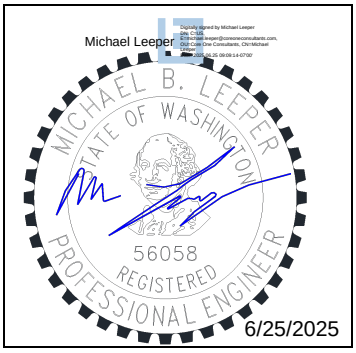
CORE ONE CONSULTING US LTD.
13555 SE 36th St, Suite 100
Bellevue, WA 98006

Mount Analysis Report

Site Name:	Mercer Island
Site Number:	SD05
Project:	LTE 1C RRH Swap
Client:	AT&T
FA #:	10092489
IWM #:	WSWOR0048444
PACE #:	--
PTN #:	3801A1HCV6
Structure Type:	Mount
Structure Description:	Pipe Mount
Site Location:	7900 SE 28th Street Mercer Island, WA 98040 King County 47.5856400°N, 122.2320600°W
Analysis Load Case:	Final Configuration
Analysis Result:	**Adequate @ 53%** See Conclusion & Rendering for installation requirements.

SEAL



Michael Leeper, PE
Director of Engineering

Rev: 0 June 25, 2025

1.0 Introduction

At the request of AT&T , an analysis of the existing mount has been performed. All supporting documents have been obtained from the client and are assumed to be accurate and applicable to this site. The structure was analyzed using Risa 3D.

2.0 Analysis Procedure & Design Criteria

The following documents were provided for site Mercer Island :

- Construction Drawings
  Core One Consulting USA, Project # 2501U623, Rev A dated 04/07/2025
- Antenna Loading
  DE130 Scoping Document, dated 01/21/2025
- Previous Structural Analysis
  Core One Consulting USA, Rev 1, 03/22/2022
- RFDS
  AT&T , Site #: MERCER ISLAND

The structures have been analyzed pursuant to the following Design Criteria:

Adopted Codes:	
IBC: 2021	Local Codes: 2021 MICC
TIA: 222-H	AISC: 16TH ED.
ASCE: 7-16	ACI: 318-19
Wind Design Loading:	
Design Wind = 98 mph *[3-sec gust Ultimate]*	
Design Wind W/ ICE = 30 mph *[3-sec gust Ultimate] with 1" ice*	
Exposure Category C Risk Category II	Topographic Category 1 Ground Elevation = 93' (NAVD 88)
--	Live Load(s) reduction is confirmed to either not govern or not be applicable to mounts
Seismic Design Loading:	
Site Class D-Default S_s = 1.394g, S_1 = 0.485g, S_{DS} = 1.115g	Importance Factor, I_p = 1.0

3.0 Proposed Appurtenance & Equipment Information

Table 3.1 – Proposed AT&T Final Antenna Configuration[1]

RAD Height (ft)	Qty.	Appurtenance[1,2]	Sector	Azimuth A/B/C	Mount type	Carrier
67'-6"	**3**	**AIR6472 B77G B77M**	Alpha/ Beta/ Gamma	165°/ 280°/ 75°	Pipe Mount	**AT&T**
66'-0"	3	CMA-UBTMLBMLBHH-6516-16-21-21				
	3	NNH4-65B-R6				
	3	**4490 B5/B12A**				
	3	**4494 B14/B29**				
	3	**4890 B25/B66**				
	3	DC9-48-60-24-PC16-EV				

1. Bold items denote appurtenances to be installed
2. Refer to A&E Construction Drawings for additional information regarding final antenna and equipment locations and orientations.

4.0 Mount Analysis Results and Conclusion

Upon reviewing the results of this analysis, it is our opinion that the existing mount meets the specified code requirements. The mount is considered acceptable to support the final loading configuration as listed within this report. The controlling mount usages are displayed in the tables below:

Table 4.1 – Mount Structure Capacity

Load Case	Governing Assembly Components	Capacity	Results
Worst Case	Mount	43%	Pass
	Connection[1]	53%	Pass

1. **Capacity of (4) ½" Ø Hilti Kwik Bolt TZ2 – CS with 3.75" embedment**

All Sectors

Ultimate Windspeed	Radial Ice thickness	Height	Exposure Category	Structure Class	Topo Category	Allowable EPA / Sector	Allowable Weight / Sector
98 mph	**1 in**	**66.0**	**C**	**II**	**1**	**20 sqft**	**248.9 lb**

Table 4.2 – Structural Component Material Strengths

Structural Component	Nominal Strength/Material[1]
Pipe	F_y = 35 ksi (A53, Gr. B)
Tube	F_y = 46 ksi (A500, Gr. B)
Structural Shapes (L, C, W, etc.), Plate & Bar	F_y = 36 ksi (A36)
Wood	Dimension Lumber: DF-L No. 2 GluLam: DF/DF 24F-V4
Uni-Strut (P1000, etc.)	F_y = 33 ksi (A570, Gr. 33)
Connection Bolts	A325
U-Bolts / Threaded Rod	SAE J429 Grade 2 (Substitution: ASTM A449) F_y = 57 ksi (Yield) & F_u = 74 ksi (Tension)
	SAE J429 Grade 5 (¼" to 1" Nominal ϕ) F_y = 92 ksi (Yield) & F_u = 120 ksi (Tension)
Mechanical Anchors	Concrete: HILTI KWIK Bolt TZ2 Stainless Steel Expansion Anchors (ICC-ES ESR-4266)
	CMU: Threaded Rod / Rebar HILTI HIT-HY 270 Epoxy (ICC-ES-ESR-4143)
Stainless Steel Bolts	18-8 Stainless, Grade 316/304 F_y = 74 ksi (Yield) & F_u = 29 ksi (Tension)
Welds	E70XX Electrodes
Platform Steel Grating	McNichols GW Series – 1-1/2"x1/8" (8.3 psf) (Or Equivalent)
Fiberglass Reinforced Plastic (FRP)	F_u = 33,000 psi E = 2,600,000 psi
Concrete / Reinforcing	f'_c = 3,000 psi / F_y = 60 ksi
Concrete Slab Post-Tensioning	F_y = 270 ksi Ultimate Strength
CMU	f'_m = 1,500 psi

1. Strengths listed were assumed for this analysis and are based upon ASTM, AISC, RCSC, AWS and ACI preferred specification values. Values and materials are consistent with industry standards. Material strengths were taken from original design documents when available.

4.3 Analysis Notes & Assumptions

Core One Consulting USA does not take responsibility for the appurtenances or equipment loading of other carriers, as these fall outside the scope of this analysis. This evaluation focuses solely on the areas and structural members immediately adjacent to the referenced carriers existing and proposed equipment and antenna mount assemblies. Our assessment is based only on the information provided, and we have not independently verified the existing structural conditions. If any of the reported conditions (such as appurtenance loading, member sizes, etc.) are inaccurate, please contact our office immediately to request an amended report, as any discrepancies will render this evaluation inaccurate.
This analysis confirms the adequacy of the primary components of the structure. However, it's important to note that not all connections, welds, bolts, plates, etc., were individually detailed and analyzed. In instances where specific analysis was not conducted, it was assumed that the existing connection plates, welds, bolts, etc., were sufficient to develop the full capacity of the main structural members.
Furthermore, this analysis does not account for unusual or extreme wind events, rime/in-cloud ice loadings, harmonic or nodal vibration, vortex shedding, or similar conditions. Therefore, it is the owner's responsibility to determine the appropriate design wind speed and the amount of ice accumulation beyond code minimum values that should be considered in the analysis.
This report solely evaluates the proposed carrier's structure outline in the appendix. It does not assess the adequacy of other mounts, tower, building or coaxial mounting attachments, which are assumed to be adequate and installed per manufacturer requirements for the purposes of this analysis.

PROJECT DATA	
Project Number:	SD05
Carrier:	AT&T Mobility
Carrier Site ID:	10092489
Carrier Site Name:	Mercer Island
Date:	6/25/2025

CELLMAX

CODES AND STANDARDS	
Building Code:	2021 IBC
Local Code:	1 WBC w/ Amendments
Analysis Code:	TIA-222-H
Design Criteria	LRFD

STRUCTURE DETAILS		
Structure Type:	Building	
Structure Height:	62.8	ft
Mount Status:	Existing	
Mount Type:	Pipe	
Mount Elevation:	66.0	ft
Number of Sectors:	3	

SITE PARAMETERS				
Classification			**Topography**	
Risk Category:	II		Category:	1
Exposure Category:	C		Feature:	0
Site Class:	D - Default		Calculated Factor:	1.000
Wind and Ice Parameters			**Seismic Parameters**	
Design Wind Speed:	98	mph	Short Period Accel.:	1.394
Ice Wind Speed:	30	mph	1-Second Accel.:	0.485
Design Ice Thickness:	1.00	in		

CALCULATIONS				
Wind and Ice			**Seismic**	
Velocity Pressure:	26.99	psf	Short Period Design:	1.11520
Ice Velocity Pressure:	2.34	psf	1-Second Design:	0.38800
Ice Thickness:	1.0718	in	Short Period Coef.:	1.20000
			1-Second Coef.:	1.20000

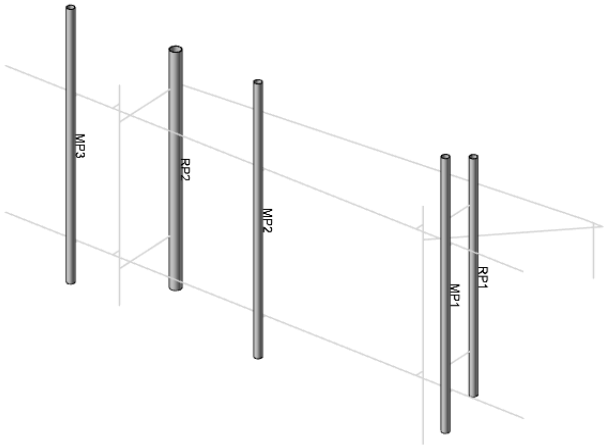
EQUIPMENT SUMMARY					
Equipment Model	**EPA_N**	**EPA_T**	**WIND F_N**	**WIND F_T**	**SEISMIC E_h**
--	FT^2	FT^2	LBS	LBS	LBS
ERICSSON AIR 6472 B77G/B77M*	4.9	1.7	120.6	40.3	51.5
TECHNOLOGIES CMA-UBTMLBMLBHH/6	15.1	5.1	366.2	123.6	66.9
COMMSCOPE NNH4-65B-R6*	6.9	2.4	168.4	58.3	64.6
ERICSSON RADIO 4490 B5/B12	2.0	0.9	48.1	22.1	45.5
ERICSSON RADIO 4494 B14/B29	2.4	0.9	58.5	23.0	38.4
ERICSSON RADIO 4890 B25/B66	2.0	0.9	48.1	22.4	45.5
RAYCAP DC9-48-60-24-PC16-EV	2.0	1.0	49.3	24.4	23.4

***Antenna CaAa values are provided per Manufacturer CFD data, and implemented from all wind directions with Ka = 1.0. All other Manufacturers have not generated CFD data and therefore not implemented in this analysis.**

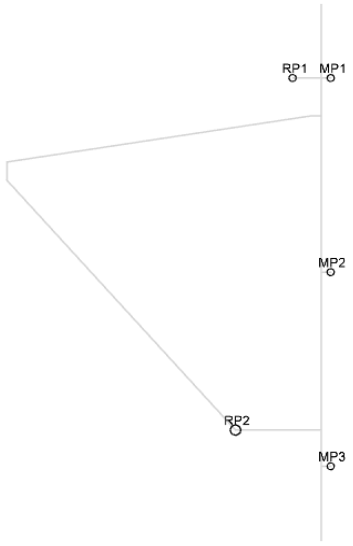
EQUIPMENT SUMMARY											
Equipment Model	CFD Antenna Increments										
--	**0**	**10**	**20**	**30**	**40**	**45**	**50**	**60**	**70**	**80**	**90**
ERICSSON AIR 6472 B77G/B77M	**4.9**	**4.8**	**4.4**	**3.9**	**3.3**	**3.1**	**2.9**	**2.4**	**1.9**	**1.6**	**1.7**
COMMSCOPE NNH4-65B-R6	**6.9**	**8.5**	**9.0**	**8.5**	**7.8**	**7.4**	**6.9**	**5.2**	**4.3**	**3.1**	**2.4**

Shown equiment EPA has been adjusted per wind tunnel & CFD testing

ELEVATION VIEW

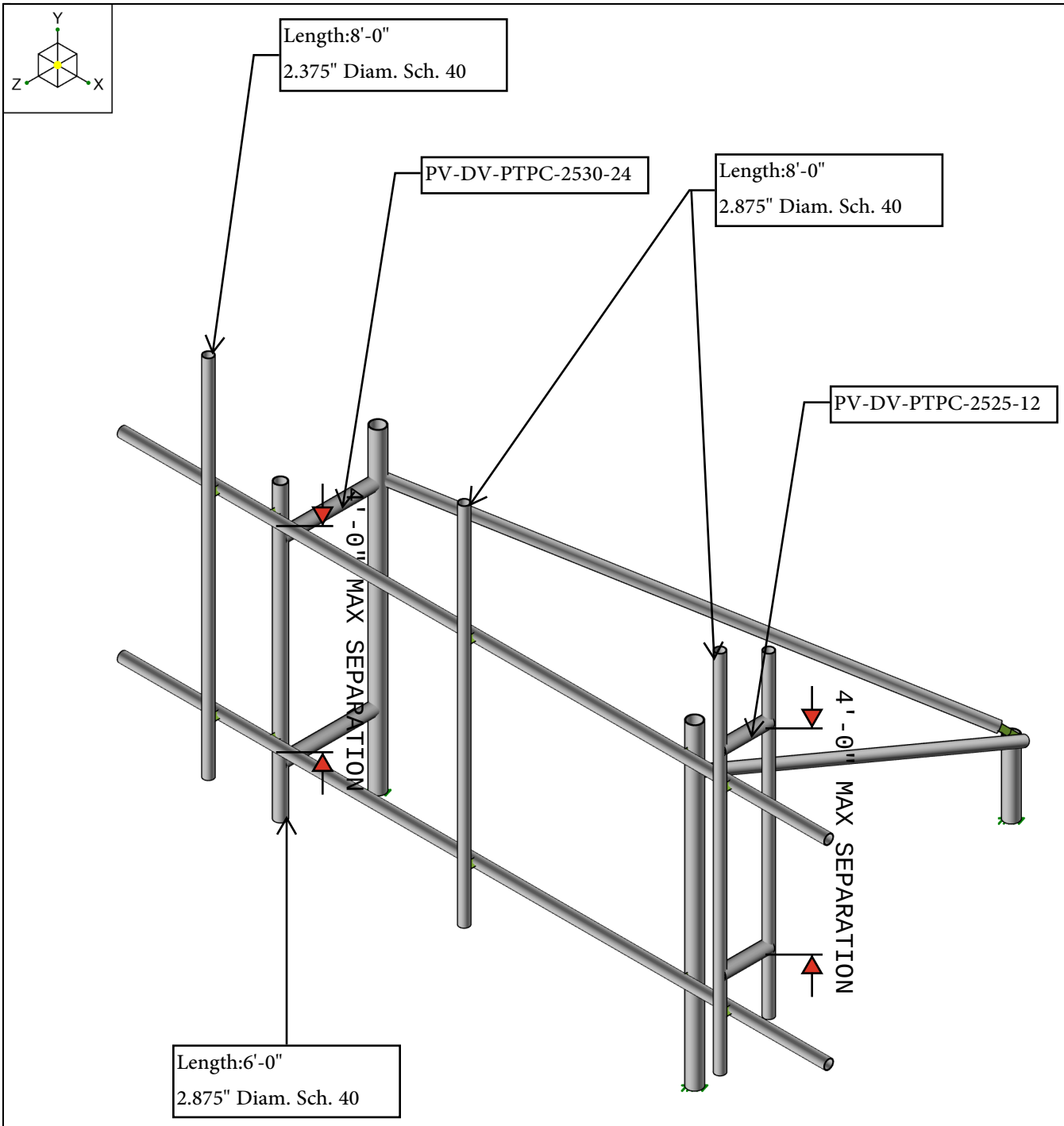


PLAN VIEW



EQUIPMENT SUMMARY				
Equipment Name	**Total Quantity**	**Antenna Centerline**	**Mount Pipe Positions**	**Equipment Azimuths**
ERICSSON AIR 6472 B77G/B77M*	3.0	67.5	MP2	165°, 280°, 75°
HNOLOGIES CMA-UBTMLBMLBHH	3.0	66.0	MP1	165°, 280°, 75°
COMMSCOPE NNH4-65B-R6*	3.0	66.0	MP3	165°, 280°, 75°
ERICSSON RADIO 4490 B5/B12	3.0	66.0	RP1	165°, 280°, 75°
ERICSSON RADIO 4494 B14/B29	3.0	66.0	RP2	165°, 280°, 75°
ERICSSON RADIO 4890 B25/B66	3.0	66.0	RP2	165°, 280°, 75°
RAYCAP DC9-48-60-24-PC16-EV	3.0	66.0	RP1	165°, 280°, 75°

***Antenna CaAa values are provided per Manufacturer CFD data, and implemented from all wind directions with Ka = 1.0. All other Manufacturers have not generated CFD data and therefore not implemented in this analysis.**



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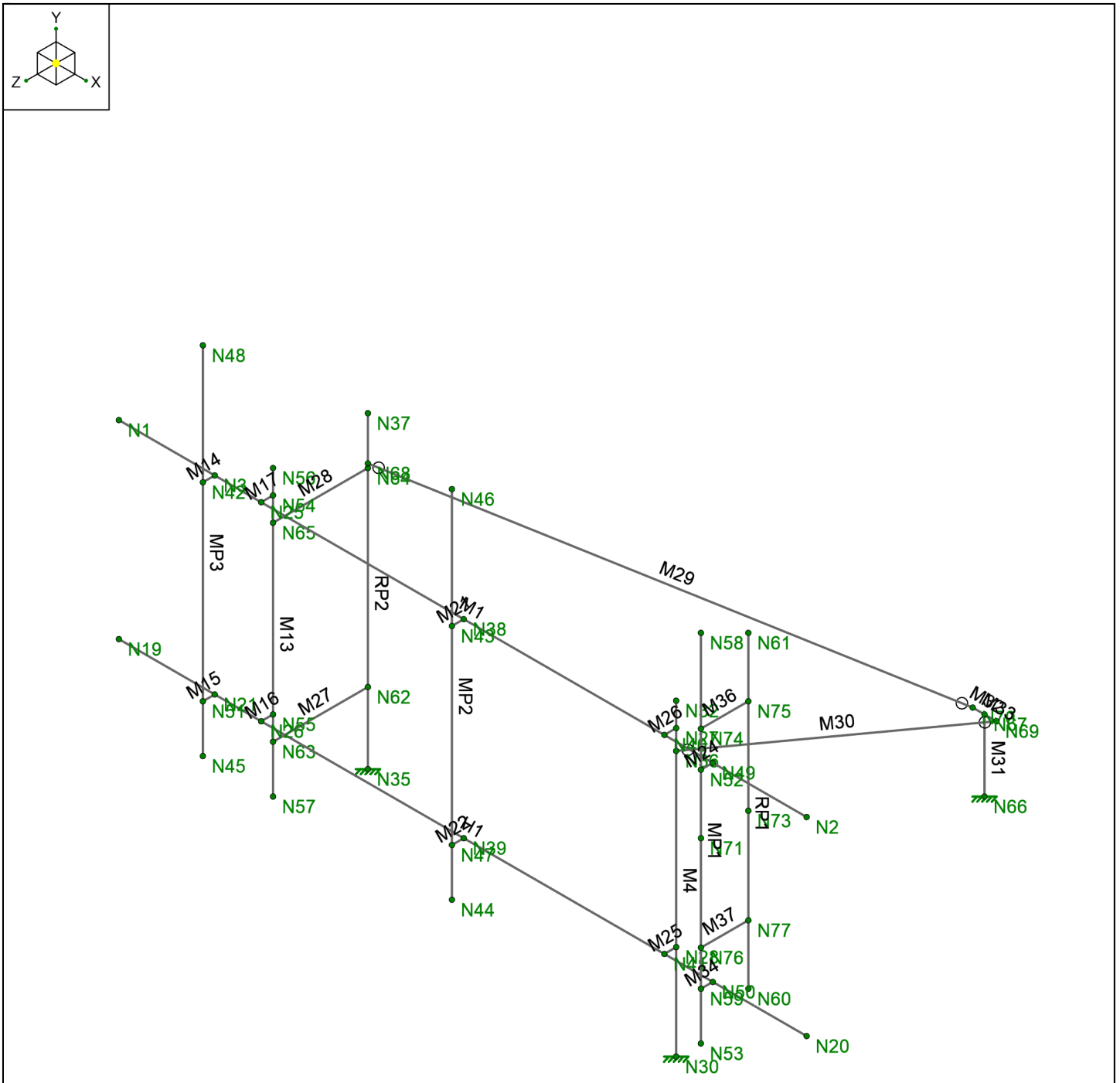

CORE ONE CONSULTING USA	Core One Consulting USA	Mercer Island	SK-2
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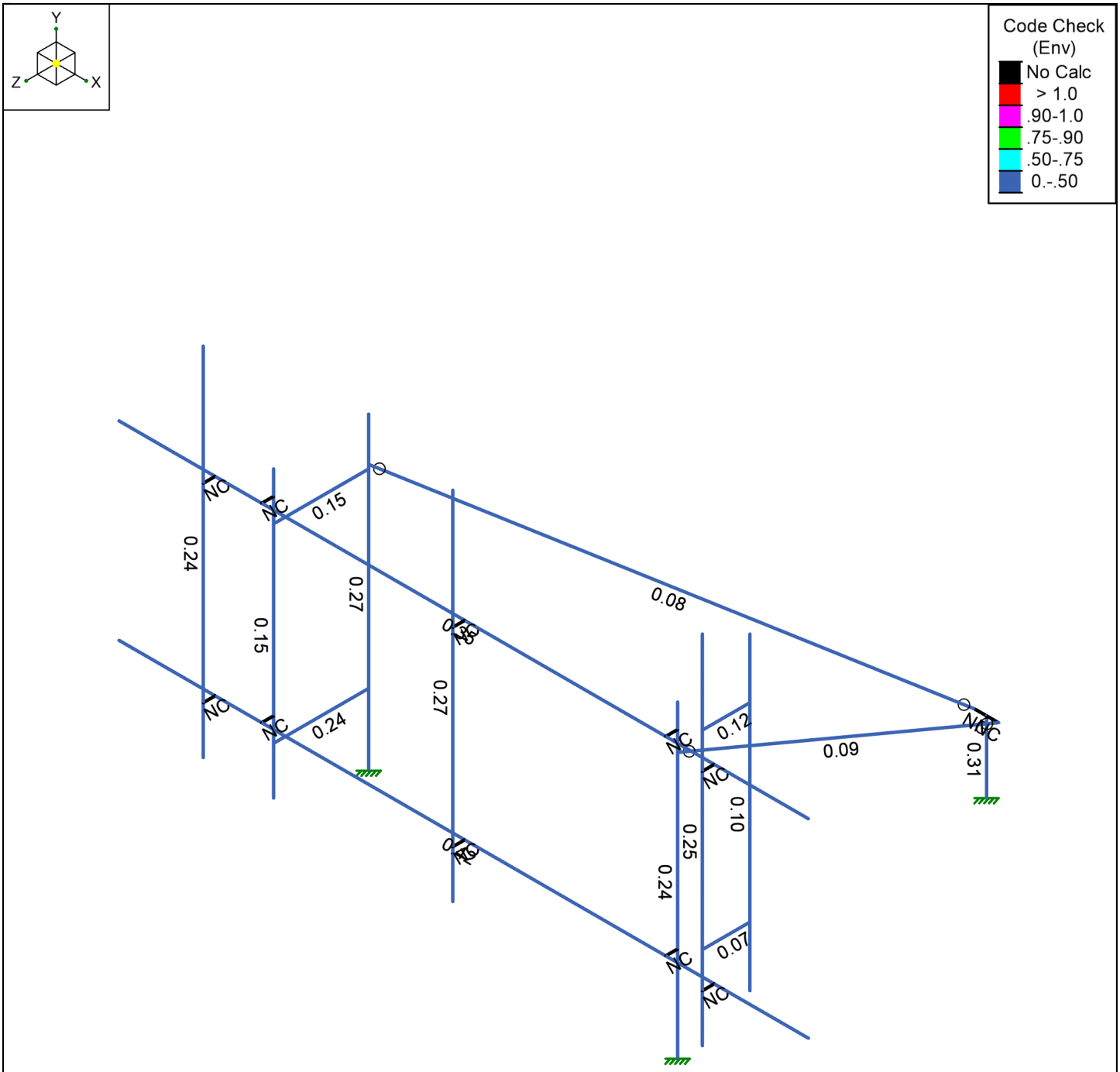

Member Code Checks Displayed (Enveloped)

COREONE CONSULTING USA	Core One Consulting USA	Mercer Island	SK-3
	MZ		Jun 25, 2025 at 01:53 AM
	SD05		SD05_loaded.r3d

Hot Rolled Steel Properties

	Label	E [ksi]	G [ksi]	Nu	Therm. Coeff. [1e⁵°F⁻¹]	Density [lb/ft³]	Yield [ksi]	Ry	Fu [ksi]	Rt
1	A992	29000	11154	0.3	0.65	490	50	1.1	65	1.1
2	A36 Gr.36	29000	11154	0.3	0.65	490	36	1.5	58	1.2
3	A572 Gr.50	29000	11154	0.3	0.65	490	50	1.1	65	1.1
4	A500 Gr.B RND	29000	11154	0.3	0.65	527	42	1.4	58	1.3
5	A500 Gr.B RECT	29000	11154	0.3	0.65	527	46	1.4	58	1.3
6	A500 Gr.C RND	29000	11154	0.3	0.65	527	46	1.4	62	1.3
7	A500 Gr.C RECT	29000	11154	0.3	0.65	527	50	1.4	62	1.3
8	A53 Gr.B	29000	11154	0.3	0.65	490	35	1.6	60	1.2
9	A1085	29000	11154	0.3	0.65	490	50	1.4	65	1.3
10	A913 Gr.65	29000	11154	0.3	0.65	490	65	1.1	80	1.1

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Design Rule	Area [in²]	Iyy [in⁴]	Izz [in⁴]	J [in⁴]
1	PIPE_2.0	PIPE_2.0	Beam	HSS Pipe	A53 Gr.B	Typical	1.02	0.627	0.627	1.25
2	PIPE_2.5	PIPE_2.5	Beam	HSS Pipe	A53 Gr.B	Typical	1.61	1.45	1.45	2.89
3	PIPE_3.0	PIPE_3.0	Beam	HSS Pipe	A53 Gr.B	Typical	2.07	2.85	2.85	5.69

Member Primary Data

	Label	I Node	J Node	Section/Shape	Type	Design List	Material	Design Rule
1	M1	N1	N2	PIPE_2.0	Beam	HSS Pipe	A53 Gr.B	Typical
2	H1	N19	N20	PIPE_2.0	Beam	HSS Pipe	A53 Gr.B	Typical
3	M4	N32	N30	PIPE_3.0	Beam	HSS Pipe	A53 Gr.B	Typical
4	RP2	N37	N35	PIPE_3.0	Beam	HSS Pipe	A53 Gr.B	Typical
5	MP3	N48	N45	PIPE_2.0	Beam	HSS Pipe	A53 Gr.B	Typical
6	M13	N56	N57	PIPE_2.5	Beam	HSS Pipe	A53 Gr.B	Typical
7	M14	N42	N3	RIGID	None	None	RIGID	Typical
8	M15	N51	N21	RIGID	None	None	RIGID	Typical
9	M16	N26	N55	RIGID	None	None	RIGID	Typical
10	M17	N25	N54	RIGID	None	None	RIGID	Typical
11	M25	N28	N41	RIGID	None	None	RIGID	Typical
12	M26	N27	N40	RIGID	None	None	RIGID	Typical
13	M27	N63	N62	PIPE_2.5	Beam	HSS Pipe	A53 Gr.B	Typical
14	M28	N65	N64	PIPE_2.5	Beam	HSS Pipe	A53 Gr.B	Typical
15	M29	N68	N70	PIPE_2.0	Beam	HSS Pipe	A53 Gr.B	Typical
16	M30	N36	N69	PIPE_2.0	Beam	HSS Pipe	A53 Gr.B	Typical
17	M31	N67	N66	PIPE_3.0	Beam	HSS Pipe	A53 Gr.B	Typical
18	M32	N70	N67	RIGID	None	None	RIGID	Typical
19	M33	N67	N69	RIGID	None	None	RIGID	Typical
20	MP2	N46	N44	PIPE_2.0	Beam	HSS Pipe	A53 Gr.B	Typical
21	M21	N43	N38	RIGID	None	None	RIGID	Typical
22	M22	N47	N39	RIGID	None	None	RIGID	Typical
23	MP1	N58	N53	PIPE_2.0	Beam	HSS Pipe	A53 Gr.B	Typical
24	M24	N52	N49	RIGID	None	None	RIGID	Typical
25	M34	N59	N50	RIGID	None	None	RIGID	Typical
26	RP1	N61	N60	PIPE_2.0	Beam	HSS Pipe	A53 Gr.B	Typical
27	M36	N74	N75	PIPE_2.5	Beam	HSS Pipe	A53 Gr.B	Typical
28	M37	N76	N77	PIPE_2.5	Beam	HSS Pipe	A53 Gr.B	Typical

Basic Load Cases

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Point	Distributed
1	Self Weight	DL		-1		10	
2	Structure Wind Z	WLZ					28
3	Structure Wind X	WLX					28
4	Wind Load 0 AZI	WLZ				20	
5	Wind Load 30 AZI	None				20	
6	Wind Load 45 AZI	None				20	
7	Wind Load 60 AZI	None				20	
8	Wind Load 90 AZI	WLX				20	
9	Wind Load 120 AZI	None				20	
10	Wind Load 135 AZI	None				20	
11	Wind Load 150 AZI	None				20	
12	Ice Weight	OL1				10	28
13	Ice Structure Wind Z	OL2					28
14	Ice Structure Wind X	OL3					28
15	Ice Wind Load 0 AZI	OL2				20	
16	Ice Wind Load 30 AZI	None				20	
17	Ice Wind Load 45 AZI	None				20	
18	Ice Wind Load 60 AZI	None				20	
19	Ice Wind Load 90 AZI	OL3				20	
20	Ice Wind Load 120 AZI	None				20	
21	Ice Wind Load 135 AZI	None				20	
22	Ice Wind Load 150 AZI	None				20	
23	Seismic Load Z	ELZ			-0.669	10	
24	Seismic Load X	ELX	-0.669			10	
25	Snow Load	SL					
26	Roof Live Load	RLL					
27	Live Load	LL					
28	Live Load 1 (Lv)	LL				1	
29	Live Load 2 (Lv)	LL				1	
30	Live Load 3 (Lv)	LL				1	
31	Maintenance Load 1 (Lm)	None				1	
32	Maintenance Load 2 (Lm)	None				1	
33	Maintenance Load 3 (Lm)	None				1	

Load Combinations

	Description	Solve	P-Delta	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor
1	1.4DL	Yes	Y	DL	1.4												
2	1.2DL + 1WL 0 AZI	Yes	Y	DL	1.2	2	1	3		4	1						
3	1.2DL + 1WL 30 AZI	Yes	Y	DL	1.2	2	0.866	3	0.5	5	1						
4	1.2DL + 1WL 45 AZI	Yes	Y	DL	1.2	2	0.707	3	0.707	6	1						
5	1.2DL + 1WL 60 AZI	Yes	Y	DL	1.2	2	0.5	3	0.866	7	1						
6	1.2DL + 1WL 90 AZI	Yes	Y	DL	1.2	2		3	1	8	1						
7	1.2DL + 1WL 120 AZI	Yes	Y	DL	1.2	2	-0.5	3	0.866	9	1						
8	1.2DL + 1WL 135 AZI	Yes	Y	DL	1.2	2	-0.707	3	0.707	10	1						
9	1.2DL + 1WL 150 AZI	Yes	Y	DL	1.2	2	-0.866	3	0.5	11	1						
10	1.2DL + 1WL 180 AZI	Yes	Y	DL	1.2	2	-1	3		4	-1						
11	1.2DL + 1WL 210 AZI	Yes	Y	DL	1.2	2	-0.866	3	-0.5	5	-1						
12	1.2DL + 1WL 225 AZI	Yes	Y	DL	1.2	2	-0.707	3	-0.707	6	-1						
13	1.2DL + 1WL 240 AZI	Yes	Y	DL	1.2	2	-0.5	3	-0.866	7	-1						
14	1.2DL + 1WL 270 AZI	Yes	Y	DL	1.2	2		3	-1	8	-1						
15	1.2DL + 1WL 300 AZI	Yes	Y	DL	1.2	2	0.5	3	-0.866	9	-1						
16	1.2DL + 1WL 315 AZI	Yes	Y	DL	1.2	2	0.707	3	-0.707	10	-1						
17	1.2DL + 1WL 330 AZI	Yes	Y	DL	1.2	2	0.866	3	-0.5	11	-1						
18	0.9DL + 1WL 0 AZI	Yes	Y	DL	0.9	2	1	3		4	1						

Load Combinations (Continued)

	Description	Solve	P-Delta	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor
19	0.9DL + 1WL 30 AZI	Yes	Y	DL	0.9	2	0.866	3	0.5	5	1						
20	0.9DL + 1WL 45 AZI	Yes	Y	DL	0.9	2	0.707	3	0.707	6	1						
21	0.9DL + 1WL 60 AZI	Yes	Y	DL	0.9	2	0.5	3	0.866	7	1						
22	0.9DL + 1WL 90 AZI	Yes	Y	DL	0.9	2		3	1	8	1						
23	0.9DL + 1WL 120 AZI	Yes	Y	DL	0.9	2	-0.5	3	0.866	9	1						
24	0.9DL + 1WL 135 AZI	Yes	Y	DL	0.9	2	-0.707	3	0.707	10	1						
25	0.9DL + 1WL 150 AZI	Yes	Y	DL	0.9	2	-0.866	3	0.5	11	1						
26	0.9DL + 1WL 180 AZI	Yes	Y	DL	0.9	2	-1	3		4	-1						
27	0.9DL + 1WL 210 AZI	Yes	Y	DL	0.9	2	-0.866	3	-0.5	5	-1						
28	0.9DL + 1WL 225 AZI	Yes	Y	DL	0.9	2	-0.707	3	-0.707	6	-1						
29	0.9DL + 1WL 240 AZI	Yes	Y	DL	0.9	2	-0.5	3	-0.866	7	-1						
30	0.9DL + 1WL 270 AZI	Yes	Y	DL	0.9	2		3	-1	8	-1						
31	0.9DL + 1WL 300 AZI	Yes	Y	DL	0.9	2	0.5	3	-0.866	9	-1						
32	0.9DL + 1WL 315 AZI	Yes	Y	DL	0.9	2	0.707	3	-0.707	10	-1						
33	0.9DL + 1WL 330 AZI	Yes	Y	DL	0.9	2	0.866	3	-0.5	11	-1						
34	1.2DL + 1DLi + 1WLi 0 AZI	Yes	Y	DL	1.2	OL1	1	13	1	14		15	1				
35	1.2DL + 1DLi + 1WLi 30 AZI	Yes	Y	DL	1.2	OL1	1	13	0.866	14	0.5	16	1				
36	1.2DL + 1DLi + 1WLi 45 AZI	Yes	Y	DL	1.2	OL1	1	13	0.707	14	0.707	17	1				
37	1.2DL + 1DLi + 1WLi 60 AZI	Yes	Y	DL	1.2	OL1	1	13	0.5	14	0.866	18	1				
38	1.2DL + 1DLi + 1WLi 90 AZI	Yes	Y	DL	1.2	OL1	1	13		14	1	19	1				
39	1.2DL + 1DLi + 1WLi 120 AZI	Yes	Y	DL	1.2	OL1	1	13	-0.5	14	0.866	20	1				
40	1.2DL + 1DLi + 1WLi 135 AZI	Yes	Y	DL	1.2	OL1	1	13	-0.707	14	0.707	21	1				
41	1.2DL + 1DLi + 1WLi 150 AZI	Yes	Y	DL	1.2	OL1	1	13	-0.866	14	0.5	22	1				
42	1.2DL + 1DLi + 1WLi 180 AZI	Yes	Y	DL	1.2	OL1	1	13	-1	14		15	-1				
43	1.2DL + 1DLi + 1WLi 210 AZI	Yes	Y	DL	1.2	OL1	1	13	-0.866	14	-0.5	16	-1				
44	1.2DL + 1DLi + 1WLi 225 AZI	Yes	Y	DL	1.2	OL1	1	13	-0.707	14	-0.707	17	-1				
45	1.2DL + 1DLi + 1WLi 240 AZI	Yes	Y	DL	1.2	OL1	1	13	-0.5	14	-0.866	18	-1				
46	1.2DL + 1DLi + 1WLi 270 AZI	Yes	Y	DL	1.2	OL1	1	13		14	-1	19	-1				
47	1.2DL + 1DLi + 1WLi 300 AZI	Yes	Y	DL	1.2	OL1	1	13	0.5	14	-0.866	20	-1				
48	1.2DL + 1DLi + 1WLi 315 AZI	Yes	Y	DL	1.2	OL1	1	13	0.707	14	-0.707	21	-1				
49	1.2DL + 1DLi + 1WLi 330 AZI	Yes	Y	DL	1.2	OL1	1	13	0.866	14	-0.5	22	-1				
50	(1.2+0.2Sds)DL + 1E 0 AZI	Yes	Y	DL	1.423	23	1	24									
51	(1.2+0.2Sds)DL + 1E 30 AZI	Yes	Y	DL	1.423	23	0.866	24	0.5								
52	(1.2+0.2Sds)DL + 1E 45 AZI	Yes	Y	DL	1.423	23	0.707	24	0.707								
53	(1.2+0.2Sds)DL + 1E 60 AZI	Yes	Y	DL	1.423	23	0.5	24	0.866								
54	(1.2+0.2Sds)DL + 1E 90 AZI	Yes	Y	DL	1.423	23		24	1								
55	(1.2+0.2Sds)DL + 1E 120 AZI	Yes	Y	DL	1.423	23	-0.5	24	0.866								
56	(1.2+0.2Sds)DL + 1E 135 AZI	Yes	Y	DL	1.423	23	-0.707	24	0.707								
57	(1.2+0.2Sds)DL + 1E 150 AZI	Yes	Y	DL	1.423	23	-0.866	24	0.5								
58	(1.2+0.2Sds)DL + 1E 180 AZI	Yes	Y	DL	1.423	23	-1	24									
59	(1.2+0.2Sds)DL + 1E 210 AZI	Yes	Y	DL	1.423	23	-0.866	24	-0.5								
60	(1.2+0.2Sds)DL + 1E 225 AZI	Yes	Y	DL	1.423	23	-0.707	24	-0.707								
61	(1.2+0.2Sds)DL + 1E 240 AZI	Yes	Y	DL	1.423	23	-0.5	24	-0.866								
62	(1.2+0.2Sds)DL + 1E 270 AZI	Yes	Y	DL	1.423	23		24	-1								
63	(1.2+0.2Sds)DL + 1E 300 AZI	Yes	Y	DL	1.423	23	0.5	24	-0.866								
64	(1.2+0.2Sds)DL + 1E 315 AZI	Yes	Y	DL	1.423	23	0.707	24	-0.707								
65	(1.2+0.2Sds)DL + 1E 330 AZI	Yes	Y	DL	1.423	23	0.866	24	-0.5								
66	(0.9-0.2Sds)DL + 1E 0 AZI	Yes	Y	DL	0.677	23	1	24									
67	(0.9-0.2Sds)DL + 1E 30 AZI	Yes	Y	DL	0.677	23	0.866	24	0.5								
68	(0.9-0.2Sds)DL + 1E 45 AZI	Yes	Y	DL	0.677	23	0.707	24	0.707								
69	(0.9-0.2Sds)DL + 1E 60 AZI	Yes	Y	DL	0.677	23	0.5	24	0.866								
70	(0.9-0.2Sds)DL + 1E 90 AZI	Yes	Y	DL	0.677	23		24	1								
71	(0.9-0.2Sds)DL + 1E 120 AZI	Yes	Y	DL	0.677	23	-0.5	24	0.866								
72	(0.9-0.2Sds)DL + 1E 135 AZI	Yes	Y	DL	0.677	23	-0.707	24	0.707								
73	(0.9-0.2Sds)DL + 1E 150 AZI	Yes	Y	DL	0.677	23	-0.866	24	0.5								

Load Combinations (Continued)

	Description	Solve	P-Delta	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor
74	(0.9-0.2Sds)DL + 1E 180 AZI	Yes	Y	DL	0.677	23	-1	24									
75	(0.9-0.2Sds)DL + 1E 210 AZI	Yes	Y	DL	0.677	23	-0.866	24	-0.5								
76	(0.9-0.2Sds)DL + 1E 225 AZI	Yes	Y	DL	0.677	23	-0.707	24	-0.707								
77	(0.9-0.2Sds)DL + 1E 240 AZI	Yes	Y	DL	0.677	23	-0.5	24	-0.866								
78	(0.9-0.2Sds)DL + 1E 270 AZI	Yes	Y	DL	0.677	23		24	-1								
79	(0.9-0.2Sds)DL + 1E 300 AZI	Yes	Y	DL	0.677	23	0.5	24	-0.866								
80	(0.9-0.2Sds)DL + 1E 315 AZI	Yes	Y	DL	0.677	23	0.707	24	-0.707								
81	(0.9-0.2Sds)DL + 1E 330 AZI	Yes	Y	DL	0.677	23	0.866	24	-0.5								
82	1.2DL + 1.6L + 0.5Lr	Yes	Y	DL	1.2	LL	1.6	RLL	0.5								
83	1.2DL + 1.6Lr + 1L	Yes	Y	DL	1.2	RLL	1.6	LL	1								
84	1.2DL + 1.6Lr + 0.5WL 0 AZI	Yes	Y	DL	1.2	RLL	1.6	2	0.5	3		4	0.5				
85	1.2DL + 1.6Lr + 0.5WL 30 AZI	Yes	Y	DL	1.2	RLL	1.6	2	0.433	3	0.25	5	0.5				
86	1.2DL + 1.6Lr + 0.5WL 45 AZI	Yes	Y	DL	1.2	RLL	1.6	2	0.354	3	0.354	6	0.5				
87	1.2DL + 1.6Lr + 0.5WL 60 AZI	Yes	Y	DL	1.2	RLL	1.6	2	0.25	3	0.433	7	0.5				
88	1.2DL + 1.6Lr + 0.5WL 90 AZI	Yes	Y	DL	1.2	RLL	1.6	2		3	0.5	8	0.5				
89	1.2DL + 1.6Lr + 0.5WL 120 AZI	Yes	Y	DL	1.2	RLL	1.6	2	-0.25	3	0.433	9	0.5				
90	1.2DL + 1.6Lr + 0.5WL 135 AZI	Yes	Y	DL	1.2	RLL	1.6	2	-0.354	3	0.354	10	0.5				
91	1.2DL + 1.6Lr + 0.5WL 150 AZI	Yes	Y	DL	1.2	RLL	1.6	2	-0.433	3	0.25	11	0.5				
92	1.2DL + 1.6Lr + 0.5WL 180 AZI	Yes	Y	DL	1.2	RLL	1.6	2	-0.5	3		4	-0.5				
93	1.2DL + 1.6Lr + 0.5WL 210 AZI	Yes	Y	DL	1.2	RLL	1.6	2	-0.433	3	-0.25	5	-0.5				
94	1.2DL + 1.6Lr + 0.5WL 225 AZI	Yes	Y	DL	1.2	RLL	1.6	2	-0.354	3	-0.354	6	-0.5				
95	1.2DL + 1.6Lr + 0.5WL 240 AZI	Yes	Y	DL	1.2	RLL	1.6	2	-0.25	3	-0.433	7	-0.5				
96	1.2DL + 1.6Lr + 0.5WL 270 AZI	Yes	Y	DL	1.2	RLL	1.6	2		3	-0.5	8	-0.5				
97	1.2DL + 1.6Lr + 0.5WL 300 AZI	Yes	Y	DL	1.2	RLL	1.6	2	0.25	3	-0.433	9	-0.5				
98	1.2DL + 1.6Lr + 0.5WL 315 AZI	Yes	Y	DL	1.2	RLL	1.6	2	0.354	3	-0.354	10	-0.5				
99	1.2DL + 1.6Lr + 0.5WL 330 AZI	Yes	Y	DL	1.2	RLL	1.6	2	0.433	3	-0.25	11	-0.5				
100	1.2DL + 1L + 0.5Lr + 1WL 0 AZI	Yes	Y	DL	1.2	LL	1	RLL	0.5	2	1	3		4	1		
101	1.2DL + 1L + 0.5Lr + 1WL 30 AZI	Yes	Y	DL	1.2	LL	1	RLL	0.5	2	0.866	3	0.5	5	1		
102	1.2DL + 1L + 0.5Lr + 1WL 45 AZI	Yes	Y	DL	1.2	LL	1	RLL	0.5	2	0.707	3	0.707	6	1		
103	1.2DL + 1L + 0.5Lr + 1WL 60 AZI	Yes	Y	DL	1.2	LL	1	RLL	0.5	2	0.5	3	0.866	7	1		
104	1.2DL + 1L + 0.5Lr + 1WL 90 AZI	Yes	Y	DL	1.2	LL	1	RLL	0.5	2		3	1	8	1		
105	1.2DL + 1L + 0.5Lr + 1WL 120 AZI	Yes	Y	DL	1.2	LL	1	RLL	0.5	2	-0.5	3	0.866	9	1		
106	1.2DL + 1L + 0.5Lr + 1WL 135 AZI	Yes	Y	DL	1.2	LL	1	RLL	0.5	2	-0.707	3	0.707	10	1		
107	1.2DL + 1L + 0.5Lr + 1WL 150 AZI	Yes	Y	DL	1.2	LL	1	RLL	0.5	2	-0.866	3	0.5	11	1		
108	1.2DL + 1L + 0.5Lr + 1WL 180 AZI	Yes	Y	DL	1.2	LL	1	RLL	0.5	2	-1	3		4	-1		
109	1.2DL + 1L + 0.5Lr + 1WL 210 AZI	Yes	Y	DL	1.2	LL	1	RLL	0.5	2	-0.866	3	-0.5	5	-1		
110	1.2DL + 1L + 0.5Lr + 1WL 225 AZI	Yes	Y	DL	1.2	LL	1	RLL	0.5	2	-0.707	3	-0.707	6	-1		
111	1.2DL + 1L + 0.5Lr + 1WL 240 AZI	Yes	Y	DL	1.2	LL	1	RLL	0.5	2	-0.5	3	-0.866	7	-1		
112	1.2DL + 1L + 0.5Lr + 1WL 270 AZI	Yes	Y	DL	1.2	LL	1	RLL	0.5	2		3	-1	8	-1		
113	1.2DL + 1L + 0.5Lr + 1WL 300 AZI	Yes	Y	DL	1.2	LL	1	RLL	0.5	2	0.5	3	-0.866	9	-1		
114	1.2DL + 1L + 0.5Lr + 1WL 315 AZI	Yes	Y	DL	1.2	LL	1	RLL	0.5	2	0.707	3	-0.707	10	-1		
115	1.2DL + 1L + 0.5Lr + 1WL 330 AZI	Yes	Y	DL	1.2	LL	1	RLL	0.5	2	0.866	3	-0.5	11	-1		
116	1.2DL + 1.6L + 0.5SL	Yes	Y	DL	1.2	LL	1.6	SL	0.5								
117	1.2DL + 1.6SL + 1L	Yes	Y	DL	1.2	SL	1.6	LL	1								
118	1.2DL + 1.6SL + 0.5WL 0 AZI	Yes	Y	DL	1.2	SL	1.6	2	0.5	3		4	0.5				
119	1.2DL + 1.6SL + 0.5WL 30 AZI	Yes	Y	DL	1.2	SL	1.6	2	0.433	3	0.25	5	0.5				
120	1.2DL + 1.6SL + 0.5WL 45 AZI	Yes	Y	DL	1.2	SL	1.6	2	0.354	3	0.354	6	0.5				
121	1.2DL + 1.6SL + 0.5WL 60 AZI	Yes	Y	DL	1.2	SL	1.6	2	0.25	3	0.433	7	0.5				
122	1.2DL + 1.6SL + 0.5WL 90 AZI	Yes	Y	DL	1.2	SL	1.6	2		3	0.5	8	0.5				
123	1.2DL + 1.6SL + 0.5WL 120 AZI	Yes	Y	DL	1.2	SL	1.6	2	-0.25	3	0.433	9	0.5				
124	1.2DL + 1.6SL + 0.5WL 135 AZI	Yes	Y	DL	1.2	SL	1.6	2	-0.354	3	0.354	10	0.5				
125	1.2DL + 1.6SL + 0.5WL 150 AZI	Yes	Y	DL	1.2	SL	1.6	2	-0.433	3	0.25	11	0.5				
126	1.2DL + 1.6SL + 0.5WL 180 AZI	Yes	Y	DL	1.2	SL	1.6	2	-0.5	3		4	-0.5				
127	1.2DL + 1.6SL + 0.5WL 210 AZI	Yes	Y	DL	1.2	SL	1.6	2	-0.433	3	-0.25	5	-0.5				
128	1.2DL + 1.6SL + 0.5WL 225 AZI	Yes	Y	DL	1.2	SL	1.6	2	-0.354	3	-0.354	6	-0.5				

Load Combinations (Continued)

	Description	Solve	P-Delta	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor
129	1.2DL + 1.6SL + 0.5WL 240 AZI	Yes	Y	DL	1.2	SL	1.6	2	-0.25	3	-0.433	7	-0.5				
130	1.2DL + 1.6SL + 0.5WL 270 AZI	Yes	Y	DL	1.2	SL	1.6	2		3	-0.5	8	-0.5				
131	1.2DL + 1.6SL + 0.5WL 300 AZI	Yes	Y	DL	1.2	SL	1.6	2	0.25	3	-0.433	9	-0.5				
132	1.2DL + 1.6SL + 0.5WL 315 AZI	Yes	Y	DL	1.2	SL	1.6	2	0.354	3	-0.354	10	-0.5				
133	1.2DL + 1.6SL + 0.5WL 330 AZI	Yes	Y	DL	1.2	SL	1.6	2	0.433	3	-0.25	11	-0.5				
134	1.2DL + 1L + 0.5SL + 1WL 0 AZI	Yes	Y	DL	1.2	LL	1	SL	0.5	2	1	3		4	1		
135	1.2DL + 1L + 0.5SL + 1WL 30 AZI	Yes	Y	DL	1.2	LL	1	SL	0.5	2	0.866	3	0.5	5	1		
136	1.2DL + 1L + 0.5SL + 1WL 45 AZI	Yes	Y	DL	1.2	LL	1	SL	0.5	2	0.707	3	0.707	6	1		
137	1.2DL + 1L + 0.5SL + 1WL 60 AZI	Yes	Y	DL	1.2	LL	1	SL	0.5	2	0.5	3	0.866	7	1		
138	1.2DL + 1L + 0.5SL + 1WL 90 AZI	Yes	Y	DL	1.2	LL	1	SL	0.5	2		3	1	8	1		
139	1.2DL + 1L + 0.5SL + 1WL 120 AZI	Yes	Y	DL	1.2	LL	1	SL	0.5	2	-0.5	3	0.866	9	1		
140	1.2DL + 1L + 0.5SL + 1WL 135 AZI	Yes	Y	DL	1.2	LL	1	SL	0.5	2	-0.707	3	0.707	10	1		
141	1.2DL + 1L + 0.5SL + 1WL 150 AZI	Yes	Y	DL	1.2	LL	1	SL	0.5	2	-0.866	3	0.5	11	1		
142	1.2DL + 1L + 0.5SL + 1WL 180 AZI	Yes	Y	DL	1.2	LL	1	SL	0.5	2	-1	3		4	-1		
143	1.2DL + 1L + 0.5SL + 1WL 210 AZI	Yes	Y	DL	1.2	LL	1	SL	0.5	2	-0.866	3	-0.5	5	-1		
144	1.2DL + 1L + 0.5SL + 1WL 225 AZI	Yes	Y	DL	1.2	LL	1	SL	0.5	2	-0.707	3	-0.707	6	-1		
145	1.2DL + 1L + 0.5SL + 1WL 240 AZI	Yes	Y	DL	1.2	LL	1	SL	0.5	2	-0.5	3	-0.866	7	-1		
146	1.2DL + 1L + 0.5SL + 1WL 270 AZI	Yes	Y	DL	1.2	LL	1	SL	0.5	2		3	-1	8	-1		
147	1.2DL + 1L + 0.5SL + 1WL 300 AZI	Yes	Y	DL	1.2	LL	1	SL	0.5	2	0.5	3	-0.866	9	-1		
148	1.2DL + 1L + 0.5SL + 1WL 315 AZI	Yes	Y	DL	1.2	LL	1	SL	0.5	2	0.707	3	-0.707	10	-1		
149	1.2DL + 1L + 0.5SL + 1WL 330 AZI	Yes	Y	DL	1.2	LL	1	SL	0.5	2	0.866	3	-0.5	11	-1		
150	1.2DL + 1.6L + 0.2Di + 0.5SL	Yes	Y	DL	1.2	LL	1.6	OL1	0.2	SL	0.5						
151	1.2DL + 1L + 0.5SL + 1DLi + 0.5SL 0 AZI	Yes	Y	DL	1.2	LL	1	SL	0.5	OL1	1	13	1	14		15	1
152	1.2DL + 1L + 0.5SL + 1DLi + 0.5SL 30 AZI	Yes	Y	DL	1.2	LL	1	SL	0.5	OL1	1	13	0.866	14	0.5	16	1
153	1.2DL + 1L + 0.5SL + 1DLi + 0.5SL 45 AZI	Yes	Y	DL	1.2	LL	1	SL	0.5	OL1	1	13	0.707	14	0.707	17	1
154	1.2DL + 1L + 0.5SL + 1DLi + 0.5SL 60 AZI	Yes	Y	DL	1.2	LL	1	SL	0.5	OL1	1	13	0.5	14	0.866	18	1
155	1.2DL + 1L + 0.5SL + 1DLi + 0.5SL 90 AZI	Yes	Y	DL	1.2	LL	1	SL	0.5	OL1	1	13		14	1	19	1
156	1.2DL + 1L + 0.5SL + 1DLi + 0.5SL 120 AZI	Yes	Y	DL	1.2	LL	1	SL	0.5	OL1	1	13	-0.5	14	0.866	20	1
157	1.2DL + 1L + 0.5SL + 1DLi + 0.5SL 135 AZI	Yes	Y	DL	1.2	LL	1	SL	0.5	OL1	1	13	-0.707	14	0.707	21	1
158	1.2DL + 1L + 0.5SL + 1DLi + 0.5SL 150 AZI	Yes	Y	DL	1.2	LL	1	SL	0.5	OL1	1	13	-0.866	14	0.5	22	1
159	1.2DL + 1L + 0.5SL + 1DLi + 0.5SL 180 AZI	Yes	Y	DL	1.2	LL	1	SL	0.5	OL1	1	13	-1	14		15	-1
160	1.2DL + 1L + 0.5SL + 1DLi + 0.5SL 210 AZI	Yes	Y	DL	1.2	LL	1	SL	0.5	OL1	1	13	-0.866	14	-0.5	16	-1
161	1.2DL + 1L + 0.5SL + 1DLi + 0.5SL 225 AZI	Yes	Y	DL	1.2	LL	1	SL	0.5	OL1	1	13	-0.707	14	-0.707	17	-1
162	1.2DL + 1L + 0.5SL + 1DLi + 0.5SL 240 AZI	Yes	Y	DL	1.2	LL	1	SL	0.5	OL1	1	13	-0.5	14	-0.866	18	-1
163	1.2DL + 1L + 0.5SL + 1DLi + 0.5SL 270 AZI	Yes	Y	DL	1.2	LL	1	SL	0.5	OL1	1	13		14	-1	19	-1
164	1.2DL + 1L + 0.5SL + 1DLi + 0.5SL 300 AZI	Yes	Y	DL	1.2	LL	1	SL	0.5	OL1	1	13	0.5	14	-0.866	20	-1
165	1.2DL + 1L + 0.5SL + 1DLi + 0.5SL 315 AZI	Yes	Y	DL	1.2	LL	1	SL	0.5	OL1	1	13	0.707	14	-0.707	21	-1
166	1.2DL + 1L + 0.5SL + 1DLi + 0.5SL 330 AZI	Yes	Y	DL	1.2	LL	1	SL	0.5	OL1	1	13	0.866	14	-0.5	22	-1
167	1.2DL + 1Lv1	Yes	Y	DL	1.2	28	1.5										
168	1.2DL + 1Lv2	Yes	Y	DL	1.2	29	1.5										
169	1.2DL + 1Lv3	Yes	Y	DL	1.2	30	1.5										
170	1.2DL + 1.5Lm + 1Wm 0 AZI - MP3	Yes	Y	DL	1.2	31	1.5	2	0.094	3		4	0.094				
171	1.2DL + 1.5Lm + 1Wm 30 AZI - MP3	Yes	Y	DL	1.2	31	1.5	2	0.081	3	0.047	5	0.094				
172	1.2DL + 1.5Lm + 1Wm 45 AZI - MP3	Yes	Y	DL	1.2	31	1.5	2	0.066	3	0.066	6	0.094				
173	1.2DL + 1.5Lm + 1Wm 60 AZI - MP3	Yes	Y	DL	1.2	31	1.5	2	0.047	3	0.081	7	0.094				
174	1.2DL + 1.5Lm + 1Wm 90 AZI - MP3	Yes	Y	DL	1.2	31	1.5	2		3	0.094	8	0.094				
175	1.2DL + 1.5Lm + 1Wm 120 AZI - MP3	Yes	Y	DL	1.2	31	1.5	2	-0.047	3	0.081	9	0.094				
176	1.2DL + 1.5Lm + 1Wm 135 AZI - MP3	Yes	Y	DL	1.2	31	1.5	2	-0.066	3	0.066	10	0.094				
177	1.2DL + 1.5Lm + 1Wm 150 AZI - MP3	Yes	Y	DL	1.2	31	1.5	2	-0.081	3	0.047	11	0.094				
178	1.2DL + 1.5Lm + 1Wm 180 AZI - MP3	Yes	Y	DL	1.2	31	1.5	2	-0.094	3		4	-0.094				
179	1.2DL + 1.5Lm + 1Wm 210 AZI - MP3	Yes	Y	DL	1.2	31	1.5	2	-0.081	3	-0.047	5	-0.094				
180	1.2DL + 1.5Lm + 1Wm 225 AZI - MP3	Yes	Y	DL	1.2	31	1.5	2	-0.066	3	-0.066	6	-0.094				
181	1.2DL + 1.5Lm + 1Wm 240 AZI - MP3	Yes	Y	DL	1.2	31	1.5	2	-0.047	3	-0.081	7	-0.094				
182	1.2DL + 1.5Lm + 1Wm 270 AZI - MP3	Yes	Y	DL	1.2	31	1.5	2		3	-0.094	8	-0.094				
183	1.2DL + 1.5Lm + 1Wm 300 AZI - MP3	Yes	Y	DL	1.2	31	1.5	2	0.047	3	-0.081	9	-0.094				

Load Combinations (Continued)

	Description	Solve	P-Delta	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor
184	1.2DL + 1.5Lm + 1Wm 315 AZI - MP3	Yes	Y	DL	1.2	31	1.5	2	0.066	3	-0.066	10	-0.094				
185	1.2DL + 1.5Lm + 1Wm 330 AZI - MP3	Yes	Y	DL	1.2	31	1.5	2	0.081	3	-0.047	11	-0.094				
186	1.2DL + 1.5Lm + 1Wm 0 AZI - MP2	Yes	Y	DL	1.2	32	1.5	2	0.094	3		4	0.094				
187	1.2DL + 1.5Lm + 1Wm 30 AZI - MP2	Yes	Y	DL	1.2	32	1.5	2	0.081	3	0.047	5	0.094				
188	1.2DL + 1.5Lm + 1Wm 45 AZI - MP2	Yes	Y	DL	1.2	32	1.5	2	0.066	3	0.066	6	0.094				
189	1.2DL + 1.5Lm + 1Wm 60 AZI - MP2	Yes	Y	DL	1.2	32	1.5	2	0.047	3	0.081	7	0.094				
190	1.2DL + 1.5Lm + 1Wm 90 AZI - MP2	Yes	Y	DL	1.2	32	1.5	2		3	0.094	8	0.094				
191	1.2DL + 1.5Lm + 1Wm 120 AZI - MP2	Yes	Y	DL	1.2	32	1.5	2	-0.047	3	0.081	9	0.094				
192	1.2DL + 1.5Lm + 1Wm 135 AZI - MP2	Yes	Y	DL	1.2	32	1.5	2	-0.066	3	0.066	10	0.094				
193	1.2DL + 1.5Lm + 1Wm 150 AZI - MP2	Yes	Y	DL	1.2	32	1.5	2	-0.081	3	0.047	11	0.094				
194	1.2DL + 1.5Lm + 1Wm 180 AZI - MP2	Yes	Y	DL	1.2	32	1.5	2	-0.094	3		4	-0.094				
195	1.2DL + 1.5Lm + 1Wm 210 AZI - MP2	Yes	Y	DL	1.2	32	1.5	2	-0.081	3	-0.047	5	-0.094				
196	1.2DL + 1.5Lm + 1Wm 225 AZI - MP2	Yes	Y	DL	1.2	32	1.5	2	-0.066	3	-0.066	6	-0.094				
197	1.2DL + 1.5Lm + 1Wm 240 AZI - MP2	Yes	Y	DL	1.2	32	1.5	2	-0.047	3	-0.081	7	-0.094				
198	1.2DL + 1.5Lm + 1Wm 270 AZI - MP2	Yes	Y	DL	1.2	32	1.5	2		3	-0.094	8	-0.094				
199	1.2DL + 1.5Lm + 1Wm 300 AZI - MP2	Yes	Y	DL	1.2	32	1.5	2	0.047	3	-0.081	9	-0.094				
200	1.2DL + 1.5Lm + 1Wm 315 AZI - MP2	Yes	Y	DL	1.2	32	1.5	2	0.066	3	-0.066	10	-0.094				
201	1.2DL + 1.5Lm + 1Wm 330 AZI - MP2	Yes	Y	DL	1.2	32	1.5	2	0.081	3	-0.047	11	-0.094				
202	1.2DL + 1.5Lm + 1Wm 0 AZI - MP1	Yes	Y	DL	1.2	33	1.5	2	0.094	3		4	0.094				
203	1.2DL + 1.5Lm + 1Wm 30 AZI - MP1	Yes	Y	DL	1.2	33	1.5	2	0.081	3	0.047	5	0.094				
204	1.2DL + 1.5Lm + 1Wm 45 AZI - MP1	Yes	Y	DL	1.2	33	1.5	2	0.066	3	0.066	6	0.094				
205	1.2DL + 1.5Lm + 1Wm 60 AZI - MP1	Yes	Y	DL	1.2	33	1.5	2	0.047	3	0.081	7	0.094				
206	1.2DL + 1.5Lm + 1Wm 90 AZI - MP1	Yes	Y	DL	1.2	33	1.5	2		3	0.094	8	0.094				
207	1.2DL + 1.5Lm + 1Wm 120 AZI - MP1	Yes	Y	DL	1.2	33	1.5	2	-0.047	3	0.081	9	0.094				
208	1.2DL + 1.5Lm + 1Wm 135 AZI - MP1	Yes	Y	DL	1.2	33	1.5	2	-0.066	3	0.066	10	0.094				
209	1.2DL + 1.5Lm + 1Wm 150 AZI - MP1	Yes	Y	DL	1.2	33	1.5	2	-0.081	3	0.047	11	0.094				
210	1.2DL + 1.5Lm + 1Wm 180 AZI - MP1	Yes	Y	DL	1.2	33	1.5	2	-0.094	3		4	-0.094				
211	1.2DL + 1.5Lm + 1Wm 210 AZI - MP1	Yes	Y	DL	1.2	33	1.5	2	-0.081	3	-0.047	5	-0.094				
212	1.2DL + 1.5Lm + 1Wm 225 AZI - MP1	Yes	Y	DL	1.2	33	1.5	2	-0.066	3	-0.066	6	-0.094				
213	1.2DL + 1.5Lm + 1Wm 240 AZI - MP1	Yes	Y	DL	1.2	33	1.5	2	-0.047	3	-0.081	7	-0.094				
214	1.2DL + 1.5Lm + 1Wm 270 AZI - MP1	Yes	Y	DL	1.2	33	1.5	2		3	-0.094	8	-0.094				
215	1.2DL + 1.5Lm + 1Wm 300 AZI - MP1	Yes	Y	DL	1.2	33	1.5	2	0.047	3	-0.081	9	-0.094				
216	1.2DL + 1.5Lm + 1Wm 315 AZI - MP1	Yes	Y	DL	1.2	33	1.5	2	0.066	3	-0.066	10	-0.094				
217	1.2DL + 1.5Lm + 1Wm 330 AZI - MP1	Yes	Y	DL	1.2	33	1.5	2	0.081	3	-0.047	11	-0.094				

Member Point Loads (BLC 1 : Self Weight)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
1	MP2	Y	-38.5	0
2	MP2	Y	-38.5	36.3
3	MP1	Y	-50	0
4	MP1	Y	-50	72.4
5	MP3	Y	-48.3	0
6	MP3	Y	-48.3	72
7	RP1	Y	-68	%50
8	RP2	Y	-57.32	%50
9	RP2	Y	-68	%50
10	RP1	Y	-34.9	%50

Member Point Loads (BLC 4 : Wind Load 0 AZI)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
1	MP2	Z	-60.292	0
2	MP2	Z	-60.292	36.3
3	MP1	Z	-183.102	0

Member Point Loads (BLC 4 : Wind Load 0 AZI) (Continued)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
4	MP1	Z	-183.102	72.4
5	MP3	Z	-84.181	0
6	MP3	Z	-84.181	72
7	RP1	Z	-22.073	%50
8	RP2	Z	-22.969	%50
9	RP2	Z	-22.374	%50
10	RP1	Z	-24.413	%50
11	MP2	X	0	0
12	MP2	X	0	36.3
13	MP1	X	0	0
14	MP1	X	0	72.4
15	MP3	X	0	0
16	MP3	X	0	72
17	RP1	X	0	%50
18	RP2	X	0	%50
19	RP2	X	0	%50
20	RP1	X	0	%50

Member Point Loads (BLC 5 : Wind Load 30 AZI)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
1	MP2	Z	-40.799	0
2	MP2	Z	-40.799	36.3
3	MP1	Z	-132.308	0
4	MP1	Z	-132.308	72.4
5	MP3	Z	-89.208	0
6	MP3	Z	-89.208	72
7	RP1	Z	-24.762	%50
8	RP2	Z	-27.59	%50
9	RP2	Z	-24.957	%50
10	RP1	Z	-26.538	%50
11	MP2	X	-23.555	0
12	MP2	X	-23.555	36.3
13	MP1	X	-76.388	0
14	MP1	X	-76.388	72.4
15	MP3	X	-51.504	0
16	MP3	X	-51.504	72
17	RP1	X	-14.296	%50
18	RP2	X	-15.929	%50
19	RP2	X	-14.409	%50
20	RP1	X	-15.322	%50

Member Point Loads (BLC 6 : Wind Load 45 AZI)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
1	MP2	Z	-26.926	0
2	MP2	Z	-26.926	36.3
3	MP1	Z	-86.585	0
4	MP1	Z	-86.585	72.4
5	MP3	Z	-63.132	0
6	MP3	Z	-63.132	72
7	RP1	Z	-24.827	%50
8	RP2	Z	-28.812	%50
9	RP2	Z	-24.934	%50
10	RP1	Z	-26.073	%50

Member Point Loads (BLC 6 : Wind Load 45 AZI) (Continued)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
11	MP2	X	-26.926	0
12	MP2	X	-26.926	36.3
13	MP1	X	-86.585	0
14	MP1	X	-86.585	72.4
15	MP3	X	-63.132	0
16	MP3	X	-63.132	72
17	RP1	X	-24.827	%50
18	RP2	X	-28.812	%50
19	RP2	X	-24.934	%50
20	RP1	X	-26.073	%50

Member Point Loads (BLC 7 : Wind Load 60 AZI)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
1	MP2	Z	-14.768	0
2	MP2	Z	-14.768	36.3
3	MP1	Z	-46.062	0
4	MP1	Z	-46.062	72.4
5	MP3	Z	-31.583	0
6	MP3	Z	-31.583	72
7	RP1	Z	-20.815	%50
8	RP2	Z	-24.818	%50
9	RP2	Z	-20.853	%50
10	RP1	Z	-21.552	%50
11	MP2	X	-25.579	0
12	MP2	X	-25.579	36.3
13	MP1	X	-79.781	0
14	MP1	X	-79.781	72.4
15	MP3	X	-54.703	0
16	MP3	X	-54.703	72
17	RP1	X	-36.053	%50
18	RP2	X	-42.986	%50
19	RP2	X	-36.118	%50
20	RP1	X	-37.329	%50

Member Point Loads (BLC 8 : Wind Load 90 AZI)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
1	MP2	Z	0	0
2	MP2	Z	0	36.3
3	MP1	Z	0	0
4	MP1	Z	0	72.4
5	MP3	Z	0	0
6	MP3	Z	0	72
7	RP1	Z	0	%50
8	RP2	Z	0	%50
9	RP2	Z	0	%50
10	RP1	Z	0	%50
11	MP2	X	-20.138	0
12	MP2	X	-20.138	36.3
13	MP1	X	-61.797	0
14	MP1	X	-61.797	72.4
15	MP3	X	-29.153	0
16	MP3	X	-29.153	72
17	RP1	X	-48.149	%50

Member Point Loads (BLC 8 : Wind Load 90 AZI) (Continued)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
18	RP2	X	-58.525	%50
19	RP2	X	-48.149	%50
20	RP1	X	-49.334	%50

Member Point Loads (BLC 9 : Wind Load 120 AZI)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
1	MP2	Z	14.951	0
2	MP2	Z	14.951	36.3
3	MP1	Z	46.062	0
4	MP1	Z	46.062	72.4
5	MP3	Z	39.661	0
6	MP3	Z	39.661	72
7	RP1	Z	20.815	%50
8	RP2	Z	24.818	%50
9	RP2	Z	20.853	%50
10	RP1	Z	21.552	%50
11	MP2	X	-25.896	0
12	MP2	X	-25.896	36.3
13	MP1	X	-79.781	0
14	MP1	X	-79.781	72.4
15	MP3	X	-68.695	0
16	MP3	X	-68.695	72
17	RP1	X	-36.053	%50
18	RP2	X	-42.986	%50
19	RP2	X	-36.118	%50
20	RP1	X	-37.329	%50

Member Point Loads (BLC 10 : Wind Load 135 AZI)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
1	MP2	Z	25.459	0
2	MP2	Z	25.459	36.3
3	MP1	Z	86.585	0
4	MP1	Z	86.585	72.4
5	MP3	Z	68.114	0
6	MP3	Z	68.114	72
7	RP1	Z	24.827	%50
8	RP2	Z	28.812	%50
9	RP2	Z	24.934	%50
10	RP1	Z	26.073	%50
11	MP2	X	-25.459	0
12	MP2	X	-25.459	36.3
13	MP1	X	-86.585	0
14	MP1	X	-86.585	72.4
15	MP3	X	-68.114	0
16	MP3	X	-68.114	72
17	RP1	X	-24.827	%50
18	RP2	X	-28.812	%50
19	RP2	X	-24.934	%50
20	RP1	X	-26.073	%50

Member Point Loads (BLC 11 : Wind Load 150 AZI)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
1	MP2	Z	34.986	0
2	MP2	Z	34.986	36.3
3	MP1	Z	132.308	0
4	MP1	Z	132.308	72.4
5	MP3	Z	86.683	0
6	MP3	Z	86.683	72
7	RP1	Z	24.762	%50
8	RP2	Z	27.59	%50
9	RP2	Z	24.957	%50
10	RP1	Z	26.538	%50
11	MP2	X	-20.199	0
12	MP2	X	-20.199	36.3
13	MP1	X	-76.388	0
14	MP1	X	-76.388	72.4
15	MP3	X	-50.047	0
16	MP3	X	-50.047	72
17	RP1	X	-14.296	%50
18	RP2	X	-15.929	%50
19	RP2	X	-14.409	%50
20	RP1	X	-15.322	%50

Member Point Loads (BLC 12 : Ice Weight)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
1	MP2	Y	-41.586	0
2	MP2	Y	-41.586	36.3
3	MP1	Y	-103.186	0
4	MP1	Y	-103.186	72.4
5	MP3	Y	-81.392	0
6	MP3	Y	-81.392	72
7	RP1	Y	-39.942	%50
8	RP2	Y	-43.646	%50
9	RP2	Y	-40.183	%50
10	RP1	Y	-43.971	%50

Member Point Loads (BLC 15 : Ice Wind Load 0 AZI)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
1	MP2	Z	-5.109	0
2	MP2	Z	-5.109	36.3
3	MP1	Z	-15.082	0
4	MP1	Z	-15.082	72.4
5	MP3	Z	-7.294	0
6	MP3	Z	-7.294	72
7	RP1	Z	-4.159	%50
8	RP2	Z	-5.007	%50
9	RP2	Z	-4.161	%50
10	RP1	Z	-4.253	%50
11	MP2	X	0	0
12	MP2	X	0	36.3
13	MP1	X	0	0
14	MP1	X	0	72.4
15	MP3	X	0	0
16	MP3	X	0	72

Member Point Loads (BLC 15 : Ice Wind Load 0 AZI) (Continued)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
17	RP1	X	0	%50
18	RP2	X	0	%50
19	RP2	X	0	%50
20	RP1	X	0	%50

Member Point Loads (BLC 16 : Ice Wind Load 30 AZI)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
1	MP2	Z	-4.416	0
2	MP2	Z	-4.416	36.3
3	MP1	Z	-13.04	0
4	MP1	Z	-13.04	72.4
5	MP3	Z	-6.306	0
6	MP3	Z	-6.306	72
7	RP1	Z	-3.627	%50
8	RP2	Z	-4.365	%50
9	RP2	Z	-3.628	%50
10	RP1	Z	-3.709	%50
11	MP2	X	-2.549	0
12	MP2	X	-2.549	36.3
13	MP1	X	-7.529	0
14	MP1	X	-7.529	72.4
15	MP3	X	-3.641	0
16	MP3	X	-3.641	72
17	RP1	X	-2.094	%50
18	RP2	X	-2.52	%50
19	RP2	X	-2.095	%50
20	RP1	X	-2.141	%50

Member Point Loads (BLC 17 : Ice Wind Load 45 AZI)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
1	MP2	Z	-3.598	0
2	MP2	Z	-3.598	36.3
3	MP1	Z	-10.63	0
4	MP1	Z	-10.63	72.4
5	MP3	Z	-5.14	0
6	MP3	Z	-5.14	72
7	RP1	Z	-2.982	%50
8	RP2	Z	-3.587	%50
9	RP2	Z	-2.982	%50
10	RP1	Z	-3.049	%50
11	MP2	X	-3.598	0
12	MP2	X	-3.598	36.3
13	MP1	X	-10.63	0
14	MP1	X	-10.63	72.4
15	MP3	X	-5.14	0
16	MP3	X	-5.14	72
17	RP1	X	-2.982	%50
18	RP2	X	-3.587	%50
19	RP2	X	-2.982	%50
20	RP1	X	-3.049	%50

Member Point Loads (BLC 18 : Ice Wind Load 60 AZI)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
1	MP2	Z	-2.539	0
2	MP2	Z	-2.539	36.3
3	MP1	Z	-7.504	0
4	MP1	Z	-7.504	72.4
5	MP3	Z	-3.628	0
6	MP3	Z	-3.628	72
7	RP1	Z	-2.123	%50
8	RP2	Z	-2.553	%50
9	RP2	Z	-2.123	%50
10	RP1	Z	-2.171	%50
11	MP2	X	-4.397	0
12	MP2	X	-4.397	36.3
13	MP1	X	-12.997	0
14	MP1	X	-12.997	72.4
15	MP3	X	-6.283	0
16	MP3	X	-6.283	72
17	RP1	X	-3.677	%50
18	RP2	X	-4.422	%50
19	RP2	X	-3.677	%50
20	RP1	X	-3.76	%50

Member Point Loads (BLC 19 : Ice Wind Load 90 AZI)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
1	MP2	Z	0	0
2	MP2	Z	0	36.3
3	MP1	Z	0	0
4	MP1	Z	0	72.4
5	MP3	Z	0	0
6	MP3	Z	0	72
7	RP1	Z	0	%50
8	RP2	Z	0	%50
9	RP2	Z	0	%50
10	RP1	Z	0	%50
11	MP2	X	-5.067	0
12	MP2	X	-5.067	36.3
13	MP1	X	-14.983	0
14	MP1	X	-14.983	72.4
15	MP3	X	-7.242	0
16	MP3	X	-7.242	72
17	RP1	X	-4.275	%50
18	RP2	X	-5.14	%50
19	RP2	X	-4.275	%50
20	RP1	X	-4.371	%50

Member Point Loads (BLC 20 : Ice Wind Load 120 AZI)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
1	MP2	Z	2.539	0
2	MP2	Z	2.539	36.3
3	MP1	Z	7.504	0
4	MP1	Z	7.504	72.4
5	MP3	Z	3.628	0
6	MP3	Z	3.628	72

Member Point Loads (BLC 20 : Ice Wind Load 120 AZI) (Continued)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
7	RP1	Z	2.123	%50
8	RP2	Z	2.553	%50
9	RP2	Z	2.123	%50
10	RP1	Z	2.171	%50
11	MP2	X	-4.397	0
12	MP2	X	-4.397	36.3
13	MP1	X	-12.997	0
14	MP1	X	-12.997	72.4
15	MP3	X	-6.283	0
16	MP3	X	-6.283	72
17	RP1	X	-3.677	%50
18	RP2	X	-4.422	%50
19	RP2	X	-3.677	%50
20	RP1	X	-3.76	%50

Member Point Loads (BLC 21 : Ice Wind Load 135 AZI)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
1	MP2	Z	3.598	0
2	MP2	Z	3.598	36.3
3	MP1	Z	10.63	0
4	MP1	Z	10.63	72.4
5	MP3	Z	5.14	0
6	MP3	Z	5.14	72
7	RP1	Z	2.982	%50
8	RP2	Z	3.587	%50
9	RP2	Z	2.982	%50
10	RP1	Z	3.049	%50
11	MP2	X	-3.598	0
12	MP2	X	-3.598	36.3
13	MP1	X	-10.63	0
14	MP1	X	-10.63	72.4
15	MP3	X	-5.14	0
16	MP3	X	-5.14	72
17	RP1	X	-2.982	%50
18	RP2	X	-3.587	%50
19	RP2	X	-2.982	%50
20	RP1	X	-3.049	%50

Member Point Loads (BLC 22 : Ice Wind Load 150 AZI)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
1	MP2	Z	4.416	0
2	MP2	Z	4.416	36.3
3	MP1	Z	13.04	0
4	MP1	Z	13.04	72.4
5	MP3	Z	6.306	0
6	MP3	Z	6.306	72
7	RP1	Z	3.627	%50
8	RP2	Z	4.365	%50
9	RP2	Z	3.628	%50
10	RP1	Z	3.709	%50
11	MP2	X	-2.549	0
12	MP2	X	-2.549	36.3
13	MP1	X	-7.529	0

Member Point Loads (BLC 22 : Ice Wind Load 150 AZI) (Continued)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
14	MP1	X	-7.529	72.4
15	MP3	X	-3.641	0
16	MP3	X	-3.641	72
17	RP1	X	-2.094	%50
18	RP2	X	-2.52	%50
19	RP2	X	-2.095	%50
20	RP1	X	-2.141	%50

Member Point Loads (BLC 23 : Seismic Load Z)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
1	MP2	Z	-25.761	0
2	MP2	Z	-25.761	36.3
3	MP1	Z	-33.456	0
4	MP1	Z	-33.456	72.4
5	MP3	Z	-32.318	0
6	MP3	Z	-32.318	72
7	RP1	Z	-45.5	%50
8	RP2	Z	-38.354	%50
9	RP2	Z	-45.5	%50
10	RP1	Z	-23.352	%50

Member Point Loads (BLC 24 : Seismic Load X)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
1	MP2	X	-25.761	0
2	MP2	X	-25.761	36.3
3	MP1	X	-33.456	0
4	MP1	X	-33.456	72.4
5	MP3	X	-32.318	0
6	MP3	X	-32.318	72
7	RP1	X	-45.5	%50
8	RP2	X	-38.354	%50
9	RP2	X	-45.5	%50
10	RP1	X	-23.352	%50

Member Point Loads (BLC 28 : Live Load 1 (Lv))

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
1	H1	Y	-250	0

Member Point Loads (BLC 29 : Live Load 2 (Lv))

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
1	H1	Y	-250	%50

Member Point Loads (BLC 30 : Live Load 3 (Lv))

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
1	H1	Y	-250	%100

Member Point Loads (BLC 31 : Maintenance Load 1 (Lm))

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
1	MP3	Y	-500	%50

Member Point Loads (BLC 32 : Maintenance Load 2 (Lm))

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
1	MP2	Y	-500	%50

Member Point Loads (BLC 33 : Maintenance Load 3 (Lm))

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
1	MP1	Y	-500	%50

Member Distributed Loads (BLC 2 : Structure Wind Z)

	Member Label	Direction	Start Magnitude [lb/ft, F, psf, lb-ft/in]	End Magnitude [lb/ft, F, psf, lb-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1	M1	SZ	-29.153	-29.153	0	%100
2	H1	SZ	-29.153	-29.153	0	%100
3	M4	SZ	-29.153	-29.153	0	%100
4	RP2	SZ	-29.153	-29.153	0	%100
5	MP3	SZ	-29.153	-29.153	0	%100
6	M13	SZ	-29.153	-29.153	0	%100
7	M14	SZ	-48.589	-48.589	0	%100
8	M15	SZ	-48.589	-48.589	0	%100
9	M16	SZ	-48.589	-48.589	0	%100
10	M17	SZ	-48.589	-48.589	0	%100
11	M25	SZ	-48.589	-48.589	0	%100
12	M26	SZ	-48.589	-48.589	0	%100
13	M27	SZ	-29.153	-29.153	0	%100
14	M28	SZ	-29.153	-29.153	0	%100
15	M29	SZ	-29.153	-29.153	0	%100
16	M30	SZ	-29.153	-29.153	0	%100
17	M31	SZ	-29.153	-29.153	0	%100
18	M32	SZ	-48.589	-48.589	0	%100
19	M33	SZ	-48.589	-48.589	0	%100
20	MP2	SZ	-29.153	-29.153	0	%100
21	M21	SZ	-48.589	-48.589	0	%100
22	M22	SZ	-48.589	-48.589	0	%100
23	MP1	SZ	-29.153	-29.153	0	%100
24	M24	SZ	-48.589	-48.589	0	%100
25	M34	SZ	-48.589	-48.589	0	%100
26	RP1	SZ	-29.153	-29.153	0	%100
27	M36	SZ	-29.153	-29.153	0	%100
28	M37	SZ	-29.153	-29.153	0	%100

Member Distributed Loads (BLC 3 : Structure Wind X)

	Member Label	Direction	Start Magnitude [lb/ft, F, psf, lb-ft/in]	End Magnitude [lb/ft, F, psf, lb-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1	M1	SX	-29.153	-29.153	0	%100
2	H1	SX	-29.153	-29.153	0	%100
3	M4	SX	-29.153	-29.153	0	%100
4	RP2	SX	-29.153	-29.153	0	%100
5	MP3	SX	-29.153	-29.153	0	%100
6	M13	SX	-29.153	-29.153	0	%100

Member Distributed Loads (BLC 3 : Structure Wind X) (Continued)

	Member Label	Direction	Start Magnitude [lb/ft, F, psf, lb-ft/in]	End Magnitude [lb/ft, F, psf, lb-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
7	M14	SX	-48.589	-48.589	0	%100
8	M15	SX	-48.589	-48.589	0	%100
9	M16	SX	-48.589	-48.589	0	%100
10	M17	SX	-48.589	-48.589	0	%100
11	M25	SX	-48.589	-48.589	0	%100
12	M26	SX	-48.589	-48.589	0	%100
13	M27	SX	-29.153	-29.153	0	%100
14	M28	SX	-29.153	-29.153	0	%100
15	M29	SX	-29.153	-29.153	0	%100
16	M30	SX	-29.153	-29.153	0	%100
17	M31	SX	-29.153	-29.153	0	%100
18	M32	SX	-48.589	-48.589	0	%100
19	M33	SX	-48.589	-48.589	0	%100
20	MP2	SX	-29.153	-29.153	0	%100
21	M21	SX	-48.589	-48.589	0	%100
22	M22	SX	-48.589	-48.589	0	%100
23	MP1	SX	-29.153	-29.153	0	%100
24	M24	SX	-48.589	-48.589	0	%100
25	M34	SX	-48.589	-48.589	0	%100
26	RP1	SX	-29.153	-29.153	0	%100
27	M36	SX	-29.153	-29.153	0	%100
28	M37	SX	-29.153	-29.153	0	%100

Member Distributed Loads (BLC 12 : Ice Weight)

	Member Label	Direction	Start Magnitude [lb/ft, F, psf, lb-ft/in]	End Magnitude [lb/ft, F, psf, lb-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1	M1	Y	-4.513	-4.513	0	%100
2	H1	Y	-4.513	-4.513	0	%100
3	M4	Y	-5.986	-5.986	0	%100
4	RP2	Y	-5.986	-5.986	0	%100
5	MP3	Y	-4.513	-4.513	0	%100
6	M13	Y	-5.168	-5.168	0	%100
7	M14	Y	0	0	0	%100
8	M15	Y	0	0	0	%100
9	M16	Y	0	0	0	%100
10	M17	Y	0	0	0	%100
11	M25	Y	0	0	0	%100
12	M26	Y	0	0	0	%100
13	M27	Y	-5.168	-5.168	0	%100
14	M28	Y	-5.168	-5.168	0	%100
15	M29	Y	-4.513	-4.513	0	%100
16	M30	Y	-4.513	-4.513	0	%100
17	M31	Y	-5.986	-5.986	0	%100
18	M32	Y	0	0	0	%100
19	M33	Y	0	0	0	%100
20	MP2	Y	-4.513	-4.513	0	%100
21	M21	Y	0	0	0	%100
22	M22	Y	0	0	0	%100
23	MP1	Y	-4.513	-4.513	0	%100
24	M24	Y	0	0	0	%100
25	M34	Y	0	0	0	%100
26	RP1	Y	-4.513	-4.513	0	%100
27	M36	Y	-5.168	-5.168	0	%100
28	M37	Y	-5.168	-5.168	0	%100

Member Distributed Loads (BLC 13 : Ice Structure Wind Z)

	Member Label	Direction	Start Magnitude [lb/ft, F, psf, lb-ft/in]	End Magnitude [lb/ft, F, psf, lb-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1	M1	SZ	-4.804	-4.804	0	%100
2	H1	SZ	-4.804	-4.804	0	%100
3	M4	SZ	-4.072	-4.072	0	%100
4	RP2	SZ	-4.072	-4.072	0	%100
5	MP3	SZ	-4.804	-4.804	0	%100
6	M13	SZ	-4.408	-4.408	0	%100
7	M14	SZ	0	0	0	%100
8	M15	SZ	0	0	0	%100
9	M16	SZ	0	0	0	%100
10	M17	SZ	0	0	0	%100
11	M25	SZ	0	0	0	%100
12	M26	SZ	0	0	0	%100
13	M27	SZ	-4.408	-4.408	0	%100
14	M28	SZ	-4.408	-4.408	0	%100
15	M29	SZ	-4.804	-4.804	0	%100
16	M30	SZ	-4.804	-4.804	0	%100
17	M31	SZ	-4.072	-4.072	0	%100
18	M32	SZ	0	0	0	%100
19	M33	SZ	0	0	0	%100
20	MP2	SZ	-4.804	-4.804	0	%100
21	M21	SZ	0	0	0	%100
22	M22	SZ	0	0	0	%100
23	MP1	SZ	-4.804	-4.804	0	%100
24	M24	SZ	0	0	0	%100
25	M34	SZ	0	0	0	%100
26	RP1	SZ	-4.804	-4.804	0	%100
27	M36	SZ	-4.408	-4.408	0	%100
28	M37	SZ	-4.408	-4.408	0	%100

Member Distributed Loads (BLC 14 : Ice Structure Wind X)

	Member Label	Direction	Start Magnitude [lb/ft, F, psf, lb-ft/in]	End Magnitude [lb/ft, F, psf, lb-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1	M1	SX	-4.804	-4.804	0	%100
2	H1	SX	-4.804	-4.804	0	%100
3	M4	SX	-4.072	-4.072	0	%100
4	RP2	SX	-4.072	-4.072	0	%100
5	MP3	SX	-4.804	-4.804	0	%100
6	M13	SX	-4.408	-4.408	0	%100
7	M14	SX	0	0	0	%100
8	M15	SX	0	0	0	%100
9	M16	SX	0	0	0	%100
10	M17	SX	0	0	0	%100
11	M25	SX	0	0	0	%100
12	M26	SX	0	0	0	%100
13	M27	SX	-4.408	-4.408	0	%100
14	M28	SX	-4.408	-4.408	0	%100
15	M29	SX	-4.804	-4.804	0	%100
16	M30	SX	-4.804	-4.804	0	%100
17	M31	SX	-4.072	-4.072	0	%100
18	M32	SX	0	0	0	%100
19	M33	SX	0	0	0	%100
20	MP2	SX	-4.804	-4.804	0	%100
21	M21	SX	0	0	0	%100
22	M22	SX	0	0	0	%100
23	MP1	SX	-4.804	-4.804	0	%100

Member Distributed Loads (BLC 14 : Ice Structure Wind X) (Continued)

	Member Label	Direction	Start Magnitude [lb/ft, F, psf, lb-ft/in]	End Magnitude [lb/ft, F, psf, lb-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
24	M24	SX	0	0	0	%100
25	M34	SX	0	0	0	%100
26	RP1	SX	-4.804	-4.804	0	%100
27	M36	SX	-4.408	-4.408	0	%100
28	M37	SX	-4.408	-4.408	0	%100

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	N30	max	570.879	21	1684.766	160	162.947	149	300.511	149	114.55	25	1278.746	145
2		min	-661.355	111	-71.914	19	-119.584	25	-273.567	9	-209.482	115	-1057.713	21
3	N66	max	526.859	140	543.264	18	917.531	18	1226.713	18	111.728	27	401.721	32
4		min	-290.342	32	-654.354	108	-1205.76	108	-1687.356	108	-133.302	101	-709.875	106
5	N35	max	127.339	20	1545.468	156	536.853	135	845.582	19	298.688	140	891.67	144
6		min	-270.213	110	71.326	32	-293.283	27	-1225.158	109	-229.294	32	-474.395	20
7	Totals:	max	921.564	139	2990.574	155	1336.581	134						
8		min	-921.563	31	634.23	78	-1336.559	26						

Envelope AISC 15TH (360-16): LRFD Member Steel Code Checks

	Member	Shape	Code Check	Loc[in]	LC	Shear Check	Loc[in]	LC	phi*Pnc [lb]	phi*Pnt [lb]	phi*Mn y-y [lb-ft]	phi*Mn z-z [lb-ft]	Cb	Eqn
1	H1	PIPE_2.0	0.425	23.563	150	0.092	139.563	210	4678.524	32130	1871.625	1871.625	1	H1-1b
2	M1	PIPE_2.0	0.353	137.75	144	0.114	34.438	143	4678.524	32130	1871.625	1871.625	1	H1-1b
3	M31	PIPE_3.0	0.311	18	142	0.083	18	142	64424.35	65205	5748.75	5748.75	1	H1-1b
4	MP2	PIPE_2.0	0.274	77.813	144	0.054	77.813	144	16368.554	32130	1871.625	1871.625	1	H1-1b
5	RP2	PIPE_3.0	0.27	78	143	0.082	12.188	140	52006.429	65205	5748.75	5748.75	1	H1-1b
6	MP1	PIPE_2.0	0.251	77.813	150	0.085	30	146	16368.554	32130	1871.625	1871.625	1	H1-1b
7	M27	PIPE_2.5	0.243	24	177	0.078	24	176	49081.775	50715	3596.25	3596.25	1	H1-1b
8	MP3	PIPE_2.0	0.238	77.813	150	0.042	30	140	16368.554	32130	1871.625	1871.625	1	H1-1b
9	M4	PIPE_3.0	0.236	78	145	0.066	78	148	52006.429	65205	5748.75	5748.75	1	H1-1b
10	M13	PIPE_2.5	0.15	12	177	0.106	12	141	37773.818	50715	3596.25	3596.25	1	H1-1b
11	M28	PIPE_2.5	0.148	24	140	0.104	24	141	49081.775	50715	3596.25	3596.25	1	H1-1b
12	M36	PIPE_2.5	0.116	0	142	0.059	0	144	50301.668	50715	3596.25	3596.25	1	H1-1b
13	RP1	PIPE_2.0	0.098	15.438	149	0.019	15.438	3	19360.206	32130	1871.625	1871.625	1	H1-1b
14	M30	PIPE_2.0	0.093	0	142	0.018	0	144	11961.409	32130	1871.625	1871.625	1	H1-1b
15	M29	PIPE_2.0	0.08	0	141	0.033	0	143	10013.219	32130	1871.625	1871.625	1	H1-1b
16	M37	PIPE_2.5	0.065	0	2	0.036	0	134	50301.668	50715	3596.25	3596.25	1	H1-1b

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Address:		Specifier:	
Phone I Fax:	|	E-Mail:	
Design:	Concrete - Apr 7, 2025 (1)	Date:	4/25/2025
Fastening point:			

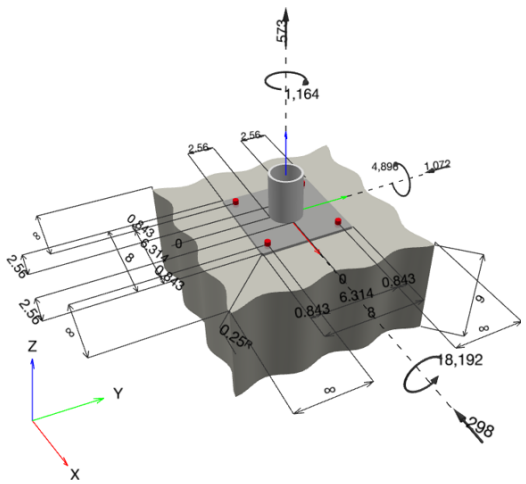
Specifier's comments:

1 Input data

Anchor type and diameter:	**Kwik Bolt TZ2 - CS 1/2 (3 1/4)**
Item number:	2210255 KB-TZ2 1/2x4 1/2
Specification text:	Hilti ∅ 1/2 in Kwik Bolt TZ2 - CS with 3.75 in nominal embedment depth per ICC-ES ESR-4266 , Hammer drill bit installation per MPII,
Effective embedment depth:	$h_{ef,act}$ = 3.250 in., h_{nom} = 3.750 in.
Material:	Carbon Steel
Evaluation Service Report:	ESR-4266
Issued I Valid:	10/1/2024 | 12/1/2025
Proof:	Design Method ACI 318-19 / Mech
Shear edge breakout verification:	Row closest to edge (Case 3 only from ACI 318-19 Fig. R.17.7.2.1b)
Stand-off installation:	e_b = 0.000 in. (no stand-off); t = 0.250 in.
Anchor plate[R] :	l_x x l_y x t = 8.000 in. x 8.000 in. x 0.250 in.; (Recommended plate thickness: not calculated)
Profile:	Steel pipe, PIPE2-1/2STD; (L x W x T) = 2.880 in. x 2.880 in. x 0.203 in.
Base material:	cracked concrete, 4000, f_c' = 4,000 psi; h = 9.000 in.
Installation:	**Hammer drilled hole, Installation condition: Dry**
Reinforcement:	tension: not present, shear: not present; no supplemental splitting reinforcement present edge reinforcement: none or < No. 4 bar

[R] - The anchor calculation is based on a rigid anchor plate assumption.

Geometry [in.] & Loading [lb, in.lb]



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1.1 Load combination and design results

Case	Description	Forces [lb] / Moments [in.lb]	Seismic	Max. Util. Anchor [%]
1	LC 1: N30	N = -649; V_x = -2; V_y = 15; M_x = 204; M_y = -96; M_z = 156;	no	1
2	LC 1: N66	N = 7; V_x = -82; V_y = -92; M_x = 2,112; M_y = -1,344; M_z = 84;	no	6
3	LC 1: N35	N = -641; V_x = 85; V_y = 77; M_x = 2,148; M_y = 3,540; M_z = 96;	no	5
4	LC 2: N30	N = -196; V_x = 94; V_y = 146; M_x = -2,928; M_y = 2,748; M_z = 2,304;	no	7
5	LC 2: N66	N = -471; V_x = 62; V_y = 783; M_x = -12,456; M_y = 1,272; M_z = 1,380;	no	25
6	LC 2: N35	N = -432; V_x = -156; V_y = 387; M_x = -10,716; M_y = -5,604; M_z = -60;	no	24
7	LC 3: N30	N = -116; V_x = -408; V_y = 89; M_x = -1,248; M_y = -9,012; M_z = 936;	no	20
8	LC 3: N66	N = -342; V_x = -55; V_y = 573; M_x = -9,072; M_y = -816; M_z = 1,404;	no	19
9	LC 3: N35	N = -642; V_x = -132; V_y = 458; M_x = -11,568; M_y = -5,616; M_z = -72;	no	24
10	LC 4: N30	N = -149; V_x = -560; V_y = 58; M_x = -360; M_y = -12,624; M_z = 240;	no	28
11	LC 4: N66	N = -228; V_x = -129; V_y = 379; M_x = -5,880; M_y = -2,076; M_z = 1,260;	no	14
12	LC 4: N35	N = -723; V_x = -97; V_y = 422; M_x = -9,600; M_y = -4,320; M_z = -36;	no	19
13	LC 5: N30	N = -216; V_x = -615; V_y = 30; M_x = 372; M_y = -13,992; M_z = -228;	no	30
14	LC 5: N66	N = -112; V_x = -196; V_y = 177; M_x = -2,520; M_y = -3,204; M_z = 1,068;	no	8
15	LC 5: N35	N = -771; V_x = -63; V_y = 349; M_x = -6,696; M_y = -2,700; M_z = 0;	no	11
16	LC 6: N30	N = -362; V_x = -614; V_y = -26; M_x = 1,608; M_y = -14,124; M_z = -756;	no	30
17	LC 6: N66	N = 74; V_x = -276; V_y = -162; M_x = 3,132; M_y = -4,596; M_z = 648;	no	13

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Case	Description	Forces [lb] / Moments [in.lb]	Seismic	Max. Util. Anchor [%]
18	LC 6: N35	N = -811; V_x = 1; V_y = 188; M_x = -1,140; M_y = 276; M_z = 60;	no	2
19	LC 7: N30	N = -483; V_x = -709; V_y = -85; M_x = 3,024; M_y = -16,692; M_z = -1,908;	no	36
20	LC 7: N66	N = 265; V_x = -341; V_y = -508; M_x = 8,868; M_y = -5,676; M_z = 228;	no	24
21	LC 7: N35	N = -881; V_x = 147; V_y = 20; M_x = 5,328; M_y = 5,244; M_z = 132;	no	10
22	LC 8: N30	N = -580; V_x = -669; V_y = -107; M_x = 3,492; M_y = -15,996; M_z = -2,556;	no	34
23	LC 8: N66	N = 362; V_x = -350; V_y = -685; M_x = 11,820; M_y = -5,832; M_z = -108;	no	33
24	LC 8: N35	N = -881; V_x = 226; V_y = -74; M_x = 8,892; M_y = 8,040; M_z = 180;	no	19
25	LC 9: N30	N = -696; V_x = -538; V_y = -122; M_x = 3,708; M_y = -13,080; M_z = -2,964;	no	27
26	LC 9: N66	N = 436; V_x = -325; V_y = -828; M_x = 14,184; M_y = -5,460; M_z = -504;	no	40
27	LC 9: N35	N = -839; V_x = 278; V_y = -153; M_x = 11,640; M_y = 10,044; M_z = 204;	no	26
28	LC 10: N30	N = -916; V_x = -93; V_y = -120; M_x = 3,276; M_y = -2,796; M_z = -2,028;	no	4
29	LC 10: N66	N = 483; V_x = -204; V_y = -942; M_x = 16,092; M_y = -3,576; M_z = -1,224;	no	47
30	LC 10: N35	N = -666; V_x = 296; V_y = -253; M_x = 14,268; M_y = 11,520; M_z = 228;	no	34
31	LC 11: N30	N = -996; V_x = 404; V_y = -63; M_x = 1,596; M_y = 8,880; M_z = -684;	no	14
32	LC 11: N66	N = 353; V_x = -85; V_y = -732; M_x = 12,696; M_y = -1,452; M_z = -1,260;	no	32
33	LC 11: N35	N = -457; V_x = 275; V_y = -326; M_x = 15,168; M_y = 11,592; M_z = 228;	no	37
34	LC 12: N30	N = -963; V_x = 554; V_y = -32; M_x = 720; M_y = 12,468; M_z = 12;	no	22

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35	LC 12: N66	N = 239; V_x = -11; V_y = -537; M_x = 9,492; M_y = -204; M_z = -1,116;	no	23
36	LC 12: N35	N = -375; V_x = 242; V_y = -291; M_x = 13,236; M_y = 10,344; M_z = 204;	no	33
37	LC 13: N30	N = -896; V_x = 610; V_y = -4; M_x = -12; M_y = 13,824; M_z = 480;	no	25
38	LC 13: N66	N = 123; V_x = 56; V_y = -335; M_x = 6,144; M_y = 924; M_z = -924;	no	16
39	LC 13: N35	N = -327; V_x = 208; V_y = -218; M_x = 10,356; M_y = 8,748; M_z = 168;	no	26
40	LC 14: N30	N = -751; V_x = 610; V_y = 52; M_x = -1,260; M_y = 13,968; M_z = 1,008;	no	27
41	LC 14: N66	N = -62; V_x = 135; V_y = 4; M_x = 492; M_y = 2,292; M_z = -504;	no	5
42	LC 14: N35	N = -287; V_x = 145; V_y = -55; M_x = 4,788; M_y = 5,772; M_z = 108;	no	14
43	LC 15: N30	N = -630; V_x = 709; V_y = 111; M_x = -2,676; M_y = 16,632; M_z = 2,184;	no	34
44	LC 15: N66	N = -253; V_x = 199; V_y = 348; M_x = -5,232; M_y = 3,360; M_z = -72;	no	11
45	LC 15: N35	N = -216; V_x = -4; V_y = 114; M_x = -1,728; M_y = 744; M_z = 24;	no	3
46	LC 16: N30	N = -533; V_x = 672; V_y = 133; M_x = -3,144; M_y = 15,984; M_z = 2,844;	no	34
47	LC 16: N66	N = -350; V_x = 207; V_y = 525; M_x = -8,172; M_y = 3,516; M_z = 252;	no	18
48	LC 16: N35	N = -216; V_x = -86; V_y = 209; M_x = -5,340; M_y = -2,112; M_z = -24;	no	12
49	LC 17: N30	N = -417; V_x = 542; V_y = 148; M_x = -3,360; M_y = 13,104; M_z = 3,252;	no	29
50	LC 17: N66	N = -424; V_x = 182; V_y = 668; M_x = -10,536; M_y = 3,132; M_z = 660;	no	24
51	LC 17: N35	N = -258; V_x = -139; V_y = 288; M_x = -8,112; M_y = -4,164; M_z = -48;	no	19

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52	LC 18: N30	N = -57; V_x = 94; V_y = 143; M_x = -2,976; M_y = 2,772; M_z = 2,280;	no	9
53	LC 18: N66	N = -472; V_x = 80; V_y = 802; M_x = -12,912; M_y = 1,560; M_z = 1,368;	no	26
54	LC 18: N35	N = -295; V_x = -174; V_y = 370; M_x = -11,184; M_y = -6,372; M_z = -84;	no	26
55	LC 19: N30	N = 23; V_x = -407; V_y = 86; M_x = -1,296; M_y = -8,988; M_z = 912;	no	21
56	LC 19: N66	N = -343; V_x = -37; V_y = 593; M_x = -9,528; M_y = -528; M_z = 1,380;	no	19
57	LC 19: N35	N = -504; V_x = -150; V_y = 442; M_x = -12,024; M_y = -6,372; M_z = -84;	no	26
58	LC 20: N30	N = -10; V_x = -559; V_y = 55; M_x = -408; M_y = -12,600; M_z = 204;	no	29
59	LC 20: N66	N = -229; V_x = -111; V_y = 399; M_x = -6,324; M_y = -1,788; M_z = 1,248;	no	15
60	LC 20: N35	N = -586; V_x = -116; V_y = 406; M_x = -10,056; M_y = -5,076; M_z = -60;	no	21
61	LC 21: N30	N = -77; V_x = -615; V_y = 27; M_x = 324; M_y = -13,968; M_z = -264;	no	31
62	LC 21: N66	N = -114; V_x = -178; V_y = 197; M_x = -2,976; M_y = -2,916; M_z = 1,044;	no	8
63	LC 21: N35	N = -634; V_x = -81; V_y = 333; M_x = -7,152; M_y = -3,456; M_z = -24;	no	13
64	LC 22: N30	N = -223; V_x = -614; V_y = -29; M_x = 1,572; M_y = -14,100; M_z = -780;	no	31
65	LC 22: N66	N = 72; V_x = -259; V_y = -142; M_x = 2,676; M_y = -4,308; M_z = 624;	no	11
66	LC 22: N35	N = -674; V_x = -17; V_y = 171; M_x = -1,596; M_y = -492; M_z = 36;	no	1
67	LC 23: N30	N = -344; V_x = -708; V_y = -89; M_x = 2,976; M_y = -16,668; M_z = -1,944;	no	37
68	LC 23: N66	N = 263; V_x = -323; V_y = -488; M_x = 8,412; M_y = -5,388; M_z = 204;	no	23

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69	LC 23: N35	N = -744; V_x = 129; V_y = 3; M_x = 4,872; M_y = 4,476; M_z = 120;	no	9
70	LC 24: N30	N = -441; V_x = -669; V_y = -110; M_x = 3,456; M_y = -15,972; M_z = -2,592;	no	35
71	LC 24: N66	N = 360; V_x = -332; V_y = -665; M_x = 11,364; M_y = -5,544; M_z = -120;	no	32
72	LC 24: N35	N = -744; V_x = 208; V_y = -91; M_x = 8,436; M_y = 7,284; M_z = 156;	no	18
73	LC 25: N30	N = -557; V_x = -538; V_y = -125; M_x = 3,672; M_y = -13,068; M_z = -3,000;	no	30
74	LC 25: N66	N = 434; V_x = -307; V_y = -808; M_x = 13,728; M_y = -5,172; M_z = -528;	no	39
75	LC 25: N35	N = -702; V_x = 260; V_y = -170; M_x = 11,172; M_y = 9,288; M_z = 192;	no	26
76	LC 26: N30	N = -777; V_x = -92; V_y = -123; M_x = 3,240; M_y = -2,784; M_z = -2,064;	no	4
77	LC 26: N66	N = 481; V_x = -186; V_y = -922; M_x = 15,624; M_y = -3,288; M_z = -1,248;	no	46
78	LC 26: N35	N = -529; V_x = 278; V_y = -269; M_x = 13,812; M_y = 10,764; M_z = 204;	no	33
79	LC 27: N30	N = -857; V_x = 404; V_y = -66; M_x = 1,560; M_y = 8,892; M_z = -720;	no	15
80	LC 27: N66	N = 352; V_x = -67; V_y = -712; M_x = 12,240; M_y = -1,176; M_z = -1,272;	no	31
81	LC 27: N35	N = -320; V_x = 257; V_y = -342; M_x = 14,700; M_y = 10,836; M_z = 204;	no	36
82	LC 28: N30	N = -824; V_x = 555; V_y = -35; M_x = 672; M_y = 12,480; M_z = -24;	no	23
83	LC 28: N66	N = 238; V_x = 7; V_y = -517; M_x = 9,036; M_y = 84; M_z = -1,128;	no	22
84	LC 28: N35	N = -238; V_x = 224; V_y = -307; M_x = 12,768; M_y = 9,576; M_z = 180;	no	32
85	LC 29: N30	N = -757; V_x = 610; V_y = -8; M_x = -60; M_y = 13,836; M_z = 444;	no	26

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86	LC 29: N66	N = 122; V_x = 74; V_y = -315; M_x = 5,688; M_y = 1,212; M_z = -936;	no	17
87	LC 29: N35	N = -190; V_x = 190; V_y = -234; M_x = 9,888; M_y = 7,992; M_z = 144;	no	26
88	LC 30: N30	N = -612; V_x = 611; V_y = 49; M_x = -1,308; M_y = 13,992; M_z = 972;	no	28
89	LC 30: N66	N = -64; V_x = 153; V_y = 23; M_x = 48; M_y = 2,580; M_z = -516;	no	6
90	LC 30: N35	N = -150; V_x = 126; V_y = -72; M_x = 4,320; M_y = 5,016; M_z = 84;	no	13
91	LC 31: N30	N = -491; V_x = 709; V_y = 108; M_x = -2,724; M_y = 16,644; M_z = 2,148;	no	35
92	LC 31: N66	N = -254; V_x = 216; V_y = 368; M_x = -5,688; M_y = 3,648; M_z = -96;	no	12
93	LC 31: N35	N = -79; V_x = -23; V_y = 97; M_x = -2,196; M_y = -24; M_z = 0;	no	5
94	LC 32: N30	N = -394; V_x = 673; V_y = 130; M_x = -3,192; M_y = 15,996; M_z = 2,808;	no	35
95	LC 32: N66	N = -351; V_x = 224; V_y = 545; M_x = -8,628; M_y = 3,792; M_z = 240;	no	19
96	LC 32: N35	N = -79; V_x = -104; V_y = 192; M_x = -5,796; M_y = -2,880; M_z = -36;	no	14
97	LC 33: N30	N = -278; V_x = 543; V_y = 144; M_x = -3,408; M_y = 13,116; M_z = 3,216;	no	33
98	LC 33: N66	N = -425; V_x = 199; V_y = 687; M_x = -10,992; M_y = 3,420; M_z = 648;	no	26
99	LC 33: N35	N = -121; V_x = -157; V_y = 272; M_x = -8,568; M_y = -4,920; M_z = -72;	no	20
100	LC 34: N30	N = -1,119; V_x = 4; V_y = 58; M_x = -180; M_y = 108; M_z = 504;	no	1
101	LC 34: N66	N = -25; V_x = -136; V_y = -85; M_x = 2,436; M_y = -2,184; M_z = 264;	no	7
102	LC 34: N35	N = -1,057; V_x = 132; V_y = 190; M_x = 2,352; M_y = 5,568; M_z = 156;	no	7

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103	LC 35: N30	N = -1,107; V_x = -52; V_y = 53; M_x = 0; M_y = -1,212; M_z = 360;	no	1
104	LC 35: N66	N = -12; V_x = -155; V_y = -106; M_x = 2,772; M_y = -2,496; M_z = 288;	no	8
105	LC 35: N35	N = -1,081; V_x = 135; V_y = 194; M_x = 2,352; M_y = 5,580; M_z = 156;	no	7
106	LC 36: N30	N = -1,107; V_x = -77; V_y = 48; M_x = 108; M_y = -1,788; M_z = 288;	no	1
107	LC 36: N66	N = -1; V_x = -165; V_y = -125; M_x = 3,084; M_y = -2,664; M_z = 288;	no	9
108	LC 36: N35	N = -1,093; V_x = 139; V_y = 192; M_x = 2,520; M_y = 5,700; M_z = 156;	no	7
109	LC 37: N30	N = -1,110; V_x = -96; V_y = 44; M_x = 240; M_y = -2,256; M_z = 216;	no	1
110	LC 37: N66	N = 13; V_x = -174; V_y = -148; M_x = 3,468; M_y = -2,820; M_z = 276;	no	10
111	LC 37: N35	N = -1,103; V_x = 144; V_y = 186; M_x = 2,784; M_y = 5,880; M_z = 168;	no	8
112	LC 38: N30	N = -1,126; V_x = -116; V_y = 34; M_x = 468; M_y = -2,748; M_z = 84;	no	1
113	LC 38: N66	N = 42; V_x = -187; V_y = -200; M_x = 4,344; M_y = -3,048; M_z = 216;	no	12
114	LC 38: N35	N = -1,116; V_x = 157; V_y = 167; M_x = 3,540; M_y = 6,384; M_z = 168;	no	8
115	LC 39: N30	N = -1,151; V_x = -106; V_y = 26; M_x = 636; M_y = -2,568; M_z = 12;	no	1
116	LC 39: N66	N = 68; V_x = -191; V_y = -249; M_x = 5,160; M_y = -3,132; M_z = 132;	no	13
117	LC 39: N35	N = -1,117; V_x = 172; V_y = 142; M_x = 4,404; M_y = 6,948; M_z = 180;	no	10
118	LC 40: N30	N = -1,165; V_x = -91; V_y = 23; M_x = 672; M_y = -2,232; M_z = 0;	no	1
119	LC 40: N66	N = 77; V_x = -190; V_y = -268; M_x = 5,484; M_y = -3,108; M_z = 96;	no	14

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120	LC 40: N35	N = -1,113; V_x = 178; V_y = 130; M_x = 4,812; M_y = 7,212; M_z = 192;	no	11
121	LC 41: N30	N = -1,179; V_x = -70; V_y = 22; M_x = 684; M_y = -1,752; M_z = 24;	no	1
122	LC 41: N66	N = 84; V_x = -186; V_y = -282; M_x = 5,700; M_y = -3,048; M_z = 48;	no	15
123	LC 41: N35	N = -1,106; V_x = 183; V_y = 119; M_x = 5,160; M_y = 7,428; M_z = 192;	no	11
124	LC 42: N30	N = -1,201; V_x = -16; V_y = 23; M_x = 612; M_y = -516; M_z = 108;	no	1
125	LC 42: N66	N = 86; V_x = -172; V_y = -289; M_x = 5,832; M_y = -2,808; M_z = -12;	no	16
126	LC 42: N35	N = -1,085; V_x = 188; V_y = 103; M_x = 5,580; M_y = 7,704; M_z = 192;	no	13
127	LC 43: N30	N = -1,213; V_x = 40; V_y = 29; M_x = 432; M_y = 804; M_z = 252;	no	1
128	LC 43: N66	N = 73; V_x = -153; V_y = -268; M_x = 5,496; M_y = -2,496; M_z = -36;	no	15
129	LC 43: N35	N = -1,060; V_x = 186; V_y = 99; M_x = 5,580; M_y = 7,680; M_z = 192;	no	13
130	LC 44: N30	N = -1,214; V_x = 64; V_y = 33; M_x = 324; M_y = 1,380; M_z = 324;	no	1
131	LC 44: N66	N = 62; V_x = -143; V_y = -249; M_x = 5,184; M_y = -2,328; M_z = -36;	no	14
132	LC 44: N35	N = -1,048; V_x = 182; V_y = 101; M_x = 5,412; M_y = 7,572; M_z = 192;	no	12
133	LC 45: N30	N = -1,211; V_x = 84; V_y = 37; M_x = 204; M_y = 1,848; M_z = 396;	no	1
134	LC 45: N66	N = 48; V_x = -134; V_y = -226; M_x = 4,800; M_y = -2,172; M_z = -24;	no	13
135	LC 45: N35	N = -1,038; V_x = 177; V_y = 107; M_x = 5,148; M_y = 7,392; M_z = 192;	no	12
136	LC 46: N30	N = -1,195; V_x = 103; V_y = 47; M_x = -36; M_y = 2,352; M_z = 528;	no	2

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137	LC 46: N66	N = 19; V_x = -121; V_y = -174; M_x = 3,924; M_y = -1,944; M_z = 36;	no	10
138	LC 46: N35	N = -1,025; V_x = 163; V_y = 126; M_x = 4,392; M_y = 6,888; M_z = 180;	no	10
139	LC 47: N30	N = -1,170; V_x = 94; V_y = 55; M_x = -192; M_y = 2,160; M_z = 600;	no	2
140	LC 47: N66	N = -7; V_x = -117; V_y = -125; M_x = 3,108; M_y = -1,860; M_z = 120;	no	8
141	LC 47: N35	N = -1,024; V_x = 149; V_y = 151; M_x = 3,528; M_y = 6,324; M_z = 168;	no	9
142	LC 48: N30	N = -1,156; V_x = 79; V_y = 58; M_x = -240; M_y = 1,824; M_z = 612;	no	2
143	LC 48: N66	N = -16; V_x = -118; V_y = -106; M_x = 2,784; M_y = -1,884; M_z = 156;	no	7
144	LC 48: N35	N = -1,028; V_x = 142; V_y = 163; M_x = 3,120; M_y = 6,060; M_z = 168;	no	8
145	LC 49: N30	N = -1,142; V_x = 58; V_y = 59; M_x = -252; M_y = 1,344; M_z = 588;	no	2
146	LC 49: N66	N = -23; V_x = -122; V_y = -92; M_x = 2,568; M_y = -1,956; M_z = 204;	no	7
147	LC 49: N35	N = -1,036; V_x = 137; V_y = 174; M_x = 2,784; M_y = 5,832; M_z = 168;	no	8
148	LC 50: N30	N = -513; V_x = 34; V_y = 71; M_x = -1,116; M_y = 1,032; M_z = 732;	no	2
149	LC 50: N66	N = -193; V_x = -6; V_y = 268; M_x = -3,888; M_y = -48; M_z = 552;	no	8
150	LC 50: N35	N = -597; V_x = -27; V_y = 273; M_x = -4,656; M_y = -756; M_z = 24;	no	7
151	LC 51: N30	N = -463; V_x = -195; V_y = 50; M_x = -408; M_y = -4,236; M_z = 312;	no	7
152	LC 51: N66	N = -143; V_x = -78; V_y = 191; M_x = -2,628; M_y = -1,248; M_z = 684;	no	6
153	LC 51: N35	N = -698; V_x = -34; V_y = 290; M_x = -4,716; M_y = -1,032; M_z = 24;	no	7

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Case	Description	Forces [lb] / Moments [in.lb]	Seismic	Max. Util. Anchor [%]
154	LC 52: N30	N = -457; V_x = -293; V_y = 35; M_x = 24; M_y = -6,528; M_z = 84;	no	12
155	LC 52: N66	N = -102; V_x = -116; V_y = 122; M_x = -1,476; M_y = -1,872; M_z = 696;	no	5
156	LC 52: N35	N = -745; V_x = -24; V_y = 276; M_x = -4,032; M_y = -696; M_z = 36;	no	5
157	LC 53: N30	N = -465; V_x = -372; V_y = 19; M_x = 456; M_y = -8,388; M_z = -132;	no	16
158	LC 53: N66	N = -53; V_x = -152; V_y = 38; M_x = -84; M_y = -2,472; M_z = 660;	no	6
159	LC 53: N35	N = -785; V_x = -8; V_y = 250; M_x = -2,928; M_y = -72; M_z = 48;	no	2
160	LC 54: N30	N = -520; V_x = -449; V_y = -13; M_x = 1,260; M_y = -10,308; M_z = -516;	no	20
161	LC 54: N66	N = 53; V_x = -207; V_y = -151; M_x = 3,048; M_y = -3,408; M_z = 480;	no	10
162	LC 54: N35	N = -837; V_x = 43; V_y = 164; M_x = 216; M_y = 1,872; M_z = 84;	no	2
163	LC 55: N30	N = -612; V_x = -407; V_y = -37; M_x = 1,788; M_y = -9,492; M_z = -708;	no	18
164	LC 55: N66	N = 147; V_x = -230; V_y = -325; M_x = 5,952; M_y = -3,792; M_z = 204;	no	16
165	LC 55: N35	N = -839; V_x = 105; V_y = 55; M_x = 3,888; M_y = 4,272; M_z = 120;	no	7
166	LC 56: N30	N = -664; V_x = -343; V_y = -44; M_x = 1,884; M_y = -8,100; M_z = -720;	no	15
167	LC 56: N66	N = 181; V_x = -226; V_y = -391; M_x = 7,056; M_y = -3,732; M_z = 36;	no	19
168	LC 56: N35	N = -821; V_x = 135; V_y = 1; M_x = 5,604; M_y = 5,436; M_z = 144;	no	11
169	LC 57: N30	N = -717; V_x = -256; V_y = -47; M_x = 1,884; M_y = -6,168; M_z = -672;	no	10
170	LC 57: N66	N = 204; V_x = -213; V_y = -437; M_x = 7,836; M_y = -3,528; M_z = -108;	no	22

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171	LC 57: N35	N = -791; V_x = 162; V_y = -47; M_x = 7,092; M_y = 6,480; M_z = 156;	no	15
172	LC 58: N30	N = -806; V_x = -38; V_y = -41; M_x = 1,536; M_y = -1,212; M_z = -420;	no	1
173	LC 58: N66	N = 207; V_x = -161; V_y = -456; M_x = 8,184; M_y = -2,676; M_z = -372;	no	23
174	LC 58: N35	N = -705; V_x = 199; V_y = -116; M_x = 8,988; M_y = 7,932; M_z = 168;	no	20
175	LC 59: N30	N = -856; V_x = 190; V_y = -19; M_x = 828; M_y = 4,032; M_z = -12;	no	4
176	LC 59: N66	N = 157; V_x = -89; V_y = -379; M_x = 6,924; M_y = -1,476; M_z = -504;	no	20
177	LC 59: N35	N = -605; V_x = 206; V_y = -133; M_x = 9,060; M_y = 8,208; M_z = 168;	no	22
178	LC 60: N30	N = -862; V_x = 288; V_y = -4; M_x = 396; M_y = 6,324; M_z = 216;	no	9
179	LC 60: N66	N = 115; V_x = -51; V_y = -310; M_x = 5,784; M_y = -840; M_z = -516;	no	15
180	LC 60: N35	N = -558; V_x = 197; V_y = -120; M_x = 8,388; M_y = 7,884; M_z = 156;	no	20
181	LC 61: N30	N = -853; V_x = 366; V_y = 12; M_x = -36; M_y = 8,184; M_z = 444;	no	13
182	LC 61: N66	N = 67; V_x = -16; V_y = -225; M_x = 4,380; M_y = -252; M_z = -492;	no	11
183	LC 61: N35	N = -517; V_x = 180; V_y = -93; M_x = 7,284; M_y = 7,260; M_z = 144;	no	18
184	LC 62: N30	N = -799; V_x = 444; V_y = 43; M_x = -840; M_y = 10,116; M_z = 816;	no	18
185	LC 62: N66	N = -40; V_x = 40; V_y = -37; M_x = 1,248; M_y = 672; M_z = -312;	no	3
186	LC 62: N35	N = -465; V_x = 129; V_y = -7; M_x = 4,128; M_y = 5,316; M_z = 108;	no	11
187	LC 63: N30	N = -707; V_x = 403; V_y = 68; M_x = -1,368; M_y = 9,312; M_z = 1,020;	no	17

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188	LC 63: N66	N = -134; V_x = 62; V_y = 137; M_x = -1,644; M_y = 1,056; M_z = -24;	no	4
189	LC 63: N35	N = -463; V_x = 67; V_y = 102; M_x = 456; M_y = 2,904; M_z = 72;	no	4
190	LC 64: N30	N = -655; V_x = 339; V_y = 75; M_x = -1,464; M_y = 7,932; M_z = 1,032;	no	14
191	LC 64: N66	N = -168; V_x = 58; V_y = 203; M_x = -2,760; M_y = 1,008; M_z = 132;	no	6
192	LC 64: N35	N = -481; V_x = 36; V_y = 156; M_x = -1,272; M_y = 1,728; M_z = 48;	no	2
193	LC 65: N30	N = -603; V_x = 252; V_y = 78; M_x = -1,464; M_y = 6,000; M_z = 984;	no	10
194	LC 65: N66	N = -190; V_x = 45; V_y = 248; M_x = -3,528; M_y = 792; M_z = 288;	no	7
195	LC 65: N35	N = -511; V_x = 9; V_y = 205; M_x = -2,760; M_y = 684; M_z = 36;	no	3
196	LC 66: N30	N = -167; V_x = 35; V_y = 63; M_x = -1,224; M_y = 1,092; M_z = 648;	no	3
197	LC 66: N66	N = -197; V_x = 38; V_y = 317; M_x = -5,004; M_y = 660; M_z = 504;	no	11
198	LC 66: N35	N = -256; V_x = -73; V_y = 233; M_x = -5,796; M_y = -2,652; M_z = -36;	no	13
199	LC 67: N30	N = -117; V_x = -193; V_y = 42; M_x = -516; M_y = -4,164; M_z = 240;	no	9
200	LC 67: N66	N = -147; V_x = -34; V_y = 240; M_x = -3,756; M_y = -528; M_z = 636;	no	8
201	LC 67: N35	N = -356; V_x = -79; V_y = 249; M_x = -5,856; M_y = -2,916; M_z = -24;	no	12
202	LC 68: N30	N = -112; V_x = -292; V_y = 27; M_x = -96; M_y = -6,468; M_z = 12;	no	14
203	LC 68: N66	N = -105; V_x = -72; V_y = 171; M_x = -2,604; M_y = -1,164; M_z = 648;	no	6
204	LC 68: N35	N = -403; V_x = -70; V_y = 235; M_x = -5,172; M_y = -2,580; M_z = -24;	no	10

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205	LC 69: N30	N = -120; V_x = -370; V_y = 11; M_x = 348; M_y = -8,316; M_z = -216;	no	18
206	LC 69: N66	N = -57; V_x = -108; V_y = 87; M_x = -1,212; M_y = -1,752; M_z = 612;	no	4
207	LC 69: N35	N = -444; V_x = -53; V_y = 208; M_x = -4,068; M_y = -1,956; M_z = 0;	no	7
208	LC 70: N30	N = -174; V_x = -448; V_y = -21; M_x = 1,152; M_y = -10,248; M_z = -588;	no	23
209	LC 70: N66	N = 50; V_x = -163; V_y = -102; M_x = 1,920; M_y = -2,688; M_z = 432;	no	8
210	LC 70: N35	N = -496; V_x = -2; V_y = 122; M_x = -924; M_y = -12; M_z = 36;	no	1
211	LC 71: N30	N = -266; V_x = -406; V_y = -45; M_x = 1,668; M_y = -9,432; M_z = -792;	no	20
212	LC 71: N66	N = 144; V_x = -185; V_y = -275; M_x = 4,824; M_y = -3,072; M_z = 156;	no	13
213	LC 71: N35	N = -498; V_x = 60; V_y = 14; M_x = 2,748; M_y = 2,376; M_z = 72;	no	5
214	LC 72: N30	N = -319; V_x = -342; V_y = -52; M_x = 1,776; M_y = -8,052; M_z = -804;	no	17
215	LC 72: N66	N = 178; V_x = -182; V_y = -341; M_x = 5,928; M_y = -3,024; M_z = 0;	no	17
216	LC 72: N35	N = -479; V_x = 90; V_y = -40; M_x = 4,464; M_y = 3,552; M_z = 84;	no	9
217	LC 73: N30	N = -371; V_x = -255; V_y = -55; M_x = 1,776; M_y = -6,108; M_z = -756;	no	12
218	LC 73: N66	N = 200; V_x = -169; V_y = -387; M_x = 6,696; M_y = -2,808; M_z = -156;	no	19
219	LC 73: N35	N = -449; V_x = 117; V_y = -89; M_x = 5,952; M_y = 4,596; M_z = 108;	no	13
220	LC 74: N30	N = -460; V_x = -37; V_y = -49; M_x = 1,428; M_y = -1,164; M_z = -504;	no	1
221	LC 74: N66	N = 203; V_x = -117; V_y = -407; M_x = 7,056; M_y = -1,956; M_z = -420;	no	21

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222	LC 74: N35	N = -364; V_x = 154; V_y = -158; M_x = 7,836; M_y = 6,036; M_z = 120;	no	18
223	LC 75: N30	N = -510; V_x = 191; V_y = -27; M_x = 720; M_y = 4,080; M_z = -96;	no	6
224	LC 75: N66	N = 153; V_x = -45; V_y = -330; M_x = 5,796; M_y = -768; M_z = -552;	no	15
225	LC 75: N35	N = -263; V_x = 161; V_y = -174; M_x = 7,908; M_y = 6,312; M_z = 120;	no	20
226	LC 76: N30	N = -516; V_x = 289; V_y = -12; M_x = 288; M_y = 6,372; M_z = 132;	no	11
227	LC 76: N66	N = 112; V_x = -7; V_y = -260; M_x = 4,644; M_y = -132; M_z = -564;	no	12
228	LC 76: N35	N = -216; V_x = 152; V_y = -161; M_x = 7,224; M_y = 5,988; M_z = 108;	no	18
229	LC 77: N30	N = -508; V_x = 368; V_y = 4; M_x = -144; M_y = 8,220; M_z = 360;	no	15
230	LC 77: N66	N = 63; V_x = 28; V_y = -176; M_x = 3,252; M_y = 468; M_z = -528;	no	8
231	LC 77: N35	N = -176; V_x = 135; V_y = -134; M_x = 6,132; M_y = 5,364; M_z = 96;	no	16
232	LC 78: N30	N = -453; V_x = 446; V_y = 35; M_x = -948; M_y = 10,164; M_z = 732;	no	20
233	LC 78: N66	N = -43; V_x = 83; V_y = 12; M_x = 120; M_y = 1,392; M_z = -360;	no	3
234	LC 78: N35	N = -124; V_x = 84; V_y = -48; M_x = 2,976; M_y = 3,420; M_z = 60;	no	9
235	LC 79: N30	N = -361; V_x = 404; V_y = 60; M_x = -1,476; M_y = 9,372; M_z = 936;	no	19
236	LC 79: N66	N = -137; V_x = 105; V_y = 186; M_x = -2,772; M_y = 1,776; M_z = -72;	no	6
237	LC 79: N35	N = -122; V_x = 21; V_y = 61; M_x = -696; M_y = 1,020; M_z = 24;	no	2
238	LC 80: N30	N = -309; V_x = 341; V_y = 67; M_x = -1,584; M_y = 7,980; M_z = 948;	no	17

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239	LC 80: N66	N = -171; V_x = 102; V_y = 251; M_x = -3,876; M_y = 1,716; M_z = 84;	no	9
240	LC 80: N35	N = -140; V_x = -9; V_y = 115; M_x = -2,424; M_y = -156; M_z = 0;	no	5
241	LC 81: N30	N = -257; V_x = 254; V_y = 70; M_x = -1,572; M_y = 6,048; M_z = 900;	no	13
242	LC 81: N66	N = -193; V_x = 89; V_y = 297; M_x = -4,656; M_y = 1,500; M_z = 240;	no	11
243	LC 81: N35	N = -170; V_x = -36; V_y = 164; M_x = -3,912; M_y = -1,212; M_z = -12;	no	9
244	LC 82: N30	N = -1,245; V_x = -11; V_y = 72; M_x = -804; M_y = -864; M_z = 468;	no	1
245	LC 82: N66	N = 150; V_x = -221; V_y = -285; M_x = 5,172; M_y = -3,276; M_z = 180;	no	14
246	LC 82: N35	N = -1,205; V_x = 232; V_y = 213; M_x = 4,968; M_y = 9,060; M_z = 228;	no	14
247	LC 83: N30	N = -987; V_x = -8; V_y = 50; M_x = -432; M_y = -576; M_z = 336;	no	1
248	LC 83: N66	N = 96; V_x = -165; V_y = -208; M_x = 3,912; M_y = -2,484; M_z = 144;	no	11
249	LC 83: N35	N = -959; V_x = 173; V_y = 158; M_x = 3,792; M_y = 6,804; M_z = 180;	no	10
250	LC 84: N30	N = -376; V_x = 45; V_y = 79; M_x = -1,380; M_y = 1,320; M_z = 1,212;	no	3
251	LC 84: N66	N = -233; V_x = -4; V_y = 352; M_x = -5,328; M_y = 60; M_z = 720;	no	11
252	LC 84: N35	N = -491; V_x = -41; V_y = 226; M_x = -4,428; M_y = -1,272; M_z = 12;	no	8
253	LC 85: N30	N = -336; V_x = -205; V_y = 51; M_x = -528; M_y = -4,560; M_z = 540;	no	8
254	LC 85: N66	N = -168; V_x = -63; V_y = 247; M_x = -3,636; M_y = -984; M_z = 732;	no	8
255	LC 85: N35	N = -595; V_x = -29; V_y = 262; M_x = -4,860; M_y = -1,284; M_z = 12;	no	8

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256	LC 86: N30	N = -352; V_x = -281; V_y = 36; M_x = -96; M_y = -6,360; M_z = 192;	no	12
257	LC 86: N66	N = -111; V_x = -100; V_y = 150; M_x = -2,028; M_y = -1,620; M_z = 672;	no	5
258	LC 86: N35	N = -636; V_x = -12; V_y = 244; M_x = -3,876; M_y = -636; M_z = 24;	no	5
259	LC 87: N30	N = -386; V_x = -309; V_y = 22; M_x = 276; M_y = -7,044; M_z = -48;	no	13
260	LC 87: N66	N = -53; V_x = -134; V_y = 49; M_x = -360; M_y = -2,184; M_z = 564;	no	5
261	LC 87: N35	N = -660; V_x = 5; V_y = 208; M_x = -2,436; M_y = 168; M_z = 36;	no	2
262	LC 88: N30	N = -459; V_x = -308; V_y = -6; M_x = 900; M_y = -7,104; M_z = -312;	no	13
263	LC 88: N66	N = 40; V_x = -174; V_y = -120; M_x = 2,472; M_y = -2,868; M_z = 360;	no	9
264	LC 88: N35	N = -680; V_x = 37; V_y = 127; M_x = 348; M_y = 1,656; M_z = 72;	no	1
265	LC 89: N30	N = -519; V_x = -356; V_y = -36; M_x = 1,596; M_y = -8,400; M_z = -888;	no	16
266	LC 89: N66	N = 135; V_x = -206; V_y = -293; M_x = 5,340; M_y = -3,408; M_z = 144;	no	15
267	LC 89: N35	N = -715; V_x = 110; V_y = 43; M_x = 3,588; M_y = 4,152; M_z = 108;	no	7
268	LC 90: N30	N = -568; V_x = -336; V_y = -47; M_x = 1,836; M_y = -8,064; M_z = -1,224;	no	15
269	LC 90: N66	N = 184; V_x = -210; V_y = -382; M_x = 6,816; M_y = -3,492; M_z = -12;	no	19
270	LC 90: N35	N = -715; V_x = 150; V_y = -4; M_x = 5,376; M_y = 5,556; M_z = 132;	no	11
271	LC 91: N30	N = -626; V_x = -271; V_y = -54; M_x = 1,944; M_y = -6,612; M_z = -1,416;	no	12
272	LC 91: N66	N = 221; V_x = -198; V_y = -453; M_x = 7,992; M_y = -3,300; M_z = -216;	no	23

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273	LC 91: N35	N = -694; V_x = 176; V_y = -44; M_x = 6,756; M_y = 6,564; M_z = 144;	no	15
274	LC 92: N30	N = -736; V_x = -48; V_y = -53; M_x = 1,728; M_y = -1,452; M_z = -948;	no	2
275	LC 92: N66	N = 244; V_x = -137; V_y = -511; M_x = 8,952; M_y = -2,364; M_z = -576;	no	26
276	LC 92: N35	N = -608; V_x = 185; V_y = -93; M_x = 8,064; M_y = 7,296; M_z = 156;	no	19
277	LC 93: N30	N = -776; V_x = 201; V_y = -25; M_x = 888; M_y = 4,392; M_z = -276;	no	5
278	LC 93: N66	N = 180; V_x = -78; V_y = -405; M_x = 7,248; M_y = -1,308; M_z = -588;	no	22
279	LC 93: N35	N = -503; V_x = 174; V_y = -130; M_x = 8,508; M_y = 7,320; M_z = 156;	no	20
280	LC 94: N30	N = -760; V_x = 276; V_y = -10; M_x = 444; M_y = 6,192; M_z = 72;	no	9
281	LC 94: N66	N = 122; V_x = -41; V_y = -308; M_x = 5,652; M_y = -672; M_z = -516;	no	14
282	LC 94: N35	N = -462; V_x = 158; V_y = -112; M_x = 7,536; M_y = 6,696; M_z = 144;	no	18
283	LC 95: N30	N = -726; V_x = 304; V_y = 4; M_x = 84; M_y = 6,864; M_z = 300;	no	11
284	LC 95: N66	N = 65; V_x = -7; V_y = -207; M_x = 3,972; M_y = -108; M_z = -420;	no	10
285	LC 95: N35	N = -438; V_x = 140; V_y = -76; M_x = 6,096; M_y = 5,892; M_z = 120;	no	15
286	LC 96: N30	N = -653; V_x = 304; V_y = 32; M_x = -540; M_y = 6,936; M_z = 564;	no	11
287	LC 96: N66	N = -28; V_x = 32; V_y = -38; M_x = 1,152; M_y = 576; M_z = -216;	no	3
288	LC 96: N35	N = -418; V_x = 109; V_y = 5; M_x = 3,312; M_y = 4,404; M_z = 96;	no	9
289	LC 97: N30	N = -593; V_x = 353; V_y = 62; M_x = -1,248; M_y = 8,256; M_z = 1,152;	no	15

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Case	Description	Forces [lb] / Moments [in.lb]	Seismic	Max. Util. Anchor [%]
290	LC 97: N66	N = -124; V_x = 64; V_y = 135; M_x = -1,716; M_y = 1,104; M_z = 0;	no	4
291	LC 97: N35	N = -383; V_x = 35; V_y = 90; M_x = 60; M_y = 1,896; M_z = 48;	no	2
292	LC 98: N30	N = -544; V_x = 334; V_y = 73; M_x = -1,488; M_y = 7,920; M_z = 1,488;	no	15
293	LC 98: N66	N = -172; V_x = 68; V_y = 223; M_x = -3,180; M_y = 1,188; M_z = 168;	no	7
294	LC 98: N35	N = -383; V_x = -6; V_y = 137; M_x = -1,740; M_y = 480; M_z = 36;	no	2
295	LC 99: N30	N = -486; V_x = 269; V_y = 80; M_x = -1,596; M_y = 6,480; M_z = 1,680;	no	12
296	LC 99: N66	N = -209; V_x = 56; V_y = 295; M_x = -4,368; M_y = 996; M_z = 360;	no	9
297	LC 99: N35	N = -404; V_x = -32; V_y = 177; M_x = -3,120; M_y = -540; M_z = 12;	no	5
298	LC 100: N30	N = -627; V_x = 87; V_y = 183; M_x = -3,540; M_y = 2,232; M_z = 2,520;	no	5
299	LC 100: N66	N = -381; V_x = -32; V_y = 654; M_x = -10,356; M_y = -72; M_z = 1,452;	no	21
300	LC 100: N35	N = -842; V_x = -54; V_y = 478; M_x = -8,748; M_y = -1,800; M_z = 24;	no	15
301	LC 101: N30	N = -546; V_x = -414; V_y = 126; M_x = -1,860; M_y = -9,528; M_z = 1,152;	no	19
302	LC 101: N66	N = -252; V_x = -150; V_y = 445; M_x = -6,984; M_y = -2,148; M_z = 1,476;	no	17
303	LC 101: N35	N = -1,051; V_x = -31; V_y = 550; M_x = -9,600; M_y = -1,812; M_z = 24;	no	15
304	LC 102: N30	N = -579; V_x = -566; V_y = 95; M_x = -972; M_y = -13,128; M_z = 456;	no	26
305	LC 102: N66	N = -137; V_x = -223; V_y = 250; M_x = -3,780; M_y = -3,408; M_z = 1,332;	no	10
306	LC 102: N35	N = -1,133; V_x = 4; V_y = 514; M_x = -7,644; M_y = -528; M_z = 48;	no	10

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Case	Description	Forces [lb] / Moments [in.lb]	Seismic	Max. Util. Anchor [%]
307	LC 103: N30	N = -647; V_x = -621; V_y = 67; M_x = -240; M_y = -14,496; M_z = -24;	no	28
308	LC 103: N66	N = -22; V_x = -291; V_y = 48; M_x = -420; M_y = -4,548; M_z = 1,140;	no	11
309	LC 103: N35	N = -1,181; V_x = 38; V_y = 441; M_x = -4,740; M_y = 1,080; M_z = 96;	no	4
310	LC 104: N30	N = -793; V_x = -619; V_y = 11; M_x = 996; M_y = -14,604; M_z = -540;	no	28
311	LC 104: N66	N = 164; V_x = -371; V_y = -291; M_x = 5,232; M_y = -5,928; M_z = 720;	no	18
312	LC 104: N35	N = -1,221; V_x = 100; V_y = 280; M_x = 816; M_y = 4,032; M_z = 156;	no	2
313	LC 105: N30	N = -914; V_x = -713; V_y = -48; M_x = 2,412; M_y = -17,160; M_z = -1,704;	no	33
314	LC 105: N66	N = 355; V_x = -435; V_y = -637; M_x = 10,980; M_y = -7,008; M_z = 288;	no	30
315	LC 105: N35	N = -1,291; V_x = 246; V_y = 112; M_x = 7,272; M_y = 8,988; M_z = 228;	no	15
316	LC 106: N30	N = -1,011; V_x = -673; V_y = -70; M_x = 2,880; M_y = -16,452; M_z = -2,352;	no	31
317	LC 106: N66	N = 452; V_x = -444; V_y = -815; M_x = 13,920; M_y = -7,164; M_z = -36;	no	38
318	LC 106: N35	N = -1,291; V_x = 325; V_y = 18; M_x = 10,824; M_y = 11,772; M_z = 276;	no	24
319	LC 107: N30	N = -1,127; V_x = -542; V_y = -85; M_x = 3,096; M_y = -13,536; M_z = -2,748;	no	24
320	LC 107: N66	N = 527; V_x = -419; V_y = -958; M_x = 16,284; M_y = -6,780; M_z = -432;	no	46
321	LC 107: N35	N = -1,249; V_x = 376; V_y = -61; M_x = 13,572; M_y = 13,776; M_z = 300;	no	32
322	LC 108: N30	N = -1,347; V_x = -97; V_y = -83; M_x = 2,664; M_y = -3,252; M_z = -1,824;	no	3
323	LC 108: N66	N = 573; V_x = -298; V_y = -1,072; M_x = 18,192; M_y = -4,896; M_z = -1,164;	no	53

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Case	Description	Forces [lb] / Moments [in.lb]	Seismic	Max. Util. Anchor [%]
324	LC 108: N35	N = -1,076; V_x = 394; V_y = -160; M_x = 16,212; M_y = 15,252; M_z = 324;	no	39
325	LC 109: N30	N = -1,426; V_x = 399; V_y = -26; M_x = 984; M_y = 8,424; M_z = -480;	no	10
326	LC 109: N66	N = 444; V_x = -178; V_y = -861; M_x = 14,796; M_y = -2,784; M_z = -1,188;	no	44
327	LC 109: N35	N = -867; V_x = 374; V_y = -233; M_x = 17,100; M_y = 15,336; M_z = 324;	no	42
328	LC 110: N30	N = -1,393; V_x = 549; V_y = 5; M_x = 108; M_y = 12,000; M_z = 216;	no	17
329	LC 110: N66	N = 329; V_x = -105; V_y = -666; M_x = 11,592; M_y = -1,524; M_z = -1,044;	no	30
330	LC 110: N35	N = -785; V_x = 341; V_y = -199; M_x = 15,180; M_y = 14,100; M_z = 300;	no	38
331	LC 111: N30	N = -1,326; V_x = 604; V_y = 33; M_x = -624; M_y = 13,344; M_z = 684;	no	21
332	LC 111: N66	N = 214; V_x = -38; V_y = -464; M_x = 8,244; M_y = -396; M_z = -852;	no	21
333	LC 111: N35	N = -737; V_x = 308; V_y = -126; M_x = 12,312; M_y = 12,516; M_z = 264;	no	32
334	LC 112: N30	N = -1,181; V_x = 604; V_y = 89; M_x = -1,872; M_y = 13,488; M_z = 1,212;	no	23
335	LC 112: N66	N = 28; V_x = 41; V_y = -125; M_x = 2,592; M_y = 960; M_z = -432;	no	7
336	LC 112: N35	N = -697; V_x = 245; V_y = 36; M_x = 6,756; M_y = 9,552; M_z = 204;	no	20
337	LC 113: N30	N = -1,060; V_x = 702; V_y = 148; M_x = -3,288; M_y = 16,128; M_z = 2,388;	no	30
338	LC 113: N66	N = -163; V_x = 104; V_y = 220; M_x = -3,144; M_y = 2,028; M_z = -12;	no	7
339	LC 113: N35	N = -627; V_x = 96; V_y = 205; M_x = 240; M_y = 4,536; M_z = 120;	no	6
340	LC 114: N30	N = -963; V_x = 665; V_y = 170; M_x = -3,768; M_y = 15,468; M_z = 3,048;	no	30

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Case	Description	Forces [lb] / Moments [in.lb]	Seismic	Max. Util. Anchor [%]
341	LC 114: N66	N = -259; V_x = 113; V_y = 397; M_x = -6,084; M_y = 2,184; M_z = 324;	no	14
342	LC 114: N35	N = -627; V_x = 16; V_y = 300; M_x = -3,360; M_y = 1,692; M_z = 72;	no	5
343	LC 115: N30	N = -847; V_x = 535; V_y = 185; M_x = -3,984; M_y = 12,576; M_z = 3,456;	no	25
344	LC 115: N66	N = -334; V_x = 87; V_y = 539; M_x = -8,448; M_y = 1,800; M_z = 720;	no	18
345	LC 115: N35	N = -668; V_x = -37; V_y = 380; M_x = -6,132; M_y = -360; M_z = 48;	no	9
346	LC 116: N30	N = -1,245; V_x = -11; V_y = 72; M_x = -804; M_y = -864; M_z = 468;	no	1
347	LC 116: N66	N = 150; V_x = -221; V_y = -285; M_x = 5,172; M_y = -3,276; M_z = 180;	no	14
348	LC 116: N35	N = -1,205; V_x = 232; V_y = 213; M_x = 4,968; M_y = 9,060; M_z = 228;	no	14
349	LC 117: N30	N = -987; V_x = -8; V_y = 50; M_x = -432; M_y = -576; M_z = 336;	no	1
350	LC 117: N66	N = 96; V_x = -165; V_y = -208; M_x = 3,912; M_y = -2,484; M_z = 144;	no	11
351	LC 117: N35	N = -959; V_x = 173; V_y = 158; M_x = 3,792; M_y = 6,804; M_z = 180;	no	10
352	LC 118: N30	N = -376; V_x = 45; V_y = 79; M_x = -1,380; M_y = 1,320; M_z = 1,212;	no	3
353	LC 118: N66	N = -233; V_x = -4; V_y = 352; M_x = -5,328; M_y = 60; M_z = 720;	no	11
354	LC 118: N35	N = -491; V_x = -41; V_y = 226; M_x = -4,428; M_y = -1,272; M_z = 12;	no	8
355	LC 119: N30	N = -336; V_x = -205; V_y = 51; M_x = -528; M_y = -4,560; M_z = 540;	no	8
356	LC 119: N66	N = -168; V_x = -63; V_y = 247; M_x = -3,636; M_y = -984; M_z = 732;	no	8
357	LC 119: N35	N = -595; V_x = -29; V_y = 262; M_x = -4,860; M_y = -1,284; M_z = 12;	no	8

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358	LC 120: N30	N = -352; V_x = -281; V_y = 36; M_x = -96; M_y = -6,360; M_z = 192;	no	12
359	LC 120: N66	N = -111; V_x = -100; V_y = 150; M_x = -2,028; M_y = -1,620; M_z = 672;	no	5
360	LC 120: N35	N = -636; V_x = -12; V_y = 244; M_x = -3,876; M_y = -636; M_z = 24;	no	5
361	LC 121: N30	N = -386; V_x = -309; V_y = 22; M_x = 276; M_y = -7,044; M_z = -48;	no	13
362	LC 121: N66	N = -53; V_x = -134; V_y = 49; M_x = -360; M_y = -2,184; M_z = 564;	no	5
363	LC 121: N35	N = -660; V_x = 5; V_y = 208; M_x = -2,436; M_y = 168; M_z = 36;	no	2
364	LC 122: N30	N = -459; V_x = -308; V_y = -6; M_x = 900; M_y = -7,104; M_z = -312;	no	13
365	LC 122: N66	N = 40; V_x = -174; V_y = -120; M_x = 2,472; M_y = -2,868; M_z = 360;	no	9
366	LC 122: N35	N = -680; V_x = 37; V_y = 127; M_x = 348; M_y = 1,656; M_z = 72;	no	1
367	LC 123: N30	N = -519; V_x = -356; V_y = -36; M_x = 1,596; M_y = -8,400; M_z = -888;	no	16
368	LC 123: N66	N = 135; V_x = -206; V_y = -293; M_x = 5,340; M_y = -3,408; M_z = 144;	no	15
369	LC 123: N35	N = -715; V_x = 110; V_y = 43; M_x = 3,588; M_y = 4,152; M_z = 108;	no	7
370	LC 124: N30	N = -568; V_x = -336; V_y = -47; M_x = 1,836; M_y = -8,064; M_z = -1,224;	no	15
371	LC 124: N66	N = 184; V_x = -210; V_y = -382; M_x = 6,816; M_y = -3,492; M_z = -12;	no	19
372	LC 124: N35	N = -715; V_x = 150; V_y = -4; M_x = 5,376; M_y = 5,556; M_z = 132;	no	11
373	LC 125: N30	N = -626; V_x = -271; V_y = -54; M_x = 1,944; M_y = -6,612; M_z = -1,416;	no	12
374	LC 125: N66	N = 221; V_x = -198; V_y = -453; M_x = 7,992; M_y = -3,300; M_z = -216;	no	23

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375	LC 125: N35	N = -694; V_x = 176; V_y = -44; M_x = 6,756; M_y = 6,564; M_z = 144;	no	15
376	LC 126: N30	N = -736; V_x = -48; V_y = -53; M_x = 1,728; M_y = -1,452; M_z = -948;	no	2
377	LC 126: N66	N = 244; V_x = -137; V_y = -511; M_x = 8,952; M_y = -2,364; M_z = -576;	no	26
378	LC 126: N35	N = -608; V_x = 185; V_y = -93; M_x = 8,064; M_y = 7,296; M_z = 156;	no	19
379	LC 127: N30	N = -776; V_x = 201; V_y = -25; M_x = 888; M_y = 4,392; M_z = -276;	no	5
380	LC 127: N66	N = 180; V_x = -78; V_y = -405; M_x = 7,248; M_y = -1,308; M_z = -588;	no	22
381	LC 127: N35	N = -503; V_x = 174; V_y = -130; M_x = 8,508; M_y = 7,320; M_z = 156;	no	20
382	LC 128: N30	N = -760; V_x = 276; V_y = -10; M_x = 444; M_y = 6,192; M_z = 72;	no	9
383	LC 128: N66	N = 122; V_x = -41; V_y = -308; M_x = 5,652; M_y = -672; M_z = -516;	no	14
384	LC 128: N35	N = -462; V_x = 158; V_y = -112; M_x = 7,536; M_y = 6,696; M_z = 144;	no	18
385	LC 129: N30	N = -726; V_x = 304; V_y = 4; M_x = 84; M_y = 6,864; M_z = 300;	no	11
386	LC 129: N66	N = 65; V_x = -7; V_y = -207; M_x = 3,972; M_y = -108; M_z = -420;	no	10
387	LC 129: N35	N = -438; V_x = 140; V_y = -76; M_x = 6,096; M_y = 5,892; M_z = 120;	no	15
388	LC 130: N30	N = -653; V_x = 304; V_y = 32; M_x = -540; M_y = 6,936; M_z = 564;	no	11
389	LC 130: N66	N = -28; V_x = 32; V_y = -38; M_x = 1,152; M_y = 576; M_z = -216;	no	3
390	LC 130: N35	N = -418; V_x = 109; V_y = 5; M_x = 3,312; M_y = 4,404; M_z = 96;	no	9
391	LC 131: N30	N = -593; V_x = 353; V_y = 62; M_x = -1,248; M_y = 8,256; M_z = 1,152;	no	15

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392	LC 131: N66	N = -124; V_x = 64; V_y = 135; M_x = -1,716; M_y = 1,104; M_z = 0;	no	4
393	LC 131: N35	N = -383; V_x = 35; V_y = 90; M_x = 60; M_y = 1,896; M_z = 48;	no	2
394	LC 132: N30	N = -544; V_x = 334; V_y = 73; M_x = -1,488; M_y = 7,920; M_z = 1,488;	no	15
395	LC 132: N66	N = -172; V_x = 68; V_y = 223; M_x = -3,180; M_y = 1,188; M_z = 168;	no	7
396	LC 132: N35	N = -383; V_x = -6; V_y = 137; M_x = -1,740; M_y = 480; M_z = 36;	no	2
397	LC 133: N30	N = -486; V_x = 269; V_y = 80; M_x = -1,596; M_y = 6,480; M_z = 1,680;	no	12
398	LC 133: N66	N = -209; V_x = 56; V_y = 295; M_x = -4,368; M_y = 996; M_z = 360;	no	9
399	LC 133: N35	N = -404; V_x = -32; V_y = 177; M_x = -3,120; M_y = -540; M_z = 12;	no	5
400	LC 134: N30	N = -627; V_x = 87; V_y = 183; M_x = -3,540; M_y = 2,232; M_z = 2,520;	no	5
401	LC 134: N66	N = -381; V_x = -32; V_y = 654; M_x = -10,356; M_y = -72; M_z = 1,452;	no	21
402	LC 134: N35	N = -842; V_x = -54; V_y = 478; M_x = -8,748; M_y = -1,800; M_z = 24;	no	15
403	LC 135: N30	N = -546; V_x = -414; V_y = 126; M_x = -1,860; M_y = -9,528; M_z = 1,152;	no	19
404	LC 135: N66	N = -252; V_x = -150; V_y = 445; M_x = -6,984; M_y = -2,148; M_z = 1,476;	no	17
405	LC 135: N35	N = -1,051; V_x = -31; V_y = 550; M_x = -9,600; M_y = -1,812; M_z = 24;	no	15
406	LC 136: N30	N = -579; V_x = -566; V_y = 95; M_x = -972; M_y = -13,128; M_z = 456;	no	26
407	LC 136: N66	N = -137; V_x = -223; V_y = 250; M_x = -3,780; M_y = -3,408; M_z = 1,332;	no	10
408	LC 136: N35	N = -1,133; V_x = 4; V_y = 514; M_x = -7,644; M_y = -528; M_z = 48;	no	10

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409	LC 137: N30	N = -647; V_x = -621; V_y = 67; M_x = -240; M_y = -14,496; M_z = -24;	no	28
410	LC 137: N66	N = -22; V_x = -291; V_y = 48; M_x = -420; M_y = -4,548; M_z = 1,140;	no	11
411	LC 137: N35	N = -1,181; V_x = 38; V_y = 441; M_x = -4,740; M_y = 1,080; M_z = 96;	no	4
412	LC 138: N30	N = -793; V_x = -619; V_y = 11; M_x = 996; M_y = -14,604; M_z = -540;	no	28
413	LC 138: N66	N = 164; V_x = -371; V_y = -291; M_x = 5,232; M_y = -5,928; M_z = 720;	no	18
414	LC 138: N35	N = -1,221; V_x = 100; V_y = 280; M_x = 816; M_y = 4,032; M_z = 156;	no	2
415	LC 139: N30	N = -914; V_x = -713; V_y = -48; M_x = 2,412; M_y = -17,160; M_z = -1,704;	no	33
416	LC 139: N66	N = 355; V_x = -435; V_y = -637; M_x = 10,980; M_y = -7,008; M_z = 288;	no	30
417	LC 139: N35	N = -1,291; V_x = 246; V_y = 112; M_x = 7,272; M_y = 8,988; M_z = 228;	no	15
418	LC 140: N30	N = -1,011; V_x = -673; V_y = -70; M_x = 2,880; M_y = -16,452; M_z = -2,352;	no	31
419	LC 140: N66	N = 452; V_x = -444; V_y = -815; M_x = 13,920; M_y = -7,164; M_z = -36;	no	38
420	LC 140: N35	N = -1,291; V_x = 325; V_y = 18; M_x = 10,824; M_y = 11,772; M_z = 276;	no	24
421	LC 141: N30	N = -1,127; V_x = -542; V_y = -85; M_x = 3,096; M_y = -13,536; M_z = -2,748;	no	24
422	LC 141: N66	N = 527; V_x = -419; V_y = -958; M_x = 16,284; M_y = -6,780; M_z = -432;	no	46
423	LC 141: N35	N = -1,249; V_x = 376; V_y = -61; M_x = 13,572; M_y = 13,776; M_z = 300;	no	32
424	LC 142: N30	N = -1,347; V_x = -97; V_y = -83; M_x = 2,664; M_y = -3,252; M_z = -1,824;	no	3
425	LC 142: N66	N = 573; V_x = -298; V_y = -1,072; M_x = 18,192; M_y = -4,896; M_z = -1,164;	no	53

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426	LC 142: N35	N = -1,076; V_x = 394; V_y = -160; M_x = 16,212; M_y = 15,252; M_z = 324;	no	39
427	LC 143: N30	N = -1,426; V_x = 399; V_y = -26; M_x = 984; M_y = 8,424; M_z = -480;	no	10
428	LC 143: N66	N = 444; V_x = -178; V_y = -861; M_x = 14,796; M_y = -2,784; M_z = -1,188;	no	44
429	LC 143: N35	N = -867; V_x = 374; V_y = -233; M_x = 17,100; M_y = 15,336; M_z = 324;	no	42
430	LC 144: N30	N = -1,393; V_x = 549; V_y = 5; M_x = 108; M_y = 12,000; M_z = 216;	no	17
431	LC 144: N66	N = 329; V_x = -105; V_y = -666; M_x = 11,592; M_y = -1,524; M_z = -1,044;	no	30
432	LC 144: N35	N = -785; V_x = 341; V_y = -199; M_x = 15,180; M_y = 14,100; M_z = 300;	no	38
433	LC 145: N30	N = -1,326; V_x = 604; V_y = 33; M_x = -624; M_y = 13,344; M_z = 684;	no	21
434	LC 145: N66	N = 214; V_x = -38; V_y = -464; M_x = 8,244; M_y = -396; M_z = -852;	no	21
435	LC 145: N35	N = -737; V_x = 308; V_y = -126; M_x = 12,312; M_y = 12,516; M_z = 264;	no	32
436	LC 146: N30	N = -1,181; V_x = 604; V_y = 89; M_x = -1,872; M_y = 13,488; M_z = 1,212;	no	23
437	LC 146: N66	N = 28; V_x = 41; V_y = -125; M_x = 2,592; M_y = 960; M_z = -432;	no	7
438	LC 146: N35	N = -697; V_x = 245; V_y = 36; M_x = 6,756; M_y = 9,552; M_z = 204;	no	20
439	LC 147: N30	N = -1,060; V_x = 702; V_y = 148; M_x = -3,288; M_y = 16,128; M_z = 2,388;	no	30
440	LC 147: N66	N = -163; V_x = 104; V_y = 220; M_x = -3,144; M_y = 2,028; M_z = -12;	no	7
441	LC 147: N35	N = -627; V_x = 96; V_y = 205; M_x = 240; M_y = 4,536; M_z = 120;	no	6
442	LC 148: N30	N = -963; V_x = 665; V_y = 170; M_x = -3,768; M_y = 15,468; M_z = 3,048;	no	30

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443	LC 148: N66	N = -259; V_x = 113; V_y = 397; M_x = -6,084; M_y = 2,184; M_z = 324;	no	14
444	LC 148: N35	N = -627; V_x = 16; V_y = 300; M_x = -3,360; M_y = 1,692; M_z = 72;	no	5
445	LC 149: N30	N = -847; V_x = 535; V_y = 185; M_x = -3,984; M_y = 12,576; M_z = 3,456;	no	25
446	LC 149: N66	N = -334; V_x = 87; V_y = 539; M_x = -8,448; M_y = 1,800; M_z = 720;	no	18
447	LC 149: N35	N = -668; V_x = -37; V_y = 380; M_x = -6,132; M_y = -360; M_z = 48;	no	9
448	LC 150: N30	N = -1,366; V_x = -12; V_y = 78; M_x = -792; M_y = -876; M_z = 504;	no	2
449	LC 150: N66	N = 155; V_x = -238; V_y = -307; M_x = 5,640; M_y = -3,540; M_z = 192;	no	15
450	LC 150: N35	N = -1,309; V_x = 250; V_y = 229; M_x = 5,388; M_y = 9,780; M_z = 252;	no	15
451	LC 151: N30	N = -1,550; V_x = -2; V_y = 95; M_x = -792; M_y = -372; M_z = 720;	no	2
452	LC 151: N66	N = 66; V_x = -230; V_y = -215; M_x = 4,548; M_y = -3,516; M_z = 336;	no	13
453	LC 151: N35	N = -1,467; V_x = 232; V_y = 282; M_x = 4,320; M_y = 9,348; M_z = 252;	no	13
454	LC 152: N30	N = -1,538; V_x = -58; V_y = 90; M_x = -612; M_y = -1,692; M_z = 576;	no	2
455	LC 152: N66	N = 79; V_x = -249; V_y = -235; M_x = 4,884; M_y = -3,828; M_z = 360;	no	14
456	LC 152: N35	N = -1,491; V_x = 234; V_y = 287; M_x = 4,320; M_y = 9,372; M_z = 252;	no	13
457	LC 153: N30	N = -1,538; V_x = -82; V_y = 85; M_x = -504; M_y = -2,268; M_z = 492;	no	2
458	LC 153: N66	N = 90; V_x = -259; V_y = -254; M_x = 5,196; M_y = -3,996; M_z = 360;	no	15
459	LC 153: N35	N = -1,503; V_x = 238; V_y = 284; M_x = 4,488; M_y = 9,480; M_z = 252;	no	13

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460	LC 154: N30	N = -1,541; V_x = -102; V_y = 81; M_x = -384; M_y = -2,736; M_z = 420;	no	2
461	LC 154: N66	N = 103; V_x = -268; V_y = -277; M_x = 5,580; M_y = -4,140; M_z = 348;	no	16
462	LC 154: N35	N = -1,513; V_x = 243; V_y = 278; M_x = 4,752; M_y = 9,660; M_z = 264;	no	13
463	LC 155: N30	N = -1,557; V_x = -121; V_y = 71; M_x = -144; M_y = -3,228; M_z = 288;	no	2
464	LC 155: N66	N = 132; V_x = -281; V_y = -330; M_x = 6,456; M_y = -4,380; M_z = 288;	no	18
465	LC 155: N35	N = -1,526; V_x = 257; V_y = 259; M_x = 5,508; M_y = 10,152; M_z = 264;	no	14
466	LC 156: N30	N = -1,582; V_x = -112; V_y = 63; M_x = 12; M_y = -3,048; M_z = 216;	no	1
467	LC 156: N66	N = 158; V_x = -285; V_y = -379; M_x = 7,272; M_y = -4,452; M_z = 204;	no	19
468	LC 156: N35	N = -1,527; V_x = 271; V_y = 234; M_x = 6,372; M_y = 10,728; M_z = 276;	no	16
469	LC 157: N30	N = -1,596; V_x = -96; V_y = 60; M_x = 60; M_y = -2,700; M_z = 216;	no	1
470	LC 157: N66	N = 168; V_x = -284; V_y = -398; M_x = 7,584; M_y = -4,440; M_z = 168;	no	20
471	LC 157: N35	N = -1,523; V_x = 277; V_y = 222; M_x = 6,768; M_y = 10,980; M_z = 276;	no	16
472	LC 158: N30	N = -1,609; V_x = -75; V_y = 59; M_x = 72; M_y = -2,220; M_z = 228;	no	1
473	LC 158: N66	N = 174; V_x = -280; V_y = -411; M_x = 7,812; M_y = -4,368; M_z = 120;	no	21
474	LC 158: N35	N = -1,515; V_x = 282; V_y = 211; M_x = 7,116; M_y = 11,208; M_z = 288;	no	17
475	LC 159: N30	N = -1,632; V_x = -22; V_y = 60; M_x = 0; M_y = -996; M_z = 312;	no	1
476	LC 159: N66	N = 176; V_x = -266; V_y = -418; M_x = 7,932; M_y = -4,140; M_z = 60;	no	21

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477	LC 159: N35	N = -1,494; V_x = 287; V_y = 195; M_x = 7,548; M_y = 11,472; M_z = 288;	no	18
478	LC 160: N30	N = -1,644; V_x = 34; V_y = 66; M_x = -180; M_y = 324; M_z = 456;	no	1
479	LC 160: N66	N = 163; V_x = -247; V_y = -398; M_x = 7,608; M_y = -3,816; M_z = 24;	no	21
480	LC 160: N35	N = -1,470; V_x = 285; V_y = 191; M_x = 7,548; M_y = 11,460; M_z = 288;	no	18
481	LC 161: N30	N = -1,645; V_x = 59; V_y = 70; M_x = -288; M_y = 900; M_z = 540;	no	2
482	LC 161: N66	N = 152; V_x = -237; V_y = -379; M_x = 7,296; M_y = -3,660; M_z = 36;	no	20
483	LC 161: N35	N = -1,458; V_x = 281; V_y = 194; M_x = 7,380; M_y = 11,340; M_z = 288;	no	18
484	LC 162: N30	N = -1,642; V_x = 78; V_y = 75; M_x = -420; M_y = 1,368; M_z = 612;	no	2
485	LC 162: N66	N = 139; V_x = -228; V_y = -356; M_x = 6,900; M_y = -3,504; M_z = 48;	no	19
486	LC 162: N35	N = -1,448; V_x = 276; V_y = 199; M_x = 7,116; M_y = 11,160; M_z = 288;	no	17
487	LC 163: N30	N = -1,626; V_x = 98; V_y = 84; M_x = -648; M_y = 1,872; M_z = 744;	no	2
488	LC 163: N66	N = 110; V_x = -215; V_y = -303; M_x = 6,036; M_y = -3,276; M_z = 108;	no	16
489	LC 163: N35	N = -1,435; V_x = 263; V_y = 219; M_x = 6,360; M_y = 10,668; M_z = 276;	no	16
490	LC 164: N30	N = -1,600; V_x = 88; V_y = 92; M_x = -816; M_y = 1,680; M_z = 816;	no	2
491	LC 164: N66	N = 84; V_x = -211; V_y = -254; M_x = 5,208; M_y = -3,192; M_z = 180;	no	14
492	LC 164: N35	N = -1,434; V_x = 248; V_y = 243; M_x = 5,496; M_y = 10,104; M_z = 264;	no	15
493	LC 165: N30	N = -1,586; V_x = 73; V_y = 95; M_x = -852; M_y = 1,344; M_z = 816;	no	2

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494	LC 165: N66	N = 74; V_x = -212; V_y = -235; M_x = 4,896; M_y = -3,216; M_z = 228;	no	13
495	LC 165: N35	N = -1,438; V_x = 242; V_y = 255; M_x = 5,088; M_y = 9,840; M_z = 264;	no	14
496	LC 166: N30	N = -1,573; V_x = 52; V_y = 96; M_x = -864; M_y = 864; M_z = 804;	no	2
497	LC 166: N66	N = 68; V_x = -216; V_y = -222; M_x = 4,668; M_y = -3,276; M_z = 264;	no	13
498	LC 166: N35	N = -1,446; V_x = 237; V_y = 266; M_x = 4,752; M_y = 9,624; M_z = 252;	no	14
499	LC 167: N30	N = -507; V_x = -2; V_y = 16; M_x = 588; M_y = -2,484; M_z = 324;	no	3
500	LC 167: N66	N = 105; V_x = -214; V_y = -214; M_x = 4,056; M_y = -3,240; M_z = 408;	no	12
501	LC 167: N35	N = -1,072; V_x = 216; V_y = 198; M_x = 3,348; M_y = 7,368; M_z = 180;	no	11
502	LC 168: N30	N = -775; V_x = -5; V_y = 29; M_x = 96; M_y = -1,224; M_z = 180;	no	1
503	LC 168: N66	N = 46; V_x = -114; V_y = -137; M_x = 2,784; M_y = -1,776; M_z = 120;	no	8
504	LC 168: N35	N = -745; V_x = 118; V_y = 108; M_x = 2,928; M_y = 4,932; M_z = 132;	no	7
505	LC 169: N30	N = -1,032; V_x = -8; V_y = 49; M_x = -1,080; M_y = 2,724; M_z = 192;	no	1
506	LC 169: N66	N = 2; V_x = -25; V_y = -80; M_x = 1,752; M_y = -432; M_z = -204;	no	5
507	LC 169: N35	N = -444; V_x = 33; V_y = 31; M_x = 2,160; M_y = 2,448; M_z = 72;	no	4
508	LC 170: N30	N = -558; V_x = 4; V_y = 50; M_x = 144; M_y = -2,028; M_z = 768;	no	2
509	LC 170: N66	N = 146; V_x = -307; V_y = -254; M_x = 4,788; M_y = -4,392; M_z = 624;	no	15
510	LC 170: N35	N = -1,438; V_x = 303; V_y = 328; M_x = 4,584; M_y = 11,136; M_z = 288;	no	18

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511	LC 171: N30	N = -550; V_x = -43; V_y = 44; M_x = 300; M_y = -3,120; M_z = 648;	no	4
512	LC 171: N66	N = 159; V_x = -318; V_y = -274; M_x = 5,100; M_y = -4,596; M_z = 624;	no	16
513	LC 171: N35	N = -1,458; V_x = 305; V_y = 335; M_x = 4,500; M_y = 11,124; M_z = 288;	no	17
514	LC 172: N30	N = -553; V_x = -57; V_y = 42; M_x = 384; M_y = -3,456; M_z = 576;	no	4
515	LC 172: N66	N = 169; V_x = -325; V_y = -292; M_x = 5,400; M_y = -4,716; M_z = 612;	no	17
516	LC 172: N35	N = -1,465; V_x = 308; V_y = 331; M_x = 4,692; M_y = 11,244; M_z = 288;	no	18
517	LC 173: N30	N = -560; V_x = -62; V_y = 39; M_x = 456; M_y = -3,576; M_z = 540;	no	5
518	LC 173: N66	N = 180; V_x = -331; V_y = -311; M_x = 5,724; M_y = -4,812; M_z = 600;	no	18
519	LC 173: N35	N = -1,470; V_x = 312; V_y = 324; M_x = 4,956; M_y = 11,400; M_z = 288;	no	18
520	LC 174: N30	N = -573; V_x = -62; V_y = 34; M_x = 576; M_y = -3,588; M_z = 492;	no	5
521	LC 174: N66	N = 198; V_x = -339; V_y = -343; M_x = 6,252; M_y = -4,944; M_z = 552;	no	19
522	LC 174: N35	N = -1,474; V_x = 317; V_y = 309; M_x = 5,472; M_y = 11,676; M_z = 300;	no	18
523	LC 175: N30	N = -585; V_x = -71; V_y = 28; M_x = 708; M_y = -3,828; M_z = 372;	no	5
524	LC 175: N66	N = 215; V_x = -345; V_y = -376; M_x = 6,792; M_y = -5,052; M_z = 516;	no	20
525	LC 175: N35	N = -1,480; V_x = 331; V_y = 294; M_x = 6,084; M_y = 12,132; M_z = 300;	no	19
526	LC 176: N30	N = -594; V_x = -67; V_y = 26; M_x = 744; M_y = -3,768; M_z = 312;	no	5
527	LC 176: N66	N = 225; V_x = -346; V_y = -392; M_x = 7,068; M_y = -5,064; M_z = 480;	no	20

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528	LC 176: N35	N = -1,480; V_x = 338; V_y = 285; M_x = 6,420; M_y = 12,396; M_z = 312;	no	20
529	LC 177: N30	N = -605; V_x = -55; V_y = 25; M_x = 768; M_y = -3,492; M_z = 276;	no	4
530	LC 177: N66	N = 232; V_x = -343; V_y = -406; M_x = 7,284; M_y = -5,028; M_z = 444;	no	21
531	LC 177: N35	N = -1,476; V_x = 343; V_y = 277; M_x = 6,672; M_y = 12,588; M_z = 312;	no	21
532	LC 178: N30	N = -625; V_x = -13; V_y = 25; M_x = 732; M_y = -2,520; M_z = 372;	no	2
533	LC 178: N66	N = 236; V_x = -332; V_y = -416; M_x = 7,464; M_y = -4,848; M_z = 384;	no	21
534	LC 178: N35	N = -1,460; V_x = 345; V_y = 268; M_x = 6,924; M_y = 12,732; M_z = 312;	no	21
535	LC 179: N30	N = -633; V_x = 34; V_y = 30; M_x = 564; M_y = -1,428; M_z = 492;	no	1
536	LC 179: N66	N = 224; V_x = -321; V_y = -397; M_x = 7,152; M_y = -4,656; M_z = 372;	no	20
537	LC 179: N35	N = -1,440; V_x = 343; V_y = 261; M_x = 7,008; M_y = 12,732; M_z = 312;	no	21
538	LC 180: N30	N = -630; V_x = 48; V_y = 33; M_x = 492; M_y = -1,092; M_z = 552;	no	2
539	LC 180: N66	N = 213; V_x = -314; V_y = -378; M_x = 6,852; M_y = -4,536; M_z = 396;	no	19
540	LC 180: N35	N = -1,433; V_x = 340; V_y = 265; M_x = 6,828; M_y = 12,612; M_z = 312;	no	21
541	LC 181: N30	N = -623; V_x = 53; V_y = 36; M_x = 420; M_y = -972; M_z = 600;	no	2
542	LC 181: N66	N = 202; V_x = -308; V_y = -359; M_x = 6,528; M_y = -4,428; M_z = 408;	no	18
543	LC 181: N35	N = -1,428; V_x = 337; V_y = 271; M_x = 6,552; M_y = 12,468; M_z = 312;	no	21
544	LC 182: N30	N = -610; V_x = 53; V_y = 41; M_x = 300; M_y = -960; M_z = 648;	no	2

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545	LC 182: N66	N = 185; V_x = -300; V_y = -328; M_x = 6,000; M_y = -4,296; M_z = 444;	no	17
546	LC 182: N35	N = -1,424; V_x = 331; V_y = 287; M_x = 6,036; M_y = 12,192; M_z = 300;	no	20
547	LC 183: N30	N = -598; V_x = 61; V_y = 47; M_x = 168; M_y = -720; M_z = 756;	no	2
548	LC 183: N66	N = 167; V_x = -294; V_y = -295; M_x = 5,460; M_y = -4,200; M_z = 492;	no	16
549	LC 183: N35	N = -1,418; V_x = 317; V_y = 302; M_x = 5,424; M_y = 11,724; M_z = 288;	no	19
550	LC 184: N30	N = -589; V_x = 58; V_y = 49; M_x = 120; M_y = -780; M_z = 816;	no	2
551	LC 184: N66	N = 158; V_x = -293; V_y = -278; M_x = 5,184; M_y = -4,188; M_z = 516;	no	16
552	LC 184: N35	N = -1,418; V_x = 310; V_y = 311; M_x = 5,100; M_y = 11,460; M_z = 288;	no	18
553	LC 185: N30	N = -578; V_x = 46; V_y = 50; M_x = 108; M_y = -1,056; M_z = 864;	no	2
554	LC 185: N66	N = 151; V_x = -296; V_y = -265; M_x = 4,968; M_y = -4,224; M_z = 552;	no	15
555	LC 185: N35	N = -1,422; V_x = 305; V_y = 318; M_x = 4,836; M_y = 11,268; M_z = 288;	no	18
556	LC 186: N30	N = -976; V_x = -1; V_y = 79; M_x = -396; M_y = -2,220; M_z = 396;	no	1
557	LC 186: N66	N = 60; V_x = -152; V_y = -145; M_x = 2,940; M_y = -2,304; M_z = 252;	no	9
558	LC 186: N35	N = -933; V_x = 153; V_y = 188; M_x = 3,048; M_y = 6,456; M_z = 180;	no	10
559	LC 187: N30	N = -969; V_x = -48; V_y = 74; M_x = -240; M_y = -3,324; M_z = 276;	no	2
560	LC 187: N66	N = 72; V_x = -163; V_y = -164; M_x = 3,252; M_y = -2,496; M_z = 252;	no	10
561	LC 187: N35	N = -953; V_x = 155; V_y = 195; M_x = 2,964; M_y = 6,444; M_z = 180;	no	9

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Case	Description	Forces [lb] / Moments [in.lb]	Seismic	Max. Util. Anchor [%]
562	LC 188: N30	N = -972; V_x = -62; V_y = 71; M_x = -156; M_y = -3,660; M_z = 204;	no	3
563	LC 188: N66	N = 83; V_x = -170; V_y = -183; M_x = 3,552; M_y = -2,616; M_z = 240;	no	10
564	LC 188: N35	N = -960; V_x = 159; V_y = 192; M_x = 3,144; M_y = 6,564; M_z = 180;	no	10
565	LC 189: N30	N = -978; V_x = -67; V_y = 69; M_x = -84; M_y = -3,780; M_z = 156;	no	3
566	LC 189: N66	N = 94; V_x = -176; V_y = -201; M_x = 3,864; M_y = -2,724; M_z = 216;	no	11
567	LC 189: N35	N = -965; V_x = 162; V_y = 185; M_x = 3,420; M_y = 6,720; M_z = 180;	no	10
568	LC 190: N30	N = -992; V_x = -67; V_y = 63; M_x = 24; M_y = -3,792; M_z = 108;	no	3
569	LC 190: N66	N = 111; V_x = -184; V_y = -233; M_x = 4,392; M_y = -2,844; M_z = 180;	no	12
570	LC 190: N35	N = -969; V_x = 168; V_y = 170; M_x = 3,936; M_y = 6,996; M_z = 192;	no	11
571	LC 191: N30	N = -1,003; V_x = -76; V_y = 58; M_x = 156; M_y = -4,032; M_z = 0;	no	3
572	LC 191: N66	N = 129; V_x = -190; V_y = -266; M_x = 4,932; M_y = -2,952; M_z = 144;	no	13
573	LC 191: N35	N = -975; V_x = 181; V_y = 154; M_x = 4,548; M_y = 7,464; M_z = 192;	no	12
574	LC 192: N30	N = -1,012; V_x = -73; V_y = 56; M_x = 204; M_y = -3,972; M_z = -60;	no	3
575	LC 192: N66	N = 138; V_x = -191; V_y = -282; M_x = 5,208; M_y = -2,964; M_z = 108;	no	14
576	LC 192: N35	N = -975; V_x = 189; V_y = 145; M_x = 4,884; M_y = 7,728; M_z = 204;	no	12
577	LC 193: N30	N = -1,023; V_x = -60; V_y = 54; M_x = 228; M_y = -3,696; M_z = -96;	no	2
578	LC 193: N66	N = 145; V_x = -188; V_y = -296; M_x = 5,436; M_y = -2,928; M_z = 72;	no	15

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579	LC 193: N35	N = -971; V_x = 194; V_y = 138; M_x = 5,136; M_y = 7,920; M_z = 204;	no	13
580	LC 194: N30	N = -1,044; V_x = -18; V_y = 54; M_x = 180; M_y = -2,736; M_z = -12;	no	1
581	LC 194: N66	N = 149; V_x = -177; V_y = -306; M_x = 5,616; M_y = -2,748; M_z = 0;	no	16
582	LC 194: N35	N = -955; V_x = 195; V_y = 129; M_x = 5,388; M_y = 8,052; M_z = 204;	no	14
583	LC 195: N30	N = -1,051; V_x = 28; V_y = 60; M_x = 24; M_y = -1,632; M_z = 120;	no	1
584	LC 195: N66	N = 137; V_x = -166; V_y = -287; M_x = 5,292; M_y = -2,556; M_z = 0;	no	15
585	LC 195: N35	N = -935; V_x = 193; V_y = 122; M_x = 5,472; M_y = 8,064; M_z = 204;	no	14
586	LC 196: N30	N = -1,048; V_x = 42; V_y = 63; M_x = -60; M_y = -1,296; M_z = 180;	no	1
587	LC 196: N66	N = 127; V_x = -159; V_y = -268; M_x = 4,992; M_y = -2,436; M_z = 12;	no	14
588	LC 196: N35	N = -928; V_x = 190; V_y = 125; M_x = 5,292; M_y = 7,944; M_z = 204;	no	14
589	LC 197: N30	N = -1,042; V_x = 47; V_y = 65; M_x = -120; M_y = -1,176; M_z = 228;	no	1
590	LC 197: N66	N = 116; V_x = -153; V_y = -249; M_x = 4,680; M_y = -2,328; M_z = 36;	no	13
591	LC 197: N35	N = -923; V_x = 187; V_y = 132; M_x = 5,016; M_y = 7,788; M_z = 204;	no	13
592	LC 198: N30	N = -1,028; V_x = 47; V_y = 71; M_x = -240; M_y = -1,164; M_z = 276;	no	1
593	LC 198: N66	N = 98; V_x = -145; V_y = -218; M_x = 4,152; M_y = -2,208; M_z = 72;	no	11
594	LC 198: N35	N = -919; V_x = 181; V_y = 147; M_x = 4,500; M_y = 7,512; M_z = 192;	no	12
595	LC 199: N30	N = -1,017; V_x = 56; V_y = 76; M_x = -372; M_y = -912; M_z = 384;	no	2

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596	LC 199: N66	N = 80; V_x = -139; V_y = -185; M_x = 3,612; M_y = -2,100; M_z = 108;	no	10
597	LC 199: N35	N = -913; V_x = 167; V_y = 163; M_x = 3,888; M_y = 7,044; M_z = 192;	no	11
598	LC 200: N30	N = -1,008; V_x = 53; V_y = 78; M_x = -420; M_y = -984; M_z = 444;	no	2
599	LC 200: N66	N = 71; V_x = -138; V_y = -169; M_x = 3,336; M_y = -2,088; M_z = 144;	no	9
600	LC 200: N35	N = -913; V_x = 160; V_y = 172; M_x = 3,552; M_y = 6,780; M_z = 180;	no	10
601	LC 201: N30	N = -997; V_x = 40; V_y = 80; M_x = -444; M_y = -1,248; M_z = 480;	no	2
602	LC 201: N66	N = 64; V_x = -141; V_y = -155; M_x = 3,120; M_y = -2,124; M_z = 180;	no	9
603	LC 201: N35	N = -917; V_x = 155; V_y = 179; M_x = 3,300; M_y = 6,588; M_z = 180;	no	10
604	LC 202: N30	N = -1,366; V_x = -6; V_y = 107; M_x = -1,080; M_y = 2,112; M_z = 420;	no	2
605	LC 202: N66	N = -10; V_x = -20; V_y = -57; M_x = 1,392; M_y = -372; M_z = -156;	no	4
606	LC 202: N35	N = -473; V_x = 26; V_y = 74; M_x = 876; M_y = 1,812; M_z = 60;	no	2
607	LC 203: N30	N = -1,359; V_x = -53; V_y = 101; M_x = -912; M_y = 1,008; M_z = 288;	no	1
608	LC 203: N66	N = 2; V_x = -31; V_y = -77; M_x = 1,716; M_y = -564; M_z = -156;	no	5
609	LC 203: N35	N = -493; V_x = 28; V_y = 81; M_x = 804; M_y = 1,812; M_z = 60;	no	2
610	LC 204: N30	N = -1,362; V_x = -67; V_y = 98; M_x = -840; M_y = 672; M_z = 228;	no	1
611	LC 204: N66	N = 13; V_x = -38; V_y = -95; M_x = 2,016; M_y = -684; M_z = -168;	no	6
612	LC 204: N35	N = -500; V_x = 32; V_y = 77; M_x = 984; M_y = 1,932; M_z = 60;	no	2

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613	LC 205: N30	N = -1,368; V_x = -72; V_y = 96; M_x = -768; M_y = 540; M_z = 180;	no	1
614	LC 205: N66	N = 23; V_x = -44; V_y = -114; M_x = 2,328; M_y = -792; M_z = -180;	no	7
615	LC 205: N35	N = -505; V_x = 35; V_y = 71; M_x = 1,248; M_y = 2,076; M_z = 60;	no	3
616	LC 206: N30	N = -1,382; V_x = -72; V_y = 91; M_x = -648; M_y = 528; M_z = 132;	no	1
617	LC 206: N66	N = 41; V_x = -52; V_y = -146; M_x = 2,856; M_y = -924; M_z = -228;	no	8
618	LC 206: N35	N = -509; V_x = 41; V_y = 55; M_x = 1,776; M_y = 2,364; M_z = 72;	no	3
619	LC 207: N30	N = -1,393; V_x = -81; V_y = 85; M_x = -516; M_y = 288; M_z = 24;	no	1
620	LC 207: N66	N = 59; V_x = -58; V_y = -178; M_x = 3,396; M_y = -1,020; M_z = -264;	no	10
621	LC 207: N35	N = -515; V_x = 55; V_y = 40; M_x = 2,388; M_y = 2,832; M_z = 72;	no	5
622	LC 208: N30	N = -1,402; V_x = -78; V_y = 83; M_x = -468; M_y = 348; M_z = -36;	no	1
623	LC 208: N66	N = 68; V_x = -59; V_y = -195; M_x = 3,672; M_y = -1,032; M_z = -288;	no	11
624	LC 208: N35	N = -515; V_x = 62; V_y = 31; M_x = 2,724; M_y = 3,096; M_z = 84;	no	5
625	LC 209: N30	N = -1,413; V_x = -66; V_y = 82; M_x = -456; M_y = 624; M_z = -72;	no	1
626	LC 209: N66	N = 75; V_x = -56; V_y = -208; M_x = 3,888; M_y = -996; M_z = -336;	no	11
627	LC 209: N35	N = -511; V_x = 67; V_y = 23; M_x = 2,976; M_y = 3,288; M_z = 84;	no	6
628	LC 210: N30	N = -1,434; V_x = -24; V_y = 82; M_x = -492; M_y = 1,584; M_z = 12;	no	1
629	LC 210: N66	N = 79; V_x = -45; V_y = -219; M_x = 4,068; M_y = -828; M_z = -396;	no	12

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630	LC 210: N35	N = -495; V_x = 69; V_y = 14; M_x = 3,228; M_y = 3,420; M_z = 84;	no	7
631	LC 211: N30	N = -1,441; V_x = 23; V_y = 87; M_x = -648; M_y = 2,688; M_z = 144;	no	1
632	LC 211: N66	N = 67; V_x = -34; V_y = -199; M_x = 3,756; M_y = -624; M_z = -396;	no	10
633	LC 211: N35	N = -475; V_x = 67; V_y = 7; M_x = 3,300; M_y = 3,420; M_z = 84;	no	7
634	LC 212: N30	N = -1,438; V_x = 37; V_y = 90; M_x = -732; M_y = 3,024; M_z = 204;	no	1
635	LC 212: N66	N = 56; V_x = -27; V_y = -181; M_x = 3,456; M_y = -504; M_z = -384;	no	9
636	LC 212: N35	N = -468; V_x = 63; V_y = 11; M_x = 3,120; M_y = 3,300; M_z = 84;	no	7
637	LC 213: N30	N = -1,432; V_x = 42; V_y = 93; M_x = -804; M_y = 3,156; M_z = 252;	no	1
638	LC 213: N66	N = 45; V_x = -21; V_y = -162; M_x = 3,132; M_y = -396; M_z = -372;	no	8
639	LC 213: N35	N = -463; V_x = 60; V_y = 17; M_x = 2,856; M_y = 3,156; M_z = 84;	no	6
640	LC 214: N30	N = -1,418; V_x = 42; V_y = 98; M_x = -924; M_y = 3,168; M_z = 300;	no	1
641	LC 214: N66	N = 28; V_x = -13; V_y = -130; M_x = 2,604; M_y = -276; M_z = -336;	no	7
642	LC 214: N35	N = -459; V_x = 54; V_y = 33; M_x = 2,328; M_y = 2,868; M_z = 72;	no	5
643	LC 215: N30	N = -1,407; V_x = 51; V_y = 103; M_x = -1,056; M_y = 3,420; M_z = 408;	no	2
644	LC 215: N66	N = 10; V_x = -7; V_y = -98; M_x = 2,076; M_y = -168; M_z = -288;	no	5
645	LC 215: N35	N = -453; V_x = 40; V_y = 48; M_x = 1,716; M_y = 2,400; M_z = 72;	no	3
646	LC 216: N30	N = -1,398; V_x = 48; V_y = 105; M_x = -1,092; M_y = 3,360; M_z = 468;	no	2

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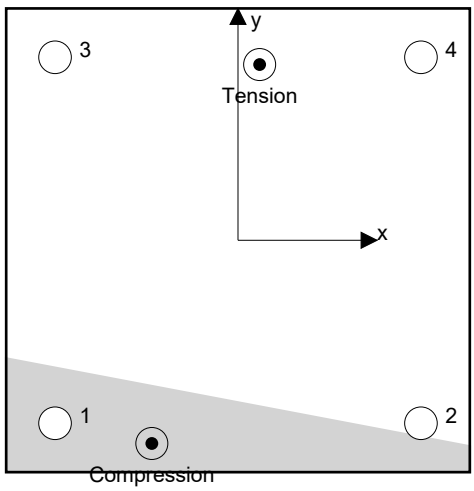
Case	Description	Forces [lb] / Moments [in.lb]	Seismic	Max. Util. Anchor [%]
647	LC 216: N66	N = 1; V_x = -6; V_y = -81; M_x = 1,800; M_y = -156; M_z = -264;	no	5
648	LC 216: N35	N = -453; V_x = 33; V_y = 57; M_x = 1,380; M_y = 2,136; M_z = 60;	no	3
649	LC 217: N30	N = -1,387; V_x = 36; V_y = 107; M_x = -1,116; M_y = 3,084; M_z = 504;	no	2
650	LC 217: N66	N = -6; V_x = -9; V_y = -68; M_x = 1,572; M_y = -192; M_z = -228;	no	4
651	LC 217: N35	N = -457; V_x = 28; V_y = 65; M_x = 1,128; M_y = 1,944; M_z = 60;	no	2

2 Load case/Resulting anchor forces

Controlling load case: 425 LC 142: N66



Anchor reactions [lb]

Tension force: (+Tension, -Compression)

Anchor	Tension force	Shear force	Shear force x	Shear force y
1	0	253	-121	-222
2	61	336	-121	-314
3	1,362	224	-28	-222
4	1,667	315	-28	-314

Max. concrete compressive strain:	0.17 [‰]
Max. concrete compressive stress:	755 [psi]
Resulting tension force in (x/y)=(0.373/3.032):	3,090 [lb]
Resulting compression force in (x/y)=(-1.487/-3.506):	2,517 [lb]

Anchor forces are calculated based on the assumption of a rigid anchor plate.

3 Tension load

	Load N_{ua} [lb]	Capacity ϕ N_n [lb]	Utilization $\beta_N = N_{ua}/\phi$ N_n	Status
Steel Strength*	1,667	8,433	20	OK
Pullout Strength*	N/A	N/A	N/A	N/A
Concrete Breakout Failure**	3,090	5,867	53	OK

* highest loaded anchor **anchor group (anchors in tension)

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3.1 Steel Strength

N_{sa} = ESR value — refer to ICC-ES ESR-4266
$\phi\ N_{sa} \geq N_{ua}$ — ACI 318-19 Table 17.5.2

Variables

$A_{se,N}$ [in.^{2}]	f_{uta} [psi]
0.10	114,004

Calculations

N_{sa} [lb]
11,244

Results

N_{sa} [lb]	ϕ_{steel}	$\phi\ N_{sa}$ [lb]	N_{ua} [lb]
11,244	0.750	8,433	1,667

3.2 Concrete Breakout Failure

$N_{cbg} = \left(\frac{A_{Nc}}{A_{Nc0}}\right) \psi_{ec,N}\ \psi_{ed,N}\ \psi_{c,N}\ \psi_{cp,N}\ N_b$ — ACI 318-19 Eq. (17.6.2.1b)

$\phi\ N_{cbg} \geq N_{ua}$ — ACI 318-19 Table 17.5.2

A_{Nc} see ACI 318-19, Section 17.6.2.1, Fig. R 17.6.2.1(b)

$A_{Nc0} = 9\ h_{ef}^2$ — ACI 318-19 Eq. (17.6.2.1.4)

$\psi_{ec,N} = \left(\frac{1}{1 + \frac{2\ e'_N}{3\ h_{ef}}}\right) \leq 1.0$ — ACI 318-19 Eq. (17.6.2.3.1)

$\psi_{ed,N} = 0.7 + 0.3 \left(\frac{c_{a,min}}{1.5 h_{ef}}\right) \leq 1.0$ — ACI 318-19 Eq. (17.6.2.4.1b)

$\psi_{cp,N} = \text{MAX}\left(\frac{c_{a,min}}{c_{ac}}, \frac{1.5 h_{ef}}{c_{ac}}\right) \leq 1.0$ — ACI 318-19 Eq. (17.6.2.6.1b)

$N_b = k_c\ \lambda_a\ \sqrt{f'_c}\ h_{ef}^{1.5}$ — ACI 318-19 Eq. (17.6.2.2.1)

Variables

h_{ef} [in.]	$e_{c1,N}$ [in.]	$e_{c2,N}$ [in.]	$c_{a,min}$ [in.]	$\psi_{c,N}$
3.250	0.679	1.980	∞	1.000

c_{ac} [in.]	k_c	λ_a	f'_c [psi]
10.000	17	1.000	4,000

Calculations

A_{Nc} [in.^{2}]	A_{Nc0} [in.^{2}]	$\psi_{ec1,N}$	$\psi_{ec2,N}$	$\psi_{ed,N}$	$\psi_{cp,N}$	N_b [lb]
218.19	95.06	0.878	0.711	1.000	1.000	6,299

Results

N_{cbg} [lb]	$\phi_{concrete}$	$\phi\ N_{cbg}$ [lb]	N_{ua} [lb]
9,026	0.650	5,867	3,090

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4 Shear load

	Load V_{ua} [lb]	Capacity ϕ V_n [lb]	Utilization $\beta_V = V_{ua}/\phi$ V_n	Status
Steel Strength*	336	4,471	8	OK
Steel failure (with lever arm)*	N/A	N/A	N/A	N/A
Pryout Strength**	1,113	18,760	6	OK
Concrete edge failure in direction **	N/A	N/A	N/A	N/A

* highest loaded anchor **anchor group (relevant anchors)

4.1 Steel Strength

V_{sa} = ESR value refer to ICC-ES ESR-4266
ϕ $V_{steel} \geq V_{ua}$ ACI 318-19 Table 17.5.2

Variables

$A_{se,V}$ [in.^{2}]	f_{uta} [psi]
0.10	114,004

Calculations

V_{sa} [lb]
6,878

Results

V_{sa} [lb]	ϕ_{steel}	ϕ V_{sa} [lb]	V_{ua} [lb]
6,878	0.650	4,471	336

4.2 Pryout Strength

$V_{cpg} = k_{cp} \left[\left(\frac{A_{Nc}}{A_{Nc0}} \right) \psi_{ec,N} \psi_{ed,N} \psi_{c,N} \psi_{cp,N} N_b \right]$ ACI 318-19 Eq. (17.7.3.1b)

$\phi V_{cpg} \geq V_{ua}$ ACI 318-19 Table 17.5.2

A_{Nc} see ACI 318-19, Section 17.6.2.1, Fig. R 17.6.2.1(b)

$A_{Nc0} = 9 h_{ef}^2$ ACI 318-19 Eq. (17.6.2.1.4)

$\psi_{ec,N} = \left(\frac{1}{1 + \frac{2 e'_N}{3 h_{ef}}} \right) \leq 1.0$ ACI 318-19 Eq. (17.6.2.3.1)

$\psi_{ed,N} = 0.7 + 0.3 \left(\frac{c_{a,min}}{1.5 h_{ef}} \right) \leq 1.0$ ACI 318-19 Eq. (17.6.2.4.1b)

$\psi_{cp,N} = \text{MAX}\left(\frac{c_{a,min}}{c_{ac}}, \frac{1.5 h_{ef}}{c_{ac}} \right) \leq 1.0$ ACI 318-19 Eq. (17.6.2.6.1b)

$N_b = k_c \lambda_a \sqrt{f'_c} h_{ef}^{1.5}$ ACI 318-19 Eq. (17.6.2.2.1)

Variables

k_{cp}	h_{ef} [in.]	$e_{c1,N}$ [in.]	$e_{c2,N}$ [in.]	$c_{a,min}$ [in.]
2	3.250	1.008	0.280	∞

$\psi_{c,N}$	c_{ac} [in.]	k_c	λ_a	f'_c [psi]
1.000	10.000	17	1.000	4,000

Calculations

A_{Nc} [in.^{2}]	A_{Nc0} [in.^{2}]	$\psi_{ec1,N}$	$\psi_{ec2,N}$	$\psi_{ed,N}$	$\psi_{cp,N}$	N_b [lb]
258.05	95.06	0.829	0.946	1.000	1.000	6,299

Results

V_{cpg} [lb]	$\phi_{concrete}$	ϕV_{cpg} [lb]	V_{ua} [lb]
26,800	0.700	18,760	1,113

5 Combined tension and shear loads, per ACI 318-19 section 17.8

β_N	β_V	ζ	Utilization $\beta_{N,V}$ [%]	Status
0.527	0.075	5/3	36	OK

$\beta_{NV} = \beta_N^{\zeta} + \beta_V^{\zeta} <= 1$

Company:		Page:	44
Address:		Specifier:	
Phone I Fax:	|	E-Mail:	
Design:	Concrete - Apr 7, 2025 (1)	Date:	4/25/2025
Fastening point:			

6 Warnings

- The anchor design methods in PROFIS Engineering require rigid anchor plates per current regulations (AS 5216:2021, ETAG 001/Annex C, EOTA TR029 etc.). This means load re-distribution on the anchors due to elastic deformations of the anchor plate are not considered - the anchor plate is assumed to be sufficiently stiff, in order not to be deformed when subjected to the design loading. PROFIS Engineering calculates the minimum required anchor plate thickness with CBFEM to limit the stress of the anchor plate based on the assumptions explained above. The proof if the rigid anchor plate assumption is valid is not carried out by PROFIS Engineering. Input data and results must be checked for agreement with the existing conditions and for plausibility!
- The equations presented in this report are based on imperial units. When inputs are displayed in metric units, the user should be aware that the equations remain in their imperial format.
- Condition A applies where the potential concrete failure surfaces are crossed by supplementary reinforcement proportioned to tie the potential concrete failure prism into the structural member. Condition B applies where such supplementary reinforcement is not provided, or where pullout or pryout strength governs.
- Refer to the manufacturer's product literature for cleaning and installation instructions.
- For additional information about ACI 318 strength design provisions, please go to https://viewer.joomag.com/profis-design-guide-us-en-summer-2021/0841849001625154758?short&/
- Hilti post-installed anchors shall be installed in accordance with the Hilti Manufacturer's Printed Installation Instructions (MPII). Reference ACI 318-19, Section 26.7.

Fastening meets the design criteria!

Company:		Page:	45
Address:		Specifier:	
Phone I Fax:	|	E-Mail:	
Design:	Concrete - Apr 7, 2025 (1)	Date:	4/25/2025
Fastening point:			

7 Installation data

Profile: Steel pipe, PIPE2-1/2STD; (L x W x T) = 2.880 in. x 2.880 in. x 0.203 in.

Hole diameter in the fixture: d_f = 0.562 in.

Plate thickness (input): 0.250 in.

Recommended plate thickness: not calculated

Drilling method: Hammer drilled

Cleaning: Manual cleaning of the drilled hole according to instructions for use is required.

Anchor type and diameter: Kwik Bolt TZ2 - CS 1/2 (3 1/4)

Item number: 2210255 KB-TZ2 1/2x4 1/2

Maximum installation torque: 602 in.lb

Hole diameter in the base material: 0.500 in.

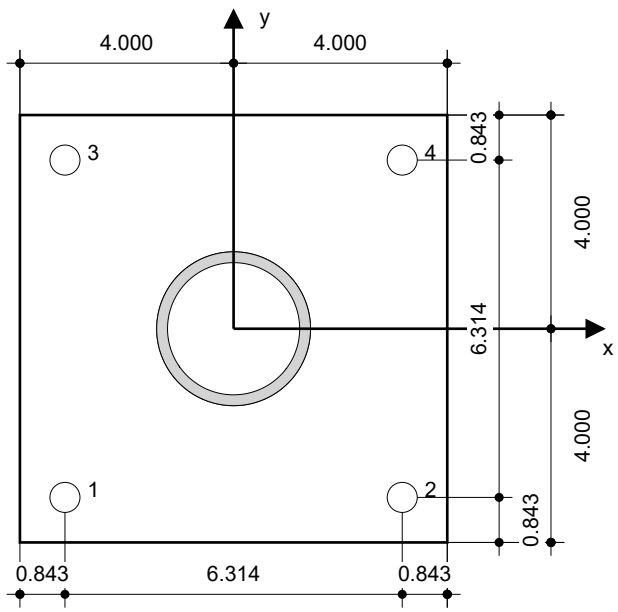
Hole depth in the base material: 4.250 in.

Minimum thickness of the base material: 5.500 in.

Hilti ∅ 1/2 in Kwik Bolt TZ2 - CS with 3.75 in nominal embedment depth per ICC-ES ESR-4266 , Hammer drill bit installation per MPII

7.1 Recommended accessories

Drilling	Cleaning	Setting
• Suitable Rotary Hammer • Properly sized drill bit	• Manual blow-out pump	• Torque controlled cordless impact tool • Torque wrench • Hammer



Coordinates Anchor [in.]

Anchor	x	y	c_{-x}	c_{+x}	c_{-y}	c_{+y}
1	-3.157	-3.157	-	-	-	-
2	3.157	-3.157	-	-	-	-
3	-3.157	3.157	-	-	-	-
4	3.157	3.157	-	-	-	-

8 Remarks; Your Cooperation Duties

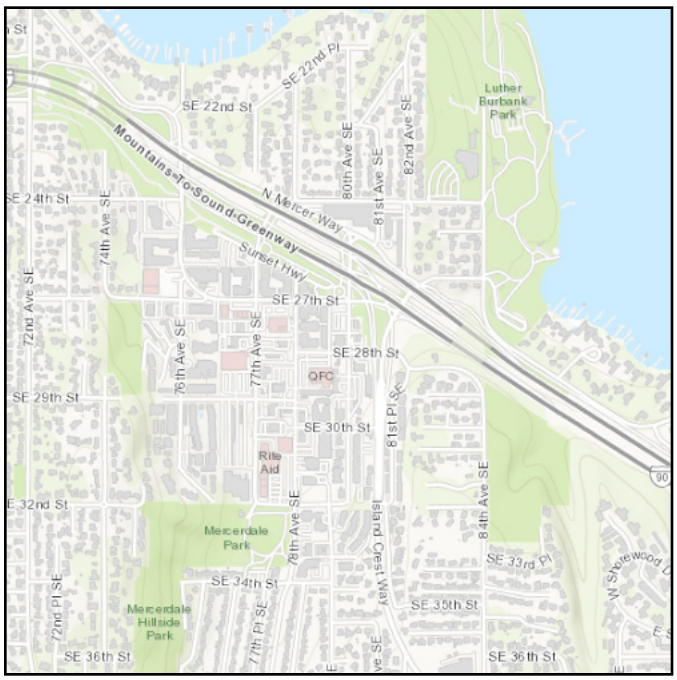
- Any and all information and data contained in the Software concern solely the use of Hilti products and are based on the principles, formulas and security regulations in accordance with Hilti's technical directions and operating, mounting and assembly instructions, etc., that must be strictly complied with by the user. All figures contained therein are average figures, and therefore use-specific tests are to be conducted prior to using the relevant Hilti product. The results of the calculations carried out by means of the Software are based essentially on the data you put in. Therefore, you bear the sole responsibility for the absence of errors, the completeness and the relevance of the data to be put in by you. Moreover, you bear sole responsibility for having the results of the calculation checked and cleared by an expert, particularly with regard to compliance with applicable norms and permits, prior to using them for your specific facility. The Software serves only as an aid to interpret norms and permits without any guarantee as to the absence of errors, the correctness and the relevance of the results or suitability for a specific application.
- You must take all necessary and reasonable steps to prevent or limit damage caused by the Software. In particular, you must arrange for the regular backup of programs and data and, if applicable, carry out the updates of the Software offered by Hilti on a regular basis. If you do not use the AutoUpdate function of the Software, you must ensure that you are using the current and thus up-to-date version of the Software in each case by carrying out manual updates via the Hilti Website. Hilti will not be liable for consequences, such as the recovery of lost or damaged data or programs, arising from a culpable breach of duty by you.

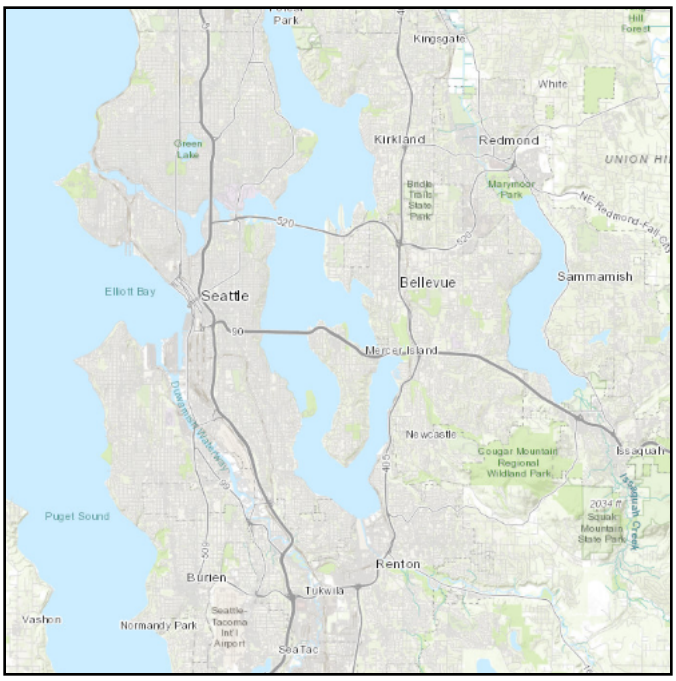
ASCE Hazards Report

Address:
7900 SE 28th St
Mercer Island, Washington
98040

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

Latitude: 47.585757
Longitude: -122.232083
Elevation: 93.02845448937765 ft (NAVD 88)





Wind

Results:

Wind Speed	98 Vmph
10-year MRI	67 Vmph
25-year MRI	74 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: Mon Apr 07 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 :	1.394	S_{D1} :	N/A
S_1 :	0.485	T_L :	6
F_a :	1.2	PGA :	0.596
F_v :	N/A	PGA_M :	0.715
S_{MS} :	1.672	F_{PGA} :	1.2
S_{M1} :	N/A	I_e :	1
S_{DS} :	1.115	C_v :	1.379

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

Data Accessed: Mon Apr 07 2025

Date Source: USGS Seismic Design Maps

Ice

Results:

Ice Thickness:	1.00 in.
Concurrent Temperature:	25 F
Gust Speed	30 mph
Data Source:	Standard ASCE/SEI 7-16, Figs. 10-2 through 10-8
Date Accessed:	Mon Apr 07 2025

Ice thicknesses on structures in exposed locations at elevations higher than the surrounding terrain and in valleys and gorges may exceed the mapped values.

Values provided are equivalent radial ice thicknesses due to freezing rain with concurrent 3-second gust speeds, for a 500-year mean recurrence interval, and temperatures concurrent with ice thicknesses due to freezing rain. Thicknesses for ice accretions caused by other sources shall be obtained from local meteorological studies. Ice thicknesses in exposed locations at elevations higher than the surrounding terrain and in valleys and gorges may exceed the mapped values.

Snow

Results:

Mapped Elevation:

Data Source:

Date Accessed: Mon Apr 07 2025

In "Case Study" areas, site-specific case studies are required to establish ground snow loads. Extreme local variations in ground snow loads in these areas preclude mapping at this scale.

Ground snow load determination for such sites shall be based on an extreme value statistical analysis of data available in the vicinity of the site using a value with a 2 percent annual probability of being exceeded (50-year mean recurrence interval).

Statutory requirements of the Authority Having Jurisdiction are not included. Site is outside ASCE/SEI 7-16, Table 7.2-5 boundaries. For ground snow loads in this area, see SEAW Snow Load Analysis for Washington, 2nd Ed. (1995). Structural Engineers Association of Washington, Seattle, WA.

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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