



VP Buildings, Inc.

3200 Players Club Circle
Memphis, TN 38125-8843

STRUCTURAL DESIGN DATA

FOR APPROVAL/PERMIT

Project: Millennium Building Systems, LLC Joist Plant
Name: BD0462 Millenium Steel - Joist Plant All Together (REV 1)
Builder PO #: BD0462
Jobsite:

City, State: Lake City, Florida
County: Columbia
Country: United States

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10-25-04

Clifton E. Query, P.E. No. 58888
VP Buildings, Inc.
1140 West Mountain Street
Kernersville, NC 27284



Calculations Package

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 Time: 11:41:24 AM
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Building Loading - Expanded Report

Shape : Joist Plant Phase 1

Loads and Codes - Shape: Joist Plant Phase 1

City: Lake City County: Columbia
 Building Code: 2001 Florida State Building Code
 Building Use: Standard Occupancy Structures
 Allow. Overstress:Frm: 1.03, Sec: 1.03, Brc: 1.03

State: Florida Country: United States
 Built Up: 89AISC
 Cold Form: 96AISI
 Rainfall: 10.00 in per hour

Dead and Collateral Loads

Collateral Gravity: 5.00 psf
 Collateral Uplift: 0.00 psf

Frame Weight (assumed for seismic): 2.50 psf

Side	Type	Mag	Units	Shape	Applied to	Description
A	D	3.630	psf	Entire	Frm	Covering Weight - 24 SSR + Secondary Weight By Others 2.50 : Roof: A
A	D	1.130	psf	Entire	Pur	Covering Weight - 24 SSR : Roof: A
B	D	3.630	psf	Entire	Frm	Covering Weight - 24 SSR + Secondary Weight By Others 2.50 : Roof: B
B	D	1.130	psf	Entire	Pur	Covering Weight - 24 SSR : Roof: B

Live Load

Live Load: 20.00 psf Reducible

LL for Below Eave Canopy: N/A

Wind Load

Wind Speed: 100.00 mph
 Wind Enclosure: Enclosed
 Height Used: 29/6/4 (Type: Eave)
 Base Elevation: 0/0/0
 Primary Zone Strip Width: 52/1/15
 Velocity Pressure: (qz) 25.60 psf
 Topographic Factor: 1.0000
 Directionality Factor: 0.8500
 Wind Exposure (Factor): C (0.979)
 Basic Wind Pressure: 21.30 psf

Gust Factor: 1.0000
 Wind Importance Factor: 1.000
 Least Horiz. Dimension: 652/0/0

NOT Windborne Debris Region
 Parts / Portions Zone Strip Width: 26/0/15
 $qz = 0.00256 * (1.00) * (100.00)^2 * (1.00)$
 The 'Low Rise' Method is Used

Snow Load

Ground Snow Load: 0.00 psf
 Design Snow (Sloped): 0.00 psf
 Snow Accumulation Factor: 1.000
 Snow Importance: 1.000
 Ground / Roof Conversion: 1.00

Snow Exposure Category (Factor): 1 (1.00)
 Thermal Category (Factor): Heated (1.00)
 Unobstructed, Slippery Roof
 Rain Surcharge: 0.00
 Slope Reduction: 1.00
 Slope Used: 0.000 (0.000:12)

Seismic Load

N/A

Side	Type	Mag	Units	Shape	Applied to	Description
1	E	0.016	psf	Spec	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.70 : Wall: 1
1	E	0.016	psf	Spec	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.70 : Wall: 1
1	E	0.016	psf	Spec	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.70 : Wall: 1
1	E	0.016	psf	Spec	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.70 : Wall: 1
1	E	0.016	psf	Spec	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.70 : Wall: 1
1	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 1
1	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 1
1	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 1
1	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 1
2	E	0.017	psf	Rect	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.74 : Wall: 2
2	E	0.017	psf	Rect	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.74 : Wall: 2
2	E	0.017	psf	Rect	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.74 : Wall: 2
2	E	0.017	psf	Rect	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.74 : Wall: 2
2	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 2
2	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 2
2	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 2
2	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 2
4	E	0.015	psf	Rect	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.52 : Wall: 4
4	E	0.015	psf	Rect	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.52 : Wall: 4
4	E	0.015	psf	Rect	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.52 : Wall: 4
4	E	0.015	psf	Rect	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.52 : Wall: 4



Calculations Package

4	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 4
4	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 4
4	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 4
4	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 4
5	E	0.017	psf	Spec	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.77 : Wall: 5
5	E	0.017	psf	Spec	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.77 : Wall: 5
5	E	0.017	psf	Spec	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.77 : Wall: 5
5	E	0.017	psf	Spec	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.77 : Wall: 5
5	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 5
5	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 5
5	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 5
5	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 5
6	E	0.017	psf	Rect	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.73 : Wall: 6
6	E	0.017	psf	Rect	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.73 : Wall: 6
6	E	0.017	psf	Rect	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.73 : Wall: 6
6	E	0.017	psf	Rect	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.73 : Wall: 6
6	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 6
6	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 6
6	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 6
6	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 6
A	E	0.111	psf	Entire	Frm	Seismic: Covering Weight - 24 SSR + Secondary Weight By Others 2.50 + Seismic (Includes 5.000 Collateral 2.500 Frame Weight) : Roof: A
A	E	0.111	psf	Entire	Brc	Seismic: Covering Weight - 24 SSR + Secondary Weight By Others 2.50 + Seismic (Includes 5.000 Collateral 2.500 Frame Weight) : Roof: A
B	E	0.111	psf	Entire	Frm	Seismic: Covering Weight - 24 SSR + Secondary Weight By Others 2.50 + Seismic (Includes 5.000 Collateral 2.500 Frame Weight) : Roof: B
B	E	0.111	psf	Entire	Brc	Seismic: Covering Weight - 24 SSR + Secondary Weight By Others 2.50 + Seismic (Includes 5.000 Collateral 2.500 Frame Weight) : Roof: B

Deflection Conditions

Frames are vertically supporting: Metal Roof Purlins and Panels

Frames are laterally supporting: Metal Wall Girts and Panels

Purlins are supporting: Metal Roof Panels

Girts are supporting: Metal Wall Panels

Per Article 2.9 in the Builder Agreement, VP Buildings assumes that the Builder has called the local Building Official or Project Engineer to obtain all code and loading information for this specific building site.

Design Load Combinations - Purlin

No.	Origin	Factor	Application	Description
1	System	1.000	1.0 D + 1.0 CG + 1.0 L	D + CG + L
2	System	1.000	1.0 D + 1.0 W1>	D + W1>
3	System	1.000	1.0 D + 1.0 <W2	D + <W2
4	System	1.000	1.0 D + 1.0 CG + 0.750 L + 0.750 W1>	D + CG + L + W1>
5	System	1.000	1.0 D + 1.0 CG + 0.750 L + 0.750 <W2	D + CG + L + <W2

Design Load Combinations - Girt

No.	Origin	Factor	Application	Description
1	System	1.000	1.0 W1>	W1>
2	System	1.000	1.0 <W2	<W2

Design Load Combinations - Roof - Panel

No.	Origin	Factor	Application	Description
1	System	1.000	1.0 D + 1.0 L	D + L
2	System	1.000	1.0 D + 1.0 W1>	D + W1>
3	System	1.000	1.0 D + 1.0 <W2	D + <W2

Design Load Combinations - Wall - Panel

No.	Origin	Factor	Application	Description
1	System	1.000	1.0 W1>	W1>
2	System	1.000	1.0 <W2	<W2

Deflection Load Combinations - Purlin

No.	Origin	Factor	Deflection	Application	Description
1	System	1.000	150	1.0 L	L
2	System	1.000	120	1.0 D + 1.0 CG + 1.0 L	D + CG + L

Deflection Load Combinations - Girt

No.	Origin	Factor	Deflection	Application	Description
1	System	1.000	90	1.0 W1>	W1>
2	System	1.000	90	1.0 <W2	<W2

Deflection Load Combinations - Roof - Panel

No.	Origin	Factor	Def H	Def V	Application	Description
1	System	1.000	60	60	1.0 D + 1.0 L	D + L

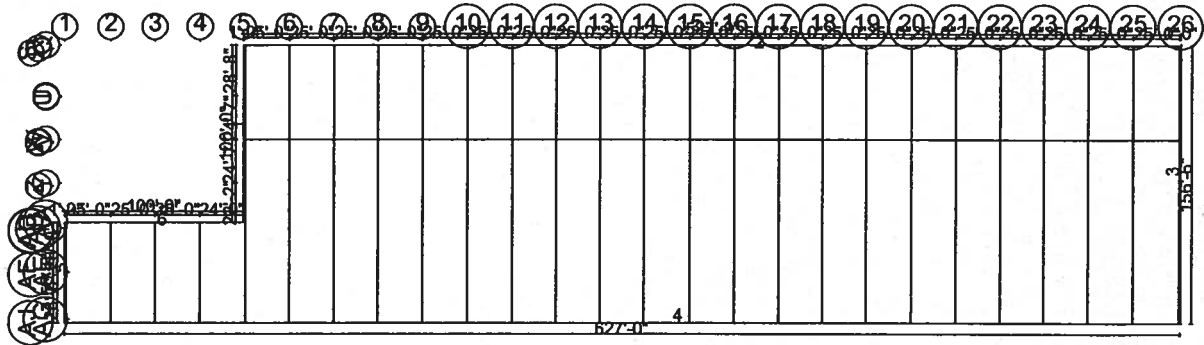
Deflection Load Combinations - Wall - Panel

No.	Origin	Factor	Def H	Def V	Application	Description
1	System	1.000	60	60	1.0 W1>	W1>
2	System	1.000	60	60	1.0 <W2	<W2

Load Type Descriptions

<p>D Material Dead Weight</p> <p>CG Collateral Load for Gravity Cases</p> <p>L Live Load</p> <p>^ASL Alternate Span Live Load, Shifted Left</p> <p>S Snow Load</p> <p>*US1 Unbalanced Snow Load 1, Shifted Left</p> <p>*US2 Unbalanced Snow Load 2, Shifted Left</p> <p>SS Sliding Snow Load</p> <p>PF1 Partial Load, Full, 1 Span</p> <p>PF2 Partial Load, Full, 2 Spans</p> <p>W Wind Load</p> <p><W1 Wind Load, Case 1, Left</p> <p><W2 Wind Load, Case 2, Left</p> <p><W3 Wind Load, Case 3, Left</p> <p><W4 Wind Load, Case 4, Left</p> <p><W5 Wind Load, Case 5, Left</p> <p><W6 Wind Load, Case 6, Left</p> <p>WPR Wind Load, Ridge, Right</p> <p>WPA1 Wind Parallel - Ref A, Case 1</p> <p>WPB1 Wind Parallel - Ref B, Case 1</p> <p>WPC1 Wind Parallel - Ref C, Case 1</p> <p>WPD1 Wind Parallel - Ref D, Case 1</p> <p>WB1> Wind Brace Reaction, Case 1, Right</p> <p>WB2> Wind Brace Reaction, Case 2, Right</p> <p>WB3> Wind Brace Reaction, Case 3, Right</p> <p>WB4> Wind Brace Reaction, Case 4, Right</p> <p>WB5> Wind Brace Reaction, Case 5, Right</p> <p>WB6> Wind Brace Reaction, Case 6, Right</p> <p>E Seismic Load</p> <p><E Seismic Load, Left</p> <p>EG+ Vertical Seismic Effect, Additive</p> <p>EB> Seismic Brace Reaction, Right</p> <p>FL Floor Live Load</p> <p>*FL Alternate Span Floor Live Load, Shifted Left</p> <p>AL Auxiliary Live Load</p> <p>*AL> Auxiliary Live Load, Right, Left</p> <p><*AL Auxiliary Live Load, Left, Left</p> <p>*AL Aux Live, Left</p> <p>*AL>(1) Auxiliary Live Load, Right, Left, Aisle 1</p> <p><*AL(1) Auxiliary Live Load, Left, Left, Aisle 1</p> <p>*AL(1) Aux Live, Left, Aisle 1</p> <p>*AL>(2) Auxiliary Live Load, Right, Left, Aisle 2</p> <p><*AL(2) Auxiliary Live Load, Left, Left, Aisle 2</p> <p>*AL(2) Aux Live, Left, Aisle 2</p> <p>*AL>(3) Auxiliary Live Load, Right, Left, Aisle 3</p> <p><*AL(3) Auxiliary Live Load, Left, Left, Aisle 3</p> <p>*AL(3) Aux Live, Left, Aisle 3</p> <p>*AL>(4) Auxiliary Live Load, Right, Left, Aisle 4</p> <p><*AL(4) Auxiliary Live Load, Left, Left, Aisle 4</p> <p>*AL(4) Aux Live, Left, Aisle 4</p> <p>*AL>(5) Auxiliary Live Load, Right, Left, Aisle 5</p> <p><*AL(5) Auxiliary Live Load, Left, Left, Aisle 5</p>	<p>C Collateral Load</p> <p>CU Collateral Load for Wind Cases</p> <p>ASL^ Alternate Span Live Load, Shifted Right</p> <p>PL2 Partial Live, Full, 2 Spans</p> <p>US1* Unbalanced Snow Load 1, Shifted Right</p> <p>US2* Unbalanced Snow Load 2, Shifted Right</p> <p>SD Snow Drift Load</p> <p>RS Rain Surcharge Load</p> <p>PH1 Partial Load, Half, 1 Span</p> <p>PH2 Partial Load, Half, 2 Spans</p> <p>W1> Wind Load, Case 1, Right</p> <p>W2> Wind Load, Case 2, Right</p> <p>W3> Wind Load, Case 3, Right</p> <p>W4> Wind Load, Case 4, Right</p> <p>W5> Wind Load, Case 5, Right</p> <p>W6> Wind Load, Case 6, Right</p> <p>WP Wind Load, Parallel to Ridge</p> <p>WPL Wind Load, Ridge, Left</p> <p>WPA2 Wind Parallel - Ref A, Case 2</p> <p>WPB2 Wind Parallel - Ref B, Case 2</p> <p>WPC2 Wind Parallel - Ref C, Case 2</p> <p>WPD2 Wind Parallel - Ref D, Case 2</p> <p><WB1 Wind Brace Reaction, Case 1, Left</p> <p><WB2 Wind Brace Reaction, Case 2, Left</p> <p><WB3 Wind Brace Reaction, Case 3, Left</p> <p><WB4 Wind Brace Reaction, Case 4, Left</p> <p><WB5 Wind Brace Reaction, Case 5, Left</p> <p><WB6 Wind Brace Reaction, Case 6, Left</p> <p>E> Seismic Load, Right</p> <p>EG Vertical Seismic Effect</p> <p>EG- Vertical Seismic Effect, Subtractive</p> <p><EB Seismic Brace Reaction, Left</p> <p>FL* Alternate Span Floor Live Load, Shifted Right</p> <p>FD Floor Dead Load</p> <p>AL*> Auxiliary Live Load, Right, Right</p> <p><AL* Auxiliary Live Load, Left, Right</p> <p>AL* Aux Live, Right</p> <p>AL*>(1) Auxiliary Live Load, Right, Right, Aisle 1</p> <p><AL*(1) Auxiliary Live Load, Left, Right, Aisle 1</p> <p>AL*(1) Aux Live, Right, Aisle 1</p> <p>AL*>(2) Auxiliary Live Load, Right, Right, Aisle 2</p> <p><AL*(2) Auxiliary Live Load, Left, Right, Aisle 2</p> <p>AL*(2) Aux Live, Right, Aisle 2</p> <p>AL*>(3) Auxiliary Live Load, Right, Right, Aisle 3</p> <p><AL*(3) Auxiliary Live Load, Left, Right, Aisle 3</p> <p>AL*(3) Aux Live, Right, Aisle 3</p> <p>AL*>(4) Auxiliary Live Load, Right, Right, Aisle 4</p> <p><AL*(4) Auxiliary Live Load, Left, Right, Aisle 4</p> <p>AL*(4) Aux Live, Right, Aisle 4</p> <p>AL*>(5) Auxiliary Live Load, Right, Right, Aisle 5</p> <p><AL*(5) Auxiliary Live Load, Left, Right, Aisle 5</p> <p>AL*(5) Aux Live, Right, Aisle 5</p>
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*AL(5)	Aux Live, Left, Aisle 5	ALB	Aux Live Bracing Reaction
ALB>	Aux Live Bracing Reaction, Right	<ALB	Aux Live Bracing Reaction, Left
WALB>	Wind, Aux Live Bracing Reaction, Right	<WALB	Wind, Aux Live Bracing Reaction, Left
ALB>(1)	Aux Live Bracing Reaction, Right, Aisle 1	<ALB(1)	Aux Live Bracing Reaction, Left, Aisle 1
WALB>(1)	Wind, Aux Live Bracing Reaction, Right, Aisle 1	<WALB(1)	Wind, Aux Live Bracing Reaction, Left, Aisle 1
ALB>(2)	Aux Live Bracing Reaction, Right, Aisle 2	<ALB(2)	Aux Live Bracing Reaction, Left, Aisle 2
WALB>(2)	Wind, Aux Live Bracing Reaction, Right, Aisle 2	<WALB(2)	Wind, Aux Live Bracing Reaction, Left, Aisle 2
ALB>(3)	Aux Live Bracing Reaction, Right, Aisle 3	<ALB(3)	Aux Live Bracing Reaction, Left, Aisle 3
WALB>(3)	Wind, Aux Live Bracing Reaction, Right, Aisle 3	<WALB(3)	Wind, Aux Live Bracing Reaction, Left, Aisle 3
ALB>(4)	Aux Live Bracing Reaction, Right, Aisle 4	<ALB(4)	Aux Live Bracing Reaction, Left, Aisle 4
WALB>(4)	Wind, Aux Live Bracing Reaction, Right, Aisle 4	<WALB(4)	Wind, Aux Live Bracing Reaction, Left, Aisle 4
ALB>(5)	Aux Live Bracing Reaction, Right, Aisle 5	<ALB(5)	Aux Live Bracing Reaction, Left, Aisle 5
WALB>(5)	Wind, Aux Live Bracing Reaction, Right, Aisle 5	<WALB(5)	Wind, Aux Live Bracing Reaction, Left, Aisle 5
WALB	Wind, Aux Live Bracing Reaction	AD	Auxiliary Dead Load
U0	User Defined Load	U1	User Defined Load - 1
U2	User Defined Load - 2	U3	User Defined Load - 3
U4	User Defined Load - 4	U5	User Defined Load - 5
U6	User Defined Load - 6	U7	User Defined Load - 7
U8	User Defined Load - 8	U9	User Defined Load - 9
UB	User Brace Reaction	UB1	User Brace Reaction - 1
UB2	User Brace Reaction - 2	UB3	User Brace Reaction - 3
UB4	User Brace Reaction - 4	UB5	User Brace Reaction - 5
UB6	User Brace Reaction - 6	UB7	User Brace Reaction - 7
UB8	User Brace Reaction - 8	UB9	User Brace Reaction - 9
R	Rain Load	T	Temperature Load
V	Shear		





Calculations Package

Shape : Copy of BD0462 Millenium Steel Joist Plant 2

Loads and Codes - Shape: Copy of BD0462 Millenium Steel Joist Plant 2

City: Lake City County: Columbia State: Florida Country: United States
 Building Code: 2001 Florida State Building Code Built Up: 89AISC
 Building Use: Standard Occupancy Structures Cold Form: 96AISI
 Allow. Overstress:Frm: 1.03, Sec: 1.03, Brc: 1.03 Rainfall: 10.00 in per hour

Dead and Collateral Loads

Collateral Gravity: 5.00 psf Frame Weight (assumed for seismic): 2.50 psf
 Collateral Uplift: 0.00 psf

Side	Type	Mag	Units	Shape	Applied to	Description
A	D	3.630	psf	Entire	Frm	Covering Weight - 24 SSR + Secondary Weight By Others 2.50 : Roof: A
A	D	1.130	psf	Entire	Pur	Covering Weight - 24 SSR : Roof: A
B	D	3.630	psf	Entire	Frm	Covering Weight - 24 SSR + Secondary Weight By Others 2.50 : Roof: B
B	D	1.130	psf	Entire	Pur	Covering Weight - 24 SSR : Roof: B

Live Load

Live Load: 20.00 psf Reducible LL for Below Eave Canopy: N/A

Wind Load

Wind Speed: 100.00 mph Gust Factor: 1.0000
 Wind Enclosure: Enclosed Wind Importance Factor: 1.000
 Height Used: 27/2/0 (Type: Eave) Least Horiz. Dimension: 652/0/0
 Base Elevation: 0/0/0
 Primary Zone Strip Width: 52/1/15 NOT Windborne Debris Region
 Velocity Pressure: (qz) 25.60 psf Parts / Portions Zone Strip Width: 26/0/15
 Topographic Factor: 1.0000 $qz = 0.00256 * (1.00) * (100.00)^2 * (1.00)$
 Directionality Factor: 0.8500 The 'Low Rise' Method is Used
 Wind Exposure (Factor): C (0.962)
 Basic Wind Pressure: 20.93 psf

Snow Load

Ground Snow Load: 0.00 psf Snow Exposure Category (Factor): 1 (1.00)
 Design Snow (Sloped): 0.00 psf Thermal Category (Factor): Heated (1.00)
 Snow Accumulation Factor: 1.000 Unobstructed, Slippery Roof
 Snow Importance: 1.000 Rain Surcharge: 0.00
 Ground / Roof Conversion: 1.00 Slope Reduction: 1.00
 Slope Used: 0.000 (0.000:12)

Seismic Load

N/A

Side	Type	Mag	Units	Shape	Applied to	Description
1	E	0.015	psf	Spec	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.53 : Wall: 1
1	E	0.015	psf	Spec	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.53 : Wall: 1
1	E	0.015	psf	Spec	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.53 : Wall: 1
1	E	0.015	psf	Spec	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.53 : Wall: 1
1	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 1
1	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 1
1	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 1
1	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 1
2	E	0.018	psf	Rect	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.83 : Wall: 2
2	E	0.018	psf	Rect	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.83 : Wall: 2
2	E	0.018	psf	Rect	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.83 : Wall: 2
2	E	0.018	psf	Rect	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.83 : Wall: 2
2	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 2
2	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 2
2	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 2
2	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 2
4	E	0.015	psf	Rect	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.53 : Wall: 4
4	E	0.015	psf	Rect	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.53 : Wall: 4
4	E	0.015	psf	Rect	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.53 : Wall: 4
4	E	0.015	psf	Rect	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.53 : Wall: 4
4	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 4
4	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 4
4	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 4

4	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 4
A	E	0.111	psf	Entire	Frm	Seismic: Covering Weight - 24 SSR + Secondary Weight By Others 2.50 + Seismic (Includes 5.000 Collateral 2.500 Frame Weight) : Roof: A
A	E	0.111	psf	Entire	Brc	Seismic: Covering Weight - 24 SSR + Secondary Weight By Others 2.50 + Seismic (Includes 5.000 Collateral 2.500 Frame Weight) : Roof: A
B	E	0.111	psf	Entire	Frm	Seismic: Covering Weight - 24 SSR + Secondary Weight By Others 2.50 + Seismic (Includes 5.000 Collateral 2.500 Frame Weight) : Roof: B
B	E	0.111	psf	Entire	Brc	Seismic: Covering Weight - 24 SSR + Secondary Weight By Others 2.50 + Seismic (Includes 5.000 Collateral 2.500 Frame Weight) : Roof: B

Deflection Conditions

Frames are vertically supporting: Metal Roof Purlins and Panels

Frames are laterally supporting: Metal Wall Girts and Panels

Purlins are supporting: Metal Roof Panels

Girts are supporting: Metal Wall Panels

Per Article 2.9 in the Builder Agreement, VP Buildings assumes that the Builder has called the local Building Official or Project Engineer to obtain all code and loading information for this specific building site.

Design Load Combinations - Purlin

No.	Origin	Factor	Application	Description
1	System	1.000	1.0 D + 1.0 CG + 1.0 L	D + CG + L
2	System	1.000	1.0 D + 1.0 W1>	D + W1>
3	System	1.000	1.0 D + 1.0 <W2	D + <W2
4	System	1.000	1.0 D + 1.0 CG + 0.750 L + 0.750 W1>	D + CG + L + W1>
5	System	1.000	1.0 D + 1.0 CG + 0.750 L + 0.750 <W2	D + CG + L + <W2

Design Load Combinations - Girt

No.	Origin	Factor	Application	Description
1	System	1.000	1.0 W1>	W1>
2	System	1.000	1.0 <W2	<W2

Design Load Combinations - Roof - Panel

No.	Origin	Factor	Application	Description
1	System	1.000	1.0 D + 1.0 L	D + L
2	System	1.000	1.0 D + 1.0 W1>	D + W1>
3	System	1.000	1.0 D + 1.0 <W2	D + <W2

Design Load Combinations - Wall - Panel

No.	Origin	Factor	Application	Description
1	System	1.000	1.0 W1>	W1>
2	System	1.000	1.0 <W2	<W2

Deflection Load Combinations - Framing

No.	Origin	Factor	Def H	Def V	Application	Description
1	System	1.000	0	180	1.0 L	L
2	System	1.000	0	120	1.0 D + 1.0 CG + 1.0 L	D + CG + L
3	System	1.000	60	0	0.700 W1>	W1>
4	System	1.000	60	0	0.700 <W1	<W1
5	System	1.000	60	0	0.700 W2>	W2>
6	System	1.000	60	0	0.700 <W2	<W2
7	System	1.000	60	0	0.700 WPL	WPL
8	System	1.000	60	0	0.700 WPR	WPR

Deflection Load Combinations - Purlin

No.	Origin	Factor	Deflection	Application	Description
1	System	1.000	150	1.0 L	L
2	System	1.000	120	1.0 D + 1.0 CG + 1.0 L	D + CG + L

Deflection Load Combinations - Girt

No.	Origin	Factor	Deflection	Application	Description
1	System	1.000	90	1.0 W1>	W1>
2	System	1.000	90	1.0 <W2	<W2

Deflection Load Combinations - Roof - Panel

No.	Origin	Factor	Def H	Def V	Application	Description
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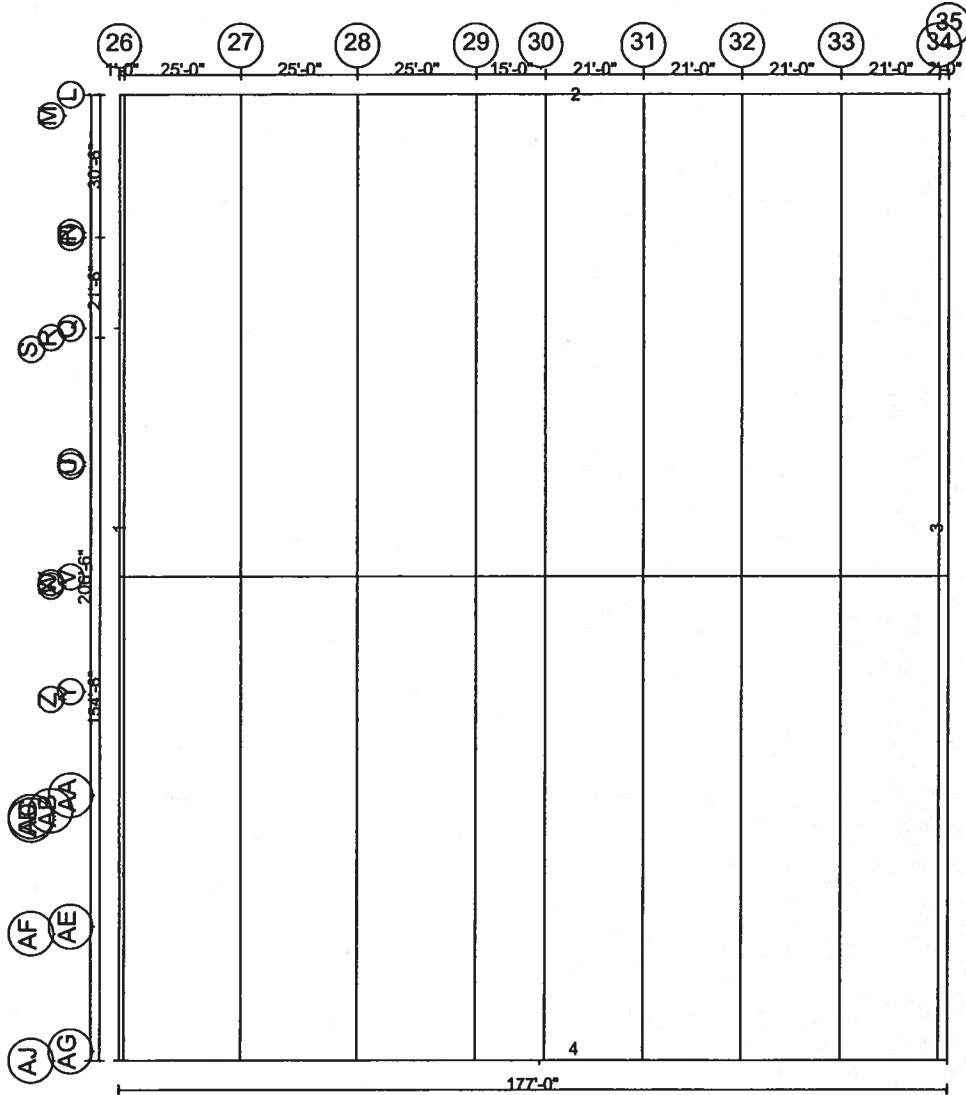
Calculations Package

Date: 10/21/2004
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1	System	1.000	60	60	1.0 D+1.0 L	D+L
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Deflection Load Combinations - Wall - Panel

No.	Origin	Factor	Def H	Def V	Application	Description
1	System	1.000	60	60	1.0 W1>	W1>
2	System	1.000	60	60	1.0 <W2	<W2





Calculations Package

Date: 10/21/2004
 Time: 11:41:24 AM
 Page: 9 of 55

Shape : BD0462 Millenium Steel Phase 2 lean-to

Loads and Codes - Shape: BD0462 Millenium Steel Phase 2 lean-to

City: Lake City County: Columbia
 Building Code: 2001 Florida State Building Code
 Building Use: Standard Occupancy Structures
 Allow. Overstress: Frm: 1.03, Sec: 1.03, Brc: 1.03

State: Florida Country: United States
 Built Up: 89AISC
 Cold Form: 96AISI
 Rainfall: 10.00 in per hour

Dead and Collateral Loads

Collateral Gravity: 5.00 psf
 Collateral Uplift: 0.00 psf

Frame Weight (assumed for seismic): 2.50 psf

Side	Type	Mag	Units	Shape	Applied to	Description
A	D	3.630	psf	Entire	Frm	Covering Weight - 24 SSR + Secondary Weight By Others 2.50 : Roof: A
A	D	1.130	psf	Entire	Pur	Covering Weight - 24 SSR : Roof: A

Live Load

Live Load: 20.00 psf Reducible

LL for Below Eave Canopy: N/A

Wind Load

Wind Speed: 100.00 mph
 Wind Enclosure: Enclosed
 Height Used: 26/1/0 (Type: Mean)
 Base Elevation: 0/0/0
 Primary Zone Strip Width: 21/5/12
 Velocity Pressure: (qz) 25.60 psf
 Topographic Factor: 1.0000
 Directionality Factor: 0.8500
 Wind Exposure (Factor): C (0.954)
 Basic Wind Pressure: 20.75 psf

Gust Factor: 1.0000
 Wind Importance Factor: 1.000
 Least Horiz. Dimension: 268/6/0
 NOT Windborne Debris Region
 Parts / Portions Zone Strip Width: 10/8/14
 $qz = 0.00256 * (1.00) * (100.00)^2 * (1.00)$
 The 'Low Rise' Method is Used

Snow Load

Ground Snow Load: 0.00 psf
 Design Snow (Sloped): 0.00 psf
 Snow Accumulation Factor: 1.000
 Snow Importance: 1.000
 Ground / Roof Conversion: 1.00

Snow Exposure Category (Factor): 1 (1.00)
 Thermal Category (Factor): Heated (1.00)
 Unobstructed, Slippery Roof
 Rain Surcharge: 0.00
 Slope Reduction: 1.00
 Slope Used: 0.000 (0.000:12)

Seismic Load

N/A

Side	Type	Mag	Units	Shape	Applied to	Description
1	E	0.018	psf	Spec	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.88 : Wall: 1
1	E	0.018	psf	Spec	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.88 : Wall: 1
1	E	0.018	psf	Spec	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.88 : Wall: 1
1	E	0.018	psf	Spec	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.88 : Wall: 1
1	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 1
1	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 1
1	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 1
1	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 1
1	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 1
4	E	0.019	psf	Rect	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.95 : Wall: 4
4	E	0.019	psf	Rect	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.95 : Wall: 4
4	E	0.019	psf	Rect	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.95 : Wall: 4
4	E	0.019	psf	Rect	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.95 : Wall: 4
4	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 4
4	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 4
4	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 4
4	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 4
A	E	0.111	psf	Entire	Frm	Seismic: Covering Weight - 24 SSR + Secondary Weight By Others 2.50 + Seismic (Includes 5.000 Collateral 2.500 Frame Weight) : Roof: A
A	E	0.111	psf	Entire	Brc	Seismic: Covering Weight - 24 SSR + Secondary Weight By Others 2.50 + Seismic (Includes 5.000 Collateral 2.500 Frame Weight) : Roof: A

Deflection Conditions

Frames are vertically supporting: Metal Roof Purlins and Panels
 Frames are laterally supporting: Metal Wall Girts and Panels

Purlins are supporting: Metal Roof Panels
 Girts are supporting: Metal Wall Panels

Per Article 2.9 in the Builder Agreement, VP Buildings assumes that the Builder has called the local Building Official or Project Engineer to obtain all code and loading information for this specific building site.

Design Load Combinations - Purlin

No.	Origin	Factor	Application	Description
1	System	1.000	1.0 D + 1.0 CG + 1.0 L	D + CG + L
2	System	1.000	1.0 D + 1.0 W1>	D + W1>
3	System	1.000	1.0 D + 1.0 <W2	D + <W2
4	System	1.000	1.0 D + 1.0 CG + 0.750 L + 0.750 W1>	D + CG + L + W1>
5	System	1.000	1.0 D + 1.0 CG + 0.750 L + 0.750 <W2	D + CG + L + <W2

Design Load Combinations - Girt

No.	Origin	Factor	Application	Description
1	System	1.000	1.0 W1>	W1>
2	System	1.000	1.0 <W2	<W2

Design Load Combinations - Roof - Panel

No.	Origin	Factor	Application	Description
1	System	1.000	1.0 D + 1.0 L	D + L
2	System	1.000	1.0 D + 1.0 W1>	D + W1>
3	System	1.000	1.0 D + 1.0 <W2	D + <W2

Design Load Combinations - Wall - Panel

No.	Origin	Factor	Application	Description
1	System	1.000	1.0 W1>	W1>
2	System	1.000	1.0 <W2	<W2

Deflection Load Combinations - Framing

No.	Origin	Factor	Def H	Def V	Application	Description
1	System	1.000	0	180	1.0 L	L
2	System	1.000	0	120	1.0 D + 1.0 CG + 1.0 L	D + CG + L
3	System	1.000	60	0	0.700 W1>	W1>
4	System	1.000	60	0	0.700 <W1	<W1
5	System	1.000	60	0	0.700 W2>	W2>
6	System	1.000	60	0	0.700 <W2	<W2
7	System	1.000	60	0	0.700 WPL	WPL
8	System	1.000	60	0	0.700 WPR	WPR

Deflection Load Combinations - Purlin

No.	Origin	Factor	Deflection	Application	Description
1	System	1.000	150	1.0 L	L
2	System	1.000	120	1.0 D + 1.0 CG + 1.0 L	D + CG + L

Deflection Load Combinations - Girt

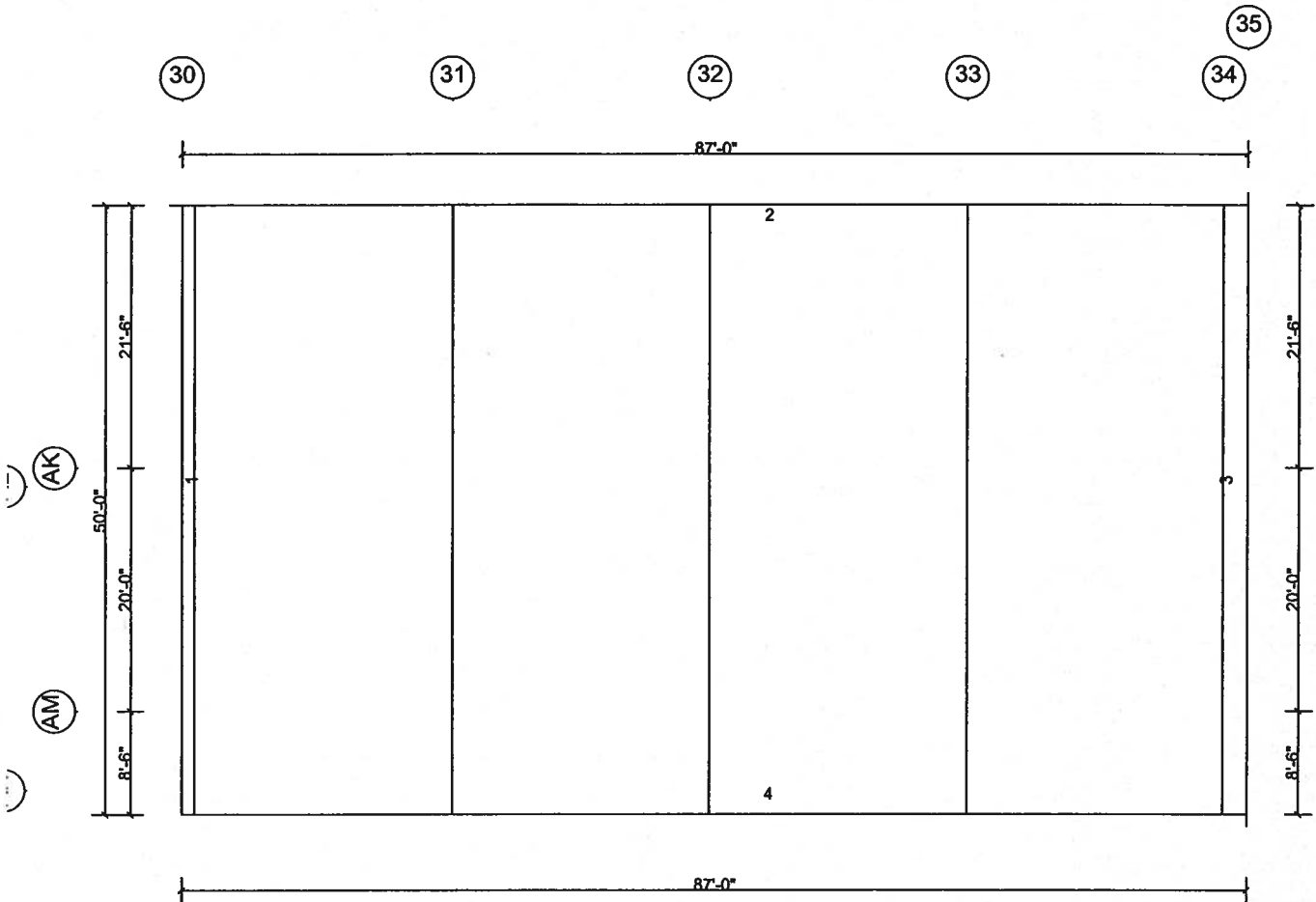
No.	Origin	Factor	Deflection	Application	Description
1	System	1.000	90	1.0 W1>	W1>
2	System	1.000	90	1.0 <W2	<W2

Deflection Load Combinations - Roof - Panel

No.	Origin	Factor	Def H	Def V	Application	Description
1	System	1.000	60	60	1.0 D + 1.0 L	D + L

Deflection Load Combinations - Wall - Panel

No.	Origin	Factor	Def H	Def V	Application	Description
1	System	1.000	60	60	1.0 W1>	W1>
2	System	1.000	60	60	1.0 <W2	<W2



Shape : BD0462 Millenium Steel Joist Plant 3

Loads and Codes - Shape: BD0462 Millenium Steel Joist Plant 3

City: Lake City County: Columbia
 Building Code: 2001 Florida State Building Code
 Building Use: Standard Occupancy Structures
 Allow. Overstress:Frm: 1.03, Sec: 1.03, Brc: 1.03

State: Florida
 Built Up: 89AISC
 Cold Form: 96AISI
 Rainfall: 10.00 in per hour

Country: United States

Dead and Collateral Loads

Collateral Gravity: 5.00 psf
 Collateral Uplift: 0.00 psf

Frame Weight (assumed for seismic): 2.50 psf

Side	Type	Mag	Units	Shape	Applied to	Description
A	D	3.630	psf	Entire	Frm	Covering Weight - 24 SSR + Secondary Weight By Others 2.50 : Roof: A
A	D	1.130	psf	Entire	Pur	Covering Weight - 24 SSR : Roof: A

Live Load

Live Load: 20.00 psf Reducible

LL for Below Eave Canopy: N/A

Wind Load

Wind Speed: 100.00 mph
 Wind Enclosure: Enclosed
 Height Used: 39/1/4 (Type: Mean)
 Base Elevation: 0/0/0
 Primary Zone Strip Width: 31/3/6

Gust Factor: 1.0000
 Wind Importance Factor: 1.000
 Least Horiz. Dimension: 268/6/0
 NOT Windborne Debris Region



Calculations Package

Velocity Pressure: (qz) 25.60 psf
 Topographic Factor: 1.0000
 Directionality Factor: 0.8500
 Wind Exposure (Factor): C (1.039)
 Basic Wind Pressure: 22.60 psf

Parts / Portions Zone Strip Width: 15/7/11
 $qz = 0.00256 * (1.00) * (100.00)^2 * (1.00)$
 The 'Low Rise' Method is Used

Snow Load

Ground Snow Load: 0.00 psf
 Design Snow (Sloped): 0.00 psf
 Snow Accumulation Factor: 1.000
 Snow Importance: 1.000
 Ground / Roof Conversion: 1.00

Snow Exposure Category (Factor): 1 (1.00)
 Thermal Category (Factor): Heated (1.00)
 Unobstructed, Slippery Roof
 Rain Surcharge: 0.00
 Slope Reduction: 1.00
 Slope Used: 0.000 (0.000:12)

Seismic Load

N/A

Side	Type	Mag	Units	Shape	Applied to	Description
1	E	0.018	psf	Spec	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.85 : Wall: 1
1	E	0.018	psf	Spec	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.85 : Wall: 1
1	E	0.018	psf	Spec	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.85 : Wall: 1
1	E	0.018	psf	Spec	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.85 : Wall: 1
1	E	0.720	psf	Spec	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 1
1	E	0.720	psf	Spec	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 1
1	E	0.720	psf	Spec	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 1
1	E	0.720	psf	Spec	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 1
2	E	0.017	psf	Spec	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.76 : Wall: 2
2	E	0.017	psf	Spec	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.76 : Wall: 2
2	E	0.017	psf	Spec	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.76 : Wall: 2
2	E	0.017	psf	Spec	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.76 : Wall: 2
2	E	0.017	psf	Spec	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.76 : Wall: 2
2	E	0.017	psf	Spec	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.76 : Wall: 2
2	E	0.017	psf	Spec	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.76 : Wall: 2
2	E	0.017	psf	Spec	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.76 : Wall: 2
2	E	0.017	psf	Spec	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.76 : Wall: 2
2	E	0.017	psf	Spec	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.76 : Wall: 2
2	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 2
2	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 2
2	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 2
2	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 2
2	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 2
2	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 2
2	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 2
2	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 2
2	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 2
3	E	0.018	psf	Spec	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.85 : Wall: 3
3	E	0.018	psf	Spec	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.85 : Wall: 3
3	E	0.018	psf	Spec	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.85 : Wall: 3
3	E	0.018	psf	Spec	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.85 : Wall: 3
3	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 3
3	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 3
3	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 3
3	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 3
4	E	0.018	psf	Rect	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.87 : Wall: 4
4	E	0.018	psf	Rect	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.87 : Wall: 4
4	E	0.018	psf	Rect	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.87 : Wall: 4
4	E	0.018	psf	Rect	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.87 : Wall: 4
4	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 4
4	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 4
4	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 4
4	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 4
A	E	0.111	psf	Entire	Frm	Seismic: Covering Weight - 24 SSR + Secondary Weight By Others 2.50 + Seismic (Includes 5.000 Collateral 2.500 Frame Weight) : Roof: A
A	E	0.111	psf	Entire	Brc	Seismic: Covering Weight - 24 SSR + Secondary Weight By Others 2.50 + Seismic (Includes 5.000 Collateral 2.500 Frame Weight) : Roof: A

Deflection Conditions

Frames are vertically supporting: Metal Roof Purlins and Panels



Calculations Package

Frames are laterally supporting: Metal Wall Girts and Panels
 Purlins are supporting: Metal Roof Panels
 Girts are supporting: Metal Wall Panels

Per Article 2.9 in the Builder Agreement, VP Buildings assumes that the Builder has called the local Building Official or Project Engineer to obtain all code and loading information for this specific building site.

Design Load Combinations - Purlin

No.	Origin	Factor	Application	Description
1	System	1.000	1.0 D + 1.0 CG + 1.0 L	D + CG + L
2	System	1.000	1.0 D + 1.0 W1>	D + W1>
3	System	1.000	1.0 D + 1.0 <W2	D + <W2
4	System	1.000	1.0 D + 1.0 CG + 0.750 L + 0.750 W1>	D + CG + L + W1>
5	System	1.000	1.0 D + 1.0 CG + 0.750 L + 0.750 <W2	D + CG + L + <W2

Design Load Combinations - Girt

No.	Origin	Factor	Application	Description
1	System	1.000	1.0 W1>	W1>
2	System	1.000	1.0 <W2	<W2

Design Load Combinations - Roof - Panel

No.	Origin	Factor	Application	Description
1	System	1.000	1.0 D + 1.0 L	D + L
2	System	1.000	1.0 D + 1.0 W1>	D + W1>
3	System	1.000	1.0 D + 1.0 <W2	D + <W2

Design Load Combinations - Wall - Panel

No.	Origin	Factor	Application	Description
1	System	1.000	1.0 W1>	W1>
2	System	1.000	1.0 <W2	<W2

Deflection Load Combinations - Purlin

No.	Origin	Factor	Deflection	Application	Description
1	System	1.000	150	1.0 L	L
2	System	1.000	120	1.0 D + 1.0 CG + 1.0 L	D + CG + L

Deflection Load Combinations - Girt

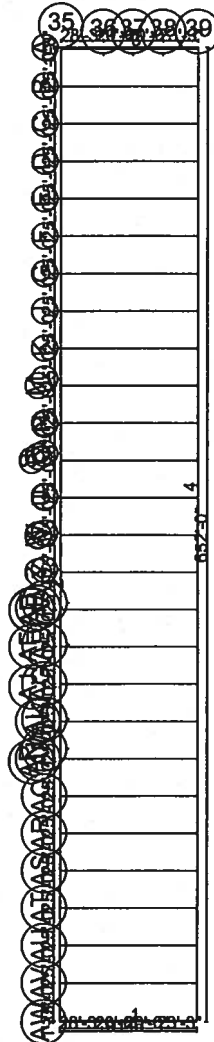
No.	Origin	Factor	Deflection	Application	Description
1	System	1.000	90	1.0 W1>	W1>
2	System	1.000	90	1.0 <W2	<W2

Deflection Load Combinations - Roof - Panel

No.	Origin	Factor	Def H	Def V	Application	Description
1	System	1.000	60	60	1.0 D + 1.0 L	D + L

Deflection Load Combinations - Wall - Panel

No.	Origin	Factor	Def H	Def V	Application	Description
1	System	1.000	60	60	1.0 W1>	W1>
2	System	1.000	60	60	1.0 <W2	<W2





Bracing - Summary Report

DESCRIPTION:

Diagonal Roof Bracing is typically used by VP Buildings to resist lateral wind loads and seismic forces acting perpendicular to the rigid frames. This Diagonal "X"-Bracing transmits the applied loads throughout the roof planes, delivering them to vertical bracing systems, and eventually into the foundation.

ANALYSIS:

VP Buildings Diagonal Bracing is analyzed by the Stiffness Method for the applied wind loads and seismic loads acting on the structure. All diagonal members are assumed to be considered to have pinned connections, while moment frames are typically assumed to be AISC Type 1 Construction (rigid frames).

DESIGN:

Diagonal Bracing is designed for axial forces, using the prevailing AISC Allowable forces acting on the Net Area of each member. Moment frames are also designed in accordance with AISC allowed working stresses.

MATERIAL:

Typical Rod Bracing used by VP Buildings is 65 ksi Structural Steel. Angle bracing is typically 50 ksi steel, tube bracing is 46 ksi, and moment frames are typically designed and constructed from 50 ksi steel.

Shape : Joist Plant Phase 1

Loads and Codes - Shape: Joist Plant Phase 1

City: Lake City County: Columbia State: Florida Country: United States
Building Code: 2001 Florida State Building Code Built Up: 89AISC Rainfall: 10.00 in per hour
Building Use: Standard Occupancy Structures Cold Form: 96AISI Allow. Overstress:
Frm: 1.03, Sec: 1.03, Brc: 1.03

Dead and Collateral Loads

Collateral Gravity: 5.00 psf
Collateral Uplift: 0.00 psf

Roof Covering + Second. Dead Load: 3.63 psf
Frame Weight (assumed for seismic): 2.50 psf

Live Load

Live Load: 20.00 psf Reducible
LL for Below Eave Canopy: N/A

Wind Load

Wind Speed: 100.00 mph
Wind Exposure (Factor): C (0.979)
Parts Wind Exposure Factor: 0.979
Wind Enclosure: Enclosed
Wind Importance Factor: 1.000

Snow Load

Ground Snow Load: 0.00 psf
Design Snow (Sloped): 0.00 psf
Snow Exposure Category (Factor): 1 (1.00)
Snow Importance: 1.000
Thermal Category (Factor): Heated (1.00)
Ground / Roof Conversion: 1.00
% Snow Used in Seismic: 0.00
Seismic Snow Load: 0.00 psf
Unobstructed, Slippery Roof

Seismic Load

N/A

NOT Windborne Debris Region

Base Elevation: 0/0/0
Primary Zone Strip Width: 52/1/15
Parts / Portions Zone Strip Width: 26/0/15
Basic Wind Pressure: 21.30 psf

Deflection Conditions

Frames are vertically supporting: Metal Roof Purlins and Panels
Frames are laterally supporting: Metal Wall Girts and Panels
Purlins are supporting: Metal Roof Panels
Girts are supporting: Metal Wall Panels

Per Article 2.9 in the Builder Agreement, VP Buildings assumes that the Builder has called the local Building Official or Project Engineer to obtain all code and loading information for this specific building site.



Calculations Package

Shape : Copy of BD0462 Millenium Steel Joist Plant 2

Loads and Codes - Shape: Copy of BD0462 Millenium Steel Joist Plant 2

City: Lake City	County: Columbia	State: Florida	Country: United States
Building Code: 2001 Florida State Building Code		Built Up: 89AISC	Rainfall: 10.00 in per hour
Building Use: Standard Occupancy Structures		Cold Form: 96AISI	Allow. Overstress:
			Frm: 1.03, Sec: 1.03, Brc: 1.03

Dead and Collateral Loads

Collateral Gravity: 5.00 psf	Roof Covering + Second. Dead Load: 3.63 psf
Collateral Uplift: 0.00 psf	Frame Weight (assumed for seismic): 2.50 psf

Live Load

Live Load: 20.00 psf Reducible
LL for Below Eave Canopy: N/A

Wind Load

Wind Speed: 100.00 mph
Wind Exposure (Factor): C (0.962)
Parts Wind Exposure Factor: 0.962
Wind Enclosure: Enclosed
Wind Importance Factor: 1.000

Snow Load

Ground Snow Load: 0.00 psf
Design Snow (Sloped): 0.00 psf
Snow Exposure Category (Factor): 1 (1.00)
Snow Importance: 1.000
Thermal Category (Factor): Heated (1.00)
Ground / Roof Conversion: 1.00
% Snow Used in Seismic: 0.00
Seismic Snow Load: 0.00 psf
Unobstructed, Slippery Roof

Seismic Load

N/A

NOT Windborne Debris Region
Base Elevation: 0/0/0
Primary Zone Strip Width: 52/1/15
Parts / Portions Zone Strip Width: 26/0/15
Basic Wind Pressure: 20.93 psf

Deflection Conditions

Frames are vertically supporting: Metal Roof Purlins and Panels
Frames are laterally supporting: Metal Wall Girts and Panels
Purlins are supporting: Metal Roof Panels
Girts are supporting: Metal Wall Panels

Per Article 2.9 in the Builder Agreement, VP Buildings assumes that the Builder has called the local Building Official or Project Engineer to obtain all code and loading information for this specific building site.

Shape : BD0462 Millenium Steel Phase 2 lean-to

Loads and Codes - Shape: BD0462 Millenium Steel Phase 2 lean-to

City: Lake City	County: Columbia	State: Florida	Country: United States
Building Code: 2001 Florida State Building Code		Built Up: 89AISC	Rainfall: 10.00 in per hour
Building Use: Standard Occupancy Structures		Cold Form: 96AISI	Allow. Overstress:
			Frm: 1.03, Sec: 1.03, Brc: 1.03

Dead and Collateral Loads

Collateral Gravity: 5.00 psf	Roof Covering + Second. Dead Load: 3.63 psf
Collateral Uplift: 0.00 psf	Frame Weight (assumed for seismic): 2.50 psf

Live Load

Live Load: 20.00 psf Reducible
LL for Below Eave Canopy: N/A

Wind Load

Wind Speed: 100.00 mph
Wind Exposure (Factor): C (0.954)
Parts Wind Exposure Factor: 0.954
Wind Enclosure: Enclosed
Wind Importance Factor: 1.000

Snow Load

Ground Snow Load: 0.00 psf
Design Snow (Sloped): 0.00 psf
Snow Exposure Category (Factor): 1 (1.00)
Snow Importance: 1.000
Thermal Category (Factor): Heated (1.00)
Ground / Roof Conversion: 1.00
% Snow Used in Seismic: 0.00
Seismic Snow Load: 0.00 psf
Unobstructed, Slippery Roof

Seismic Load

N/A

NOT Windborne Debris Region
Base Elevation: 0/0/0
Primary Zone Strip Width: 21/5/12
Parts / Portions Zone Strip Width: 10/8/14
Basic Wind Pressure: 20.75 psf

Deflection Conditions

Frames are vertically supporting: Metal Roof Purlins and Panels
Frames are laterally supporting: Metal Wall Girts and Panels
Purlins are supporting: Metal Roof Panels
Girts are supporting: Metal Wall Panels

Per Article 2.9 in the Builder Agreement, VP Buildings assumes that the Builder has called the local Building Official or Project Engineer to obtain all code and loading information for this specific building site.



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Shape : BD0462 Millenium Steel Joist Plant 3

Loads and Codes - Shape: BD0462 Millenium Steel Joist Plant 3

City: Lake City	County: Columbia	State: Florida	Country: United States
Building Code: 2001 Florida State Building Code		Built Up: 89AISC	Rainfall: 10.00 in per hour
Building Use: Standard Occupancy Structures		Cold Form: 96AISI	Allow. Overstress:
			Frm: 1.03, Sec: 1.03, Brc: 1.03

Dead and Collateral Loads

Collateral Gravity: 5.00 psf	Roof Covering + Second. Dead Load: 3.63 psf
Collateral Uplift: 0.00 psf	Frame Weight (assumed for seismic): 2.50 psf

Live Load

Live Load: 20.00 psf Reducible
LL for Below Eave Canopy: N/A

Wind Load

Wind Speed: 100.00 mph
Wind Exposure (Factor): C (1.039)
Parts Wind Exposure Factor: 1.039
Wind Enclosure: Enclosed
Wind Importance Factor: 1.000

Snow Load

Ground Snow Load: 0.00 psf
Design Snow (Sloped): 0.00 psf
Snow Exposure Category (Factor): 1 (1.00)
Snow Importance: 1.000
Thermal Category (Factor): Heated (1.00)
Ground / Roof Conversion: 1.00
% Snow Used in Seismic: 0.00
Seismic Snow Load: 0.00 psf
Unobstructed, Slippery Roof

Seismic Load

N/A

NOT Windborne Debris Region
Base Elevation: 0/0/0
Primary Zone Strip Width: 31/3/6
Parts / Portions Zone Strip Width: 15/7/11
Basic Wind Pressure: 22.60 psf

Deflection Conditions

Frames are vertically supporting: Metal Roof Purlins and Panels
Frames are laterally supporting: Metal Wall Girts and Panels
Purlins are supporting: Metal Roof Panels
Girts are supporting: Metal Wall Panels

Per Article 2.9 in the Builder Agreement, VP Buildings assumes that the Builder has called the local Building Official or Project Engineer to obtain all code and loading information for this specific building site.

Secondary - Summary Report

Loads and Codes - Shape: Joist Plant Phase 1

City: Lake City	County: Columbia	State: Florida	Country: United States
Building Code: 2001 Florida State Building Code		Built Up: 89AISC	Rainfall: 10.00 in per hour
Building Use: Standard Occupancy Structures		Cold Form: 96AISI	Allow. Overstress:
			Frm: 1.03, Sec: 1.03, Brc: 1.03

Dead and Collateral Loads

Collateral Gravity: 5.00 psf	Roof Covering + Second. Dead Load: 3.63 psf
Collateral Uplift: 0.00 psf	Frame Weight (assumed for seismic): 2.50 psf

Live Load

Live Load: 20.00 psf Reducible
LL for Below Eave Canopy: N/A

Wind Load

Wind Speed: 100.00 mph
Wind Exposure (Factor): C (0.979)
Parts Wind Exposure Factor: 0.979
Wind Enclosure: Enclosed
Wind Importance Factor: 1.000

Snow Load

Ground Snow Load: 0.00 psf
Design Snow (Sloped): 0.00 psf
Snow Exposure Category (Factor): 1 (1.00)
Snow Importance: 1.000
Thermal Category (Factor): Heated (1.00)
Ground / Roof Conversion: 1.00
% Snow Used in Seismic: 0.00
Seismic Snow Load: 0.00 psf
Unobstructed, Slippery Roof

Seismic Load

N/A

NOT Windborne Debris Region
Base Elevation: 0/0/0
Primary Zone Strip Width: 52/1/15
Parts / Portions Zone Strip Width: 26/0/15
Basic Wind Pressure: 21.30 psf

Per Article 2.9 in the Builder Agreement, VP Buildings assumes that the Builder has called the local Building Official or Project Engineer to obtain all code and loading information for this specific building site.

Design Load Combinations - Purlin

No.	Origin	Factor	Application	Description
1	System	1.000	1.0 D + 1.0 CG + 1.0 L	D + CG + L
2	System	1.000	1.0 D + 1.0 W1>	D + W1>
3	System	1.000	1.0 D + 1.0 <W2	D + <W2
4	System	1.000	1.0 D + 1.0 CG + 0.750 L + 0.750 W1>	D + CG + L + W1>
5	System	1.000	1.0 D + 1.0 CG + 0.750 L + 0.750 <W2	D + CG + L + <W2



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Design Load Combinations - Girt

No.	Origin	Factor	Application	Description
1	System	1.000	1.0 W1>	W1>
2	System	1.000	1.0 <W2	<W2

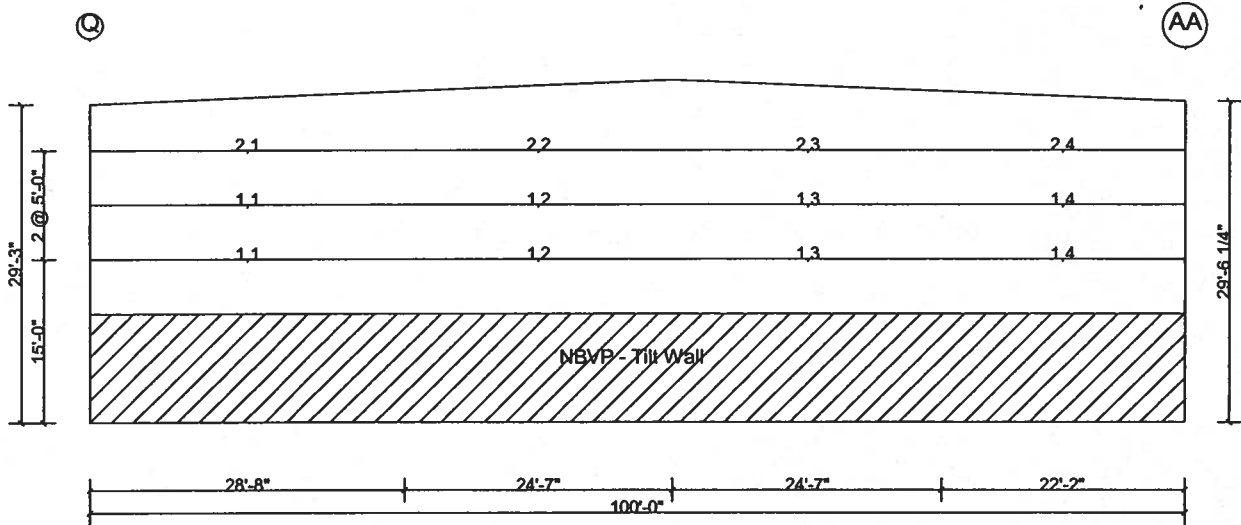
Deflection Load Combinations - Purlin

No.	Origin	Factor	Deflection	Application	Description
1	System	1.000	150	1.0 L	L
2	System	1.000	120	1.0 D + 1.0 CG + 1.0 L	D + CG + L

Deflection Load Combinations - Girt

No.	Origin	Factor	Deflection	Application	Description
1	System	1.000	90	1.0 W1>	W1>
2	System	1.000	90	1.0 <W2	<W2

Wall : 1



SECONDARY ELEVATION AT 5

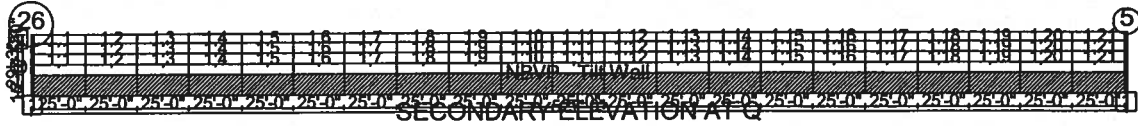
Maximum Secondary Designs for Shape Joist Plant Phase 1 on Side 1

Des Id	Len (ft)	Description	Design Status	Detail Lap (in.)	Exterior				Interior					Exterior							
					% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	Lap (in.)	% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	Lap (in.)
1,1	28.67	8.50x0.092 Z Con	Yes	36					1	18	1.03	0.00	1.03	0.00	1	0.59	0.15	0.59	0.00	1	36
1,2	24.58	8.50x0.065 Z Con	Yes	18	0.59	0.12	0.59	0.00	1	18	0.88	0.38	0.88	0.00	1	0.40	0.20	0.40	0.00	1	18
1,3	24.58	8.50x0.059 Z Con	Yes	18	0.40	0.22	0.40	0.00	1	18	0.88	0.52	1.00	0.00	1	0.65	0.26	0.65	0.00	1	18
1,4	22.17	8.50x0.065 Z Con	Yes	30	0.65	0.29	0.65	0.00	1	24	0.97	0.00	0.97	0.00	1						
2,1	28.67	8.50x0.105 Z Con	Yes	36					1	12	0.97	0.00	0.97	0.00	1	0.58	0.13	0.58	0.00	1	36
2,2	24.58	8.50x0.065 Z Con	Yes	18	0.58	0.10	0.58	0.00	1	18	0.92	0.41	0.98	0.00	1	0.46	0.24	0.46	0.00	1	12
2,3	24.58	8.50x0.059 Z Con	Yes	18	0.46	0.25	0.46	0.00	1	18	0.82	0.55	0.94	0.00	1	0.71	0.29	0.71	0.00	1	18
2,4	22.17	8.50x0.065 Z Con	Yes	30	0.71	0.31	0.71	0.00	1	30	0.90	0.49	1.00	0.00	1						

Maximum Secondary Deflections for Shape Joist Plant Phase 1 on Side 1

Design Id	Segment	Deflection(in.)	Ratio	Location(ft)	Load Case	Description
1	1	1.80	(L/191)	13.00	1	W1>
1	2	-0.17	(L/1752)	32.67	1	W1>
1	3	0.49	(L/599)	64.75	1	W1>
1	4	0.88	(L/302)	90.33	1	W1>
2	1	1.91	(L/181)	13.00	1	W1>
2	2	-0.19	(L/1519)	42.67	2	<W2
2	3	0.58	(L/507)	64.75	1	W1>
2	4	0.88	(L/301)	90.83	1	W1>

Wall : 2



Dimension Key
1 1'-0"
2 4'-3"

Maximum Secondary Designs for Shape Joist Plant Phase 1 on Side 2

Des Id	Len (ft)	Description	Design Status	Detail Lap (in.)	Exterior				Interior				Exterior								
					% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	Lap (in.)	% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	Lap (in.)
1,1	26.00	8.50x0.073 Z Con	Yes	30					1	12	1.03	0.00	1.03	0.00	1	0.62	0.25	0.62	0.00	1	30
1,2	25.00	8.50x0.059 Z Con	Yes	12	0.62	0.21	0.62	0.00	1	12	0.89	0.50	0.99	0.00	1	0.51	0.26	0.51	0.00	1	12
1,3	25.00	8.50x0.059 Z Con	Yes	18	0.51	0.28	0.51	0.00	1	18	0.81	0.51	0.88	0.00	1	0.59	0.29	0.59	0.00	1	18
1,4	25.00	8.50x0.059 Z Con	Yes	18	0.59	0.29	0.59	0.00	1	18	0.88	0.52	1.00	0.00	1	0.56	0.28	0.56	0.00	1	18
1,5	25.00	8.50x0.059 Z Con	Yes	12	0.56	0.28	0.56	0.00	1	12	0.88	0.52	1.01	0.00	1	0.57	0.28	0.57	0.00	1	12
1,6	25.00	8.50x0.059 Z Con	Yes	12	0.57	0.28	0.57	0.00	1	12	0.88	0.52	1.01	0.00	1	0.57	0.28	0.57	0.00	1	12
1,7	25.00	8.50x0.059 Z Con	Yes	12	0.57	0.28	0.57	0.00	1	12	0.88	0.52	1.00	0.00	1	0.57	0.28	0.57	0.00	1	12
1,8	25.00	8.50x0.059 Z Con	Yes	12	0.57	0.28	0.57	0.00	1	12	0.88	0.52	1.00	0.00	1	0.57	0.28	0.57	0.00	1	12
1,9	25.00	8.50x0.059 Z Con	Yes	12	0.57	0.28	0.57	0.00	1	12	0.88	0.52	1.00	0.00	1	0.57	0.28	0.57	0.00	1	12
1,10	25.00	8.50x0.059 Z Con	Yes	12	0.57	0.28	0.57	0.00	1	12	0.88	0.52	1.00	0.00	1	0.57	0.28	0.57	0.00	1	12
1,11	25.00	8.50x0.059 Z Con	Yes	12	0.57	0.28	0.57	0.00	1	12	0.88	0.52	1.00	0.00	1	0.57	0.28	0.57	0.00	1	12
1,12	25.00	8.50x0.059 Z Con	Yes	12	0.57	0.28	0.57	0.00	1	12	0.88	0.52	1.00	0.00	1	0.57	0.28	0.57	0.00	1	12
1,13	25.00	8.50x0.059 Z Con	Yes	12	0.57	0.28	0.57	0.00	1	12	0.88	0.52	1.00	0.00	1	0.57	0.28	0.57	0.00	1	12
1,14	25.00	8.50x0.059 Z Con	Yes	12	0.57	0.28	0.57	0.00	1	12	0.88	0.52	1.00	0.00	1	0.57	0.28	0.57	0.00	1	12
1,15	25.00	8.50x0.059 Z Con	Yes	12	0.57	0.28	0.57	0.00	1	12	0.88	0.52	1.00	0.00	1	0.57	0.28	0.57	0.00	1	12
1,16	25.00	8.50x0.059 Z Con	Yes	12	0.57	0.28	0.57	0.00	1	12	0.88	0.52	1.01	0.00	1	0.57	0.28	0.57	0.00	1	12
1,17	25.00	8.50x0.059 Z Con	Yes	12	0.57	0.28	0.57	0.00	1	12	0.88	0.52	1.01	0.00	1	0.56	0.28	0.56	0.00	1	12
1,18	25.00	8.50x0.059 Z Con	Yes	18	0.56	0.28	0.56	0.00	1	18	0.88	0.52	1.00	0.00	1	0.59	0.29	0.59	0.00	1	18
1,19	25.00	8.50x0.059 Z Con	Yes	18	0.59	0.29	0.59	0.00	1	18	0.81	0.51	0.88	0.00	1	0.51	0.28	0.51	0.00	1	18
1,20	25.00	8.50x0.059 Z Con	Yes	12	0.51	0.26	0.51	0.00	1	12	0.88	0.49	0.99	0.00	1	0.62	0.21	0.62	0.00	1	12
1,21	26.00	8.50x0.073 Z Con	Yes	30	0.62	0.25	0.62	0.00	1	30	1.03	0.00	1.03	0.00	1						

Maximum Secondary Deflections for Shape Joist Plant Phase 1 on Side 2

Design Id	Segment	Deflection(in.)	Ratio	Location(ft)	Load Case	Description
1	1	1.23	(L/245)	12.00	1	W1>
1	2	-0.30	(L/997)	39.50	2	<W2
1	3	0.64	(L/472)	63.00	1	W1>
1	4	0.53	(L/571)	88.50	1	W1>
1	5	0.59	(L/512)	113.50	1	W1>
1	6	0.58	(L/516)	138.50	1	W1>
1	7	0.58	(L/515)	163.50	1	W1>
1	8	0.58	(L/515)	188.50	1	W1>
1	9	0.58	(L/515)	213.50	1	W1>
1	10	0.58	(L/515)	238.50	1	W1>
1	11	0.58	(L/515)	263.50	1	W1>
1	12	0.58	(L/515)	288.50	1	W1>
1	13	0.58	(L/515)	313.50	1	W1>
1	14	0.58	(L/515)	338.50	1	W1>
1	15	0.58	(L/515)	363.50	1	W1>
1	16	0.58	(L/516)	388.50	1	W1>
1	17	0.59	(L/512)	413.50	1	W1>
1	18	0.52	(L/573)	438.50	1	W1>



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1	19	0.64	(L/468)	464.00	1	W1>
1	20	-0.29	(L/1044)	487.50	2	<W2
1	21	1.35	(L/222)	515.00	1	W1>

Wall : 4



Dimension Key
 1 1'-0"
 2 2'-2"

Maximum Secondary Designs for Shape Joist Plant Phase 1 on Side 4

Des Id	Len (ft)	Description	Design Status	Detail Lap (in.)	Exterior				Interior				Exterior								
					% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	Lap (in.)	% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	Lap (in.)					
1,1	26.00	8.50x0.073 Z Con	Yes	30							1.03	0.00	1.03	0.00	1	0.62	0.25	0.62	0.00	1	30
1,2	25.00	8.50x0.059 Z Con	Yes	30	0.62	0.21	0.62	0.00	1	12	0.89	0.50	0.99	0.00	1	0.51	0.26	0.51	0.00	1	12
1,3	25.00	8.50x0.059 Z Con	Yes	18	0.51	0.28	0.51	0.00	1	18	0.81	0.51	0.88	0.00	1	0.59	0.29	0.59	0.00	1	18
1,4	25.00	8.50x0.059 Z Con	Yes	18	0.59	0.29	0.59	0.00	1	18	0.88	0.52	1.00	0.00	1	0.56	0.28	0.56	0.00	1	18
1,5	25.00	8.50x0.059 Z Con	Yes	12	0.56	0.28	0.56	0.00	1	12	0.88	0.52	1.01	0.00	1	0.57	0.28	0.57	0.00	1	12
1,6	25.00	8.50x0.059 Z Con	Yes	12	0.57	0.28	0.57	0.00	1	12	0.88	0.52	1.01	0.00	1	0.57	0.28	0.57	0.00	1	12
1,7	25.00	8.50x0.059 Z Con	Yes	12	0.57	0.28	0.57	0.00	1	12	0.88	0.52	1.00	0.00	1	0.57	0.28	0.57	0.00	1	12
1,8	25.00	8.50x0.059 Z Con	Yes	12	0.57	0.28	0.57	0.00	1	12	0.88	0.52	1.00	0.00	1	0.57	0.28	0.57	0.00	1	12
1,9	25.00	8.50x0.059 Z Con	Yes	12	0.57	0.28	0.57	0.00	1	12	0.88	0.52	1.00	0.00	1	0.57	0.28	0.57	0.00	1	12
1,10	25.00	8.50x0.059 Z Con	Yes	12	0.57	0.28	0.57	0.00	1	12	0.88	0.52	1.00	0.00	1	0.57	0.28	0.57	0.00	1	12
1,11	25.00	8.50x0.059 Z Con	Yes	12	0.57	0.28	0.57	0.00	1	12	0.88	0.52	1.00	0.00	1	0.57	0.28	0.57	0.00	1	12
1,12	25.00	8.50x0.059 Z Con	Yes	12	0.57	0.28	0.57	0.00	1	12	0.88	0.52	1.00	0.00	1	0.57	0.28	0.57	0.00	1	12
1,13	25.00	8.50x0.059 Z Con	Yes	12	0.57	0.28	0.57	0.00	1	12	0.88	0.52	1.00	0.00	1	0.57	0.28	0.57	0.00	1	12
1,14	25.00	8.50x0.059 Z Con	Yes	12	0.57	0.28	0.57	0.00	1	12	0.88	0.52	1.00	0.00	1	0.57	0.28	0.57	0.00	1	12
1,15	25.00	8.50x0.059 Z Con	Yes	12	0.57	0.28	0.57	0.00	1	12	0.88	0.52	1.00	0.00	1	0.57	0.28	0.57	0.00	1	12
1,16	25.00	8.50x0.059 Z Con	Yes	12	0.57	0.28	0.57	0.00	1	12	0.88	0.52	1.00	0.00	1	0.57	0.28	0.57	0.00	1	12
1,17	25.00	8.50x0.059 Z Con	Yes	12	0.57	0.28	0.57	0.00	1	12	0.88	0.52	1.00	0.00	1	0.57	0.28	0.57	0.00	1	12
1,18	25.00	8.50x0.059 Z Con	Yes	12	0.57	0.28	0.57	0.00	1	12	0.88	0.52	1.00	0.00	1	0.57	0.28	0.57	0.00	1	12
1,19	25.00	8.50x0.059 Z Con	Yes	12	0.57	0.28	0.57	0.00	1	12	0.88	0.52	1.00	0.00	1	0.57	0.28	0.57	0.00	1	12
1,20	25.00	8.50x0.059 Z Con	Yes	12	0.57	0.28	0.57	0.00	1	12	0.88	0.52	1.01	0.00	1	0.57	0.28	0.57	0.00	1	12
1,21	25.00	8.50x0.059 Z Con	Yes	12	0.57	0.28	0.57	0.00	1	12	0.88	0.52	1.01	0.00	1	0.57	0.28	0.57	0.00	1	12
1,22	25.00	8.50x0.059 Z Con	Yes	18	0.57	0.28	0.57	0.00	1	18	0.88	0.52	1.00	0.00	1	0.59	0.28	0.59	0.00	1	18
1,23	25.00	8.50x0.059 Z Con	Yes	18	0.59	0.29	0.59	0.00	1	18	0.80	0.51	0.87	0.00	1	0.52	0.28	0.52	0.00	1	18
1,24	25.00	8.50x0.059 Z Con	Yes	12	0.52	0.26	0.52	0.00	1	12	0.84	0.49	0.91	0.00	1	0.60	0.21	0.60	0.00	1	12
1,25	26.00	8.50x0.073 Z Con	Yes	30	0.60	0.24	0.60	0.00	1	30	0.96	0.00	0.96	0.00	1						
2,1	26.00	8.50x0.059 Z Con	Yes	30							1.03	0.00	1.03	0.00	1	0.57	0.26	0.57	0.00	1	30
2,2	25.00	8.50x0.059 Z Con	Yes	30	0.57	0.22	0.57	0.00	1	30	0.68	0.36	0.68	0.00	1	0.37	0.18	0.37	0.00	1	30
2,3	25.00	8.50x0.059 Z Con	Yes	18	0.37	0.20	0.37	0.00	1	12	0.65	0.38	0.65	0.00	1	0.41	0.21	0.41	0.00	1	12
2,4	25.00	8.50x0.059 Z Con	Yes	18	0.41	0.20	0.41	0.00	1	12	0.65	0.37	0.65	0.00	1	0.40	0.20	0.40	0.00	1	12
2,5	25.00	8.50x0.059 Z Con	Yes	12	0.40	0.20	0.40	0.00	1	12	0.63	0.37	0.63	0.00	1	0.40	0.20	0.40	0.00	1	12
2,6	25.00	8.50x0.059 Z Con	Yes	12	0.40	0.20	0.40	0.00	1	12	0.63	0.37	0.63	0.00	1	0.40	0.20	0.40	0.00	1	12
2,7	25.00	8.50x0.059 Z Con	Yes	12	0.40	0.20	0.40	0.00	1	12	0.63	0.37	0.63	0.00	1	0.40	0.20	0.40	0.00	1	12
2,8	25.00	8.50x0.059 Z Con	Yes	12	0.40	0.20	0.40	0.00	1	12	0.63	0.37	0.63	0.00	1	0.40	0.20	0.40	0.00	1	12
2,9	25.00	8.50x0.059 Z Con	Yes	12	0.40	0.20	0.40	0.00	1	12	0.63	0.37	0.63	0.00	1	0.40	0.20	0.40	0.00	1	12
2,10	25.00	8.50x0.059 Z Con	Yes	12	0.40	0.20	0.40	0.00	1	12	0.63	0.37	0.63	0.00	1	0.40	0.20	0.40	0.00	1	12
2,11	25.00	8.50x0.059 Z Con	Yes	12	0.40	0.20	0.40	0.00	1	12	0.63	0.37	0.63	0.00	1	0.40	0.20	0.40	0.00	1	12
2,12	25.00	8.50x0.059 Z Con	Yes	12	0.40	0.20	0.40	0.00	1	12	0.63	0.37	0.63	0.00	1	0.40	0.20	0.40	0.00	1	12
2,13	25.00	8.50x0.059 Z Con	Yes	12	0.40	0.20	0.40	0.00	1	12	0.63	0.37	0.63	0.00	1	0.40	0.20	0.40	0.00	1	12
2,14	25.00	8.50x0.059 Z Con	Yes	12	0.40	0.20	0.40	0.00	1	12	0.63	0.37	0.63	0.00	1	0.40	0.20	0.40	0.00	1	12



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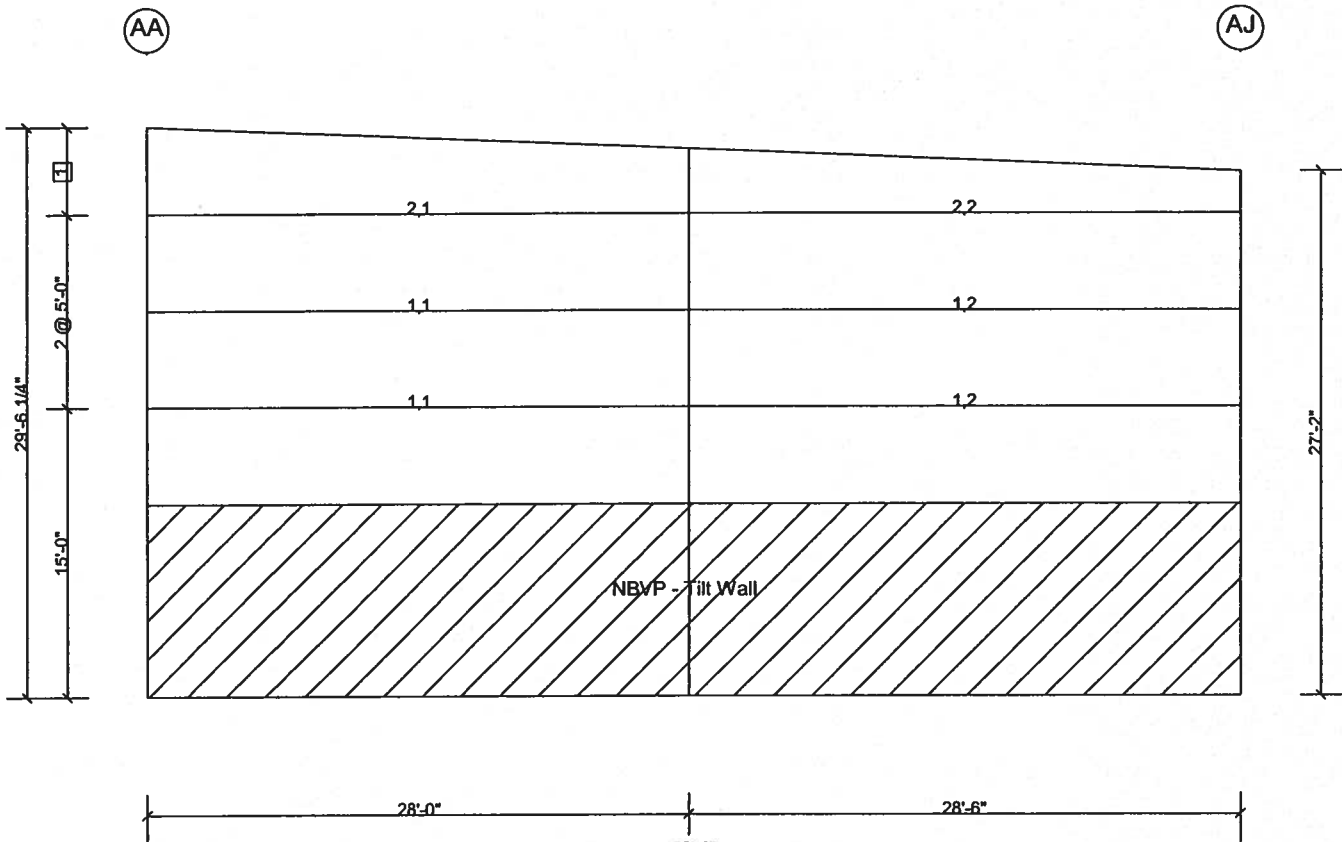
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2,15	25.00	8.50x0.059 Z Con	Yes	12	0.40	0.20	0.40	0.00	1	12	0.63	0.37	0.63	0.00	1	0.40	0.20	0.40	0.00	1	12
2,16	25.00	8.50x0.059 Z Con	Yes	12	0.40	0.20	0.40	0.00	1	12	0.63	0.37	0.63	0.00	1	0.40	0.20	0.40	0.00	1	12
2,17	25.00	8.50x0.059 Z Con	Yes	12	0.40	0.20	0.40	0.00	1	12	0.63	0.37	0.63	0.00	1	0.40	0.20	0.40	0.00	1	12
2,18	25.00	8.50x0.059 Z Con	Yes	12	0.40	0.20	0.40	0.00	1	12	0.63	0.37	0.63	0.00	1	0.40	0.20	0.40	0.00	1	12
2,19	25.00	8.50x0.059 Z Con	Yes	12	0.40	0.20	0.40	0.00	1	12	0.63	0.37	0.63	0.00	1	0.40	0.20	0.40	0.00	1	12
2,20	25.00	8.50x0.059 Z Con	Yes	12	0.40	0.20	0.40	0.00	1	12	0.63	0.37	0.63	0.00	1	0.40	0.20	0.40	0.00	1	12
2,21	25.00	8.50x0.059 Z Con	Yes	12	0.40	0.20	0.40	0.00	1	12	0.63	0.37	0.63	0.00	1	0.40	0.20	0.40	0.00	1	12
2,22	25.00	8.50x0.059 Z Con	Yes	18	0.40	0.20	0.40	0.00	1	12	0.65	0.37	0.65	0.00	1	0.41	0.20	0.41	0.00	1	12
2,23	25.00	8.50x0.059 Z Con	Yes	18	0.41	0.21	0.41	0.00	1	12	0.64	0.38	0.64	0.00	1	0.37	0.20	0.37	0.00	1	12
2,24	25.00	8.50x0.059 Z Con	Yes	12	0.37	0.19	0.37	0.00	1	12	0.84	0.40	0.84	0.00	1	0.52	0.21	0.52	0.00	1	12
2,25	26.00	8.50x0.059 Z Con	Yes	30	0.52	0.24	0.52	0.00	1	12	1.00	0.00	1.00	0.00	1						

Maximum Secondary Deflections for Shape Joist Plant Phase 1 on Side 4

Design Id	Segment	Deflection(in.)	Ratio	Location(ft)	Load Case	Description
1	1	1.23	(L/245)	12.00	1	W1>
1	2	-0.30	(L/997)	39.50	2	<W2
1	3	0.64	(L/472)	63.00	1	W1>
1	4	0.53	(L/571)	88.50	1	W1>
1	5	0.59	(L/512)	113.50	1	W1>
1	6	0.58	(L/516)	138.50	1	W1>
1	7	0.58	(L/515)	163.50	1	W1>
1	8	0.58	(L/515)	188.50	1	W1>
1	9	0.58	(L/515)	213.50	1	W1>
1	10	0.58	(L/515)	238.50	1	W1>
1	11	0.58	(L/515)	263.50	1	W1>
1	12	0.58	(L/515)	288.50	1	W1>
1	13	0.58	(L/515)	313.50	1	W1>
1	14	0.58	(L/515)	338.50	1	W1>
1	15	0.58	(L/515)	363.50	1	W1>
1	16	0.58	(L/515)	388.50	1	W1>
1	17	0.58	(L/515)	413.50	1	W1>
1	18	0.58	(L/515)	438.50	1	W1>
1	19	0.58	(L/515)	463.50	1	W1>
1	20	0.58	(L/516)	488.50	1	W1>
1	21	0.58	(L/513)	513.50	1	W1>
1	22	0.53	(L/569)	538.50	1	W1>
1	23	0.63	(L/477)	563.50	1	W1>
1	24	0.32	(L/947)	587.50	1	W1>
1	25	1.25	(L/241)	615.00	1	W1>
2	1	1.07	(L/280)	12.00	1	W1>
2	2	-0.15	(L/1976)	39.50	2	<W2
2	3	0.48	(L/625)	63.00	1	W1>
2	4	0.40	(L/754)	88.50	1	W1>
2	5	0.42	(L/713)	113.50	1	W1>
2	6	0.41	(L/724)	138.50	1	W1>
2	7	0.42	(L/721)	163.50	1	W1>
2	8	0.42	(L/722)	188.50	1	W1>
2	9	0.42	(L/722)	213.50	1	W1>
2	10	0.42	(L/722)	238.50	1	W1>
2	11	0.42	(L/722)	263.50	1	W1>
2	12	0.42	(L/722)	288.50	1	W1>
2	13	0.42	(L/722)	313.50	1	W1>
2	14	0.42	(L/722)	338.50	1	W1>
2	15	0.42	(L/722)	363.50	1	W1>
2	16	0.42	(L/722)	388.50	1	W1>
2	17	0.42	(L/722)	413.50	1	W1>
2	18	0.42	(L/722)	438.50	1	W1>
2	19	0.42	(L/721)	463.50	1	W1>
2	20	0.41	(L/724)	488.50	1	W1>
2	21	0.42	(L/714)	513.50	1	W1>
2	22	0.40	(L/751)	538.50	1	W1>
2	23	0.47	(L/635)	563.50	1	W1>
2	24	0.22	(L/1348)	587.50	1	W1>
2	25	1.14	(L/263)	615.00	1	W1>

Wall : 5



Dimension Key
 1 4'-6 1/4"

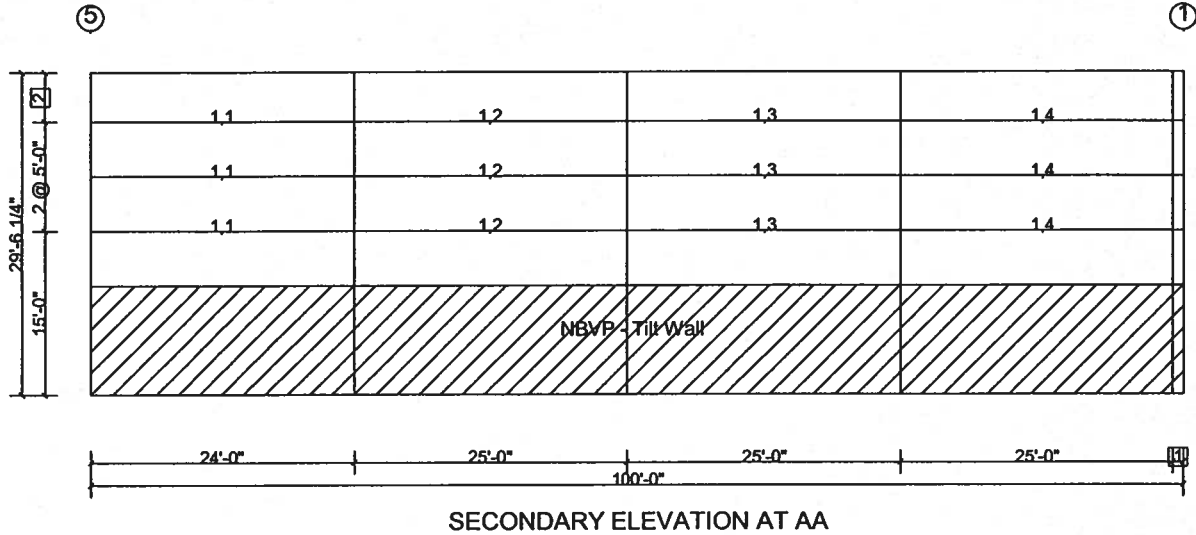
Maximum Secondary Designs for Shape Joist Plant Phase 1 on Side 5

Des Id	Len (ft)	Description	Design Status	Detail Lap (in.)	Exterior				Interior				Exterior									
					% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	Lap (in.)	% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	Lap (in.)	
1,1	28.00	8.50x0.082 Z Con	Yes	30																		
1,2	28.50	8.50x0.082 Z Con	Yes	24	0.69	0.15	0.69	0.00	1	24	0.97	0.00	0.97	0.00	1	0.69	0.15	0.69	0.00	1	24	
2,1	28.00	8.50x0.082 Z Con	Yes	30																		
2,2	28.50	8.50x0.073 Z Con	Yes	24	0.69	0.16	0.69	0.00	1	18	0.95	0.34	0.98	0.00	1	0.69	0.17	0.69	0.00	1	30	

Maximum Secondary Deflections for Shape Joist Plant Phase 1 on Side 5

Design Id	Segment	Deflection(in.)	Ratio	Location(ft)	Load Case	Description
1	1	1.46	(L/230)	11.50	1	W1>
1	2	1.65	(L/207)	44.50	1	W1>
2	1	1.57	(L/214)	12.00	1	W1>
2	2	1.45	(L/236)	45.00	1	W1>

Wall : 6



Dimension Key
 1 1'-0"
 2 4'-6 1/4"

Maximum Secondary Designs for Shape Joist Plant Phase 1 on Side 6

Des Id	Len (ft)	Description	Design Status	Detail Lap (in.)	Exterior				Interior				Exterior								
					% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	Lap (in.)	% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	Lap (in.)
1,1	24.00	8.50x0.073 Z Con	Yes	30					1	12	0.95	0.00	0.95	0.00	1	0.62	0.25	0.62	0.00	1	30
1,2	25.00	8.50x0.059 Z Con	Yes	12	0.62	0.21	0.62	0.00	1	12	0.86	0.50	0.95	0.00	1	0.46	0.26	0.46	0.00	1	12
1,3	25.00	8.50x0.059 Z Con	Yes	12	0.46	0.26	0.46	0.00	1	12	0.90	0.51	1.03	0.00	1	0.64	0.21	0.64	0.00	1	12
1,4	26.00	8.50x0.073 Z Con	Yes	30	0.64	0.25	0.64	0.00	1	30	1.02	0.00	1.02	0.00	1						

Maximum Secondary Deflections for Shape Joist Plant Phase 1 on Side 6

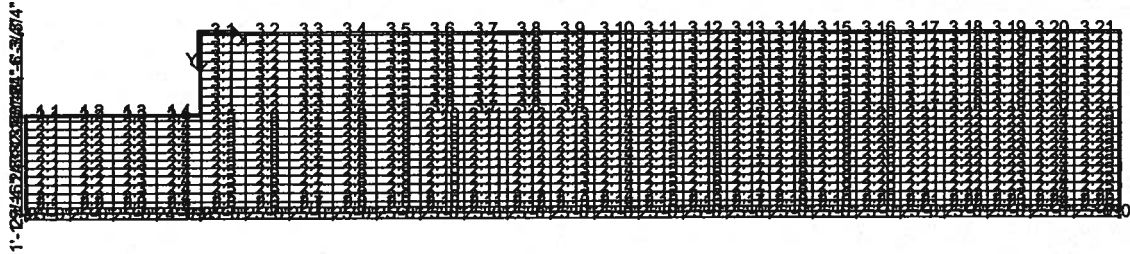
Design Id	Segment	Deflection(in.)	Ratio	Location(ft)	Load Case	Description
1	1	1.13	(L/255)	10.50	1	W1>
1	2	0.42	(L/722)	37.50	1	W1>
1	3	0.36	(L/836)	60.00	1	W1>
1	4	1.32	(L/226)	88.00	1	W1>



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Roof : A



Maximum Secondary Designs for Shape Joist Plant Phase 1 on Side A

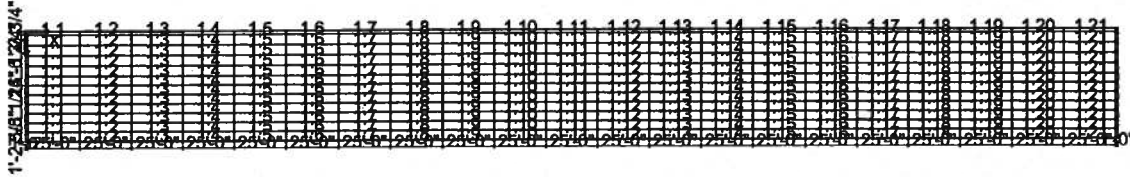
Des Id	Len (ft)	Description	Design Status	Detail Lap (in.)	Exterior					Interior					Exterior						
					% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	Lap (in.)	% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	Lap (in.)
1,1	26.00	18.00x0.000 JST Sim	Yes	0																	
1,2	25.00	18.00x0.000 JST Sim	Yes	0																	
1,3	25.00	18.00x0.000 JST Sim	Yes	0																	
1,4	25.00	18.00x0.000 JST Sim	Yes	0																	
2,1	26.00	18.00x0.000 JST Sim	Yes	0																	
2,2	25.00	18.00x0.000 JST Sim	Yes	0																	
2,3	25.00	18.00x0.000 JST Sim	Yes	0																	
2,4	25.00	18.00x0.000 JST Sim	Yes	0																	
2,5	25.00	18.00x0.000 JST Sim	Yes	0																	
2,6	25.00	18.00x0.000 JST Sim	Yes	0																	
2,7	25.00	18.00x0.000 JST Sim	Yes	0																	
2,8	25.00	18.00x0.000 JST Sim	Yes	0																	
2,9	25.00	18.00x0.000 JST Sim	Yes	0																	
2,10	25.00	18.00x0.000 JST Sim	Yes	0																	
2,11	25.00	18.00x0.000 JST Sim	Yes	0																	
2,12	25.00	18.00x0.000 JST Sim	Yes	0																	
2,13	25.00	18.00x0.000 JST Sim	Yes	0																	
2,14	25.00	18.00x0.000 JST Sim	Yes	0																	
2,15	25.00	18.00x0.000 JST Sim	Yes	0																	
2,16	25.00	18.00x0.000 JST Sim	Yes	0																	
2,17	25.00	18.00x0.000 JST Sim	Yes	0																	
2,18	25.00	18.00x0.000 JST Sim	Yes	0																	
2,19	25.00	18.00x0.000 JST Sim	Yes	0																	
2,20	25.00	18.00x0.000 JST Sim	Yes	0																	
2,21	25.00	18.00x0.000 JST Sim	Yes	0																	
2,22	25.00	18.00x0.000 JST Sim	Yes	0																	
2,23	25.00	18.00x0.000 JST Sim	Yes	0																	
2,24	25.00	18.00x0.000 JST Sim	Yes	0																	
2,25	26.00	18.00x0.000 JST Sim	Yes	0																	
3,1	26.00	18.00x0.000 JST Sim	Yes	0																	
3,2	25.00	18.00x0.000 JST Sim	Yes	0																	
3,3	25.00	18.00x0.000 JST Sim	Yes	0																	
3,4	25.00	18.00x0.000 JST Sim	Yes	0																	
3,5	25.00	18.00x0.000 JST Sim	Yes	0																	
3,6	25.00	18.00x0.000 JST Sim	Yes	0																	
3,7	25.00	18.00x0.000 JST Sim	Yes	0																	
3,8	25.00	18.00x0.000 JST Sim	Yes	0																	
3,9	25.00	18.00x0.000 JST Sim	Yes	0																	
3,10	25.00	18.00x0.000 JST Sim	Yes	0																	
3,11	25.00	18.00x0.000 JST Sim	Yes	0																	
3,12	25.00	18.00x0.000 JST Sim	Yes	0																	



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Roof : B



Maximum Secondary Designs for Shape Joist Plant Phase 1 on Side B

Des Id	Len (ft)	Description	Design Status	Detail Lap (in.)	Exterior					Interior					Exterior						
					% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	Lap (in.)	% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	Lap (in.)
1,1	26.00	18.00x0.000 JST Sim	Yes	0																	
1,2	25.00	18.00x0.000 JST Sim	Yes	0																	
1,3	25.00	18.00x0.000 JST Sim	Yes	0																	
1,4	25.00	18.00x0.000 JST Sim	Yes	0																	
1,5	25.00	18.00x0.000 JST Sim	Yes	0																	
1,6	25.00	18.00x0.000 JST Sim	Yes	0																	
1,7	25.00	18.00x0.000 JST Sim	Yes	0																	
1,8	25.00	18.00x0.000 JST Sim	Yes	0																	
1,9	25.00	18.00x0.000 JST Sim	Yes	0																	
1,10	25.00	18.00x0.000 JST Sim	Yes	0																	
1,11	25.00	18.00x0.000 JST Sim	Yes	0																	
1,12	25.00	18.00x0.000 JST Sim	Yes	0																	
1,13	25.00	18.00x0.000 JST Sim	Yes	0																	
1,14	25.00	18.00x0.000 JST Sim	Yes	0																	
1,15	25.00	18.00x0.000 JST Sim	Yes	0																	
1,16	25.00	18.00x0.000 JST Sim	Yes	0																	
1,17	25.00	18.00x0.000 JST Sim	Yes	0																	
1,18	25.00	18.00x0.000 JST Sim	Yes	0																	
1,19	25.00	18.00x0.000 JST Sim	Yes	0																	
1,20	25.00	18.00x0.000 JST Sim	Yes	0																	
1,21	26.00	18.00x0.000 JST Sim	Yes	0																	

Maximum Secondary Deflections for Shape Joist Plant Phase 1 on Side B

Design Id	Segment	Deflection(in.)	Ratio	Location(ft)	Load Case	Description
1	1	1.13	(L/255)	10.50	0	
1	2	0.42	(L/722)	37.50	0	
1	3	0.36	(L/836)	60.00	0	
1	4	1.32	(L/226)	88.00	0	
1	5	0.42	(L/713)	113.50	0	
1	6	0.41	(L/724)	138.50	0	
1	7	0.42	(L/721)	163.50	0	
1	8	0.42	(L/722)	188.50	0	
1	9	0.42	(L/722)	213.50	0	
1	10	0.42	(L/722)	238.50	0	
1	11	0.42	(L/722)	263.50	0	
1	12	0.42	(L/722)	288.50	0	
1	13	0.42	(L/722)	313.50	0	
1	14	0.42	(L/722)	338.50	0	
1	15	0.42	(L/722)	363.50	0	
1	16	0.42	(L/722)	388.50	0	
1	17	0.42	(L/722)	413.50	0	
1	18	0.42	(L/722)	438.50	0	
1	19	0.42	(L/721)	463.50	0	



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1	20	0.41	(L/724)	488.50	0
1	21	0.42	(L/714)	513.50	0

Purlin Anchorage Forces

Shape	Force(k)	Resistance(k)	Numb. Purlins	Roof Angle (Pitch)
A	0.00	0.00	24	2.386 (0.500:12)
B	0.00	0.00	12	2.386 (0.500:12)

Loads and Codes - Shape: Copy of BD0462 Millenium Steel Joist Plant 2

City: Lake City	County: Columbia	State: Florida	Country: United States
Building Code: 2001 Florida State Building Code		Built Up: 89AISC	Rainfall: 10.00 in per hour
Building Use: Standard Occupancy Structures		Cold Form: 96AISI	Allow. Overstress: Frm: 1.03, Sec: 1.03, Brc: 1.03

Dead and Collateral Loads

Collateral Gravity: 5.00 psf
 Collateral Uplift: 0.00 psf

Roof Covering + Second. Dead Load: 3.63 psf
 Frame Weight (assumed for seismic): 2.50 psf

Live Load

Live Load: 20.00 psf Reducible
 LL for Below Eave Canopy: N/A

Wind Load

Wind Speed: 100.00 mph
 Wind Exposure (Factor): C (0.962)
 Parts Wind Exposure Factor: 0.962
 Wind Enclosure: Enclosed
 Wind Importance Factor: 1.000

Snow Load

Ground Snow Load: 0.00 psf
 Design Snow (Sloped): 0.00 psf
 Snow Exposure Category (Factor): 1 (1.00)
 Snow Importance: 1.000
 Thermal Category (Factor): Heated (1.00)
 Ground / Roof Conversion: 1.00
 % Snow Used in Seismic: 0.00
 Seismic Snow Load: 0.00 psf
 Unobstructed, Slippery Roof

Seismic Load

N/A

NOT Windborne Debris Region

Base Elevation: 0/0/0
 Primary Zone Strip Width: 52/1/15
 Parts / Portions Zone Strip Width: 26/0/15
 Basic Wind Pressure: 20.93 psf

Per Article 2.9 in the Builder Agreement, VP Buildings assumes that the Builder has called the local Building Official or Project Engineer to obtain all code and loading information for this specific building site.

Design Load Combinations - Purlin

No.	Origin	Factor	Application	Description
1	System	1.000	1.0 D + 1.0 CG + 1.0 L	D + CG + L
2	System	1.000	1.0 D + 1.0 W1>	D + W1>
3	System	1.000	1.0 D + 1.0 <W2	D + <W2
4	System	1.000	1.0 D + 1.0 CG + 0.750 L + 0.750 W1>	D + CG + L + W1>
5	System	1.000	1.0 D + 1.0 CG + 0.750 L + 0.750 <W2	D + CG + L + <W2

Design Load Combinations - Girt

No.	Origin	Factor	Application	Description
1	System	1.000	1.0 W1>	W1>
2	System	1.000	1.0 <W2	<W2

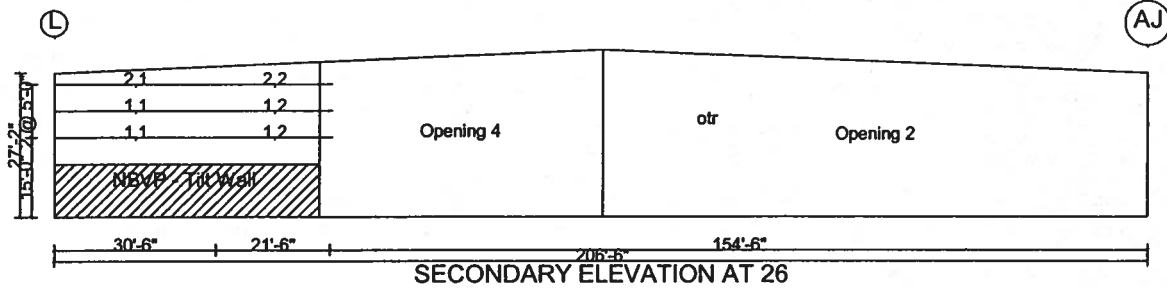
Deflection Load Combinations - Purlin

No.	Origin	Factor	Deflection	Application	Description
1	System	1.000	150	1.0 L	L
2	System	1.000	120	1.0 D + 1.0 CG + 1.0 L	D + CG + L

Deflection Load Combinations - Girt

No.	Origin	Factor	Deflection	Application	Description
1	System	1.000	90	1.0 W1>	W1>
2	System	1.000	90	1.0 <W2	<W2

Wall : 1



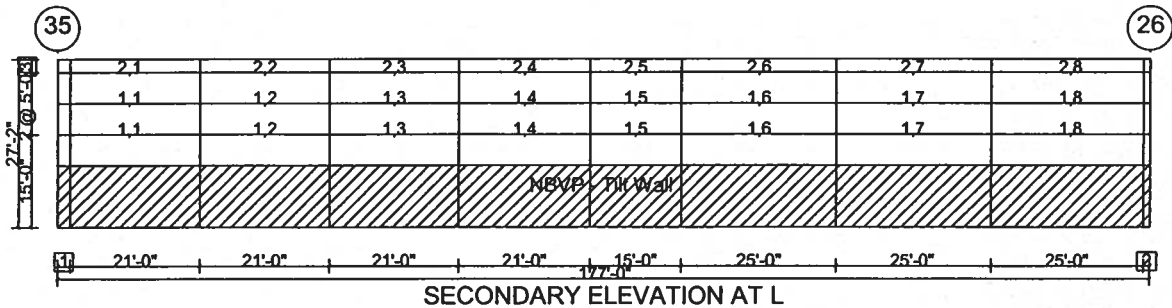
Maximum Secondary Designs for Shape Copy of BD0462 Millenium Steel Joist Plant 2 on Side 1

Des Id	Len (ft)	Description	Design Status	Detail Lap (in.)	Exterior				Interior				Exterior								
					% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	Lap (in.)	% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	Lap (in.)
1,1	30.50	8.50x0.105 Z Con	Yes	48					1	12	0.96	0.00	0.96	0.00	1	0.63	0.12	0.63	0.00	1	42
1,2	22.00	8.50x0.065 Z Con	Yes	42	0.63	0.11	0.63	0.00			0.87	0.44	0.92	0.00	1						
2,1	30.50	8.50x0.082 Z Con	Yes	48							1.03	0.00	1.03	0.00	1	0.70	0.19	0.70	0.00	1	48
2,2	22.00	8.50x0.065 Z Con	Yes	42	0.70	0.17	0.70	0.00	1	42	0.77	0.38	0.77	0.00	1						

Maximum Secondary Deflections for Shape Copy of BD0462 Millenium Steel Joist Plant 2 on Side 1

Design Id	Segment	Deflection(in.)	Ratio	Location(ft)	Load Case	Description
1	1	2.07	(L/177)	13.50	1	W1>
1	2	0.35	(L/736)	44.50	1	W1>
2	1	2.20	(L/167)	13.50	1	W1>
2	2	0.25	(L/1013)	45.00	1	W1>

Wall : 2



Dimension Key

- 1 2'-0"
- 2 1'-0"
- 3 2'-2"

Maximum Secondary Designs for Shape Copy of BD0462 Millenium Steel Joist Plant 2 on Side 2

Detail	Exterior	Interior	Exterior
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Calculations Package

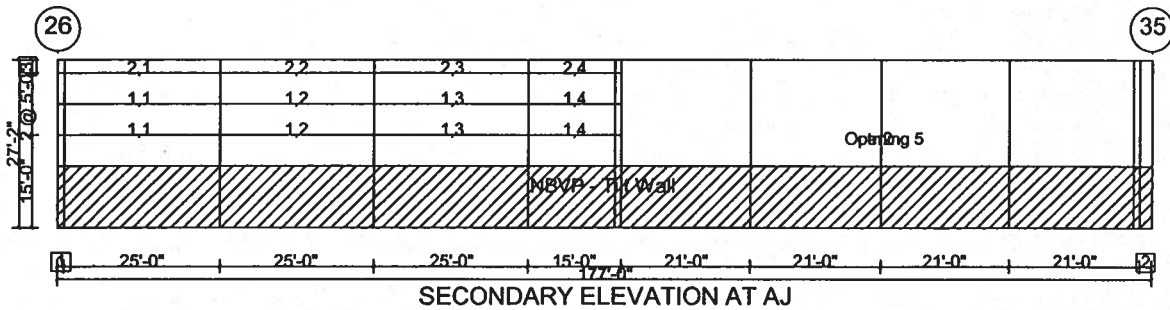
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Des Id	Len (ft)	Description	Design Status	Lap (in.)	% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	Lap (in.)	% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	Lap (in.)
1,1	23.00	8.50x0.059 Z Con	Yes	12					1	18	1.03	0.00	1.03	0.00	1	0.55	0.31	0.55	0.00	1	12
1,2	21.00	8.50x0.059 Z Con	Yes	18	0.55	0.26	0.55	0.00	1	12	0.86	0.48	0.93	0.00	1	0.36	0.22	0.36	0.00	1	18
1,3	21.00	8.50x0.059 Z Con	Yes	12	0.36	0.23	0.36	0.00	1	12	0.69	0.45	0.69	0.00	1	0.45	0.25	0.45	0.00	1	12
1,4	21.00	8.50x0.059 Z Con	Yes	12	0.45	0.26	0.45	0.00	1	12	0.68	0.47	0.68	0.00	1	0.35	0.20	0.35	0.00	2	12
1,5	15.00	8.50x0.059 Z Con	Yes	12	0.35	0.14	0.35	0.00	2	12	0.87	0.32	0.87	0.00	2	0.55	0.18	0.55	0.00	2	12
1,6	25.00	8.50x0.059 Z Con	Yes	12	0.55	0.24	0.55	0.00	2	12	0.83	0.53	0.94	0.00	1	0.54	0.29	0.54	0.00	1	12
1,7	25.00	8.50x0.059 Z Con	Yes	24	0.54	0.26	0.54	0.00	1	12	0.86	0.48	0.93	0.00	1	0.60	0.20	0.60	0.00	1	12
1,8	26.00	8.50x0.073 Z Con	Yes	30	0.60	0.24	0.60	0.00	1	30	1.02	0.00	1.02	0.00	1						
2,1	23.00	8.50x0.059 Z Con	Yes	12					1	12	0.74	0.00	0.74	0.00	1	0.39	0.22	0.39	0.00	1	12
2,2	21.00	8.50x0.059 Z Con	Yes	18	0.39	0.19	0.39	0.00	1	12	0.61	0.34	0.61	0.00	1	0.25	0.16	0.25	0.00	1	12
2,3	21.00	8.50x0.059 Z Con	Yes	12	0.25	0.16	0.25	0.00	1	12	0.49	0.32	0.49	0.00	1	0.32	0.18	0.32	0.00	1	12
2,4	21.00	8.50x0.059 Z Con	Yes	12	0.32	0.18	0.32	0.00	1	12	0.48	0.34	0.48	0.00	1	0.25	0.14	0.25	0.00	2	12
2,5	15.00	8.50x0.059 Z Con	Yes	12	0.25	0.10	0.25	0.00	2	12	0.62	0.23	0.62	0.00	2	0.39	0.13	0.39	0.00	2	12
2,6	25.00	8.50x0.059 Z Con	Yes	12	0.39	0.17	0.39	0.00	2	12	0.65	0.00	0.65	0.00	1	0.39	0.21	0.39	0.00	1	12
2,7	25.00	8.50x0.059 Z Con	Yes	24	0.39	0.19	0.39	0.00	1	24	0.72	0.36	0.72	0.00	1	0.54	0.21	0.54	0.00	1	24
2,8	26.00	8.50x0.059 Z Con	Yes	30	0.54	0.26	0.54	0.00	1	24	1.03	0.00	1.03	0.00	1						

Maximum Secondary Deflections for Shape Copy of BD0462 Millenium Steel Joist Plant 2 on Side 2

Design Id	Segment	Deflection(in.)	Ratio	Location(ft)	Load Case	Description
1	1	0.76	(L/332)	11.00	1	W1>
1	2	-0.16	(L/1607)	34.50	2	<W2
1	3	0.28	(L/908)	54.00	1	W1>
1	4	0.44	(L/569)	76.00	1	W1>
1	5	-0.16	(L/1136)	95.50	1	W1>
1	6	0.92	(L/327)	113.00	1	W1>
1	7	-0.22	(L/1380)	138.00	2	<W2
1	8	1.35	(L/222)	165.00	1	W1>
2	1	0.60	(L/422)	11.00	1	W1>
2	2	-0.12	(L/2185)	34.50	2	<W2
2	3	0.20	(L/1249)	54.00	1	W1>
2	4	0.31	(L/800)	76.00	1	W1>
2	5	-0.11	(L/1603)	95.50	1	W1>
2	6	0.65	(L/461)	113.00	1	W1>
2	7	-0.12	(L/2581)	137.50	2	<W2
2	8	1.08	(L/277)	165.00	1	W1>

Wall : 4



Dimension Key

- 1 1'-0"
- 2 2'-0"
- 3 2'-2"

Maximum Secondary Designs for Shape Copy of BD0462 Millenium Steel Joist Plant 2 on Side 4

Des	Len	Description	Design	Detail Lap	Exterior				Interior				Exterior			
					%	%	%	%	Ld	Lap	%	%	%	%	Ld	Lap



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Id	(ft)		Status	(in.)	Bnd	Shr	Cmb	Wcp	Cs	(in.)	Bnd	Shr	Cmb	Wcp	Cs	Bnd	Shr	Cmb	Wcp	Cs	(in.)	
1,1	26.00	8.50x0.073 Z Con	Yes	30							0.95	0.00	0.95	0.00	1	0.59	0.23	0.59	0.00	1	30	
1,2	25.00	8.50x0.059 Z Con	Yes	12	0.59	0.20	0.59	0.00	1	12	0.84	0.48	0.91	0.00	1	0.54	0.26	0.54	0.00	1	12	
1,3	25.00	8.50x0.059 Z Con	Yes	12	0.54	0.28	0.54	0.00	1	12	0.82	0.52	0.91	0.00	1	0.52	0.29	0.52	0.00	1	12	
1,4	15.00	8.50x0.059 Z Con	Yes	12	0.52	0.28	0.52	0.00	1	12	0.79	0.50	0.85	0.00	1							
2,1	26.00	8.50x0.059 Z Con	Yes	30							0.99	0.00	0.99	0.00	1	0.50	0.24	0.50	0.00	1	12	
2,2	25.00	8.50x0.059 Z Con	Yes	12	0.50	0.21	0.50	0.00	1	12	0.82	0.39	0.82	0.00	1	0.38	0.19	0.38	0.00	1	12	
2,3	25.00	8.50x0.059 Z Con	Yes	12	0.38	0.20	0.38	0.00	1	12	0.61	0.00	0.61	0.00	1	0.37	0.21	0.37	0.00	1	12	
2,4	15.00	8.50x0.059 Z Con	Yes	12	0.37	0.20	0.37	0.00	1	12	0.57	0.37	0.57	0.00	1							

Maximum Secondary Deflections for Shape Copy of BD0462 Millenium Steel Joist Plant 2 on Side 4

Design Id	Segment	Deflection(in.)	Ratio	Location(ft)	Load Case	Description
1	1	1.24	(L/241)	12.00	1	W1>
1	2	0.26	(L/1146)	39.50	1	W1>
1	3	0.82	(L/364)	63.50	1	W1>
1	4	0.09	(L/1980)	86.00	1	W1>
2	1	1.13	(L/264)	12.00	1	W1>
2	2	0.18	(L/1650)	39.50	1	W1>
2	3	0.58	(L/516)	63.50	1	W1>
2	4	0.07	(L/2417)	86.00	1	W1>

Roof : A

	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8
0.2500/4"	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8
	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8
	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8
	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8
47'-11.17"	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8
	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8
	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8
	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8
2'-0"	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8
	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8
	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8
	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8
50'-0.78"	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8
	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8
	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8
	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8
1'-1.616"	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8
0"	25'-0"	25'-0"	25'-0"	15'-0"	21'-0"	21'-0"	21'-0"	21'-0"

Maximum Secondary Designs for Shape Copy of BD0462 Millenium Steel Joist Plant 2 on Side A

Des Id	Len (ft)	Description	Design Status	Detail Lap (in.)	Exterior					Interior					Exterior				
					% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	Lap (in.)	% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	% Bnd	% Shr	% Cmb	% Wcp
1,1	26.00	18.00x0.000 JST Sim	Yes	0															



Calculations Package

Date: 10/21/2004

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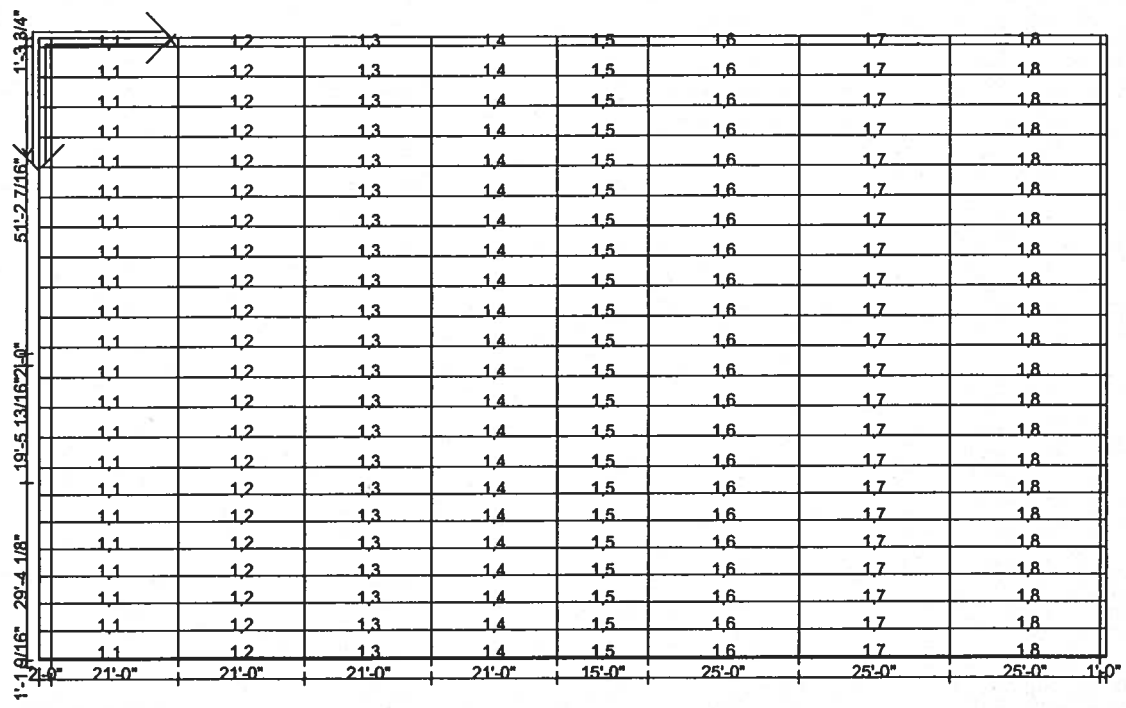
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1,2	25.00	18.00x0.000 JST Sim	Yes	0																
1,3	25.00	18.00x0.000 JST Sim	Yes	0																
1,4	15.00	18.00x0.000 JST Sim	Yes	0																
1,5	21.00	18.00x0.000 JST Sim	Yes	0																
1,6	21.00	18.00x0.000 JST Sim	Yes	0																
1,7	21.00	18.00x0.000 JST Sim	Yes	0																
1,8	23.00	18.00x0.000 JST Sim	Yes	0																

Maximum Secondary Deflections for Shape Copy of BD0462 Millenium Steel Joist Plant 2 on Side A

Design Id	Segment	Deflection(in.)	Ratio	Location(ft)	Load Case	Description
1	1	1.13	(L/264)	12.00	1	L
1	2	0.18	(L/1650)	39.50	1	L
1	3	0.58	(L/516)	63.50	1	L
1	4	0.07	(L/2417)	86.00	1	L
1	5	-0.11	(L/1603)	95.50	1	L
1	6	0.65	(L/461)	113.00	1	L
1	7	-0.12	(L/2581)	137.50	2	D + CG + L
1	8	1.08	(L/277)	165.00	1	L

Roof : B

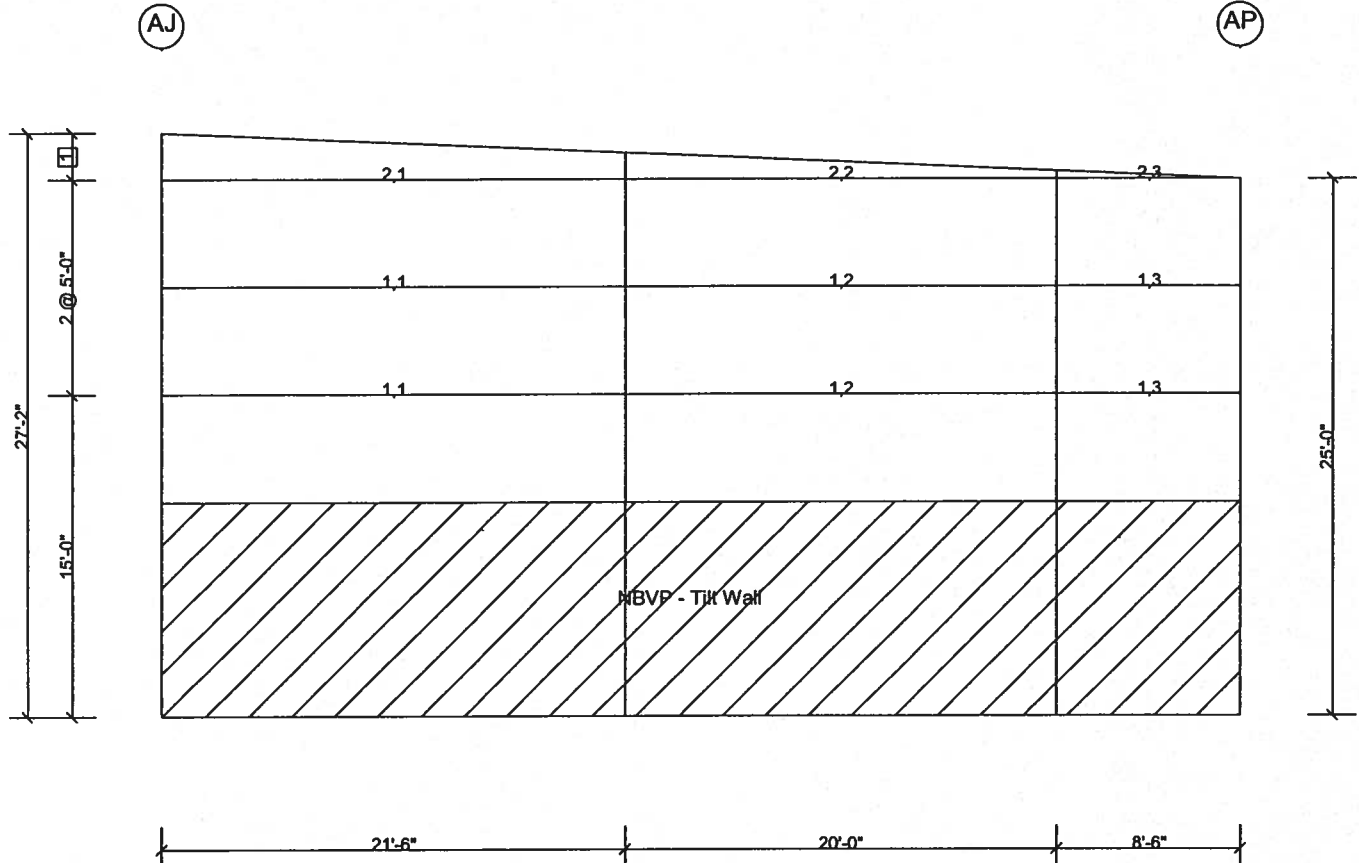


Maximum Secondary Designs for Shape Copy of BD0462 Millenium Steel Joist Plant 2 on Side B

Des Id	Len (ft)	Description	Design Status	Detail Lap (in.)	Exterior				Interior					Exterior						
					% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	Lap (in.)	% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	% Bnd	% Shr	% Cmb	% Wcp	Ld Cs
1,1	23.00	18.00x0.000 JST Sim	Yes	0																
1,2	21.00	18.00x0.000 JST Sim	Yes	0																
1,3	21.00	18.00x0.000 JST Sim	Yes	0																

1	System	1.000	90	1.0 W1>		W1>
2	System	1.000	90	1.0 <W2		<W2

Wall : 1



Dimension Key
1 2'-2"

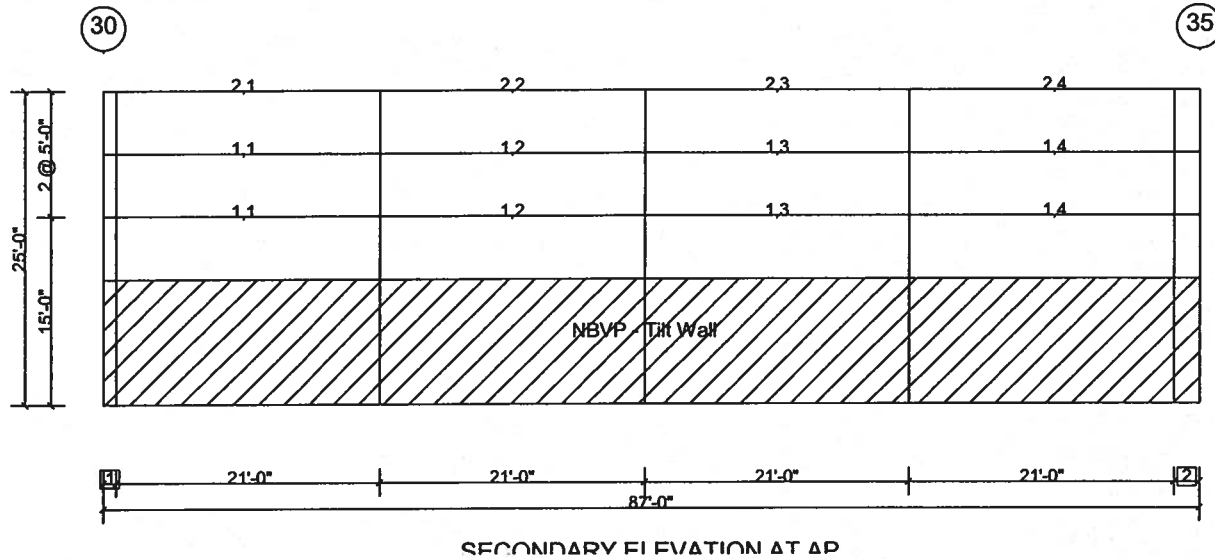
Maximum Secondary Designs for Shape BD0462 Millenium Steel Phase 2 lean-to on Side 1

Des Id	Len (ft)	Description	Design Status	Detail Lap (in.)	Exterior				Interior					Exterior							
					% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	Lap (in.)	% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	Lap (in.)
1,1	21.50	8.50x0.059 Z Con	Yes	24																	
1,2	20.00	8.50x0.059 Z Con	Yes	24	0.65	0.30	0.65	0.00	1	24	0.79	0.50	0.85	0.00	1	0.65	0.31	0.65	0.00	1	24
1,3	8.50	8.50x0.059 Z Sim	Yes	0							0.34	0.00	0.34	0.00	1						
2,1	21.50	8.50x0.059 Z Con	Yes	24							0.79	0.00	0.79	0.00	1	0.42	0.21	0.42	0.00	1	12
2,2	20.00	8.50x0.059 Z Con	Yes	12	0.42	0.19	0.42	0.00	1	12	0.66	0.35	0.66	0.00	1						
2,3	8.50	8.50x0.059 Z Sim	Yes	0							0.19	0.00	0.19	0.00	1						

Maximum Secondary Deflections for Shape BD0462 Millenium Steel Phase 2 lean-to on Side 1

Design Id	Segment	Deflection(in.)	Ratio	Location(ft)	Load Case	Description
1	1	0.78	(L/330)	9.00	1	W1>
1	2	0.42	(L/567)	34.00	1	W1>
1	3	0.06	(L/1807)	46.00	1	W1>
2	1	0.65	(L/397)	9.00	1	W1>
2	2	0.23	(L/1037)	34.00	1	W1>
2	3	0.00	(L/3259)	45.50	1	W1>

Wall : 4



Dimension Key

- 1 1'-0"
- 2 2'-0"
- 3

Maximum Secondary Designs for Shape BD0462 Millenium Steel Phase 2 lean-to on Side 4

Des Id	Len (ft)	Description	Design Status	Detail Lap (in.)	Exterior				Interior					Exterior							
					% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	Lap (in.)	% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	Lap (in.)
1,1	22.00	8.50x0.059 Z Con	Yes	12					1	12	1.02	0.00	1.02	0.00	1	0.53	0.29	0.53	0.00	1	12
1,2	21.00	8.50x0.059 Z Con	Yes	12	0.53	0.26	0.53	0.00	1	12	0.84	0.47	0.89	0.00	1	0.33	0.22	0.33	0.00	1	12
1,3	21.00	8.50x0.059 Z Con	Yes	12	0.33	0.22	0.33	0.00	1	12	0.82	0.47	0.86	0.00	1	0.52	0.26	0.52	0.00	1	12
1,4	23.00	8.50x0.059 Z Con	Yes	12	0.52	0.29	0.52	0.00	1	12	0.98	0.00	0.98	0.00	1						
2,1	22.00	8.50x0.073 Z Sim	Yes	0							0.40	0.65	0.56	0.00	1						
2,2	21.00	8.50x0.059 Z Sim	Yes	0							0.82	0.00	0.82	0.00	1						
2,3	21.00	8.50x0.059 Z Sim	Yes	0							0.82	0.00	0.82	0.00	1						
2,4	23.00	8.50x0.065 Z Sim	Yes	0							0.77	0.21	0.77	0.00	2						

Maximum Secondary Deflections for Shape BD0462 Millenium Steel Phase 2 lean-to on Side 4

Design Id	Segment	Deflection(in.)	Ratio	Location(ft)	Load Case	Description
1	1	0.82	(L/307)	10.00	1	W1>
1	2	0.18	(L/1426)	33.50	1	W1>
1	3	0.19	(L/1314)	52.50	1	W1>
1	4	0.78	(L/322)	76.00	1	W1>
2	1	0.37	(L/682)	13.00	1	W1>
2	2	0.84	(L/301)	32.50	1	W1>
2	3	0.84	(L/301)	53.50	1	W1>
2	4	0.24	(L/1034)	72.00	1	W1>



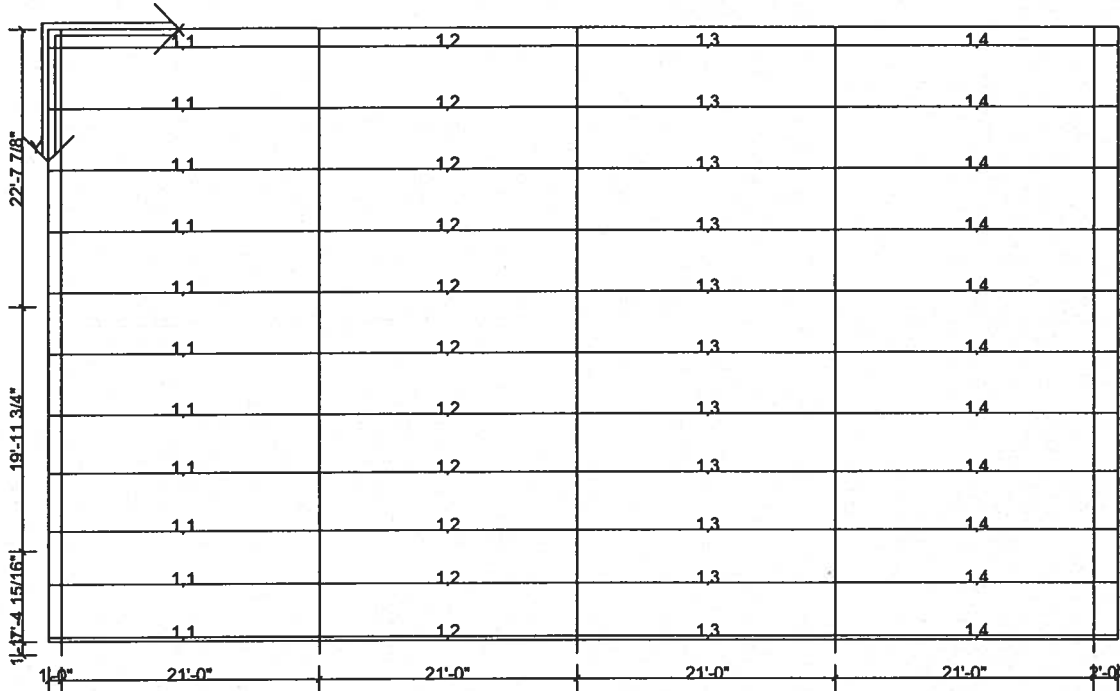
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Roof : A



Maximum Secondary Designs for Shape BD0462 Millenium Steel Phase 2 lean-to on Side A

Des Id	Len (ft)	Description	Design Status	Detail Lap (in.)	Exterior				Interior				Exterior								
					% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	Lap (in.)	% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	Lap (in.)
1,1	22.00	18.00x0.000 JST Sim	Yes	0																	
1,2	21.00	18.00x0.000 JST Sim	Yes	0																	
1,3	21.00	18.00x0.000 JST Sim	Yes	0																	
1,4	23.00	18.00x0.000 JST Sim	Yes	0																	

Maximum Secondary Deflections for Shape BD0462 Millenium Steel Phase 2 lean-to on Side A

Design Id	Segment	Deflection(in.)	Ratio	Location(ft)	Load Case	Description
1	1	0.37	(L/682)	13.00	1	L
1	2	0.84	(L/301)	32.50	1	L
1	3	0.84	(L/301)	53.50	1	L
1	4	0.24	(L/1034)	72.00	1	L

Purlin Anchorage Forces

Shape	Force(k)	Resistance(k)	Numb. Purlins	Roof Angle (Pitch)
A	0.00	0.00	11	-2.481 (-0.520:12)



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Loads and Codes - Shape: BD0462 Millenium Steel Joist Plant 3

City: Lake City County: Columbia State: Florida
 Building Code: 2001 Florida State Building Code Built Up: 89AISC
 Building Use: Standard Occupancy Structures Cold Form: 96AISI

Country: United States
 Rainfall: 10.00 in per hour
 Allow. Overstress:
 Frm: 1.03, Sec: 1.03, Br: 1.03

Dead and Collateral Loads

Collateral Gravity: 5.00 psf
 Collateral Uplift: 0.00 psf

Roof Covering + Second. Dead Load: 3.63 psf
 Frame Weight (assumed for seismic): 2.50 psf

Live Load

Live Load: 20.00 psf Reducible
 LL for Below Eave Canopy: N/A

Wind Load

Wind Speed: 100.00 mph
 Wind Exposure (Factor): C (1.039)
 Parts Wind Exposure Factor: 1.039
 Wind Enclosure: Enclosed
 Wind Importance Factor: 1.000

Snow Load

Ground Snow Load: 0.00 psf
 Design Snow (Sloped): 0.00 psf
 Snow Exposure Category (Factor): 1 (1.00)
 Snow Importance: 1.000
 Thermal Category (Factor): Heated (1.00)
 Ground / Roof Conversion: 1.00
 % Snow Used in Seismic: 0.00
 Seismic Snow Load: 0.00 psf
 Unobstructed, Slippery Roof

Seismic Load

N/A

NOT Windborne Debris Region

Base Elevation: 0/0/0
 Primary Zone Strip Width: 31/3/6
 Parts / Portions Zone Strip Width: 15/7/11
 Basic Wind Pressure: 22.60 psf

Per Article 2.9 in the Builder Agreement, VP Buildings assumes that the Builder has called the local Building Official or Project Engineer to obtain all code and loading information for this specific building site.

Design Load Combinations - Purlin

No.	Origin	Factor	Application	Description
1	System	1.000	1.0 D + 1.0 CG + 1.0 L	D + CG + L
2	System	1.000	1.0 D + 1.0 W1>	D + W1>
3	System	1.000	1.0 D + 1.0 <W2	D + <W2
4	System	1.000	1.0 D + 1.0 CG + 0.750 L + 0.750 W1>	D + CG + L + W1>
5	System	1.000	1.0 D + 1.0 CG + 0.750 L + 0.750 <W2	D + CG + L + <W2

Design Load Combinations - Girt

No.	Origin	Factor	Application	Description
1	System	1.000	1.0 W1>	W1>
2	System	1.000	1.0 <W2	<W2

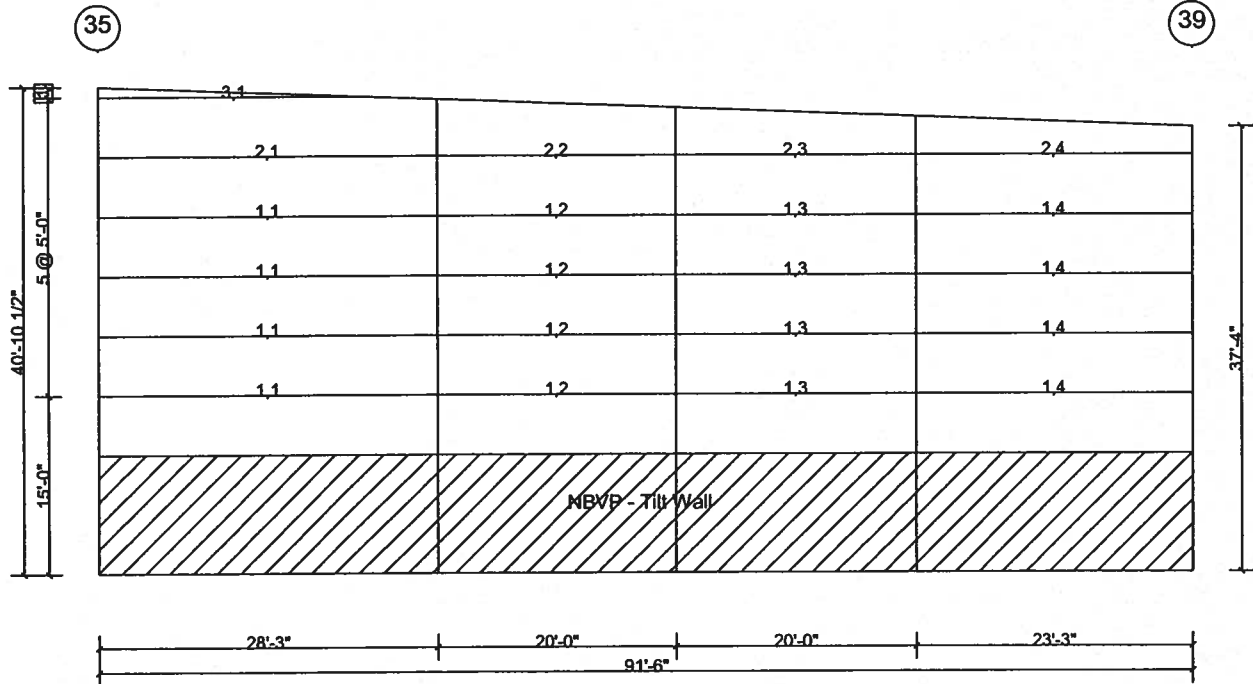
Deflection Load Combinations - Purlin

No.	Origin	Factor	Deflection	Application	Description
1	System	1.000	150	1.0 L	L
2	System	1.000	120	1.0 D + 1.0 CG + 1.0 L	D + CG + L

Deflection Load Combinations - Girt

No.	Origin	Factor	Deflection	Application	Description
1	System	1.000	90	1.0 W1>	W1>
2	System	1.000	90	1.0 <W2	<W2

Wall : 1



SECONDARY ELEVATION AT AW

Dimension Key
1 10 1/2"

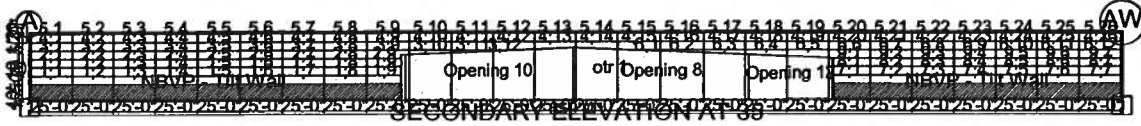
Maximum Secondary Designs for Shape BD0462 Millenium Steel Joist Plant 3 on Side 1

Des Id	Len (ft)	Description	Design Status	Detail Lap (in.)	Exterior				Interior					Exterior							
					% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	Lap (in.)	% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	Lap (in.)
1,1	28.25	8.50x0.105 Z Con	Yes	48					1	42	0.93	0.00	0.93	0.00	1	0.56	0.12	0.56	0.00	1	48
1,2	20.00	8.50x0.065 Z Con	Yes	42	0.56	0.10	0.56	0.00	1	42	0.71	0.34	0.71	0.00	1	0.17	0.14	0.17	0.00	1	42
1,3	20.00	8.50x0.059 Z Con	Yes	42	0.17	0.16	0.17	0.00	1	42	0.64	0.44	0.64	0.00	1	0.61	0.21	0.61	0.00	1	42
1,4	23.25	8.50x0.073 Z Con	Yes	42	0.61	0.25	0.61	0.00	1	42	0.94	0.00	0.94	0.00	1						
2,1	28.25	8.50x0.105 Z Con	Yes	48					1	12	1.00	0.00	1.00	0.00	1	0.53	0.12	0.53	0.00	1	30
2,2	20.00	8.50x0.065 Z Con	Yes	42	0.53	0.09	0.53	0.00	1	12	0.94	0.38	0.98	0.00	1	0.17	0.14	0.17	0.00	1	12
2,3	20.00	8.50x0.059 Z Con	Yes	42	0.17	0.15	0.17	0.00	1	12	0.84	0.46	0.89	0.00	1	0.54	0.22	0.54	0.00	1	12
2,4	23.25	8.50x0.065 Z Con	Yes	42	0.54	0.26	0.54	0.00	1	18	1.00	0.00	1.00	0.00	1						
3,1	22.61	8.50x0.073 Z Sim	Yes	0							0.93	0.00	0.93	0.00	1						

Maximum Secondary Deflections for Shape BD0462 Millenium Steel Joist Plant 3 on Side 1

Design Id	Segment	Deflection(in.)	Ratio	Location(ft)	Load Case	Description
1	1	1.69	(L/201)	12.50	1	W1>
1	2	-0.24	(L/988)	33.75	1	W1>
1	3	-0.12	(L/1996)	55.75	2	<W2
1	4	1.04	(L/267)	81.25	1	W1>
2	1	1.93	(L/176)	13.00	1	W1>
2	2	-0.24	(L/980)	33.25	1	W1>
2	3	-0.15	(L/1566)	56.25	2	<W2
2	4	1.07	(L/262)	81.25	1	W1>
3	1	1.23	(L/220)	11.00	1	W1>

Wall : 2



Dimension Key
 1 1'-0"
 2 10 1/2"

Maximum Secondary Designs for Shape BD0462 Millenium Steel Joist Plant 3 on Side 2

Des Id	Len (ft)	Description	Design Status	Detail Lap (in.)	Exterior					Interior					Exterior						
					% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	Lap (in.)	% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	Lap (in.)
1,1	26.00	8.50x0.082 Z Con	Yes	48							0.88	0.00	0.88	0.00	1	0.62	0.20	0.62	0.00	1	48
1,2	25.00	8.50x0.059 Z Con	Yes	48	0.62	0.17	0.62	0.00	1	48	0.66	0.45	0.66	0.00	1	0.58	0.28	0.58	0.00	1	48
1,3	25.00	8.50x0.059 Z Con	Yes	48	0.58	0.29	0.58	0.00	1	48	0.71	0.00	0.71	0.00	1	0.66	0.31	0.66	0.00	1	48
1,4	25.00	8.50x0.059 Z Con	Yes	48	0.66	0.30	0.66	0.00	1	48	0.63	0.00	0.63	0.00	1	0.64	0.30	0.64	0.00	1	48
1,5	25.00	8.50x0.059 Z Con	Yes	48	0.64	0.30	0.64	0.00	1	48	0.66	0.00	0.66	0.00	1	0.64	0.30	0.64	0.00	1	48
1,6	25.00	8.50x0.059 Z Con	Yes	48	0.64	0.30	0.64	0.00	1	48	0.64	0.00	0.64	0.00	1	0.65	0.30	0.65	0.00	1	48
1,7	25.00	8.50x0.059 Z Con	Yes	48	0.65	0.30	0.65	0.00	1	48	0.67	0.00	0.67	0.00	1	0.62	0.30	0.62	0.00	1	48
1,8	25.00	8.50x0.059 Z Con	Yes	48	0.62	0.29	0.62	0.00	1	48	0.59	0.00	0.59	0.00	1	0.70	0.31	0.70	0.00	1	48
1,9	20.50	8.50x0.059 Z Con	Yes	42	0.70	0.34	0.70	0.00	1	42	0.99	0.00	0.99	0.00	1						
2,1	26.00	8.50x0.073 Z Con	Yes	48							1.03	0.00	1.03	0.00	1	0.69	0.26	0.69	0.00	1	48
2,2	25.00	8.50x0.059 Z Con	Yes	48	0.69	0.22	0.69	0.00	1	48	0.76	0.48	0.78	0.00	1	0.56	0.27	0.56	0.00	1	48
2,3	25.00	8.50x0.059 Z Con	Yes	48	0.56	0.29	0.56	0.00	1	18	0.85	0.54	0.97	0.00	1	0.62	0.30	0.62	0.00	1	18
2,4	25.00	8.50x0.059 Z Con	Yes	48	0.62	0.30	0.62	0.00	1	18	0.85	0.53	0.97	0.00	1	0.60	0.30	0.60	0.00	1	18
2,5	25.00	8.50x0.059 Z Con	Yes	48	0.60	0.30	0.60	0.00	1	18	0.82	0.53	0.92	0.00	1	0.61	0.30	0.61	0.00	1	18
2,6	25.00	8.50x0.059 Z Con	Yes	48	0.61	0.30	0.61	0.00	1	18	0.83	0.53	0.93	0.00	1	0.61	0.30	0.61	0.00	1	18
2,7	25.00	8.50x0.059 Z Con	Yes	48	0.61	0.30	0.61	0.00	1	18	0.83	0.53	0.93	0.00	1	0.60	0.30	0.60	0.00	1	18
2,8	25.00	8.50x0.059 Z Con	Yes	48	0.60	0.29	0.60	0.00	1	24	0.81	0.51	0.89	0.00	1	0.66	0.30	0.66	0.00	1	24
2,9	20.50	8.50x0.059 Z Con	Yes	42	0.66	0.33	0.66	0.00	1	24	0.99	0.00	0.99	0.00	1						
3,1	26.00	8.50x0.073 Z Con	Yes	48							1.03	0.00	1.03	0.00	1	0.69	0.26	0.69	0.00	1	48
3,2	25.00	8.50x0.059 Z Con	Yes	48	0.69	0.22	0.69	0.00	1	48	0.76	0.48	0.78	0.00	1	0.56	0.27	0.56	0.00	1	48
3,3	25.00	8.50x0.059 Z Con	Yes	48	0.56	0.29	0.56	0.00	1	18	0.85	0.54	0.97	0.00	1	0.62	0.30	0.62	0.00	1	18
3,4	25.00	8.50x0.059 Z Con	Yes	48	0.62	0.30	0.62	0.00	1	18	0.85	0.53	0.97	0.00	1	0.60	0.30	0.60	0.00	1	18
3,5	25.00	8.50x0.059 Z Con	Yes	48	0.60	0.30	0.60	0.00	1	18	0.82	0.53	0.92	0.00	1	0.61	0.30	0.61	0.00	1	18
3,6	25.00	8.50x0.059 Z Con	Yes	48	0.61	0.30	0.61	0.00	1	18	0.83	0.53	0.93	0.00	1	0.61	0.30	0.61	0.00	1	18
3,7	25.00	8.50x0.059 Z Con	Yes	48	0.61	0.30	0.61	0.00	1	18	0.83	0.53	0.93	0.00	1	0.60	0.30	0.60	0.00	1	18
3,8	25.00	8.50x0.059 Z Con	Yes	48	0.60	0.29	0.60	0.00	1	24	0.82	0.52	0.90	0.00	1	0.66	0.30	0.66	0.00	1	24
3,9	25.00	8.50x0.059 Z Con	Yes	24	0.66	0.32	0.66	0.00	1	24	0.84	0.52	0.94	0.00	1	0.54	0.28	0.54	0.00	1	24
3,10	25.00	8.50x0.059 Z Con	Yes	18	0.54	0.24	0.54	0.00	1	12	0.68	0.41	0.68	0.00	1	0.42	0.21	0.42	0.00	1	12
3,11	25.00	8.50x0.059 Z Con	Yes	18	0.42	0.21	0.42	0.00	1	12	0.66	0.39	0.66	0.00	1	0.30	0.18	0.30	0.00	1	12
3,12	13.50	8.50x0.059 Z Con	Yes	12	0.30	0.15	0.30	0.00	1	12	0.47	0.26	0.47	0.00	1						
4,1	26.00	8.50x0.073 Z Con	Yes	48							1.03	0.00	1.03	0.00	1	0.69	0.26	0.69	0.00	1	48
4,2	25.00	8.50x0.059 Z Con	Yes	48	0.69	0.22	0.69	0.00	1	48	0.76	0.48	0.78	0.00	1	0.56	0.27	0.56	0.00	1	48
4,3	25.00	8.50x0.059 Z Con	Yes	48	0.56	0.29	0.56	0.00	1	18	0.85	0.54	0.97	0.00	1	0.62	0.30	0.62	0.00	1	18
4,4	25.00	8.50x0.059 Z Con	Yes	48	0.62	0.30	0.62	0.00	1	18	0.85	0.53	0.97	0.00	1	0.60	0.30	0.60	0.00	1	18
4,5	25.00	8.50x0.059 Z Con	Yes	48	0.60	0.30	0.60	0.00	1	18	0.83	0.53	0.92	0.00	1	0.61	0.30	0.61	0.00	1	18
4,6	25.00	8.50x0.059 Z Con	Yes	48	0.61	0.30	0.61	0.00	1	18	0.83	0.53	0.92	0.00	1	0.61	0.30	0.61	0.00	1	18
4,7	25.00	8.50x0.059 Z Con	Yes	48	0.61	0.30	0.61	0.00	1	18	0.82	0.53	0.92	0.00	1	0.61	0.30	0.61	0.00	1	18
4,8	25.00	8.50x0.059 Z Con	Yes	48	0.61	0.30	0.61	0.00	1	18	0.82	0.53	0.92	0.00	1	0.61	0.30	0.61	0.00	1	18
4,9	25.00	8.50x0.059 Z Con	Yes	24	0.61	0.30	0.61	0.00	1	18	0.83	0.53	0.92	0.00	1	0.61	0.30	0.61	0.00	1	18
4,10	25.00	8.50x0.059 Z Con	Yes	18	0.61	0.30	0.61	0.00	1	18	0.83	0.53	0.92	0.00	1	0.60	0.30	0.60	0.00	1	18
4,11	25.00	8.50x0.059 Z Con	Yes	18	0.60	0.30	0.60	0.00	1	18	0.86	0.53	0.98	0.00	1	0.63	0.30	0.63	0.00	1	18
4,12	25.00	8.50x0.059 Z Con	Yes	18	0.63	0.31	0.63	0.00	1	18	0.84	0.55	0.97	0.00	1	0.61	0.30	0.61	0.00	1	18
4,13	25.00	8.50x0.059 Z Con	Yes	18	0.61	0.29	0.61	0.00	1	18	0.83	0.51	0.92	0.00	1	0.55	0.27	0.55	0.00	1	18



Calculations Package

Table with columns for item ID, dimensions, material type, status, and various numerical values (e.g., 4,14 25.00 8.50x0.059 Z Con Yes 18 0.55 0.27 0.55 0.00 1 18 0.84 0.51 0.93 0.00 1 0.61 0.29 0.61 0.00 1 18).



Calculations Package

Date: 10/21/2004

Time: 11:41:24 AM

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9,5	25.00	8.50x0.059 Z Con	Yes	48	0.62	0.30	0.62	0.00	1	18	0.84	0.54	0.95	0.00	1	0.56	0.29	0.56	0.00	1	18
9,6	25.00	8.50x0.059 Z Con	Yes	48	0.56	0.27	0.56	0.00	1	48	0.77	0.48	0.79	0.00	1	0.69	0.22	0.69	0.00	1	48
9,7	26.00	8.50x0.073 Z Con	Yes	48	0.69	0.26	0.69	0.00	1	48	1.03	0.00	1.03	0.00	1						

Maximum Secondary Deflections for Shape BD0462 Millenium Steel Joist Plant 3 on Side 2

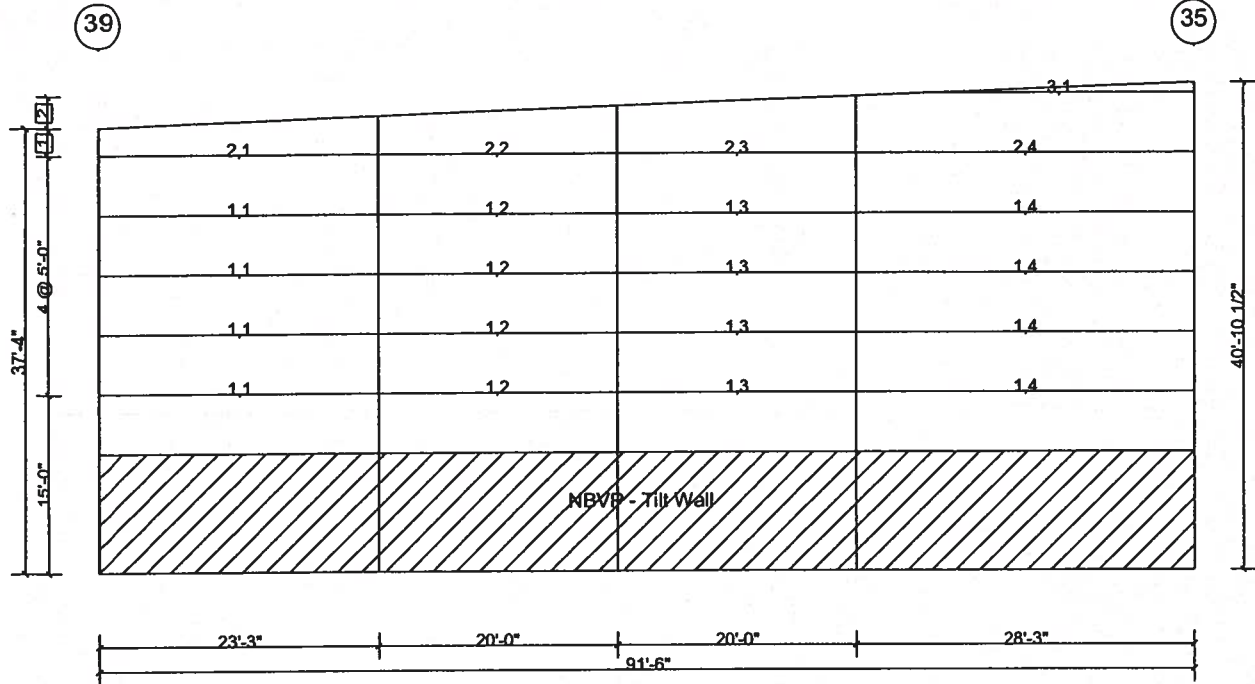
Design Id	Segment	Deflection(in.)	Ratio	Location(ft)	Load Case	Description
1	1	1.20	(L/250)	12.00	1	W1>
1	2	-0.19	(L/1554)	39.50	2	<W2
1	3	0.58	(L/514)	63.00	1	W1>
1	4	0.45	(L/666)	88.50	1	W1>
1	5	0.50	(L/603)	113.50	1	W1>
1	6	0.47	(L/639)	138.50	1	W1>
1	7	0.52	(L/579)	163.50	1	W1>
1	8	-0.38	(L/787)	188.00	2	<W2
1	9	0.70	(L/350)	213.00	1	W1>
2	1	1.24	(L/243)	12.00	1	W1>
2	2	0.23	(L/1288)	39.50	1	W1>
2	3	0.66	(L/455)	63.00	1	W1>
2	4	0.56	(L/539)	88.50	1	W1>
2	5	0.59	(L/511)	113.50	1	W1>
2	6	0.57	(L/525)	138.50	1	W1>
2	7	0.60	(L/499)	163.50	1	W1>
2	8	0.47	(L/640)	188.00	1	W1>
2	9	0.71	(L/346)	213.00	1	W1>
3	1	1.24	(L/243)	12.00	1	W1>
3	2	0.23	(L/1288)	39.50	1	W1>
3	3	0.66	(L/455)	63.00	1	W1>
3	4	0.56	(L/539)	88.50	1	W1>
3	5	0.59	(L/511)	113.50	1	W1>
3	6	0.57	(L/524)	138.50	1	W1>
3	7	0.60	(L/503)	163.50	1	W1>
3	8	0.49	(L/618)	188.50	1	W1>
3	9	0.74	(L/405)	214.00	1	W1>
3	10	0.33	(L/898)	239.00	1	W1>
3	11	0.55	(L/541)	264.00	1	W1>
3	12	-0.06	(L/2788)	279.50	1	W1>
4	1	1.24	(L/243)	12.00	1	W1>
4	2	0.23	(L/1287)	39.50	1	W1>
4	3	0.66	(L/455)	63.00	1	W1>
4	4	0.56	(L/538)	88.50	1	W1>
4	5	0.59	(L/513)	113.50	1	W1>
4	6	0.58	(L/520)	138.50	1	W1>
4	7	0.58	(L/518)	163.50	1	W1>
4	8	0.58	(L/518)	188.50	1	W1>
4	9	0.58	(L/521)	213.50	1	W1>
4	10	0.59	(L/510)	238.50	1	W1>
4	11	0.55	(L/547)	263.50	1	W1>
4	12	0.66	(L/453)	288.50	1	W1>
4	13	0.52	(L/579)	313.50	1	W1>
4	14	0.53	(L/566)	338.50	1	W1>
4	15	0.66	(L/455)	363.50	1	W1>
4	16	0.55	(L/546)	388.50	1	W1>
4	17	0.59	(L/511)	413.50	1	W1>
4	18	0.58	(L/520)	438.50	1	W1>
4	19	0.58	(L/518)	463.50	1	W1>
4	20	0.58	(L/518)	488.50	1	W1>
4	21	0.58	(L/520)	513.50	1	W1>
4	22	0.59	(L/513)	538.50	1	W1>
4	23	0.56	(L/538)	563.50	1	W1>
4	24	0.66	(L/456)	589.00	1	W1>
4	25	0.23	(L/1286)	612.50	1	W1>
4	26	1.23	(L/243)	640.00	1	W1>
5	1	0.73	(L/411)	15.50	1	W1>
5	2	1.65	(L/182)	38.50	1	W1>
5	3	1.65	(L/182)	63.50	1	W1>
5	4	1.65	(L/182)	88.50	1	W1>
5	5	1.65	(L/182)	113.50	1	W1>
5	6	1.65	(L/182)	138.50	1	W1>



Calculations Package

5	7	1.65	(L/182)	163.50	1	W1>
5	8	1.65	(L/182)	188.50	1	W1>
5	9	1.65	(L/182)	213.50	1	W1>
5	10	1.65	(L/182)	238.50	1	W1>
5	11	1.65	(L/182)	263.50	1	W1>
5	12	1.65	(L/182)	288.50	1	W1>
5	13	1.65	(L/182)	313.50	1	W1>
5	14	1.65	(L/182)	338.50	1	W1>
5	15	1.65	(L/182)	363.50	1	W1>
5	16	1.65	(L/182)	388.50	1	W1>
5	17	1.65	(L/182)	413.50	1	W1>
5	18	1.65	(L/182)	438.50	1	W1>
5	19	1.65	(L/182)	463.50	1	W1>
5	20	1.65	(L/182)	488.50	1	W1>
5	21	1.65	(L/182)	513.50	1	W1>
5	22	1.65	(L/182)	538.50	1	W1>
5	23	1.65	(L/182)	563.50	1	W1>
5	24	1.65	(L/182)	588.50	1	W1>
5	25	1.65	(L/182)	613.50	1	W1>
5	26	0.39	(L/778)	635.50	1	W1>
6	1	-0.10	(L/1970)	11.00	1	W1>
6	2	0.57	(L/525)	28.00	1	W1>
6	3	0.43	(L/691)	53.50	1	W1>
6	4	0.55	(L/549)	78.50	1	W1>
6	5	0.58	(L/516)	103.50	1	W1>
6	6	0.61	(L/489)	128.50	1	W1>
6	7	0.57	(L/530)	153.50	1	W1>
6	8	0.59	(L/510)	178.50	1	W1>
6	9	0.56	(L/539)	203.50	1	W1>
6	10	0.66	(L/455)	229.00	1	W1>
6	11	0.23	(L/1286)	252.50	1	W1>
6	12	1.23	(L/243)	280.00	1	W1>
7	1	1.32	(L/227)	11.50	1	W1>
7	2	-0.17	(L/1775)	39.50	2	<W2
7	3	0.61	(L/489)	62.50	1	W1>
7	4	0.41	(L/726)	88.00	1	W1>
7	5	0.60	(L/504)	113.50	1	W1>
7	6	-0.19	(L/1574)	137.00	2	<W2
7	7	1.20	(L/251)	164.50	1	W1>
8	1	1.34	(L/224)	11.50	1	W1>
8	2	-0.20	(L/1486)	39.00	2	<W2
8	3	0.69	(L/437)	62.50	1	W1>
8	4	0.53	(L/566)	88.00	1	W1>
8	5	0.67	(L/450)	113.50	1	W1>
8	6	-0.23	(L/1299)	137.00	2	<W2
8	7	1.24	(L/243)	164.50	1	W1>
9	1	1.34	(L/224)	11.50	1	W1>
9	2	0.31	(L/971)	39.00	1	W1>
9	3	0.68	(L/441)	63.00	1	W1>
9	4	0.53	(L/567)	88.00	1	W1>
9	5	0.67	(L/450)	113.50	1	W1>
9	6	0.23	(L/1300)	137.00	1	W1>
9	7	1.24	(L/243)	164.50	1	W1>

Wall : 3



SECONDARY ELEVATION AT A

Dimension Key

- 1 2'-4"
- 2 2'-8"

Maximum Secondary Designs for Shape BD0462 Millenium Steel Joist Plant 3 on Side 3

Des Id	Len (ft)	Description	Design Status	Detail Lap (in.)	Exterior						Interior					Exterior					
					% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	Lap (in.)	% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	Lap (in.)
1,1	23.25	8.50x0.073 Z Con	Yes	42							0.94	0.00	0.94	0.00	1	0.61	0.25	0.61	0.00	1	42
1,2	20.00	8.50x0.059 Z Con	Yes	42	0.61	0.21	0.61	0.00	1	42	0.64	0.44	0.64	0.00	1	0.17	0.16	0.17	0.00	1	42
1,3	20.00	8.50x0.065 Z Con	Yes	42	0.17	0.14	0.17	0.00	1	42	0.71	0.34	0.71	0.00	1	0.56	0.10	0.56	0.00	1	42
1,4	28.25	8.50x0.105 Z Con	Yes	48	0.56	0.12	0.56	0.00	1	48	0.93	0.00	0.93	0.00	1						
2,1	23.25	8.50x0.065 Z Con	Yes	42							1.00	0.00	1.00	0.00	1	0.54	0.26	0.54	0.00	1	18
2,2	20.00	8.50x0.059 Z Con	Yes	42	0.54	0.22	0.54	0.00	1	12	0.84	0.46	0.89	0.00	1	0.17	0.15	0.17	0.00	1	12
2,3	20.00	8.50x0.065 Z Con	Yes	42	0.17	0.14	0.17	0.00	1	12	0.94	0.38	0.98	0.00	1	0.53	0.09	0.53	0.00	1	12
2,4	28.25	8.50x0.105 Z Con	Yes	48	0.53	0.12	0.53	0.00	1	30	1.00	0.00	1.00	0.00	1						
3,1	22.61	8.50x0.073 Z Sim	Yes	0							0.88	0.00	0.88	0.00	1						

Maximum Secondary Deflections for Shape BD0462 Millenium Steel Joist Plant 3 on Side 3

Design Id	Segment	Deflection(in.)	Ratio	Location(ft)	Load Case	Description
1	1	1.05	(L/266)	10.00	1	W1>
1	2	-0.12	(L/2015)	35.75	2	<W2
1	3	-0.24	(L/991)	57.75	1	W1>
1	4	1.68	(L/201)	79.25	1	W1>
2	1	1.07	(L/262)	10.00	1	W1>
2	2	-0.15	(L/1554)	35.25	2	<W2
2	3	-0.24	(L/1009)	58.25	1	W1>
2	4	1.93	(L/176)	78.75	1	W1>
3	1	1.16	(L/235)	11.50	1	W1>

Wall : 4



Dimension Key

- 1 1'-0"
- 2 2'-4"

Maximum Secondary Designs for Shape BD0462 Millenium Steel Joist Plant 3 on Side 4

Des Id	Len (ft)	Description	Design Status	Detail Lap (in.)	Exterior				Interior				Exterior								
					% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	Lap (in.)	% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	Lap (in.)
1,1	26.00	8.50x0.082 Z Con	Yes	48					1	48	0.88	0.00	0.88	0.00	1	0.62	0.20	0.62	0.00	1	48
1,2	25.00	8.50x0.059 Z Con	Yes	48	0.62	0.17	0.62	0.00	1	48	0.66	0.45	0.66	0.00	1	0.58	0.28	0.58	0.00	1	48
1,3	25.00	8.50x0.059 Z Con	Yes	48	0.58	0.29	0.58	0.00	1	48	0.71	0.00	0.71	0.00	1	0.66	0.31	0.66	0.00	1	48
1,4	25.00	8.50x0.059 Z Con	Yes	48	0.66	0.30	0.66	0.00	1	48	0.63	0.00	0.63	0.00	1	0.64	0.30	0.64	0.00	1	48
1,5	25.00	8.50x0.059 Z Con	Yes	48	0.64	0.30	0.64	0.00	1	48	0.65	0.00	0.65	0.00	1	0.64	0.30	0.64	0.00	1	48
1,6	25.00	8.50x0.059 Z Con	Yes	48	0.64	0.30	0.64	0.00	1	48	0.64	0.00	0.64	0.00	1	0.64	0.30	0.64	0.00	1	48
1,7	25.00	8.50x0.059 Z Con	Yes	48	0.64	0.30	0.64	0.00	1	48	0.65	0.00	0.65	0.00	1	0.64	0.30	0.64	0.00	1	48
1,8	25.00	8.50x0.059 Z Con	Yes	48	0.64	0.30	0.64	0.00	1	48	0.65	0.00	0.65	0.00	1	0.64	0.30	0.64	0.00	1	48
1,9	25.00	8.50x0.059 Z Con	Yes	48	0.64	0.30	0.64	0.00	1	48	0.65	0.00	0.65	0.00	1	0.64	0.30	0.64	0.00	1	48
1,10	25.00	8.50x0.059 Z Con	Yes	48	0.64	0.30	0.64	0.00	1	48	0.65	0.00	0.65	0.00	1	0.64	0.30	0.64	0.00	1	48
1,11	25.00	8.50x0.059 Z Con	Yes	48	0.64	0.30	0.64	0.00	1	48	0.65	0.00	0.65	0.00	1	0.64	0.30	0.64	0.00	1	48
1,12	25.00	8.50x0.059 Z Con	Yes	48	0.64	0.30	0.64	0.00	1	48	0.65	0.00	0.65	0.00	1	0.64	0.30	0.64	0.00	1	48
1,13	25.00	8.50x0.059 Z Con	Yes	48	0.64	0.30	0.64	0.00	1	48	0.65	0.00	0.65	0.00	1	0.64	0.30	0.64	0.00	1	48
1,14	25.00	8.50x0.059 Z Con	Yes	48	0.64	0.30	0.64	0.00	1	48	0.65	0.00	0.65	0.00	1	0.64	0.30	0.64	0.00	1	48
1,15	25.00	8.50x0.059 Z Con	Yes	48	0.64	0.30	0.64	0.00	1	48	0.65	0.00	0.65	0.00	1	0.64	0.30	0.64	0.00	1	48
1,16	25.00	8.50x0.059 Z Con	Yes	48	0.64	0.30	0.64	0.00	1	48	0.65	0.00	0.65	0.00	1	0.64	0.30	0.64	0.00	1	48
1,17	25.00	8.50x0.059 Z Con	Yes	48	0.64	0.30	0.64	0.00	1	48	0.65	0.00	0.65	0.00	1	0.64	0.30	0.64	0.00	1	48
1,18	25.00	8.50x0.059 Z Con	Yes	48	0.64	0.30	0.64	0.00	1	48	0.65	0.00	0.65	0.00	1	0.64	0.30	0.64	0.00	1	48
1,19	25.00	8.50x0.059 Z Con	Yes	48	0.64	0.30	0.64	0.00	1	48	0.65	0.00	0.65	0.00	1	0.64	0.30	0.64	0.00	1	48
1,20	25.00	8.50x0.059 Z Con	Yes	48	0.64	0.30	0.64	0.00	1	48	0.65	0.00	0.65	0.00	1	0.64	0.30	0.64	0.00	1	48
1,21	25.00	8.50x0.059 Z Con	Yes	48	0.64	0.30	0.64	0.00	1	48	0.64	0.00	0.64	0.00	1	0.64	0.30	0.64	0.00	1	48
1,22	25.00	8.50x0.059 Z Con	Yes	48	0.64	0.30	0.64	0.00	1	48	0.65	0.00	0.65	0.00	1	0.64	0.30	0.64	0.00	1	48
1,23	25.00	8.50x0.059 Z Con	Yes	48	0.64	0.30	0.64	0.00	1	48	0.63	0.00	0.63	0.00	1	0.66	0.30	0.66	0.00	1	48
1,24	25.00	8.50x0.059 Z Con	Yes	48	0.66	0.31	0.66	0.00	1	48	0.71	0.00	0.71	0.00	1	0.58	0.29	0.58	0.00	1	48
1,25	25.00	8.50x0.059 Z Con	Yes	48	0.58	0.28	0.58	0.00	1	48	0.66	0.45	0.66	0.00	1	0.62	0.17	0.62	0.00	1	48
1,26	26.00	8.50x0.082 Z Con	Yes	48	0.62	0.20	0.62	0.00	1	48	0.88	0.00	0.88	0.00	1						
2,1	26.00	8.50x0.065 Z Con	Yes	48							0.98	0.00	0.98	0.00	1	0.52	0.23	0.52	0.00	1	12
2,2	25.00	8.50x0.059 Z Con	Yes	48	0.52	0.20	0.52	0.00	1	12	0.93	0.43	1.01	0.00	1	0.40	0.20	0.40	0.00	1	12
2,3	25.00	8.50x0.059 Z Con	Yes	48	0.40	0.22	0.40	0.00	1	12	0.70	0.41	0.70	0.00	1	0.45	0.22	0.45	0.00	1	12
2,4	25.00	8.50x0.059 Z Con	Yes	48	0.45	0.22	0.45	0.00	1	12	0.70	0.41	0.70	0.00	1	0.44	0.22	0.44	0.00	1	12
2,5	25.00	8.50x0.059 Z Con	Yes	48	0.44	0.22	0.44	0.00	1	12	0.68	0.40	0.68	0.00	1	0.44	0.22	0.44	0.00	1	12
2,6	25.00	8.50x0.059 Z Con	Yes	48	0.44	0.22	0.44	0.00	1	12	0.68	0.40	0.68	0.00	1	0.44	0.22	0.44	0.00	1	12
2,7	25.00	8.50x0.059 Z Con	Yes	48	0.44	0.22	0.44	0.00	1	12	0.68	0.40	0.68	0.00	1	0.44	0.22	0.44	0.00	1	12
2,8	25.00	8.50x0.059 Z Con	Yes	48	0.44	0.22	0.44	0.00	1	12	0.68	0.40	0.68	0.00	1	0.44	0.22	0.44	0.00	1	12
2,9	25.00	8.50x0.059 Z Con	Yes	48	0.44	0.22	0.44	0.00	1	12	0.68	0.40	0.68	0.00	1	0.44	0.22	0.44	0.00	1	12
2,10	25.00	8.50x0.059 Z Con	Yes	48	0.44	0.22	0.44	0.00	1	12	0.68	0.40	0.68	0.00	1	0.44	0.22	0.44	0.00	1	12
2,11	25.00	8.50x0.059 Z Con	Yes	48	0.44	0.22	0.44	0.00	1	12	0.68	0.40	0.68	0.00	1	0.44	0.22	0.44	0.00	1	12
2,12	25.00	8.50x0.059 Z Con	Yes	48	0.44	0.22	0.44	0.00	1	12	0.68	0.40	0.68	0.00	1	0.44	0.22	0.44	0.00	1	12
2,13	25.00	8.50x0.059 Z Con	Yes	48	0.44	0.22	0.44	0.00	1	12	0.68	0.40	0.68	0.00	1	0.44	0.22	0.44	0.00	1	12
2,14	25.00	8.50x0.059 Z Con	Yes	48	0.44	0.22	0.44	0.00	1	12	0.68	0.40	0.68	0.00	1	0.44	0.22	0.44	0.00	1	12
2,15	25.00	8.50x0.059 Z Con	Yes	48	0.44	0.22	0.44	0.00	1	12	0.68	0.40	0.68	0.00	1	0.44	0.22	0.44	0.00	1	12
2,16	25.00	8.50x0.059 Z Con	Yes	48	0.44	0.22	0.44	0.00	1	12	0.68	0.40	0.68	0.00	1	0.44	0.22	0.44	0.00	1	12
2,17	25.00	8.50x0.059 Z Con	Yes	48	0.44	0.22	0.44	0.00	1	12	0.68	0.40	0.68	0.00	1	0.44	0.22	0.44	0.00	1	12



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2,18	25.00	8.50x0.059 Z Con	Yes	48	0.44	0.22	0.44	0.00	1	12	0.68	0.40	0.68	0.00	1	0.44	0.22	0.44	0.00	1	12
2,19	25.00	8.50x0.059 Z Con	Yes	48	0.44	0.22	0.44	0.00	1	12	0.68	0.40	0.68	0.00	1	0.44	0.22	0.44	0.00	1	12
2,20	25.00	8.50x0.059 Z Con	Yes	48	0.44	0.22	0.44	0.00	1	12	0.68	0.40	0.68	0.00	1	0.44	0.22	0.44	0.00	1	12
2,21	25.00	8.50x0.059 Z Con	Yes	48	0.44	0.22	0.44	0.00	1	12	0.68	0.40	0.68	0.00	1	0.44	0.22	0.44	0.00	1	12
2,22	25.00	8.50x0.059 Z Con	Yes	48	0.44	0.22	0.44	0.00	1	12	0.68	0.40	0.68	0.00	1	0.44	0.22	0.44	0.00	1	12
2,23	25.00	8.50x0.059 Z Con	Yes	48	0.44	0.22	0.44	0.00	1	12	0.70	0.41	0.70	0.00	1	0.45	0.22	0.45	0.00	1	12
2,24	25.00	8.50x0.059 Z Con	Yes	48	0.45	0.22	0.45	0.00	1	12	0.70	0.41	0.70	0.00	1	0.40	0.22	0.40	0.00	1	12
2,25	25.00	8.50x0.059 Z Con	Yes	48	0.40	0.20	0.40	0.00	1	12	0.93	0.43	1.00	0.00	1	0.52	0.20	0.52	0.00	1	12
2,26	26.00	8.50x0.065 Z Con	Yes	48	0.52	0.23	0.52	0.00	1	12	0.98	0.00	0.98	0.00	1						

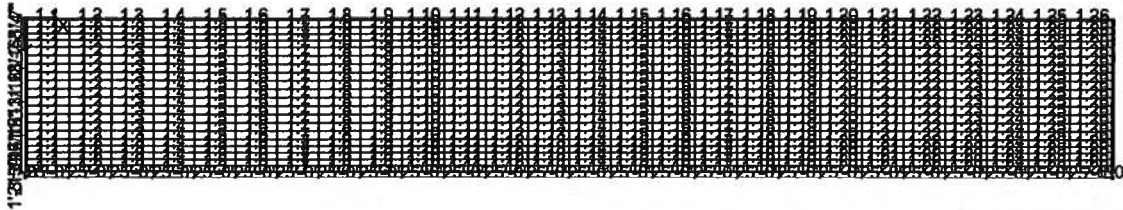
Maximum Secondary Deflections for Shape BD0462 Millenium Steel Joist Plant 3 on Side 4

Design Id	Segment	Deflection(in.)	Ratio	Location(ft)	Load Case	Description
1	1	1.20	(L/250)	12.00	1	W1>
1	2	-0.19	(L/1554)	39.50	2	<W2
1	3	0.58	(L/514)	63.00	1	W1>
1	4	0.45	(L/664)	88.50	1	W1>
1	5	0.49	(L/607)	113.50	1	W1>
1	6	0.48	(L/624)	138.50	1	W1>
1	7	0.48	(L/619)	163.50	1	W1>
1	8	0.48	(L/620)	188.50	1	W1>
1	9	0.48	(L/620)	213.50	1	W1>
1	10	0.48	(L/620)	238.50	1	W1>
1	11	0.48	(L/620)	263.50	1	W1>
1	12	0.48	(L/620)	288.50	1	W1>
1	13	0.48	(L/620)	313.50	1	W1>
1	14	0.48	(L/620)	338.50	1	W1>
1	15	0.48	(L/620)	363.50	1	W1>
1	16	0.48	(L/620)	388.50	1	W1>
1	17	0.48	(L/620)	413.50	1	W1>
1	18	0.48	(L/620)	438.50	1	W1>
1	19	0.48	(L/620)	463.50	1	W1>
1	20	0.48	(L/619)	488.50	1	W1>
1	21	0.48	(L/624)	513.50	1	W1>
1	22	0.49	(L/607)	538.50	1	W1>
1	23	0.45	(L/664)	563.50	1	W1>
1	24	0.58	(L/514)	589.00	1	W1>
1	25	-0.19	(L/1548)	612.50	2	<W2
1	26	1.20	(L/251)	640.00	1	W1>
2	1	1.20	(L/249)	12.00	1	W1>
2	2	0.23	(L/1290)	39.50	1	W1>
2	3	0.52	(L/582)	63.50	1	W1>
2	4	0.43	(L/693)	88.50	1	W1>
2	5	0.46	(L/657)	113.50	1	W1>
2	6	0.45	(L/667)	138.50	1	W1>
2	7	0.45	(L/664)	163.50	1	W1>
2	8	0.45	(L/665)	188.50	1	W1>
2	9	0.45	(L/665)	213.50	1	W1>
2	10	0.45	(L/665)	238.50	1	W1>
2	11	0.45	(L/665)	263.50	1	W1>
2	12	0.45	(L/665)	288.50	1	W1>
2	13	0.45	(L/665)	313.50	1	W1>
2	14	0.45	(L/665)	338.50	1	W1>
2	15	0.45	(L/665)	363.50	1	W1>
2	16	0.45	(L/665)	388.50	1	W1>
2	17	0.45	(L/665)	413.50	1	W1>
2	18	0.45	(L/665)	438.50	1	W1>
2	19	0.45	(L/665)	463.50	1	W1>
2	20	0.45	(L/664)	488.50	1	W1>
2	21	0.45	(L/667)	513.50	1	W1>
2	22	0.46	(L/657)	538.50	1	W1>
2	23	0.43	(L/693)	563.50	1	W1>
2	24	0.52	(L/582)	588.50	1	W1>
2	25	0.23	(L/1286)	612.50	1	W1>
2	26	1.20	(L/249)	640.00	1	W1>



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Roof : A



Maximum Secondary Designs for Shape BD0462 Millenium Steel Joist Plant 3 on Side A

Des Id	Len (ft)	Description	Design Status	Detail Lap (in.)	Exterior					Interior					Exterior						
					% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	Lap (in.)	% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	Lap (in.)
1,1	26.00	18.00x0.000 JST Sim	Yes	0																	
1,2	25.00	18.00x0.000 JST Sim	Yes	0																	
1,3	25.00	18.00x0.000 JST Sim	Yes	0																	
1,4	25.00	18.00x0.000 JST Sim	Yes	0																	
1,5	25.00	18.00x0.000 JST Sim	Yes	0																	
1,6	25.00	18.00x0.000 JST Sim	Yes	0																	
1,7	25.00	18.00x0.000 JST Sim	Yes	0																	
1,8	25.00	18.00x0.000 JST Sim	Yes	0																	
1,9	25.00	18.00x0.000 JST Sim	Yes	0																	
1,10	25.00	18.00x0.000 JST Sim	Yes	0																	
1,11	25.00	18.00x0.000 JST Sim	Yes	0																	
1,12	25.00	18.00x0.000 JST Sim	Yes	0																	
1,13	25.00	18.00x0.000 JST Sim	Yes	0																	
1,14	25.00	18.00x0.000 JST Sim	Yes	0																	
1,15	25.00	18.00x0.000 JST Sim	Yes	0																	
1,16	25.00	18.00x0.000 JST Sim	Yes	0																	
1,17	25.00	18.00x0.000 JST Sim	Yes	0																	
1,18	25.00	18.00x0.000 JST Sim	Yes	0																	
1,19	25.00	18.00x0.000 JST Sim	Yes	0																	
1,20	25.00	18.00x0.000 JST Sim	Yes	0																	
1,21	25.00	18.00x0.000 JST Sim	Yes	0																	
1,22	25.00	18.00x0.000 JST Sim	Yes	0																	
1,23	25.00	18.00x0.000 JST Sim	Yes	0																	
1,24	25.00	18.00x0.000 JST Sim	Yes	0																	
1,25	25.00	18.00x0.000 JST Sim	Yes	0																	
1,26	26.00	18.00x0.000 JST Sim	Yes	0																	

Maximum Secondary Deflections for Shape BD0462 Millenium Steel Joist Plant 3 on Side A

Design Id	Segment	Deflection(in.)	Ratio	Location(ft)	Load Case	Description
1	1	1.20	(L/249)	12.00	1	L
1	2	0.23	(L/1290)	39.50	1	L
1	3	0.52	(L/582)	63.50	1	L
1	4	0.43	(L/693)	88.50	1	L
1	5	0.46	(L/657)	113.50	1	L
1	6	0.45	(L/667)	138.50	1	L
1	7	0.45	(L/664)	163.50	1	L
1	8	0.45	(L/665)	188.50	1	L
1	9	0.45	(L/665)	213.50	1	L
1	10	0.45	(L/665)	238.50	1	L
1	11	0.45	(L/665)	263.50	1	L
1	12	0.45	(L/665)	288.50	1	L
1	13	0.45	(L/665)	313.50	1	L



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1	14	0.45	(L/665)	338.50	1	L
1	15	0.45	(L/665)	363.50	1	L
1	16	0.45	(L/665)	388.50	1	L
1	17	0.45	(L/665)	413.50	1	L
1	18	0.45	(L/665)	438.50	1	L
1	19	0.45	(L/665)	463.50	1	L
1	20	0.45	(L/664)	488.50	1	L
1	21	0.45	(L/667)	513.50	1	L
1	22	0.46	(L/657)	538.50	1	L
1	23	0.43	(L/693)	563.50	1	L
1	24	0.52	(L/582)	588.50	1	L
1	25	0.23	(L/1286)	612.50	1	L
1	26	1.20	(L/249)	640.00	1	L

Purlin Anchorage Forces

Shape	Force(k)	Resistance(k)	Numb. Purlins	Roof Angle (Pitch)
A	0.00	0.00	21	-2.214 (-0.464:12)

Framing - Summary Report

Loads and Codes - Shape: Joist Plant Phase 1

City: Lake City	County: Columbia	State: Florida	Country: United States
Building Code: 2001 Florida State Building Code	Built Up: 89AISC	Rainfall: 10.00 in per hour	Allow. Overstress:
Building Use: Standard Occupancy Structures	Cold Form: 96AISI	Frm: 1.03, Sec: 1.03, Brc: 1.03	

Dead and Collateral Loads

Collateral Gravity: 5.00 psf
Collateral Uplift: 0.00 psf

Roof Covering + Second. Dead Load: 3.63 psf
Frame Weight (assumed for seismic): 2.50 psf

Live Load

Live Load: 20.00 psf Reducible
LL for Below Eave Canopy: N/A

Wind Load

Wind Speed: 100.00 mph
Wind Exposure (Factor): C (0.979)
Parts Wind Exposure Factor: 0.979
Wind Enclosure: Enclosed
Wind Importance Factor: 1.000

Snow Load

Ground Snow Load: 0.00 psf
Design Snow (Sloped): 0.00 psf
Snow Exposure Category (Factor): 1 (1.00)
Snow Importance: 1.000
Thermal Category (Factor): Heated (1.00)
Ground / Roof Conversion: 1.00
% Snow Used in Seismic: 0.00
Seismic Snow Load: 0.00 psf
Unobstructed, Slippery Roof

Seismic Load

N/A

NOT Windborne Debris Region
Base Elevation: 0/0/0
Primary Zone Strip Width: 52/1/15
Parts / Portions Zone Strip Width: 26/0/15
Basic Wind Pressure: 21.30 psf

Deflection Conditions

Frames are vertically supporting: Metal Roof Purlins and Panels
Frames are laterally supporting: Metal Wall Girts and Panels
Purlins are supporting: Metal Roof Panels
Girts are supporting: Metal Wall Panels

Per Article 2.9 in the Builder Agreement, VP Buildings assumes that the Builder has called the local Building Official or Project Engineer to obtain all code and loading information for this specific building site.



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Loads and Codes - Shape: Copy of BD0462 Millenium Steel Joist Plant 2

City: Lake City County: Columbia State: Florida
Building Code: 2001 Florida State Building Code Built Up: 89AISC
Building Use: Standard Occupancy Structures Cold Form: 96AISI

Country: United States
Rainfall: 10.00 in per hour
Allow. Overstress:
Frm: 1.03, Sec: 1.03, Brc: 1.03

Dead and Collateral Loads

Collateral Gravity: 5.00 psf
Collateral Uplift: 0.00 psf

Roof Covering + Second. Dead Load: 3.63 psf
Frame Weight (assumed for seismic): 2.50 psf

Live Load

Live Load: 20.00 psf Reducible
LL for Below Eave Canopy: N/A

Wind Load

Wind Speed: 100.00 mph
Wind Exposure (Factor): C (0.962)
Parts Wind Exposure Factor: 0.962
Wind Enclosure: Enclosed
Wind Importance Factor: 1.000

Snow Load

Ground Snow Load: 0.00 psf
Design Snow (Sloped): 0.00 psf
Snow Exposure Category (Factor): 1 (1.00)
Snow Importance: 1.000
Thermal Category (Factor): Heated (1.00)
Ground / Roof Conversion: 1.00
% Snow Used in Seismic: 0.00
Seismic Snow Load: 0.00 psf
Unobstructed, Slippery Roof

Seismic Load

N/A

NOT Windborne Debris Region

Base Elevation: 0/0/0
Primary Zone Strip Width: 52/1/15
Parts / Portions Zone Strip Width: 26/0/15
Basic Wind Pressure: 20.93 psf

Deflection Conditions

Frames are vertically supporting: Metal Roof Purlins and Panels
Frames are laterally supporting: Metal Wall Girts and Panels
Purlins are supporting: Metal Roof Panels
Girts are supporting: Metal Wall Panels

Per Article 2.9 in the Builder Agreement, VP Buildings assumes that the Builder has called the local Building Official or Project Engineer to obtain all code and loading information for this specific building site.

Loads and Codes - Shape: BD0462 Millenium Steel Phase 2 lean-to

City: Lake City County: Columbia State: Florida
Building Code: 2001 Florida State Building Code Built Up: 89AISC
Building Use: Standard Occupancy Structures Cold Form: 96AISI

Country: United States
Rainfall: 10.00 in per hour
Allow. Overstress:
Frm: 1.03, Sec: 1.03, Brc: 1.03

Dead and Collateral Loads

Collateral Gravity: 5.00 psf
Collateral Uplift: 0.00 psf

Roof Covering + Second. Dead Load: 3.63 psf
Frame Weight (assumed for seismic): 2.50 psf

Live Load

Live Load: 20.00 psf Reducible
LL for Below Eave Canopy: N/A

Wind Load

Wind Speed: 100.00 mph
Wind Exposure (Factor): C (0.954)
Parts Wind Exposure Factor: 0.954
Wind Enclosure: Enclosed
Wind Importance Factor: 1.000

Snow Load

Ground Snow Load: 0.00 psf
Design Snow (Sloped): 0.00 psf
Snow Exposure Category (Factor): 1 (1.00)
Snow Importance: 1.000
Thermal Category (Factor): Heated (1.00)
Ground / Roof Conversion: 1.00
% Snow Used in Seismic: 0.00
Seismic Snow Load: 0.00 psf
Unobstructed, Slippery Roof

Seismic Load

N/A

NOT Windborne Debris Region

Base Elevation: 0/0/0
Primary Zone Strip Width: 21/5/12
Parts / Portions Zone Strip Width: 10/8/14
Basic Wind Pressure: 20.75 psf

Deflection Conditions

Frames are vertically supporting: Metal Roof Purlins and Panels
Frames are laterally supporting: Metal Wall Girts and Panels
Purlins are supporting: Metal Roof Panels
Girts are supporting: Metal Wall Panels

Per Article 2.9 in the Builder Agreement, VP Buildings assumes that the Builder has called the local Building Official or Project Engineer to obtain all code and loading information for this specific building site.



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Loads and Codes - Shape: BD0462 Millenium Steel Joist Plant 3

City: Lake City	County: Columbia	State: Florida	Country: United States
Building Code: 2001 Florida State Building Code		Built Up: 89AISC	Rainfall: 10.00 in per hour
Building Use: Standard Occupancy Structures		Cold Form: 96AISI	Allow. Overstress:
			Frm: 1.03, Sec: 1.03, Brc: 1.03

Dead and Collateral Loads

Collateral Gravity: 5.00 psf
 Collateral Uplift: 0.00 psf

Roof Covering + Second. Dead Load: 3.63 psf
 Frame Weight (assumed for seismic): 2.50 psf

Live Load

Live Load: 20.00 psf Reducible
 LL for Below Eave Canopy: N/A

Wind Load

Wind Speed: 100.00 mph
 Wind Exposure (Factor): C (1.039)
 Parts Wind Exposure Factor: 1.039
 Wind Enclosure: Enclosed
 Wind Importance Factor: 1.000

Snow Load

Ground Snow Load: 0.00 psf
 Design Snow (Sloped): 0.00 psf
 Snow Exposure Category (Factor): 1 (1.00)
 Snow Importance: 1.000
 Thermal Category (Factor): Heated (1.00)
 Ground / Roof Conversion: 1.00
 % Snow Used in Seismic: 0.00
 Seismic Snow Load: 0.00 psf
 Unobstructed, Slippery Roof

Seismic Load

N/A

NOT Windborne Debris Region

Base Elevation: 0/0/0
 Primary Zone Strip Width: 31/3/6
 Parts / Portions Zone Strip Width: 15/7/11
 Basic Wind Pressure: 22.60 psf

Deflection Conditions

Frames are vertically supporting: Metal Roof Purlins and Panels
 Frames are laterally supporting: Metal Wall Girts and Panels
 Purlins are supporting: Metal Roof Panels
 Girts are supporting: Metal Wall Panels

Per Article 2.9 in the Builder Agreement, VP Buildings assumes that the Builder has called the local Building Official or Project Engineer to obtain all code and loading information for this specific building site.

Covering - Summary Report

Shape: Joist Plant Phase 1

Loads and Codes - Shape: Joist Plant Phase 1

City: Lake City	County: Columbia	State: Florida	Country: United States
Building Code: 2001 Florida State Building Code		Built Up: 89AISC	Rainfall: 10.00 in per hour
Building Use: Standard Occupancy Structures		Cold Form: 96AISI	Allow. Overstress:
			Frm: 1.03, Sec: 1.03, Brc: 1.03

Dead and Collateral Loads

Collateral Gravity: 5.00 psf
 Collateral Uplift: 0.00 psf

Roof Covering + Second. Dead Load: 3.63 psf
 Frame Weight (assumed for seismic): 2.50 psf

Live Load

Live Load: 20.00 psf Reducible
 LL for Below Eave Canopy: N/A

Wind Load

Wind Speed: 100.00 mph
 Wind Exposure (Factor): C (0.979)
 Parts Wind Exposure Factor: 0.979
 Wind Enclosure: Enclosed
 Wind Importance Factor: 1.000

Snow Load

Ground Snow Load: 0.00 psf
 Design Snow (Sloped): 0.00 psf
 Snow Exposure Category (Factor): 1 (1.00)
 Snow Importance: 1.000
 Thermal Category (Factor): Heated (1.00)
 Ground / Roof Conversion: 1.00
 % Snow Used in Seismic: 0.00
 Seismic Snow Load: 0.00 psf
 Unobstructed, Slippery Roof

Seismic Load

N/A

NOT Windborne Debris Region

Base Elevation: 0/0/0
 Primary Zone Strip Width: 52/1/15
 Parts / Portions Zone Strip Width: 26/0/15
 Basic Wind Pressure: 21.30 psf

Per Article 2.9 in the Builder Agreement, VP Buildings assumes that the Builder has called the local Building Official or Project Engineer to obtain all code and loading information for this specific building site.

Covering Design Loads - Wall: 1

Zone	Units	Type	Description	Actual	Loc1	Allow.	Ratio	Dir.	Coef.
End Zone	psf	W1>	Need Lower and Upper Girt	30.67	0/0/0	42.000	0.73	OUT	-1.440
End Zone	psf	<W2	Need Lower Girt	23.01	0/0/0	26.000	0.88	IN	1.080
End Zone	psf	W1>	Need Lower and Upper Girt	30.67	73/11/1	42.000	0.73	OUT	-1.440
End Zone	psf	<W2	Need Lower Girt	23.01	73/11/1	26.000	0.88	IN	1.080
Interior Area	psf	W1>	Need Lower and Upper Girt	24.92	26/0/15	42.000	0.59	OUT	-1.170
Interior Area	psf	<W2	Need Lower Girt	23.01	26/0/15	26.000	0.88	IN	1.080



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Covering Design Loads - Wall: 2

Zone	Units	Type	Description	Actual	Loc1	Allow.	Ratio	Dir.	Coef.
End Zone	psf	W1>	Need Lower and Upper Girt	30.67	0/0/0	42.000	0.73	OUT	-1.440
End Zone	psf	<W2	Need Lower Girt	23.01	0/0/0	26.000	0.88	IN	1.080
End Zone	psf	W1>	Need Lower and Upper Girt	30.67	500/11/1	42.000	0.73	OUT	-1.440
End Zone	psf	<W2	Need Lower Girt	23.01	500/11/1	26.000	0.88	IN	1.080
Interior Area	psf	W1>	Need Lower and Upper Girt	24.92	26/0/15	42.000	0.59	OUT	-1.170
Interior Area	psf	<W2	Need Lower Girt	23.01	26/0/15	26.000	0.88	IN	1.080

Covering Design Loads - Wall: 4

Zone	Units	Type	Description	Actual	Loc1	Allow.	Ratio	Dir.	Coef.
End Zone	psf	W1>	Need Lower and Upper Girt	30.67	0/0/0	42.000	0.73	OUT	-1.440
End Zone	psf	<W2	Need Lower Girt	23.01	0/0/0	26.000	0.88	IN	1.080
Interior Area	psf	W1>	Need Lower and Upper Girt	24.92	26/0/15	42.000	0.59	OUT	-1.170
Interior Area	psf	<W2	Need Lower Girt	23.01	26/0/15	26.000	0.88	IN	1.080

Covering Design Loads - Wall: 5

Zone	Units	Type	Description	Actual	Loc1	Allow.	Ratio	Dir.	Coef.
End Zone	psf	W1>	Need Lower and Upper Girt	30.67	0/0/0	42.000	0.73	OUT	-1.440
End Zone	psf	<W2	Need Lower Girt	23.01	0/0/0	26.000	0.88	IN	1.080
End Zone	psf	W1>	Need Lower and Upper Girt	30.67	30/5/1	42.000	0.73	OUT	-1.440
End Zone	psf	<W2	Need Lower Girt	23.01	30/5/1	26.000	0.88	IN	1.080
Interior Area	psf	W1>	Need Lower and Upper Girt	24.92	26/0/15	42.000	0.59	OUT	-1.170
Interior Area	psf	<W2	Need Lower Girt	23.01	26/0/15	26.000	0.88	IN	1.080

Covering Design Loads - Wall: 6

Zone	Units	Type	Description	Actual	Loc1	Allow.	Ratio	Dir.	Coef.
End Zone	psf	W1>	Need Lower and Upper Girt	30.67	0/0/0	42.000	0.73	OUT	-1.440
End Zone	psf	<W2	Need Lower Girt	23.01	0/0/0	26.000	0.88	IN	1.080
End Zone	psf	W1>	Need Lower and Upper Girt	30.67	73/11/1	42.000	0.73	OUT	-1.440
End Zone	psf	<W2	Need Lower Girt	23.01	73/11/1	26.000	0.88	IN	1.080
Interior Area	psf	W1>	Need Lower and Upper Girt	24.92	26/0/15	42.000	0.59	OUT	-1.170
Interior Area	psf	<W2	Need Lower Girt	23.01	26/0/15	26.000	0.88	IN	1.080

Covering Design Loads - Roof: A

Zone	Units	Type	Description	Actual	Loc1	Allow.	Ratio	Dir.	Coef.
Entire Surface	psf	L	Standard Spacing is Adequate	21.13	0/0/0	70.000	0.30	IN	1.000
Side Zone	psf	W1>	Non-std Spacing: 4/6/0 Required	41.05	-73/11/1	40.000	1.03	OUT	-1.980
Side Zone	psf	<W2	Standard Spacing is Adequate	11.35	-73/11/1	70.000	0.16	IN	0.480
Corner Zone	psf	W1>	Non-std Spacing: 2/6/0 Required	62.35	-73/11/1	63.000	0.99	OUT	-2.980
Corner Zone	psf	<W2	Standard Spacing is Adequate	11.35	-73/11/1	70.000	0.16	IN	0.480
Side Zone	psf	W1>	Non-std Spacing: 4/6/0 Required	41.05	0/0/0	40.000	1.03	OUT	-1.980
Side Zone	psf	<W2	Standard Spacing is Adequate	11.35	0/0/0	70.000	0.16	IN	0.480
Corner Zone	psf	W1>	Non-std Spacing: 2/6/0 Required	62.35	0/0/0	63.000	0.99	OUT	-2.980
Corner Zone	psf	<W2	Standard Spacing is Adequate	11.35	0/0/0	70.000	0.16	IN	0.480
Side Zone	psf	W1>	Non-std Spacing: 4/6/0 Required	41.05	26/0/15	40.000	1.03	OUT	-1.980
Side Zone	psf	<W2	Standard Spacing is Adequate	11.35	26/0/15	70.000	0.16	IN	0.480
Side Zone	psf	W1>	Non-std Spacing: 4/6/0 Required	41.05	527/0/0	40.000	1.03	OUT	-1.980
Side Zone	psf	<W2	Standard Spacing is Adequate	11.35	527/0/0	70.000	0.16	IN	0.480
Corner Zone	psf	W1>	Non-std Spacing: 2/6/0 Required	62.35	-100/0/0	63.000	0.99	OUT	-2.980
Corner Zone	psf	<W2	Standard Spacing is Adequate	11.35	-100/0/0	70.000	0.16	IN	0.480
Interior Area	psf	W1>	Standard Spacing is Adequate	24.01	26/0/15	37.000	0.65	OUT	-1.180
Interior Area	psf	<W2	Standard Spacing is Adequate	11.35	26/0/15	70.000	0.16	IN	0.480

Covering Design Loads - Roof: B

Zone	Units	Type	Description	Actual	Loc1	Allow.	Ratio	Dir.	Coef.
Entire Surface	psf	L	Standard Spacing is Adequate	21.13	527/0/0	70.000	0.30	IN	1.000
Side Zone	psf	W1>	Non-std Spacing: 4/6/0 Required	41.05	500/11/1	40.000	1.03	OUT	-1.980
Side Zone	psf	<W2	Standard Spacing is Adequate	11.35	500/11/1	70.000	0.16	IN	0.480
Corner Zone	psf	W1>	Non-std Spacing: 2/6/0 Required	62.35	500/11/1	63.000	0.99	OUT	-2.980
Corner Zone	psf	<W2	Standard Spacing is Adequate	11.35	500/11/1	70.000	0.16	IN	0.480
Side Zone	psf	W1>	Non-std Spacing: 4/6/0 Required	41.05	0/0/0	40.000	1.03	OUT	-1.980
Side Zone	psf	<W2	Standard Spacing is Adequate	11.35	0/0/0	70.000	0.16	IN	0.480
Interior Area	psf	W1>	Standard Spacing is Adequate	24.01	0/0/0	37.000	0.65	OUT	-1.180
Interior Area	psf	<W2	Standard Spacing is Adequate	11.35	0/0/0	70.000	0.16	IN	0.480

Panel Data



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Wall/Roof	Type	Thickness	Finish	Color	Direction	Gable Dir	Max. Length
Wall: 1	Panel Rib	26	KXL	Standard Color	Left to Right	Peak Out	41/0/0
Location: 2	NBVP - Tilt Wall	0/5/0					
Wall: 2	Panel Rib	26	KXL	Standard Color	Left to Right	Peak Out	41/0/0
Location: 2	NBVP - Tilt Wall	0/5/0					
Wall: 3	NBVP - Other	1/0/0	psf = 1.00				
Wall: 4	Panel Rib	26	KXL	Standard Color	Left to Right	Peak Out	41/0/0
Location: 2	NBVP - Tilt Wall	0/5/0					
Wall: 5	Panel Rib	26	KXL	Standard Color	Left to Right	Peak Out	41/0/0
Location: 2	NBVP - Tilt Wall	0/5/0					
Wall: 6	Panel Rib	26	KXL	Standard Color	Left to Right	Peak Out	41/0/0
Location: 2	NBVP - Tilt Wall	0/5/0					
Roof: A	SSR	24	Galvalume	Standard Color	System Generated	Not Applicable	51/0/0
Roof: B	SSR	24	Galvalume	Standard Color	System Generated	Not Applicable	51/0/0

Abbreviation Definitions

Codes	Definition
LE	From Left Edge
RE	From Right Edge
FL	From Frame
FS	From Start Dim

Location Data

Wall/Roof	Start Dim.	Bottom Elev.	Top Elev.	End Dim.	Bottom Elev.	Top Elev.	First Pitch	Second Pitch	Ridge Distance	Ridge Height	psf
Wall: 1 Location: 2	Full Width	0/0/0	9/11/10		0/0/0	9/11/10					72.00
Wall: 2 Location: 2	Full Width	0/0/0	9/11/10		0/0/0	9/11/10					72.00
Wall: 4 Location: 2	Full Width	0/0/0	9/11/10		0/0/0	9/11/10					72.00
Wall: 5 Location: 2	Full Width	0/0/0	9/11/10		0/0/0	9/11/10					72.00
Wall: 6 Location: 2	Full Width	0/0/0	9/11/10		0/0/0	9/11/10					72.00

Fastener Data

Wall/Roof	Type	Length	Spacing	Washers	Insul. Block	Mod. Ctrl.	Ice Damming
Wall: 1	Color Match Carbon	Standard Option	Standard Option	No	None	No	No
Location: 2	Not Applicable						
Wall: 2	Color Match Carbon	Standard Option	Standard Option	No	None	No	No
Location: 2	Not Applicable						
Wall: 3	Not Applicable						
Wall: 4	Color Match Carbon	Standard Option	Standard Option	No	None	No	No
Location: 2	Not Applicable						
Wall: 5	Color Match Carbon	Standard Option	Standard Option	No	None	No	No
Location: 2	Not Applicable						
Wall: 6	Color Match Carbon	Standard Option	Standard Option	No	None	No	No
Location: 2	Not Applicable						
Roof: A	Stainless Steel Capped	Standard Option	Standard Option	Yes	None	No	No
Roof: B	Stainless Steel Capped	Standard Option	Standard Option	Yes	None	No	No

Shape: Copy of BD0462 Millenium Steel Joist Plant 2

Loads and Codes - Shape: Copy of BD0462 Millenium Steel Joist Plant 2

City: Lake City	County: Columbia	State: Florida	Country: United States
Building Code: 2001 Florida State Building Code		Built Up: 89AISC	Rainfall: 10.00 in per hour
Building Use: Standard Occupancy Structures		Cold Form: 96AISI	Allow. Overstress:
			Frm: 1.03, Sec: 1.03, Br: 1.03

Dead and Collateral Loads

Collateral Gravity: 5.00 psf
 Collateral Uplift: 0.00 psf

Roof Covering + Second. Dead Load: 3.63 psf
 Frame Weight (assumed for seismic): 2.50 psf

Live Load

Live Load: 20.00 psf Reducible
 LL for Below Eave Canopy: N/A

Wind Load

Wind Speed: 100.00 mph
 Wind Exposure (Factor): C (0.962)
 Parts Wind Exposure Factor: 0.962
 Wind Enclosure: Enclosed
 Wind Importance Factor: 1.000

Snow Load

Ground Snow Load: 0.00 psf
 Design Snow (Sloped): 0.00 psf
 Snow Exposure Category (Factor): 1 (1.00)
 Snow Importance: 1.000
 Thermal Category (Factor): Heated (1.00)
 Ground / Roof Conversion: 1.00
 % Snow Used in Seismic: 0.00
 Seismic Snow Load: 0.00 psf
 Unobstructed, Slippery Roof

Seismic Load

N/A

NOT Windborne Debris Region
 Base Elevation: 0/0/0
 Primary Zone Strip Width: 52/1/15



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Parts / Portions Zone Strip Width: 26/0/15
 Basic Wind Pressure: 20.93 psf

Per Article 2.9 in the Builder Agreement, VP Buildings assumes that the Builder has called the local Building Official or Project Engineer to obtain all code and loading information for this specific building site.

Covering Design Loads - Wall: 1

Zone	Units	Type	Description	Actual	Loc1	Allow.	Ratio	Dir.	Coef.
End Zone	psf	W1>	Need Lower and Upper Girt	30.14	0/0/0	42.000	0.72	OUT	-1.440
End Zone	psf	<W2	Need Lower Girt	22.61	0/0/0	26.000	0.87	IN	1.080

Covering Design Loads - Wall: 2

Zone	Units	Type	Description	Actual	Loc1	Allow.	Ratio	Dir.	Coef.
End Zone	psf	W1>	Need Lower and Upper Girt	30.14	0/0/0	42.000	0.72	OUT	-1.440
End Zone	psf	<W2	Need Lower Girt	22.61	0/0/0	26.000	0.87	IN	1.080
End Zone	psf	W1>	Need Lower and Upper Girt	30.14	150/11/1	42.000	0.72	OUT	-1.440
End Zone	psf	<W2	Need Lower Girt	22.61	150/11/1	26.000	0.87	IN	1.080
Interior Area	psf	W1>	Need Lower and Upper Girt	24.49	26/0/15	42.000	0.58	OUT	-1.170
Interior Area	psf	<W2	Need Lower Girt	22.61	26/0/15	26.000	0.87	IN	1.080

Covering Design Loads - Wall: 4

Zone	Units	Type	Description	Actual	Loc1	Allow.	Ratio	Dir.	Coef.
End Zone	psf	W1>	Need Lower and Upper Girt	30.14	63/11/1	42.000	0.72	OUT	-1.440
End Zone	psf	<W2	Need Lower Girt	22.61	63/11/1	26.000	0.87	IN	1.080
Interior Area	psf	W1>	Need Lower and Upper Girt	24.49	0/0/0	42.000	0.58	OUT	-1.170
Interior Area	psf	<W2	Need Lower Girt	22.61	0/0/0	26.000	0.87	IN	1.080

Covering Design Loads - Roof: A

Zone	Units	Type	Description	Actual	Loc1	Allow.	Ratio	Dir.	Coef.
Entire Surface	psf	L	Standard Spacing is Adequate	21.13	0/0/0	70.000	0.30	IN	1.000
Side Zone	psf	W1>	Non-std Spacing: 4/6/0 Required	40.32	150/11/1	40.000	1.01	OUT	-1.980
Side Zone	psf	<W2	Standard Spacing is Adequate	11.18	150/11/1	70.000	0.16	IN	0.480
Corner Zone	psf	W1>	Non-std Spacing: 2/6/0 Required	61.25	150/11/1	63.000	0.97	OUT	-2.980
Corner Zone	psf	<W2	Standard Spacing is Adequate	11.18	150/11/1	70.000	0.16	IN	0.480
Side Zone	psf	W1>	Non-std Spacing: 4/6/0 Required	40.32	0/0/0	40.000	1.01	OUT	-1.980
Side Zone	psf	<W2	Standard Spacing is Adequate	11.18	0/0/0	70.000	0.16	IN	0.480
Interior Area	psf	W1>	Standard Spacing is Adequate	23.57	0/0/0	37.000	0.64	OUT	-1.180
Interior Area	psf	<W2	Standard Spacing is Adequate	11.18	0/0/0	70.000	0.16	IN	0.480

Covering Design Loads - Roof: B

Zone	Units	Type	Description	Actual	Loc1	Allow.	Ratio	Dir.	Coef.
Entire Surface	psf	L	Standard Spacing is Adequate	21.13	177/0/0	70.000	0.30	IN	1.000
Side Zone	psf	W1>	Non-std Spacing: 4/6/0 Required	40.32	26/0/15	40.000	1.01	OUT	-1.980
Side Zone	psf	<W2	Standard Spacing is Adequate	11.18	26/0/15	70.000	0.16	IN	0.480
Corner Zone	psf	W1>	Non-std Spacing: 2/6/0 Required	61.25	177/0/0	63.000	0.97	OUT	-2.980
Corner Zone	psf	<W2	Standard Spacing is Adequate	11.18	177/0/0	70.000	0.16	IN	0.480
Side Zone	psf	W1>	Non-std Spacing: 4/6/0 Required	40.32	150/11/1	40.000	1.01	OUT	-1.980
Side Zone	psf	<W2	Standard Spacing is Adequate	11.18	150/11/1	70.000	0.16	IN	0.480
Corner Zone	psf	W1>	Non-std Spacing: 2/6/0 Required	61.25	150/11/1	63.000	0.97	OUT	-2.980
Corner Zone	psf	<W2	Standard Spacing is Adequate	11.18	150/11/1	70.000	0.16	IN	0.480
Side Zone	psf	W1>	Non-std Spacing: 4/6/0 Required	40.32	26/0/15	40.000	1.01	OUT	-1.980
Side Zone	psf	<W2	Standard Spacing is Adequate	11.18	26/0/15	70.000	0.16	IN	0.480
Corner Zone	psf	W1>	Non-std Spacing: 2/6/0 Required	61.25	0/0/0	63.000	0.97	OUT	-2.980
Corner Zone	psf	<W2	Standard Spacing is Adequate	11.18	0/0/0	70.000	0.16	IN	0.480
Interior Area	psf	W1>	Standard Spacing is Adequate	23.57	177/0/0	37.000	0.64	OUT	-1.180
Interior Area	psf	<W2	Standard Spacing is Adequate	11.18	177/0/0	70.000	0.16	IN	0.480

Panel Data

Wall/Roof	Type	Thickness	Finish	Color	Direction	Gable Dir	Max. Length
Wall: 1	Panel Rib	26	KXL	Arctic White	Left to Right	Right to Left	41/0/0
Location: 2	NBVP - Tilt Wall	0/5/0					
Wall: 2	Panel Rib	26	KXL	Standard Color	Left to Right	Peak Out	41/0/0
Location: 2	NBVP - Tilt Wall	0/5/0					
Wall: 3	NBVP - Other	1/0/0	psf = 1.00				
Wall: 4	Panel Rib	26	KXL	Standard Color	Left to Right	Peak Out	41/0/0
Location: 2	NBVP - Tilt Wall	0/5/0					
Roof: A	SSR	24	Galvalume	Standard Color	System Generated	Not Applicable	51/0/0



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Roof: B	SSR	24	Galvalume	Standard Color	System Generated	Not Applicable	51/0/0
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Abbreviation Definitions

Codes	Definition
LE	From Left Edge
RE	From Right Edge
FL	From Frame
FS	From Start Dim

Location Data

Wall/Roof	Start Dim.	Bottom Elev.	Top Elev.	End Dim.	Bottom Elev.	Top Elev.	First Pitch	Second Pitch	Ridge Distance	Ridge Height	psf
Wall: 1 Location: 2	0/0/0 LE	0/0/0	9/11/10	50/0/0 FS	0/0/0	9/11/10					72.00
Wall: 2 Location: 2	Full Width	0/0/0	9/11/10		0/0/0	9/11/10					72.00
Wall: 4 Location: 2	Full Width	0/0/0	9/11/10		0/0/0	9/11/10					72.00

Fastener Data

Wall/Roof	Type	Length	Spacing	Washers	Insul. Block	Mod. Ctrl.	Ice Damming
Wall: 1	Color Match Carbon	Standard Option	Standard Option	No	None	No	No
Location: 2	Not Applicable						
Wall: 2	Color Match Carbon	Standard Option	Standard Option	No	None	No	No
Location: 2	Not Applicable						
Wall: 3	Not Applicable						
Wall: 4	Color Match Carbon	Standard Option	Standard Option	No	None	No	No
Location: 2	Not Applicable						
Roof: A	Stainless Steel Capped	Standard Option	Standard Option	Yes	None	No	No
Roof: B	Stainless Steel Capped	Standard Option	Standard Option	Yes	None	No	No

Shape: BD0462 Millenium Steel Phase 2 lean-to

Loads and Codes - Shape: BD0462 Millenium Steel Phase 2 lean-to

City: Lake City County: Columbia State: Florida Country: United States
 Building Code: 2001 Florida State Building Code Built Up: 89AISC Rainfall: 10.00 in per hour
 Building Use: Standard Occupancy Structures Cold Form: 96AISI Allow. Overstress: Frm: 1.03, Sec: 1.03, Brc: 1.03

Dead and Collateral Loads

Collateral Gravity: 5.00 psf Roof Covering + Second. Dead Load: 3.63 psf
 Collateral Uplift: 0.00 psf Frame Weight (assumed for seismic): 2.50 psf

Live Load

Live Load: 20.00 psf Reducible
 LL for Below Eave Canopy: N/A

Wind Load

Wind Speed: 100.00 mph
 Wind Exposure (Factor): C (0.954)
 Parts Wind Exposure Factor: 0.954
 Wind Enclosure: Enclosed
 Wind Importance Factor: 1.000

Snow Load

Ground Snow Load: 0.00 psf
 Design Snow (Sloped): 0.00 psf
 Snow Exposure Category (Factor): 1 (1.00)
 Snow Importance: 1.000
 Thermal Category (Factor): Heated (1.00)
 Ground / Roof Conversion: 1.00
 % Snow Used in Seismic: 0.00
 Seismic Snow Load: 0.00 psf
 Unobstructed, Slippery Roof

Seismic Load

N/A

NOT Windborne Debris Region

Base Elevation: 0/0/0
 Primary Zone Strip Width: 21/5/12
 Parts / Portions Zone Strip Width: 10/8/14
 Basic Wind Pressure: 20.75 psf

Per Article 2.9 in the Builder Agreement, VP Buildings assumes that the Builder has called the local Building Official or Project Engineer to obtain all code and loading information for this specific building site.

Covering Design Loads - Wall: 1

Zone	Units	Type	Description	Actual	Loc1	Allow.	Ratio	Dir.	Coef.
End Zone	psf	W1>	Need Lower and Upper Girt	29.89	0/0/0	42.000	0.71	OUT	-1.440
End Zone	psf	<W2	Need Lower Girt	22.41	0/0/0	26.000	0.86	IN	1.080
End Zone	psf	W1>	Need Lower and Upper Girt	29.89	39/3/2	42.000	0.71	OUT	-1.440
End Zone	psf	<W2	Need Lower Girt	22.41	39/3/2	26.000	0.86	IN	1.080
Interior Area	psf	W1>	Need Lower and Upper Girt	24.28	10/8/14	42.000	0.58	OUT	-1.170
Interior Area	psf	<W2	Need Lower Girt	22.41	10/8/14	26.000	0.86	IN	1.080

Covering Design Loads - Wall: 4

Zone	Units	Type	Description	Actual	Loc1	Allow.	Ratio	Dir.	Coef.
End Zone	psf	W1>	Need Lower and Upper Girt	29.89	0/0/0	42.000	0.71	OUT	-1.440
End Zone	psf	<W2	Need Lower Girt	22.41	0/0/0	26.000	0.86	IN	1.080



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End Zone	psf	W1>	Need Lower and Upper Girt	29.89	76/3/2	42.000	0.71	OUT	-1.440
End Zone	psf	<W2	Need Lower Girt	22.41	76/3/2	26.000	0.86	IN	1.080
Interior Area	psf	W1>	Need Lower and Upper Girt	24.28	10/8/14	42.000	0.58	OUT	-1.170
Interior Area	psf	<W2	Need Lower Girt	22.41	10/8/14	26.000	0.86	IN	1.080

Covering Design Loads - Roof: A

Zone	Units	Type	Description	Actual	Loc1	Allow.	Ratio	Dir.	Coef.
Entire Surface	psf	L	Standard Spacing is Adequate	21.13	0/0/0	70.000	0.30	IN	1.000
Side Zone	psf	W1>	Non-std Spacing: 4/9/0 Required	39.96	10/8/14	39.000	1.02	OUT	-1.980
Side Zone	psf	<W2	Standard Spacing is Adequate	11.13	10/8/14	70.000	0.16	IN	0.482
Side Zone	psf	W1>	Non-std Spacing: 4/9/0 Required	39.96	76/3/2	39.000	1.02	OUT	-1.980
Side Zone	psf	<W2	Standard Spacing is Adequate	11.13	76/3/2	70.000	0.16	IN	0.482
Corner Zone	psf	W1>	Non-std Spacing: 2/6/0 Required	60.72	76/3/2	63.000	0.96	OUT	-2.980
Corner Zone	psf	<W2	Standard Spacing is Adequate	11.13	76/3/2	70.000	0.16	IN	0.482
Side Zone	psf	W1>	Non-std Spacing: 4/9/0 Required	39.96	10/8/14	39.000	1.02	OUT	-1.980
Side Zone	psf	<W2	Standard Spacing is Adequate	11.13	10/8/14	70.000	0.16	IN	0.482
Corner Zone	psf	W1>	Non-std Spacing: 2/6/0 Required	60.72	0/0/0	63.000	0.96	OUT	-2.980
Corner Zone	psf	<W2	Standard Spacing is Adequate	11.13	0/0/0	70.000	0.16	IN	0.482
Interior Area	psf	W1>	Standard Spacing is Adequate	23.36	10/8/14	37.000	0.63	OUT	-1.180
Interior Area	psf	<W2	Standard Spacing is Adequate	11.13	10/8/14	70.000	0.16	IN	0.482

Panel Data

Wall/Roof	Type	Thickness	Finish	Color	Direction	Gable Dir	Max. Length
Wall: 1	Panel Rib	26	KXL	Standard Color	Left to Right	Peak Out	41/0/0
Location: 2	NBVP - Tilt Wall	0/5/0					
Wall: 2	Open						
Wall: 3	Open						
Wall: 4	Panel Rib	26	KXL	Standard Color	Left to Right	Peak Out	41/0/0
Location: 2	NBVP - Tilt Wall	0/5/0					
Roof: A	SSR	24	Galvalume	Standard Color	System Generated	Not Applicable	51/0/0

Abbreviation Definitions

Codes	Definition
LE	From Left Edge
RE	From Right Edge
FL	From Frame
FS	From Start Dim

Location Data

Wall/Roof	Start Dim.	Bottom Elev.	Top Elev.	End Dim.	Bottom Elev.	Top Elev.	First Pitch	Second Pitch	Ridge Distance	Ridge Height	psf
Wall: 1 Location: 2	Full Width	0/0/0	9/11/10		0/0/0	9/11/10					72.00
Wall: 4 Location: 2	Full Width	0/0/0	9/11/10		0/0/0	9/11/10					72.00

Fastener Data

Wall/Roof	Type	Length	Spacing	Washers	Insul. Block	Mod. Ctrl.	Ice Damming
Wall: 1	Color Match Carbon	Standard Option	Standard Option	No	None	No	No
Location: 2	Not Applicable						
Wall: 2	Not Applicable						
Wall: 3	Not Applicable						
Wall: 4	Color Match Carbon	Standard Option	Standard Option	No	None	No	No
Location: 2	Not Applicable						
Roof: A	Stainless Steel Capped	Standard Option	Standard Option	Yes	None	No	No

Shape: BD0462 Millenium Steel Joist Plant 3

Loads and Codes - Shape: BD0462 Millenium Steel Joist Plant 3

City: Lake City County: Columbia

Building Code: 2001 Florida State Building Code

Building Use: Standard Occupancy Structures

State: Florida

Built Up: 89AISC

Cold Form: 96AISI

Country: United States

Rainfall: 10.00 in per hour

Allow. Overstress:

Frm: 1.03, Sec: 1.03, Brc: 1.03

Dead and Collateral Loads

Collateral Gravity: 5.00 psf

Collateral Uplift: 0.00 psf

Roof Covering + Second. Dead Load: 3.63 psf

Frame Weight (assumed for seismic): 2.50 psf

Live Load

Live Load: 20.00 psf Reducible

LL for Below Eave Canopy: N/A

Wind Load

Wind Speed: 100.00 mph

Wind Exposure (Factor): C (1.039)

Snow Load

Ground Snow Load: 0.00 psf

Design Snow (Sloped): 0.00 psf

Seismic Load

N/A



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Parts Wind Exposure Factor: 1.039
Wind Enclosure: Enclosed
Wind Importance Factor: 1.000

Snow Exposure Category (Factor): 1 (1.00)
Snow Importance: 1.000
Thermal Category (Factor): Heated (1.00)
Ground / Roof Conversion: 1.00
% Snow Used in Seismic: 0.00
Seismic Snow Load: 0.00 psf
Unobstructed, Slippery Roof

NOT Windborne Debris Region
Base Elevation: 0/0/0
Primary Zone Strip Width: 31/3/6
Parts / Portions Zone Strip Width: 15/7/11
Basic Wind Pressure: 22.60 psf

Per Article 2.9 in the Builder Agreement, VP Buildings assumes that the Builder has called the local Building Official or Project Engineer to obtain all code and loading information for this specific building site.

Covering Design Loads - Wall: 1

Zone	Units	Type	Description	Actual	Loc1	Allow.	Ratio	Dir.	Coef.
End Zone	psf	W1>	Need Lower and Upper Girt	32.54	0/0/0	42.000	0.77	OUT	-1.440
End Zone	psf	<W2	Need Lower Girt	24.41	0/0/0	26.000	0.94	IN	1.080
End Zone	psf	W1>	Need Lower and Upper Girt	32.54	75/10/5	42.000	0.77	OUT	-1.440
End Zone	psf	<W2	Need Lower Girt	24.41	75/10/5	26.000	0.94	IN	1.080
Interior Area	psf	W1>	Need Lower and Upper Girt	26.44	15/7/11	42.000	0.63	OUT	-1.170
Interior Area	psf	<W2	Need Lower Girt	24.41	15/7/11	26.000	0.94	IN	1.080

Covering Design Loads - Wall: 2

Zone	Units	Type	Description	Actual	Loc1	Allow.	Ratio	Dir.	Coef.
End Zone	psf	W1>	Need Lower and Upper Girt	32.54	0/0/0	42.000	0.77	OUT	-1.440
End Zone	psf	<W2	Need Lower Girt	24.41	0/0/0	26.000	0.94	IN	1.080
End Zone	psf	W1>	Need Lower and Upper Girt	32.54	636/4/5	42.000	0.77	OUT	-1.440
End Zone	psf	<W2	Need Lower Girt	24.41	636/4/5	26.000	0.94	IN	1.080
End Zone	psf	W1>	Need Lower and Upper Girt	32.54	463/7/5	42.000	0.77	OUT	-1.440
End Zone	psf	<W2	Need Lower Girt	24.41	463/7/5	26.000	0.94	IN	1.080
End Zone	psf	W1>	Need Lower and Upper Girt	32.54	205/10/5	42.000	0.77	OUT	-1.440
End Zone	psf	<W2	Need Lower Girt	24.41	205/10/5	26.000	0.94	IN	1.080
Interior Area	psf	W1>	Need Lower and Upper Girt	26.44	15/7/11	42.000	0.63	OUT	-1.170
Interior Area	psf	<W2	Need Lower Girt	24.41	15/7/11	26.000	0.94	IN	1.080

Covering Design Loads - Wall: 3

Zone	Units	Type	Description	Actual	Loc1	Allow.	Ratio	Dir.	Coef.
End Zone	psf	W1>	Need Lower and Upper Girt	32.54	0/0/0	42.000	0.77	OUT	-1.440
End Zone	psf	<W2	Need Lower Girt	24.41	0/0/0	26.000	0.94	IN	1.080
End Zone	psf	W1>	Need Lower and Upper Girt	32.54	75/10/5	42.000	0.77	OUT	-1.440
End Zone	psf	<W2	Need Lower Girt	24.41	75/10/5	26.000	0.94	IN	1.080
Interior Area	psf	W1>	Need Lower and Upper Girt	26.44	15/7/11	42.000	0.63	OUT	-1.170
Interior Area	psf	<W2	Need Lower Girt	24.41	15/7/11	26.000	0.94	IN	1.080

Covering Design Loads - Wall: 4

Zone	Units	Type	Description	Actual	Loc1	Allow.	Ratio	Dir.	Coef.
End Zone	psf	W1>	Need Lower and Upper Girt	32.54	0/0/0	42.000	0.77	OUT	-1.440
End Zone	psf	<W2	Need Lower Girt	24.41	0/0/0	26.000	0.94	IN	1.080
End Zone	psf	W1>	Need Lower and Upper Girt	32.54	636/4/5	42.000	0.77	OUT	-1.440
End Zone	psf	<W2	Need Lower Girt	24.41	636/4/5	26.000	0.94	IN	1.080
Interior Area	psf	W1>	Need Lower and Upper Girt	26.44	15/7/11	42.000	0.63	OUT	-1.170
Interior Area	psf	<W2	Need Lower Girt	24.41	15/7/11	26.000	0.94	IN	1.080

Covering Design Loads - Roof: A

Zone	Units	Type	Description	Actual	Loc1	Allow.	Ratio	Dir.	Coef.
Entire Surface	psf	L	Standard Spacing is Adequate	21.13	0/0/0	70.000	0.30	IN	1.000
Corner Zone	psf	W1>	Non-std Spacing: 2/0/0 Required	66.22	15/7/11	76.000	0.87	OUT	-2.980
Corner Zone	psf	<W2	Standard Spacing is Adequate	11.98	15/7/11	70.000	0.17	IN	0.480
Side Zone	psf	W1>	Non-std Spacing: 4/0/0 Required	43.62	15/7/11	44.000	0.99	OUT	-1.980
Side Zone	psf	<W2	Standard Spacing is Adequate	11.98	15/7/11	70.000	0.17	IN	0.480
Corner Zone	psf	W1>	Non-std Spacing: 2/0/0 Required	66.22	15/7/11	76.000	0.87	OUT	-2.980
Corner Zone	psf	<W2	Standard Spacing is Adequate	11.98	15/7/11	70.000	0.17	IN	0.480
Side Zone	psf	W1>	Non-std Spacing: 4/0/0 Required	43.62	636/4/5	44.000	0.99	OUT	-1.980
Side Zone	psf	<W2	Standard Spacing is Adequate	11.98	636/4/5	70.000	0.17	IN	0.480
Corner Zone	psf	W1>	Non-std Spacing: 2/0/0 Required	66.22	636/4/5	76.000	0.87	OUT	-2.980
Corner Zone	psf	<W2	Standard Spacing is Adequate	11.98	636/4/5	70.000	0.17	IN	0.480
Side Zone	psf	W1>	Non-std Spacing: 4/0/0 Required	43.62	636/4/5	44.000	0.99	OUT	-1.980



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Side Zone	psf	<W2	Standard Spacing is Adequate	11.98	636/4/5	70.000	0.17	IN	0.480
Corner Zone	psf	W1>	Non-std Spacing: 2/0/0 Required	66.22	636/4/5	76.000	0.87	OUT	-2.980
Corner Zone	psf	<W2	Standard Spacing is Adequate	11.98	636/4/5	70.000	0.17	IN	0.480
Side Zone	psf	W1>	Non-std Spacing: 4/0/0 Required	43.62	15/7/11	44.000	0.99	OUT	-1.980
Side Zone	psf	<W2	Standard Spacing is Adequate	11.98	15/7/11	70.000	0.17	IN	0.480
Interior Area	psf	W1>	Standard Spacing is Adequate	25.54	15/7/11	37.000	0.69	OUT	-1.180
Interior Area	psf	<W2	Standard Spacing is Adequate	11.98	15/7/11	70.000	0.17	IN	0.480

Panel Data

Wall/Roof	Type	Thickness	Finish	Color	Direction	Gable Dir	Max. Length
Wall: 1	Panel Rib	26	KXL	Standard Color	Left to Right	Peak Out	41/0/0
Location: 2	NBVP - Tilt Wall	0/5/0					
Wall: 2	Panel Rib	26	KXL	Standard Color	Left to Right	Peak Out	41/0/0
Location: 2	NBVP - Tilt Wall	0/5/0					
Location: 3	NBVP - Tilt Wall	0/5/0					
Wall: 3	Panel Rib	26	KXL	Standard Color	Left to Right	Peak Out	41/0/0
Location: 2	NBVP - Tilt Wall	0/5/0					
Wall: 4	Panel Rib	26	KXL	Standard Color	Left to Right	Peak Out	41/0/0
Location: 2	NBVP - Tilt Wall	0/5/0					
Roof: A	SSR	24	Galvalume	Standard Color	System Generated	Not Applicable	51/0/0

Abbreviation Definitions

Codes	Definition
LE	From Left Edge
RE	From Right Edge
FL	From Frame
FS	From Start Dim

Location Data

Wall/Roof	Start Dim.	Bottom Elev.	Top Elev.	End Dim.	Bottom Elev.	Top Elev.	First Pitch	Second Pitch	Ridge Distance	Ridge Height	psf
Wall: 1 Location: 2	Full Width	0/0/0	9/11/10		0/0/0	10/0/0					72.00
Wall: 2 Location: 2	0/0/0 LE	0/0/0	9/11/10	221/9/0 FS	0/0/0	9/11/10					72.00
Wall: 2 Location: 3	479/3/0 LE	0/0/0	9/11/10	172/9/0 FS	0/0/0	9/11/10					72.00
Wall: 3 Location: 2	Full Width	0/0/0	9/11/10		0/0/0	9/11/10					72.00
Wall: 4 Location: 2	Full Width	0/0/0	9/11/10		0/0/0	9/11/10					72.00

Fastener Data

Wall/Roof	Type	Length	Spacing	Washers	Insul. Block	Mod. Ctrl.	Ice Damming
Wall: 1	Color Match Carbon	Standard Option	Standard Option	No	None	No	No
Location: 2	Not Applicable						
Wall: 2	Color Match Carbon	Standard Option	Standard Option	No	None	No	No
Location: 2	Not Applicable						
Location: 3	Not Applicable						
Wall: 3	Color Match Carbon	Standard Option	Standard Option	No	None	No	No
Location: 2	Not Applicable						
Wall: 4	Color Match Carbon	Standard Option	Standard Option	No	None	No	No
Location: 2	Not Applicable						
Roof: A	Stainless Steel Capped	Standard Option	Standard Option	Yes	None	No	No



VP Buildings, Inc.

3200 Players Club Circle
Memphis, TN 38125-8843

STRUCTURAL DESIGN DATA

FOR PERMIT/APPROVAL

Project: Millennium Bldg. Sys. Deck Plant
Name: BD0462 Millenium Deck Plant All Together (REV.1)
Builder PO #: BD0462
Jobsite:

City, State: Lake City, Florida
County: Columbia
Country: United States

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Larry L. Boozer, P.E. No. 44236
VP Buildings, Inc.
1140 W. Mountain Street
Kernersville, NC 27284

Larry L. Boozer
OCT 25 2004



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Building Loading - Expanded Report

Shape : BD0462 New Millenium Deck Plant 1

Loads and Codes - Shape: BD0462 New Millenium Deck Plant 1

City: Lake City, Florida County: Columbia
 Building Code: 2000 International Building Code
 Building Use: Standard Occupancy Structures
 Allow. Overstress:Frm: 1.03, Sec: 1.03, Brc: 1.03

State: Florida Country: United States
 Built Up: 89AISC
 Cold Form: 96AISI
 Rainfall: 10.00 in per hour

Dead and Collateral Loads

Collateral Gravity: 5.00 psf
 Collateral Uplift: 0.00 psf

Frame Weight (assumed for seismic): 2.50 psf

Side	Type	Mag	Units	Shape	Applied to	Description
A	D	3.630	psf	Entire	Frm	Covering Weight - 24 SSR + Secondary Weight By Others 2.50 : Roof: A
A	D	1.130	psf	Entire	Pur	Covering Weight - 24 SSR : Roof: A
B	D	3.630	psf	Entire	Frm	Covering Weight - 24 SSR + Secondary Weight By Others 2.50 : Roof: B
B	D	1.130	psf	Entire	Pur	Covering Weight - 24 SSR : Roof: B

Live Load

Live Load: 20.00 psf Reducible

LL for Below Eave Canopy: N/A

Wind Load

Wind Speed: 100.00 mph
 Wind Enclosure: Enclosed
 Height Used: 30/5/0 (Type: Eave)
 Base Elevation: 0/0/0
 Primary Zone Strip Width: 24/4/0
 Velocity Pressure: (qz) 25.60 psf
 Topographic Factor: 1.0000
 Directionality Factor: 0.8500
 Wind Exposure (Factor): C (0.985)
 Basic Wind Pressure: 21.44 psf

Gust Factor: 1.0000
 Wind Importance Factor: 1.000
 Least Horiz. Dimension: 202/10/0

Parts / Portions Zone Strip Width: 12/2/0
 $qz = 0.00256 * (1.00) * (100.00)^2 * (1.00)$
 The 'Low Rise' Method is Used

Snow Load

Ground Snow Load: 0.00 psf
 Design Snow (Sloped): 0.00 psf
 Snow Accumulation Factor: 1.000
 Snow Importance: 1.000
 Ground / Roof Conversion: 1.00

Snow Exposure Category (Factor): 1 (1.00)
 Thermal Category (Factor): Heated (1.00)
 Unobstructed, Slippery Roof
 Rain Surcharge: 0.00
 Slope Reduction: 1.00
 Slope Used: 0.000 (0.000:12)

Seismic Load

Mapped Spectral Response - Ss: 0.00 %g
 Mapped Spectral Response - S1: 0.00 %g
 Seismic Hazard / Use Group: Group 1
 Seismic Performance / Design Category: A
 System NOT detailed for Seismic
 Seismic Importance: 1.000
 Frame Seismic Factor (Cs): 0.0100
 Brace Seismic Factor (Cs): 0.0100
 Framing R-Factor: 4.0000
 Bracing R-Factor: 5.0000

Seismic Snow Load: 0.00 psf
 Frame Redundancy Factor: 1.0000
 Brace Redundancy Factor: 1.0000
 Soil Profile Type: Stiff soil (D, 4)
 Framing Seismic Period: 0.0000
 Bracing Seismic Period: 0.0000
 Seismic Period Height Used: 30/5/0
 Design Spectral Response - Sds: 0.0000
 Design Spectral Response - Sd1: 0.0000

Side	Type	Mag	Units	Shape	Applied to	Description
1	E	0.016	psf	Spec	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.67 : Wall: 1
1	E	0.016	psf	Spec	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.67 : Wall: 1
1	E	0.016	psf	Spec	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.67 : Wall: 1
1	E	0.016	psf	Spec	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.67 : Wall: 1
1	E	0.016	psf	Spec	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.67 : Wall: 1
1	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 1
1	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 1
1	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 1
1	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 1
2	E	0.014	psf	Rect	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.47 : Wall: 2
2	E	0.014	psf	Rect	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.47 : Wall: 2
2	E	0.014	psf	Rect	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.47 : Wall: 2



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2	E	0.014	psf	Rect	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.47 : Wall: 2
2	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 2
2	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 2
2	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 2
2	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 2
3	E	0.014	psf	Spec	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.46 : Wall: 3
3	E	0.014	psf	Spec	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.46 : Wall: 3
3	E	0.014	psf	Spec	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.46 : Wall: 3
3	E	0.014	psf	Spec	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.46 : Wall: 3
3	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 3
3	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 3
3	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 3
3	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 3
4	E	0.016	psf	Rect	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.70 : Wall: 4
4	E	0.016	psf	Rect	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.70 : Wall: 4
4	E	0.016	psf	Rect	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.70 : Wall: 4
4	E	0.016	psf	Rect	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.70 : Wall: 4
4	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 4
4	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 4
4	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 4
4	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 4
A	E	0.111	psf	Entire	Frm	Seismic: Covering Weight - 24 SSR + Secondary Weight By Others 2.50 + Seismic (Includes 5.000 Collateral 2.500 Frame Weight) : Roof: A
A	E	0.111	psf	Entire	Brc	Seismic: Covering Weight - 24 SSR + Secondary Weight By Others 2.50 + Seismic (Includes 5.000 Collateral 2.500 Frame Weight) : Roof: A
B	E	0.111	psf	Entire	Frm	Seismic: Covering Weight - 24 SSR + Secondary Weight By Others 2.50 + Seismic (Includes 5.000 Collateral 2.500 Frame Weight) : Roof: B
B	E	0.111	psf	Entire	Brc	Seismic: Covering Weight - 24 SSR + Secondary Weight By Others 2.50 + Seismic (Includes 5.000 Collateral 2.500 Frame Weight) : Roof: B

Deflection Conditions

Frames are vertically supporting: Metal Roof Purlins and Panels
 Frames are laterally supporting: Metal Wall Girts and Panels
 Purlins are supporting: Metal Roof Panels
 Girts are supporting: Metal Wall Panels

Per Article 2.9 in the Builder Agreement, VP Buildings assumes that the Builder has called the local Building Official or Project Engineer to obtain all code and loading information for this specific building site.

Design Load Combinations - Purlin

No.	Origin	Factor	Application	Description
1	System	1.000	1.0 D + 1.0 CG + 1.0 L	D + CG + L
2	System	1.000	1.0 D + 1.0 W1>	D + W1>
3	System	1.000	1.0 D + 1.0 <W2	D + <W2
4	System	1.000	1.0 D + 1.0 CG + 0.750 L + 0.750 W1>	D + CG + L + W1>
5	System	1.000	1.0 D + 1.0 CG + 0.750 L + 0.750 <W2	D + CG + L + <W2
6	System	1.275	1.200 D + 1.200 CG + 1.0 E> + 1.0 EG+	D + CG + E> + EG+
7	System	1.275	1.200 D + 1.200 CG + 1.0 <E + 1.0 EG+	D + CG + <E + EG+

Design Load Combinations - Girt

No.	Origin	Factor	Application	Description
1	System	1.000	1.0 W1>	W1>
2	System	1.000	1.0 <W2	<W2

Design Load Combinations - Roof - Panel

No.	Origin	Factor	Application	Description
1	System	1.000	1.0 D + 1.0 L	D + L
2	System	1.000	1.0 D + 1.0 W1>	D + W1>
3	System	1.000	1.0 D + 1.0 <W2	D + <W2

Design Load Combinations - Wall - Panel

No.	Origin	Factor	Application	Description
1	System	1.000	1.0 W1>	W1>
2	System	1.000	1.0 <W2	<W2



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Deflection Load Combinations - Purlin

No.	Origin	Factor	Deflection	Application	Description
1	System	1.000	150	1.0 L	L

Deflection Load Combinations - Girt

No.	Origin	Factor	Deflection	Application	Description
1	System	1.000	90	0.700 W1>	W1>
2	System	1.000	90	0.700 <W2	<W2

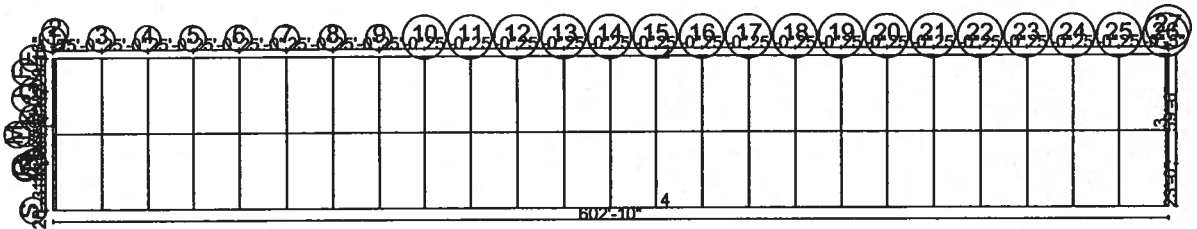
Load Type Descriptions

D	Material Dead Weight	C	Collateral Load
CG	Collateral Load for Gravity Cases	CU	Collateral Load for Wind Cases
L	Live Load	ASL^	Alternate Span Live Load, Shifted Right
^ASL	Alternate Span Live Load, Shifted Left	PL2	Partial Live, Full, 2 Spans
S	Snow Load	US1*	Unbalanced Snow Load 1, Shifted Right
US1	Unbalanced Snow Load 1, Shifted Left	US2	Unbalanced Snow Load 2, Shifted Right
*US2	Unbalanced Snow Load 2, Shifted Left	SD	Snow Drift Load
SS	Sliding Snow Load	RS	Rain Surcharge Load
PF1	Partial Load, Full, 1 Span	PH1	Partial Load, Half, 1 Span
PF2	Partial Load, Full, 2 Spans	PH2	Partial Load, Half, 2 Spans
W	Wind Load	W1>	Wind Load, Case 1, Right
<W1	Wind Load, Case 1, Left	W2>	Wind Load, Case 2, Right
<W2	Wind Load, Case 2, Left	W3>	Wind Load, Case 3, Right
<W3	Wind Load, Case 3, Left	W4>	Wind Load, Case 4, Right
<W4	Wind Load, Case 4, Left	W5>	Wind Load, Case 5, Right
<W5	Wind Load, Case 5, Left	W6>	Wind Load, Case 6, Right
<W6	Wind Load, Case 6, Left	WP	Wind Load, Parallel to Ridge
WPR	Wind Load, Ridge, Right	WPL	Wind Load, Ridge, Left
WPA1	Wind Parallel - Ref A, Case 1	WPA2	Wind Parallel - Ref A, Case 2
WPB1	Wind Parallel - Ref B, Case 1	WPB2	Wind Parallel - Ref B, Case 2
WPC1	Wind Parallel - Ref C, Case 1	WPC2	Wind Parallel - Ref C, Case 2
WPD1	Wind Parallel - Ref D, Case 1	WPD2	Wind Parallel - Ref D, Case 2
WB1>	Wind Brace Reaction, Case 1, Right	<WB1	Wind Brace Reaction, Case 1, Left
WB2>	Wind Brace Reaction, Case 2, Right	<WB2	Wind Brace Reaction, Case 2, Left
WB3>	Wind Brace Reaction, Case 3, Right	<WB3	Wind Brace Reaction, Case 3, Left
WB4>	Wind Brace Reaction, Case 4, Right	<WB4	Wind Brace Reaction, Case 4, Left
WB5>	Wind Brace Reaction, Case 5, Right	<WB5	Wind Brace Reaction, Case 5, Left
WB6>	Wind Brace Reaction, Case 6, Right	<WB6	Wind Brace Reaction, Case 6, Left
E	Seismic Load	E>	Seismic Load, Right
<E	Seismic Load, Left	EG	Vertical Seismic Effect
EG+	Vertical Seismic Effect, Additive	EG-	Vertical Seismic Effect, Subtractive
EB>	Seismic Brace Reaction, Right	<EB	Seismic Brace Reaction, Left
FL	Floor Live Load	FL*	Alternate Span Floor Live Load, Shifted Right
*FL	Alternate Span Floor Live Load, Shifted Left	FD	Floor Dead Load
AL	Auxiliary Live Load	AL*>	Auxiliary Live Load, Right, Right
AL>	Auxiliary Live Load, Right, Left	<AL	Auxiliary Live Load, Left, Right
<*AL	Auxiliary Live Load, Left, Left	AL*	Aux Live, Right
AL	Aux Live, Left	AL>(1)	Auxiliary Live Load, Right, Right, Aisle 1
AL>(1)	Auxiliary Live Load, Right, Left, Aisle 1	<AL(1)	Auxiliary Live Load, Left, Right, Aisle 1
<*AL(1)	Auxiliary Live Load, Left, Left, Aisle 1	AL*(1)	Aux Live, Right, Aisle 1
AL(1)	Aux Live, Left, Aisle 1	AL>(2)	Auxiliary Live Load, Right, Right, Aisle 2
AL>(2)	Auxiliary Live Load, Right, Left, Aisle 2	<AL(2)	Auxiliary Live Load, Left, Right, Aisle 2
<*AL(2)	Auxiliary Live Load, Left, Left, Aisle 2	AL*(2)	Aux Live, Right, Aisle 2
AL(2)	Aux Live, Left, Aisle 2	AL>(3)	Auxiliary Live Load, Right, Right, Aisle 3
AL>(3)	Auxiliary Live Load, Right, Left, Aisle 3	<AL(3)	Auxiliary Live Load, Left, Right, Aisle 3
<*AL(3)	Auxiliary Live Load, Left, Left, Aisle 3	AL*(3)	Aux Live, Right, Aisle 3
AL(3)	Aux Live, Left, Aisle 3	AL>(4)	Auxiliary Live Load, Right, Right, Aisle 4
AL>(4)	Auxiliary Live Load, Right, Left, Aisle 4	<AL(4)	Auxiliary Live Load, Left, Right, Aisle 4
<*AL(4)	Auxiliary Live Load, Left, Left, Aisle 4	AL*(4)	Aux Live, Right, Aisle 4
AL(4)	Aux Live, Left, Aisle 4	AL>(5)	Auxiliary Live Load, Right, Right, Aisle 5
AL>(5)	Auxiliary Live Load, Right, Left, Aisle 5	<AL(5)	Auxiliary Live Load, Left, Right, Aisle 5
<*AL(5)	Auxiliary Live Load, Left, Left, Aisle 5	AL*(5)	Aux Live, Right, Aisle 5
*AL(5)	Aux Live, Left, Aisle 5	ALB	Aux Live Bracing Reaction
ALB>	Aux Live Bracing Reaction, Right	<ALB	Aux Live Bracing Reaction, Left
WALB>	Wind, Aux Live Bracing Reaction, Right	<WALB	Wind, Aux Live Bracing Reaction, Left
ALB>(1)	Aux Live Bracing Reaction, Right, Aisle 1	<ALB(1)	Aux Live Bracing Reaction, Left, Aisle 1
WALB>(1)	Wind, Aux Live Bracing Reaction, Right, Aisle 1	<WALB(1)	Wind, Aux Live Bracing Reaction, Left, Aisle 1
ALB>(2)	Aux Live Bracing Reaction, Right, Aisle 2	<ALB(2)	Aux Live Bracing Reaction, Left, Aisle 2



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WALB>(2)	Wind, Aux Live Bracing Reaction, Right, Aisle 2	<WALB(2)	Wind, Aux Live Bracing Reaction, Left, Aisle 2
ALB>(3)	Aux Live Bracing Reaction, Right, Aisle 3	<ALB(3)	Aux Live Bracing Reaction, Left, Aisle 3
WALB>(3)	Wind, Aux Live Bracing Reaction, Right, Aisle 3	<WALB(3)	Wind, Aux Live Bracing Reaction, Left, Aisle 3
ALB>(4)	Aux Live Bracing Reaction, Right, Aisle 4	<ALB(4)	Aux Live Bracing Reaction, Left, Aisle 4
WALB>(4)	Wind, Aux Live Bracing Reaction, Right, Aisle 4	<WALB(4)	Wind, Aux Live Bracing Reaction, Left, Aisle 4
ALB>(5)	Aux Live Bracing Reaction, Right, Aisle 5	<ALB(5)	Aux Live Bracing Reaction, Left, Aisle 5
WALB>(5)	Wind, Aux Live Bracing Reaction, Right, Aisle 5	<WALB(5)	Wind, Aux Live Bracing Reaction, Left, Aisle 5
WALB	Wind, Aux Live Bracing Reaction	AD	Auxiliary Dead Load
U0	User Defined Load	U1	User Defined Load - 1
U2	User Defined Load - 2	U3	User Defined Load - 3
U4	User Defined Load - 4	U5	User Defined Load - 5
U6	User Defined Load - 6	U7	User Defined Load - 7
U8	User Defined Load - 8	U9	User Defined Load - 9
UB	User Brace Reaction	UB1	User Brace Reaction - 1
UB2	User Brace Reaction - 2	UB3	User Brace Reaction - 3
UB4	User Brace Reaction - 4	UB5	User Brace Reaction - 5
UB6	User Brace Reaction - 6	UB7	User Brace Reaction - 7
UB8	User Brace Reaction - 8	UB9	User Brace Reaction - 9
R	Rain Load	T	Temperature Load
V	Shear		





Calculations Package

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Shape : BD0462 New Millenium Deck Plant 2

Loads and Codes - Shape: BD0462 New Millenium Deck Plant 2

City: Lake City, Florida County: Columbia
 Building Code: 2000 International Building Code
 Building Use: Standard Occupancy Structures
 Allow. Overstress:Frm: 1.03, Sec: 1.03, Brc: 1.03

State: Florida
 Built Up: 89AISC
 Cold Form: 96AISI
 Rainfall: 10.00 in per hour

Country: United States

Dead and Collateral Loads

Collateral Gravity: 5.00 psf
 Collateral Uplift: 0.00 psf

Frame Weight (assumed for seismic): 2.50 psf

Side	Type	Mag	Units	Shape	Applied to	Description
A	D	3.630	psf	Entire	Frm	Covering Weight - 24 SSR + Secondary Weight By Others 2.50 : Roof: A
A	D	1.130	psf	Entire	Pur	Covering Weight - 24 SSR : Roof: A
B	D	3.630	psf	Entire	Frm	Covering Weight - 24 SSR + Secondary Weight By Others 2.50 : Roof: B
B	D	1.130	psf	Entire	Pur	Covering Weight - 24 SSR : Roof: B

Live Load

Live Load: 20.00 psf Reducible

LL for Below Eave Canopy: N/A

Wind Load

Wind Speed: 100.00 mph
 Wind Enclosure: Enclosed
 Height Used: 42/0/0 (Type: Eave)
 Base Elevation: 0/0/0
 Primary Zone Strip Width: 33/7/3
 Velocity Pressure: (qz) 25.60 psf
 Topographic Factor: 1.0000
 Directionality Factor: 0.8500
 Wind Exposure (Factor): C (1.054)
 Basic Wind Pressure: 22.94 psf

Gust Factor: 1.0000
 Wind Importance Factor: 1.000
 Least Horiz. Dimension: 202/10/0

Parts / Portions Zone Strip Width: 16/9/10
 $qz = 0.00256 * (1.00) * (100.00)^2 * (1.00)$
 The 'Low Rise' Method is Used

Snow Load

Ground Snow Load: 0.00 psf
 Design Snow (Sloped): 0.00 psf
 Snow Accumulation Factor: 1.000
 Snow Importance: 1.000
 Ground / Roof Conversion: 1.00

Snow Exposure Category (Factor): 1 (1.00)
 Thermal Category (Factor): Heated (1.00)
 Unobstructed, Slippery Roof
 Rain Surcharge: 0.00
 Slope Reduction: 1.00
 Slope Used: 0.000 (0.000:12)

Seismic Load

Mapped Spectral Response - Ss: 0.00 %g
 Mapped Spectral Response - S1: 0.00 %g
 Seismic Hazard / Use Group: Group 1
 Seismic Performance / Design Category: A
 System NOT detailed for Seismic
 Seismic Importance: 1.000
 Frame Seismic Factor (Cs): 0.0100
 Brace Seismic Factor (Cs): 0.0100
 Framing R-Factor: 4.0000
 Bracing R-Factor: 5.0000

Seismic Snow Load: 0.00 psf
 Frame Redundancy Factor: 1.0000
 Brace Redundancy Factor: 1.0000
 Soil Profile Type: Stiff soil (D, 4)
 Framing Seismic Period: 0.0000
 Bracing Seismic Period: 0.0000
 Seismic Period Height Used: 42/0/0
 Design Spectral Response - Sds: 0.0000
 Design Spectral Response - Sd1: 0.0000

Side	Type	Mag	Units	Shape	Applied to	Description
1	E	0.014	psf	Spec	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.42 : Wall: 1
1	E	0.014	psf	Spec	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.42 : Wall: 1
1	E	0.014	psf	Spec	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.42 : Wall: 1
1	E	0.014	psf	Spec	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.42 : Wall: 1
1	E	0.014	psf	Spec	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.42 : Wall: 1
1	E	0.014	psf	Spec	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.42 : Wall: 1
1	E	0.010	psf	Spec	Frm Brc	Seismic: Covering Weight - 1.00 NBVP - Other : Wall: 1
1	E	0.010	psf	Spec	Frm Brc	Seismic: Covering Weight - 1.00 NBVP - Other : Wall: 1
1	E	0.010	psf	Spec	Frm Brc	Seismic: Covering Weight - 1.00 NBVP - Other : Wall: 1
1	E	0.010	psf	Spec	Frm Brc	Seismic: Covering Weight - 1.00 NBVP - Other : Wall: 1
1	E	0.010	psf	Spec	Frm Brc	Seismic: Covering Weight - 1.00 NBVP - Other : Wall: 1
2	E	0.015	psf	Rect	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.56 : Wall: 2
2	E	0.015	psf	Rect	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.56 : Wall: 2
2	E	0.015	psf	Rect	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.56 : Wall: 2



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2	E	0.015	psf	Rect	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.56 : Wall: 2
2	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 2
2	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 2
2	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 2
2	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 2
3	E	0.010	psf	Spec	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.00 : Wall: 3
3	E	0.010	psf	Spec	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.00 : Wall: 3
3	E	0.010	psf	Spec	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.00 : Wall: 3
3	E	0.010	psf	Spec	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.00 : Wall: 3
3	E	0.010	psf	Spec	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.00 : Wall: 3
4	E	0.017	psf	Spec	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.74 : Wall: 4
4	E	0.017	psf	Spec	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.74 : Wall: 4
4	E	0.017	psf	Spec	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.74 : Wall: 4
4	E	0.017	psf	Spec	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.74 : Wall: 4
4	E	0.720	psf	Spec	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 4
4	E	0.720	psf	Spec	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 4
4	E	0.720	psf	Spec	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 4
4	E	0.720	psf	Spec	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 4
A	E	0.111	psf	Entire	Frm	Seismic: Covering Weight - 24 SSR + Secondary Weight By Others 2.50 + Seismic (Includes 5.000 Collateral 2.500 Frame Weight) : Roof: A
A	E	0.111	psf	Entire	Brc	Seismic: Covering Weight - 24 SSR + Secondary Weight By Others 2.50 + Seismic (Includes 5.000 Collateral 2.500 Frame Weight) : Roof: A
B	E	0.111	psf	Entire	Frm	Seismic: Covering Weight - 24 SSR + Secondary Weight By Others 2.50 + Seismic (Includes 5.000 Collateral 2.500 Frame Weight) : Roof: B
B	E	0.111	psf	Entire	Brc	Seismic: Covering Weight - 24 SSR + Secondary Weight By Others 2.50 + Seismic (Includes 5.000 Collateral 2.500 Frame Weight) : Roof: B

Deflection Conditions

Frames are vertically supporting: Metal Roof Purlins and Panels

Frames are laterally supporting: Metal Wall Girts and Panels

Purlins are supporting: Metal Roof Panels

Girts are supporting: Metal Wall Panels

Per Article 2.9 in the Builder Agreement, VP Buildings assumes that the Builder has called the local Building Official or Project Engineer to obtain all code and loading information for this specific building site.

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Design Load Combinations - Purlin

No.	Origin	Factor	Application	Description
1	System	1.000	1.0 D + 1.0 CG + 1.0 L	D + CG + L
2	System	1.000	1.0 D + 1.0 W1>	D + W1>
3	System	1.000	1.0 D + 1.0 <W2	D + <W2
4	System	1.000	1.0 D + 1.0 CG + 0.750 L + 0.750 W1>	D + CG + L + W1>
5	System	1.000	1.0 D + 1.0 CG + 0.750 L + 0.750 <W2	D + CG + L + <W2
6	System	1.275	1.200 D + 1.200 CG + 1.0 E> + 1.0 EG+	D + CG + E> + EG+
7	System	1.275	1.200 D + 1.200 CG + 1.0 <E + 1.0 EG+	D + CG + <E + EG+

Design Load Combinations - Girt

No.	Origin	Factor	Application	Description
1	System	1.000	1.0 W1>	W1>
2	System	1.000	1.0 <W2	<W2

Design Load Combinations - Roof - Panel

No.	Origin	Factor	Application	Description
1	System	1.000	1.0 D + 1.0 L	D + L
2	System	1.000	1.0 D + 1.0 W1>	D + W1>
3	System	1.000	1.0 D + 1.0 <W2	D + <W2

Design Load Combinations - Wall - Panel

No.	Origin	Factor	Application	Description
1	System	1.000	1.0 W1>	W1>
2	System	1.000	1.0 <W2	<W2



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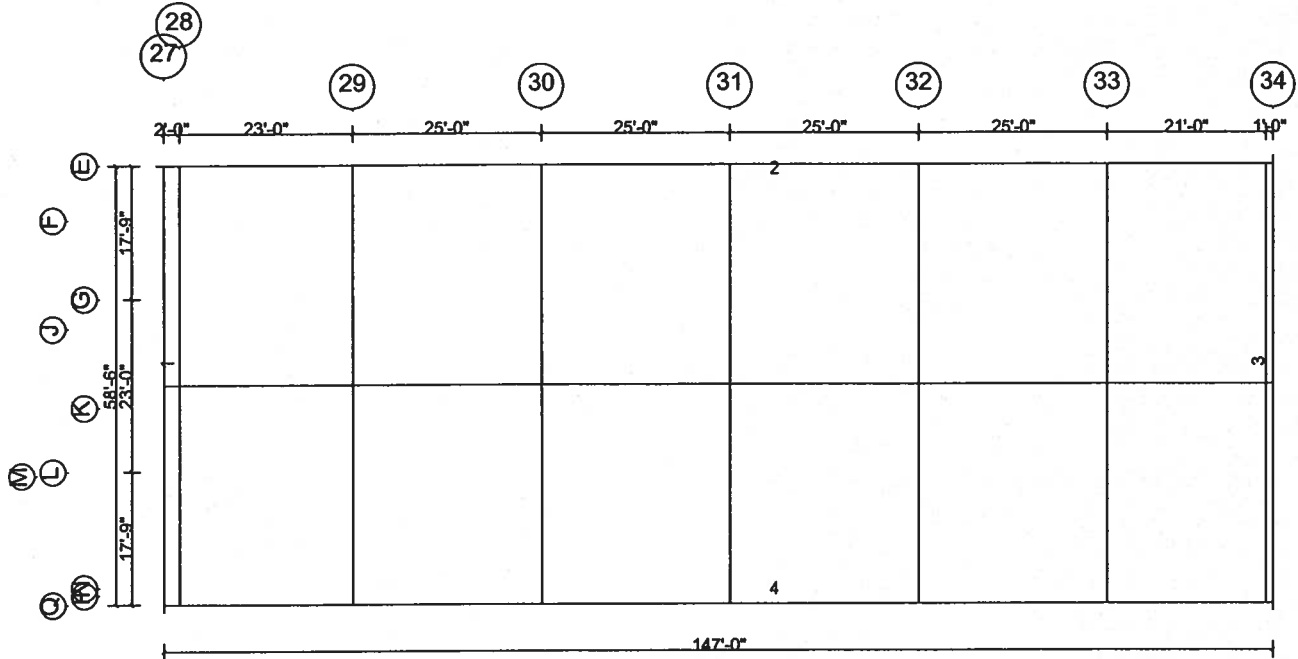
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Deflection Load Combinations - Purlin

No.	Origin	Factor	Deflection	Application	Description
1	System	1.000	150	1.0 L	L

Deflection Load Combinations - Girt

No.	Origin	Factor	Deflection	Application	Description
1	System	1.000	90	0.700 W1>	W1>
2	System	1.000	90	0.700 <W2	<W2





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Shape : BD0462 New Millenium Deck Plant 3

Loads and Codes - Shape: BD0462 New Millenium Deck Plant 3

City: Lake City, Florida County: Columbia
 Building Code: 2000 International Building Code
 Building Use: Standard Occupancy Structures
 Allow. Overstress:Frm: 1.03, Sec: 1.03, Brc: 1.03

State: Florida
 Built Up: 89AISC
 Cold Form: 96AISI
 Rainfall: 10.00 in per hour

Country: United States

Dead and Collateral Loads

Collateral Gravity: 5.00 psf
 Collateral Uplift: 0.00 psf

Frame Weight (assumed for seismic): 2.50 psf

Side	Type	Mag	Units	Shape	Applied to	Description
A	D	3.630	psf	Entire	Frm	Covering Weight - 24 SSR + Secondary Weight By Others 2.50 : Roof: A
A	D	1.130	psf	Entire	Pur	Covering Weight - 24 SSR : Roof: A

Live Load

Live Load: 20.00 psf Reducible

LL for Below Eave Canopy: N/A

Wind Load

Wind Speed: 100.00 mph
 Wind Enclosure: Enclosed
 Height Used: 39/1/4 (Type: Mean)
 Base Elevation: 0/0/0
 Primary Zone Strip Width: 31/3/6
 Velocity Pressure: (qz) 25.60 psf
 Topographic Factor: 1.0000
 Directionality Factor: 0.8500
 Wind Exposure (Factor): C (1.039)
 Basic Wind Pressure: 22.60 psf

Gust Factor: 1.0000
 Wind Importance Factor: 1.000
 Least Horiz. Dimension: 202/10/0

Parts / Portions Zone Strip Width: 15/7/11
 $qz = 0.00256 * (1.00) * (100.00)^2 * (1.00)$
 The 'Low Rise' Method is Used

Snow Load

Ground Snow Load: 0.00 psf
 Design Snow (Sloped): 0.00 psf
 Snow Accumulation Factor: 1.000
 Snow Importance: 1.000
 Ground / Roof Conversion: 1.00

Snow Exposure Category (Factor): 1 (1.00)
 Thermal Category (Factor): Heated (1.00)
 Unobstructed, Slippery Roof
 Rain Surcharge: 0.00
 Slope Reduction: 1.00
 Slope Used: 0.000 (0.000:12)

Seismic Load

Mapped Spectral Response - Ss: 0.00 %g
 Mapped Spectral Response - S1: 0.00 %g
 Seismic Hazard / Use Group: Group 1
 Seismic Performance / Design Category: A
 System NOT detailed for Seismic
 Seismic Importance: 1.000
 Frame Seismic Factor (Cs): 0.0100
 Brace Seismic Factor (Cs): 0.0100
 Framing R-Factor: 4.0000
 Bracing R-Factor: 5.0000

Seismic Snow Load: 0.00 psf
 Frame Redundancy Factor: 1.0000
 Brace Redundancy Factor: 1.0000
 Soil Profile Type: Stiff soil (D, 4)
 Framing Seismic Period: 0.0000
 Bracing Seismic Period: 0.0000
 Seismic Period Height Used: 39/1/4
 Design Spectral Response - Sds: 0.0000
 Design Spectral Response - Sd1: 0.0000

Side	Type	Mag	Units	Shape	Applied to	Description
1	E	0.018	psf	Spec	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.81 : Wall: 1
1	E	0.018	psf	Spec	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.81 : Wall: 1
1	E	0.018	psf	Spec	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.81 : Wall: 1
1	E	0.018	psf	Spec	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.81 : Wall: 1
1	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 1
1	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 1
1	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 1
1	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 1
2	E	0.015	psf	Rect	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.58 : Wall: 2
2	E	0.015	psf	Rect	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.58 : Wall: 2
2	E	0.015	psf	Rect	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.58 : Wall: 2
2	E	0.015	psf	Rect	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.58 : Wall: 2
2	E	0.015	psf	Spec	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.58 : Wall: 2
2	E	0.015	psf	Spec	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.58 : Wall: 2
2	E	0.015	psf	Spec	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.58 : Wall: 2
2	E	0.015	psf	Spec	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.58 : Wall: 2



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2	E	0.015	psf	Spec	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.58 : Wall: 2
2	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 2
2	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 2
2	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 2
2	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 2
2	E	0.720	psf	Spec	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 2
2	E	0.720	psf	Spec	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 2
2	E	0.720	psf	Spec	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 2
2	E	0.720	psf	Spec	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 2
2	E	0.720	psf	Spec	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 2
3	E	0.018	psf	Spec	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.81 : Wall: 3
3	E	0.018	psf	Spec	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.81 : Wall: 3
3	E	0.018	psf	Spec	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.81 : Wall: 3
3	E	0.018	psf	Spec	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.81 : Wall: 3
3	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 3
3	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 3
3	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 3
3	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 3
4	E	0.018	psf	Rect	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.87 : Wall: 4
4	E	0.018	psf	Rect	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.87 : Wall: 4
4	E	0.018	psf	Rect	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.87 : Wall: 4
4	E	0.018	psf	Rect	Frm Brc	Seismic: Covering Weight - 26 Panel Rib + Secondary Weight 0.87 : Wall: 4
4	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 4
4	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 4
4	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 4
4	E	0.720	psf	Rect	Frm Brc	Seismic: Covering Weight - 72.00 NBVP - Tilt Wall : Wall: 4
A	E	0.111	psf	Entire	Frm	Seismic: Covering Weight - 24 SSR + Secondary Weight By Others 2.50 + Seismic (Includes 5.000 Collateral 2.500 Frame Weight) : Roof: A
A	E	0.111	psf	Entire	Brc	Seismic: Covering Weight - 24 SSR + Secondary Weight By Others 2.50 + Seismic (Includes 5.000 Collateral 2.500 Frame Weight) : Roof: A

Deflection Conditions

Frames are vertically supporting: Metal Roof Purlins and Panels

Frames are laterally supporting: Metal Wall Girts and Panels

Purlins are supporting: Metal Roof Panels

Girts are supporting: Metal Wall Panels

Per Article 2.9 in the Builder Agreement, VP Buildings assumes that the Builder has called the local Building Official or Project Engineer to obtain all code and loading information for this specific building site.

Design Load Combinations - Purlin

No.	Origin	Factor	Application	Description
1	System	1.000	1.0 D + 1.0 CG + 1.0 L	D + CG + L
2	System	1.000	1.0 D + 1.0 W1>	D + W1>
3	System	1.000	1.0 D + 1.0 <W2	D + <W2
4	System	1.000	1.0 D + 1.0 CG + 0.750 L + 0.750 W1>	D + CG + L + W1>
5	System	1.000	1.0 D + 1.0 CG + 0.750 L + 0.750 <W2	D + CG + L + <W2
6	System	1.275	1.200 D + 1.200 CG + 1.0 E> + 1.0 EG+	D + CG + E> + EG+
7	System	1.275	1.200 D + 1.200 CG + 1.0 <E + 1.0 EG+	D + CG + <E + EG+

Design Load Combinations - Girt

No.	Origin	Factor	Application	Description
1	System	1.000	1.0 W1>	W1>
2	System	1.000	1.0 <W2	<W2

Design Load Combinations - Roof - Panel

No.	Origin	Factor	Application	Description
1	System	1.000	1.0 D + 1.0 L	D + L
2	System	1.000	1.0 D + 1.0 W1>	D + W1>
3	System	1.000	1.0 D + 1.0 <W2	D + <W2

Design Load Combinations - Wall - Panel

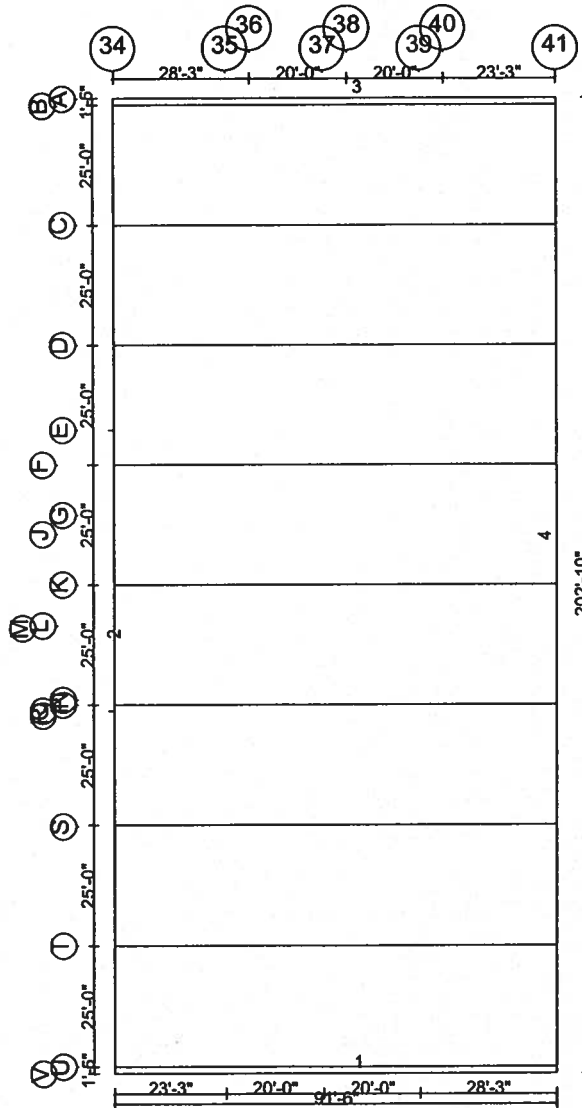
No.	Origin	Factor	Application	Description
1	System	1.000	1.0 W1>	W1>
2	System	1.000	1.0 <W2	<W2

Deflection Load Combinations - Purlin

No.	Origin	Factor	Deflection	Application	Description
1	System	1.000	150	1.0 L	L

Deflection Load Combinations - Girt

No.	Origin	Factor	Deflection	Application	Description
1	System	1.000	90	0.700 W1>	W1>
2	System	1.000	90	0.700 <W2	<W2





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Bracing - Summary Report

DESCRIPTION:

Diagonal Roof Bracing is typically used by VP Buildings to resist lateral wind loads and seismic forces acting perpendicular to the rigid frames. This Diagonal "X"-Bracing transmits the applied loads throughout the roof planes, delivering them to vertical bracing systems, and eventually into the foundation. Vertical Bracing systems are typically diagonal "X"-Bracing similar to roof plane bracing, although may also utilize vertical diaphragms, moment-resisting frames, concentric braced frames utilizing tension/compression members or tension only members, or other types of bracing systems, as permitted by Specifications.

ANALYSIS:

VP Buildings Diagonal Bracing is analyzed by the Stiffness Method for the applied wind loads and seismic loads acting on the structure. All diagonal members are assumed to be considered to have pinned connections, while moment frames are typically assumed to be AISC Type 1 Construction (rigid frames). with pinned base connections.

DESIGN:

Diagonal Bracing is designed for axial forces, using the prevailing AISC Allowable forces acting on the Net Area of each member. Moment frames are also designed in accordance with AISC allowed working stresses.

MATERIAL:

Typical Rod Bracing used by VP Buildings is 65 ksi Structural Steel. Angle bracing is typically 50 ksi steel, tube bracing is 46 ksi, and moment frames are typically designed and constructed from 50 ksi steel.

Shape : BD0462 New Millenium Deck Plant 1

Loads and Codes - Shape: BD0462 New Millenium Deck Plant 1

City: Lake City, Florida County: Columbia
Building Code: 2000 International Building Code
Building Use: Standard Occupancy Structures

State: Florida
Built Up: 89AISC
Cold Form: 96AISI

Country: United States
Rainfall: 10.00 in per hour
Allow. Overstress:
Frm: 1.03, Sec: 1.03, Brc: 1.03

Dead and Collateral Loads

Collateral Gravity: 5.00 psf
Collateral Uplift: 0.00 psf

Roof Covering + Second. Dead Load: 3.63 psf
Frame Weight (assumed for seismic): 2.50 psf

Live Load

Live Load: 20.00 psf Reducible
LL for Below Eave Canopy: N/A

Wind Load

Wind Speed: 100.00 mph
Wind Exposure (Factor): C (0.985)
Parts Wind Exposure Factor: 0.985
Wind Enclosure: Enclosed
Wind Importance Factor: 1.000

Snow Load

Ground Snow Load: 0.00 psf
Design Snow (Sloped): 0.00 psf
Snow Exposure Category (Factor): 1 (1.00)
Snow Importance: 1.000
Thermal Category (Factor): Heated (1.00)
Ground / Roof Conversion: 1.00
% Snow Used in Seismic: 0.00
Seismic Snow Load: 0.00 psf
Unobstructed, Slippery Roof

Seismic Load

Mapped Spectral Response - Ss: 0.00 %g
Mapped Spectral Response - S1: 0.00 %g
Seismic Hazard / Use Group: Group 1
Seismic Importance: 1.000
Seismic Performance / Design Category: A
System NOT detailed for Seismic
Framing Seismic Period: 0.0000
Bracing Seismic Period: 0.0000
Framing R-Factor: 4.0000
Bracing R-Factor: 5.0000
Soil Profile Type: Stiff soil (D, 4)
Frame Redundancy Factor: 1.0000
Brace Redundancy Factor: 1.0000
Frame Seismic Factor (Cs): 0.0100
Brace Seismic Factor (Cs): 0.0100

Base Elevation: 0/0/0

Primary Zone Strip Width: 24/4/0
Parts / Portions Zone Strip Width: 12/2/0
Basic Wind Pressure: 21.44 psf

Deflection Conditions

Frames are vertically supporting: Metal Roof Purlins and Panels
Frames are laterally supporting: Metal Wall Girts and Panels
Purlins are supporting: Metal Roof Panels
Girts are supporting: Metal Wall Panels

Per Article 2.9 in the Builder Agreement, VP Buildings assumes that the Builder has called the local Building Official or Project Engineer to obtain all code and loading information for this specific building site.

Shape : BD0462 New Millenium Deck Plant 2

Loads and Codes - Shape: BD0462 New Millenium Deck Plant 2

City: Lake City, Florida County: Columbia
Building Code: 2000 International Building Code
Building Use: Standard Occupancy Structures

State: Florida
Built Up: 89AISC
Cold Form: 96AISI

Country: United States
Rainfall: 10.00 in per hour
Allow. Overstress:
Frm: 1.03, Sec: 1.03, Brc: 1.03

Dead and Collateral Loads

Collateral Gravity: 5.00 psf
Collateral Uplift: 0.00 psf

Roof Covering + Second. Dead Load: 3.63 psf
Frame Weight (assumed for seismic): 2.50 psf

Live Load

Live Load: 20.00 psf Reducible
LL for Below Eave Canopy: N/A

Wind Load

Wind Speed: 100.00 mph
Wind Exposure (Factor): C (1.054)
Parts Wind Exposure Factor: 1.054

Snow Load

Ground Snow Load: 0.00 psf
Design Snow (Sloped): 0.00 psf
Snow Exposure Category (Factor): 1 (1.00)

Seismic Load

Mapped Spectral Response - Ss: 0.00 %g
Mapped Spectral Response - S1: 0.00 %g
Seismic Hazard / Use Group: Group 1



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Wind Enclosure: Enclosed
Wind Importance Factor: 1.000

Base Elevation: 0/0/0
Primary Zone Strip Width: 33/7/3
Parts / Portions Zone Strip Width: 16/9/10
Basic Wind Pressure: 22.94 psf

Snow Importance: 1.000
Thermal Category (Factor): Heated (1.00)
Ground / Roof Conversion: 1.00
% Snow Used in Seismic: 0.00
Seismic Snow Load: 0.00 psf
Unobstructed, Slippery Roof

Seismic Importance: 1.000
Seismic Performance / Design Category: A
System NOT detailed for Seismic
Framing Seismic Period: 0.0000
Bracing Seismic Period: 0.0000
Framing R-Factor: 4.0000
Bracing R-Factor: 5.0000
Soil Profile Type: Stiff soil (D, 4)
Frame Redundancy Factor: 1.0000
Brace Redundancy Factor: 1.0000
Frame Seismic Factor (Cs): 0.0100
Brace Seismic Factor (Cs): 0.0100

Deflection Conditions

Frames are vertically supporting: Metal Roof Purlins and Panels
Frames are laterally supporting: Metal Wall Girts and Panels
Purlins are supporting: Metal Roof Panels
Girts are supporting: Metal Wall Panels

Per Article 2.9 in the Builder Agreement, VP Buildings assumes that the Builder has called the local Building Official or Project Engineer to obtain all code and loading information for this specific building site.

Shape : BD0462 New Millenium Deck Plant 3

Loads and Codes - Shape: BD0462 New Millenium Deck Plant 3

City: Lake City, Florida County: Columbia

Building Code: 2000 International Building Code

Building Use: Standard Occupancy Structures

State: Florida
Built Up: 89AISC
Cold Form: 96AISI

Country: United States
Rainfall: 10.00 in per hour
Allow. Overstress:
Frm: 1.03, Sec: 1.03, Br: 1.03

Dead and Collateral Loads

Collateral Gravity: 5.00 psf
Collateral Uplift: 0.00 psf

Roof Covering + Second. Dead Load: 3.63 psf
Frame Weight (assumed for seismic): 2.50 psf

Live Load

Live Load: 20.00 psf Reducible
LL for Below Eave Canopy: N/A

Wind Load

Wind Speed: 100.00 mph
Wind Exposure (Factor): C (1.039)
Parts Wind Exposure Factor: 1.039
Wind Enclosure: Enclosed
Wind Importance Factor: 1.000

Base Elevation: 0/0/0
Primary Zone Strip Width: 31/3/6
Parts / Portions Zone Strip Width: 15/7/11
Basic Wind Pressure: 22.60 psf

Snow Load

Ground Snow Load: 0.00 psf
Design Snow (Sloped): 0.00 psf
Snow Exposure Category (Factor): 1 (1.00)
Snow Importance: 1.000
Thermal Category (Factor): Heated (1.00)
Ground / Roof Conversion: 1.00
% Snow Used in Seismic: 0.00
Seismic Snow Load: 0.00 psf
Unobstructed, Slippery Roof

Seismic Load

Mapped Spectral Response - Ss: 0.00 %g
Mapped Spectral Response - S1: 0.00 %g
Seismic Hazard / Use Group: Group 1
Seismic Importance: 1.000
Seismic Performance / Design Category: A
System NOT detailed for Seismic
Framing Seismic Period: 0.0000
Bracing Seismic Period: 0.0000
Framing R-Factor: 4.0000
Bracing R-Factor: 5.0000
Soil Profile Type: Stiff soil (D, 4)
Frame Redundancy Factor: 1.0000
Brace Redundancy Factor: 1.0000
Frame Seismic Factor (Cs): 0.0100
Brace Seismic Factor (Cs): 0.0100

Deflection Conditions

Frames are vertically supporting: Metal Roof Purlins and Panels
Frames are laterally supporting: Metal Wall Girts and Panels
Purlins are supporting: Metal Roof Panels
Girts are supporting: Metal Wall Panels

Per Article 2.9 in the Builder Agreement, VP Buildings assumes that the Builder has called the local Building Official or Project Engineer to obtain all code and loading information for this specific building site.



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Secondary - Summary Report

Loads and Codes - Shape: BD0462 New Millenium Deck Plant 1

City: Lake City, Florida County: Columbia
Building Code: 2000 International Building Code
Building Use: Standard Occupancy Structures

State: Florida
Built Up: 89AISC
Cold Form: 96AISI

Country: United States
Rainfall: 10.00 in per hour
Allow. Overstress:
Frm: 1.03, Sec: 1.03, Brc: 1.03

Dead and Collateral Loads

Collateral Gravity: 5.00 psf
Collateral Uplift: 0.00 psf

Roof Covering + Second. Dead Load: 3.63 psf
Frame Weight (assumed for seismic): 2.50 psf

Live Load

Live Load: 20.00 psf Reducible
LL for Below Eave Canopy: N/A

Wind Load

Wind Speed: 100.00 mph
Wind Exposure (Factor): C (0.985)
Parts Wind Exposure Factor: 0.985
Wind Enclosure: Enclosed
Wind Importance Factor: 1.000

Base Elevation: 0/0/0
Primary Zone Strip Width: 24/4/0
Parts / Portions Zone Strip Width: 12/2/0
Basic Wind Pressure: 21.44 psf

Snow Load

Ground Snow Load: 0.00 psf
Design Snow (Sloped): 0.00 psf
Snow Exposure Category (Factor): 1 (1.00)
Snow Importance: 1.000
Thermal Category (Factor): Heated (1.00)
Ground / Roof Conversion: 1.00
% Snow Used in Seismic: 0.00
Seismic Snow Load: 0.00 psf
Unobstructed, Slippery Roof

Seismic Load

Mapped Spectral Response - Ss: 0.00 %g
Mapped Spectral Response - S1: 0.00 %g
Seismic Hazard / Use Group: Group 1
Seismic Importance: 1.000
Seismic Performance / Design Category: A
System NOT detailed for Seismic
Framing Seismic Period: 0.0000
Bracing Seismic Period: 0.0000
Framing R-Factor: 4.0000
Bracing R-Factor: 5.0000
Soil Profile Type: Stiff soil (D, 4)
Frame Redundancy Factor: 1.0000
Brace Redundancy Factor: 1.0000
Frame Seismic Factor (Cs): 0.0100
Brace Seismic Factor (Cs): 0.0100

Per Article 2.9 in the Builder Agreement, VP Buildings assumes that the Builder has called the local Building Official or Project Engineer to obtain all code and loading information for this specific building site.

Design Load Combinations - Purlin

No.	Origin	Factor	Application	Description
1	System	1.000	1.0 D + 1.0 CG + 1.0 L	D + CG + L
2	System	1.000	1.0 D + 1.0 W1>	D + W1>
3	System	1.000	1.0 D + 1.0 <W2	D + <W2
4	System	1.000	1.0 D + 1.0 CG + 0.750 L + 0.750 W1>	D + CG + L + W1>
5	System	1.000	1.0 D + 1.0 CG + 0.750 L + 0.750 <W2	D + CG + L + <W2
6	System	1.275	1.200 D + 1.200 CG + 1.0 E> + 1.0 EG+	D + CG + E> + EG+
7	System	1.275	1.200 D + 1.200 CG + 1.0 <E + 1.0 EG+	D + CG + <E + EG+

Design Load Combinations - Girt

No.	Origin	Factor	Application	Description
1	System	1.000	1.0 W1>	W1>
2	System	1.000	1.0 <W2	<W2

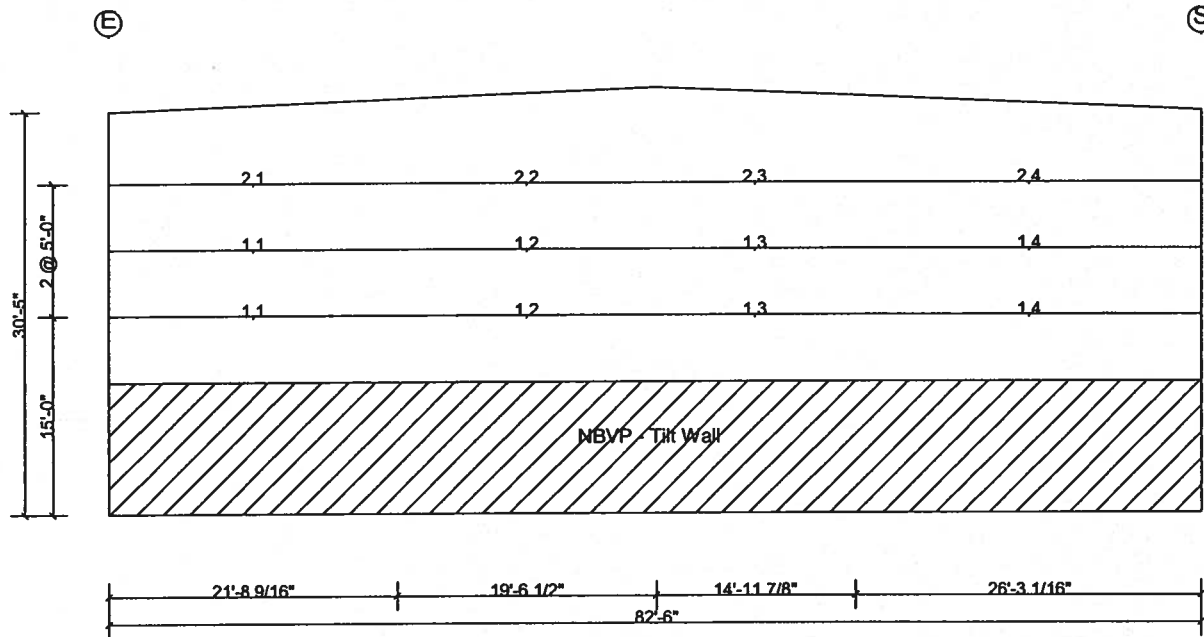
Deflection Load Combinations - Purlin

No.	Origin	Factor	Deflection	Application	Description
1	System	1.000	150	1.0 L	L

Deflection Load Combinations - Girt

No.	Origin	Factor	Deflection	Application	Description
1	System	1.000	90	0.700 W1>	W1>
2	System	1.000	90	0.700 <W2	<W2

Wall : 1



Maximum Secondary Designs for Shape BD0462 New Millenium Deck Plant 1 on Side 1

Des Id	Len (ft)	Description	Design Status	Detail Lap (in.)	Exterior				Interior				Exterior								
					% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	Lap (in.)	% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	Lap (in.)
1,1	21.71	8.50x0.065 Z Con	Yes	30					1	12	0.97	0.00	0.97	0.00	1	0.56	0.27	0.56	0.00	1	18
1,2	19.54	8.50x0.059 Z Con	Yes	30	0.56	0.24	0.56	0.00	1	12	0.85	0.50	0.93	0.00	1	0.17	0.16	0.17	0.00	2	12
1,3	14.99	8.50x0.059 Z Con	Yes	12	0.17	0.09	0.17	0.00	2	12	1.00	0.35	1.00	0.00	2	0.68	0.13	0.68	0.00	2	12
1,4	26.26	8.50x0.082 Z Con	Yes	36	0.68	0.17	0.68	0.00	2	36	1.01	0.00	1.01	0.00	1						
2,1	21.71	8.50x0.065 Z Con	Yes	30					1	30	1.03	0.00	1.03	0.00	1	0.67	0.31	0.67	0.00	1	30
2,2	19.54	8.50x0.059 Z Con	Yes	30	0.67	0.28	0.67	0.00	1	30	0.78	0.53	0.85	0.00	1	0.21	0.17	0.21	0.00	2	30
2,3	14.99	8.50x0.065 Z Con	Yes	12	0.21	0.10	0.21	0.00	2	12	0.97	0.30	0.97	0.00	2	0.67	0.11	0.67	0.00	2	12
2,4	26.26	8.50x0.092 Z Con	Yes	36	0.67	0.14	0.67	0.00	2	36	1.03	0.00	1.03	0.00	1						

Maximum Secondary Deflections for Shape BD0462 New Millenium Deck Plant 1 on Side 1

Design Id	Segment	Deflection(in.)	Ratio	Location(ft)	Load Case	Description
1	1	0.62	(L/422)	9.50	1	W1>
1	2	0.17	(L/1378)	33.71	1	W1>
1	3	-0.17	(L/1030)	50.76	1	W1>
1	4	1.16	(L/272)	70.74	1	W1>
2	1	0.58	(L/450)	9.50	1	W1>
2	2	0.19	(L/1245)	33.71	1	W1>
2	3	-0.17	(L/1073)	50.76	1	W1>
2	4	1.09	(L/290)	70.74	1	W1>



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Wall : 2



Dimension Key
1 1'-5"

Maximum Secondary Designs for Shape BD0462 New Millenium Deck Plant 1 on Side 2

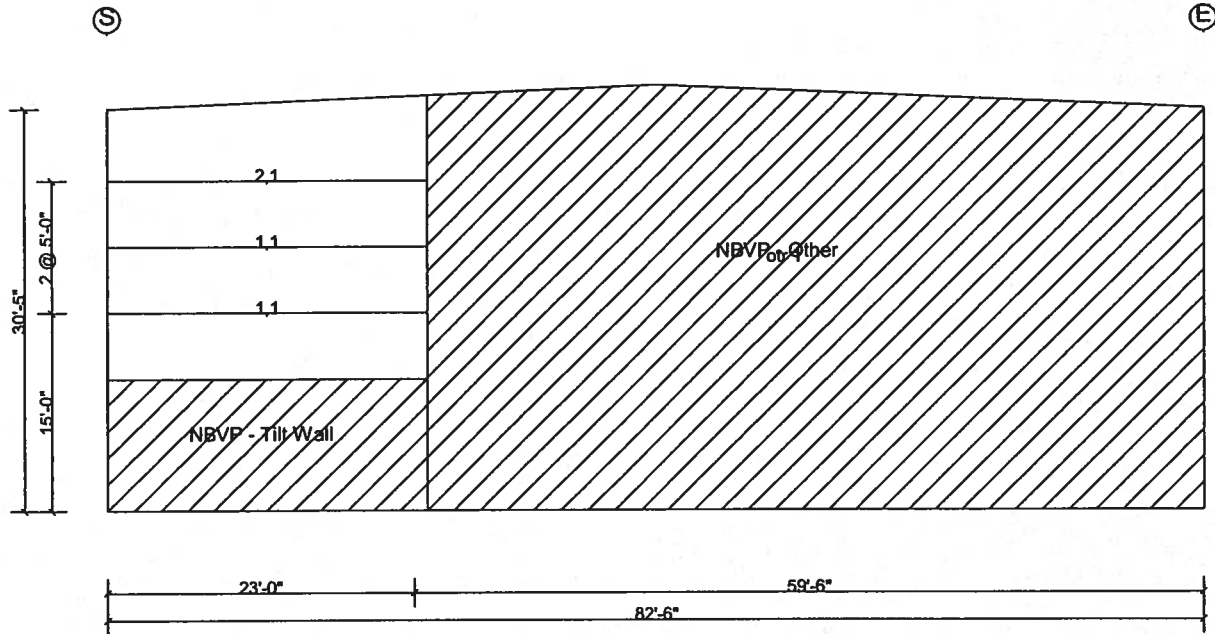
Des Id	Len (ft)	Description	Design Status	Detail Lap (in.)	Exterior					Interior					Exterior						
					% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	Lap (in.)	% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	Lap (in.)
1,1	26.42	8.50x0.073 Z Con	Yes	30					1	12	1.00	0.00	1.00	0.00	1	0.63	0.25	0.63	0.00	1	30
1,2	25.00	8.50x0.059 Z Con	Yes	12	0.63	0.22	0.63	0.00	1	12	0.87	0.51	0.99	0.00	1	0.55	0.28	0.55	0.00	1	12
1,3	25.00	8.50x0.059 Z Con	Yes	18	0.55	0.29	0.55	0.00	1	18	0.84	0.53	0.95	0.00	1	0.62	0.30	0.62	0.00	1	18
1,4	25.00	8.50x0.059 Z Con	Yes	18	0.62	0.30	0.62	0.00	1	18	0.84	0.52	0.95	0.00	1	0.60	0.29	0.60	0.00	1	18
1,5	25.00	8.50x0.059 Z Con	Yes	18	0.60	0.29	0.60	0.00	1	18	0.82	0.52	0.90	0.00	1	0.60	0.30	0.60	0.00	1	18
1,6	25.00	8.50x0.059 Z Con	Yes	18	0.60	0.30	0.60	0.00	1	18	0.82	0.52	0.90	0.00	1	0.60	0.30	0.60	0.00	1	18
1,7	25.00	8.50x0.059 Z Con	Yes	18	0.60	0.30	0.60	0.00	1	18	0.81	0.52	0.90	0.00	1	0.60	0.30	0.60	0.00	1	18
1,8	25.00	8.50x0.059 Z Con	Yes	18	0.60	0.30	0.60	0.00	1	18	0.81	0.52	0.90	0.00	1	0.60	0.30	0.60	0.00	1	18
1,9	25.00	8.50x0.059 Z Con	Yes	18	0.60	0.30	0.60	0.00	1	18	0.81	0.52	0.90	0.00	1	0.60	0.30	0.60	0.00	1	18
1,10	25.00	8.50x0.059 Z Con	Yes	18	0.60	0.30	0.60	0.00	1	18	0.81	0.52	0.90	0.00	1	0.60	0.30	0.60	0.00	1	18
1,11	25.00	8.50x0.059 Z Con	Yes	18	0.60	0.30	0.60	0.00	1	18	0.81	0.52	0.90	0.00	1	0.60	0.30	0.60	0.00	1	18
1,12	25.00	8.50x0.059 Z Con	Yes	18	0.60	0.30	0.60	0.00	1	18	0.81	0.52	0.90	0.00	1	0.60	0.30	0.60	0.00	1	18
1,13	25.00	8.50x0.059 Z Con	Yes	18	0.60	0.30	0.60	0.00	1	18	0.81	0.52	0.90	0.00	1	0.60	0.30	0.60	0.00	1	18
1,14	25.00	8.50x0.059 Z Con	Yes	18	0.60	0.30	0.60	0.00	1	18	0.81	0.52	0.90	0.00	1	0.60	0.30	0.60	0.00	1	18
1,15	25.00	8.50x0.059 Z Con	Yes	18	0.60	0.30	0.60	0.00	1	18	0.81	0.52	0.90	0.00	1	0.60	0.30	0.60	0.00	1	18
1,16	25.00	8.50x0.059 Z Con	Yes	18	0.60	0.30	0.60	0.00	1	18	0.81	0.52	0.90	0.00	1	0.60	0.30	0.60	0.00	1	18
1,17	25.00	8.50x0.059 Z Con	Yes	18	0.60	0.30	0.60	0.00	1	18	0.81	0.52	0.90	0.00	1	0.60	0.30	0.60	0.00	1	18
1,18	25.00	8.50x0.059 Z Con	Yes	18	0.60	0.30	0.60	0.00	1	18	0.81	0.52	0.90	0.00	1	0.60	0.30	0.60	0.00	1	18
1,19	25.00	8.50x0.059 Z Con	Yes	18	0.60	0.30	0.60	0.00	1	18	0.82	0.52	0.90	0.00	1	0.60	0.30	0.60	0.00	1	18
1,20	25.00	8.50x0.059 Z Con	Yes	18	0.60	0.30	0.60	0.00	1	18	0.82	0.52	0.90	0.00	1	0.60	0.29	0.60	0.00	1	18
1,21	25.00	8.50x0.059 Z Con	Yes	18	0.60	0.29	0.60	0.00	1	18	0.84	0.52	0.95	0.00	1	0.62	0.30	0.62	0.00	1	18
1,22	25.00	8.50x0.059 Z Con	Yes	18	0.62	0.30	0.62	0.00	1	18	0.84	0.53	0.95	0.00	1	0.54	0.29	0.54	0.00	1	18
1,23	25.00	8.50x0.059 Z Con	Yes	12	0.54	0.28	0.54	0.00	1	12	0.89	0.51	1.02	0.00	1	0.64	0.22	0.64	0.00	1	12
1,24	26.42	8.50x0.073 Z Con	Yes	30	0.64	0.25	0.64	0.00	1	30	1.03	0.00	1.03	0.00	1						

Maximum Secondary Deflections for Shape BD0462 New Millenium Deck Plant 1 on Side 2

Design Id	Segment	Deflection(in.)	Ratio	Location(ft)	Load Case	Description
1	1	0.91	(L/331)	12.42	1	W1>
1	2	0.23	(L/1286)	39.92	1	W1>
1	3	0.46	(L/652)	63.92	1	W1>
1	4	0.38	(L/784)	88.92	1	W1>
1	5	0.41	(L/740)	113.92	1	W1>
1	6	0.40	(L/752)	138.92	1	W1>
1	7	0.40	(L/748)	163.92	1	W1>
1	8	0.40	(L/750)	188.92	1	W1>
1	9	0.40	(L/749)	213.92	1	W1>
1	10	0.40	(L/749)	238.92	1	W1>
1	11	0.40	(L/749)	263.92	1	W1>
1	12	0.40	(L/749)	288.92	1	W1>
1	13	0.40	(L/749)	313.92	1	W1>
1	14	0.40	(L/749)	338.92	1	W1>
1	15	0.40	(L/749)	363.92	1	W1>
1	16	0.40	(L/749)	388.92	1	W1>
1	17	0.40	(L/750)	413.92	1	W1>

1	18	0.40	(L/748)	438.92	1	W1>
1	19	0.40	(L/752)	463.92	1	W1>
1	20	0.41	(L/739)	488.92	1	W1>
1	21	0.38	(L/786)	513.92	1	W1>
1	22	0.46	(L/647)	538.92	1	W1>
1	23	0.22	(L/1348)	562.92	1	W1>
1	24	0.95	(L/317)	590.42	1	W1>

Wall : 3



Maximum Secondary Designs for Shape BD0462 New Millenium Deck Plant 1 on Side 3

Des Id	Len (ft)	Description	Design Status	Detail Lap (in.)	Exterior				Interior					Exterior									
					% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	Lap (in.)	% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	Lap (in.)		
1,1	24.00	8.50x0.105 Z Sim	Yes	0							0.98	0.00	0.98	0.00	1								
2,1	24.00	8.50x0.120 Z Sim	Yes	0							0.99	0.00	0.99	0.00	1								

Maximum Secondary Deflections for Shape BD0462 New Millenium Deck Plant 1 on Side 3

Design Id	Segment	Deflection(in.)	Ratio	Location(ft)	Load Case	Description
1	1	1.01	(L/275)	11.50	1	W1>
2	1	1.01	(L/274)	11.50	1	W1>

Wall : 4



Dimension Key
1 1'-5"

Maximum Secondary Designs for Shape BD0462 New Millenium Deck Plant 1 on Side 4

Des Id	Len (ft)	Description	Design Status	Detail Lap (in.)	Exterior					Interior					Exterior						
					% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	Lap (in.)	% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	Lap (in.)
1,1	26.42	8.50x0.073 Z Con	Yes	30					1	12	1.03	0.00	1.03	0.00	1	0.64	0.25	0.64	0.00	1	30
1,2	25.00	8.50x0.059 Z Con	Yes	12	0.64	0.22	0.64	0.00	1	12	0.89	0.51	1.02	0.00	1	0.54	0.28	0.54	0.00	1	12
1,3	25.00	8.50x0.059 Z Con	Yes	18	0.54	0.29	0.54	0.00	1	18	0.84	0.53	0.95	0.00	1	0.62	0.30	0.62	0.00	1	18
1,4	25.00	8.50x0.059 Z Con	Yes	18	0.62	0.30	0.62	0.00	1	18	0.84	0.52	0.95	0.00	1	0.60	0.29	0.60	0.00	1	18
1,5	25.00	8.50x0.059 Z Con	Yes	18	0.60	0.29	0.60	0.00	1	18	0.82	0.52	0.90	0.00	1	0.60	0.30	0.60	0.00	1	18
1,6	25.00	8.50x0.059 Z Con	Yes	18	0.60	0.30	0.60	0.00	1	18	0.82	0.52	0.90	0.00	1	0.60	0.30	0.60	0.00	1	18
1,7	25.00	8.50x0.059 Z Con	Yes	18	0.60	0.30	0.60	0.00	1	18	0.81	0.52	0.90	0.00	1	0.60	0.30	0.60	0.00	1	18
1,8	25.00	8.50x0.059 Z Con	Yes	18	0.60	0.30	0.60	0.00	1	18	0.81	0.52	0.90	0.00	1	0.60	0.30	0.60	0.00	1	18
1,9	25.00	8.50x0.059 Z Con	Yes	18	0.60	0.30	0.60	0.00	1	18	0.81	0.52	0.90	0.00	1	0.60	0.30	0.60	0.00	1	18
1,10	25.00	8.50x0.059 Z Con	Yes	18	0.60	0.30	0.60	0.00	1	18	0.81	0.52	0.90	0.00	1	0.60	0.30	0.60	0.00	1	18
1,11	25.00	8.50x0.059 Z Con	Yes	18	0.60	0.30	0.60	0.00	1	18	0.81	0.52	0.90	0.00	1	0.60	0.30	0.60	0.00	1	18
1,12	25.00	8.50x0.059 Z Con	Yes	18	0.60	0.30	0.60	0.00	1	18	0.81	0.52	0.90	0.00	1	0.60	0.30	0.60	0.00	1	18
1,13	25.00	8.50x0.059 Z Con	Yes	18	0.60	0.30	0.60	0.00	1	18	0.81	0.52	0.90	0.00	1	0.60	0.30	0.60	0.00	1	18
1,14	25.00	8.50x0.059 Z Con	Yes	18	0.60	0.30	0.60	0.00	1	18	0.81	0.52	0.90	0.00	1	0.60	0.30	0.60	0.00	1	18
1,15	25.00	8.50x0.059 Z Con	Yes	18	0.60	0.30	0.60	0.00	1	18	0.81	0.52	0.90	0.00	1	0.60	0.30	0.60	0.00	1	18
1,16	25.00	8.50x0.059 Z Con	Yes	18	0.60	0.30	0.60	0.00	1	18	0.81	0.52	0.90	0.00	1	0.60	0.30	0.60	0.00	1	18
1,17	25.00	8.50x0.059 Z Con	Yes	18	0.60	0.30	0.60	0.00	1	18	0.81	0.52	0.90	0.00	1	0.60	0.30	0.60	0.00	1	18
1,18	25.00	8.50x0.059 Z Con	Yes	18	0.60	0.30	0.60	0.00	1	18	0.81	0.52	0.90	0.00	1	0.60	0.30	0.60	0.00	1	18
1,19	25.00	8.50x0.059 Z Con	Yes	18	0.60	0.30	0.60	0.00	1	18	0.82	0.52	0.90	0.00	1	0.60	0.30	0.60	0.00	1	18
1,20	25.00	8.50x0.059 Z Con	Yes	18	0.60	0.30	0.60	0.00	1	18	0.82	0.52	0.90	0.00	1	0.60	0.29	0.60	0.00	1	18
1,21	25.00	8.50x0.059 Z Con	Yes	18	0.60	0.29	0.60	0.00	1	18	0.84	0.52	0.95	0.00	1	0.62	0.30	0.62	0.00	1	18
1,22	25.00	8.50x0.059 Z Con	Yes	18	0.62	0.30	0.62	0.00	1	18	0.84	0.53	0.95	0.00	1	0.54	0.29	0.54	0.00	1	18
1,23	25.00	8.50x0.059 Z Con	Yes	12	0.54	0.28	0.54	0.00	1	12	0.89	0.51	1.02	0.00	1	0.64	0.22	0.64	0.00	1	12
1,24	26.42	8.50x0.073 Z Con	Yes	30	0.64	0.25	0.64	0.00	1	30	1.03	0.00	1.03	0.00	1						

Maximum Secondary Deflections for Shape BD0462 New Millenium Deck Plant 1 on Side 4

Design Id	Segment	Deflection(in.)	Ratio	Location(ft)	Load Case	Description
1	1	0.95	(L/317)	12.42	1	W1>
1	2	0.22	(L/1350)	39.92	1	W1>
1	3	0.46	(L/647)	63.92	1	W1>
1	4	0.38	(L/786)	88.92	1	W1>
1	5	0.41	(L/739)	113.92	1	W1>
1	6	0.40	(L/752)	138.92	1	W1>
1	7	0.40	(L/748)	163.92	1	W1>
1	8	0.40	(L/750)	188.92	1	W1>
1	9	0.40	(L/749)	213.92	1	W1>
1	10	0.40	(L/749)	238.92	1	W1>
1	11	0.40	(L/749)	263.92	1	W1>
1	12	0.40	(L/749)	288.92	1	W1>
1	13	0.40	(L/749)	313.92	1	W1>
1	14	0.40	(L/749)	338.92	1	W1>
1	15	0.40	(L/749)	363.92	1	W1>
1	16	0.40	(L/749)	388.92	1	W1>
1	17	0.40	(L/750)	413.92	1	W1>

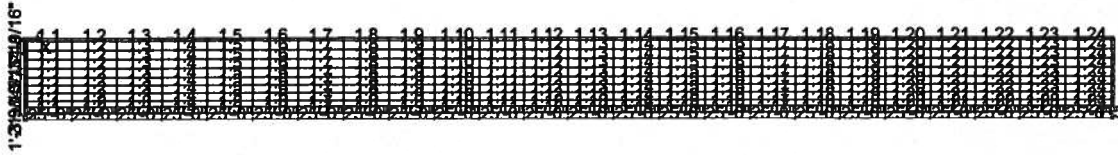


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1	18	0.40	(L/748)	438.92	1	W1>
1	19	0.40	(L/752)	463.92	1	W1>
1	20	0.41	(L/739)	488.92	1	W1>
1	21	0.38	(L/786)	513.92	1	W1>
1	22	0.46	(L/647)	538.92	1	W1>
1	23	0.22	(L/1348)	562.92	1	W1>
1	24	0.95	(L/317)	590.42	1	W1>

Roof : A



Maximum Secondary Designs for Shape BD0462 New Millenium Deck Plant 1 on Side A

Des Id	Len (ft)	Description	Design Status	Detail Lap (in.)	Exterior					Interior					Exterior						
					% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	Lap (in.)	% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	Lap (in.)
1,1	26.42	18.00x0.000 JST Sim	Yes	0																	
1,2	25.00	18.00x0.000 JST Sim	Yes	0																	
1,3	25.00	18.00x0.000 JST Sim	Yes	0																	
1,4	25.00	18.00x0.000 JST Sim	Yes	0																	
1,5	25.00	18.00x0.000 JST Sim	Yes	0																	
1,6	25.00	18.00x0.000 JST Sim	Yes	0																	
1,7	25.00	18.00x0.000 JST Sim	Yes	0																	
1,8	25.00	18.00x0.000 JST Sim	Yes	0																	
1,9	25.00	18.00x0.000 JST Sim	Yes	0																	
1,10	25.00	18.00x0.000 JST Sim	Yes	0																	
1,11	25.00	18.00x0.000 JST Sim	Yes	0																	
1,12	25.00	18.00x0.000 JST Sim	Yes	0																	
1,13	25.00	18.00x0.000 JST Sim	Yes	0																	
1,14	25.00	18.00x0.000 JST Sim	Yes	0																	
1,15	25.00	18.00x0.000 JST Sim	Yes	0																	
1,16	25.00	18.00x0.000 JST Sim	Yes	0																	
1,17	25.00	18.00x0.000 JST Sim	Yes	0																	
1,18	25.00	18.00x0.000 JST Sim	Yes	0																	
1,19	25.00	18.00x0.000 JST Sim	Yes	0																	
1,20	25.00	18.00x0.000 JST Sim	Yes	0																	
1,21	25.00	18.00x0.000 JST Sim	Yes	0																	
1,22	25.00	18.00x0.000 JST Sim	Yes	0																	
1,23	25.00	18.00x0.000 JST Sim	Yes	0																	
1,24	26.42	18.00x0.000 JST Sim	Yes	0																	

Maximum Secondary Deflections for Shape BD0462 New Millenium Deck Plant 1 on Side A

Design Id	Segment	Deflection(in.)	Ratio	Location(ft)	Load Case	Description
1	1	0.95	(L/317)	12.42	1	L
1	2	0.22	(L/1350)	39.92	1	L
1	3	0.46	(L/647)	63.92	1	L
1	4	0.38	(L/786)	88.92	1	L
1	5	0.41	(L/739)	113.92	1	L
1	6	0.40	(L/752)	138.92	1	L
1	7	0.40	(L/748)	163.92	1	L
1	8	0.40	(L/750)	188.92	1	L
1	9	0.40	(L/749)	213.92	1	L
1	10	0.40	(L/749)	238.92	1	L

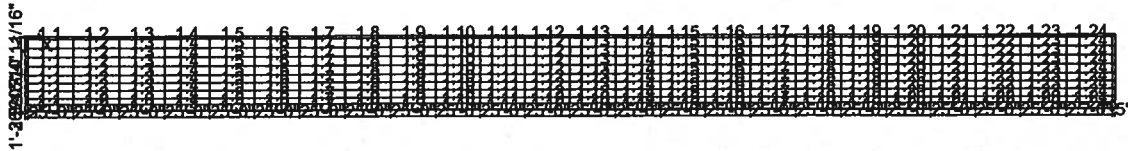


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1	11	0.40	(L/749)	263.92	1	L
1	12	0.40	(L/749)	288.92	1	L
1	13	0.40	(L/749)	313.92	1	L
1	14	0.40	(L/749)	338.92	1	L
1	15	0.40	(L/749)	363.92	1	L
1	16	0.40	(L/749)	388.92	1	L
1	17	0.40	(L/750)	413.92	1	L
1	18	0.40	(L/748)	438.92	1	L
1	19	0.40	(L/752)	463.92	1	L
1	20	0.41	(L/739)	488.92	1	L
1	21	0.38	(L/786)	513.92	1	L
1	22	0.46	(L/647)	538.92	1	L
1	23	0.22	(L/1348)	562.92	1	L
1	24	0.95	(L/317)	590.42	1	L

Roof : B



Maximum Secondary Designs for Shape BD0462 New Millenium Deck Plant 1 on Side B

Des Id	Len (ft)	Description	Design Status	Detail Lap (in.)	Exterior					Interior					Exterior						
					% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	Lap (in.)	% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	Lap (in.)
1,1	26.42	18.00x0.000 JST Sim	Yes	0																	
1,2	25.00	18.00x0.000 JST Sim	Yes	0																	
1,3	25.00	18.00x0.000 JST Sim	Yes	0																	
1,4	25.00	18.00x0.000 JST Sim	Yes	0																	
1,5	25.00	18.00x0.000 JST Sim	Yes	0																	
1,6	25.00	18.00x0.000 JST Sim	Yes	0																	
1,7	25.00	18.00x0.000 JST Sim	Yes	0																	
1,8	25.00	18.00x0.000 JST Sim	Yes	0																	
1,9	25.00	18.00x0.000 JST Sim	Yes	0																	
1,10	25.00	18.00x0.000 JST Sim	Yes	0																	
1,11	25.00	18.00x0.000 JST Sim	Yes	0																	
1,12	25.00	18.00x0.000 JST Sim	Yes	0																	
1,13	25.00	18.00x0.000 JST Sim	Yes	0																	
1,14	25.00	18.00x0.000 JST Sim	Yes	0																	
1,15	25.00	18.00x0.000 JST Sim	Yes	0																	
1,16	25.00	18.00x0.000 JST Sim	Yes	0																	
1,17	25.00	18.00x0.000 JST Sim	Yes	0																	
1,18	25.00	18.00x0.000 JST Sim	Yes	0																	
1,19	25.00	18.00x0.000 JST Sim	Yes	0																	
1,20	25.00	18.00x0.000 JST Sim	Yes	0																	
1,21	25.00	18.00x0.000 JST Sim	Yes	0																	
1,22	25.00	18.00x0.000 JST Sim	Yes	0																	
1,23	25.00	18.00x0.000 JST Sim	Yes	0																	
1,24	26.42	18.00x0.000 JST Sim	Yes	0																	

Maximum Secondary Deflections for Shape BD0462 New Millenium Deck Plant 1 on Side B

Design Id	Segment	Deflection(in.)	Ratio	Location(ft)	Load Case	Description
1	1	0.95	(L/317)	12.42	0	
1	2	0.22	(L/1350)	39.92	0	
1	3	0.46	(L/647)	63.92	0	



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1	4	0.38	(L/786)	88.92	0
1	5	0.41	(L/739)	113.92	0
1	6	0.40	(L/752)	138.92	0
1	7	0.40	(L/748)	163.92	0
1	8	0.40	(L/750)	188.92	0
1	9	0.40	(L/749)	213.92	0
1	10	0.40	(L/749)	238.92	0
1	11	0.40	(L/749)	263.92	0
1	12	0.40	(L/749)	288.92	0
1	13	0.40	(L/749)	313.92	0
1	14	0.40	(L/749)	338.92	0
1	15	0.40	(L/749)	363.92	0
1	16	0.40	(L/749)	388.92	0
1	17	0.40	(L/750)	413.92	0
1	18	0.40	(L/748)	438.92	0
1	19	0.40	(L/752)	463.92	0
1	20	0.41	(L/739)	488.92	0
1	21	0.38	(L/786)	513.92	0
1	22	0.46	(L/647)	538.92	0
1	23	0.22	(L/1348)	562.92	0
1	24	0.95	(L/317)	590.42	0

Purlin Anchorage Forces

Shape	Force(k)	Resistance(k)	Numb. Purlins	Roof Angle (Pitch)
A	0.00	0.00	10	2.443 (0.512:12)
B	0.00	0.00	10	2.443 (0.512:12)

Loads and Codes - Shape: BD0462 New Millenium Deck Plant 2

City: Lake City, Florida County: Columbia State: Florida Country: United States
 Building Code: 2000 International Building Code Built Up: 89AISC Rainfall: 10.00 in per hour
 Building Use: Standard Occupancy Structures Cold Form: 96AISI Allow. Overstress:
 Frm: 1.03, Sec: 1.03, Brc: 1.03

Dead and Collateral Loads

Collateral Gravity: 5.00 psf
 Collateral Uplift: 0.00 psf

Roof Covering + Second. Dead Load: 3.63 psf
 Frame Weight (assumed for seismic): 2.50 psf

Live Load

Live Load: 20.00 psf Reducible
 LL for Below Eave Canopy: N/A

Wind Load

Wind Speed: 100.00 mph
 Wind Exposure (Factor): C (1.054)
 Parts Wind Exposure Factor: 1.054
 Wind Enclosure: Enclosed
 Wind Importance Factor: 1.000

Snow Load

Ground Snow Load: 0.00 psf
 Design Snow (Sloped): 0.00 psf
 Snow Exposure Category (Factor): 1 (1.00)
 Snow Importance: 1.000
 Thermal Category (Factor): Heated (1.00)
 Ground / Roof Conversion: 1.00
 % Snow Used in Seismic: 0.00
 Seismic Snow Load: 0.00 psf
 Unobstructed, Slippery Roof

Seismic Load

Mapped Spectral Response - Ss: 0.00 %g
 Mapped Spectral Response - S1: 0.00 %g
 Seismic Hazard / Use Group: Group 1
 Seismic Importance: 1.000
 Seismic Performance / Design Category: A
 System NOT detailed for Seismic
 Framing Seismic Period: 0.0000
 Bracing Seismic Period: 0.0000
 Framing R-Factor: 4.0000
 Bracing R-Factor: 5.0000
 Soil Profile Type: Stiff soil (D, 4)
 Frame Redundancy Factor: 1.0000
 Brace Redundancy Factor: 1.0000
 Frame Seismic Factor (Cs): 0.0100
 Brace Seismic Factor (Cs): 0.0100

Base Elevation: 0/0/0
 Primary Zone Strip Width: 33/7/3
 Parts / Portions Zone Strip Width: 16/9/10
 Basic Wind Pressure: 22.94 psf

Per Article 2.9 in the Builder Agreement, VP Buildings assumes that the Builder has called the local Building Official or Project Engineer to obtain all code and loading information for this specific building site.

Design Load Combinations - Purlin

No.	Origin	Factor	Application	Description
1	System	1.000	1.0 D + 1.0 CG + 1.0 L	D + CG + L
2	System	1.000	1.0 D + 1.0 W1>	D + W1>
3	System	1.000	1.0 D + 1.0 <W2	D + <W2
4	System	1.000	1.0 D + 1.0 CG + 0.750 L + 0.750 W1>	D + CG + L + W1>
5	System	1.000	1.0 D + 1.0 CG + 0.750 L + 0.750 <W2	D + CG + L + <W2
6	System	1.275	1.200 D + 1.200 CG + 1.0 E> + 1.0 EG+	D + CG + E> + EG+
7	System	1.275	1.200 D + 1.200 CG + 1.0 <E + 1.0 EG+	D + CG + <E + EG+

Design Load Combinations - Girt



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No.	Origin	Factor	Application	Description
1	System	1.000	1.0 W1>	W1>
2	System	1.000	1.0 <W2	<W2

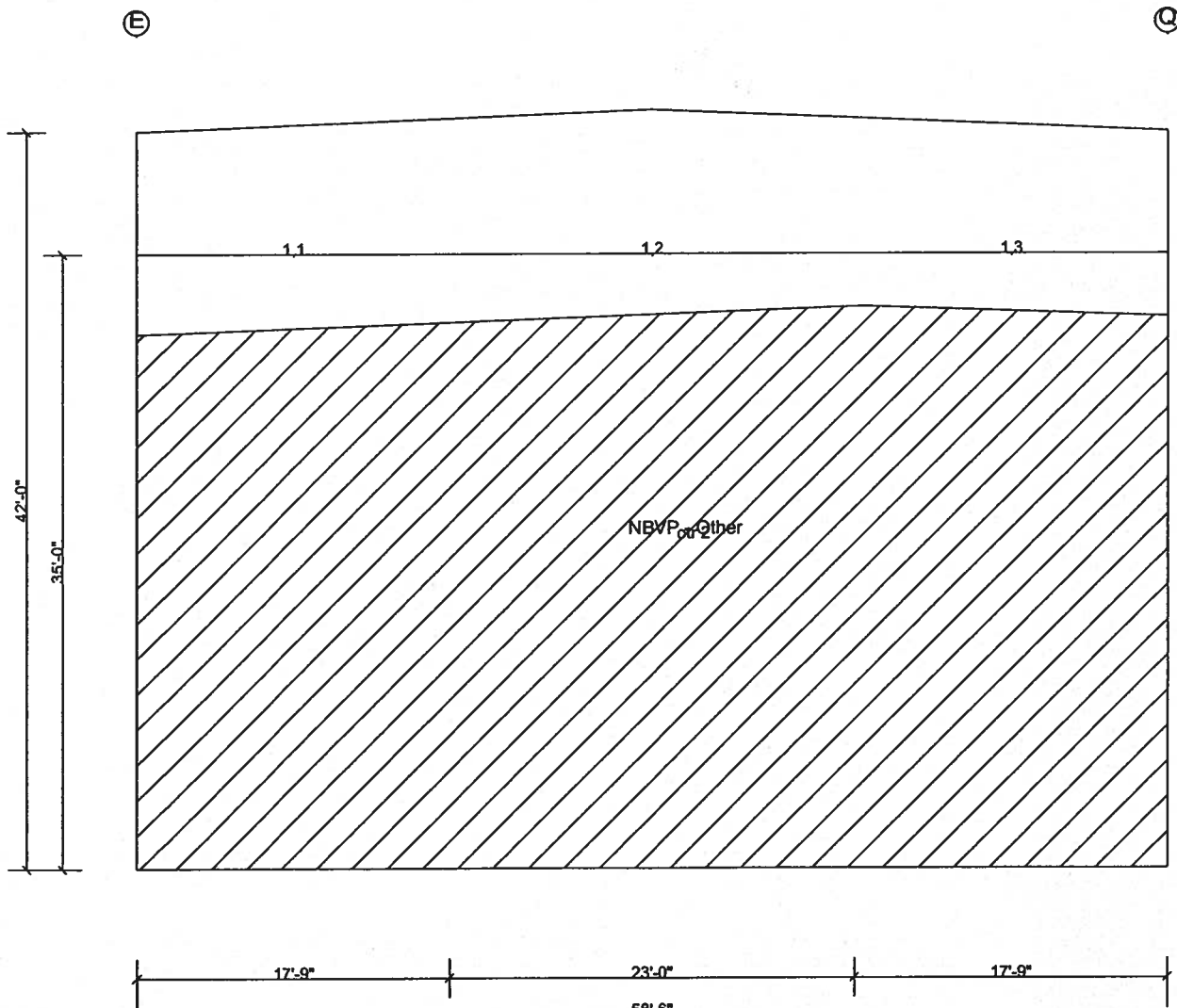
Deflection Load Combinations - Purlin

No.	Origin	Factor	Deflection	Application	Description
1	System	1.000	150	1.0 L	L

Deflection Load Combinations - Girt

No.	Origin	Factor	Deflection	Application	Description
1	System	1.000	90	0.700 W1>	W1>
2	System	1.000	90	0.700 <W2	<W2

Wall : 1



Maximum Secondary Designs for Shape BD0462 New Millenium Deck Plant 2 on Side 1

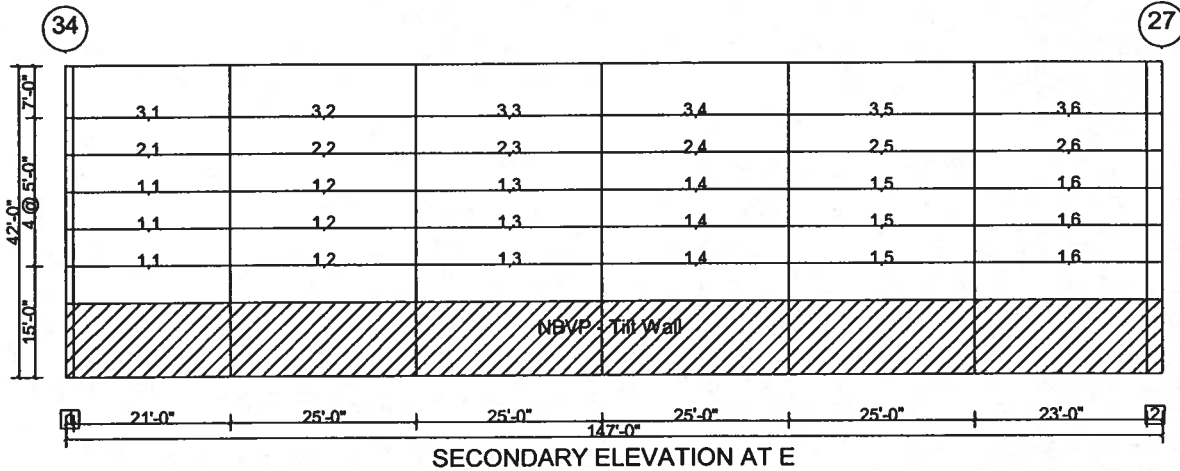
Des Id	Len (ft)	Description	Design Status	Detail Lap (in.)	Exterior						Interior						Exterior					
					% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	Lap (in.)	% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	Lap (in.)	
1,1	17.75	8.50x0.059 Z Con	Yes	24					1	24	0.90	0.00	0.90	0.00	1	0.66	0.37	0.66	0.00	1	24	
1,2	23.00	8.50x0.059 Z Con	Yes	24	0.66	0.34	0.66	0.00	1	24	0.81	0.56	0.94	0.00	1	0.62	0.32	0.62	0.00	1	24	

1,3	17.75	8.50x0.059 Z Con	Yes	18	0.62	0.34	0.62	0.00	1	18	0.83	0.00	0.83	0.00	1						
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Maximum Secondary Deflections for Shape BD0462 New Millenium Deck Plant 2 on Side 1

Design Id	Segment	Deflection(in.)	Ratio	Location(ft)	Load Case	Description
1	1	0.32	(L/665)	7.50	1	W1>
1	2	-0.34	(L/811)	29.25	2	<W2
1	3	0.30	(L/714)	51.25	1	W1>

Wall : 2



Dimension Key

- 1 1'-0"
- 2 2'-0"

Maximum Secondary Designs for Shape BD0462 New Millenium Deck Plant 2 on Side 2

Des Id	Len (ft)	Description	Design Status	Detail Lap (in.)	Exterior				Interior					Exterior							
					% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	Lap (in.)	% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	Lap (in.)
1,1	22.00	8.50x0.065 Z Con	Yes	42					1	18	0.92	0.00	0.92	0.00	1	0.63	0.29	0.63	0.00	1	24
1,2	25.00	8.50x0.059 Z Con	Yes	42	0.63	0.27	0.63	0.00	1	18	0.84	0.53	0.94	0.00	1	0.60	0.30	0.60	0.00	1	18
1,3	25.00	8.50x0.059 Z Con	Yes	30	0.60	0.30	0.60	0.00	1	18	0.86	0.54	1.00	0.00	1	0.63	0.31	0.63	0.00	1	18
1,4	25.00	8.50x0.059 Z Con	Yes	30	0.63	0.31	0.63	0.00	1	18	0.86	0.54	1.00	0.00	1	0.59	0.30	0.59	0.00	1	18
1,5	25.00	8.50x0.059 Z Con	Yes	24	0.59	0.29	0.59	0.00	1	18	0.79	0.51	0.86	0.00	1	0.67	0.27	0.67	0.00	1	18
1,6	25.00	8.50x0.065 Z Con	Yes	30	0.67	0.30	0.67	0.00	1	30	1.01	0.00	1.01	0.00	1						
2,1	22.00	8.50x0.059 Z Con	Yes	42							1.03	0.00	1.03	0.00	1	0.72	0.35	0.72	0.00	1	42
2,2	25.00	8.50x0.059 Z Con	Yes	42	0.72	0.31	0.72	0.00	1	42	0.83	0.51	0.91	0.00	1	0.60	0.29	0.60	0.00	1	42
2,3	25.00	8.50x0.059 Z Con	Yes	30	0.60	0.30	0.60	0.00	1	18	0.86	0.54	0.99	0.00	1	0.63	0.31	0.63	0.00	1	18
2,4	25.00	8.50x0.059 Z Con	Yes	30	0.63	0.31	0.63	0.00	1	18	0.86	0.54	0.99	0.00	1	0.58	0.30	0.58	0.00	1	18
2,5	25.00	8.50x0.059 Z Con	Yes	24	0.58	0.29	0.58	0.00	1	18	0.80	0.51	0.87	0.00	1	0.67	0.27	0.67	0.00	1	18
2,6	25.00	8.50x0.065 Z Con	Yes	30	0.67	0.30	0.67	0.00	1	30	1.03	0.00	1.03	0.00	1						
3,1	22.00	8.50x0.073 Z Con	Yes	42					1	24	0.88	0.00	0.88	0.00	1	0.69	0.28	0.69	0.00	1	36
3,2	25.00	8.50x0.059 Z Con	Yes	42	0.69	0.26	0.69	0.00	1	24	0.76	0.57	0.87	0.00	1	0.73	0.35	0.73	0.00	1	24
3,3	25.00	8.50x0.059 Z Con	Yes	30	0.73	0.36	0.73	0.00	1	30	0.84	0.60	1.02	0.00	1	0.78	0.37	0.78	0.00	1	30
3,4	25.00	8.50x0.059 Z Con	Yes	30	0.78	0.37	0.78	0.00	1	30	0.81	0.60	0.97	0.00	1	0.71	0.36	0.71	0.00	1	30
3,5	25.00	8.50x0.059 Z Con	Yes	24	0.71	0.35	0.71	0.00	1	24	0.74	0.56	0.83	0.00	1	0.74	0.26	0.74	0.00	1	24
3,6	25.00	8.50x0.073 Z Con	Yes	42	0.74	0.29	0.74	0.00	1	42	1.03	0.00	1.03	0.00	1						

Maximum Secondary Deflections for Shape BD0462 New Millenium Deck Plant 2 on Side 2

Design Id	Segment	Deflection(in.)	Ratio	Location(ft)	Load Case	Description
1	1	0.52	(L/487)	10.00	1	W1>
1	2	0.34	(L/870)	35.00	1	W1>
1	3	0.42	(L/708)	59.50	1	W1>

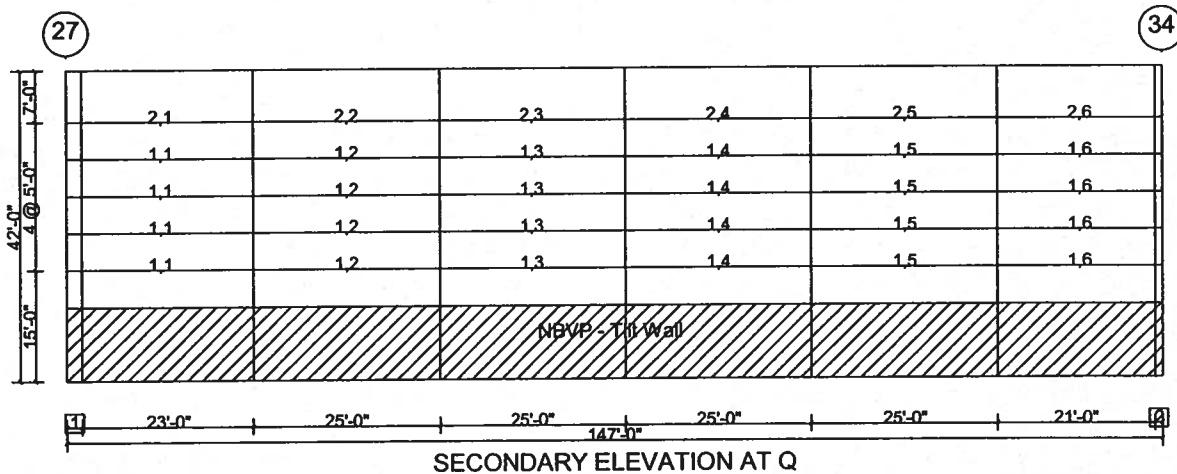


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1	4	0.44	(L/680)	84.50	1	W1>
1	5	0.30	(L/1000)	109.00	1	W1>
1	6	0.69	(L/402)	135.00	1	W1>
2	1	0.54	(L/468)	10.00	1	W1>
2	2	0.27	(L/1102)	35.00	1	W1>
2	3	0.43	(L/705)	59.50	1	W1>
2	4	0.44	(L/682)	84.50	1	W1>
2	5	0.30	(L/999)	109.00	1	W1>
2	6	0.64	(L/434)	135.00	1	W1>
3	1	0.53	(L/472)	10.00	1	W1>
3	2	0.39	(L/762)	35.00	1	W1>
3	3	0.46	(L/652)	59.50	1	W1>
3	4	0.48	(L/621)	84.50	1	W1>
3	5	0.34	(L/893)	109.00	1	W1>
3	6	0.70	(L/392)	135.00	1	W1>

Wall : 4



Dimension Key

- 1 2'-0"
- 2 1'-0"

Maximum Secondary Designs for Shape BD0462 New Millenium Deck Plant 2 on Side 4

Des Id	Len (ft)	Description	Design Status	Detail Lap (in.)	Exterior				Interior					Exterior							
					% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	Lap (in.)	% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	Lap (in.)
1,1	25.00	8.50x0.073 Z Con	Yes	30					1	18	0.88	0.00	0.88	0.00	1	0.61	0.24	0.61	0.00	1	30
1,2	25.00	8.50x0.059 Z Con	Yes	24	0.61	0.22	0.61	0.00	1	18	0.81	0.52	0.89	0.00	1	0.58	0.29	0.58	0.00	1	18
1,3	25.00	8.50x0.059 Z Con	Yes	30	0.58	0.30	0.58	0.00	1	18	0.87	0.55	1.01	0.00	1	0.64	0.31	0.64	0.00	1	18
1,4	25.00	8.50x0.059 Z Con	Yes	30	0.64	0.31	0.64	0.00	1	18	0.87	0.54	1.01	0.00	1	0.60	0.30	0.60	0.00	1	18
1,5	25.00	8.50x0.059 Z Con	Yes	24	0.60	0.30	0.60	0.00	1	18	0.84	0.53	0.95	0.00	1	0.63	0.27	0.63	0.00	1	18
1,6	22.00	8.50x0.065 Z Con	Yes	36	0.63	0.29	0.63	0.00	1	24	0.92	0.00	0.92	0.00	1						
2,1	25.00	8.50x0.073 Z Con	Yes	42							1.03	0.00	1.03	0.00	1	0.74	0.29	0.74	0.00	1	42
2,2	25.00	8.50x0.059 Z Con	Yes	24	0.74	0.26	0.74	0.00	1	24	0.74	0.56	0.83	0.00	1	0.71	0.35	0.71	0.00	1	24
2,3	25.00	8.50x0.059 Z Con	Yes	30	0.71	0.36	0.71	0.00	1	30	0.81	0.60	0.97	0.00	1	0.78	0.37	0.78	0.00	1	30
2,4	25.00	8.50x0.059 Z Con	Yes	30	0.78	0.37	0.78	0.00	1	30	0.84	0.60	1.03	0.00	1	0.73	0.36	0.73	0.00	1	30
2,5	25.00	8.50x0.059 Z Con	Yes	24	0.73	0.35	0.73	0.00	1	24	0.76	0.57	0.87	0.00	1	0.69	0.26	0.69	0.00	1	24
2,6	22.00	8.50x0.073 Z Con	Yes	36	0.69	0.28	0.69	0.00	1	36	0.88	0.00	0.88	0.00	1						

Maximum Secondary Deflections for Shape BD0462 New Millenium Deck Plant 2 on Side 4

Design Id	Segment	Deflection(in.)	Ratio	Location(ft)	Load Case	Description
1	1	0.66	(L/416)	12.00	1	W1>
1	2	0.29	(L/1024)	38.00	1	W1>

Roof : B

	1,1	1,2	1,3	1,4	1,5	1,6	
	1,1	1,2	1,3	1,4	1,5	1,6	
	1,1	1,2	1,3	1,4	1,5	1,6	
	1,1	1,2	1,3	1,4	1,5	1,6	
	1,1	1,2	1,3	1,4	1,5	1,6	
	1,1	1,2	1,3	1,4	1,5	1,6	
	1,1	1,2	1,3	1,4	1,5	1,6	
	1,1	1,2	1,3	1,4	1,5	1,6	
11'-0"	21'-0"	25'-0"	25'-0"	25'-0"	25'-0"	23'-0"	2'-0"

Maximum Secondary Designs for Shape BD0462 New Millenium Deck Plant 2 on Side B

Des Id	Len (ft)	Description	Design Status	Detail Lap (in.)	Exterior						Interior					Exterior					
					% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	Lap (in.)	% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	Lap (in.)
1,1	22.00	18.00x0.000 JST Sim	Yes	0																	
1,2	25.00	18.00x0.000 JST Sim	Yes	0																	
1,3	25.00	18.00x0.000 JST Sim	Yes	0																	
1,4	25.00	18.00x0.000 JST Sim	Yes	0																	
1,5	25.00	18.00x0.000 JST Sim	Yes	0																	
1,6	25.00	18.00x0.000 JST Sim	Yes	0																	

Maximum Secondary Deflections for Shape BD0462 New Millenium Deck Plant 2 on Side B

Design Id	Segment	Deflection(in.)	Ratio	Location(ft)	Load Case	Description
1	1	0.70	(L/393)	12.00	0	
1	2	0.34	(L/889)	38.00	0	
1	3	0.48	(L/621)	62.50	0	
1	4	0.46	(L/652)	87.50	0	
1	5	0.39	(L/761)	112.00	0	
1	6	0.53	(L/472)	137.00	0	

Purlin Anchorage Forces

Shape	Force(k)	Resistance(k)	Numb. Purlins	Roof Angle (Pitch)
A	0.00	0.00	8	2.386 (0.500:12)
B	0.00	0.00	8	2.386 (0.500:12)



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Loads and Codes - Shape: BD0462 New Millenium Deck Plant 3

City: Lake City, Florida County: Columbia
 Building Code: 2000 International Building Code
 Building Use: Standard Occupancy Structures

State: Florida
 Built Up: 89AISC
 Cold Form: 96AISI

Country: United States
 Rainfall: 10.00 in per hour
 Allow. Overstress:
 Frm: 1.03, Sec: 1.03, Brc: 1.03

Dead and Collateral Loads

Collateral Gravity: 5.00 psf
 Collateral Uplift: 0.00 psf

Roof Covering + Second. Dead Load: 3.63 psf
 Frame Weight (assumed for seismic): 2.50 psf

Live Load

Live Load: 20.00 psf Reducible
 LL for Below Eave Canopy: N/A

Wind Load

Wind Speed: 100.00 mph
 Wind Exposure (Factor): C (1.039)
 Parts Wind Exposure Factor: 1.039
 Wind Enclosure: Enclosed
 Wind Importance Factor: 1.000

Snow Load

Ground Snow Load: 0.00 psf
 Design Snow (Sloped): 0.00 psf
 Snow Exposure Category (Factor): 1 (1.00)
 Snow Importance: 1.000
 Thermal Category (Factor): Heated (1.00)
 Ground / Roof Conversion: 1.00
 % Snow Used in Seismic: 0.00
 Seismic Snow Load: 0.00 psf
 Unobstructed, Slippery Roof

Seismic Load

Mapped Spectral Response - Ss: 0.00 %g
 Mapped Spectral Response - S1: 0.00 %g
 Seismic Hazard / Use Group: Group 1
 Seismic Importance: 1.000
 Seismic Performance / Design Category: A
 System NOT detailed for Seismic
 Framing Seismic Period: 0.0000
 Bracing Seismic Period: 0.0000
 Framing R-Factor: 4.0000
 Bracing R-Factor: 5.0000
 Soil Profile Type: Stiff soil (D, 4)
 Frame Redundancy Factor: 1.0000
 Brace Redundancy Factor: 1.0000
 Frame Seismic Factor (Cs): 0.0100
 Brace Seismic Factor (Cs): 0.0100

Base Elevation: 0/0/0
 Primary Zone Strip Width: 31/3/6
 Parts / Portions Zone Strip Width: 15/7/11
 Basic Wind Pressure: 22.60 psf

Per Article 2.9 in the Builder Agreement, VP Buildings assumes that the Builder has called the local Building Official or Project Engineer to obtain all code and loading information for this specific building site.

Design Load Combinations - Purlin

No.	Origin	Factor	Application	Description
1	System	1.000	1.0 D + 1.0 CG + 1.0 L	D + CG + L
2	System	1.000	1.0 D + 1.0 W1>	D + W1>
3	System	1.000	1.0 D + 1.0 <W2	D + <W2
4	System	1.000	1.0 D + 1.0 CG + 0.750 L + 0.750 W1>	D + CG + L + W1>
5	System	1.000	1.0 D + 1.0 CG + 0.750 L + 0.750 <W2	D + CG + L + <W2
6	System	1.275	1.200 D + 1.200 CG + 1.0 E> + 1.0 EG+	D + CG + E> + EG+
7	System	1.275	1.200 D + 1.200 CG + 1.0 <E + 1.0 EG+	D + CG + <E + EG+

Design Load Combinations - Girt

No.	Origin	Factor	Application	Description
1	System	1.000	1.0 W1>	W1>
2	System	1.000	1.0 <W2	<W2

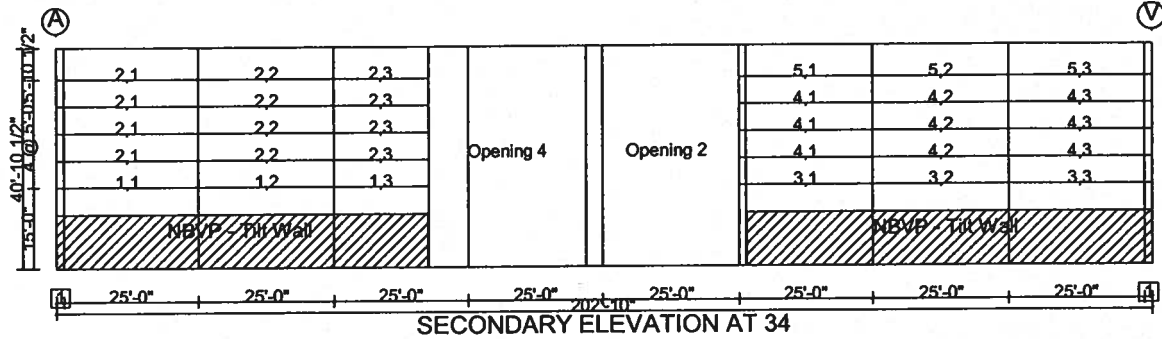
Deflection Load Combinations - Purlin

No.	Origin	Factor	Deflection	Application	Description
1	System	1.000	150	1.0 L	L

Deflection Load Combinations - Girt

No.	Origin	Factor	Deflection	Application	Description
1	System	1.000	90	0.700 W1>	W1>
2	System	1.000	90	0.700 <W2	<W2

Wall : 2



Dimension Key
1 1'-5"

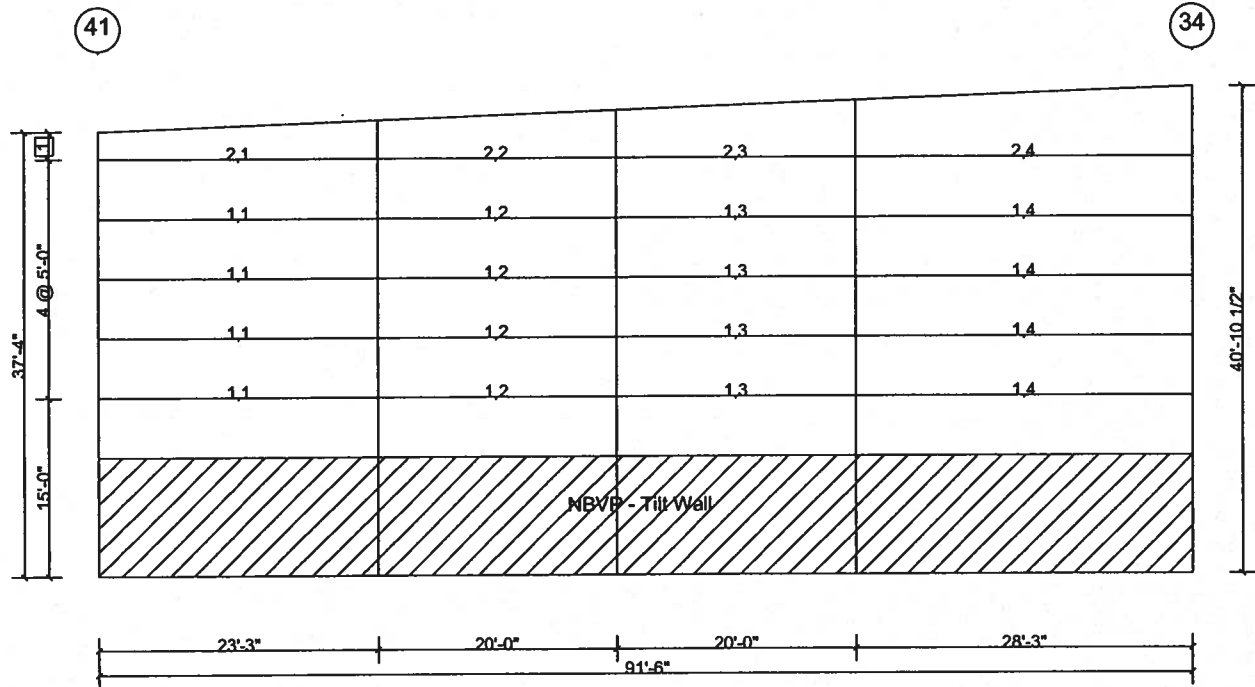
Maximum Secondary Designs for Shape BD0462 New Millenium Deck Plant 3 on Side 2

Des Id	Len (ft)	Description	Design Status	Detail Lap (in.)	Exterior				Interior					Exterior							
					% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	Lap (in.)	% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	Lap (in.)
1,1	26.42	8.50x0.073 Z Con	Yes	36					1	42	1.03	0.00	1.03	0.00	1	0.69	0.26	0.69	0.00	1	36
1,2	25.00	8.50x0.059 Z Con	Yes	42	0.69	0.23	0.69	0.00	1	42	0.87	0.51	0.98	0.00	1	0.54	0.28	0.54	0.00	1	42
1,3	17.75	8.50x0.059 Z Con	Yes	12	0.54	0.31	0.54	0.00	1	12	0.82	0.00	0.82	0.00	1						
2,1	26.42	8.50x0.082 Z Con	Yes	42					1	42	0.96	0.00	0.96	0.00	1	0.66	0.22	0.66	0.00	1	42
2,2	25.00	8.50x0.059 Z Con	Yes	42	0.66	0.19	0.66	0.00	1	12	0.86	0.54	0.99	0.00	1	0.56	0.30	0.56	0.00	1	12
2,3	17.75	8.50x0.059 Z Con	Yes	12	0.56	0.33	0.56	0.00	1	12	0.82	0.61	1.01	0.00	1						
3,1	25.00	8.50x0.082 Z Con	Yes	42					1	42	1.03	0.00	1.03	0.00	1	0.60	0.21	0.60	0.00	1	42
3,2	25.00	8.50x0.059 Z Con	Yes	24	0.60	0.17	0.60	0.00	1	24	0.84	0.47	0.89	0.00	1	0.54	0.16	0.54	0.00	1	24
3,3	26.42	8.50x0.082 Z Con	Yes	30	0.54	0.20	0.54	0.00	1	30	0.95	0.00	0.95	0.00	1						
4,1	25.00	8.50x0.082 Z Con	Yes	36					1	36	1.03	0.00	1.03	0.00	1	0.58	0.21	0.58	0.00	1	36
4,2	25.00	8.50x0.059 Z Con	Yes	24	0.58	0.16	0.58	0.00	1	18	0.83	0.47	0.87	0.00	1	0.53	0.16	0.53	0.00	1	18
4,3	26.42	8.50x0.082 Z Con	Yes	30	0.53	0.20	0.53	0.00	1	30	0.94	0.00	0.94	0.00	1						
5,1	25.00	8.50x0.092 Z Con	Yes	36					1	36	1.00	0.00	1.00	0.00	1	0.57	0.17	0.57	0.00	1	36
5,2	25.00	8.50x0.059 Z Con	Yes	24	0.57	0.14	0.57	0.00	1	12	0.90	0.51	1.03	0.00	1	0.58	0.17	0.58	0.00	1	12
5,3	26.42	8.50x0.082 Z Con	Yes	30	0.58	0.21	0.58	0.00	1	30	1.02	0.00	1.02	0.00	1						

Maximum Secondary Deflections for Shape BD0462 New Millenium Deck Plant 3 on Side 2

Design Id	Segment	Deflection(in.)	Ratio	Location(ft)	Load Case	Description
1	1	0.86	(L/347)	12.42	1	W1>
1	2	-0.23	(L/1279)	39.92	2	<W2
1	3	0.31	(L/693)	61.92	1	W1>
2	1	0.93	(L/323)	12.42	1	W1>
2	2	-0.30	(L/1000)	39.92	2	<W2
2	3	0.33	(L/650)	61.92	1	W1>
3	1	0.95	(L/315)	11.00	1	W1>
3	2	-0.11	(L/2790)	29.50	1	W1>
3	3	0.95	(L/315)	64.00	1	W1>
4	1	0.95	(L/316)	11.00	1	W1>
4	2	-0.11	(L/2793)	29.00	1	W1>
4	3	0.95	(L/317)	64.00	1	W1>
5	1	1.02	(L/293)	11.00	1	W1>
5	2	-0.11	(L/2758)	29.00	1	W1>
5	3	1.03	(L/291)	64.00	1	W1>

Wall : 3



SECONDARY ELEVATION AT A

Dimension Key
 1 2'-4"

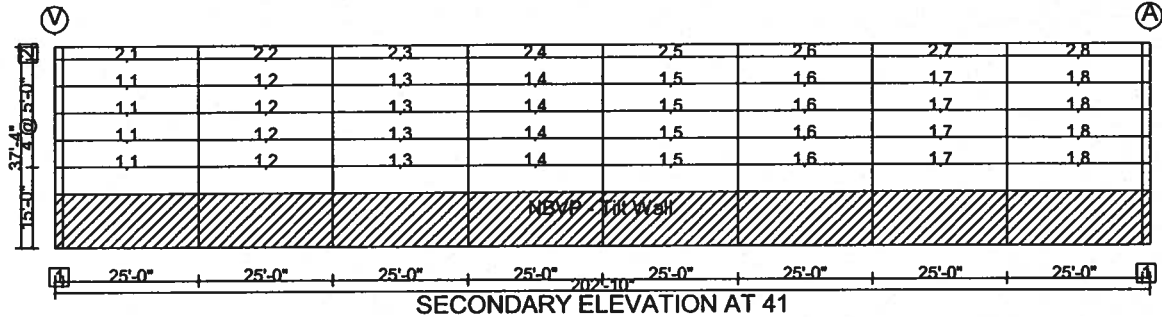
Maximum Secondary Designs for Shape BD0462 New Millenium Deck Plant 3 on Side 3

Des Id	Len (ft)	Description	Design Status	Detail Lap (in.)	Exterior				Interior				Exterior								
					% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	Lap (in.)	% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	Lap (in.)
1,1	23.25	8.50x0.073 Z Con	Yes	42					1	42	0.94	0.00	0.94	0.00	1	0.61	0.25	0.61	0.00	1	42
1,2	20.00	8.50x0.059 Z Con	Yes	42	0.61	0.21	0.61	0.00	1	42	0.64	0.44	0.64	0.00	1	0.17	0.16	0.17	0.00	1	42
1,3	20.00	8.50x0.065 Z Con	Yes	42	0.17	0.14	0.17	0.00	1	42	0.71	0.34	0.71	0.00	1	0.56	0.10	0.56	0.00	1	42
1,4	28.25	8.50x0.105 Z Con	Yes	48	0.56	0.12	0.56	0.00	1	48	0.93	0.00	0.93	0.00	1						
2,1	23.25	8.50x0.065 Z Con	Yes	42					1	42	0.94	0.00	0.94	0.00	1	0.60	0.26	0.60	0.00	1	42
2,2	20.00	8.50x0.059 Z Con	Yes	42	0.60	0.23	0.60	0.00	1	42	0.55	0.39	0.55	0.00	1	0.15	0.14	0.15	0.00	2	42
2,3	20.00	8.50x0.065 Z Con	Yes	42	0.15	0.12	0.15	0.00	2	42	0.78	0.35	0.78	0.00	1	0.53	0.08	0.53	0.00	1	42
2,4	28.25	8.50x0.120 Z Con	Yes	48	0.53	0.10	0.53	0.00	1	48	0.93	0.00	0.93	0.00	1						

Maximum Secondary Deflections for Shape BD0462 New Millenium Deck Plant 3 on Side 3

Design Id	Segment	Deflection(in.)	Ratio	Location(ft)	Load Case	Description
1	1	0.73	(L/380)	10.00	1	W1>
1	2	-0.08	(L/2878)	35.75	2	<W2
1	3	-0.17	(L/1415)	57.75	1	W1>
1	4	1.18	(L/288)	79.25	1	W1>
2	1	0.67	(L/413)	10.00	1	W1>
2	2	-0.10	(L/2470)	35.75	2	<W2
2	3	-0.20	(L/1201)	57.25	1	W1>
2	4	1.19	(L/284)	78.75	1	W1>

Wall : 4



Dimension Key

- 1 1'-5"
- 2 2'-4"

Maximum Secondary Designs for Shape BD0462 New Millenium Deck Plant 3 on Side 4

Des Id	Len (ft)	Description	Design Status	Detail Lap (in.)	Exterior				Interior					Exterior							
					% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	Lap (in.)	% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	% Bnd	% Shr	% Cmb	% Wcp	Ld Cs	Lap (in.)
1,1	26.42	8.50x0.073 Z Con	Yes	42					1	36	1.03	0.00	1.03	0.00	1	0.68	0.26	0.68	0.00	1	42
1,2	25.00	8.50x0.059 Z Con	Yes	36	0.68	0.22	0.68	0.00	1	36	0.76	0.48	0.78	0.00	1	0.56	0.28	0.56	0.00	1	36
1,3	25.00	8.50x0.059 Z Con	Yes	18	0.56	0.29	0.56	0.00	1	18	0.85	0.54	0.98	0.00	1	0.63	0.31	0.63	0.00	1	18
1,4	25.00	8.50x0.059 Z Con	Yes	18	0.63	0.30	0.63	0.00	1	18	0.86	0.53	0.98	0.00	1	0.60	0.30	0.60	0.00	1	18
1,5	25.00	8.50x0.059 Z Con	Yes	18	0.60	0.30	0.60	0.00	1	18	0.86	0.53	0.98	0.00	1	0.63	0.30	0.63	0.00	1	18
1,6	25.00	8.50x0.059 Z Con	Yes	18	0.63	0.31	0.63	0.00	1	18	0.85	0.54	0.98	0.00	1	0.56	0.29	0.56	0.00	1	18
1,7	25.00	8.50x0.059 Z Con	Yes	36	0.56	0.28	0.56	0.00	1	36	0.76	0.48	0.78	0.00	1	0.68	0.22	0.68	0.00	1	36
1,8	26.42	8.50x0.073 Z Con	Yes	42	0.68	0.26	0.68	0.00	1	42	1.03	0.00	1.03	0.00	1						
2,1	26.42	8.50x0.065 Z Con	Yes	12					1	12	0.97	0.00	0.97	0.00	1	0.52	0.23	0.52	0.00	1	12
2,2	25.00	8.50x0.059 Z Con	Yes	36	0.52	0.20	0.52	0.00	1	12	0.92	0.43	1.00	0.00	1	0.40	0.21	0.40	0.00	1	12
2,3	25.00	8.50x0.059 Z Con	Yes	18	0.40	0.22	0.40	0.00	1	12	0.70	0.41	0.70	0.00	1	0.45	0.22	0.45	0.00	1	12
2,4	25.00	8.50x0.059 Z Con	Yes	18	0.45	0.22	0.45	0.00	1	12	0.70	0.41	0.70	0.00	1	0.43	0.22	0.43	0.00	1	12
2,5	25.00	8.50x0.059 Z Con	Yes	18	0.43	0.22	0.43	0.00	1	12	0.70	0.41	0.70	0.00	1	0.45	0.22	0.45	0.00	1	12
2,6	25.00	8.50x0.059 Z Con	Yes	18	0.45	0.22	0.45	0.00	1	12	0.70	0.41	0.70	0.00	1	0.40	0.22	0.40	0.00	1	12
2,7	25.00	8.50x0.059 Z Con	Yes	36	0.40	0.21	0.40	0.00	1	12	0.92	0.43	0.99	0.00	1	0.52	0.20	0.52	0.00	1	12
2,8	26.42	8.50x0.065 Z Con	Yes	12	0.52	0.23	0.52	0.00	1	12	0.97	0.00	0.97	0.00	1						

Maximum Secondary Deflections for Shape BD0462 New Millenium Deck Plant 3 on Side 4

Design Id	Segment	Deflection(in.)	Ratio	Location(ft)	Load Case	Description
1	1	0.86	(L/347)	12.42	1	W1>
1	2	0.18	(L/1655)	39.92	1	W1>
1	3	0.46	(L/653)	63.42	1	W1>
1	4	0.40	(L/758)	88.92	1	W1>
1	5	0.40	(L/758)	113.92	1	W1>
1	6	0.46	(L/654)	139.42	1	W1>
1	7	0.18	(L/1653)	162.92	1	W1>
1	8	0.86	(L/348)	190.42	1	W1>
2	1	0.83	(L/361)	12.42	1	W1>
2	2	0.17	(L/1803)	39.92	1	W1>
2	3	0.36	(L/836)	63.92	1	W1>
2	4	0.31	(L/978)	88.92	1	W1>
2	5	0.31	(L/978)	113.92	1	W1>
2	6	0.36	(L/837)	138.92	1	W1>
2	7	0.17	(L/1797)	162.92	1	W1>
2	8	0.83	(L/360)	190.42	1	W1>



Calculations Package

Date: 10/21/2004
Time: 11:20:32 AM
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Framing - Summary Report

Loads and Codes - Shape: BD0462 New Millenium Deck Plant 1

City: Lake City, Florida County: Columbia
Building Code: 2000 International Building Code
Building Use: Standard Occupancy Structures

State: Florida
Built Up: 89AISC
Cold Form: 96AISI

Country: United States
Rainfall: 10.00 in per hour
Allow. Overstress:
Frm: 1.03, Sec: 1.03, Brc: 1.03

Dead and Collateral Loads

Collateral Gravity: 5.00 psf
Collateral Uplift: 0.00 psf

Roof Covering + Second. Dead Load: 3.63 psf
Frame Weight (assumed for seismic): 2.50 psf

Live Load

Live Load: 20.00 psf Reducible
LL for Below Eave Canopy: N/A

Wind Load

Wind Speed: 100.00 mph
Wind Exposure (Factor): C (0.985)
Parts Wind Exposure Factor: 0.985
Wind Enclosure: Enclosed
Wind Importance Factor: 1.000

Snow Load

Ground Snow Load: 0.00 psf
Design Snow (Sloped): 0.00 psf
Snow Exposure Category (Factor): 1 (1.00)
Snow Importance: 1.000
Thermal Category (Factor): Heated (1.00)
Ground / Roof Conversion: 1.00
% Snow Used in Seismic: 0.00
Seismic Snow Load: 0.00 psf
Unobstructed, Slippery Roof

Seismic Load

Mapped Spectral Response - Ss: 0.00 %g
Mapped Spectral Response - S1: 0.00 %g
Seismic Hazard / Use Group: Group 1
Seismic Importance: 1.000
Seismic Performance / Design Category: A
System NOT detailed for Seismic
Framing Seismic Period: 0.0000
Bracing Seismic Period: 0.0000
Framing R-Factor: 4.0000
Bracing R-Factor: 5.0000
Soil Profile Type: Stiff soil (D, 4)
Frame Redundancy Factor: 1.0000
Brace Redundancy Factor: 1.0000
Frame Seismic Factor (Cs): 0.0100
Brace Seismic Factor (Cs): 0.0100

Base Elevation: 0/0/0

Primary Zone Strip Width: 24/4/0
Parts / Portions Zone Strip Width: 12/2/0
Basic Wind Pressure: 21.44 psf

Deflection Conditions

Frames are vertically supporting: Metal Roof Purlins and Panels
Frames are laterally supporting: Metal Wall Girts and Panels
Purlins are supporting: Metal Roof Panels
Girts are supporting: Metal Wall Panels

Per Article 2.9 in the Builder Agreement, VP Buildings assumes that the Builder has called the local Building Official or Project Engineer to obtain all code and loading information for this specific building site.

Loads and Codes - Shape: BD0462 New Millenium Deck Plant 2

City: Lake City, Florida County: Columbia
Building Code: 2000 International Building Code
Building Use: Standard Occupancy Structures

State: Florida
Built Up: 89AISC
Cold Form: 96AISI

Country: United States
Rainfall: 10.00 in per hour
Allow. Overstress:
Frm: 1.03, Sec: 1.03, Brc: 1.03

Dead and Collateral Loads

Collateral Gravity: 5.00 psf
Collateral Uplift: 0.00 psf

Roof Covering + Second. Dead Load: 3.63 psf
Frame Weight (assumed for seismic): 2.50 psf

Live Load

Live Load: 20.00 psf Reducible
LL for Below Eave Canopy: N/A

Wind Load

Wind Speed: 100.00 mph
Wind Exposure (Factor): C (1.054)
Parts Wind Exposure Factor: 1.054
Wind Enclosure: Enclosed
Wind Importance Factor: 1.000

Snow Load

Ground Snow Load: 0.00 psf
Design Snow (Sloped): 0.00 psf
Snow Exposure Category (Factor): 1 (1.00)
Snow Importance: 1.000
Thermal Category (Factor): Heated (1.00)
Ground / Roof Conversion: 1.00
% Snow Used in Seismic: 0.00
Seismic Snow Load: 0.00 psf
Unobstructed, Slippery Roof

Seismic Load

Mapped Spectral Response - Ss: 0.00 %g
Mapped Spectral Response - S1: 0.00 %g
Seismic Hazard / Use Group: Group 1
Seismic Importance: 1.000
Seismic Performance / Design Category: A
System NOT detailed for Seismic
Framing Seismic Period: 0.0000
Bracing Seismic Period: 0.0000
Framing R-Factor: 4.0000
Bracing R-Factor: 5.0000
Soil Profile Type: Stiff soil (D, 4)
Frame Redundancy Factor: 1.0000
Brace Redundancy Factor: 1.0000
Frame Seismic Factor (Cs): 0.0100
Brace Seismic Factor (Cs): 0.0100

Base Elevation: 0/0/0

Primary Zone Strip Width: 33/7/3
Parts / Portions Zone Strip Width: 16/9/10
Basic Wind Pressure: 22.94 psf

Deflection Conditions

Frames are vertically supporting: Metal Roof Purlins and Panels
Frames are laterally supporting: Metal Wall Girts and Panels
Purlins are supporting: Metal Roof Panels
Girts are supporting: Metal Wall Panels



Calculations Package

Per Article 2.9 in the Builder Agreement, VP Buildings assumes that the Builder has called the local Building Official or Project Engineer to obtain all code and loading information for this specific building site.

Loads and Codes - Shape: BD0462 New Millenium Deck Plant 3

City: Lake City, Florida	County: Columbia	State: Florida	Country: United States
Building Code: 2000 International Building Code		Built Up: 89AISC	Rainfall: 10.00 in per hour
Building Use: Standard Occupancy Structures		Cold Form: 96AISI	Allow. Overstress: Frm: 1.03, Sec: 1.03, Br: 1.03

Dead and Collateral Loads

Collateral Gravity: 5.00 psf	Roof Covering + Second. Dead Load: 3.63 psf
Collateral Uplift: 0.00 psf	Frame Weight (assumed for seismic): 2.50 psf

Live Load

Live Load: 20.00 psf Reducible
LL for Below Eave Canopy: N/A

Wind Load

Wind Speed: 100.00 mph
Wind Exposure (Factor): C (1.039)
Parts Wind Exposure Factor: 1.039
Wind Enclosure: Enclosed
Wind Importance Factor: 1.000

Base Elevation: 0/0/0
Primary Zone Strip Width: 31/3/6
Parts / Portions Zone Strip Width: 15/7/11
Basic Wind Pressure: 22.60 psf

Snow Load

Ground Snow Load: 0.00 psf
Design Snow (Sloped): 0.00 psf
Snow Exposure Category (Factor): 1 (1.00)
Snow Importance: 1.000
Thermal Category (Factor): Heated (1.00)
Ground / Roof Conversion: 1.00
% Snow Used in Seismic: 0.00
Seismic Snow Load: 0.00 psf
Unobstructed, Slippery Roof

Seismic Load

Mapped Spectral Response - Ss: 0.00 %g
Mapped Spectral Response - S1: 0.00 %g
Seismic Hazard / Use Group: Group 1
Seismic Importance: 1.000
Seismic Performance / Design Category: A
System NOT detailed for Seismic
Framing Seismic Period: 0.0000
Bracing Seismic Period: 0.0000
Framing R-Factor: 4.0000
Bracing R-Factor: 5.0000
Soil Profile Type: Stiff soil (D, 4)
Frame Redundancy Factor: 1.0000
Brace Redundancy Factor: 1.0000
Frame Seismic Factor (Cs): 0.0100
Brace Seismic Factor (Cs): 0.0100

Deflection Conditions

Frames are vertically supporting: Metal Roof Purlins and Panels
Frames are laterally supporting: Metal Wall Girts and Panels
Purlins are supporting: Metal Roof Panels
Girts are supporting: Metal Wall Panels

Per Article 2.9 in the Builder Agreement, VP Buildings assumes that the Builder has called the local Building Official or Project Engineer to obtain all code and loading information for this specific building site.

Covering - Summary Report

Shape: BD0462 New Millenium Deck Plant 1

Loads and Codes - Shape: BD0462 New Millenium Deck Plant 1

City: Lake City, Florida	County: Columbia	State: Florida	Country: United States
Building Code: 2000 International Building Code		Built Up: 89AISC	Rainfall: 10.00 in per hour
Building Use: Standard Occupancy Structures		Cold Form: 96AISI	Allow. Overstress: Frm: 1.03, Sec: 1.03, Br: 1.03

Dead and Collateral Loads

Collateral Gravity: 5.00 psf	Roof Covering + Second. Dead Load: 3.63 psf
Collateral Uplift: 0.00 psf	Frame Weight (assumed for seismic): 2.50 psf

Live Load

Live Load: 20.00 psf Reducible
LL for Below Eave Canopy: N/A

Wind Load

Wind Speed: 100.00 mph
Wind Exposure (Factor): C (0.985)
Parts Wind Exposure Factor: 0.985
Wind Enclosure: Enclosed
Wind Importance Factor: 1.000

Base Elevation: 0/0/0
Primary Zone Strip Width: 24/4/0
Parts / Portions Zone Strip Width: 12/2/0
Basic Wind Pressure: 21.44 psf

Snow Load

Ground Snow Load: 0.00 psf
Design Snow (Sloped): 0.00 psf
Snow Exposure Category (Factor): 1 (1.00)
Snow Importance: 1.000
Thermal Category (Factor): Heated (1.00)
Ground / Roof Conversion: 1.00
% Snow Used in Seismic: 0.00
Seismic Snow Load: 0.00 psf
Unobstructed, Slippery Roof

Seismic Load

Mapped Spectral Response - Ss: 0.00 %g
Mapped Spectral Response - S1: 0.00 %g
Seismic Hazard / Use Group: Group 1
Seismic Importance: 1.000
Seismic Performance / Design Category: A
System NOT detailed for Seismic
Framing Seismic Period: 0.0000
Bracing Seismic Period: 0.0000
Framing R-Factor: 4.0000
Bracing R-Factor: 5.0000
Soil Profile Type: Stiff soil (D, 4)
Frame Redundancy Factor: 1.0000
Brace Redundancy Factor: 1.0000
Frame Seismic Factor (Cs): 0.0100
Brace Seismic Factor (Cs): 0.0100



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Per Article 2.9 in the Builder Agreement, VP Buildings assumes that the Builder has called the local Building Official or Project Engineer to obtain all code and loading information for this specific building site.

Covering Design Loads - Wall: 1

Zone	Units	Type	Description	Actual	Loc1	Allow.	Ratio	Dir.	Coef.
End Zone	psf	W1>	Need Lower and Upper Girt	30.87	0/0/0	42.000	0.73	OUT	-1.440
End Zone	psf	<W2	Need Lower Girt	23.15	0/0/0	26.000	0.89	IN	1.080
End Zone	psf	W1>	Need Lower and Upper Girt	30.87	70/4/0	42.000	0.73	OUT	-1.440
End Zone	psf	<W2	Need Lower Girt	23.15	70/4/0	26.000	0.89	IN	1.080
Interior Area	psf	W1>	Need Lower and Upper Girt	25.08	12/2/0	42.000	0.60	OUT	-1.170
Interior Area	psf	<W2	Need Lower Girt	23.15	12/2/0	26.000	0.89	IN	1.080

Covering Design Loads - Wall: 2

Zone	Units	Type	Description	Actual	Loc1	Allow.	Ratio	Dir.	Coef.
End Zone	psf	W1>	Need Lower and Upper Girt	30.87	590/8/0	42.000	0.73	OUT	-1.440
End Zone	psf	<W2	Need Lower Girt	23.15	590/8/0	26.000	0.89	IN	1.080
Interior Area	psf	W1>	Need Lower and Upper Girt	25.08	0/0/0	42.000	0.60	OUT	-1.170
Interior Area	psf	<W2	Need Lower Girt	23.15	0/0/0	26.000	0.89	IN	1.080

Covering Design Loads - Wall: 3

Zone	Units	Type	Description	Actual	Loc1	Allow.	Ratio	Dir.	Coef.
End Zone	psf	W1>	Need Lower and Upper Girt	30.87	0/0/0	42.000	0.73	OUT	-1.440
End Zone	psf	<W2	Need Lower Girt	23.15	0/0/0	26.000	0.89	IN	1.080

Covering Design Loads - Wall: 4

Zone	Units	Type	Description	Actual	Loc1	Allow.	Ratio	Dir.	Coef.
End Zone	psf	W1>	Need Lower and Upper Girt	30.87	0/0/0	42.000	0.73	OUT	-1.440
End Zone	psf	<W2	Need Lower Girt	23.15	0/0/0	26.000	0.89	IN	1.080
End Zone	psf	W1>	Need Lower and Upper Girt	30.87	590/8/0	42.000	0.73	OUT	-1.440
End Zone	psf	<W2	Need Lower Girt	23.15	590/8/0	26.000	0.89	IN	1.080
Interior Area	psf	W1>	Need Lower and Upper Girt	25.08	12/2/0	42.000	0.60	OUT	-1.170
Interior Area	psf	<W2	Need Lower Girt	23.15	12/2/0	26.000	0.89	IN	1.080

Covering Design Loads - Roof: A

Zone	Units	Type	Description	Actual	Loc1	Allow.	Ratio	Dir.	Coef.
Entire Surface	psf	L	Standard Spacing is Adequate	21.13	0/0/0	70.000	0.30	IN	1.000
Side Zone	psf	W1>	Non-std Spacing: 4/3/0 Required	41.31	12/2/0	42.000	0.98	OUT	-1.980
Side Zone	psf	<W2	Standard Spacing is Adequate	11.42	12/2/0	70.000	0.16	IN	0.480
Side Zone	psf	W1>	Non-std Spacing: 4/3/0 Required	41.31	590/8/0	42.000	0.98	OUT	-1.980
Side Zone	psf	<W2	Standard Spacing is Adequate	11.42	590/8/0	70.000	0.16	IN	0.480
Corner Zone	psf	W1>	Non-std Spacing: 2/6/0 Required	62.75	590/8/0	63.000	1.00	OUT	-2.980
Corner Zone	psf	<W2	Standard Spacing is Adequate	11.42	590/8/0	70.000	0.16	IN	0.480
Side Zone	psf	W1>	Non-std Spacing: 4/3/0 Required	41.31	12/2/0	42.000	0.98	OUT	-1.980
Side Zone	psf	<W2	Standard Spacing is Adequate	11.42	12/2/0	70.000	0.16	IN	0.480
Corner Zone	psf	W1>	Non-std Spacing: 2/6/0 Required	62.75	0/0/0	63.000	1.00	OUT	-2.980
Corner Zone	psf	<W2	Standard Spacing is Adequate	11.42	0/0/0	70.000	0.16	IN	0.480
Interior Area	psf	W1>	Standard Spacing is Adequate	24.16	12/2/0	37.000	0.65	OUT	-1.180
Interior Area	psf	<W2	Standard Spacing is Adequate	11.42	12/2/0	70.000	0.16	IN	0.480

Covering Design Loads - Roof: B

Zone	Units	Type	Description	Actual	Loc1	Allow.	Ratio	Dir.	Coef.
Entire Surface	psf	L	Standard Spacing is Adequate	21.13	602/10/0	70.000	0.30	IN	1.000
Side Zone	psf	W1>	Non-std Spacing: 4/3/0 Required	41.31	12/2/0	42.000	0.98	OUT	-1.980
Side Zone	psf	<W2	Standard Spacing is Adequate	11.42	12/2/0	70.000	0.16	IN	0.480
Side Zone	psf	W1>	Non-std Spacing: 4/3/0 Required	41.31	590/8/0	42.000	0.98	OUT	-1.980
Side Zone	psf	<W2	Standard Spacing is Adequate	11.42	590/8/0	70.000	0.16	IN	0.480
Corner Zone	psf	W1>	Non-std Spacing: 2/6/0 Required	62.75	590/8/0	63.000	1.00	OUT	-2.980
Corner Zone	psf	<W2	Standard Spacing is Adequate	11.42	590/8/0	70.000	0.16	IN	0.480
Side Zone	psf	W1>	Non-std Spacing: 4/3/0 Required	41.31	12/2/0	42.000	0.98	OUT	-1.980
Side Zone	psf	<W2	Standard Spacing is Adequate	11.42	12/2/0	70.000	0.16	IN	0.480
Corner Zone	psf	W1>	Non-std Spacing: 2/6/0 Required	62.75	0/0/0	63.000	1.00	OUT	-2.980
Corner Zone	psf	<W2	Standard Spacing is Adequate	11.42	0/0/0	70.000	0.16	IN	0.480
Interior Area	psf	W1>	Standard Spacing is Adequate	24.16	12/2/0	37.000	0.65	OUT	-1.180
Interior Area	psf	<W2	Standard Spacing is Adequate	11.42	12/2/0	70.000	0.16	IN	0.480

Panel Data



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Wall/Roof	Type	Thickness	Finish	Color	Direction	Gable Dir	Max. Length
Wall: 1	Panel Rib	26	KXL	Standard Color	Left to Right	Peak Out	41/0/0
Location: 2	NBVP - Tilt Wall	0/5/0					
Wall: 2	Panel Rib	26	KXL	Standard Color	Left to Right	Peak Out	41/0/0
Location: 2	NBVP - Tilt Wall	0/5/0					
Wall: 3	Panel Rib	26	KXL	Arctic White	Left to Right	Left to Right	41/0/0
Location: 2	NBVP - Tilt Wall	0/5/0					
Location: 3	NBVP - Other	1/0/0					
Wall: 4	Panel Rib	26	KXL	Standard Color	Left to Right	Peak Out	41/0/0
Location: 2	NBVP - Tilt Wall	0/5/0					
Roof: A	SSR	24	Galvalume	Standard Color	System Generated	Not Applicable	51/0/0
Roof: B	SSR	24	Galvalume	Standard Color	System Generated	Not Applicable	51/0/0

Abbreviation Definitions

Codes	Definition
LE	From Left Edge
RE	From Right Edge
FL	From Frame
FS	From Start Dim

Location Data

Wall/Roof	Start Dim.	Bottom Elev.	Top Elev.	End Dim.	Bottom Elev.	Top Elev.	First Pitch	Second Pitch	Ridge Distance	Ridge Height	psf
Wall: 1 Location: 2	Full Width	0/0/0	9/11/10		0/0/0	9/11/10					72.00
Wall: 2 Location: 2	Full Width	0/0/0	9/11/10		0/0/0	9/11/10					72.00
Wall: 3 Location: 2	0/0/0 LE	0/0/0	9/11/10	24/0/0 FS	0/0/0	9/11/10					72.00
Wall: 3 Location: 3	24/0/0 LE	0/0/0	0/0/0	58/6/0 FS	0/0/0	0/0/0					1.00
Wall: 4 Location: 2	Full Width	0/0/0	9/11/10		0/0/0	9/11/10					72.00

Fastener Data

Wall/Roof	Type	Length	Spacing	Washers	Insul. Block	Mod. Ctrl.	Ice Damming
Wall: 1	Color Match Carbon	Standard Option	Standard Option	No	None	No	No
Location: 2	Not Applicable						
Wall: 2	Color Match Carbon	Standard Option	Standard Option	No	None	No	No
Location: 2	Not Applicable						
Wall: 3	Color Match Carbon	Standard Option	Standard Option	No	None	No	No
Location: 2	Not Applicable						
Location: 3	Not Applicable						
Wall: 4	Color Match Carbon	Standard Option	Standard Option	No	None	No	No
Location: 2	Not Applicable						
Roof: A	Stainless Steel Capped	Standard Option	Standard Option	Yes	None	No	No
Roof: B	Stainless Steel Capped	Standard Option	Standard Option	Yes	None	No	No

Shape: BD0462 New Millenium Deck Plant 2

Loads and Codes - Shape: BD0462 New Millenium Deck Plant 2

City: Lake City, Florida County: Columbia
 Building Code: 2000 International Building Code
 Building Use: Standard Occupancy Structures

State: Florida
 Built Up: 89AISC
 Cold Form: 96AISI

Country: United States
 Rainfall: 10.00 in per hour
 Allow. Overstress:
 Frm: 1.03, Sec: 1.03, Brc: 1.03

Dead and Collateral Loads

Collateral Gravity: 5.00 psf
 Collateral Uplift: 0.00 psf

Roof Covering + Second. Dead Load: 3.63 psf
 Frame Weight (assumed for seismic): 2.50 psf

Live Load

Live Load: 20.00 psf Reducible
 LL for Below Eave Canopy: N/A

Wind Load

Wind Speed: 100.00 mph
 Wind Exposure (Factor): C (1.054)
 Parts Wind Exposure Factor: 1.054
 Wind Enclosure: Enclosed
 Wind Importance Factor: 1.000

Snow Load

Ground Snow Load: 0.00 psf
 Design Snow (Sloped): 0.00 psf
 Snow Exposure Category (Factor): 1 (1.00)
 Snow Importance: 1.000
 Thermal Category (Factor): Heated (1.00)
 Ground / Roof Conversion: 1.00
 % Snow Used in Seismic: 0.00
 Seismic Snow Load: 0.00 psf
 Unobstructed, Slippery Roof

Seismic Load

Mapped Spectral Response - Ss: 0.00 %g
 Mapped Spectral Response - S1: 0.00 %g
 Seismic Hazard / Use Group: Group 1
 Seismic Importance: 1.000
 Seismic Performance / Design Category: A
 System NOT detailed for Seismic
 Framing Seismic Period: 0.0000
 Bracing Seismic Period: 0.0000
 Framing R-Factor: 4.0000
 Bracing R-Factor: 5.0000
 Soil Profile Type: Stiff soil (D, 4)
 Frame Redundancy Factor: 1.0000
 Brace Redundancy Factor: 1.0000

Base Elevation: 0/0/0

Primary Zone Strip Width: 33/7/3

Parts / Portions Zone Strip Width: 16/9/10

Basic Wind Pressure: 22.94 psf



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Frame Seismic Factor (Cs): 0.0100
 Brace Seismic Factor (Cs): 0.0100

Per Article 2.9 in the Builder Agreement, VP Buildings assumes that the Builder has called the local Building Official or Project Engineer to obtain all code and loading information for this specific building site.

Covering Design Loads - Wall: 1

Zone	Units	Type	Description	Actual	Loc1	Allow.	Ratio	Dir.	Coef.
End Zone	psf	W1>	Need Lower and Upper Girt	33.04	0/0/0	42.000	0.79	OUT	-1.440
End Zone	psf	<W2	Need Lower Girt	24.78	0/0/0	26.000	0.95	IN	1.080
End Zone	psf	W1>	Need Lower and Upper Girt	33.04	41/8/6	42.000	0.79	OUT	-1.440
End Zone	psf	<W2	Need Lower Girt	24.78	41/8/6	26.000	0.95	IN	1.080
Interior Area	psf	W1>	Need Lower and Upper Girt	26.84	16/9/10	42.000	0.64	OUT	-1.170
Interior Area	psf	<W2	Need Lower Girt	24.78	16/9/10	26.000	0.95	IN	1.080

Covering Design Loads - Wall: 2

Zone	Units	Type	Description	Actual	Loc1	Allow.	Ratio	Dir.	Coef.
End Zone	psf	W1>	Need Lower and Upper Girt	33.04	0/0/0	42.000	0.79	OUT	-1.440
End Zone	psf	<W2	Need Lower Girt	24.78	0/0/0	26.000	0.95	IN	1.080
End Zone	psf	W1>	Need Lower and Upper Girt	33.04	130/2/6	42.000	0.79	OUT	-1.440
End Zone	psf	<W2	Need Lower Girt	24.78	130/2/6	26.000	0.95	IN	1.080
Interior Area	psf	W1>	Need Lower and Upper Girt	26.84	16/9/10	42.000	0.64	OUT	-1.170
Interior Area	psf	<W2	Need Lower Girt	24.78	16/9/10	26.000	0.95	IN	1.080

Covering Design Loads - Wall: 3

Zone	Units	Type	Description	Actual	Loc1	Allow.	Ratio	Dir.	Coef.
End Zone	psf	W1>	Need Lower and Upper Girt	33.04	0/0/0	42.000	0.79	OUT	-1.440
End Zone	psf	<W2	Need Lower Girt	24.78	0/0/0	26.000	0.95	IN	1.080
End Zone	psf	W1>	Need Lower and Upper Girt	33.04	41/8/6	42.000	0.79	OUT	-1.440
End Zone	psf	<W2	Need Lower Girt	24.78	41/8/6	26.000	0.95	IN	1.080
Interior Area	psf	W1>	Need Lower and Upper Girt	26.84	16/9/10	42.000	0.64	OUT	-1.170
Interior Area	psf	<W2	Need Lower Girt	24.78	16/9/10	26.000	0.95	IN	1.080

Covering Design Loads - Wall: 4

Zone	Units	Type	Description	Actual	Loc1	Allow.	Ratio	Dir.	Coef.
End Zone	psf	W1>	Need Lower and Upper Girt	33.04	0/0/0	42.000	0.79	OUT	-1.440
End Zone	psf	<W2	Need Lower Girt	24.78	0/0/0	26.000	0.95	IN	1.080
End Zone	psf	W1>	Need Lower and Upper Girt	33.04	130/2/6	42.000	0.79	OUT	-1.440
End Zone	psf	<W2	Need Lower Girt	24.78	130/2/6	26.000	0.95	IN	1.080
Interior Area	psf	W1>	Need Lower and Upper Girt	26.84	16/9/10	42.000	0.64	OUT	-1.170
Interior Area	psf	<W2	Need Lower Girt	24.78	16/9/10	26.000	0.95	IN	1.080

Covering Design Loads - Roof: A

Zone	Units	Type	Description	Actual	Loc1	Allow.	Ratio	Dir.	Coef.
Entire Surface	psf	L	Standard Spacing is Adequate	21.13	0/0/0	70.000	0.30	IN	1.000
Side Zone	psf	W1>	Non-std Spacing: 4/0/0 Required	44.30	16/9/10	44.000	1.01	OUT	-1.980
Side Zone	psf	<W2	Standard Spacing is Adequate	12.14	16/9/10	70.000	0.17	IN	0.480
Side Zone	psf	W1>	Non-std Spacing: 4/0/0 Required	44.30	130/2/6	44.000	1.01	OUT	-1.980
Side Zone	psf	<W2	Standard Spacing is Adequate	12.14	130/2/6	70.000	0.17	IN	0.480
Corner Zone	psf	W1>	Non-std Spacing: 2/0/0 Required	67.24	130/2/6	76.000	0.88	OUT	-2.980
Corner Zone	psf	<W2	Standard Spacing is Adequate	12.14	130/2/6	70.000	0.17	IN	0.480
Side Zone	psf	W1>	Non-std Spacing: 4/0/0 Required	44.30	16/9/10	44.000	1.01	OUT	-1.980
Side Zone	psf	<W2	Standard Spacing is Adequate	12.14	16/9/10	70.000	0.17	IN	0.480
Corner Zone	psf	W1>	Non-std Spacing: 2/0/0 Required	67.24	0/0/0	76.000	0.88	OUT	-2.980
Corner Zone	psf	<W2	Standard Spacing is Adequate	12.14	0/0/0	70.000	0.17	IN	0.480
Interior Area	psf	W1>	Standard Spacing is Adequate	25.94	16/9/10	37.000	0.70	OUT	-1.180
Interior Area	psf	<W2	Standard Spacing is Adequate	12.14	16/9/10	70.000	0.17	IN	0.480

Covering Design Loads - Roof: B

Zone	Units	Type	Description	Actual	Loc1	Allow.	Ratio	Dir.	Coef.
Entire Surface	psf	L	Standard Spacing is Adequate	21.13	147/0/0	70.000	0.30	IN	1.000
Side Zone	psf	W1>	Non-std Spacing: 4/0/0 Required	44.30	16/9/10	44.000	1.01	OUT	-1.980
Side Zone	psf	<W2	Standard Spacing is Adequate	12.14	16/9/10	70.000	0.17	IN	0.480
Side Zone	psf	W1>	Non-std Spacing: 4/0/0 Required	44.30	130/2/6	44.000	1.01	OUT	-1.980
Side Zone	psf	<W2	Standard Spacing is Adequate	12.14	130/2/6	70.000	0.17	IN	0.480
Corner Zone	psf	W1>	Non-std Spacing: 2/0/0 Required	67.24	130/2/6	76.000	0.88	OUT	-2.980
Corner Zone	psf	<W2	Standard Spacing is Adequate	12.14	130/2/6	70.000	0.17	IN	0.480



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Side Zone	psf	W1>	Non-std Spacing: 4/0/0 Required	44.30	16/9/10	44.000	1.01	OUT	-1.980
Side Zone	psf	<W2	Standard Spacing is Adequate	12.14	16/9/10	70.000	0.17	IN	0.480
Corner Zone	psf	W1>	Non-std Spacing: 2/0/0 Required	67.24	0/0/0	76.000	0.88	OUT	-2.980
Corner Zone	psf	<W2	Standard Spacing is Adequate	12.14	0/0/0	70.000	0.17	IN	0.480
Interior Area	psf	W1>	Standard Spacing is Adequate	25.94	16/9/10	37.000	0.70	OUT	-1.180
Interior Area	psf	<W2	Standard Spacing is Adequate	12.14	16/9/10	70.000	0.17	IN	0.480

Panel Data

Wall/Roof	Type	Thickness	Finish	Color	Direction	Gable Dir	Max. Length
Wall: 1	Panel Rib	26	KXL	Standard Color	Left to Right	Peak Out	41/0/0
Location: 2	NBVP - Other	1/0/0					
Wall: 2	Panel Rib	26	KXL	Standard Color	Left to Right	Peak Out	41/0/0
Location: 2	NBVP - Tilt Wall	0/5/0					
Wall: 3	Panel Rib	26	KXL	Standard Color	Left to Right	Peak Out	41/0/0
Wall: 4	Panel Rib	26	KXL	Standard Color	Left to Right	Peak Out	41/0/0
Location: 2	NBVP - Tilt Wall	0/5/0					
Roof: A	SSR	24	Galvalume	Standard Color	System Generated	Not Applicable	51/0/0
Roof: B	SSR	24	Galvalume	Standard Color	System Generated	Not Applicable	51/0/0

Abbreviation Definitions

Codes	Definition
LE	From Left Edge
RE	From Right Edge
FL	From Frame
FS	From Start Dim

Location Data

Wall/Roof	Start Dim.	Bottom Elev.	Top Elev.	End Dim.	Bottom Elev.	Top Elev.	First Pitch	Second Pitch	Ridge Distance	Ridge Height	psf
Wall: 1 Location: 2	Full Width	0/0/0	30/5/0		0/0/0	31/5/0			41/3/0	32/0/0	1.00
Wall: 2 Location: 2	Full Width	0/0/0	9/11/10		0/0/0	9/11/10					72.00
Wall: 4 Location: 2	Full Width	0/0/0	9/11/10		0/0/0	9/11/10					72.00

Fastener Data

Wall/Roof	Type	Length	Spacing	Washers	Insul. Block	Mod. Ctrl.	Ice Damming
Wall: 1	Color Match Carbon	Standard Option	Standard Option	No	None	No	No
Location: 2	Not Applicable						
Wall: 2	Color Match Carbon	Standard Option	Standard Option	No	None	No	No
Location: 2	Not Applicable						
Wall: 3	Color Match Carbon	Standard Option	Standard Option	No	None	No	No
Wall: 4	Color Match Carbon	Standard Option	Standard Option	No	None	No	No
Location: 2	Not Applicable						
Roof: A	Stainless Steel Capped	Standard Option	Standard Option	Yes	None	No	No
Roof: B	Stainless Steel Capped	Standard Option	Standard Option	Yes	None	No	No

Shape: BD0462 New Millenium Deck Plant 3

Loads and Codes - Shape: BD0462 New Millenium Deck Plant 3

City: Lake City, Florida County: Columbia

Building Code: 2000 International Building Code

Building Use: Standard Occupancy Structures

State: Florida

Built Up: 89AISC

Cold Form: 96AISI

Country: United States

Rainfall: 10.00 in per hour

Allow. Overstress:

Frm: 1.03, Sec: 1.03, Brc: 1.03

Dead and Collateral Loads

Collateral Gravity: 5.00 psf

Collateral Uplift: 0.00 psf

Roof Covering + Second. Dead Load: 3.63 psf

Frame Weight (assumed for seismic): 2.50 psf

Live Load

Live Load: 20.00 psf Reducible

LL for Below Eave Canopy: N/A

Wind Load

Wind Speed: 100.00 mph

Wind Exposure (Factor): C (1.039)

Parts Wind Exposure Factor: 1.039

Wind Enclosure: Enclosed

Wind Importance Factor: 1.000

Snow Load

Ground Snow Load: 0.00 psf

Design Snow (Sloped): 0.00 psf

Snow Exposure Category (Factor): 1 (1.00)

Snow Importance: 1.000

Thermal Category (Factor): Heated (1.00)

Ground / Roof Conversion: 1.00

% Snow Used in Seismic: 0.00

Seismic Snow Load: 0.00 psf

Unobstructed, Slippery Roof

Seismic Load

Mapped Spectral Response - Ss: 0.00 %g

Mapped Spectral Response - S1: 0.00 %g

Seismic Hazard / Use Group: Group 1

Seismic Importance: 1.000

Seismic Performance / Design Category: A

System NOT detailed for Seismic

Framing Seismic Period: 0.0000

Bracing Seismic Period: 0.0000

Framing R-Factor: 4.0000

Bracing R-Factor: 5.0000

Soil Profile Type: Stiff soil (D, 4)

Base Elevation: 0/0/0

Primary Zone Strip Width: 31/3/6

Parts / Portions Zone Strip Width: 15/7/11

Basic Wind Pressure: 22.60 psf



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Frame Redundancy Factor: 1.0000
Brace Redundancy Factor: 1.0000
Frame Seismic Factor (Cs): 0.0100
Brace Seismic Factor (Cs): 0.0100

Per Article 2.9 in the Builder Agreement, VP Buildings assumes that the Builder has called the local Building Official or Project Engineer to obtain all code and loading information for this specific building site.

Covering Design Loads - Wall: 1

Zone	Units	Type	Description	Actual	Loc1	Allow.	Ratio	Dir.	Coef.
End Zone	psf	W1>	Need Lower and Upper Girt	32.54	0/0/0	42.000	0.77	OUT	-1.440
End Zone	psf	<W2	Need Lower Girt	24.41	0/0/0	26.000	0.94	IN	1.080
End Zone	psf	W1>	Need Lower and Upper Girt	32.54	75/10/5	42.000	0.77	OUT	-1.440
End Zone	psf	<W2	Need Lower Girt	24.41	75/10/5	26.000	0.94	IN	1.080
Interior Area	psf	W1>	Need Lower and Upper Girt	26.44	15/7/11	42.000	0.63	OUT	-1.170
Interior Area	psf	<W2	Need Lower Girt	24.41	15/7/11	26.000	0.94	IN	1.080

Covering Design Loads - Wall: 2

Zone	Units	Type	Description	Actual	Loc1	Allow.	Ratio	Dir.	Coef.
End Zone	psf	W1>	Need Lower and Upper Girt	32.54	0/0/0	42.000	0.77	OUT	-1.440
End Zone	psf	<W2	Need Lower Girt	24.41	0/0/0	26.000	0.94	IN	1.080
End Zone	psf	W1>	Need Lower and Upper Girt	32.54	53/6/5	42.000	0.77	OUT	-1.440
End Zone	psf	<W2	Need Lower Girt	24.41	53/6/5	26.000	0.94	IN	1.080
Interior Area	psf	W1>	Need Lower and Upper Girt	26.44	15/7/11	42.000	0.63	OUT	-1.170
Interior Area	psf	<W2	Need Lower Girt	24.41	15/7/11	26.000	0.94	IN	1.080
End Zone	psf	W1>	Need Lower and Upper Girt	32.54	112/2/5	42.000	0.77	OUT	-1.440
End Zone	psf	<W2	Need Lower Girt	24.41	112/2/5	26.000	0.94	IN	1.080
End Zone	psf	W1>	Need Lower and Upper Girt	32.54	187/2/5	42.000	0.77	OUT	-1.440
End Zone	psf	<W2	Need Lower Girt	24.41	187/2/5	26.000	0.94	IN	1.080
Interior Area	psf	W1>	Need Lower and Upper Girt	26.44	143/3/11	42.000	0.63	OUT	-1.170
Interior Area	psf	<W2	Need Lower Girt	24.41	143/3/11	26.000	0.94	IN	1.080

Covering Design Loads - Wall: 3

Zone	Units	Type	Description	Actual	Loc1	Allow.	Ratio	Dir.	Coef.
End Zone	psf	W1>	Need Lower and Upper Girt	32.54	0/0/0	42.000	0.77	OUT	-1.440
End Zone	psf	<W2	Need Lower Girt	24.41	0/0/0	26.000	0.94	IN	1.080
End Zone	psf	W1>	Need Lower and Upper Girt	32.54	75/10/5	42.000	0.77	OUT	-1.440
End Zone	psf	<W2	Need Lower Girt	24.41	75/10/5	26.000	0.94	IN	1.080
Interior Area	psf	W1>	Need Lower and Upper Girt	26.44	15/7/11	42.000	0.63	OUT	-1.170
Interior Area	psf	<W2	Need Lower Girt	24.41	15/7/11	26.000	0.94	IN	1.080

Covering Design Loads - Wall: 4

Zone	Units	Type	Description	Actual	Loc1	Allow.	Ratio	Dir.	Coef.
End Zone	psf	W1>	Need Lower and Upper Girt	32.54	0/0/0	42.000	0.77	OUT	-1.440
End Zone	psf	<W2	Need Lower Girt	24.41	0/0/0	26.000	0.94	IN	1.080
End Zone	psf	W1>	Need Lower and Upper Girt	32.54	187/2/5	42.000	0.77	OUT	-1.440
End Zone	psf	<W2	Need Lower Girt	24.41	187/2/5	26.000	0.94	IN	1.080
Interior Area	psf	W1>	Need Lower and Upper Girt	26.44	15/7/11	42.000	0.63	OUT	-1.170
Interior Area	psf	<W2	Need Lower Girt	24.41	15/7/11	26.000	0.94	IN	1.080

Covering Design Loads - Roof: A

Zone	Units	Type	Description	Actual	Loc1	Allow.	Ratio	Dir.	Coef.
Entire Surface	psf	L	Standard Spacing is Adequate	21.13	0/0/0	70.000	0.30	IN	1.000
Corner Zone	psf	W1>	Non-std Spacing: 2/0/0 Required	66.22	15/7/11	76.000	0.87	OUT	-2.980
Corner Zone	psf	<W2	Standard Spacing is Adequate	11.98	15/7/11	70.000	0.17	IN	0.480
Side Zone	psf	W1>	Non-std Spacing: 4/0/0 Required	43.62	15/7/11	44.000	0.99	OUT	-1.980
Side Zone	psf	<W2	Standard Spacing is Adequate	11.98	15/7/11	70.000	0.17	IN	0.480
Corner Zone	psf	W1>	Non-std Spacing: 2/0/0 Required	66.22	15/7/11	76.000	0.87	OUT	-2.980
Corner Zone	psf	<W2	Standard Spacing is Adequate	11.98	15/7/11	70.000	0.17	IN	0.480
Side Zone	psf	W1>	Non-std Spacing: 4/0/0 Required	43.62	187/2/5	44.000	0.99	OUT	-1.980
Side Zone	psf	<W2	Standard Spacing is Adequate	11.98	187/2/5	70.000	0.17	IN	0.480
Corner Zone	psf	W1>	Non-std Spacing: 2/0/0 Required	66.22	187/2/5	76.000	0.87	OUT	-2.980
Corner Zone	psf	<W2	Standard Spacing is Adequate	11.98	187/2/5	70.000	0.17	IN	0.480
Side Zone	psf	W1>	Non-std Spacing: 4/0/0 Required	43.62	187/2/5	44.000	0.99	OUT	-1.980
Side Zone	psf	<W2	Standard Spacing is Adequate	11.98	187/2/5	70.000	0.17	IN	0.480
Corner Zone	psf	W1>	Non-std Spacing: 2/0/0 Required	66.22	187/2/5	76.000	0.87	OUT	-2.980
Corner Zone	psf	<W2	Standard Spacing is Adequate	11.98	187/2/5	70.000	0.17	IN	0.480



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Side Zone	psf	W1>	Non-std Spacing: 4/0/0 Required	43.62	15/7/11	44.000	0.99	OUT	-1.980
Side Zone	psf	<W2	Standard Spacing is Adequate	11.98	15/7/11	70.000	0.17	IN	0.480
Interior Area	psf	W1>	Standard Spacing is Adequate	25.54	15/7/11	37.000	0.69	OUT	-1.180
Interior Area	psf	<W2	Standard Spacing is Adequate	11.98	15/7/11	70.000	0.17	IN	0.480

Panel Data

Wall/Roof	Type	Thickness	Finish	Color	Direction	Gable Dir	Max. Length
Wall: 1	Panel Rib	26	KXL	Standard Color	Left to Right	Peak Out	41/0/0
Location: 2	NBVP - Tilt Wall	0/5/0					
Wall: 2	Panel Rib	26	KXL	Standard Color	Left to Right	Peak Out	41/0/0
Location: 2	NBVP - Tilt Wall	0/5/0					
Location: 3	NBVP - Tilt Wall	0/5/0					
Wall: 3	Panel Rib	26	KXL	Standard Color	Left to Right	Peak Out	41/0/0
Location: 2	NBVP - Tilt Wall	0/5/0					
Wall: 4	Panel Rib	26	KXL	Standard Color	Left to Right	Peak Out	41/0/0
Location: 2	NBVP - Tilt Wall	0/5/0					
Roof: A	SSR	24	Galvalume	Standard Color	System Generated	Not Applicable	51/0/0

Abbreviation Definitions

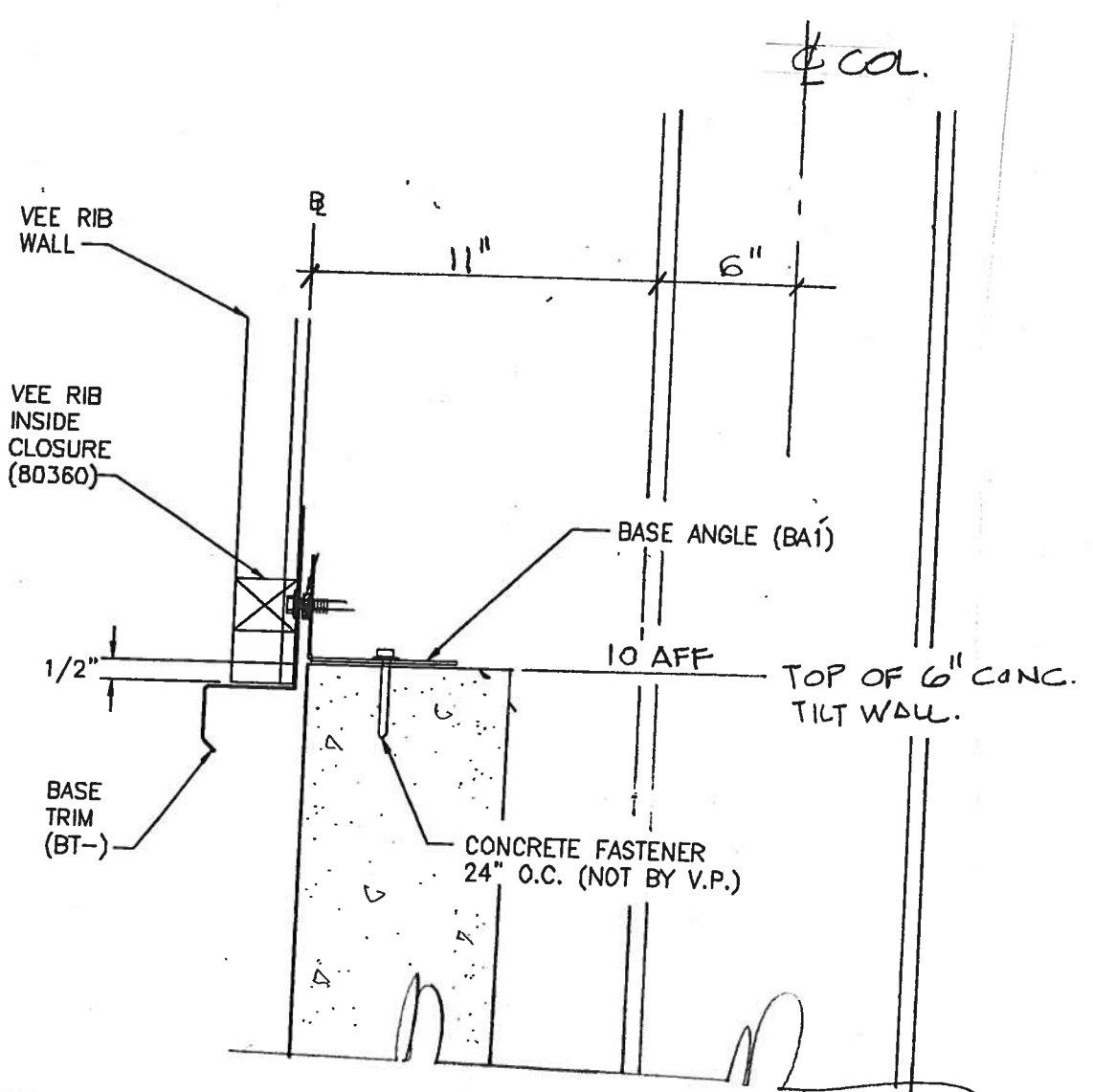
Codes	Definition
LE	From Left Edge
RE	From Right Edge
FL	From Frame
FS	From Start Dim

Location Data

Wall/Roof	Start Dim.	Bottom Elev.	Top Elev.	End Dim.	Bottom Elev.	Top Elev.	First Pitch	Second Pitch	Ridge Distance	Ridge Height	psf
Wall: 1 Location: 2	Full Width	0/0/0	9/11/10		0/0/0	9/11/10					72.00
Wall: 2 Location: 2	0/0/0 LE	0/0/0	9/11/0	69/0/0 FS	0/0/0	9/11/0					72.00
Wall: 2 Location: 3	127/10/0 LE	0/0/0	9/11/0	0/0/0 RE	0/0/0	9/11/0					72.00
Wall: 3 Location: 2	Full Width	0/0/0	9/11/10		0/0/0	9/11/10					72.00
Wall: 4 Location: 2	Full Width	0/0/0	9/11/10		0/0/0	9/11/10					72.00

Fastener Data

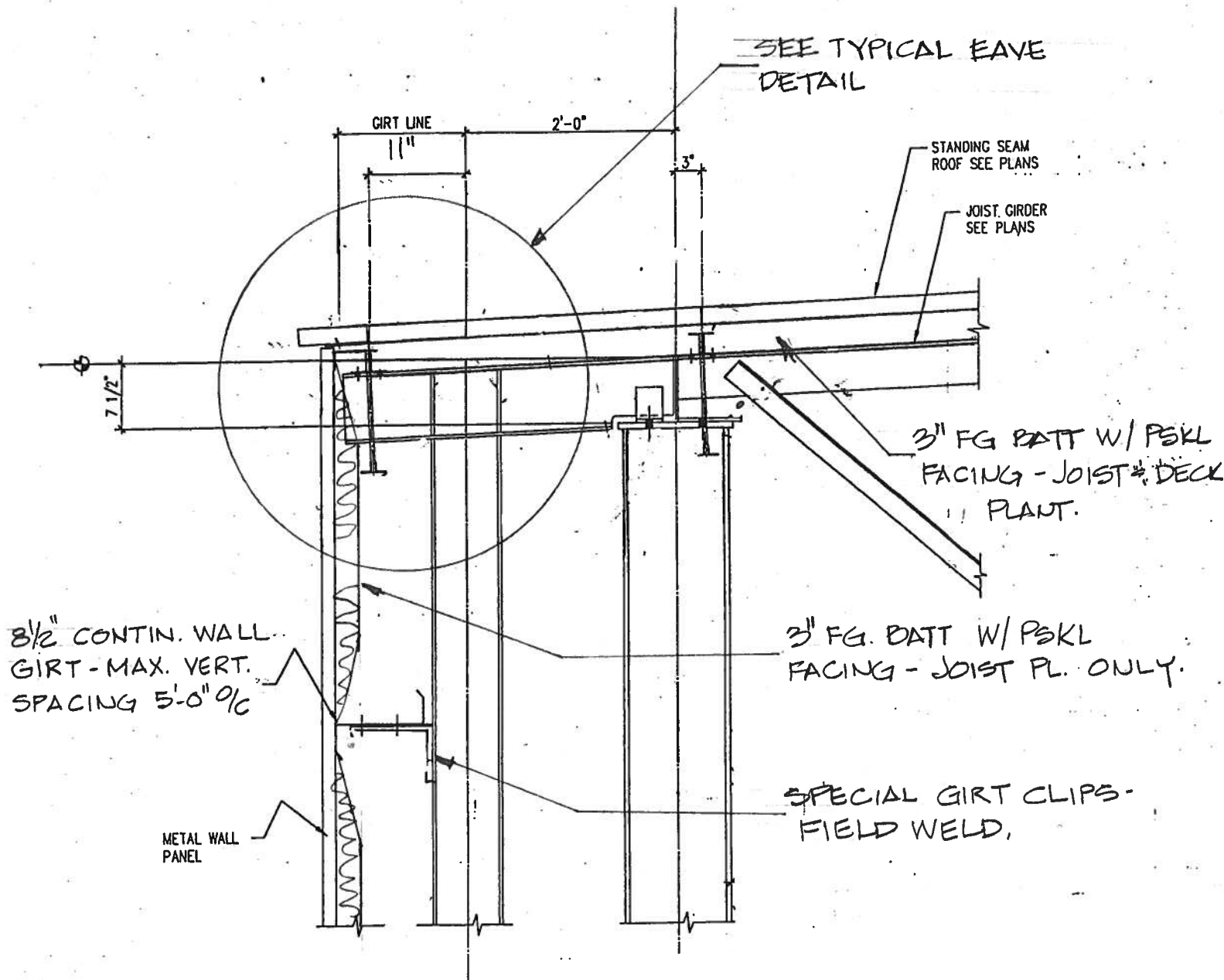
Wall/Roof	Type	Length	Spacing	Washers	Insul. Block	Mod. Ctrl.	Ice Damming
Wall: 1	Color Match Carbon	Standard Option	Standard Option	No	None	No	No
Location: 2	Not Applicable						
Wall: 2	Color Match Carbon	Standard Option	Standard Option	No	None	No	No
Location: 2	Not Applicable						
Location: 3	Not Applicable						
Wall: 3	Color Match Carbon	Standard Option	Standard Option	No	None	No	No
Location: 2	Not Applicable						
Wall: 4	Color Match Carbon	Standard Option	Standard Option	No	None	No	No
Location: 2	Not Applicable						
Roof: A	Stainless Steel Capped	Standard Option	Standard Option	Yes	None	No	No



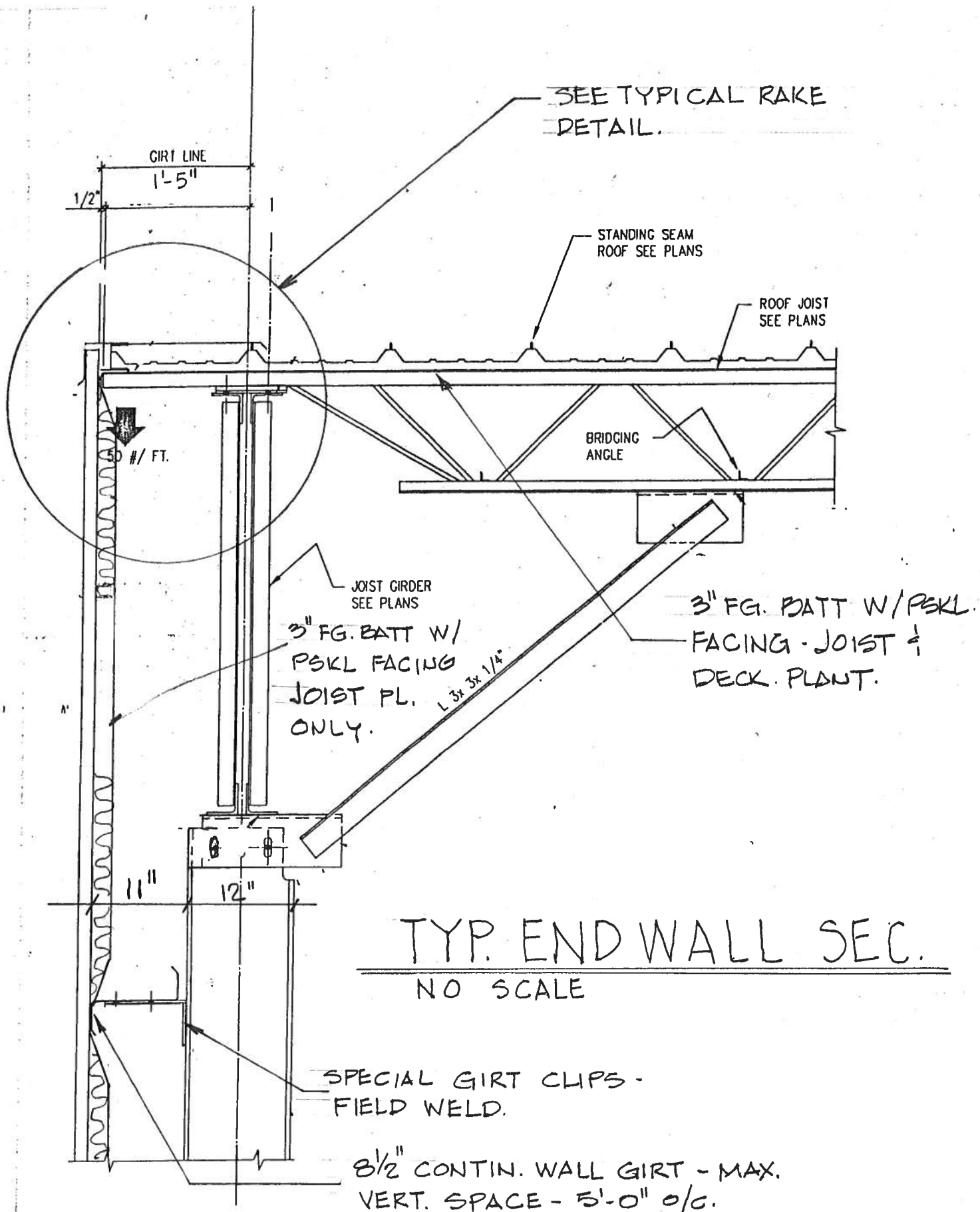
ca.

PANEL BASE DTL.

NO SCALE



TYPICAL SIDE WALL SEC.
 NO SCALE



TYP. END WALL SEC.

NO SCALE