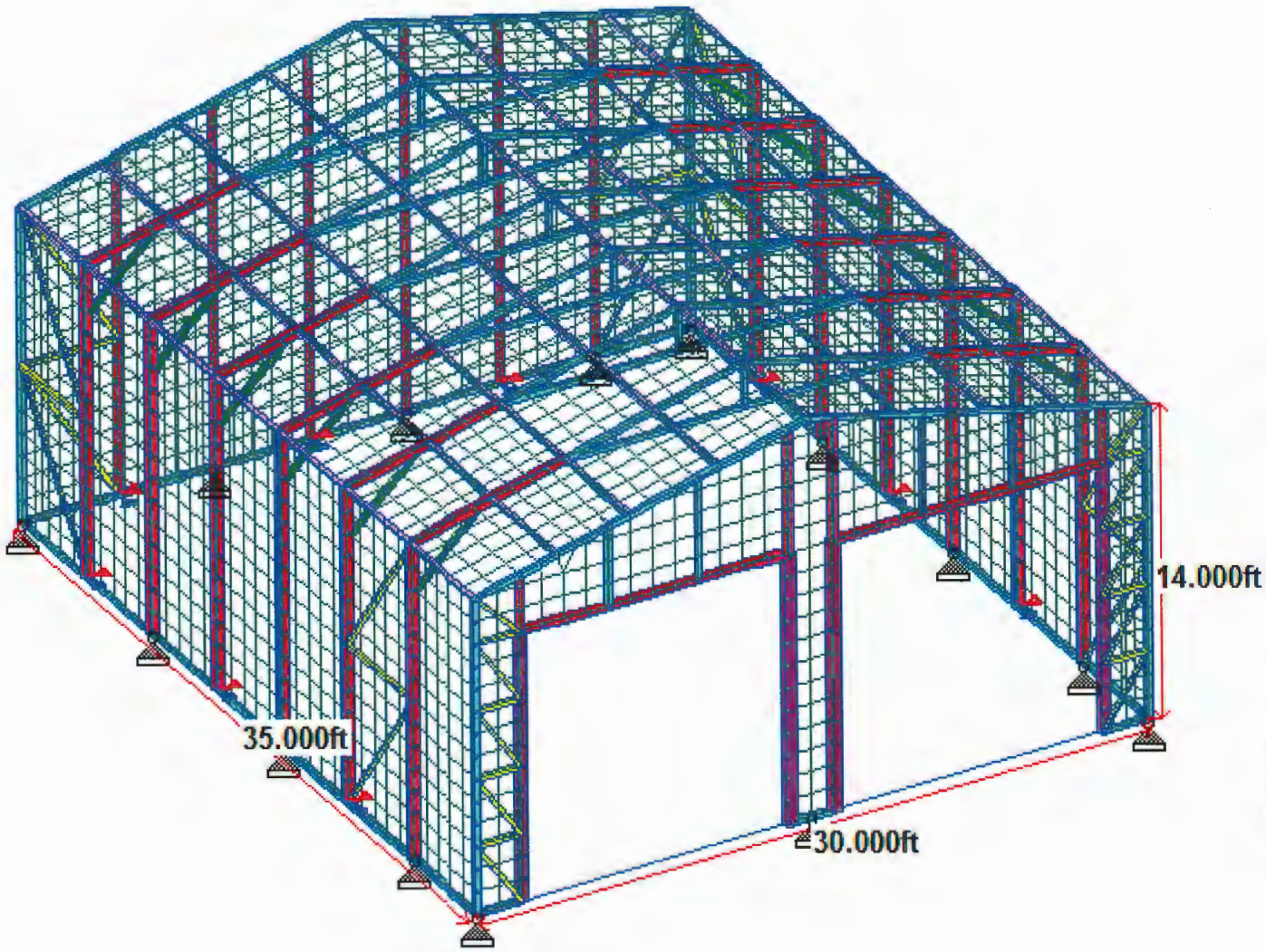
A&A ENGINEERING
CIVIL • STRUCTURAL
6036 Renaissance Place
Toledo, Ohio 43623
Tel: 419-292-1983
Fax: 419-292-0955

PROJECT:		PROJECT NO.:	SHEET NO.:
MILAM AUTO		233-21-3409	1/7
CLIENT: AMERICAN CARPORTS	LOCATION: PUYALLUP, WA 98371		
CALCULATED BY: A.F.	CHECKED BY: O.A.	APPROVED BY:	SCALE:
DATE: 11/6/2021	DATE: 11/6/2021	DATE:	



Entity Color Legend

- TS252514GA
- TS252514GAD14
- TS252514GAQ14
- TS222214GA
- C401014GAD
- C351514GA
- DUMMY
- Default Plate Color
- Default Solid Color

SAADY AMIN
STATE OF WASHINGTON
57344
REGISTERED
PROFESSIONAL ENGINEER

DATE EXPIRES: 01/03/2024
DATE SIGNED: 04/05/2022

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PROJECT:		PROJECT NO.:	SHEET NO.:
MILAM AUTO		233-21-3409	2/7
CLIENT: AMERICAN CARPORTS	LOCATION: PUYALLUP, WA 98371		
CALCULATED BY: A.F.	CHECKED BY: O.A.	APPROVED BY:	SCALE:
DATE: 11/6/2021	DATE: 11/6/2021	DATE:	

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DATE EXPIRES: 01/03/2024
DATE SIGNED: 04/05/2022

A&A ENGINEERING
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Toledo, Ohio 43623
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PROJECT: MILAM AUTO		PROJECT NO.: 233-21-3409	SHEET NO.: 3/7
CLIENT: AMERICAN CARPORTS	LOCATION: PUYALLUP, WA 98371		
CALCULATED BY: A.F.	CHECKED BY: O.A.	APPROVED BY:	SCALE:
DATE: 11/6/2021	DATE: 11/6/2021	DATE:	

I. Summary:

1. **Building Size:**

Length:	**35** ft
Width:	**30** ft
Eave height:	**14** ft
Roof pitch:	**3** / 12
Total Building square footage:	**1050** Sq ft

2. **Loads:**

Roof live load:	**20** psf
Ground snow load:	**30** psf
Wind speed:	**110** mph
Exposure:	**C**
Seismic S_s spectral response accel.:	**1.277**
Seismic Design Category:	**D**

II. Code Information:

1. **Code:**

WSBC (IBC 2018)

2. **Occupancy:**

Occupancy Group:	**U**
Construction Type:	**II-B**
Risk Category:	**I**

III. Load Calculations:

1. **Dead Load (D):**

Dead load (super imposed): D = **2** psf

2. **Roof Live Load (L_r):**

Roof live load (specified): L_r = **20 psf**

3. **Snow Load(S):**

Peak ground snow load:	p_g = **30** psf
Exposure factor:	C_e = **1.00**
Thermal factor:	C_t = **1.20**
Importance factor:	I_s = **0.80**
Slope factor:	C_s = **1.0**
Flat roof load:	
→ p_f = **20.00** psf	
Sloped roof load:	
→ p_s = **20.00** psf	

* ***Roof live load controls***

4. **Wind Load (W):**

*Please see Appendix W1-W4 for wind load calculations

Base Shear due to Wind Loads:	**V**
V_W in X dir:	**12.031** Kips
V_W in Z dir:	**12.135** Kips

(Refer Statics Check Results on sheet SO 10, 11 / 25)

5. **Earthquake Load (E):**

Site Class:	**D (Default)**
Seismic Design category:	**D**
Spectral response acceleration at short periods:	S_S = **1.277** g
Site Coeffecient:	F_a = **1.200**
Adjusted spectral response acceleration:	$S_{MS} = F_a S_s$
→ S_{MS} = 1.200 ×1.277 = **1.532** % g	
Design spectral response acceleration:	S_{DS} = ⅔ S_{MS}
→ S_{DS} = (2 / 3) × 1.532 = **1.022** % g	
Lateral Force resisting system :	
"steel ordinary concentrically braced frames"	
Response modification factor:	R = **3.25**
(ASCE Table 12.2-1)	

Over strength Factor (Applied in load combinations): Ω = 2
(ASCE 7 Table 12.2-1)

Occupancy importance factor:	I = **1.00**
Weight of structure:	W = **2100.00** lbs
20% of Roof Live Load (20 psf):	0.20 L_r = **0.00** lbs
Effective Seismic weight of structure:	$W_s = D + 0.20\ L_r$

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PROJECT: MILAM AUTO		PROJECT NO.: 233-21-3409	SHEET NO.: 4/7
CLIENT: AMERICAN CARPORTS	LOCATION: PUYALLUP, WA 98371		
CALCULATED BY: A.F.	CHECKED BY: O.A.	APPROVED BY:	SCALE:
DATE: 11/6/2021	DATE: 11/6/2021	DATE:	

W_s = **2100.00** lbs

Seismic response coeffecient: $C_s = \frac{S_{DS}}{R/I}$

→ C_s = 1.022 / (3.25 / 1.00) = **0.314**

Seismic base shear: $V_S = C_s W_s$

→ V_S = 0.314 × 2100.00 = **660.11 lbs**

Min. no. of resisting frames in X dir: n_X **= 4**

Seismic Force per frame in X dir: $E_X = Vs / n_X$

→ E_X = 660.11 / 4 = **165.03 lbs**

Min. no. of resisting frames in Z dir: n_Z **= 4**

Seismic Force per frame in Z dir: $E_Z = Vs / n_Z$

→ E_Z = 660.11 / 4 = **165.03 lbs**

Minimum Base Shear due to Wind Loads:
(Refer Statics Check Results on sheet SO 10, 11 / 25)

V_W in X dir: **12.031** Kips

Vw = 12031.00 lbs > V_S =660.11 lbs

Thus, Wind load controls Base Shear in X direction.

V_W in Z dir: **12.135** Kips

Vw = 12135.00 lbs > V_S =660.11 lbs

Thus, Wind load controls Base Shear in Z direction.

IV. Load Combinations:

a. Strength

1. D + (L_r or S)
2. D + (0.6W or 0.7 E × Ω)
3. D + 0.75 (L_r or S) + 0.75 (0.6W)
4. 0.6 D + (0.6W or 0.7 E × Ω)

Over strength Factor: Ω = 2

(Based on ASCE 7 Table 12.2-1)

V. Material Properties:

1. **Steel:**

ASTM A572 Grade 50
F_y = **50** ksi
F_u = **65** ksi
E = **29,000** ksi
γ = **490** lbs/ft^3

VI. Section Properties:

Section	A	I_z	I_y	Gauge
TS252514GA	0.802	0.782	0.782	14
TS252514GAD14	1.605	3.596	1.564	14
TS252514GAQ14	1.632	7.586	7.586	14
TS222214GA	0.719	0.564	0.564	14
C351514GA	0.32	0.117	0.317	14
C401014GAD	1.188	1.929	4.098	14

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PROJECT: MILAM AUTO		PROJECT NO.: 233-21-3409	SHEET NO.: 5/7
CLIENT: AMERICAN CARPORTS	LOCATION: PUYALLUP, WA 98371		
CALCULATED BY: A.F.	CHECKED BY: O.A.	APPROVED BY:	SCALE:
DATE: 11/6/2021	DATE: 11/6/2021	DATE:	

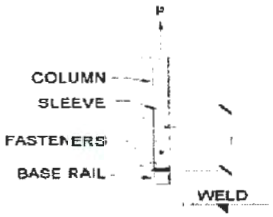
VII. Maximum Deflections :

Xmax	$\frac{l_y}{120}$	Ymax	$\frac{l_x}{180}$	Zmax	$\frac{l_y}{120}$
0.41	1.78 OK	0.73	2.00 OK	0.56	1.78 OK

VIII. Connection Calculations:

Note: See ESR2196 for Hilti Kwik-Pro (equivalent to ITW BuildexTEKS screws) specifications

1. **Frame Column – Base Connection:**



A. Forces:

Uplift force in column: P = **1.53** Kips
Max. Shear force **V= 1.25** Kips
Combined Uplift + Shear: $F = (P^2 + V^2)^{1/2}$ = **1.97** Kips

B. Dimensions & Properties:

a. Column:

Tube side: s_c =**2.5** in
Tube thickness: t_c =**0.083** in

b. Base rail:

Tube side: s_b = **2.5** in
Tube thickness: t_b = **0.083** in

c. Connector Sleeve:

Tube side: s_s = **2** in
Tube thickness: t_s = **0.083** in
Length: l_s = **6** in

d. Fasteners:

Fastener type: **HILTI Kwik Pro**
Nominal diameter: **#12**
Min. number of fasteners: n_f = **4**

e. Weld:

Weld size: t_w = **0.125** in
Weld tensile strength: F_{uw} = **60** ksi

C. Component checks:

a. Weld:

Total length of weld:
→ $l_w = 2 \times 2.5 =$ **5** in
Nominal shear strength: $P_{nw} = \mathbf{t}\, l_w\, F_{uw}$ (AISI E2.4-3)
→ $P_{nw} = 0.125 \times 5 \times 60 =$ **37.5** Kips
Allowable shear strength: $P_{aw} = P_{nw} / \Omega$
→ $P_{aw} = 37.5 / 2.35 =$ **15.96** Kips > **P = 1.53** Kips **OK**
→ $P_{aw} = 37.5 / 2.35 =$ **15.96** Kips > **V= 1.25** Kips **OK**
→ $P_{aw} = 37.5 / 2.35 =$ **15.96** Kips > **F= 1.97** Kips **OK**

b. Fasteners:

Allowable shear strength: V_{af} = **0.76** Kips (ESR-2196)
Total allowable shear strength: $V_{aft} = n_f\, V_{af}$
→ $V_{aft} =$ **4** × 0.76 = **3.04** Kips > **P** = **1.97** Kips **OK**

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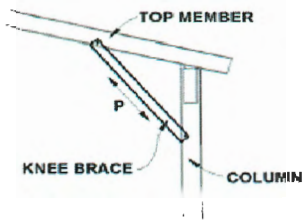
PROJECT: MILAM AUTO		PROJECT NO.: 233-21-3409	SHEET NO.: 6/7
CLIENT: AMERICAN CARPORTS	LOCATION: PUYALLUP, WA 98371		
CALCULATED BY: A.F.	CHECKED BY: O.A.	APPROVED BY:	SCALE:
DATE: 11/6/2021	DATE: 11/6/2021	DATE:	

2. Hat-Channel - Knee Brace Connection:



A. Forces:

Max. force in double knee brace: **2P = 1.102** Kips
Max. force in single knee brace: **P = 0.551** Kips

B. Dimensions & Properties:

a. Knee brace:

Channel flanges: s_c = **4.0** in
Channel wall thickness: t_c = **0.083** in

b. Top member:

Tube side: s_b = **2.5** in
Tube thickness: t_b = **0.083** in

c. Fasteners:

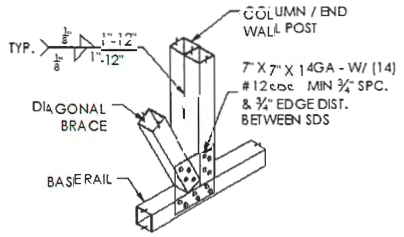
Fastener type: **HILTI Kwik Pro**
Nominal diameter: **#12**
Min. number of fasteners on end: n_f = **3**

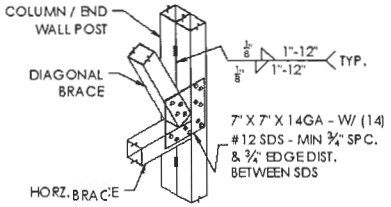
C. Component checks:

a. Fasteners in shear:

Allowable shear strength: V_{af} = **0.76** Kips (ESR-2196)
Total allowable shear strength: $V_{aft} = n_f V_{af}$
→ V_{aft} = 3 × 0.76 = **2.28** Kips > **0.551** Kips **OK**

3. Diagonal Bracing Component Checks:





A. Design Forces:

Max. Axial force in diagonal brace: P = **1.05** Kips

B. Dimensions & Properties:

a. Brace member:

Tube side: s_b = **2.25** in
Tube thickness: t_b = **0.083** in

b. Plate:

Clip thickness: **14GA**
Min. Plate dimension: $1p_s$ = 7 in

c. Fasteners:

Fastener type: **HILTI Kwik Pro**
Nominal diameter: **#12**
Min. number of fasteners at connection: n_{ft} = **4**

C. Component checks:

a. Fasteners :

Allowable shear strength: V_{af} = **0.76** Kips (ESR-2196)
Total allowable shear strength: $V_{aft} = n_f V_{af}$
→ V_{aft} = 4 × 0.76 = **3.04** Kips > **1.05** Kips **OK**

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PROJECT: MILAM AUTO		PROJECT NO.: 233-21-3409	SHEET NO.: 7/7
CLIENT: AMERICAN CARPORTS	LOCATION: PUYALLUP, WA 98371		
CALCULATED BY: A.F.	CHECKED BY: O.A.	APPROVED BY:	SCALE:
DATE: 11/6/2021	DATE: 11/6/2021	DATE:	

IX. Foundation Calculations:

1. Anchor Reactions:

Max. Uplift reaction: F_{up} = **1.53** Kips
Total uplift @ side wall: $F_{up,1}$ = **5.881** Kips
Total uplift @ end wall: $F_{up,2}$ = **3.072** Kips
Max downwards reaction: F_{dn} = **3.36** Kips
Max. lateral reaction: F_{lt} = **1.25** Kips
Total lateral @ Side -wall: $F_{lt,1}$ = **4.229** Kips
Total lateral @ End -wall: $F_{lt,2}$ = **3.243** Kips

2. Home Pride HP 9 (Barbed Anchor):

Note: See appendices for specs.
Anchor Model: ***HP 9***
Anchor dimensions: **(4) 2" × 3/4" × 1/8"** tabs
3/4 in diameter
22 in long shaft

Anchor testing load (*See Report No: LO28906*): **4725 lbf**
Allowable uplift capacity: Q_u = S.F. × n × **4.725** Kips

Total no. of Anchors at side wall: n = **5**
Allowable uplift check:
→Q_u = **5** × 2/3 × **4.725** = **15.75 Kips** > $F_{up,1}$ = **5.881** Kips **OK**

Total no. of Anchors at end wall: n = **5**
Allowable uplift check:
Q_u = **5** × 2/3 × **4.725** = **15.75 Kips** > $F_{up,2}$ = **3.072** Kips **OK**

3. Soil Bearing Check

Dead Load total (DL) *Statics Check sheet SO 10, 11 / 25*: **2.1** Kips
Live Load total (LL) *Statics Check sheet SO 10, 11 / 25*: **21.0** Kips
Total Load applied at base to soil (DL + LL): **23.1** Kips

Length of base rail each side: **35 ft**
Total base rail under bearing: 2 × 35 ft = **70 ft**

Effective base rail width: 3 × 2.5 in = **7.5 in**
Effective base rail surface area: 70 ft × 7.5 in = **43.75 sq.ft**
Pressure applied to soil at base rail: **23.1** Kips / **43.75** sq.ft = **528.00 psf**
Allowed Soil bearing capacity: **1500 psf**
Soil Bearing Check: **1500 psf** > **528.00 psf** **OK**

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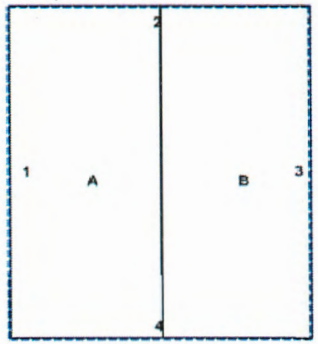
PROJECT:		PROJECT NO.:	SHEET NO.:
CLIENT:	LOCATION:		
CALCULATED BY:	CHECKED BY:	APPROVED BY:	SCALE:
DATE:	DATE:	DATE:	

APPENDICES

Project Number:	233-21-3409
Customer Name:	AMERICAN CARPORTS,INC
Address:	608 RIVER RD, PUYALLUP, WA, 98371
Prepared By:	AF
Project Comments:	30 ' X 35 ' X 14 '



Signature / Stamp

Site Information

Wind Dir.	Exposure
1	C
2	C
3	C
4	C

Basic Wind Speed:	110 mph
Topography:	Flat

Optional Factors

This project uses load combinations from ASCE 7.

Structure Information

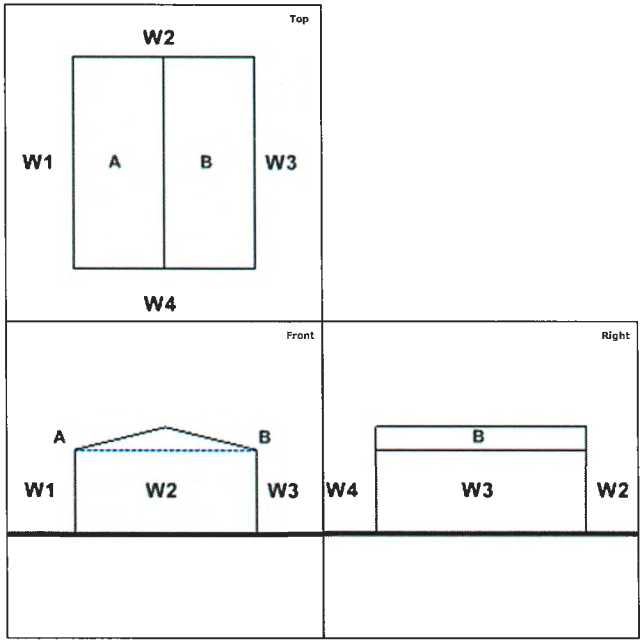
Structure Type: Building
Structure Category: I
Enclosure Classification: Enclosed

Main Section

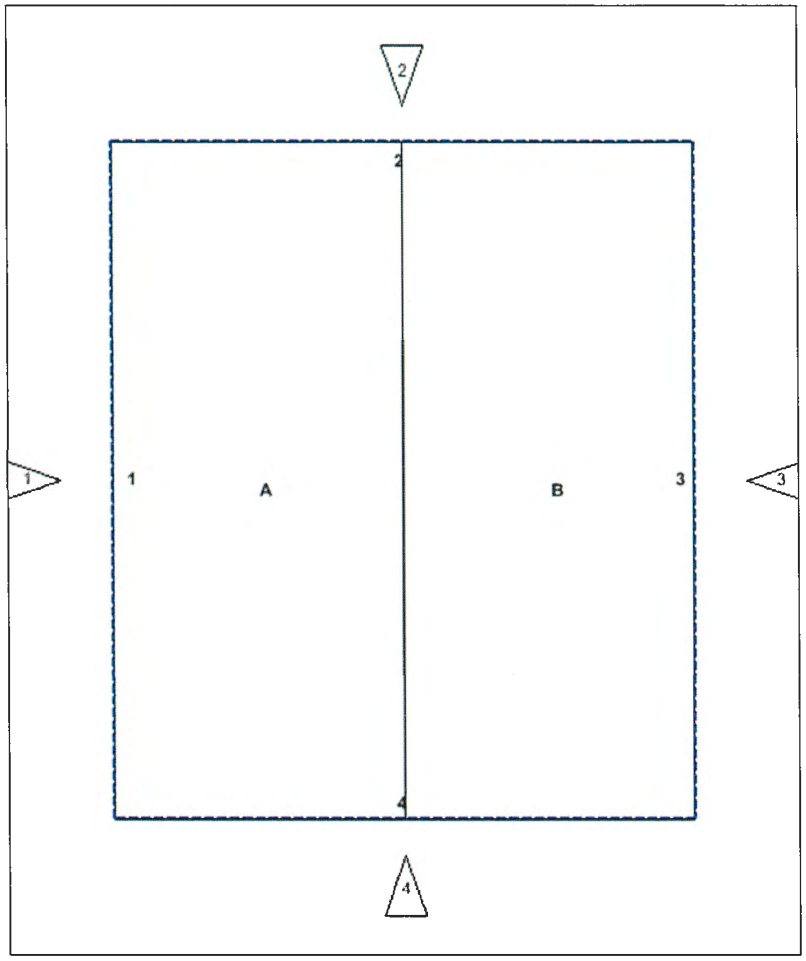
Wall	Length (ft)	Overhang (ft)
1	35.0	0.00
2	30.0	0.00
3	35.0	0.00
4	30.0	0.00

Eave Height: 14.0 ft
Parapet Height: 0.00 ft
Parapet Enclosure: Solid
Roof Shape: Gabled

Roof	Slope (X:12)
A & B	3.00



Composite Drawing



MILAM AUTO

ASCE 7-16 Wind Load Report - Wind Direction 1

November 06, 2021

This data was calculated using the building of all heights method.

#	Surface	z (ft)	q (psf)	G	Cp	GCpi	Ext Pres (psf)	Net w/ +GCpi (psf)	Net w/ -GCpi (psf)
1	Windward Wall	14.0	22.3	0.886	0.800	0.180	15.8	11.8	19.9
2	Side Wall	15.9	22.6	0.886	-0.700	0.180	-14.0	-18.1	-9.96
3	Leeward Wall	15.9	22.6	0.886	-0.500	0.180	-10.0	-14.1	-5.95
4	Side Wall	15.9	22.6	0.886	-0.700	0.180	-14.0	-18.1	-9.96
A	Windward Roof	15.9	22.6	0.886	-0.180	0.180	-3.61	-7.68	0.462
		15.9	22.6		-0.755		-15.1	-19.2	-11.1
B	Leeward Roof	15.9	22.6	0.886	-0.507	0.180	-10.2	-14.2	-6.09

This is load case 1 in ASCE 7-16 Figure 27.3-8. See Figure 27.3-8 for other cases.

MILAM AUTO

ASCE 7-16 Wind Load Report - Wind Direction 2

November 06, 2021

This data was calculated using the building of all heights method.

#	Surface	z (ft)	q (psf)	G	Cp	GCpi	Ext Pres (psf)	Net w/ +GCpi (psf)	Net w/ -GCpi (psf)
1	Side Wall	15.9	22.6	0.889	-0.700	0.180	-14.1	-18.1	-9.99
2	Windward Wall	15.0	22.3	0.889	0.800	0.180	15.9	11.8	19.9
		15.9	22.6				16.1	12.0	20.1
		17.7	23.1				16.5	12.4	20.5
3	Side Wall	15.9	22.6	0.889	-0.700	0.180	-14.1	-18.1	-9.99
4	Leeward Wall	15.9	22.6	0.889	-0.467	0.180	-9.37	-13.4	-5.31
A&B Roof		0.00 - 7.94*	22.6	0.889	-0.900	0.180	-18.1	-22.1	-14.0
		7.94 - 15.9*	22.6				-18.1	-22.1	-14.0
		15.9 - 31.7*	22.6		-0.500		-10.0	-14.1	-5.97
		31.7 - 35.0*	22.6		-0.300		-6.03	-10.1	-1.96
		0.00 - 35.0*	22.6		-0.180		-3.62	-7.68	0.453

This is load case 1 in ASCE 7-16 Figure 27.3-8. See Figure 27.3-8 for other cases.
* Distance from windward edge.

This data was calculated using the building of all heights method.

#	Surface	z (ft)	q (psf)	G	Cp	GCpi	Ext Pres (psf)	Net w/ +GCpi (psf)	Net w/ -GCpi (psf)
1	Leeward Wall	15.9	22.6	0.886	-0.500	0.180	-10.0	-14.1	-5.95
2	Side Wall	15.9	22.6	0.886	-0.700	0.180	-14.0	-18.1	-9.96
3	Windward Wall	14.0	22.3	0.886	0.800	0.180	15.8	11.8	19.9
4	Side Wall	15.9	22.6	0.886	-0.700	0.180	-14.0	-18.1	-9.96
B	Windward Roof	15.9	22.6	0.886	-0.180	0.180	-3.61	-7.68	0.462
		15.9	22.6		-0.755		-15.1	-19.2	-11.1
A	Leeward Roof	15.9	22.6	0.886	-0.507	0.180	-10.2	-14.2	-6.09

This is load case 1 in ASCE 7-16 Figure 27.3-8. See Figure 27.3-8 for other cases.

This data was calculated using the building of all heights method.

#	Surface	z (ft)	q (psf)	G	Cp	GCpi	Ext Pres (psf)	Net w/ +GCpi (psf)	Net w/ -GCpi (psf)
1	Side Wall	15.9	22.6	0.889	-0.700	0.180	-14.1	-18.1	-9.99
2	Leeward Wall	15.9	22.6	0.889	-0.467	0.180	-9.37	-13.4	-5.31
3	Side Wall	15.9	22.6	0.889	-0.700	0.180	-14.1	-18.1	-9.99
4	Windward Wall	15.0	22.3	0.889	0.800	0.180	15.9	11.8	19.9
		15.9	22.6				16.1	12.0	20.1
		17.7	23.1				16.5	12.4	20.5
A&B Roof		0.00 - 7.94*	22.6	0.889	-0.900	0.180	-18.1	-22.1	-14.0
		7.94 - 15.9*	22.6				-18.1	-22.1	-14.0
		15.9 - 31.7*	22.6		-0.500		-10.0	-14.1	-5.97
		31.7 - 35.0*	22.6		-0.300		-6.03	-10.1	-1.96
		0.00 - 35.0*	22.6		-0.180		-3.62	-7.68	0.453

This is load case 1 in ASCE 7-16 Figure 27.3-8. See Figure 27.3-8 for other cases.
* Distance from windward edge.

```
AAD SPACE
ART JOB INFORMATION
GINEER DATE 06-Nov-21
B NAME MILAM AUTO
B CLIENT AMERICAN CARPORTS,INC
B NO 233-21-3409
GINEER NAME AF
ECKER NAME OA
ECKER DATE 06-Nov-21
D JOB INFORMATION
PUT WIDTH 79
IT INCHES KIP
T FLOOR LOAD TOLERANCE 0.01
INT COORDINATES
0 0 -420; 2 0 0 -300; 3 0 0 -180; 4 0 0 -60; 5 0 0 0; 6 102.9 0 -420;
180 0 0; 8 205.7 0 -420; 9 308.5 0 -420; 10 360 0 -420; 11 360 0 -300;
 360 0 -180; 13 360 0 -60; 14 360 0 0; 15 0 0 -360; 16 0 0 -240; 17 0 0 -120;
MBER INCIDENCES
100 1; 2 101 100; 3 102 101; 4 103 102; 5 15 103; 6 105 15; 7 106 105;
107 106; 9 108 107; 10 2 108; 11 109 2; 12 110 109; 13 111 110; 14 112 111;
 16 112; 16 114 16; 17 115 114; 18 116 115; 19 117 116; 20 3 117; 21 118 3;
EMENT INCIDENCES SHELL
50 1 100 132 131; 2651 100 101 133 132; 2652 101 102 134 133;
53 102 103 135 134; 2654 103 15 136 135; 2655 15 105 137 136;
56 105 106 138 137; 2657 106 107 139 138; 2658 107 108 140 139;
ART USER TABLE
BLE 1
IT INCHES KIP
BE
252512GA
04248 2.5 2.5 0.109 0.995349 0.995349 1.48993 0.545 0.545
252514GA
802444 2.5 2.5 0.083 0.782219 0.782219 1.17195 0.415 0.415
222212GA
933476 2.25 2.25 0.109 0.715006 0.715006 1.06974 0.4905 0.4905
222214GA
719444 2.25 2.25 0.083 0.563898 0.563898 0.844607 0.3735 0.3735
252512GAD12
08496 5 2.5 0.109 5.24844 1.9907 2 1.09 1.09
252514GAD14
60489 5 2.5 0.083 3.59562 1.56447 2 0.83 0.83
222212GAD12
86695 4.5 2.25 0.109 3.79287 1.43001 1.06974 0.933476 0.933476
222214GAD14
43889 4.5 2.25 0.083 1.47444 1.1278 1 0.719444 0.719444
222212GAD14
65292 4.25 2.25 0.083 3.3358 1.279 1.06974 0.82646 0.82646
252514GAI14
366 2.5 2.5 0.166 1.501 1.501 2.33454 0.683 0.683
252514GAI12
715 2.5 2.5 0.192 1.715 1.715 2.33454 0.857 0.857
252512GAI14
606 2.5 2.5 0.192 1.714 1.714 2.33454 0.803 0.803
252512GAI12
97596 2.5 2.5 0.218 1.71036 1.71036 2.55967 1.0355 1.0355
303014GA
968445 3 3 0.083 1.37451 1.37451 2.0601 0.498 0.498
202014GA
636444 2 2 0.083 0.390541 0.390541 0.584715 0.332 0.332
222212GAI12
758 2.25 2.25 0.218 1.28 1.28 1.82906 0.981 0.981
512IN2514
73438 2.5 2.5 0.1875 1.55597 1.55597 2.31871 0.9375 0.9375
222212GAD12I
21378 4.5 2.25 0.166 5.90277 2.32002 5.09474 1.494 0.83
252514GI12GAD
73254 5 2.5 0.192 8.69836 2.86597 6.64501 1.92 0.96
252514GAT1414
40733 7.5 2.5 0.083 12.3772 2.34666 5.42485 1.245 0.276667
252514GAT
40733 7.5 2.5 0.083 12.3772 2.34666 3.51585 1.245 1.245
MMY
019796 0.2 0.1 0.049 6.64898e-005 1.66666e-005 2.87719e-005 0.0196 0.0098
252514GAQ14
63244 5 5 0.083 7.586 7.586 9.86685 0.83 0.83
222212GAQ12
63244 4.5 4.5 0.109 7.586 7.586 15.2 1.962 1.962
BLE 2
ANNEL
252514GA
608722 2.5 0.083 2.5 0.083 0.694277 0.409143 0.00139783 0.865402 -
```



```
0.2075 0.276667
CS252518GA
0.381675 2.5 0.0516 2.5 0.0516 0.445919 0.259691 0.000338744 0.85332 -
0.129 0.172
PROFILE_POINTS
 -1 0.0435 -1 -0.0435 1 -0.0435 1 0.0435
STRESS_LOCATIONS
 -1 0.0435 -1 -0.0435 1 -0.0435 1 0.0435
CS5025GA14
12.5 5 0.083 2.5 0.083 19.7476 6.51042 26.0417 1.25 0.415 8.33333
PROFILE_POINTS
 -1 0.0435 -1 -0.0435 1 -0.0435 1 0.0435
STRESS_LOCATIONS
 -1 0.0435 -1 -0.0435 1 -0.0435 1 0.0435
TABLE 3
GENERAL
CH501014GA
0.4353 1.0747 0.0747 5 0.0747 0.0706801 0.92233 0.00765685 0.113423 -
0.368931 0.108825 0.326475 0.559575 0.160151 0.0174336 0
PROFILE_POINTS
 -2.5 -0.5484 -2.5 -0.6231 -1.9845 -0.6231 -0.9845 0.3769 0.9846 0.3769 1.9846 -0.6231 2.5 -0.6231 2.5 -0.5484 2
0155 -0.5484 1.0155 0.4516 -1.0154 0.4516 -2.0154 -0.5484
STRESS_LOCATIONS
 -2.5 -0.6231 2.5 -0.6231 1.0155 0.4516 -1.0154 0.4516
CH501014GAD
0.87073 1.6494 0.083 5 0.083 2.66206 1.84467 1 1.1451 0.737868 0.43515 -
0.43515 0 0 0 0
PROFILE_POINTS
 -2.50001 2.32465 -2.50001 2.24995 -2.01541 2.24995 -1.01541 1.24996 -7e-006 1.24996 -7e-006 -1.25004 -1.01541 -
.25004 -2.01541 -2.25005 -2.50001 -2.25005 -2.50001 -2.32475 -1.98451 -2.32475 -0.984507 -1.32475 0.984593 -1.3
75 1.98459 -2.32475 2.49999 -2.32475 2.49999 -2.25005 2.01549 -2.25005 1.01549 -1.25004 -7e-006 -1.25004 9.3e-0
 1.24996 1.01549 1.24996 2.01549 2.24995 2.49999 2.24995 2.49999 2.32465 1.98459 2.32465 0.984593 1.32465 -0.98
07 1.32465 -1.98451 2.32465
STRESS_LOCATIONS
 -2.50001 2.32465 -2.50001 -2.32475 2.49999 -2.32475 2.49999 2.32465
C401014GA
0.593849 4 0.087 1 0.087 1.40526 0.122165 0.00141953 0.702629 0.106602 -
0.138396 0.301615 0.829011 0.22851 0.319817 0
C351514GA
0.319991 1.5 0.087 3.5 0.087 0.116858 0.316509 0.000253754 0.146933 -
0.18086 0.116754 0.0799434 0.294492 0.178795 0.053675 1.5
PROFILE_POINTS
 -1.75 -0.795309 -0.950005 -0.795309 -0.950005 0.654692 0.949996 0.654692 0.949996 -0.795309 1.75 -0.795309 1.75
-0.745309 0.999996 -0.745309 0.999996 0.704691 -1 0.704691 -1 -0.745309 -1.75 -0.745309 -1.75 -0.795309
C401014GAD
1.1876 1.834 0.083 4 0.083 1.92899 4.09819 2 2.10359 2.04909 1.1876 -
1.1876 4.90669 3.36169 4 1.834
PROFILE_POINTS
 0 -5.5374 0 -5.6204 0.7183 -5.6204 0.9683 -6.5374 3.0317 -6.5374 3.2817 -5.6204 4 -5.6204 4 -5.4473 3.2817 -5.4
73 3.0317 -4.5303 0.9683 -4.5303 0.7183 -5.4473 0 -5.4473 0 -5.5303 0.7817 -5.5303 1.0317 -4.6133 2.9683 -4.613
3.2183 -5.5303 3.2183 -5.5374 2.9683 -6.4544 1.0317 -6.4544 0.7817 -5.5374
END
START GROUP DEFINITION
FLOOR
_LROOF 65 66 69 70 73 74 76 77 79 TO 81 83 84 86 87 92 94 95 97 TO 104 106 -
107 TO 114 116 TO 123 130 TO 137 145 TO 152 154 156 TO 163 165 TO 172 175 -
176 TO 182 654 TO 665 669 TO 674 676 TO 681 683 TO 688 705 TO 710 712 TO 717 -
719 TO 724 1850 TO 2024
_LWALL 1 TO 63 570 TO 653 1850 TO 1884
_RWALL 309 TO 371 888 TO 971 2130 TO 2164
_FWALL 37 39 41 43 45 47 49 51 53 55 57 59 61 63 66 67 70 71 74 76 80 84 86 -
88 TO 92 94 103 113 123 125 TO 129 137 152 162 172 174 182 190 198 207 216 -
227 242 TO 247 256 265 275 278 280 TO 284 286 289 292 296 298 301 302 305 -
307 345 347 349 351 353 355 357 359 361 363 365 367 369 371 666 TO 668 675 -
682 704 711 718 725 726 743 TO 746 764 TO 777 795 TO 798 815 816 823 830 -
837 859 866 873 TO 875 1170 TO 1217 2350 2351
_BWALL 36 38 40 42 44 46 48 50 52 54 56 58 60 62 64 65 68 69 72 73 75 -
77 TO 79 81 TO 83 85 87 93 95 96 104 TO 106 114 TO 116 124 130 138 145 153 -
154 TO 155 163 TO 165 173 175 183 191 199 200 208 209 217 TO 220 234 235 248 -
249 257 258 266 TO 268 276 277 279 285 287 288 290 291 293 TO 295 297 299 -
300 303 304 306 308 344 346 348 350 352 354 356 358 360 362 364 366 368 370 -
689 TO 703 727 TO 742 747 TO 763 778 TO 794 799 TO 814 838 TO 852
_RROOF 191 TO 198 200 TO 207 209 TO 216 218 220 TO 227 235 TO 242 249 TO 256 -
258 TO 266 268 TO 275 277 278 280 285 286 288 289 291 TO 293 295 296 298 -
299 302 303 306 307 817 TO 822 824 TO 829 831 TO 836 853 TO 858 860 TO 865 -
867 TO 872 876 TO 887 1990 TO 2164
JOINT
END GROUP DEFINITION
ELEMENT PROPERTY
2650 TO 5545 THICKNESS 0.0135
DEFINE MATERIAL START
```

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TO 371 UPTABLE 1 TS252514GA
0 TO 971 UPTABLE 1 TS252514GAD14
70 TO 1217 UPTABLE 1 TS252514GAQ14
00 TO 1435 UPTABLE 1 TS222214GA
50 TO 1661 UPTABLE 3 C401014GAD
50 TO 2164 UPTABLE 3 C351514GA
50 2351 UPTABLE 1 DUMMY
NSTANTS
TA 270 MEMB 1650 TO 1661
TA 346 MEMB 1850 TO 1989
TA 14 MEMB 2025 TO 2164
TA 90 MEMB 666 TO 668 675 682 689 TO 704 711 718 725 TO 816 823 830 837 -
8 TO 852 859 866 873 TO 875
TERIAL STEEL ALL
PPORTS
TO 14 PINNED
 TO 23 FIXED BUT FY MX MY MZ
MBER RELEASE
24 START MX MY MZ
IT FEET POUND
AD 1 LOADTYPE Dead  TITLE DEAD
OOR LOAD
ROOF FLOAD -1.94 GY INCLINED
ROOF FLOAD -1.94 GY INCLINED
AD 2 LOADTYPE Roof Live  TITLE ROOFLIVE
OOR LOAD
ROOF FLOAD -19.4 GY INCLINED
ROOF FLOAD -19.4 GY INCLINED
AD 3 LOADTYPE Wind  TITLE WINDXP
OOR LOAD
WALL FLOAD 11.8 GX
WALL FLOAD 14.1 GX
WALL FLOAD 18.1 GZ
WALL FLOAD -18.1 GZ
ROOF FLOAD 18.63 GY INCLINED
ROOF FLOAD -4.66 GX INCLINED
ROOF FLOAD 13.78 GY INCLINED
ROOF FLOAD 3.44 GX INCLINED
AD 4 LOADTYPE Wind  TITLE WINDXN
OOR LOAD
WALL FLOAD 19.9 GX
WALL FLOAD 5.95 GX
WALL FLOAD 9.96 GZ
WALL FLOAD -9.96 GZ
ROOF FLOAD 10.77 GY INCLINED
ROOF FLOAD -2.69 GX INCLINED
ROOF FLOAD 5.91 GY INCLINED
ROOF FLOAD 1.48 GX INCLINED
AD 5 LOADTYPE Wind  TITLE WINDZP
OOR LOAD
WALL FLOAD 12.07 GZ
WALL FLOAD 13.4 GZ
WALL FLOAD -18.1 GX
WALL FLOAD 18.1 GX
ROOF FLOAD 16.56 GY INCLINED
ROOF FLOAD 16.56 GY INCLINED
ROOF FLOAD -4.14 GX INCLINED
ROOF FLOAD 4.14 GX INCLINED
AD 6 LOADTYPE Wind  TITLE WINDZN
OOR LOAD
WALL FLOAD 20.17 GZ
WALL FLOAD 5.31 GZ
WALL FLOAD -9.99 GX
WALL FLOAD 9.99 GX
ROOF FLOAD 8.69 GY INCLINED
ROOF FLOAD 8.69 GY INCLINED
ROOF FLOAD -2.17 GX INCLINED
ROOF FLOAD 2.17 GX INCLINED
AD 7 LOADTYPE Seismic  TITLE EXP
INT LOAD
9 634 766 890 2282 2406 3022 3057 FX 82.51
AD 8 LOADTYPE Seismic  TITLE EXN
INT LOAD
9 634 766 890 2282 2406 3022 3057 FX -82.51
AD 9 LOADTYPE Seismic  TITLE EZP
INT LOAD
9 604 624 629 3022 3027 3052 3057 FZ 82.51
AD 10 LOADTYPE Seismic  TITLE EZN
INT LOAD
9 604 624 629 3022 3027 3052 3057 FZ -82.51
TRESS COMBINATIONS
```



```
LOAD COMB 11 D+LR
1 1.0 2 1.0
LOAD COMB 12 D+0.6WXP
1 1.0 3 0.6
LOAD COMB 13 D+0.6WXN
1 1.0 4 0.6
LOAD COMB 14 D+0.6WZP
1 1.0 5 0.6
LOAD COMB 15 D+0.6WZN
1 1.0 6 0.6
LOAD COMB 16 D+0.75LR+0.45WXP
1 1.0 2 0.75 3 0.45
LOAD COMB 17 D+0.75LR+0.45WXN
1 1.0 2 0.75 4 0.45
LOAD COMB 18 D+0.75LR+0.45WZP
1 1.0 2 0.75 5 0.45
LOAD COMB 19 D+0.75LR+0.45WZN
1 1.0 2 0.75 6 0.45
LOAD COMB 20 0.6D+0.6WXP
1 0.6 3 0.6
LOAD COMB 21 0.6D+0.6WXN
1 0.6 4 0.6
LOAD COMB 22 0.6D+0.6WZP
1 0.6 5 0.6
LOAD COMB 23 0.6D+0.6WZN
1 0.6 6 0.6
LOAD COMB 24 D+0.7EXP *(OS FACTOR=2)
1 1.0 7 1.4
LOAD COMB 25 D+0.7EXN *(OS FACTOR=2)
1 1.0 8 1.4
LOAD COMB 26 D+0.7EZP *(OS FACTOR=2)
1 1.0 9 1.4
LOAD COMB 27 D+0.7EZN *(OS FACTOR=2)
1 1.0 10 1.4
LOAD COMB 28 D+0.75LR+0.53EXP
1 1.0 2 0.75 7 0.53
LOAD COMB 29 D+0.75LR+0.53EXN
1 1.0 2 0.75 8 0.53
LOAD COMB 30 D+0.75LR+0.53EZP
1 1.0 2 0.75 9 0.53
LOAD COMB 31 D+0.75LR+0.53EZN
1 1.0 2 0.75 10 0.53
LOAD COMB 32 0.6D+0.7EXP *(OS FACTOR=2)
1 0.6 7 1.4
LOAD COMB 33 0.6D+0.7EXN *(OS FACTOR=2)
1 0.6 8 1.4
LOAD COMB 34 0.6D+0.7EZP *(OS FACTOR=2)
1 0.6 9 1.4
LOAD COMB 35 0.6D+0.7EZN *(OS FACTOR=2)
1 0.6 10 1.4
PERFORM ANALYSIS
DEFINE ENVELOPE
11 TO 35 ENVELOPE 1 TYPE STRESS
END DEFINE ENVELOPE
LOAD LIST 11 TO 35
UNIT INCHES KIP
PARAMETER 1
CODE AISC UNIFIED 2010
METHOD ASD
FU 65 ALL
FYLD 50 ALL
CHECK CODE ALL
FINISH
```

Job Information

	Engineer	Checked	Approved
Name:	AF	OA	
Date:	06-Nov-21	06-Nov-21	

Project ID	
Project Name	

Structure Type	SPACE FRAME

Number of Nodes	2972	Highest Node	3057
Number of Elements	1186	Highest Beam	2351
Number of Plates	2896	Highest Plate	5545

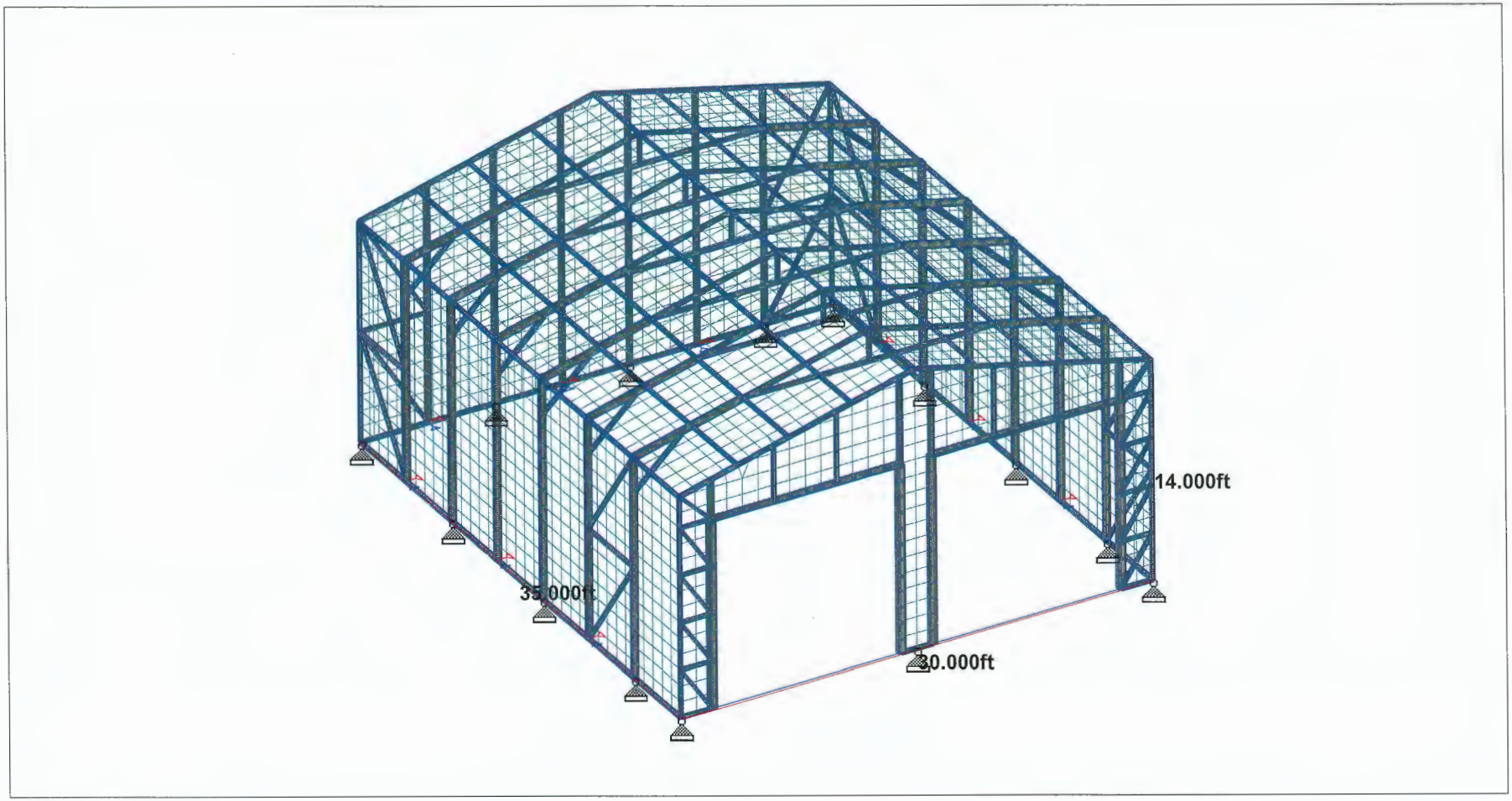
Number of Basic Load Cases	-2
Number of Combination Load Cases	25

Included in this printout are data for:

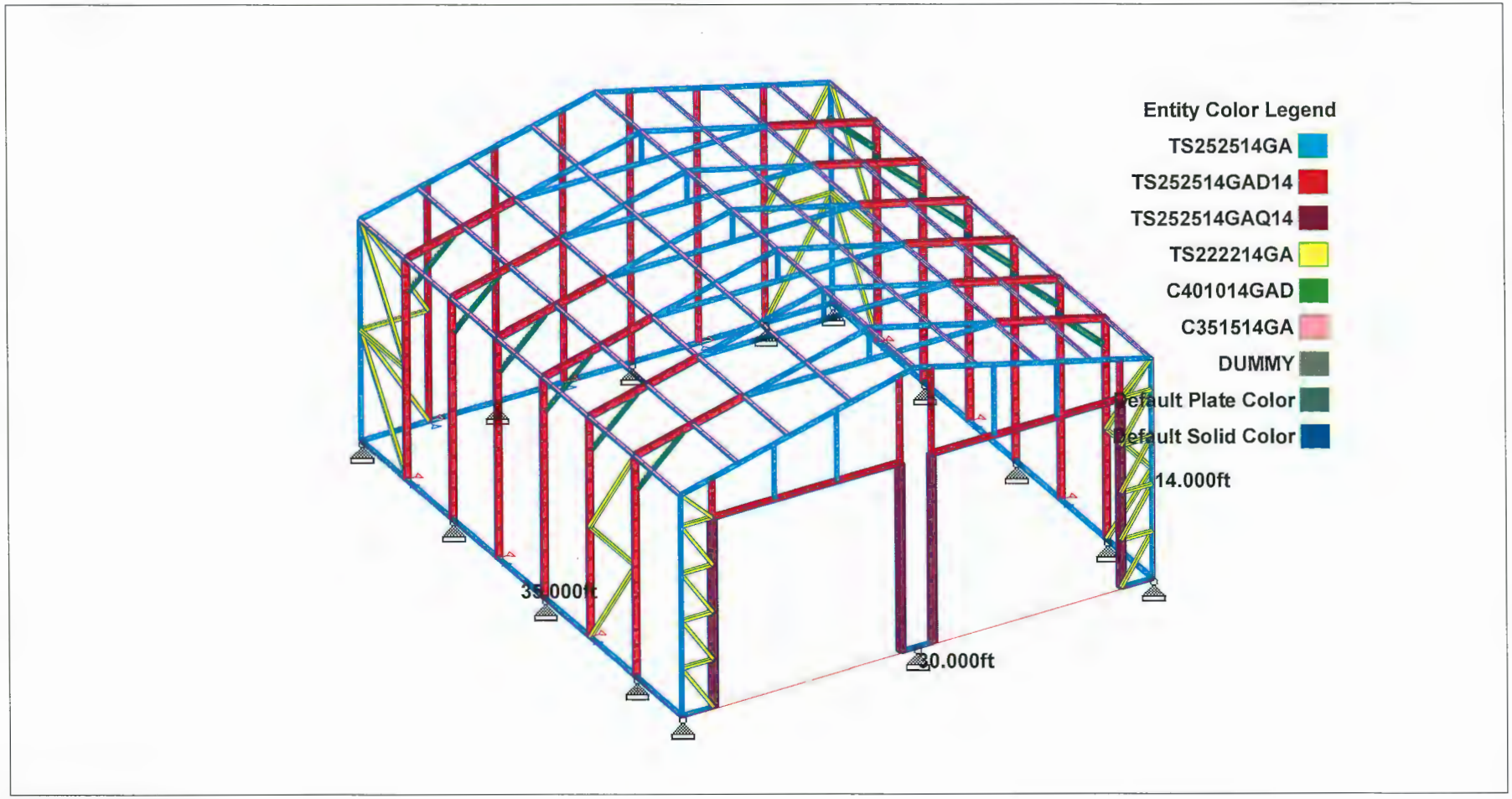
View	MAIN FRAME

Included in this printout are results for load cases:

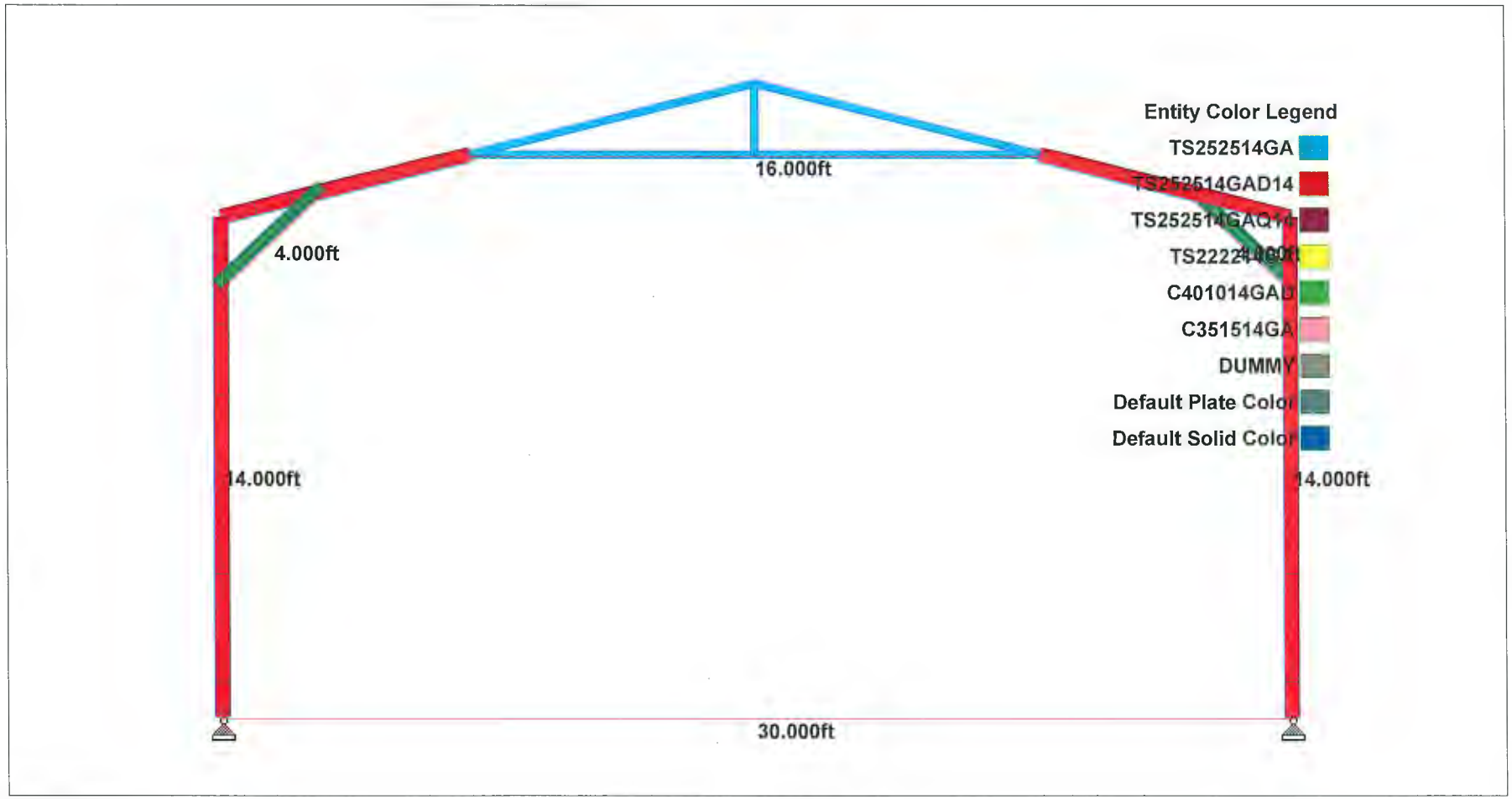
Type	L/C	Name
Combination	11	D+LR
Combination	12	D+0.6WXP
Combination	13	D+0.6WXN
Combination	14	D+0.6WZP
Combination	15	D+0.6WZN
Combination	16	D+0.75LR+0.45WXP
Combination	17	D+0.75LR+0.45WXN
Combination	18	D+0.75LR+0.45WZP
Combination	19	D+0.75LR+0.45WZN



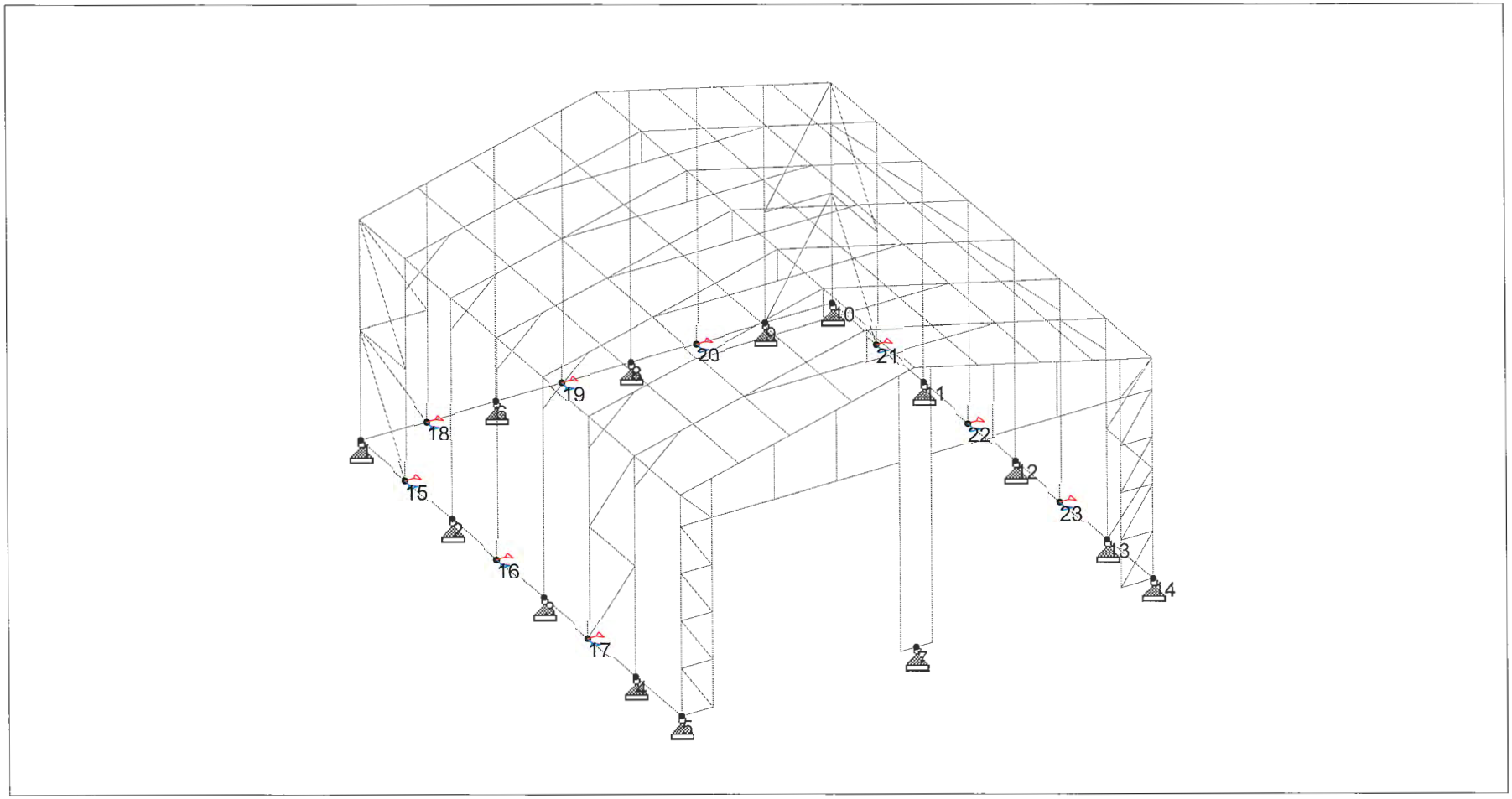
WHOLE STRUCTURE



MAIN FRAME OVERVIEW


Entity Color Legend
TS252514GA
TS252514GAD14
TS252514GAC14
TS222414GD1
C401014GAD
C351514GA
DUMMY
Default Plate Color
Default Solid Color
16.000ft
4.000ft
14.000ft
14.000ft
30.000ft

MAIN FRAME



SUPPORTS WITH NUMBERS

Section Properties

Prop	Section	Area (in^2)	I_{yy} (in^4)	I_{zz} (in^4)	J (in^4)	Material
2	TS252514GA	0.802	0.782	0.782	1.172	STEEL
3	TS252514GAD14	1.605	1.564	3.596	2.000	STEEL
4	TS252514GAQ14	1.632	7.586	7.586	9.867	STEEL
5	TS222214GA	0.719	0.564	0.564	0.845	STEEL
6	C401014GAD	1.188	4.098	1.929	2.000	STEEL
7	C351514GA	0.320	0.317	0.117	0.000	STEEL
8	DUMMY	0.020	0.000	0.000	0.000	STEEL

Plate Thickness

Prop	Node A (in)	Node B (in)	Node C (in)	Node D (in)	Material
1	0.014	0.014	0.014	0.014	STEEL

Materials

Mat	Name	E (kip/in^2)	ν	Density (kip/in^3)	α (/°F)
1	STEEL	29E+3	0.300	0.000	6.5E-6
2	STAINLESSSTEEL	28E+3	0.300	0.000	10E-6
3	ALUMINUM	10E+3	0.330	0.000	13E-6
4	CONCRETE	3.15E+3	0.170	0.000	5E-6

Primary Load Cases

Number	Name	Type
1	DEAD	Dead
2	ROOFLIVE	Roof Live
3	WINDXP	Wind
4	WINDXN	Wind
5	WINDZP	Wind
6	WINDZN	Wind
7	EXP	Seismic
8	EXN	Seismic
9	EZP	Seismic
10	EZN	Seismic

Combination Load Cases

Comb.	Combination L/C Name	Primary	Primary L/C Name	Factor
11	D+LR	1	DEAD	1.00
		2	ROOFLIVE	1.00
12	D+0.6WXP	1	DEAD	1.00
		3	WINDXP	0.60
13	D+0.6WXN	1	DEAD	1.00
		4	WINDXN	0.60
14	D+0.6WZP	1	DEAD	1.00
		5	WINDZP	0.60
15	D+0.6WZN	1	DEAD	1.00
		6	WINDZN	0.60
16	D+0.75LR+0.45WXP	1	DEAD	1.00
		2	ROOFLIVE	0.75
		3	WINDXP	0.45
17	D+0.75LR+0.45WXN	1	DEAD	1.00
		2	ROOFLIVE	0.75
		4	WINDXN	0.45
18	D+0.75LR+0.45WZP	1	DEAD	1.00
		2	ROOFLIVE	0.75
		5	WINDZP	0.45
19	D+0.75LR+0.45WZN	1	DEAD	1.00
		2	ROOFLIVE	0.75
		6	WINDZN	0.45
20	0.6D+0.6WXP	1	DEAD	0.60
		3	WINDXP	0.60
21	0.6D+0.6WXN	1	DEAD	0.60
		4	WINDXN	0.60
22	0.6D+0.6WZP	1	DEAD	0.60
		5	WINDZP	0.60
23	0.6D+0.6WZN	1	DEAD	0.60
		6	WINDZN	0.60
24	D+0.7EXP *(OS FACTOR=2)	1	DEAD	1.00
		7	EXP	1.40
25	D+0.7EXN *(OS FACTOR=2)	1	DEAD	1.00
		8	EXN	1.40
26	D+0.7EZP *(OS FACTOR=2)	1	DEAD	1.00
		9	EZP	1.40
27	D+0.7EZN *(OS FACTOR=2)	1	DEAD	1.00
		10	EZN	1.40
28	D+0.75LR+0.53EXP	1	DEAD	1.00
		2	ROOFLIVE	0.75
		7	EXP	0.53
29	D+0.75LR+0.53EXN	1	DEAD	1.00
		2	ROOFLIVE	0.75
		8	EXN	0.53
30	D+0.75LR+0.53EZP	1	DEAD	1.00

Combination Load Cases Cont...

Comb.	Combination L/C Name	Primary	Primary L/C Name	Factor
		2	ROOFLIVE	0.75
		9	EZP	0.53
31	D+0.75LR+0.53EZN	1	DEAD	1.00
		2	ROOFLIVE	0.75
		10	EZN	0.53
32	0.6D+0.7EXP *(OS FACTOR=2)	1	DEAD	0.60
		7	EXP	1.40
33	0.6D+0.7EXN *(OS FACTOR=2)	1	DEAD	0.60
		8	EXN	1.40
34	0.6D+0.7EZP *(OS FACTOR=2)	1	DEAD	0.60
		9	EZP	1.40
35	0.6D+0.7EZN *(OS FACTOR=2)	1	DEAD	0.60
		10	EZN	1.40

Node Displacement Summary

	Node	L/C	X (in)	Y (in)	Z (in)	Resultant (in)	rX (rad)	rY (rad)	rZ (rad)
Max X	367	21:0.6D+0.6W	**0.406**	-0.001	0.002	0.406	0.000	0.000	-0.000
Min X	434	11:D+LR	**-0.379**	0.001	-0.003	0.379	-0.000	-0.000	-0.001
Max Y	1188	20:0.6D+0.6W	-0.041	**0.466**	0.001	0.467	-0.000	0.000	0.000
Min Y	1856	11:D+LR	-0.058	**-0.734**	-0.001	0.736	-0.002	0.000	-0.002
Max Z	1636	12:D+0.6WXP	0.031	0.001	**0.563**	0.564	0.000	-0.002	-0.000
Min Z	1748	12:D+0.6WXP	0.006	0.000	**-0.473**	0.474	-0.001	-0.001	-0.000
Max rX	1839	11:D+LR	-0.000	-0.094	0.019	0.096	**0.009**	-0.002	-0.000
Min rX	1894	12:D+0.6WXP	0.035	0.005	0.178	0.182	**-0.010**	0.002	0.000
Max rY	2391	20:0.6D+0.6W	0.000	0.010	0.249	0.249	-0.000	**0.012**	-0.000
Min rY	751	12:D+0.6WXP	0.000	-0.005	0.291	0.291	0.000	**-0.014**	-0.000
Max rZ	2306	11:D+LR	0.050	-0.287	0.002	0.291	-0.000	-0.000	**0.007**
Min rZ	16	21:0.6D+0.6W	0.000	-0.001	0.000	0.001	0.000	0.000	**-0.008**
Max Rst	1856	11:D+LR	-0.058	-0.734	-0.001	**0.736**	-0.002	0.000	-0.002

Beam Maximum Forces by Section Property

Section		Axial	Shear		Torsion	Bending	
		Max Fx (kip)	Max Fy (kip)	Max Fz (kip)	Max Mx (kip-in)	Max My (kip-in)	Max Mz (kip-in)
TS252514GA	Max +ve	3.236	0.597	0.764	4.625	10.757	8.828
	Max -ve	-4.445	-0.594	-0.772	-2.460	-11.030	-5.572
TS252514GAD14	Max +ve	1.715	0.487	0.390	3.216	3.209	18.695
	Max -ve	-2.760	-0.487	-0.397	-3.411	-3.131	-16.151
TS252514GAQ14	Max +ve	1.591	0.592	0.102	5.726	0.965	4.601
	Max -ve	-1.665	-0.602	-0.368	-7.922	-23.358	-4.384
TS222214GA	Max +ve	0.646	0.015	0.200	1.230	5.035	0.210
	Max -ve	-1.050	-0.018	-0.114	-0.985	-2.902	-0.330
C401014GAD	Max +ve	0.989	0.057	0.157	0.395	3.941	1.750
	Max -ve	-1.102	-0.053	-0.145	-0.374	-6.327	-1.759
C351514GA	Max +ve	3.355	0.234	0.129	0.000	0.948	2.590
	Max -ve	-1.738	-0.260	-0.122	-0.000	-1.281	-3.168

Reaction Summary

	Node	L/C	Horizontal FX (kip)	Vertical FY (kip)	Horizontal FZ (kip)	Moment MX (kip-in)	MY (kip-in)	MZ (kip-in)
Max FX	17	18:D+0.75LR+(	**0.479**	0.000	-0.186	0.000	0.000	0.000
Min FX	4	20:0.6D+0.6W)	**-0.775**	-0.955	0.054	0.000	0.000	0.000
Max FY	12	11:D+LR	-0.464	**3.355**	-0.002	0.000	0.000	0.000
Min FY	3	20:0.6D+0.6W)	-0.538	**-1.525**	0.013	0.000	0.000	0.000
Max FZ	19	12:D+0.6WXP	-0.116	0.000	**0.389**	0.000	0.000	0.000
Min FZ	7	12:D+0.6WXP	-0.690	-0.502	**-1.246**	0.000	0.000	0.000
Max MX	1	11:D+LR	0.008	0.664	0.046	**0.000**	0.000	0.000
Min MX	1	11:D+LR	0.008	0.664	0.046	**0.000**	0.000	0.000
Max MY	1	11:D+LR	0.008	0.664	0.046	0.000	**0.000**	0.000
Min MY	1	11:D+LR	0.008	0.664	0.046	0.000	**0.000**	0.000
Max MZ	1	11:D+LR	0.008	0.664	0.046	0.000	0.000	**0.000**
Min MZ	1	11:D+LR	0.008	0.664	0.046	0.000	0.000	**0.000**

Statics Check Results

L/C		FX (kip)	FY (kip)	FZ (kip)	MX (kip-in)	MY (kip-in)	MZ (kip-in)
1:DEAD	Loads	0.000	-2.100	0.000	-440.935	-0.000	-377.944
1:DEAD	Reactions	-0.000	2.100	0.000	440.935	0.000	377.944
	Difference	-0.000	-0.000	0.000	-0.000	0.000	0.000
2:ROOFLIVE	Loads	-0.000	-20.997	0.000	-4.41E+3	0.000	-3.78E+3
2:ROOFLIVE	Reactions	0.000	20.997	0.000	4.41E+3	-0.000	3.78E+3
	Difference	-0.000	-0.000	0.000	-0.000	0.000	0.000
3:WINDXP	Loads	12.031	17.539	-0.000	3.69E+3	-2.53E+3	1.98E+3
3:WINDXP	Reactions	-12.031	-17.539	0.000	-3.69E+3	2.53E+3	-1.98E+3
	Difference	-0.000	0.000	-0.000	-0.000	0.000	-0.000
4:WINDXN	Loads	12.012	9.027	-0.000	1.9E+3	-2.52E+3	448.822
4:WINDXN	Reactions	-12.012	-9.027	0.000	-1.9E+3	2.52E+3	-448.822
	Difference	-0.000	0.000	-0.000	-0.000	0.000	-0.000
5:WINDZP	Loads	-0.000	17.923	12.130	4.92E+3	-2.18E+3	3.23E+3
5:WINDZP	Reactions	0.000	-17.923	-12.130	-4.92E+3	2.18E+3	-3.23E+3
	Difference	0.000	0.000	0.000	-0.000	-0.000	-0.000
6:WINDZN	Loads	-0.000	9.405	12.135	3.13E+3	-2.18E+3	1.69E+3
6:WINDZN	Reactions	0.000	-9.405	-12.135	-3.13E+3	2.18E+3	-1.69E+3
	Difference	0.000	0.000	0.000	-0.000	-0.000	-0.000
7:EXP	Loads	0.660	0.000	0.000	0.000	-138.617	-114.008
7:EXP	Reactions	-0.660	0.000	-0.000	0.000	138.617	114.008
	Difference	-0.000	0.000	-0.000	0.000	-0.000	-0.000
8:EXN	Loads	-0.660	0.000	0.000	0.000	138.617	114.008
8:EXN	Reactions	0.660	-0.000	0.000	-0.000	-138.617	-114.008
	Difference	0.000	-0.000	0.000	-0.000	0.000	0.000

Statics Check Results Cont...

L/C		FX (kip)	FY (kip)	FZ (kip)	MX (kip-in)	MY (kip-in)	MZ (kip-in)
9:EZP	Reactions	0.000	0.000	-0.660	-110.893	118.814	0.000
	Difference	0.000	0.000	0.000	0.000	-0.000	0.000
10:EZN	Loads	0.000	0.000	-0.660	-110.893	118.814	0.000
10:EZN	Reactions	-0.000	-0.000	0.660	110.893	-118.814	-0.000
	Difference	-0.000	-0.000	-0.000	-0.000	0.000	-0.000

Reaction Envelope

Node	Env	Horizontal FX (kip)	Vertical FY (kip)	Horizontal FZ (kip)	Moment MX (kip-in)	MY (kip-in)	MZ (kip-in)
1	+ve	0.168	0.664	0.141	0.000	0.000	0.000
1	+ve	Load: 14	Load: 11	Load: 12	-	-	-
1	-ve	-0.291	-0.986	-0.270	0.000	0.000	0.000
1	-ve	Load: 21	Load: 22	Load: 23	-	-	-
2	+ve	0.475	3.116	0.065	0.000	0.000	0.000
2	+ve	Load: 18	Load: 11	Load: 27	-	-	-
2	-ve	-0.586	-1.488	-0.251	0.000	0.000	0.000
2	-ve	Load: 21	Load: 20	Load: 23	-	-	-
3	+ve	0.473	3.354	0.061	0.000	0.000	0.000
3	+ve	Load: 18	Load: 11	Load: 35	-	-	-
3	-ve	-0.600	-1.525	-0.244	0.000	0.000	0.000
3	-ve	Load: 21	Load: 20	Load: 14	-	-	-
4	+ve	0.315	2.165	0.059	0.000	0.000	0.000
4	+ve	Load: 11	Load: 11	Load: 35	-	-	-
4	-ve	-0.775	-1.157	-0.249	0.000	0.000	0.000
4	-ve	Load: 20	Load: 22	Load: 19	-	-	-
5	+ve	0.403	0.836	0.037	0.000	0.000	0.000
5	+ve	Load: 14	Load: 19	Load: 35	-	-	-
5	-ve	-0.389	-1.008	-0.623	0.000	0.000	0.000
5	-ve	Load: 21	Load: 20	Load: 12	-	-	-
6	+ve	0.040	0.868	0.355	0.000	0.000	0.000
6	+ve	Load: 25	Load: 11	Load: 12	-	-	-
6	-ve	-0.144	-0.453	-0.434	0.000	0.000	0.000
6	-ve	Load: 21	Load: 22	Load: 23	-	-	-
7	+ve	0.197	1.402	0.008	0.000	0.000	0.000
7	+ve	Load: 33	Load: 11	Load: 35	-	-	-
7	-ve	-0.690	-0.553	-1.246	0.000	0.000	0.000
7	-ve	Load: 12	Load: 20	Load: 12	-	-	-
8	+ve	0.032	1.022	0.386	0.000	0.000	0.000
8	+ve	Load: 33	Load: 11	Load: 12	-	-	-
8	-ve	-0.117	-0.422	-0.460	0.000	0.000	0.000
8	-ve	Load: 12	Load: 20	Load: 23	-	-	-
9	+ve	0.045	0.555	0.333	0.000	0.000	0.000

Reaction Envelope Cont...

Node	Env	Horizontal FX (kip)	Vertical FY (kip)	Horizontal FZ (kip)	Moment MX (kip-in)	MY (kip-in)	MZ (kip-in)
9	+ve	0.045	0.555	0.333	0.000	0.000	0.000
9	+ve	Load: 33	Load: 11	Load: 12	-	-	-
9	-ve	-0.167	-0.422	-0.458	0.000	0.000	0.000
9	-ve	Load: 13	Load: 20	Load: 23	-	-	-
10	+ve	0.028	0.870	0.143	0.000	0.000	0.000
10	+ve	Load: 25	Load: 17	Load: 12	-	-	-
10	-ve	-0.251	-0.854	-0.270	0.000	0.000	0.000
10	-ve	Load: 20	Load: 22	Load: 23	-	-	-
11	+ve	0.000	3.113	0.065	0.000	0.000	0.000
11	+ve	-	Load: 11	Load: 27	-	-	-
11	-ve	-0.487	-1.270	-0.251	0.000	0.000	0.000
11	-ve	Load: 16	Load: 22	Load: 23	-	-	-
12	+ve	0.000	3.355	0.061	0.000	0.000	0.000
12	+ve	-	Load: 11	Load: 35	-	-	-
12	-ve	-0.475	-1.381	-0.244	0.000	0.000	0.000
12	-ve	Load: 16	Load: 22	Load: 14	-	-	-
13	+ve	0.043	2.165	0.059	0.000	0.000	0.000
13	+ve	Load: 22	Load: 11	Load: 35	-	-	-
13	-ve	-0.315	-1.157	-0.249	0.000	0.000	0.000
13	-ve	Load: 11	Load: 22	Load: 19	-	-	-
14	+ve	0.076	0.836	0.037	0.000	0.000	0.000
14	+ve	Load: 33	Load: 19	Load: 35	-	-	-
14	-ve	-0.661	-0.177	-0.637	0.000	0.000	0.000
14	-ve	Load: 12	Load: 35	Load: 12	-	-	-
15	+ve	0.386	0.000	0.065	0.000	0.000	0.000
15	+ve	Load: 18	-	Load: 27	-	-	-
15	-ve	-0.568	0.000	-0.248	0.000	0.000	0.000
15	-ve	Load: 21	-	Load: 23	-	-	-
16	+ve	0.443	0.000	0.061	0.000	0.000	0.000
16	+ve	Load: 18	-	Load: 35	-	-	-
16	-ve	-0.564	0.000	-0.243	0.000	0.000	0.000
16	-ve	Load: 21	-	Load: 15	-	-	-
17	+ve	0.479	0.000	0.062	0.000	0.000	0.000
17	+ve	Load: 18	-	Load: 35	-	-	-
17	-ve	-0.501	0.000	-0.245	0.000	0.000	0.000
17	-ve	Load: 21	-	Load: 14	-	-	-
18	+ve	0.047	0.000	0.359	0.000	0.000	0.000
18	+ve	Load: 33	-	Load: 12	-	-	-
18	-ve	-0.171	0.000	-0.457	0.000	0.000	0.000
18	-ve	Load: 13	-	Load: 23	-	-	-
19	+ve	0.032	0.000	0.389	0.000	0.000	0.000
19	+ve	Load: 25	-	Load: 12	-	-	-
19	-ve	-0.116	0.000	-0.460	0.000	0.000	0.000
19	-ve	Load: 21	-	Load: 23	-	-	-

Reaction Envelope Cont...

Node	Env	Horizontal FX (kip)	Vertical FY (kip)	Horizontal FZ (kip)	Moment MX (kip-in)	MY (kip-in)	MZ (kip-in)
20	+ve	0.038	0.000	0.352	0.000	0.000	0.000
20	+ve	Load: 25	-	Load: 12	-	-	-
20	-ve	-0.140	0.000	-0.434	0.000	0.000	0.000
20	-ve	Load: 20	-	Load: 23	-	-	-
21	+ve	0.020	0.000	0.065	0.000	0.000	0.000
21	+ve	Load: 33	-	Load: 27	-	-	-
21	-ve	-0.412	0.000	-0.249	0.000	0.000	0.000
21	-ve	Load: 16	-	Load: 22	-	-	-
22	+ve	0.001	0.000	0.061	0.000	0.000	0.000
22	+ve	Load: 33	-	Load: 35	-	-	-
22	-ve	-0.443	0.000	-0.243	0.000	0.000	0.000
22	-ve	Load: 16	-	Load: 15	-	-	-
23	+ve	0.000	0.000	0.062	0.000	0.000	0.000
23	+ve	-	-	Load: 35	-	-	-
23	-ve	-0.484	0.000	-0.245	0.000	0.000	0.000
23	-ve	Load: 16	-	Load: 14	-	-	-

Utilization Ratio

Beam	Analysis Property	Design Property	Actual Ratio	Allowable Ratio	Ratio (Act./Allow.)	Clause	L/C	Ax (in^2)	Iz (in^4)	Iy (in^4)	Ix (in^4)
1	TS252514G/	TS252514G/	0.063	1.000	0.063	Eq. H3-1	21	0.802	0.782	0.782	1.172
2	TS252514G/	TS252514G/	0.063	1.000	0.063	Eq. H3-1	21	0.802	0.782	0.782	1.172
3	TS252514G/	TS252514G/	0.063	1.000	0.063	Eq. H3-1	21	0.802	0.782	0.782	1.172
4	TS252514G/	TS252514G/	0.063	1.000	0.063	Eq. H3-1	21	0.802	0.782	0.782	1.172
5	TS252514G/	TS252514G/	0.071	1.000	0.071	Eq. H1-1b	21	0.802	0.782	0.782	1.172
6	TS252514G/	TS252514G/	0.028	1.000	0.028	Eq. H1-1b	11	0.802	0.782	0.782	1.172
7	TS252514G/	TS252514G/	0.028	1.000	0.028	Eq. H3-1	21	0.802	0.782	0.782	1.172
8	TS252514G/	TS252514G/	0.028	1.000	0.028	Eq. H3-1	21	0.802	0.782	0.782	1.172
9	TS252514G/	TS252514G/	0.028	1.000	0.028	Eq. H3-1	21	0.802	0.782	0.782	1.172
10	TS252514G/	TS252514G/	0.032	1.000	0.032	Eq. H1-1b	21	0.802	0.782	0.782	1.172
11	TS252514G/	TS252514G/	0.039	1.000	0.039	Eq. H1-1b	14	0.802	0.782	0.782	1.172
12	TS252514G/	TS252514G/	0.011	1.000	0.011	Eq. H1-1b	22	0.802	0.782	0.782	1.172
13	TS252514G/	TS252514G/	0.011	1.000	0.011	Eq. H1-1b	13	0.802	0.782	0.782	1.172
14	TS252514G/	TS252514G/	0.011	1.000	0.011	Eq. H1-1b	13	0.802	0.782	0.782	1.172
15	TS252514G/	TS252514G/	0.029	1.000	0.029	Eq. H1-1b	22	0.802	0.782	0.782	1.172
16	TS252514G/	TS252514G/	0.025	1.000	0.025	Eq. H1-1b	13	0.802	0.782	0.782	1.172
17	TS252514G/	TS252514G/	0.013	1.000	0.013	Eq. H1-1b	14	0.802	0.782	0.782	1.172
18	TS252514G/	TS252514G/	0.014	1.000	0.014	Eq. H1-1b	14	0.802	0.782	0.782	1.172
19	TS252514G/	TS252514G/	0.014	1.000	0.014	Eq. H1-1b	14	0.802	0.782	0.782	1.172
20	TS252514G/	TS252514G/	0.043	1.000	0.043	Eq. H1-1b	21	0.802	0.782	0.782	1.172
21	TS252514G/	TS252514G/	0.040	1.000	0.040	Eq. H1-1b	18	0.802	0.782	0.782	1.172
22	TS252514G/	TS252514G/	0.017	1.000	0.017	Eq. H1-1b	21	0.802	0.782	0.782	1.172
23	TS252514G/	TS252514G/	0.024	1.000	0.024	Eq. H1-1b	20	0.802	0.782	0.782	1.172
24	TS252514G/	TS252514G/	0.026	1.000	0.026	Eq. H1-1b	20	0.802	0.782	0.782	1.172
25	TS252514G/	TS252514G/	0.050	1.000	0.050	Eq. H1-1b	22	0.802	0.782	0.782	1.172
26	TS252514G/	TS252514G/	0.046	1.000	0.046	Eq. H1-1b	14	0.802	0.782	0.782	1.172
27	TS252514G/	TS252514G/	0.031	1.000	0.031	Eq. H1-1b	22	0.802	0.782	0.782	1.172
28	TS252514G/	TS252514G/	0.056	1.000	0.056	Eq. H1-1b	12	0.802	0.782	0.782	1.172
29	TS252514G/	TS252514G/	0.095	1.000	0.095	Eq. H1-1b	12	0.802	0.782	0.782	1.172
30	TS252514G/	TS252514G/	0.140	1.000	0.140	Eq. H1-1b	12	0.802	0.782	0.782	1.172
31	TS252514G/	TS252514G/	0.171	1.000	0.171	Eq. H1-1b	20	0.802	0.782	0.782	1.172
32	TS252514G/	TS252514G/	0.128	1.000	0.128	Eq. H1-1b	12	0.802	0.782	0.782	1.172
33	TS252514G/	TS252514G/	0.261	1.000	0.261	Eq. H1-1b	12	0.802	0.782	0.782	1.172
34	TS252514G/	TS252514G/	0.390	1.000	0.390	Eq. H1-1b	20	0.802	0.782	0.782	1.172
35	TS252514G/	TS252514G/	0.511	1.000	0.511	Eq. H1-1b	12	0.802	0.782	0.782	1.172
36	TS252514G/	TS252514G/	0.136	1.000	0.136	Sec. E1	11	0.802	0.782	0.782	1.172
37	TS252514G/	TS252514G/	0.123	1.000	0.123	Sec. E1	11	0.802	0.782	0.782	1.172
38	TS252514G/	TS252514G/	0.116	1.000	0.116	Sec. E1	11	0.802	0.782	0.782	1.172
39	TS252514G/	TS252514G/	0.108	1.000	0.108	Sec. E1	11	0.802	0.782	0.782	1.172
40	TS252514G/	TS252514G/	0.102	1.000	0.102	Sec. E1	11	0.802	0.782	0.782	1.172
41	TS252514G/	TS252514G/	0.098	1.000	0.098	Sec. E1	11	0.802	0.782	0.782	1.172
42	TS252514G/	TS252514G/	0.093	1.000	0.093	Sec. E1	11	0.802	0.782	0.782	1.172
43	TS252514G/	TS252514G/	0.091	1.000	0.091	Sec. E1	11	0.802	0.782	0.782	1.172
44	TS252514G/	TS252514G/	0.085	1.000	0.085	Sec. E1	11	0.802	0.782	0.782	1.172
45	TS252514G/	TS252514G/	0.085	1.000	0.085	Sec. E1	11	0.802	0.782	0.782	1.172

Utilization Ratio Cont...

Beam	Analysis Property	Design Property	Actual Ratio	Allowable Ratio	Ratio (Act./Allow.)	Clause	L/C	Ax (in^2)	Iz (in^4)	Iy (in^4)	Ix (in^4)
46	TS252514G/	TS252514G/	0.080	1.000	0.080	Sec. E1	11	0.802	0.782	0.782	1.172
47	TS252514G/	TS252514G/	0.080	1.000	0.080	Sec. E1	11	0.802	0.782	0.782	1.172
48	TS252514G/	TS252514G/	0.075	1.000	0.075	Sec. E1	11	0.802	0.782	0.782	1.172
49	TS252514G/	TS252514G/	0.075	1.000	0.075	Sec. E1	11	0.802	0.782	0.782	1.172
50	TS252514G/	TS252514G/	0.078	1.000	0.078	Sec. E1	11	0.802	0.782	0.782	1.172
51	TS252514G/	TS252514G/	0.070	1.000	0.070	Sec. E1	11	0.802	0.782	0.782	1.172
52	TS252514G/	TS252514G/	0.074	1.000	0.074	Sec. E1	11	0.802	0.782	0.782	1.172
53	TS252514G/	TS252514G/	0.065	1.000	0.065	Sec. E1	11	0.802	0.782	0.782	1.172
54	TS252514G/	TS252514G/	0.070	1.000	0.070	Sec. E1	11	0.802	0.782	0.782	1.172
55	TS252514G/	TS252514G/	0.093	1.000	0.093	Eq. H3-1	12	0.802	0.782	0.782	1.172
56	TS252514G/	TS252514G/	0.065	1.000	0.065	Sec. E1	11	0.802	0.782	0.782	1.172
57	TS252514G/	TS252514G/	0.093	1.000	0.093	Eq. H3-1	12	0.802	0.782	0.782	1.172
58	TS252514G/	TS252514G/	0.058	1.000	0.058	Sec. E1	11	0.802	0.782	0.782	1.172
59	TS252514G/	TS252514G/	0.093	1.000	0.093	Eq. H3-1	12	0.802	0.782	0.782	1.172
60	TS252514G/	TS252514G/	0.047	1.000	0.047	Sec. E1	11	0.802	0.782	0.782	1.172
61	TS252514G/	TS252514G/	0.134	1.000	0.134	Eq. H3-1	12	0.802	0.782	0.782	1.172
62	TS252514G/	TS252514G/	0.085	1.000	0.085	Eq. H1-1b	20	0.802	0.782	0.782	1.172
63	TS252514G/	TS252514G/	0.138	1.000	0.138	Eq. H1-1b	12	0.802	0.782	0.782	1.172
64	TS252514G/	TS252514G/	0.060	1.000	0.060	Eq. H1-1b	21	0.802	0.782	0.782	1.172
65	TS252514G/	TS252514G/	0.083	1.000	0.083	Eq. H1-1b	20	0.802	0.782	0.782	1.172
66	TS252514G/	TS252514G/	0.139	1.000	0.139	Eq. H1-1b	12	0.802	0.782	0.782	1.172
67	TS252514G/	TS252514G/	0.492	1.000	0.492	Eq. H1-1b	20	0.802	0.782	0.782	1.172
68	TS252514G/	TS252514G/	0.053	1.000	0.053	Eq. H3-1	23	0.802	0.782	0.782	1.172
69	TS252514G/	TS252514G/	0.047	1.000	0.047	Eq. H3-1	23	0.802	0.782	0.782	1.172
70	TS252514G/	TS252514G/	0.111	1.000	0.111	Eq. H3-1	12	0.802	0.782	0.782	1.172
71	TS252514G/	TS252514G/	0.229	1.000	0.229	Eq. H1-1b	12	0.802	0.782	0.782	1.172
72	TS252514G/	TS252514G/	0.053	1.000	0.053	Eq. H3-1	23	0.802	0.782	0.782	1.172
73	TS252514G/	TS252514G/	0.047	1.000	0.047	Eq. H3-1	23	0.802	0.782	0.782	1.172
74	TS252514G/	TS252514G/	0.129	1.000	0.129	Eq. H1-1b	20	0.802	0.782	0.782	1.172
75	TS252514G/	TS252514G/	0.053	1.000	0.053	Eq. H3-1	23	0.802	0.782	0.782	1.172
76	TS252514G/	TS252514G/	0.083	1.000	0.083	Eq. H3-1	11	0.802	0.782	0.782	1.172
77	TS252514G/	TS252514G/	0.047	1.000	0.047	Eq. H3-1	23	0.802	0.782	0.782	1.172
78	TS252514G/	TS252514G/	0.096	1.000	0.096	Eq. H1-1b	23	0.802	0.782	0.782	1.172
79	TS252514G/	TS252514G/	0.131	1.000	0.131	Eq. H3-1	20	0.802	0.782	0.782	1.172
80	TS252514G/	TS252514G/	0.108	1.000	0.108	Eq. H3-1	20	0.802	0.782	0.782	1.172
81	TS252514G/	TS252514G/	0.087	1.000	0.087	Eq. H1-1b	11	0.802	0.782	0.782	1.172
82	TS252514G/	TS252514G/	0.050	1.000	0.050	Eq. H3-1	23	0.802	0.782	0.782	1.172
83	TS252514G/	TS252514G/	0.063	1.000	0.063	Eq. H1-1b	11	0.802	0.782	0.782	1.172
84	TS252514G/	TS252514G/	0.108	1.000	0.108	Eq. H3-1	20	0.802	0.782	0.782	1.172
85	TS252514G/	TS252514G/	0.050	1.000	0.050	Eq. H3-1	23	0.802	0.782	0.782	1.172
86	TS252514G/	TS252514G/	0.108	1.000	0.108	Eq. H3-1	20	0.802	0.782	0.782	1.172
87	TS252514G/	TS252514G/	0.068	1.000	0.068	Eq. Sec. D2	11	0.802	0.782	0.782	1.172
88	TS252514G/	TS252514G/	0.133	1.000	0.133	Eq. H1-1b	20	0.802	0.782	0.782	1.172
89	TS252514G/	TS252514G/	0.063	1.000	0.063	Eq. H1-1b	11	0.802	0.782	0.782	1.172
90	TS252514G/	TS252514G/	0.144	1.000	0.144	Eq. H1-1b	20	0.802	0.782	0.782	1.172

Utilization Ratio Cont...

Beam	Analysis Property	Design Property	Actual Ratio	Allowable Ratio	Ratio (Act./Allow.)	Clause	L/C	Ax (in^2)	Iz (in^4)	Iy (in^4)	Ix (in^4)
91	TS252514G/	TS252514G/	0.216	1.000	0.216	Eq. H1-1b	20	0.802	0.782	0.782	1.172
92	TS252514G/	TS252514G/	0.128	1.000	0.128	Eq. H3-1	20	0.802	0.782	0.782	1.172
93	TS252514G/	TS252514G/	0.050	1.000	0.050	Eq. H3-1	23	0.802	0.782	0.782	1.172
94	TS252514G/	TS252514G/	0.128	1.000	0.128	Eq. H3-1	20	0.802	0.782	0.782	1.172
95	TS252514G/	TS252514G/	0.082	1.000	0.082	Eq. H1-1b	11	0.802	0.782	0.782	1.172
96	TS252514G/	TS252514G/	0.050	1.000	0.050	Eq. H3-1	23	0.802	0.782	0.782	1.172
97	TS252514G/	TS252514G/	0.149	1.000	0.149	Eq. H1-1b	11	0.802	0.782	0.782	1.172
98	TS252514G/	TS252514G/	0.131	1.000	0.131	Eq. H1-1b	17	0.802	0.782	0.782	1.172
99	TS252514G/	TS252514G/	0.120	1.000	0.120	Eq. H1-1b	20	0.802	0.782	0.782	1.172
100	TS252514G/	TS252514G/	0.117	1.000	0.117	Eq. H1-1b	20	0.802	0.782	0.782	1.172
101	TS252514G/	TS252514G/	0.131	1.000	0.131	Eq. H1-1b	17	0.802	0.782	0.782	1.172
102	TS252514G/	TS252514G/	0.147	1.000	0.147	Eq. H1-1b	11	0.802	0.782	0.782	1.172
103	TS252514G/	TS252514G/	0.071	1.000	0.071	Eq. Sec. D2	11	0.802	0.782	0.782	1.172
104	TS252514G/	TS252514G/	0.118	1.000	0.118	Eq. H3-1	20	0.802	0.782	0.782	1.172
105	TS252514G/	TS252514G/	0.070	1.000	0.070	Eq. H1-1b	23	0.802	0.782	0.782	1.172
106	TS252514G/	TS252514G/	0.118	1.000	0.118	Eq. H3-1	20	0.802	0.782	0.782	1.172
107	TS252514G/	TS252514G/	0.132	1.000	0.132	Eq. H1-1b	11	0.802	0.782	0.782	1.172
108	TS252514G/	TS252514G/	0.165	1.000	0.165	Eq. H1-1b	11	0.802	0.782	0.782	1.172
109	TS252514G/	TS252514G/	0.179	1.000	0.179	Eq. H1-1b	11	0.802	0.782	0.782	1.172
110	TS252514G/	TS252514G/	0.179	1.000	0.179	Eq. H1-1b	11	0.802	0.782	0.782	1.172
111	TS252514G/	TS252514G/	0.166	1.000	0.166	Eq. H1-1b	11	0.802	0.782	0.782	1.172
112	TS252514G/	TS252514G/	0.133	1.000	0.133	Eq. H1-1b	11	0.802	0.782	0.782	1.172
113	TS252514G/	TS252514G/	0.090	1.000	0.090	Eq. Sec. D2	11	0.802	0.782	0.782	1.172
114	TS252514G/	TS252514G/	0.137	1.000	0.137	Eq. H1-1b	11	0.802	0.782	0.782	1.172
115	TS252514G/	TS252514G/	0.075	1.000	0.075	Eq. H1-1b	20	0.802	0.782	0.782	1.172
116	TS252514G/	TS252514G/	0.127	1.000	0.127	Eq. Sec. D2	11	0.802	0.782	0.782	1.172
117	TS252514G/	TS252514G/	0.195	1.000	0.195	Eq. H1-1b	11	0.802	0.782	0.782	1.172
118	TS252514G/	TS252514G/	0.230	1.000	0.230	Eq. H1-1b	11	0.802	0.782	0.782	1.172
119	TS252514G/	TS252514G/	0.236	1.000	0.236	Eq. H1-1b	11	0.802	0.782	0.782	1.172
120	TS252514G/	TS252514G/	0.235	1.000	0.235	Eq. H1-1b	11	0.802	0.782	0.782	1.172
121	TS252514G/	TS252514G/	0.231	1.000	0.231	Eq. H1-1b	11	0.802	0.782	0.782	1.172
122	TS252514G/	TS252514G/	0.196	1.000	0.196	Eq. H1-1b	11	0.802	0.782	0.782	1.172
123	TS252514G/	TS252514G/	0.113	1.000	0.113	Eq. Sec. D2	11	0.802	0.782	0.782	1.172
124	TS252514G/	TS252514G/	0.027	1.000	0.027	Eq. H1-1b	20	0.802	0.782	0.782	1.172
125	TS252514G/	TS252514G/	0.106	1.000	0.106	Eq. H1-1b	20	0.802	0.782	0.782	1.172
126	TS252514G/	TS252514G/	0.072	1.000	0.072	Eq. H1-1b	12	0.802	0.782	0.782	1.172
127	TS252514G/	TS252514G/	0.071	1.000	0.071	Eq. H1-1b	11	0.802	0.782	0.782	1.172
128	TS252514G/	TS252514G/	0.121	1.000	0.121	Eq. H1-1b	20	0.802	0.782	0.782	1.172
129	TS252514G/	TS252514G/	0.175	1.000	0.175	Eq. H1-1b	20	0.802	0.782	0.782	1.172
130	TS252514G/	TS252514G/	0.142	1.000	0.142	Eq. Sec. D2	11	0.802	0.782	0.782	1.172
131	TS252514G/	TS252514G/	0.259	1.000	0.259	Eq. H1-1b	11	0.802	0.782	0.782	1.172
132	TS252514G/	TS252514G/	0.283	1.000	0.283	Eq. H1-1b	11	0.802	0.782	0.782	1.172
133	TS252514G/	TS252514G/	0.272	1.000	0.272	Eq. H1-1b	11	0.802	0.782	0.782	1.172
134	TS252514G/	TS252514G/	0.271	1.000	0.271	Eq. H1-1b	11	0.802	0.782	0.782	1.172
135	TS252514G/	TS252514G/	0.284	1.000	0.284	Eq. H1-1b	11	0.802	0.782	0.782	1.172

Utilization Ratio Cont...

Beam	Analysis Property	Design Property	Actual Ratio	Allowable Ratio	Ratio (Act./Allow.)	Clause	L/C	Ax (in^2)	Iz (in^4)	Iy (in^4)	Ix (in^4)
136	TS252514G/	TS252514G/	0.260	1.000	0.260	Eq. H1-1b	11	0.802	0.782	0.782	1.172
137	TS252514G/	TS252514G/	0.132	1.000	0.132	Eq. H3-1	20	0.802	0.782	0.782	1.172
138	TS252514G/	TS252514G/	0.029	1.000	0.029	Eq. H1-1b	23	0.802	0.782	0.782	1.172
139	TS252514G/	TS252514G/	0.242	1.000	0.242	Eq. H1-1b	11	0.802	0.782	0.782	1.172
140	TS252514G/	TS252514G/	0.291	1.000	0.291	Eq. H1-1b	11	0.802	0.782	0.782	1.172
141	TS252514G/	TS252514G/	0.305	1.000	0.305	Eq. H1-1b	11	0.802	0.782	0.782	1.172
142	TS252514G/	TS252514G/	0.304	1.000	0.304	Eq. H1-1b	11	0.802	0.782	0.782	1.172
143	TS252514G/	TS252514G/	0.292	1.000	0.292	Eq. H1-1b	11	0.802	0.782	0.782	1.172
144	TS252514G/	TS252514G/	0.250	1.000	0.250	Eq. H1-1b	11	0.802	0.782	0.782	1.172
145	TS252514G/	TS252514G/	0.162	1.000	0.162	Eq. Sec. D2	11	0.802	0.782	0.782	1.172
146	TS252514G/	TS252514G/	0.238	1.000	0.238	Eq. H1-1b	11	0.802	0.782	0.782	1.172
147	TS252514G/	TS252514G/	0.268	1.000	0.268	Eq. H1-1b	11	0.802	0.782	0.782	1.172
148	TS252514G/	TS252514G/	0.267	1.000	0.267	Eq. H1-1b	11	0.802	0.782	0.782	1.172
149	TS252514G/	TS252514G/	0.267	1.000	0.267	Eq. H1-1b	11	0.802	0.782	0.782	1.172
150	TS252514G/	TS252514G/	0.269	1.000	0.269	Eq. H1-1b	11	0.802	0.782	0.782	1.172
151	TS252514G/	TS252514G/	0.239	1.000	0.239	Eq. H1-1b	11	0.802	0.782	0.782	1.172
152	TS252514G/	TS252514G/	0.147	1.000	0.147	Eq. Sec. D2	11	0.802	0.782	0.782	1.172
153	TS252514G/	TS252514G/	0.024	1.000	0.024	Eq. H1-1b	20	0.802	0.782	0.782	1.172
154	TS252514G/	TS252514G/	0.180	1.000	0.180	Eq. Sec. D2	11	0.802	0.782	0.782	1.172
155	TS252514G/	TS252514G/	0.068	1.000	0.068	Eq. H1-1b	20	0.802	0.782	0.782	1.172
156	TS252514G/	TS252514G/	0.132	1.000	0.132	Eq. H1-1b	11	0.802	0.782	0.782	1.172
157	TS252514G/	TS252514G/	0.148	1.000	0.148	Eq. H1-1b	11	0.802	0.782	0.782	1.172
158	TS252514G/	TS252514G/	0.147	1.000	0.147	Eq. H1-1b	11	0.802	0.782	0.782	1.172
159	TS252514G/	TS252514G/	0.147	1.000	0.147	Eq. H1-1b	11	0.802	0.782	0.782	1.172
160	TS252514G/	TS252514G/	0.149	1.000	0.149	Eq. H1-1b	11	0.802	0.782	0.782	1.172
161	TS252514G/	TS252514G/	0.131	1.000	0.131	Eq. H1-1b	11	0.802	0.782	0.782	1.172
162	TS252514G/	TS252514G/	0.163	1.000	0.163	Eq. Sec. D2	11	0.802	0.782	0.782	1.172
163	TS252514G/	TS252514G/	0.190	1.000	0.190	Eq. H1-1b	11	0.802	0.782	0.782	1.172
164	TS252514G/	TS252514G/	0.055	1.000	0.055	Eq. H1-1b	12	0.802	0.782	0.782	1.172
165	TS252514G/	TS252514G/	0.174	1.000	0.174	Eq. Sec. D2	11	0.802	0.782	0.782	1.172
166	TS252514G/	TS252514G/	0.184	1.000	0.184	Eq. H1-1b	11	0.802	0.782	0.782	1.172
167	TS252514G/	TS252514G/	0.206	1.000	0.206	Eq. H1-1b	11	0.802	0.782	0.782	1.172
168	TS252514G/	TS252514G/	0.208	1.000	0.208	Eq. H1-1b	11	0.802	0.782	0.782	1.172
169	TS252514G/	TS252514G/	0.208	1.000	0.208	Eq. H1-1b	11	0.802	0.782	0.782	1.172
170	TS252514G/	TS252514G/	0.206	1.000	0.206	Eq. H1-1b	11	0.802	0.782	0.782	1.172
171	TS252514G/	TS252514G/	0.186	1.000	0.186	Eq. H1-1b	11	0.802	0.782	0.782	1.172
172	TS252514G/	TS252514G/	0.182	1.000	0.182	Eq. Sec. D2	11	0.802	0.782	0.782	1.172
173	TS252514G/	TS252514G/	0.033	1.000	0.033	Eq. H1-1b	23	0.802	0.782	0.782	1.172
174	TS252514G/	TS252514G/	0.566	1.000	0.566	Eq. H1-1b	20	0.802	0.782	0.782	1.172
175	TS252514G/	TS252514G/	0.252	1.000	0.252	Eq. H1-1b	19	0.802	0.782	0.782	1.172
176	TS252514G/	TS252514G/	0.388	1.000	0.388	Eq. H1-1b	11	0.802	0.782	0.782	1.172
177	TS252514G/	TS252514G/	0.416	1.000	0.416	Eq. H1-1b	11	0.802	0.782	0.782	1.172
178	TS252514G/	TS252514G/	0.424	1.000	0.424	Eq. H1-1b	11	0.802	0.782	0.782	1.172
179	TS252514G/	TS252514G/	0.424	1.000	0.424	Eq. H1-1b	11	0.802	0.782	0.782	1.172
180	TS252514G/	TS252514G/	0.417	1.000	0.417	Eq. H1-1b	11	0.802	0.782	0.782	1.172

Utilization Ratio Cont...

Beam	Analysis Property	Design Property	Actual Ratio	Allowable Ratio	Ratio (Act./Allow.)	Clause	L/C	Ax (in^2)	Iz (in^4)	Iy (in^4)	Ix (in^4)
181	TS252514G/	TS252514G/	0.389	1.000	0.389	Eq. H1-1b	11	0.802	0.782	0.782	1.172
182	TS252514G/	TS252514G/	0.445	1.000	0.445	Eq. H1-1b	20	0.802	0.782	0.782	1.172
183	TS252514G/	TS252514G/	0.038	1.000	0.038	Eq. H1-1b	15	0.802	0.782	0.782	1.172
184	TS252514G/	TS252514G/	0.087	1.000	0.087	Eq. H1-1b	12	0.802	0.782	0.782	1.172
185	TS252514G/	TS252514G/	0.124	1.000	0.124	Eq. H1-1b	20	0.802	0.782	0.782	1.172
186	TS252514G/	TS252514G/	0.126	1.000	0.126	Eq. H1-1b	20	0.802	0.782	0.782	1.172
187	TS252514G/	TS252514G/	0.124	1.000	0.124	Eq. H1-1b	20	0.802	0.782	0.782	1.172
188	TS252514G/	TS252514G/	0.124	1.000	0.124	Eq. H1-1b	20	0.802	0.782	0.782	1.172
189	TS252514G/	TS252514G/	0.091	1.000	0.091	Eq. H1-1b	12	0.802	0.782	0.782	1.172
190	TS252514G/	TS252514G/	0.573	1.000	0.573	Eq. H1-1b	20	0.802	0.782	0.782	1.172
191	TS252514G/	TS252514G/	0.252	1.000	0.252	Eq. H1-1b	19	0.802	0.782	0.782	1.172
192	TS252514G/	TS252514G/	0.388	1.000	0.388	Eq. H1-1b	11	0.802	0.782	0.782	1.172
193	TS252514G/	TS252514G/	0.416	1.000	0.416	Eq. H1-1b	11	0.802	0.782	0.782	1.172
194	TS252514G/	TS252514G/	0.424	1.000	0.424	Eq. H1-1b	11	0.802	0.782	0.782	1.172
195	TS252514G/	TS252514G/	0.425	1.000	0.425	Eq. H1-1b	11	0.802	0.782	0.782	1.172
196	TS252514G/	TS252514G/	0.416	1.000	0.416	Eq. H1-1b	11	0.802	0.782	0.782	1.172
197	TS252514G/	TS252514G/	0.387	1.000	0.387	Eq. H1-1b	11	0.802	0.782	0.782	1.172
198	TS252514G/	TS252514G/	0.451	1.000	0.451	Eq. H1-1b	20	0.802	0.782	0.782	1.172
199	TS252514G/	TS252514G/	0.033	1.000	0.033	Eq. H1-1b	23	0.802	0.782	0.782	1.172
200	TS252514G/	TS252514G/	0.174	1.000	0.174	Eq. Sec. D2	11	0.802	0.782	0.782	1.172
201	TS252514G/	TS252514G/	0.184	1.000	0.184	Eq. H1-1b	11	0.802	0.782	0.782	1.172
202	TS252514G/	TS252514G/	0.206	1.000	0.206	Eq. H1-1b	11	0.802	0.782	0.782	1.172
203	TS252514G/	TS252514G/	0.208	1.000	0.208	Eq. H1-1b	11	0.802	0.782	0.782	1.172
204	TS252514G/	TS252514G/	0.208	1.000	0.208	Eq. H1-1b	11	0.802	0.782	0.782	1.172
205	TS252514G/	TS252514G/	0.206	1.000	0.206	Eq. H1-1b	11	0.802	0.782	0.782	1.172
206	TS252514G/	TS252514G/	0.184	1.000	0.184	Eq. H1-1b	11	0.802	0.782	0.782	1.172
207	TS252514G/	TS252514G/	0.183	1.000	0.183	Eq. Sec. D2	11	0.802	0.782	0.782	1.172
208	TS252514G/	TS252514G/	0.054	1.000	0.054	Eq. H1-1b	12	0.802	0.782	0.782	1.172
209	TS252514G/	TS252514G/	0.190	1.000	0.190	Eq. H1-1b	11	0.802	0.782	0.782	1.172
210	TS252514G/	TS252514G/	0.132	1.000	0.132	Eq. H1-1b	11	0.802	0.782	0.782	1.172
211	TS252514G/	TS252514G/	0.148	1.000	0.148	Eq. H1-1b	11	0.802	0.782	0.782	1.172
212	TS252514G/	TS252514G/	0.147	1.000	0.147	Eq. H1-1b	11	0.802	0.782	0.782	1.172
213	TS252514G/	TS252514G/	0.148	1.000	0.148	Eq. H1-1b	11	0.802	0.782	0.782	1.172
214	TS252514G/	TS252514G/	0.147	1.000	0.147	Eq. H1-1b	11	0.802	0.782	0.782	1.172
215	TS252514G/	TS252514G/	0.132	1.000	0.132	Eq. H1-1b	11	0.802	0.782	0.782	1.172
216	TS252514G/	TS252514G/	0.163	1.000	0.163	Eq. Sec. D2	11	0.802	0.782	0.782	1.172
217	TS252514G/	TS252514G/	0.067	1.000	0.067	Eq. H1-1b	20	0.802	0.782	0.782	1.172
218	TS252514G/	TS252514G/	0.180	1.000	0.180	Eq. Sec. D2	11	0.802	0.782	0.782	1.172
219	TS252514G/	TS252514G/	0.024	1.000	0.024	Eq. H1-1b	23	0.802	0.782	0.782	1.172
220	TS252514G/	TS252514G/	0.162	1.000	0.162	Eq. Sec. D2	11	0.802	0.782	0.782	1.172
221	TS252514G/	TS252514G/	0.239	1.000	0.239	Eq. H1-1b	11	0.802	0.782	0.782	1.172
222	TS252514G/	TS252514G/	0.268	1.000	0.268	Eq. H1-1b	11	0.802	0.782	0.782	1.172
223	TS252514G/	TS252514G/	0.268	1.000	0.268	Eq. H1-1b	11	0.802	0.782	0.782	1.172
224	TS252514G/	TS252514G/	0.268	1.000	0.268	Eq. H1-1b	11	0.802	0.782	0.782	1.172
225	TS252514G/	TS252514G/	0.268	1.000	0.268	Eq. H1-1b	11	0.802	0.782	0.782	1.172

Utilization Ratio Cont...

Beam	Analysis Property	Design Property	Actual Ratio	Allowable Ratio	Ratio (Act./Allow.)	Clause	L/C	Ax (in^2)	Iz (in^4)	Iy (in^4)	Ix (in^4)
226	TS252514G/	TS252514G/	0.238	1.000	0.238	Eq. H1-1b	11	0.802	0.782	0.782	1.172
227	TS252514G/	TS252514G/	0.147	1.000	0.147	Eq. Sec. D2	11	0.802	0.782	0.782	1.172
228	TS252514G/	TS252514G/	0.242	1.000	0.242	Eq. H1-1b	11	0.802	0.782	0.782	1.172
229	TS252514G/	TS252514G/	0.291	1.000	0.291	Eq. H1-1b	11	0.802	0.782	0.782	1.172
230	TS252514G/	TS252514G/	0.306	1.000	0.306	Eq. H1-1b	11	0.802	0.782	0.782	1.172
231	TS252514G/	TS252514G/	0.307	1.000	0.307	Eq. H1-1b	11	0.802	0.782	0.782	1.172
232	TS252514G/	TS252514G/	0.291	1.000	0.291	Eq. H1-1b	11	0.802	0.782	0.782	1.172
233	TS252514G/	TS252514G/	0.239	1.000	0.239	Eq. H1-1b	11	0.802	0.782	0.782	1.172
234	TS252514G/	TS252514G/	0.029	1.000	0.029	Eq. H1-1b	23	0.802	0.782	0.782	1.172
235	TS252514G/	TS252514G/	0.142	1.000	0.142	Eq. Sec. D2	11	0.802	0.782	0.782	1.172
236	TS252514G/	TS252514G/	0.260	1.000	0.260	Eq. H1-1b	11	0.802	0.782	0.782	1.172
237	TS252514G/	TS252514G/	0.283	1.000	0.283	Eq. H1-1b	11	0.802	0.782	0.782	1.172
238	TS252514G/	TS252514G/	0.272	1.000	0.272	Eq. H1-1b	11	0.802	0.782	0.782	1.172
239	TS252514G/	TS252514G/	0.272	1.000	0.272	Eq. H1-1b	11	0.802	0.782	0.782	1.172
240	TS252514G/	TS252514G/	0.282	1.000	0.282	Eq. H1-1b	11	0.802	0.782	0.782	1.172
241	TS252514G/	TS252514G/	0.259	1.000	0.259	Eq. H1-1b	11	0.802	0.782	0.782	1.172
242	TS252514G/	TS252514G/	0.127	1.000	0.127	Eq. Sec. D2	11	0.802	0.782	0.782	1.172
243	TS252514G/	TS252514G/	0.103	1.000	0.103	Eq. H1-1b	20	0.802	0.782	0.782	1.172
244	TS252514G/	TS252514G/	0.078	1.000	0.078	Eq. H1-1b	12	0.802	0.782	0.782	1.172
245	TS252514G/	TS252514G/	0.070	1.000	0.070	Eq. H1-1b	11	0.802	0.782	0.782	1.172
246	TS252514G/	TS252514G/	0.092	1.000	0.092	Eq. H1-1b	11	0.802	0.782	0.782	1.172
247	TS252514G/	TS252514G/	0.130	1.000	0.130	Eq. H1-1b	11	0.802	0.782	0.782	1.172
248	TS252514G/	TS252514G/	0.025	1.000	0.025	Eq. H1-1b	23	0.802	0.782	0.782	1.172
249	TS252514G/	TS252514G/	0.126	1.000	0.126	Eq. Sec. D2	11	0.802	0.782	0.782	1.172
250	TS252514G/	TS252514G/	0.195	1.000	0.195	Eq. H1-1b	11	0.802	0.782	0.782	1.172
251	TS252514G/	TS252514G/	0.230	1.000	0.230	Eq. H1-1b	11	0.802	0.782	0.782	1.172
252	TS252514G/	TS252514G/	0.236	1.000	0.236	Eq. H1-1b	11	0.802	0.782	0.782	1.172
253	TS252514G/	TS252514G/	0.237	1.000	0.237	Eq. H1-1b	11	0.802	0.782	0.782	1.172
254	TS252514G/	TS252514G/	0.230	1.000	0.230	Eq. H1-1b	11	0.802	0.782	0.782	1.172
255	TS252514G/	TS252514G/	0.192	1.000	0.192	Eq. H1-1b	11	0.802	0.782	0.782	1.172
256	TS252514G/	TS252514G/	0.114	1.000	0.114	Eq. Sec. D2	11	0.802	0.782	0.782	1.172
257	TS252514G/	TS252514G/	0.059	1.000	0.059	Eq. H1-1b	20	0.802	0.782	0.782	1.172
258	TS252514G/	TS252514G/	0.135	1.000	0.135	Eq. H1-1b	11	0.802	0.782	0.782	1.172
259	TS252514G/	TS252514G/	0.132	1.000	0.132	Eq. H1-1b	11	0.802	0.782	0.782	1.172
260	TS252514G/	TS252514G/	0.165	1.000	0.165	Eq. H1-1b	11	0.802	0.782	0.782	1.172
261	TS252514G/	TS252514G/	0.180	1.000	0.180	Eq. H1-1b	11	0.802	0.782	0.782	1.172
262	TS252514G/	TS252514G/	0.180	1.000	0.180	Eq. H1-1b	11	0.802	0.782	0.782	1.172
263	TS252514G/	TS252514G/	0.166	1.000	0.166	Eq. H1-1b	11	0.802	0.782	0.782	1.172
264	TS252514G/	TS252514G/	0.126	1.000	0.126	Eq. H1-1b	11	0.802	0.782	0.782	1.172
265	TS252514G/	TS252514G/	0.091	1.000	0.091	Eq. Sec. D2	11	0.802	0.782	0.782	1.172
266	TS252514G/	TS252514G/	0.116	1.000	0.116	Eq. Sec. D2	11	0.802	0.782	0.782	1.172
267	TS252514G/	TS252514G/	0.067	1.000	0.067	Eq. H1-1b	12	0.802	0.782	0.782	1.172
268	TS252514G/	TS252514G/	0.101	1.000	0.101	Eq. Sec. D2	11	0.802	0.782	0.782	1.172
269	TS252514G/	TS252514G/	0.149	1.000	0.149	Eq. H1-1b	11	0.802	0.782	0.782	1.172
270	TS252514G/	TS252514G/	0.143	1.000	0.143	Eq. H1-1b	20	0.802	0.782	0.782	1.172

Utilization Ratio Cont...

Beam	Analysis Property	Design Property	Actual Ratio	Allowable Ratio	Ratio (Act./Allow.)	Clause	L/C	Ax (in^2)	Iz (in^4)	Iy (in^4)	Ix (in^4)
271	TS252514G/	TS252514G/	0.131	1.000	0.131	Eq. H1-1b	20	0.802	0.782	0.782	1.172
272	TS252514G/	TS252514G/	0.133	1.000	0.133	Eq. H1-1b	20	0.802	0.782	0.782	1.172
273	TS252514G/	TS252514G/	0.141	1.000	0.141	Eq. H1-1b	20	0.802	0.782	0.782	1.172
274	TS252514G/	TS252514G/	0.160	1.000	0.160	Eq. H1-1b	11	0.802	0.782	0.782	1.172
275	TS252514G/	TS252514G/	0.072	1.000	0.072	Eq. Sec. D2	11	0.802	0.782	0.782	1.172
276	TS252514G/	TS252514G/	0.050	1.000	0.050	Eq. H3-1	23	0.802	0.782	0.782	1.172
277	TS252514G/	TS252514G/	0.083	1.000	0.083	Eq. H1-1b	11	0.802	0.782	0.782	1.172
278	TS252514G/	TS252514G/	0.091	1.000	0.091	Eq. H3-1	11	0.802	0.782	0.782	1.172
279	TS252514G/	TS252514G/	0.050	1.000	0.050	Eq. H3-1	23	0.802	0.782	0.782	1.172
280	TS252514G/	TS252514G/	0.091	1.000	0.091	Eq. H3-1	11	0.802	0.782	0.782	1.172
281	TS252514G/	TS252514G/	0.107	1.000	0.107	Eq. H1-1b	20	0.802	0.782	0.782	1.172
282	TS252514G/	TS252514G/	0.072	1.000	0.072	Eq. H1-1b	16	0.802	0.782	0.782	1.172
283	TS252514G/	TS252514G/	0.092	1.000	0.092	Eq. H1-1b	11	0.802	0.782	0.782	1.172
284	TS252514G/	TS252514G/	0.138	1.000	0.138	Eq. H1-1b	11	0.802	0.782	0.782	1.172
285	TS252514G/	TS252514G/	0.069	1.000	0.069	Eq. Sec. D2	11	0.802	0.782	0.782	1.172
286	TS252514G/	TS252514G/	0.094	1.000	0.094	Eq. H3-1	20	0.802	0.782	0.782	1.172
287	TS252514G/	TS252514G/	0.050	1.000	0.050	Eq. H3-1	23	0.802	0.782	0.782	1.172
288	TS252514G/	TS252514G/	0.067	1.000	0.067	Eq. H1-1b	11	0.802	0.782	0.782	1.172
289	TS252514G/	TS252514G/	0.094	1.000	0.094	Eq. H3-1	20	0.802	0.782	0.782	1.172
290	TS252514G/	TS252514G/	0.050	1.000	0.050	Eq. H3-1	23	0.802	0.782	0.782	1.172
291	TS252514G/	TS252514G/	0.094	1.000	0.094	Eq. H1-1b	11	0.802	0.782	0.782	1.172
292	TS252514G/	TS252514G/	0.094	1.000	0.094	Eq. H3-1	20	0.802	0.782	0.782	1.172
293	TS252514G/	TS252514G/	0.113	1.000	0.113	Eq. H3-1	19	0.802	0.782	0.782	1.172
294	TS252514G/	TS252514G/	0.103	1.000	0.103	Eq. H1-1b	23	0.802	0.782	0.782	1.172
295	TS252514G/	TS252514G/	0.047	1.000	0.047	Eq. H3-1	23	0.802	0.782	0.782	1.172
296	TS252514G/	TS252514G/	0.081	1.000	0.081	Eq. H3-1	11	0.802	0.782	0.782	1.172
297	TS252514G/	TS252514G/	0.053	1.000	0.053	Eq. H3-1	23	0.802	0.782	0.782	1.172
298	TS252514G/	TS252514G/	0.118	1.000	0.118	Eq. H1-1b	16	0.802	0.782	0.782	1.172
299	TS252514G/	TS252514G/	0.047	1.000	0.047	Eq. H3-1	23	0.802	0.782	0.782	1.172
300	TS252514G/	TS252514G/	0.053	1.000	0.053	Eq. H3-1	23	0.802	0.782	0.782	1.172
301	TS252514G/	TS252514G/	0.211	1.000	0.211	Eq. H1-1b	20	0.802	0.782	0.782	1.172
302	TS252514G/	TS252514G/	0.102	1.000	0.102	Eq. H3-1	12	0.802	0.782	0.782	1.172
303	TS252514G/	TS252514G/	0.047	1.000	0.047	Eq. H3-1	23	0.802	0.782	0.782	1.172
304	TS252514G/	TS252514G/	0.053	1.000	0.053	Eq. H3-1	23	0.802	0.782	0.782	1.172
305	TS252514G/	TS252514G/	0.415	1.000	0.415	Eq. H1-1b	12	0.802	0.782	0.782	1.172
306	TS252514G/	TS252514G/	0.062	1.000	0.062	Eq. H1-1b	19	0.802	0.782	0.782	1.172
307	TS252514G/	TS252514G/	0.131	1.000	0.131	Eq. H1-1b	20	0.802	0.782	0.782	1.172
308	TS252514G/	TS252514G/	0.053	1.000	0.053	Eq. H3-1	23	0.802	0.782	0.782	1.172
309	TS252514G/	TS252514G/	0.046	1.000	0.046	Eq. H3-1	18	0.802	0.782	0.782	1.172
310	TS252514G/	TS252514G/	0.046	1.000	0.046	Eq. H3-1	18	0.802	0.782	0.782	1.172
311	TS252514G/	TS252514G/	0.046	1.000	0.046	Eq. H3-1	18	0.802	0.782	0.782	1.172
312	TS252514G/	TS252514G/	0.046	1.000	0.046	Eq. H3-1	18	0.802	0.782	0.782	1.172
313	TS252514G/	TS252514G/	0.052	1.000	0.052	Eq. H1-1b	18	0.802	0.782	0.782	1.172
314	TS252514G/	TS252514G/	0.028	1.000	0.028	Eq. H3-1	16	0.802	0.782	0.782	1.172
315	TS252514G/	TS252514G/	0.028	1.000	0.028	Eq. H3-1	16	0.802	0.782	0.782	1.172

Utilization Ratio Cont...

Beam	Analysis Property	Design Property	Actual Ratio	Allowable Ratio	Ratio (Act./Allow.)	Clause	L/C	Ax (in^2)	Iz (in^4)	Iy (in^4)	Ix (in^4)
316	TS252514G/	TS252514G/	0.028	1.000	0.028	Eq. H3-1	16	0.802	0.782	0.782	1.172
317	TS252514G/	TS252514G/	0.028	1.000	0.028	Eq. H3-1	16	0.802	0.782	0.782	1.172
318	TS252514G/	TS252514G/	0.028	1.000	0.028	Eq. H1-1b	18	0.802	0.782	0.782	1.172
319	TS252514G/	TS252514G/	0.037	1.000	0.037	Eq. H1-1b	14	0.802	0.782	0.782	1.172
320	TS252514G/	TS252514G/	0.011	1.000	0.011	Eq. H1-1b	22	0.802	0.782	0.782	1.172
321	TS252514G/	TS252514G/	0.011	1.000	0.011	Eq. H1-1b	22	0.802	0.782	0.782	1.172
322	TS252514G/	TS252514G/	0.011	1.000	0.011	Eq. H1-1b	22	0.802	0.782	0.782	1.172
323	TS252514G/	TS252514G/	0.029	1.000	0.029	Eq. H1-1b	22	0.802	0.782	0.782	1.172
324	TS252514G/	TS252514G/	0.024	1.000	0.024	Eq. H1-1b	22	0.802	0.782	0.782	1.172
325	TS252514G/	TS252514G/	0.013	1.000	0.013	Eq. H1-1b	14	0.802	0.782	0.782	1.172
326	TS252514G/	TS252514G/	0.015	1.000	0.015	Eq. H1-1b	14	0.802	0.782	0.782	1.172
327	TS252514G/	TS252514G/	0.014	1.000	0.014	Eq. H1-1b	14	0.802	0.782	0.782	1.172
328	TS252514G/	TS252514G/	0.023	1.000	0.023	Eq. H1-1b	18	0.802	0.782	0.782	1.172
329	TS252514G/	TS252514G/	0.034	1.000	0.034	Eq. H1-1b	18	0.802	0.782	0.782	1.172
330	TS252514G/	TS252514G/	0.010	1.000	0.010	Eq. H3-1	11	0.802	0.782	0.782	1.172
331	TS252514G/	TS252514G/	0.010	1.000	0.010	Eq. H3-1	11	0.802	0.782	0.782	1.172
332	TS252514G/	TS252514G/	0.025	1.000	0.025	Eq. H1-1b	12	0.802	0.782	0.782	1.172
333	TS252514G/	TS252514G/	0.051	1.000	0.051	Eq. H1-1b	12	0.802	0.782	0.782	1.172
334	TS252514G/	TS252514G/	0.054	1.000	0.054	Eq. H1-1b	12	0.802	0.782	0.782	1.172
335	TS252514G/	TS252514G/	0.037	1.000	0.037	Eq. H1-1b	12	0.802	0.782	0.782	1.172
336	TS252514G/	TS252514G/	0.067	1.000	0.067	Eq. H1-1b	12	0.802	0.782	0.782	1.172
337	TS252514G/	TS252514G/	0.089	1.000	0.089	Eq. H1-1b	12	0.802	0.782	0.782	1.172
338	TS252514G/	TS252514G/	0.117	1.000	0.117	Eq. H1-1b	12	0.802	0.782	0.782	1.172
339	TS252514G/	TS252514G/	0.102	1.000	0.102	Eq. H1-1b	20	0.802	0.782	0.782	1.172
340	TS252514G/	TS252514G/	0.101	1.000	0.101	Eq. H1-1b	12	0.802	0.782	0.782	1.172
341	TS252514G/	TS252514G/	0.208	1.000	0.208	Eq. H1-1b	20	0.802	0.782	0.782	1.172
342	TS252514G/	TS252514G/	0.326	1.000	0.326	Eq. H1-1b	20	0.802	0.782	0.782	1.172
343	TS252514G/	TS252514G/	0.457	1.000	0.457	Eq. H1-1b	20	0.802	0.782	0.782	1.172
344	TS252514G/	TS252514G/	0.102	1.000	0.102	Sec. E1	11	0.802	0.782	0.782	1.172
345	TS252514G/	TS252514G/	0.123	1.000	0.123	Sec. E1	11	0.802	0.782	0.782	1.172
346	TS252514G/	TS252514G/	0.088	1.000	0.088	Sec. E1	11	0.802	0.782	0.782	1.172
347	TS252514G/	TS252514G/	0.107	1.000	0.107	Sec. E1	11	0.802	0.782	0.782	1.172
348	TS252514G/	TS252514G/	0.078	1.000	0.078	Sec. E1	11	0.802	0.782	0.782	1.172
349	TS252514G/	TS252514G/	0.096	1.000	0.096	Sec. E1	11	0.802	0.782	0.782	1.172
350	TS252514G/	TS252514G/	0.072	1.000	0.072	Sec. E1	11	0.802	0.782	0.782	1.172
351	TS252514G/	TS252514G/	0.089	1.000	0.089	Sec. E1	11	0.802	0.782	0.782	1.172
352	TS252514G/	TS252514G/	0.067	1.000	0.067	Sec. E1	11	0.802	0.782	0.782	1.172
353	TS252514G/	TS252514G/	0.082	1.000	0.082	Sec. E1	11	0.802	0.782	0.782	1.172
354	TS252514G/	TS252514G/	0.063	1.000	0.063	Sec. E1	11	0.802	0.782	0.782	1.172
355	TS252514G/	TS252514G/	0.076	1.000	0.076	Sec. E1	11	0.802	0.782	0.782	1.172
356	TS252514G/	TS252514G/	0.059	1.000	0.059	Sec. E1	11	0.802	0.782	0.782	1.172
357	TS252514G/	TS252514G/	0.266	1.000	0.266	Eq. H3-1	12	0.802	0.782	0.782	1.172
358	TS252514G/	TS252514G/	0.073	1.000	0.073	Sec. E1	11	0.802	0.782	0.782	1.172
359	TS252514G/	TS252514G/	0.101	1.000	0.101	Eq. H3-1	16	0.802	0.782	0.782	1.172
360	TS252514G/	TS252514G/	0.070	1.000	0.070	Sec. E1	11	0.802	0.782	0.782	1.172

Utilization Ratio Cont...

Beam	Analysis Property	Design Property	Actual Ratio	Allowable Ratio	Ratio (Act./Allow.)	Clause	L/C	Ax (in^2)	Iz (in^4)	Iy (in^4)	Ix (in^4)
361	TS252514G/	TS252514G/	0.101	1.000	0.101	Eq. H3-1	16	0.802	0.782	0.782	1.172
362	TS252514G/	TS252514G/	0.066	1.000	0.066	Sec. E1	11	0.802	0.782	0.782	1.172
363	TS252514G/	TS252514G/	0.065	1.000	0.065	Sec. E1	11	0.802	0.782	0.782	1.172
364	TS252514G/	TS252514G/	0.061	1.000	0.061	Sec. E1	11	0.802	0.782	0.782	1.172
365	TS252514G/	TS252514G/	0.059	1.000	0.059	Sec. E1	11	0.802	0.782	0.782	1.172
366	TS252514G/	TS252514G/	0.054	1.000	0.054	Sec. E1	11	0.802	0.782	0.782	1.172
367	TS252514G/	TS252514G/	0.063	1.000	0.063	Eq. H1-1b	20	0.802	0.782	0.782	1.172
368	TS252514G/	TS252514G/	0.044	1.000	0.044	Sec. E1	11	0.802	0.782	0.782	1.172
369	TS252514G/	TS252514G/	0.107	1.000	0.107	Eq. H3-1	12	0.802	0.782	0.782	1.172
370	TS252514G/	TS252514G/	0.074	1.000	0.074	Eq. H1-1b	16	0.802	0.782	0.782	1.172
371	TS252514G/	TS252514G/	0.125	1.000	0.125	Eq. H1-1b	20	0.802	0.782	0.782	1.172
570	TS252514G/	TS252514G/	0.036	1.000	0.036	Eq. H1-1b	21	1.605	3.596	1.564	2.000
571	TS252514G/	TS252514G/	0.055	1.000	0.055	Eq. H1-1b	21	1.605	3.596	1.564	2.000
572	TS252514G/	TS252514G/	0.062	1.000	0.062	Eq. H1-1b	21	1.605	3.596	1.564	2.000
573	TS252514G/	TS252514G/	0.069	1.000	0.069	Eq. H1-1b	21	1.605	3.596	1.564	2.000
574	TS252514G/	TS252514G/	0.053	1.000	0.053	Eq. H1-1b	21	1.605	3.596	1.564	2.000
575	TS252514G/	TS252514G/	0.044	1.000	0.044	Eq. H1-1b	13	1.605	3.596	1.564	2.000
576	TS252514G/	TS252514G/	0.075	1.000	0.075	Eq. H1-1b	21	1.605	3.596	1.564	2.000
577	TS252514G/	TS252514G/	0.112	1.000	0.112	Eq. H1-1b	21	1.605	3.596	1.564	2.000
578	TS252514G/	TS252514G/	0.118	1.000	0.118	Eq. H1-1b	21	1.605	3.596	1.564	2.000
579	TS252514G/	TS252514G/	0.124	1.000	0.124	Eq. H1-1b	21	1.605	3.596	1.564	2.000
580	TS252514G/	TS252514G/	0.109	1.000	0.109	Eq. H1-1b	21	1.605	3.596	1.564	2.000
581	TS252514G/	TS252514G/	0.096	1.000	0.096	Eq. H1-1b	21	1.605	3.596	1.564	2.000
582	TS252514G/	TS252514G/	0.117	1.000	0.117	Eq. H1-1b	21	1.605	3.596	1.564	2.000
583	TS252514G/	TS252514G/	0.159	1.000	0.159	Eq. H1-1b	21	1.605	3.596	1.564	2.000
584	TS252514G/	TS252514G/	0.165	1.000	0.165	Eq. H1-1b	21	1.605	3.596	1.564	2.000
585	TS252514G/	TS252514G/	0.170	1.000	0.170	Eq. H1-1b	21	1.605	3.596	1.564	2.000
586	TS252514G/	TS252514G/	0.156	1.000	0.156	Eq. H1-1b	21	1.605	3.596	1.564	2.000
587	TS252514G/	TS252514G/	0.139	1.000	0.139	Eq. H1-1b	21	1.605	3.596	1.564	2.000
588	TS252514G/	TS252514G/	0.147	1.000	0.147	Eq. H1-1b	21	1.605	3.596	1.564	2.000
589	TS252514G/	TS252514G/	0.194	1.000	0.194	Eq. H1-1b	21	1.605	3.596	1.564	2.000
590	TS252514G/	TS252514G/	0.201	1.000	0.201	Eq. H1-1b	21	1.605	3.596	1.564	2.000
591	TS252514G/	TS252514G/	0.205	1.000	0.205	Eq. H1-1b	21	1.605	3.596	1.564	2.000
592	TS252514G/	TS252514G/	0.192	1.000	0.192	Eq. H1-1b	21	1.605	3.596	1.564	2.000
593	TS252514G/	TS252514G/	0.170	1.000	0.170	Eq. H1-1b	21	1.605	3.596	1.564	2.000
594	TS252514G/	TS252514G/	0.165	1.000	0.165	Eq. H1-1b	21	1.605	3.596	1.564	2.000
595	TS252514G/	TS252514G/	0.217	1.000	0.217	Eq. H1-1b	21	1.605	3.596	1.564	2.000
596	TS252514G/	TS252514G/	0.224	1.000	0.224	Eq. H1-1b	21	1.605	3.596	1.564	2.000
597	TS252514G/	TS252514G/	0.228	1.000	0.228	Eq. H1-1b	21	1.605	3.596	1.564	2.000
598	TS252514G/	TS252514G/	0.215	1.000	0.215	Eq. H1-1b	21	1.605	3.596	1.564	2.000
599	TS252514G/	TS252514G/	0.189	1.000	0.189	Eq. H1-1b	21	1.605	3.596	1.564	2.000
600	TS252514G/	TS252514G/	0.171	1.000	0.171	Eq. H1-1b	21	1.605	3.596	1.564	2.000
601	TS252514G/	TS252514G/	0.228	1.000	0.228	Eq. H1-1b	21	1.605	3.596	1.564	2.000
602	TS252514G/	TS252514G/	0.236	1.000	0.236	Eq. H1-1b	21	1.605	3.596	1.564	2.000
603	TS252514G/	TS252514G/	0.238	1.000	0.238	Eq. H1-1b	21	1.605	3.596	1.564	2.000

Utilization Ratio Cont...

Beam	Analysis Property	Design Property	Actual Ratio	Allowable Ratio	Ratio (Act./Allow.)	Clause	L/C	Ax (in^2)	Iz (in^4)	Iy (in^4)	Ix (in^4)
604	TS252514G/	TS252514G/	0.227	1.000	0.227	Eq. H1-1b	21	1.605	3.596	1.564	2.000
605	TS252514G/	TS252514G/	0.196	1.000	0.196	Eq. H1-1b	21	1.605	3.596	1.564	2.000
606	TS252514G/	TS252514G/	0.173	1.000	0.173	Eq. H1-1b	21	1.605	3.596	1.564	2.000
607	TS252514G/	TS252514G/	0.228	1.000	0.228	Eq. H1-1b	21	1.605	3.596	1.564	2.000
608	TS252514G/	TS252514G/	0.237	1.000	0.237	Eq. H1-1b	21	1.605	3.596	1.564	2.000
609	TS252514G/	TS252514G/	0.239	1.000	0.239	Eq. H1-1b	21	1.605	3.596	1.564	2.000
610	TS252514G/	TS252514G/	0.230	1.000	0.230	Eq. H1-1b	21	1.605	3.596	1.564	2.000
611	TS252514G/	TS252514G/	0.196	1.000	0.196	Eq. H1-1b	21	1.605	3.596	1.564	2.000
612	TS252514G/	TS252514G/	0.154	1.000	0.154	Eq. H1-1b	21	1.605	3.596	1.564	2.000
613	TS252514G/	TS252514G/	0.226	1.000	0.226	Eq. H1-1b	21	1.605	3.596	1.564	2.000
614	TS252514G/	TS252514G/	0.235	1.000	0.235	Eq. H1-1b	21	1.605	3.596	1.564	2.000
615	TS252514G/	TS252514G/	0.236	1.000	0.236	Eq. H1-1b	21	1.605	3.596	1.564	2.000
616	TS252514G/	TS252514G/	0.208	1.000	0.208	Eq. H1-1b	21	1.605	3.596	1.564	2.000
617	TS252514G/	TS252514G/	0.210	1.000	0.210	Eq. H1-1b	21	1.605	3.596	1.564	2.000
618	TS252514G/	TS252514G/	0.151	1.000	0.151	Eq. H1-1b	21	1.605	3.596	1.564	2.000
619	TS252514G/	TS252514G/	0.213	1.000	0.213	Eq. H1-1b	21	1.605	3.596	1.564	2.000
620	TS252514G/	TS252514G/	0.222	1.000	0.222	Eq. H1-1b	21	1.605	3.596	1.564	2.000
621	TS252514G/	TS252514G/	0.223	1.000	0.223	Eq. H1-1b	21	1.605	3.596	1.564	2.000
622	TS252514G/	TS252514G/	0.198	1.000	0.198	Eq. H1-1b	21	1.605	3.596	1.564	2.000
623	TS252514G/	TS252514G/	0.192	1.000	0.192	Eq. H1-1b	21	1.605	3.596	1.564	2.000
624	TS252514G/	TS252514G/	0.148	1.000	0.148	Eq. H1-1b	11	1.605	3.596	1.564	2.000
625	TS252514G/	TS252514G/	0.204	1.000	0.204	Eq. H1-1b	11	1.605	3.596	1.564	2.000
626	TS252514G/	TS252514G/	0.233	1.000	0.233	Eq. H1-1b	11	1.605	3.596	1.564	2.000
627	TS252514G/	TS252514G/	0.230	1.000	0.230	Eq. H1-1b	11	1.605	3.596	1.564	2.000
628	TS252514G/	TS252514G/	0.204	1.000	0.204	Eq. H1-1b	11	1.605	3.596	1.564	2.000
629	TS252514G/	TS252514G/	0.162	1.000	0.162	Eq. H1-1b	11	1.605	3.596	1.564	2.000
630	TS252514G/	TS252514G/	0.176	1.000	0.176	Eq. H1-1b	11	1.605	3.596	1.564	2.000
631	TS252514G/	TS252514G/	0.226	1.000	0.226	Eq. H1-1b	11	1.605	3.596	1.564	2.000
632	TS252514G/	TS252514G/	0.257	1.000	0.257	Eq. H1-1b	11	1.605	3.596	1.564	2.000
633	TS252514G/	TS252514G/	0.255	1.000	0.255	Eq. H1-1b	11	1.605	3.596	1.564	2.000
634	TS252514G/	TS252514G/	0.231	1.000	0.231	Eq. H1-1b	11	1.605	3.596	1.564	2.000
635	TS252514G/	TS252514G/	0.176	1.000	0.176	Eq. H1-1b	11	1.605	3.596	1.564	2.000
636	TS252514G/	TS252514G/	0.206	1.000	0.206	Eq. H1-1b	11	1.605	3.596	1.564	2.000
637	TS252514G/	TS252514G/	0.246	1.000	0.246	Eq. H1-1b	11	1.605	3.596	1.564	2.000
638	TS252514G/	TS252514G/	0.281	1.000	0.281	Eq. H1-1b	11	1.605	3.596	1.564	2.000
639	TS252514G/	TS252514G/	0.279	1.000	0.279	Eq. H1-1b	11	1.605	3.596	1.564	2.000
640	TS252514G/	TS252514G/	0.258	1.000	0.258	Eq. H1-1b	11	1.605	3.596	1.564	2.000
641	TS252514G/	TS252514G/	0.188	1.000	0.188	Eq. H1-1b	11	1.605	3.596	1.564	2.000
642	TS252514G/	TS252514G/	0.117	1.000	0.117	Eq. H1-1b	11	1.605	3.596	1.564	2.000
643	TS252514G/	TS252514G/	0.148	1.000	0.148	Eq. H1-1b	11	1.605	3.596	1.564	2.000
644	TS252514G/	TS252514G/	0.168	1.000	0.168	Eq. H1-1b	11	1.605	3.596	1.564	2.000
645	TS252514G/	TS252514G/	0.167	1.000	0.167	Eq. H1-1b	11	1.605	3.596	1.564	2.000
646	TS252514G/	TS252514G/	0.152	1.000	0.152	Eq. H1-1b	11	1.605	3.596	1.564	2.000
647	TS252514G/	TS252514G/	0.114	1.000	0.114	Eq. H1-1b	11	1.605	3.596	1.564	2.000
648	TS252514G/	TS252514G/	0.058	1.000	0.058	Eq. H1-1b	11	1.605	3.596	1.564	2.000

Utilization Ratio Cont...

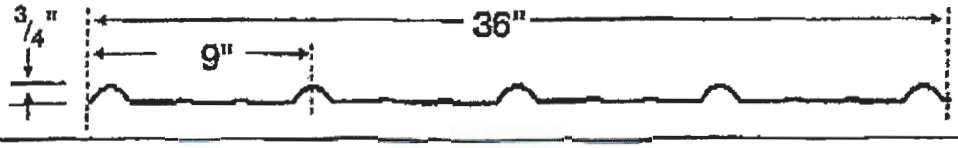
Beam	Analysis Property	Design Property	Actual Ratio	Allowable Ratio	Ratio (Act./Allow.)	Clause	L/C	Ax (in^2)	Iz (in^4)	Iy (in^4)	Ix (in^4)
649	TS252514G/	TS252514G/	0.065	1.000	0.065	Eq. H1-1b	11	1.605	3.596	1.564	2.000
650	TS252514G/	TS252514G/	0.069	1.000	0.069	Eq. H1-1b	11	1.605	3.596	1.564	2.000
651	TS252514G/	TS252514G/	0.069	1.000	0.069	Eq. H1-1b	11	1.605	3.596	1.564	2.000
652	TS252514G/	TS252514G/	0.067	1.000	0.067	Eq. H1-1b	11	1.605	3.596	1.564	2.000
653	TS252514G/	TS252514G/	0.056	1.000	0.056	Eq. H1-1b	11	1.605	3.596	1.564	2.000
654	TS252514G/	TS252514G/	0.045	1.000	0.045	Eq. H1-1b	11	1.605	3.596	1.564	2.000
655	TS252514G/	TS252514G/	0.041	1.000	0.041	Eq. H1-1b	11	1.605	3.596	1.564	2.000
656	TS252514G/	TS252514G/	0.044	1.000	0.044	Eq. H1-1b	11	1.605	3.596	1.564	2.000
657	TS252514G/	TS252514G/	0.041	1.000	0.041	Eq. H1-1b	22	1.605	3.596	1.564	2.000
658	TS252514G/	TS252514G/	0.041	1.000	0.041	Eq. H1-1b	22	1.605	3.596	1.564	2.000
659	TS252514G/	TS252514G/	0.039	1.000	0.039	Eq. H1-1b	22	1.605	3.596	1.564	2.000
660	TS252514G/	TS252514G/	0.045	1.000	0.045	Eq. H1-1b	22	1.605	3.596	1.564	2.000
661	TS252514G/	TS252514G/	0.050	1.000	0.050	Eq. H1-1b	22	1.605	3.596	1.564	2.000
662	TS252514G/	TS252514G/	0.051	1.000	0.051	Eq. H1-1b	22	1.605	3.596	1.564	2.000
663	TS252514G/	TS252514G/	0.051	1.000	0.051	Eq. H1-1b	22	1.605	3.596	1.564	2.000
664	TS252514G/	TS252514G/	0.049	1.000	0.049	Eq. H1-1b	22	1.605	3.596	1.564	2.000
665	TS252514G/	TS252514G/	0.047	1.000	0.047	Eq. H1-1b	21	1.605	3.596	1.564	2.000
666	TS252514G/	TS252514G/	0.153	1.000	0.153	Eq. H1-1b	12	1.605	3.596	1.564	2.000
667	TS252514G/	TS252514G/	0.097	1.000	0.097	Eq. H3-1	12	1.605	3.596	1.564	2.000
668	TS252514G/	TS252514G/	0.097	1.000	0.097	Eq. H3-1	12	1.605	3.596	1.564	2.000
669	TS252514G/	TS252514G/	0.090	1.000	0.090	Eq. H1-1b	22	1.605	3.596	1.564	2.000
670	TS252514G/	TS252514G/	0.097	1.000	0.097	Eq. H1-1b	22	1.605	3.596	1.564	2.000
671	TS252514G/	TS252514G/	0.099	1.000	0.099	Eq. H1-1b	22	1.605	3.596	1.564	2.000
672	TS252514G/	TS252514G/	0.099	1.000	0.099	Eq. H1-1b	22	1.605	3.596	1.564	2.000
673	TS252514G/	TS252514G/	0.096	1.000	0.096	Eq. H1-1b	22	1.605	3.596	1.564	2.000
674	TS252514G/	TS252514G/	0.093	1.000	0.093	Eq. H1-1b	22	1.605	3.596	1.564	2.000
675	TS252514G/	TS252514G/	0.084	1.000	0.084	Eq. H1-1b	11	1.605	3.596	1.564	2.000
676	TS252514G/	TS252514G/	0.133	1.000	0.133	Eq. H1-1b	22	1.605	3.596	1.564	2.000
677	TS252514G/	TS252514G/	0.145	1.000	0.145	Eq. H1-1b	22	1.605	3.596	1.564	2.000
678	TS252514G/	TS252514G/	0.147	1.000	0.147	Eq. H1-1b	22	1.605	3.596	1.564	2.000
679	TS252514G/	TS252514G/	0.147	1.000	0.147	Eq. H1-1b	22	1.605	3.596	1.564	2.000
680	TS252514G/	TS252514G/	0.142	1.000	0.142	Eq. H1-1b	22	1.605	3.596	1.564	2.000
681	TS252514G/	TS252514G/	0.153	1.000	0.153	Eq. H1-1b	21	1.605	3.596	1.564	2.000
682	TS252514G/	TS252514G/	0.074	1.000	0.074	Eq. H1-1b	12	1.605	3.596	1.564	2.000
683	TS252514G/	TS252514G/	0.119	1.000	0.119	Eq. H1-1b	21	1.605	3.596	1.564	2.000
684	TS252514G/	TS252514G/	0.143	1.000	0.143	Eq. H1-1b	21	1.605	3.596	1.564	2.000
685	TS252514G/	TS252514G/	0.138	1.000	0.138	Eq. H1-1b	21	1.605	3.596	1.564	2.000
686	TS252514G/	TS252514G/	0.135	1.000	0.135	Eq. H1-1b	21	1.605	3.596	1.564	2.000
687	TS252514G/	TS252514G/	0.131	1.000	0.131	Eq. H1-1b	21	1.605	3.596	1.564	2.000
688	TS252514G/	TS252514G/	0.141	1.000	0.141	Eq. H1-1b	21	1.605	3.596	1.564	2.000
689	TS252514G/	TS252514G/	0.027	1.000	0.027	Eq. H3-1	23	1.605	3.596	1.564	2.000
690	TS252514G/	TS252514G/	0.041	1.000	0.041	Eq. H1-1b	20	1.605	3.596	1.564	2.000
691	TS252514G/	TS252514G/	0.067	1.000	0.067	Eq. H1-1b	20	1.605	3.596	1.564	2.000
692	TS252514G/	TS252514G/	0.089	1.000	0.089	Eq. H1-1b	15	1.605	3.596	1.564	2.000
693	TS252514G/	TS252514G/	0.106	1.000	0.106	Eq. H1-1b	15	1.605	3.596	1.564	2.000

Failed Members

There is no data of this type.

THRU FASTENER INFORMATION

IMPERIAL RIB®
36" Coverage



SECTION PROPERTIES								
			TOP IN COMPRESSION			BOTTOM IN COMPRESSION		
PANEL THICKNESS	WEIGHT (PSF)	FY (KSI)	Ix (IN⁴/ft.)	Se (IN³/ft.)	Ma (Kip in.)	Ix (IN⁴/ft.)	Se (IN³/ft.)	Ma (Kip in.)
0.015	0.70	80	0.0103	0.0163	0.5852	0.0089	0.0165	0.5936
0.019	0.88	80	0.0135	0.0218	0.7829	0.0079	0.0189	0.6780

NOTES
1. Section properties and allowable stresses are calculated in accordance with the 1986 AISI specifications for light gauge structural members.
2. Ix is for deflection determination.
3. Se is for bending.
4. Ma is allowable bending movement.
5. All values are for one foot of panel width.

29 GAUGE — ALLOWABLE UNIFORM LOADS (PSF) IN POUNDS PER SQUARE FOOT

Span Type	Load Type	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	5.00	5.50	6.00	6.50	7.00	7.50	8.00	8.50
Single	Positive Wind	520	231	130	83	58	42	33	26	21	17	14	12	11	9	8	7
	Negative Wind	528	235	132	84	59	43	33	26	21	17	15	12	11	9	8	7
	Live	390	173	98	62	43	32	24	19	16	13	11	9	8	7	6	5
	Deflection (L/180)	900	257	113	58	33	21	14	10	7	5	4	3	3	2	2	1
	Deflection (L/240)	675	200	84	43	25	16	11	7	5	4	3	2	2	2	1	1
2 Span	Positive Wind	528	235	132	84	59	43	33	28	21	17	15	12	11	9	8	7
	Negative Wind	520	231	130	83	58	42	33	26	21	17	14	12	11	9	8	7
	Live	396	176	99	63	44	32	25	20	16	13	11	9	8	7	6	5
	Deflection (L/180)	1874	555	234	120	69	44	29	21	15	11	9	7	5	4	4	3
	Deflection (L/240)	1405	416	176	90	52	33	22	15	11	8	7	5	4	3	3	2
3 Span	Positive Wind	660	293	165	106	73	54	41	33	26	22	18	16	13	12	10	9
	Negative Wind	650	289	163	104	72	53	41	32	26	21	18	15	13	12	10	9
	Live	495	220	124	79	55	40	31	24	20	16	14	12	10	9	8	7
	Deflection (L/180)	1468	435	184	94	54	34	23	16	12	9	7	5	4	3	3	2
	Deflection (L/240)	1101	326	138	70	41	26	17	12	9	7	5	4	3	3	2	2

26 GAUGE — ALLOWABLE UNIFORM LOADS (PSF) IN POUNDS PER SQUARE FOOT

Span Type	Load Type	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	5.00	5.50	6.00	6.50	7.00	7.50	8.00	8.50
Single	Positive Wind	696	309	174	111	77	57	43	34	28	23	19	16	14	12	11	10
	Negative Wind	603	268	151	96	67	49	38	30	24	20	17	14	12	11	9	8
	Live	522	232	130	84	58	43	33	26	21	17	14	12	11	9	8	7
	Deflection (L/180)	1180	350	148	76	44	28	18	13	9	7	5	4	3	3	2	2
	Deflection (L/240)	885	262	111	57	33	21	14	10	7	5	4	3	3	2	2	1
2 Span	Positive Wind	603	268	151	96	67	49	38	30	24	20	17	14	12	11	9	8
	Negative Wind	696	309	174	111	77	57	43	34	28	23	19	16	14	12	11	10
	Live	452	201	113	72	50	37	28	22	18	15	13	11	9	8	7	6
	Deflection (L/180)	1663	493	208	106	62	39	26	18	13	10	8	6	5	4	3	3
	Deflection (L/240)	1248	370	156	80	46	29	19	14	10	7	6	5	4	3	2	2
3 Span	Positive Wind	753	335	188	121	84	61	47	37	30	25	21	18	15	13	12	10
	Negative Wind	870	387	217	139	97	71	54	43	35	29	24	21	18	15	14	12
	Live	565	251	141	90	63	46	35	28	23	19	16	13	12	10	9	8
	Deflection (L/180)	1303	386	163	83	48	30	20	14	10	8	6	5	4	3	3	2
	Deflection (L/240)	977	290	122	63	36	23	15	11	8	6	5	4	3	2	2	2

NOTES:
1. Section properties and allowable stresses are calculated in accordance with the 1986 AISI specifications for light gauge structural members.
2. Steel strength of thru fastener panels is 80 KSI minimum yield. Steel strength of concealed panels is 50 KSI minimum yield. These conform to ASTM A635 (galvanized) and A792-94 (Galvalume®).
3. Values shown as allowable loads are based on panel covering three equal spans. Multiply by 0.8 for two span allowable loads.
4. Allowable loads for wind have been increased by 33%. Panel weight has not been deducted. Minimum bearing length must be checked.
5. For agricultural structures, the UBC and SBCCI building codes require a minimum of 10 PSF roof live loads.
6. Deflection loads are limited by a maximum deflection ratio of L/180 of span.

TRI-STATE
TESTING SERVICES, INC.

September 17, 2003

Report No.: LO28906

Home Pride, Inc.
P.O. Box 160387
Nashville, TN 37216
Telephone: (615) 226-6453
Fax: (615) 226-1301

SUBJECT: Performance Test Report –HP9

ITEM DESCRIPTION: Model HP9 (Barbed Anchor)

TEST DATE: September 12, 2003

TEST METHODOLOGY: Model HP9 was installed per installation instructions.

Mr. Oliphant – We have concluded testing on the above referenced item.

A Performance test was performed on model HP9. Model HP9 was installed by drilling a 1 ¼" hole 15 inches deep. Model HP9 was then driven into the hole to a depth of 13".

The performance test consists of three-load test. Each anchor was pre-bent to a forty-five degree angle and preloaded prior to the start of each test.

RESULTS: Model HP9 was found to be acceptable based on previously mentioned acceptance criteria (see attached data log). There was no disfiguring or failure to Model HP9, all anchors were loaded to any ultimate load of 4,725 lbs with no movement in excess of three inches in a horizontal direction and two inches in a vertical direction.

If we can answer any questions concerning this report please let me know.

Respectfully Submitted,
TRI-STATE TESTING SERVICES, INC.

Will Jackson
Assistant Manager

RICHARD HARBOUR
Glenn R Harbour Jr.
10-2-03
TENNESSEE

6756 Buckles Cove Memphis, TN 38133 901 385 1199 fax 901-386 6614

Tri-State Testing Services

45 degree anchor test

Customer: Home Pride, Inc.
Anchor mdl: HP9
Date: September 12, 2003

Test No. 1			Test No. 2			Test No. 3		
load	lift	deflection	load	lift	deflection	load	lift	deflection
1000	0	0	1000	0	0	1000	0	0
1500	0	0	1500	0	0	1500	0	0
2000	0	0	2000	0	0	2000	0	0
2500	0	0	2500	0	0	2500	0	0
3000	0	0	3000	0	0	3000	0	0
3500	0	0	3500	0	0	3500	0	0
4000	0	0	4000	0	0	4000	0	0
4500	0	0	4500	0	0	4500	0	0
4725	0	0	4725	0	0	4725	0	0

Total Load	4725	Total Load	4725	Total Load	4725
Total Lift	0	Total Lift	0	Total Lift	0
Total Defl.	0	Total Defl.	0	Total Defl.	0
Results	Acceptable	Results	Acceptable	Results	Acceptable

HP9 Barbed Anchor

2" Swivel Head

22" x 3/4" A529 Grade 50

HP9
22" x 3/4"
Barbed Anchor

2" x 3/4" x .125" A36

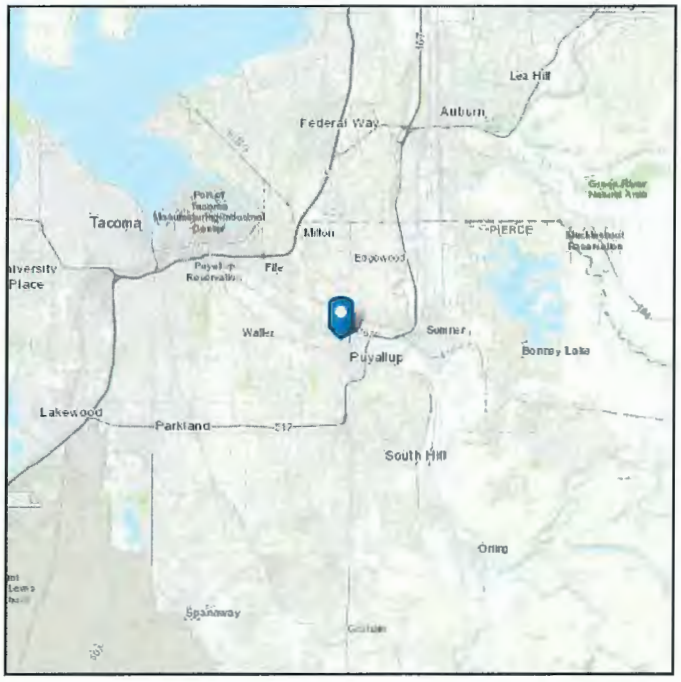
4 Tabs Must be Angled To the Right.

ASCE 7 Hazards Report

Address:
608 River Rd
Puyallup, Washington
98371

Standard: ASCE/SEI 7-16
Risk Category: I
Soil Class: D - Default (see Section 11.4.3)

Elevation: 41.39 ft (NAVD 88)
Latitude: 47.200016
Longitude: -122.30103



Wind

Results:

Wind Speed:	92 Vmph
10-year MRI	67 Vmph
25-year MRI	73 Vmph
50-year MRI	78 Vmph
100-year MRI	83 Vmph

Data Source: ASCE/SEI 7-16, Fig. 26.5-1A and Figs. CC.2-1–CC.2-4, and Section 26.5.2
Date Accessed: Sat Nov 06 2021

Value provided is 3-second gust wind speeds at 33 ft above ground for Exposure C Category, based on linear interpolation between contours. Wind speeds are interpolated in accordance with the 7-16 Standard. Wind speeds correspond to approximately a 15% probability of exceedance in 50 years (annual exceedance probability = 0.00333, MRI = 300 years).

Site is not in a hurricane-prone region as defined in ASCE/SEI 7-16 Section 26.2.

ASCE
AMERICAN SOCIETY OF CIVIL ENGINEERS

Seismic

Site Soil Class: D - Default (see Section 11.4.3)

Results:

S_S :	1.277	S_{D1} :	N/A
S_1 :	0.439	T_L :	6
F_a :	1.2	PGA :	0.5
F_v :	N/A	PGA_M :	0.6
S_{MS} :	1.533	F_{PGA} :	1.2
S_{M1} :	N/A	I_e :	1
S_{DS} :	1.022	C_v :	1.355

Ground motion hazard analysis may be required. See ASCE/SEI 7-16 Section 11.4.8.

Data Accessed: Sat Nov 06 2021

Date Source: USGS Seismic Design Maps

Snow

Results:

Ground Snow Load, p_g:	18 lb/ft^2
Elevation:	41.4 ft
Data Source:	
Date Accessed:	Sat Nov 06 2021

Statutory requirements of the Authority Having Jurisdiction are not included.