PRCNC20231424

FINAL SHOP DRAWINGS

RedBUILT™ Engineered Wood Products

200 E. Mallard Drive Boise, Idaho 83706, www.RedBuilt.com

Project Number: 137320

Project Name: Arco AM/PM

Project Address: 1402 S MERIDIAN
PUYALLUP, WA 98371

Project Description:

COLOR REPORT IS REQUIRED TO BE PROVIDED BY THE PERMITTEE ON SITE FOR ALL INSPECTIONS

Date: 11/1/2023 1:20:41 PM

PROJECT INFORMATION:

Current Submittal: APPROVED FOR PRODUCTION

REFERENCE DOCUMENTS:

DISCIPLINE	BY	DATE	REVISION#	TYPE	SHEETS
Architectural	NOT PROVIDED				Not Provided
Structural	Barghausen Consulting Engineers, Inc.	10/4/23		BID	Full Set
Mechanical	NOT PROVIDED				Not Provided

PROJECT CONTACTS:

Technical Representative:
Trevor Allmon
(614) 915-4463
TAllmon@redbuilt.com

Design Technician:
Douglas Taraska
380-799-5141
DTaraska@redbuilt.com

Checking by PCS is only for conformance of design criteria and concept. Structural performance of the supplier designed components is the responsibility of the components structural engineer. BRT 11/6/2023

BALTAZAR BEDOLLA STATE OF WASHINGTON 57503 REGISTERED PROFESSIONAL ENGINEER

Digitally signed by Baltazar Bedolla
Date: 2023.11.06 07:16:13-08'00'

City of Puyallup Building ACCEPTED
JMontgomery
01/29/2024
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Material List and Calculations pp: 1-15

Shop Drawings pp: R001-R500

Our responsibility is limited to the design of RedBuilt products in accordance with the above referenced documents based on design loads specified by the Engineer Of Record.

IMPORTANT (Please Read)

- Installation of the materials is the sole responsibility of the installer.
- Refer to Installation Information sheets for more detailed instruction.
- all materials shall be furnished by others unless included on the material list provided herein.

APPROVED FOR PRODUCTION

PRCNC20231424

Material List

RB Number 137320
Project Name Arco AM/PM
Location Puyallup, WA

Operator DVT
Office Delaware

Delivery D1: ROOF
Plant Hillsboro

Comment
Status **Approved For Production**
Report Type Customer

RedBuilt™ Open-Web Products — Trusses

Quantity	Type	Series	Depth(s)	Appl.	Profile	Clear Span	Pr. Length	Pr. Load	Fastnrs. Left	Fastnrs. Right		Footage	Notes
12	S1W	Red-S	42/32	115%	Tapered	39'-10.00"	41.0	194.9	8-SDS1/4x3	8-SDS1/4x3		492.0	
10	S1	Red-S	42/32	115%	Tapered	39'-10.00"	41.0	194.9	8-SDS1/4x3	8-SDS1/4x3		410.0	
4	S2W	Red-S	42/32	115%	Tapered	39'-10.00"	41.0	193.7	8-SDS1/4x3	8-SDS1/4x3		164.0	
3	S2	Red-S	42/32	115%	Tapered	39'-10.00"	41.0	193.7	8-SDS1/4x3	8-SDS1/4x3		123.0	
29		Red-S									Total	1189.0	

RedBuilt™ Open-Web Products — Blocking

Quantity	Type	Size	Length	Net	Custom Width	Series & Clip	Spacing	Tight To		Notes
44		2x4	48.000 (in)	Nom		Red-S - S-Clip	48	Bearing Clip		

RedBuilt™ Open-Web Products — Bottom Chord Nailer

Lineal Ft	Type	Size	Grade		Notes
240		2x4			

RedBuilt™ Open-Web Products — Strut Bracing

Quantity	Type	Style	Spacing	Series		Notes
70		W5	48	Red-S		

RedBuilt™ Open-Web Products — Cross Bracing

Quantity	Type	Style	Length		Bend Profile	Uplift Application	Depth	Spacing			Notes
12		B2	47.250			Wind Uplift 30"+	34				
12		B2	51.250			Wind Uplift 30"+	37				
12		B2	55.000			Wind Uplift 30"+	40				

RedLam™ LVL Products — LVL Beams

Quantity	Type	Size	Length	Grade	P.E.T.			Footage	Notes
2	R01	1.75x11.88	21'-0.00"	2.0E	No			42.0	
2	R02	1.75x11.88	24'-0.00"	2.0E	No			48.0	
1	R03	1.75x11.88	6'-0.00"	2.0E	No			6.0	
4	R04	1.75x11.88	4'-0.00"	2.0E	No			16.0	
9		1.75x11.88					Total	112.0	

Third-Party (Sourced by RedBuilt™) — Glulam Beams

Quantity	Type	Size	Length	Layup	Camber	Appearance	P.E.T.			Footage	Notes
2	G01	5.125x16.5	20'-0.00"	24F-V4	5000'	Architectural	No			40.0	
1	G02	5.125x12	14'-0.00"	24F-V4	5000'	Architectural	No			14.0	
1	G03	5.125x15	14'-0.00"	24F-V4	5000'	Architectural	No			14.0	
1	G04	5.125x12	14'-0.00"	24F-V4	5000'	Architectural	No			14.0	
2	G05	5.125x16.5	8'-0.00"	24F-V4	5000'	Industrial	No			16.0	
2	G06	5.125x16.5	17'-0.00"	24F-V8	0"	Industrial	No			34.0	
2	G07	5.125x16.5	8'-0.00"	24F-V8	0"	Industrial	No			16.0	
2		5.125x12 V4							Total	28.0	
2		5.125x16.5 V4							Total	40.0	
1		5.125x15 V4							Total	14.0	
4		5.125x16.5 V8							Total	50.0	
2		5.125x16.5 V4							Total	16.0	

RedBuilt™ Products — Plywood Edge Blocking

Quantity	Type	Size	Length	Z-Clips	Grade	Spacing	Series			Notes
198		2x4	48.000	One End		48	Red-S			

Hardware

Quantity	Type	Description		Notes
1.0 lb		8dx1.5" Nails (0.131"x1.5")		
7.0 lb		10dx1.5" Nails (0.148"x1.5")		
464		SDS1/4x3 Screw		
198		PEB Z-Clip (1.5")		
12		A35 Framing Anchor		

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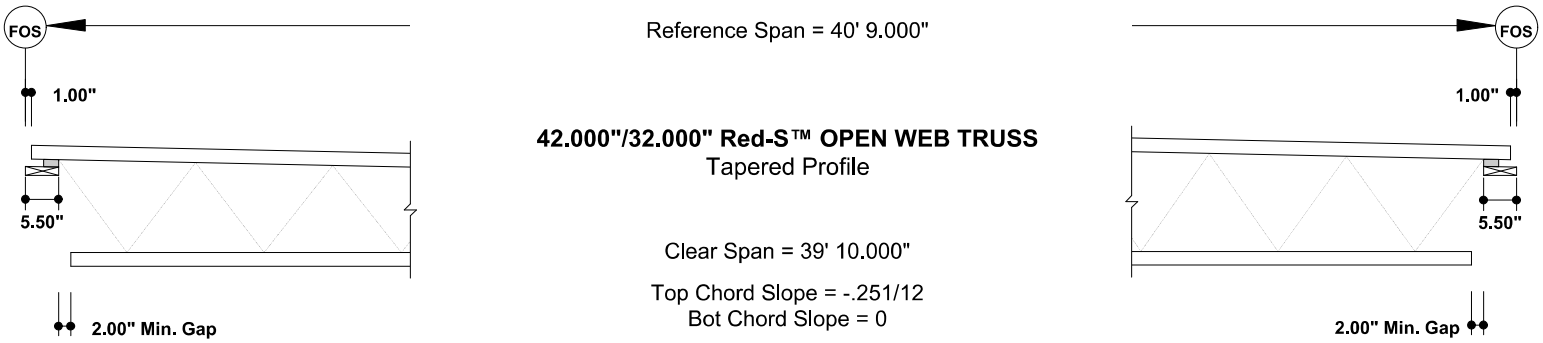
Project: Arco AM/PM
Location: Puyallup, WA
Delivery: R1
Del. Desc.: Roof

Type: S1
Qty: 10
Project Number: 137320

THIS PRODUCT MEETS OR EXCEEDS THE SET DESIGN CONTROLS FOR THE APPLICATION AND LOADS LISTED



All dimensions are horizontal.

Product diagram is conceptual.

LOADS

Analysis for Open-web Member Supporting SNOW Structural Classification.
Loads (psf): 25 Snow at 115% duration, 20 Dead (top chord), 0 Dead (bottom chord), @ 48.000" O.C. and:

LOAD GROUP #1 @ 48.000" O.C.-Wind Uplift Typ.

TYPE	CLASS	LIVE	DEAD	LOCATION(1)	APPL	APPLIED TO	COMMENT
Uniform(psf)	W(1.60)	-30.7	0	1.000" to 40' 8.000"	Adds to	TC	Wind Uplift ULT

LOAD GROUP #2 @ 48.000" O.C.-1-3 From LEFT (CNDRS)

TYPE	CLASS	LIVE	DEAD	LOCATION(1)	APPL	APPLIED TO	COMMENT
Uniform(psf)	W(1.60)	16	0	1.000" to 40' 8.000"	Adds to	TC	Wind Down (ULT)
Point(lbs)	S(1.15)	0	150	7' 1.000"	Adds to	TC, on chord(s)	CNDR (300#/2)
Point(lbs)	S(1.15)	0	150	17' 6.000"	Adds to	TC, on chord(s)	CNDR (300#/2)
Point(lbs)	S(1.15)	0	150	23' 1.000"	Adds to	TC, on chord(s)	CNDR (300#/2)

LOAD GROUP #3 @ 24.000" O.C.-S1 DBL Typ.

TYPE	CLASS	LIVE	DEAD	LOCATION(1)	APPL	APPLIED TO	COMMENT
Uniform(psf)	W(1.60)	16	0	1.000" to 40' 8.000"	Adds to	TC	Wind Down (ULT)
Uniform(plf)	W(1.60)	150	50	1.000" to 6' 1.000"	Adds to	TC	Return Wall /2
Point(lbs)	S(1.15)	0	225	30' 3.000"	Adds to	TC, on chord(s)	RTU (900#/4)
Point(lbs)	S(1.15)	0	225	37' 2.000"	Adds to	TC, on chord(s)	RTU (900#/4)
Point(lbs)	W(1.60)	1500	0	5' 1.000"	Adds to	TC, on chord(s)	Post Load /2

LOAD GROUP #4 @ 48.000" O.C.-6FR

TYPE	CLASS	LIVE	DEAD	LOCATION(1)	APPL	APPLIED TO	COMMENT
Uniform(psf)	W(1.60)	16	0	1.000" to 40' 8.000"	Adds to	TC	Wind Down (ULT)
Point(lbs)	S(1.15)	0	134	22' 1.000"	Adds to	TC, on chord(s)	RTU (800#/6)
Point(lbs)	S(1.15)	0	134	26' 1.000"	Adds to	TC, on chord(s)	RTU (800#/6)
Point(lbs)	S(1.15)	0	100	33' 4.000"	Adds to	TC, on chord(s)	Hatch

LOAD GROUP #5 @ 24.000" O.C.-Uplift @ Return Wall - Wide DBL

TYPE	CLASS	LIVE	DEAD	LOCATION(1)	APPL	APPLIED TO	COMMENT
Uniform(psf)	W(1.60)	-30.7	0	1.000" to 40' 8.000"	Adds to	TC	Wind Uplift
Uniform(plf)	W(1.60)	150	50	1.000" to 6' 1.000"	Adds to	TC	Return Wall /2
Point(lbs)	W(1.60)	-1500	0	5' 1.000"	Adds to	TC, on chord(s)	Post Load /2

LOAD GROUP #6 @ 24.000" O.C.-5 From Left (Wall&Post)

TYPE	CLASS	LIVE	DEAD	LOCATION(1)	APPL	APPLIED TO	COMMENT
Uniform(psf)	W(1.60)	16	0	1.000" to 40' 8.000"	Adds to	TC	Wind Down (ULT)
Uniform(plf)	W(1.60)	150	50	1.000" to 6' 1.000"	Adds to	TC	Return Wall /2
Point(lbs)	W(1.60)	1500	0	5' 1.000"	Adds to	TC, on chord(s)	Post Load /2

(1) Location is specified from left reference point unless noted otherwise.
(3) All wind (W) loads are Strength based.

SUPPORTS

	LEFT SUPPORT	(Angle: 0°)	RIGHT SUPPORT	(Angle: 0°)
	Material:	Plate(s)	Material:	Plate(s)
	Bearing Clip:	Heavy S-Clip	Bearing Clip:	Heavy S-Clip
	Reinforcement:	Chord(s) only	Reinforcement:	Chord(s) only

DESIGN CONTROLS

Truss Member's Critical Design Component Value: 99.9% (Design / Allowable)
Wood allowable design values have been reduced 5.0% due to end user request.

Project: Arco AM/PM
Location: Puyallup, WA
Delivery: R1
Del. Desc.: Roof

Type: S1
Qty: 10
Project Number: 137320

Truss design includes consideration for partial span application live load.

REACTIONS

	LEFT MAXIMUM	LEFT MINIMUM	RIGHT MAXIMUM	RIGHT MINIMUM
Total Load (lbs)	4006 W (1.60)	-521 W (1.60)	3970 W (1.60)	-521 W (1.60)
Live Load (lbs)	2107	-1495	2106	-1495

DEFLECTIONS & CAMBER

Deflection (Total Load) Span: 1.530" (L/312)
Deflection (Live Load) Span: 0.801" (L/597)

Center Span Camber: 1.003", Recommended

ADDITIONAL NOTES

- IMPORTANT! The analysis presented is output from software developed by RedBuilt LLC. Allowable product values shown are in accordance with current RedBuilt™ materials and code accepted design values. RedBuilt™ Engineering has verified the analysis. The input loads and dimensions have been provided by others and must be verified and approved for the specific application by the design professional for the project. Truss design values have been accepted by the following agencies: ICC ES Report No. ESR-1774 and LABC/LARC Supplement, DSA.
- Allowable Stress Design methodology was used for Code IBC analyzing the RedBuilt™ custom products listed above with chords analyzed using RedBuilt™ analysis.
- Pricing Load = 194.9 plf

OPERATOR INFORMATION

Douglas Taraska, 380-799-5141

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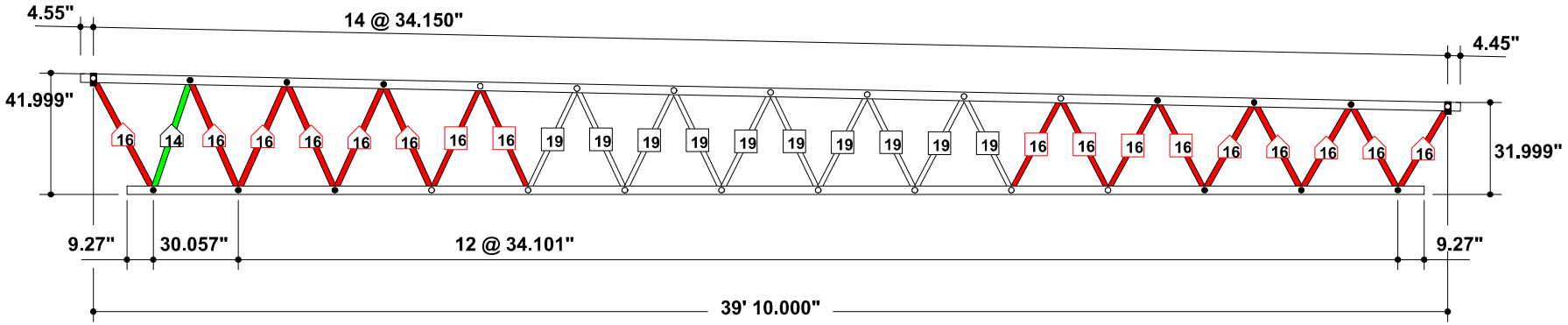
DO NOT SCALE THIS TRUSS PROFILE



Left First Web Distance:	21.121"
Top Chord Material:	2- 1.50X 2.3" RedLam™ LVL
Bottom Chord Material:	2- 1.50X 2.3" RedLam™ LVL
Camber:	1.003"
Bottom Chord Slope:	0

Red-S™ SERIES LEGEND

Heavy S-Clip @ LEFT TOP PIN# 1.
Heavy S-Clip @ RIGHT TOP PIN# 15.

3/4" DIA. PIN

WEB, 1" DIA. & WEB GAUGE

1 1/2" DIA.

1/2" DIA. PIN

1 1/4" DIA.

Project: Arco AM/PM	Truss ID: S1
Location: Puyallup, WA	Quantity: 10
Delivery: R1	Project Number: 137320

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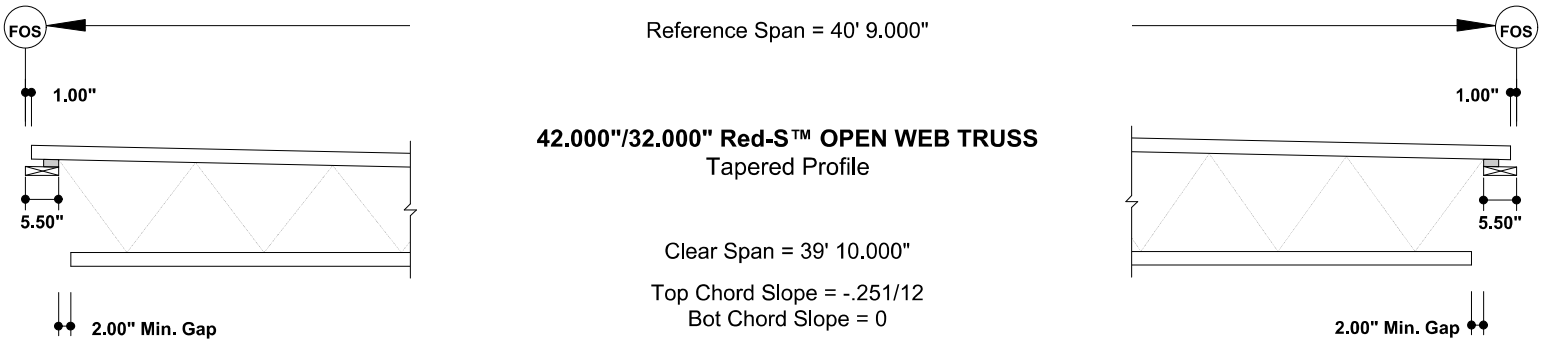
Project: Arco AM/PM
Location: Puyallup, WA
Delivery: R1
Del. Desc.: Roof

Type: S1W
Qty: 12
Project Number: 137320

THIS PRODUCT MEETS OR EXCEEDS THE SET DESIGN CONTROLS FOR THE APPLICATION AND LOADS LISTED



All dimensions are horizontal.

Product diagram is conceptual.

LOADS

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Loads (psf): 25 Snow at 115% duration, 20 Dead (top chord), 0 Dead (bottom chord), @ 48.000" O.C. and:

LOAD GROUP #1 @ 48.000" O.C.-Wind Uplift Typ.

TYPE	CLASS	LIVE	DEAD	LOCATION(1)	APPL	APPLIED TO	COMMENT
Uniform(psf)	W(1.60)	-30.7	0	1.000" to 40' 8.000"	Adds to	TC	Wind Uplift ULT

LOAD GROUP #2 @ 48.000" O.C.-1-3 From LEFT (CNDRS)

TYPE	CLASS	LIVE	DEAD	LOCATION(1)	APPL	APPLIED TO	COMMENT
Uniform(psf)	W(1.60)	16	0	1.000" to 40' 8.000"	Adds to	TC	Wind Down (ULT)
Point(lbs)	S(1.15)	0	150	7' 1.000"	Adds to	TC, on chord(s)	CNDR (300#/2)
Point(lbs)	S(1.15)	0	150	17' 6.000"	Adds to	TC, on chord(s)	CNDR (300#/2)
Point(lbs)	S(1.15)	0	150	23' 1.000"	Adds to	TC, on chord(s)	CNDR (300#/2)

LOAD GROUP #3 @ 24.000" O.C.-S1 DBL Typ.

TYPE	CLASS	LIVE	DEAD	LOCATION(1)	APPL	APPLIED TO	COMMENT
Uniform(psf)	W(1.60)	16	0	1.000" to 40' 8.000"	Adds to	TC	Wind Down (ULT)
Uniform(plf)	W(1.60)	150	50	1.000" to 6' 1.000"	Adds to	TC	Return Wall /2
Point(lbs)	S(1.15)	0	225	30' 3.000"	Adds to	TC, on chord(s)	RTU (900#/4)
Point(lbs)	S(1.15)	0	225	37' 2.000"	Adds to	TC, on chord(s)	RTU (900#/4)
Point(lbs)	W(1.60)	1500	0	5' 1.000"	Adds to	TC, on chord(s)	Post Load /2

LOAD GROUP #4 @ 48.000" O.C.-6FR

TYPE	CLASS	LIVE	DEAD	LOCATION(1)	APPL	APPLIED TO	COMMENT
Uniform(psf)	W(1.60)	16	0	1.000" to 40' 8.000"	Adds to	TC	Wind Down (ULT)
Point(lbs)	S(1.15)	0	134	22' 1.000"	Adds to	TC, on chord(s)	RTU (800#/6)
Point(lbs)	S(1.15)	0	134	26' 1.000"	Adds to	TC, on chord(s)	RTU (800#/6)
Point(lbs)	S(1.15)	0	100	33' 4.000"	Adds to	TC, on chord(s)	Hatch

LOAD GROUP #5 @ 24.000" O.C.-Uplift @ Return Wall - Wide DBL

TYPE	CLASS	LIVE	DEAD	LOCATION(1)	APPL	APPLIED TO	COMMENT
Uniform(psf)	W(1.60)	-30.7	0	1.000" to 40' 8.000"	Adds to	TC	Wind Uplift
Uniform(plf)	W(1.60)	150	50	1.000" to 6' 1.000"	Adds to	TC	Return Wall /2
Point(lbs)	W(1.60)	-1500	0	5' 1.000"	Adds to	TC, on chord(s)	Post Load /2

LOAD GROUP #6 @ 24.000" O.C.-5 From Left (Wall&Post)

TYPE	CLASS	LIVE	DEAD	LOCATION(1)	APPL	APPLIED TO	COMMENT
Uniform(psf)	W(1.60)	16	0	1.000" to 40' 8.000"	Adds to	TC	Wind Down (ULT)
Uniform(plf)	W(1.60)	150	50	1.000" to 6' 1.000"	Adds to	TC	Return Wall /2
Point(lbs)	W(1.60)	1500	0	5' 1.000"	Adds to	TC, on chord(s)	Post Load /2

(1) Location is specified from left reference point unless noted otherwise.
(3) All wind (W) loads are Strength based.

SUPPORTS

	LEFT SUPPORT	(Angle: 0°)	RIGHT SUPPORT	(Angle: 0°)
	Material:	Plate(s)	Material:	Plate(s)
	Bearing Clip:	Heavy S-Clip	Bearing Clip:	Heavy S-Clip
	Reinforcement:	Chord(s) only	Reinforcement:	Chord(s) only

DESIGN CONTROLS

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Project: Arco AM/PM
Location: Puyallup, WA
Delivery: R1
Del. Desc.: Roof

Type: S1W
Qty: 12
Project Number: 137320

Truss design includes consideration for partial span application live load.

REACTIONS

	LEFT MAXIMUM	LEFT MINIMUM	RIGHT MAXIMUM	RIGHT MINIMUM
Total Load (lbs)	4006 W (1.60)	-521 W (1.60)	3970 W (1.60)	-521 W (1.60)
Live Load (lbs)	2107	-1495	2106	-1495

DEFLECTIONS & CAMBER

Deflection (Total Load) Span: 1.530" (L/312)
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ADDITIONAL NOTES

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- Allowable Stress Design methodology was used for Code IBC analyzing the RedBuilt™ custom products listed above with chords analyzed using RedBuilt™ analysis.
- Pricing Load = 194.9 plf

OPERATOR INFORMATION

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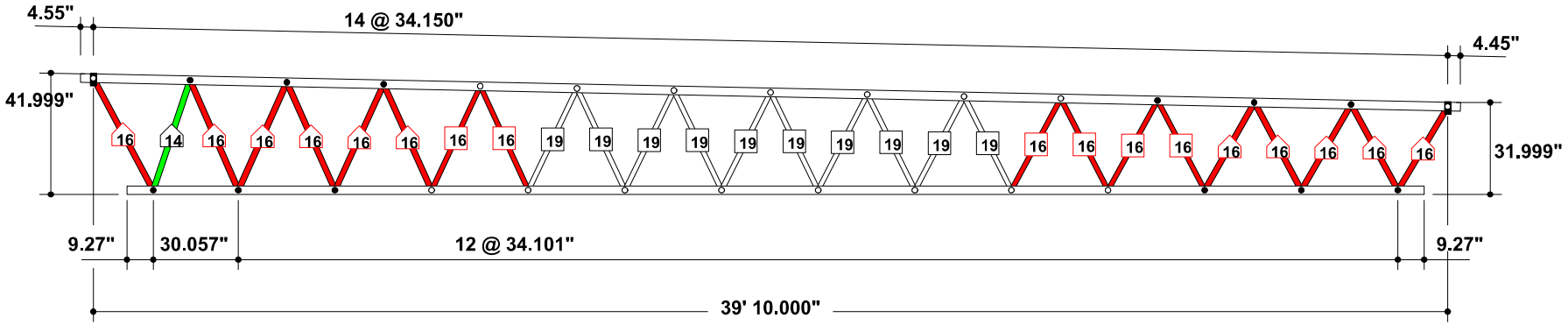

Left First Web Distance:	21.121"
Top Chord Material:	2- 1.50X 2.3" RedLam™ LVL
Bottom Chord Material:	2- 1.50X 2.3" RedLam™ LVL
Camber:	1.003"
Bottom Chord Slope:	0

Red-S™ SERIES LEGEND

Heavy S-Clip @ LEFT TOP PIN# 1.
Heavy S-Clip @ RIGHT TOP PIN# 15.

3/4" DIA. PIN
WEB, 1" DIA. & WEB GAUGE
1 1/2" DIA.
1/2" DIA. PIN
1 1/4" DIA.

Project: Arco AM/PM	Truss ID: S1W
Location: Puyallup, WA	Quantity: 12
Delivery: R1	Project Number: 137320

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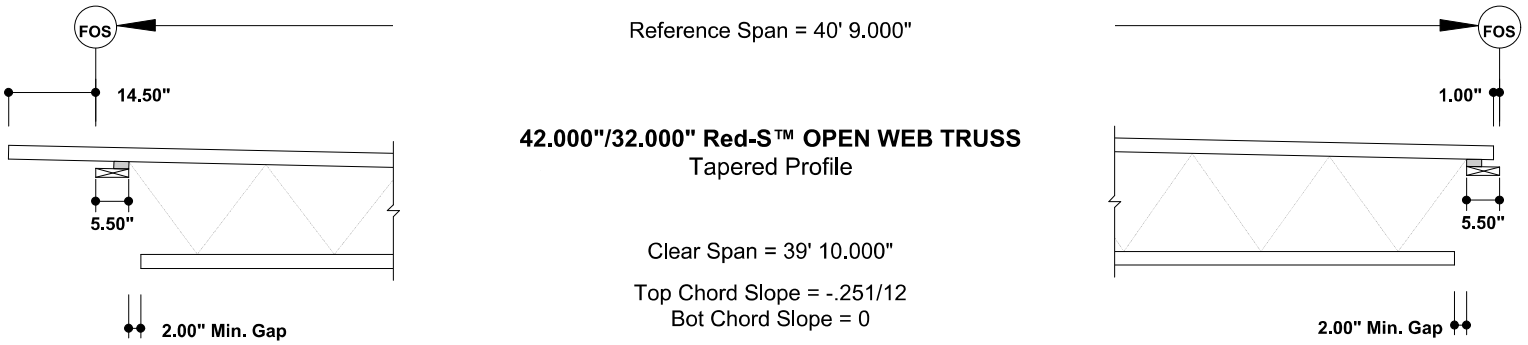
Project: Arco AM/PM
Location: Puyallup, WA
Delivery: R1
Del. Desc.: Roof

Type: S2
Qty: 3
Project Number: 137320

THIS PRODUCT MEETS OR EXCEEDS THE SET DESIGN CONTROLS FOR THE APPLICATION AND LOADS LISTED



All dimensions are horizontal.

Product diagram is conceptual.

LOADS

Analysis for Open-web Member Supporting SNOW Structural Classification.
Loads (psf): 25 Snow at 115% duration, 20 Dead (top chord), 0 Dead (bottom chord), @ 48.000" O.C. and:

LOAD GROUP #1 @ 48.000" O.C.-Wind Uplift Typ.

TYPE	CLASS	LIVE	DEAD	LOCATION(1)	APPL	APPLIED TO	COMMENT
Uniform(psf)	W(1.60)	-30.7	0	1.000" to 40' 8.000"	Adds to	TC	Wind Uplift

LOAD GROUP #2 @ 48.000" O.C.-1-3 From LEFT

TYPE	CLASS	LIVE	DEAD	LOCATION(1)	APPL	APPLIED TO	COMMENT
Uniform(psf)	W(1.60)	16	0	1.000" to 40' 8.000"	Adds to	TC	Wind Down (ULT)
Point(lbs)	S(1.15)	0	150	7' 1.000"	Adds to	TC, on chord(s)	CNDR (300#/2)
Point(lbs)	S(1.15)	0	150	17' 6.000"	Adds to	TC, on chord(s)	CNDR (300#/2)
Point(lbs)	S(1.15)	0	150	23' 1.000"	Adds to	TC, on chord(s)	CNDR (300#/2)

LOAD GROUP #3 @ 24.000" O.C.-S1 DBL Typ.

TYPE	CLASS	LIVE	DEAD	LOCATION(1)	APPL	APPLIED TO	COMMENT
Uniform(psf)	W(1.60)	16	0	1.000" to 40' 8.000"	Adds to	TC	Wind Down (ULT)
Uniform(plf)	W(1.60)	150	50	1.000" to 6' 1.000"	Adds to	TC	Return Wall /2
Point(lbs)	S(1.15)	0	225	29' 10.000"	Adds to	TC, on chord(s)	RTU (900#/4)
Point(lbs)	S(1.15)	0	225	36' 9.000"	Adds to	TC, on chord(s)	RTU (900#/4)
Point(lbs)	W(1.60)	1500	0	5' 1.000"	Adds to	TC, on chord(s)	Post Load /2

LOAD GROUP #4 @ 48.000" O.C.-6 FR

TYPE	CLASS	LIVE	DEAD	LOCATION(1)	APPL	APPLIED TO	COMMENT
Uniform(psf)	W(1.60)	16	0	1.000" to 40' 8.000"	Adds to	TC	Wind Down (ULT)
Point(lbs)	S(1.15)	0	134	22' 1.000"	Adds to	TC, on chord(s)	RTU (800#/6)
Point(lbs)	S(1.15)	0	134	26' 1.000"	Adds to	TC, on chord(s)	RTU (800#/6)
Point(lbs)	S(1.15)	0	100	33' 10.000"	Adds to	TC, on chord(s)	Hatch

LOAD GROUP #5 @ 24.000" O.C.-Uplift @ Return Wall - Wide DBL

TYPE	CLASS	LIVE	DEAD	LOCATION(1)	APPL	APPLIED TO	COMMENT
Uniform(psf)	W(1.60)	-30.7	0	1.000" to 40' 8.000"	Adds to	TC	Wind Uplift
Uniform(plf)	W(1.60)	150	50	1.000" to 6' 1.000"	Adds to	TC	Return Wall /2
Point(lbs)	W(1.60)	-1500	0	5' 1.000"	Adds to	TC, on chord(s)	Post Load /2

LOAD GROUP #6 @ 24.000" O.C.-5 From Left

TYPE	CLASS	LIVE	DEAD	LOCATION(1)	APPL	APPLIED TO	COMMENT
Uniform(psf)	W(1.60)	16	0	1.000" to 40' 8.000"	Adds to	TC	Wind Down (ULT)
Uniform(plf)	S(1.15)	150	50	1.000" to 6' 1.000"	Adds to	TC	Return Wall /2
Point(lbs)	W(1.60)	1500	0	5' 1.000"	Adds to	TC, on chord(s)	Post Load /2

(1) Location is specified from left reference point unless noted otherwise.
(3) All wind (W) loads are Strength based.

SUPPORTS

LEFT SUPPORT	(Angle: 0°)	RIGHT SUPPORT	(Angle: 0°)
Material:	Plate(s)	Material:	Plate(s)
Bearing Clip:	Heavy S-Clip	Bearing Clip:	Heavy S-Clip
Reinforcement:	Chord(s) only	Reinforcement:	Chord(s) only

DESIGN CONTROLS

Truss Member's Critical Design Component Value: 99.9% (Design / Allowable)
Wood allowable design values have been reduced 5.0% due to end user request.

Project: Arco AM/PM
Location: Puyallup, WA
Delivery: R1
Del. Desc.: Roof

Type: S2
Qty: 3
Project Number: 137320

Truss design includes consideration for partial span application live load.

REACTIONS

	LEFT MAXIMUM	LEFT MINIMUM	RIGHT MAXIMUM	RIGHT MINIMUM
Total Load (lbs)	4206 W (1.60)	-459 W (1.60)	3972 W (1.60)	-521 W (1.60)
Live Load (lbs)	2201	-1497	2109	-1493

DEFLECTIONS & CAMBER

Deflection (Total Load) Span: 1.530" (L/312)
Deflection (Live Load) Span: 0.801" (L/597)

Center Span Camber: 1.003", Recommended

ADDITIONAL NOTES

- IMPORTANT! The analysis presented is output from software developed by RedBuilt LLC. Allowable product values shown are in accordance with current RedBuilt™ materials and code accepted design values. RedBuilt™ Engineering has verified the analysis. The input loads and dimensions have been provided by others and must be verified and approved for the specific application by the design professional for the project. Truss design values have been accepted by the following agencies: ICC ES Report No. ESR-1774 and LABC/LARC Supplement, DSA.
- Allowable Stress Design methodology was used for Code IBC analyzing the RedBuilt™ custom products listed above with chords analyzed using RedBuilt™ analysis.
- Pricing Load = 193.7 plf

OPERATOR INFORMATION

Douglas Taraska, 380-799-5141

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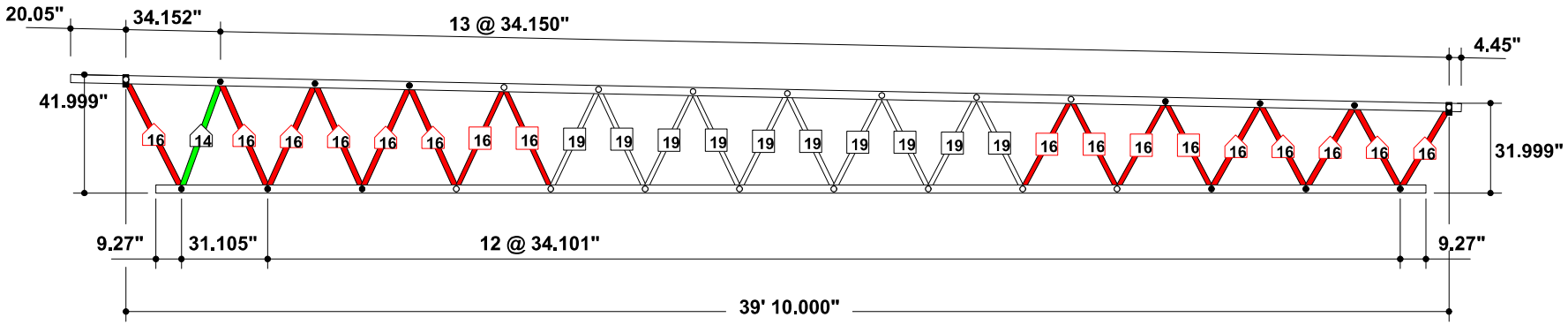
11/2/2023 10:44:23 AM

DO NOT SCALE THIS TRUSS PROFILE



Left First Web Distance:	20.073"
Top Chord Material:	2- 1.50X 2.3" RedLam™ LVL
Bottom Chord Material:	2- 1.50X 2.3" RedLam™ LVL
Camber:	1.003"
Bottom Chord Slope:	0

Red-S™ SERIES LEGEND

Heavy S-Clip @ LEFT TOP PIN# 1.
Heavy S-Clip @ RIGHT TOP PIN# 15.

3/4" DIA. PIN

WEB, 1" DIA. & WEB GAUGE

1 1/2" DIA.

1/2" DIA. PIN

1 1/4" DIA.

Project: Arco AM/PM	Truss ID: S2
Location: Puyallup, WA	Quantity: 3
Delivery: R1	Project Number: 137320

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PRCNC20231424

RedOpenWeb™ v5.0.30
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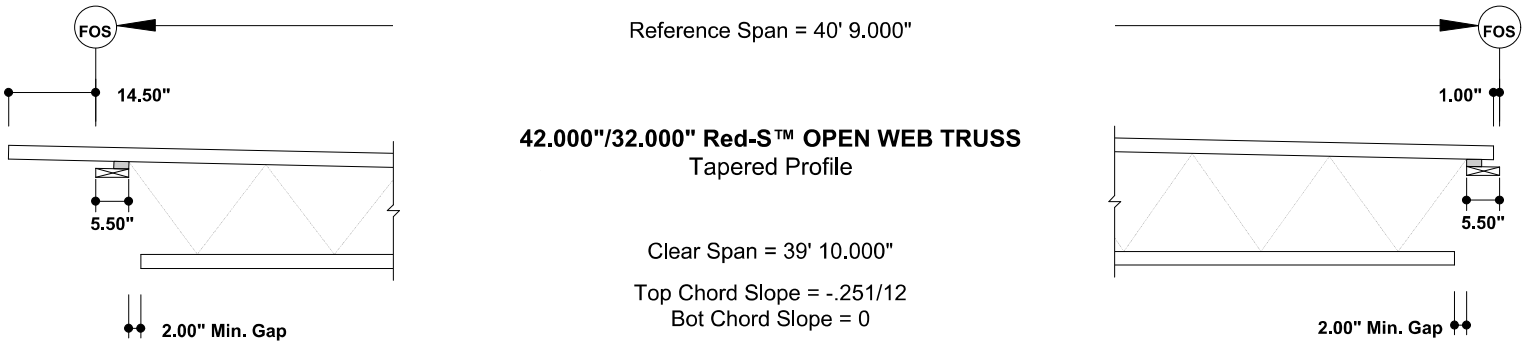
Project: Arco AM/PM
Location: Puyallup, WA
Delivery: R1
Del. Desc.: Roof

Type: S2W
Qty: 4
Project Number: 137320

THIS PRODUCT MEETS OR EXCEEDS THE SET DESIGN CONTROLS FOR THE APPLICATION AND LOADS LISTED



All dimensions are horizontal.

Product diagram is conceptual.

LOADS

Analysis for Open-web Member Supporting SNOW Structural Classification.
Loads (psf): 25 Snow at 115% duration, 20 Dead (top chord), 0 Dead (bottom chord), @ 48.000" O.C. and:

LOAD GROUP #1 @ 48.000" O.C.-Wind Uplift Typ.

TYPE	CLASS	LIVE	DEAD	LOCATION(1)	APPL	APPLIED TO	COMMENT
Uniform(psf)	W(1.60)	-30.7	0	1.000" to 40' 8.000"	Adds to	TC	Wind Uplift

LOAD GROUP #2 @ 48.000" O.C.-1-3 From LEFT

TYPE	CLASS	LIVE	DEAD	LOCATION(1)	APPL	APPLIED TO	COMMENT
Uniform(psf)	W(1.60)	16	0	1.000" to 40' 8.000"	Adds to	TC	Wind Down (ULT)
Point(lbs)	S(1.15)	0	150	7' 1.000"	Adds to	TC, on chord(s)	CNDR (300#/2)
Point(lbs)	S(1.15)	0	150	17' 6.000"	Adds to	TC, on chord(s)	CNDR (300#/2)
Point(lbs)	S(1.15)	0	150	23' 1.000"	Adds to	TC, on chord(s)	CNDR (300#/2)

LOAD GROUP #3 @ 24.000" O.C.-S1 DBL Typ.

TYPE	CLASS	LIVE	DEAD	LOCATION(1)	APPL	APPLIED TO	COMMENT
Uniform(psf)	W(1.60)	16	0	1.000" to 40' 8.000"	Adds to	TC	Wind Down (ULT)
Uniform(plf)	W(1.60)	150	50	1.000" to 6' 1.000"	Adds to	TC	Return Wall /2
Point(lbs)	S(1.15)	0	225	29' 10.000"	Adds to	TC, on chord(s)	RTU (900#/4)
Point(lbs)	S(1.15)	0	225	36' 9.000"	Adds to	TC, on chord(s)	RTU (900#/4)
Point(lbs)	W(1.60)	1500	0	5' 1.000"	Adds to	TC, on chord(s)	Post Load /2

LOAD GROUP #4 @ 48.000" O.C.-6 FR

TYPE	CLASS	LIVE	DEAD	LOCATION(1)	APPL	APPLIED TO	COMMENT
Uniform(psf)	W(1.60)	16	0	1.000" to 40' 8.000"	Adds to	TC	Wind Down (ULT)
Point(lbs)	S(1.15)	0	134	22' 1.000"	Adds to	TC, on chord(s)	RTU (800#/6)
Point(lbs)	S(1.15)	0	134	26' 1.000"	Adds to	TC, on chord(s)	RTU (800#/6)
Point(lbs)	S(1.15)	0	100	33' 10.000"	Adds to	TC, on chord(s)	Hatch

LOAD GROUP #5 @ 24.000" O.C.-Uplift @ Return Wall - Wide DBL

TYPE	CLASS	LIVE	DEAD	LOCATION(1)	APPL	APPLIED TO	COMMENT
Uniform(psf)	W(1.60)	-30.7	0	1.000" to 40' 8.000"	Adds to	TC	Wind Uplift
Uniform(plf)	W(1.60)	150	50	1.000" to 6' 1.000"	Adds to	TC	Return Wall /2
Point(lbs)	W(1.60)	-1500	0	5' 1.000"	Adds to	TC, on chord(s)	Post Load /2

LOAD GROUP #6 @ 24.000" O.C.-5 From Left

TYPE	CLASS	LIVE	DEAD	LOCATION(1)	APPL	APPLIED TO	COMMENT
Uniform(psf)	W(1.60)	16	0	1.000" to 40' 8.000"	Adds to	TC	Wind Down (ULT)
Uniform(plf)	S(1.15)	150	50	1.000" to 6' 1.000"	Adds to	TC	Return Wall /2
Point(lbs)	W(1.60)	1500	0	5' 1.000"	Adds to	TC, on chord(s)	Post Load /2

(1) Location is specified from left reference point unless noted otherwise.
(3) All wind (W) loads are Strength based.

SUPPORTS

LEFT SUPPORT	(Angle: 0°)	RIGHT SUPPORT	(Angle: 0°)
Material:	Plate(s)	Material:	Plate(s)
Bearing Clip:	Heavy S-Clip	Bearing Clip:	Heavy S-Clip
Reinforcement:	Chord(s) only	Reinforcement:	Chord(s) only

DESIGN CONTROLS

Truss Member's Critical Design Component Value: 99.9% (Design / Allowable)
Wood allowable design values have been reduced 5.0% due to end user request.

Project: Arco AM/PM
Location: Puyallup, WA
Delivery: R1
Del. Desc.: Roof

Type: S2W
Qty: 4
Project Number: 137320

Truss design includes consideration for partial span application live load.

REACTIONS

	LEFT MAXIMUM	LEFT MINIMUM	RIGHT MAXIMUM	RIGHT MINIMUM
Total Load (lbs)	4206 W (1.60)	-459 W (1.60)	3972 W (1.60)	-521 W (1.60)
Live Load (lbs)	2201	-1497	2109	-1493

DEFLECTIONS & CAMBER

Deflection (Total Load) Span: 1.530" (L/312)
Deflection (Live Load) Span: 0.801" (L/597)

Center Span Camber: 1.003", Recommended

ADDITIONAL NOTES

- IMPORTANT! The analysis presented is output from software developed by RedBuilt LLC. Allowable product values shown are in accordance with current RedBuilt™ materials and code accepted design values. RedBuilt™ Engineering has verified the analysis. The input loads and dimensions have been provided by others and must be verified and approved for the specific application by the design professional for the project. Truss design values have been accepted by the following agencies: ICC ES Report No. ESR-1774 and LABC/LARC Supplement, DSA.
- Allowable Stress Design methodology was used for Code IBC analyzing the RedBuilt™ custom products listed above with chords analyzed using RedBuilt™ analysis.
- Pricing Load = 193.7 plf

OPERATOR INFORMATION

Douglas Taraska, 380-799-5141

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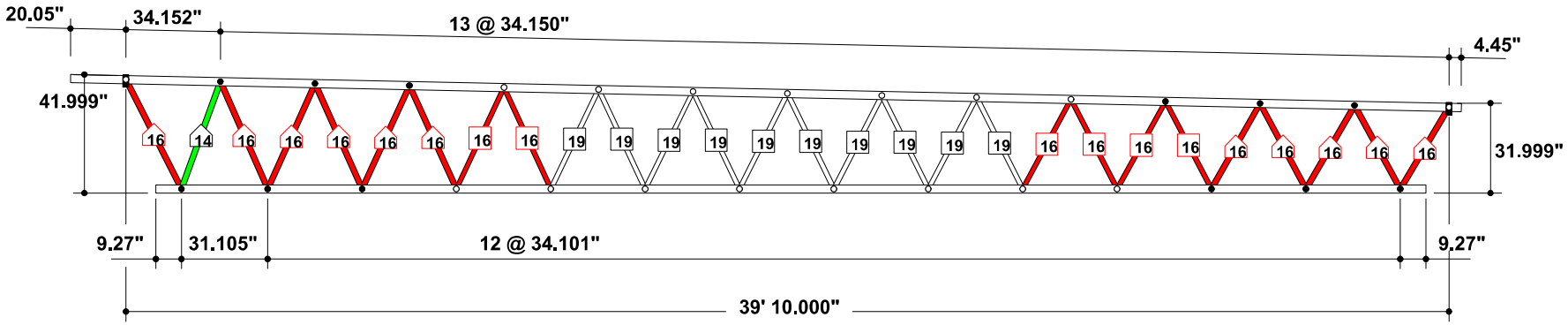
DO NOT SCALE THIS TRUSS PROFILE



Left First Web Distance:	20.073"
Top Chord Material:	2- 1.50X 2.3" RedLam™ LVL
Bottom Chord Material:	2- 1.50X 2.3" RedLam™ LVL
Camber:	1.003"
Bottom Chord Slope:	0

Red-S™ SERIES LEGEND

Heavy S-Clip @ LEFT TOP PIN# 1.
Heavy S-Clip @ RIGHT TOP PIN# 15.

3/4" DIA. PIN

WEB, 1" DIA. & WEB GAUGE

1 1/2" DIA.

1/2" DIA. PIN

1 1/4" DIA.

Project: Arco AM/PM	Truss ID: S2W
Location: Puyallup, WA	Quantity: 4
Delivery: R1	Project Number: 137320

PRCNC20231424

OPEN-WEB TRUSS INSTALLATION INFORMATION

ATTENTION BUILDER

Enclosed is IMPORTANT information on how to safely and properly install RedBuilt™ Joists. Personal injury or death may result from failure to read and follow this information.

RedBUILT™ Engineered Wood Products

1 PRODUCT HANDLING

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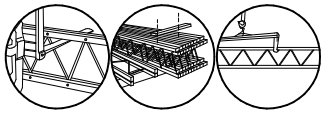

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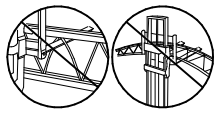


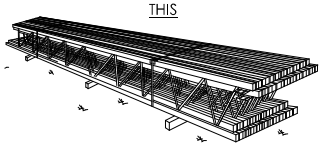
WARNING
Workers should stay clear when cutting the banding to avoid possible injury from flying banding or toppling trusses.

CAUTION
DO NOT hit webs with forklift forks. Bent or dented webs must be replaced.

- Trusses will be delivered to the jobsite in bundles of twenty or fewer, banded together for handling and shipment. To avoid damage they should be left in these bundles until they are ready to be installed in the structure.
- Miscellaneous hardware such as bearing angles, lag screws, bolts and nails as required for each specific job will be shipped in bags or boxes with the trusses.
- Bridging material and pre-cut blocking items, if supplied by RedBuilt ™, will be bundled and banded.

2 PRODUCT STORAGE

THIS



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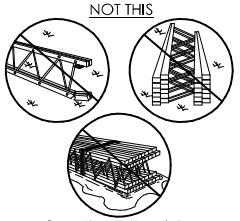


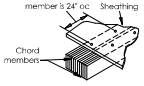
Damaged trusses must be repaired or replaced

- Always set truss bundles on stickers placed at the truss pin locations. Never store trusses flat or set trusses directly on the ground or in contact with standing water.
- Cover truss bundles with paper wrap or canvas tarps to protect them from the weather. Do not use plastic covers as they will cause moisture to accumulate on the trusses. Prolonged exposure to the elements harms the appearance and strength of the trusses.

3 NAILING OF SHEATHING TO TOP CHORD MEMBERS

Maximum Nail Spacing

Widest spacing for nails in each chord member is 24" oc



Nailing pattern per plans and specifications, nail spacing should never exceed 24" on-center in either chord member, do not use nails smaller than 8dx21/2" or larger than 16dx31/2".

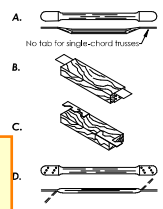
Minimum Nail Spacing

Nail Size	Red-L™ Red-W™	Red-S™	Red-M™ Red-H™	RedLam™ LVL Narrow Face
.113" x 2 1/2" .131" x 2 1/2"	4" 6"	4" 6"	2" 2"	3" 3"
.128" x 3" .148" x 3"	6" 6"	6" 6"	2" 2 1/2"	3" 4" (2)
.128" x 3 1/4" .148" x 3 1/4"	6" 6"	6" 6"	2" 2 1/2"	3" 4" (2)
.135" x 3 1/2" .148" x 3 1/4" .162" x 3 1/2"	6" 6" 8"	6" 6" 8"	2 1/2" 2 1/2" 4"	3" 4" (2) 8" (3)

(1) 14 gauge staples may be a direct substitute for 8dx2 1/2" nails if a minimum penetration of 1" into the flange is maintained.
(2) Minimum spacing must be 5" for 4 rows of nails.
(3) Spacing may be reduced to 5" where nail penetration does not exceed 1 3/8".
If more than one row of nails is used, offset rows at least 1/2" and stagger. Maintain 3/8" minimum edge distance.

IMPORTANT
Nailing closer than specified may cause the chords to split.

4 MATERIAL IDENTIFICATION



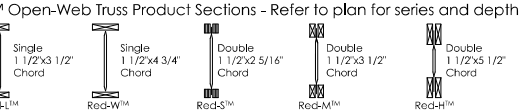
A. *Strut Bracing* is tubular steel with flattened ends supplied with all open-web trusses (Simpson HRS12 supplied for 12" OC systems). Strut bracing to be installed as each truss is set. See sections 5A - 5D.

B. *Plywood Edge Blocking* is provided by RedBuilt™ on some projects and used for nailing sheathing edges. Edge blocking does not take the place of strut bracing and will not prevent trusses from bowing. Install edge blocking after strut bracing (installation bracing) is in place and immediately prior to laying sheathing.

C. *2x4 Starter Struts* supplied by contractor with framing anchors each end (shipped loose) supplied by RedBuilt™. Flatten speed prong and fold portion of vertical tab around end of 2x4. Attach with 6-8dx2 1/2"x1 1/2" nails each end. See sections 5A and 5D.

D. *Cross Bracing* is provided for most bottom-bearing locations. Cross bracing to be installed as each truss is set. Contractor to bend ends prior to installation.

RedBuilt™ Open-Web Truss Product Sections - Refer to plan for series and depth

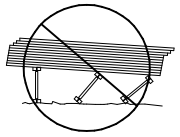


5 INSTALLATION BRACING

DO NOT walk on the trusses until all truss bearings and bracing have been permanently attached. Injury may result.

WARNING
Without correctly installed bracing, trusses can bow and roll over, causing death, serious personal injury, or property damage.

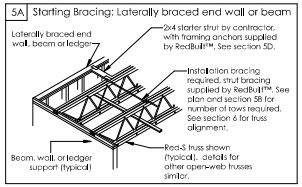
NOTICE
Installation bracing and procedures, as well as the safety of workers, are the responsibility of the installer. The installer should make sure that this installation information is understood by all persons involved in the truss installation.



DO NOT stack building materials on trusses before all truss bearings and bracing have been permanently attached. See section 7

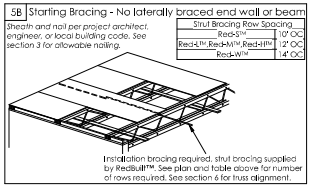
Brace EACH truss as it is placed

5A Starting Bracing: Laterally braced end wall or beam

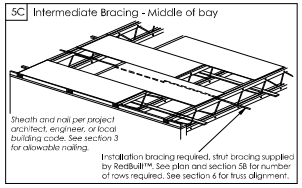


5B Starting Bracing - No laterally braced end wall or beam

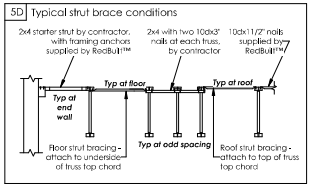
Strut Bracing Row Spacing	
Red-S™	10" OC
Red-L™, Red-M™, Red-H™	12" OC
Red-W™	14" OC



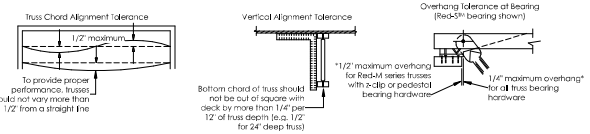
5C Intermediate Bracing - Middle of bay



5D Typical strut brace conditions



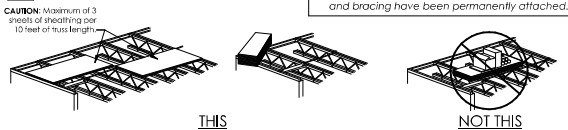
6 INSTALLATION TOLERANCES PERMITTED



7 STACKING MATERIAL

WARNING
DO NOT allow workers or materials on the trusses until all truss bearings and bracing have been permanently attached. See section 5.

CAUTION: Maximum of 3 sheets of sheathing per 10 feet of truss length



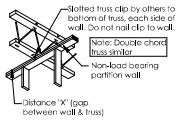
THIS NOT THIS

FIELD MODIFICATION OF TRUSSES NOT PERMITTED	• *DO NOT cut, drill or damage the chords or webs.* • *DO NOT remove steel pins or webs (even temporarily).* • *DO NOT make field modifications to trusses without written approval of RedBuilt™.*

Rev 10/20

8 STANDARD INSTALLATION DETAILS

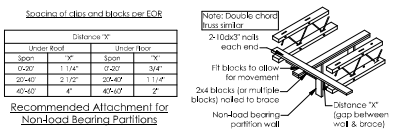
8A



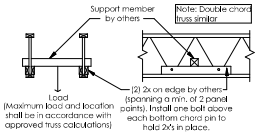
Spacing of clips and blocks per EOR

Distance "X"			
Under Roof		Under Floor	
Span	"X"	Span	"X"
0'-20'	1 1/4"	0'-20'	3/4"
20'-40'	2 1/2"	20'-40'	1 1/4"
40'-60'	4"	40'-60'	2"

Recommended Attachment for Non-load Bearing Partitions

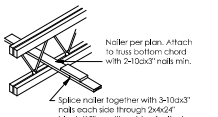


8B



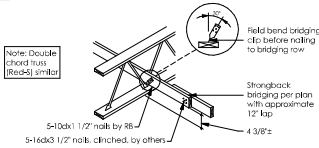
Support Detail for Loads Supported from Bottom Chord

8C



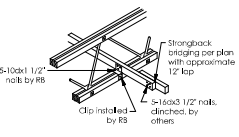
Bottom Chord Nailer

8D



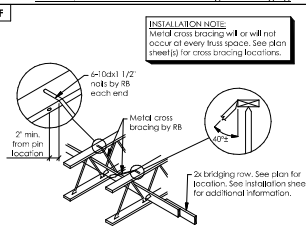
Red-L™, Red-W™ and Red-S™ Strongback Bridging

8E



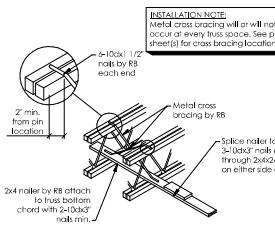
Red-M™ and Red-H™ Strongback Bridging

8F



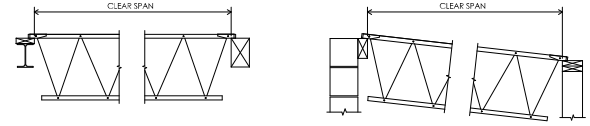
Red-L™ and Red-W™ Cross Bracing (Truss to Bridging)

8G



Red-S™, Red-M™ and Red-H™ Cross Bracing (Truss to Nailer)

8H



CLEAR SPAN IS THE HORIZONTAL DISTANCE BETWEEN THE INSIDE FACE OF BEARING SURFACES. (ACTUAL BEARING CONDITION AND TRUSS SERIES MAY VARY)

Guidelines for Open Web "Clear Spans"

For allowable holes and fasteners information please scan the QR code or use the link below to access page number 3 of sprinkler system installation guide

https://www.redbuilt.com/SprinklerSystemInstallationGuide

For product warranty information please scan the QR code or use the link below to access the form

https://www.redbuilt.com/ProductWarranty

If you have questions or concerns:
Call your RedBuilt™ Representative directly, or for general customer service call (866) 859-6757

Sheet R001

PRCNC20231424

GENERAL INFORMATION

- ALL NAILS SPECIFIED IN FRAMING PACKAGE TO BE "COMMON" NAILS UNLESS NOTED OTHERWISE. USE PROPER SIZE NAILS TO FILL ALL NAILS HOLES IN BEARING CLIPS, BRIDGING CLIPS, BRACING, ETC.
- DO NOT SCALE DRAWINGS: WRITTEN DIMENSIONS TAKE PRECEDENCE.
- MANUFACTURER'S RESPONSIBILITY IS ONLY FOR THE DESIGN OF THE REDBUILT™ PRODUCTS AND NOT FOR ANY SUPPORTING STRUCTURE OR LOADS OTHER THAN INDICATED HEREIN. ALL MATERIALS SHALL BE SUPPLIED BY OTHERS, UNLESS SPECIFICALLY NOTED AS "BY RB" OR "BY REDBUILT™" HEREIN.
- STRAPS, ANCHORS, CLIPS, AND OTHER HARDWARE NOT SHOWN ARE TO BE PROVIDED BY OTHERS. HARDWARE SHOWN IS TO BE PROVIDED BY OTHERS UNLESS MARKED 'BY RB'. REFER TO THE CONTRACT DOCUMENTS FOR HARDWARE SPECIFICATIONS AND INSTALLATION INSTRUCTIONS.
- REFER TO CURRENT SIMPSON STRONG-TIE® LITERATURE FOR HANGER SPECIFIC INSTALLATION INSTRUCTIONS.
- FOR BEAMS SUPPLIED BY OTHERS, SEE CONTRACT DOCUMENTS FOR SPECIFICATIONS AND OTHER INFORMATION NOT SHOWN HEREIN.
- SEE I-JOIST INSTALLATION SHEET FOR WEB STIFFENER NAILING

FASTENER SIZES

FASTENER TYPE	FASTENER SIZE	FASTENER TYPE	FASTENER SIZE	FASTENER TYPE	FASTENER SIZE
8d (1)	.131" x 2.5"	N8	.131" x 1.5"	#9SD (2)	.131" x 1.5" .131" x 2.5"
10d	.148" x 3"	N10	.148" x 1.5"	#10SD (2)	.162" x 1.5" .162" x 2.5"
12d	.148" x 3.25"	N16	.162" x 2.5"		
16d	.162" x 3.5"				

NOTE: ALL NAILS ARE COMMON UNO

(1) 14 GAUGE STAPLES MAY BE A DIRECT SUBSTITUTE FOR 8d X 2.5" NAILS FOR WEB STIFFENERS ONLY
(2) SD SCREWS PROVIDED BY SIMPSON STRONG-TIE® COMPANY

ABBREVIATIONS

ABBREVIATION	TERMS
AFP	APPROVED FOR PRODUCTION
AOR	ARCHITECT OF RECORD
BLK/BLKG	BLOCKING
BBO	BEAM BY OTHERS
CL	CENTERLINE
COL	COLUMN
DBL	DOUBLE
DL	DEAD LOAD
EOR	ENGINEER OF RECORD
FBO	FRAMING BY OTHERS
FOB	FACE OF BEAM
FOC	FACE OF CONCRETE/CMU
FOS	FACE OF STUD
FOSH	FACE OF SHEATING
GC	GENERAL CONTRACTOR
HDG	HOT-DIPPED GALVANIZED
IBC	INTERNATIONAL BUILDING CODE
LBS	POUNDS
LL	LIVE LOADS
LSL	LAMINATED STRAND LUMBER
LVL	LAMINATED VENEER LUMBER
OFA	OUT FOR APPROVAL
OW	OPEN-WEB TRUSSES BY REDBUILT™
PL	PARTITION LOAD
PLF	POUNDS PER LINEAL FOOT
PLT	PLATE
PSF	POUNDS PER SQUARE FOOT
PSL	PARALLEL STRANDED LUMBER
RB	REDBUILT™
SIM	SIMILAR
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
WF	WIDE FLANGE

PLAN SYMBOLS

- REDBUILT BEARING DETAIL
- ARCHITECT, STRUCTURAL, MEP DETAIL
- FRAMING BY OTHERS (FBO)
- STEP IN FRAMING
- SLOPE IN FRAMING 99:12

FOR ALLOWABLE HOLES, FASTENER INFORMATION OR ATTACHMENT OF SPRINKLER LINES, MECHANICAL DUCTS, ETC. TO REDBUILT JOIST OR TRUSSES,
SCAN THE QR CODE OR USE THE LINK BELOW TO DOWNLOAD A COPY OF OUR "SPRINKLER SYSTEM INSTALLATION GUIDE".

https://www.redbuilt.com/SprinklerSystemInstallationGuide

FOR PRODUCT WARRANTY INFORMATION PLEASE SCAN THE QR CODE OR USE THE LINK BELOW TO ACCESS THE FORM

https://www.redbuilt.com/ProductWarranty

DRAWING NOTES & LEGEND

XX(##) — PRODUCT CALLOUT AND QUANTITY ON PLAN.
"XX" - STRUCTURAL MEMBER TYPE CALLOUT
(##) - QUANTITY OF STRUCTURAL MEMBERS IN BAY

(#) CONTINUOUS HANGER TYPE. SEE HANGER INFO.

ALL DIMENSIONS ARE FROM FACE-OF-STUD, FACE-OF-CONCRETE OR CENTER-OF COLUMN/BEAM UNLESS NOTED OTHERWISE.

THE DESIGN OF REDBUILT PRODUCTS FOR THIS PROJECT IS BASED ON DRY SERVICE CONDITIONS . (AVERAGE EQUILIBRIUM MOISTURE CONTENT OVER A YEAR IS 15% OR LESS AND DOES NOT EXCEED 19%).

I-JOIST NOTES & LEGEND

ALL I-JOISTS WILL BE SENT LONG TO BE FIELD TRIMMED, UNLESS MARKED "PET" ON MATERIAL LIST.

W# — WEB STIFFENER TYPE FOR GENERAL BEARING LOCATIONS OR SPECIFIC DETAIL WHERE SHOWN. SEE MATERIAL LIST.
SEE I-JOIST INSTALLATION SHEET, SECTION 4, FOR WEB STIFFENER NAILING.

OPEN-WEB NOTES & LEGEND

NO MORE THAN **20** TRUSSES PER BAY ARE TO BE INSTALLED BEFORE TOP CHORD SHEATHING IS REQUIRED.

2x4 STARTER STRUT BY OTHERS, REQUIRED DURING TRUSS INSTALLATION. SEE SECTION 5 OF THE OPEN WEB INSTALLATION SHEET.

CONTINUOUS ROW OF METAL STRUT BRACING BY RB, REQUIRED FOR LATERAL SUPPORT DURING TRUSS INSTALLATION. SEE SECTION 5 OF THE OPEN WEB INSTALLATION SHEET.

CONTINUOUS ROW OF 2x4 FLAT BOTTOM CHORD NAILER **RB**. FOR ADDITIONAL INFORMATION. SEE MATERIAL LIST AND DETAIL 8C ON OPEN WEB INSTALLATION SHEET.

#'-#" — INTERMITTENT ROW(S) OF METAL CROSS BRACING BY RB. FOR ADDITIONAL INFORMATION. SEE MATERIAL LIST AND DETAILS 8F & 8G ON OPEN WEB INSTALLATION SHEET. "#'-#" - METAL BRACE LENGTH FROM TIP TO TIP.

RECTANGULAR SECTIONS

R# LOCATION OF BEAM OR COLUMN BY RB. SEE MATERIAL LIST FOR MORE INFORMATION.

ALL REDLAM LVL MATERIAL AND ANY ASSOCIATED HARDWARE PROVIDED BY REDBUILT IS AS SPECIFIED ON THE CONTRACT DRAWINGS, SPECIFICATIONS AND SIZE HAVE NOT BEEN VERIFIED BY REDBUILT ENGINEERING, UNLESS OTHERWISE NOTED.

THIRD PARTY PRODUCTS SOURCED BY REDBUILT

G# LOCATION OF GLULAM BEAM. SEE MATERIAL LIST FOR MORE INFORMATION.

REDBUILT WILL PROVIDE GLULAM BEAMS WITH A 5000' RADIUS CAMBER. VB BEAMS WILL NOT BE CAMBERED.

ALL GLULAM BEAMS BY REDBUILT ARE SUPPLIED BASED ON THE SPECIFICATION SHOWN IN THE CONTRACT DOCUMENTS. REDBUILT SERVICES FOR THESE ITEMS ARE LIMITED TO PLACEMENT DRAWINGS ONLY. APPLICATION AND ADEQUACY REVIEW OF GLULAM BEAMS ARE THE SOLE RESPONSIBILITY OF DESIGN PROFESSIONAL OF RECORD AND ARE NOT PROVIDED BY REDBUILT.

DESIGN INFORMATION

PROJECT ASSUMPTIONS

ALL MISCELLANEOUS ITEMS (SPRINKLER LINES, SOFFIT, DUCTWORK, ELECTRICAL CONDUITS, ETC.) ARE ASSUMED TO BE INCLUDED IN THE UNIFORM DESIGN DEAD LOAD SHOWN, UNLESS SPECIFICALLY SHOWN OTHERWISE ON THESE SHOP DRAWINGS.

ALL OPENINGS (HATCHES, DUCTWORK, SKYLIGHTS, ETC.) ARE ASSUMED TO FIT BETWEEN REGULAR ON-CENTER SPACING AS SHOWN, UNLESS SPECIFICALLY SHOWN OTHERWISE ON THESE SHOP DRAWINGS.

DESIGN CONSIDERATIONS

BUILDING CODE: (2018 IBC)

ROOF DESIGN

SNOW LOAD (@ 115%):	25 PSF
DEAD LOAD:	20 PSF

* 5 PSF INCLUDED IN DESIGN DL FOR FUTURE SOLAR

DESIGN WIND PRESSURE (ULT @ 160%):

ZONE 1'	+16.0/-16.0 PSF
ZONE 1	+16.0/-18.5 PSF
ZONE 2	+16.0/-24.6 PSF
ZONE 3	+16.0/-30.7 PSF

- SPRINKLER LINES ARE ASSUMED TO BE INCLUDED IN DESIGN DEAD LOAD UNLESS NOTED OTHERWISE.

ADDITIONAL LOADING

XXX# -MECHANICAL WEIGHT

========== -WALL LOAD

PRODUCT CALLOUT LEGEND

RED-I JOISTS:
- A# - I45
- B# - I45L
- C# - I55
- D# - I58
- E# - I65
- F# - I90
- J# - I90H
- K# - I90HS

TAPERED RED-I JOISTS:
- X# - TAPERED I45
- Y# - TAPERED I65
- Z# - TAPERED I90

RED-I JOIST SUB-TYPE CALLOUTS (I.E. F4D):
- D - FACTORY ASSEMBLED DOUBLE JOIST

OPENWEB TRUSSES:
- H# - RED-H
- L# - RED-L
- M# - RED-M
- S# - RED-S
- W# - RED-W

OPENWEB TRUSS SUB-TYPE CALLOUTS (I.E. L2W):
- D - FACTORY ASSEMBLED DOUBLE TRUSS WITH LTBs
- H - SINGLE TRUSS WITH FACTORY INSTALLED HEADER CLIPS
- S - SINGLE TRUSS WITH FACTORY INSTALLED LTBs
- W - FACTORY ASSEMBLED WIDE DOUBLE TRUSS WITH LTBs

RECTANGULAR SECTION PRODUCTS:
- G# - GLULAM BEAMS
- P# - PARALLAM BEAMS
- R# - REDLAM BEAMS

ACCESSORIES:
- WS# - WEB STIFFENERS
- BP# - BEVELED BEARING PLATES
- # - HANGERS
- TB## - TENSION BRIDGING
- ##.##' - OPENWEB X-BRACING

PROJECT 3D VIEW

APPROVED FOR PRODUCTION

RedBUILT™ Engineered Wood Products
200 E. Mallard Drive Boise, Idaho 83706 Phone: (866) 839-4757
www.RedBuilt.com

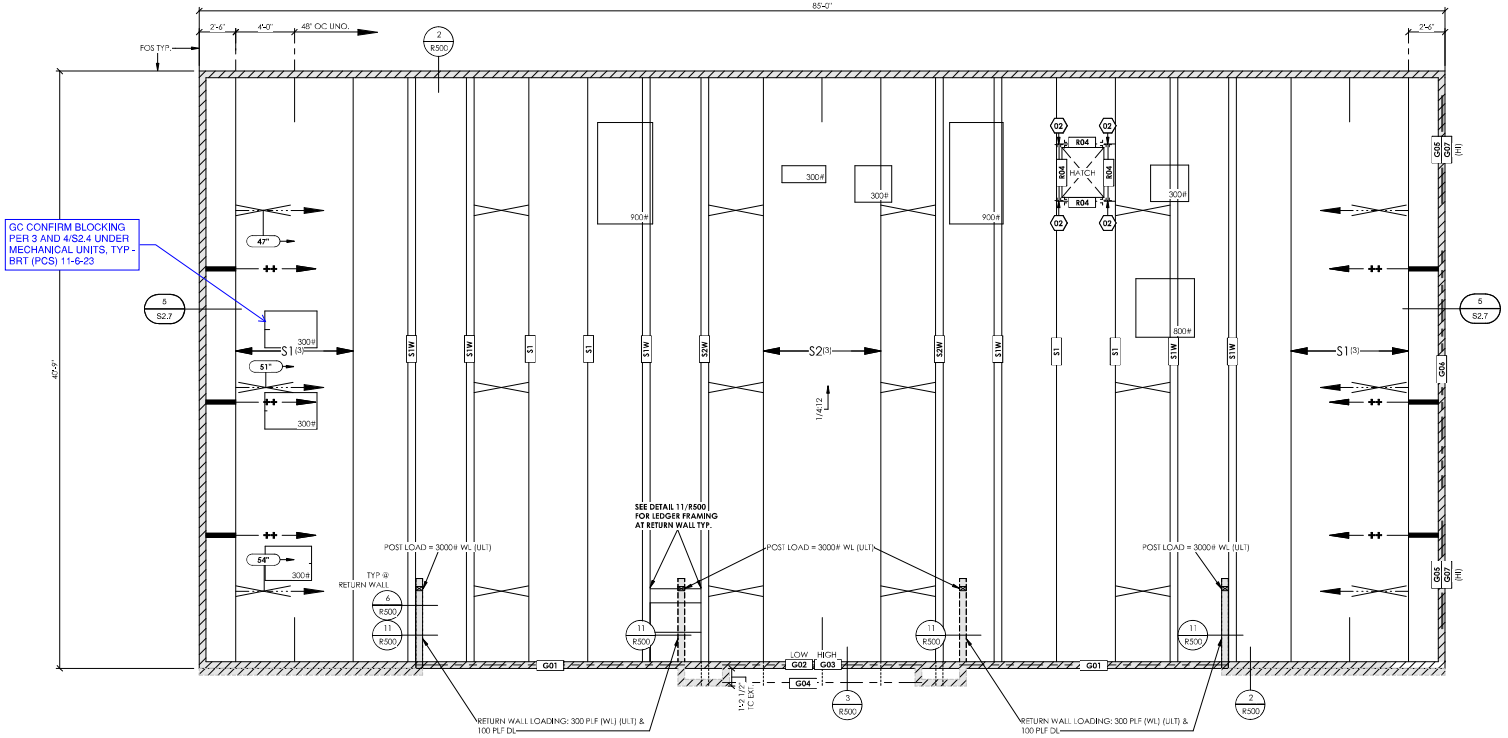
BALTAZAR BEDOLLA — STATE OF WASHINGTON — 57503 — REGISTERED PROFESSIONAL ENGINEER
Digitally signed by Baltazar Bedolla
Date: 2023.11.06 07:16:31 -08'00'

PROJECT: Arco AM/PM
LOCATION: 1402 S MERIDIAN PUYALLUP, WA 98371

#	Description	Date	by
	Revisions		

DRAWN BY: DVT DATE: 11/3/23
CHKD BY: BB DATE: 11/3/23
REDBUILT PROJECT #: 137320
SHEET NAME: PROJECT INFORMATION
SHEET #: R010

THINK SAFETY – READ INSTALLATION INFORMATION BEFORE PROCEEDING



1 ROOF PLACEMENT PLAN
1/4" = 1'-0"

RedBuilt™ Open Web - Trusses

Quantity	Type	OW Description	Clear Span
10	S1	42"/32" Red-S Tapered	39' - 10"
12	S1W	42"/32" Red-S Tapered	39' - 10"
3	S2	42"/32" Red-S Tapered	39' - 10"
4	S2W	42"/32" Red-S Tapered	39' - 10"

CLEAR SPAN IS THE HORIZONTAL DISTANCE BETWEEN THE INSIDE FACE OF BEARING SURFACES.

* NOTE: PLYWOOD EDGE BLOCKING PROVIDED BY RB ON C-STORE ROOF FRAMING @ 4' OC UNO

3rd Party - Glulam Beams (Sourced by RedBuilt™)

Quantity	Type	GLB Description	Cut Length	Camber	Appearance
2	G01	5.125x16.5-24F-V4	20' - 0"	5000	Architectural
1	G02	5.125x12-24F-V4	14' - 0"	5000	Architectural
1	G03	5.125x15-24F-V4	14' - 0"	5000	Architectural
1	G04	5.125x12-24F-V4	14' - 0"	5000	Architectural
2	G05	5.125x16.5-24F-V4	8' - 0"	5000	Industrial
2	G06	5.125x16.5-24F-V8	17' - 0"	0*	Industrial
2	G07	5.125x16.5-24F-V8	8' - 0"	0*	Industrial

RedLam™ Products - LVL Beams

Quantity	Type	Description	Cut Length
4	K04	1 3/4"x11 7/8" 2.0E RedLam LVL	4' - 0"

TYPE "R804" USED FOR ROOF HATCH.

3rd Party - Connectors (Sourced by RedBuilt™) C-Store

Quantity	Type	Model	Fasteners		
			Top	Face	Member
8	02	ITS1.81/11.88	4-N10	4-N10	4-N10

- SEE SHEET R010 FOR SYMBOLOGY, TAG CALLOUTS AND GENERAL NOTES NOT SHOWN HEREIN.
- SEE 'MATERIAL LISTS' & 'CALCULATION PACKAGE' FOR DETAILED INFORMATION ON MATERIALS HEREIN SUPPLIED BY REDBUILT.

APPROVED FOR PRODUCTION

☐ Conforms to Design Concept
☒ Conforms to Design Concept as Noted
☐ Does Not Conform – Revise & Resubmit

Checking is only for conformance with the design concept of the project. Contractor is responsible for dimensions to be confirmed and correlated at the job site; for information that pertains solely to the fabrication processes or to techniques of construction; and for the coordination of the work of all trades.

By BRT Date 11/6/2023

PCS Structural Solutions
101 SW Main Street, Suite 200
Portland, OR 98702 503-233-3746

Checking by PCS is only for conformance of design criteria and concept. Structural performance of the supplier designed components is the responsibility of the components structural engineer. BRT 11/6/2023

THINK SAFETY – READ INSTALLATION INFORMATION BEFORE PROCEEDING

RedBuilt™
Engineered Wood Products
200 E. Mallard Drive Boise, Idaho 83706 Phone: (866) 839-6757
www.RedBuilt.com

BALTAZAR BEDOLLA
STATE OF WASHINGTON
57503
REGISTERED PROFESSIONAL ENGINEER

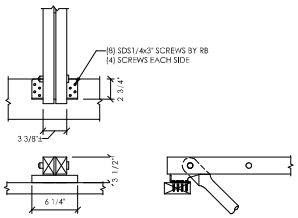
Digitally signed by Baltazar Bedolla
Date: 2023.11.06 07:16:26-08'00'

PROJECT: Arco AM/PM
LOCATION: 1402 S MERIDIAN PUYALLUP, WA 98371

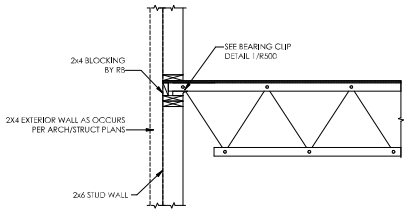
#	Description	Date	by
	Revisions		

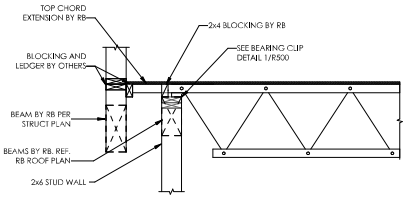
DRAWN BY: DVT DATE: 11/3/23
CHK'D BY: BB DATE: 11/3/23
REDBUILT PROJECT #: 137320
SHEET NAME: ROOF PLACEMENT PLAN
SHEET #: R130

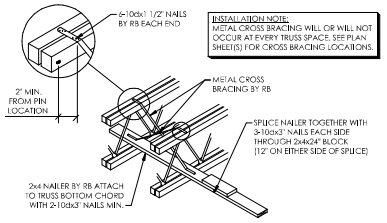
PRCNC20231424



RED-S HEAVY BEARING CLIP
TOP CHORD BEARING

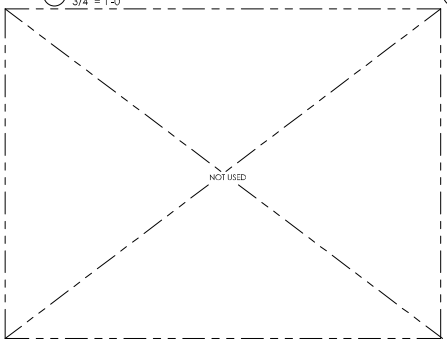




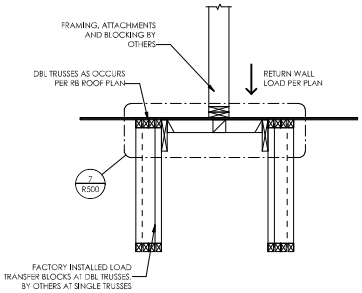


RED-S, RED-M AND RED-H
CROSS BRACING (TRUSS TO NAILER)

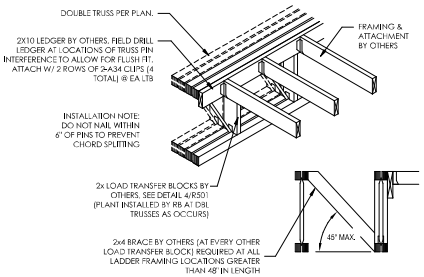
1 Heavy Red-S
3/4" = 1'-0"



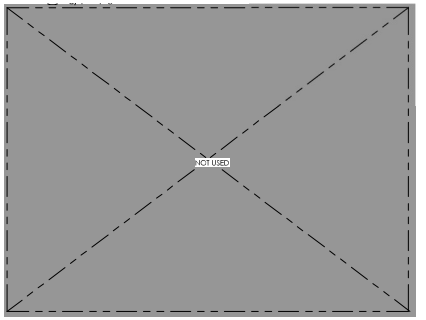
2 N.T.S. Ref. 1 & 2/S2.7
3/4" = 1'-0"



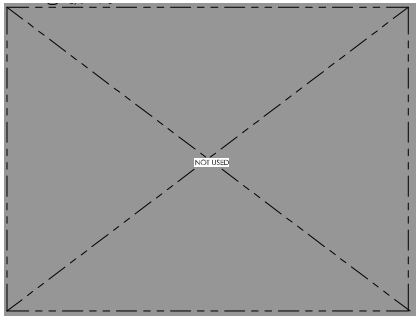
3 N.T.S. Ref. 5/S2.5
3/4" = 1'-0"



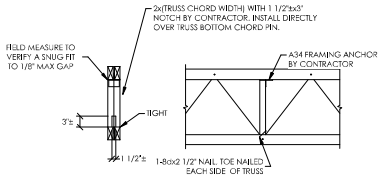
4 N.T.S. OW XBracing
3/4" = 1'-0"



5 N.T.S. OW XBracing
3/4" = 1'-0"

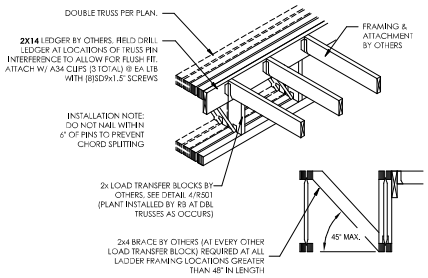


6 Parallel Tower Wall
3/4" = 1'-0"



DOUBLE CHORD LOAD TRANSFER BLOCK BY OTHERS

7 Ladder Framing By Others
3/4" = 1'-0"



8 N.T.S. Ref. 5/CWS2.4
3/4" = 1'-0"

9 N.T.S. Ref. 6/CWS2.4
3/4" = 1'-0"

10 Load Transfer Block By Others
3/4" = 1'-0"

11 Ladder Framing By Others Copy 1
3/4" = 1'-0"

- STRAPS, ANCHORS, CLIPS, AND OTHER HARDWARE NOT SHOWN ARE TO BE PROVIDED BY OTHERS. HARDWARE SHOWN IS TO BE PROVIDED BY OTHERS UNLESS MARKED "BY RB." REFER TO THE CONTRACT DOCUMENTS FOR HARDWARE SPECIFICATIONS AND INSTALLATION INSTRUCTIONS.
- SEE I-JOIST INSTALLATION SHEET FOR WEB STIFFENER NAILING.
- FOR BEAMS SUPPLIED BY OTHERS. SEE CONTRACT DOCUMENTS FOR SPECIFICATIONS AND OTHER INFORMATION NOT SHOWN HEREIN.
- FOR ATTACHMENT OF SPRINKLER LINES, MECHANICAL DUCTS, ETC... TO JOISTS OR TRUSSES, PLEASE SEE "SPRINKLER SYSTEM INSTALLATION GUIDELINES". IF ADDITIONAL COPIES ARE REQUIRED, PLEASE CONTACT REDBUILT OR GO ONLINE TO: HTTP://WWW.REDBUILT.COM

APPROVED FOR PRODUCTION

RedBuilt™
Engineered Wood Products
200 E. Mallard Drive Boise, Idaho 83706 Phone: (866) 859-6757
www.RedBuilt.com

BALTAZAR BEDOLLA
STATE OF WASHINGTON
57503
REGISTERED PROFESSIONAL ENGINEER
Digitally signed by Baltazar Bedolla
Date: 2023.11.06 07:16:21 -08'00'

PROJECT: Arco AM/PM
LOCATION: 1402 S MERIDIAN PUYALLUP, WA 98371

#	by	Description	Date
		Revisions	

DRAWN BY: DVT DATE: 11/3/23
CHK'D BY: BB DATE: 11/3/23
REDBUILT PROJECT #: 137320
SHEET NAME: DETAILS
SHEET #: R500