPORTING ROOF OR CURB IS 300 LBS. OR LESS (IBC Eq. 16-12) H OR HT OR HMD HURRICANE PADS FROM DIVERSITECH CAN BE USED AS A CURB STRUCTURE TO AVOID ROOF PENETRATION. A REGISTERED PROFESSIONAL ENGINEER MUST PROVIDE ALL THE SUPPORTING CALCULATIONS FOR THIS FORM OF STAND SUPPORT.

THE QSMS1205/1805/2405 AND QSTD3000/3001 AND THEIR VARIANTS ARE TO SUPPORT GENERAL CONDENSER SYSTEMS IN H.V.H.Z. (180 M.P.H.)

THESE STANDS ARE DESIGNED TO SUPPORT ONE CONDENSER EACH. CONDENSER UNITS SUPPORTED CAN VARY BY MODEL, BY SIZE, AND BY WEIGHT.

MAX. WEIGHT OF CONDENSER EQUIPMENT SUPPORTED ON ANY INDIVIDUAL STAND IS 500 LBS.

EACH OF THESE STANDS REQUIRES 16 CORROSION RESISTANT ANCHOR POINTS (4 PER FOOT) INTO THE ROOF OR CURB STRUCTURE.

(PER IBC Eq.16-15) EACH OF THESE ANCHOR POINTS MUST HAVE:

- 1. A MINIMUM TENSION RATED CAPACITY OF 900 lbs.
- 2. A MINIMUM SHEAR RATED CAPACITY OF 100 lbs.

MAXIMUM DOWNWARD FOOT REACTION (PER FOOT) ON SUPPORTING ROOF OR CURB IS 300 LBS. OR LESS (IBC Eq. 16-12) H OR HT OR HMD HURRICANE PADS FROM DIVERSITECH CAN BE USED AS A CURB STRUCTURE TO AVOID ROOF PENETRATION. A REGISTERED PROFESSIONAL ENGINEER MUST PROVIDE ALL THE SUPPORTING CALCULATIONS FOR THIS FORM OF STAND SUPPORT.

The anchors listed below meet the requirements specified above for anchoring into a CONCRETE or WOOD roof deck.
Anchoring into other materials must be specified by a Professional Engineer.

For f'c > 3000 psi (20.7 MPa) Concre	te — Cracked & Uncracked — 10	0' BLDG — Risk Cat. II — Exposure C
Anchor Size (Select Any Below)	Minimum Embedment	Minimum Edge Distance
3/8" Titen HD anchors	3 - 3/4"	4 - 1/2"
3/8" Strong-Tie Strong Bolt	2"	6"
3/8" Hilti KWIK Bolt TZ	2 - 5/16"	4"
3/8" Heavy Duty Tapcon	2 - 1/2"	4"
5/16" Heavy Duty Tapcon	1 - 3/4"	4"

For f'c > 2000 PSI (13.8 MPa) Grout-Fil	ed CMU - 50' BLDG - Risk Cat. II, III &	IV - Exposure C & D
For 8-inch Lightweight, Medium-Weight ar	id Normal-Weight Hollow CMU - 30' BLDC	G - Risk Cat. II - Exposure C
For 8-inch Lightweight, Medium-Weight ar	d Normal-Weight Grout-Filled CMU - 40'	BLDG - Risk Cat. II - Exposure
Anchor Size (Select Any Below)	Minimum Embedment	Minimum Edge Distance
3/8" Titen HD anchors	3 - 3/4"	12"
3/8" Strong-Tie Strong Bolt	2"	12"
3/8" Hilti KWIK Bolt TZ	2 - 5/16"	12"
3/8" Heavy Duty Tapcon	2 - 1/2"	12"
5/16" Heavy Duty Tapcon	1 - 3/4"	12"

Wood,	G - 0.42 Min., Cd - 1.6 -	15' BLDG - Risk Cat. II - Expos	sure C
Anchor Size	Minimum Embedment	Minimum Edge Distance	Minimum End
3/8" LAG Screw	2 - 1/2"	5/8" into side grain	1 - 1/

D. Not enough clearance FBC 1522.3

1522.3

Machinery, piping, conduit, ductwork, signs and similar equipment may be mounted on roofs in compliance with the following:

TABLE 1522.3

ROOF MOUNTED EQUIPMENT HEIGHT REQUIREMENTS

WIDTH OF EQUIPMENT (in.)	HEIGHT OF LEGS (in.)
Up to 24	14
25 to 36	18
37 to 48	24
49 to 60	30
61 and wider	48

For SI: 1 inch = 25.4 mm.

1522.3.1

Permanently mounted rooftop equipment shall be installed to provide clearances, in accordance with <u>Table 1522.3</u>, to <u>permit repairs</u>, replacement and/or maintenance of the roofing system or any of its components.

1522.3.2

When <u>reroofing</u>, recovering, performing <u>repair</u> or roof maintenance, and where the roof top equipment is moved to properly execute such work, the minimum clearances of the said equipment support shall be in accordance with <u>Table 1522.3</u>.

1522.3.3

In buildings where the existing rooftop equipment, in the opinion of the <u>building official</u>, provides sufficient clearance to <u>repair</u>, recover, replace and/or maintain the roofing system or any of its components, such existing equipment need not comply with Table 1522.3.

Randall M. Bachtel, P.E. FL 80017 / RMB Engineering Response to Comment "D"

The maximum WIDTH of any equipment mounted to a QuickSling SuperStand (QSSB48 / 62 / 74 and its variants) as part of FL 22415-1 submittal is 48.0 inches.

The requirement for this condition is to have legs that are 24" tall. A 24" tall (leg height) version is a standard height that is available on all of these stand variants.

The maximum WIDTH of any equipment mounted to a QuickSling MiniSplit SuperStand (QSMS3001 and its variants) as part of FL 22415-1 submittal is 36.0 inches

The requirement for this condition is to have legs that are 18" tall. Both an 18" and 24" tall (leg height) version is a standard height that is available on all of these stand variants.

The maximum WIDTH of any equipment mounted to a QSMS1200 / 1201 / 1202 / 1205 stand as part of FL 22415-1 submittal is 24.0 inches. The requirement for this condition is to have legs that are 14" tall. The QSMS1200 / 1201 / 1202 / 1205 stands each have a leg height that is 13.5" tall.

The maximum WIDTH of any equipment mounted to a QSTD3000/3001 and QSMS1800 / 1801 / 1802 / 1805 stand as part of FL 22415-1 submittal is 36.0 inches

The requirement for this condition is to have legs that are 18" tall. The QSMS1200 / 1201 / 1202 / 1205 stands each have a leg height that is 19.5 tall.

The maximum WIDTH of any equipment mounted to a QSMS 2400 / 2401 / 2402 / 2405 as part of FL 22415-1 submittal is 40.0 inches. The requirement for this condition is to have legs that are 24" tall. The QSMS1200 / 1201 / 1202 / 1205 stands each have a leg height that is 25.5" tall.

E. Components missing dimensions/thickness and material strength FBC 2203 and 2217."

Section 2203 Identification and Protection of Steel for Structural Purposes

2203.1 Identification

Identification of <u>structural steel elements</u> shall be in accordance with AISC 360. Identification of cold-formed steel members shall be in accordance with AISI S100. Identification of cold-formed steel <u>light-frame construction</u> shall also comply with the requirements contained in AISI S200 or AISI S220, as applicable. Other steel furnished for structural load-carrying purposes shall be properly identified for conformity to the ordered <u>grade</u> in accordance with the specified ASTM standard or other specification and the provisions of this chapter. Steel that is not readily identifiable as to <u>grade</u> from marking and test records shall be tested to determine conformity to such standards.

2203.2 Protection

Painting of <u>structural steel elements</u> shall be in accordance with AISC 360. Painting of open-web <u>steel joists</u> and joist girders shall be in accordance with SJI CJ, SJI JG, SJI K and SJI LH/DLH. Individual structural members and assembled <u>panels</u> of <u>cold-formed steel</u> <u>construction</u> shall be protected against corrosion in accordance with the requirements contained in AISI S100. Protection of cold-formed steel light-frame construction shall be in accordance with AISI S200 or AISI S220, as applicable.

Section 2217 High-Velocity Hurricane Zones— Minimum Thickness of Material

2217.1

The minimum thickness of material shall not be less than as set forth in the applicable standards listed in <u>Section 2214.3</u> except as otherwise set forth herein.

Randall M. Bachtel, P.E. FL 80017 / RMB Engineering Response to Comment "E"

QuickSling SuperStand (QSSB48 / 62 / 74 and its variants and QuickSling MiniSplit SuperStand (QSMS3001 and its variants are made from the following structural components:

ASTM A500 Grade B or C 1-1/4" Square Structural Tubing - 11 ga. and 1-1/2" Square Structural Tubing - 11 ga.

ASME SA36 07ga. & 11ga. steel plate either in flat form or bent using a standard press brake.

These are all per: American Institute of Steel Construction, AISC - FBC 2214.3

QSMS1200 / 1201 / 1202 / 1205 and QSTD3000/3001 and QSMS1800 / 1801 / 1802 / 1805 and QSMS 2400 / 2401 / 2402 / 2405 are made from the following structural components:

ASTM A500 Grade B or C 1" Square Structural Tubing - 14 ga.

ASME SA36 11ga. & 14ga. steel plate either in flat form or bent using a standard press brake.

These are all per: American Institute of Steel Construction, AISC - FBC 2214.3

Material Strength for the components listed above are as follows:

ASME SA36 07ga. & 11ga. & 14ga. steel plate all has a minimum YIELD STRENGTH of 36ksi

ASTM A500 Grade B or C structural steel tubing has a minimum YIELD STRENGTH of 46ksi

For 2203.2 (Protection) please refer to the response for COMMENT "B" above.

All of these material properties, specifications and material thickness (gauge) will be updated on all three (3) DRAWING packages that are being submitted with FL22415-1 (see below)

There are three (3) different DRAWING DOCUMENTS where the information illustrated above will be added.

If the responses above to comments A through E are sufficient, then these five (5) responses will be "CONDENSED" and added to all three (3) DRAWING DOCUMENTS that are part of FL 22415-1 by close of business on Tuesday July 23.

Thank-you & God Bless,





Randall M. Bachtel, P.E. ** Principal Engineer/C.E.O.

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On Mon, Jul 15, 2019 at 1:29 PM Binici, Zubeyde < Zubeyde.Binici@myfloridalicense.com> wrote:

Dear Product Approval Applicant,

We have received the following public comments regarding your product as part of public comment period:

"Design pressure test not listed or pound-force per FBC 1620.6., No G-90 or corrosion test per FBC TAS 114 App. E, No unit-stand connection detail and roofdeck anchorage provided FBC 1522.2 and 2204, Not enough clearance FBC 1522.3, Components missing dimensions/thickness and material strength FBC 2203

Please respond to these public comments no later than noon July 19th, 2019 in order for your response to be included on the Product Approval POC Agenda of August 1st , 2019.

Thank you, Zubeyde

Please note that you should use ProCodesProductApproval ProCodesProductApproval@myfloridalicense.com email for any questions/requests to prevent any inconvenience since we all are linked to this email address and if one of us is not here, the others may assist you. Thanks for your cooperation!



Mrs Zubeyde Binici | Management Analyst

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