Calculations required to be provided by the Permittee on site for all Inspections

City of Puyallup
Building
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FOR
COMPLIANCE
SKinnear
03/25/2026
3:09:08 PM

City of Puyallup
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Fire | Traffic

PRCTI20260356

# *Structural Calculations*

*PREPARED FOR:*

Washington State Fair
110 9th Ave SW
Puyallup, WA 98371

Marty Mattes, COO

*PROJECT:*

WSF Giant Slide

2250414.20

*PREPARED BY:*

Andy Pflueger, PE, SE
Senior Associate

*REVIEWED BY:*

Drew McEachern, PE, SE
Principal

*DATE:*

March, 2026

Structural Calculations

For

# Washington State Fair – Giant Slide
# Puyallup, Washington

*Project # 2250414.20*

| | |
|---|---|
| **Project Principal** | Drew McEachern, PE, SE |
| **Project Manager** | Andy Pflueger, PE, SE |

## Design Criteria

### Design Codes and Standards

Codes and Standards: Structural design and construction shall be in accordance with the applicable sections of the following codes and standards as adopted and amended by the local building authority: International Building Code, 2021 Edition.

### Structural Design Criteria:


Live Load Criteria:

| | |
|---|---|
| Minimum Snow Load | 25 psf |
| Slide | 50 psf or 300 lbs |
| Stair/Landing | 100 psf or 300 lbs |

Wind Load Criteria:

| | |
|---|---|
| Basic Wind Speed | 97 mph |
| Risk Category | II |
| Wind Exposure | B |
| Topographic Factor | 1.0 (by Inspection) |

Seismic Criteria:

| | | | |
|---|---|---|---|
| Risk Category | | | II |
| Seismic Importance Factor | | | 1.0 |
| $S_s$ | = 1.271 | $S_1$ | = 0.438 |
| $S_{ds}$ | = 1.017 | $S_{d1}$ | = N/A |
| Site Class | | | = D-Default |
| Seismic Design Category | | | = D |
| Response Modification Coeff. (R): | | | 2.0 |
| Seismic Response Coeff. ($C_s$): | | | 0.5085 |

Soil Criteria:

Based on presumptive values by IBC chapter 18, and existing building performance:

Allowable Soil Bearing Capacity: 1500 psf allow 33% increase for loads from wind or seismic origin.

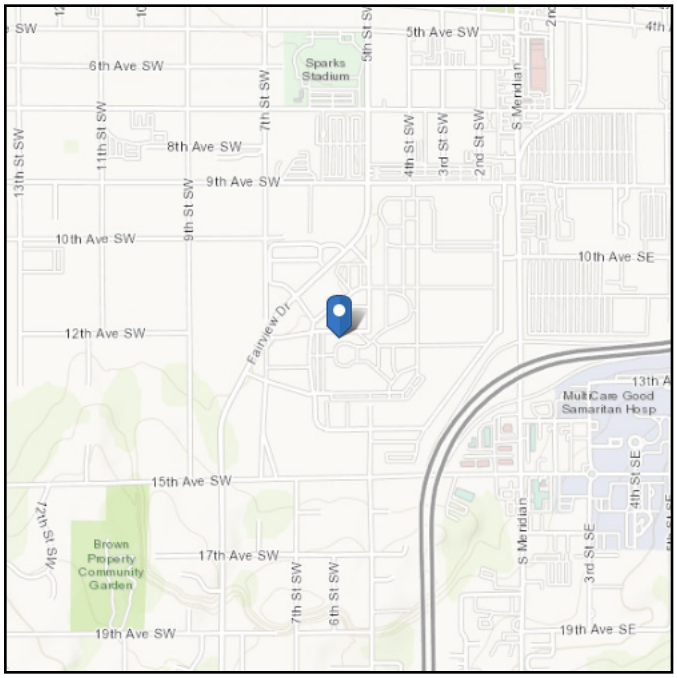
**Project Description**

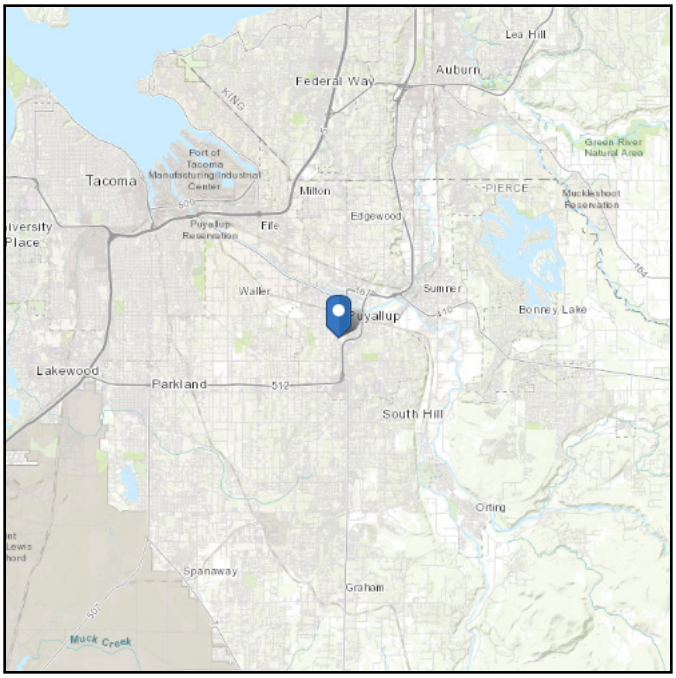
The project consists of replacing the scaffolding that supports the existing Giant Slide Ride at the Washington State Fair. The scaffolding will be a pre-engineered structure by Berg Equipment & Scaffolding Co., Inc. AHBL design includes review and design of the wind/seismic bracing, surface footing for the scaffolding column loads, and review and design of improvements to the existing dead-man foundations.

# ASCE Hazards Report

**Address:**
No Address at This Location

| | | | |
|---|---|---|---|
| **Standard:** | ASCE/SEI 7-16 | **Latitude:** | 47.180694 |
| **Risk Category:** | II | **Longitude:** | -122.30002 |
| **Soil Class:** | D - Default (see Section 11.4.3) | **Elevation:** | 39.79455582066984 ft (NAVD 88) |




## Wind

**Results:**

| | |
|---|---|
| Wind Speed | 97 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. 26.5-1B and Figs. CC.2-1–CC.2-4, and Section 26.5.2

Date Accessed: Wed Oct 29 2025

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 7% probability of exceedance in 50 years (annual exceedance probability = 0.00143, MRI = 700 years).

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

# Seismic

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

**Results:**

| | | | |
|---|---|---|---|
| $S_S$ : | 1.271 | $S_{D1}$ : | N/A |
| $S_1$ : | 0.438 | $T_L$ : | 6 |
| $F_a$ : | 1.2 | PGA : | 0.5 |
| $F_v$ : | N/A | $PGA_M$ : | 0.6 |
| $S_{MS}$ : | 1.526 | $F_{PGA}$ : | 1.2 |
| $S_{M1}$ : | N/A | $I_e$ : | 1 |
| $S_{DS}$ : | 1.017 | $C_v$ : | 1.354 |

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

**Data Accessed:** Wed Oct 29 2025

**Date Source:** USGS Seismic Design Maps

# Snow

**Results:**

| | |
|---|---|
| Ground Snow Load, $p_g$: | 18 lb/ft$^2$ |
| Mapped Elevation: | 39.8 ft |
| Data Source: | |
| Date Accessed: | Wed Oct 29 2025 |

Statutory requirements of the Authority Having Jurisdiction are not included.

Snow load values are mapped to a 0.5 mile resolution. This resolution can create a mismatch between the mapped elevation and the site-specific elevation in topographically complex areas. Engineers should consult the local authority having jurisdiction in locations where the reported 'elevation' and 'mapped elevation' differ significantly from each other.

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PROJECT LOCATION:

LAT: 47.180694
LONG: -122.300020.

DESIGN CRITERIA:

IBC 2021.

LIVE LOAD STEPS: 100 PSF OR 300#

LIVE LOAD SLIDE: 50 PSF OR 300#.
SNOW LOAD: 25 PSF.

WIND LOAD:

97 MPH
EXP B
$K_{zt}$ = 1.0

SEISMIC LOADS:

$S_S$ = 1.271
$S_1$ = 0.438

$S_{DS}$ = 1.017
$S_{D1}$ = N/A.

SITE CLASS D - DEFAULT
SDC = D

EH. 15 R = 2.0 $\Omega_0$ = 2.0 $C_d$ = 2.0
$I_e$ = 1.0

$C_s = \frac{S_{DS}}{(R/I_e)} = \frac{1.017}{2} = 0.5085$

$C_{s\,MIN} = 0.044 S_{DS} I_e$
$= 0.0447.$

$\therefore V = E = 0.5085 \times W.$

If this does not meet with your understanding, please contact us in writing within seven days. THANK YOU.

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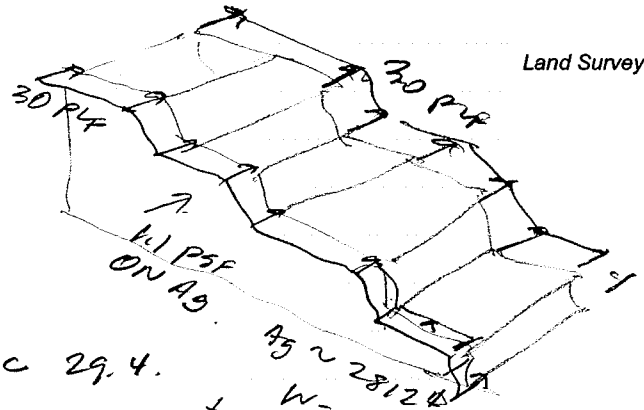
## WIND LOAD:

$q_z = 0.00256\, K_z K_{zt} K_d K_e V^2$

$K_z = 0.76$ @ 40 ft  $V = 97$ MPH
$K_{zt} = 1.0$
$K_d = 0.85$
$K_e = 1.0$

$q_z = 15.56$ PSF




TRANSVERSE LOAD: PER AISC 29.4.

$F = q_z G C_f A_f$

$\epsilon$ = SOLID AREA TO GROSS AREA

SAN CHAIN LINK AREA = 68.21 % OPEN. $\epsilon = 0.3179$ @ Chainlink.

SCAFFOLDING AREA = 2"/10 ft. SOLID = 0.0167
+ $\frac{2" \times 2 \times 10\text{ ft}}{10 \times 6'4"}$ SOLID = 0.0526

$\epsilon = 0.0693$ @ scaffold.

$\epsilon < 0.1$  $D/T_{q_z} \leq 2.5$
$C_f = 1.2$ FIGURE 29.4-2

∴ USE $F = 15.56(0.85)(1.20)(0.3179)\, A_g = 5.0955$ PSF FOR CHAINLINK

$F = 15.56(0.85)(1.20)(0.0693)\, A_g = 1.099$ PSF FOR SCAFFOLDING

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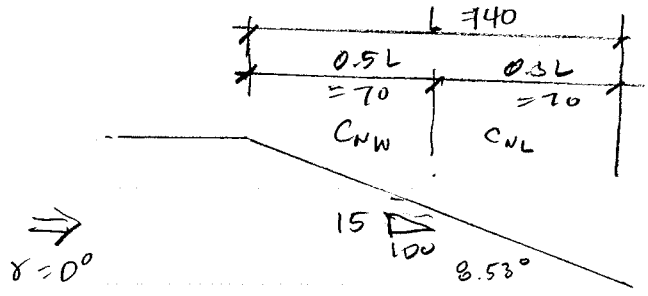
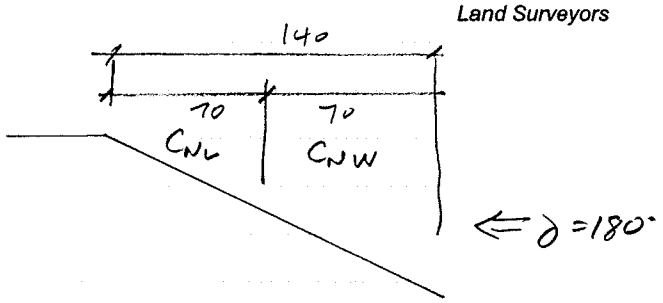
## WIND LOAD ON OPEN STRUCTURE:

CH. 27 +16 PSF MIN FOR OPEN BLDGS.

$p = q_h G C_N$. $h$ @ MRH MRH = 19 $q_h = 12.69$ PSF $K_h = 0.62$

$G = 0.85$




CASE A $C_{NW} = -1.0$ $C_{NL} = -1.5$

$p = -10.8$ psf $p = -16.2$ psf

CASE B $C_{NW} = -1.7$ $C_{NL} = -0.8$

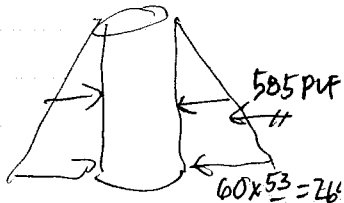
$p = -18.3$ psf $p = -8.6$ psf

$C_{NL} = -1.2$ $C_{NW} = -0.2$

$p = -13.0$ PSF $p = -2.2$ PSF

$C_{NL} = -0.3$ $C_{NW} = 0.8$

$p = -3.2$ PSF $p = 8.6$ PSF

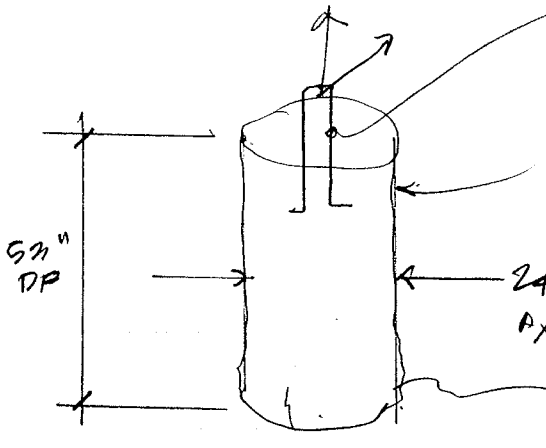



$C = \pi D$

$= 6.28$ FT

#4 $\phi P_n = 0.9 \times 60 \cdot 0.20 \cdot 2$

$= 21600\#$ ult.




DEAD WEIGHT $= 13.875\ \# \times 150$ PCF

$= 2081\#$.

$0.6DL = 1248\#$

$SF = 0.525 \times 585 \times 6.28$ FT

$= 1929\#$

$Vol = 3.1416\left(\frac{53}{12}\right)$

$= 13.875$

SKIN FRICTION:

$SF = f \cdot A_{surface}$ $0.6 \times SF$

$f = \mu \cdot \gamma \cdot K_o$ $= 1157\#$

$K_o = 1 - \sin\phi$ ALLOW

say $\phi = 30°$

$K_o = 0.50$

$\gamma = 120$

$\gamma K_o = 60$ PCF

$\mu = 0.35 \times 1.5 = 0.525$

## IN-SITU DEAD MAN:

$= 1248 + 1157\#$

0.6D + ALLOW SKIN FRICT. $= 2405\#$

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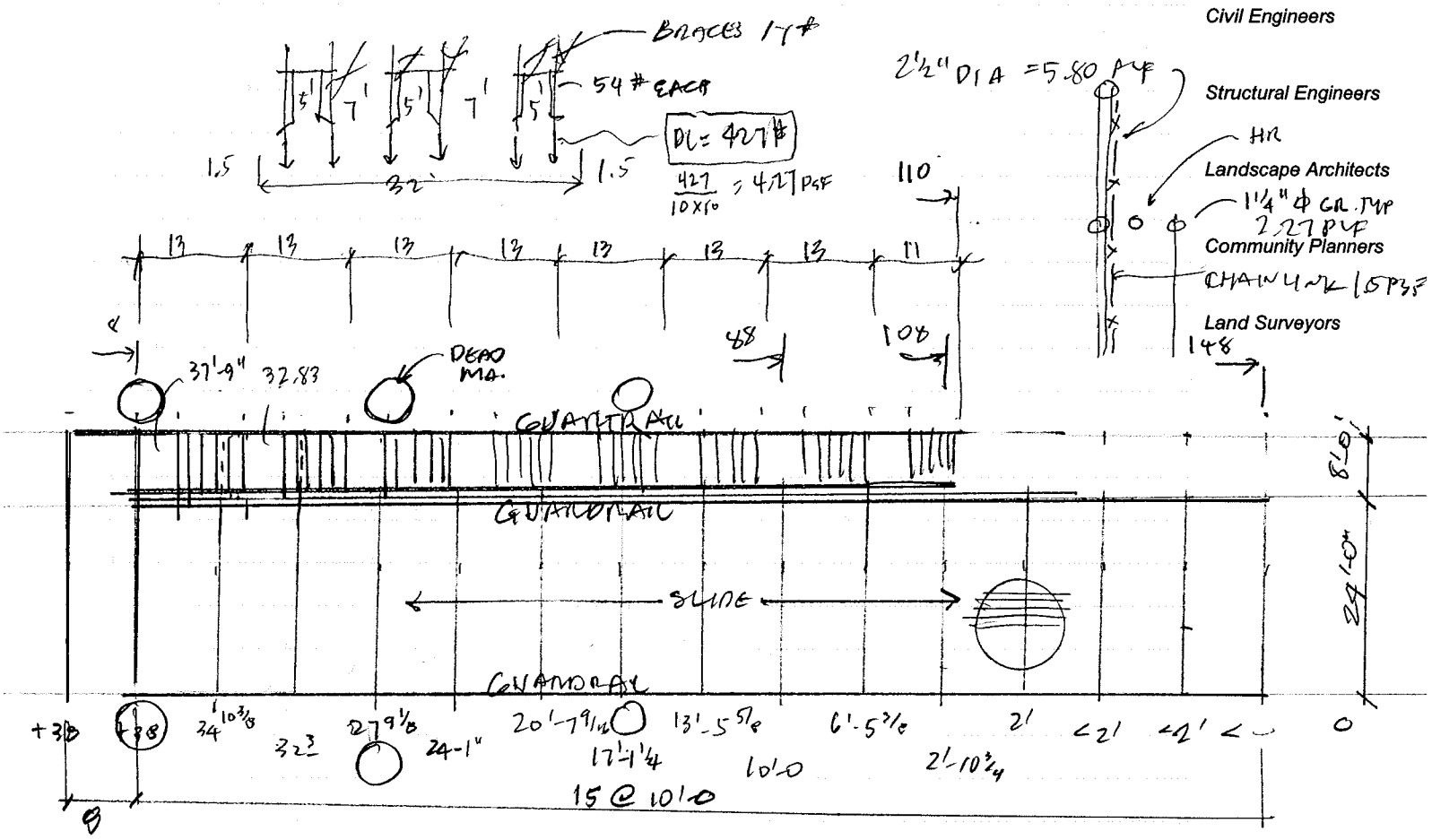
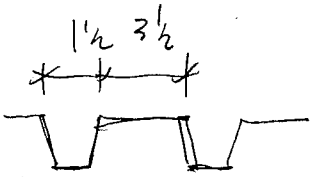



DEAD LOAD :



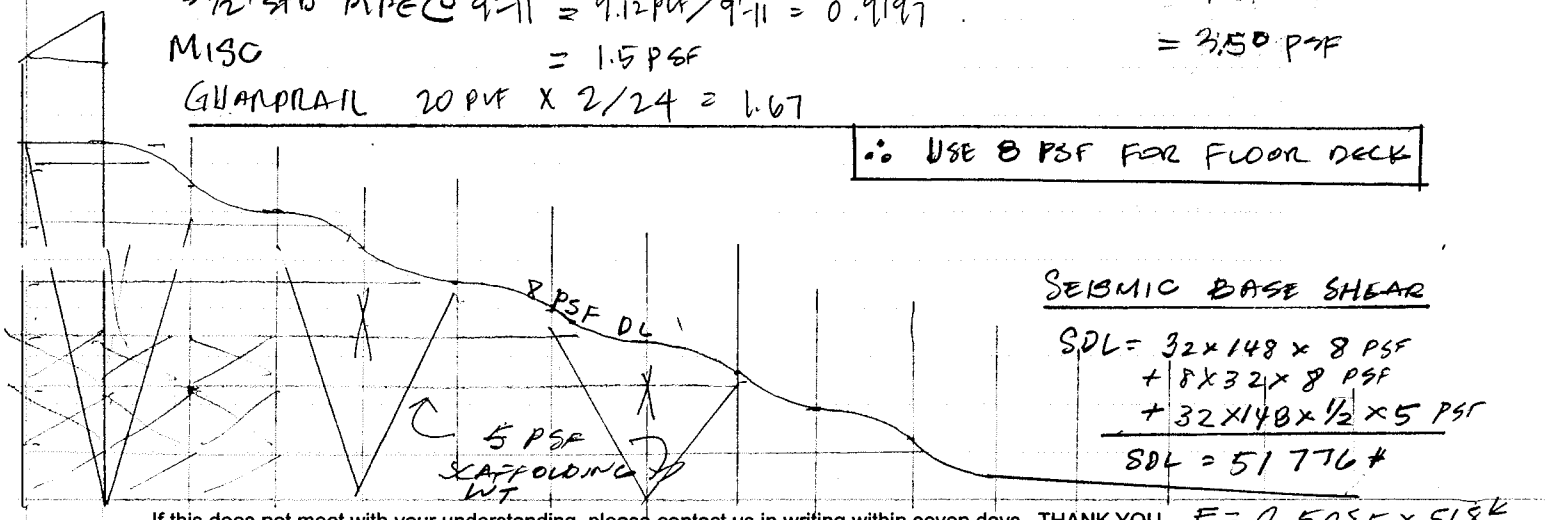

16 GA DECKING 0.0598" WT = $\frac{0.0598"}{12"}(490)\left(\frac{1\frac{1}{2}+3\frac{1}{2}+2\times1\frac{5}{8}}{1\frac{1}{2}+3\frac{1}{2}}\right)$ = 3.50 PSF

3½" STD PIPE @ 9'-11" = 9.12 PLF / 9'-11 = 0.919

MISC = 1.5 PSF

GUARDRAIL 20 PLF X 2/24 = 1.67

∴ USE 8 PSF FOR FLOOR DECK




SEISMIC BASE SHEAR

SDL = 32 x 148 x 8 PSF
+ 8 x 32 x 8 PSF
+ 32 x 148 x ½ x 5 PSF
SDL = 51 776 #

E = 0.0585 x 51.8 k
E = 26 328 #

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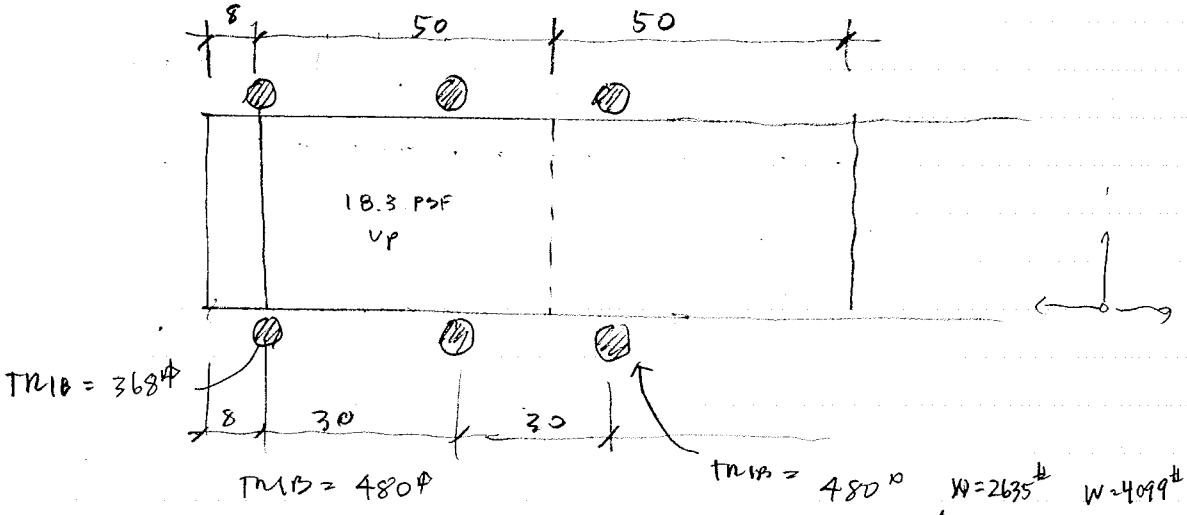
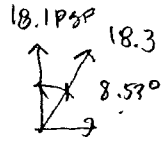
HAND CALC ESTIMATE / LAYOUT - SEE RISA DESIGN FOR UPDATED FORCES/REACTIONS

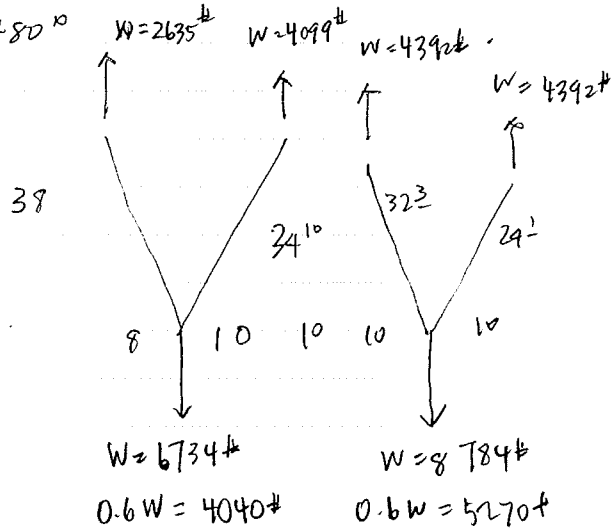
## WIND LOAD UPLIFT:

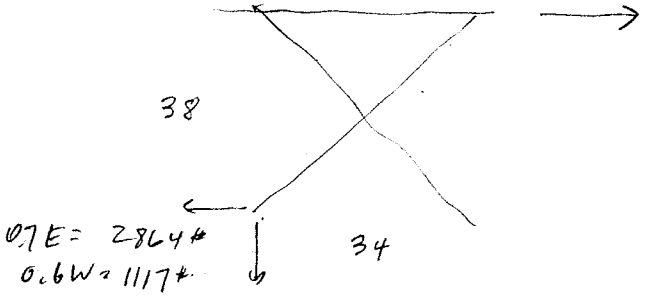


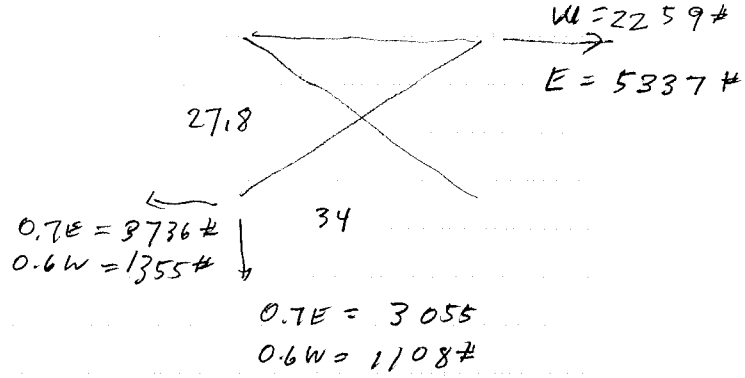

$0.6W = 0.6 \cdot 18.3\ PSF \cdot 368\ SF = 4041\#$

or $0.6 \cdot 18.3\ PSF \cdot 480\ SF = 5270\#$




W = 1861#
E = 4092#

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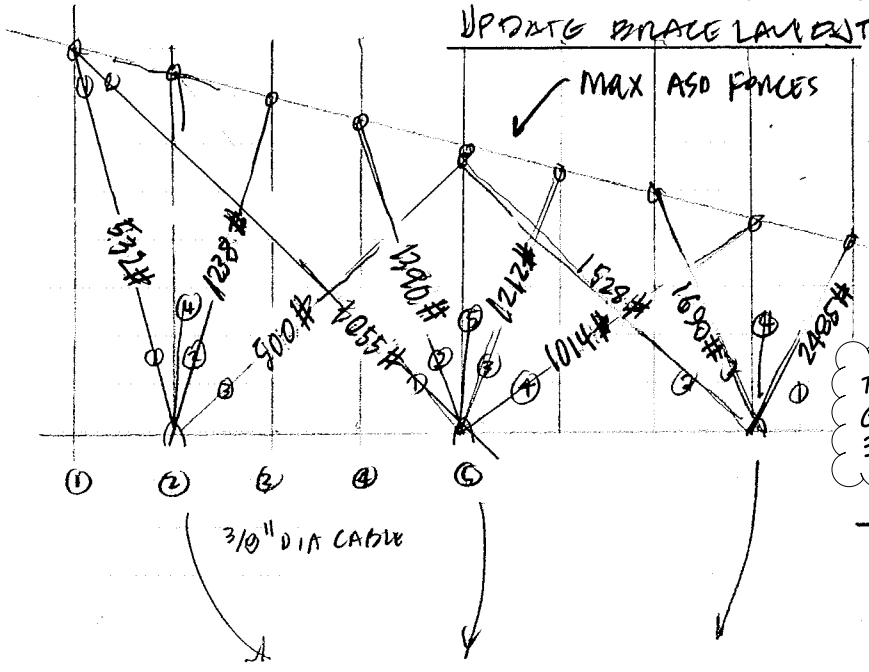
# RIGA MODEL RESULTS

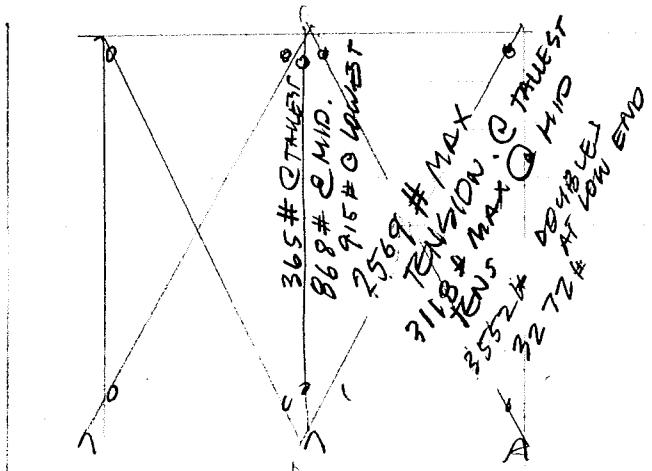
## UPDATE BRACE LAYOUT

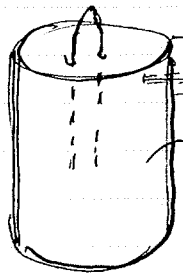



~~7x7 GALV 3/8 = 13100~~
~~7x19 GALV 3/8 = 14400~~

PER BERG SCAFFOLDING - USE 5/16" DIA. 7x19 GALV WIRE. NOM STRENGTH = 9800 # ALLOW - 3267#

NOM STRENGTH
~~EIPS FIBRE CORE = 0.90 X 6.71 TONS~~
~~GALV. = 12078 #~~
FS = 3.0 ⇒ ~~4026# per~~
~~5.0 ⇒ 2415# per~~



0.60+ ALLOW SKIN FRICT.
= 2405#

$V_r$ = VOL REQ'D
= (Pa - 2405) / 0.6(150)

RISA ENVELOPE UPLIFT (Pa ASD)

1. $V_r$ = 0
2342#
$P_u$ = 6374
$V_r$ = 0

2. $V_r$ = 11.8#
3469#
$P_u$ = 10481
$V_r$ = 0

3. $V_r$ = 39.7#
5978#
$P_u$ = 18287

4. 1913# $V_r$ = 0
$P_u$ = 5755

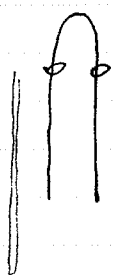
5. 2307#
$P_u$ = 7032

6. $V_r$ = 3.2#
2695#
$P_u$ = 8202

7. $V_r$ = 2.3#
2612#
$P_u$ = 7748

8. $V_r$ = 10.1#
3318#
$P_u$ = 9772

9. $V_r$ = 32.6#
5338#
$P_u$ = 16456



$A_s$ = 0.31 x 2

$\phi R_n$ = 0.9 x 0.31 x 2 x 60001
= 33480#

$P_u$ = STRENGTH DESIGN FORCES W/ OVERSTR.

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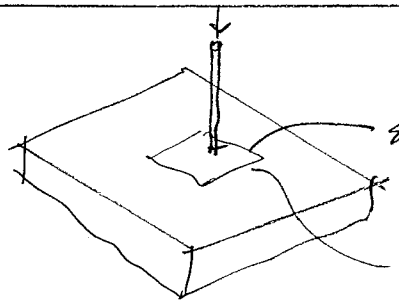
## 21.0" SQUARE FOOTING:

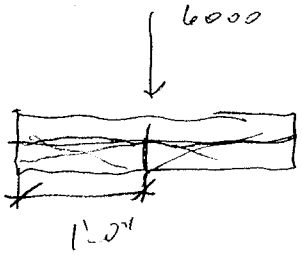
6000# W/ GRAVITY ONLY
8000# W/ SEISMIC/WIND

ASBP = 1500 PSF

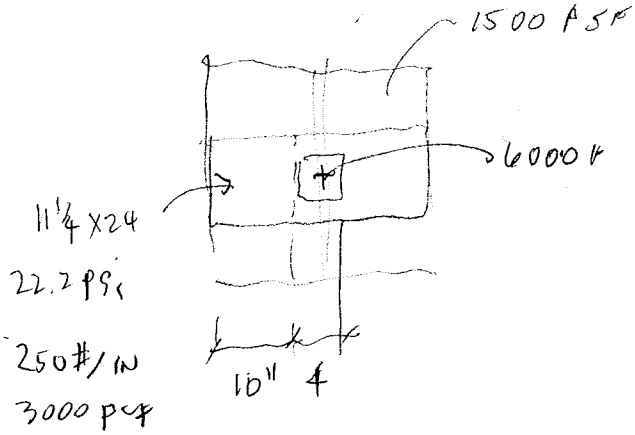



64 IN²

$\frac{6000}{625\ psi}$ = 9.6 IN² MIN




$\frac{6000}{2 \times 2}$ = 1500 PSF




$q = \frac{VQ}{I}$ =

V = 3000 ($\frac{16}{12}$)
= 2500#

Q = AȳA = 1½ x 11¼ x 1½
= 25.3125 IN³

$I = \frac{bh^3}{12} = \frac{11\frac{1}{4}(1\frac{1}{2})^3}{12}$
= 3.1641 IN⁴

$q = \frac{2500\# \times 25.3125}{3.1641}$
= 20000#

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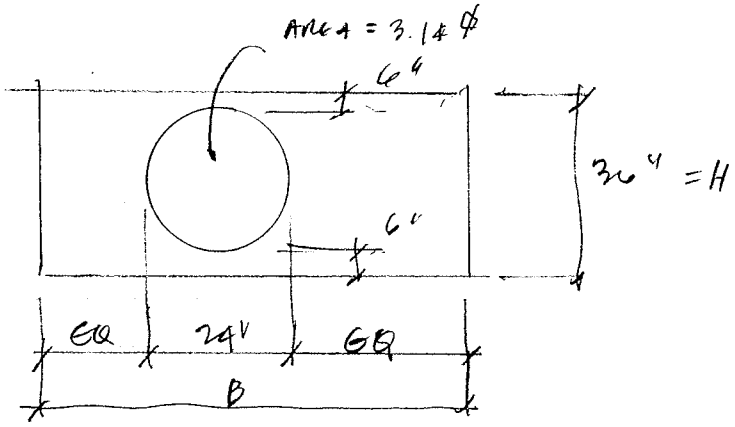
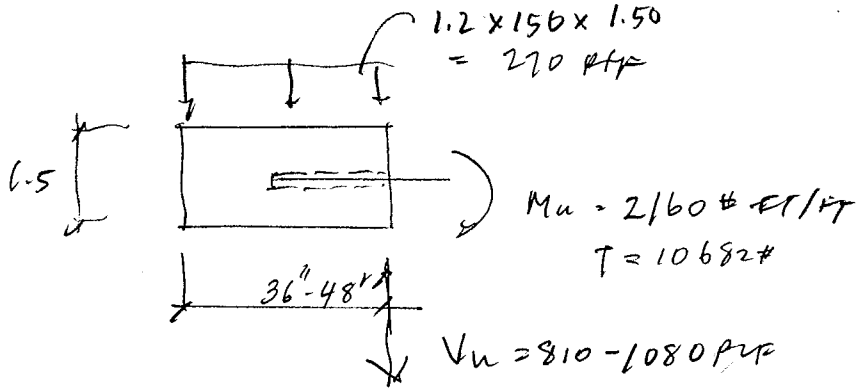



| B | H | T | AREA | VOL | |
|---|---|---|---|---|---|
| | | | | TARGET = 3.7 CF | |
| 4.0 | 3.0 | 0.50 | 8.96 SF | 4.42 CF | 2405 + 0.6 (150) (4.42) = 2802# |
| | | | | TARGET = 11.8 CF | |
| 6.67 | 3.0 | 0.67 | 16.86 Φ | 11.26 CF | 2405 + 0.6 (150) (11.26) = 3418# |
| | | | | TARGET = 39.7 CF | (UNITY = 1.015 OK |
| 8.0 | 3.5 | 1.5P | 24.96 Φ | 37.3 | 2405 + 0.6 (150) (37.3) = 5762 |
| | | | | | (UNITY = 1.038 OK) |




$A_s = 0.31$

T = C = 18600 #

d = 3" MIN @ 6"
4" MIN @ 8"
9" MIN @ 18"

a = 0.6078

$\phi M_n$ = 3.78 K-FT/FT @ 6"
5.16 K-FT/FT @ 8"

Project _____ Project No. _____ ☐ Page ____ of ____

Subject _____ Phone _____ ☐ Calculations

With/To _____ Fax # _____ ☐ Fax

Address _____ # Faxed Pages _____ ☐ Memorandum

Date _____ By _____ ☐ Meeting Minutes

☐ Telephone Memo

AHBL

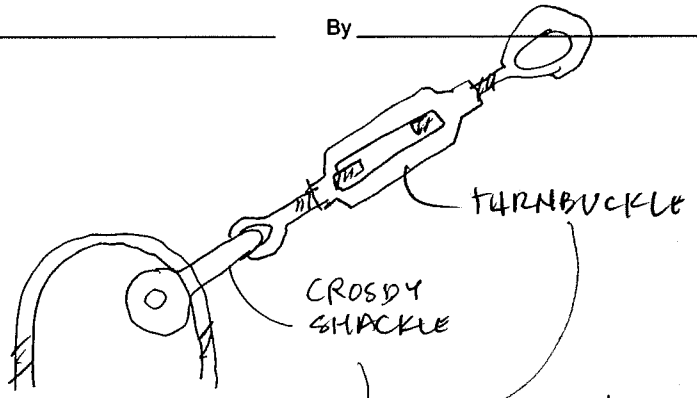
*Civil Engineers*

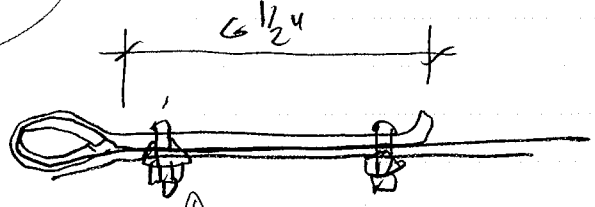
*Structural Engineers*

*Landscape Architects*

*Community Planners*

*Land Surveyors*




(2) CLIPS
CROSBY G450

WORKING LOAD LIMIT
ANCHOR SHACKLE G.209

3/8" SIZE ⇒ 1 TON = 2000# PIN = 7/16 ϕ

7/16" SIZE ⇒ 1½ TON = 3000# PIN = ½ ϕ

½" SIZE ⇒ 2 TON = 4000# PIN = 5/8 ϕ

BOLT TYPE G2130
SAME RATING

HG 226
EYE-EYE

3/8 ϕ X 6 1200# WORKING LOAD LIMIT

½ ϕ X 6 2200# WORKING LOAD LIMIT

} BASED ON Ω = 5

Ω = 3.0 IN AISC 3/8" DIA ⇒ $R_n/\Omega$ = 3333#

½" DIA ⇒ 3670#

If this does not meet with your understanding, please contact us in writing within seven days. THANK YOU.

Project Title:
Engineer:
Project ID:
Project Descr:

# Wood Beam

Project File: WSF GIANT SLIDE.ec6



**DESCRIPTION:** (3) 2X BU (NOT COMPOSITE) W/ 6" FOOT

## Code References

Governing Code : IBC 2024
Referenced Design Standard(s) : NDS 2024
Load Combination Set : IBC 2021

## Material Properties

Analysis Method : Allowable Stress Design
Load Combination : IBC 2021

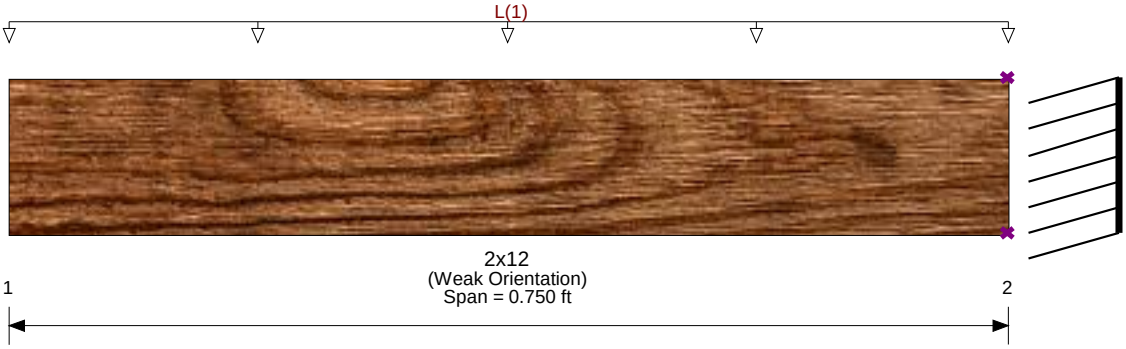
Wood Species : Douglas Fir-Larch
Wood Grade : No.1

Beam Bracing : Completely Unbraced

| | |
|---|---|
| Fb + | 1200 psi |
| Fb - | 1200 psi |
| Fc - Prll | 1000 psi |
| Fc - Perp | 625 psi |
| Fv | 170 psi |
| Ft | 825 psi |

*E : Modulus of Elasticity*

| | |
|---|---|
| Ebend- xx | 1600 ksi |
| Eminbend - xx | 580 ksi |
| Density | 31.21 pcf |




## Applied Loads

Service loads entered. Load Factors will be applied for calculations.

Beam self weight NOT internally calculated and added
Uniform Load : L = 1.0 , Tributary Width = 1.0 ft

## DESIGN SUMMARY

**Design OK**

| | | | | | |
|---|---|---|---|---|---|
| Maximum Bending Stress Ratio | = | **0.833** : 1 | Maximum Shear Stress Ratio | = | **0.410** : 1 |
| Section used for this span | | **2x12** NDS2018 *(weak orientation)* | Section used for this span | | **2x12** NDS2018 *(weak orientation)* |
| fb: Actual | = | 800.00 psi | fv: Actual | = | 55.72 psi |
| F'b | = | 960.00 psi | F'v | = | 136.00 psi |
| Load Combination | | L Only | Load Combination | | L Only |
| Location of maximum on span | = | 0.750 ft | Location of maximum on span | = | 0.627 ft |
| Span # where maximum occurs | = | Span # 1 | Span # where maximum occurs | = | Span # 1 |

Maximum Deflection

| | | | | |
|---|---|---|---|---|
| Max Downward Transient Deflection | 0 in | Ratio = | 0 >=360 | n/a |
| Max Upward Transient Deflection | 0 in | Ratio = | 0 >=360 | n/a |
| Max Downward Total Deflection | 0.014 in | Ratio = | 1262 >=180 | Span: 1 : L Only |
| Max Upward Total Deflection | 0 in | Ratio = | 0 >=180 | n/a |

## Maximum Forces & Stresses for Load Combinations

| Load Combination / Segment Length | Span # | Max Stress Ratios M | V | CD | CM | $C_t$ | CLx | $C_F$ | Cfu | $C_i$ | $C_r$ | Moment Values M | fb | F'b | Shear Values V | fv | F'v |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | 0.0 | 0.00 | 0.0 | 0.0 |
| Length = 0.750 ft | 1 | | | 0.90 | 1.00 | 1.00 | 1.00 | 1.000 | 1.00 | 0.80 | 1.00 | | | 864.0 | 0.00 | 0.0 | 122.4 |
| L Only | | | | | 1.00 | 1.00 | 1.00 | 1.000 | 1.00 | 0.80 | 1.00 | | | 0.0 | 0.00 | 0.0 | 0.0 |
| Length = 0.750 ft | 1 | 0.833 | 0.410 | 1.00 | 1.00 | 1.00 | 1.00 | 1.000 | 1.00 | 0.80 | 1.00 | 0.28 | 800.0 | 960.0 | 0.63 | 55.7 | 136.0 |
| +0.750L | | | | | 1.00 | 1.00 | 1.00 | 1.000 | 1.00 | 0.80 | 1.00 | | | 0.0 | 0.00 | 0.0 | 0.0 |
| Length = 0.750 ft | 1 | 0.500 | 0.246 | 1.25 | 1.00 | 1.00 | 1.00 | 1.000 | 1.00 | 0.80 | 1.00 | 0.21 | 600.0 | 1,200.0 | 0.47 | 41.8 | 170.0 |

Project Title:
Engineer:
Project ID:
Project Descr:

# Wood Beam

Project File: WSF GIANT SLIDE.ec6



**DESCRIPTION:** (3) 2X BU (NOT COMPOSITE) W/ 6" FOOT

## Overall Maximum Deflections

| Span | Load Combination | Max. "-" Defl | Location in Span | Load Combination | Max. "+" Defl | Location in Span |
|---|---|---|---|---|---|---|
| 1 | L Only | 0.0142 | 0.000 | | 0.0000 | 0.000 |

## Vertical Reactions

Support notation : Far left is #1 Values in KIPS

| Load Combination | Support 1 | Support 2 |
|---|---|---|
| Max Upward from all Load Conditions | | 0.750 |
| Max Upward from Load Combinations | | 0.563 |
| Max Upward from Load Cases | | 0.750 |
| L Only | | 0.750 |
| +0.750L | | 0.563 |

Project Title:
Engineer:
Project ID:
Project Descr:

# Wood Beam

Project File: WSF GIANT SLIDE.ec6



**DESCRIPTION:** 2x12 TRTD UNDER BU TRANSFER BU

## Code References

Governing Code : IBC 2024
Referenced Design Standard(s) : NDS 2024
Load Combination Set : IBC 2021

## Material Properties

Analysis Method : Allowable Stress Design
Load Combination : IBC 2021

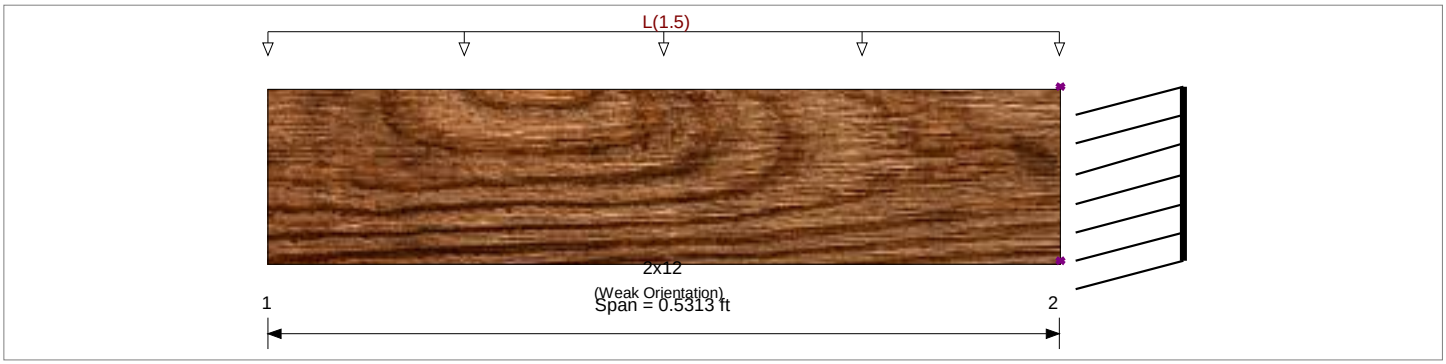
Wood Species : Douglas Fir-Larch
Wood Grade : No.1

Beam Bracing : Completely Unbraced

| | |
|---|---|
| Fb + | 1,200.0 psi |
| Fb - | 1,200.0 psi |
| Fc - Prll | 1,000.0 psi |
| Fc - Perp | 625.0 psi |
| Fv | 170.0 psi |
| Ft | 825.0 psi |

*E : Modulus of Elasticity*

| | |
|---|---|
| Ebend- xx | 1,600.0 ksi |
| Eminbend - xx | 580.0 ksi |
| Density | 31.210 pcf |




## Applied Loads

Service loads entered. Load Factors will be applied for calculations.

Beam self weight NOT internally calculated and added
Uniform Load : L = 1.50 , Tributary Width = 1.0 ft

## DESIGN SUMMARY

**Design OK**

| | | | | | |
|---|---|---|---|---|---|
| Maximum Bending Stress Ratio | = | **0.627** : 1 | Maximum Shear Stress Ratio | = | **0.399** : 1 |
| Section used for this span | | **2x12** NDS2018 *(weak orientation)* | Section used for this span | | **2x12** NDS2018 *(weak orientation)* |
| fb: Actual | = | 602.20 psi | fv: Actual | = | 54.29 psi |
| F'b | = | 960.00 psi | F'v | = | 136.00 psi |
| Load Combination | | L Only | Load Combination | | L Only |
| Location of maximum on span | = | 0.531 ft | Location of maximum on span | = | 0.407 ft |
| Span # where maximum occurs | = | Span # 1 | Span # where maximum occurs | = | Span # 1 |

Maximum Deflection

| | | | | |
|---|---|---|---|---|
| Max Downward Transient Deflection | 0 in | Ratio = | 0 >=360 | n/a |
| Max Upward Transient Deflection | 0 in | Ratio = | 0 >=360 | n/a |
| Max Downward Total Deflection | 0.005 in | Ratio = | 2368 >=180 | Span: 1 : L Only |
| Max Upward Total Deflection | 0 in | Ratio = | 0 >=180 | n/a |

## Maximum Forces & Stresses for Load Combinations

| Load Combination / Segment Length | Span # | Max Stress Ratios M | V | CD | CM | $C_t$ | CLx | $C_F$ | Cfu | $C_i$ | $C_r$ | Moment Values M | fb | F'b | Shear Values V | fv | F'v |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | 0.0 | 0.00 | 0.0 | 0.0 |
| Length = 0.5313 ft | 1 | | | 0.90 | 1.00 | 1.00 | 1.00 | 1.000 | 1.00 | 0.80 | 1.00 | | | 864.0 | 0.00 | 0.0 | 122.4 |
| L Only | | | | | 1.00 | 1.00 | 1.00 | 1.000 | 1.00 | 0.80 | 1.00 | | | 0.0 | 0.00 | 0.0 | 0.0 |
| Length = 0.5313 ft | 1 | 0.627 | 0.399 | 1.00 | 1.00 | 1.00 | 1.00 | 1.000 | 1.00 | 0.80 | 1.00 | 0.21 | 602.2 | 960.0 | 0.61 | 54.3 | 136.0 |
| +0.750L | | | | | 1.00 | 1.00 | 1.00 | 1.000 | 1.00 | 0.80 | 1.00 | | | 0.0 | 0.00 | 0.0 | 0.0 |
| Length = 0.5313 ft | 1 | 0.376 | 0.240 | 1.25 | 1.00 | 1.00 | 1.00 | 1.000 | 1.00 | 0.80 | 1.00 | 0.16 | 451.6 | 1,200.0 | 0.46 | 40.7 | 170.0 |

Project Title:
Engineer:
Project ID:
Project Descr:

# Wood Beam

Project File: WSF GIANT SLIDE.ec6



**DESCRIPTION:** 2x12 TRTD UNDER BU TRANSFER BU

## Overall Maximum Deflections

| Span | Load Combination | Max. "-" Defl | Location in Span | Load Combination | Max. "+" Defl | Location in Span |
|---|---|---|---|---|---|---|
| 1 | L Only | 0.0054 | 0.000 | | 0.0000 | 0.000 |

## Vertical Reactions

Support notation : Far left is #1 Values in KIPS

| Load Combination | Support 1 | Support 2 |
|---|---|---|
| Max Upward from all Load Conditions | | 0.797 |
| Max Upward from Load Combinations | | 0.598 |
| Max Upward from Load Cases | | 0.797 |
| L Only | | 0.797 |
| +0.750L | | 0.598 |

| | | | |
|---|---|---|---|
| Company: | | Date: | 2/16/2026 |
| Engineer: | | Page: | 1 |
| Project: | | | |
| Address: | | | |
| Phone: | | | |
| E-mail: | | | |

## 1.Project information

Project description:
Location:
Design name: Design

Comment:

## 2. Input Data & Anchor Parameters

**General**
Design method:ACI 318-19
Units: Imperial units

**Anchor Information:**
Anchor type: Bonded anchor
Material: A615 Grade 60 Rebar
Diameter (inch): 0.625
Effective Embedment depth, $h_{ef}$ (inch): 12.500
Code report: ESR-5026
Anchor category: -
Anchor ductility: Yes
$h_{min}$ (inch): 14.00
$c_{ac}$ (inch): 22.20
$C_{min}$ (inch): 2.00
$S_{min}$ (inch): 3.00

**Base Material**
Concrete: Normal-weight
Concrete thickness, h (inch): 48.00
State: Cracked
Compressive strength, $f'_c$ (psi): 3000
$\Psi_{c,V}$: 1.0
Reinforcement condition: B tension, B shear
Supplemental edge reinforcement: Not applicable
Reinforcement provided at corners: No
Ignore concrete breakout in tension: No
Ignore concrete breakout in shear: No
Hole condition: Dry concrete
Inspection: Continuous
Temperature range, Short/Long: 150/110°F
Reduced installation torque (for AT-3G): No
Ignore 6do requirement: Not applicable
Build-up grout pad: No

**Base Plate**
Length x Width x Thickness (inch): 8.00 x 8.00 x 0.25

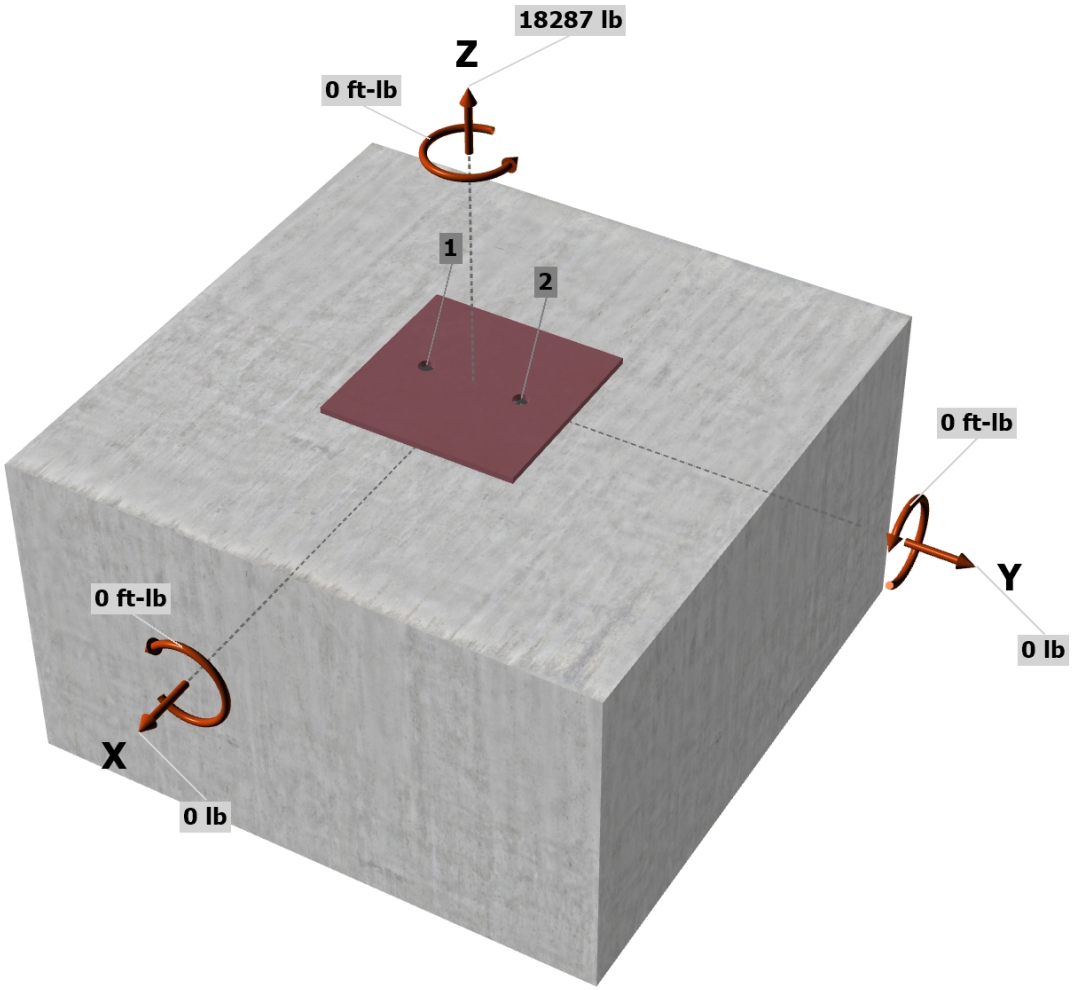
**Recommended Anchor**
Anchor Name: AT-3G™ - AT-3G w/ #5 A615 Gr. 60 Rebar
Code Report: ESR-5026

**Load and Geometry**
Load factor source: ACI 318 Section 5.3
Load combination: not set
Seismic design: No
Anchors subjected to sustained tension: No
Apply entire shear load at front row: No
Anchors only resisting wind and/or seismic loads: No

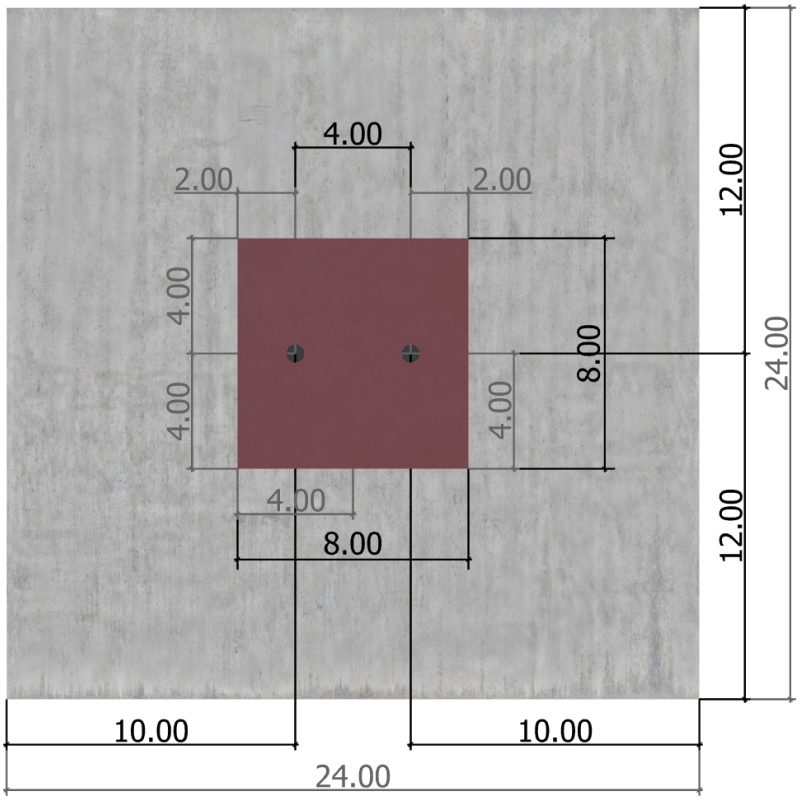
Strength level loads:

| | |
|---|---|
| $N_{ua}$ [lb]: | 18287 |
| $V_{uax}$ [lb]: | 0 |
| $V_{uay}$ [lb]: | 0 |
| $M_{ux}$ [ft-lb]: | 0 |
| $M_{uy}$ [ft-lb]: | 0 |
| $M_{uz}$ [ft-lb]: | 0 |

<Figure 1>



<Figure 2>

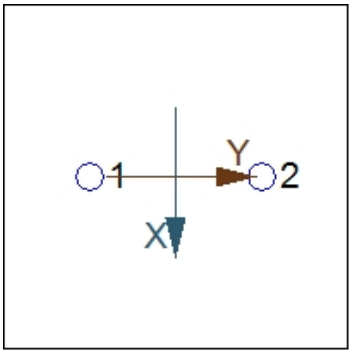



**3. Resulting Anchor Forces**

| Anchor | Tension load, $N_{ua}$ (lb) | Shear load x, $V_{uax}$ (lb) | Shear load y, $V_{uay}$ (lb) | Shear load combined, $\sqrt{(V_{uax})^2+(V_{uay})^2}$ (lb) |
|---|---|---|---|---|
| 1 | 9143.5 | 0.0 | 0.0 | 0.0 |
| 2 | 9143.5 | 0.0 | 0.0 | 0.0 |
| Sum | 18287.0 | 0.0 | 0.0 | 0.0 |

Maximum concrete compression strain (‰): 0.00
Maximum concrete compression stress (psi): 0
Resultant tension force (lb): 18287
Resultant compression force (lb): 0
Eccentricity of resultant tension forces in x-axis, $e'_{Nx}$ (inch): 0.00
Eccentricity of resultant tension forces in y-axis, $e'_{Ny}$ (inch): 0.00

<Figure 3>



## 4. Steel Strength of Anchor in Tension (Sec. 17.6.1)

| $N_{sa}$ (lb) | $\phi$ | $\phi N_{sa}$ (lb) |
|---|---|---|
| 24800 | 0.75 | 18600 |

## 5. Concrete Breakout Strength of Anchor in Tension (Sec. 17.6.2)

$N_b = k_c \lambda_a \sqrt{f'_c} h_{ef}^{1.5}$ (Eq. 17.6.2.2.1)

| $k_c$ | $\lambda_a$ | $f'_c$ (psi) | $h_{ef}$ (in) | $N_b$ (lb) |
|---|---|---|---|---|
| 17.0 | 1.00 | 3000 | 8.000 | 21069 |

$\phi N_{cbg} = \phi \, (A_{Nc} / A_{Nco}) \Psi_{ec,N} \Psi_{ed,N} \Psi_{c,N} \Psi_{cp,N} N_b$ (Sec. 17.5.1.2 & Eq. 17.6.2.1a)

| $A_{Nc}$ (in$^2$) | $A_{Nco}$ (in$^2$) | $c_{a,min}$ (in) | $\Psi_{ec,N}$ | $\Psi_{ed,N}$ | $\Psi_{c,N}$ | $\Psi_{cp,N}$ | $N_b$ (lb) | $\phi$ | $\phi N_{cbg}$ (lb) |
|---|---|---|---|---|---|---|---|---|---|
| 576.00 | 576.00 | 10.00 | 1.000 | 0.950 | 1.00 | 1.000 | 21069 | 0.65 | 13010 |

## 6. Adhesive Strength of Anchor in Tension (Sec. 17.6.5)

$\tau_{k,cr} = \tau_{k,cr} f_{short\text{-}term} K_{sat} (f'_c / 2{,}500)^n$

| $\tau_{k,cr}$ (psi) | $f_{short\text{-}term}$ | $K_{sat}$ | $f'_c$ (psi) | $n$ | $\tau_{k,cr}$ (psi) |
|---|---|---|---|---|---|
| 1130 | 1.00 | 1.00 | 3000 | 0.10 | 1151 |

$N_{ba} = \lambda_a \tau_{cr} \pi d_a h_{ef}$ (Eq. 17.6.5.2.1)

| $\lambda_a$ | $\tau_{cr}$ (psi) | $d_a$ (in) | $h_{ef}$ (in) | $N_{ba}$ (lb) |
|---|---|---|---|---|
| 1.00 | 1151 | 0.63 | 12.500 | 28245 |

$\phi N_{ag} = \phi \, (A_{Na} / A_{Na0}) \Psi_{ec,Na} \Psi_{ed,Na} \Psi_{cp,Na} N_{ba}$ (Sec. 17.5.1.2 & Eq. 17.6.5.1b)

| $A_{Na}$ (in$^2$) | $A_{Na0}$ (in$^2$) | $c_{Na}$ (in) | $c_{a,min}$ (in) | $\Psi_{ec,Na}$ | $\Psi_{ed,Na}$ | $\Psi_{cp,Na}$ | $N_{ba}$(lb) | $\phi$ | $\phi N_{ag}$ (lb) |
|---|---|---|---|---|---|---|---|---|---|
| 362.20 | 293.66 | 8.57 | 10.00 | 1.000 | 1.000 | 1.000 | 28245 | 0.65 | 22644 |

## 7. Results

### Interaction of Tensile and Shear Forces (Sec. 17.8)

| Tension | Factored Load, $N_{ua}$ (lb) | Design Strength, ø$N_n$ (lb) | Ratio | Status |
|---|---|---|---|---|
| Steel | 9144 | 18600 | 0.49 | Pass |
| **Concrete breakout** | **18287** | **13010** | **1.41** | **Fail (Governs)** |
| Adhesive | 18287 | 22644 | 0.81 | Pass |

**FAIL! Selected anchor type and embedment do not meet the selected design criteria.**

## 8. Warnings

- Designer must exercise own judgement to determine if this design is suitable.

- Refer to manufacturer's product literature for hole cleaning and installation instructions.

[AHBL]: PROVIDE EXTERNAL THREADED ROD ANCHORAGE TO RESIST CONCRETE BREAKOUT FAILURE MECHANISM

SIMPSON Strong-Tie

# Anchor Designer™ for Concrete Software

Version 3.4.2512.1

| | | | |
|---|---|---|---|
| Company: | | Date: | 2/16/2026 |
| Engineer: | | Page: | 1 |
| Project: | | | |
| Address: | | | |
| Phone: | | | |
| E-mail: | | | |

## 1.Project information

Project description:
Location:
Design name: Design

Comment:

## 2. Input Data & Anchor Parameters

**General**
Design method:ACI 318-19
Units: Imperial units

**Anchor Information:**
Anchor type: Bonded anchor
Material: A615 Grade 60 Rebar
Diameter (inch): 0.625
Effective Embedment depth, $h_{ef}$ (inch): 8.000
Code report: ESR-5026
Anchor category: -
Anchor ductility: Yes
$h_{min}$ (inch): 9.50
$c_{ac}$ (inch): 13.82
$C_{min}$ (inch): 2.00
$S_{min}$ (inch): 3.00

**Base Material**
Concrete: Normal-weight
Concrete thickness, h (inch): 24.00
State: Cracked
Compressive strength, $f'_c$ (psi): 3000
$\Psi_{c,V}$: 1.0
Reinforcement condition: B tension, B shear
Supplemental edge reinforcement: Not applicable
Reinforcement provided at corners: No
Ignore concrete breakout in tension: No
Ignore concrete breakout in shear: No
Hole condition: Dry concrete
Inspection: Continuous
Temperature range, Short/Long: 150/110°F
Reduced installation torque (for AT-3G): No
Ignore 6do requirement: Not applicable
Build-up grout pad: No

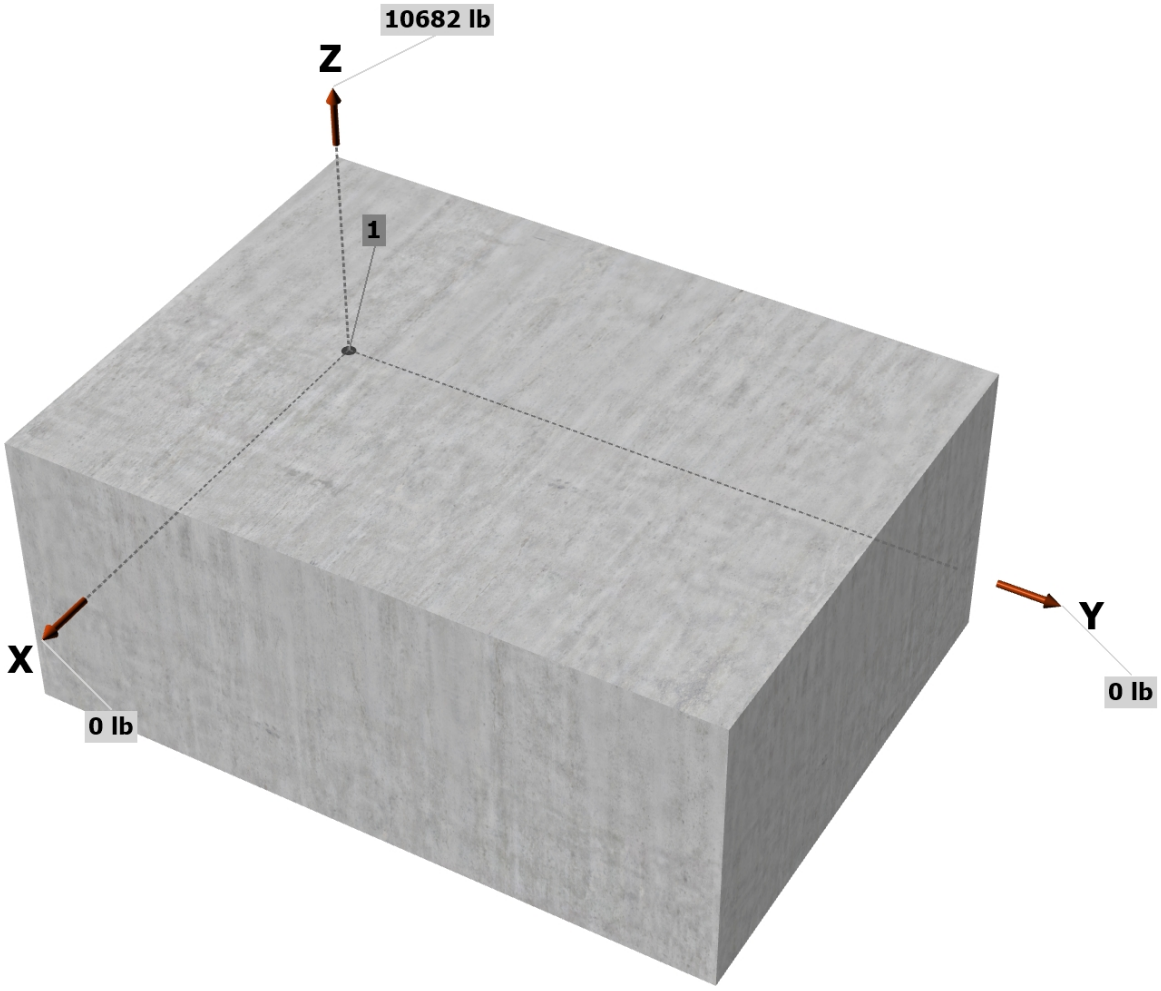
**Recommended Anchor**
Anchor Name: AT-3G™ - AT-3G w/ #5 A615 Gr. 60 Rebar
Code Report: ESR-5026

**Load and Geometry**
Load factor source: ACI 318 Section 5.3
Load combination: not set
Seismic design: No
Anchors subjected to sustained tension: No
Apply entire shear load at front row: No
Anchors only resisting wind and/or seismic loads: No

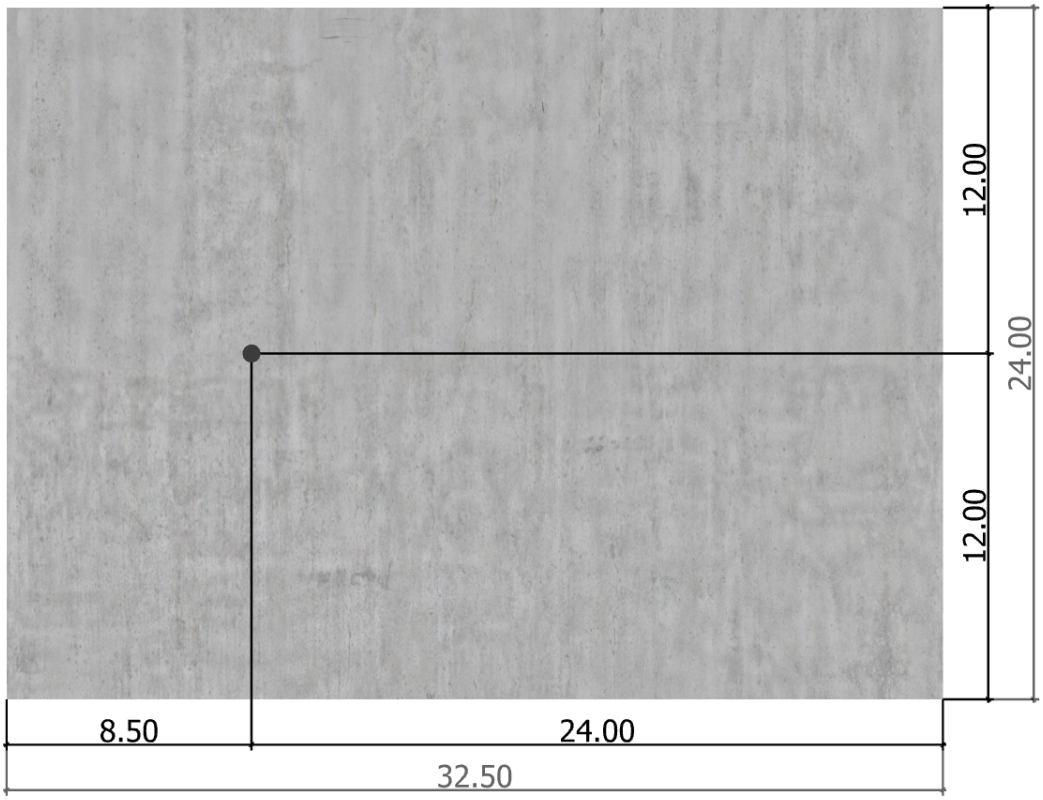
Strength level loads:

$N_{ua}$ [lb]: 10682
$V_{uax}$ [lb]: 0
$V_{uay}$ [lb]: 0

<Figure 1>



<Figure 2>




**3. Resulting Anchor Forces**

| Anchor | Tension load, $N_{ua}$ (lb) | Shear load x, $V_{uax}$ (lb) | Shear load y, $V_{uay}$ (lb) | Shear load combined, $\sqrt{(V_{uax})^2+(V_{uay})^2}$ (lb) |
|---|---|---|---|---|
| 1 | 10682.0 | 0.0 | 0.0 | 0.0 |
| Sum | 10682.0 | 0.0 | 0.0 | 0.0 |

Maximum concrete compression strain (‰): 0.00
Maximum concrete compression stress (psi): 0
Resultant tension force (lb): 10682
Resultant compression force (lb): 0
Eccentricity of resultant tension forces in x-axis, $e'_{Nx}$ (inch): 0.00
Eccentricity of resultant tension forces in y-axis, $e'_{Ny}$ (inch): 0.00

## 4. Steel Strength of Anchor in Tension (Sec. 17.6.1)

| $N_{sa}$ (lb) | $\phi$ | $\phi N_{sa}$ (lb) |
|---|---|---|
| 24800 | 0.75 | 18600 |

## 5. Concrete Breakout Strength of Anchor in Tension (Sec. 17.6.2)

$N_b = k_c \lambda_a \sqrt{f'_c} h_{ef}^{1.5}$ (Eq. 17.6.2.2.1)

| $k_c$ | $\lambda_a$ | $f'_c$ (psi) | $h_{ef}$ (in) | $N_b$ (lb) |
|---|---|---|---|---|
| 17.0 | 1.00 | 3000 | 8.000 | 21069 |

$\phi N_{cb} = \phi \, (A_{Nc} / A_{Nco}) \, \Psi_{ed,N} \, \Psi_{c,N} \, \Psi_{cp,N} N_b$ (Sec. 17.5.1.2 & Eq. 17.6.2.1a)

| $A_{Nc}$ (in$^2$) | $A_{Nco}$ (in$^2$) | $c_{a,min}$ (in) | $\Psi_{ed,N}$ | $\Psi_{c,N}$ | $\Psi_{cp,N}$ | $N_b$ (lb) | $\phi$ | $\phi N_{cb}$ (lb) |
|---|---|---|---|---|---|---|---|---|
| 492.00 | 576.00 | 8.50 | 0.913 | 1.00 | 1.000 | 21069 | 0.65 | 10674 |

## 6. Adhesive Strength of Anchor in Tension (Sec. 17.6.5)

$\tau_{k,cr} = \tau_{k,cr} f_{short\text{-}term} K_{sat} (f'_c / 2{,}500)^n$

| $\tau_{k,cr}$ (psi) | $f_{short\text{-}term}$ | $K_{sat}$ | $f'_c$ (psi) | $n$ | $\tau_{k,cr}$ (psi) |
|---|---|---|---|---|---|
| 1130 | 1.00 | 1.00 | 3000 | 0.10 | 1151 |

$N_{ba} = \lambda_a \tau_{cr} \pi d_a h_{ef}$ (Eq. 17.6.5.2.1)

| $\lambda_a$ | $\tau_{cr}$ (psi) | $d_a$ (in) | $h_{ef}$ (in) | $N_{ba}$ (lb) |
|---|---|---|---|---|
| 1.00 | 1151 | 0.63 | 8.000 | 18077 |

$\phi N_a = \phi \, (A_{Na} / A_{Na0}) \, \Psi_{ed,Na} \, \Psi_{cp,Na} N_{ba}$ (Sec. 17.5.1.2 & Eq. 17.6.5.1a)

| $A_{Na}$ (in$^2$) | $A_{Na0}$ (in$^2$) | $c_{Na}$ (in) | $c_{a,min}$ (in) | $\Psi_{ed,Na}$ | $\Psi_{cp,Na}$ | $N_{ba}$ (lb) | $\phi$ | $\phi N_a$ (lb) |
|---|---|---|---|---|---|---|---|---|
| 292.49 | 293.66 | 8.57 | 8.50 | 0.998 | 1.000 | 18077 | 0.65 | 11675 |

## 7. Results

### Interaction of Tensile and Shear Forces (Sec. 17.8)

| Tension | Factored Load, $N_{ua}$ (lb) | Design Strength, ø$N_n$ (lb) | Ratio | Status |
|---|---|---|---|---|
| Steel | 10682 | 18600 | 0.57 | Pass |
| **Concrete breakout** | **10682** | **10674** | **1.00** | **Fail (Governs)** |
| Adhesive | 10682 | 11675 | 0.91 | Pass |

**FAIL! Selected anchor type and embedment do not meet the selected design criteria.**

[AHBL]: 100% UNITY IS ACCEPTABLE

## 8. Warnings

- Designer must exercise own judgement to determine if this design is suitable.

- Refer to manufacturer's product literature for hole cleaning and installation instructions.

## *Model Settings*

| | |
|---|---|
| Number of Reported Sections | 5 |
| Number of Internal Sections | 100 |
| Member Area Load Mesh Size ($in^2$) | 9 |
| Consider Shear Deformation | Yes |
| Consider Torsional Warping | Yes |
| Approximate Mesh Size (in) | 24 |
| Transfer Forces Between Intersecting Wood Walls | Yes |
| Increase Wood Wall Nailing Capacity for Wind Loads | Yes |
| Include P-Delta for Walls | Yes |
| Optimize Masonry and Wood Walls | Yes |
| Maximum Number of Iterations | 3 |
| Single | No |
| Multiple (Optimum) | Yes |
| Maximum | No |

| | |
|---|---|
| Global Axis corresponding to vertical direction | Y |
| Convert Existing Data | Yes |
| Default Global Plane for z-axis | XZ |
| Plate Local Axis Orientation | Global |

| | |
|---|---|
| Hot Rolled Steel | AISC 15th (360-16): ASD |
| Stiffness Adjustment | Yes (Iterative) |
| Notional Annex | None |
| Connections | AISC 15th (360-16): ASD |
| Cold Formed Steel | AISI S100-20: ASD |
| Stiffness Adjustment | Yes (Iterative) |
| Wood | AWC NDS-18 / SDPWS-21 ASD |
| Temperature | < 100F |
| Concrete | ACI 318-19 |
| Masonry | TMS 402-16: ASD |
| Aluminum | AA ADM1-20: ASD |
| Structure Type | Building |
| Stiffness Adjustment | Yes (Iterative) |
| Stainless | AISC 14th (360-10): ASD |
| Stiffness Adjustment | Yes (Iterative) |

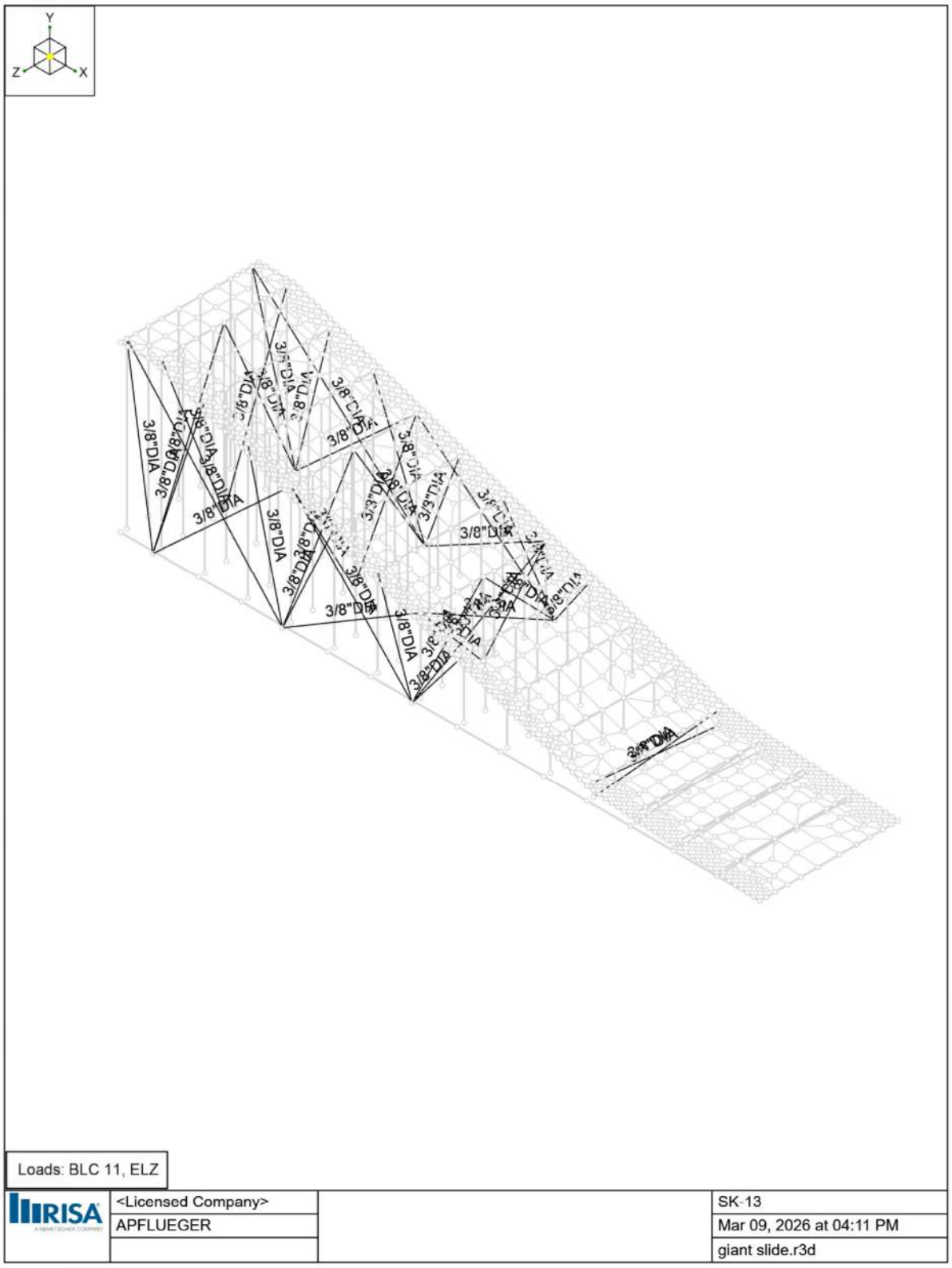
| | |
|---|---|
| Compression Stress Block | Rectangular Stress Block |
| Analyze using Cracked Sections | Yes |
| Leave room for horizontal rebar splices (2*d bar spacing) | No |
| List forces which were ignored for design in the Detail Report | Yes |

| | |
|---|---|
| Column Min Steel | 1 |
| Column Max Steel | 8 |
| Rebar Material Spec | ASTM A615 |
| Warn if beam-column framing arrangement is not understood | No |
| Number of Shear Regions | 4 |
| Region 2 & 3 Spacing Increase Increment (in) | 4 |

| | |
|---|---|
| Code | ASCE 7-16 |
| Risk Category | I or II |
| Drift Cat | Other |

***Model Settings (Continued)***

| | |
|---|---|
| Base Elevation (ft) | |
| Include the weight of the structure in base shear calcs | Yes |
| $S_1$ (g) | 0.438 |
| $SD_1$ (g) | 0.438 |
| $SD_s$ (g) | 1.017 |
| $T_L$ (sec) | 5 |
| T Z (sec) | 0.5 |
| T X (sec) | 0.5 |
| $C_tZ$ | 0.02 |
| $C_tX$ | 0.02 |
| $C_t$Exp. Z | 0.75 |
| $C_t$Exp. X | 0.75 |
| R Z | 2 |
| R X | 2 |
| $\Omega_0Z$ | 2 |
| $\Omega_0X$ | 2 |
| $C_dZ$ | 2 |
| $C_dX$ | 2 |
| ρ Z | 1 |
| ρ X | 1 |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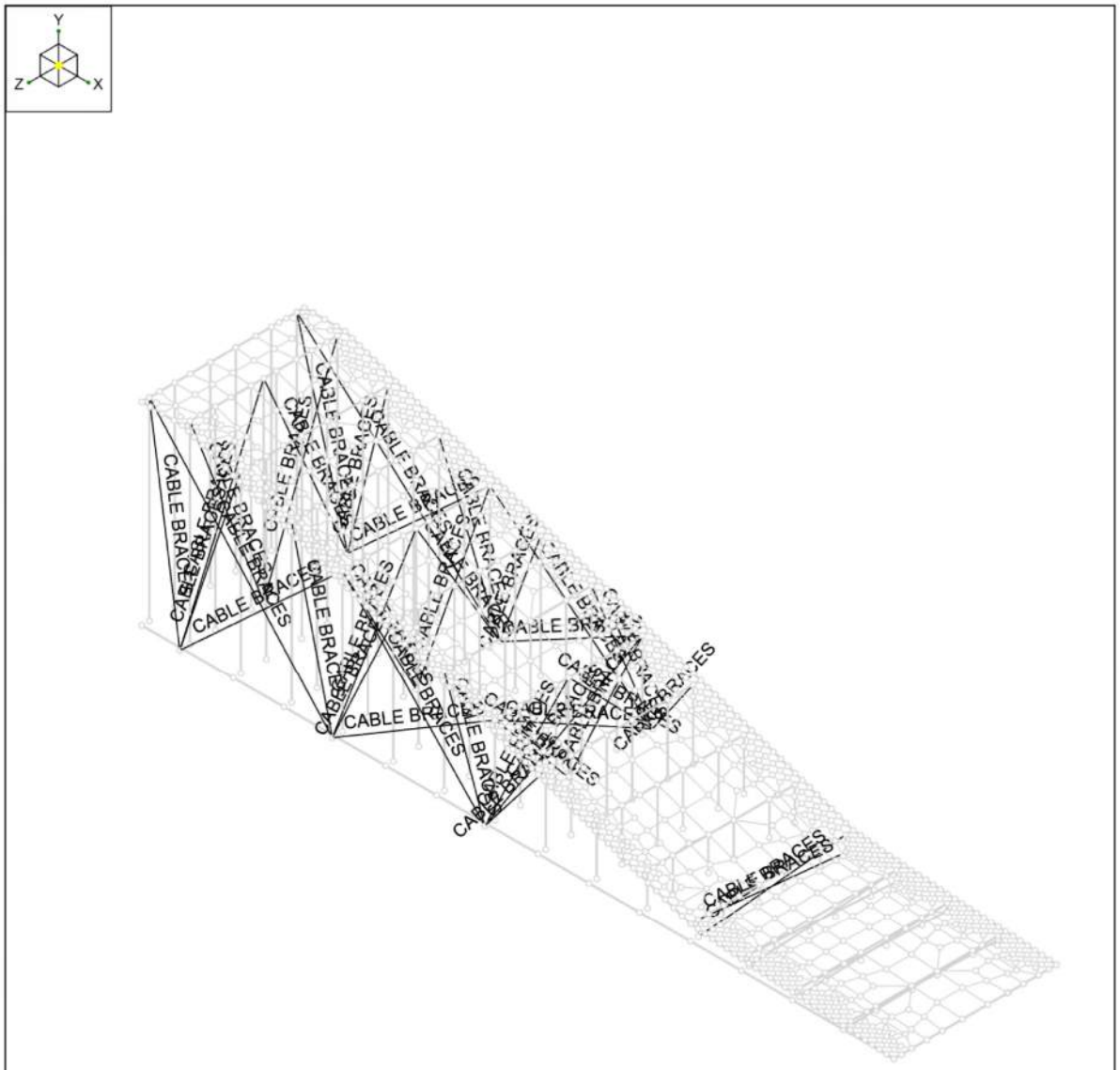


Loads: BLC 11, ELZ

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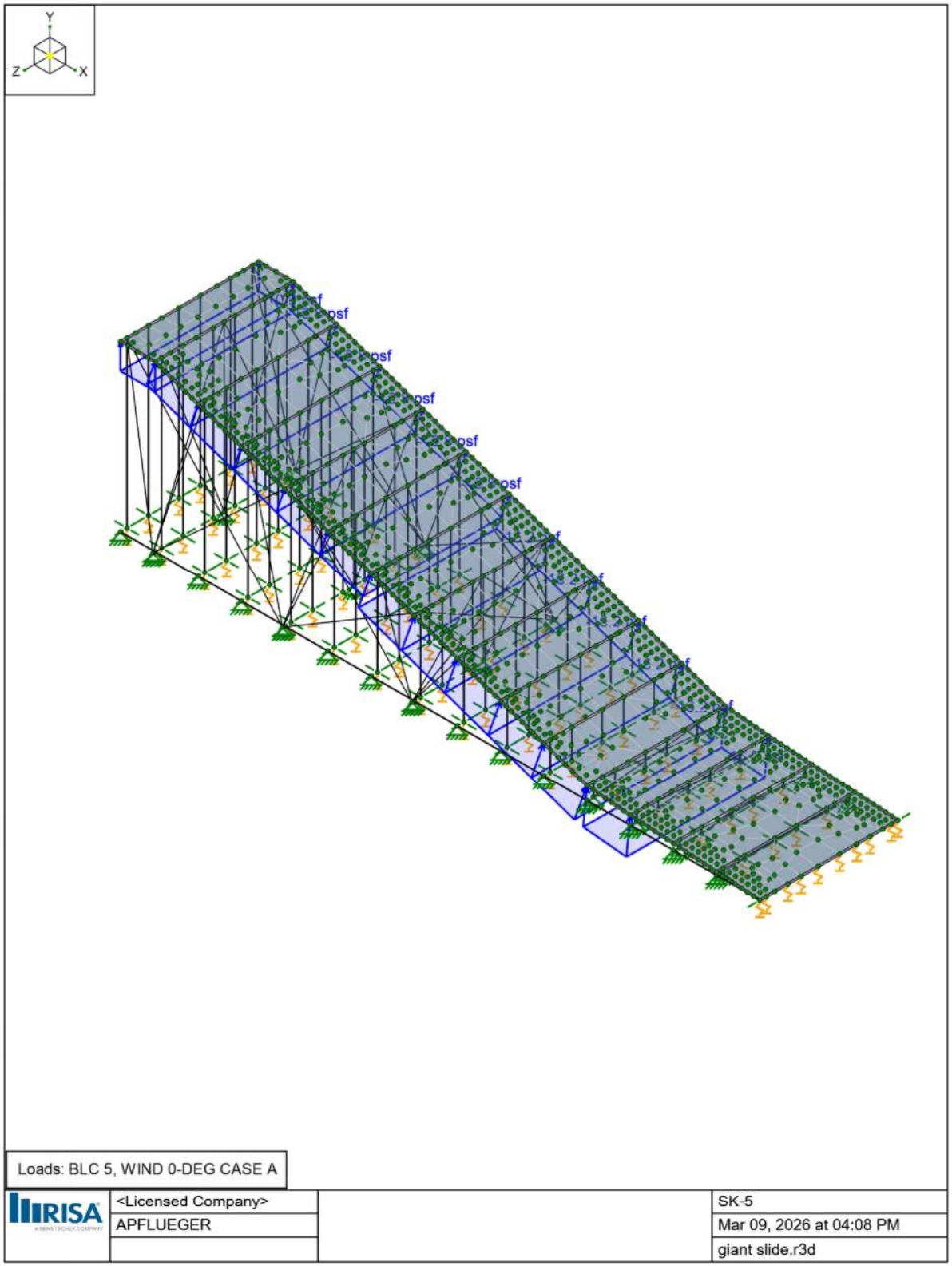
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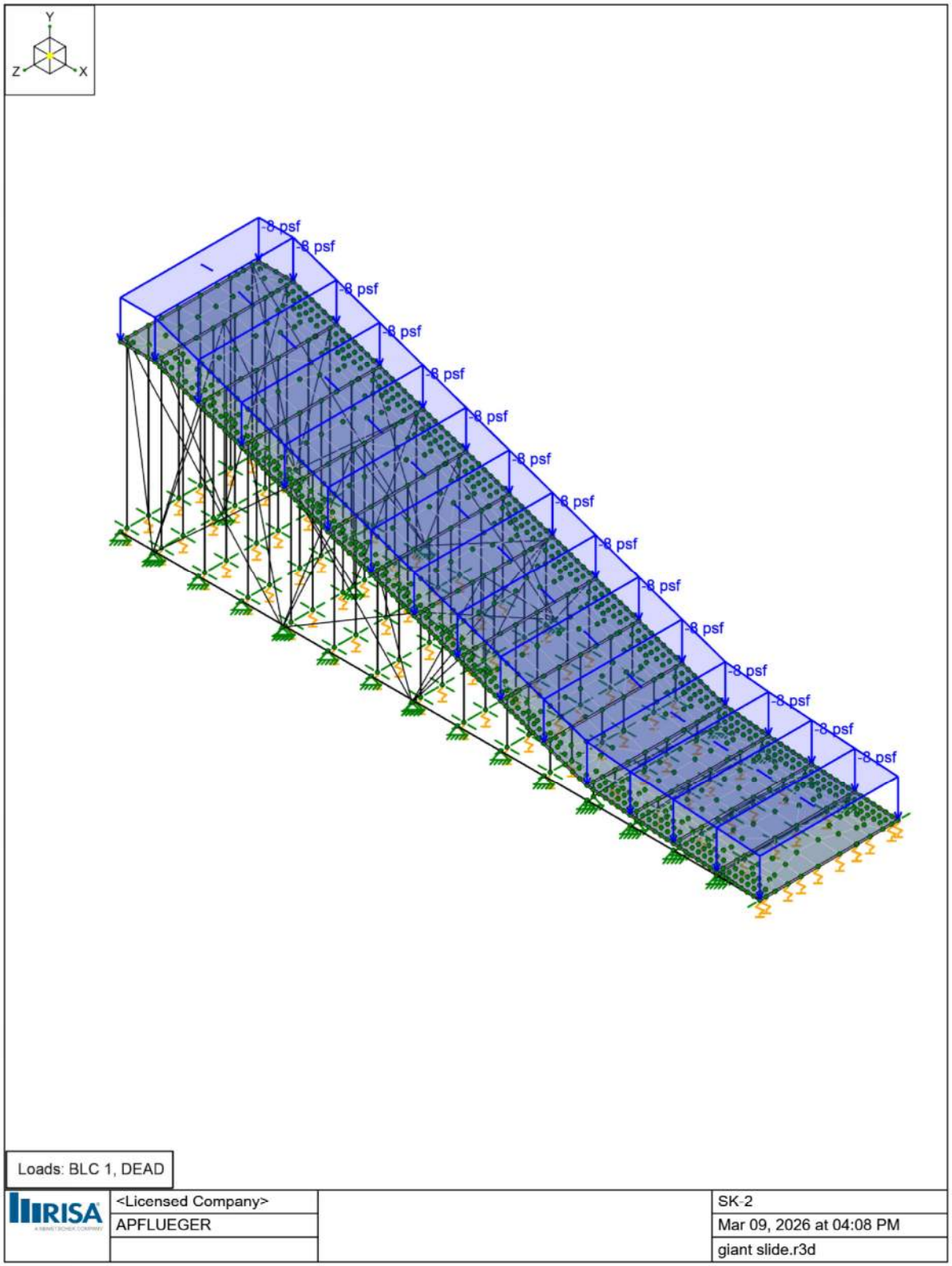
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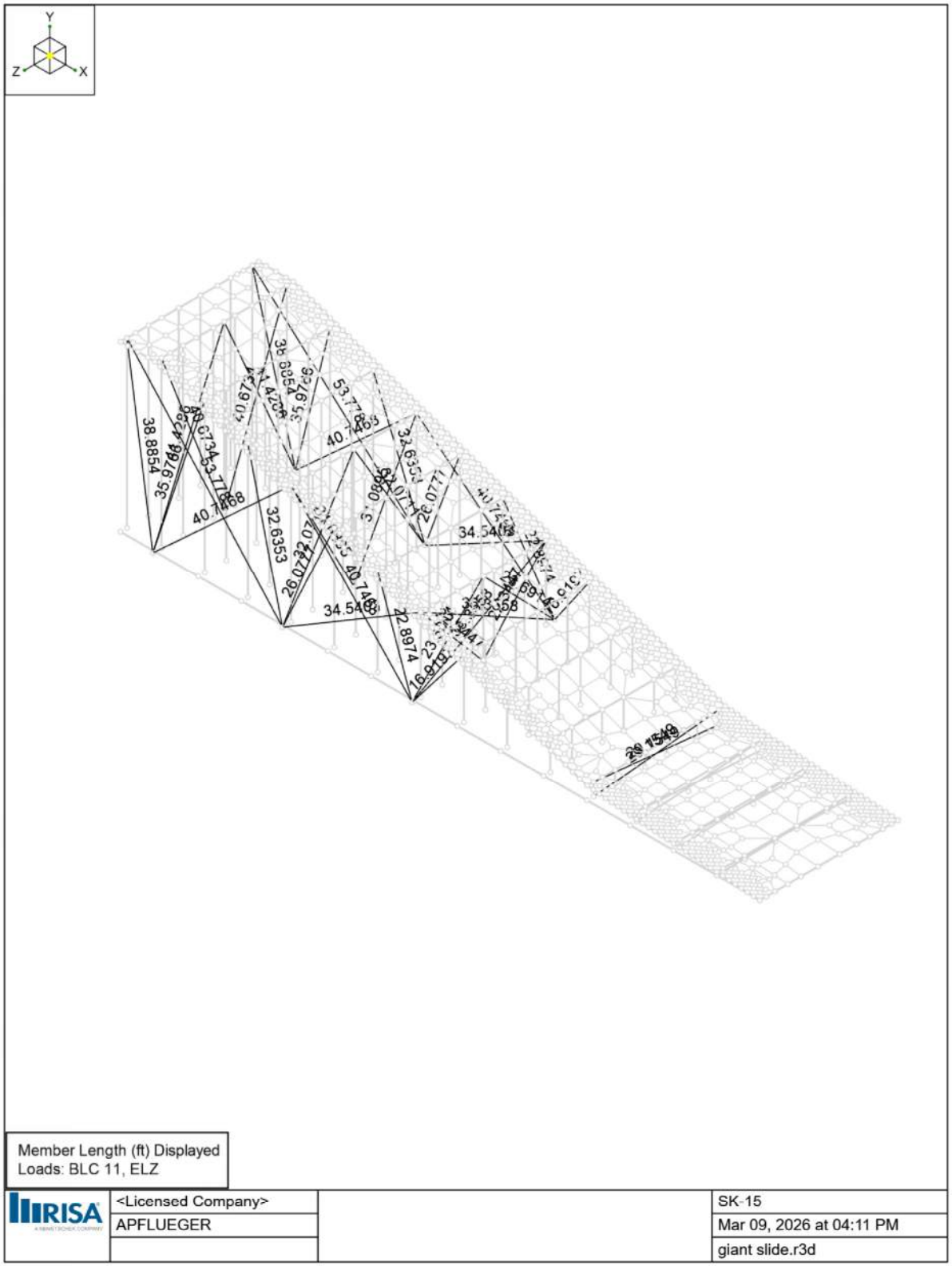
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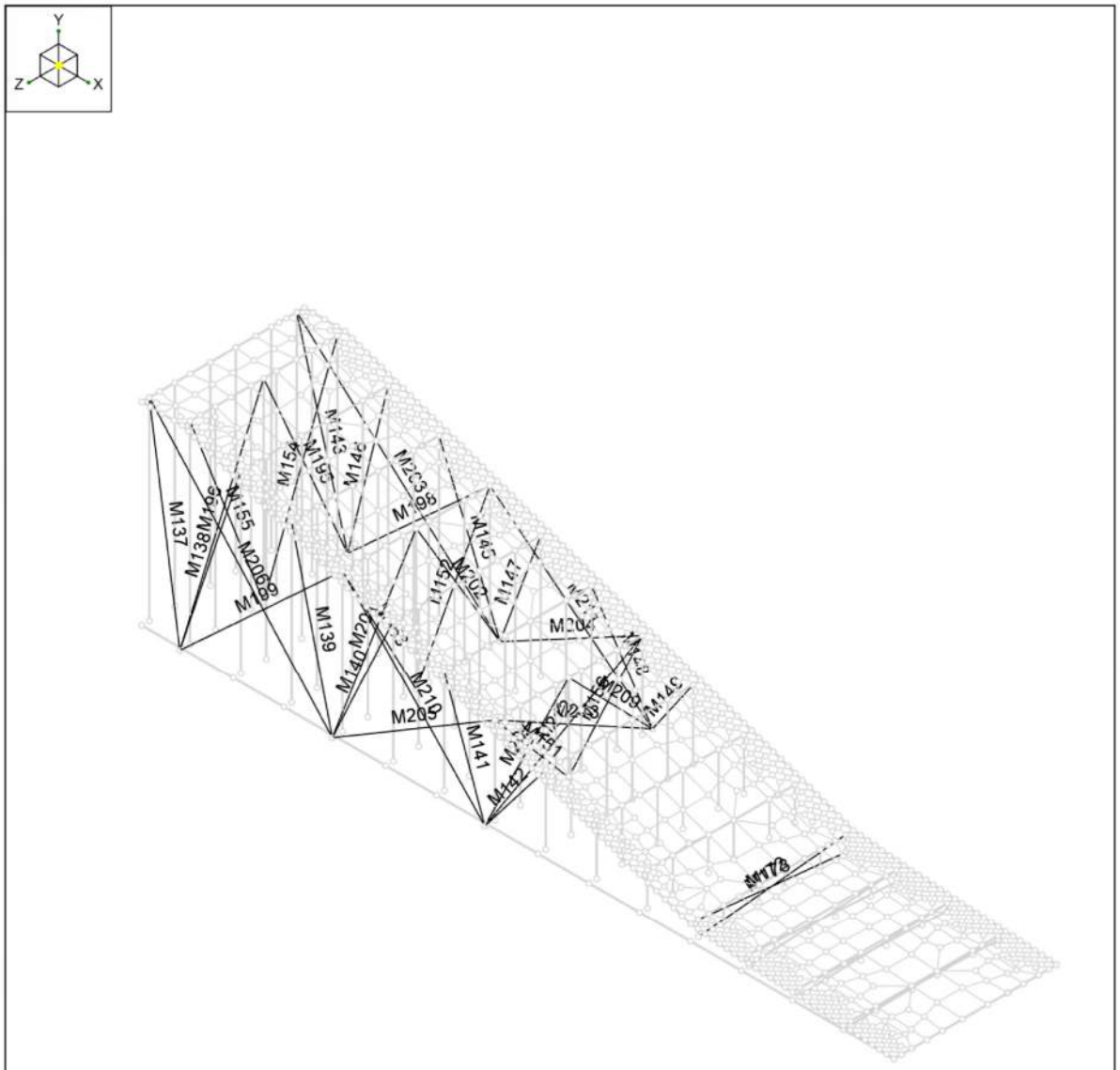
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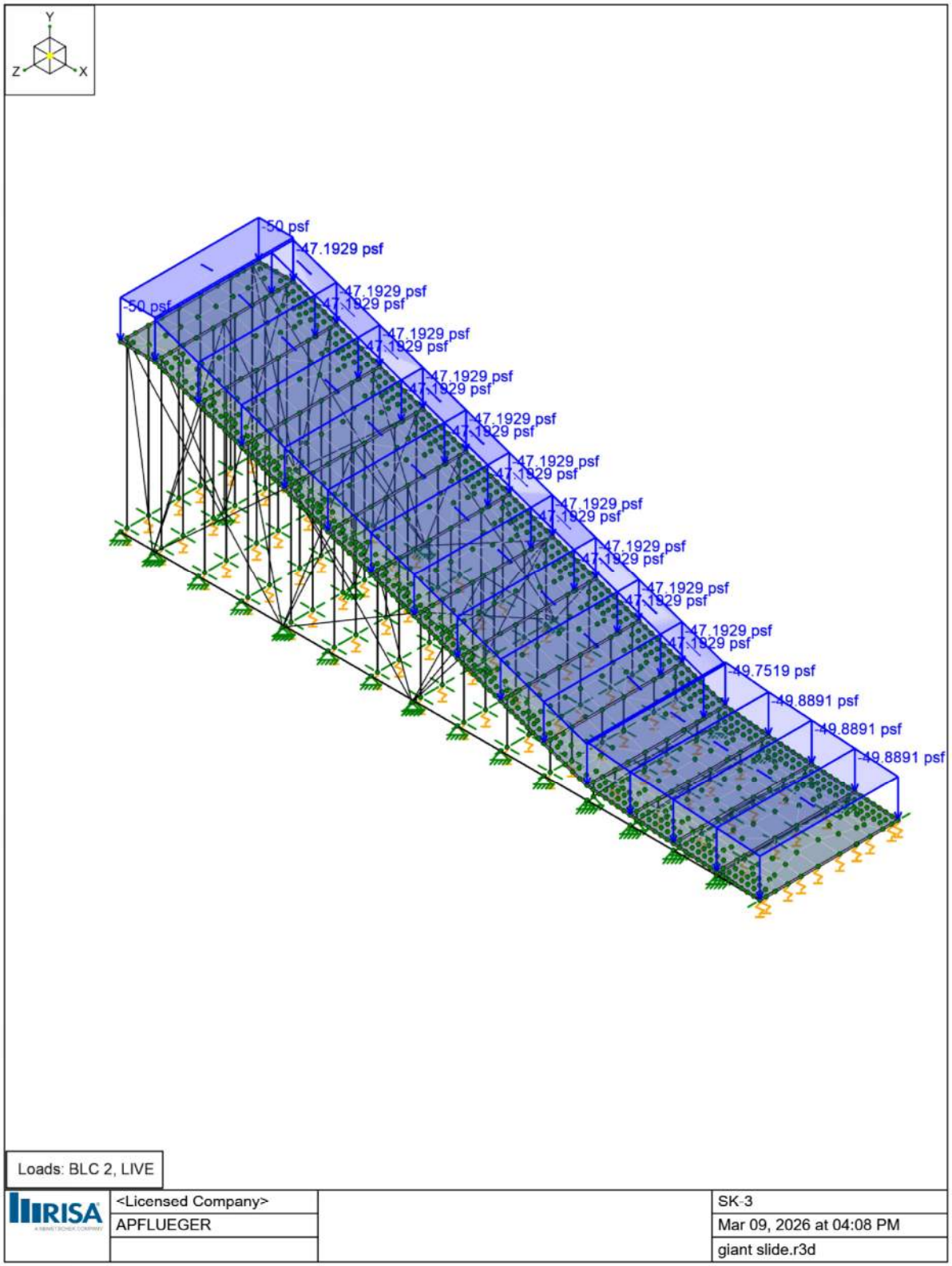
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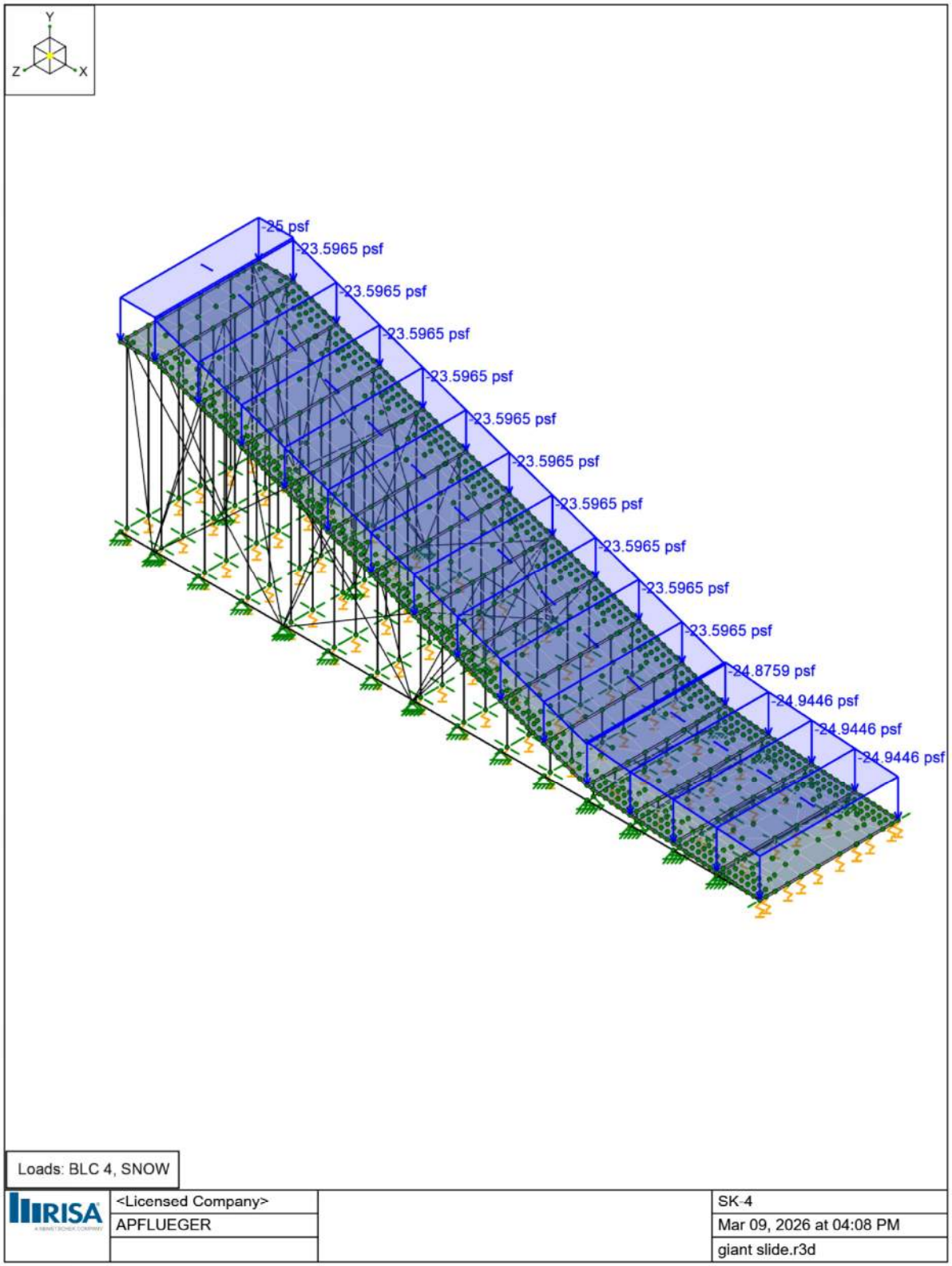
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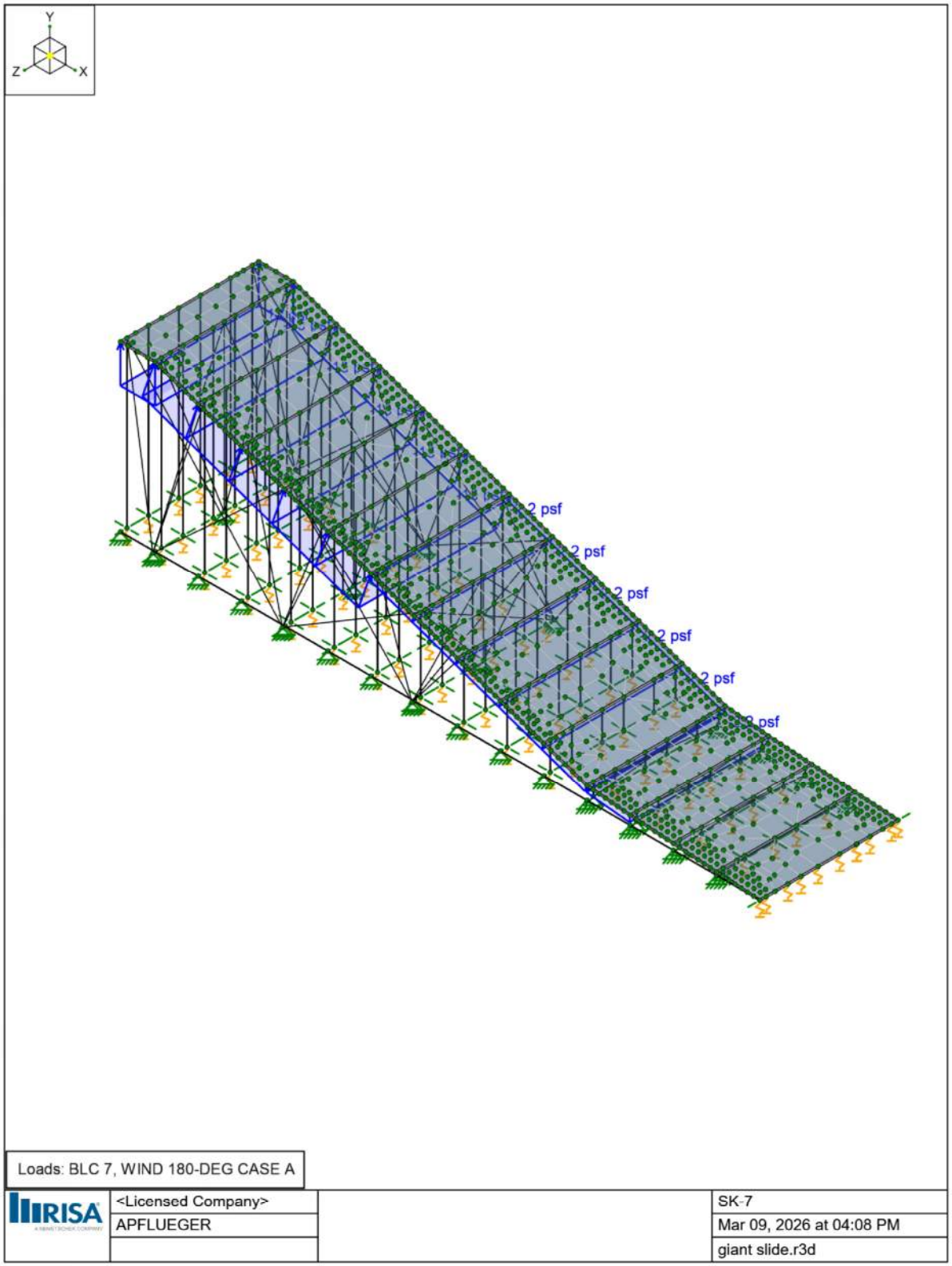
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APFLUEGER
SK-7
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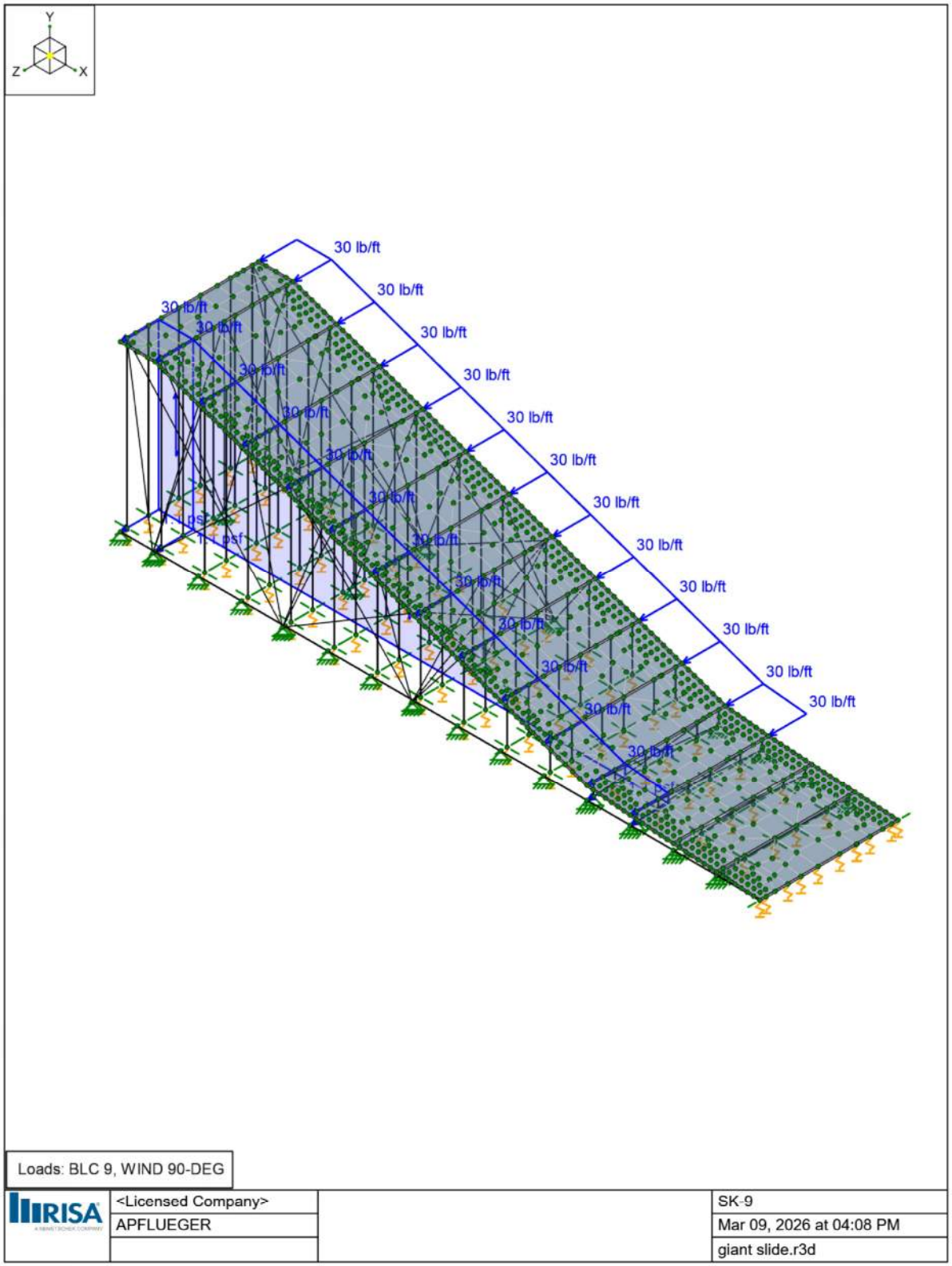
Y
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Loads: BLC 9, WIND 90-DEG
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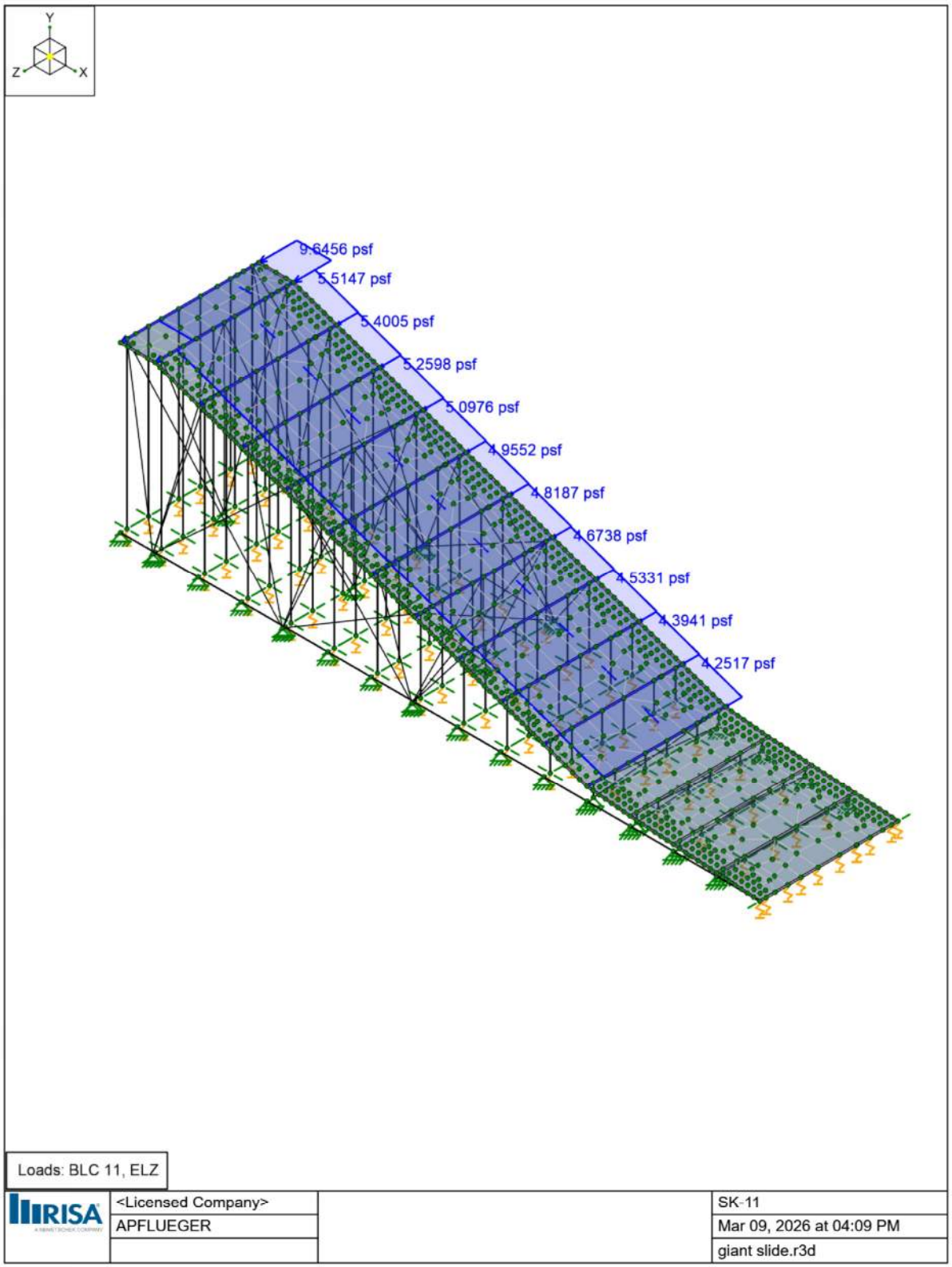
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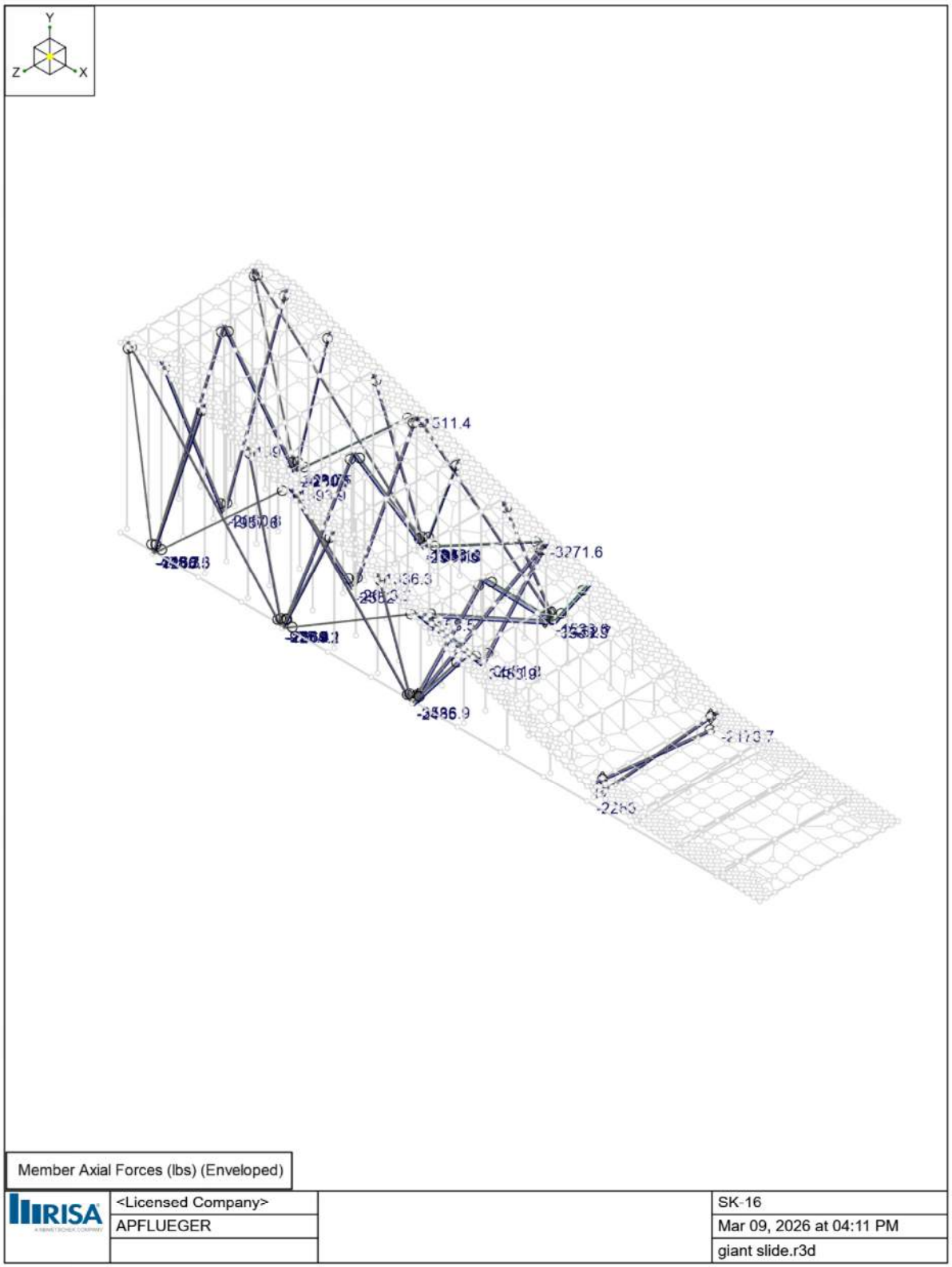
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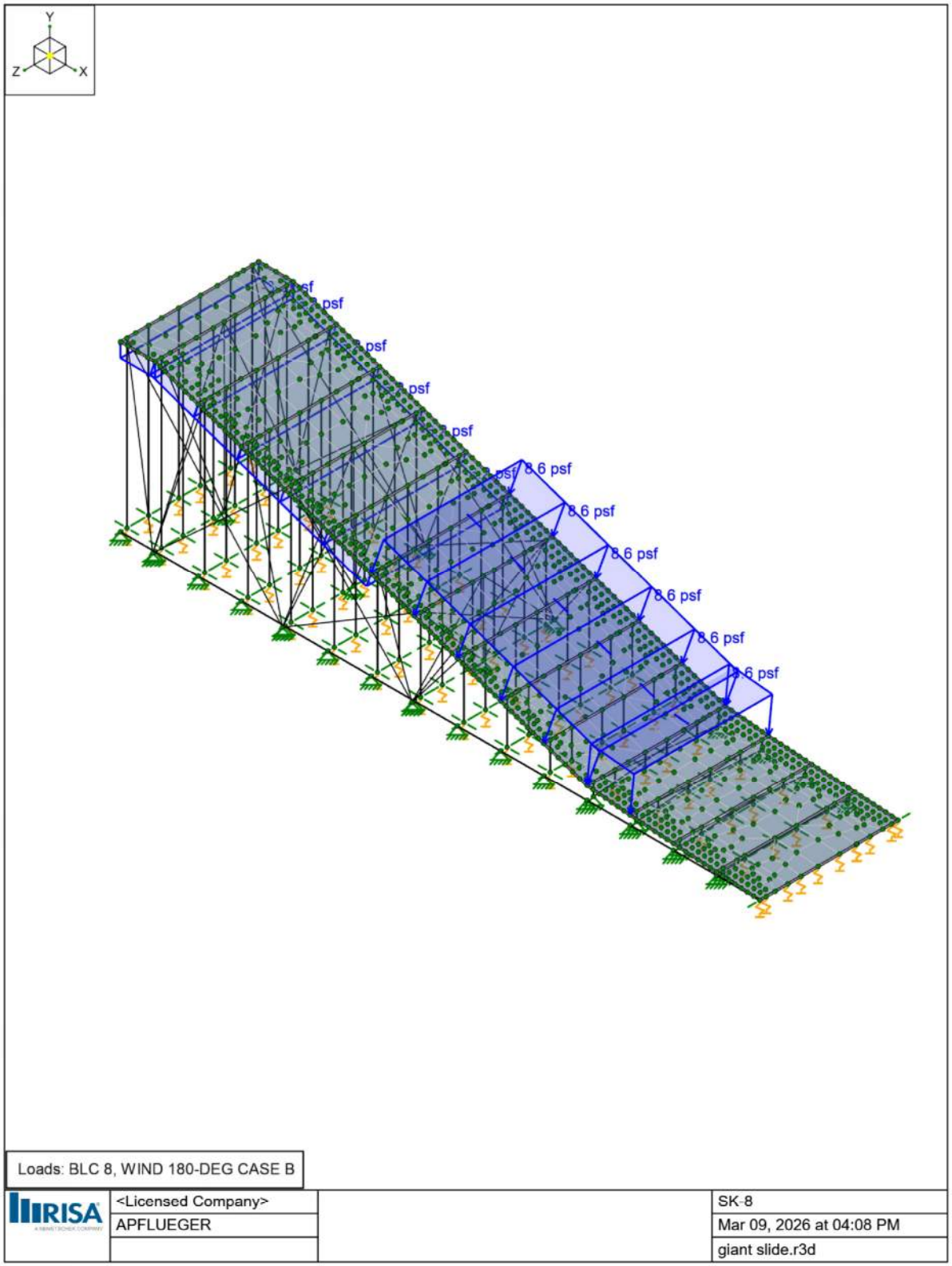
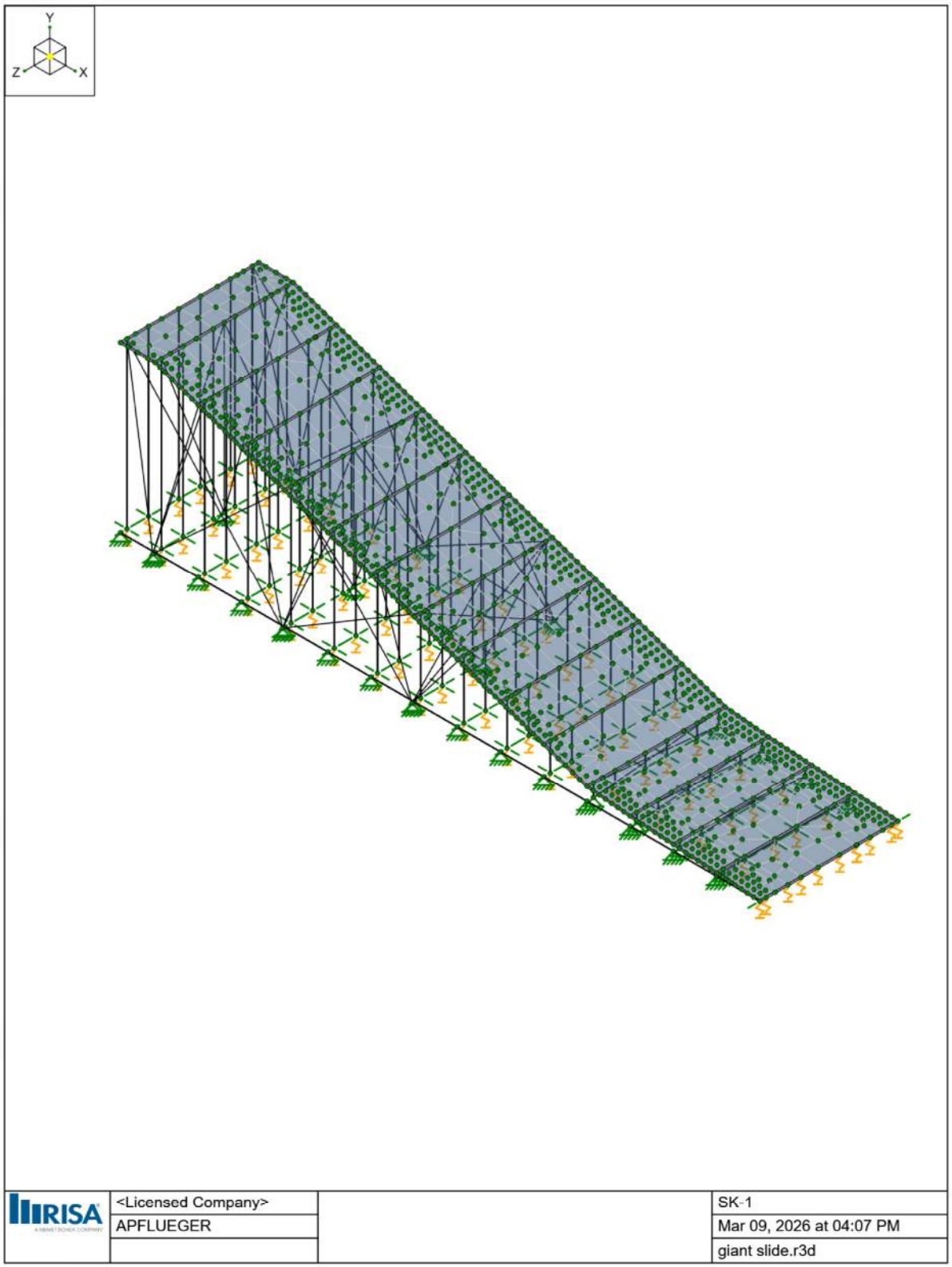
-2173.7
-2265
Member Axial Forces (lbs) (Enveloped)
<Licensed Company>
APFLUEGER
SK-16
Mar 09, 2026 at 04:11 PM
giant slide.r3d


Y
Z
X
psf
psf
psf
psf
psf
psf
8.6 psf
8.6 psf
8.6 psf
8.6 psf
8.6 psf
8.6 psf
Loads: BLC 8, WIND 180-DEG CASE B
<Licensed Company>
APFLUEGER
SK-8
Mar 09, 2026 at 04:08 PM
giant slide.r3d


Y
Z
X
<Licensed Company>
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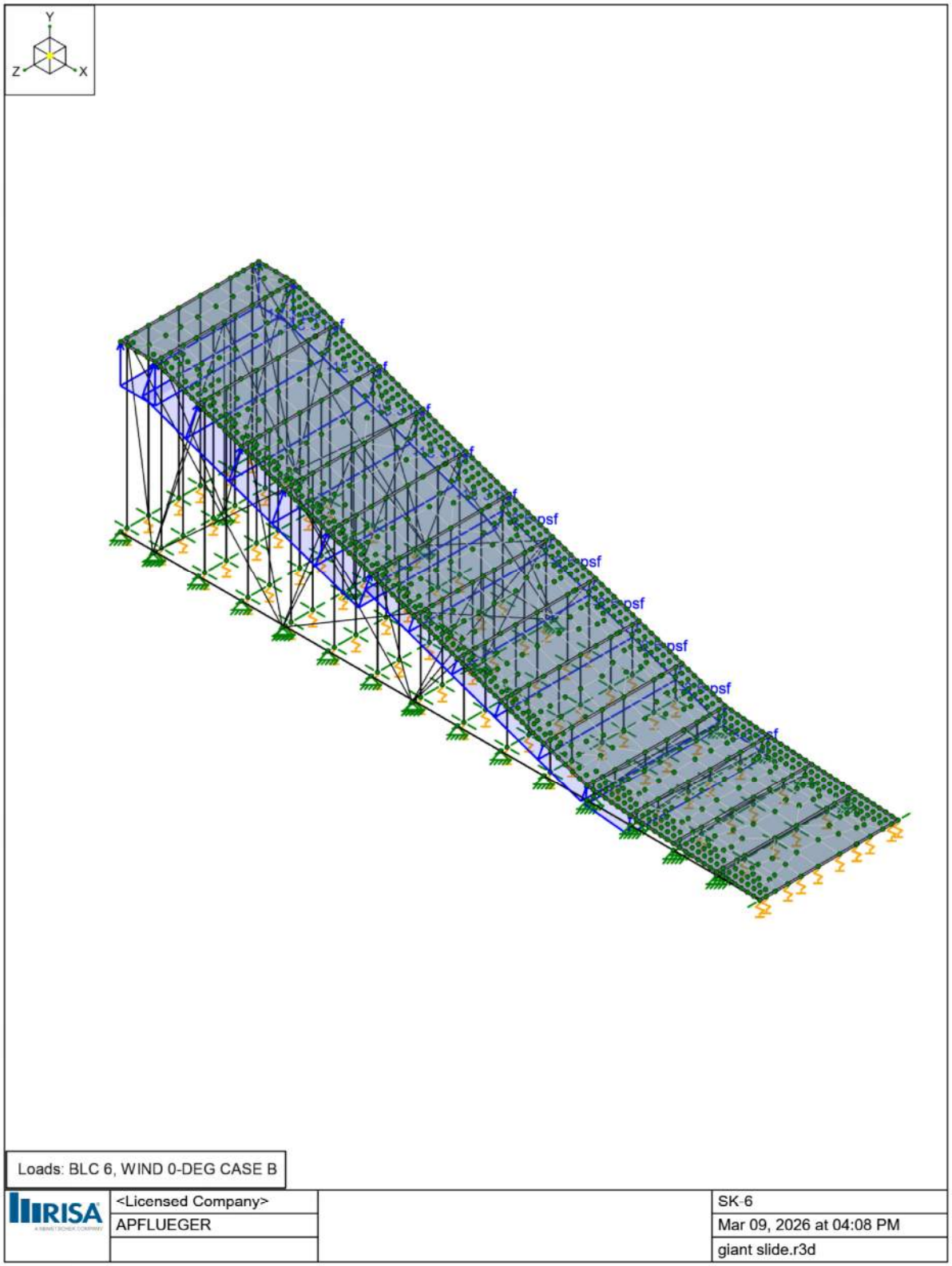
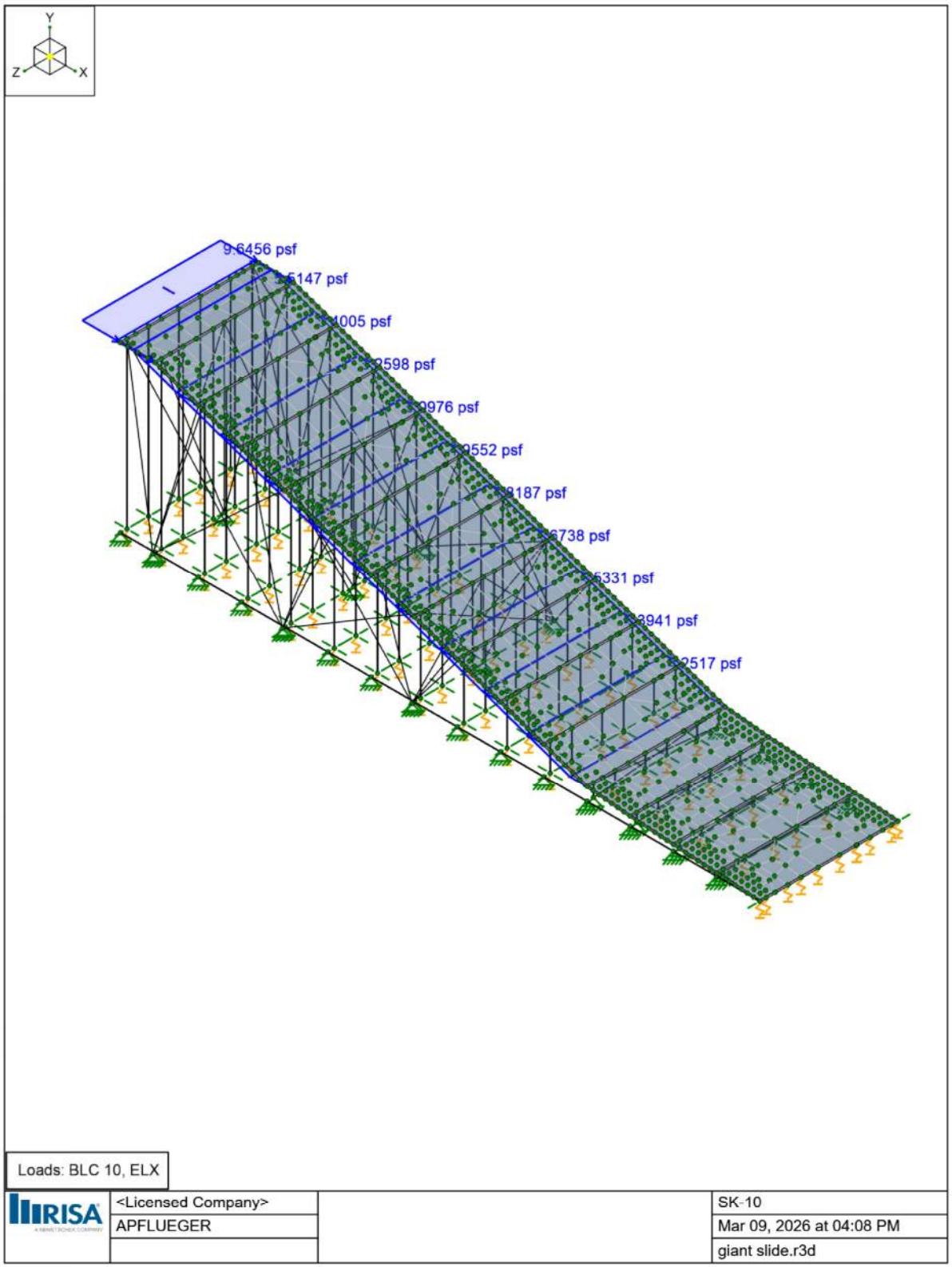
SK-1
Mar 09, 2026 at 04:07 PM
giant slide.r3d


Y
Z
X
psf
psf
psf
psf
psf
Loads: BLC 6, WIND 0-DEG CASE B
<Licensed Company>
APFLUEGER
SK-6
Mar 09, 2026 at 04:08 PM
giant slide.r3d


Y
Z
X
9.6456 psf
5147 psf
1005 psf
2598 psf
0976 psf
552 psf
8187 psf
6738 psf
5331 psf
3941 psf
2517 psf
Loads: BLC 10, ELX
<Licensed Company>
APFLUEGER
SK-10
Mar 09, 2026 at 04:08 PM
giant slide.r3d

***Node Coordinates***

| | Label | X [ft] | Y [ft] | Z [ft] | Detach From Diaphragm |
|---|---|---|---|---|---|
| 1 | N1 | 0 | 38.001 | 0 | |
| 2 | N2 | 8 | 38.001 | 0 | |
| 3 | N3 | 18 | 34.501 | 0 | |
| 4 | N4 | 28 | 31.001 | 0 | |
| 5 | N5 | 38 | 27.501 | 0 | |
| 6 | N6 | 48 | 24.001 | 0 | |
| 7 | N7 | 58 | 20.501 | 0 | |
| 8 | N8 | 68 | 17.001 | 0 | |
| 9 | N9 | 78 | 13.501 | 0 | |
| 10 | N10 | 88 | 10.001 | 0 | |
| 11 | N11 | 98 | 6.501 | 0 | |
| 12 | N12 | 108 | 3.001 | 0 | |
| 13 | N13 | 118 | 2.001 | 0 | |
| 14 | N14 | 128 | 1.334 | 0 | |
| 15 | N15 | 138 | 0.667 | 0 | |
| 16 | N16 | 148 | 0 | 0 | |
| 17 | N17 | 0 | 38.001 | 1.5 | |
| 18 | N18 | 8 | 38.001 | 1.5 | |
| 19 | N19 | 18 | 34.501 | 1.5 | |
| 20 | N20 | 28 | 31.001 | 1.5 | |
| 21 | N21 | 38 | 27.501 | 1.5 | |
| 22 | N22 | 48 | 24.001 | 1.5 | |
| 23 | N23 | 58 | 20.501 | 1.5 | |
| 24 | N24 | 68 | 17.001 | 1.5 | |
| 25 | N25 | 78 | 13.501 | 1.5 | |
| 26 | N26 | 88 | 10.001 | 1.5 | |
| 27 | N27 | 98 | 6.501 | 1.5 | |
| 28 | N28 | 108 | 3.001 | 1.5 | |
| 29 | N29 | 118 | 2.001 | 1.5 | |
| 30 | N30 | 128 | 1.334 | 1.5 | |
| 31 | N31 | 138 | 0.667 | 1.5 | |
| 32 | N32 | 148 | 0 | 1.5 | |
| 33 | N33 | 0 | 38.001 | 6.5 | |
| 34 | N34 | 8 | 38.001 | 6.5 | |
| 35 | N35 | 18 | 34.501 | 6.5 | |
| 36 | N36 | 28 | 31.001 | 6.5 | |
| 37 | N37 | 38 | 27.501 | 6.5 | |
| 38 | N38 | 48 | 24.001 | 6.5 | |
| 39 | N39 | 58 | 20.501 | 6.5 | |
| 40 | N40 | 68 | 17.001 | 6.5 | |
| 41 | N41 | 78 | 13.501 | 6.5 | |
| 42 | N42 | 88 | 10.001 | 6.5 | |
| 43 | N43 | 98 | 6.501 | 6.5 | |
| 44 | N44 | 108 | 3.001 | 6.5 | |
| 45 | N45 | 118 | 2.001 | 6.5 | |
| 46 | N46 | 128 | 1.334 | 6.5 | |
| 47 | N47 | 138 | 0.667 | 6.5 | |
| 48 | N48 | 148 | 0 | 6.5 | |
| 49 | N49 | 0 | 38.001 | 13.5 | |
| 50 | N50 | 8 | 38.001 | 13.5 | |
| 51 | N51 | 18 | 34.501 | 13.5 | |
| 52 | N52 | 28 | 31.001 | 13.5 | |
| 53 | N53 | 38 | 27.501 | 13.5 | |
| 54 | N54 | 48 | 24.001 | 13.5 | |
| 55 | N55 | 58 | 20.501 | 13.5 | |

***Node Coordinates (Continued)***

| | Label | X [ft] | Y [ft] | Z [ft] | Detach From Diaphragm |
|---|---|---|---|---|---|
| 56 | N56 | 68 | 17.001 | 13.5 | |
| 57 | N57 | 78 | 13.501 | 13.5 | |
| 58 | N58 | 88 | 10.001 | 13.5 | |
| 59 | N59 | 98 | 6.501 | 13.5 | |
| 60 | N60 | 108 | 3.001 | 13.5 | |
| 61 | N61 | 118 | 2.001 | 13.5 | |
| 62 | N62 | 128 | 1.334 | 13.5 | |
| 63 | N63 | 138 | 0.667 | 13.5 | |
| 64 | N64 | 148 | 0 | 13.5 | |
| 65 | N65 | 0 | 38.001 | 18.5 | |
| 66 | N66 | 8 | 38.001 | 18.5 | |
| 67 | N67 | 18 | 34.501 | 18.5 | |
| 68 | N68 | 28 | 31.001 | 18.5 | |
| 69 | N69 | 38 | 27.501 | 18.5 | |
| 70 | N70 | 48 | 24.001 | 18.5 | |
| 71 | N71 | 58 | 20.501 | 18.5 | |
| 72 | N72 | 68 | 17.001 | 18.5 | |
| 73 | N73 | 78 | 13.501 | 18.5 | |
| 74 | N74 | 88 | 10.001 | 18.5 | |
| 75 | N75 | 98 | 6.501 | 18.5 | |
| 76 | N76 | 108 | 3.001 | 18.5 | |
| 77 | N77 | 118 | 2.001 | 18.5 | |
| 78 | N78 | 128 | 1.334 | 18.5 | |
| 79 | N79 | 138 | 0.667 | 18.5 | |
| 80 | N80 | 148 | 0 | 18.5 | |
| 81 | N81 | 0 | 38.001 | 25.5 | |
| 82 | N82 | 8 | 38.001 | 25.5 | |
| 83 | N83 | 18 | 34.501 | 25.5 | |
| 84 | N84 | 28 | 31.001 | 25.5 | |
| 85 | N85 | 38 | 27.501 | 25.5 | |
| 86 | N86 | 48 | 24.001 | 25.5 | |
| 87 | N87 | 58 | 20.501 | 25.5 | |
| 88 | N88 | 68 | 17.001 | 25.5 | |
| 89 | N89 | 78 | 13.501 | 25.5 | |
| 90 | N90 | 88 | 10.001 | 25.5 | |
| 91 | N91 | 98 | 6.501 | 25.5 | |
| 92 | N92 | 108 | 3.001 | 25.5 | |
| 93 | N93 | 118 | 2.001 | 25.5 | |
| 94 | N94 | 128 | 1.334 | 25.5 | |
| 95 | N95 | 138 | 0.667 | 25.5 | |
| 96 | N96 | 148 | 0 | 25.5 | |
| 97 | N97 | 0 | 38.001 | 30.5 | |
| 98 | N98 | 8 | 38.001 | 30.5 | |
| 99 | N99 | 18 | 34.501 | 30.5 | |
| 100 | N100 | 28 | 31.001 | 30.5 | |
| 101 | N101 | 38 | 27.501 | 30.5 | |
| 102 | N102 | 48 | 24.001 | 30.5 | |
| 103 | N103 | 58 | 20.501 | 30.5 | |
| 104 | N104 | 68 | 17.001 | 30.5 | |
| 105 | N105 | 78 | 13.501 | 30.5 | |
| 106 | N106 | 88 | 10.001 | 30.5 | |
| 107 | N107 | 98 | 6.501 | 30.5 | |
| 108 | N108 | 108 | 3.001 | 30.5 | |
| 109 | N109 | 118 | 2.001 | 30.5 | |
| 110 | N110 | 128 | 1.334 | 30.5 | |

***Node Coordinates (Continued)***

| | Label | X [ft] | Y [ft] | Z [ft] | Detach From Diaphragm |
|---|---|---|---|---|---|
| 111 | N111 | 138 | 0.667 | 30.5 | |
| 112 | N112 | 148 | 0 | 30.5 | |
| 113 | N113 | 0 | 38.001 | 32 | |
| 114 | N114 | 8 | 38.001 | 32 | |
| 115 | N115 | 18 | 34.501 | 32 | |
| 116 | N116 | 28 | 31.001 | 32 | |
| 117 | N117 | 38 | 27.501 | 32 | |
| 118 | N118 | 48 | 24.001 | 32 | |
| 119 | N119 | 58 | 20.501 | 32 | |
| 120 | N120 | 68 | 17.001 | 32 | |
| 121 | N121 | 78 | 13.501 | 32 | |
| 122 | N122 | 88 | 10.001 | 32 | |
| 123 | N123 | 98 | 6.501 | 32 | |
| 124 | N124 | 108 | 3.001 | 32 | |
| 125 | N125 | 118 | 2.001 | 32 | |
| 126 | N126 | 128 | 1.334 | 32 | |
| 127 | N127 | 138 | 0.667 | 32 | |
| 128 | N128 | 148 | 0 | 32 | |
| 129 | N129 | 0 | 0 | 1.5 | |
| 130 | N130 | 0 | 0 | 6.5 | |
| 131 | N131 | 0 | 0 | 13.5 | |
| 132 | N132 | 0 | 0 | 18.5 | |
| 133 | N133 | 0 | 0 | 25.5 | |
| 134 | N134 | 0 | 0 | 30.5 | |
| 135 | N135 | 8 | 0 | 13.5 | |
| 136 | N136 | 8 | 0 | 25.5 | |
| 137 | N137 | 8 | 0 | 1.5 | |
| 138 | N138 | 8 | 0 | 6.5 | |
| 139 | N139 | 8 | 0 | 18.5 | |
| 140 | N140 | 8 | 0 | 30.5 | |
| 141 | N141 | 18 | 0 | 6.5 | |
| 142 | N142 | 18 | 0 | 13.5 | |
| 143 | N143 | 18 | 0 | 25.5 | |
| 144 | N144 | 18 | 0 | 1.5 | |
| 145 | N145 | 18 | 0 | 18.5 | |
| 146 | N146 | 18 | 0 | 30.5 | |
| 147 | N153 | 28 | 0 | 6.5 | |
| 148 | N154 | 28 | 0 | 13.5 | |
| 149 | N155 | 28 | 0 | 25.5 | |
| 150 | N156 | 28 | 0 | 1.5 | |
| 151 | N157 | 28 | 0 | 18.5 | |
| 152 | N158 | 28 | 0 | 30.5 | |
| 153 | N165 | 38 | 0 | 6.5 | |
| 154 | N166 | 38 | 0 | 13.5 | |
| 155 | N167 | 38 | 0 | 25.5 | |
| 156 | N168 | 38 | 0 | 1.5 | |
| 157 | N169 | 38 | 0 | 18.5 | |
| 158 | N170 | 38 | 0 | 30.5 | |
| 159 | N177 | 48 | 0 | 6.5 | |
| 160 | N178 | 48 | 0 | 25.5 | |
| 161 | N179 | 48 | 0 | 30.5 | |
| 162 | N180 | 48 | 0 | 13.5 | |
| 163 | N181 | 48 | 0 | 1.5 | |
| 164 | N182 | 48 | 0 | 18.5 | |
| 165 | N189 | 58 | 0 | 6.5 | |

***Node Coordinates (Continued)***

| | Label | X [ft] | Y [ft] | Z [ft] | Detach From Diaphragm |
|---|---|---|---|---|---|
| 166 | N190 | 58 | 0 | 25.5 | |
| 167 | N191 | 58 | 0 | 30.5 | |
| 168 | N192 | 58 | 0 | 13.5 | |
| 169 | N193 | 58 | 0 | 1.5 | |
| 170 | N194 | 58 | 0 | 18.5 | |
| 171 | N201 | 68 | 0 | 6.5 | |
| 172 | N202 | 68 | 0 | 25.5 | |
| 173 | N203 | 68 | 0 | 30.5 | |
| 174 | N204 | 68 | 0 | 13.5 | |
| 175 | N205 | 68 | 0 | 1.5 | |
| 176 | N206 | 68 | 0 | 18.5 | |
| 177 | N213 | 78 | 0 | 6.5 | |
| 178 | N214 | 78 | 0 | 25.5 | |
| 179 | N215 | 78 | 0 | 30.5 | |
| 180 | N216 | 78 | 0 | 13.5 | |
| 181 | N217 | 78 | 0 | 1.5 | |
| 182 | N218 | 78 | 0 | 18.5 | |
| 183 | N225 | 88 | 0 | 6.5 | |
| 184 | N226 | 88 | 0 | 25.5 | |
| 185 | N227 | 88 | 0 | 30.5 | |
| 186 | N228 | 88 | 0 | 13.5 | |
| 187 | N229 | 88 | 0 | 1.5 | |
| 188 | N230 | 88 | 0 | 18.5 | |
| 189 | N237 | 98 | 0 | 6.5 | |
| 190 | N238 | 98 | 0 | 25.5 | |
| 191 | N239 | 98 | 0 | 30.5 | |
| 192 | N240 | 98 | 0 | 13.5 | |
| 193 | N241 | 98 | 0 | 1.5 | |
| 194 | N242 | 98 | 0 | 18.5 | |
| 195 | N249 | 108 | 0 | 6.5 | |
| 196 | N250 | 108 | 0 | 25.5 | |
| 197 | N251 | 108 | 0 | 30.5 | |
| 198 | N252 | 108 | 0 | 13.5 | |
| 199 | N253 | 108 | 0 | 1.5 | |
| 200 | N254 | 108 | 0 | 18.5 | |
| 201 | N261 | 118 | 0 | 25.5 | |
| 202 | N262 | 118 | 0 | 13.5 | |
| 203 | N263 | 118 | 0 | 30.5 | |
| 204 | N264 | 118 | 0 | 6.5 | |
| 205 | N265 | 118 | 0 | 1.5 | |
| 206 | N266 | 118 | 0 | 18.5 | |
| 207 | N273 | 128 | 0 | 25.5 | |
| 208 | N274 | 128 | 0 | 13.5 | |
| 209 | N275 | 128 | 0 | 30.5 | |
| 210 | N276 | 128 | 0 | 6.5 | |
| 211 | N277 | 128 | 0 | 1.5 | |
| 212 | N278 | 128 | 0 | 18.5 | |
| 213 | N285 | 138 | 0 | 25.5 | |
| 214 | N286 | 138 | 0 | 13.5 | |
| 215 | N287 | 138 | 0 | 30.5 | |
| 216 | N288 | 138 | 0 | 6.5 | |
| 217 | N289 | 138 | 0 | 1.5 | |
| 218 | N290 | 138 | 0 | 18.5 | |
| 219 | N297 | 8 | 0 | 32.5 | |
| 220 | N298 | 38 | 0 | 32.5 | |

***Node Coordinates (Continued)***

| | Label | X [ft] | Y [ft] | Z [ft] | Detach From Diaphragm |
|---|---|---|---|---|---|
| 221 | N299 | 68 | 0 | 32.5 | |
| 222 | N222 | 8 | 0 | -0.5 | |
| 223 | N223 | 38 | 0 | -0.5 | |
| 224 | N224 | 68 | 0 | -0.5 | |
| 225 | N300 | 0 | 38.001 | 9.549377 | |
| 226 | N301 | 4 | 38.001 | 9.932817 | |
| 227 | N302 | 4 | 38.001 | 13.895107 | |
| 228 | N303 | 4 | 38.001 | 18.108249 | |
| 229 | N304 | 4 | 38.001 | 2.676696 | |
| 230 | N305 | 8 | 38.001 | 3.538348 | |
| 231 | N306 | 4 | 38.001 | 6.47312 | |
| 232 | N307 | 8 | 38.001 | 9.549377 | |
| 233 | N308 | 1.61411 | 38.001 | 1.285841 | |
| 234 | N309 | 0 | 38.001 | 3.538348 | |
| 235 | N310 | 6.38589 | 38.001 | 1.285841 | |
| 236 | N311 | 4 | 38.001 | 0 | |
| 237 | N312 | 6.315342 | 38.001 | 0 | |
| 238 | N313 | 4 | 38.001 | 22.066815 | |
| 239 | N314 | 4 | 38.001 | 25.525028 | |
| 240 | N315 | 0 | 38.001 | 22.450623 | |
| 241 | N316 | 4 | 38.001 | 29.322764 | |
| 242 | N317 | 0 | 38.001 | 28.461652 | |
| 243 | N318 | 6.38589 | 38.001 | 30.714069 | |
| 244 | N319 | 8 | 38.001 | 28.461652 | |
| 245 | N320 | 1.61411 | 38.001 | 30.714069 | |
| 246 | N321 | 4 | 38.001 | 32 | |
| 247 | N322 | 1.684658 | 38.001 | 32 | |
| 248 | N323 | 8 | 38.001 | 22.450623 | |
| 249 | N324 | 1.684658 | 38.001 | 0 | |
| 250 | N325 | 6.315342 | 38.001 | 32 | |
| 251 | N326 | 39.428571 | 27.001 | 0 | |
| 252 | N327 | 39.428571 | 27.001 | 1.5 | |
| 253 | N328 | 76.571429 | 14.001 | 1.5 | |
| 254 | N329 | 76.571429 | 14.001 | 0 | |
| 255 | N330 | 26.571429 | 31.501 | 1.5 | |
| 256 | N331 | 26.571429 | 31.501 | 0 | |
| 257 | N332 | 53.714286 | 22.001 | 0 | |
| 258 | N333 | 53.714286 | 22.001 | 1.5 | |
| 259 | N334 | 52.285714 | 22.501 | 1.5 | |
| 260 | N335 | 52.285714 | 22.501 | 0 | |
| 261 | N336 | 36.571429 | 28.001 | 1.5 | |
| 262 | N337 | 36.571429 | 28.001 | 0 | |
| 263 | N338 | 42.285714 | 26.001 | 1.5 | |
| 264 | N339 | 42.285714 | 26.001 | 0 | |
| 265 | N340 | 43.714286 | 25.501 | 0 | |
| 266 | N341 | 43.714286 | 25.501 | 1.5 | |
| 267 | N342 | 33.714286 | 29.001 | 0 | |
| 268 | N343 | 33.714286 | 29.001 | 1.5 | |
| 269 | N344 | 32.285714 | 29.501 | 1.5 | |
| 270 | N345 | 32.285714 | 29.501 | 0 | |
| 271 | N346 | 49.428571 | 23.501 | 0 | |
| 272 | N347 | 49.428571 | 23.501 | 1.5 | |
| 273 | N348 | 56.571429 | 21.001 | 1.5 | |
| 274 | N349 | 56.571429 | 21.001 | 0 | |
| 275 | N350 | 46.571429 | 24.501 | 1.5 | |

***Node Coordinates (Continued)***

| | Label | X [ft] | Y [ft] | Z [ft] | Detach From Diaphragm |
|---|---|---|---|---|---|
| 276 | N351 | 46.571429 | 24.501 | 0 | |
| 277 | N352 | 50.857143 | 23.001 | 1.5 | |
| 278 | N353 | 50.857143 | 23.001 | 0 | |
| 279 | N354 | 45.142857 | 25.001 | 0 | |
| 280 | N355 | 45.142857 | 25.001 | 1.5 | |
| 281 | N356 | 12.285714 | 36.501 | 1.5 | |
| 282 | N357 | 12.285714 | 36.501 | 0 | |
| 283 | N358 | 13.714286 | 36.001 | 0 | |
| 284 | N359 | 13.714286 | 36.001 | 1.5 | |
| 285 | N360 | 29.428571 | 30.501 | 0 | |
| 286 | N361 | 29.428571 | 30.501 | 1.5 | |
| 287 | N362 | 23.714286 | 32.501 | 0 | |
| 288 | N363 | 23.714286 | 32.501 | 1.5 | |
| 289 | N364 | 22.285714 | 33.001 | 1.5 | |
| 290 | N365 | 22.285714 | 33.001 | 0 | |
| 291 | N366 | 30.857143 | 30.001 | 1.5 | |
| 292 | N367 | 30.857143 | 30.001 | 0 | |
| 293 | N368 | 16.571429 | 35.001 | 1.5 | |
| 294 | N369 | 16.571429 | 35.001 | 0 | |
| 295 | N370 | 9.428571 | 37.501 | 0 | |
| 296 | N371 | 9.428571 | 37.501 | 1.5 | |
| 297 | N372 | 19.428571 | 34.001 | 0 | |
| 298 | N373 | 19.428571 | 34.001 | 1.5 | |
| 299 | N374 | 15.142857 | 35.501 | 0 | |
| 300 | N375 | 15.142857 | 35.501 | 1.5 | |
| 301 | N376 | 20.857143 | 33.501 | 1.5 | |
| 302 | N377 | 20.857143 | 33.501 | 0 | |
| 303 | N378 | 89.428571 | 9.501 | 0 | |
| 304 | N379 | 89.428571 | 9.501 | 1.5 | |
| 305 | N380 | 62.285714 | 19.001 | 1.5 | |
| 306 | N381 | 62.285714 | 19.001 | 0 | |
| 307 | N382 | 63.714286 | 18.501 | 0 | |
| 308 | N383 | 63.714286 | 18.501 | 1.5 | |
| 309 | N384 | 79.428571 | 13.001 | 0 | |
| 310 | N385 | 79.428571 | 13.001 | 1.5 | |
| 311 | N386 | 73.714286 | 15.001 | 0 | |
| 312 | N387 | 73.714286 | 15.001 | 1.5 | |
| 313 | N388 | 72.285714 | 15.501 | 1.5 | |
| 314 | N389 | 72.285714 | 15.501 | 0 | |
| 315 | N390 | 82.285714 | 12.001 | 1.5 | |
| 316 | N391 | 82.285714 | 12.001 | 0 | |
| 317 | N392 | 83.714286 | 11.501 | 0 | |
| 318 | N393 | 83.714286 | 11.501 | 1.5 | |
| 319 | N394 | 66.571429 | 17.501 | 1.5 | |
| 320 | N395 | 66.571429 | 17.501 | 0 | |
| 321 | N396 | 59.428571 | 20.001 | 0 | |
| 322 | N397 | 59.428571 | 20.001 | 1.5 | |
| 323 | N398 | 69.428571 | 16.501 | 0 | |
| 324 | N399 | 69.428571 | 16.501 | 1.5 | |
| 325 | N400 | 65.142857 | 18.001 | 0 | |
| 326 | N401 | 65.142857 | 18.001 | 1.5 | |
| 327 | N402 | 70.857143 | 16.001 | 1.5 | |
| 328 | N403 | 70.857143 | 16.001 | 0 | |
| 329 | N404 | 103.714286 | 4.501 | 0 | |
| 330 | N405 | 103.714286 | 4.501 | 1.5 | |

***Node Coordinates (Continued)***

| | Label | X [ft] | Y [ft] | Z [ft] | Detach From Diaphragm |
|---|---|---|---|---|---|
| 331 | N406 | 102.285714 | 5.001 | 1.5 | |
| 332 | N407 | 102.285714 | 5.001 | 0 | |
| 333 | N408 | 86.571429 | 10.501 | 1.5 | |
| 334 | N409 | 86.571429 | 10.501 | 0 | |
| 335 | N410 | 92.285714 | 8.501 | 1.5 | |
| 336 | N411 | 92.285714 | 8.501 | 0 | |
| 337 | N412 | 93.714286 | 8.001 | 0 | |
| 338 | N413 | 93.714286 | 8.001 | 1.5 | |
| 339 | N414 | 85.142857 | 11.001 | 0 | |
| 340 | N415 | 85.142857 | 11.001 | 1.5 | |
| 341 | N416 | 99.428571 | 6.001 | 0 | |
| 342 | N417 | 99.428571 | 6.001 | 1.5 | |
| 343 | N418 | 106.571429 | 3.501 | 1.5 | |
| 344 | N419 | 106.571429 | 3.501 | 0 | |
| 345 | N420 | 96.571429 | 7.001 | 1.5 | |
| 346 | N421 | 96.571429 | 7.001 | 0 | |
| 347 | N422 | 100.857143 | 5.501 | 1.5 | |
| 348 | N423 | 100.857143 | 5.501 | 0 | |
| 349 | N424 | 95.142857 | 7.501 | 0 | |
| 350 | N425 | 95.142857 | 7.501 | 1.5 | |
| 351 | N426 | 40.857143 | 26.501 | 0 | |
| 352 | N427 | 40.857143 | 26.501 | 1.5 | |
| 353 | N428 | 75.142857 | 14.501 | 1.5 | |
| 354 | N429 | 75.142857 | 14.501 | 0 | |
| 355 | N430 | 25.142857 | 32.001 | 1.5 | |
| 356 | N431 | 25.142857 | 32.001 | 0 | |
| 357 | N432 | 55.142857 | 21.501 | 0 | |
| 358 | N433 | 55.142857 | 21.501 | 1.5 | |
| 359 | N434 | 35.142857 | 28.501 | 1.5 | |
| 360 | N435 | 35.142857 | 28.501 | 0 | |
| 361 | N436 | 10.857143 | 37.001 | 1.5 | |
| 362 | N437 | 10.857143 | 37.001 | 0 | |
| 363 | N438 | 90.857143 | 9.001 | 0 | |
| 364 | N439 | 90.857143 | 9.001 | 1.5 | |
| 365 | N440 | 60.857143 | 19.501 | 1.5 | |
| 366 | N441 | 60.857143 | 19.501 | 0 | |
| 367 | N442 | 80.857143 | 12.501 | 0 | |
| 368 | N443 | 80.857143 | 12.501 | 1.5 | |
| 369 | N444 | 105.142857 | 4.001 | 0 | |
| 370 | N445 | 105.142857 | 4.001 | 1.5 | |
| 371 | N446 | 46.571922 | 24.500827 | 3.026818 | |
| 372 | N447 | 48.010778 | 23.997228 | 4.649865 | |
| 373 | N448 | 73.840243 | 14.956915 | 4.058044 | |
| 374 | N449 | 72.453348 | 15.442328 | 4.061582 | |
| 375 | N450 | 71.372632 | 15.820579 | 5.010602 | |
| 376 | N451 | 74.915564 | 14.580552 | 4.994685 | |
| 377 | N452 | 33.838264 | 28.957607 | 3.979851 | |
| 378 | N453 | 32.456177 | 29.441338 | 3.997079 | |
| 379 | N454 | 31.388646 | 29.814974 | 4.950026 | |
| 380 | N455 | 34.919498 | 28.579176 | 4.913828 | |
| 381 | N456 | 53.81771 | 21.964801 | 4.071914 | |
| 382 | N457 | 52.416365 | 22.455272 | 4.0128 | |
| 383 | N458 | 51.253529 | 22.862265 | 5.035132 | |
| 384 | N459 | 54.907131 | 21.583504 | 5.02136 | |
| 385 | N460 | 43.731909 | 25.494832 | 4.05631 | |

***Node Coordinates (Continued)***

| | Label | X [ft] | Y [ft] | Z [ft] | Detach From Diaphragm |
|---|---|---|---|---|---|
| 386 | N461 | 42.302762 | 25.995033 | 3.986111 | |
| 387 | N462 | 41.094299 | 26.417995 | 5.01679 | |
| 388 | N463 | 44.85671 | 25.101151 | 5.023032 | |
| 389 | N464 | 44.917124 | 25.080006 | 6.5 | |
| 390 | N465 | 38.00053 | 27.500815 | 4.651792 | |
| 391 | N466 | 41.082876 | 26.421993 | 6.5 | |
| 392 | N467 | 42.290716 | 25.999249 | 2.869414 | |
| 393 | N468 | 40.866085 | 26.49787 | 3.024133 | |
| 394 | N469 | 43.732269 | 25.494706 | 2.850489 | |
| 395 | N470 | 45.139882 | 25.002041 | 3.026446 | |
| 396 | N471 | 39.424246 | 27.002514 | 3.030174 | |
| 397 | N472 | 56.57501 | 20.999746 | 3.011513 | |
| 398 | N473 | 58.000007 | 20.500998 | 4.662618 | |
| 399 | N474 | 51.082876 | 22.921993 | 6.5 | |
| 400 | N475 | 54.917124 | 21.580006 | 6.5 | |
| 401 | N476 | 52.300426 | 22.495851 | 2.827214 | |
| 402 | N477 | 50.861921 | 22.999327 | 3.031932 | |
| 403 | N478 | 53.733443 | 21.994295 | 2.815223 | |
| 404 | N479 | 55.141171 | 21.50159 | 3.000467 | |
| 405 | N480 | 49.422058 | 23.50328 | 3.034757 | |
| 406 | N481 | 23.662818 | 32.519014 | 3.989073 | |
| 407 | N482 | 22.293539 | 32.998261 | 3.995915 | |
| 408 | N483 | 21.100272 | 33.415905 | 5.021786 | |
| 409 | N484 | 24.84912 | 32.103808 | 5.027651 | |
| 410 | N485 | 36.574233 | 28.000019 | 2.922508 | |
| 411 | N486 | 28.009904 | 30.997534 | 4.802012 | |
| 412 | N487 | 31.082876 | 29.921993 | 6.5 | |
| 413 | N488 | 34.917124 | 28.580006 | 6.5 | |
| 414 | N489 | 32.301724 | 29.495396 | 2.807501 | |
| 415 | N490 | 30.873458 | 29.99529 | 3.032276 | |
| 416 | N491 | 33.738452 | 28.992542 | 2.786038 | |
| 417 | N492 | 35.142562 | 28.501103 | 2.948204 | |
| 418 | N493 | 29.425592 | 30.502043 | 3.035794 | |
| 419 | N494 | 14.57627 | 35.699306 | 5.021896 | |
| 420 | N495 | 10.659038 | 37.070337 | 5.039275 | |
| 421 | N496 | 10.970945 | 36.961169 | 6.5 | |
| 422 | N497 | 14.80981 | 35.617566 | 6.5 | |
| 423 | N498 | 26.569506 | 31.501673 | 3.035102 | |
| 424 | N499 | 17.999666 | 34.501117 | 4.75461 | |
| 425 | N500 | 21.082876 | 33.421993 | 6.5 | |
| 426 | N501 | 24.917124 | 32.080006 | 6.5 | |
| 427 | N502 | 22.286709 | 33.000652 | 2.861841 | |
| 428 | N503 | 20.865551 | 33.498057 | 3.026252 | |
| 429 | N504 | 23.71358 | 32.501247 | 2.858193 | |
| 430 | N505 | 25.135633 | 32.003528 | 3.041098 | |
| 431 | N506 | 19.425829 | 34.00196 | 3.022146 | |
| 432 | N507 | 16.571992 | 35.000803 | 3.100963 | |
| 433 | N508 | 13.430117 | 36.100459 | 4.01852 | |
| 434 | N509 | 11.995143 | 36.6027 | 3.900173 | |
| 435 | N510 | 13.694394 | 36.007962 | 2.772493 | |
| 436 | N511 | 15.135997 | 35.503401 | 3.097577 | |
| 437 | N512 | 12.265454 | 36.508091 | 2.772019 | |
| 438 | N513 | 10.834881 | 37.008792 | 2.779097 | |
| 439 | N514 | 9.429218 | 37.500774 | 2.663129 | |
| 440 | N515 | 86.575756 | 10.499485 | 2.929365 | |

***Node Coordinates (Continued)***

| | Label | X [ft] | Y [ft] | Z [ft] | Detach From Diaphragm |
|---|---|---|---|---|---|
| 441 | N516 | 87.999753 | 10.001086 | 4.465582 | |
| 442 | N517 | 66.5708 | 17.50122 | 3.045442 | |
| 443 | N518 | 67.999361 | 17.001224 | 4.817604 | |
| 444 | N519 | 76.570844 | 14.001204 | 2.960183 | |
| 445 | N520 | 77.991734 | 13.503893 | 4.594618 | |
| 446 | N521 | 71.082876 | 15.921993 | 6.5 | |
| 447 | N522 | 74.917124 | 14.580006 | 6.5 | |
| 448 | N523 | 72.295598 | 15.497541 | 2.781983 | |
| 449 | N524 | 70.873381 | 15.995317 | 3.031939 | |
| 450 | N525 | 73.731717 | 14.994899 | 2.771961 | |
| 451 | N526 | 75.139063 | 14.502328 | 2.955661 | |
| 452 | N527 | 69.429595 | 16.500642 | 3.026557 | |
| 453 | N528 | 63.687897 | 18.510236 | 4.09928 | |
| 454 | N529 | 62.266933 | 19.007574 | 4.066048 | |
| 455 | N530 | 61.133106 | 19.404413 | 5.034658 | |
| 456 | N531 | 64.773874 | 18.130144 | 5.03741 | |
| 457 | N532 | 64.917124 | 18.080006 | 6.5 | |
| 458 | N533 | 61.082876 | 19.421993 | 6.5 | |
| 459 | N534 | 62.278837 | 19.003407 | 2.865677 | |
| 460 | N535 | 60.863694 | 19.498707 | 3.031214 | |
| 461 | N536 | 63.710334 | 18.502383 | 2.882499 | |
| 462 | N537 | 65.136497 | 18.003226 | 3.041384 | |
| 463 | N538 | 59.428947 | 20.000869 | 3.02956 | |
| 464 | N539 | 96.570425 | 7.001351 | 3.017473 | |
| 465 | N540 | 98.000428 | 6.50085 | 4.670829 | |
| 466 | N541 | 83.803549 | 11.469758 | 4.042758 | |
| 467 | N542 | 82.381187 | 11.967585 | 3.952797 | |
| 468 | N543 | 81.13333 | 12.404335 | 5.020049 | |
| 469 | N544 | 84.945958 | 11.069915 | 5.031802 | |
| 470 | N545 | 84.917124 | 11.080006 | 6.5 | |
| 471 | N546 | 81.082876 | 12.421993 | 6.5 | |
| 472 | N547 | 82.296294 | 11.997297 | 2.880397 | |
| 473 | N548 | 80.860497 | 12.499826 | 3.022873 | |
| 474 | N549 | 83.74733 | 11.489435 | 2.840771 | |
| 475 | N550 | 85.137481 | 11.002882 | 2.934354 | |
| 476 | N551 | 79.430238 | 13.000417 | 3.013028 | |
| 477 | N552 | 103.929416 | 4.425704 | 4.032558 | |
| 478 | N553 | 102.470212 | 4.936426 | 4.046442 | |
| 479 | N554 | 101.335325 | 5.333636 | 5.042453 | |
| 480 | N555 | 105.094313 | 4.017991 | 5.039799 | |
| 481 | N556 | 93.687676 | 8.010313 | 4.088894 | |
| 482 | N557 | 92.277 | 8.50405 | 4.042613 | |
| 483 | N558 | 91.126846 | 8.906604 | 5.026482 | |
| 484 | N559 | 94.778755 | 7.628436 | 5.038929 | |
| 485 | N560 | 94.917124 | 7.580006 | 6.5 | |
| 486 | N561 | 91.082876 | 8.921993 | 6.5 | |
| 487 | N562 | 92.277844 | 8.503755 | 2.866094 | |
| 488 | N563 | 90.856528 | 9.001215 | 3.019135 | |
| 489 | N564 | 93.704365 | 8.004472 | 2.87474 | |
| 490 | N565 | 95.134463 | 7.503938 | 3.027865 | |
| 491 | N566 | 89.425205 | 9.502178 | 3.011821 | |
| 492 | N567 | 106.578883 | 3.498391 | 2.739449 | |
| 493 | N568 | 108 | 3.001 | 3.541199 | |
| 494 | N569 | 101.082876 | 5.421993 | 6.5 | |
| 495 | N570 | 104.917124 | 4.080006 | 6.5 | |

***Node Coordinates (Continued)***

| | Label | X [ft] | Y [ft] | Z [ft] | Detach From Diaphragm |
|---|---|---|---|---|---|
| 496 | N571 | 102.304578 | 4.994398 | 2.779866 | |
| 497 | N572 | 100.860102 | 5.499964 | 3.010932 | |
| 498 | N573 | 103.721049 | 4.498633 | 2.772123 | |
| 499 | N574 | 105.142351 | 4.001177 | 2.778038 | |
| 500 | N575 | 99.429914 | 6.00053 | 3.00884 | |
| 501 | N576 | 41.510626 | 26.272281 | 9.401292 | |
| 502 | N577 | 74.489353 | 14.729727 | 9.402775 | |
| 503 | N578 | 73 | 15.251 | 13.5 | |
| 504 | N579 | 71.936166 | 15.623342 | 9.922663 | |
| 505 | N580 | 21.510617 | 33.272284 | 9.401928 | |
| 506 | N581 | 48 | 24.001 | 9.98057 | |
| 507 | N582 | 51.936172 | 22.62334 | 9.922279 | |
| 508 | N583 | 53 | 22.251 | 13.5 | |
| 509 | N584 | 34.489353 | 28.729727 | 9.402775 | |
| 510 | N585 | 33 | 29.251 | 13.5 | |
| 511 | N586 | 31.936166 | 29.623342 | 9.922663 | |
| 512 | N587 | 44.063828 | 25.37866 | 9.922279 | |
| 513 | N588 | 27.999977 | 31.001008 | 9.978527 | |
| 514 | N589 | 54.489374 | 21.729719 | 9.401292 | |
| 515 | N590 | 14.412249 | 35.756713 | 9.393726 | |
| 516 | N591 | 12.818148 | 36.314648 | 13.5 | |
| 517 | N592 | 11.876394 | 36.644262 | 9.867888 | |
| 518 | N593 | 24.063824 | 32.378662 | 9.922557 | |
| 519 | N594 | 94.489353 | 7.729727 | 9.402775 | |
| 520 | N595 | 93 | 8.251 | 13.5 | |
| 521 | N596 | 91.936166 | 8.623342 | 9.922663 | |
| 522 | N597 | 67.999977 | 17.001008 | 9.978527 | |
| 523 | N598 | 64.063824 | 18.378662 | 9.922557 | |
| 524 | N599 | 81.510617 | 12.272284 | 9.401928 | |
| 525 | N600 | 87.999977 | 10.001008 | 9.978527 | |
| 526 | N601 | 84.063824 | 11.378662 | 9.922557 | |
| 527 | N602 | 61.510617 | 19.272284 | 9.401928 | |
| 528 | N603 | 101.510626 | 5.272281 | 9.39435 | |
| 529 | N604 | 108 | 3.001 | 9.573976 | |
| 530 | N605 | 104.063828 | 4.37866 | 9.871041 | |
| 531 | N606 | 43 | 25.751 | 13.5 | |
| 532 | N607 | 23 | 32.751 | 13.5 | |
| 533 | N608 | 63 | 18.751 | 13.5 | |
| 534 | N609 | 83 | 11.751 | 13.5 | |
| 535 | N610 | 103 | 4.751 | 13.5 | |
| 536 | N611 | 33 | 29.251 | 18.5 | |
| 537 | N612 | 83 | 11.751 | 18.5 | |
| 538 | N613 | 43 | 25.751 | 18.5 | |
| 539 | N614 | 53 | 22.251 | 18.5 | |
| 540 | N615 | 23 | 32.751 | 18.5 | |
| 541 | N616 | 13 | 36.251 | 18.5 | |
| 542 | N617 | 73 | 15.251 | 18.5 | |
| 543 | N618 | 63 | 18.751 | 18.5 | |
| 544 | N619 | 93 | 8.251 | 18.5 | |
| 545 | N620 | 103 | 4.751 | 18.5 | |
| 546 | N621 | 43 | 25.751 | 22 | |
| 547 | N622 | 38 | 27.501 | 22 | |
| 548 | N623 | 73 | 15.251 | 22 | |
| 549 | N624 | 78 | 13.501 | 22 | |
| 550 | N625 | 73 | 15.251 | 25.5 | |

***Node Coordinates (Continued)***

| | Label | X [ft] | Y [ft] | Z [ft] | Detach From Diaphragm |
|---|---|---|---|---|---|
| 551 | N626 | 22.987467 | 32.755386 | 22.00092 | |
| 552 | N627 | 28 | 31.001 | 22 | |
| 553 | N628 | 23 | 32.751 | 25.5 | |
| 554 | N629 | 48 | 24.001 | 22 | |
| 555 | N630 | 43 | 25.751 | 25.5 | |
| 556 | N631 | 33 | 29.251 | 22 | |
| 557 | N632 | 33 | 29.251 | 25.5 | |
| 558 | N633 | 53 | 22.251 | 22 | |
| 559 | N634 | 53 | 22.251 | 25.5 | |
| 560 | N635 | 58 | 20.501 | 22 | |
| 561 | N636 | 17.899738 | 34.536092 | 22.007363 | |
| 562 | N637 | 12.901937 | 36.285322 | 22.057248 | |
| 563 | N638 | 12.315757 | 36.490485 | 25.5 | |
| 564 | N639 | 92.955433 | 8.266599 | 22.001758 | |
| 565 | N640 | 87.994845 | 10.002804 | 22.001142 | |
| 566 | N641 | 68 | 17.001 | 22 | |
| 567 | N642 | 83 | 11.751 | 22 | |
| 568 | N643 | 63 | 18.751 | 22 | |
| 569 | N644 | 63 | 18.751 | 25.5 | |
| 570 | N645 | 97.648617 | 6.623984 | 22.01292 | |
| 571 | N646 | 93 | 8.251 | 25.5 | |
| 572 | N647 | 83 | 11.751 | 25.5 | |
| 573 | N648 | 101.891428 | 5.139 | 22.076495 | |
| 574 | N649 | 101.333333 | 5.334333 | 25.5 | |
| 575 | N650 | 104.481905 | 4.232333 | 22.596082 | |
| 576 | N651 | 104.666667 | 4.167667 | 25.5 | |
| 577 | N652 | 33 | 29.251 | 30.5 | |
| 578 | N653 | 83 | 11.751 | 30.5 | |
| 579 | N654 | 43 | 25.751 | 30.5 | |
| 580 | N655 | 53 | 22.251 | 30.5 | |
| 581 | N656 | 23 | 32.751 | 30.5 | |
| 582 | N657 | 13.554992 | 36.056753 | 30.5 | |
| 583 | N659 | 10.313738 | 37.191192 | 30.5 | |
| 584 | N660 | 73 | 15.251 | 30.5 | |
| 585 | N661 | 63 | 18.751 | 30.5 | |
| 586 | N662 | 93 | 8.251 | 30.5 | |
| 587 | N663 | 104.666667 | 4.167667 | 30.5 | |
| 588 | N664 | 101.333333 | 5.334333 | 30.5 | |
| 589 | N665 | 43 | 25.751 | 32 | |
| 590 | N666 | 41.75 | 26.1885 | 32 | |
| 591 | N667 | 41.75 | 26.1885 | 30.5 | |
| 592 | N668 | 64.25 | 18.3135 | 30.5 | |
| 593 | N669 | 64.25 | 18.3135 | 32 | |
| 594 | N670 | 63 | 18.751 | 32 | |
| 595 | N671 | 15.036661 | 35.538169 | 30.5 | |
| 596 | N672 | 15.036661 | 35.538169 | 32 | |
| 597 | N673 | 13.554992 | 36.056753 | 32 | |
| 598 | N674 | 49.25 | 23.5635 | 32 | |
| 599 | N675 | 49.25 | 23.5635 | 30.5 | |
| 600 | N676 | 50.5 | 23.126 | 30.5 | |
| 601 | N677 | 50.5 | 23.126 | 32 | |
| 602 | N678 | 36.75 | 27.9385 | 32 | |
| 603 | N679 | 36.75 | 27.9385 | 30.5 | |
| 604 | N680 | 40.5 | 26.626 | 32 | |
| 605 | N681 | 40.5 | 26.626 | 30.5 | |

***Node Coordinates (Continued)***

| | Label | X [ft] | Y [ft] | Z [ft] | Detach From Diaphragm |
|---|---|---|---|---|---|
| 606 | N682 | 44.25 | 25.3135 | 32 | |
| 607 | N683 | 44.25 | 25.3135 | 30.5 | |
| 608 | N684 | 45.5 | 24.876 | 30.5 | |
| 609 | N685 | 45.5 | 24.876 | 32 | |
| 610 | N686 | 39.25 | 27.0635 | 30.5 | |
| 611 | N687 | 39.25 | 27.0635 | 32 | |
| 612 | N688 | 34.25 | 28.8135 | 30.5 | |
| 613 | N689 | 34.25 | 28.8135 | 32 | |
| 614 | N690 | 33 | 29.251 | 32 | |
| 615 | N691 | 55.5 | 21.376 | 30.5 | |
| 616 | N692 | 55.5 | 21.376 | 32 | |
| 617 | N693 | 54.25 | 21.8135 | 32 | |
| 618 | N694 | 54.25 | 21.8135 | 30.5 | |
| 619 | N695 | 46.75 | 24.4385 | 30.5 | |
| 620 | N696 | 46.75 | 24.4385 | 32 | |
| 621 | N697 | 53 | 22.251 | 32 | |
| 622 | N698 | 56.75 | 20.9385 | 32 | |
| 623 | N699 | 56.75 | 20.9385 | 30.5 | |
| 624 | N700 | 51.75 | 22.6885 | 30.5 | |
| 625 | N701 | 51.75 | 22.6885 | 32 | |
| 626 | N702 | 24.25 | 32.3135 | 32 | |
| 627 | N703 | 24.25 | 32.3135 | 30.5 | |
| 628 | N704 | 25.5 | 31.876 | 30.5 | |
| 629 | N705 | 25.5 | 31.876 | 32 | |
| 630 | N706 | 11.934365 | 36.623972 | 32 | |
| 631 | N707 | 11.934365 | 36.623972 | 30.5 | |
| 632 | N708 | 16.518331 | 35.019584 | 32 | |
| 633 | N709 | 16.518331 | 35.019584 | 30.5 | |
| 634 | N710 | 19.25 | 34.0635 | 32 | |
| 635 | N711 | 19.25 | 34.0635 | 30.5 | |
| 636 | N712 | 20.5 | 33.626 | 30.5 | |
| 637 | N713 | 20.5 | 33.626 | 32 | |
| 638 | N714 | 9.156869 | 37.596096 | 30.5 | |
| 639 | N715 | 9.156869 | 37.596096 | 32 | |
| 640 | N716 | 26.75 | 31.4385 | 30.5 | |
| 641 | N717 | 26.75 | 31.4385 | 32 | |
| 642 | N718 | 21.75 | 33.1885 | 30.5 | |
| 643 | N719 | 21.75 | 33.1885 | 32 | |
| 644 | N720 | 29.25 | 30.5635 | 30.5 | |
| 645 | N721 | 29.25 | 30.5635 | 32 | |
| 646 | N722 | 31.75 | 29.6885 | 32 | |
| 647 | N723 | 31.75 | 29.6885 | 30.5 | |
| 648 | N724 | 93 | 8.251 | 32 | |
| 649 | N725 | 91.75 | 8.6885 | 32 | |
| 650 | N726 | 91.75 | 8.6885 | 30.5 | |
| 651 | N727 | 74.25 | 14.8135 | 32 | |
| 652 | N728 | 74.25 | 14.8135 | 30.5 | |
| 653 | N729 | 75.5 | 14.376 | 30.5 | |
| 654 | N730 | 75.5 | 14.376 | 32 | |
| 655 | N731 | 61.75 | 19.1885 | 32 | |
| 656 | N732 | 61.75 | 19.1885 | 30.5 | |
| 657 | N733 | 66.75 | 17.4385 | 30.5 | |
| 658 | N734 | 66.75 | 17.4385 | 32 | |
| 659 | N735 | 65.5 | 17.876 | 32 | |
| 660 | N736 | 65.5 | 17.876 | 30.5 | |

***Node Coordinates (Continued)***

| | Label | X [ft] | Y [ft] | Z [ft] | Detach From Diaphragm |
|---|---|---|---|---|---|
| 661 | N737 | 69.25 | 16.5635 | 32 | |
| 662 | N738 | 69.25 | 16.5635 | 30.5 | |
| 663 | N739 | 70.5 | 16.126 | 30.5 | |
| 664 | N740 | 70.5 | 16.126 | 32 | |
| 665 | N741 | 59.25 | 20.0635 | 30.5 | |
| 666 | N742 | 59.25 | 20.0635 | 32 | |
| 667 | N743 | 76.75 | 13.9385 | 30.5 | |
| 668 | N744 | 76.75 | 13.9385 | 32 | |
| 669 | N745 | 71.75 | 15.6885 | 30.5 | |
| 670 | N746 | 71.75 | 15.6885 | 32 | |
| 671 | N747 | 79.25 | 13.0635 | 30.5 | |
| 672 | N748 | 79.25 | 13.0635 | 32 | |
| 673 | N749 | 81.75 | 12.1885 | 32 | |
| 674 | N750 | 81.75 | 12.1885 | 30.5 | |
| 675 | N751 | 83 | 11.751 | 32 | |
| 676 | N752 | 99.666667 | 5.917667 | 32 | |
| 677 | N753 | 99.666667 | 5.917667 | 30.5 | |
| 678 | N754 | 101.333333 | 5.334333 | 32 | |
| 679 | N755 | 86.75 | 10.4385 | 32 | |
| 680 | N756 | 86.75 | 10.4385 | 30.5 | |
| 681 | N757 | 90.5 | 9.126 | 32 | |
| 682 | N758 | 90.5 | 9.126 | 30.5 | |
| 683 | N759 | 94.25 | 7.8135 | 32 | |
| 684 | N760 | 94.25 | 7.8135 | 30.5 | |
| 685 | N761 | 95.5 | 7.376 | 30.5 | |
| 686 | N762 | 95.5 | 7.376 | 32 | |
| 687 | N763 | 89.25 | 9.5635 | 30.5 | |
| 688 | N764 | 89.25 | 9.5635 | 32 | |
| 689 | N765 | 84.25 | 11.3135 | 30.5 | |
| 690 | N766 | 84.25 | 11.3135 | 32 | |
| 691 | N767 | 103 | 4.751 | 30.5 | |
| 692 | N768 | 103 | 4.751 | 32 | |
| 693 | N769 | 96.75 | 6.9385 | 30.5 | |
| 694 | N770 | 96.75 | 6.9385 | 32 | |
| 695 | N771 | 106.333333 | 3.584333 | 32 | |
| 696 | N772 | 106.333333 | 3.584333 | 30.5 | |
| 697 | N773 | 35.5 | 28.376 | 32 | |
| 698 | N774 | 35.5 | 28.376 | 30.5 | |
| 699 | N775 | 23 | 32.751 | 32 | |
| 700 | N776 | 10.313738 | 37.191192 | 32 | |
| 701 | N777 | 30.5 | 30.126 | 30.5 | |
| 702 | N778 | 30.5 | 30.126 | 32 | |
| 703 | N779 | 73 | 15.251 | 32 | |
| 704 | N780 | 60.5 | 19.626 | 32 | |
| 705 | N781 | 60.5 | 19.626 | 30.5 | |
| 706 | N782 | 80.5 | 12.626 | 30.5 | |
| 707 | N783 | 80.5 | 12.626 | 32 | |
| 708 | N784 | 85.5 | 10.876 | 32 | |
| 709 | N785 | 85.5 | 10.876 | 30.5 | |
| 710 | N786 | 104.666667 | 4.167667 | 32 | |
| 711 | N787 | 43 | 25.751 | 27.720203 | |
| 712 | N788 | 40.5 | 26.626 | 28.435152 | |
| 713 | N789 | 40.5 | 26.626 | 25.5 | |
| 714 | N790 | 74.041667 | 14.886417 | 29.507354 | |
| 715 | N791 | 75.5 | 14.376 | 28.435135 | |

***Node Coordinates (Continued)***

| | Label | X [ft] | Y [ft] | Z [ft] | Detach From Diaphragm |
|---|---|---|---|---|---|
| 716 | N792 | 24.042331 | 32.386184 | 29.50424 | |
| 717 | N793 | 25.500383 | 31.875866 | 28.434052 | |
| 718 | N794 | 49.041667 | 23.636417 | 29.50741 | |
| 719 | N795 | 50.5 | 23.126 | 28.435188 | |
| 720 | N796 | 38 | 27.501 | 27.720658 | |
| 721 | N797 | 35.5 | 28.376 | 28.435221 | |
| 722 | N798 | 35.5 | 28.376 | 25.5 | |
| 723 | N799 | 44.041667 | 25.386417 | 29.506629 | |
| 724 | N800 | 45.5 | 24.876 | 28.435364 | |
| 725 | N801 | 41.958333 | 26.115583 | 29.506974 | |
| 726 | N802 | 43 | 25.751 | 29.38804 | |
| 727 | N803 | 45.5 | 24.876 | 25.5 | |
| 728 | N804 | 33 | 29.251 | 27.720742 | |
| 729 | N805 | 39.041667 | 27.136417 | 29.507086 | |
| 730 | N806 | 36.958333 | 27.865583 | 29.507097 | |
| 731 | N807 | 38 | 27.501 | 29.388152 | |
| 732 | N808 | 34.041667 | 28.886417 | 29.507121 | |
| 733 | N809 | 54.041667 | 21.886417 | 29.507398 | |
| 734 | N810 | 55.5 | 21.376 | 28.435203 | |
| 735 | N811 | 48 | 24.001 | 27.721129 | |
| 736 | N812 | 50.5 | 23.126 | 25.5 | |
| 737 | N813 | 46.958333 | 24.365583 | 29.507177 | |
| 738 | N814 | 48 | 24.001 | 29.388143 | |
| 739 | N815 | 56.958333 | 20.865583 | 29.506842 | |
| 740 | N816 | 58 | 20.501 | 27.721231 | |
| 741 | N817 | 58 | 20.501 | 29.388074 | |
| 742 | N818 | 53 | 22.251 | 27.721073 | |
| 743 | N819 | 55.5 | 21.376 | 25.5 | |
| 744 | N820 | 51.958333 | 22.615583 | 29.507123 | |
| 745 | N821 | 53 | 22.251 | 29.388114 | |
| 746 | N822 | 16.207071 | 35.128525 | 25.5 | |
| 747 | N823 | 16.311261 | 35.092059 | 27.334371 | |
| 748 | N824 | 13.82662 | 35.961683 | 27.544545 | |
| 749 | N825 | 14.134402 | 35.853959 | 25.5 | |
| 750 | N826 | 29.041672 | 30.636415 | 29.506397 | |
| 751 | N827 | 30.500003 | 30.125999 | 28.435397 | |
| 752 | N828 | 23.003049 | 32.749933 | 27.714031 | |
| 753 | N829 | 20.517913 | 33.619731 | 28.395716 | |
| 754 | N830 | 20.5 | 33.626 | 25.5 | |
| 755 | N831 | 25.5 | 31.876 | 25.5 | |
| 756 | N832 | 21.961291 | 33.114548 | 29.498006 | |
| 757 | N833 | 23.002477 | 32.750133 | 29.380236 | |
| 758 | N834 | 31.958334 | 29.615583 | 29.507151 | |
| 759 | N835 | 33 | 29.251 | 29.388204 | |
| 760 | N836 | 28.000054 | 31.000981 | 27.720976 | |
| 761 | N837 | 30.5 | 30.126 | 25.5 | |
| 762 | N838 | 26.958409 | 31.365557 | 29.506926 | |
| 763 | N839 | 28.000065 | 31.000977 | 29.387968 | |
| 764 | N840 | 12.717155 | 36.349996 | 26.938234 | |
| 765 | N841 | 19.075392 | 34.124613 | 29.43535 | |
| 766 | N842 | 15.037463 | 35.537888 | 29.149585 | |
| 767 | N843 | 16.508578 | 35.022998 | 28.950342 | |
| 768 | N844 | 18.039934 | 34.487023 | 29.191596 | |
| 769 | N845 | 18.144506 | 34.450423 | 27.524785 | |
| 770 | N846 | 10.795865 | 37.022447 | 27.216215 | |

***Node Coordinates (Continued)***

| | Label | X [ft] | Y [ft] | Z [ft] | Detach From Diaphragm |
|---|---|---|---|---|---|
| 771 | N847 | 9.275647 | 37.554524 | 26.833514 | |
| 772 | N848 | 10.459114 | 37.14031 | 28.670042 | |
| 773 | N849 | 9.156876 | 37.596094 | 28.468901 | |
| 774 | N850 | 93.005574 | 8.249049 | 27.71951 | |
| 775 | N851 | 90.501043 | 9.125635 | 28.435204 | |
| 776 | N852 | 90.5 | 9.126 | 25.5 | |
| 777 | N853 | 68 | 17.001 | 27.720534 | |
| 778 | N854 | 65.5 | 17.876 | 28.435393 | |
| 779 | N855 | 65.5 | 17.876 | 25.5 | |
| 780 | N856 | 79.041667 | 13.136417 | 29.507402 | |
| 781 | N857 | 80.5 | 12.626 | 28.435216 | |
| 782 | N858 | 73 | 15.251 | 27.720883 | |
| 783 | N859 | 70.5 | 16.126 | 28.435501 | |
| 784 | N860 | 70.5 | 16.126 | 25.5 | |
| 785 | N861 | 75.5 | 14.376 | 25.5 | |
| 786 | N862 | 71.958333 | 15.615583 | 29.507158 | |
| 787 | N863 | 73 | 15.251 | 29.388106 | |
| 788 | N864 | 81.958333 | 12.115583 | 29.506847 | |
| 789 | N865 | 83.000001 | 11.751 | 27.721235 | |
| 790 | N866 | 83.000001 | 11.751 | 29.388077 | |
| 791 | N867 | 78 | 13.501 | 27.721082 | |
| 792 | N868 | 80.5 | 12.626 | 25.5 | |
| 793 | N869 | 76.958333 | 13.865583 | 29.507122 | |
| 794 | N870 | 78 | 13.501 | 29.388113 | |
| 795 | N871 | 63 | 18.751 | 27.721162 | |
| 796 | N872 | 60.5 | 19.626 | 28.434575 | |
| 797 | N873 | 60.5 | 19.626 | 25.5 | |
| 798 | N874 | 69.041667 | 16.636417 | 29.507144 | |
| 799 | N875 | 66.958333 | 17.365583 | 29.507126 | |
| 800 | N876 | 68 | 17.001 | 29.388212 | |
| 801 | N877 | 64.041667 | 18.386417 | 29.507307 | |
| 802 | N878 | 61.958333 | 19.115583 | 29.506158 | |
| 803 | N879 | 63 | 18.751 | 29.387285 | |
| 804 | N880 | 59.041667 | 20.136417 | 29.506738 | |
| 805 | N881 | 99.323799 | 6.03767 | 29.475746 | |
| 806 | N882 | 100.62371 | 5.582701 | 28.298735 | |
| 807 | N883 | 88.000159 | 10.000944 | 27.721139 | |
| 808 | N884 | 85.500006 | 10.875998 | 28.434581 | |
| 809 | N885 | 85.5 | 10.876 | 25.5 | |
| 810 | N886 | 94.048773 | 7.883929 | 29.505656 | |
| 811 | N887 | 95.532933 | 7.364473 | 28.430304 | |
| 812 | N888 | 91.960332 | 8.614884 | 29.506757 | |
| 813 | N889 | 93.006082 | 8.248871 | 29.387179 | |
| 814 | N890 | 95.5 | 7.376 | 25.5 | |
| 815 | N891 | 89.041884 | 9.636341 | 29.50727 | |
| 816 | N892 | 86.958347 | 10.365579 | 29.506166 | |
| 817 | N893 | 88.0001 | 10.000965 | 29.38728 | |
| 818 | N894 | 84.041668 | 11.386416 | 29.506741 | |
| 819 | N895 | 102.603564 | 4.889753 | 28.465953 | |
| 820 | N896 | 98.18245 | 6.437143 | 27.694202 | |
| 821 | N897 | 97.016399 | 6.84526 | 29.496917 | |
| 822 | N898 | 98.136631 | 6.453179 | 29.361541 | |
| 823 | N899 | 106.611111 | 3.487111 | 28.485273 | |
| 824 | N900 | 108 | 3.001 | 28.41164 | |
| 825 | N1063 | 108 | 3.001 | 9.651387 | |

***Node Coordinates (Continued)***

| | Label | X [ft] | Y [ft] | Z [ft] | Detach From Diaphragm |
|---|---|---|---|---|---|
| 826 | N1071 | 148 | 0 | 9.651387 | |
| 827 | N1136 | 108 | 3.001 | 28.464713 | |
| 828 | N1137 | 112.285714 | 2.572429 | 1.5 | |
| 829 | N1138 | 112.285714 | 2.572429 | 0 | |
| 830 | N1139 | 113.714286 | 2.429571 | 0 | |
| 831 | N1140 | 113.714286 | 2.429571 | 1.5 | |
| 832 | N1141 | 115.142857 | 2.286714 | 0 | |
| 833 | N1142 | 115.142857 | 2.286714 | 1.5 | |
| 834 | N1143 | 109.428571 | 2.858143 | 0 | |
| 835 | N1144 | 109.428571 | 2.858143 | 1.5 | |
| 836 | N1145 | 116.571429 | 2.143857 | 1.5 | |
| 837 | N1146 | 116.571429 | 2.143857 | 0 | |
| 838 | N1147 | 110.857143 | 2.715286 | 1.5 | |
| 839 | N1148 | 110.857143 | 2.715286 | 0 | |
| 840 | N1149 | 129.428571 | 1.238714 | 0 | |
| 841 | N1150 | 129.428571 | 1.238714 | 1.5 | |
| 842 | N1151 | 143.714286 | 0.285857 | 0 | |
| 843 | N1152 | 143.714286 | 0.285857 | 1.5 | |
| 844 | N1153 | 142.285714 | 0.381143 | 1.5 | |
| 845 | N1154 | 142.285714 | 0.381143 | 0 | |
| 846 | N1155 | 123.714286 | 1.619857 | 0 | |
| 847 | N1156 | 123.714286 | 1.619857 | 1.5 | |
| 848 | N1157 | 122.285714 | 1.715143 | 1.5 | |
| 849 | N1158 | 122.285714 | 1.715143 | 0 | |
| 850 | N1159 | 132.285714 | 1.048143 | 1.5 | |
| 851 | N1160 | 132.285714 | 1.048143 | 0 | |
| 852 | N1161 | 133.714286 | 0.952857 | 0 | |
| 853 | N1162 | 133.714286 | 0.952857 | 1.5 | |
| 854 | N1163 | 120.857143 | 1.810429 | 1.5 | |
| 855 | N1164 | 120.857143 | 1.810429 | 0 | |
| 856 | N1165 | 126.571429 | 1.429286 | 1.5 | |
| 857 | N1166 | 126.571429 | 1.429286 | 0 | |
| 858 | N1167 | 119.428571 | 1.905714 | 0 | |
| 859 | N1168 | 119.428571 | 1.905714 | 1.5 | |
| 860 | N1169 | 139.428571 | 0.571714 | 0 | |
| 861 | N1170 | 139.428571 | 0.571714 | 1.5 | |
| 862 | N1171 | 146.571429 | 0.095286 | 1.5 | |
| 863 | N1172 | 146.571429 | 0.095286 | 0 | |
| 864 | N1173 | 136.571429 | 0.762286 | 1.5 | |
| 865 | N1174 | 136.571429 | 0.762286 | 0 | |
| 866 | N1175 | 140.857143 | 0.476429 | 1.5 | |
| 867 | N1176 | 140.857143 | 0.476429 | 0 | |
| 868 | N1177 | 135.142857 | 0.857571 | 0 | |
| 869 | N1178 | 135.142857 | 0.857571 | 1.5 | |
| 870 | N1179 | 130.857143 | 1.143429 | 0 | |
| 871 | N1180 | 130.857143 | 1.143429 | 1.5 | |
| 872 | N1181 | 145.142857 | 0.190571 | 0 | |
| 873 | N1182 | 145.142857 | 0.190571 | 1.5 | |
| 874 | N1183 | 125.142857 | 1.524571 | 0 | |
| 875 | N1184 | 125.142857 | 1.524571 | 1.5 | |
| 876 | N1185 | 112.2325 | 2.57775 | 4.164455 | |
| 877 | N1186 | 113.691465 | 2.431854 | 4.10985 | |
| 878 | N1187 | 114.913404 | 2.30966 | 5.104893 | |
| 879 | N1188 | 111.07941 | 2.693059 | 5.096317 | |
| 880 | N1189 | 109.419595 | 2.85904 | 2.757701 | |

***Node Coordinates (Continued)***

| | Label | X [ft] | Y [ft] | Z [ft] | Detach From Diaphragm |
|---|---|---|---|---|---|
| 881 | N1190 | 108 | 3.001 | 3.524298 | |
| 882 | N1191 | 118 | 2.001 | 3.524298 | |
| 883 | N1192 | 114.91141 | 2.309859 | 6.5 | |
| 884 | N1193 | 111.08859 | 2.692141 | 6.5 | |
| 885 | N1194 | 113.720459 | 2.428954 | 2.917073 | |
| 886 | N1195 | 115.142505 | 2.286749 | 2.947965 | |
| 887 | N1196 | 112.270045 | 2.573995 | 2.895919 | |
| 888 | N1197 | 110.856005 | 2.715399 | 2.942837 | |
| 889 | N1198 | 116.581666 | 2.142833 | 2.82234 | |
| 890 | N1199 | 132.241079 | 1.05112 | 4.121293 | |
| 891 | N1200 | 133.716791 | 0.95269 | 4.118822 | |
| 892 | N1201 | 134.897859 | 0.873913 | 5.108777 | |
| 893 | N1202 | 131.074386 | 1.128938 | 5.041203 | |
| 894 | N1203 | 121.995746 | 1.734484 | 4.018044 | |
| 895 | N1204 | 123.483663 | 1.63524 | 4.027162 | |
| 896 | N1205 | 124.638279 | 1.558227 | 4.982051 | |
| 897 | N1206 | 120.811411 | 1.813479 | 5.007416 | |
| 898 | N1207 | 139.432078 | 0.57148 | 3.098248 | |
| 899 | N1208 | 137.998566 | 0.667096 | 4.672567 | |
| 900 | N1209 | 129.425403 | 1.238926 | 2.937623 | |
| 901 | N1210 | 127.999734 | 1.334018 | 4.562799 | |
| 902 | N1211 | 134.911111 | 0.873029 | 6.5 | |
| 903 | N1212 | 131.088889 | 1.127971 | 6.5 | |
| 904 | N1213 | 133.729816 | 0.951821 | 2.905091 | |
| 905 | N1214 | 135.133366 | 0.858204 | 2.950621 | |
| 906 | N1215 | 132.266778 | 1.049406 | 2.889088 | |
| 907 | N1216 | 130.857241 | 1.143422 | 2.93577 | |
| 908 | N1217 | 136.566299 | 0.762628 | 2.948319 | |
| 909 | N1218 | 142.465695 | 0.369138 | 3.986855 | |
| 910 | N1219 | 143.939051 | 0.270865 | 4.025484 | |
| 911 | N1220 | 145.173296 | 0.188541 | 5.035461 | |
| 912 | N1221 | 141.203576 | 0.453321 | 5.016217 | |
| 913 | N1222 | 141.088889 | 0.460971 | 6.5 | |
| 914 | N1223 | 148 | 0 | 3.523406 | |
| 915 | N1224 | 144.911111 | 0.206029 | 6.5 | |
| 916 | N1225 | 143.754731 | 0.283159 | 2.791303 | |
| 917 | N1226 | 145.16156 | 0.189324 | 2.784139 | |
| 918 | N1227 | 142.289614 | 0.380883 | 2.87058 | |
| 919 | N1228 | 140.861448 | 0.476141 | 3.097825 | |
| 920 | N1229 | 146.565746 | 0.095665 | 2.680019 | |
| 921 | N1230 | 119.412571 | 1.906781 | 2.7624 | |
| 922 | N1232 | 124.911111 | 1.540029 | 6.5 | |
| 923 | N1233 | 121.088889 | 1.794971 | 6.5 | |
| 924 | N1234 | 123.698979 | 1.620878 | 2.822609 | |
| 925 | N1235 | 125.124013 | 1.525828 | 3.073846 | |
| 926 | N1236 | 122.267441 | 1.716362 | 2.773578 | |
| 927 | N1237 | 120.847712 | 1.811058 | 2.789699 | |
| 928 | N1238 | 126.567621 | 1.42954 | 2.97355 | |
| 929 | N1239 | 111.264338 | 2.674566 | 9.948326 | |
| 930 | N1240 | 111.032005 | 2.697799 | 13.5 | |
| 931 | N1241 | 114.490814 | 2.351919 | 13.5 | |
| 932 | N1242 | 114.598395 | 2.341161 | 9.935411 | |
| 933 | N1243 | 118 | 2.001 | 9.534965 | |
| 934 | N1244 | 134.495233 | 0.900768 | 9.403626 | |
| 935 | N1245 | 133 | 1.0005 | 13.5 | |

***Node Coordinates (Continued)***

| | Label | X [ft] | Y [ft] | Z [ft] | Detach From Diaphragm |
|---|---|---|---|---|---|
| 936 | N1246 | 131.973463 | 1.06897 | 9.92407 | |
| 937 | N1247 | 124.666667 | 1.556333 | 13.5 | |
| 938 | N1248 | 124.701674 | 1.553998 | 9.989714 | |
| 939 | N1249 | 128.292468 | 1.314492 | 9.988934 | |
| 940 | N1250 | 141.510658 | 0.432839 | 9.393338 | |
| 941 | N1251 | 148 | 0 | 9.533129 | |
| 942 | N1252 | 144.063832 | 0.262542 | 9.865808 | |
| 943 | N1254 | 121.337709 | 1.778375 | 9.940355 | |
| 944 | N1255 | 121.333333 | 1.778667 | 13.5 | |
| 945 | N1256 | 143 | 0.3335 | 13.5 | |
| 946 | N1257 | 113.714286 | 2.429571 | 30.5 | |
| 947 | N1258 | 113.714286 | 2.429571 | 32 | |
| 948 | N1259 | 112.285714 | 2.572429 | 32 | |
| 949 | N1260 | 112.285714 | 2.572429 | 30.5 | |
| 950 | N1261 | 110.857143 | 2.715286 | 32 | |
| 951 | N1262 | 110.857143 | 2.715286 | 30.5 | |
| 952 | N1263 | 116.571429 | 2.143857 | 32 | |
| 953 | N1264 | 116.571429 | 2.143857 | 30.5 | |
| 954 | N1265 | 109.428571 | 2.858143 | 30.5 | |
| 955 | N1266 | 109.428571 | 2.858143 | 32 | |
| 956 | N1267 | 115.142857 | 2.286714 | 30.5 | |
| 957 | N1268 | 115.142857 | 2.286714 | 32 | |
| 958 | N1269 | 129.428571 | 1.238714 | 30.5 | |
| 959 | N1270 | 129.428571 | 1.238714 | 32 | |
| 960 | N1271 | 143.714286 | 0.285857 | 30.5 | |
| 961 | N1272 | 143.714286 | 0.285857 | 32 | |
| 962 | N1273 | 142.285714 | 0.381143 | 32 | |
| 963 | N1274 | 142.285714 | 0.381143 | 30.5 | |
| 964 | N1275 | 123.714286 | 1.619857 | 30.5 | |
| 965 | N1276 | 123.714286 | 1.619857 | 32 | |
| 966 | N1277 | 122.285714 | 1.715143 | 32 | |
| 967 | N1278 | 122.285714 | 1.715143 | 30.5 | |
| 968 | N1279 | 132.285714 | 1.048143 | 32 | |
| 969 | N1280 | 132.285714 | 1.048143 | 30.5 | |
| 970 | N1281 | 133.714286 | 0.952857 | 30.5 | |
| 971 | N1282 | 133.714286 | 0.952857 | 32 | |
| 972 | N1283 | 120.857143 | 1.810429 | 32 | |
| 973 | N1284 | 120.857143 | 1.810429 | 30.5 | |
| 974 | N1285 | 126.571429 | 1.429286 | 32 | |
| 975 | N1286 | 126.571429 | 1.429286 | 30.5 | |
| 976 | N1287 | 119.428571 | 1.905714 | 30.5 | |
| 977 | N1288 | 119.428571 | 1.905714 | 32 | |
| 978 | N1289 | 139.428571 | 0.571714 | 30.5 | |
| 979 | N1290 | 139.428571 | 0.571714 | 32 | |
| 980 | N1291 | 146.571429 | 0.095286 | 32 | |
| 981 | N1292 | 146.571429 | 0.095286 | 30.5 | |
| 982 | N1293 | 136.571429 | 0.762286 | 32 | |
| 983 | N1294 | 136.571429 | 0.762286 | 30.5 | |
| 984 | N1295 | 140.857143 | 0.476429 | 32 | |
| 985 | N1296 | 140.857143 | 0.476429 | 30.5 | |
| 986 | N1297 | 135.142857 | 0.857571 | 30.5 | |
| 987 | N1298 | 135.142857 | 0.857571 | 32 | |
| 988 | N1299 | 130.857143 | 1.143429 | 30.5 | |
| 989 | N1300 | 130.857143 | 1.143429 | 32 | |
| 990 | N1301 | 145.142857 | 0.190571 | 30.5 | |

***Node Coordinates (Continued)***

| | Label | X [ft] | Y [ft] | Z [ft] | Detach From Diaphragm |
|---|---|---|---|---|---|
| 991 | N1302 | 145.142857 | 0.190571 | 32 | |
| 992 | N1303 | 125.142857 | 1.524571 | 30.5 | |
| 993 | N1304 | 125.142857 | 1.524571 | 32 | |
| 994 | N1305 | 113.767861 | 2.424214 | 27.940746 | |
| 995 | N1306 | 112.307983 | 2.570202 | 27.969574 | |
| 996 | N1307 | 111.0466 | 2.69634 | 26.942629 | |
| 997 | N1308 | 114.986223 | 2.302378 | 26.922319 | |
| 998 | N1309 | 116.577025 | 2.143298 | 29.252419 | |
| 999 | N1310 | 118 | 2.001 | 28.475702 | |
| 1000 | N1311 | 108 | 3.001 | 28.475702 | |
| 1001 | N1312 | 111.08859 | 2.692141 | 25.5 | |
| 1002 | N1313 | 114.91141 | 2.309859 | 25.5 | |
| 1003 | N1314 | 112.281706 | 2.572829 | 29.108183 | |
| 1004 | N1315 | 110.859503 | 2.71505 | 29.050811 | |
| 1005 | N1316 | 113.737438 | 2.427256 | 29.144219 | |
| 1006 | N1317 | 115.143335 | 2.286666 | 29.099416 | |
| 1007 | N1318 | 109.424259 | 2.858574 | 29.2287 | |
| 1008 | N1319 | 126.559275 | 1.430096 | 29.047194 | |
| 1009 | N1320 | 127.994353 | 1.334377 | 27.542283 | |
| 1010 | N1321 | 136.571934 | 0.762252 | 28.982637 | |
| 1011 | N1322 | 137.997842 | 0.667144 | 27.323869 | |
| 1012 | N1323 | 123.758576 | 1.616903 | 27.836806 | |
| 1013 | N1324 | 122.289527 | 1.714889 | 27.870564 | |
| 1014 | N1325 | 121.091557 | 1.794793 | 26.891898 | |
| 1015 | N1326 | 124.909018 | 1.540168 | 26.899658 | |
| 1016 | N1327 | 124.911111 | 1.540029 | 25.5 | |
| 1017 | N1329 | 121.088889 | 1.794971 | 25.5 | |
| 1018 | N1330 | 122.270278 | 1.716172 | 29.084254 | |
| 1019 | N1331 | 120.86391 | 1.809977 | 29.061134 | |
| 1020 | N1332 | 123.73414 | 1.618533 | 29.107795 | |
| 1021 | N1333 | 125.140393 | 1.524736 | 29.044863 | |
| 1022 | N1334 | 119.412041 | 1.906817 | 29.164193 | |
| 1023 | N1335 | 143.801237 | 0.280058 | 28.047866 | |
| 1024 | N1336 | 142.359902 | 0.376195 | 27.917598 | |
| 1025 | N1337 | 141.163382 | 0.456002 | 26.936049 | |
| 1026 | N1338 | 145.147136 | 0.190286 | 26.917602 | |
| 1027 | N1339 | 133.607826 | 0.959958 | 27.931698 | |
| 1028 | N1340 | 132.238519 | 1.051291 | 27.981649 | |
| 1029 | N1341 | 131.114863 | 1.126239 | 27.087275 | |
| 1030 | N1342 | 134.667311 | 0.88929 | 27.057309 | |
| 1031 | N1343 | 134.911111 | 0.873029 | 25.5 | |
| 1032 | N1344 | 131.088889 | 1.127971 | 25.5 | |
| 1033 | N1345 | 132.265801 | 1.049471 | 29.158244 | |
| 1034 | N1346 | 130.856399 | 1.143478 | 29.065038 | |
| 1035 | N1347 | 133.717228 | 0.952661 | 29.129181 | |
| 1036 | N1348 | 135.138592 | 0.857856 | 28.979223 | |
| 1037 | N1349 | 129.42818 | 1.23874 | 29.069973 | |
| 1038 | N1350 | 146.573516 | 0.095146 | 29.261413 | |
| 1039 | N1351 | 148 | 0 | 28.476594 | |
| 1040 | N1352 | 141.088889 | 0.460971 | 25.5 | |
| 1041 | N1353 | 144.911111 | 0.206029 | 25.5 | |
| 1042 | N1354 | 142.296624 | 0.380415 | 29.1373 | |
| 1043 | N1355 | 140.866271 | 0.47582 | 29.065991 | |
| 1044 | N1356 | 143.743449 | 0.283912 | 29.183712 | |
| 1045 | N1357 | 145.146629 | 0.19032 | 29.214478 | |

***Node Coordinates (Continued)***

| | Label | X [ft] | Y [ft] | Z [ft] | Detach From Diaphragm |
|---|---|---|---|---|---|
| 1046 | N1358 | 139.427916 | 0.571758 | 29.068285 | |
| 1047 | N1359 | 114.666441 | 2.334356 | 22.065934 | |
| 1048 | N1360 | 118 | 2.001 | 22.465035 | |
| 1049 | N1361 | 108 | 3.001 | 22.465035 | |
| 1050 | N1362 | 111.333305 | 2.667669 | 22.066371 | |
| 1051 | N1363 | 114.666667 | 2.334333 | 18.5 | |
| 1052 | N1364 | 111.333333 | 2.667667 | 18.5 | |
| 1053 | N1365 | 124.644831 | 1.55779 | 22.009104 | |
| 1054 | N1366 | 128.266981 | 1.316192 | 22.012885 | |
| 1055 | N1367 | 134.494662 | 0.900806 | 22.598087 | |
| 1056 | N1368 | 121.281576 | 1.782119 | 22.059949 | |
| 1057 | N1369 | 124.525359 | 1.565759 | 18.5 | |
| 1058 | N1370 | 121.084736 | 1.795248 | 18.5 | |
| 1059 | N1371 | 141.510658 | 0.432839 | 22.606662 | |
| 1060 | N1372 | 143 | 0.3335 | 18.5 | |
| 1061 | N1373 | 144.063832 | 0.262542 | 22.134192 | |
| 1062 | N1374 | 131.970205 | 1.069187 | 22.076371 | |
| 1063 | N1375 | 148 | 0 | 22.466871 | |
| 1064 | N1376 | 133 | 1.0005 | 18.5 | |
| 1065 | N1066 | 118 | 0 | 32 | |
| 1066 | N1067 | 0 | 0 | 32 | |
| 1067 | N1068 | 8 | 0 | 32 | |
| 1068 | N1069 | 18 | 0 | 32 | |
| 1069 | N1070 | 38 | 0 | 32 | |
| 1070 | N1072 | 28 | 0 | 32 | |
| 1071 | N1073 | 48 | 0 | 32 | |
| 1072 | N1074 | 58 | 0 | 32 | |
| 1073 | N1075 | 68 | 0 | 32 | |
| 1074 | N1076 | 78 | 0 | 32 | |
| 1075 | N1077 | 88 | 0 | 32 | |
| 1076 | N1078 | 98 | 0 | 32 | |
| 1077 | N1079 | 108 | 0 | 32 | |
| 1078 | N1080 | 138 | 0 | 32 | |
| 1079 | N1081 | 128 | 0 | 32 | |
| 1080 | N1082 | 8 | 0 | 16 | |
| 1081 | N1083 | 38 | 0 | 16 | |
| 1082 | N1084 | 68 | 0 | 16 | |
| 1083 | N1085 | 8 | 38.001 | 16 | |
| 1084 | N1087 | 38 | 27.501 | 16 | |
| 1085 | N1088 | 68 | 17.001 | 16 | |
| 1086 | N1089 | 0 | 38.001 | 5 | |
| 1087 | N1090 | 8 | 38.001 | 5 | |
| 1088 | N1091 | 18 | 34.501 | 5 | |
| 1089 | N1092 | 28 | 31.001 | 5 | |
| 1090 | N1093 | 38 | 27.501 | 5 | |
| 1091 | N1094 | 48 | 24.001 | 5 | |
| 1092 | N1095 | 58 | 20.501 | 5 | |
| 1093 | N1096 | 68 | 17.001 | 5 | |
| 1094 | N1097 | 78 | 13.501 | 5 | |
| 1095 | N1098 | 88 | 10.001 | 5 | |
| 1096 | N1099 | 98 | 6.501 | 5 | |
| 1097 | N1100 | 108 | 3.001 | 5 | |

***Node Boundary Conditions***

| | Node Label | X [k/in] | Y [k/in] | Z [k/in] |
|---|---|---|---|---|
| 1 | N112 | | CS9999 | |
| 2 | N32 | | CS9999 | |
| 3 | N1251 | | CS9999 | |
| 4 | N1071 | | CS9999 | |
| 5 | N1375 | | CS9999 | |
| 6 | N1 | | | |
| 7 | N2 | | | |
| 8 | N3 | | | |
| 9 | N4 | | | |
| 10 | N5 | | | |
| 11 | N6 | | | |
| 12 | N7 | | | |
| 13 | N8 | | | |
| 14 | N9 | | | |
| 15 | N10 | | | |
| 16 | N11 | | | |
| 17 | N12 | | | |
| 18 | N16 | | CS9999 | Reaction |
| 19 | N17 | | | |
| 20 | N18 | | | |
| 21 | N19 | | | |
| 22 | N20 | | | |
| 23 | N21 | | | |
| 24 | N22 | | | |
| 25 | N23 | | | |
| 26 | N24 | | | |
| 27 | N25 | | | |
| 28 | N26 | | | |
| 29 | N27 | | | |
| 30 | N28 | | | |
| 31 | N29 | | | |
| 32 | N30 | | | |
| 33 | N31 | | | |
| 34 | N33 | | | |
| 35 | N34 | | | |
| 36 | N35 | | | |
| 37 | N36 | | | |
| 38 | N37 | | | |
| 39 | N38 | | | |
| 40 | N39 | | | |
| 41 | N40 | | | |
| 42 | N41 | | | |
| 43 | N42 | | | |
| 44 | N43 | | | |
| 45 | N44 | | | |
| 46 | N45 | | | |
| 47 | N46 | | | |
| 48 | N48 | | CS9999 | |
| 49 | N49 | | | |
| 50 | N50 | | | |
| 51 | N51 | | | |
| 52 | N52 | | | |
| 53 | N53 | | | |
| 54 | N54 | | | |
| 55 | N55 | | | |

***Node Boundary Conditions (Continued)***

| | Node Label | X [k/in] | Y [k/in] | Z [k/in] |
|---|---|---|---|---|
| 56 | N56 | | | |
| 57 | N57 | | | |
| 58 | N58 | | | |
| 59 | N59 | | | |
| 60 | N60 | | | |
| 61 | N61 | | | |
| 62 | N62 | | | |
| 63 | N64 | | CS9999 | |
| 64 | N65 | | | |
| 65 | N66 | | | |
| 66 | N67 | | | |
| 67 | N68 | | | |
| 68 | N69 | | | |
| 69 | N70 | | | |
| 70 | N71 | | | |
| 71 | N72 | | | |
| 72 | N73 | | | |
| 73 | N74 | | | |
| 74 | N75 | | | |
| 75 | N76 | | | |
| 76 | N77 | | | |
| 77 | N78 | | | |
| 78 | N80 | | CS9999 | |
| 79 | N81 | | | |
| 80 | N82 | | | |
| 81 | N83 | | | |
| 82 | N84 | | | |
| 83 | N85 | | | |
| 84 | N86 | | | |
| 85 | N87 | | | |
| 86 | N88 | | | |
| 87 | N89 | | | |
| 88 | N90 | | | |
| 89 | N91 | | | |
| 90 | N92 | | | |
| 91 | N93 | | | |
| 92 | N94 | | | |
| 93 | N96 | | CS9999 | |
| 94 | N97 | | | |
| 95 | N98 | | | |
| 96 | N99 | | | |
| 97 | N100 | | | |
| 98 | N101 | | | |
| 99 | N102 | | | |
| 100 | N103 | | | |
| 101 | N104 | | | |
| 102 | N105 | | | |
| 103 | N106 | | | |
| 104 | N107 | | | |
| 105 | N108 | | | |
| 106 | N109 | | | |
| 107 | N110 | | | |
| 108 | N111 | | | |
| 109 | N113 | | | |
| 110 | N114 | | | |

***Node Boundary Conditions (Continued)***

| | Node Label | X [k/in] | Y [k/in] | Z [k/in] |
|---|---|---|---|---|
| 111 | N115 | | | |
| 112 | N116 | | | |
| 113 | N117 | | | |
| 114 | N118 | | | |
| 115 | N119 | | | |
| 116 | N120 | | | |
| 117 | N121 | | | |
| 118 | N122 | | | |
| 119 | N123 | | | |
| 120 | N124 | | | |
| 121 | N128 | | CS9999 | Reaction |
| 122 | N129 | Reaction | CS9999 | Reaction |
| 123 | N130 | Reaction | CS9999 | Reaction |
| 124 | N131 | Reaction | CS9999 | Reaction |
| 125 | N133 | Reaction | CS9999 | Reaction |
| 126 | N132 | Reaction | CS9999 | Reaction |
| 127 | N134 | Reaction | CS9999 | Reaction |
| 128 | N135 | Reaction | CS9999 | Reaction |
| 129 | N136 | Reaction | CS9999 | Reaction |
| 130 | N137 | Reaction | CS9999 | Reaction |
| 131 | N138 | Reaction | CS9999 | Reaction |
| 132 | N139 | Reaction | CS9999 | Reaction |
| 133 | N140 | Reaction | CS9999 | Reaction |
| 134 | N141 | Reaction | CS9999 | Reaction |
| 135 | N142 | Reaction | CS9999 | Reaction |
| 136 | N143 | Reaction | CS9999 | Reaction |
| 137 | N144 | Reaction | CS9999 | Reaction |
| 138 | N145 | Reaction | CS9999 | Reaction |
| 139 | N146 | Reaction | CS9999 | Reaction |
| 140 | N153 | Reaction | CS9999 | Reaction |
| 141 | N154 | Reaction | CS9999 | Reaction |
| 142 | N155 | Reaction | CS9999 | Reaction |
| 143 | N156 | Reaction | CS9999 | Reaction |
| 144 | N157 | Reaction | CS9999 | Reaction |
| 145 | N158 | Reaction | CS9999 | Reaction |
| 146 | N165 | Reaction | CS9999 | Reaction |
| 147 | N166 | Reaction | CS9999 | Reaction |
| 148 | N167 | Reaction | CS9999 | Reaction |
| 149 | N168 | Reaction | CS9999 | Reaction |
| 150 | N169 | Reaction | CS9999 | Reaction |
| 151 | N170 | Reaction | CS9999 | Reaction |
| 152 | N177 | Reaction | CS9999 | Reaction |
| 153 | N178 | Reaction | CS9999 | Reaction |
| 154 | N179 | Reaction | CS9999 | Reaction |
| 155 | N180 | Reaction | CS9999 | Reaction |
| 156 | N181 | Reaction | CS9999 | Reaction |
| 157 | N182 | Reaction | CS9999 | Reaction |
| 158 | N189 | Reaction | CS9999 | Reaction |
| 159 | N190 | Reaction | CS9999 | Reaction |
| 160 | N191 | Reaction | CS9999 | Reaction |
| 161 | N192 | Reaction | CS9999 | Reaction |
| 162 | N193 | Reaction | CS9999 | Reaction |
| 163 | N194 | Reaction | CS9999 | Reaction |
| 164 | N201 | Reaction | CS9999 | Reaction |
| 165 | N202 | Reaction | CS9999 | Reaction |

***Node Boundary Conditions (Continued)***

| | Node Label | X [k/in] | Y [k/in] | Z [k/in] |
|---|---|---|---|---|
| 166 | N203 | Reaction | CS9999 | Reaction |
| 167 | N204 | Reaction | CS9999 | Reaction |
| 168 | N205 | Reaction | CS9999 | Reaction |
| 169 | N206 | Reaction | CS9999 | Reaction |
| 170 | N213 | Reaction | CS9999 | Reaction |
| 171 | N214 | Reaction | CS9999 | Reaction |
| 172 | N215 | Reaction | CS9999 | Reaction |
| 173 | N216 | Reaction | CS9999 | Reaction |
| 174 | N217 | Reaction | CS9999 | Reaction |
| 175 | N218 | Reaction | CS9999 | Reaction |
| 176 | N225 | Reaction | CS9999 | Reaction |
| 177 | N226 | Reaction | CS9999 | Reaction |
| 178 | N227 | Reaction | CS9999 | Reaction |
| 179 | N228 | Reaction | CS9999 | Reaction |
| 180 | N229 | Reaction | CS9999 | Reaction |
| 181 | N230 | Reaction | CS9999 | Reaction |
| 182 | N237 | Reaction | CS9999 | Reaction |
| 183 | N238 | Reaction | CS9999 | Reaction |
| 184 | N239 | Reaction | CS9999 | Reaction |
| 185 | N240 | Reaction | CS9999 | Reaction |
| 186 | N241 | Reaction | CS9999 | Reaction |
| 187 | N242 | Reaction | CS9999 | Reaction |
| 188 | N249 | Reaction | CS9999 | Reaction |
| 189 | N250 | Reaction | CS9999 | Reaction |
| 190 | N251 | Reaction | Reaction | Reaction |
| 191 | N252 | Reaction | CS9999 | Reaction |
| 192 | N253 | Reaction | Reaction | Reaction |
| 193 | N254 | Reaction | CS9999 | Reaction |
| 194 | N261 | Reaction | CS9999 | Reaction |
| 195 | N262 | Reaction | CS9999 | Reaction |
| 196 | N263 | Reaction | Reaction | Reaction |
| 197 | N264 | Reaction | CS9999 | Reaction |
| 198 | N265 | Reaction | Reaction | Reaction |
| 199 | N266 | Reaction | CS9999 | Reaction |
| 200 | N273 | Reaction | CS9999 | Reaction |
| 201 | N274 | Reaction | CS9999 | Reaction |
| 202 | N275 | Reaction | Reaction | Reaction |
| 203 | N276 | Reaction | CS9999 | Reaction |
| 204 | N277 | Reaction | Reaction | Reaction |
| 205 | N278 | Reaction | CS9999 | Reaction |
| 206 | N285 | Reaction | CS9999 | Reaction |
| 207 | N286 | Reaction | CS9999 | Reaction |
| 208 | N287 | Reaction | Reaction | Reaction |
| 209 | N288 | Reaction | CS9999 | Reaction |
| 210 | N289 | Reaction | Reaction | Reaction |
| 211 | N290 | Reaction | CS9999 | Reaction |
| 212 | N297 | Reaction | Reaction | Reaction |
| 213 | N298 | Reaction | Reaction | Reaction |
| 214 | N299 | Reaction | Reaction | Reaction |
| 215 | N222 | Reaction | Reaction | Reaction |
| 216 | N223 | Reaction | Reaction | Reaction |
| 217 | N224 | Reaction | Reaction | Reaction |
| 218 | N1066 | Reaction | Reaction | Reaction |
| 219 | N1067 | Reaction | Reaction | Reaction |
| 220 | N1068 | Reaction | Reaction | Reaction |

### Node Boundary Conditions (Continued)

| | Node Label | X [k/in] | Y [k/in] | Z [k/in] |
|---|---|---|---|---|
| 221 | N1069 | Reaction | Reaction | Reaction |
| 222 | N1070 | Reaction | Reaction | Reaction |
| 223 | N1072 | Reaction | Reaction | Reaction |
| 224 | N1073 | Reaction | Reaction | Reaction |
| 225 | N1074 | Reaction | Reaction | Reaction |
| 226 | N1075 | Reaction | Reaction | Reaction |
| 227 | N1076 | Reaction | Reaction | Reaction |
| 228 | N1077 | Reaction | Reaction | Reaction |
| 229 | N1078 | Reaction | Reaction | Reaction |
| 230 | N1079 | Reaction | Reaction | Reaction |
| 231 | N1080 | Reaction | Reaction | Reaction |
| 232 | N1081 | Reaction | Reaction | Reaction |
| 233 | N1082 | Reaction | Reaction | Reaction |
| 234 | N1083 | Reaction | Reaction | Reaction |
| 235 | N1084 | Reaction | Reaction | Reaction |
| 236 | N1089 | | | |
| 237 | N1090 | | | |
| 238 | N1091 | | | |
| 239 | N1092 | | | |
| 240 | N1093 | | | |
| 241 | N1094 | | | |
| 242 | N1095 | | | |
| 243 | N1096 | | | |
| 244 | N1097 | | | |
| 245 | N1098 | | | |
| 246 | N1099 | | | |
| 247 | N1100 | | | |

### Hot Rolled Steel Properties

| | Label | E [ksi] | G [ksi] | Nu | Therm. Coeff. [1e⁵°F⁻¹] | Density [k/ft³] | Yield [ksi] | Ry | Fu [ksi] | Rt |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | A992 | 29000 | 11154 | 0.3 | 0.65 | 0.49 | 50 | 1.1 | 65 | 1.1 |
| 2 | A36 Gr.36 | 29000 | 11154 | 0.3 | 0.65 | 0.49 | 36 | 1.5 | 58 | 1.2 |
| 3 | A572 Gr.50 | 29000 | 11154 | 0.3 | 0.65 | 0.49 | 50 | 1.1 | 65 | 1.1 |
| 4 | A500 Gr.B RND | 29000 | 11154 | 0.3 | 0.65 | 0.527 | 42 | 1.4 | 58 | 1.3 |
| 5 | A500 Gr.B RECT | 29000 | 11154 | 0.3 | 0.65 | 0.527 | 46 | 1.4 | 58 | 1.3 |
| 6 | A500 Gr.C RND | 29000 | 11154 | 0.3 | 0.65 | 0.527 | 46 | 1.4 | 62 | 1.3 |
| 7 | A500 Gr.C RECT | 29000 | 11154 | 0.3 | 0.65 | 0.527 | 50 | 1.4 | 62 | 1.3 |
| 8 | A53 Gr.B | 29000 | 11154 | 0.3 | 0.65 | 0.49 | 35 | 1.6 | 60 | 1.2 |
| 9 | A1085 | 29000 | 11154 | 0.3 | 0.65 | 0.49 | 50 | 1.4 | 65 | 1.3 |
| 10 | A913 Gr.65 | 29000 | 11154 | 0.3 | 0.65 | 0.49 | 65 | 1.1 | 80 | 1.1 |

### General Materials Properties

| | Label | E [ksi] | G [ksi] | Nu | Therm. Coeff. [1e⁵°F⁻¹] | Density [k/ft³] | Plate Methodology |
|---|---|---|---|---|---|---|---|
| 1 | gen_Conc3NW | 3155 | 1372 | 0.15 | 0.6 | 0.145 | Isotropic |
| 2 | gen_Conc4NW | 3644 | 1584 | 0.15 | 0.6 | 0.145 | Isotropic |
| 3 | gen_Conc3LW | 2085 | 906 | 0.15 | 0.6 | 0.11 | Isotropic |
| 4 | gen_Conc4LW | 2408 | 1047 | 0.15 | 0.6 | 0.11 | Isotropic |
| 5 | gen_Alum | 10100 | 4077 | 0.3 | 1.29 | 0.173 | Isotropic |
| 6 | gen_Steel | 29000 | 11154 | 0.3 | 0.65 | 0.49 | Isotropic |
| 7 | gen_Plywood | 1800 | 38 | 0 | 0.3 | 0.035 | Isotropic |
| 8 | RIGID | 1e+6 | | 0.3 | 0 | 0 | Isotropic |
| 9 | gen_Ortho | | | | 0.65 | 0.49 | Orthotropic |

### Hot Rolled Steel Section Sets

| | Label | Shape | Type | Design List | Material | Design Rule | Area [in²] | Iyy [in⁴] | Izz [in⁴] | J [in⁴] |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | CABLE BRACES | 3/8"DIA | HBrace | BAR | A36 Gr.36 | Typical | 0.1104 | 0.0009707 | 0.0009707 | 0.0019 |
| 2 | SHORING TOWER COLUMNS | PIPE_1.25 | Beam | Pipe | A53 Gr.B | Typical | 0.625 | 0.184 | 0.184 | 0.368 |
| 3 | PIPE BEAM | PIPE_3.5 | Beam | HSS Pipe | A53 Gr.B | Typical | 2.5 | 4.52 | 4.52 | 9.04 |

### General Section Sets

| | Label | Shape | Type | Material | Area [in²] | Iyy [in⁴] | Izz [in⁴] | J [in⁴] |
|---|---|---|---|---|---|---|---|---|
| 1 | GEN1 | RE4X4 | Beam | gen_Conc3NW | 16 | 21.3333 | 21.3333 | 31.5733 |
| 2 | RIGID | | None | RIGID | 1e+6 | 1e+6 | 1e+6 | 1e+6 |

### Member Primary Data

| | Label | I Node | J Node | Section/Shape | Type | Design List | Material | Design Rule |
|---|---|---|---|---|---|---|---|---|
| 1 | M1 | N113 | N1 | PIPE BEAM | Beam | HSS Pipe | A53 Gr.B | Typical |
| 2 | M2 | N114 | N2 | PIPE BEAM | Beam | HSS Pipe | A53 Gr.B | Typical |
| 3 | M3 | N115 | N3 | PIPE BEAM | Beam | HSS Pipe | A53 Gr.B | Typical |
| 4 | M4 | N116 | N4 | PIPE BEAM | Beam | HSS Pipe | A53 Gr.B | Typical |
| 5 | M5 | N117 | N5 | PIPE BEAM | Beam | HSS Pipe | A53 Gr.B | Typical |
| 6 | M6 | N118 | N6 | PIPE BEAM | Beam | HSS Pipe | A53 Gr.B | Typical |
| 7 | M7 | N119 | N7 | PIPE BEAM | Beam | HSS Pipe | A53 Gr.B | Typical |
| 8 | M8 | N120 | N8 | PIPE BEAM | Beam | HSS Pipe | A53 Gr.B | Typical |
| 9 | M9 | N121 | N9 | PIPE BEAM | Beam | HSS Pipe | A53 Gr.B | Typical |
| 10 | M10 | N122 | N10 | PIPE BEAM | Beam | HSS Pipe | A53 Gr.B | Typical |
| 11 | M11 | N123 | N11 | PIPE BEAM | Beam | HSS Pipe | A53 Gr.B | Typical |
| 12 | M12 | N124 | N12 | PIPE BEAM | Beam | HSS Pipe | A53 Gr.B | Typical |
| 13 | M13 | N125 | N13 | PIPE BEAM | Beam | HSS Pipe | A53 Gr.B | Typical |
| 14 | M14 | N126 | N14 | PIPE BEAM | Beam | HSS Pipe | A53 Gr.B | Typical |
| 15 | M15 | N127 | N15 | PIPE BEAM | Beam | HSS Pipe | A53 Gr.B | Typical |
| 16 | M16 | N128 | N16 | PIPE BEAM | Beam | HSS Pipe | A53 Gr.B | Typical |
| 17 | M17 | N134 | N97 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 18 | M18 | N133 | N81 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 19 | M19 | N132 | N65 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 20 | M20 | N131 | N49 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 21 | M21 | N130 | N33 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 22 | M22 | N129 | N17 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 23 | M23 | N140 | N98 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 24 | M24 | N136 | N82 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 25 | M25 | N139 | N66 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 26 | M26 | N135 | N50 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 27 | M27 | N138 | N34 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 28 | M28 | N137 | N18 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 29 | M29 | N145 | N67 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 30 | M30 | N143 | N83 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 31 | M31 | N141 | N35 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 32 | M32 | N144 | N19 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 33 | M33 | N146 | N99 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 34 | M34 | N142 | N51 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 35 | M35 | N157 | N68 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 36 | M36 | N155 | N84 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 37 | M37 | N153 | N36 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 38 | M38 | N156 | N20 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 39 | M39 | N158 | N100 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 40 | M40 | N154 | N52 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 41 | M41 | N169 | N69 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |

***Member Primary Data (Continued)***

| | Label | I Node | J Node | Section/Shape | Type | Design List | Material | Design Rule |
|---|---|---|---|---|---|---|---|---|
| 42 | M42 | N167 | N85 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 43 | M43 | N165 | N37 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 44 | M44 | N168 | N21 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 45 | M45 | N170 | N101 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 46 | M46 | N166 | N53 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 47 | M47 | N181 | N22 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 48 | M48 | N177 | N38 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 49 | M49 | N179 | N102 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 50 | M50 | N180 | N54 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 51 | M51 | N182 | N70 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 52 | M52 | N178 | N86 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 53 | M53 | N193 | N23 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 54 | M54 | N189 | N39 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 55 | M55 | N191 | N103 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 56 | M56 | N192 | N55 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 57 | M57 | N194 | N71 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 58 | M58 | N190 | N87 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 59 | M59 | N205 | N24 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 60 | M60 | N201 | N40 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 61 | M61 | N203 | N104 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 62 | M62 | N204 | N56 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 63 | M63 | N206 | N72 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 64 | M64 | N202 | N88 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 65 | M65 | N217 | N25 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 66 | M66 | N213 | N41 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 67 | M67 | N215 | N105 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 68 | M68 | N216 | N57 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 69 | M69 | N218 | N73 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 70 | M70 | N214 | N89 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 71 | M71 | N229 | N26 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 72 | M72 | N225 | N42 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 73 | M73 | N227 | N106 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 74 | M74 | N228 | N58 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 75 | M75 | N230 | N74 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 76 | M76 | N226 | N90 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 77 | M77 | N241 | N27 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 78 | M78 | N237 | N43 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 79 | M79 | N239 | N107 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 80 | M80 | N240 | N59 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 81 | M81 | N242 | N75 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 82 | M82 | N238 | N91 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 83 | M83 | N253 | N28 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 84 | M84 | N249 | N44 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 85 | M85 | N251 | N108 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 86 | M86 | N252 | N60 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 87 | M87 | N254 | N76 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 88 | M88 | N250 | N92 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 89 | M89 | N266 | N77 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 90 | M90 | N263 | N109 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 91 | M91 | N262 | N61 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 92 | M92 | N265 | N29 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 93 | M93 | N264 | N45 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 94 | M94 | N261 | N93 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 95 | M95 | N278 | N78 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 96 | M96 | N275 | N110 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |

***Member Primary Data (Continued)***

| | Label | I Node | J Node | Section/Shape | Type | Design List | Material | Design Rule |
|---|---|---|---|---|---|---|---|---|
| 97 | M97 | N274 | N62 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 98 | M98 | N277 | N30 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 99 | M99 | N276 | N46 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 100 | M100 | N273 | N94 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 101 | M101 | N290 | N79 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 102 | M102 | N287 | N111 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 103 | M103 | N286 | N63 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 104 | M104 | N289 | N31 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 105 | M105 | N288 | N47 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 106 | M106 | N285 | N95 | SHORING TOWER COLUMNS | Beam | Pipe | A53 Gr.B | Typical |
| 107 | M107 | N113 | N114 | PIPE BEAM | Beam | HSS Pipe | A53 Gr.B | Typical |
| 108 | M108 | N114 | N115 | PIPE BEAM | Beam | HSS Pipe | A53 Gr.B | Typical |
| 109 | M109 | N115 | N116 | PIPE BEAM | Beam | HSS Pipe | A53 Gr.B | Typical |
| 110 | M110 | N116 | N117 | PIPE BEAM | Beam | HSS Pipe | A53 Gr.B | Typical |
| 111 | M111 | N117 | N118 | PIPE BEAM | Beam | HSS Pipe | A53 Gr.B | Typical |
| 112 | M112 | N118 | N119 | PIPE BEAM | Beam | HSS Pipe | A53 Gr.B | Typical |
| 113 | M113 | N119 | N120 | PIPE BEAM | Beam | HSS Pipe | A53 Gr.B | Typical |
| 114 | M114 | N120 | N121 | PIPE BEAM | Beam | HSS Pipe | A53 Gr.B | Typical |
| 115 | M115 | N121 | N122 | PIPE BEAM | Beam | HSS Pipe | A53 Gr.B | Typical |
| 116 | M116 | N122 | N123 | PIPE BEAM | Beam | HSS Pipe | A53 Gr.B | Typical |
| 117 | M117 | N123 | N124 | PIPE BEAM | Beam | HSS Pipe | A53 Gr.B | Typical |
| 118 | M118 | N124 | N125 | PIPE BEAM | Beam | HSS Pipe | A53 Gr.B | Typical |
| 119 | M119 | N125 | N126 | PIPE BEAM | Beam | HSS Pipe | A53 Gr.B | Typical |
| 120 | M120 | N126 | N127 | PIPE BEAM | Beam | HSS Pipe | A53 Gr.B | Typical |
| 121 | M121 | N127 | N128 | PIPE BEAM | Beam | HSS Pipe | A53 Gr.B | Typical |
| 122 | M122 | N16 | N15 | PIPE BEAM | Beam | HSS Pipe | A53 Gr.B | Typical |
| 123 | M123 | N15 | N14 | PIPE BEAM | Beam | HSS Pipe | A53 Gr.B | Typical |
| 124 | M124 | N14 | N13 | PIPE BEAM | Beam | HSS Pipe | A53 Gr.B | Typical |
| 125 | M125 | N13 | N12 | PIPE BEAM | Beam | HSS Pipe | A53 Gr.B | Typical |
| 126 | M126 | N12 | N11 | PIPE BEAM | Beam | HSS Pipe | A53 Gr.B | Typical |
| 127 | M127 | N11 | N10 | PIPE BEAM | Beam | HSS Pipe | A53 Gr.B | Typical |
| 128 | M128 | N10 | N9 | PIPE BEAM | Beam | HSS Pipe | A53 Gr.B | Typical |
| 129 | M129 | N9 | N8 | PIPE BEAM | Beam | HSS Pipe | A53 Gr.B | Typical |
| 130 | M130 | N8 | N7 | PIPE BEAM | Beam | HSS Pipe | A53 Gr.B | Typical |
| 131 | M131 | N7 | N6 | PIPE BEAM | Beam | HSS Pipe | A53 Gr.B | Typical |
| 132 | M132 | N6 | N5 | PIPE BEAM | Beam | HSS Pipe | A53 Gr.B | Typical |
| 133 | M133 | N5 | N4 | PIPE BEAM | Beam | HSS Pipe | A53 Gr.B | Typical |
| 134 | M134 | N4 | N3 | PIPE BEAM | Beam | HSS Pipe | A53 Gr.B | Typical |
| 135 | M135 | N3 | N2 | PIPE BEAM | Beam | HSS Pipe | A53 Gr.B | Typical |
| 136 | M136 | N2 | N1 | PIPE BEAM | Beam | HSS Pipe | A53 Gr.B | Typical |
| 137 | M137 | N297 | N97 | CABLE BRACES | HBrace | BAR | A36 Gr.36 | Typical |
| 138 | M138 | N297 | N99 | CABLE BRACES | HBrace | BAR | A36 Gr.36 | Typical |
| 139 | M139 | N100 | N298 | CABLE BRACES | HBrace | BAR | A36 Gr.36 | Typical |
| 140 | M140 | N298 | N102 | CABLE BRACES | HBrace | BAR | A36 Gr.36 | Typical |
| 141 | M141 | N103 | N299 | CABLE BRACES | HBrace | BAR | A36 Gr.36 | Typical |
| 142 | M142 | N299 | N105 | CABLE BRACES | HBrace | BAR | A36 Gr.36 | Typical |
| 143 | M143 | N222 | N17 | CABLE BRACES | HBrace | BAR | A36 Gr.36 | Typical |
| 144 | M145 | N223 | N20 | CABLE BRACES | HBrace | BAR | A36 Gr.36 | Typical |
| 145 | M146 | N222 | N19 | CABLE BRACES | HBrace | BAR | A36 Gr.36 | Typical |
| 146 | M147 | N223 | N22 | CABLE BRACES | HBrace | BAR | A36 Gr.36 | Typical |
| 147 | M148 | N224 | N23 | CABLE BRACES | HBrace | BAR | A36 Gr.36 | Typical |
| 148 | M149 | N224 | N25 | CABLE BRACES | HBrace | BAR | A36 Gr.36 | Typical |
| 149 | M151 | N1084 | N104 | CABLE BRACES | HBrace | BAR | A36 Gr.36 | Typical |
| 150 | M152 | N1083 | N21 | CABLE BRACES | HBrace | BAR | A36 Gr.36 | Typical |
| 151 | M153 | N1083 | N101 | CABLE BRACES | HBrace | BAR | A36 Gr.36 | Typical |

***Member Primary Data (Continued)***

| | Label | I Node | J Node | Section/Shape | Type | Design List | Material | Design Rule |
|---|---|---|---|---|---|---|---|---|
| 152 | M154 | N1082 | N18 | CABLE BRACES | HBrace | BAR | A36 Gr.36 | Typical |
| 153 | M155 | N1082 | N98 | CABLE BRACES | HBrace | BAR | A36 Gr.36 | Typical |
| 154 | M156 | N1084 | N24 | CABLE BRACES | HBrace | BAR | A36 Gr.36 | Typical |
| 155 | M172 | N251 | N28 | CABLE BRACES | HBrace | BAR | A36 Gr.36 | Typical |
| 156 | M173 | N253 | N108 | CABLE BRACES | HBrace | BAR | A36 Gr.36 | Typical |
| 157 | M174 | N1067 | N1068 | RIGID | None | None | RIGID | Typical |
| 158 | M175 | N1068 | N1069 | RIGID | None | None | RIGID | Typical |
| 159 | M176 | N1069 | N1072 | RIGID | None | None | RIGID | Typical |
| 160 | M177 | N1072 | N1070 | RIGID | None | None | RIGID | Typical |
| 161 | M178 | N1070 | N1073 | RIGID | None | None | RIGID | Typical |
| 162 | M179 | N1073 | N1074 | RIGID | None | None | RIGID | Typical |
| 163 | M180 | N1074 | N1075 | RIGID | None | None | RIGID | Typical |
| 164 | M181 | N1075 | N1076 | RIGID | None | None | RIGID | Typical |
| 165 | M182 | N1076 | N1077 | RIGID | None | None | RIGID | Typical |
| 166 | M183 | N1077 | N1078 | RIGID | None | None | RIGID | Typical |
| 167 | M184 | N1078 | N1079 | RIGID | None | None | RIGID | Typical |
| 168 | M185 | N1079 | N1066 | RIGID | None | None | RIGID | Typical |
| 169 | M186 | N1066 | N1081 | RIGID | None | None | RIGID | Typical |
| 170 | M187 | N1081 | N1080 | RIGID | None | None | RIGID | Typical |
| 171 | M188 | N1080 | N128 | RIGID | None | None | RIGID | Typical |
| 172 | M189 | N263 | N29 | CABLE BRACES | HBrace | BAR | A36 Gr.36 | Typical |
| 173 | M190 | N265 | N109 | CABLE BRACES | HBrace | BAR | A36 Gr.36 | Typical |
| 174 | M191 | N275 | N30 | CABLE BRACES | HBrace | BAR | A36 Gr.36 | Typical |
| 175 | M192 | N277 | N110 | CABLE BRACES | HBrace | BAR | A36 Gr.36 | Typical |
| 176 | M193 | N111 | N289 | CABLE BRACES | HBrace | BAR | A36 Gr.36 | Typical |
| 177 | M194 | N31 | N287 | CABLE BRACES | HBrace | BAR | A36 Gr.36 | Typical |
| 178 | M195 | N222 | N1085 | CABLE BRACES | HBrace | BAR | A36 Gr.36 | Typical |
| 179 | M196 | N297 | N1085 | CABLE BRACES | HBrace | BAR | A36 Gr.36 | Typical |
| 180 | M197 | N1085 | N1082 | CABLE BRACES | HBrace | BAR | A36 Gr.36 | Typical |
| 181 | M198 | N222 | N21 | CABLE BRACES | HBrace | BAR | A36 Gr.36 | Typical |
| 182 | M199 | N297 | N101 | CABLE BRACES | HBrace | BAR | A36 Gr.36 | Typical |
| 183 | M200 | N1083 | N1087 | CABLE BRACES | HBrace | BAR | A36 Gr.36 | Typical |
| 184 | M201 | N298 | N1087 | CABLE BRACES | HBrace | BAR | A36 Gr.36 | Typical |
| 185 | M202 | N223 | N1087 | CABLE BRACES | HBrace | BAR | A36 Gr.36 | Typical |
| 186 | M203 | N223 | N17 | CABLE BRACES | HBrace | BAR | A36 Gr.36 | Typical |
| 187 | M204 | N223 | N24 | CABLE BRACES | HBrace | BAR | A36 Gr.36 | Typical |
| 188 | M205 | N298 | N104 | CABLE BRACES | HBrace | BAR | A36 Gr.36 | Typical |
| 189 | M206 | N298 | N97 | CABLE BRACES | HBrace | BAR | A36 Gr.36 | Typical |
| 190 | M207 | N299 | N1088 | CABLE BRACES | HBrace | BAR | A36 Gr.36 | Typical |
| 191 | M208 | N1084 | N1088 | CABLE BRACES | HBrace | BAR | A36 Gr.36 | Typical |
| 192 | M209 | N224 | N1088 | CABLE BRACES | HBrace | BAR | A36 Gr.36 | Typical |
| 193 | M210 | N101 | N299 | CABLE BRACES | HBrace | BAR | A36 Gr.36 | Typical |
| 194 | M211 | N21 | N224 | CABLE BRACES | HBrace | BAR | A36 Gr.36 | Typical |
| 195 | M212 | N24 | N299 | CABLE BRACES | HBrace | BAR | A36 Gr.36 | Typical |
| 196 | M213 | N104 | N224 | CABLE BRACES | HBrace | BAR | A36 Gr.36 | Typical |

***Member Advanced Data***

| | Label | I Release | J Release | Col-Wall Vert Release | T/C Only | Physical | Deflection Ratio Options | Activation | Seismic DR |
|---|---|---|---|---|---|---|---|---|---|
| 1 | M1 | | | | | Yes | Default | Exclude | None |
| 2 | M2 | | | | | Yes | Default | Exclude | None |
| 3 | M3 | | | | | Yes | Default | Exclude | None |
| 4 | M4 | | | | | Yes | Default | Exclude | None |
| 5 | M5 | | | | | Yes | Default | Exclude | None |
| 6 | M6 | | | | | Yes | Default | Exclude | None |
| 7 | M7 | | | | | Yes | Default | Exclude | None |

***Member Advanced Data (Continued)***

| | Label | I Release | J Release | Col-Wall Vert Release | T/C Only | Physical | Deflection Ratio Options | Activation | Seismic DR |
|---|---|---|---|---|---|---|---|---|---|
| 8 | M8 | | | | | Yes | Default | Exclude | None |
| 9 | M9 | | | | | Yes | Default | Exclude | None |
| 10 | M10 | | | | | Yes | Default | Exclude | None |
| 11 | M11 | | | | | Yes | Default | Exclude | None |
| 12 | M12 | | | | | Yes | Default | Exclude | None |
| 13 | M13 | | | | | Yes | Default | Exclude | None |
| 14 | M14 | | | | | Yes | Default | Exclude | None |
| 15 | M15 | | | | | Yes | Default | Exclude | None |
| 16 | M16 | | | | | Yes | Default | Exclude | None |
| 17 | M17 | | BenPIN | | | Yes | Default | Exclude | None |
| 18 | M18 | | BenPIN | | | Yes | Default | Exclude | None |
| 19 | M19 | | BenPIN | | | Yes | Default | Exclude | None |
| 20 | M20 | | BenPIN | | | Yes | Default | Exclude | None |
| 21 | M21 | | BenPIN | | | Yes | Default | Exclude | None |
| 22 | M22 | | BenPIN | | | Yes | Default | Exclude | None |
| 23 | M23 | | BenPIN | | | Yes | Default | Exclude | None |
| 24 | M24 | | BenPIN | | | Yes | Default | Exclude | None |
| 25 | M25 | | BenPIN | | | Yes | Default | Exclude | None |
| 26 | M26 | | BenPIN | | | Yes | Default | Exclude | None |
| 27 | M27 | | BenPIN | | | Yes | Default | Exclude | None |
| 28 | M28 | | BenPIN | | | Yes | Default | Exclude | None |
| 29 | M29 | | BenPIN | | | Yes | Default | Exclude | None |
| 30 | M30 | | BenPIN | | | Yes | Default | Exclude | None |
| 31 | M31 | | BenPIN | | | Yes | Default | Exclude | None |
| 32 | M32 | | BenPIN | | | Yes | Default | Exclude | None |
| 33 | M33 | | BenPIN | | | Yes | Default | Exclude | None |
| 34 | M34 | | BenPIN | | | Yes | Default | Exclude | None |
| 35 | M35 | | BenPIN | | | Yes | Default | Exclude | None |
| 36 | M36 | | BenPIN | | | Yes | Default | Exclude | None |
| 37 | M37 | | BenPIN | | | Yes | Default | Exclude | None |
| 38 | M38 | | BenPIN | | | Yes | Default | Exclude | None |
| 39 | M39 | | BenPIN | | | Yes | Default | Exclude | None |
| 40 | M40 | | BenPIN | | | Yes | Default | Exclude | None |
| 41 | M41 | | BenPIN | | | Yes | Default | Exclude | None |
| 42 | M42 | | BenPIN | | | Yes | Default | Exclude | None |
| 43 | M43 | | BenPIN | | | Yes | Default | Exclude | None |
| 44 | M44 | | BenPIN | | | Yes | Default | Exclude | None |
| 45 | M45 | | BenPIN | | | Yes | Default | Exclude | None |
| 46 | M46 | | BenPIN | | | Yes | Default | Exclude | None |
| 47 | M47 | | BenPIN | | | Yes | Default | Exclude | None |
| 48 | M48 | | BenPIN | | | Yes | Default | Exclude | None |
| 49 | M49 | | BenPIN | | | Yes | Default | Exclude | None |
| 50 | M50 | | BenPIN | | | Yes | Default | Exclude | None |
| 51 | M51 | | BenPIN | | | Yes | Default | Exclude | None |
| 52 | M52 | | BenPIN | | | Yes | Default | Exclude | None |
| 53 | M53 | | BenPIN | | | Yes | Default | Exclude | None |
| 54 | M54 | | BenPIN | | | Yes | Default | Exclude | None |
| 55 | M55 | | BenPIN | | | Yes | Default | Exclude | None |
| 56 | M56 | | BenPIN | | | Yes | Default | Exclude | None |
| 57 | M57 | | BenPIN | | | Yes | Default | Exclude | None |
| 58 | M58 | | BenPIN | | | Yes | Default | Exclude | None |
| 59 | M59 | | BenPIN | | | Yes | Default | Exclude | None |
| 60 | M60 | | BenPIN | | | Yes | Default | Exclude | None |
| 61 | M61 | | BenPIN | | | Yes | Default | Exclude | None |
| 62 | M62 | | BenPIN | | | Yes | Default | Exclude | None |

***Member Advanced Data (Continued)***

| | Label | I Release | J Release | Col-Wall Vert Release | T/C Only | Physical | Deflection Ratio Options | Activation | Seismic DR |
|---|---|---|---|---|---|---|---|---|---|
| 63 | M63 | | BenPIN | | | Yes | Default | Exclude | None |
| 64 | M64 | | BenPIN | | | Yes | Default | Exclude | None |
| 65 | M65 | | BenPIN | | | Yes | Default | Exclude | None |
| 66 | M66 | | BenPIN | | | Yes | Default | Exclude | None |
| 67 | M67 | | BenPIN | | | Yes | Default | Exclude | None |
| 68 | M68 | | BenPIN | | | Yes | Default | Exclude | None |
| 69 | M69 | | BenPIN | | | Yes | Default | Exclude | None |
| 70 | M70 | | BenPIN | | | Yes | Default | Exclude | None |
| 71 | M71 | | BenPIN | | | Yes | Default | Exclude | None |
| 72 | M72 | | BenPIN | | | Yes | Default | Exclude | None |
| 73 | M73 | | BenPIN | | | Yes | Default | Exclude | None |
| 74 | M74 | | BenPIN | | | Yes | Default | Exclude | None |
| 75 | M75 | | BenPIN | | | Yes | Default | Exclude | None |
| 76 | M76 | | BenPIN | | | Yes | Default | Exclude | None |
| 77 | M77 | | BenPIN | | | Yes | Default | Exclude | None |
| 78 | M78 | | BenPIN | | | Yes | Default | Exclude | None |
| 79 | M79 | | BenPIN | | | Yes | Default | Exclude | None |
| 80 | M80 | | BenPIN | | | Yes | Default | Exclude | None |
| 81 | M81 | | BenPIN | | | Yes | Default | Exclude | None |
| 82 | M82 | | BenPIN | | | Yes | Default | Exclude | None |
| 83 | M83 | | BenPIN | | | Yes | Default | Exclude | None |
| 84 | M84 | | BenPIN | | | Yes | Default | Exclude | None |
| 85 | M85 | | BenPIN | | | Yes | Default | Exclude | None |
| 86 | M86 | | BenPIN | | | Yes | Default | Exclude | None |
| 87 | M87 | | BenPIN | | | Yes | Default | Exclude | None |
| 88 | M88 | | BenPIN | | | Yes | Default | Exclude | None |
| 89 | M89 | | BenPIN | | | Yes | Default | Exclude | None |
| 90 | M90 | | BenPIN | | | Yes | Default | Exclude | None |
| 91 | M91 | | BenPIN | | | Yes | Default | Exclude | None |
| 92 | M92 | | BenPIN | | | Yes | Default | Exclude | None |
| 93 | M93 | | BenPIN | | | Yes | Default | Exclude | None |
| 94 | M94 | | BenPIN | | | Yes | Default | Exclude | None |
| 95 | M95 | | BenPIN | | | Yes | Default | Exclude | None |
| 96 | M96 | | BenPIN | | | Yes | Default | Exclude | None |
| 97 | M97 | | BenPIN | | | Yes | Default | Exclude | None |
| 98 | M98 | | BenPIN | | | Yes | Default | Exclude | None |
| 99 | M99 | | BenPIN | | | Yes | Default | Exclude | None |
| 100 | M100 | | BenPIN | | | Yes | Default | Exclude | None |
| 101 | M101 | | BenPIN | | | Yes | Default | Exclude | None |
| 102 | M102 | | BenPIN | | | Yes | Default | Exclude | None |
| 103 | M103 | | BenPIN | | | Yes | Default | Exclude | None |
| 104 | M104 | | BenPIN | | | Yes | Default | Exclude | None |
| 105 | M105 | | BenPIN | | | Yes | Default | Exclude | None |
| 106 | M106 | | BenPIN | | | Yes | Default | Exclude | None |
| 107 | M107 | BenPIN | BenPIN | | | Yes | Default | Exclude | None |
| 108 | M108 | BenPIN | BenPIN | | | Yes | Default | Exclude | None |
| 109 | M109 | BenPIN | BenPIN | | | Yes | Default | Exclude | None |
| 110 | M110 | BenPIN | BenPIN | | | Yes | Default | Exclude | None |
| 111 | M111 | BenPIN | BenPIN | | | Yes | Default | Exclude | None |
| 112 | M112 | BenPIN | BenPIN | | | Yes | Default | Exclude | None |
| 113 | M113 | BenPIN | BenPIN | | | Yes | Default | Exclude | None |
| 114 | M114 | BenPIN | BenPIN | | | Yes | Default | Exclude | None |
| 115 | M115 | BenPIN | BenPIN | | | Yes | Default | Exclude | None |
| 116 | M116 | BenPIN | BenPIN | | | Yes | Default | Exclude | None |
| 117 | M117 | BenPIN | BenPIN | | | Yes | Default | Exclude | None |

***Member Advanced Data (Continued)***

| | Label | I Release | J Release | Col-Wall Vert Release | T/C Only | Physical | Deflection Ratio Options | Activation | Seismic DR |
|---|---|---|---|---|---|---|---|---|---|
| 118 | M118 | BenPIN | BenPIN | | | Yes | Default | Exclude | None |
| 119 | M119 | BenPIN | BenPIN | | | Yes | Default | Exclude | None |
| 120 | M120 | BenPIN | BenPIN | | | Yes | Default | Exclude | None |
| 121 | M121 | BenPIN | BenPIN | | | Yes | Default | Exclude | None |
| 122 | M122 | BenPIN | BenPIN | | | Yes | Default | Exclude | None |
| 123 | M123 | BenPIN | BenPIN | | | Yes | Default | Exclude | None |
| 124 | M124 | BenPIN | BenPIN | | | Yes | Default | Exclude | None |
| 125 | M125 | BenPIN | BenPIN | | | Yes | Default | Exclude | None |
| 126 | M126 | BenPIN | BenPIN | | | Yes | Default | Exclude | None |
| 127 | M127 | BenPIN | BenPIN | | | Yes | Default | Exclude | None |
| 128 | M128 | BenPIN | BenPIN | | | Yes | Default | Exclude | None |
| 129 | M129 | BenPIN | BenPIN | | | Yes | Default | Exclude | None |
| 130 | M130 | BenPIN | BenPIN | | | Yes | Default | Exclude | None |
| 131 | M131 | BenPIN | BenPIN | | | Yes | Default | Exclude | None |
| 132 | M132 | BenPIN | BenPIN | | | Yes | Default | Exclude | None |
| 133 | M133 | BenPIN | BenPIN | | | Yes | Default | Exclude | None |
| 134 | M134 | BenPIN | BenPIN | | | Yes | Default | Exclude | None |
| 135 | M135 | BenPIN | BenPIN | | | Yes | Default | Exclude | None |
| 136 | M136 | BenPIN | BenPIN | | | Yes | Default | Exclude | None |
| 137 | M137 | BenPIN | BenPIN | | Tension Only | Yes | ** NA ** | | None |
| 138 | M138 | BenPIN | BenPIN | | Tension Only | Yes | ** NA ** | | None |
| 139 | M139 | BenPIN | BenPIN | | Tension Only | Yes | ** NA ** | | None |
| 140 | M140 | BenPIN | BenPIN | | Tension Only | Yes | ** NA ** | | None |
| 141 | M141 | BenPIN | BenPIN | | Tension Only | Yes | ** NA ** | | None |
| 142 | M142 | BenPIN | BenPIN | | Tension Only | Yes | ** NA ** | | None |
| 143 | M143 | BenPIN | BenPIN | | Tension Only | Yes | ** NA ** | | None |
| 144 | M145 | BenPIN | BenPIN | | Tension Only | Yes | ** NA ** | | None |
| 145 | M146 | BenPIN | BenPIN | | Tension Only | Yes | ** NA ** | | None |
| 146 | M147 | BenPIN | BenPIN | | Tension Only | Yes | ** NA ** | | None |
| 147 | M148 | BenPIN | BenPIN | | Tension Only | Yes | ** NA ** | | None |
| 148 | M149 | BenPIN | BenPIN | | Tension Only | Yes | ** NA ** | | None |
| 149 | M151 | BenPIN | BenPIN | | Tension Only | Yes | ** NA ** | | None |
| 150 | M152 | BenPIN | BenPIN | | Tension Only | Yes | ** NA ** | | None |
| 151 | M153 | BenPIN | BenPIN | | Tension Only | Yes | ** NA ** | | None |
| 152 | M154 | BenPIN | BenPIN | | Tension Only | Yes | ** NA ** | | None |
| 153 | M155 | BenPIN | BenPIN | | Tension Only | Yes | ** NA ** | | None |
| 154 | M156 | BenPIN | BenPIN | | Tension Only | Yes | ** NA ** | | None |
| 155 | M172 | BenPIN | AllPIN | | Tension Only | Yes | ** NA ** | | None |
| 156 | M173 | BenPIN | AllPIN | | Tension Only | Yes | ** NA ** | | None |
| 157 | M174 | BenPIN | AllPIN | | | Yes | ** NA ** | | None |
| 158 | M175 | BenPIN | AllPIN | | | Yes | ** NA ** | | None |
| 159 | M176 | BenPIN | AllPIN | | | Yes | ** NA ** | | None |
| 160 | M177 | BenPIN | AllPIN | | | Yes | ** NA ** | | None |
| 161 | M178 | BenPIN | AllPIN | | | Yes | ** NA ** | | None |
| 162 | M179 | BenPIN | AllPIN | | | Yes | ** NA ** | | None |
| 163 | M180 | BenPIN | AllPIN | | | Yes | ** NA ** | | None |
| 164 | M181 | BenPIN | AllPIN | | | Yes | ** NA ** | | None |
| 165 | M182 | BenPIN | AllPIN | | | Yes | ** NA ** | | None |
| 166 | M183 | BenPIN | AllPIN | | | Yes | ** NA ** | | None |
| 167 | M184 | BenPIN | AllPIN | | | Yes | ** NA ** | | None |
| 168 | M185 | BenPIN | AllPIN | | | Yes | ** NA ** | | None |
| 169 | M186 | BenPIN | AllPIN | | | Yes | ** NA ** | | None |
| 170 | M187 | BenPIN | AllPIN | | | Yes | ** NA ** | | None |
| 171 | M188 | BenPIN | AllPIN | | | Yes | ** NA ** | | None |
| 172 | M189 | BenPIN | AllPIN | | Tension Only | Yes | ** NA ** | Exclude | None |

### Member Advanced Data (Continued)

| | Label | I Release | J Release | Col-Wall Vert Release | T/C Only | Physical | Deflection Ratio Options | Activation | Seismic DR |
|---|---|---|---|---|---|---|---|---|---|
| 173 | M190 | BenPIN | AllPIN | | Tension Only | Yes | ** NA ** | Exclude | None |
| 174 | M191 | BenPIN | AllPIN | | Tension Only | Yes | ** NA ** | Exclude | None |
| 175 | M192 | BenPIN | AllPIN | | Tension Only | Yes | ** NA ** | Exclude | None |
| 176 | M193 | BenPIN | AllPIN | | Tension Only | Yes | ** NA ** | Exclude | None |
| 177 | M194 | BenPIN | AllPIN | | Tension Only | Yes | ** NA ** | Exclude | None |
| 178 | M195 | BenPIN | BenPIN | | Tension Only | Yes | ** NA ** | | None |
| 179 | M196 | BenPIN | BenPIN | | Tension Only | Yes | ** NA ** | | None |
| 180 | M197 | BenPIN | BenPIN | | Tension Only | Yes | ** NA ** | Exclude | None |
| 181 | M198 | BenPIN | BenPIN | | Tension Only | Yes | ** NA ** | | None |
| 182 | M199 | BenPIN | BenPIN | | Tension Only | Yes | ** NA ** | | None |
| 183 | M200 | BenPIN | BenPIN | | Tension Only | Yes | ** NA ** | Exclude | None |
| 184 | M201 | BenPIN | BenPIN | | Tension Only | Yes | ** NA ** | | None |
| 185 | M202 | BenPIN | BenPIN | | Tension Only | Yes | ** NA ** | | None |
| 186 | M203 | BenPIN | BenPIN | | Tension Only | Yes | ** NA ** | | None |
| 187 | M204 | BenPIN | BenPIN | | Tension Only | Yes | ** NA ** | | None |
| 188 | M205 | BenPIN | BenPIN | | Tension Only | Yes | ** NA ** | | None |
| 189 | M206 | BenPIN | BenPIN | | Tension Only | Yes | ** NA ** | | None |
| 190 | M207 | BenPIN | BenPIN | | Tension Only | Yes | ** NA ** | | None |
| 191 | M208 | BenPIN | BenPIN | | Tension Only | Yes | ** NA ** | Exclude | None |
| 192 | M209 | BenPIN | BenPIN | | Tension Only | Yes | ** NA ** | | None |
| 193 | M210 | BenPIN | BenPIN | | Tension Only | Yes | ** NA ** | | None |
| 194 | M211 | BenPIN | BenPIN | | Tension Only | Yes | ** NA ** | | None |
| 195 | M212 | BenPIN | AllPIN | | Tension Only | Yes | ** NA ** | | None |
| 196 | M213 | BenPIN | AllPIN | | Tension Only | Yes | ** NA ** | | None |

### Nodal Loads and Enforced Displacements

No Data to Print...

### Member Point Loads

No Data to Print...

### Member Distributed Loads (BLC 9 : WIND 90-DEG)

| | Member Label | Direction | Start Magnitude [lb/ft, F, psf, lb-ft/ft] | End Magnitude [lb/ft, F, psf, lb-ft/ft] | Start Location [(ft, %)] | End Location [(ft, %)] |
|---|---|---|---|---|---|---|
| 1 | M107 | Z | 30 | 30 | 0 | %100 |
| 2 | M108 | Z | 30 | 30 | 0 | %100 |
| 3 | M109 | Z | 30 | 30 | 0 | %100 |
| 4 | M110 | Z | 30 | 30 | 0 | %100 |
| 5 | M111 | Z | 30 | 30 | 0 | %100 |
| 6 | M112 | Z | 30 | 30 | 0 | %100 |
| 7 | M113 | Z | 30 | 30 | 0 | %100 |
| 8 | M114 | Z | 30 | 30 | 0 | %100 |
| 9 | M115 | Z | 30 | 30 | 0 | %100 |
| 10 | M116 | Z | 30 | 30 | 0 | %100 |
| 11 | M117 | Z | 30 | 30 | 0 | %100 |
| 12 | M118 | Z | 30 | 30 | 0 | %100 |
| 13 | M125 | Z | 30 | 30 | 0 | %100 |
| 14 | M126 | Z | 30 | 30 | 0 | %100 |
| 15 | M127 | Z | 30 | 30 | 0 | %100 |
| 16 | M128 | Z | 30 | 30 | 0 | %100 |
| 17 | M129 | Z | 30 | 30 | 0 | %100 |
| 18 | M130 | Z | 30 | 30 | 0 | %100 |
| 19 | M131 | Z | 30 | 30 | 0 | %100 |
| 20 | M132 | Z | 30 | 30 | 0 | %100 |
| 21 | M133 | Z | 30 | 30 | 0 | %100 |

### *Member Distributed Loads (BLC 9 : WIND 90-DEG) (Continued)*

| | Member Label | Direction | Start Magnitude [lb/ft, F, psf, lb-ft/ft] | End Magnitude [lb/ft, F, psf, lb-ft/ft] | Start Location [(ft, %)] | End Location [(ft, %)] |
|---|---|---|---|---|---|---|
| 22 | M134 | Z | 30 | 30 | 0 | %100 |
| 23 | M135 | Z | 30 | 30 | 0 | %100 |
| 24 | M136 | Z | 30 | 30 | 0 | %100 |

### *Member Distributed Loads (BLC 12 : BLC 1 Transient Area Loads)*

| | Member Label | Direction | Start Magnitude [lb/ft, F, psf, lb-ft/ft] | End Magnitude [lb/ft, F, psf, lb-ft/ft] | Start Location [(ft, %)] | End Location [(ft, %)] |
|---|---|---|---|---|---|---|
| 1 | M1 | Y | -32 | -32 | 0 | 32 |
| 2 | M2 | Y | -32 | -32 | 1.776e-15 | 32 |
| 3 | M2 | Y | -42.3792 | -42.3792 | 7.008e-15 | 32 |
| 4 | M3 | Y | -42.3792 | -42.3792 | 1.796e-14 | 32 |
| 5 | M3 | Y | -42.3792 | -42.3792 | 1.441e-14 | 32 |
| 6 | M4 | Y | -42.3792 | -42.3792 | 1.962e-14 | 32 |
| 7 | M4 | Y | -42.3792 | -42.3792 | 2.362e-14 | 32 |
| 8 | M5 | Y | -42.3792 | -42.3792 | 7.702e-15 | 32 |
| 9 | M5 | Y | -42.3792 | -42.3792 | 3.081e-14 | 32 |
| 10 | M6 | Y | -42.3792 | -42.3792 | 9.207e-14 | 32 |
| 11 | M6 | Y | -42.3792 | -42.3792 | 5.457e-14 | 32 |
| 12 | M7 | Y | -42.3792 | -42.3792 | 9.409e-14 | 32 |
| 13 | M7 | Y | -42.3792 | -42.3792 | 1.044e-13 | 32 |
| 14 | M8 | Y | -42.3792 | -42.3792 | 1.081e-13 | 32 |
| 15 | M8 | Y | -42.3792 | -42.3792 | 1.777e-13 | 32 |
| 16 | M9 | Y | -42.3792 | -42.3792 | 2.359e-16 | 32 |
| 17 | M9 | Y | -42.3792 | -42.3792 | 2.832e-14 | 32 |
| 18 | M10 | Y | -42.3792 | -42.3792 | 8.341e-15 | 32 |
| 19 | M10 | Y | -42.3792 | -42.3792 | 8.758e-14 | 32 |
| 20 | M11 | Y | -42.3792 | -42.3792 | 2.999e-14 | 32 |
| 21 | M11 | Y | -42.3792 | -42.3792 | 2.952e-14 | 32 |
| 22 | M12 | Y | -42.3792 | -42.3792 | 4.065e-14 | 32 |
| 23 | M12 | Y | -40.1995 | -40.1995 | 2.433e-14 | 32 |
| 24 | M13 | Y | -40.1995 | -40.1995 | 2.516e-13 | 32 |
| 25 | M13 | Y | -40.0889 | -40.0889 | 1.557e-13 | 32 |
| 26 | M14 | Y | -40.0889 | -40.0889 | 6.88e-13 | 32 |
| 27 | M14 | Y | -40.0889 | -40.0889 | 2.037e-13 | 32 |
| 28 | M15 | Y | -40.0889 | -40.0889 | 1.38e-13 | 32 |
| 29 | M15 | Y | -40.0889 | -40.0889 | 1.998e-13 | 32 |
| 30 | M16 | Y | -40.0889 | -40.0889 | 2.942e-13 | 32 |

### *Member Distributed Loads (BLC 13 : BLC 2 Transient Area Loads)*

| | Member Label | Direction | Start Magnitude [lb/ft, F, psf, lb-ft/ft] | End Magnitude [lb/ft, F, psf, lb-ft/ft] | Start Location [(ft, %)] | End Location [(ft, %)] |
|---|---|---|---|---|---|---|
| 1 | M8 | Y | -250 | -250 | 1.081e-13 | 32 |
| 2 | M8 | Y | -250 | -250 | 1.777e-13 | 32 |
| 3 | M9 | Y | -250 | -250 | 2.359e-16 | 32 |
| 4 | M9 | Y | -250 | -250 | 2.832e-14 | 32 |
| 5 | M10 | Y | -250 | -250 | 8.341e-15 | 32 |
| 6 | M10 | Y | -250 | -250 | 8.758e-14 | 32 |
| 7 | M11 | Y | -250 | -250 | 2.999e-14 | 32 |
| 8 | M11 | Y | -250 | -250 | 2.952e-14 | 32 |
| 9 | M12 | Y | -250 | -250 | 4.065e-14 | 32 |
| 10 | M12 | Y | -250 | -250 | 2.433e-14 | 32 |
| 11 | M13 | Y | -250 | -250 | 2.516e-13 | 32 |
| 12 | M13 | Y | -250 | -250 | 1.557e-13 | 32 |
| 13 | M14 | Y | -250 | -250 | 6.88e-13 | 32 |
| 14 | M14 | Y | -250 | -250 | 2.037e-13 | 32 |

### *Member Distributed Loads (BLC 13 : BLC 2 Transient Area Loads) (Continued)*

| | Member Label | Direction | Start Magnitude [lb/ft, F, psf, lb-ft/ft] | End Magnitude [lb/ft, F, psf, lb-ft/ft] | Start Location [(ft, %)] | End Location [(ft, %)] |
|---|---|---|---|---|---|---|
| 15 | M15 | Y | -250 | -250 | 1.38e-13 | 32 |
| 16 | M15 | Y | -250 | -250 | 1.998e-13 | 32 |
| 17 | M16 | Y | -250 | -250 | 2.942e-13 | 32 |
| 18 | M1 | Y | -200 | -200 | 1.776e-15 | 32 |
| 19 | M2 | Y | -200 | -200 | 0 | 32 |
| 20 | M2 | Y | -250 | -250 | 27 | 32 |
| 21 | M3 | Y | -500 | -500 | 27 | 32 |
| 22 | M4 | Y | -500 | -500 | 27 | 32 |
| 23 | M5 | Y | -500 | -500 | 27 | 32 |
| 24 | M6 | Y | -500 | -500 | 27 | 32 |
| 25 | M7 | Y | -500 | -500 | 27 | 32 |
| 26 | M8 | Y | -500 | -500 | 27 | 32 |
| 27 | M9 | Y | -500 | -500 | 27 | 32 |
| 28 | M10 | Y | -500 | -500 | 27 | 32 |
| 29 | M11 | Y | -500 | -500 | 27 | 32 |
| 30 | M12 | Y | -250 | -250 | 27 | 32 |
| 31 | M1 | Y | -200 | -200 | 0 | 32 |
| 32 | M2 | Y | -200 | -200 | 1.776e-15 | 32 |
| 33 | M2 | Y | -250 | -250 | 7.008e-15 | 32 |
| 34 | M3 | Y | -250 | -250 | 1.796e-14 | 32 |
| 35 | M3 | Y | -250 | -250 | 1.441e-14 | 32 |
| 36 | M4 | Y | -250 | -250 | 1.962e-14 | 32 |
| 37 | M4 | Y | -250 | -250 | 2.362e-14 | 32 |
| 38 | M5 | Y | -250 | -250 | 7.702e-15 | 32 |
| 39 | M5 | Y | -250 | -250 | 3.081e-14 | 32 |
| 40 | M6 | Y | -250 | -250 | 9.207e-14 | 32 |
| 41 | M6 | Y | -250 | -250 | 5.457e-14 | 32 |
| 42 | M7 | Y | -250 | -250 | 9.409e-14 | 32 |
| 43 | M7 | Y | -250 | -250 | 1.044e-13 | 32 |

### *Member Distributed Loads (BLC 14 : BLC 4 Transient Area Loads)*

| | Member Label | Direction | Start Magnitude [lb/ft, F, psf, lb-ft/ft] | End Magnitude [lb/ft, F, psf, lb-ft/ft] | Start Location [(ft, %)] | End Location [(ft, %)] |
|---|---|---|---|---|---|---|
| 1 | M1 | Y | -100 | -100 | 0 | 32 |
| 2 | M2 | Y | -100 | -100 | 1.776e-15 | 32 |
| 3 | M2 | Y | -125 | -125 | 7.008e-15 | 32 |
| 4 | M3 | Y | -125 | -125 | 1.796e-14 | 32 |
| 5 | M3 | Y | -125 | -125 | 1.441e-14 | 32 |
| 6 | M4 | Y | -125 | -125 | 1.962e-14 | 32 |
| 7 | M4 | Y | -125 | -125 | 2.362e-14 | 32 |
| 8 | M5 | Y | -125 | -125 | 7.702e-15 | 32 |
| 9 | M5 | Y | -125 | -125 | 3.081e-14 | 32 |
| 10 | M6 | Y | -125 | -125 | 9.207e-14 | 32 |
| 11 | M6 | Y | -125 | -125 | 5.457e-14 | 32 |
| 12 | M7 | Y | -125 | -125 | 9.409e-14 | 32 |
| 13 | M7 | Y | -125 | -125 | 1.044e-13 | 32 |
| 14 | M8 | Y | -125 | -125 | 1.081e-13 | 32 |
| 15 | M8 | Y | -125 | -125 | 1.777e-13 | 32 |
| 16 | M9 | Y | -125 | -125 | 2.359e-16 | 32 |
| 17 | M9 | Y | -125 | -125 | 2.832e-14 | 32 |
| 18 | M10 | Y | -125 | -125 | 8.341e-15 | 32 |
| 19 | M10 | Y | -125 | -125 | 8.758e-14 | 32 |
| 20 | M11 | Y | -125 | -125 | 2.999e-14 | 32 |
| 21 | M11 | Y | -125 | -125 | 2.952e-14 | 32 |
| 22 | M12 | Y | -125 | -125 | 4.065e-14 | 32 |
| 23 | M12 | Y | -125 | -125 | 2.433e-14 | 32 |

### *Member Distributed Loads (BLC 14 : BLC 4 Transient Area Loads) (Continued)*

| | Member Label | Direction | Start Magnitude [lb/ft, F, psf, lb-ft/ft] | End Magnitude [lb/ft, F, psf, lb-ft/ft] | Start Location [(ft, %)] | End Location [(ft, %)] |
|---|---|---|---|---|---|---|
| 24 | M13 | Y | -125 | -125 | 2.516e-13 | 32 |
| 25 | M13 | Y | -125 | -125 | 1.557e-13 | 32 |
| 26 | M14 | Y | -125 | -125 | 6.88e-13 | 32 |
| 27 | M14 | Y | -125 | -125 | 2.037e-13 | 32 |
| 28 | M15 | Y | -125 | -125 | 1.38e-13 | 32 |
| 29 | M15 | Y | -125 | -125 | 1.998e-13 | 32 |
| 30 | M16 | Y | -125 | -125 | 2.942e-13 | 32 |

### *Member Distributed Loads (BLC 15 : BLC 5 Transient Area Loads)*

| | Member Label | Direction | Start Magnitude [lb/ft, F, psf, lb-ft/ft] | End Magnitude [lb/ft, F, psf, lb-ft/ft] | Start Location [(ft, %)] | End Location [(ft, %)] |
|---|---|---|---|---|---|---|
| 1 | M3 | Y | 54 | 54 | 1.441e-14 | 32 |
| 2 | M4 | X | 18.9 | 18.9 | 1.962e-14 | 32 |
| 3 | M4 | Y | 54 | 54 | 1.962e-14 | 32 |
| 4 | M4 | X | 18.9 | 18.9 | 2.362e-14 | 32 |
| 5 | M4 | Y | 54 | 54 | 2.362e-14 | 32 |
| 6 | M5 | X | 18.9 | 18.9 | 7.702e-15 | 32 |
| 7 | M5 | Y | 54 | 54 | 7.702e-15 | 32 |
| 8 | M5 | X | 18.9 | 18.9 | 3.081e-14 | 32 |
| 9 | M5 | Y | 54 | 54 | 3.081e-14 | 32 |
| 10 | M6 | X | 18.9 | 18.9 | 9.207e-14 | 32 |
| 11 | M6 | Y | 54 | 54 | 9.207e-14 | 32 |
| 12 | M6 | X | 18.9 | 18.9 | 5.457e-14 | 32 |
| 13 | M6 | Y | 54 | 54 | 5.457e-14 | 32 |
| 14 | M7 | X | 18.9 | 18.9 | 9.409e-14 | 32 |
| 15 | M7 | Y | 54 | 54 | 9.409e-14 | 32 |
| 16 | M7 | X | 28.35 | 28.35 | 1.044e-13 | 32 |
| 17 | M7 | Y | 81 | 81 | 1.044e-13 | 32 |
| 18 | M8 | X | 28.35 | 28.35 | 1.081e-13 | 32 |
| 19 | M8 | Y | 81 | 81 | 1.081e-13 | 32 |
| 20 | M8 | X | 28.35 | 28.35 | 1.777e-13 | 32 |
| 21 | M8 | Y | 81 | 81 | 1.777e-13 | 32 |
| 22 | M9 | X | 28.35 | 28.35 | 2.359e-16 | 32 |
| 23 | M9 | Y | 81 | 81 | 2.359e-16 | 32 |
| 24 | M9 | X | 28.35 | 28.35 | 2.832e-14 | 32 |
| 25 | M9 | Y | 81 | 81 | 2.832e-14 | 32 |
| 26 | M10 | X | 28.35 | 28.35 | 8.341e-15 | 32 |
| 27 | M10 | Y | 81 | 81 | 8.341e-15 | 32 |
| 28 | M10 | X | 28.35 | 28.35 | 8.758e-14 | 32 |
| 29 | M10 | Y | 81 | 81 | 8.758e-14 | 32 |
| 30 | M10 | Z | 1.255e-15 | 1.255e-15 | 8.758e-14 | 32 |
| 31 | M11 | X | 28.35 | 28.35 | 2.999e-14 | 32 |
| 32 | M11 | Y | 81 | 81 | 2.999e-14 | 32 |
| 33 | M11 | Z | 1.255e-15 | 1.255e-15 | 2.999e-14 | 32 |
| 34 | M11 | X | 28.35 | 28.35 | 2.952e-14 | 32 |
| 35 | M11 | Y | 81 | 81 | 2.952e-14 | 32 |
| 36 | M12 | X | 28.35 | 28.35 | 4.065e-14 | 32 |
| 37 | M12 | Y | 81 | 81 | 4.065e-14 | 32 |
| 38 | M12 | X | 8.1 | 8.1 | 2.433e-14 | 32 |
| 39 | M12 | Y | 81 | 81 | 2.433e-14 | 32 |
| 40 | M13 | X | 8.1 | 8.1 | 2.516e-13 | 32 |
| 41 | M13 | Y | 81 | 81 | 2.516e-13 | 32 |
| 42 | M1 | Y | 43.2 | 43.2 | 0 | 32 |
| 43 | M2 | Y | 43.2 | 43.2 | 1.776e-15 | 32 |
| 44 | M2 | X | 18.9 | 18.9 | 7.008e-15 | 32 |
| 45 | M2 | Y | 54 | 54 | 7.008e-15 | 32 |

### *Member Distributed Loads (BLC 15 : BLC 5 Transient Area Loads) (Continued)*

| | Member Label | Direction | Start Magnitude [lb/ft, F, psf, lb-ft/ft] | End Magnitude [lb/ft, F, psf, lb-ft/ft] | Start Location [(ft, %)] | End Location [(ft, %)] |
|---|---|---|---|---|---|---|
| 46 | M3 | X | 18.9 | 18.9 | 1.796e-14 | 32 |
| 47 | M3 | Y | 54 | 54 | 1.796e-14 | 32 |
| 48 | M3 | X | 18.9 | 18.9 | 1.441e-14 | 32 |

### *Member Distributed Loads (BLC 16 : BLC 6 Transient Area Loads)*

| | Member Label | Direction | Start Magnitude [lb/ft, F, psf, lb-ft/ft] | End Magnitude [lb/ft, F, psf, lb-ft/ft] | Start Location [(ft, %)] | End Location [(ft, %)] |
|---|---|---|---|---|---|---|
| 1 | M1 | Y | 73.2 | 73.2 | 0 | 32 |
| 2 | M2 | Y | 73.2 | 73.2 | 1.776e-15 | 32 |
| 3 | M2 | X | 32.025 | 32.025 | 7.008e-15 | 32 |
| 4 | M2 | Y | 91.5 | 91.5 | 7.008e-15 | 32 |
| 5 | M3 | X | 32.025 | 32.025 | 1.796e-14 | 32 |
| 6 | M3 | Y | 91.5 | 91.5 | 1.796e-14 | 32 |
| 7 | M3 | X | 32.025 | 32.025 | 1.441e-14 | 32 |
| 8 | M3 | Y | 91.5 | 91.5 | 1.441e-14 | 32 |
| 9 | M4 | X | 32.025 | 32.025 | 1.962e-14 | 32 |
| 10 | M4 | Y | 91.5 | 91.5 | 1.962e-14 | 32 |
| 11 | M4 | X | 32.025 | 32.025 | 2.362e-14 | 32 |
| 12 | M4 | Y | 91.5 | 91.5 | 2.362e-14 | 32 |
| 13 | M5 | X | 32.025 | 32.025 | 7.702e-15 | 32 |
| 14 | M5 | Y | 91.5 | 91.5 | 7.702e-15 | 32 |
| 15 | M5 | X | 32.025 | 32.025 | 3.081e-14 | 32 |
| 16 | M5 | Y | 91.5 | 91.5 | 3.081e-14 | 32 |
| 17 | M6 | X | 32.025 | 32.025 | 9.207e-14 | 32 |
| 18 | M6 | Y | 91.5 | 91.5 | 9.207e-14 | 32 |
| 19 | M6 | X | 32.025 | 32.025 | 5.457e-14 | 32 |
| 20 | M6 | Y | 91.5 | 91.5 | 5.457e-14 | 32 |
| 21 | M7 | X | 32.025 | 32.025 | 9.409e-14 | 32 |
| 22 | M7 | Y | 91.5 | 91.5 | 9.409e-14 | 32 |
| 23 | M7 | X | 15.05 | 15.05 | 1.044e-13 | 32 |
| 24 | M7 | Y | 43 | 43 | 1.044e-13 | 32 |
| 25 | M8 | X | 15.05 | 15.05 | 1.081e-13 | 32 |
| 26 | M8 | Y | 43 | 43 | 1.081e-13 | 32 |
| 27 | M8 | X | 15.05 | 15.05 | 1.777e-13 | 32 |
| 28 | M8 | Y | 43 | 43 | 1.777e-13 | 32 |
| 29 | M9 | X | 15.05 | 15.05 | 2.359e-16 | 32 |
| 30 | M9 | Y | 43 | 43 | 2.359e-16 | 32 |
| 31 | M9 | X | 15.05 | 15.05 | 2.832e-14 | 32 |
| 32 | M9 | Y | 43 | 43 | 2.832e-14 | 32 |
| 33 | M10 | X | 15.05 | 15.05 | 8.341e-15 | 32 |
| 34 | M10 | Y | 43 | 43 | 8.341e-15 | 32 |
| 35 | M10 | X | 15.05 | 15.05 | 8.758e-14 | 32 |
| 36 | M10 | Y | 43 | 43 | 8.758e-14 | 32 |
| 37 | M10 | Z | 6.66e-16 | 6.66e-16 | 8.758e-14 | 32 |
| 38 | M11 | X | 15.05 | 15.05 | 2.999e-14 | 32 |
| 39 | M11 | Y | 43 | 43 | 2.999e-14 | 32 |
| 40 | M11 | Z | 6.66e-16 | 6.66e-16 | 2.999e-14 | 32 |
| 41 | M11 | X | 15.05 | 15.05 | 2.952e-14 | 32 |
| 42 | M11 | Y | 43 | 43 | 2.952e-14 | 32 |
| 43 | M12 | X | 15.05 | 15.05 | 4.065e-14 | 32 |
| 44 | M12 | Y | 43 | 43 | 4.065e-14 | 32 |
| 45 | M12 | X | 4.3 | 4.3 | 2.433e-14 | 32 |
| 46 | M12 | Y | 43 | 43 | 2.433e-14 | 32 |
| 47 | M13 | X | 4.3 | 4.3 | 2.516e-13 | 32 |
| 48 | M13 | Y | 43 | 43 | 2.516e-13 | 32 |

### *Member Distributed Loads (BLC 17 : BLC 7 Transient Area Loads)*

| | Member Label | Direction | Start Magnitude [lb/ft, F, psf, lb-ft/ft] | End Magnitude [lb/ft, F, psf, lb-ft/ft] | Start Location [(ft, %)] | End Location [(ft, %)] |
|---|---|---|---|---|---|---|
| 1 | M1 | Y | 52 | 52 | 0 | 32 |
| 2 | M2 | Y | 52 | 52 | 1.776e-15 | 32 |
| 3 | M2 | X | 22.75 | 22.75 | 7.008e-15 | 32 |
| 4 | M2 | Y | 65 | 65 | 7.008e-15 | 32 |
| 5 | M3 | X | 22.75 | 22.75 | 1.796e-14 | 32 |
| 6 | M3 | Y | 65 | 65 | 1.796e-14 | 32 |
| 7 | M3 | X | 22.75 | 22.75 | 1.441e-14 | 32 |
| 8 | M3 | Y | 65 | 65 | 1.441e-14 | 32 |
| 9 | M4 | X | 22.75 | 22.75 | 1.962e-14 | 32 |
| 10 | M4 | Y | 65 | 65 | 1.962e-14 | 32 |
| 11 | M4 | X | 22.75 | 22.75 | 2.362e-14 | 32 |
| 12 | M4 | Y | 65 | 65 | 2.362e-14 | 32 |
| 13 | M5 | X | 22.75 | 22.75 | 7.702e-15 | 32 |
| 14 | M5 | Y | 65 | 65 | 7.702e-15 | 32 |
| 15 | M5 | X | 22.75 | 22.75 | 3.081e-14 | 32 |
| 16 | M5 | Y | 65 | 65 | 3.081e-14 | 32 |
| 17 | M6 | X | 22.75 | 22.75 | 9.207e-14 | 32 |
| 18 | M6 | Y | 65 | 65 | 9.207e-14 | 32 |
| 19 | M6 | X | 22.75 | 22.75 | 5.457e-14 | 32 |
| 20 | M6 | Y | 65 | 65 | 5.457e-14 | 32 |
| 21 | M7 | X | 22.75 | 22.75 | 9.409e-14 | 32 |
| 22 | M7 | Y | 65 | 65 | 9.409e-14 | 32 |
| 23 | M7 | X | 3.85 | 3.85 | 1.044e-13 | 32 |
| 24 | M7 | Y | 11 | 11 | 1.044e-13 | 32 |
| 25 | M8 | X | 3.85 | 3.85 | 1.081e-13 | 32 |
| 26 | M8 | Y | 11 | 11 | 1.081e-13 | 32 |
| 27 | M8 | X | 3.85 | 3.85 | 1.777e-13 | 32 |
| 28 | M8 | Y | 11 | 11 | 1.777e-13 | 32 |
| 29 | M9 | X | 3.85 | 3.85 | 2.359e-16 | 32 |
| 30 | M9 | Y | 11 | 11 | 2.359e-16 | 32 |
| 31 | M9 | X | 3.85 | 3.85 | 2.832e-14 | 32 |
| 32 | M9 | Y | 11 | 11 | 2.832e-14 | 32 |
| 33 | M10 | X | 3.85 | 3.85 | 8.341e-15 | 32 |
| 34 | M10 | Y | 11 | 11 | 8.341e-15 | 32 |
| 35 | M10 | X | 3.85 | 3.85 | 8.758e-14 | 32 |
| 36 | M10 | Y | 11 | 11 | 8.758e-14 | 32 |
| 37 | M10 | Z | 1.704e-16 | 1.704e-16 | 8.758e-14 | 32 |
| 38 | M11 | X | 3.85 | 3.85 | 2.999e-14 | 32 |
| 39 | M11 | Y | 11 | 11 | 2.999e-14 | 32 |
| 40 | M11 | Z | 1.704e-16 | 1.704e-16 | 2.999e-14 | 32 |
| 41 | M11 | X | 3.85 | 3.85 | 2.952e-14 | 32 |
| 42 | M11 | Y | 11 | 11 | 2.952e-14 | 32 |
| 43 | M12 | X | 3.85 | 3.85 | 4.065e-14 | 32 |
| 44 | M12 | Y | 11 | 11 | 4.065e-14 | 32 |
| 45 | M12 | X | 1.1 | 1.1 | 2.433e-14 | 32 |
| 46 | M12 | Y | 11 | 11 | 2.433e-14 | 32 |
| 47 | M13 | X | 1.1 | 1.1 | 2.516e-13 | 32 |
| 48 | M13 | Y | 11 | 11 | 2.516e-13 | 32 |

### *Member Distributed Loads (BLC 18 : BLC 8 Transient Area Loads)*

| | Member Label | Direction | Start Magnitude [lb/ft, F, psf, lb-ft/ft] | End Magnitude [lb/ft, F, psf, lb-ft/ft] | Start Location [(ft, %)] | End Location [(ft, %)] |
|---|---|---|---|---|---|---|
| 1 | M1 | Y | 12.8 | 12.8 | 0 | 32 |
| 2 | M2 | Y | 12.8 | 12.8 | 1.776e-15 | 32 |
| 3 | M2 | X | 5.6 | 5.6 | 7.008e-15 | 32 |

### *Member Distributed Loads (BLC 18 : BLC 8 Transient Area Loads) (Continued)*

| | Member Label | Direction | Start Magnitude [lb/ft, F, psf, lb-ft/ft] | End Magnitude [lb/ft, F, psf, lb-ft/ft] | Start Location [(ft, %)] | End Location [(ft, %)] |
|---|---|---|---|---|---|---|
| 4 | M2 | Y | 16 | 16 | 7.008e-15 | 32 |
| 5 | M3 | X | 5.6 | 5.6 | 1.796e-14 | 32 |
| 6 | M3 | Y | 16 | 16 | 1.796e-14 | 32 |
| 7 | M3 | X | 5.6 | 5.6 | 1.441e-14 | 32 |
| 8 | M3 | Y | 16 | 16 | 1.441e-14 | 32 |
| 9 | M4 | X | 5.6 | 5.6 | 1.962e-14 | 32 |
| 10 | M4 | Y | 16 | 16 | 1.962e-14 | 32 |
| 11 | M4 | X | 5.6 | 5.6 | 2.362e-14 | 32 |
| 12 | M4 | Y | 16 | 16 | 2.362e-14 | 32 |
| 13 | M5 | X | 5.6 | 5.6 | 7.702e-15 | 32 |
| 14 | M5 | Y | 16 | 16 | 7.702e-15 | 32 |
| 15 | M5 | X | 5.6 | 5.6 | 3.081e-14 | 32 |
| 16 | M5 | Y | 16 | 16 | 3.081e-14 | 32 |
| 17 | M6 | X | 5.6 | 5.6 | 9.207e-14 | 32 |
| 18 | M6 | Y | 16 | 16 | 9.207e-14 | 32 |
| 19 | M6 | X | 5.6 | 5.6 | 5.457e-14 | 32 |
| 20 | M6 | Y | 16 | 16 | 5.457e-14 | 32 |
| 21 | M7 | X | 5.6 | 5.6 | 9.409e-14 | 32 |
| 22 | M7 | Y | 16 | 16 | 9.409e-14 | 32 |
| 23 | M7 | X | -15.05 | -15.05 | 1.044e-13 | 32 |
| 24 | M7 | Y | -43 | -43 | 1.044e-13 | 32 |
| 25 | M8 | X | -15.05 | -15.05 | 1.081e-13 | 32 |
| 26 | M8 | Y | -43 | -43 | 1.081e-13 | 32 |
| 27 | M8 | X | -15.05 | -15.05 | 1.777e-13 | 32 |
| 28 | M8 | Y | -43 | -43 | 1.777e-13 | 32 |
| 29 | M9 | X | -15.05 | -15.05 | 2.359e-16 | 32 |
| 30 | M9 | Y | -43 | -43 | 2.359e-16 | 32 |
| 31 | M9 | X | -15.05 | -15.05 | 2.832e-14 | 32 |
| 32 | M9 | Y | -43 | -43 | 2.832e-14 | 32 |
| 33 | M10 | X | -15.05 | -15.05 | 8.341e-15 | 32 |
| 34 | M10 | Y | -43 | -43 | 8.341e-15 | 32 |
| 35 | M10 | X | -15.05 | -15.05 | 8.758e-14 | 32 |
| 36 | M10 | Y | -43 | -43 | 8.758e-14 | 32 |
| 37 | M10 | Z | -6.66e-16 | -6.66e-16 | 8.758e-14 | 32 |
| 38 | M11 | X | -15.05 | -15.05 | 2.999e-14 | 32 |
| 39 | M11 | Y | -43 | -43 | 2.999e-14 | 32 |
| 40 | M11 | Z | -6.66e-16 | -6.66e-16 | 2.999e-14 | 32 |
| 41 | M11 | X | -15.05 | -15.05 | 2.952e-14 | 32 |
| 42 | M11 | Y | -43 | -43 | 2.952e-14 | 32 |
| 43 | M12 | X | -15.05 | -15.05 | 4.065e-14 | 32 |
| 44 | M12 | Y | -43 | -43 | 4.065e-14 | 32 |
| 45 | M12 | X | -4.3 | -4.3 | 2.433e-14 | 32 |
| 46 | M12 | Y | -43 | -43 | 2.433e-14 | 32 |
| 47 | M13 | X | -4.3 | -4.3 | 2.516e-13 | 32 |
| 48 | M13 | Y | -43 | -43 | 2.516e-13 | 32 |

### *Member Distributed Loads (BLC 19 : BLC 9 Transient Area Loads)*

| | Member Label | Direction | Start Magnitude [lb/ft, F, psf, lb-ft/ft] | End Magnitude [lb/ft, F, psf, lb-ft/ft] | Start Location [(ft, %)] | End Location [(ft, %)] |
|---|---|---|---|---|---|---|
| 1 | M107 | Z | 20.9005 | 20.9005 | 0 | 8 |
| 2 | M174 | Z | 20.9005 | 20.9005 | 1.347e-13 | 8 |
| 3 | M108 | Z | 20.555 | 20.2655 | 0 | 0.5045 |
| 4 | M108 | Z | 20.2655 | 20.1543 | 0.5045 | 1.009 |
| 5 | M108 | Z | 20.1543 | 20.09 | 1.009 | 1.5135 |
| 6 | M108 | Z | 20.09 | 19.9355 | 1.5135 | 2.0181 |
| 7 | M108 | Z | 19.9355 | 17.3131 | 2.0181 | 2.5226 |

***Member Distributed Loads (BLC 19 : BLC 9 Transient Area Loads) (Continued)***

| | Member Label | Direction | Start Magnitude [lb/ft, F, psf, lb-ft/ft] | End Magnitude [lb/ft, F, psf, lb-ft/ft] | Start Location [(ft, %)] | End Location [(ft, %)] |
|---|---|---|---|---|---|---|
| 8 | M108 | Z | 17.3131 | 16.7414 | 2.5226 | 3.0271 |
| 9 | M108 | Z | 16.7414 | 18.8046 | 3.0271 | 3.5316 |
| 10 | M108 | Z | 18.8046 | 19.1986 | 3.5316 | 4.0361 |
| 11 | M108 | Z | 19.1986 | 19.4401 | 4.0361 | 4.5406 |
| 12 | M108 | Z | 19.4401 | 19.4515 | 4.5406 | 5.0451 |
| 13 | M108 | Z | 19.4515 | 19.4267 | 5.0451 | 5.5497 |
| 14 | M108 | Z | 19.4267 | 19.2655 | 5.5497 | 6.0542 |
| 15 | M108 | Z | 19.2655 | 19.1895 | 6.0542 | 6.5587 |
| 16 | M108 | Z | 19.1895 | 19.3094 | 6.5587 | 7.0632 |
| 17 | M108 | Z | 19.3094 | 17.5746 | 7.0632 | 7.5677 |
| 18 | M108 | Z | 17.5746 | 16.6406 | 7.5677 | 8.0722 |
| 19 | M108 | Z | 16.6406 | 17.576 | 8.0722 | 8.5768 |
| 20 | M108 | Z | 17.576 | 18.1157 | 8.5768 | 9.0813 |
| 21 | M108 | Z | 18.1157 | 18.6275 | 9.0813 | 9.5858 |
| 22 | M108 | Z | 18.6275 | 18.5593 | 9.5858 | 10.0903 |
| 23 | M108 | Z | 18.5593 | 18.5178 | 10.0903 | 10.5948 |
| 24 | M109 | Z | 19.6498 | 18.2018 | 0 | 0.5045 |
| 25 | M109 | Z | 18.2018 | 17.2202 | 0.5045 | 1.009 |
| 26 | M109 | Z | 17.2202 | 17.3704 | 1.009 | 1.5135 |
| 27 | M109 | Z | 17.3704 | 17.66 | 1.5135 | 2.0181 |
| 28 | M109 | Z | 17.66 | 17.5636 | 2.0181 | 2.5226 |
| 29 | M109 | Z | 17.5636 | 16.9997 | 2.5226 | 3.0271 |
| 30 | M109 | Z | 16.9997 | 17.1846 | 3.0271 | 3.5316 |
| 31 | M109 | Z | 17.1846 | 17.183 | 3.5316 | 4.0361 |
| 32 | M109 | Z | 17.183 | 16.7988 | 4.0361 | 4.5406 |
| 33 | M109 | Z | 16.7988 | 16.821 | 4.5406 | 5.0451 |
| 34 | M109 | Z | 16.821 | 16.5625 | 5.0451 | 5.5497 |
| 35 | M109 | Z | 16.5625 | 17.0191 | 5.5497 | 6.0542 |
| 36 | M109 | Z | 17.0191 | 17.065 | 6.0542 | 6.5587 |
| 37 | M109 | Z | 17.065 | 16.9374 | 6.5587 | 7.0632 |
| 38 | M109 | Z | 16.9374 | 16.5614 | 7.0632 | 7.5677 |
| 39 | M109 | Z | 16.5614 | 16.5858 | 7.5677 | 8.0722 |
| 40 | M109 | Z | 16.5858 | 16.7014 | 8.0722 | 8.5768 |
| 41 | M109 | Z | 16.7014 | 16.3011 | 8.5768 | 9.0813 |
| 42 | M109 | Z | 16.3011 | 16.3318 | 9.0813 | 9.5858 |
| 43 | M109 | Z | 16.3318 | 16.2056 | 9.5858 | 10.0903 |
| 44 | M109 | Z | 16.2056 | 16.0123 | 10.0903 | 10.5948 |
| 45 | M110 | Z | 15.6802 | 15.7666 | 0 | 0.5045 |
| 46 | M110 | Z | 15.7666 | 16.2366 | 0.5045 | 1.009 |
| 47 | M110 | Z | 16.2366 | 16.014 | 1.009 | 1.5135 |
| 48 | M110 | Z | 16.014 | 15.4463 | 1.5135 | 2.0181 |
| 49 | M110 | Z | 15.4463 | 15.7393 | 2.0181 | 2.5226 |
| 50 | M110 | Z | 15.7393 | 15.5461 | 2.5226 | 3.0271 |
| 51 | M110 | Z | 15.5461 | 15.4258 | 3.0271 | 3.5316 |
| 52 | M110 | Z | 15.4258 | 15.4936 | 3.5316 | 4.0361 |
| 53 | M110 | Z | 15.4936 | 15.2078 | 4.0361 | 4.5406 |
| 54 | M110 | Z | 15.2078 | 15.1589 | 4.5406 | 5.0451 |
| 55 | M110 | Z | 15.1589 | 14.9504 | 5.0451 | 5.5497 |
| 56 | M110 | Z | 14.9504 | 15.0617 | 5.5497 | 6.0542 |
| 57 | M110 | Z | 15.0617 | 15.1851 | 6.0542 | 6.5587 |
| 58 | M110 | Z | 15.1851 | 14.8315 | 6.5587 | 7.0632 |
| 59 | M110 | Z | 14.8315 | 14.6756 | 7.0632 | 7.5677 |
| 60 | M110 | Z | 14.6756 | 14.7013 | 7.5677 | 8.0722 |
| 61 | M110 | Z | 14.7013 | 14.7158 | 8.0722 | 8.5768 |
| 62 | M110 | Z | 14.7158 | 14.6857 | 8.5768 | 9.0813 |

***Member Distributed Loads (BLC 19 : BLC 9 Transient Area Loads) (Continued)***

| | Member Label | Direction | Start Magnitude [lb/ft, F, psf, lb-ft/ft] | End Magnitude [lb/ft, F, psf, lb-ft/ft] | Start Location [(ft, %)] | End Location [(ft, %)] |
|---|---|---|---|---|---|---|
| 63 | M110 | Z | 14.6857 | 14.6249 | 9.0813 | 9.5858 |
| 64 | M110 | Z | 14.6249 | 14.2507 | 9.5858 | 10.0903 |
| 65 | M110 | Z | 14.2507 | 13.6245 | 10.0903 | 10.5948 |
| 66 | M111 | Z | 14.0268 | 14.1444 | 0 | 0.5045 |
| 67 | M111 | Z | 14.1444 | 14.1067 | 0.5045 | 1.009 |
| 68 | M111 | Z | 14.1067 | 14.1519 | 1.009 | 1.5135 |
| 69 | M111 | Z | 14.1519 | 14.0856 | 1.5135 | 2.0181 |
| 70 | M111 | Z | 14.0856 | 13.878 | 2.0181 | 2.5226 |
| 71 | M111 | Z | 13.878 | 13.8506 | 2.5226 | 3.0271 |
| 72 | M111 | Z | 13.8506 | 13.4651 | 3.0271 | 3.5316 |
| 73 | M111 | Z | 13.4651 | 13.5682 | 3.5316 | 4.0361 |
| 74 | M111 | Z | 13.5682 | 13.9786 | 4.0361 | 4.5406 |
| 75 | M111 | Z | 13.9786 | 13.6255 | 4.5406 | 5.0451 |
| 76 | M111 | Z | 13.6255 | 13.0365 | 5.0451 | 5.5497 |
| 77 | M111 | Z | 13.0365 | 13.2809 | 5.5497 | 6.0542 |
| 78 | M111 | Z | 13.2809 | 13.4876 | 6.0542 | 6.5587 |
| 79 | M111 | Z | 13.4876 | 12.9581 | 6.5587 | 7.0632 |
| 80 | M111 | Z | 12.9581 | 12.7807 | 7.0632 | 7.5677 |
| 81 | M111 | Z | 12.7807 | 12.7523 | 7.5677 | 8.0722 |
| 82 | M111 | Z | 12.7523 | 12.9904 | 8.0722 | 8.5768 |
| 83 | M111 | Z | 12.9904 | 12.6642 | 8.5768 | 9.0813 |
| 84 | M111 | Z | 12.6642 | 12.3428 | 9.0813 | 9.5858 |
| 85 | M111 | Z | 12.3428 | 12.3858 | 9.5858 | 10.0903 |
| 86 | M111 | Z | 12.3858 | 11.8729 | 10.0903 | 10.5948 |
| 87 | M112 | Z | 12.8053 | 12.6462 | 0 | 0.5045 |
| 88 | M112 | Z | 12.6462 | 12.4934 | 0.5045 | 1.009 |
| 89 | M112 | Z | 12.4934 | 12.2866 | 1.009 | 1.5135 |
| 90 | M112 | Z | 12.2866 | 12.151 | 1.5135 | 2.0181 |
| 91 | M112 | Z | 12.151 | 12.0378 | 2.0181 | 2.5226 |
| 92 | M112 | Z | 12.0378 | 11.8841 | 2.5226 | 3.0271 |
| 93 | M112 | Z | 11.8841 | 11.9576 | 3.0271 | 3.5316 |
| 94 | M112 | Z | 11.9576 | 11.9379 | 3.5316 | 4.0361 |
| 95 | M112 | Z | 11.9379 | 11.5073 | 4.0361 | 4.5406 |
| 96 | M112 | Z | 11.5073 | 11.3923 | 4.5406 | 5.0451 |
| 97 | M112 | Z | 11.3923 | 11.6009 | 5.0451 | 5.5497 |
| 98 | M112 | Z | 11.6009 | 11.4101 | 5.5497 | 6.0542 |
| 99 | M112 | Z | 11.4101 | 11.1128 | 6.0542 | 6.5587 |
| 100 | M112 | Z | 11.1128 | 11.2879 | 6.5587 | 7.0632 |
| 101 | M112 | Z | 11.2879 | 11.2073 | 7.0632 | 7.5677 |
| 102 | M112 | Z | 11.2073 | 11.1657 | 7.5677 | 8.0722 |
| 103 | M112 | Z | 11.1657 | 11.0932 | 8.0722 | 8.5768 |
| 104 | M112 | Z | 11.0932 | 10.8636 | 8.5768 | 9.0813 |
| 105 | M112 | Z | 10.8636 | 10.9982 | 9.0813 | 9.5858 |
| 106 | M112 | Z | 10.9982 | 10.7374 | 9.5858 | 10.0903 |
| 107 | M112 | Z | 10.7374 | 10.2165 | 10.0903 | 10.5948 |
| 108 | M113 | Z | 10.7405 | 10.55 | 0 | 0.5045 |
| 109 | M113 | Z | 10.55 | 10.4517 | 0.5045 | 1.009 |
| 110 | M113 | Z | 10.4517 | 10.5822 | 1.009 | 1.5135 |
| 111 | M113 | Z | 10.5822 | 10.1772 | 1.5135 | 2.0181 |
| 112 | M113 | Z | 10.1772 | 9.8644 | 2.0181 | 2.5226 |
| 113 | M113 | Z | 9.8644 | 9.9348 | 2.5226 | 3.0271 |
| 114 | M113 | Z | 9.9348 | 10.0553 | 3.0271 | 3.5316 |
| 115 | M113 | Z | 10.0553 | 10.2711 | 3.5316 | 4.0361 |
| 116 | M113 | Z | 10.2711 | 9.7814 | 4.0361 | 4.5406 |
| 117 | M113 | Z | 9.7814 | 9.2233 | 4.5406 | 5.0451 |

***Member Distributed Loads (BLC 19 : BLC 9 Transient Area Loads) (Continued)***

| | Member Label | Direction | Start Magnitude [lb/ft, F, psf, lb-ft/ft] | End Magnitude [lb/ft, F, psf, lb-ft/ft] | Start Location [(ft, %)] | End Location [(ft, %)] |
|---|---|---|---|---|---|---|
| 118 | M113 | Z | 9.2233 | 9.4315 | 5.0451 | 5.5497 |
| 119 | M113 | Z | 9.4315 | 9.9339 | 5.5497 | 6.0542 |
| 120 | M113 | Z | 9.9339 | 9.8703 | 6.0542 | 6.5587 |
| 121 | M113 | Z | 9.8703 | 9.5869 | 6.5587 | 7.0632 |
| 122 | M113 | Z | 9.5869 | 9.5112 | 7.0632 | 7.5677 |
| 123 | M113 | Z | 9.5112 | 9.3265 | 7.5677 | 8.0722 |
| 124 | M113 | Z | 9.3265 | 8.8979 | 8.0722 | 8.5768 |
| 125 | M113 | Z | 8.8979 | 8.8284 | 8.5768 | 9.0813 |
| 126 | M113 | Z | 8.8284 | 8.8533 | 9.0813 | 9.5858 |
| 127 | M113 | Z | 8.8533 | 8.724 | 9.5858 | 10.0903 |
| 128 | M113 | Z | 8.724 | 8.8074 | 10.0903 | 10.5948 |
| 129 | M114 | Z | 8.4867 | 8.8768 | 0 | 0.5045 |
| 130 | M114 | Z | 8.8768 | 8.9301 | 0.5045 | 1.009 |
| 131 | M114 | Z | 8.9301 | 8.86 | 1.009 | 1.5135 |
| 132 | M114 | Z | 8.86 | 8.7024 | 1.5135 | 2.0181 |
| 133 | M114 | Z | 8.7024 | 8.3429 | 2.0181 | 2.5226 |
| 134 | M114 | Z | 8.3429 | 8.2146 | 2.5226 | 3.0271 |
| 135 | M114 | Z | 8.2146 | 8.1214 | 3.0271 | 3.5316 |
| 136 | M114 | Z | 8.1214 | 8.0424 | 3.5316 | 4.0361 |
| 137 | M114 | Z | 8.0424 | 7.9987 | 4.0361 | 4.5406 |
| 138 | M114 | Z | 7.9987 | 7.8481 | 4.5406 | 5.0451 |
| 139 | M114 | Z | 7.8481 | 7.9806 | 5.0451 | 5.5497 |
| 140 | M114 | Z | 7.9806 | 8.0475 | 5.5497 | 6.0542 |
| 141 | M114 | Z | 8.0475 | 7.7517 | 6.0542 | 6.5587 |
| 142 | M114 | Z | 7.7517 | 7.489 | 6.5587 | 7.0632 |
| 143 | M114 | Z | 7.489 | 6.8614 | 7.0632 | 7.5677 |
| 144 | M114 | Z | 6.8614 | 6.9796 | 7.5677 | 8.0722 |
| 145 | M114 | Z | 6.9796 | 7.4859 | 8.0722 | 8.5768 |
| 146 | M114 | Z | 7.4859 | 7.4428 | 8.5768 | 9.0813 |
| 147 | M114 | Z | 7.4428 | 7.5377 | 9.0813 | 9.5858 |
| 148 | M114 | Z | 7.5377 | 7.4906 | 9.5858 | 10.0903 |
| 149 | M114 | Z | 7.4906 | 7.3531 | 10.0903 | 10.5948 |
| 150 | M115 | Z | 6.7939 | 6.803 | 0 | 0.5045 |
| 151 | M115 | Z | 6.803 | 6.6205 | 0.5045 | 1.009 |
| 152 | M115 | Z | 6.6205 | 6.5499 | 1.009 | 1.5135 |
| 153 | M115 | Z | 6.5499 | 6.7094 | 1.5135 | 2.0181 |
| 154 | M115 | Z | 6.7094 | 6.697 | 2.0181 | 2.5226 |
| 155 | M115 | Z | 6.697 | 6.6324 | 2.5226 | 3.0271 |
| 156 | M115 | Z | 6.6324 | 6.5044 | 3.0271 | 3.5316 |
| 157 | M115 | Z | 6.5044 | 6.2842 | 3.5316 | 4.0361 |
| 158 | M115 | Z | 6.2842 | 6.3303 | 4.0361 | 4.5406 |
| 159 | M115 | Z | 6.3303 | 6.452 | 4.5406 | 5.0451 |
| 160 | M115 | Z | 6.452 | 6.2102 | 5.0451 | 5.5497 |
| 161 | M115 | Z | 6.2102 | 5.9316 | 5.5497 | 6.0542 |
| 162 | M115 | Z | 5.9316 | 5.7991 | 6.0542 | 6.5587 |
| 163 | M115 | Z | 5.7991 | 5.7628 | 6.5587 | 7.0632 |
| 164 | M115 | Z | 5.7628 | 5.6691 | 7.0632 | 7.5677 |
| 165 | M115 | Z | 5.6691 | 5.5085 | 7.5677 | 8.0722 |
| 166 | M115 | Z | 5.5085 | 5.5597 | 8.0722 | 8.5768 |
| 167 | M115 | Z | 5.5597 | 5.5806 | 8.5768 | 9.0813 |
| 168 | M115 | Z | 5.5806 | 5.3103 | 9.0813 | 9.5858 |
| 169 | M115 | Z | 5.3103 | 5.1677 | 9.5858 | 10.0903 |
| 170 | M115 | Z | 5.1677 | 5.2961 | 10.0903 | 10.5948 |
| 171 | M116 | Z | 4.6105 | 4.9709 | 0 | 0.5045 |
| 172 | M116 | Z | 4.9709 | 5.0061 | 0.5045 | 1.009 |

***Member Distributed Loads (BLC 19 : BLC 9 Transient Area Loads) (Continued)***

| | Member Label | Direction | Start Magnitude [lb/ft, F, psf, lb-ft/ft] | End Magnitude [lb/ft, F, psf, lb-ft/ft] | Start Location [(ft, %)] | End Location [(ft, %)] |
|---|---|---|---|---|---|---|
| 173 | M116 | Z | 5.0061 | 4.8858 | 1.009 | 1.5135 |
| 174 | M116 | Z | 4.8858 | 4.8734 | 1.5135 | 2.0181 |
| 175 | M116 | Z | 4.8734 | 4.8042 | 2.0181 | 2.5226 |
| 176 | M116 | Z | 4.8042 | 4.7414 | 2.5226 | 3.0271 |
| 177 | M116 | Z | 4.7414 | 4.5426 | 3.0271 | 3.5316 |
| 178 | M116 | Z | 4.5426 | 4.4159 | 3.5316 | 4.0361 |
| 179 | M116 | Z | 4.4159 | 4.5155 | 4.0361 | 4.5406 |
| 180 | M116 | Z | 4.5155 | 4.4246 | 4.5406 | 5.0451 |
| 181 | M116 | Z | 4.4246 | 4.2971 | 5.0451 | 5.5497 |
| 182 | M116 | Z | 4.2971 | 4.2132 | 5.5497 | 6.0542 |
| 183 | M116 | Z | 4.2132 | 4.0114 | 6.0542 | 6.5587 |
| 184 | M116 | Z | 4.0114 | 3.9113 | 6.5587 | 7.0632 |
| 185 | M116 | Z | 3.9113 | 3.7867 | 7.0632 | 7.5677 |
| 186 | M116 | Z | 3.7867 | 3.6504 | 7.5677 | 8.0722 |
| 187 | M116 | Z | 3.6504 | 3.6872 | 8.0722 | 8.5768 |
| 188 | M116 | Z | 3.6872 | 3.6908 | 8.5768 | 9.0813 |
| 189 | M116 | Z | 3.6908 | 3.5202 | 9.0813 | 9.5858 |
| 190 | M116 | Z | 3.5202 | 3.5535 | 9.5858 | 10.0903 |
| 191 | M116 | Z | 3.5535 | 3.8632 | 10.0903 | 10.5948 |
| 192 | M117 | Z | 3.6511 | 3.2242 | 0 | 0.5045 |
| 193 | M117 | Z | 3.2242 | 3.0957 | 0.5045 | 1.009 |
| 194 | M117 | Z | 3.0957 | 2.9851 | 1.009 | 1.5135 |
| 195 | M117 | Z | 2.9851 | 2.83 | 1.5135 | 2.0181 |
| 196 | M117 | Z | 2.83 | 2.8838 | 2.0181 | 2.5226 |
| 197 | M117 | Z | 2.8838 | 2.9269 | 2.5226 | 3.0271 |
| 198 | M117 | Z | 2.9269 | 2.881 | 3.0271 | 3.5316 |
| 199 | M117 | Z | 2.881 | 2.7323 | 3.5316 | 4.0361 |
| 200 | M117 | Z | 2.7323 | 2.5911 | 4.0361 | 4.5406 |
| 201 | M117 | Z | 2.5911 | 2.5299 | 4.5406 | 5.0451 |
| 202 | M117 | Z | 2.5299 | 2.4696 | 5.0451 | 5.5497 |
| 203 | M117 | Z | 2.4696 | 2.1866 | 5.5497 | 6.0542 |
| 204 | M117 | Z | 2.1866 | 2.1019 | 6.0542 | 6.5587 |
| 205 | M117 | Z | 2.1019 | 2.2041 | 6.5587 | 7.0632 |
| 206 | M117 | Z | 2.2041 | 2.163 | 7.0632 | 7.5677 |
| 207 | M117 | Z | 2.163 | 2.1181 | 7.5677 | 8.0722 |
| 208 | M117 | Z | 2.1181 | 2.0297 | 8.0722 | 8.5768 |
| 209 | M117 | Z | 2.0297 | 1.8968 | 8.5768 | 9.0813 |
| 210 | M117 | Z | 1.8968 | 1.6707 | 9.0813 | 9.5858 |
| 211 | M117 | Z | 1.6707 | 1.5896 | 9.5858 | 10.0903 |
| 212 | M117 | Z | 1.5896 | 1.7254 | 10.0903 | 10.5948 |
| 213 | M175 | Z | 20.9134 | 20.7766 | 0 | 0.5 |
| 214 | M175 | Z | 20.7766 | 20.6398 | 0.5 | 1 |
| 215 | M175 | Z | 20.6398 | 20.5714 | 1 | 1.5 |
| 216 | M175 | Z | 20.5714 | 20.503 | 1.5 | 2 |
| 217 | M175 | Z | 20.503 | 20.3663 | 2 | 2.5 |
| 218 | M175 | Z | 20.3663 | 20.2979 | 2.5 | 3 |
| 219 | M175 | Z | 20.2979 | 20.1611 | 3 | 3.5 |
| 220 | M175 | Z | 20.1611 | 20.0243 | 3.5 | 4 |
| 221 | M175 | Z | 20.0243 | 20.0243 | 4 | 4.5 |
| 222 | M175 | Z | 20.0243 | 19.8875 | 4.5 | 5 |
| 223 | M175 | Z | 19.8875 | 19.7507 | 5 | 5.5 |
| 224 | M175 | Z | 19.7507 | 19.7507 | 5.5 | 6 |
| 225 | M175 | Z | 19.7507 | 19.6139 | 6 | 6.5 |
| 226 | M175 | Z | 19.6139 | 19.4916 | 6.5 | 7 |
| 227 | M175 | Z | 19.4916 | 19.5306 | 7 | 7.5 |

***Member Distributed Loads (BLC 19 : BLC 9 Transient Area Loads) (Continued)***

| | Member Label | Direction | Start Magnitude [lb/ft, F, psf, lb-ft/ft] | End Magnitude [lb/ft, F, psf, lb-ft/ft] | Start Location [(ft, %)] | End Location [(ft, %)] |
|---|---|---|---|---|---|---|
| 228 | M175 | Z | 19.5306 | 19.4432 | 7.5 | 8 |
| 229 | M175 | Z | 19.4432 | 19.3551 | 8 | 8.5 |
| 230 | M175 | Z | 19.3551 | 19.3255 | 8.5 | 9 |
| 231 | M175 | Z | 19.3255 | 19.2041 | 9 | 9.5 |
| 232 | M175 | Z | 19.2041 | 19.0683 | 9.5 | 10 |
| 233 | M176 | Z | 19.2118 | 19.0744 | 0 | 0.5 |
| 234 | M176 | Z | 19.0744 | 18.938 | 0.5 | 1 |
| 235 | M176 | Z | 18.938 | 18.8696 | 1 | 1.5 |
| 236 | M176 | Z | 18.8696 | 18.5747 | 1.5 | 2 |
| 237 | M176 | Z | 18.5747 | 18.4558 | 2 | 2.5 |
| 238 | M176 | Z | 18.4558 | 18.8362 | 2.5 | 3 |
| 239 | M176 | Z | 18.8362 | 18.8262 | 3 | 3.5 |
| 240 | M176 | Z | 18.8262 | 18.1871 | 3.5 | 4 |
| 241 | M176 | Z | 18.1871 | 17.8406 | 4 | 4.5 |
| 242 | M176 | Z | 17.8406 | 18.008 | 4.5 | 5 |
| 243 | M176 | Z | 18.008 | 17.7067 | 5 | 5.5 |
| 244 | M176 | Z | 17.7067 | 17.4863 | 5.5 | 6 |
| 245 | M176 | Z | 17.4863 | 17.634 | 6 | 6.5 |
| 246 | M176 | Z | 17.634 | 17.5483 | 6.5 | 7 |
| 247 | M176 | Z | 17.5483 | 17.2643 | 7 | 7.5 |
| 248 | M176 | Z | 17.2643 | 17.4105 | 7.5 | 8 |
| 249 | M176 | Z | 17.4105 | 17.456 | 8 | 8.5 |
| 250 | M176 | Z | 17.456 | 17.3192 | 8.5 | 9 |
| 251 | M176 | Z | 17.3192 | 17.2099 | 9 | 9.5 |
| 252 | M176 | Z | 17.2099 | 16.6222 | 9.5 | 10 |
| 253 | M177 | Z | 17.5642 | 16.8355 | 0 | 0.5 |
| 254 | M177 | Z | 16.8355 | 16.5367 | 0.5 | 1 |
| 255 | M177 | Z | 16.5367 | 16.7205 | 1 | 1.5 |
| 256 | M177 | Z | 16.7205 | 16.7698 | 1.5 | 2 |
| 257 | M177 | Z | 16.7698 | 16.6277 | 2 | 2.5 |
| 258 | M177 | Z | 16.6277 | 16.6035 | 2.5 | 3 |
| 259 | M177 | Z | 16.6035 | 16.3627 | 3 | 3.5 |
| 260 | M177 | Z | 16.3627 | 16.0849 | 3.5 | 4 |
| 261 | M177 | Z | 16.0849 | 16.429 | 4 | 4.5 |
| 262 | M177 | Z | 16.429 | 16.3537 | 4.5 | 5 |
| 263 | M177 | Z | 16.3537 | 15.7132 | 5 | 5.5 |
| 264 | M177 | Z | 15.7132 | 15.6639 | 5.5 | 6 |
| 265 | M177 | Z | 15.6639 | 15.7305 | 6 | 6.5 |
| 266 | M177 | Z | 15.7305 | 15.4767 | 6.5 | 7 |
| 267 | M177 | Z | 15.4767 | 15.8057 | 7 | 7.5 |
| 268 | M177 | Z | 15.8057 | 15.9435 | 7.5 | 8 |
| 269 | M177 | Z | 15.9435 | 15.2914 | 8 | 8.5 |
| 270 | M177 | Z | 15.2914 | 15.1077 | 8.5 | 9 |
| 271 | M177 | Z | 15.1077 | 15.2866 | 9 | 9.5 |
| 272 | M177 | Z | 15.2866 | 15.3626 | 9.5 | 10 |
| 273 | M178 | Z | 15.4848 | 14.9911 | 0 | 0.5 |
| 274 | M178 | Z | 14.9911 | 14.8551 | 0.5 | 1 |
| 275 | M178 | Z | 14.8551 | 14.7351 | 1 | 1.5 |
| 276 | M178 | Z | 14.7351 | 14.7202 | 1.5 | 2 |
| 277 | M178 | Z | 14.7202 | 14.8061 | 2 | 2.5 |
| 278 | M178 | Z | 14.8061 | 14.6126 | 2.5 | 3 |
| 279 | M178 | Z | 14.6126 | 14.1722 | 3 | 3.5 |
| 280 | M178 | Z | 14.1722 | 14.155 | 3.5 | 4 |
| 281 | M178 | Z | 14.155 | 14.3176 | 4 | 4.5 |
| 282 | M178 | Z | 14.3176 | 14.1773 | 4.5 | 5 |

***Member Distributed Loads (BLC 19 : BLC 9 Transient Area Loads) (Continued)***

| | Member Label | Direction | Start Magnitude [lb/ft, F, psf, lb-ft/ft] | End Magnitude [lb/ft, F, psf, lb-ft/ft] | Start Location [(ft, %)] | End Location [(ft, %)] |
|---|---|---|---|---|---|---|
| 283 | M178 | Z | 14.1773 | 14.0559 | 5 | 5.5 |
| 284 | M178 | Z | 14.0559 | 14.0095 | 5.5 | 6 |
| 285 | M178 | Z | 14.0095 | 13.8781 | 6 | 6.5 |
| 286 | M178 | Z | 13.8781 | 13.7596 | 6.5 | 7 |
| 287 | M178 | Z | 13.7596 | 13.6081 | 7 | 7.5 |
| 288 | M178 | Z | 13.6081 | 13.5434 | 7.5 | 8 |
| 289 | M178 | Z | 13.5434 | 13.6394 | 8 | 8.5 |
| 290 | M178 | Z | 13.6394 | 13.636 | 8.5 | 9 |
| 291 | M178 | Z | 13.636 | 13.4872 | 9 | 9.5 |
| 292 | M178 | Z | 13.4872 | 12.9269 | 9.5 | 10 |
| 293 | M179 | Z | 12.9033 | 13.1501 | 0 | 0.5 |
| 294 | M179 | Z | 13.1501 | 12.9647 | 0.5 | 1 |
| 295 | M179 | Z | 12.9647 | 12.7457 | 1 | 1.5 |
| 296 | M179 | Z | 12.7457 | 12.7964 | 1.5 | 2 |
| 297 | M179 | Z | 12.7964 | 12.6607 | 2 | 2.5 |
| 298 | M179 | Z | 12.6607 | 12.4852 | 2.5 | 3 |
| 299 | M179 | Z | 12.4852 | 12.6277 | 3 | 3.5 |
| 300 | M179 | Z | 12.6277 | 12.6528 | 3.5 | 4 |
| 301 | M179 | Z | 12.6528 | 12.2612 | 4 | 4.5 |
| 302 | M179 | Z | 12.2612 | 12.1554 | 4.5 | 5 |
| 303 | M179 | Z | 12.1554 | 12.2637 | 5 | 5.5 |
| 304 | M179 | Z | 12.2637 | 11.982 | 5.5 | 6 |
| 305 | M179 | Z | 11.982 | 11.9533 | 6 | 6.5 |
| 306 | M179 | Z | 11.9533 | 12.0327 | 6.5 | 7 |
| 307 | M179 | Z | 12.0327 | 11.7508 | 7 | 7.5 |
| 308 | M179 | Z | 11.7508 | 11.5153 | 7.5 | 8 |
| 309 | M179 | Z | 11.5153 | 11.3996 | 8 | 8.5 |
| 310 | M179 | Z | 11.3996 | 11.4283 | 8.5 | 9 |
| 311 | M179 | Z | 11.4283 | 11.312 | 9 | 9.5 |
| 312 | M179 | Z | 11.312 | 11.0828 | 9.5 | 10 |
| 313 | M180 | Z | 10.6017 | 11.081 | 0 | 0.5 |
| 314 | M180 | Z | 11.081 | 11.4013 | 0.5 | 1 |
| 315 | M180 | Z | 11.4013 | 11.3054 | 1 | 1.5 |
| 316 | M180 | Z | 11.3054 | 10.9807 | 1.5 | 2 |
| 317 | M180 | Z | 10.9807 | 10.9021 | 2 | 2.5 |
| 318 | M180 | Z | 10.9021 | 10.9122 | 2.5 | 3 |
| 319 | M180 | Z | 10.9122 | 10.9138 | 3 | 3.5 |
| 320 | M180 | Z | 10.9138 | 10.6345 | 3.5 | 4 |
| 321 | M180 | Z | 10.6345 | 10.1962 | 4 | 4.5 |
| 322 | M180 | Z | 10.1962 | 10.2217 | 4.5 | 5 |
| 323 | M180 | Z | 10.2217 | 10.2029 | 5 | 5.5 |
| 324 | M180 | Z | 10.2029 | 10.1223 | 5.5 | 6 |
| 325 | M180 | Z | 10.1223 | 10.0854 | 6 | 6.5 |
| 326 | M180 | Z | 10.0854 | 10.0398 | 6.5 | 7 |
| 327 | M180 | Z | 10.0398 | 9.9184 | 7 | 7.5 |
| 328 | M180 | Z | 9.9184 | 9.8279 | 7.5 | 8 |
| 329 | M180 | Z | 9.8279 | 9.5891 | 8 | 8.5 |
| 330 | M180 | Z | 9.5891 | 9.3528 | 8.5 | 9 |
| 331 | M180 | Z | 9.3528 | 9.4785 | 9 | 9.5 |
| 332 | M180 | Z | 9.4785 | 9.5574 | 9.5 | 10 |
| 333 | M181 | Z | 9.3615 | 9.183 | 0 | 0.5 |
| 334 | M181 | Z | 9.183 | 9.0458 | 0.5 | 1 |
| 335 | M181 | Z | 9.0458 | 9.0672 | 1 | 1.5 |
| 336 | M181 | Z | 9.0672 | 9.0424 | 1.5 | 2 |
| 337 | M181 | Z | 9.0424 | 8.7725 | 2 | 2.5 |

***Member Distributed Loads (BLC 19 : BLC 9 Transient Area Loads) (Continued)***

| | Member Label | Direction | Start Magnitude [lb/ft, F, psf, lb-ft/ft] | End Magnitude [lb/ft, F, psf, lb-ft/ft] | Start Location [(ft, %)] | End Location [(ft, %)] |
|---|---|---|---|---|---|---|
| 338 | M181 | Z | 8.7725 | 8.5269 | 2.5 | 3 |
| 339 | M181 | Z | 8.5269 | 8.5006 | 3 | 3.5 |
| 340 | M181 | Z | 8.5006 | 8.7944 | 3.5 | 4 |
| 341 | M181 | Z | 8.7944 | 8.5663 | 4 | 4.5 |
| 342 | M181 | Z | 8.5663 | 8.3352 | 4.5 | 5 |
| 343 | M181 | Z | 8.3352 | 8.738 | 5 | 5.5 |
| 344 | M181 | Z | 8.738 | 8.4512 | 5.5 | 6 |
| 345 | M181 | Z | 8.4512 | 7.9871 | 6 | 6.5 |
| 346 | M181 | Z | 7.9871 | 7.9434 | 6.5 | 7 |
| 347 | M181 | Z | 7.9434 | 7.8398 | 7 | 7.5 |
| 348 | M181 | Z | 7.8398 | 7.6841 | 7.5 | 8 |
| 349 | M181 | Z | 7.6841 | 7.6074 | 8 | 8.5 |
| 350 | M181 | Z | 7.6074 | 7.5376 | 8.5 | 9 |
| 351 | M181 | Z | 7.5376 | 7.4032 | 9 | 9.5 |
| 352 | M181 | Z | 7.4032 | 7.269 | 9.5 | 10 |
| 353 | M182 | Z | 7.3545 | 7.2916 | 0 | 0.5 |
| 354 | M182 | Z | 7.2916 | 7.2008 | 0.5 | 1 |
| 355 | M182 | Z | 7.2008 | 7.1655 | 1 | 1.5 |
| 356 | M182 | Z | 7.1655 | 7.2419 | 1.5 | 2 |
| 357 | M182 | Z | 7.2419 | 7.0455 | 2 | 2.5 |
| 358 | M182 | Z | 7.0455 | 6.6861 | 2.5 | 3 |
| 359 | M182 | Z | 6.6861 | 6.6671 | 3 | 3.5 |
| 360 | M182 | Z | 6.6671 | 6.5097 | 3.5 | 4 |
| 361 | M182 | Z | 6.5097 | 6.3436 | 4 | 4.5 |
| 362 | M182 | Z | 6.3436 | 6.3465 | 4.5 | 5 |
| 363 | M182 | Z | 6.3465 | 6.2321 | 5 | 5.5 |
| 364 | M182 | Z | 6.2321 | 6.0855 | 5.5 | 6 |
| 365 | M182 | Z | 6.0855 | 6.0825 | 6 | 6.5 |
| 366 | M182 | Z | 6.0825 | 6.2341 | 6.5 | 7 |
| 367 | M182 | Z | 6.2341 | 6.1338 | 7 | 7.5 |
| 368 | M182 | Z | 6.1338 | 5.8938 | 7.5 | 8 |
| 369 | M182 | Z | 5.8938 | 5.8723 | 8 | 8.5 |
| 370 | M182 | Z | 5.8723 | 5.8318 | 8.5 | 9 |
| 371 | M182 | Z | 5.8318 | 5.7296 | 9 | 9.5 |
| 372 | M182 | Z | 5.7296 | 5.7574 | 9.5 | 10 |
| 373 | M183 | Z | 5.2545 | 5.5288 | 0 | 0.5 |
| 374 | M183 | Z | 5.5288 | 5.3686 | 0.5 | 1 |
| 375 | M183 | Z | 5.3686 | 5.2892 | 1 | 1.5 |
| 376 | M183 | Z | 5.2892 | 5.2828 | 1.5 | 2 |
| 377 | M183 | Z | 5.2828 | 4.9877 | 2 | 2.5 |
| 378 | M183 | Z | 4.9877 | 4.8811 | 2.5 | 3 |
| 379 | M183 | Z | 4.8811 | 4.7464 | 3 | 3.5 |
| 380 | M183 | Z | 4.7464 | 4.6115 | 3.5 | 4 |
| 381 | M183 | Z | 4.6115 | 4.5244 | 4 | 4.5 |
| 382 | M183 | Z | 4.5244 | 4.3739 | 4.5 | 5 |
| 383 | M183 | Z | 4.3739 | 4.4721 | 5 | 5.5 |
| 384 | M183 | Z | 4.4721 | 4.6068 | 5.5 | 6 |
| 385 | M183 | Z | 4.6068 | 4.3782 | 6 | 6.5 |
| 386 | M183 | Z | 4.3782 | 4.2405 | 6.5 | 7 |
| 387 | M183 | Z | 4.2405 | 4.1893 | 7 | 7.5 |
| 388 | M183 | Z | 4.1893 | 3.9488 | 7.5 | 8 |
| 389 | M183 | Z | 3.9488 | 3.7911 | 8 | 8.5 |
| 390 | M183 | Z | 3.7911 | 3.7381 | 8.5 | 9 |
| 391 | M183 | Z | 3.7381 | 3.6114 | 9 | 9.5 |
| 392 | M183 | Z | 3.6114 | 3.4712 | 9.5 | 10 |

***Member Distributed Loads (BLC 19 : BLC 9 Transient Area Loads) (Continued)***

| | Member Label | Direction | Start Magnitude [lb/ft, F, psf, lb-ft/ft] | End Magnitude [lb/ft, F, psf, lb-ft/ft] | Start Location [(ft, %)] | End Location [(ft, %)] |
|---|---|---|---|---|---|---|
| 393 | M184 | Z | 3.4158 | 3.5136 | 0 | 0.5 |
| 394 | M184 | Z | 3.5136 | 3.4726 | 0.5 | 1 |
| 395 | M184 | Z | 3.4726 | 3.3219 | 1 | 1.5 |
| 396 | M184 | Z | 3.3219 | 3.2379 | 1.5 | 2 |
| 397 | M184 | Z | 3.2379 | 3.1712 | 2 | 2.5 |
| 398 | M184 | Z | 3.1712 | 3.0482 | 2.5 | 3 |
| 399 | M184 | Z | 3.0482 | 2.9063 | 3 | 3.5 |
| 400 | M184 | Z | 2.9063 | 2.7801 | 3.5 | 4 |
| 401 | M184 | Z | 2.7801 | 2.6471 | 4 | 4.5 |
| 402 | M184 | Z | 2.6471 | 2.5784 | 4.5 | 5 |
| 403 | M184 | Z | 2.5784 | 2.4718 | 5 | 5.5 |
| 404 | M184 | Z | 2.4718 | 2.4183 | 5.5 | 6 |
| 405 | M184 | Z | 2.4183 | 2.404 | 6 | 6.5 |
| 406 | M184 | Z | 2.404 | 2.0938 | 6.5 | 7 |
| 407 | M184 | Z | 2.0938 | 1.9705 | 7 | 7.5 |
| 408 | M184 | Z | 1.9705 | 2.1105 | 7.5 | 8 |
| 409 | M184 | Z | 2.1105 | 2.0015 | 8 | 8.5 |
| 410 | M184 | Z | 2.0015 | 1.7935 | 8.5 | 9 |
| 411 | M184 | Z | 1.7935 | 1.6751 | 9 | 9.5 |
| 412 | M184 | Z | 1.6751 | 1.5941 | 9.5 | 10 |
| 413 | M118 | Z | 1.6429 | 1.6155 | 0 | 0.5025 |
| 414 | M118 | Z | 1.6155 | 1.588 | 0.5025 | 1.005 |
| 415 | M118 | Z | 1.588 | 1.5567 | 1.005 | 1.5075 |
| 416 | M118 | Z | 1.5567 | 1.5094 | 1.5075 | 2.01 |
| 417 | M118 | Z | 1.5094 | 1.4211 | 2.01 | 2.5125 |
| 418 | M118 | Z | 1.4211 | 1.3517 | 2.5125 | 3.015 |
| 419 | M118 | Z | 1.3517 | 1.489 | 3.015 | 3.5175 |
| 420 | M118 | Z | 1.489 | 1.5623 | 3.5175 | 4.02 |
| 421 | M118 | Z | 1.5623 | 1.4504 | 4.02 | 4.5224 |
| 422 | M118 | Z | 1.4504 | 1.3901 | 4.5224 | 5.0249 |
| 423 | M118 | Z | 1.3901 | 1.3486 | 5.0249 | 5.5274 |
| 424 | M118 | Z | 1.3486 | 1.3157 | 5.5274 | 6.0299 |
| 425 | M118 | Z | 1.3157 | 1.2845 | 6.0299 | 6.5324 |
| 426 | M118 | Z | 1.2845 | 1.2379 | 6.5324 | 7.0349 |
| 427 | M118 | Z | 1.2379 | 1.1499 | 7.0349 | 7.5374 |
| 428 | M118 | Z | 1.1499 | 1.1426 | 7.5374 | 8.0399 |
| 429 | M118 | Z | 1.1426 | 1.2675 | 8.0399 | 8.5424 |
| 430 | M118 | Z | 1.2675 | 1.2682 | 8.5424 | 9.0449 |
| 431 | M118 | Z | 1.2682 | 1.1595 | 9.0449 | 9.5474 |
| 432 | M118 | Z | 1.1595 | 1.0895 | 9.5474 | 10.0499 |
| 433 | M185 | Z | 1.6502 | 1.6227 | 0 | 0.5 |
| 434 | M185 | Z | 1.6227 | 1.5953 | 0.5 | 1 |
| 435 | M185 | Z | 1.5953 | 1.5696 | 1 | 1.5 |
| 436 | M185 | Z | 1.5696 | 1.551 | 1.5 | 2 |
| 437 | M185 | Z | 1.551 | 1.5477 | 2 | 2.5 |
| 438 | M185 | Z | 1.5477 | 1.5678 | 2.5 | 3 |
| 439 | M185 | Z | 1.5678 | 1.4628 | 3 | 3.5 |
| 440 | M185 | Z | 1.4628 | 1.3487 | 3.5 | 4 |
| 441 | M185 | Z | 1.3487 | 1.3582 | 4 | 4.5 |
| 442 | M185 | Z | 1.3582 | 1.3552 | 4.5 | 5 |
| 443 | M185 | Z | 1.3552 | 1.3411 | 5 | 5.5 |
| 444 | M185 | Z | 1.3411 | 1.319 | 5.5 | 6 |
| 445 | M185 | Z | 1.319 | 1.2941 | 6 | 6.5 |
| 446 | M185 | Z | 1.2941 | 1.2738 | 6.5 | 7 |
| 447 | M185 | Z | 1.2738 | 1.27 | 7 | 7.5 |

### Member Distributed Loads (BLC 19 : BLC 9 Transient Area Loads) (Continued)

| | Member Label | Direction | Start Magnitude [lb/ft, F, psf, lb-ft/ft] | End Magnitude [lb/ft, F, psf, lb-ft/ft] | Start Location [(ft, %)] | End Location [(ft, %)] |
|---|---|---|---|---|---|---|
| 448 | M185 | Z | 1.27 | 1.2285 | 7.5 | 8 |
| 449 | M185 | Z | 1.2285 | 1.1343 | 8 | 8.5 |
| 450 | M185 | Z | 1.1343 | 1.0934 | 8.5 | 9 |
| 451 | M185 | Z | 1.0934 | 1.1011 | 9 | 9.5 |
| 452 | M185 | Z | 1.1011 | 1.1012 | 9.5 | 10 |

### Member Distributed Loads (BLC 20 : BLC 10 Transient Area Loads)

| | Member Label | Direction | Start Magnitude [lb/ft, F, psf, lb-ft/ft] | End Magnitude [lb/ft, F, psf, lb-ft/ft] | Start Location [(ft, %)] | End Location [(ft, %)] |
|---|---|---|---|---|---|---|
| 1 | M3 | X | 28.6086 | 28.6086 | 1.441e-14 | 32 |
| 2 | M4 | X | 28.6086 | 28.6086 | 1.962e-14 | 32 |
| 3 | M4 | X | 27.8633 | 27.8633 | 2.362e-14 | 32 |
| 4 | M5 | X | 27.8633 | 27.8633 | 7.702e-15 | 32 |
| 5 | M5 | X | 27.0041 | 27.0041 | 3.081e-14 | 32 |
| 6 | M6 | X | 27.0041 | 27.0041 | 9.207e-14 | 32 |
| 7 | M6 | X | 26.2497 | 26.2497 | 5.457e-14 | 32 |
| 8 | M7 | X | 26.2497 | 26.2497 | 9.409e-14 | 32 |
| 9 | M7 | X | 25.5266 | 25.5266 | 1.044e-13 | 32 |
| 10 | M8 | X | 25.5266 | 25.5266 | 1.081e-13 | 32 |
| 11 | M8 | X | 24.759 | 24.759 | 1.777e-13 | 32 |
| 12 | M9 | X | 24.759 | 24.759 | 2.359e-16 | 32 |
| 13 | M9 | X | 24.0137 | 24.0137 | 2.832e-14 | 32 |
| 14 | M10 | X | 24.0137 | 24.0137 | 8.341e-15 | 32 |
| 15 | M10 | X | 23.2773 | 23.2773 | 8.758e-14 | 32 |
| 16 | M11 | X | 23.2773 | 23.2773 | 2.999e-14 | 32 |
| 17 | M11 | X | 22.523 | 22.523 | 2.952e-14 | 32 |
| 18 | M12 | X | 22.523 | 22.523 | 4.065e-14 | 32 |
| 19 | M1 | X | 38.5824 | 38.5824 | 0 | 32 |
| 20 | M2 | X | 38.5824 | 38.5824 | 1.776e-15 | 32 |
| 21 | M2 | X | 29.2136 | 29.2136 | 7.008e-15 | 32 |
| 22 | M3 | X | 29.2136 | 29.2136 | 1.796e-14 | 32 |

### Member Distributed Loads (BLC 21 : BLC 11 Transient Area Loads)

| | Member Label | Direction | Start Magnitude [lb/ft, F, psf, lb-ft/ft] | End Magnitude [lb/ft, F, psf, lb-ft/ft] | Start Location [(ft, %)] | End Location [(ft, %)] |
|---|---|---|---|---|---|---|
| 1 | M7 | Z | 26.2497 | 26.2497 | 9.409e-14 | 32 |
| 2 | M7 | Z | 25.5266 | 25.5266 | 1.044e-13 | 32 |
| 3 | M8 | Z | 25.5266 | 25.5266 | 1.081e-13 | 32 |
| 4 | M8 | Z | 24.759 | 24.759 | 1.777e-13 | 32 |
| 5 | M9 | Z | 24.759 | 24.759 | 2.359e-16 | 32 |
| 6 | M9 | Z | 24.0137 | 24.0137 | 2.832e-14 | 32 |
| 7 | M10 | Z | 24.0137 | 24.0137 | 8.341e-15 | 32 |
| 8 | M10 | Z | 23.2773 | 23.2773 | 8.758e-14 | 32 |
| 9 | M11 | Z | 23.2773 | 23.2773 | 2.999e-14 | 32 |
| 10 | M11 | Z | 22.523 | 22.523 | 2.952e-14 | 32 |
| 11 | M12 | Z | 22.523 | 22.523 | 4.065e-14 | 32 |
| 12 | M1 | Z | 38.5824 | 38.5824 | 0 | 32 |
| 13 | M2 | Z | 38.5824 | 38.5824 | 1.776e-15 | 32 |
| 14 | M2 | Z | 29.2136 | 29.2136 | 7.008e-15 | 32 |
| 15 | M3 | Z | 29.2136 | 29.2136 | 1.796e-14 | 32 |
| 16 | M3 | Z | 28.6086 | 28.6086 | 1.441e-14 | 32 |
| 17 | M4 | Z | 28.6086 | 28.6086 | 1.962e-14 | 32 |
| 18 | M4 | Z | 27.8633 | 27.8633 | 2.362e-14 | 32 |
| 19 | M5 | Z | 27.8633 | 27.8633 | 7.702e-15 | 32 |
| 20 | M5 | Z | 27.0041 | 27.0041 | 3.081e-14 | 32 |

### Member Distributed Loads (BLC 21 : BLC 11 Transient Area Loads) (Continued)

| | Member Label | Direction | Start Magnitude [lb/ft, F, psf, lb-ft/ft] | End Magnitude [lb/ft, F, psf, lb-ft/ft] | Start Location [(ft, %)] | End Location [(ft, %)] |
|---|---|---|---|---|---|---|
| 21 | M6 | Z | 27.0041 | 27.0041 | 9.207e-14 | 32 |
| 22 | M6 | Z | 26.2497 | 26.2497 | 5.457e-14 | 32 |

### Member Area Loads (BLC 1 : DEAD)

| | Node A | Node B | Node C | Node D | Direction | Load Direction | A Magnitude [psf] | B Magnitude [psf] | C Magnitude [psf] | D Magnitude [psf] | Exclude Braces |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | N1 | N2 | N114 | N113 | Y | A-B | -8 | -8 | -8 | -8 | Yes |
| 2 | N2 | N3 | N115 | N114 | Y | A-B | -8 | -8 | -8 | -8 | Yes |
| 3 | N3 | N4 | N116 | N115 | Y | A-B | -8 | -8 | -8 | -8 | Yes |
| 4 | N4 | N5 | N117 | N116 | Y | A-B | -8 | -8 | -8 | -8 | Yes |
| 5 | N5 | N6 | N118 | N117 | Y | A-B | -8 | -8 | -8 | -8 | Yes |
| 6 | N6 | N7 | N119 | N118 | Y | A-B | -8 | -8 | -8 | -8 | Yes |
| 7 | N7 | N8 | N120 | N119 | Y | A-B | -8 | -8 | -8 | -8 | Yes |
| 8 | N8 | N9 | N121 | N120 | Y | A-B | -8 | -8 | -8 | -8 | Yes |
| 9 | N9 | N10 | N122 | N121 | Y | A-B | -8 | -8 | -8 | -8 | Yes |
| 10 | N10 | N11 | N123 | N122 | Y | A-B | -8 | -8 | -8 | -8 | Yes |
| 11 | N11 | N12 | N124 | N123 | Y | A-B | -8 | -8 | -8 | -8 | Yes |
| 12 | N12 | N13 | N125 | N124 | Y | A-B | -8 | -8 | -8 | -8 | Yes |
| 13 | N13 | N14 | N126 | N125 | Y | A-B | -8 | -8 | -8 | -8 | Yes |
| 14 | N14 | N15 | N127 | N126 | Y | A-B | -8 | -8 | -8 | -8 | Yes |
| 15 | N15 | N16 | N128 | N127 | Y | A-B | -8 | -8 | -8 | -8 | Yes |

### Member Area Loads (BLC 2 : LIVE)

| | Node A | Node B | Node C | Node D | Direction | Load Direction | A Magnitude [psf] | B Magnitude [psf] | C Magnitude [psf] | D Magnitude [psf] | Exclude Braces |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | N1 | N2 | N114 | N113 | PY | A-B | -50 | -50 | -50 | -50 | Yes |
| 2 | N2 | N3 | N115 | N114 | PY | A-B | -50 | -50 | -50 | -50 | Yes |
| 3 | N3 | N4 | N116 | N115 | PY | A-B | -50 | -50 | -50 | -50 | Yes |
| 4 | N4 | N5 | N117 | N116 | PY | A-B | -50 | -50 | -50 | -50 | Yes |
| 5 | N5 | N6 | N118 | N117 | PY | A-B | -50 | -50 | -50 | -50 | Yes |
| 6 | N6 | N7 | N119 | N118 | PY | A-B | -50 | -50 | -50 | -50 | Yes |
| 7 | N7 | N8 | N120 | N119 | PY | A-B | -50 | -50 | -50 | -50 | Yes |
| 8 | N8 | N9 | N121 | N120 | PY | A-B | -50 | -50 | -50 | -50 | Yes |
| 9 | N9 | N10 | N122 | N121 | PY | A-B | -50 | -50 | -50 | -50 | Yes |
| 10 | N10 | N11 | N123 | N122 | PY | A-B | -50 | -50 | -50 | -50 | Yes |
| 11 | N11 | N12 | N124 | N123 | PY | A-B | -50 | -50 | -50 | -50 | Yes |
| 12 | N12 | N13 | N125 | N124 | PY | A-B | -50 | -50 | -50 | -50 | Yes |
| 13 | N13 | N14 | N126 | N125 | PY | A-B | -50 | -50 | -50 | -50 | Yes |
| 14 | N14 | N15 | N127 | N126 | PY | A-B | -50 | -50 | -50 | -50 | Yes |
| 15 | N15 | N16 | N128 | N127 | PY | A-B | -50 | -50 | -50 | -50 | Yes |
| 16 | N113 | N114 | N2 | N1 | PY | A-B | -50 | -50 | -50 | -50 | Yes |
| 17 | N2 | N3 | N1091 | N1090 | PY | A-B | -50 | -50 | -50 | -50 | Yes |
| 18 | N1091 | N1092 | N4 | N3 | PY | A-B | -50 | -50 | -50 | -50 | Yes |
| 19 | N1092 | N1093 | N5 | N4 | PY | A-B | -50 | -50 | -50 | -50 | Yes |
| 20 | N1093 | N1094 | N6 | N5 | PY | A-B | -50 | -50 | -50 | -50 | Yes |
| 21 | N1094 | N1095 | N7 | N6 | PY | A-B | -50 | -50 | -50 | -50 | Yes |
| 22 | N1095 | N1096 | N8 | N7 | PY | A-B | -50 | -50 | -50 | -50 | Yes |
| 23 | N1096 | N1097 | N9 | N8 | PY | A-B | -50 | -50 | -50 | -50 | Yes |
| 24 | N1097 | N1098 | N10 | N9 | PY | A-B | -50 | -50 | -50 | -50 | Yes |
| 25 | N1098 | N1099 | N11 | N10 | PY | A-B | -50 | -50 | -50 | -50 | Yes |
| 26 | N1099 | N1100 | N12 | N11 | PY | A-B | -50 | -50 | -50 | -50 | Yes |

### Member Area Loads (BLC 4 : SNOW)

| | Node A | Node B | Node C | Node D | Direction | Load Direction | A Magnitude [psf] | B Magnitude [psf] | C Magnitude [psf] | D Magnitude [psf] | Exclude Braces |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | N1 | N2 | N114 | N113 | PY | A-B | -25 | -25 | -25 | -25 | Yes |
| 2 | N2 | N3 | N115 | N114 | PY | A-B | -25 | -25 | -25 | -25 | Yes |
| 3 | N3 | N4 | N116 | N115 | PY | A-B | -25 | -25 | -25 | -25 | Yes |
| 4 | N4 | N5 | N117 | N116 | PY | A-B | -25 | -25 | -25 | -25 | Yes |
| 5 | N5 | N6 | N118 | N117 | PY | A-B | -25 | -25 | -25 | -25 | Yes |
| 6 | N6 | N7 | N119 | N118 | PY | A-B | -25 | -25 | -25 | -25 | Yes |
| 7 | N7 | N8 | N120 | N119 | PY | A-B | -25 | -25 | -25 | -25 | Yes |
| 8 | N8 | N9 | N121 | N120 | PY | A-B | -25 | -25 | -25 | -25 | Yes |
| 9 | N9 | N10 | N122 | N121 | PY | A-B | -25 | -25 | -25 | -25 | Yes |
| 10 | N10 | N11 | N123 | N122 | PY | A-B | -25 | -25 | -25 | -25 | Yes |
| 11 | N11 | N12 | N124 | N123 | PY | A-B | -25 | -25 | -25 | -25 | Yes |
| 12 | N12 | N13 | N125 | N124 | PY | A-B | -25 | -25 | -25 | -25 | Yes |
| 13 | N13 | N14 | N126 | N125 | PY | A-B | -25 | -25 | -25 | -25 | Yes |
| 14 | N14 | N15 | N127 | N126 | PY | A-B | -25 | -25 | -25 | -25 | Yes |
| 15 | N15 | N16 | N128 | N127 | PY | A-B | -25 | -25 | -25 | -25 | Yes |

### Member Area Loads (BLC 5 : WIND 0-DEG CASE A)

| | Node A | Node B | Node C | Node D | Direction | Load Direction | A Magnitude [psf] | B Magnitude [psf] | C Magnitude [psf] | D Magnitude [psf] | Exclude Braces |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | N1 | N2 | N114 | N113 | Perp | A-B | -10.8 | -10.8 | -10.8 | -10.8 | Yes |
| 2 | N2 | N3 | N115 | N114 | Perp | A-B | -10.8 | -10.8 | -10.8 | -10.8 | Yes |
| 3 | N3 | N4 | N116 | N115 | Perp | A-B | -10.8 | -10.8 | -10.8 | -10.8 | Yes |
| 4 | N4 | N5 | N117 | N116 | Perp | A-B | -10.8 | -10.8 | -10.8 | -10.8 | Yes |
| 5 | N5 | N6 | N118 | N117 | Perp | A-B | -10.8 | -10.8 | -10.8 | -10.8 | Yes |
| 6 | N6 | N7 | N119 | N118 | Perp | A-B | -10.8 | -10.8 | -10.8 | -10.8 | Yes |
| 7 | N7 | N8 | N120 | N119 | Perp | A-B | -16.2 | -16.2 | -16.2 | -16.2 | Yes |
| 8 | N8 | N9 | N121 | N120 | Perp | A-B | -16.2 | -16.2 | -16.2 | -16.2 | Yes |
| 9 | N9 | N10 | N122 | N121 | Perp | A-B | -16.2 | -16.2 | -16.2 | -16.2 | Yes |
| 10 | N10 | N11 | N123 | N122 | Perp | A-B | -16.2 | -16.2 | -16.2 | -16.2 | Yes |
| 11 | N11 | N12 | N124 | N123 | Perp | A-B | -16.2 | -16.2 | -16.2 | -16.2 | Yes |
| 12 | N12 | N13 | N125 | N124 | Perp | A-B | -16.2 | -16.2 | -16.2 | -16.2 | Yes |

### Member Area Loads (BLC 6 : WIND 0-DEG CASE B)

| | Node A | Node B | Node C | Node D | Direction | Load Direction | A Magnitude [psf] | B Magnitude [psf] | C Magnitude [psf] | D Magnitude [psf] | Exclude Braces |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | N1 | N2 | N114 | N113 | Perp | A-B | -18.3 | -18.3 | -18.3 | -18.3 | Yes |
| 2 | N2 | N3 | N115 | N114 | Perp | A-B | -18.3 | -18.3 | -18.3 | -18.3 | Yes |
| 3 | N3 | N4 | N116 | N115 | Perp | A-B | -18.3 | -18.3 | -18.3 | -18.3 | Yes |
| 4 | N4 | N5 | N117 | N116 | Perp | A-B | -18.3 | -18.3 | -18.3 | -18.3 | Yes |
| 5 | N5 | N6 | N118 | N117 | Perp | A-B | -18.3 | -18.3 | -18.3 | -18.3 | Yes |
| 6 | N6 | N7 | N119 | N118 | Perp | A-B | -18.3 | -18.3 | -18.3 | -18.3 | Yes |
| 7 | N7 | N8 | N120 | N119 | Perp | A-B | -8.6 | -8.6 | -8.6 | -8.6 | Yes |
| 8 | N8 | N9 | N121 | N120 | Perp | A-B | -8.6 | -8.6 | -8.6 | -8.6 | Yes |
| 9 | N9 | N10 | N122 | N121 | Perp | A-B | -8.6 | -8.6 | -8.6 | -8.6 | Yes |
| 10 | N10 | N11 | N123 | N122 | Perp | A-B | -8.6 | -8.6 | -8.6 | -8.6 | Yes |
| 11 | N11 | N12 | N124 | N123 | Perp | A-B | -8.6 | -8.6 | -8.6 | -8.6 | Yes |
| 12 | N12 | N13 | N125 | N124 | Perp | A-B | -8.6 | -8.6 | -8.6 | -8.6 | Yes |

### Member Area Loads (BLC 7 : WIND 180-DEG CASE A)

| | Node A | Node B | Node C | Node D | Direction | Load Direction | A Magnitude [psf] | B Magnitude [psf] | C Magnitude [psf] | D Magnitude [psf] | Exclude Braces |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | N1 | N2 | N114 | N113 | Perp | A-B | -13 | -13 | -13 | -13 | Yes |
| 2 | N2 | N3 | N115 | N114 | Perp | A-B | -13 | -13 | -13 | -13 | Yes |
| 3 | N3 | N4 | N116 | N115 | Perp | A-B | -13 | -13 | -13 | -13 | Yes |

### Member Area Loads (BLC 7 : WIND 180-DEG CASE A) (Continued)

| | Node A | Node B | Node C | Node D | Direction | Load Direction | A Magnitude [psf] | B Magnitude [psf] | C Magnitude [psf] | D Magnitude [psf] | Exclude Braces |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 4 | N4 | N5 | N117 | N116 | Perp | A-B | -13 | -13 | -13 | -13 | Yes |
| 5 | N5 | N6 | N118 | N117 | Perp | A-B | -13 | -13 | -13 | -13 | Yes |
| 6 | N6 | N7 | N119 | N118 | Perp | A-B | -13 | -13 | -13 | -13 | Yes |
| 7 | N7 | N8 | N120 | N119 | Perp | A-B | -2.2 | -2.2 | -2.2 | -2.2 | Yes |
| 8 | N8 | N9 | N121 | N120 | Perp | A-B | -2.2 | -2.2 | -2.2 | -2.2 | Yes |
| 9 | N9 | N10 | N122 | N121 | Perp | A-B | -2.2 | -2.2 | -2.2 | -2.2 | Yes |
| 10 | N10 | N11 | N123 | N122 | Perp | A-B | -2.2 | -2.2 | -2.2 | -2.2 | Yes |
| 11 | N11 | N12 | N124 | N123 | Perp | A-B | -2.2 | -2.2 | -2.2 | -2.2 | Yes |
| 12 | N12 | N13 | N125 | N124 | Perp | A-B | -2.2 | -2.2 | -2.2 | -2.2 | Yes |

### Member Area Loads (BLC 8 : WIND 180-DEG CASE B)

| | Node A | Node B | Node C | Node D | Direction | Load Direction | A Magnitude [psf] | B Magnitude [psf] | C Magnitude [psf] | D Magnitude [psf] | Exclude Braces |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | N1 | N2 | N114 | N113 | Perp | A-B | -3.2 | -3.2 | -3.2 | -3.2 | Yes |
| 2 | N2 | N3 | N115 | N114 | Perp | A-B | -3.2 | -3.2 | -3.2 | -3.2 | Yes |
| 3 | N3 | N4 | N116 | N115 | Perp | A-B | -3.2 | -3.2 | -3.2 | -3.2 | Yes |
| 4 | N4 | N5 | N117 | N116 | Perp | A-B | -3.2 | -3.2 | -3.2 | -3.2 | Yes |
| 5 | N5 | N6 | N118 | N117 | Perp | A-B | -3.2 | -3.2 | -3.2 | -3.2 | Yes |
| 6 | N6 | N7 | N119 | N118 | Perp | A-B | -3.2 | -3.2 | -3.2 | -3.2 | Yes |
| 7 | N7 | N8 | N120 | N119 | Perp | A-B | 8.6 | 8.6 | 8.6 | 8.6 | Yes |
| 8 | N8 | N9 | N121 | N120 | Perp | A-B | 8.6 | 8.6 | 8.6 | 8.6 | Yes |
| 9 | N9 | N10 | N122 | N121 | Perp | A-B | 8.6 | 8.6 | 8.6 | 8.6 | Yes |
| 10 | N10 | N11 | N123 | N122 | Perp | A-B | 8.6 | 8.6 | 8.6 | 8.6 | Yes |
| 11 | N11 | N12 | N124 | N123 | Perp | A-B | 8.6 | 8.6 | 8.6 | 8.6 | Yes |
| 12 | N12 | N13 | N125 | N124 | Perp | A-B | 8.6 | 8.6 | 8.6 | 8.6 | Yes |

### Member Area Loads (BLC 9 : WIND 90-DEG)

| | Node A | Node B | Node C | Node D | Direction | Load Direction | A Magnitude [psf] | B Magnitude [psf] | C Magnitude [psf] | D Magnitude [psf] | Exclude Braces |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | N1067 | N113 | N114 | N1068 | Z | A-B | 1.1 | 1.1 | 1.1 | 1.1 | Yes |
| 2 | N1068 | N114 | N124 | N1079 | Z | A-B | 1.1 | 1.1 | 1.1 | 1.1 | Yes |
| 3 | N1079 | N124 | N125 | N1066 | Z | A-B | 1.1 | 1.1 | 1.1 | 1.1 | Yes |

### Member Area Loads (BLC 10 : ELX)

| | Node A | Node B | Node C | Node D | Direction | Load Direction | A Magnitude [psf] | B Magnitude [psf] | C Magnitude [psf] | D Magnitude [psf] | Exclude Braces |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | N1 | N2 | N114 | N113 | X | A-B | 9.6456 | 9.6456 | 9.6456 | 9.6456 | Yes |
| 2 | N2 | N3 | N115 | N114 | X | A-B | 5.5147 | 5.5147 | 5.5147 | 5.5147 | Yes |
| 3 | N3 | N4 | N116 | N115 | X | A-B | 5.4005 | 5.4005 | 5.4005 | 5.4005 | Yes |
| 4 | N4 | N5 | N117 | N116 | X | A-B | 5.2598 | 5.2598 | 5.2598 | 5.2598 | Yes |
| 5 | N5 | N6 | N118 | N117 | X | A-B | 5.0976 | 5.0976 | 5.0976 | 5.0976 | Yes |
| 6 | N6 | N7 | N119 | N118 | X | A-B | 4.9552 | 4.9552 | 4.9552 | 4.9552 | Yes |
| 7 | N7 | N8 | N120 | N119 | X | A-B | 4.8187 | 4.8187 | 4.8187 | 4.8187 | Yes |
| 8 | N8 | N9 | N121 | N120 | X | A-B | 4.6738 | 4.6738 | 4.6738 | 4.6738 | Yes |
| 9 | N9 | N10 | N122 | N121 | X | A-B | 4.5331 | 4.5331 | 4.5331 | 4.5331 | Yes |
| 10 | N10 | N11 | N123 | N122 | X | A-B | 4.3941 | 4.3941 | 4.3941 | 4.3941 | Yes |
| 11 | N11 | N12 | N124 | N123 | X | A-B | 4.2517 | 4.2517 | 4.2517 | 4.2517 | Yes |

### Member Area Loads (BLC 11 : ELZ)

| | Node A | Node B | Node C | Node D | Direction | Load Direction | A Magnitude [psf] | B Magnitude [psf] | C Magnitude [psf] | D Magnitude [psf] | Exclude Braces |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | N1 | N2 | N114 | N113 | Z | A-B | 9.6456 | 9.6456 | 9.6456 | 9.6456 | Yes |
| 2 | N2 | N3 | N115 | N114 | Z | A-B | 5.5147 | 5.5147 | 5.5147 | 5.5147 | Yes |
| 3 | N3 | N4 | N116 | N115 | Z | A-B | 5.4005 | 5.4005 | 5.4005 | 5.4005 | Yes |

### Member Area Loads (BLC 11 : ELZ) (Continued)

| | Node A | Node B | Node C | Node D | Direction | Load Direction | A Magnitude [psf] | B Magnitude [psf] | C Magnitude [psf] | D Magnitude [psf] | Exclude Braces |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 4 | N4 | N5 | N117 | N116 | Z | A-B | 5.2598 | 5.2598 | 5.2598 | 5.2598 | Yes |
| 5 | N5 | N6 | N118 | N117 | Z | A-B | 5.0976 | 5.0976 | 5.0976 | 5.0976 | Yes |
| 6 | N6 | N7 | N119 | N118 | Z | A-B | 4.9552 | 4.9552 | 4.9552 | 4.9552 | Yes |
| 7 | N7 | N8 | N120 | N119 | Z | A-B | 4.8187 | 4.8187 | 4.8187 | 4.8187 | Yes |
| 8 | N8 | N9 | N121 | N120 | Z | A-B | 4.6738 | 4.6738 | 4.6738 | 4.6738 | Yes |
| 9 | N9 | N10 | N122 | N121 | Z | A-B | 4.5331 | 4.5331 | 4.5331 | 4.5331 | Yes |
| 10 | N10 | N11 | N123 | N122 | Z | A-B | 4.3941 | 4.3941 | 4.3941 | 4.3941 | Yes |
| 11 | N11 | N12 | N124 | N123 | Z | A-B | 4.2517 | 4.2517 | 4.2517 | 4.2517 | Yes |

### Plate Surface Loads

No Data to Print...

### Basic Load Cases

| | BLC Description | Category | Distributed | Area(Member) |
|---|---|---|---|---|
| 1 | DEAD | DL | | 15 |
| 2 | LIVE | LL | | 26 |
| 3 | ROOF LIVE | RLL | | |
| 4 | SNOW | SL | | 15 |
| 5 | WIND 0-DEG CASE A | WL+X | | 12 |
| 6 | WIND 0-DEG CASE B | WL-X | | 12 |
| 7 | WIND 180-DEG CASE A | WL+Z | | 12 |
| 8 | WIND 180-DEG CASE B | WL-Z | | 12 |
| 9 | WIND 90-DEG | WL | 24 | 3 |
| 10 | ELX | ELX | | 11 |
| 11 | ELZ | ELZ | | 11 |
| 12 | BLC 1 Transient Area Loads | None | 30 | |
| 13 | BLC 2 Transient Area Loads | None | 43 | |
| 14 | BLC 4 Transient Area Loads | None | 30 | |
| 15 | BLC 5 Transient Area Loads | None | 48 | |
| 16 | BLC 6 Transient Area Loads | None | 48 | |
| 17 | BLC 7 Transient Area Loads | None | 48 | |
| 18 | BLC 8 Transient Area Loads | None | 48 | |
| 19 | BLC 9 Transient Area Loads | None | 452 | |
| 20 | BLC 10 Transient Area Loads | None | 22 | |
| 21 | BLC 11 Transient Area Loads | None | 22 | |

### Load Combinations

| | Description | Solve | P-Delta | BLC | Factor | BLC | Factor | BLC | Factor | BLC | Factor | BLC | Factor | BLC | Factor | BLC | Factor |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | EX | | Y | ELX | 1 | | | | | | | | | | | | |
| 2 | ** ASD GRAVITY LOAD ** | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | |
| 4 | Deflection 1 | Yes | Y | DL | 1 | | | | | | | | | | | | |
| 5 | Deflection 2 | Yes | Y | LL | 1 | | | | | | | | | | | | |
| 6 | Deflection 3 | Yes | Y | DL | 1 | LL | 1 | | | | | | | | | | |
| 7 | IBC 21/ASCE ASD 1 (DL) | Yes | Y | DL | 1 | | | | | | | | | | | | |
| 8 | IBC 21/ASCE ASD 2 (DL+LL) | Yes | Y | DL | 1 | LL | 1 | LLS | 1 | | | | | | | | |
| 9 | IBC 21/ASCE ASD 3 (a) (DL+RLL) | Yes | Y | DL | 1 | RLL | 1 | | | | | | | | | | |
| 10 | IBC 21/ASCE ASD 3 (b) (DL+SL) | Yes | Y | DL | 1 | SL | 1 | SLN | 1 | | | | | | | | |
| 11 | IBC 21/ASCE ASD 4 (a) (DL+RLL+SL) | Yes | Y | DL | 1 | LL | 0.75 | LLS | 0.75 | RLL | 0.75 | | | | | | |
| 12 | IBC 21/ASCE ASD 4 (b) (DL+LL+SL) | Yes | Y | DL | 1 | LL | 0.75 | LLS | 0.75 | SL | 0.75 | SLN | 0.75 | | | | |
| 13 | | | | | | | | | | | | | | | | | |
| 14 | ** ASD WIND LOAD CASES ** | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | | |

***Load Combinations (Continued)***

| | Description | Solve | P-Delta | BLC | Factor | BLC | Factor | BLC | Factor | BLC | Factor | BLC | Factor | BLC | Factor | BLC | Factor |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16 | IBC 21/ASCE ASD 5 (a) (a) | Yes | Y | DL | 1 | WL | 0.6 | | | | | | | | | | |
| 17 | IBC 21/ASCE ASD 5 (a) (b) | Yes | Y | DL | 1 | WL+X | 0.6 | | | | | | | | | | |
| 18 | IBC 21/ASCE ASD 5 (a) (c) | Yes | Y | DL | 1 | WL-X | 0.6 | | | | | | | | | | |
| 19 | IBC 21/ASCE ASD 5 (a) (d) | Yes | Y | DL | 1 | WL+Z | 0.6 | | | | | | | | | | |
| 20 | IBC 21/ASCE ASD 5 (a) (e) | Yes | Y | DL | 1 | WL-Z | 0.6 | | | | | | | | | | |
| 21 | IBC 21/ASCE ASD 6 (a) (a) | Yes | Y | DL | 1 | WL | 0.45 | LL | 0.75 | LLS | 0.75 | RLL | 0.75 | | | | |
| 22 | IBC 21/ASCE ASD 6 (a) (b) | Yes | Y | DL | 1 | WL+X | 0.45 | LL | 0.75 | LLS | 0.75 | RLL | 0.75 | | | | |
| 23 | IBC 21/ASCE ASD 6 (a) (c) | Yes | Y | DL | 1 | WL-X | 0.45 | LL | 0.75 | LLS | 0.75 | RLL | 0.75 | | | | |
| 24 | IBC 21/ASCE ASD 6 (a) (d) | Yes | Y | DL | 1 | WL+Z | 0.45 | LL | 0.75 | LLS | 0.75 | RLL | 0.75 | | | | |
| 25 | IBC 21/ASCE ASD 6 (a) (e) | Yes | Y | DL | 1 | WL-Z | 0.45 | LL | 0.75 | LLS | 0.75 | RLL | 0.75 | | | | |
| 26 | IBC 21/ASCE ASD 6 (b) (a) | Yes | Y | DL | 1 | WL | 0.45 | LL | 0.75 | LLS | 0.75 | SL | 0.75 | SLN | 0.75 | | |
| 27 | IBC 21/ASCE ASD 6 (b) (b) | Yes | Y | DL | 1 | WL+X | 0.45 | LL | 0.75 | LLS | 0.75 | SL | 0.75 | SLN | 0.75 | | |
| 28 | IBC 21/ASCE ASD 6 (b) (c) | Yes | Y | DL | 1 | WL-X | 0.45 | LL | 0.75 | LLS | 0.75 | SL | 0.75 | SLN | 0.75 | | |
| 29 | IBC 21/ASCE ASD 6 (b) (d) | Yes | Y | DL | 1 | WL+Z | 0.45 | LL | 0.75 | LLS | 0.75 | SL | 0.75 | SLN | 0.75 | | |
| 30 | IBC 21/ASCE ASD 6 (b) (e) | Yes | Y | DL | 1 | WL-Z | 0.45 | LL | 0.75 | LLS | 0.75 | SL | 0.75 | SLN | 0.75 | | |
| 31 | IBC 21/ASCE ASD 6 (c) (a) | Yes | Y | DL | 1 | WL | 0.45 | LL | 0.75 | LLS | 0.75 | | | | | | |
| 32 | IBC 21/ASCE ASD 6 (c) (b) | Yes | Y | DL | 1 | WL+X | 0.45 | LL | 0.75 | LLS | 0.75 | | | | | | |
| 33 | IBC 21/ASCE ASD 6 (c) (c) | Yes | Y | DL | 1 | WL-X | 0.45 | LL | 0.75 | LLS | 0.75 | | | | | | |
| 34 | IBC 21/ASCE ASD 6 (c) (d) | Yes | Y | DL | 1 | WL+Z | 0.45 | LL | 0.75 | LLS | 0.75 | | | | | | |
| 35 | IBC 21/ASCE ASD 6 (c) (e) | Yes | Y | DL | 1 | WL-Z | 0.45 | LL | 0.75 | LLS | 0.75 | | | | | | |
| 36 | IBC 21/ASCE ASD 7 (a) | Yes | Y | DL | 0.6 | WL | 0.6 | | | | | | | | | | |
| 37 | IBC 21/ASCE ASD 7 (b) | Yes | Y | DL | 0.6 | WL+X | 0.6 | | | | | | | | | | |
| 38 | IBC 21/ASCE ASD 7 (c) | Yes | Y | DL | 0.6 | WL-X | 0.6 | | | | | | | | | | |
| 39 | IBC 21/ASCE ASD 7 (d) | Yes | Y | DL | 0.6 | WL+Z | 0.6 | | | | | | | | | | |
| 40 | IBC 21/ASCE ASD 7 (e) | Yes | Y | DL | 0.6 | WL-Z | 0.6 | | | | | | | | | | |
| 41 | | | | | | | | | | | | | | | | | |
| 42 | ** ASD SEISIMIC LOAD CASES ** | | | | | | | | | | | | | | | | |
| 43 | | | | | | | | | | | | | | | | | |
| 44 | IBC 21/ASCE ASD 8 (a) | Yes | Y | DL | 1 | | | ELX | 0.7 | | | | | | | | |
| 45 | IBC 21/ASCE ASD 8 (b) | Yes | Y | DL | 1 | | | ELZ | 0.7 | | | | | | | | |
| 46 | IBC 21/ASCE ASD 8 (c) | Yes | Y | DL | 1 | | | ELX | -0.7 | | | | | | | | |
| 47 | IBC 21/ASCE ASD 8 (d) | Yes | Y | DL | 1 | | | ELZ | -0.7 | | | | | | | | |
| 48 | IBC 21/ASCE ASD 9 (a) | Yes | Y | DL | 1 | | | ELX | 0.525 | LL | 0.75 | LLS | 0.75 | SL | 0.75 | SLN | 0.75 |
| 49 | IBC 21/ASCE ASD 9 (b) | Yes | Y | DL | 1 | | | ELZ | 0.525 | LL | 0.75 | LLS | 0.75 | SL | 0.75 | SLN | 0.75 |
| 50 | IBC 21/ASCE ASD 9 (c) | Yes | Y | DL | 1 | | | ELX | -0.525 | LL | 0.75 | LLS | 0.75 | SL | 0.75 | SLN | 0.75 |
| 51 | IBC 21/ASCE ASD 9 (d) | Yes | Y | DL | 1 | | | ELZ | -0.525 | LL | 0.75 | LLS | 0.75 | SL | 0.75 | SLN | 0.75 |
| 52 | IBC 21/ASCE ASD 10 (a) | Yes | Y | DL | 0.6 | | | ELX | 0.7 | | | | | | | | |
| 53 | IBC 21/ASCE ASD 10 (b) | Yes | Y | DL | 0.6 | | | ELZ | 0.7 | | | | | | | | |
| 54 | IBC 21/ASCE ASD 10 (c) | Yes | Y | DL | 0.6 | | | ELX | -0.7 | | | | | | | | |
| 55 | IBC 21/ASCE ASD 10 (d) | Yes | Y | DL | 0.6 | | | ELZ | -0.7 | | | | | | | | |
| 56 | | | | | | | | | | | | | | | | | |
| 57 | ** LRFD COMBINATIONS FOR ANCHORAGE ** | | | | | | | | | | | | | | | | |
| 58 | | | | | | | | | | | | | | | | | |
| 59 | IBC 21/ASCE Strength 1 | | Y | DL | 1.4 | NL | 1 | | | | | | | | | | |
| 60 | IBC 21/ASCE Strength 2 (a) | | Y | DL | 1.2 | LL | 1.6 | LLS | 1.6 | RLL | 0.5 | NL | 1 | | | | |
| 61 | IBC 21/ASCE Strength 2 (b) | | Y | DL | 1.2 | LL | 1.6 | LLS | 1.6 | SL | 0.5 | SLN | 0.5 | NL | 1 | | |
| 62 | IBC 21/ASCE Strength 2 (c) | | Y | DL | 1.2 | LL | 1.6 | LLS | 1.6 | NL | 1 | | | | | | |
| 63 | IBC 21/ASCE Strength 3 (a) | | Y | DL | 1.2 | RLL | 1.6 | LL | 0.5 | LLS | 1 | NL | 1 | | | | |
| 64 | IBC 21/ASCE Strength 3 (c) | | Y | DL | 1.2 | SL | 1.6 | SLN | 1.6 | LL | 0.5 | LLS | 1 | NL | 1 | | |
| 65 | IBC 21/ASCE Strength 3 (b) (a) | | Y | DL | 1.2 | RLL | 1.6 | WL | 0.5 | | | | | | | | |
| 66 | IBC 21/ASCE Strength 3 (b) (b) | | Y | DL | 1.2 | RLL | 1.6 | WL+X | 0.5 | | | | | | | | |
| 67 | IBC 21/ASCE Strength 3 (b) (c) | | Y | DL | 1.2 | RLL | 1.6 | WL-X | 0.5 | | | | | | | | |
| 68 | IBC 21/ASCE Strength 3 (b) (d) | | Y | DL | 1.2 | RLL | 1.6 | WL+Z | 0.5 | | | | | | | | |
| 69 | IBC 21/ASCE Strength 3 (b) (e) | | Y | DL | 1.2 | RLL | 1.6 | WL-Z | 0.5 | | | | | | | | |
| 70 | IBC 21/ASCE Strength 3 (b) (g) | | Y | DL | 1.2 | RLL | 1.6 | WL | -0.5 | | | | | | | | |

***Load Combinations (Continued)***

| | Description | Solve | P-Delta | BLC | Factor | BLC | Factor | BLC | Factor | BLC | Factor | BLC | Factor | BLC | Factor | BLC | Factor |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 71 | IBC 21/ASCE Strength 3 (b) (h) | | Y | DL | 1.2 | RLL | 1.6 | WL+X | -0.5 | | | | | | | | |
| 72 | IBC 21/ASCE Strength 3 (b) (i) | | Y | DL | 1.2 | RLL | 1.6 | WL-X | -0.5 | | | | | | | | |
| 73 | IBC 21/ASCE Strength 3 (b) (j) | | Y | DL | 1.2 | RLL | 1.6 | WL+Z | -0.5 | | | | | | | | |
| 74 | IBC 21/ASCE Strength 3 (b) (k) | | Y | DL | 1.2 | RLL | 1.6 | WL-Z | -0.5 | | | | | | | | |
| 75 | IBC 21/ASCE Strength 3 (d) (a) | | Y | DL | 1.2 | SL | 1.6 | SLN | 1.6 | WL | 0.5 | | | | | | |
| 76 | IBC 21/ASCE Strength 3 (d) (b) | | Y | DL | 1.2 | SL | 1.6 | SLN | 1.6 | WL+X | 0.5 | | | | | | |
| 77 | IBC 21/ASCE Strength 3 (d) (c) | | Y | DL | 1.2 | SL | 1.6 | SLN | 1.6 | WL-X | 0.5 | | | | | | |
| 78 | IBC 21/ASCE Strength 3 (d) (d) | | Y | DL | 1.2 | SL | 1.6 | SLN | 1.6 | WL+Z | 0.5 | | | | | | |
| 79 | IBC 21/ASCE Strength 3 (d) (e) | | Y | DL | 1.2 | SL | 1.6 | SLN | 1.6 | WL-Z | 0.5 | | | | | | |
| 80 | IBC 21/ASCE Strength 3 (d) (g) | | Y | DL | 1.2 | SL | 1.6 | SLN | 1.6 | WL | -0.5 | | | | | | |
| 81 | IBC 21/ASCE Strength 3 (d) (h) | | Y | DL | 1.2 | SL | 1.6 | SLN | 1.6 | WL+X | -0.5 | | | | | | |
| 82 | IBC 21/ASCE Strength 3 (d) (i) | | Y | DL | 1.2 | SL | 1.6 | SLN | 1.6 | WL-X | -0.5 | | | | | | |
| 83 | IBC 21/ASCE Strength 3 (d) (j) | | Y | DL | 1.2 | SL | 1.6 | SLN | 1.6 | WL+Z | -0.5 | | | | | | |
| 84 | IBC 21/ASCE Strength 3 (d) (k) | | Y | DL | 1.2 | SL | 1.6 | SLN | 1.6 | WL-Z | -0.5 | | | | | | |
| 85 | IBC 21/ASCE Strength 3 (f) (a) | | Y | DL | 1.2 | WL | 0.5 | | | | | | | | | | |
| 86 | IBC 21/ASCE Strength 3 (f) (b) | | Y | DL | 1.2 | WL+X | 0.5 | | | | | | | | | | |
| 87 | IBC 21/ASCE Strength 3 (f) (c) | | Y | DL | 1.2 | WL-X | 0.5 | | | | | | | | | | |
| 88 | IBC 21/ASCE Strength 3 (f) (d) | | Y | DL | 1.2 | WL+Z | 0.5 | | | | | | | | | | |
| 89 | IBC 21/ASCE Strength 3 (f) (e) | | Y | DL | 1.2 | WL-Z | 0.5 | | | | | | | | | | |
| 90 | IBC 21/ASCE Strength 3 (f) (g) | | Y | DL | 1.2 | WL | -0.5 | | | | | | | | | | |
| 91 | IBC 21/ASCE Strength 3 (f) (h) | | Y | DL | 1.2 | WL+X | -0.5 | | | | | | | | | | |
| 92 | IBC 21/ASCE Strength 3 (f) (i) | | Y | DL | 1.2 | WL-X | -0.5 | | | | | | | | | | |
| 93 | IBC 21/ASCE Strength 3 (f) (j) | | Y | DL | 1.2 | WL+Z | -0.5 | | | | | | | | | | |
| 94 | IBC 21/ASCE Strength 3 (f) (k) | | Y | DL | 1.2 | WL-Z | -0.5 | | | | | | | | | | |
| 95 | IBC 21/ASCE Strength 4 (a) (a) | | Y | DL | 1.2 | WL | 1 | LL | 0.5 | LLS | 1 | RLL | 0.5 | | | | |
| 96 | IBC 21/ASCE Strength 4 (a) (b) | | Y | DL | 1.2 | WL+X | 1 | LL | 0.5 | LLS | 1 | RLL | 0.5 | | | | |
| 97 | IBC 21/ASCE Strength 4 (a) (c) | | Y | DL | 1.2 | WL-X | 1 | LL | 0.5 | LLS | 1 | RLL | 0.5 | | | | |
| 98 | IBC 21/ASCE Strength 4 (a) (d) | | Y | DL | 1.2 | WL+Z | 1 | LL | 0.5 | LLS | 1 | RLL | 0.5 | | | | |
| 99 | IBC 21/ASCE Strength 4 (a) (e) | | Y | DL | 1.2 | WL-Z | 1 | LL | 0.5 | LLS | 1 | RLL | 0.5 | | | | |
| 100 | IBC 21/ASCE Strength 4 (a) (g) | | Y | DL | 1.2 | WL | -1 | LL | 0.5 | LLS | 1 | RLL | 0.5 | | | | |
| 101 | IBC 21/ASCE Strength 4 (a) (h) | | Y | DL | 1.2 | WL+X | -1 | LL | 0.5 | LLS | 1 | RLL | 0.5 | | | | |
| 102 | IBC 21/ASCE Strength 4 (a) (i) | | Y | DL | 1.2 | WL-X | -1 | LL | 0.5 | LLS | 1 | RLL | 0.5 | | | | |
| 103 | IBC 21/ASCE Strength 4 (a) (j) | | Y | DL | 1.2 | WL+Z | -1 | LL | 0.5 | LLS | 1 | RLL | 0.5 | | | | |
| 104 | IBC 21/ASCE Strength 4 (a) (k) | | Y | DL | 1.2 | WL-Z | -1 | LL | 0.5 | LLS | 1 | RLL | 0.5 | | | | |
| 105 | IBC 21/ASCE Strength 4 (b) (a) | | Y | DL | 1.2 | WL | 1 | LL | 0.5 | LLS | 1 | SL | 0.5 | SLN | 0.5 | | |
| 106 | IBC 21/ASCE Strength 4 (b) (b) | | Y | DL | 1.2 | WL+X | 1 | LL | 0.5 | LLS | 1 | SL | 0.5 | SLN | 0.5 | | |
| 107 | IBC 21/ASCE Strength 4 (b) (c) | | Y | DL | 1.2 | WL-X | 1 | LL | 0.5 | LLS | 1 | SL | 0.5 | SLN | 0.5 | | |
| 108 | IBC 21/ASCE Strength 4 (b) (d) | | Y | DL | 1.2 | WL+Z | 1 | LL | 0.5 | LLS | 1 | SL | 0.5 | SLN | 0.5 | | |
| 109 | IBC 21/ASCE Strength 4 (b) (e) | | Y | DL | 1.2 | WL-Z | 1 | LL | 0.5 | LLS | 1 | SL | 0.5 | SLN | 0.5 | | |
| 110 | IBC 21/ASCE Strength 4 (b) (f) | | Y | DL | 1.2 | WLZP2 | 1 | LL | 0.5 | LLS | 1 | SL | 0.5 | SLN | 0.5 | | |
| 111 | IBC 21/ASCE Strength 4 (b) (h) | | Y | DL | 1.2 | WL | -1 | LL | 0.5 | LLS | 1 | SL | 0.5 | SLN | 0.5 | | |
| 112 | IBC 21/ASCE Strength 4 (b) (i) | | Y | DL | 1.2 | WL+X | -1 | LL | 0.5 | LLS | 1 | SL | 0.5 | SLN | 0.5 | | |
| 113 | IBC 21/ASCE Strength 4 (b) (j) | | Y | DL | 1.2 | WL-X | -1 | LL | 0.5 | LLS | 1 | SL | 0.5 | SLN | 0.5 | | |
| 114 | IBC 21/ASCE Strength 4 (b) (k) | | Y | DL | 1.2 | WL+Z | -1 | LL | 0.5 | LLS | 1 | SL | 0.5 | SLN | 0.5 | | |
| 115 | IBC 21/ASCE Strength 4 (b) (l) | | Y | DL | 1.2 | WL-Z | -1 | LL | 0.5 | LLS | 1 | SL | 0.5 | SLN | 0.5 | | |
| 116 | IBC 21/ASCE Strength 4 (c) (b) | | Y | DL | 1.2 | WL | 1 | LL | 0.5 | LLS | 1 | | | | | | |
| 117 | IBC 21/ASCE Strength 4 (c) (c) | | Y | DL | 1.2 | WL+X | 1 | LL | 0.5 | LLS | 1 | | | | | | |
| 118 | IBC 21/ASCE Strength 4 (c) (d) | | Y | DL | 1.2 | WL-X | 1 | LL | 0.5 | LLS | 1 | | | | | | |
| 119 | IBC 21/ASCE Strength 4 (c) (e) | | Y | DL | 1.2 | WL+Z | 1 | LL | 0.5 | LLS | 1 | | | | | | |
| 120 | IBC 21/ASCE Strength 4 (c) (f) | | Y | DL | 1.2 | WL-Z | 1 | LL | 0.5 | LLS | 1 | | | | | | |
| 121 | IBC 21/ASCE Strength 4 (c) (g) | | Y | DL | 1.2 | WL | -1 | LL | 0.5 | LLS | 1 | | | | | | |
| 122 | IBC 21/ASCE Strength 4 (c) (h) | | Y | DL | 1.2 | WL+X | -1 | LL | 0.5 | LLS | 1 | | | | | | |
| 123 | IBC 21/ASCE Strength 4 (c) (i) | | Y | DL | 1.2 | WL-X | -1 | LL | 0.5 | LLS | 1 | | | | | | |
| 124 | IBC 21/ASCE Strength 4 (c) (j) | | Y | DL | 1.2 | WL+Z | -1 | LL | 0.5 | LLS | 1 | | | | | | |
| 125 | IBC 21/ASCE Strength 4 (c) (k) | | Y | DL | 1.2 | WL-Z | -1 | LL | 0.5 | LLS | 1 | | | | | | |

### Load Combinations (Continued)

| | Description | Solve | P-Delta | BLC | Factor | BLC | Factor | BLC | Factor | BLC | Factor | BLC | Factor | BLC | Factor | BLC | Factor |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 126 | IBC 21/ASCE Strength 5 (a) | | Y | DL | 0.9 | WL | 1 | | | | | | | | | | |
| 127 | IBC 21/ASCE Strength 5 (b) | | Y | DL | 0.9 | WL+X | 1 | | | | | | | | | | |
| 128 | IBC 21/ASCE Strength 5 (c) | | Y | DL | 0.9 | WL-X | 1 | | | | | | | | | | |
| 129 | IBC 21/ASCE Strength 5 (d) | | Y | DL | 0.9 | WL+Z | 1 | | | | | | | | | | |
| 130 | IBC 21/ASCE Strength 5 (e) | | Y | DL | 0.9 | WL-Z | 1 | | | | | | | | | | |
| 131 | IBC 21/ASCE Strength 5 (g) | | Y | DL | 0.9 | WL | -1 | | | | | | | | | | |
| 132 | IBC 21/ASCE Strength 5 (h) | | Y | DL | 0.9 | WL+X | -1 | | | | | | | | | | |
| 133 | IBC 21/ASCE Strength 5 (i) | | Y | DL | 0.9 | WL-X | -1 | | | | | | | | | | |
| 134 | IBC 21/ASCE Strength 5 (j) | | Y | DL | 0.9 | WL+Z | -1 | | | | | | | | | | |
| 135 | IBC 21/ASCE Strength 5 (k) | | Y | DL | 0.9 | WL-Z | -1 | | | | | | | | | | |
| 136 | IBC 21/ASCE Strength 6 (a) | | Y | DL | 1.2 | Sds*DL | 0.2 | ELX | 2 | LL | 0.5 | LLS | 1 | SL | 0.2 | SLN | 0.2 |
| 137 | IBC 21/ASCE Strength 6 (b) | | Y | DL | 1.2 | Sds*DL | 0.2 | ELZ | 2 | LL | 0.5 | LLS | 1 | SL | 0.2 | SLN | 0.2 |
| 138 | IBC 21/ASCE Strength 6 (c) | | Y | DL | 1.2 | Sds*DL | 0.2 | ELX | -2 | LL | 0.5 | LLS | 1 | SL | 0.2 | SLN | 0.2 |
| 139 | IBC 21/ASCE Strength 6 (d) | | Y | DL | 1.2 | Sds*DL | 0.2 | ELZ | -2 | LL | 0.5 | LLS | 1 | SL | 0.2 | SLN | 0.2 |
| 140 | IBC 21/ASCE Strength 7 (a) | | Y | DL | 0.9 | Sds*DL | -0.2 | ELX | 2 | | | | | | | | |
| 141 | IBC 21/ASCE Strength 7 (b) | | Y | DL | 0.9 | Sds*DL | -0.2 | ELZ | 2 | | | | | | | | |
| 142 | IBC 21/ASCE Strength 7 (c) | | Y | DL | 0.9 | Sds*DL | -0.2 | ELX | -2 | | | | | | | | |
| 143 | IBC 21/ASCE Strength 7 (d) | | Y | DL | 0.9 | Sds*DL | -0.2 | ELZ | -2 | | | | | | | | |

### Load Combination Design

| | Description | CD | Service | Hot Rolled | Cold Formed | Wood | Concrete | Masonry | Aluminum | Stainless | Connection |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | EX | | | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| 2 | ** ASD GRAVITY LOAD ** | | | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| 3 | | | | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| 4 | Deflection 1 | | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| 5 | Deflection 2 | | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| 6 | Deflection 3 | | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| 7 | IBC 21/ASCE ASD 1 (DL) | 0.9 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| 8 | IBC 21/ASCE ASD 2 (DL+LL) | | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| 9 | IBC 21/ASCE ASD 3 (a) (DL+RLL) | 1.25 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| 10 | IBC 21/ASCE ASD 3 (b) (DL+SL) | 1.15 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| 11 | IBC 21/ASCE ASD 4 (a) (DL+RLL+SL) | 1.25 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| 12 | IBC 21/ASCE ASD 4 (b) (DL+LL+SL) | 1.15 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| 13 | | 1.15 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| 14 | ** ASD WIND LOAD CASES ** | 1.15 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| 15 | | 1.15 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| 16 | IBC 21/ASCE ASD 5 (a) (a) | 1.6 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| 17 | IBC 21/ASCE ASD 5 (a) (b) | 1.6 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| 18 | IBC 21/ASCE ASD 5 (a) (c) | 1.6 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| 19 | IBC 21/ASCE ASD 5 (a) (d) | 1.6 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| 20 | IBC 21/ASCE ASD 5 (a) (e) | 1.6 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| 21 | IBC 21/ASCE ASD 6 (a) (a) | 1.6 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| 22 | IBC 21/ASCE ASD 6 (a) (b) | 1.6 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| 23 | IBC 21/ASCE ASD 6 (a) (c) | 1.6 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| 24 | IBC 21/ASCE ASD 6 (a) (d) | 1.6 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| 25 | IBC 21/ASCE ASD 6 (a) (e) | 1.6 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| 26 | IBC 21/ASCE ASD 6 (b) (a) | 1.6 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| 27 | IBC 21/ASCE ASD 6 (b) (b) | 1.6 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| 28 | IBC 21/ASCE ASD 6 (b) (c) | 1.6 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| 29 | IBC 21/ASCE ASD 6 (b) (d) | 1.6 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| 30 | IBC 21/ASCE ASD 6 (b) (e) | 1.6 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| 31 | IBC 21/ASCE ASD 6 (c) (a) | 1.6 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| 32 | IBC 21/ASCE ASD 6 (c) (b) | 1.6 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| 33 | IBC 21/ASCE ASD 6 (c) (c) | 1.6 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| 34 | IBC 21/ASCE ASD 6 (c) (d) | 1.6 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |

***Load Combination Design (Continued)***

| | Description | CD | Service | Hot Rolled | Cold Formed | Wood | Concrete | Masonry | Aluminum | Stainless | Connection |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 35 | IBC 21/ASCE ASD 6 (c) (e) | 1.6 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| 36 | IBC 21/ASCE ASD 7 (a) | 1.6 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| 37 | IBC 21/ASCE ASD 7 (b) | 1.6 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| 38 | IBC 21/ASCE ASD 7 (c) | 1.6 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| 39 | IBC 21/ASCE ASD 7 (d) | 1.6 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| 40 | IBC 21/ASCE ASD 7 (e) | 1.6 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| 41 | | 1.6 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| 42 | ** ASD SEISIMIC LOAD CASES ** | 1.6 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| 43 | | 1.6 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| 44 | IBC 21/ASCE ASD 8 (a) | 1.6 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| 45 | IBC 21/ASCE ASD 8 (b) | 1.6 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| 46 | IBC 21/ASCE ASD 8 (c) | 1.6 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| 47 | IBC 21/ASCE ASD 8 (d) | 1.6 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| 48 | IBC 21/ASCE ASD 9 (a) | 1.6 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| 49 | IBC 21/ASCE ASD 9 (b) | 1.6 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| 50 | IBC 21/ASCE ASD 9 (c) | 1.6 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| 51 | IBC 21/ASCE ASD 9 (d) | 1.6 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| 52 | IBC 21/ASCE ASD 10 (a) | 1.6 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| 53 | IBC 21/ASCE ASD 10 (b) | 1.6 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| 54 | IBC 21/ASCE ASD 10 (c) | 1.6 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| 55 | IBC 21/ASCE ASD 10 (d) | 1.6 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| 56 | | 1.6 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| 57 | ** LRFD COMBINATIONS FOR ANCHORAGE ** | 1.6 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| 58 | | 1.6 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| 59 | IBC 21/ASCE Strength 1 | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 60 | IBC 21/ASCE Strength 2 (a) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 61 | IBC 21/ASCE Strength 2 (b) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 62 | IBC 21/ASCE Strength 2 (c) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 63 | IBC 21/ASCE Strength 3 (a) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 64 | IBC 21/ASCE Strength 3 (c) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 65 | IBC 21/ASCE Strength 3 (b) (a) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 66 | IBC 21/ASCE Strength 3 (b) (b) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 67 | IBC 21/ASCE Strength 3 (b) (c) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 68 | IBC 21/ASCE Strength 3 (b) (d) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 69 | IBC 21/ASCE Strength 3 (b) (e) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 70 | IBC 21/ASCE Strength 3 (b) (g) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 71 | IBC 21/ASCE Strength 3 (b) (h) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 72 | IBC 21/ASCE Strength 3 (b) (i) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 73 | IBC 21/ASCE Strength 3 (b) (j) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 74 | IBC 21/ASCE Strength 3 (b) (k) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 75 | IBC 21/ASCE Strength 3 (d) (a) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 76 | IBC 21/ASCE Strength 3 (d) (b) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 77 | IBC 21/ASCE Strength 3 (d) (c) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 78 | IBC 21/ASCE Strength 3 (d) (d) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 79 | IBC 21/ASCE Strength 3 (d) (e) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 80 | IBC 21/ASCE Strength 3 (d) (g) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 81 | IBC 21/ASCE Strength 3 (d) (h) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 82 | IBC 21/ASCE Strength 3 (d) (i) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 83 | IBC 21/ASCE Strength 3 (d) (j) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 84 | IBC 21/ASCE Strength 3 (d) (k) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 85 | IBC 21/ASCE Strength 3 (f) (a) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 86 | IBC 21/ASCE Strength 3 (f) (b) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 87 | IBC 21/ASCE Strength 3 (f) (c) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 88 | IBC 21/ASCE Strength 3 (f) (d) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 89 | IBC 21/ASCE Strength 3 (f) (e) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |

***Load Combination Design (Continued)***

| | Description | CD | Service | Hot Rolled | Cold Formed | Wood | Concrete | Masonry | Aluminum | Stainless | Connection |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 90 | IBC 21/ASCE Strength 3 (f) (g) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 91 | IBC 21/ASCE Strength 3 (f) (h) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 92 | IBC 21/ASCE Strength 3 (f) (i) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 93 | IBC 21/ASCE Strength 3 (f) (j) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 94 | IBC 21/ASCE Strength 3 (f) (k) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 95 | IBC 21/ASCE Strength 4 (a) (a) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 96 | IBC 21/ASCE Strength 4 (a) (b) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 97 | IBC 21/ASCE Strength 4 (a) (c) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 98 | IBC 21/ASCE Strength 4 (a) (d) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 99 | IBC 21/ASCE Strength 4 (a) (e) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 100 | IBC 21/ASCE Strength 4 (a) (g) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 101 | IBC 21/ASCE Strength 4 (a) (h) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 102 | IBC 21/ASCE Strength 4 (a) (i) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 103 | IBC 21/ASCE Strength 4 (a) (j) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 104 | IBC 21/ASCE Strength 4 (a) (k) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 105 | IBC 21/ASCE Strength 4 (b) (a) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 106 | IBC 21/ASCE Strength 4 (b) (b) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 107 | IBC 21/ASCE Strength 4 (b) (c) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 108 | IBC 21/ASCE Strength 4 (b) (d) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 109 | IBC 21/ASCE Strength 4 (b) (e) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 110 | IBC 21/ASCE Strength 4 (b) (f) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 111 | IBC 21/ASCE Strength 4 (b) (h) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 112 | IBC 21/ASCE Strength 4 (b) (i) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 113 | IBC 21/ASCE Strength 4 (b) (j) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 114 | IBC 21/ASCE Strength 4 (b) (k) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 115 | IBC 21/ASCE Strength 4 (b) (l) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 116 | IBC 21/ASCE Strength 4 (c) (b) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 117 | IBC 21/ASCE Strength 4 (c) (c) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 118 | IBC 21/ASCE Strength 4 (c) (d) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 119 | IBC 21/ASCE Strength 4 (c) (e) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 120 | IBC 21/ASCE Strength 4 (c) (f) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 121 | IBC 21/ASCE Strength 4 (c) (g) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 122 | IBC 21/ASCE Strength 4 (c) (h) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 123 | IBC 21/ASCE Strength 4 (c) (i) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 124 | IBC 21/ASCE Strength 4 (c) (j) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 125 | IBC 21/ASCE Strength 4 (c) (k) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 126 | IBC 21/ASCE Strength 5 (a) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 127 | IBC 21/ASCE Strength 5 (b) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 128 | IBC 21/ASCE Strength 5 (c) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 129 | IBC 21/ASCE Strength 5 (d) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 130 | IBC 21/ASCE Strength 5 (e) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 131 | IBC 21/ASCE Strength 5 (g) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 132 | IBC 21/ASCE Strength 5 (h) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 133 | IBC 21/ASCE Strength 5 (i) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 134 | IBC 21/ASCE Strength 5 (j) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 135 | IBC 21/ASCE Strength 5 (k) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 136 | IBC 21/ASCE Strength 6 (a) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 137 | IBC 21/ASCE Strength 6 (b) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 138 | IBC 21/ASCE Strength 6 (c) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 139 | IBC 21/ASCE Strength 6 (d) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 140 | IBC 21/ASCE Strength 7 (a) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 141 | IBC 21/ASCE Strength 7 (b) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 142 | IBC 21/ASCE Strength 7 (c) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |
| 143 | IBC 21/ASCE Strength 7 (d) | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes |

***Envelope Node Reactions***

| | Node Label | | X [lb] | LC | Y [lb] | LC | Z [lb] | LC | MX [lb-ft] | LC | MY [lb-ft] | LC | MZ [lb-ft] | LC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | N112 | max | 0 | 55 | 1301.875 | 48 | 0 | 55 | 0 | 55 | 0 | 55 | 0 | 55 |
| 2 | | min | 0 | 4 | 0 | 20 | 0 | 4 | 0 | 4 | 0 | 4 | 0 | 4 |
| 3 | N32 | max | 0 | 55 | 1217.046 | 50 | 0 | 55 | 0 | 55 | 0 | 55 | 0 | 55 |
| 4 | | min | 0 | 4 | 0 | 54 | 0 | 4 | 0 | 4 | 0 | 4 | 0 | 4 |
| 5 | N1251 | max | 0 | 55 | 0.09 | 55 | 0 | 55 | 0 | 55 | 0 | 55 | 0 | 55 |
| 6 | | min | 0 | 4 | 0 | 4 | 0 | 4 | 0 | 4 | 0 | 4 | 0 | 4 |
| 7 | N1071 | max | 0 | 55 | 812.911 | 50 | 0 | 55 | 0 | 55 | 0 | 55 | 0 | 55 |
| 8 | | min | 0 | 4 | 0 | 54 | 0 | 4 | 0 | 4 | 0 | 4 | 0 | 4 |
| 9 | N1375 | max | 0 | 55 | 690.094 | 48 | 0 | 55 | 0 | 55 | 0 | 55 | 0 | 55 |
| 10 | | min | 0 | 4 | 0 | 46 | 0 | 4 | 0 | 4 | 0 | 4 | 0 | 4 |
| 11 | N16 | max | 0 | 55 | 0 | 55 | 2112.305 | 53 | 0 | 55 | 0 | 55 | 0 | 55 |
| 12 | | min | 0 | 4 | 0 | 4 | -2147.886 | 47 | 0 | 4 | 0 | 4 | 0 | 4 |
| 13 | N48 | max | 0 | 55 | 1629.35 | 48 | 0 | 55 | 0 | 55 | 0 | 55 | 0 | 55 |
| 14 | | min | 0 | 4 | 120.749 | 37 | 0 | 4 | 0 | 4 | 0 | 4 | 0 | 4 |
| 15 | N64 | max | 0 | 55 | 1590.81 | 48 | 0 | 55 | 0 | 55 | 0 | 55 | 0 | 55 |
| 16 | | min | 0 | 4 | 0 | 46 | 0 | 4 | 0 | 4 | 0 | 4 | 0 | 4 |
| 17 | N80 | max | 0 | 55 | 1857.524 | 50 | 0 | 55 | 0 | 55 | 0 | 55 | 0 | 55 |
| 18 | | min | 0 | 4 | 0 | 46 | 0 | 4 | 0 | 4 | 0 | 4 | 0 | 4 |
| 19 | N96 | max | 0 | 55 | 2134.85 | 50 | 0 | 55 | 0 | 55 | 0 | 55 | 0 | 55 |
| 20 | | min | 0 | 4 | 0 | 40 | 0 | 4 | 0 | 4 | 0 | 4 | 0 | 4 |
| 21 | N128 | max | 0 | 55 | 800.169 | 44 | 3205.887 | 50 | 0 | 55 | 0 | 55 | 0 | 55 |
| 22 | | min | 0 | 4 | 0 | 4 | -3671.668 | 44 | 0 | 4 | 0 | 4 | 0 | 4 |
| 23 | N129 | max | 1.078 | 51 | 2243.571 | 49 | 9.353 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 24 | | min | -2.204 | 49 | 0 | 18 | -6.661 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 25 | N130 | max | 1.467 | 51 | 2769.374 | 8 | 11.066 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 26 | | min | -2.248 | 49 | 0 | 18 | -11.696 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 27 | N131 | max | 0.826 | 51 | 2592.861 | 8 | 10.101 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 28 | | min | -1.568 | 49 | 0 | 18 | -10.961 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 29 | N133 | max | 0.075 | 48 | 2773.174 | 8 | 10.911 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 30 | | min | -0.854 | 50 | 0 | 18 | -11.751 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 31 | N132 | max | 0.444 | 51 | 2592.332 | 8 | 10.239 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 32 | | min | -1.222 | 49 | 0 | 18 | -10.908 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 33 | N134 | max | 0.018 | 44 | 1700.227 | 51 | 6.195 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 34 | | min | -1.296 | 54 | 0 | 18 | -7.605 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 35 | N135 | max | 1.688 | 51 | 4995.814 | 51 | 19.016 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 36 | | min | -3.127 | 49 | 0 | 18 | -21.139 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 37 | N136 | max | 0.111 | 48 | 4524.915 | 49 | 17.797 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 38 | | min | -1.346 | 50 | 0 | 18 | -17.591 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 39 | N137 | max | 3.572 | 51 | 4914.02 | 51 | 15.046 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 40 | | min | -3.746 | 49 | 0 | 18 | -20.774 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 41 | N138 | max | 2.764 | 51 | 4890.672 | 51 | 17.457 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 42 | | min | -3.75 | 49 | 0 | 18 | -20.682 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 43 | N139 | max | 0.879 | 51 | 4857.947 | 49 | 19.123 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 44 | | min | -2.421 | 49 | 0 | 18 | -20.396 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 45 | N140 | max | 0.034 | 48 | 4261.294 | 49 | 16.755 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 46 | | min | -0.945 | 50 | 0 | 18 | -13.888 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 47 | N141 | max | 3.071 | 51 | 4783.22 | 50 | 18.877 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 48 | | min | -4.368 | 49 | 0 | 18 | -20.253 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 49 | N142 | max | 1.645 | 51 | 3801.987 | 50 | 14.963 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 50 | | min | -2.441 | 49 | 0 | 18 | -16.074 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 51 | N143 | max | 0.159 | 48 | 4223.961 | 50 | 16.625 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 52 | | min | -1.462 | 50 | 0 | 18 | -17.871 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 53 | N144 | max | 3.26 | 51 | 3999.736 | 8 | 14.988 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 54 | | min | -3.963 | 49 | 0 | 18 | -16.162 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 55 | N145 | max | 0.994 | 51 | 3992.729 | 50 | 15.728 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |

***Envelope Node Reactions (Continued)***

| | Node Label | | X [lb] | LC | Y [lb] | LC | Z [lb] | LC | MX [lb-ft] | LC | MY [lb-ft] | LC | MZ [lb-ft] | LC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 56 | | min | -1.943 | 49 | 0 | 18 | -16.889 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 57 | N146 | max | 0.15 | 48 | 2379.245 | 50 | 9.404 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 58 | | min | -0.583 | 50 | 0 | 18 | -10.05 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 59 | N153 | max | 3.493 | 51 | 4767.552 | 50 | 19.229 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 60 | | min | -4.763 | 49 | 0 | 18 | -20.541 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 61 | N154 | max | 1.9 | 51 | 3853.811 | 50 | 15.443 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 62 | | min | -2.707 | 49 | 0 | 18 | -16.612 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 63 | N155 | max | 0.227 | 48 | 4278.37 | 50 | 17.145 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 64 | | min | -1.577 | 50 | 0 | 18 | -18.466 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 65 | N156 | max | 3.678 | 51 | 3974.457 | 8 | 16.15 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 66 | | min | -4.616 | 49 | 0 | 18 | -16.399 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 67 | N157 | max | 1.155 | 51 | 3939.054 | 50 | 15.834 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 68 | | min | -2.074 | 49 | 0 | 18 | -16.967 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 69 | N158 | max | 0.189 | 48 | 2349.076 | 51 | 9.389 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 70 | | min | -1.227 | 54 | 0 | 18 | -10.289 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 71 | N165 | max | 4.011 | 51 | 4815.836 | 50 | 19.08 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 72 | | min | -5.06 | 49 | 0 | 18 | -20.873 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 73 | N166 | max | 2.616 | 51 | 4825.788 | 49 | 20.155 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 74 | | min | -3.996 | 49 | 0 | 18 | -21.62 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 75 | N167 | max | 0.329 | 48 | 4275.294 | 50 | 17.47 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 76 | | min | -1.673 | 50 | 0 | 18 | -18.282 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 77 | N168 | max | 5.963 | 51 | 5706.436 | 51 | 17.275 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 78 | | min | -5.364 | 49 | 120.915 | 39 | -25.566 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 79 | N169 | max | 1.555 | 51 | 4984.749 | 51 | 20.159 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 80 | | min | -3.004 | 49 | 0 | 18 | -22.335 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 81 | N170 | max | 0.232 | 48 | 4155.014 | 49 | 17.351 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 82 | | min | -1.741 | 54 | 26.225 | 39 | -10.629 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 83 | N177 | max | 4.731 | 51 | 4783.139 | 50 | 20.328 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 84 | | min | -5.881 | 49 | 0 | 18 | -21.738 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 85 | N178 | max | 0.453 | 48 | 4291.249 | 50 | 18.173 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 86 | | min | -1.805 | 50 | 0 | 18 | -19.55 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 87 | N179 | max | 0.285 | 48 | 2374.425 | 51 | 9.894 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 88 | | min | -0.684 | 50 | 0 | 18 | -10.97 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 89 | N180 | max | 2.595 | 51 | 3837.446 | 50 | 16.284 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 90 | | min | -3.332 | 49 | 0 | 18 | -17.459 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 91 | N181 | max | 4.851 | 51 | 3971.173 | 8 | 16.067 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 92 | | min | -5.377 | 49 | 0 | 18 | -17.254 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 93 | N182 | max | 1.663 | 51 | 3930.662 | 50 | 16.692 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 94 | | min | -2.523 | 49 | 0 | 18 | -17.867 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 95 | N189 | max | 5.722 | 51 | 4894.878 | 30 | 21.768 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 96 | | min | -6.92 | 49 | 0 | 17 | -22.995 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 97 | N190 | max | 0.619 | 48 | 4311.573 | 30 | 18.88 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 98 | | min | -1.96 | 50 | 0 | 17 | -20.361 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 99 | N191 | max | 0.353 | 48 | 2501.358 | 51 | 10.34 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 100 | | min | -2.971 | 54 | 0 | 17 | -12.034 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 101 | N192 | max | 3.059 | 51 | 3757.13 | 30 | 16.376 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 102 | | min | -3.653 | 49 | 0 | 17 | -17.71 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 103 | N193 | max | 5.692 | 51 | 4382.288 | 49 | 19.679 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 104 | | min | -7.36 | 49 | 0 | 17 | -17.858 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 105 | N194 | max | 2.071 | 51 | 4010.306 | 30 | 17.71 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 106 | | min | -2.935 | 49 | 0 | 17 | -18.848 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 107 | N201 | max | 6.857 | 51 | 4993.594 | 30 | 21.544 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 108 | | min | -7.529 | 49 | 0 | 17 | -23.653 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 109 | N202 | max | 0.848 | 48 | 4535.158 | 30 | 19.876 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 110 | | min | -2.188 | 50 | 0 | 17 | -20.626 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |

***Envelope Node Reactions (Continued)***

| | Node Label | | X [lb] | LC | Y [lb] | LC | Z [lb] | LC | MX [lb-ft] | LC | MY [lb-ft] | LC | MZ [lb-ft] | LC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 111 | N203 | max | 0.454 | 48 | 5995.012 | 49 | 28.384 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 112 | | min | -2.134 | 46 | 283.931 | 39 | -12.072 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 113 | N204 | max | 4.898 | 51 | 5027.53 | 49 | 23.892 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 114 | | min | -6.189 | 49 | 0 | 17 | -25.488 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 115 | N205 | max | 13.528 | 51 | 8012.861 | 51 | 18.003 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 116 | | min | -7.388 | 49 | 203.31 | 36 | -40.631 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 117 | N206 | max | 3.244 | 51 | 5201.325 | 51 | 23.824 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 118 | | min | -4.563 | 49 | 0 | 17 | -26.459 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 119 | N213 | max | 9.111 | 51 | 5136.784 | 30 | 25.216 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 120 | | min | -9.935 | 49 | 0 | 17 | -26.875 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 121 | N214 | max | 1.192 | 51 | 4520.289 | 30 | 21.915 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 122 | | min | -2.502 | 50 | 0 | 17 | -23.594 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 123 | N215 | max | 0.603 | 48 | 2720.054 | 51 | 11.947 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 124 | | min | -1.054 | 46 | 0 | 17 | -15.114 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 125 | N216 | max | 4.844 | 51 | 3889.524 | 30 | 18.864 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 126 | | min | -5.237 | 49 | 0 | 17 | -20.156 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 127 | N217 | max | 9.659 | 51 | 4141.797 | 51 | 19.008 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 128 | | min | -8.766 | 49 | 0 | 17 | -23.006 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 129 | N218 | max | 3.513 | 51 | 4202.066 | 30 | 20.491 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 130 | | min | -4.179 | 49 | 0 | 17 | -21.857 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 131 | N225 | max | 12.269 | 51 | 5033.034 | 30 | 28.313 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 132 | | min | -12.741 | 49 | 0 | 17 | -30.172 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 133 | N226 | max | 1.947 | 51 | 4556.892 | 30 | 25.436 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 134 | | min | -3.059 | 50 | 0 | 17 | -27.17 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 135 | N227 | max | 0.789 | 48 | 2401.205 | 30 | 13.375 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 136 | | min | -1.387 | 46 | 0 | 17 | -14.348 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 137 | N228 | max | 6.901 | 51 | 4014.886 | 30 | 22.384 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 138 | | min | -7.15 | 49 | 0 | 17 | -23.889 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 139 | N229 | max | 11.809 | 51 | 3965.225 | 8 | 22.097 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 140 | | min | -11.729 | 49 | 0 | 17 | -23.527 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 141 | N230 | max | 4.889 | 51 | 4115.27 | 30 | 22.994 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 142 | | min | -5.33 | 49 | 0 | 17 | -24.543 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 143 | N237 | max | 19.737 | 51 | 5174.571 | 30 | 37.046 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 144 | | min | -19.6 | 49 | 0 | 17 | -39.267 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 145 | N238 | max | 3.487 | 51 | 4498.57 | 30 | 31.82 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 146 | | min | -4.098 | 46 | 0 | 17 | -34.051 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 147 | N239 | max | 1.228 | 48 | 2428.382 | 30 | 17.305 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 148 | | min | -2.067 | 46 | 0 | 17 | -18.33 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 149 | N240 | max | 10.422 | 51 | 3832.638 | 30 | 27.068 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 150 | | min | -10.153 | 49 | 0 | 17 | -28.891 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 151 | N241 | max | 18.122 | 51 | 3908.875 | 8 | 27.639 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 152 | | min | -17.359 | 49 | 0 | 17 | -29.505 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 153 | N242 | max | 8.097 | 51 | 4244.596 | 30 | 30.155 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 154 | | min | -8.222 | 49 | 0 | 17 | -32.091 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 155 | N249 | max | 40.026 | 51 | 4475.487 | 51 | 52.054 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 156 | | min | -33.688 | 49 | 0 | 37 | -61.698 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 157 | N250 | max | 8.375 | 51 | 4940.91 | 48 | 60.341 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 158 | | min | -9.162 | 49 | 0 | 46 | -55.999 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 159 | N251 | max | 10.611 | 54 | 3132.364 | 49 | 2261.509 | 47 | 0 | 55 | 0 | 55 | 0 | 55 |
| 160 | | min | -2.56 | 47 | -1256.362 | 37 | -1.267 | 54 | 0 | 4 | 0 | 4 | 0 | 4 |
| 161 | N252 | max | 24.011 | 51 | 4033.09 | 48 | 47.311 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 162 | | min | -21.899 | 49 | 0 | 37 | -51.472 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 163 | N253 | max | 43.299 | 51 | 4020.203 | 51 | 2.524 | 37 | 0 | 55 | 0 | 55 | 0 | 55 |
| 164 | | min | -27.523 | 49 | -1997.212 | 37 | -2166.248 | 45 | 0 | 4 | 0 | 4 | 0 | 4 |
| 165 | N254 | max | 17.128 | 51 | 4210.977 | 48 | 51.553 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |

***Envelope Node Reactions (Continued)***

| | Node Label | | X [lb] | LC | Y [lb] | LC | Z [lb] | LC | MX [lb-ft] | LC | MY [lb-ft] | LC | MZ [lb-ft] | LC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 166 | | min | -17.166 | 49 | 0 | 37 | -51.179 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 167 | N261 | max | 13.642 | 51 | 4359.246 | 30 | 61.389 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 168 | | min | -12.75 | 49 | 0 | 37 | -64.92 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 169 | N262 | max | 36.766 | 51 | 3911.789 | 30 | 54.628 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 170 | | min | -34.11 | 49 | 0 | 37 | -58.667 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 171 | N263 | max | 3.211 | 48 | 2438.992 | 49 | 1681.413 | 47 | 0 | 55 | 0 | 55 | 0 | 55 |
| 172 | | min | -3.389 | 50 | -69.541 | 55 | -0.111 | 54 | 0 | 4 | 0 | 4 | 0 | 4 |
| 173 | N264 | max | 56.6 | 51 | 4355.788 | 30 | 60.958 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 174 | | min | -52.833 | 49 | 0 | 37 | -65.024 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 175 | N265 | max | 39.079 | 51 | 2437.242 | 51 | -0.026 | 11 | 0 | 55 | 0 | 55 | 0 | 55 |
| 176 | | min | -32.529 | 49 | -37.264 | 53 | -1612.164 | 45 | 0 | 4 | 0 | 4 | 0 | 4 |
| 177 | N266 | max | 26.343 | 51 | 3914.885 | 30 | 55.363 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 178 | | min | -24.948 | 49 | 0 | 37 | -58.155 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 179 | N273 | max | 20.982 | 51 | 4249.577 | 50 | 60.407 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 180 | | min | -19.403 | 49 | 265.385 | 54 | -64.72 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 181 | N274 | max | 54.931 | 51 | 3807.762 | 49 | 54.39 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 182 | | min | -51.343 | 49 | 281.538 | 54 | -57.888 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 183 | N275 | max | 3.917 | 48 | 2292.64 | 49 | 1108.012 | 47 | 0 | 55 | 0 | 55 | 0 | 55 |
| 184 | | min | -25.836 | 54 | 41.66 | 37 | 0.001 | 4 | 0 | 4 | 0 | 4 | 0 | 4 |
| 185 | N276 | max | 84.466 | 51 | 4243.32 | 49 | 60.692 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 186 | | min | -79.247 | 49 | 307.734 | 37 | -64.259 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 187 | N277 | max | 54.874 | 51 | 2294.268 | 51 | -0.022 | 11 | 0 | 55 | 0 | 55 | 0 | 55 |
| 188 | | min | -50.141 | 49 | 68.175 | 37 | -1061.606 | 45 | 0 | 4 | 0 | 4 | 0 | 4 |
| 189 | N278 | max | 39.829 | 51 | 3805.396 | 49 | 54.306 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 190 | | min | -37.165 | 49 | 282.943 | 55 | -57.893 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 191 | N285 | max | 43.062 | 51 | 4352.823 | 50 | 60.514 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 192 | | min | -87.838 | 46 | 308.995 | 37 | -64.857 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 193 | N286 | max | 108.901 | 51 | 3792.189 | 50 | 53.239 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 194 | | min | -101.646 | 49 | 281.251 | 52 | -56.614 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 195 | N287 | max | 121.313 | 54 | 2220.444 | 49 | 543.566 | 47 | 0 | 55 | 0 | 55 | 0 | 55 |
| 196 | | min | -6.957 | 50 | -1691.058 | 54 | -4.561 | 54 | 0 | 4 | 0 | 4 | 0 | 4 |
| 197 | N288 | max | 171.398 | 51 | 4316.475 | 49 | 60.943 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 198 | | min | -160.75 | 49 | 260.156 | 54 | -64.474 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 199 | N289 | max | 105.459 | 51 | 2211.488 | 51 | -0.021 | 11 | 0 | 55 | 0 | 55 | 0 | 55 |
| 200 | | min | -98.395 | 49 | 153.281 | 53 | -519.257 | 45 | 0 | 4 | 0 | 4 | 0 | 4 |
| 201 | N290 | max | 79.255 | 51 | 3778.001 | 49 | 53.209 | 49 | 0 | 55 | 0 | 55 | 0 | 55 |
| 202 | | min | -73.758 | 49 | 0 | 46 | -56.735 | 51 | 0 | 4 | 0 | 4 | 0 | 4 |
| 203 | N297 | max | 49.535 | 54 | 0 | 49 | 909.551 | 55 | 0 | 55 | 0 | 55 | 0 | 55 |
| 204 | | min | -354.622 | 38 | -2611.514 | 55 | 0 | 49 | 0 | 17 | 0 | 17 | 0 | 17 |
| 205 | N298 | max | 880.774 | 54 | 0 | 49 | 1452.658 | 47 | 0 | 55 | 0 | 55 | 0 | 55 |
| 206 | | min | -269.824 | 52 | -3317.669 | 38 | 0 | 49 | 0 | 4 | 0 | 17 | 0 | 17 |
| 207 | N299 | max | 1613.216 | 54 | 0 | 49 | 5491.01 | 47 | 0 | 55 | 0 | 55 | 0 | 55 |
| 208 | | min | -1013.141 | 37 | -5338.24 | 47 | 0 | 49 | 0 | 17 | 0 | 17 | 0 | 17 |
| 209 | N222 | max | 94.301 | 53 | 0 | 48 | 0 | 48 | 0 | 55 | 0 | 55 | 0 | 39 |
| 210 | | min | -350.466 | 38 | -2342.278 | 53 | -858.203 | 53 | 0 | 16 | 0 | 16 | 0 | 18 |
| 211 | N223 | max | 959.677 | 54 | 0 | 29 | 0 | 29 | 0 | 55 | 0 | 55 | 0 | 54 |
| 212 | | min | -736.782 | 47 | -3469.401 | 45 | -1406.753 | 45 | 0 | 4 | 0 | 16 | 0 | 16 |
| 213 | N224 | max | 1783.377 | 54 | 0 | 48 | 0 | 48 | 0 | 55 | 0 | 54 | 0 | 54 |
| 214 | | min | -997.135 | 37 | -5977.565 | 45 | -5330.632 | 45 | 0 | 16 | 0 | 16 | 0 | 16 |
| 215 | N1066 | max | 0 | 50 | 0 | 46 | 0 | 53 | LOCKED | | LOCKED | | LOCKED | |
| 216 | | min | 0 | 44 | 0 | 49 | -3.819 | 16 | LOCKED | | LOCKED | | LOCKED | |
| 217 | N1067 | max | 0 | 50 | 0 | 55 | 0 | 55 | LOCKED | | LOCKED | | LOCKED | |
| 218 | | min | 0 | 44 | 0 | 4 | -50.161 | 16 | LOCKED | | LOCKED | | LOCKED | |
| 219 | N1068 | max | 0 | 50 | 0 | 55 | 0 | 55 | LOCKED | | LOCKED | | LOCKED | |
| 220 | | min | 0 | 44 | 0 | 4 | -110.842 | 16 | LOCKED | | LOCKED | | LOCKED | |

### *Envelope Node Reactions (Continued)*

| | Node Label | | X [lb] | LC | Y [lb] | LC | Z [lb] | LC | MX [lb-ft] | LC | MY [lb-ft] | LC | MZ [lb-ft] | LC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 221 | N1069 | max | 0 | 50 | 0 | 55 | 0 | 55 | LOCKED | | LOCKED | | LOCKED | |
| 222 | | min | 0 | 44 | 0 | 4 | -114.146 | 16 | LOCKED | | LOCKED | | LOCKED | |
| 223 | N1070 | max | 0 | 50 | 0 | 55 | 0 | 55 | LOCKED | | LOCKED | | LOCKED | |
| 224 | | min | 0 | 44 | 0 | 4 | -90.748 | 16 | LOCKED | | LOCKED | | LOCKED | |
| 225 | N1072 | max | 0 | 50 | 0 | 55 | 0 | 55 | LOCKED | | LOCKED | | LOCKED | |
| 226 | | min | 0 | 44 | 0 | 4 | -102.171 | 16 | LOCKED | | LOCKED | | LOCKED | |
| 227 | N1073 | max | 0 | 50 | 0 | 55 | 0 | 55 | LOCKED | | LOCKED | | LOCKED | |
| 228 | | min | 0 | 44 | 0 | 4 | -79.173 | 16 | LOCKED | | LOCKED | | LOCKED | |
| 229 | N1074 | max | 0 | 50 | 0 | 55 | 0 | 55 | LOCKED | | LOCKED | | LOCKED | |
| 230 | | min | 0 | 44 | 0 | 4 | -67.74 | 16 | LOCKED | | LOCKED | | LOCKED | |
| 231 | N1075 | max | 0 | 50 | 0 | 55 | 0 | 55 | LOCKED | | LOCKED | | LOCKED | |
| 232 | | min | 0 | 44 | 0 | 4 | -56.172 | 16 | LOCKED | | LOCKED | | LOCKED | |
| 233 | N1076 | max | 0 | 50 | 0 | 55 | 0 | 55 | LOCKED | | LOCKED | | LOCKED | |
| 234 | | min | 0 | 44 | 0 | 4 | -44.374 | 16 | LOCKED | | LOCKED | | LOCKED | |
| 235 | N1077 | max | 0 | 50 | 0 | 27 | 0 | 46 | LOCKED | | LOCKED | | LOCKED | |
| 236 | | min | 0 | 44 | 0 | 46 | -33.105 | 16 | LOCKED | | LOCKED | | LOCKED | |
| 237 | N1078 | max | 0 | 50 | 0 | 46 | 0 | 49 | LOCKED | | LOCKED | | LOCKED | |
| 238 | | min | 0 | 44 | 0 | 49 | -21.487 | 16 | LOCKED | | LOCKED | | LOCKED | |
| 239 | N1079 | max | 0 | 50 | 0 | 48 | 0 | 50 | LOCKED | | LOCKED | | LOCKED | |
| 240 | | min | 0 | 44 | 0 | 46 | -11.217 | 16 | LOCKED | | LOCKED | | LOCKED | |
| 241 | N1080 | max | 10215.049 | 50 | 572.855 | 54 | 0 | 53 | LOCKED | | LOCKED | | LOCKED | |
| 242 | | min | -12207.065 | 44 | -0.009 | 51 | 0 | 44 | LOCKED | | LOCKED | | LOCKED | |
| 243 | N1081 | max | 0 | 50 | 0 | 44 | 0 | 26 | LOCKED | | LOCKED | | LOCKED | |
| 244 | | min | 0 | 44 | 0 | 46 | 0 | 36 | LOCKED | | LOCKED | | LOCKED | |
| 245 | N1082 | max | 0.191 | 54 | 0 | 50 | 738.47 | 47 | LOCKED | | 0 | 55 | 0 | 39 |
| 246 | | min | -1.634 | 47 | -1913.219 | 47 | -704.61 | 45 | LOCKED | | 0 | 16 | 0 | 18 |
| 247 | N1083 | max | 0.275 | 46 | 0 | 12 | 1227.382 | 47 | LOCKED | | 0 | 55 | 0 | 39 |
| 248 | | min | -2.639 | 47 | -2307.055 | 47 | -1198.227 | 45 | LOCKED | | 0 | 16 | 0 | 18 |
| 249 | N1084 | max | 0.854 | 54 | 0 | 12 | 2313.66 | 47 | LOCKED | | 0 | 38 | 0 | 55 |
| 250 | | min | -4.816 | 47 | -2694.859 | 47 | -2252.707 | 45 | LOCKED | | 0 | 17 | 0 | 16 |
| 251 | Totals: | max | 13333.433 | 46 | 338948.307 | 30 | 13333.433 | 47 | | | | | | |
| 252 | | min | -13333.433 | 52 | -7024.952 | 37 | -13333.433 | 45 | | | | | | |

### *Envelope Maximum Member Section Forces*

| | Member | | Axial[lb] | Loc[ft] | LC | y Shear[lb] | Loc[ft] | LC | z Shear[lb] | Loc[ft] | LC | Torque[lb-ft] | Loc[ft] | LC | y-y Moment[lb-ft] | Loc[ft] | LC | z-z Moment[lb-ft] | Loc[ft] | LC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | M137 | max | 0 | 38.885 | 53 | 0 | 38.885 | 55 | 0 | 38.885 | 55 | 0 | 38.885 | 54 | 0 | 38.885 | 55 | 0 | 38.885 | 55 |
| 2 | | min | -445.656 | 0 | 38 | 0 | 0 | 4 | 0 | 0 | 4 | -0.008 | 0 | 38 | 0 | 0 | 4 | 0 | 0 | 4 |
| 3 | M138 | max | 0 | 35.977 | 54 | 0 | 35.977 | 55 | 0 | 35.977 | 55 | 0.013 | 35.977 | 38 | 0 | 35.977 | 55 | 0 | 35.977 | 55 |
| 4 | | min | -1236.505 | 0 | 38 | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 4 |
| 5 | M139 | max | 0 | 32.635 | 53 | 0 | 32.635 | 55 | 0 | 32.635 | 55 | 0.062 | 32.635 | 38 | 0 | 32.635 | 55 | 0 | 32.635 | 55 |
| 6 | | min | -1391.071 | 0 | 38 | 0 | 0 | 4 | 0 | 0 | 4 | -0.001 | 0 | 51 | 0 | 0 | 4 | 0 | 0 | 4 |
| 7 | M140 | max | 0 | 26.078 | 54 | 0 | 26.078 | 55 | 0 | 26.078 | 55 | 0 | 26.078 | 51 | 0 | 26.078 | 55 | 0 | 26.078 | 55 |
| 8 | | min | -1204.158 | 0 | 38 | 0 | 0 | 4 | 0 | 0 | 4 | -0.05 | 0 | 38 | 0 | 0 | 4 | 0 | 0 | 4 |
| 9 | M141 | max | 0 | 22.897 | 53 | 0 | 22.897 | 55 | 0 | 22.897 | 55 | 0.001 | 22.897 | 51 | 0 | 22.897 | 55 | 0 | 22.897 | 55 |
| 10 | | min | -1336.28 | 0 | 54 | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 17 | 0 | 0 | 4 | 0 | 0 | 4 |
| 11 | M142 | max | 0 | 16.92 | 54 | 0 | 16.92 | 55 | 0 | 16.92 | 55 | 0 | 16.92 | 54 | 0 | 16.92 | 55 | 0 | 16.92 | 55 |
| 12 | | min | -2485.037 | 0 | 37 | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 51 | 0 | 0 | 4 | 0 | 0 | 4 |
| 13 | M143 | max | 0 | 38.885 | 55 | 0 | 38.885 | 55 | 0 | 38.885 | 55 | 0.008 | 38.885 | 38 | 0 | 38.885 | 55 | 0 | 38.885 | 55 |
| 14 | | min | -452.728 | 0 | 53 | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 4 |
| 15 | M145 | max | 0 | 32.635 | 55 | 0 | 32.635 | 55 | 0 | 32.635 | 55 | 0 | 32.635 | 37 | 0 | 32.635 | 55 | 0 | 32.635 | 55 |
| 16 | | min | -1389.552 | 0 | 38 | 0 | 0 | 4 | 0 | 0 | 4 | -0.061 | 0 | 38 | 0 | 0 | 4 | 0 | 0 | 4 |
| 17 | M146 | max | 0 | 35.977 | 54 | 0 | 35.977 | 55 | 0 | 35.977 | 55 | 0 | 35.977 | 55 | 0 | 35.977 | 55 | 0 | 35.977 | 55 |
| 18 | | min | -1230.549 | 0 | 38 | 0 | 0 | 4 | 0 | 0 | 4 | -0.013 | 0 | 38 | 0 | 0 | 4 | 0 | 0 | 4 |
| 19 | M147 | max | 0 | 26.078 | 54 | 0 | 26.078 | 55 | 0 | 26.078 | 55 | 0.049 | 26.078 | 38 | 0 | 26.078 | 55 | 0 | 26.078 | 55 |
| 20 | | min | -1211.341 | 0 | 38 | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 37 | 0 | 0 | 4 | 0 | 0 | 4 |

***Envelope Maximum Member Section Forces (Continued)***

| | Member | | Axial[lb] | Loc[ft] | LC | y Shear[lb] | Loc[ft] | LC | z Shear[lb] | Loc[ft] | LC | Torque[lb-ft] | Loc[ft] | LC | y-y Moment[lb-ft] | Loc[ft] | LC | z-z Moment[lb-ft] | Loc[ft] | LC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 21 | M148 | max | 0 | 22.897 | 55 | 0 | 22.897 | 55 | 0 | 22.897 | 55 | 0 | 22.897 | 55 | 0 | 22.897 | 55 | 0 | 22.897 | 55 |
| 22 | | min | -1523.552 | 0 | 54 | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 4 |
| 23 | M149 | max | 0 | 16.92 | 54 | 0 | 16.92 | 55 | 0 | 16.92 | 55 | 0 | 16.92 | 55 | 0 | 16.92 | 55 | 0 | 16.92 | 55 |
| 24 | | min | -2452.746 | 0 | 37 | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 16 | 0 | 0 | 4 | 0 | 0 | 4 |
| 25 | M151 | max | 0 | 22.345 | 55 | 0 | 22.345 | 55 | 0 | 22.345 | 55 | 0 | 22.345 | 55 | 0 | 22.345 | 55 | 0 | 22.345 | 55 |
| 26 | | min | -3458.864 | 0 | 45 | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 16 | 0 | 0 | 4 | 0 | 0 | 4 |
| 27 | M152 | max | 0 | 31.089 | 54 | 0 | 31.089 | 55 | 0 | 31.089 | 55 | 0 | 31.089 | 55 | 0 | 31.089 | 55 | 0 | 31.089 | 55 |
| 28 | | min | -2613.212 | 0 | 47 | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 4 |
| 29 | M153 | max | 0 | 31.089 | 55 | 0 | 31.089 | 55 | 0 | 31.089 | 55 | 0 | 31.089 | 55 | 0 | 31.089 | 55 | 0 | 31.089 | 55 |
| 30 | | min | -2551.96 | 0 | 45 | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 16 | 0 | 0 | 4 | 0 | 0 | 4 |
| 31 | M154 | max | 0 | 40.673 | 54 | 0 | 40.673 | 55 | 0 | 40.673 | 55 | 0 | 40.673 | 55 | 0 | 40.673 | 55 | 0 | 40.673 | 55 |
| 32 | | min | -2050.776 | 0 | 47 | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 38 | 0 | 0 | 4 | 0 | 0 | 4 |
| 33 | M155 | max | 0 | 40.673 | 55 | 0 | 40.673 | 55 | 0 | 40.673 | 55 | 0 | 40.673 | 55 | 0 | 40.673 | 55 | 0 | 40.673 | 55 |
| 34 | | min | -1957.587 | 0 | 45 | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 38 | 0 | 0 | 4 | 0 | 0 | 4 |
| 35 | M156 | max | 0 | 22.345 | 54 | 0 | 22.345 | 55 | 0 | 22.345 | 55 | 0 | 22.345 | 55 | 0 | 22.345 | 55 | 0 | 22.345 | 55 |
| 36 | | min | -3551.782 | 0 | 47 | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 4 |
| 37 | M172 | max | 0 | 29.155 | 54 | 0 | 29.155 | 55 | 0 | 29.155 | 55 | 0 | 29.155 | 55 | 0 | 29.155 | 55 | 0 | 29.155 | 55 |
| 38 | | min | -2265.951 | 0 | 47 | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 4 |
| 39 | M173 | max | 0 | 29.155 | 55 | 0 | 29.155 | 55 | 0 | 29.155 | 55 | 0 | 29.155 | 55 | 0 | 29.155 | 55 | 0 | 29.155 | 55 |
| 40 | | min | -2173.662 | 0 | 45 | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 4 |
| 41 | M174 | max | 0 | 8 | 55 | 0 | 8 | 55 | 50.161 | 8 | 36 | 0 | 8 | 55 | 0 | 8 | 55 | 0 | 8 | 55 |
| 42 | | min | 0 | 0 | 4 | 0 | 0 | 4 | -50.161 | 0 | 16 | 0 | 0 | 4 | -100.323 | 4 | 16 | 0 | 0 | 4 |
| 43 | M175 | max | 0 | 10 | 55 | 0 | 10 | 55 | 58.931 | 10 | 36 | 0 | 10 | 55 | 0 | 10 | 55 | 0 | 10 | 55 |
| 44 | | min | 0 | 0 | 4 | 0 | 0 | 4 | -60.681 | 0 | 16 | 0 | 0 | 4 | -149.34 | 5 | 16 | 0 | 0 | 4 |
| 45 | M176 | max | 0 | 10 | 55 | 0 | 10 | 55 | 52.954 | 10 | 36 | 0 | 10 | 55 | 0 | 10 | 55 | 0 | 10 | 55 |
| 46 | | min | 0 | 0 | 4 | 0 | 0 | 4 | -55.215 | 0 | 16 | 0 | 0 | 4 | -134.95 | 4.896 | 16 | 0 | 0 | 4 |
| 47 | M177 | max | 0 | 10 | 55 | 0 | 10 | 55 | 47.325 | 10 | 36 | 0 | 10 | 55 | 0 | 10 | 55 | 0 | 10 | 55 |
| 48 | | min | 0 | 0 | 4 | 0 | 0 | 4 | -49.217 | 0 | 16 | 0 | 0 | 4 | -120.639 | 4.896 | 16 | 0 | 0 | 4 |
| 49 | M178 | max | 0 | 10 | 55 | 0 | 10 | 55 | 41.587 | 10 | 36 | 0 | 10 | 55 | 0 | 10 | 55 | 0 | 10 | 55 |
| 50 | | min | 0 | 0 | 4 | 0 | 0 | 4 | -43.423 | 0 | 16 | 0 | 0 | 4 | -106.107 | 5 | 16 | 0 | 0 | 4 |
| 51 | M179 | max | 0 | 10 | 55 | 0 | 10 | 55 | 35.653 | 10 | 36 | 0 | 10 | 55 | 0 | 10 | 55 | 0 | 10 | 55 |
| 52 | | min | 0 | 0 | 4 | 0 | 0 | 4 | -37.587 | 0 | 16 | 0 | 0 | 4 | -91.77 | 4.896 | 16 | 0 | 0 | 4 |
| 53 | M180 | max | 0 | 10 | 55 | 0 | 10 | 55 | 30.086 | 10 | 36 | 0 | 10 | 55 | 0 | 10 | 55 | 0 | 10 | 55 |
| 54 | | min | 0 | 0 | 4 | 0 | 0 | 4 | -32.087 | 0 | 16 | 0 | 0 | 4 | -77.768 | 4.896 | 16 | 0 | 0 | 4 |
| 55 | M181 | max | 0 | 10 | 55 | 0 | 10 | 55 | 24.117 | 10 | 36 | 0 | 10 | 55 | 0 | 10 | 55 | 0 | 10 | 55 |
| 56 | | min | 0 | 0 | 4 | 0 | 0 | 4 | -26.085 | 0 | 16 | 0 | 0 | 4 | -63.094 | 4.896 | 16 | 0 | 0 | 4 |
| 57 | M182 | max | 0 | 10 | 55 | 0 | 10 | 55 | 18.488 | 10 | 36 | 0 | 10 | 55 | 0 | 10 | 55 | 0 | 10 | 55 |
| 58 | | min | 0 | 0 | 4 | 0 | 0 | 4 | -20.257 | 0 | 16 | 0 | 0 | 4 | -48.092 | 4.896 | 16 | 0 | 0 | 4 |
| 59 | M183 | max | 0 | 10 | 55 | 0 | 10 | 55 | 12.663 | 10 | 36 | 0 | 10 | 55 | 0 | 10 | 55 | 0 | 10 | 55 |
| 60 | | min | 0 | 0 | 4 | 0 | 0 | 4 | -14.617 | 0 | 16 | 0 | 0 | 4 | -34.111 | 4.896 | 16 | 0 | 0 | 4 |
| 61 | M184 | max | 0 | 10 | 55 | 0 | 10 | 55 | 6.813 | 10 | 36 | 0 | 10 | 55 | 0 | 10 | 55 | 0 | 10 | 55 |
| 62 | | min | 0 | 0 | 4 | 0 | 0 | 4 | -8.823 | 0 | 16 | 0 | 0 | 4 | -19.6 | 4.688 | 16 | 0 | 0 | 4 |
| 63 | M185 | max | 0 | 10 | 55 | 0 | 10 | 55 | 3.819 | 10 | 36 | 0 | 10 | 55 | 0 | 10 | 55 | 0 | 10 | 55 |
| 64 | | min | 0 | 0 | 4 | 0 | 0 | 4 | -4.404 | 0 | 16 | 0 | 0 | 4 | -10.282 | 4.792 | 16 | 0 | 0 | 4 |
| 65 | M186 | max | 0 | 10 | 55 | 0 | 10 | 55 | 0 | 10 | 55 | 0 | 10 | 55 | 0 | 10 | 55 | 0 | 10 | 55 |
| 66 | | min | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 4 |
| 67 | M187 | max | 0 | 10 | 55 | 0 | 10 | 55 | 0 | 10 | 55 | 0 | 10 | 55 | 0 | 10 | 55 | 0 | 10 | 55 |
| 68 | | min | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 4 |
| 69 | M188 | max | 10215.049 | 10 | 50 | 0 | 10 | 55 | 0 | 10 | 55 | 0 | 10 | 55 | 0 | 10 | 55 | 0 | 10 | 55 |
| 70 | | min | -12207.065 | 0 | 44 | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 4 |
| 71 | M195 | max | 0 | 41.429 | 55 | 0 | 41.429 | 55 | 0 | 41.429 | 55 | 0 | 41.429 | 55 | 0 | 41.429 | 55 | 0 | 41.429 | 55 |
| 72 | | min | -2074.589 | 0 | 53 | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 38 | 0 | 0 | 4 | 0 | 0 | 4 |
| 73 | M196 | max | 0 | 41.429 | 54 | 0 | 41.429 | 55 | 0 | 41.429 | 55 | 0 | 41.429 | 38 | 0 | 41.429 | 55 | 0 | 41.429 | 55 |
| 74 | | min | -2168.256 | 0 | 55 | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 17 | 0 | 0 | 4 | 0 | 0 | 4 |
| 75 | M198 | max | 0 | 40.747 | 54 | 0 | 40.747 | 55 | 0 | 40.747 | 55 | 0.007 | 40.747 | 38 | 0 | 40.747 | 55 | 0 | 40.747 | 55 |

### *Envelope Maximum Member Section Forces (Continued)*

| | Member | | Axial[lb] | Loc[ft] | LC | y Shear[lb] | Loc[ft] | LC | z Shear[lb] | Loc[ft] | LC | Torque[lb-ft] | Loc[ft] | LC | y-y Moment[lb-ft] | Loc[ft] | LC | z-z Moment[lb-ft] | Loc[ft] | LC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 76 | | min | -426.683 | 0 | 47 | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 17 | 0 | 0 | 4 | 0 | 0 | 4 |
| 77 | M199 | max | 0 | 40.747 | 54 | 0 | 40.747 | 55 | 0 | 40.747 | 55 | 0 | 40.747 | 54 | 0 | 40.747 | 55 | 0 | 40.747 | 55 |
| 78 | | min | -178.326 | 0 | 52 | 0 | 0 | 4 | 0 | 0 | 4 | -0.007 | 0 | 38 | 0 | 0 | 4 | 0 | 0 | 4 |
| 79 | M201 | max | 0 | 32.071 | 54 | 0 | 32.071 | 55 | 0 | 32.071 | 55 | 0 | 32.071 | 38 | 0 | 32.071 | 55 | 0 | 32.071 | 55 |
| 80 | | min | -2669.135 | 0 | 47 | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 51 | 0 | 0 | 4 | 0 | 0 | 4 |
| 81 | M202 | max | 0 | 32.071 | 55 | 0 | 32.071 | 55 | 0 | 32.071 | 55 | 0 | 32.071 | 55 | 0 | 32.071 | 55 | 0 | 32.071 | 55 |
| 82 | | min | -2561.523 | 0 | 45 | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 38 | 0 | 0 | 4 | 0 | 0 | 4 |
| 83 | M203 | max | 0 | 53.778 | 55 | 0 | 53.778 | 55 | 0 | 53.778 | 55 | 0.031 | 53.778 | 38 | 0 | 53.778 | 55 | 0 | 53.778 | 55 |
| 84 | | min | -1043.465 | 0 | 54 | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 4 |
| 85 | M204 | max | 0 | 34.54 | 54 | 0 | 34.54 | 55 | 0 | 34.54 | 55 | 0 | 34.54 | 37 | 0 | 34.54 | 55 | 0 | 34.54 | 55 |
| 86 | | min | -765.108 | 0 | 47 | 0 | 0 | 4 | 0 | 0 | 4 | -0.018 | 0 | 38 | 0 | 0 | 4 | 0 | 0 | 4 |
| 87 | M205 | max | 0 | 34.54 | 54 | 0 | 34.54 | 55 | 0 | 34.54 | 55 | 0.018 | 34.54 | 38 | 0 | 34.54 | 55 | 0 | 34.54 | 55 |
| 88 | | min | -237.442 | 0 | 52 | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 37 | 0 | 0 | 4 | 0 | 0 | 4 |
| 89 | M206 | max | 0 | 53.778 | 53 | 0 | 53.778 | 55 | 0 | 53.778 | 55 | 0.001 | 53.778 | 51 | 0 | 53.778 | 55 | 0 | 53.778 | 55 |
| 90 | | min | -975.926 | 0 | 54 | 0 | 0 | 4 | 0 | 0 | 4 | -0.031 | 0 | 38 | 0 | 0 | 4 | 0 | 0 | 4 |
| 91 | M207 | max | 0 | 23.691 | 54 | 0 | 23.691 | 55 | 0 | 23.691 | 55 | 0 | 23.691 | 55 | 0 | 23.691 | 55 | 0 | 23.691 | 55 |
| 92 | | min | -3536.93 | 0 | 47 | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 4 |
| 93 | M209 | max | 0 | 23.691 | 55 | 0 | 23.691 | 55 | 0 | 23.691 | 55 | 0 | 23.691 | 55 | 0 | 23.691 | 55 | 0 | 23.691 | 55 |
| 94 | | min | -3393.303 | 0 | 45 | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 16 | 0 | 0 | 4 | 0 | 0 | 4 |
| 95 | M210 | max | 0 | 40.747 | 53 | 0 | 40.747 | 55 | 0 | 40.747 | 55 | 0 | 40.747 | 54 | 0 | 40.747 | 55 | 0 | 40.747 | 55 |
| 96 | | min | -1393.868 | 0 | 54 | 0 | 0 | 4 | 0 | 0 | 4 | -0.001 | 0 | 51 | 0 | 0 | 4 | 0 | 0 | 4 |
| 97 | M211 | max | 0 | 40.747 | 55 | 0 | 40.747 | 55 | 0 | 40.747 | 55 | 0 | 40.747 | 55 | 0 | 40.747 | 55 | 0 | 40.747 | 55 |
| 98 | | min | -1511.399 | 0 | 54 | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 4 |
| 99 | M212 | max | 0 | 35.356 | 54 | 0 | 35.356 | 55 | 0 | 35.356 | 55 | 0 | 35.356 | 55 | 0 | 35.356 | 55 | 0 | 35.356 | 55 |
| 100 | | min | -3271.63 | 0 | 47 | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 4 |
| 101 | M213 | max | 0 | 35.356 | 55 | 0 | 35.356 | 55 | 0 | 35.356 | 55 | 0 | 35.356 | 55 | 0 | 35.356 | 55 | 0 | 35.356 | 55 |
| 102 | | min | -3158.539 | 0 | 45 | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 4 |

### *Warning Log*

| | Message |
|---|---|
| 1 | There are members defined as member type: "Beam" that are vertical (or nearly vertical). For proper deflection optimization, change member type to "Column". |