

Jinky Abanilla

From: DarrellCummings@ykkap.com
Sent: Wednesday, July 20, 2016 6:49 AM
To: Jinky Abanilla
Subject: Re: YKK YHS 50 TU height limitation?
Attachments: Wellington YHS50FI at 150 Inches risk 2 164mph.pdf; Wellington YHS50FI at 150 Inches.pdf; myThermal Assistant.pdf; Wellington YHS50FI energy sb70xl or equal.pdf

Hello Jinky

The YHS 50 FI will make the 12/6 height using comparative analysis. I have included design calculations, energy, and wind speed maps.

a. I used the ATC wind speed map at 164 mph (attached) to determine pressures at C zone.

(See attached file: Wellington YHS50FI at 150 Inches risk 2 164mph.pdf)

b. Using comparative analysis on structural loads I ran the 12/6 height and it passed using the YHS50FI (attached). This comparative analysis will need reviewed and stamped by a Florida PE for submittal.

(See attached file: Wellington YHS50FI at 150 Inches.pdf)

c. I ran the energy calcs using the YHS50FI and because of the 86% glass area it also passed the .50 U value using SB70XL on 2nd surface or equal low e. (attached)

(See attached file: myThermal Assistant.pdf) (See attached file: Wellington YHS50FI energy sb70xl or equal.pdf)

The other option for this opening is to use curtain wall which can double the cost of the opening and not match the rest of glazing.

Thank you

Darrell Cummings
Architectural Sales Representative
CSI CDT

YKK AP America Inc.

Single Span Analysis

Company Name: **WILLIAMS AND DACAR**
 Project Name: **Wellington F**
 Description: **Copy of Elevation 8719**

Project City: **Palm Beach**

Project State: **FL**

Date: **7/20/2016**

DESIGN CRITERIA:

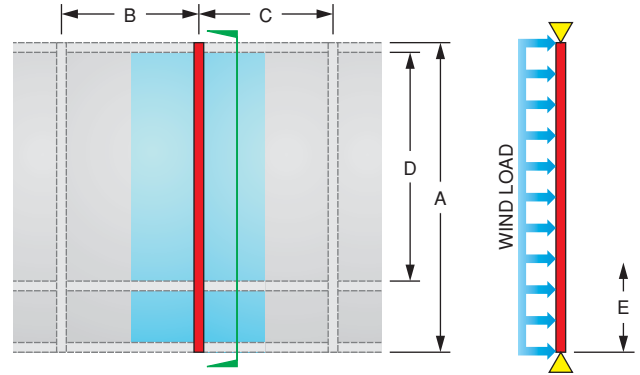
Design Pressure (PSF): Mid-Zone (Zone 4): **34.1 / -37.2**
 Corner-Zone (Zone 5): **34.1 / -42.7**
 Tributary Area: **52.1**

DEFLECTION CRITERIA:

AAMA TIR-A11
 (L/175) for spans < 13.5', (L/240 + 1/4") for spans >= 13.5'

MULLION INFORMATION:

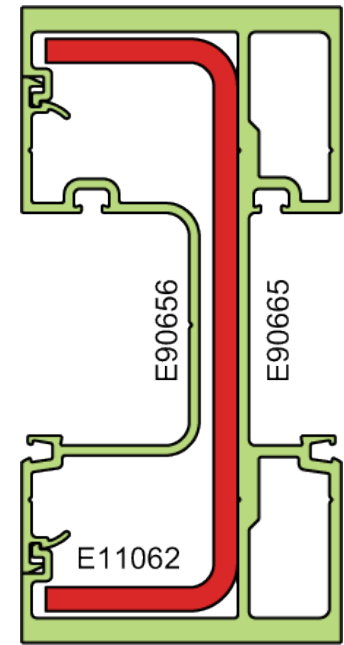
System: **YHS50FI** Mullion: **E90665**
 Finish: **Anodized** Frame Height (A): **12' 6"**
 Left Spacing (B): **3' 8"** Right Spacing (C): **3' 8"**
 Unbraced Length (D): **7' 10"** Jamb Condition? **No**
 Is the mullion located in a corner zone? **Yes**



RESULTS⁽¹⁾:

			Allowable	Calculated	Location (E)	Pass / Fail	6063-T5	6063-T6	STEEL	Thermal Break	
Maximum Deflection (in):			0.86	0.69	6' 3"	PASS					
I_{xx} (in⁴)	S_{xx} (in³)	Max. Stress (ksi):	(see below)								
7.881	3.147	E90665	13.3	9.8	7' 9"	PASS					
0.726	0.368	E90656	13.9	7.7	7' 9"	PASS					
3.492	1.552	E11062	21.6	12.4	6' 3"	PASS					
End Reaction (lbs):			(see below)								
			836		Top						
			836		Bottom						
Reinforcement Information:			Min. Length	Position							
			E11062	3' 0"	4' 9" offset from bottom.						

Slenderness Ratio: **264.6**



OVERALL RESULT

PASS

WITH REINFORCEMENT

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Allowable Anchor Reactions

Company Name: **WILLIAMS AND DACAR**
 Project Name: **Wellington F**
 Description: **Copy of Elevation 8719**

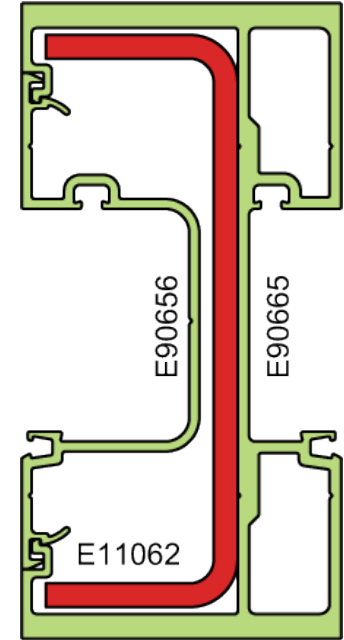
Project City: **Palm Beach**

Date: **7/20/2016**
 Project State: **FL**

Assembly / Profile: **E90665, E90656**
 Location: **Intermediate**
 Configuration: **Single Span**

■ 6063-T5
 ■ 6063-T6
 ■ STEEL
 ■ Thermal Break

Anchor Assembly Description	Type	Allowable (lbs)
End Reaction	End	1575



Anchors, bolts and/or fasteners used to secure the fenestration to the opening must be capable of resisting the calculated reactions for each project's design criteria.

Comments:

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7608 Currency Drive
Orlando FL 32809

P 407 856 0660
C 813 417 2556
F 407 856 0090

From: Jinky Abanilla <jabanilla@williamsondacar.biz>
To: "DarrellCummings@ykkap.com" <DarrellCummings@ykkap.com>
Date: 07/19/2016 02:27 PM
Subject:YKK YHS 50 TU height limitation?

Hi Darrell,

I specify this storefront product from YKK and one bidder sent us a question on the height limitation. Is it correct that this particular storefront cannot go more than 10'? What would you recommend eitherwise for 12'-6" thermally broken?

Appreciate your prompt reply.

Thanks,

Jinky B. Abanilla, GGP
Project Manager
Williamson Dacar Associates,inc.
15500 Lightwave Dr., Suite 106, Clearwater, FL 33760
Cell: 518-364-7711 (O) 727-725-0951 (F) 727-725-9894 (E)
jabanilla@williamsondacar.biz

[Click here to report this email as spam.](#)[attachment "A7.1 Door & Window Schedule.pdf" deleted by Darrell Cummings/ORL/API/YKKNCA]

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Single Span Analysis

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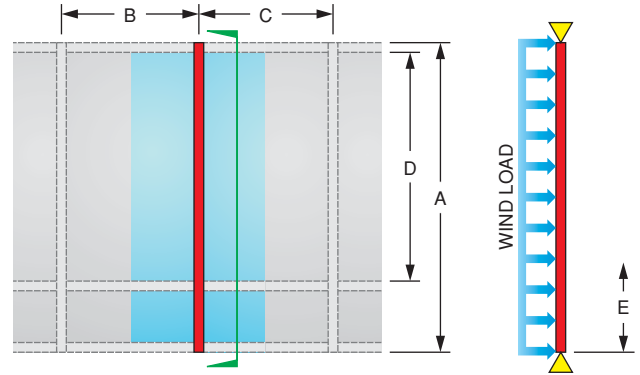
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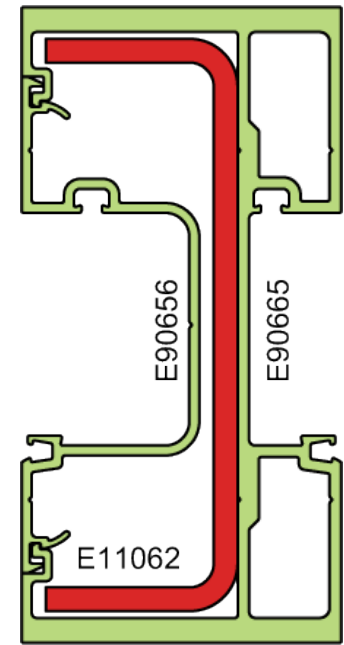
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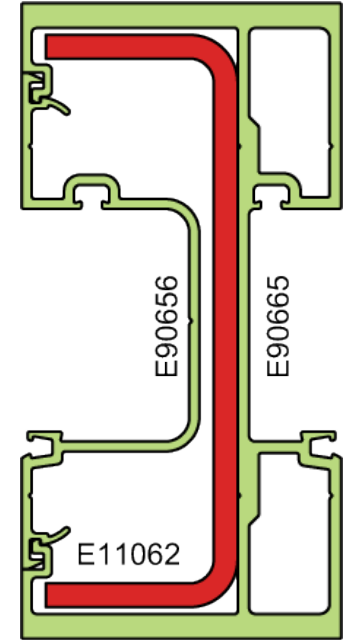
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myThermal Assistant**YKK AP America Inc.**

The system performance shown below is based on a Project Specific Size:
Frame Width: 21' 8" Frame Height: 12' 6" # of Verticals: 6 # of Horizontals: 1

System: YHS 50 FI (Large Missile)	U-factor	SHGC	VT
Glass Performance:	0.28	0.27	0.50
Calculated System Performance:	0.50	0.25	0.42

Vision Area: 86.6%

Thermal Performance metrics shown are reported using the AAMA 507 voluntary performance standard which uses independent laboratory testing to NFRC 100 and 200 standards. Project performance may vary due to configuration differences. Please contact YKK AP America if a Certificate of Compliance is necessary to demonstrate compliance to the project specification.