FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Business and Professional Regulation - Residential Performance Method

Project Name: 340CC30764BMO AH REGION 2A Street: City, State, Zip: , FL , Owner: Design Location: FL, Lakeland	Builder Name: Permit Office: Permit Number: Jurisdiction: County: POLK (Florida Climate	Zone 2)
1. New construction or existing 2. Single family or multiple family 3. Number of units, if multiple family 4. Number of Bedrooms 5. Is this a worst case? 6. Conditioned floor area above grade (ft²) Conditioned floor area below and (ft²)	9. Wall Types (1908.0 sqft.) a. Frame - Wood, Exterior b. N/A c. N/A d. N/A 10. Ceiling Types (2280.0 sqft.) a. Under Attic (Vented) b. N/A c. N/A	Insulation Area R=11.0 1908.00 ft² R= ft² R= ft² Insulation Area R=33.0 2280.00 ft² R= ft² R= ft²
Conditioned floor area below grade (ft²) 0 7. Windows(214.3 sqft.) Description Area a. U-Factor: Dbl, U=0.30 214.25 ft² SHGC: SHGC=0.29	11. Ducts a. Sup: Attic, Ret: Main, AH: Main	R ft² 6 207
b. U-Factor: N/A ft² SHGC: c. U-Factor: N/A ft² SHGC: d. U-Factor: N/A ft² SHGC: d. U-Factor: N/A ft² SHGC: Area Weighted Average Overhang Depth: 0.500 ft. Area Weighted Average SHGC: 0.290	12. Cooling systems a. Central Unit 13. Heating systems a. Electric Heat Pumps 14. Hot water systems a. Electric	kseynr Efficiency
8. Floor Types (2280.0 sqft.) Insulation Area a. Raised Floor R=11.0 2280.00 ft² b. N/A R= ft² c. N/A R= ft²	14. Hot water systems of the systems	Cap: 50 gallons EF: 0.910
Glass/Floor Area: 0.094 Total Proposed Modifi Total Baseline		PASS
I hereby certify that the plans and specifications covered by this calculation are in compliance with the Florida Energy Code. PREPARED BY: DATE: RATER ID=608 I hereby certify that this building, as designed, is in compliance with the Florida Energy Code.	Review of the plans and specifications covered by this calculation indicates compliance with the Florida Energy Code. Before construction is completed this building will be inspected for compliance with Section 553.908 Florida Statutes.	COD WE THE STATE OF THE STATE O
OWNER/AGENT: DATE: - Compliance requires certification by the air handler unit man certified factory-sealed in accordance with R403.3.2.1. - Compliance requires an Air Barrier and Insulation Inspection envelope leakage test report with enveloped rage no greater. Approved By SCOT Approved By SCO	BUILDING OFFICIAL:	WE THE
	DATE	

INPUT SUMMARY CHECKLIST REPORT

				PROJE	СТ							
Title: Building Type Owner Name # of Units: Builder Name Permit Office Jurisdiction: Family Type: New/Existing Comment:	e: User 1 a: Single-family	BMO AH REGIO	Bedrooms Conditione Total Stori Worst Cas Rotate Ang Cross Ven Whole Hou	ed Area: es: ee: gle: tilation:	4 2280 1 Yes 270		Lot Bloo Plat Stre Cou	ck/Subdiv Book: et:	rision: P lip: ,	OLK	ess	
_				CLIMA	TE							
	esign Location	TMY Site	NDED.	97.5		Winte		ner Deg	leating gree Day		re R	y Temp ange
	FL, Lakeland	FL_LAKELAND_LI	INDER	34	·	70	75		973	48	N	ledium
				BLOCK	(S							
Number 1	Name Block1	Area 2280	Volume 20520									_
				SPACE	·s							
Number	Name	Area	Volume I		Occupants	Bedroo	me	Infil ID	Finished	1 Cod	lod	
1	Main	2280	20520	Yes	5	4		1	Yes	Yes		Yes
				FLOOR	S		·					
√ #	Floor Type	Space		F	R-Value	Area				Tile Wo	ood Ca	arpet
1R	aised Floor	Ma	ain	•		2280 ft²		11		0.45	0	.55
				ROOF								
√ #	Туре	Materials	Roof Area	Gable Area	Roof Color	Rad Barr	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul	Pitch (deg)
1	Gable or shed	Composition shingle	es 2350 ft ²	284 ft²	Medium	N	0.96	No	0.9	No	0	14
-				ATTIC		-						
√ #	Туре	Ventila	ition	Vent Ratio	(1 in)	Area	RBS	qı	СС			
1	Full attic	Vente		150		280 ft²	N		N			
				CEILING	G							
√ #	Ceiling Type		Space	R-Value	Ins Ty	ре	Area	Fran	ning Frac	Truss	Туре	
1	Under Attic (Ve	ented)	Main	33	Blown	-	2280 ft²	14	0.1	Wo		

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Page of 4

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INPUT SUMMARY CHECKLIST REPORT

JKI	M R	405-2	<u> 2017</u>			INPUT	<u>SUMMA</u>	RY CHI	ECKL	<u>IST R</u>	EPOR1					
								W	ALLS							
V	/ #	Ornt		Adjac To	ent Wall	Туре	Space	Cavity	Wic		Height	Area	Sheathin	g Framing	Solar	Belo
	_ 1	N=>V		cterio		me - Wood	Main	11	76		9	684.0 ft		Fraction 0.19	Absor. 0.75	_Grad
	_ 2	S=>E	E	cterio	r Fra	me - Wood	Main	11	76		9	684.0 ft	1	0.19	0.75	
	_ 3	E=>N	N Ex	cterio	r Fra	me - Wood	Main	11	30		9	270.0 ft	2	0.19	0.75	
	_ 4	W=>	S E	terior	Fra	me - Wood	Main	11	30	!	9	270.0 ft	!	0.19	0.75	
								DC	ORS							
V	/	#		Om	t	Door Type	Space			Storms	U-Valu		Width t In	Height Ft Ir	1	Area
		1		N=>\	N	Insulated	Main			None	.4		1 38	8		7.8 ft²
	_	2		S=>I	E	Insulated	Main			None	.4		1 38	8		7.8 ft²
						Orientation	shown is the	WIN	DOWS entation	(=>) cha	nged to We	orst Case		· · · · · · · · · · · · · · · · · · ·		
	/			Wall									erhang			
V		#	Ornt	ID	Frame	Panes	NFRC	U-Factor	SHGC	Imp	Area		Separation	Int Shad	e S	Screen
	_	1 N	l=>W	1	Vinyl	Low-E Double	Yes	0.3	0.29	N	37.5 ft ²	0 ft 6 in	0 ft 24 in	Drapes/bli	nds I	Exterio
	_	2 N	l=>W	1	Vinyl	Low-E Double	Yes	0.3	0.29	N	7.5 ft²	0 ft 6 in	0 ft 10 in	None	ı	Exterio
	_	3 N	=>W	1	Vinyl	Low-E Double	Yes	0.3	0.29	N	15.0 ft ²	0 ft 6 in	0 ft 24 in	Drapes/bli	nds l	Exterio
	_	4 N	=>W	1	Vinyl	Low-E Double	Yes	0.3	0.29	N	3.0 ft²	0 ft 6 in	0 ft 10 in	None		Exterio
	_	5 S	S=>E	2	Vinyl	Low-E Double	Yes	0.3	0.29	N	75.0 ft ²	0 ft 6 in	0 ft 24 in	Drapes/bli	nds (Exterio
_	_	6 5	=>E	2	Vinyl	Low-E Double	Yes	0.3	0.29	N	15.0 ft²	0 ft 6 in	0 ft 10 in	None	E	Exterio
	_	7 S	=>E	2	Vinyl	Low-E Double	Yes	0.3	0.29	N	25.0 ft ²	0 ft 6 in	0 ft 24 in	Drapes/blir	nds E	Exterio
	_	8 S	=>E	2	Vinyl	Low-E Double	Yes	0.3	0.29	N	5.0 ft ²	0 ft 6 in	0 ft 10 in	None	E	Exterio
	_	9 S	=>E	2	Vinyl	Low-E Double	Yes	0.3	0.29	N	15.0 ft ²	0 ft 6 in	0 ft 24 in	Drapes/blir	nds E	Exterio
	_ 1	10 S	=>E	2	Vinyl	Low-E Double	Yes	0.3	0.29	N	5.0 ft ²	0 ft 6 in	0 ft 10 in	None	E	Exterio
	_ 1	11 S	=>E	2	Vinyl	Low-E Double	Yes	0.3	0.29	N	8.8 ft ²	0 ft 6 in	0 ft 26 in	Drapes/blir	nds E	Exterio
	1	12 S	=>E	2	Vinyl	Low-E Double	Yes	0.3	0.29	N	2.5 ft ²	0 ft 6 in	0 ft 12 in	None	E	xterio
								INFILT	RATIO	N					· · · · · · · · · · · · · · · · · · ·	
	Sc	оре		N	fethod		SLA (CFM 50	ELA	E	qLA	ACH	ACH	H 50		
	Whole	ehouse	9	Propo	sed AC	H(50) .000	0172	1026	56.33	10	5.93	.0605		3		
							·	HEATING	SYST	rem						
\bigvee		#	Syst	em T	уре	Su	btype			Efficiency	, ,	apacity		Blo	ock	Ducts
	_	1	Elec	tric H	eat Pun	ıp/ No	ne		-	HSPF:8.2	39	kBtu/hr		1		sys#1

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Page 3 of

FORM R405-2017

INPUT SUMMARY CHECKLIST REPORT

							LING SY	LIST RE STEM							
\vee	#	System Type		Subt	уре			Efficiency	Capacity	Air F	low	SHR	Block	D	ucts
	1	Central Unit/		None	е			SEER: 14	42 kBtu/hr	1260	cfm	0.75	1	s	/s#1
						нот м	ATER S	YSTEM							
\vee	#	System Type	SubType	Lo	cation	ΕF	C	Cap	Use	SetPnt		Co	nservatio	n	
	1	Electric	None	Ma ———	ain	0.91	50	gal	60 gal	120 deg			None		
					so	LAR HO	T WATE	R SYSTE	М		-				
V	FSEC Cert #	Company N	lame			System	Model#	Co	llector Mode		llector Area		age ume	FEF	
	None	None							0		ft²				
							DUCTS		v						
\checkmark	#	Sup Location R	ply -Value Area	Lo	Re	eturn n Area	Leaka	age Type	Air Handler	CFM 25 TOT	CFM2		RLF	HV Heat	AC #
	1	Attic	6 207 ft	2	Main	0 ft²	Defaul	t Leakage	Main	(Default)	(Defa	ult)		1	1
						TEM	PERATU	RES	_						
Program	nable The	ermostat: N			C	Ceiling Fan	s:			·					
Cooling Heating Venting	X 75	in [] Feb in [X] Feb in [] Feb	Mar X Mar X Mar	X A	or or	May May May	[X] Jun Jun Jun	(X) Jul Jul Jul	[X] Aug Aug Aug	[X] Sep [] Sep [] Sep	6	Oct Oct Oct	Nov Nov Nov		Dec Dec Dec
Thermosta		ile: HERS 200	06 Reference						urs						
Schedule '			1	2	3	4	5	6	7	8	9	10	11		12
Cooling (W	VD)	AM PM	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	-	78 78
Cooling (W	VEH)	AM PM	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	1	78 78
Heating (W	VD)	AM PM	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68		88 88
Heating (W	VEH)	AM PM	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	68 68	6	18 18
							MASS	- 00	00	00	00	00	00		0
Ma	ass Type			Are	a		Thickness	, F	urniture Frac	ction		Space			
De	efault(8 lb	s/sq.ft.		O ft²	2		0 ft		0.3			Main			

Edition (2017) Complant Software

ENERGY PERFORMANCE LEVEL (EPL) DISPLAY CARD

ESTIMATED ENERGY PERFORMANCE INDEX* = 97

The lower the Energy Performance Index, the more efficient the home.

1. New home or, addition	1. New (From Plans)	12. Ducts, location	9 inquistion lovel	
THOW HOME OF ABBIENT	. INEW (FIORI FIAIS)	a) Supply ducts		6.0
Single-family or multiple-family	2. Single-family	b) Return ducts		
O No. of a 11 / 12 / 12 / 13	_	c) AHU location	1	Main
3. No. of units (if multiple-family)	31			
4. Number of bedrooms	44	13. Cooling system		42.0
5 is this a warst cose? (vac/se)	F V	a) Split system		
5. Is this a worst case? (yes/no)	5. <u>Yes</u>	b) Single packa	nge SEER er source SEER/COP	
6. Conditioned floor area (sq. ft.)	6 2280	d) Room unit/P		
		e) Other		14.0
7. Windows, type and area				
a) U-factor:(weighted average)	7a. 0.300	44.44		
b) Solar Heat Gain Coefficient (SHGC)c) Area	7b. <u>0.290</u>	14. Heating system	: Capacity	
C) Alea	7c. <u>214.3</u>	a) Split system		
8. Skylights			ge heat pump HSPF	
a) U-factor:(weighted average)	8aNA	c) Electric resist		
b) Solar Heat Gain Coefficient (SHGC)	8b. NA	d) Gas furnace,		
a, colar rical call cochloidir (crico)	OD11/A	e) Gas furnace, f) Other	LPG AFUE	8.20
9. Floor type, insulation level:		i) Other		6.20
a) Slab-on-grade (R-value)	9a			
b) Wood, raised (R-value)	9b. 11.0	15. Water heating s	vstem	
c) Concrete, raised (R-value)	9c.	a) Electric resist		0.91
		b) Gas fired, na		<u> </u>
10. Wall type and insulation:		c) Gas fired, LP		
A. Exterior:		d) Solar system		
Wood frame (Insulation R-value)	10A1. <u>11.0</u>	e) Dedicated he	at pump with tank E	F
2. Masonry (Insulation R-value)	10A2	f) Heat recovery	unit HeatRec%_	
B. Adjacent:		g) Other		
Wood frame (Insulation R-value)	10B1			
2. Masonry (Insulation R-value)	10B2	40.15440		
11. Ceiling type and insulation level			laimed (Performance	Method)
a) Under attic	11a. <u>33.0</u>	a) Ceiling fans		NI-
b) Single assembly	11b	b) Cross ventilatec) Whole house		<u>No</u>
c) Knee walls/skylight walls	11c	d) Multizone coo		No
d) Radiant barrier installed	11d. No	e) Multizone hea		
3, 113.3.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1	110	f) Programmable		No
		_		140
*Label required by Section R303.1.3 of the Fi	orida Building Code, Ener	gy Conservation, if no	ot DEFAULT.	
I certify that this home has complied with the	Florida Building Codo, En	argy Consonyation, th	secuels the election and	
saving features which will be installed (or exc	ended) in this home before	ergy Conservation, the	rough the above ener	rgy
display card will be completed based on insta	lled code compliant featur	es	ICIWISC, A HEW EFL	
	code compliant routur			
Builder Signature:		Date:	<u>,1¹ 11 </u>	191
			7,111	
Address of New Heavy				
Address of New Home:		City/FL Zip:, FL_		1//
			1/1/1	
				W /

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FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Business and Professional Regulation - Residential Performance Method

Project Name: 340CC30764BMO PA	AC REGION 2A	Builder Name:	
Street:		Permit Office:	
City, State, Zip: , FL , Owner:		Permit Number: Jurisdiction:	
Design Location: FL, Lakeland		County: POLK (Florida Climate	Zone 2)
New construction or existing	New (From Plans)	9. Wall Types (1908.0 sqft.)	Insulation Area
Single family or multiple family	Single-family	a. Frame - Wood, Exterior b. N/A	R=11.0 1908.00 ft ²
3. Number of units, if multiple family	1	c. N/A	R= ft² R= ft²
4. Number of Bedrooms	4	d. N/A	R= ft²
5. Is this a worst case?	Yes	10. Ceiling Types (2280.0 sqft.)	Insulation Area
6. Conditioned floor area above grade (ft²)	2280	a. Under Attic (Vented) b. N/A	R=33.0 2280.00 ft ² R= ft ²
Conditioned floor area below grade (ft²)	0	c. N/A	R= ft²
	_	11. Ducts	R ft²
7. Windows(214.3 sqft.) Description a. U-Factor: Dbl, U=0.30	Area 214.25 ft²	a. Sup: Attic, Ret: Main, AH: Main	6 207
SHGC: SHGC=0.29	214.20 10		
b. U-Factor: N/A	ft²	12. Cooling systems	kBtu/hr Efficiency
SHGC:		a. Central Unit	42.0 SEER:14.00
c. U-Factor: N/A SHGC:	ft²		
d. U-Factor: N/A	ft²	13. Heating systems a. Electric Heat Pump	kBtu/hr Efficiency 42.0 HSPF:8.20
SHGC:	-	a. Library react amp	42.0 11311.0.20
Area Weighted Average Overhang Depth		44 Networker content	
Area Weighted Average SHGC:	0.290	14. Hot water systems a. Electric	Cap: 50 gallons
Floor Types (2280.0 sqft.) a. Raised Floor	Insulation Area		EF: 0.910
b. N/A	R=11.0 2280.00 ft ² R= ft ²	b. Conservation features	
c. N/A	R= ft²	None 15. Credits	
			None
Glass/Floor Area: 0.094	Total Proposed Modif		PASS
	Total Baselin	e Loads: 77.13	1700
I hereby certify that the plans and specific this calculation are in compliance with the Code. PREPARED BY: DATE: I hereby certify that this building, as deswith the Florida Energy Code. OWNER/AGENT: DATE:	fications covered by the Florida Energy D=608 igned, is in compliance	Review of the plans and specifications covered by this calculation indicates compliance with the Florida Energy Code. Before construction is completed this building will be inspected for compliance with Section 553.908 Florida Statutes.	COD WE TRUB
this calculation are in compliance with the Code. PREPARED BY: DATE: I hereby certify that this building, as deswith the Florida Energy Code. OWNER/AGENT: DATE: - Compliance requires certification be certified factory-sealed in accordant - Compliance requires an Air Barrier and envelope leakage test report with envelope leakage test report	fications covered by the Florida Energy D=608 igned, is in compliance	Review of the plans and specifications covered by this calculation indicates compliance with the Florida Energy Code. Before construction is completed this building will be inspected for compliance with Section 553.908 Florida Statutes.	e qualities as

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INPUT SUMMARY CHECKLIST REPORT

				PROJE	СТ							
Title: Building Type: Owner Name: # of Units: Builder Name: Permit Office: Jurisdiction: Family Type: New/Existing: Comment:	340CC30764B User 1 Single-family New (From Pla	imo Pac Regi	Bedrooms: Conditione Total Storic Worst Cas Rotate Ang Cross Ven Whole Hou	ed Area: es: e: gle: tilation:	4 2280 1 Yes 270		Lot # Block Plate Stree Cour	k/Subdivi Book: et:	rision: P	OLK	SS	
				CLIMA.	TE							
	gn Location	TMY Site		97.5		Int De Winte	esign Tem er Summ		leating gree Days	Design s Moisture		y Temp ange
FL,	Lakeland	FL_LAKELAND_LI	NDER			70	75		973	48	М	ledium
·				BLOCK	(S							
Number	Name	Area	Volume									
1	Block1	2280	20520									
				SPACE	<u>is</u>							
Number	Name	Area	Volume k	Kitchen (Occupants	Bedroo	ms li	nfil ID	Finished	Cool	ed	Heate
1	Main	2280	20520	Yes	5	4	1		Yes	Yes		Yes
				FLOOR	ls							
	Floor Type	Space			R-Value	Area				Tile Woo	d Ca	rpet
1 Rais	ed Floor	Mai	in			2280 ft²		11		0.45 0	0	.55
				ROOF	•							
/ #	Туре	Materials	Roof Area	Gable Area	Roof Color	Rad Barr	Solar Absor.	SA Tested	Emitt		Deck Insul.	Pitch (deg)
1	Gable or shed	Composition shingle	es 2350 ft²	284 ft²	Medium	N	0.96	No	0.9	No	0	14
				ATTIC	,							
√ #	Туре	Ventilat	ion	Vent Ratio	(1 in)	Area	RBS	IR	cc			
1	Full attic	Vente	d	150	2	280 ft²	N	1	N			
				CEILIN	G							
V #	Ceiling Type		Space	R-Value	Ins Ty	20	Area	Fran	ning Frac	Truss 1	wno	
V "	0 71		Opacc	14-Value		pe	Al Ca	riali	ming Flac	Huss I	ype	

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INPUT SUMMARY CHECKLIST REPORT

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_	/			Adiac	ent			Cavity	Wic	lth.	Height		Shoothine	g Framing	Solar	Belo
١	<u>/</u> #	_Or	nt	_To_	Wall	Туре	Space	R-Value	- Ft	ln	Ft In	Area	R-Value		Absor	
_	_ 1			xterio		me - Wood	Main	11	76		9	684.0 ft ²	2	0.19	0.75	
	_ 2			xterio		me - Wood	Main	11	76		9	684.0 ft ²	2	0.19	0.75	
	_ 3			xterio		me - Wood	Main	11	30		9	270.0 ft ²	2	0.19	0.75	
	_ 4	W=	⇒S E	xterio	r Fra	me - Wood	Main	11	30		9	270.0 ft²	·	0.19	0.75	
								DO	ORS							
١	/	#	:	Om	t	Door Type	Space	_		Storms	U-Valı		Width t In	Height Ft In		Area
		1		N=>\	N	insulated	Main			None	.4		1 38	80	2	7.8 ft²
		2	!	S=>	E	Insulated	Main			None	.4		1 38	80	2	7.8 ft²
	***		•			Orientation	shown is the	WIN	DOWS	(=>\ aba	and to M					
_	,			Wall		Orientation	shown is the	e entered or	entation	(=>) cna	inged to vv					
١		#	Ornt		Frame	Panes	NFRC	U-Factor	SHGC	qmi	Area		erhang Separation	Int Shade	a 5	Screen
		1	N=>N	1 1	Vinyl	Low-E Double	Yes	0.3	0.29	N	37.5 ft²		0 ft 24 in	Drapes/blin		Exterio
		2	N=>W	1	Vinyl	Low-E Double	Yes	0.3	0.29	N	7.5 ft²	0 ft 6 in	0 ft 10 in	None		Exterio
		3	N=>W	1	Vinyl	Low-E Double	Yes	0.3	0.29	N	15.0 ft²		0 ft 24 in	Drapes/blin		Exterio
		4	N=>W	1	Vinyl	Low-E Double	Yes	0.3	0.29	N	3.0 ft²	0 ft 6 in	0 ft 10 in	None	F	Exterio
		5	S=>E	2	Vinyl	Low-E Double	Yes	0.3	0.29	N	75.0 ft²	0 ft 6 in	0 ft 24 in	Drapes/blin	ds F	Exterio
		6	S=>E	2	Vinyl	Low-E Double	Yes	0.3	0.29	N	15.0 ft²	0 ft 6 in	0 ft 10 in	None	E	Exterio
		7	S=>E	2	Vinyl	Low-E Double	Yes	0.3	0.29	N	25.0 ft ²	0 ft 6 in	0 ft 24 in	Drapes/blin	ds E	Exterio
_		8	S=>E	2	Vinyl	Low-E Double	Yes	0.3	0.29	N	5.0 ft ²	0 ft 6 in	0 ft 10 in	None	E	Exterio
_		9	S=>E	2	Vinyl	Low-E Double	Yes	0.3	0.29	N	15.0 ft²	0 ft 6 in	0 ft 24 in	Drapes/blin	ds E	Exterio
_		10	S≃>E	2	Vinyl	Low-E Double	Yes	0.3	0.29	N	5.0 ft ²	0 ft 6 in	0 ft 10 in	None	E	Exterio
_		11	S=>E	2	Vinyl	Low-E Double	Yes	0.3	0.29	N	8.8 ft ²	0 ft 6 in	0 ft 26 in	Drapes/blin	ds E	Exterio
		12	S=>E	2	Vinyl	Low-E Double	Yes	0.3	0.29	N	2.5 ft ²	0 ft 6 in	0 ft 12 in	None	E	Exterio
								INFILT	RATIC	N						
		Scope			/lethod		SLA (CFM 50	ELA	E	qLA	ACH	ACI	-l 50		
_		olehou			osed AC	H(50) .00	0172	1026	56.33		5.93	.0605		3		
		-						HEATING	SYS	ГЕМ						
V	/	#	Sys	tem T	уре	Sı	ubtype			Efficienc	y (Capacity	<u> </u>	Blo	ck	Ducts
		1	Ele	ctric H	leat Pun	np/ No	one	-		HSPF:8.	2 42	kBtu/hr		1		sys#1

EnergyGauge® USA 6.0.02 (Rev. 1) - FlaRes2017 FBC 6th Edition (2017) Compliant Software

Pege 3 of 4

FORM R4	05-201	7	INP	UT SUMN	IARY C	HECKL	IST RI	<u> EPORT</u>						
						LING SYS								
$\overline{}$	# S	System Type		Subtype			Efficiency	Capacity	Air F	low S	SHR	Block	Duc	cts
	1 C	Central Unit/		None			SEER: 14	42 kBtu/hr	1260	cfm 0).75	1	sys#	#1
					HOT W	ATER SY	STEM							
$\overline{}$	#	System Type	SubType	Location	EF	Ca	1P	Use	SetPnt		Cor	nservatio	n	
	1	Electric	None	Main	0.91	50 g	jal	60 gal	120 deg			None		
				so	LAR HO	T WATER	SYSTE	EM						
\checkmark	FSEC Cert #	Company N	lame		System	Model #	Cc	ollector Model		llector \rea	Stora	-	FEF	
	None	None								ft²				
						DUCTS								
		Supp			eturn			Air		CFM25			HVAC	
	#		-Value Area	Location	Area	Leakag	е Туре	Handler	TOT	OUT	QN —	RLF	Heat C	Cool
	1	Attic	6 207 ft ²	Main	143 ft²	Default L	_eakage	Main	(Default)	(Default)			1	1
					TEMI	PERATUR	(ES							
Programa	able Ther	rmostat: N		С	eiling Fans	: :								
Cooling Heating Venting	[] Jar [X] Jar [] Jar	n [X] Feb	Mar X Mar X Mar	Apr Apr X Apr	[] May [] May [] May	[X] Jun Jun Jun	X Jul Jul Jul	[X] Aug [] Aug [] Aug	[X] Sep [] Sep [] Sep	X 8	oct Oct Oct	Nov X Nov X Nov	X De	ec ec ec
Thermostal		le: HERS 200	06 Reference				Ho	ours						
Schedule T	уре		1	2 3	4	5	6	7	8	9	10	11	12	
Cooling (W	D)	AM PM	78 78	78 78 78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	
Cooling (W	EH)	AM PM	78 78	78 78 78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	78 78	

on (2017) Compliant Software Page 4 of 4

Heating (WD)

Heating (WEH)

Mass Type

Default(8 lbs/sq.ft.

 Area

O ft²

 MASS

Thickness

0 ft

Furniture Fraction

0.3

 Space

Main

ENERGY PERFORMANCE LEVEL (EPL) DISPLAY CARD

ESTIMATED ENERGY PERFORMANCE INDEX* = 97

The lower the Energy Performance Index, the more efficient the home.

1. New home or, addition	1. New (From Plans)	12. Ducts, location & insulati	ion level
O Observator Co. 11		a) Supply ducts	R <u>6.0</u>
2. Single-family or multiple-family	2. <u>Single-family</u>	b) Return ducts	R <u>6.0</u>
3. No. of units (if multiple-family)	31	c) AHU location	Main
4. Number of bedrooms	44	13. Cooling system:	Capacity 42.0
5. Is this a worst case? (yes/no)	5. <u>Yes</u>	a) Split system b) Single package	SEER
6. Conditioned floor area (sq. ft.)	62280	c) Ground/water source d) Room unit/PTAC	EER
7. Windows, type and area a) U-factor:(weighted average) b) Solar Heat Gain Coefficient (SHGC) c) Area	7a. <u>0.300</u> 7b. <u>0.290</u> 7c. <u>214.3</u>	e) Other 14. Heating system: a) Split system heat pum b) Single package heat p	ump HSPF
8. Skylights		c) Electric resistance	COP
a) U-factor:(weighted average) b) Solar Heat Gain Coefficient (SHGC)	8a. <u>NA</u> 8b. <u>NA</u>	d) Gas furnace, natural ge) Gas furnace, LPGf) Other	AFUE AFUE 8.20
9. Floor type, insulation level:		,	0.20
a) Slab-on-grade (R-value)	9a		
b) Wood, raised (R-value)	9b. <u>11.0</u>	15. Water heating system	
c) Concrete, raised (R-value)	9c	 a) Electric resistance 	EF0.91
10. Wall type and insulation: A. Exterior: 1. Wood frame (Insulation R-value) 2. Masonry (Insulation R-value)	10A1. <u>11.0</u> 10A2	 b) Gas fired, natural gas c) Gas fired, LPG d) Solar system with tank e) Dedicated heat pump of the point f) Heat recovery unit 	
B. Adjacent:	40.74	g) Other	
Wood frame (Insulation R-value) Masonry (Insulation R-value)	10B1		
2. Masonry (insulation R-value)	10B2	16 LD/AC and the states of CD	
11. Ceiling type and insulation level		 HVAC credits claimed (Per a) Ceiling fans 	эпоrmance Method)
a) Under attic	11a. <u>33.0</u>	b) Cross ventilation	No
b) Single assembly	11b	c) Whole house fan	No No
c) Knee walls/skylight walls	11c	d) Multizone cooling credi	
d) Radiant barrier installed	11d. No	e) Multizone heating credi	
		f) Programmable thermos	tat No
*Label required by Section R303.1.3 of the FI I certify that this home has complied with the	Florida Building Code. En	gy Conservation, if not DEFAU	LT.
saving features which will be installed (or exc display card will be completed based on insta	eeded) in this home before	e final inspection. Otherwise, a	new EPL
Builder Signature:		Date:	110 000
		71.11	
Address of New Home:		City/FL Zip:, FL	1/1/1/

11/11/2018 5:22:24 PM

EnergyGauge® USA 6.0.02 (Rev. 1) - FlaRes2017 FBC 6th Edition (2017) Compliant Software Pege 1 of 1

Job Truss Truss Type Qty Palm Harbor 216 Plant 6/9 Plant City, FI 90642 C556007 CATHEDRAL 1 Ref. #2163030 Universal Forest Products Inc., Grand Rapids, MI 49525, Weston Gorby 8.130 e Dec 12 2017 MiTek Industries, Inc. Mon Jan 29 08:05:49 2018 Page 1 of 2 Copyright © 2018 Universal Forest Products, Inc. All Rights Reserved Alt. Overhang Detail

Alt. Cantilever Detail 1-4-0 to 3-6-0 Cantilever

REACTIONS. (lib/size) 12=701/0-3-8 (min. 0-1-8), 8=335/Mechanical Max Horz 12=274(LC 5) Max Uplift 12=-1028(LC 5), 8=-427(LC 7)

Alt. Cantilever Detail 0 to 1-4-0 Cantilever

REACTIONS. (lb/size) 8=444/Mechanical, 13=593/0-3-8 (min. 0-1-8) Max Horz 13=266(LC 5) Max Uplift8=-557(LC 7), 13=-781(LC 5)

- 13 \mathbb{X} 10 to 0:6-4

0-6-8

14-10-8

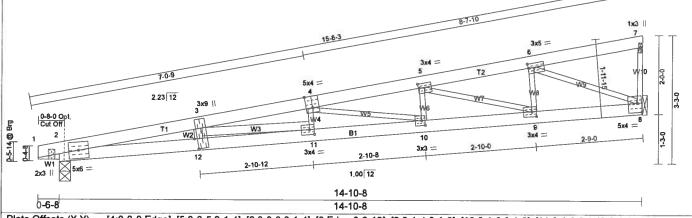


Plate Offsets (X,Y)-[4:0-2-0, Edge], [5:0-0-5,0-1-4], [6:0-0-3,0-1-4], [8:Edge,0-2-12], [9:0-1-4,0-1-8], [10:0-1-0,0-1-8], [11:0-1-8,0-1-8], [12:0-3-5,0-0-12][12:0-3-5,3-5-3]

SPACING-: 2- LOADING (psi TCLL 20.1 TCDL 7.1 BCLL 0.1	LOADING (psf) TCLL 30.0 TCDL 10.5	Plate Grip DOL 1.25 Lumber DOL 1.25 Rep Stress Incr YES	CSI. TC 0.72 BC 0.46 WB 0.54	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (loc) 0.37 11-12 0.32 11-12 -0.05 8	l/defl >482 >547 n/a	L/d 240 180 n/a	PLATES MT20	GRIP 244/190
BCDL 7.0		Code FBC2017/1P12014	Matrix-R					Weight: 57 FT = 0%	lb

LUMBER-

TOP CHORD 2x4 SP No.2 **BOT CHORD** 2x4 SP No.1

2x2 SP No.2 *Except* **WEBS**

W2,W3: 2x3 SP No.2

BRACING-

TOP CHORD **BOT CHORD** Structural wood sheathing directly applied or 3-9-4 oc

purlins, except end verticals

Rigid ceiling directly applied of 34-9 be bracifio.

BOT CHORD

WEBS

REACTIONS. (lb/size) 2=537/0-3-8 (min. 0-1-8), 8=498/Mechanical

Max Horz 2=264(LC 7)

Max Uplift 2=-651(LC 5), 8=-621(LC 7)

FORCES. (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-4/0, 2-3=-2136/2884, 3-4=-2106/2899, 4-5=-1541/2116, 5-6=-827/1115, 6-7=-21/5,

7-8=-62/119

2-12=-3065/2053, 11-12=-3064/2057, 10-11=-3062/2073, 9-10=-2248/1530, 8-9=-1216/830 3-12=-6/93, 4-11=-12/108, 5-10=-231/213, 6-9=-385/317, 6-8=-890/1307, 5-9=-754/1105,

4-10=-571/849, 3-11=-0/17

The professional engineering seal indicates that a licensed professional has reviewed the design under the standards referenced within this document. not necessarily the current state building code. The engineering seal is not an approval to use in a specific state. The final determination on whether a truss design is acceptable under the locally adopted building code rest with the building official or designated appointee.



WARNING - Verify design parameters and READ NOTES PHONE (616)-364-6161 FAX (616)-365-0069

2801 EAST BELTLINE RD, NE GRAND RAPIDS, MI 49525

Truss shall not be cut or modified without approval of the truss design engineer. This component has only been designed for the loads noted on this drawing. Construction and lifting forces have not been considered. The builder is responsible

for lifting methods and system design. Builder responsibilities are defined under TPI1. This design is based only upon parameters shown, and is for

an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of building designer - not truss designer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to insure stability during construction

is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult BCSI 1-06 from the Wood Truss Council of America and Truss Plate Institute Reco from WTCA, 6300 Enterprise LN, Madison, WI 53719 J.\support\MitekSupp\templates\ufp.tpe



Job Truss Truss Type Qty Palm Harbor 216 Plant 6/9 Plant City, FI 90642 C556007 CATHEDRAL 1

Universal Forest Products Inc., Grand Rapids, MI 49525, Weston Gorby

Ref. #2163030 8.130 e Dec 12 2017 MiTek Industries, Inc. Mon Jan 29 08:05:49 2018 Page 2 of 2

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NOTES-

1) This truss has been checked for uniform roof live load only, except as noted.

2) Wind: ASCE 7-10; Vult=154mph (3-second gust) Vasd=119mph @24in o.c.; TCDL=2.8psf; BCDL=2.8psf; (Alt. 180mph @16in o.c.; TCDL=4.2psf; BCDL=4.2psf); h=35ft; Cat. II; Exp D; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 651 lb uplift at joint 2 and 621 lb uplift at joint 8.

6) Fixity of member 8 - 7 has been changed.

7) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.

8) Based on: C556001

9) Revision:: Updated FBC code, reduced overhang

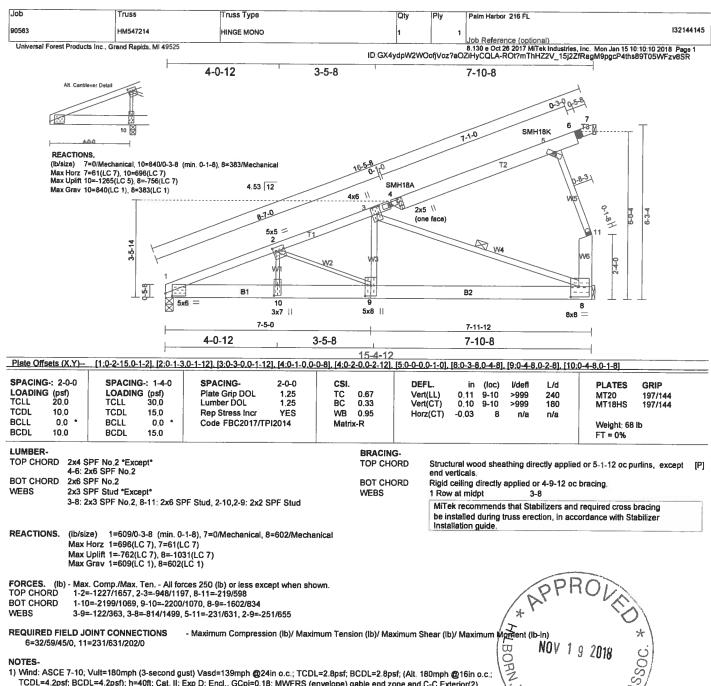
The professional engineering seal indicates that a licensed professional has reviewed the design under the standards referenced within this document, not necessarily the current state building code. The engineering seal is not an approval to use in a specific state. The final determination on whether a truss design is acceptable under the locally adopted building code rest with the building official or designated appointee.

WARNING - Verify design parameters and READ NOTES PHONE (616)-364-6161 FAX (616)-365-0060 Truss shall not be cut or modified without approval of the truss design engineer. This component has only been designed for the loads noted on this drawing. Construction and lifting forces have not been considered. The builder is responsible

for lifting methods and system design. Builder responsibilities are defined under TPI1. This design is based only upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of building designer - not truss designer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to insure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult BCSI 1-06 from the Wood Truss Council of America and Truss Plate 1 from WTCA, 6300 Enterprise LN, Madison, WI 53719 J.\support\MitekSupp\templates\ufp.tpe

2801 EAST BELTLINE RD, NE

GRAND RAPIDS, MI 49525



NOTES-

1) Wind: ASCE 7-10; Vult=180mph (3-second gust) Vasd=139mph @24in o.c.; TCDL=2,8psf; BCDL=2.8psf; (Alt. 180mph @16in o.c.; TCDL=4.2psf; BCDL=4.2psf); h=40ft; Cat. II; Exp D; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

2) All plates are MT20 plates unless otherwise indicated.

3) See HINGE PLATE DETAILS for plate placement.

Provisions must be made to prevent lateral movement of hinged member(s) during transportation.
 All additional member connections shall be provided by others for forces as indicated.

6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 762 to uplift at joint 1 and 1031 to uplift at ioint 8.

9) Take precaution to keep the chords in plane, any bending or twisting of the hinge plate must be repaired before the building is put into service.

10) The field-installed members are an integral part of the truss design. Retain a design professional to specify final field connections and temporary supports. All field-installed members must be properly fastened prior to applying any loading to the truss. This design anticipates the final set position.

⚠ WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a fruss system. Before use, the building designer must verify the applicability of design parameters and property incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSITP11 Quality Criteria, DSB-89 and BCSI Building Cot Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies

ERNER, CAR





Lumber design values are in accordance with ANSI/TPI 1 section 6.3 These truss designs rely on lumber values established by others.

RE: 90563 - Palm Harbor 216 FL

MiTek USA, Inc.

16023 Swingley Ridge Rd Chesterfield, MO 63017

314-434-1200

Site Information:

Address: werwe

Customer Info: erwer Project Name: werwer Model: werwer Lot/Block: werw

Subdivision: werw

Citv: werw

State: werwe

Name Address and License # of Structural Engineer of Record, If there is one, for the building. License #: werwe

Name: wrwer

Address: werwe

City: werwe

State: werwe

General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions):

Design Code: FBC2014/TPI2007

Wind Code: ASCE 7-10

Design Program: MiTek 20/20 8.0

Wind Speed: 180 mph

Roof Load: 40.0 psf

Floor Load: N/A psf

This package includes 1 individual, Truss Design Drawings and 0 Additional Drawings. With my seal affixed to this sheet, I hereby certify that I am the Truss Design Engineer and this index sheet conforms to 61G15-31.003, section 5 of the Florida Board of Professional Engineers Rules.

No.	Seal#	Truss Name	Date		
1	132144144	HM547214	1/15/18		

The truss drawing(s) referenced above have been prepared by MiTek USA, Inc. under my direct supervision based on the parameters provided by UFP-Grand Rapids, MI.

Truss Design Engineer's Name: Wert, David

My license renewal date for the state of Florida is FEBRUARY 28, 2019.

IMPORTANT NOTE: The seal on these truss component designs is a cartification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which were given to MiTek. Any project specific information included is for MiTek's customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek has not independently verified the applicability of the design parameters or the designs for any particular building. Before use, the building designer should verify applicability of design parameters and properly incorporate these designs into the overall building design per ANSI/TPI 1, Chapter 2.

David C. Wert PE No.36197

METek USA, Inc. FL Cert 6634 16023 Swingley Ridge Road, Chesterfield, MO 63017

January 15,2018

Wert David

1 of 1

Job	Truss	Trung Turn		2.0		
90608		Truss Type MONO TRUSS	Qty 1	Ply 1	Palm Harbor 216 FL 13	32174210
Universal Forest Products Inc., G	Grand Rapids, MI 49525				Job Reference (optional)	
	ID:U2	VbBlccdUQI	DTqm3EK	8 130 e Oct 26 2017 MiTek Industries, Inc. Wed Jan 17 13 14 26 2018 (IXRyT7v?-BGA96CihDpQyQq6i4ixUEswSF47New88nrwxXh	Page 1 zuRZh	

0-6-8 5-3-10 4-8-3 4-10-11 5 1x3 H 2.24 12 15-8-3 3x4 = 3-3-0 6x6 = WZ **B**1 8 7 6 1x3 4x4 = 6x6 = 5-3-10 4-8-3 4-10-11 14-10-8

Plate Offsets (X,Y)-	[2:0-1-11,Edge], [3:0-2-	0,0-1-4], [4:0-2-0,0-1-8]								
SPACING-: 2-0-0 LOADING (psf) (psf) TCLL 20.0 10.0 BCLL 0.0 8 BCDL 7.0 10.0	SPACING-: 1-4-0 LOADING (psf) TCLL 30.0 TCDL 15.0 BCLL 0.0 * BCDL 10.5	SPACING- 2-0-0 Plate Grip DOL 1.00 Lumber DOL 1.00 Rep Stress Incr YES Code FBC2017/TPI2014	CSI. TC 0.85 BC 0.61 WB 0.82 Matrix-R	DEFL. Vert(LL) Vert(CT) Horz(CT)	in 0.27 0.24 -0.06	(loc) 8 8 6	l/defi >653 >734 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 47 It FT = 0%	GRIP 197/144

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x4 SPF No.2 **BOT CHORD** 2x4 SPF No.2

2x3 SPF Stud

WEBS

REACTIONS. (lb/size) 2=583/0-3-8, 6=540/Mechanical Max Horz 2=353(LC 7)

Max Uplift 2=-873(LC 5), 6=-834(LC 7)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 2-3=-1674/2656, 3-4=-967/1523, 5-6=-114/266

BOT CHORD 2-8=-2920/1600, 7-8=-2920/1600, 6-7=-1687/928 4-6=-1003/1831, 4-7=-284/300, 3-7=-692/1271

NOTES-

1) Wind: ASCE 7-10; Vult=180mph (3-second gust) Vasd=139mph @24in o.c.; TCDL=4.0psf; BCDL=2.8psf; (Alt. 180mph @16in o.c.; TCDL=6.0psf; BCDL=4.2psf); h=30ft; Cat. II; Exp D; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 3) This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 873 lb uplift at joint 2 and 834 lb uplift



[P]

Structural wood sheathing directly applied or 3-11-7 oc purlins,

Rigid ceiling directly applied or 3-1-12 oc bracing.

except end verticals.

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⚠ WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE AMARNING - Verity design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MIN-7473 rev. 10/03/2015 SED Design valid for use only with MITEK® connectors. This design is based only upon parameters shown, and lis for an individual building component a truss system. Before use, the building designer must verify the applicability of design parameters and property incorporate this design into the abuilding design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

AMSUTPH1 Quality Criteria, DSB-39 and BOSI Bu Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

