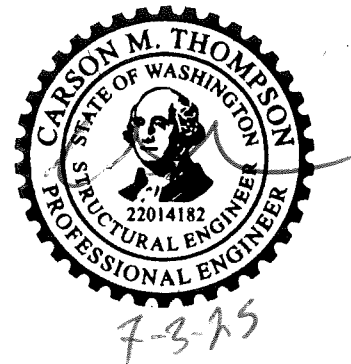


STRUCTURAL CALCULATIONS FOR:

HVAC STRUCTURAL SUPPORT
RIVERFRONT INDUSTRIAL PARK BLDG B
1601 INDUSTRIAL PARKWAY
PUYALLUP, WASHINGTON

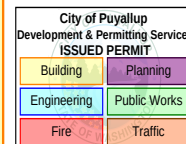
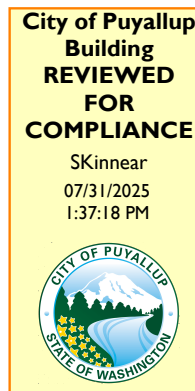


PROPOSED BY:

FRANKLIN ENGINEERING MECHANICAL CONSULTING
625 4TH AVE, SUITE 202
KIRKLAND, WASHINGTON

PRCTI20250997

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



DESIGN CRITERIA:

CODE..... INTERNATIONAL BUILDING CODE, 2021 EDITION
ROOF LIVE LOAD..... SNOW LOAD: 25PSF
WIND LOAD..... 100 MPH ZONE, EXPOSURE 'B' $I_w = 1.0$

SEISMIC DESIGN INFORMATION:

$S_s = 128.3\%$ $S_d_s = 1.026$
 $S_1 = 44.1\%$ $S_d_1 = 0.547$
 $a_p = 2.5$
 $R_p = 6.0$ $\Omega_0 = 2.0$ $I_e = 1.0$
SITE SOIL CLASS 'D' (DEFAULT)
SEISMIC DESIGN CATEGORY 'D'

PARTIAL ROOF FRAMING PLAN:

- BEAM-1

$$L = 5'-0"$$

$$W_{DL} = 10' / 2 (15 \text{ PSF}) = 75 \text{ #/ft}$$

$$W_{SL} = 10' / 2 (25 \text{ PSF}) = 125 \text{ #/ft}$$

$$W_{UNIT} = 1/3 (1300 \text{ #}) (1/5) = 87 \text{ #/ft}$$

$$R = 715 \text{ #}$$

$$M = 900 \text{ #/ft}$$

~ 4x6 DF #2 MEMBER

$$A = 19.25 \text{ IN}^2$$

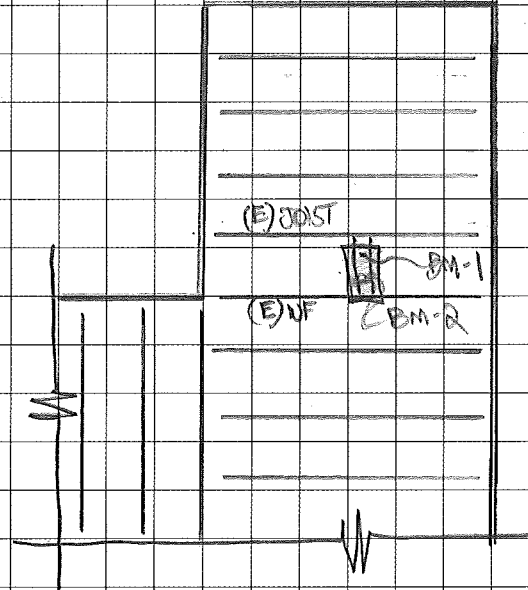
$$S = 17.65 \text{ IN}^3$$

$$I = 48.53 \text{ IN}^4$$

$$F_v = 37 \text{ psi}$$

$$F_b = 612 \text{ psi}$$

$$\Delta = 0.06" \Rightarrow L/1100$$



- BM-2

$$L = 10'-0"$$

$$W_{DL} = 1' (15 \text{ PSF}) = 15 \text{ #/ft}$$

$$W_{SL} = 1' (25 \text{ PSF}) = 25 \text{ #/ft}$$

$$W_{UNIT} = 1/4 (1300 \text{ #}) (1/7) = 46 \text{ #/ft FROM 0-77'}$$

$$P_{BM-1} = 715 \text{ # @ 7'-0"$$

$$R = 815 \text{ #}$$

$$M = 2260 \text{ #/ft}$$

~ 4x8 DF #2 MEMBER

$$A = 25.38 \text{ IN}^2$$

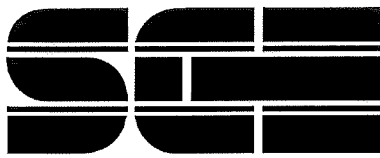
$$S = 30.66 \text{ IN}^3$$

$$I = 111.15 \text{ IN}^4$$

$$F_v = 33 \text{ psi}$$

$$F_b = 885 \text{ psi}$$

$$\Delta = 0.25" \Rightarrow L/480$$



Shutler Consulting Engineers, Inc.
12503 Bel-Red Road
Suite 100
Bellevue, WA 98005
(425) 450-4075

Project Title:
Engineer:
Project ID:
Project Descr:

S-Q

General Beam Analysis

Project File: ENERCALC_20

LIC#: KW-06015511, Build:20.25.06.05

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(c) ENERCALC, LLC 1982-2025

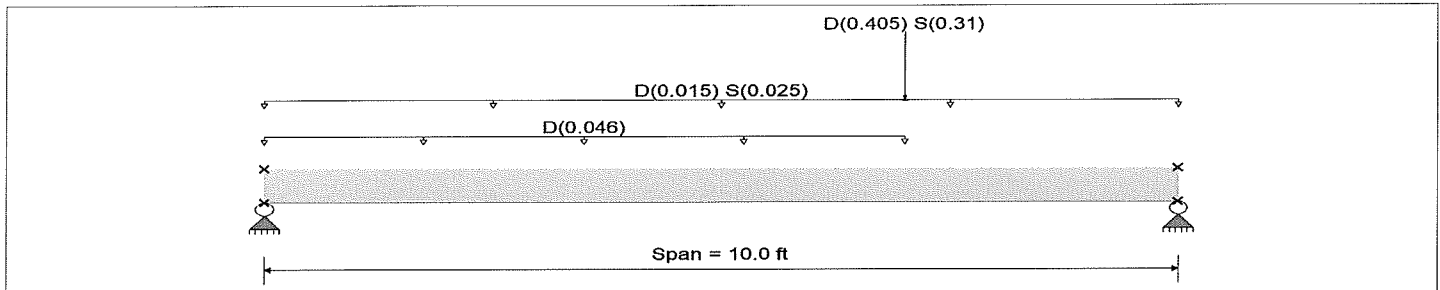
DESCRIPTION: Beam - 2

Code References

Calculations per IBC 2018, CBC 2019
Load Combinations Used : ASCE 7-16

General Beam Properties

Elastic Modulus 1,500.0 ksi
Span #1 Span Length = 10.0 ft Area = 10.0 in² Moment of Inertia = 100.0 in⁴



Applied Loads

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

Uniform Load : D = 0.0150, S = 0.0250 k/ft, Tributary Width = 1.0 ft

Uniform Load : D = 0.0460 k/ft, Extent = 0.0 --> 7.0 ft, Tributary Width = 1.0 ft

Point Load : D = 0.4050, S = 0.310 k @ 7.0 ft

DESIGN SUMMARY

Maximum Bending =	2.260 k-ft	Maximum Shear =	0.8132 k
Load Combination	+D+S	Load Combination	+D+S
Span # where maximum occurs	Span # 1	Span # where maximum occurs	Span # 1
Location of maximum on span	7.000 ft	Location of maximum on span	10.000 ft
Maximum Deflection			
Max Downward Transient Deflection	0.098 in	1229	
Max Upward Transient Deflection	0.001 in	84958	
Max Downward Total Deflection	0.253 in	473	
Max Upward Total Deflection	0.001 in	85629	

Vertical Reactions

Support notation : Far left is #

Values in KIPS

Load Combination	Support 1	Support 2
Overall MAXimum	0.624	0.813
Overall MINimum		
D Only	0.406	0.471
+D+S	0.624	0.813
+D+0.750S	0.569	0.728
+0.60D	0.243	0.283
S Only	0.218	0.342

EXISTING FRAMING CHECKS

- ORIGINAL JOIST ENVELOPE:

$$L = 50'$$

$$W_{DL} = 10' (20 \text{ psf}) = 200 \text{ #/ft}$$

$$W_{SL} = 10' (25 \text{ psf}) = 250 \text{ #/ft}$$

$$P_{DL} = 500 \text{ # ANYWHERE}$$

$$R_{MAX} = 11.75 \text{ K}$$

$$M_{MAX} = 146.9 \text{ K'}$$

- JOIST ENVELOPE WITH HVAC

$$L = 50$$

$$W_{DL} = 10' (15 \text{ psf})$$

$$W_{SL} = 10' (25 \text{ psf})$$

$$P = 815 \text{ # @ 24 @ 29}$$

$$R = 10.9 \text{ K} < 11.75 \text{ K}$$

$$M = 143.3 \text{ K' } < 146.9 \text{ K'}$$

- JOIST IS ACCEPTABLE
SEE ATTACHED

- EXISTING BEAM CHECK IS ATTACHED



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Suite 100
Bellevue, WA 98005
(425) 450-4075

Project Title:
Engineer:
Project ID:
Project Descr:

S-4

General Beam Analysis

Project File: ENERCALC_20

LIC#: KW-06015511, Build:20.25.06.05

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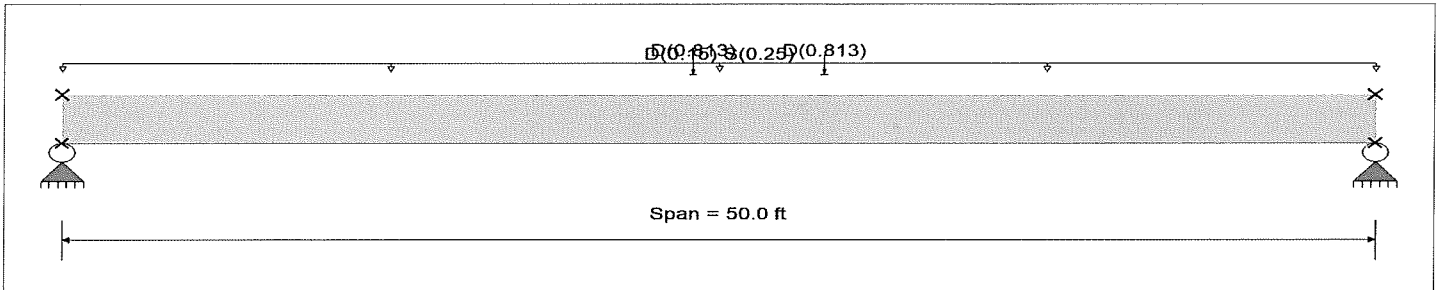
DESCRIPTION: Joist Envelope with HVAC

Code References

Calculations per IBC 2018, CBC 2019
Load Combinations Used : ASCE 7-16

General Beam Properties

Elastic Modulus 29,000.0 ksi
Span #1 Span Length = 50.0 ft Area = 100.0 in² Moment of Inertia = 1,000.0 in⁴



Applied Loads

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

Uniform Load : D = 0.0150, S = 0.0250 ksf, Tributary Width = 10.0 ft

Point Load : D = 0.8130 k @ 24.0 ft

Point Load : D = 0.8130 k @ 29.0 ft

DESIGN SUMMARY

Maximum Bending =	143.293 k-ft	Maximum Shear =	10.862 k
Load Combination	+D+S	Load Combination	+D+S
Span # where maximum occurs	Span # 1	Span # where maximum occurs	Span # 1
Location of maximum on span	25.000 ft	Location of maximum on span	50.000 ft
Maximum Deflection			
Max Downward Transient Deflection	1.222 in	491	
Max Upward Transient Deflection	0.019 in	30933	
Max Downward Total Deflection	2.204 in	272	
Max Upward Total Deflection	0.009 in	65368	

Vertical Reactions

Support notation : Far left is #

Values in KIPS

Load Combination	Support 1	Support 2
Overall MAXimum	10.764	10.862
Overall MINimum		
D Only	4.514	4.612
+D+S	10.764	10.862
+D+0.750S	9.202	9.299
+0.60D	2.709	2.767
S Only	6.250	6.250



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12503 Bel-Red Road
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Bellevue, WA 98005
(425) 450-4075

Project Title:
Engineer:
Project ID:
Project Descr:

S-5

Steel Beam

Project File: ENERCALC_20

LIC#: KW-06015511, Build:20.25.06.05

SHUTTLER CONSULTING ENGINEERS

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DESCRIPTION: Existing Node Beam with HVAC

CODE REFERENCES

Calculations per AISC 360-16, IBC 2018, CBC 2019

Load Combination Set : ASCE 7-16

Material Properties

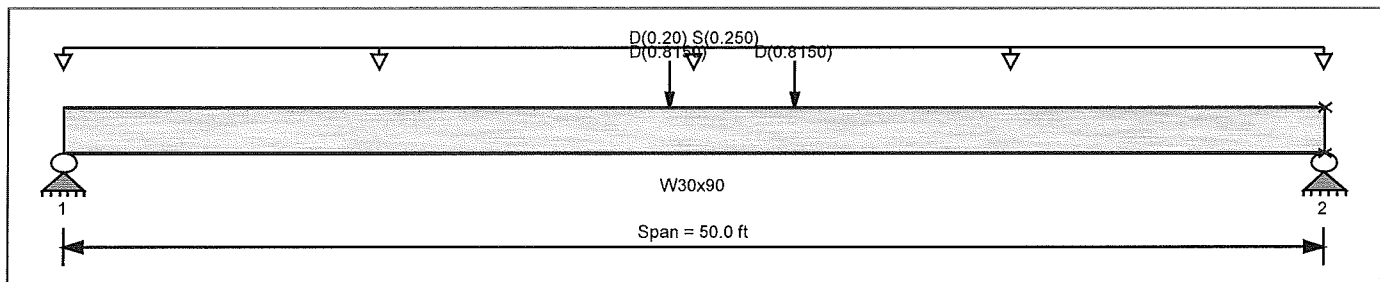
Analysis Method : Allowable Strength Design

Beam Bracing : Beam is Fully Braced against lateral-torsional buckling

Bending Axis : Major Axis Bending

Fy : Steel Yield : 50.0 ksi

E : Modulus : 29,000.0 ksi



Applied Loads

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

Beam self weight calculated and added to loading

Uniform Load : D = 0.020, S = 0.0250 ksf, Tributary Width = 10.0 ft

Point Load : D = 0.8150 k @ 24.0 ft

Point Load : D = 0.8150 k @ 29.0 ft

DESIGN SUMMARY

Design OK

Maximum Bending Stress Ratio =	0.265 : 1	Maximum Shear Stress Ratio =	0.058 : 1
Section used for this span	W30x90	Section used for this span	W30x90
Ma : Applied	187.089 k-ft	Va : Applied	14.364 k
Mn / Omega : Allowable	706.088 k-ft	Vn/Omega : Allowable	249.072 k
Load Combination		Load Combination	
	+D+S		+D+S
Span # where maximum occurs	Span # 1	Location of maximum on span	50.000 ft
Maximum Deflection		Span # where maximum occurs	Span # 1
Max Downward Transient Deflection	0.337 in Ratio = 1,778 >=360	Span: 1 : S Only	
Max Upward Transient Deflection	0 in Ratio = 0 <360	n/a	
Max Downward Total Deflection	0.798 in Ratio = 752 >=180	Span: 1 : +D+S	
Max Upward Total Deflection	0 in Ratio = 0 <180	n/a	

Overall Maximum Deflections

Span	Load Combination	Max. "-" Defl	Location in Span	Load Combination	Max. "+" Defl	Location in Span
1	+D+S	0.7977	25.143		0.0000	0.000

Vertical Reactions

Support notation : Far left is #

Values in KIPS

Load Combination	Support 1	Support 2
Max Upward from all Load Conditions	14.266	14.364
Max Upward from Load Combinations	14.266	14.364
Max Upward from Load Cases	8.016	8.114
D Only	8.016	8.114
+D+S	14.266	14.364
+D+0.750S	12.704	12.801
+0.60D	4.810	4.868
S Only	6.250	6.250



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JOB RIVERFRONT B HVAC

SHEET No. 5-6 OF

CALCULATED BY AH

DATE 7/3/25

SCALE

Wind and Seismic forces on HVAC Unit - RTU 1

Unit data:

Unit base weight	1145 lbs.	Unit Dimensions	Curb Dimensions
Economize	55 lbs.	Height = 51 in.	Height = 10 in.
Accessories	100 lbs.	Length = 89 in.	Length = 89 in.
Total weight	1300 lbs.	Width = 59 in.	Width = 59 in.
Weight used in calculations	1300 lbs., to include duct work, etc.		

Seismic:

$$F_p = (0.4 \cdot a_p \cdot S_{DS} \cdot W_p) \cdot (1 + 2 \cdot (z/h)) / (R_p / I_p)$$

$$F_p = 667 \text{ lbs.} \quad \leftarrow \text{Controls}$$

$$F_{p(\max)} = 1.6 \cdot S_{DS} \cdot I_p \cdot W_p$$

$$F_{p(\max)} = 2134 \text{ lbs.}$$

$$F_{p(\min)} = 0.3 \cdot S_{DS} \cdot I_p \cdot W_p$$

$$F_{p(\min)} = 400 \text{ lbs}$$

$$F_p = 467 \text{ lbs. (ASD)} \quad \leftarrow$$

$$W_p = 1300 \text{ lbs.}$$

$$S_{DS} = 1.026$$

$$a_p = 2.5$$

$$R_p = 6.0$$

$$I_p = 1.0$$

$$z = h \Rightarrow z/h = 1.00$$

Wind: (Section 29.4.1 of ASCE 7-16)

$$F_h = q_h \cdot (GC_r) \cdot A_f \text{ (Horizontal Force)} \quad F_v = q_h \cdot (GC_r) \cdot A_r \text{ (Vertical Uplift Force)}$$

$$q_h = 0.00256 \cdot K_z \cdot K_{zt} \cdot K_d \cdot K_e \cdot V^2 = 15.23 \text{ PSF}$$

$$F_h = 28.94 \cdot A_f \text{ PSF}$$

$$F_v = 22.85 \cdot A_r \text{ PSF}$$

$$\longrightarrow F_h = 655 \text{ lbs. (Transverse Horizontal Force) ASD}$$

$$\longrightarrow F_h = 434 \text{ lbs. (Longitudinal Horizontal Force) ASD}$$

$$\longrightarrow F_v = 500 \text{ lbs. (Vertical Uplift Force) ASD}$$

$$M_{OT} = 20,541 \text{ in.-lbs. (Seismic)}$$

$$M_{OT} = 19,967 \text{ in.-lbs. (Wind - Transverse)}$$

$$M_{OT} = 13,237 \text{ in.-lbs. (Wind - Longitudinal)}$$

$$\text{Basic Wind Speed} = 100 \text{ MPH}$$

$$\text{Exposure} = B$$

$$\text{Average roof height} = 27.00 \text{ ft.}$$

$$K_z = 0.700 \text{ Table 30.3-1}$$

$$K_d = 0.85 \text{ Table 26.6-1}$$

$$K_{zt} = 1.0 \text{ Section 26.8.2}$$

$$K_e = 1.0 \text{ Section 26.9}$$

$$(GC_r) = \text{Horizontal Gust Factor} = 1.9$$

$$(GC_r) = \text{Vert Uplift Gust Factor} = 1.5$$

$$A_r = \text{Vert Proj Area (Transverse)} = 37.7 \text{ ft}^2$$

$$A_f = \text{Vert Proj Area (Longitudinal)} = 24.99 \text{ ft}^2$$

$$A_r = \text{Horizontal Projected Area} = 36.47 \text{ ft}^2$$

Load combinations:

Case I 0.60 Dead + 0.6 Wind

Case II 0.60 Dead + 0.7 Seismic

$$\text{Transverse Seismic Hold Down Force} = -42 \text{ lbs}$$

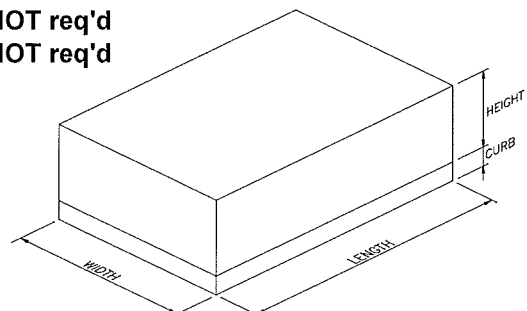
$$\text{Longitudinal Seismic Hold Down Force} = -159 \text{ lbs}$$

$$\text{Transverse Wind Hold Down Force} = 198 \text{ lbs}$$

$$\text{Longitudinal Wind Hold Down Force} = 9 \text{ lbs}$$

Hold down NOT req'd
Hold down NOT req'd

UPLIFT
UPLIFT





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Bellevue, WA 98005
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JOB RIVERFRONT B HUAC

SHEET NO. S-7 OF

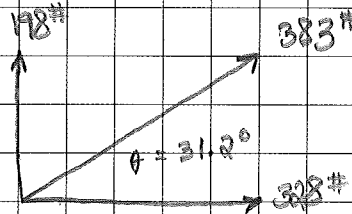
CALCULATED BY AH

DATE 7/3/25

SCALE

ATTACH TO STRUCTURE

$$\begin{aligned} V &= \frac{659}{2} = 328\# \\ T &= 198 \\ R &= 383\# \end{aligned}$$



- ATTACH CURB W/ #10 SCREWS EMBED $1\frac{1}{2}$ MINIMUM

$$\begin{aligned} W_p' &= 135\# (1.6) (1\frac{1}{2} \text{ PEN}) (\frac{8}{3}) = 216\# \\ Z' &= 110\# (1.6) (1\frac{5}{8} / 1.9) = 147\# \end{aligned}$$

$$Z_x = \frac{W_p' Z'}{W_p' \cos^2 \theta + Z' \sin^2 \theta} = \frac{216 (147)}{216 \cos^2 (31.2) + 147 \sin^2 (31.2)} = 160\#/\text{SCREW}$$

~ USE 4 PER SIDE

- ATTACH TO STRUCTURE BELOW W/ LAG SCREWS

$$\begin{aligned} W_p' &= 225\# (1.09) (1.6) = 394\# \\ Z' &= 110\# (1\frac{5}{8} / 2) (1.6) = 132\# \end{aligned}$$

$$Z_x = \frac{394 (132)}{394 \cos^2 (31.2) + 132 \sin^2 (31.2)} = 160\#/\text{SCREW}$$

~ USE 4 PER SIDE

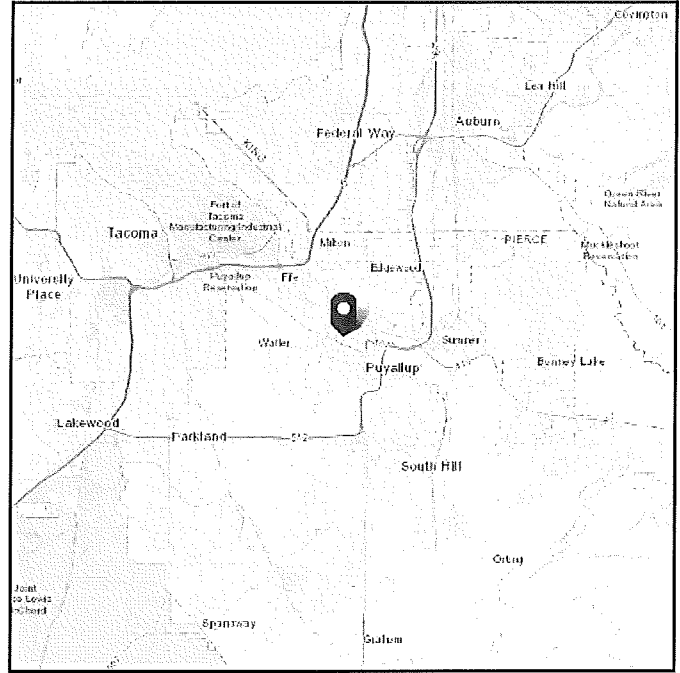
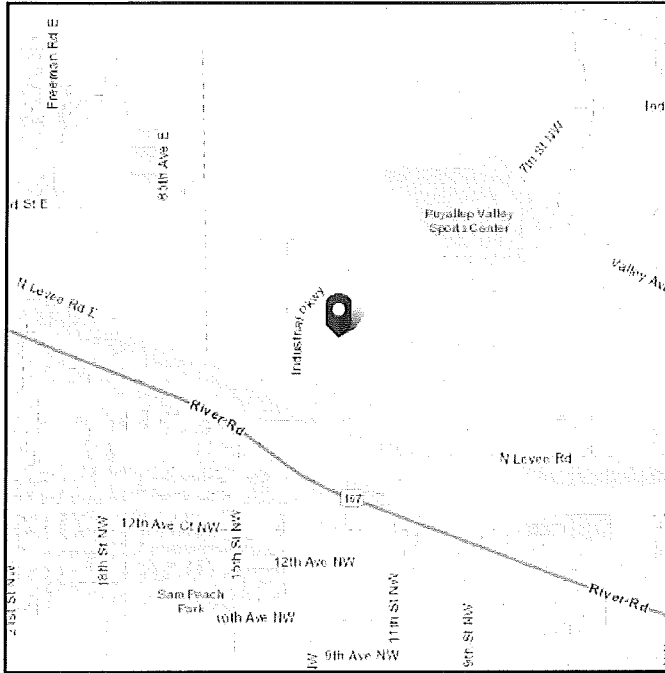
ASCE Hazards Report

5-8

Address:
No Address at This Location

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

Latitude: 47.206672
Longitude: -122.310253
Elevation: 33.752950610934285 ft (NAVD 88)



Seismic

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

Results:

S_s :	1.283	S_{D1} :	N/A
S_1 :	0.441	T_L :	6
F_a :	1.2	PGA :	0.5
F_v :	N/A	PGA_M :	0.6
S_{MS} :	1.539	F_{PGA} :	1.2
S_{M1} :	N/A	I_e :	1
S_{DS} :	1.026	C_v :	1.357

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

Data Accessed: Thu Jul 03 2025

Date Source: USGS Seismic Design Maps



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JOB RIVERFRONT B HUAC
SHEET No. S-10 OF _____
CALCULATED BY AH
DATE 7/3/25
SCALE _____

CALCULATION OF SEISMIC DESIGN PARAMETERS BASED ON IBC 2021 & ASCE 7-16

(For Site Class A, B, C, D, D-Default, E with period less than 0.50 seconds)

Seismic Criteria:

Site Specific Report	Yes
Risk Category, I, II, III or IV (Table 1.5-1 of ASCE 7-16)	= II
Seismic importance factor, I_e (Table 1.5-2 of ASCE 7-16)	= 1.00
Mapped spectral response for short periods, S_s (Site specific)	= 128.30 %
Mapped spectral response acceleration at a period of 1 second, S_1 (Site specific)	= 44.10 %
Site soil class (From soils report)	= D-Default
Response modification factor, R (Table 12.2-1 of ASCE 7-16)	= 5.00
Ω_o (Table 12.2-1 of ASCE 7-16, footnote b for flexible diaphragms)	= 2.00
C_t (Table 12.8-2 of ASCE 7-16)	= 0.02
α (Table 12.8-2 of ASCE 7-16)	= 0.75
Average roof height	= 26.00 ft.
Long period transition period, T_L (Figure 22-14 of ASCE 7-16)	= 6.00
$T_a = C_t * (h_n)^\alpha$	= 0.230 Sec.
F_a (Table 1613.2.3(1) of IBC 2018)	= 1.200
F_v (Table 1613.2.3(2) of IBC 2018)	= 1.859
Maximum spectral response acceleration at short periods, $S_{MS} = F_a * S_s$	= 1.540
Maximum spectral response acceleration at 1-second, $S_{M1} = F_v * S_1$	= 0.820
Design spectral response acceleration at short periods, $S_{DS} = 2/3 * S_{MS}$	= 1.026
Design spectral response acceleration at 1-second, $S_{D1} = 2/3 * S_{M1}$	= 0.547
Seismic Design Category based on short period response acceleration	= D
Seismic Design Category based on 1-second period response acceleration	= D
Seismic Design Category, choose most severe of above two.	= D
$C_S = S_{DS} / (R / I_e)$	= 0.205 Controls
If $T < T_L$ then $C_{S(max)} = S_{D1} / (T * (R/I_e))$	= 0.475
If $T > T_L$ then $C_{S(max)} = S_{D1} * T_L / (T^2 * (R / I_e))$	= N.A.
$C_{S(min)} = 0.044 * S_{DS} * I_e \Rightarrow 0.01$	= 0.045
If S_1 is equal to or greater than 0.6g, then $C_{S(min)} = 0.50 * S_1 / (R/I_e)$	= N.A.

Seismic Design Force

$$V = C_S * W = 0.205 \text{ W}$$

Diaphragm Shear force

ASCE 7-16 section 12.10.1.1

$$F_{px(min)} = 0.2 * S_{DS} * I_e * W_{PX} = 0.205 \text{ W}_{PX}$$

$$F_{px(max)} = 0.4 * S_{DS} * I_e * W_{PX} = 0.411 \text{ W}_{PX}$$



York® Sun™ Pro 3-12.5 Ton Package

Single Package R-410A Heat Pump

Page: 14

Project Name: Riverfront TI

Unit Model #: XP090C00P4B1BCA1A2

Quantity: 1 Tag #: In Stock

System: XP090C00P4B1BCA1A2

Cooling Performance

Total gross capacity	96.6 MBH
Sensible gross capacity	65.4 MBH
Total net capacity	92.2 MBH
Sensible net capacity	61.0 MBH
Efficiency (at ARI)	11.20 EER
Integrated eff. (at ARI)	14.60 IEER
Ambient DB temp.	95.0 °F
Entering DB temp.	80.0 °F
Entering WB temp.	67.0 °F
Evap Coil Leaving DB temp.	56.7 °F
Evap Coil Leaving WB temp.	55.0 °F
Unit Leaving DB temp.	58.3 °F
Unit Leaving WB temp.	55.7 °F
Leaving air temp dew point	53.8 °F
Power input (w/o blower)	7.30 kW
Sound power	83 dB(a)

Refrigerant

Refrigerant type	R-410A
Sys1	13 lb
Sys2	13 lb 2 oz

Heat Pump Performance

Supply air	3000 cfm
Ambient DB temp.	47 °F
Entering DB temp.	60 °F
Leaving DB temp.	88.6 °F
Air temp. rise	28.6 °F
Design Gross Capacity	80.4 MBH
Design Power Input	5.3 kW
Capacity @ 47(°F)	87.00 MBH
COP @ 47(°F)	3.50 COP
Capacity @ 17(°F)	51.00 MBH
COP @ 17(°F)	2.25 COP
Applied electric heat	24 kW

Heating Performance

Entering DB temp.	60 °F
Heating output capacity (Max)	81.8 MBH
Nominal electric heat	24 kW
Applied electric heat	24.0 kW
Installed	Field
Supply air	2600 cfm
Leaving DB temp.	89.1 °F
Air temp. rise	29.1 °F
Stages	2

Supply Air Blower Performance

Supply air	2600 cfm
Ext. static pressure	0.55 IWG
Addl. Unit Losses (Options/Accessories)	0.3 IWG
Blower speed	897 rpm
Max BHP of Motor (including service factor)	1.73 HP
Duct location	Bottom
Motor rating	1.50 HP
Actual required BHP	1.39 HP
Power input	1.30 kW
Elevation	0 ft
Drive type	BELT

Electrical Data

Power supply	460-3-60
Unit min circuit ampacity	54.9 A
Unit max over-current protection	60 A

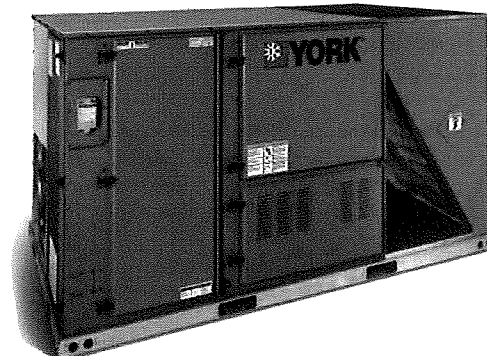
Dimensions & Weight

Hgt 51 in	Len 89 in	Wth 59 in
Weight with factory installed options		1185 lb

Clearances

Right	12 in	Front	36 in	Rear	36 in
Top	72 in	Bottom	0 in	Left	36 in

Note: Please refer to the tech guide for listed maximum static pressures



7.5 Ton

- York Sun Pro units are manufactured at an ISO 9001 registered facility and each rooftop is completely computer-run tested prior to shipment.

Unit Features

- Field Installed Electric Heat
- Full perimeter base rails with built in rigging capabilities
- Unit Cabinet Constructed of Powder Painted Steel, Certified At 750 Hours Salt Spray Test (ASTM B-117 Standards)
- Scroll Compressor[s]
- Dry Bulb Low Leak Economizer w/Barometric Relief and Hoods (Bottom or Horizontal End Return Only) with Economizer Fault Detection & Diagnostic (Meets ASHRAE 90.1-2013, IECC 2015, California Title 24, AMCA 511).
- 1.5 HP Standard Static Belt Drive Blower
- Solid Core Liquid Line Filter Driers
- Unit Ships with 2" Throwaway Filters
- Replacement Filters: 4 - (24" x 20").
- Dual refrigerant circuits for efficient part load operation
- Single Point Power Connection
- Through-the-Curb and Through-the-Base Utility Connections
- Short Circuit Current: 5kA RMS Symmetrical
- Copper tube/aluminum fin condenser coil, Copper tube/aluminum fin evaporator coil
- Composite Drain Pan - Front Connection
- Tool-free maintenance with features like hinged doors for all-access panels, slide-out blower and blower motor tray

BAS Controller

- IntelliSpeed control of the VFD based on stages of cooling. Provides Single Zone VAV Fan Operation as defined by ASHRAE 90.1 section 6.4.3.10.
- Smart Equipment Controller including Discharge Air, Return Air, and Outdoor Air Temperature Sensors. BACNet MS/TP, Modbus and N2 communication card.

Standard Unit Controller: Smart Equipment Control Board

- Safety Monitoring - Monitors the High and Low-Pressure Switches, the Freezestats, the Gas Valve, if Applicable, and the Temperature Limit Switch on Gas and Electric Heat Units. The Unit Control Board will Alarm on Ignition Failures, Safety Lockouts and Repeated Limit Switch Trips.
- An Integrated Low-Ambient Control, Anti-Short Cycle Protection, Lead-Lag, Fan On and Fan off Delays, Low Voltage Protection, On-Board Diagnostic and Fault Code Display. Allows all units to operate in the cooling mode down to 0 °F outdoor ambient without additional components or intervention.

Warranty

- One (1) Year Limited Warranty on the Complete Unit
- Five (5) Year Warranty - Compressors and Electric Heater Elements

5-12



York® Sun™ Pro 3-12.5 Ton Package

Page: 16

Single Package R-410A Heat Pump

Project Name: Riverfront TI

Unit Model #: XP090C00P4B1BCA1A2

Quantity: 1 Tag #: In Stock

System: XP090C00P4B1BCA1A2

Additional Electrical Data

Power supply	460-3-60
Unit min circuit ampacity	54.9 A
Unit max over-current protection	60 A
Min Voltage	432 V
Max Voltage	504 V
Comp #1 RLA	6.2
Comp #1 LRA	41.0
Comp #2 RLA	6.2
Comp #2 LRA	41
Indoor Mtr Voltage	460-3-60
Indoor Mtr FLA	2.6
Outdoor Mtr Qty	2
Outdoor Fan Voltage	460-1-60
OD Fan Mtr FLA (ea.)	1.1
Power Ex Mtr Qty (if applicable)	1
Powered Ex Voltage(if applicable)	460-1-60
Power Ex Mtr FLA (ea) (if applicable)	2.2



York® Sun™ Pro 3-12.5 Ton Package

Single Package R-410A Heat Pump

Project Name: Riverfront TI

Quantity: 1 Tag #: In Stock

Unit Model #: XP090C00P4B1BCA1A2

Unit Dimensions

