STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL
Ten Franklin Square, New Britain, CT 06051
Phone: (860) 827-2935 Fax: (860) 827-2950
E-Mail: siting.council@ct.gov
Web Site: portal.ct.gov/csc

VIA ELECTRONIC MAIL

September 10, 2021

Kyle Richers
Transcend Wireless
10 Industrial Ave., Suite 3
Mahwah, NJ 07430
krichers@transcendwireless.com

RE: **EM-T-MOBILE-014-210810 -** T-Mobile notice of intent to modify an existing telecommunications facility located at 50 Maple Street, Branford, Connecticut.

Dear Mr. Richers:

The Connecticut Siting Council (Council) is in receipt of your correspondence of September 9, 2021 submitted in response to the Council's September 8, 2021 notification of an incomplete request for exempt modification with regard to the above-referenced matter.

The submission renders the request for exempt modification complete and the Council will process the request in accordance with the Federal Communications Commission 60-day timeframe.

Thank you for your attention and cooperation.

Sincerely,

Melanie Bachman
Executive Director

MAB/FOC/laf

From: Kyle Richers <krichers@transcendwireless.com>
Sent: Thursday, September 9, 2021 9:23 AM
To: Fontaine, Lisa <Lisa.Fontaine@ct.gov>
Cc: CSC-DL Siting Council <Siting.Council@ct.gov>
Subject: RE: EM-T-MOBILE-014-210805 Maple Ave., Branford Incomplete Letter - CT11328F

Good Morning,

Please see the attached structural analysis for the generator on the rooftop.

CENTEK engineering

Centered on Solutions℠

Structural Analysis Report

Equipment Platform Upgrades

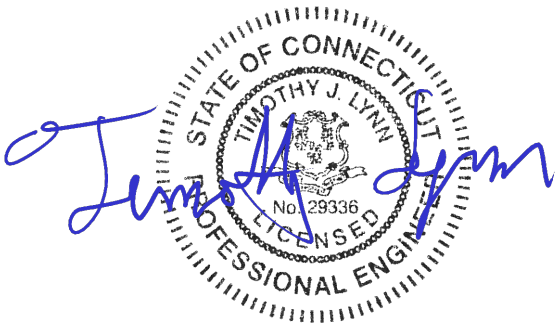
Proposed T-Mobile
Equipment Upgrade-Hardening

Site Ref: CT11328F

50 Maple Street
Branford, CT

CENTEK Project No. 21003.09

Date: April 20, 2021



Prepared for:

T-Mobile USA
35 Griffin Road
Bloomfield, CT 06002

Table of Contents

Introduction

The purpose of this structural analysis report (SAR) is to summarize the results, of the impacted structural components, by the equipment upgrade proposed by T-Mobile on the existing host rooftop located in Branford, CT.

The T-Mobile generator is mounted on proposed structural steel dunnage on the roof of the building.

Primary Assumptions Used in the Analysis

- The host structure's theoretical capacity not including any assessment of the condition of the host structure.
- The existing elevated steel platform carries the horizontal and vertical loads due to the weight of equipment, and wind and transfers into host structure.
- Proposed reinforcement and support steel will be properly installed and maintained.
- Structure is in plumb condition.
- Loading for equipment and enclosure as listed in this report.
- All bolts are appropriately tightened providing the necessary connection continuity.
- All welds are fabricated with ER-70S-6 electrodes.
- All members are assumed to be as observed during roof framing mapping.
- All members are "hot dipped" galvanized in accordance with ASTM A123 and ASTM A153 Standards.
- All member protective coatings are in good condition.

Antenna and Equipment Summary

Location	Appurtenance / Equipment		Rad Center Elevation (AGL)	Mount Type
	Generac RG025 25kw Generator	1265 lbs.	-	

Equipment – Indicates equipment to be installed.
~~Equipment~~ – Indicates equipment to be removed.

Analysis

The equipment platform was analyzed using a comprehensive computer program titled Risa3D. The program analyzes the equipment platform and antenna mounts considering the worst case code prescribed loading condition. The structures were considered to be loaded by concentric forces, and the model assumes that the members are subjected to bending, axial, and shear forces.

Design Loading

Loading was determined per the requirements of the 2015 International Building Code amended by the 2018 CSBC and ASCE 7-10 "Minimum Design Loads for Buildings and Other Structures".

Wind Speed:	V_{ult} = 130 mph	*Appendix N of the 2018 CT State Building Code*
Risk Category:	II	*2015 IBC; Table 1604.05*
Exposure Category:	Surface Roughness C	*ASCE 7-10; Section 26.7.2*
Ground Snow Load	30 psf	*Appendix N of the 2018 CT State Building Code*
Dead Load	Equipment and framing self-weight	*Identified within SAR design calculations*
Live Load	20 psf	*ASCE 7-10; Table 4-1 "Roofs – All Other Construction"*

Reference Standards

2015 International Building Code:

1. ACI 318-14, *Building Code Requirements for Structural Concrete*.
2. ACI 530-13, *Building Code Requirements for Masonry Structures*.
3. AISC 360-10, *Specification for Structural Steel Buildings*
4. AWS D1.1 – 00, *Structural Welding Code – Steel*.

Results

Member stresses and design reactions were calculated utilizing the structural analysis software RISA 3D.

The following table provides a summary of structural components impacted by the proposed upgrade along with associated member percent capacity and PASS/FAIL result:

Location	Component	Capacity (%)	Result
Equipment Platform	Existing 24” Deep Roof Girder	70%	**PASS**

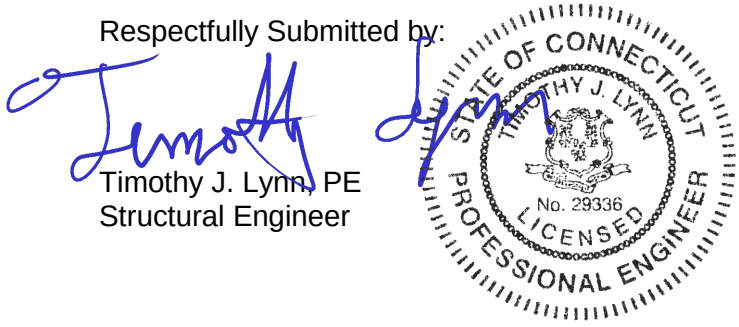
Conclusion

This analysis shows that the subject roof girder **has sufficient capacity** to support the proposed equipment configuration.

The analysis is based, in part, on the information provided to this office by T-Mobile. If the existing conditions are different than the information in this report, Centek Engineering, Inc. must be contacted for resolution of any potential issues.

Please feel free to call with any questions or comments.

Respectfully Submitted by:



Timothy J. Lynn, PE
Structural Engineer

Prepared by:

Luke Amiot
Engineer

Standard Conditions for Furnishing of Professional Engineering Services on Existing Structures

All engineering services are performed on the basis that the information used is current and correct. This information may consist of, but is not necessarily limited to:

- Information supplied by the client regarding the structure itself, its foundations, the soil conditions, the antenna and feed line loading on the structure and its components, or other relevant information.
- Information from the field and/or drawings in the possession of Centek Engineering, Inc. or generated by field inspections or measurements of the structure.
- It is the responsibility of the client to ensure that the information provided to Centek Engineering, Inc. and used in the performance of our engineering services is correct and complete. In the absence of information to the contrary, we assume that all structures were constructed in accordance with the drawings and specifications and are in an un-corroded condition and have not deteriorated. It is therefore assumed that its capacity has not significantly changed from the “as new” condition.
- All services will be performed to the codes specified by the client, and we do not imply to meet any other codes or requirements unless explicitly agreed in writing. If wind and ice loads or other relevant parameters are to be different from the minimum values recommended by the codes, the client shall specify the exact requirement. In the absence of information to the contrary, all work will be performed in accordance with the latest revision of ANSI/ASCE10 & ANSI/EIA-222
- All services performed, results obtained, and recommendations made are in accordance with generally accepted engineering principles and practices. Centek Engineering, Inc. is not responsible for the conclusions, opinions and recommendations made by others based on the information we supply.

CENTEK engineering
Centered on Solutions℠ www.centekeng.com
63-2 North Branford Road P: (203) 488-0580
Branford, CT 06405 F: (203) 488-8587

Subject: Wind Load on Equipment per ASCE 7-10

Location: Branford, CT

Rev. 0: 04/19/2021

Prepared by: L.A.A.; Checked by: T.J.L.
Job No. 21003.09

Design Wind Load on Other Structures:

(Based on IBC 2015, CSBC 2018 and ASCE 7-10)

Wind Speed =	$V := 130$	mph	(User Input)	(CSBC Appendix-N)
Risk Category =	$BC := II$		(User Input)	(IBC Table 1604.5)
Exposure Category =	$Exp := C$		(User Input)	
Height Above Grade =	$Z := 23$	ft	(User Input)	
Structure Type =	$Structuretype := Square\_Chimney$			
Structure Height =	$Height := 8$	ft	(User Input)	
Horizontal Dimension of Structure =	$Width := 2$	ft	(User Input)	

Terrain Exposure Constants:

Nominal Height of the Atmospheric Boundary Layer =

$$zg := \begin{cases} 1200 & \text{if } Exp = B \\ 900 & \text{if } Exp = C \\ 700 & \text{if } Exp = D \end{cases} = 900$$

(Table 26.9-1)

3-Sec Gust Speed Power Law Exponent =

$$\alpha := \begin{cases} 7 & \text{if } Exp = B \\ 9.5 & \text{if } Exp = C \\ 11.5 & \text{if } Exp = D \end{cases} = 9.5$$

(Table 26.9-1)

Integral Length Scale Factor =

$$l := \begin{cases} 320 & \text{if } Exp = B \\ 500 & \text{if } Exp = C \\ 650 & \text{if } Exp = D \end{cases} = 500$$

(Table 26.9-1)

Integral Length Scale Power Law Exponent =

$$E := \begin{cases} \frac{1}{3} & \text{if } Exp = B \\ \frac{1}{5} & \text{if } Exp = C \\ \frac{1}{8} & \text{if } Exp = D \end{cases} = 0.2$$

(Table 26.9-1)

Turbulence Intensity Factor =

$$c := \begin{cases} 0.3 & \text{if } Exp = B \\ 0.2 & \text{if } Exp = C \\ 0.15 & \text{if } Exp = D \end{cases} = 0.2$$

(Table 26.9-1)

CENTEK engineering
Centered on Solutions℠ www.centekeng.com
63-2 North Branford Road P: (203) 488-0580
Branford, CT 06405 F: (203) 488-8587

Exposure Constant = $Z_{min} := \begin{cases} 30 & \text{if } Exp = B \\ 15 & \text{if } Exp = C \\ 7 & \text{if } Exp = D \end{cases} = 15$ (Table 26.9-1)

Exposure Coefficient = $K_z := \begin{cases} 2.01 \cdot \left(\frac{Z}{zg}\right)^{\left(\frac{2}{\alpha}\right)} & \text{if } 15 \le Z \le zg \\ 2.01 \cdot \left(\frac{15}{zg}\right)^{\left(\frac{2}{\alpha}\right)} & \text{if } Z < 15 \end{cases} = 0.93$ (Table 29.3-1)

Topographic Factor = $K_{zt} := 1$ (Eq. 26.8-2)

Wind Directionality Factor = $K_d = 0.9$ (Table 26.6-1)

Velocity Pressure = $q_z := 0.00256 \cdot K_z \cdot K_{zt} \cdot K_d \cdot V^2 = 36.17$ (Eq. 29.3-1)

Force Coefficient = $GCr := 1.9$ (Fig 29.5-1 - 29.5-3)

Wind Force = $F := q_z \cdot GCr = 69$ psf

CENTEK engineering
Centered on Solutions℠ www.centekeng.com
63-2 North Branford Road P: (203) 488-0580
Branford, CT 06405 F: (203) 488-8587

Development of Wind on Equipment

Equipment Data:

Equipment Model =	Generac RG025 25 kW Generator		
Equipment Shape =	Flat		(User Input)
Equipment Height =	$L_{Eq} := 84.2$	in	(User Input)
Equipment Width =	$W_{Eq} := 35$	in	(User Input)
Equipment Thickness =	$T_{Eq} := 53.5$	in	(User Input)
Equipment Weight =	$WT_{Eq} := 1265$	lbs	(User Input)
Equipment Bearing Points =	$N_{Bp} := 4$		(User Input)
Number of Equipment =	$N_{Eq} := 1$		(User Input)

Wind Load (Front)

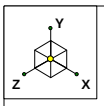
Surface Area for One Equipment =	$SA_{Eq} := \frac{L_{Eq} \cdot W_{Eq}}{144} = 20.5$	sf
Equipment Projected Surface Area =	$A_{Eq} := SA_{Eq} \cdot N_{Eq} = 20.5$	sf
Total Equipment Wind Force =	$F_{Eq} := \frac{F \cdot A_{Eq} \cdot \frac{\left(\frac{L_{Eq}}{12}\right)}{2}}{\frac{T_{Eq}}{12} \cdot 2} = 553$	lbs
Total Equipment Shear Wind Force =	$F_{Eq} := \frac{F \cdot A_{Eq}}{N_{Bp}} = 352$	lbs

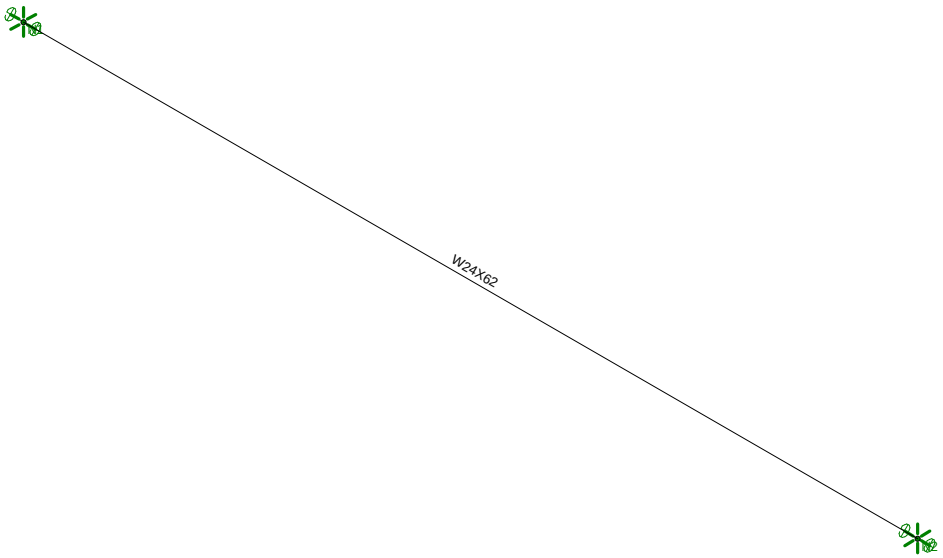
Wind Load (Side)

Surface Area for One Equipment =	$SA_{Eq} := \frac{L_{Eq} \cdot T_{Eq}}{144} = 31.3$	sf
Equipment Projected Surface Area =	$A_{Eq} := SA_{Eq} \cdot N_{Eq} = 31.3$	sf
Total Equipment Wind Force =	$F_{Eq} := \frac{F \cdot A_{Eq} \cdot \frac{\left(\frac{L_{Eq}}{12}\right)}{2}}{\frac{W_{Eq}}{12} \cdot 2} = 1293$	lbs
Total Equipment Shear Wind Force =	$F_{Eq} := \frac{F \cdot A_{Eq}}{N_{Bp}} = 537$	lbs

Gravity Load (without ice)

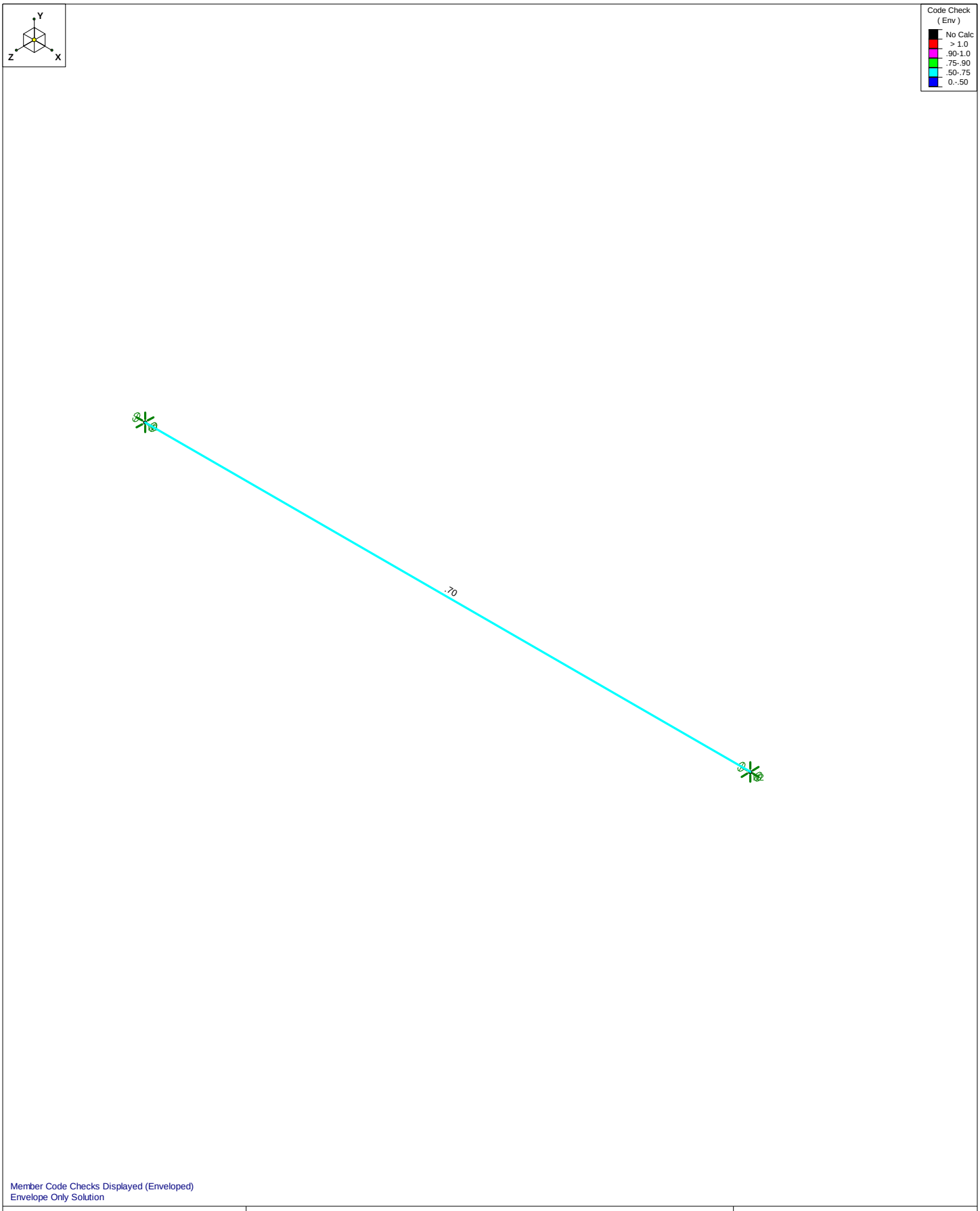
Weight of All Equipments =	$\frac{WT_{Eq}}{N_{Bp}} = 316.25$	lbs





Envelope Only Solution

Centek Engineering		
LAA	CT11328 Roof Member Analysis	Apr 20, 2021 at 10:26 AM
21003.09	Member Framing	Existing W24 Analysis.r3d



Member Code Checks Displayed (Enveloped)
Envelope Only Solution

Centek Engineering		
LAA	CT11328 Roof Member Analysis	Apr 20, 2021 at 10:26 AM
21003.09	Unity Check	Existing W24 Analysis.r3d

(Global) Model Settings

Display Sections for Member Calcs	5
Max Internal Sections for Member Calcs	97
Include Shear Deformation?	Yes
Increase Nailing Capacity for Wind?	Yes
Include Warping?	Yes
Trans Load Btwn Intersecting Wood Wall?	Yes
Area Load Mesh (in^2)	144
Merge Tolerance (in)	.12
P-Delta Analysis Tolerance	0.50%
Include P-Delta for Walls?	Yes
Automatically Iterate Stiffness for Walls?	Yes
Max Iterations for Wall Stiffness	3
Gravity Acceleration (ft/sec^2)	32.2
Wall Mesh Size (in)	12
Eigensolution Convergence Tol. (1.E-)	4
Vertical Axis	Y
Global Member Orientation Plane	XZ
Static Solver	Sparse Accelerated
Dynamic Solver	Accelerated Solver

Hot Rolled Steel Code	AISC 14th(360-10): ASD
Adjust Stiffness?	Yes(Iterative)
RISAConnection Code	AISC 14th(360-10): ASD
Cold Formed Steel Code	AISI S100-10: ASD
Wood Code	AWC NDS-12: ASD
Wood Temperature	< 100F
Concrete Code	ACI 318-11
Masonry Code	ACI 530-11: ASD
Aluminum Code	AA ADM1-10: ASD - Building
Stainless Steel Code	AISC 14th(360-10): ASD
Adjust Stiffness?	Yes(Iterative)

Number of Shear Regions	4
Region Spacing Increment (in)	4
Biaxial Column Method	Exact Integration
Parme Beta Factor (PCA)	.65
Concrete Stress Block	Rectangular
Use Cracked Sections?	Yes
Use Cracked Sections Slab?	Yes
Bad Framing Warnings?	No
Unused Force Warnings?	Yes
Min 1 Bar Diam. Spacing?	No
Concrete Rebar Set	REBAR_SET_ASTMA615
Min % Steel for Column	1
Max % Steel for Column	8

(Global) Model Settings, Continued

Seismic Code	ASCE 7-10
Seismic Base Elevation (ft)	Not Entered
Add Base Weight?	Yes
Ct X	.02
Ct Z	.02
T X (sec)	Not Entered
T Z (sec)	Not Entered
R X	3
R Z	3
Ct Exp. X	.75
Ct Exp. Z	.75
SD1	1
SDS	1
S1	1
TL (sec)	5
Risk Cat	I or II
Drift Cat	Other
Om Z	1
Om X	1
Cd Z	4
Cd X	4
Rho Z	1
Rho X	1
Footing Overturning Safety Factor	1
Optimize for OTM/Sliding	No
Check Concrete Bearing	No
Footing Concrete Weight (k/ft^3)	150.001
Footing Concrete f'c (ksi)	4
Footing Concrete Ec (ksi)	3644
Lambda	1
Footing Steel fy (ksi)	60
Minimum Steel	0.0018
Maximum Steel	0.0075
Footing Top Bar	#3
Footing Top Bar Cover (in)	2
Footing Bottom Bar	#3
Footing Bottom Bar Cover (in)	3.5
Pedestal Bar	#3
Pedestal Bar Cover (in)	1.5
Pedestal Ties	#3

Hot Rolled Steel Properties

	Label	E [ksi]	G [ksi]	Nu	Therm (\...	Density[k/ft^3]	Yield[ksi]	Ry	Fu[ksi]	Rt
1	A36 Gr.36	29000	11154	.3	.65	.49	36	1.5	58	1.2
2	A572 Gr.50	29000	11154	.3	.65	.49	50	1.1	58	1.2
3	A992	29000	11154	.3	.65	.49	50	1.1	58	1.2
4	A500 Gr.42	29000	11154	.3	.65	.49	42	1.3	58	1.1
5	A500 Gr.46	29000	11154	.3	.65	.49	46	1.2	58	1.1
6	A53 Grade B	29000	11154	.3	.65	.49	35	1.5	58	1.2

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Design Rul...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
1	Antenna Mast	PIPE_2.5	Column	Wide Flange	A53 Grade B	Typical	1.61	1.45	1.45	2.89

Hot Rolled Steel Design Parameters

	Label	Shape	Length[ft]	Lbyy[ft]	Lbzz[ft]	Lcomp top[...	Lcomp bot[...	L-torq...	Kyy	Kzz	Cb	Functi...
1	M1	W24X62	33			5						Lateral

Member Primary Data

	Label	I Joint	J Joint	K Joint	Rotate(...	Section/Shape	Type	Design List	Material	Design R...
1	M1	N1	N2			W24X62	Beam	Wide Flange	A36 Gr.36	Typical

Joint Coordinates and Temperatures

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Dia...
1	N1	0	0	0	0	
2	N2	33	0	0	0	

Joint Boundary Conditions

	Joint Label	X [k/in]	Y [k/in]	Z [k/in]	X Rot.[k-ft/rad]	Y Rot.[k-ft/rad]	Z Rot.[k-ft/rad]
1	N2	Reaction	Reaction	Reaction	Reaction		
2	N1	Reaction	Reaction	Reaction	Reaction		

Member Point Loads

Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
No Data to Print ...			

Member Distributed Loads (BLC 2 : Weight of Equipment)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
1	M1	Y	-.315	-.315	0	%100
2	M1	Y	-.18	-.18	13	20

Member Distributed Loads (BLC 4 : Wind Z-Direction)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
1	M1	Z	-.113	-.113	13	20

Member Distributed Loads (BLC 5 : Snow Load)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
1	M1	Y	-.63	-.63	0	%100

Member Distributed Loads (BLC 6 : Live Load)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/f...	Start Location[ft,%]	End Location[ft,%]
1	M1	Y	-.42	-.42	0	%100

Basic Load Cases

	BLC Description	Category	X Gra...	Y Gra...	Z Gra...	Joint	Point	Distrib...	Area(...	Surfa...
1	Self Weight	DL		-1						
2	Weight of Equipment	DL						2		
3	Wind X-Direction	WLX								
4	Wind Z-Direction	WLZ						1		
5	Snow Load	SL						1		
6	Live Load	LL						1		

Load Combinations

	Description	Solve	P...	S...	B...	Fa...	BLC	Fact...	BLC	Fa...	BLC	Fa...	BLC	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...
1	IBC 16-8	Yes	Y		DL	1																		
2	IBC 16-9	Yes	Y		DL	1	LL	1	LLS	1														
3	IBC 16-10 (a)	Yes	Y		DL	1	RLL	1																
4	IBC 16-10 (b)	Yes	Y		DL	1	SL	1	SLN	1														
5	IBC 16-10 (c)	Yes	Y		DL	1	RL	1																
6	IBC 16-11 (a)	Yes	Y		DL	1	LL	.75	LLS	.75	RLL	.75												
7	IBC 16-11 (b)	Yes	Y		DL	1	LL	.75	LLS	.75	SL	.75	SLN	.75										
8	IBC 16-11 (c)	Yes	Y		DL	1	LL	.75	LLS	.75	RL	.75												
9	IBC 16-12 (a) (a)	Yes	Y		DL	1	WLX	.6																
10	IBC 16-12 (a) (b)	Yes	Y		DL	1	WLZ	.6																
11	IBC 16-12 (a) (c)	Yes	Y		DL	1	WLX	-.6																
12	IBC 16-12 (a) (d)	Yes	Y		DL	1	WLZ	-.6																
13	IBC 16-13 (a) (a)	Yes	Y		DL	1	WLX	.45	LL	.75	LLS	.75	RLL	.75										
14	IBC 16-13 (a) (b)	Yes	Y		DL	1	WLZ	.45	LL	.75	LLS	.75	RLL	.75										
15	IBC 16-13 (a) (c)	Yes	Y		DL	1	WLX	-.45	LL	.75	LLS	.75	RLL	.75										
16	IBC 16-13 (a) (d)	Yes	Y		DL	1	WLZ	-.45	LL	.75	LLS	.75	RLL	.75										
17	IBC 16-13 (b) (a)	Yes	Y		DL	1	WLX	.45	LL	.75	LLS	.75	SL	.75	S...	.75								
18	IBC 16-13 (b) (b)	Yes	Y		DL	1	WLZ	.45	LL	.75	LLS	.75	SL	.75	S...	.75								
19	IBC 16-13 (b) (c)	Yes	Y		DL	1	WLX	-.45	LL	.75	LLS	.75	SL	.75	S...	.75								
20	IBC 16-13 (b) (d)	Yes	Y		DL	1	WLZ	-.45	LL	.75	LLS	.75	SL	.75	S...	.75								
21	IBC 16-13 (c) (a)	Yes	Y		DL	1	WLX	.45	LL	.75	LLS	.75	RL	.75										
22	IBC 16-13 (c) (b)	Yes	Y		DL	1	WLZ	.45	LL	.75	LLS	.75	RL	.75										
23	IBC 16-13 (c) (c)	Yes	Y		DL	1	WLX	-.45	LL	.75	LLS	.75	RL	.75										
24	IBC 16-13 (c) (d)	Yes	Y		DL	1	WLZ	-.45	LL	.75	LLS	.75	RL	.75										
25	IBC 16-15 (a)	Yes	Y		DL	.6	WLX	.6																
26	IBC 16-15 (b)	Yes	Y		DL	.6	WLZ	.6																
27	IBC 16-15 (c)	Yes	Y		DL	.6	WLX	-.6																
28	IBC 16-15 (d)	Yes	Y		DL	.6	WLZ	-.6																

Envelope Joint Reactions

	Joint		X [k]	LC	Y [k]	LC	Z [k]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC
1	N2	max	0	28	19.843	20	.237	26	0	28	0	28	0	28
2		min	0	1	4.11	25	-.237	12	0	1	0	1	0	1
3	N1	max	0	28	19.843	20	.237	26	0	28	0	28	0	28
4		min	0	1	4.11	25	-.237	12	0	1	0	1	0	1
5	Totals:	max	0	28	39.686	20	.475	26						
6		min	0	1	8.219	25	-.475	12						

Envelope Joint Displacements

	Joint		X [in]	LC	Y [in]	LC	Z [in]	LC	X Rotation [rad]	LC	Y Rotatio...	LC	Z Rotation [rad]	LC
1	N1	max	0	28	0	28	0	28	0	28	5.724e-03	26	-1.559e-03	28
2		min	0	1	0	1	0	1	0	1	-5.724e-03	12	-7.32e-03	7
3	N2	max	0	28	0	28	0	28	0	28	5.724e-03	28	7.32e-03	20
4		min	0	1	0	1	0	1	0	1	-5.724e-03	10	1.559e-03	25

Envelope AISC 14th(360-10): ASD Steel Code Checks

	Member	Shape	Code Check	Lo...	LC	She...	Lo...	Dir	...	Pnc/...	Pnt/o...	Mny...	Mnz...	Cb	Eqn
1	M1	W24X62	.704	16.5	20	.135	0	y	...	33.068	392....	28.171	274.85	1	H1-...