



April 14, 2015

UNI-BILT SYSTEMS  
PO BOX 2545  
BRANDON, FL 33509

14-B-81675  
JOHN EARNEST  
27255 HICKORY HILL ROAD  
BROOKSVILLE FL 34602  
85'-0" x 300'-0" x 16'-0"

To Whom It May Concern:

This is to certify that materials for the subject structure have been designed in accordance with the order documents, specifically as shown per the attached Engineering Design Criteria Sheet.

Aspects of code compliance as related to use or occupancy, such as sprinkler requirements, are not addressed by these documents.

These materials, when properly erected on an adequate foundation in accordance with the erection drawings as supplied and using the components as furnished, will meet the attached loading requirements.

This certification does not cover field modifications or the design of materials not furnished by Metallic Building Systems.

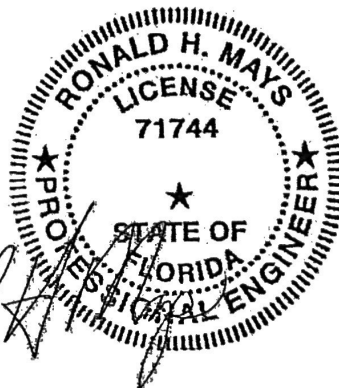
The attached design criteria information is to remain with and form part of this Letter of Certification.

The calculations and the metal building they represent are the product of Metallic Building Systems or a division of its affiliate NCI Building Systems. The engineer whose seal appears hereon is employed by either Metallic Building Systems or a division of its affiliate NCI Building Systems and is not the engineer of record for this project.

Cordially,

Metallic Building Systems  
Materials for Metal Buildings  
An NCI Company

Ronald H. Mays, P.E.  
Engineering Manager



14-B-81675



Building Code ..... FBC 10  
 Risk Category..... II - Normal

Roof Dead Load  
 Superimposed..... 2.000 psf  
 Collateral..... 2 psf  
 Roof Live Load..... 12/20.00 psf

Snow  
 Ground Snow Load (Pg)..... 0.0000 psf  
 Snow Load Importance Factor (Is) 1.0000  
 Flat Roof Snow Load (Pf)..... 0 psf  
 Snow Exposure Factor (Ce)..... 1.0  
 Thermal Factor (Ct)..... 1.00

Wind  
 Ultimate Wind Speed..... 140 mph  
 Nominal Wind Speed (Vasd)..... 108.44 mph (IBC Section 1609.3.1)  
 Wind Exposure Category ..... C  
 Internal Pressure Coef (GCpi) 0.18/-0.18  
 Loads for components not provided by building manufacturer  
 Corner Areas 39.613 psf pressure -52.718 psf suction  
 Other Areas 39.613 psf pressure -42.914 psf suction  
 These values are the maximum values required based on a 10 sq ft

area.

Components with larger areas may have lower wind loads.

Seismic  
 Seismic Importance Factor (Ie) 1.00  
 Seismic Design Category..... A  
 Soil Site Class..... D Stiff Soil  
 Ss..... 0.0858 g Sds ..... 0.0907 g  
 Sl..... 0.0360 g Sd1 ..... 0.0576 g  
 Analysis Procedure..... Equivalent Lateral Force  

Column Line	All	All(Front)	All(Back)
Basic Force Resisting System	H	H	H
Response Modification Coefficient (R)	3	3	3
System Over-Strength Factor (Omega)	3.0000	3.0000	3.0000
Seismic Response Coefficient (Cs)	0.03	0.03	0.03
Design Base Shear in kips (V)	Transverse 4.90	Longitudinal 5.00	

 Basic Structural System (from ASCE 7-10 Table 12.2-1)  
 H - Steel System not Specifically Detailed for Seismic Resistance  
 C4 - Steel Ordinary Moment Frames  
 B3 - Steel Ordinary Concentric Braced Frames  
 G2 - Cantilevered Column System

UNI-BILT SYSTEMS  
PO BOX 2545  
BRANDON, FL 33509

STRUCTURAL DESIGN CALCULATIONS  
FOR  
UNI-BILT SYSTEMS  
PO BOX 2545  
BRANDON, FL 33509

14-115C UNI-BILT - JOHN EARNES  
27255 HICKORY HILL ROAD  
BROOKSVILLE FL 34602  
14-B-81675

BUILDING LAYOUT

Width (ft)= 85.0  
Length (ft)= 300.0  
Eave Height (ft)= 16.0/ 16.0  
Roof Slope (rise/12 )= 1.00/ 1.00

BUILDING LOADS

Roof Dead Load (psf )= 2.0  
Wall Dead Load  
Left Endwall (psf )= 2.0  
Right Endwall (psf )= 2.0  
Front Sidewall (psf )= 2.0  
Back Sidewall (psf )= 2.0  
Roof Live Load (psf )= 20.0  
Frame Live Load (psf )= 12.0  
Collateral Load (psf )= 2.0  
Wind Speed (mph )= 140.0  
Wind Code = FBC 10 (IBC 12)  
Closed/Open = C  
Exposure = C  
Internal Wind Coeff = -0.18, +0.18  
Importance - Wind = 1.00  
Importance - Seismic = 1.00  
Seismic Design Category= A  
Seismic Coeff (Fa\*Ss) = 0.14

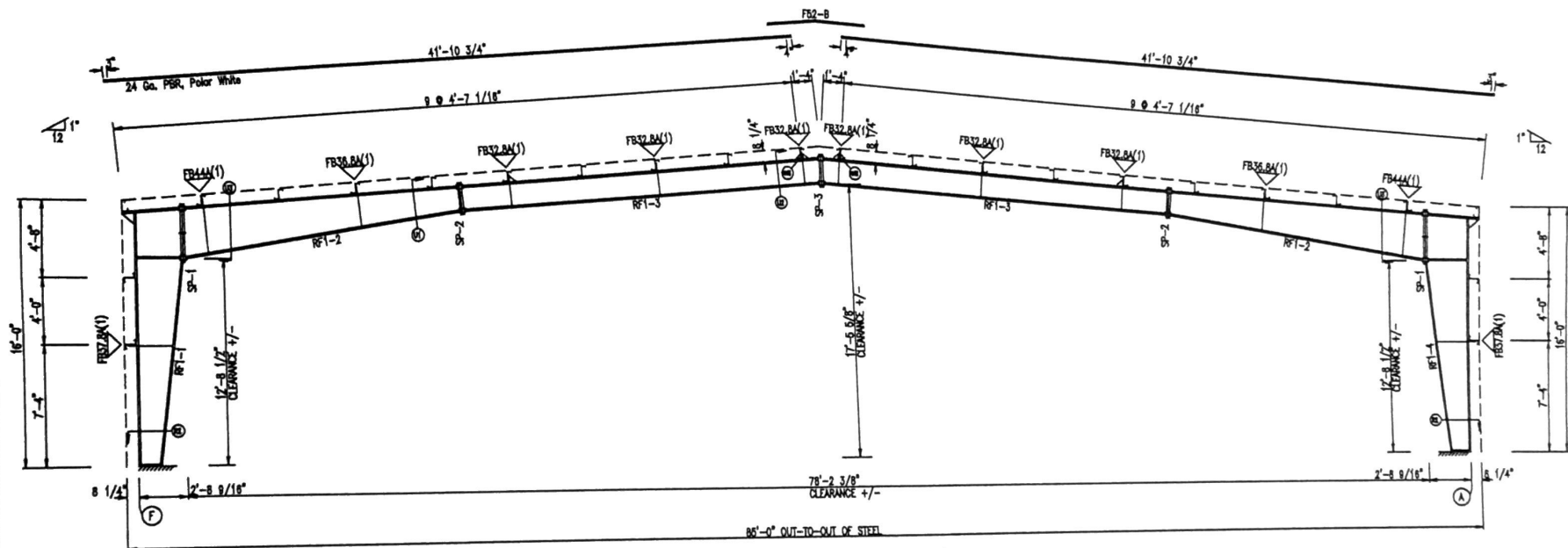
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Designer :  
Detailer : PEY

4/14/15

SPLICE BOLT TABLE							
Mark	Qty	Top	Bot	Int	Type	Dia	Length
SP-1	4	4	2		A325	3/4"	2 1/4"
SP-2	4	4	0		A325	3/4"	2 3/4"
SP-3	4	4	0		A325	3/4"	2"

MEMBER TABLE						
Mark	Web Depth	Web Thickness	Length	Outside Flange	Inside Flange	
RF1-1	18.0/32.0	0.186	148.3	8 x 7/8 x 183.5	8 x 5/16 x 144.5	
RF1-2	32.0/32.0	0.250	37.9	8 x 7/8 x 40.8		
RF1-3	34.0/18.0	0.186	201.3	8 x 7/8 x 198.4	8 x 5/16 x 222.0	
RF1-4	18.0/18.0	0.134	240.0	8 x 7/8 x 240.0	8 x 1/4 x 240.0	
	18.0/18.0	0.134	30.2	8 x 7/8 x 30.2	8 x 1/4 x 28.8	
	32.0/32.0	0.250	37.9	8 x 7/8 x 40.8	8 x 5/16 x 149.5	
	32.0/32.0	0.186	148.3	8 x 7/8 x 183.5		

FLANGE BRACES BOTH SIDES (UNLESS NOTED)  
 Flank (1) = 1/2" x 1/2" x 10'  
 A = L200X140



RIGID FRAME ELEVATION: FRAME LINE 2 5 6 7 8 11 12

**GENERAL NOTES:**

- ALL BOLTED JOINTS WITH A325M-09 TYPE 1 BOLTS ARE SPECIFIED AS SNUG TIGHTED JOINTS IN ACCORDANCE WITH THE SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS, JUNE 30, 2004. PRETENSIONING METHODS, INCLUDING TURN-OF-NUT, CALIBRATED WRENCH, TWIST OFF TYPE TENSION BOLTS OR DIRECT TENSION INDICATOR ARE NOT REQUIRED. INSTALLATION INSPECTION REQUIREMENTS FOR SNUG TIGHT BOLTS (SPECIFICATION FOR STRUCTURAL JOINTS SECTION 9.1) IS SUGGESTED.
- ALL FIELD WELDED CONNECTIONS OF SECONDARY FRAMING SHALL BE BOLTED WITH A325 MACHINE BOLTS.
- INSTALL ALL FLANGE BRACES ON COLUMN AND RAFTER AS SHOWN.

ISSUE	DATE	DESCRIPTION	BY	CHKD	DSH
A	4/16/18	FOR CONSTRUCTION PERMIT			PEY

**METALLIC** metallic building company  
 7301 FAIRVIEW, HOUSTON, TEXAS, P.O. BOX 40338  
 ZIP 77041 (713) 488-7788 ZIP 77240

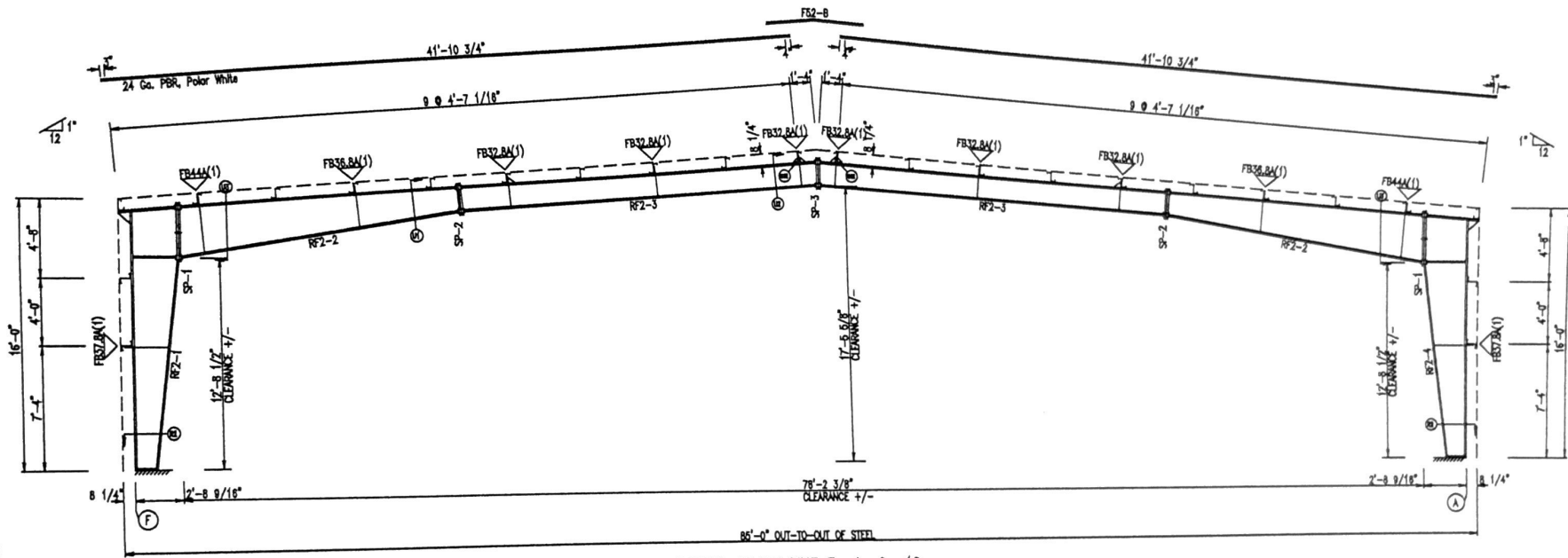
PROJECT: 14-118C UNO-BILT - JOHN EARNEST  
 CUSTOMER: UNO-BILT SYSTEMS OWNER: JOHN EARNEST  
 LOCATION: BROOKSHIRE FL 34022

CHG	DATE	SCALE	PHASE	BUILDING ID	JOB NUMBER	SHEET NUMBER	ISSUE
	4/16/18	K.T.S.	1	A	14-B-81675	E6	A

SPLICE BOLT TABLE							
Mark	Qty	Top	Bot	Ht	Type	Dia	Length
SP-1	4	4	2	AS26	3/4"	2 1/2"	
SP-2	4	4	0	AS26	3/4"	2 3/4"	
SP-3	4	4	0	AS26	3/4"	2"	

MEMBER TABLE						
Mark	Web Depth	Web Flange	Web	Outside Flange	Inside Flange	
	Start/End	Depth	Length	W x Thk x Length	W x Thk x Length	
RF2-1	13.0/32.0	0.185	148.3	8 x 1/4" x 183.5	8 x 5/16" x 148.3	
RF2-2	32.0/32.0	0.250	37.9	8 x 1/4" x 40.8		
RF2-3	34.0/16.0	0.185	201.3	8 x 1/4" x 198.4	8 x 5/16" x 202.0	
RF2-4	16.0/16.0	0.154	240.0	8 x 1/4" x 240.0	8 x 1/4" x 240.0	
RF2-5	16.0/16.0	0.154	39.2	8 x 1/4" x 39.2	8 x 1/4" x 28.8	
RF2-6	32.0/32.0	0.250	37.9	8 x 1/4" x 40.8		
RF2-7	32.0/13.0	0.185	148.3	8 x 1/4" x 183.5	8 x 5/16" x 148.3	

FLANGE BRACES: BOTH SIDES (UNLESS NOTED)  
 FB32(BA)(1)  
 A = L2CCX140



RIGID FRAME ELEVATION: FRAME LINE 3 4 9 10

**GENERAL NOTES:**  
 1. ALL BOLTED JOINTS WITH A325/A308 TYPE 1 BOLTS ARE SPECIFIED AS SHAG TIGHTED JOINTS IN ACCORDANCE WITH THE SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS, JUNE 30, 2004. PRETENSIONING METHODS, INCLUDING TURN-OF-NUT, CALIBRATED WRENCH, TWIST OFF TYPE TENSION BOLTS OR DIRECT TENSION INDICATOR ARE NOT REQUIRED. INSTALLATION INSPECTION REQUIREMENTS FOR SHAG TIGHT BOLTS (SPECIFICATION FOR STRUCTURAL JOINTS SECTION 8.1) IS SUGGESTED.  
 2. ALL FIELD WELDED CONNECTIONS OF SECONDARY FRAMING SHALL BE BOLTED WITH A325 MACHINE BOLTS.  
 3. INSTALL ALL FLANGE BRACES ON COLUMN AND RAFTER AS SHOWN.

ISSUE	DATE	DESCRIPTION	BY	CHKD	DSH
A	4/16/10	FOR CONSTRUCTION PERMIT			PEY

**METALLIC** metallic building company  
 7301 FAYVIEW, HOUSTON, TEXAS, P.O. BOX 40338  
 ZIP 77041 (713) 466-7788 ZIP 77240

PROJECT:	14-115C UM-BLT - JOHN EARNEST	OWNER:	JOHN EARNEST				
CUSTOMER:	UM-BLT SYSTEMS						
LOCATION:	BROOKSHIRE FL SAGEZ						
CD	DATE	SCALE	PHASE	BUILDING ID	JOB NUMBER	SHEET NUMBER	ISSUE
	4/16/10	K.T.S.	I	A	14-B-81676	E7	A