

FINAL SHOP DRAWINGS

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

Project Name: McDonald's (Site ID: 046-1180)

Project Address: PUYALLUP, WA

Project Number: 142875

Project Description:

PROJECT INFORMATION:

Current Submittal: APPROVED FOR PRODUCTION

REFERENCE DOC	UMENTS:				
DISCIPLINE	ВҮ	DATE	revision#	TYPE	SHEETS
Architectural	PM DESIGN INC.	12/10/24			Full Set
Structural	WCD	9/17/24			Full Set
Mechanical	PM DESIGN INC.	12/10/24			Full Set

PROJECT CONTACTS:

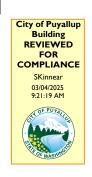
Technical Representative:

Ryan Benedetti (740) 368-4226 rbenedetti@redbuilt.com

<u>Design Technician:</u>

Isabelle Boicourt (208) 364-1357

iboicourt@redbuilt.com





Digitally signed by Daniel Gerichs Date: 2025.02.14 09:09:39-07'00'

City of Puyallup
Development & Permitting Services
(ISSUED PERMIT
Building Planning
Engineering Public Works
Fire Traffic

PRCNC20241917

Material List and Calculations pp: 1-15

Shop Drawings pp: R001-R500

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

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

RedBuilt LLC - (866) 859-6757 | | PRODUCT ACCEPTANCE | Redlam™ LVL: ESR-2993, LABC/LARC Supplement | Red-I™ Joist: ESR-2994,LABC/LARC Supplement | Red-L™, Red-W™, Red-M™, Red-H™ Truss: ESR-1774, LABC/LARC Supplement, DSA





RB Number 142875
Project Name McDonald's (ID: 046-1180)
Location Puyallup, WA

Delivery D1: Roof
Plant Delaware



Operator VR
Office Boise

Comment
Status Approved For Production
Report Type Customer

RedBui	lt™ Ope	en-Web Prod	lucts	Trusses									
Quantity	Туре	Series	Depth(s)	Appl.	Profile	Clear Span	Pr. Length	Pr. Load	Fastnrs. Left	Fastnrs. Right		Footage	Notes
25	S1	Red-S	28/35.1/28	115%	Radius Pitched	37'-10.00"	39.0	212.9	10-SD9x1.5	10-SD9x1.5		975.0	
2	S1D	Red-S	28/35.1/28	115%	Radius Pitched	37'-10.00"	39.0	212.9	10-SD9x1.5	10-SD9x1.5		78.0	
8	S1S	Red-S	28/35.1/28	115%	Radius Pitched	37'-10.00"	39.0	212.9	10-SD9x1.5	10-SD9x1.5		312.0	
8	S1W	Red-S	28/35.1/28	115%	Radius Pitched	37'-10.00"	39.0	212.9	10-SD9x1.5	10-SD9x1.5		312.0	
43		Red-S			• • • • • • • •						Total	1677.0	

RedBuil	lt™ Ope	en-Web Prod	ducts	Blocking					
Quantity	Туре	Size	Length	Net	Custom Width	Series & Clip	Spacing	Tight To	Notes
200		4x4	Continuous (ft)	Nom		Red-S - S-Clip	32	Bearing Clip	

RedBuil	lt™ Ope	en-Web Prod	ucts	Bottom Chord Nailer	
Lineal Ft	Туре	Size	Grade		Notes
180		2x4			

RedBuil	t™ Ope	n-Web Prod	ucts	Strut Braci	ing	
Quantity	Туре	Style	Spacing	Series		Notes
48		W5	32	Red-S		
4		W5	24	Red-S		
4		W5	48	Red-S		

RedBuil	t™ Ope	n-Web Prod	ucts	Cross Bra	cing					
Quantity	Туре	Style	Length		Bend Profile	Uplift Application	Depth	Spacing		Notes
40	B2	B2	41.000			Wind Uplift 30"+	30			

RedBui	lt™ Ope	en-Web Prod	ucts	Load Tran	sfer Blocks			
Quantity	Туре	Series	Size	Depth	Material	Net Length		Notes
60		Red-S	Single	35.1	Standard	30.50		

RedLan	n™ LVL	Products		LVL Bear	ns							
Quantity	Туре	Size	Length	Grade	P.E.T.	Multi-Ply Substi	tution				Footage	Notes
4	R01	5.25x9.5	5'-0.00"	2.0E	No	Allowed					20.0	
2	R02	5.25x9.5	4'-0.00"	2.0E	No	Allowed					8.0	
1	R03	5.25x9.5	6'-0.00"	2.0E	No	Allowed					6.0	
1	R04	5.25x9.5	8'-0.00"	2.0E	No	Allowed					8.0	
1	DRG1	1.75x3.5	40'-0.00"	2.0E	No	N/A					40.0	
8		5.25x9.5						 • • • • •	• • • • •	Total	42.0	
1		1.75x3.5						 		Total	40.0	

RedBuil	lt™ Pro	ducts		Bearing Pl	Bearing Plate									
Lineal Ft	Туре	Size	Net	Beveled	Min. Length (ft)	Grade	Profile	Angle	Thick	Thin	Width	W2	Notes	
200	BP1	2x6	Nom	Bev. (Sgl.)			P1	1.8	1.500	1.313	5.500			

			Hardware	
Quantity	Type	Description		Notes
5.0 lb		8dx1.5" Nails (0.131"x1.5")		
7.0 lb		10dx1.5" Nails (0.148"x1.5")		
860		SD9x1.5 Screw		
144		A35 Framing Anchor		

			Straps			
Quantity	Туре	Description		Fasteners		Notes
1		MSTC40		46-N10		

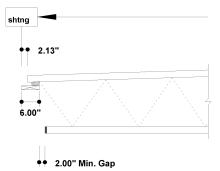


Delivery: R1
Del. Desc.: Roof

Type: S1 Qty: 25

Project Number: 142875

THIS PRODUCT MEETS OR EXCEEDS THE SET DESIGN CONTROLS FOR THE APPLICATION AND LOADS LISTED Reference Span = 38' 10.000"

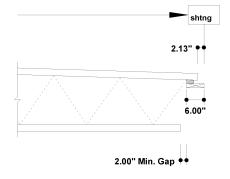


28.000"/35.100"/28.000" Red-S™ OPEN WEB TRUSS

Radius Pitched Profile

Clear Span = 37' 10.000"

Top Chord Slope: Left = .375/12, Right = -.375/12 Bot Chord Slope = 0 Ridge at 19' 5.000" from left reference point



All dimensions are horizontal.

Product diagram is conceptual.

LOADS

Analysis for Open-web Member Supporting SNOW Structural Classification. Loads (psf): 20 Snow at 115% duration, 20 Dead (top chord), 0 Dead (bottom chord), @ 32.000" O.C. and:

LOAD GROUP #1 @ 40.000" O.C.-900# & 260# Mech units (S1S)

TYPE	CLASS	LIVE	DEAD	LOCATION(1)	APPL	APPLIED TO	COMMENT
Point(plf)	W(1.60)	275	0	3' 0.000"	Adds to	TC, on chord(s)	Brace
Point(plf)	W(1.60)	275	0	35' 10.000"	Adds to	TC, on chord(s)	Brace
Point(lbs)	S(1.15)	0	150	8' 8.250"	Adds to	TC, on chord(s)	Mech (900/6)
Point(lbs)	S(1.15)	0	150	13' 8.250"	Adds to	TC, on chord(s)	Mech (900/6)
Point(lbs)	S(1.15)	0	65	20' 2.500"	Adds to	TC, on chord(s)	Mech (260/4)
Point(lbs)	S(1.15)	0	65	22' 8.250"	Adds to	TC, on chord(s)	Mech (260/4)
Point(lbs)	S(1.15)	0	65	23' 3.000"	Adds to	TC, on chord(s)	Mech (260/4)
Point(lbs)	S(1.15)	0	65	25' 3.000"	Adds to	TC, on chord(s)	Mech (260/4)
Tapered(psf)	S(1.15)	40 to 0	0 to 0	6.000" to 9' 6.000"	Adds to	TC	Drift
Tapered(psf)	S(1.15)	0 to 40	0 to 0	29' 4.000" to 38' 4.000"	Adds to	TC	Drift

LOAD GROUP #2 @ 34.000" O.C.-900# & 2900# Mech units (S1S)

TYPE	CLASS	LIVE	DEAD	LOCATION(1)	APPL	APPLIED TO	COMMENT
Point(plf)	W(1.60)	275	0	3' 0.000"	Adds to	TC, on chord(s)	Brace
Point(plf)	W(1.60)	275	0	35' 10.000"	Adds to	TC, on chord(s)	Brace
Point(lbs)	S(1.15)	0	150	9' 6.500"	Adds to	TC, on chord(s)	Mech (900/6)
Point(lbs)	S(1.15)	0	150	14' 6.500"	Adds to	TC, on chord(s)	Mech (900/6)
Point(lbs)	S(1.15)	0	363	22' 1.250"	Adds to	TC, on chord(s)	Mech (2900/8)
Point(lbs)	S(1.15)	0	363	28' 10.000"	Adds to	TC, on chord(s)	Mech (2900/8)
Tapered(psf)	S(1.15)	40 to 0	0 to 0	2.130" to 9' 6.000"	Adds to	TC	Drift
Tapered(psf)	S(1.15)	0 to 40	0 to 0	29' 4.000" to 38' 7.870"	Adds to	TC	Drift

LOAD GROUP #3 @ 34.000" O.C.-Typ. truss w/mult cond's

TYPE	CLASS	LIVE	DEAD	LOCATION(1)	APPL	APPLIED TO	COMMENT
Point(plf)	W(1.60)	275	0	3' 0.000"	Adds to	TC, on chord(s)	Brace
Point(plf)	W(1.60)	275	0	35' 10.000"	Adds to	TC, on chord(s)	Brace
Point(lbs)	S(1.15)	0	65	20' 3.000"	Adds to	TC, on chord(s)	260/4
Point(lbs)	S(1.15)	0	65	22' 3.000"	Adds to	TC, on chord(s)	260/4
Point(lbs)	S(1.15)	0	65	23' 3.000"	Adds to	TC, on chord(s)	260/4
Point(lbs)	S(1.15)	0	65	25' 3.000"	Adds to	TC, on chord(s)	260/4
Point(lbs)	S(1.15)	0	37.5	8' 5.500"	Adds to	TC, on chord(s)	150/4
Point(lbs)	S(1.15)	0	37.5	10' 6.250"	Adds to	TC, on chord(s)	150/4
Point(lbs)	S(1.15)	0	75	20' 3.000"	Adds to	TC, on chord(s)	150/2
Point(lbs)	S(1.15)	0	75	22' 3.500"	Adds to	TC, on chord(s)	150/2
Point(lbs)	S(1.15)	0	37.5	29' 4.000"	Adds to	TC, on chord(s)	150/4
Point(lbs)	S(1.15)	0	37.5	31' 4.500"	Adds to	TC, on chord(s)	150/4
Tapered(psf)	S(1.15)	40 to 0	0 to 0	2.130" to 9' 6.000"	Adds to	TC	Drift
Tapered(psf)	S(1.15)	0 to 40	0 to 0	29' 4.000" to 38' 7.870"	Adds to	TC	Drift

TYPE	CLASS	LIVE	DEAD	LOCATION(1)	APPL	APPLIED TO	COMMENT
Uniform(plf)	W(1.60)	69	0	2.130" to 38' 7.870"	Adds to	TC	Parallel Brace
Point(lbs)	S(1.15)	0	150	8' 5.750"	Adds to	TC, on chord(s)	Mech (900/6)
Point(lbs)	S(1.15)	0	150	15' 7.000"	Adds to	TC, on chord(s)	Mech (900/6)
Tapered(psf)	S(1.15)	7 to 0	0 to 0	2.130" to 3' 6.000"	Adds to	TC	Drift
Tapered(psf)	S(1.15)	0 to 7	0 to 0	35' 0.000" to 38' 7.870"	Adds to	TC	Drift
Uniform(psf)	S(1.15)	25.3	0	2.130" to 38' 7.870"	Adds to	TC	// Drift



RedOpenWeb™ v5.0.33 2/11/2025 12:44:08 PM PAGE 2 Project: McDonald's (ID:046-1180)

Location: Puyallup, WA

Delivery: R1
Del. Desc.: Roof

Type: S1 Qty: 25

Project Number: 142875

LOAD GROUP #5 @ 41.000" O.C.-Uplift (Typ)

TYPE	CLASS	LIVE	DEAD	LOCATION(1)	APPL	APPLIED TO	COMMENT
Point(plf)	W(1.60)	-320	0	3' 0.000"	Adds to	TC, on chord(s)	Brace
Point(plf)	W(1.60)	-320	0	35' 10.000"	Adds to	TC, on chord(s)	Brace
Uniform(psf)	W(1.60)	-5.1	.1	3' 0.000" to 35' 10.000"	Replaces	TC	Net uplift

LOAD GROUP #6 @ 16.500" O.C.-Uplift @ Brace

TYPE	CLASS	LIVE	DEAD	LOCATION(1)	APPL	APPLIED TO	COMMENT
Uniform(psf)	W(1.60)	-5.1	.1	3' 0.000" to 35' 10.000"	Replaces	TC	Net uplift
Uniform(plf)	W(1.60)	-80	0	3' 0.000" to 35' 10.000"	Adds to	TC	Parallel Brace

LOAD GROUP #7 @ 41.000" O.C.-900# Mech 3rd FL (S1S)

TYPE	CLASS	LIVE	DEAD	LOCATION(1)	APPL	APPLIED TO	COMMENT
Point(plf)	W(1.60)	275	0	3' 0.000"	Adds to	TC, on chord(s)	Brace
Point(plf)	W(1.60)	275	0	35' 10.000"	Adds to	TC, on chord(s)	Brace
Point(lbs)	S(1.15)	0	225	8' 5.750"	Adds to	TC, on chord(s)	900/4
Point(lbs)	S(1.15)	0	225	15' 7.000"	Adds to	TC, on chord(s)	900/4
Tapered(psf)	S(1.15)	29.6 to 0	0 to 0	2.130" to 9' 6.000"	Adds to	TC	Drift
Tapered(psf)	S(1.15)	0 to 29.6	0 to 0	29' 4.000" to 38' 7.870"	Adds to	TC	Drift
Uniform(psf)	S(1.15)	10.4	0	2.130" to 38' 7.870"	Adds to	TC	Snow

(1) Location is specified from left reference point unless noted otherwise.

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

DESIGN CONTROLS

Truss Member's Critical Design Component Value: 99.2% (Design / Allowable) Truss design includes consideration for partial span application live load.

REACTIONS		LEFT MAXIMUM	LEFT MINIMUM	RIGHT MAXIMUM	RIGHT MINIMUM
	Total Load (lbs)	4184 W (1.60)	-1381 W (1.60)	4009 W (1.60)	-1381 W (1.60)

Live Load (lbs) 2557 -1428 2557 -1428

DEFLECTIONS & CAMBER

Deflection (Total Load) Span: 1.502" (L/302)
Deflection (Live Load) Span: 0.862" (L/527)

Center Span Camber: 0.613", Recommended

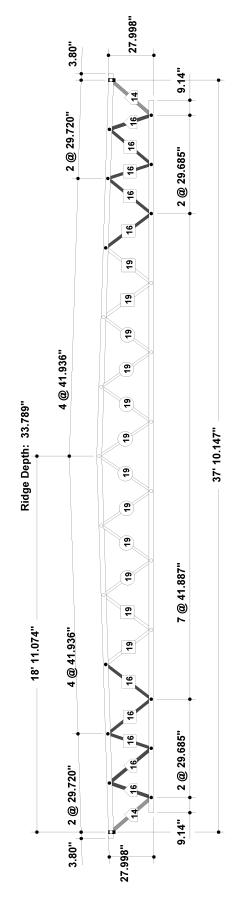
ADDITIONAL NOTES

- 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 ICC analyzing the RedBuilt™ custom products listed above with chords analyzed using RedBuilt™ analysis.
- Pricing Load = 212.9 plf

OPERATOR INFORMATION

Ryan Benedetti, RedBuilt, LLC, 740-368-4226





Left First Web Distance:

20.958" 2-1.50X 2.3" RedLam™ LVL 2-1.50X 2.3" RedLam™ LVL 0.613" Top Chord Material: Bottom Chord Material:

Camber: Bottom Chord Slope:

Red-S™ SERIES LEGEND

S-Clip @ LEFT TOP PIN# 1. S-Clip @ RIGHT TOP PIN# 13.

WEB, 1" DIA. & WEB GAUGE

1 1/2" DIA.

3/4" DIA. PIN

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Project: McDonald's (ID:046-1180) Truss ID: S1 Quantity: 25 Location: Puyallup, WA Delivery: R1

Project Number: 142875

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1/2" DIA. PIN 1 1/4" DIA.

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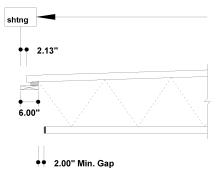


Delivery: R1
Del. Desc.: Roof

Type: S1D Qty: 2

Project Number: 142875

THIS PRODUCT MEETS OR EXCEEDS THE SET DESIGN CONTROLS FOR THE APPLICATION AND LOADS LISTED Reference Span = 38' 10.000"

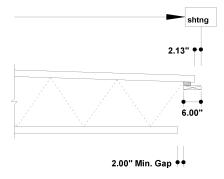


28.000"/35.100"/28.000" Red-S™ OPEN WEB TRUSS

Radius Pitched Profile

Clear Span = 37' 10.000"

Top Chord Slope: Left = .375/12, Right = -.375/12
Bot Chord Slope = 0
Ridge at 19' 5.000" from left reference point



All dimensions are horizontal.

Product diagram is conceptual.

LOADS

Analysis for Open-web Member Supporting SNOW Structural Classification.

Loads (psf): 20 Snow at 115% duration, 20 Dead (top chord), 0 Dead (bottom chord), @ 32.000" O.C. and:

LOAD GROUP #1 @ 40.000" O.C.-900# & 260# Mech units (S1S)

TYPE	CLASS	LIVE	DEAD	LOCATION(1)	APPL	APPLIED TO	COMMENT
Point(plf)	W(1.60)	275	0	3' 0.000"	Adds to	TC, on chord(s)	Brace
Point(plf)	W(1.60)	275	0	35' 10.000"	Adds to	TC, on chord(s)	Brace
Point(lbs)	S(1.15)	0	150	8' 8.250"	Adds to	TC, on chord(s)	Mech (900/6)
Point(lbs)	S(1.15)	0	150	13' 8.250"	Adds to	TC, on chord(s)	Mech (900/6)
Point(lbs)	S(1.15)	0	65	20' 2.500"	Adds to	TC, on chord(s)	Mech (260/4)
Point(lbs)	S(1.15)	0	65	22' 8.250"	Adds to	TC, on chord(s)	Mech (260/4)
Point(lbs)	S(1.15)	0	65	23' 3.000"	Adds to	TC, on chord(s)	Mech (260/4)
Point(lbs)	S(1.15)	0	65	25' 3.000"	Adds to	TC, on chord(s)	Mech (260/4)
Tapered(psf)	S(1.15)	40 to 0	0 to 0	6.000" to 9' 6.000"	Adds to	TC	Drift
Tapered(psf)	S(1.15)	0 to 40	0 to 0	29' 4.000" to 38' 4.000"	Adds to	TC	Drift

LOAD GROUP #2 @ 34.000" O.C.-900# & 2900# Mech units (S1S)

TYPE	CLASS	LIVE	DEAD	LOCATION(1)	APPL	APPLIED TO	COMMENT
Point(plf)	W(1.60)	275	0	3' 0.000"	Adds to	TC, on chord(s)	Brace
Point(plf)	W(1.60)	275	0	35' 10.000"	Adds to	TC, on chord(s)	Brace
Point(lbs)	S(1.15)	0	150	9' 6.500"	Adds to	TC, on chord(s)	Mech (900/6)
Point(lbs)	S(1.15)	0	150	14' 6.500"	Adds to	TC, on chord(s)	Mech (900/6)
Point(lbs)	S(1.15)	0	363	22' 1.250"	Adds to	TC, on chord(s)	Mech (2900/8)
Point(lbs)	S(1.15)	0	363	28' 10.000"	Adds to	TC, on chord(s)	Mech (2900/8)
Tapered(psf)	S(1.15)	40 to 0	0 to 0	2.130" to 9' 6.000"	Adds to	TC	Drift
Tapered(psf)	S(1.15)	0 to 40	0 to 0	29' 4.000" to 38' 7.870"	Adds to	TC	Drift

LOAD GROUP #3 @ 34.000" O.C.-Typ. truss w/mult cond's

	_						
TYPE	CLASS	LIVE	DEAD	LOCATION(1)	APPL	APPLIED TO	COMMENT
Point(plf)	W(1.60)	275	0	3' 0.000"	Adds to	TC, on chord(s)	Brace
Point(plf)	W(1.60)	275	0	35' 10.000"	Adds to	TC, on chord(s)	Brace
Point(lbs)	S(1.15)	0	65	20' 3.000"	Adds to	TC, on chord(s)	260/4
Point(lbs)	S(1.15)	0	65	22' 3.000"	Adds to	TC, on chord(s)	260/4
Point(lbs)	S(1.15)	0	65	23' 3.000"	Adds to	TC, on chord(s)	260/4
Point(lbs)	S(1.15)	0	65	25' 3.000"	Adds to	TC, on chord(s)	260/4
Point(lbs)	S(1.15)	0	37.5	8' 5.500"	Adds to	TC, on chord(s)	150/4
Point(lbs)	S(1.15)	0	37.5	10' 6.250"	Adds to	TC, on chord(s)	150/4
Point(lbs)	S(1.15)	0	75	20' 3.000"	Adds to	TC, on chord(s)	150/2
Point(lbs)	S(1.15)	0	75	22' 3.500"	Adds to	TC, on chord(s)	150/2
Point(lbs)	S(1.15)	0	37.5	29' 4.000"	Adds to	TC, on chord(s)	150/4
Point(lbs)	S(1.15)	0	37.5	31' 4.500"	Adds to	TC, on chord(s)	150/4
Tapered(psf)	S(1.15)	40 to 0	0 to 0	2.130" to 9' 6.000"	Adds to	TC	Drift
Tapered(psf)	S(1.15)	0 to 40	0 to 0	29' 4.000" to 38' 7.870"	Adds to	TC	Drift

TYPE	CLASS	LIVE	DEAD	LOCATION(1)	APPL	APPLIED TO	COMMENT
Uniform(plf)	W(1.60)	69	0	2.130" to 38' 7.870"	Adds to	TC	Parallel Brace
Point(lbs)	S(1.15)	0	150	8' 5.750"	Adds to	TC, on chord(s)	Mech (900/6)
Point(lbs)	S(1.15)	0	150	15' 7.000"	Adds to	TC, on chord(s)	Mech (900/6)
Tapered(psf)	S(1.15)	7 to 0	0 to 0	2.130" to 3' 6.000"	Adds to	TC	Drift
Tapered(psf)	S(1.15)	0 to 7	0 to 0	35' 0.000" to 38' 7.870"	Adds to	TC	Drift
Uniform(psf)	S(1.15)	25.3	0	2.130" to 38' 7.870"	Adds to	TC	// Drift



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Project: McDonald's (ID:046-1180)

Location: Puyallup, WA

Delivery: R1
Del. Desc.: Roof

Type: S1D Qty: 2

Project Number: 142875

LOAD GROUP #5 @ 41.000" O.C.-Uplift (Typ)

TYPE	CLASS	LIVE	DEAD	LOCATION(1)	APPL	APPLIED TO	COMMENT
Point(plf)	W(1.60)	-320	0	3' 0.000"	Adds to	TC, on chord(s)	Brace
Point(plf)	W(1.60)	-320	0	35' 10.000"	Adds to	TC, on chord(s)	Brace
Uniform(psf)	W(1.60)	-5.1	.1	3' 0.000" to 35' 10.000"	Replaces	TC	Net uplift

LOAD GROUP #6 @ 16.500" O.C.-Uplift @ Brace

TYPE	CLASS	LIVE	DEAD	LOCATION(1)	APPL	APPLIED TO	COMMENT
Uniform(psf)	W(1.60)	-5.1	.1	3' 0.000" to 35' 10.000"	Replaces	TC	Net uplift
Uniform(plf)	W(1.60)	-80	0	3' 0.000" to 35' 10.000"	Adds to	TC	Parallel Brace

LOAD GROUP #7 @ 41.000" O.C.-900# Mech 3rd FL (S1S)

TYPE	CLASS	LIVE	DEAD	LOCATION(1)	APPL	APPLIED TO	COMMENT
Point(plf)	W(1.60)	275	0	3' 0.000"	Adds to	TC, on chord(s)	Brace
Point(plf)	W(1.60)	275	0	35' 10.000"	Adds to	TC, on chord(s)	Brace
Point(lbs)	S(1.15)	0	225	8' 5.750"	Adds to	TC, on chord(s)	900/4
Point(lbs)	S(1.15)	0	225	15' 7.000"	Adds to	TC, on chord(s)	900/4
Tapered(psf)	S(1.15)	29.6 to 0	0 to 0	2.130" to 9' 6.000"	Adds to	TC	Drift
Tapered(psf)	S(1.15)	0 to 29.6	0 to 0	29' 4.000" to 38' 7.870"	Adds to	TC	Drift
Uniform(psf)	S(1.15)	10.4	0	2.130" to 38' 7.870"	Adds to	TC	Snow

(1) Location is specified from left reference point unless noted otherwise.

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

DESIGN CONTROLS

Truss Member's Critical Design Component Value: 99.2% (Design / Allowable) Truss design includes consideration for partial span application live load.

REACTIONS		LEFT MAXIMUM	LEFT MINIMUM	RIGHT MAXIMUM	RIGHT MINIMUM
	Total Load (lbs)	4184 W (1.60)	-1381 W (1.60)	4009 W (1.60)	-1381 W (1.60)

Live Load (lbs) 2557 -1428 2557 -1428

DEFLECTIONS & CAMBER

Deflection (Total Load) Span: 1.502" (L/302)
Deflection (Live Load) Span: 0.862" (L/527)

Center Span Camber: 0.613", Recommended

ADDITIONAL NOTES

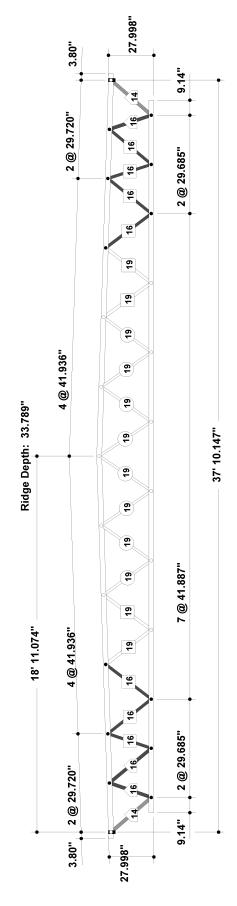
- IMPORTANT! The analysis presented is output from software developed by RedBuilt LLC. Allowable product values shown are in accordance with current RedBuilt™ materials and code accepted design values. RedBuilt™ Engineering has verified the analysis. The input loads and dimensions have been provided 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 ICC analyzing the RedBuilt™ custom products listed above with chords analyzed using RedBuilt™ analysis.
- Pricing Load = 212.9 plf

OPERATOR INFORMATION

<Program User's Name>, <Program User's Phone Number>

DO NOT SCALE THIS TRUSS PROFILE





Left First Web Distance:

20.958" 2-1.50X 2.3" RedLam™ LVL 2-1.50X 2.3" RedLam™ LVL 0.613" Top Chord Material: Bottom Chord Material:

Camber: Bottom Chord Slope:

Red-S™ SERIES LEGEND

S-Clip @ LEFT TOP PIN# 1. S-Clip @ RIGHT TOP PIN# 13.

Project: McDonald's (ID:046-1180) Truss ID: S1D Quantity: 2

Project Number: 142875 Location: Puyallup, WA Delivery: R1

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1 1/2" DIA.

•

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

1/2" DIA. PIN 1 1/4" DIA.

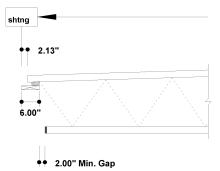


Delivery: R1
Del. Desc.: Roof

Type: S1S Qty: 8

Project Number: 142875

THIS PRODUCT MEETS OR EXCEEDS THE SET DESIGN CONTROLS FOR THE APPLICATION AND LOADS LISTED Reference Span = 38' 10.000"

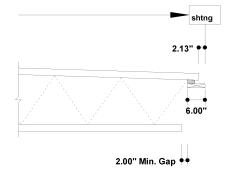


28.000"/35.100"/28.000" Red-S™ OPEN WEB TRUSS

Radius Pitched Profile

Clear Span = 37' 10.000"

Top Chord Slope: Left = .375/12, Right = -.375/12
Bot Chord Slope = 0
Ridge at 19' 5.000" from left reference point



All dimensions are horizontal.

Product diagram is conceptual.

COMMENT

LOADS

TYPE

Analysis for Open-web Member Supporting SNOW Structural Classification.

Loads (psf): 20 Snow at 115% duration, 20 Dead (top chord), 0 Dead (bottom chord), @ 32.000" O.C. and:

LOAD GROUP #1 @ 40.000" O.C.-900# & 260# Mech units (S1S)

TYPE	CLASS	LIVE	DEAD	LOCATION(1)	APPL	APPLIED TO	COMMENT
Point(plf)	W(1.60)	275	0	3' 0.000"	Adds to	TC, on chord(s)	Brace
Point(plf)	W(1.60)	275	0	35' 10.000"	Adds to	TC, on chord(s)	Brace
Point(lbs)	S(1.15)	0	150	8' 8.250"	Adds to	TC, on chord(s)	Mech (900/6)
Point(lbs)	S(1.15)	0	150	13' 8.250"	Adds to	TC, on chord(s)	Mech (900/6)
Point(lbs)	S(1.15)	0	65	20' 2.500"	Adds to	TC, on chord(s)	Mech (260/4)
Point(lbs)	S(1.15)	0	65	22' 8.250"	Adds to	TC, on chord(s)	Mech (260/4)
Point(lbs)	S(1.15)	0	65	23' 3.000"	Adds to	TC, on chord(s)	Mech (260/4)
Point(lbs)	S(1.15)	0	65	25' 3.000"	Adds to	TC, on chord(s)	Mech (260/4)
Tapered(psf)	S(1.15)	40 to 0	0 to 0	6.000" to 9' 6.000"	Adds to	TC	Drift
Tapered(psf)	S(1.15)	0 to 40	0 to 0	29' 4.000" to 38' 4.000"	Adds to	TC	Drift

LOAD GROUP #2 @ 34.000" O.C.-900# & 2900# Mech units (S1S)

DEAD

LIVE

CLASS

—	02,100		0 - 10	200, 11.0.1(1)	, _	, L.L.D . O	00
Point(plf)	W(1.60)	275	0	3' 0.000"	Adds to	TC, on chord(s)	Brace
Point(plf)	W(1.60)	275	0	35' 10.000"	Adds to	TC, on chord(s)	Brace
Point(lbs)	S(1.15)	0	150	9' 6.500"	Adds to	TC, on chord(s)	Mech (900/6)
Point(lbs)	S(1.15)	0	150	14' 6.500"	Adds to	TC, on chord(s)	Mech (900/6)
Point(lbs)	S(1.15)	0	363	22' 1.250"	Adds to	TC, on chord(s)	Mech (2900/8)
Point(lbs)	S(1.15)	0	363	28' 10.000"	Adds to	TC, on chord(s)	Mech (2900/8)
Tapered(psf)	S(1.15)	40 to 0	0 to 0	2.130" to 9' 6.000"	Adds to	TC	Drift
Tapered(psf)	S(1.15)	0 to 40	0 to 0	29' 4.000" to 38' 7.870"	Adds to	TC	Drift

APPL

APPLIED TO

LOCATION(1)

LOAD GROUP #3 @ 34.000" O.C.-Typ. truss w/mult cond's

TYPE	CLASS	LIVE	DEAD	LOCATION(1)	APPL	APPLIED TO	COMMENT
Point(plf)	W(1.60)	275	0	3' 0.000"	Adds to	TC, on chord(s)	Brace
Point(plf)	W(1.60)	275	0	35' 10.000"	Adds to	TC, on chord(s)	Brace
Point(lbs)	S(1.15)	0	65	20' 3.000"	Adds to	TC, on chord(s)	260/4
Point(lbs)	S(1.15)	0	65	22' 3.000"	Adds to	TC, on chord(s)	260/4
Point(lbs)	S(1.15)	0	65	23' 3.000"	Adds to	TC, on chord(s)	260/4
Point(lbs)	S(1.15)	0	65	25' 3.000"	Adds to	TC, on chord(s)	260/4
Point(lbs)	S(1.15)	0	37.5	8' 5.500"	Adds to	TC, on chord(s)	150/4
Point(lbs)	S(1.15)	0	37.5	10' 6.250"	Adds to	TC, on chord(s)	150/4
Point(lbs)	S(1.15)	0	75	20' 3.000"	Adds to	TC, on chord(s)	150/2
Point(lbs)	S(1.15)	0	75	22' 3.500"	Adds to	TC, on chord(s)	150/2
Point(lbs)	S(1.15)	0	37.5	29' 4.000"	Adds to	TC, on chord(s)	150/4
Point(lbs)	S(1.15)	0	37.5	31' 4.500"	Adds to	TC, on chord(s)	150/4
Tapered(psf)	S(1.15)	40 to 0	0 to 0	2.130" to 9' 6.000"	Adds to	TC	Drift
Tapered(psf)	S(1.15)	0 to 40	0 to 0	29' 4.000" to 38' 7.870"	Adds to	TC	Drift

TYPE	CLASS	LIVE	DEAD	LOCATION(1)	APPL	APPLIED TO	COMMENT
Uniform(plf)	W(1.60)	69	0	2.130" to 38' 7.870"	Adds to	TC	Parallel Brace
Point(lbs)	S(1.15)	0	150	8' 5.750"	Adds to	TC, on chord(s)	Mech (900/6)
Point(lbs)	S(1.15)	0	150	15' 7.000"	Adds to	TC, on chord(s)	Mech (900/6)
Tapered(psf)	S(1.15)	7 to 0	0 to 0	2.130" to 3' 6.000"	Adds to	TC	Drift
Tapered(psf)	S(1.15)	0 to 7	0 to 0	35' 0.000" to 38' 7.870"	Adds to	TC	Drift
Uniform(psf)	S(1.15)	25.3	0	2.130" to 38' 7.870"	Adds to	TC	// Drift



RedOpenWeb™ v5.0.33 2/11/2025 12:43:25 PM PAGE 2 Project: McDonald's (ID:046-1180)

Location: Puyallup, WA

Delivery: R1
Del. Desc.: Roof

Type: S1S Qty: 8

Project Number: 142875

LOAD GROUP #5 @ 41.000" O.C.-Uplift (Typ)

TYPE	CLASS	LIVE	DEAD	LOCATION(1)	APPL	APPLIED TO	COMMENT
Point(plf)	W(1.60)	-320	0	3' 0.000"	Adds to	TC, on chord(s)	Brace
Point(plf)	W(1.60)	-320	0	35' 10.000"	Adds to	TC, on chord(s)	Brace
Uniform(psf)	W(1.60)	-5.1	.1	3' 0.000" to 35' 10.000"	Replaces	TC	Net uplift

LOAD GROUP #6 @ 16.500" O.C.-Uplift @ Brace

TYPE	CLASS	LIVE	DEAD	LOCATION(1)	APPL	APPLIED TO	COMMENT
Uniform(psf)	W(1.60)	-5.1	.1	3' 0.000" to 35' 10.000"	Replaces	TC	Net uplift
Uniform(plf)	W(1.60)	-80	0	3' 0.000" to 35' 10.000"	Adds to	TC	Parallel Brace

LOAD GROUP #7 @ 41.000" O.C.-900# Mech 3rd FL (S1S)

TYPE	CLASS	LIVE	DEAD	LOCATION(1)	APPL	APPLIED TO	COMMENT
Point(plf)	W(1.60)	275	0	3' 0.000"	Adds to	TC, on chord(s)	Brace
Point(plf)	W(1.60)	275	0	35' 10.000"	Adds to	TC, on chord(s)	Brace
Point(lbs)	S(1.15)	0	225	8' 5.750"	Adds to	TC, on chord(s)	900/4
Point(lbs)	S(1.15)	0	225	15' 7.000"	Adds to	TC, on chord(s)	900/4
Tapered(psf)	S(1.15)	29.6 to 0	0 to 0	2.130" to 9' 6.000"	Adds to	TC	Drift
Tapered(psf)	S(1.15)	0 to 29.6	0 to 0	29' 4.000" to 38' 7.870"	Adds to	TC	Drift
Uniform(psf)	S(1.15)	10.4	0	2.130" to 38' 7.870"	Adds to	TC	Snow

(1) Location is specified from left reference point unless noted otherwise.

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

DESIGN CONTROLS

Truss Member's Critical Design Component Value: 99.2% (Design / Allowable) Truss design includes consideration for partial span application live load.

REACTIONS		LEFT MAXIMUM	LEFT MINIMUM	RIGHT MAXIMUM	RIGHT MINIMUM
	Total Load (lbs)	4184 W (1.60)	-1381 W (1.60)	4009 W (1.60)	-1381 W (1.60)

Live Load (lbs) 2557 -1428 2557 -1428

DEFLECTIONS & CAMBER

Deflection (Total Load) Span: 1.502" (L/302)
Deflection (Live Load) Span: 0.862" (L/527)

Center Span Camber: 0.613", Recommended

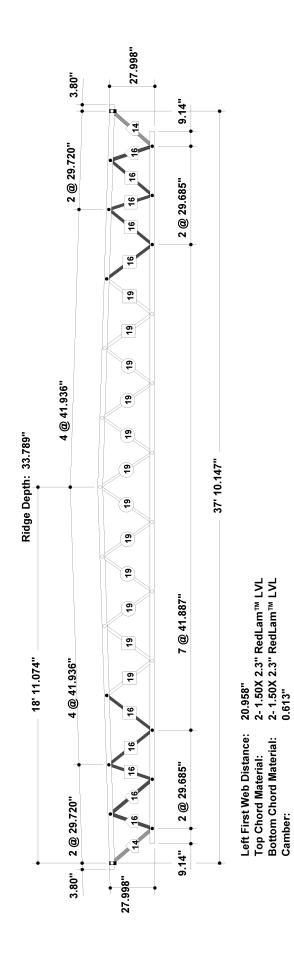
ADDITIONAL NOTES

- 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 ICC analyzing the RedBuilt™ custom products listed above with chords analyzed using RedBuilt™ analysis.
- Pricing Load = 212.9 plf

OPERATOR INFORMATION

<Program User's Name>, <Program User's Phone Number>





Red-S™ SERIES LEGEND

Left First Web Distance: Top Chord Material: Bottom Chord Material:

Camber: Bottom Chord Slope:

S-Clip @ LEFT TOP PIN# 1. S-Clip @ RIGHT TOP PIN# 13.

3/4" DIA. PIN •

WEB, 1" DIA. & WEB GAUGE 1 1/2" DIA.

1/2" DIA. PIN 1 1/4" DIA.

Project Number: 142875 Project: McDonald's (ID:046-1180) Truss ID: S1S Quantity: 8 Location: Puyallup, WA Delivery: R1

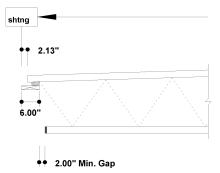
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Delivery: R1 Del. Desc.: Roof Type: S1W Qty: 8

Project Number: 142875

THIS PRODUCT MEETS OR EXCEEDS THE SET DESIGN CONTROLS FOR THE APPLICATION AND LOADS LISTED Reference Span = 38' 10.000"

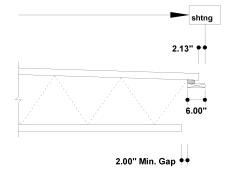


28.000"/35.100"/28.000" Red-S™ OPEN WEB TRUSS

00"/35.100"/28.000" Red-S™ OPEN WEB TRUS Radius Pitched Profile

Clear Span = 37' 10.000"

Top Chord Slope: Left = .375/12, Right = -.375/12
Bot Chord Slope = 0
Ridge at 19' 5.000" from left reference point



All dimensions are horizontal.

Product diagram is conceptual.

COMMENT

LOADS

TYPE

Analysis for Open-web Member Supporting SNOW Structural Classification.

Loads (psf): 20 Snow at 115% duration, 20 Dead (top chord), 0 Dead (bottom chord), @ 32.000" O.C. and:

LOAD GROUP #1 @ 40.000" O.C.-900# & 260# Mech units (S1S)

TYPE	CLASS	LIVE	DEAD	LOCATION(1)	APPL	APPLIED TO	COMMENT
Point(plf)	W(1.60)	275	0	3' 0.000"	Adds to	TC, on chord(s)	Brace
Point(plf)	W(1.60)	275	0	35' 10.000"	Adds to	TC, on chord(s)	Brace
Point(lbs)	S(1.15)	0	150	8' 8.250"	Adds to	TC, on chord(s)	Mech (900/6)
Point(lbs)	S(1.15)	0	150	13' 8.250"	Adds to	TC, on chord(s)	Mech (900/6)
Point(lbs)	S(1.15)	0	65	20' 2.500"	Adds to	TC, on chord(s)	Mech (260/4)
Point(lbs)	S(1.15)	0	65	22' 8.250"	Adds to	TC, on chord(s)	Mech (260/4)
Point(lbs)	S(1.15)	0	65	23' 3.000"	Adds to	TC, on chord(s)	Mech (260/4)
Point(lbs)	S(1.15)	0	65	25' 3.000"	Adds to	TC, on chord(s)	Mech (260/4)
Tapered(psf)	S(1.15)	40 to 0	0 to 0	6.000" to 9' 6.000"	Adds to	TC	Drift
Tapered(psf)	S(1.15)	0 to 40	0 to 0	29' 4.000" to 38' 4.000"	Adds to	TC	Drift

LOAD GROUP #2 @ 34.000" O.C.-900# & 2900# Mech units (S1S)

DEAD

LIVE

CLASS

—	02,100		0 - 10	200, 11.0.1(1)	, _	, L.L.D . O	00
Point(plf)	W(1.60)	275	0	3' 0.000"	Adds to	TC, on chord(s)	Brace
Point(plf)	W(1.60)	275	0	35' 10.000"	Adds to	TC, on chord(s)	Brace
Point(lbs)	S(1.15)	0	150	9' 6.500"	Adds to	TC, on chord(s)	Mech (900/6)
Point(lbs)	S(1.15)	0	150	14' 6.500"	Adds to	TC, on chord(s)	Mech (900/6)
Point(lbs)	S(1.15)	0	363	22' 1.250"	Adds to	TC, on chord(s)	Mech (2900/8)
Point(lbs)	S(1.15)	0	363	28' 10.000"	Adds to	TC, on chord(s)	Mech (2900/8)
Tapered(psf)	S(1.15)	40 to 0	0 to 0	2.130" to 9' 6.000"	Adds to	TC	Drift
Tapered(psf)	S(1.15)	0 to 40	0 to 0	29' 4.000" to 38' 7.870"	Adds to	TC	Drift

APPL

APPLIED TO

LOCATION(1)

LOAD GROUP #3 @ 34.000" O.C.-Typ. truss w/mult cond's

TYPE	CLASS	LIVE	DEAD	LOCATION(1)	APPL	APPLIED TO	COMMENT
Point(plf)	W(1.60)	275	0	3' 0.000"	Adds to	TC, on chord(s)	Brace
Point(plf)	W(1.60)	275	0	35' 10.000"	Adds to	TC, on chord(s)	Brace
Point(lbs)	S(1.15)	0	65	20' 3.000"	Adds to	TC, on chord(s)	260/4
Point(lbs)	S(1.15)	0	65	22' 3.000"	Adds to	TC, on chord(s)	260/4
Point(lbs)	S(1.15)	0	65	23' 3.000"	Adds to	TC, on chord(s)	260/4
Point(lbs)	S(1.15)	0	65	25' 3.000"	Adds to	TC, on chord(s)	260/4
Point(lbs)	S(1.15)	0	37.5	8' 5.500"	Adds to	TC, on chord(s)	150/4
Point(lbs)	S(1.15)	0	37.5	10' 6.250"	Adds to	TC, on chord(s)	150/4
Point(lbs)	S(1.15)	0	75	20' 3.000"	Adds to	TC, on chord(s)	150/2
Point(lbs)	S(1.15)	0	75	22' 3.500"	Adds to	TC, on chord(s)	150/2
Point(lbs)	S(1.15)	0	37.5	29' 4.000"	Adds to	TC, on chord(s)	150/4
Point(lbs)	S(1.15)	0	37.5	31' 4.500"	Adds to	TC, on chord(s)	150/4
Tapered(psf)	S(1.15)	40 to 0	0 to 0	2.130" to 9' 6.000"	Adds to	TC	Drift
Tapered(psf)	S(1.15)	0 to 40	0 to 0	29' 4.000" to 38' 7.870"	Adds to	TC	Drift

TYPE	CLASS	LIVE	DEAD	LOCATION(1)	APPL	APPLIED TO	COMMENT
Uniform(plf)	W(1.60)	69	0	2.130" to 38' 7.870"	Adds to	TC	Parallel Brace
Point(lbs)	S(1.15)	0	150	8' 5.750"	Adds to	TC, on chord(s)	Mech (900/6)
Point(lbs)	S(1.15)	0	150	15' 7.000"	Adds to	TC, on chord(s)	Mech (900/6)
Tapered(psf)	S(1.15)	7 to 0	0 to 0	2.130" to 3' 6.000"	Adds to	TC	Drift
Tapered(psf)	S(1.15)	0 to 7	0 to 0	35' 0.000" to 38' 7.870"	Adds to	TC	Drift
Uniform(psf)	S(1.15)	25.3	0	2.130" to 38' 7.870"	Adds to	TC	// Drift



2/11/2025 12:42:02 PM PAGE 2

Project: McDonald's (ID:046-1180)

Location: Puyallup, WA

Delivery: R1
Del. Desc.: Roof

Type: S1W Qty: 8

Project Number: 142875

LOAD GROUP #5 @ 41.000" O.C.-Uplift (Typ)

TYPE	CLASS	LIVE	DEAD	LOCATION(1)	APPL	APPLIED TO	COMMENT
Point(plf)	W(1.60)	-320	0	3' 0.000"	Adds to	TC, on chord(s)	Brace
Point(plf)	W(1.60)	-320	0	35' 10.000"	Adds to	TC, on chord(s)	Brace
Uniform(psf)	W(1.60)	-5.1	.1	3' 0.000" to 35' 10.000"	Replaces	TC	Net uplift

LOAD GROUP #6 @ 16.500" O.C.-Uplift @ Brace

TYPE	CLASS	LIVE	DEAD	LOCATION(1)	APPL	APPLIED TO	COMMENT
Uniform(psf)	W(1.60)	-5.1	.1	3' 0.000" to 35' 10.000"	Replaces	TC	Net uplift
Uniform(plf)	W(1.60)	-80	0	3' 0.000" to 35' 10.000"	Adds to	TC	Parallel Brace

LOAD GROUP #7 @ 41.000" O.C.-900# Mech 3rd FL (S1S)

TYPE	CLASS	LIVE	DEAD	LOCATION(1)	APPL	APPLIED TO	COMMENT
Point(plf)	W(1.60)	275	0	3' 0.000"	Adds to	TC, on chord(s)	Brace
Point(plf)	W(1.60)	275	0	35' 10.000"	Adds to	TC, on chord(s)	Brace
Point(lbs)	S(1.15)	0	225	8' 5.750"	Adds to	TC, on chord(s)	900/4
Point(lbs)	S(1.15)	0	225	15' 7.000"	Adds to	TC, on chord(s)	900/4
Tapered(psf)	S(1.15)	29.6 to 0	0 to 0	2.130" to 9' 6.000"	Adds to	TC	Drift
Tapered(psf)	S(1.15)	0 to 29.6	0 to 0	29' 4.000" to 38' 7.870"	Adds to	TC	Drift
Uniform(psf)	S(1.15)	10.4	0	2.130" to 38' 7.870"	Adds to	TC	Snow

(1) Location is specified from left reference point unless noted otherwise.

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

DESIGN CONTROLS

Truss Member's Critical Design Component Value: 99.2% (Design / Allowable) Truss design includes consideration for partial span application live load.

 REACTIONS
 LEFT MAXIMUM
 LEFT MINIMUM
 RIGHT MAXIMUM
 RIGHT MINIMUM

 Total Load (lbs)
 4184 W (1.60)
 -1381 W (1.60)
 4009 W (1.60)
 -1381 W (1.60)

Live Load (lbs) 2557 -1428 2557 -1428

DEFLECTIONS & CAMBER

Deflection (Total Load) Span: 1.502" (L/302)
Deflection (Live Load) Span: 0.862" (L/527)

Center Span Camber: 0.613", Recommended

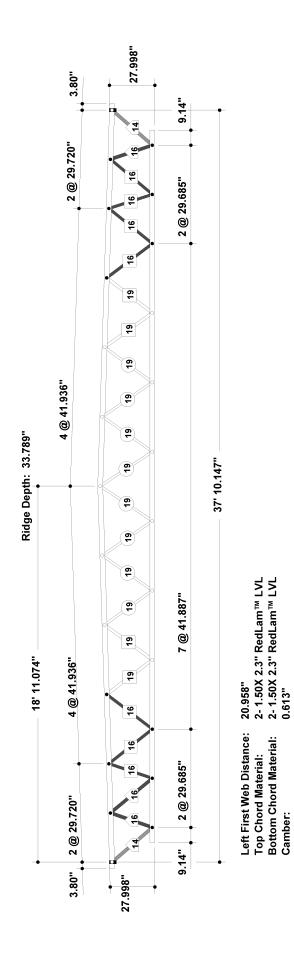
ADDITIONAL NOTES

- 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 ICC analyzing the RedBuilt™ custom products listed above with chords analyzed using RedBuilt™ analysis.
- Pricing Load = 212.9 plf

OPERATOR INFORMATION

<Program User's Name>, <Program User's Phone Number>





Red-S™ SERIES LEGEND

Left First Web Distance: Top Chord Material: Bottom Chord Material:

Camber: Bottom Chord Slope:

S-Clip @ LEFT TOP PIN# 1. S-Clip @ RIGHT TOP PIN# 13.

3/4" DIA. PIN •

WEB, 1" DIA. & WEB GAUGE 1 1/2" DIA.

1/2" DIA. PIN 1 1/4" DIA.

Project Number: 142875 Project: McDonald's (ID:046-1180) Truss ID: S1W Quantity: 8 Location: Puyallup, WA Delivery: R1

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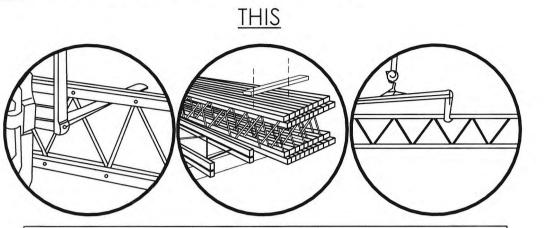
OPEN-WEB TRUSS INSTALLATION INFORMATION

ATTENTION BUILDER

Enclosed is IMPORTANT information on how to safety and properly install open-web trusses. Personal injury or death may result from failure to read and follow this information.







WARNING

Workers should stay clear when cutting the banding to

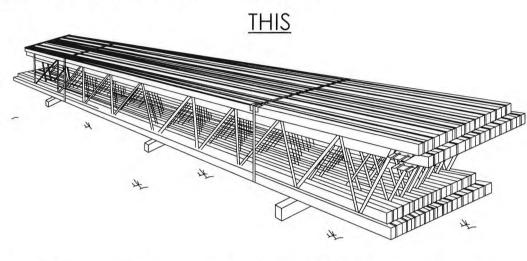
avoid possible injury from flying banding or toppling trusses

NOT THIS

DO NOT hit webs with forklift forks. Beni 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 M will be bundled and banded.

2 PRODUCT STORAGE





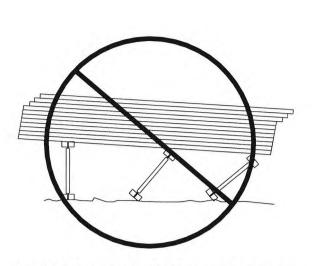
 Cover truss bundles with paper wrap or canvas tarps to protect them from the weather. Do not use plastic covers as they will cause moisture to accumulate on the trusses. Prolonged exposure to the elements harms the appearance and strength of the trusses.

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

5 INSTALLATION BRACING



as well as the safety of workers, are the responsibility of the installer. The installer should make sure that this 'nstallation information is understood by all persons involved in the truss



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

WARNING

Without correctly installed bracing,

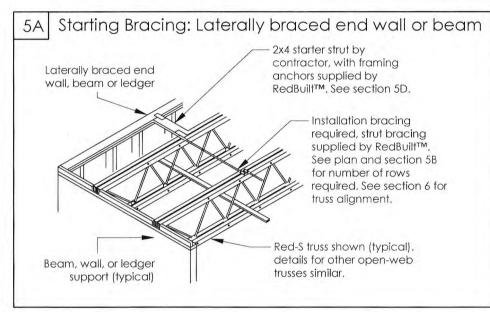
trusses can bow and roll over,

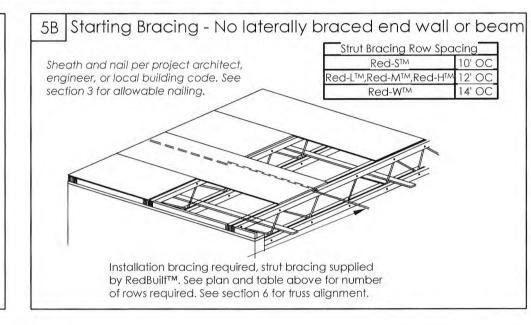
causing death, serious personal

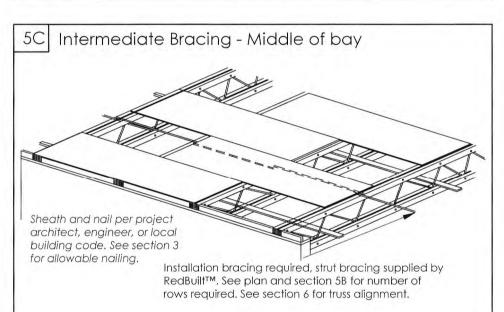
injury, or property damage.

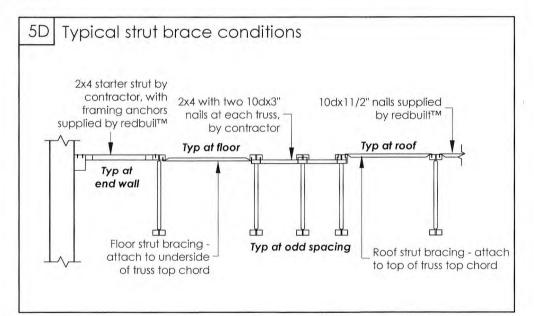
NOTICE

nstallation bracing and procedures,









3 NAILING OF SHEATHING TO TOP CHORD MEMBERS



smaller than 8dx21/2" or larger than 16dx31/2".

Single

Chord

Red-L™

1 1/2"x3 1/2"

No tab for single-chord trusses-

4 MATERIAL IDENTIFICATION

Minimum Nail Spacing Red-LTM Red-STM Red-MTM RedLamTM LVL Red-HTM Narrow Face .131" x 2 1/: .128" x 3" .148" x 3" .128" x 3 1/4" 148" x 3 1/4" .135" x 3 1/2" .162" x 3 1/2"

See sections 5A and 5D.

Single

Chord

1 1/2"x4 3/4"

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

Double

Chord

1 1/2"x2 5/16"

(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 If more than one row of nails is used, offset rows at least 1/2" and stagger. Maintain 3/8" minimum edge distance.

Damaged trusses must be repaired or

A. **Strut Bracing** is tubular steel with flattened ends supplied with all open-web

B. **Plywood Edge Blocking** is provided by RedBuilt $^{\text{TM}}$ 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

(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.

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.

Double

Chord

1 1/2"x3 1/2"

C. 2x4 Starter Struts supplied by contractor with framing anchors each end

trusses (Simpson HRS12 supplied for 12" OC systems). Strut bracing to be

installed as each truss is set. See sections 5A - 5D.

replaced

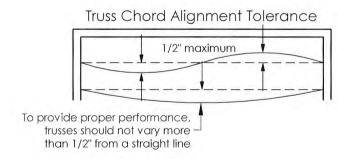
WARNING Nailing closer than specified may cause the chord to split

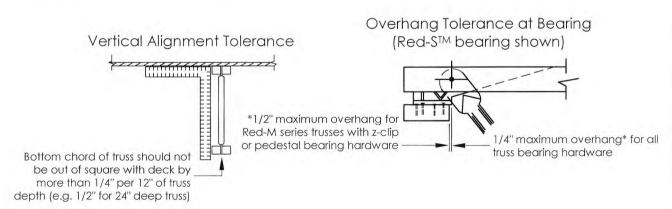
Double

Chord

Red-H™

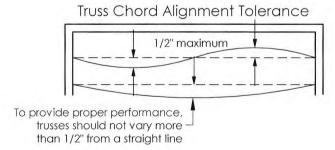
1 1/2"x5 1/2"

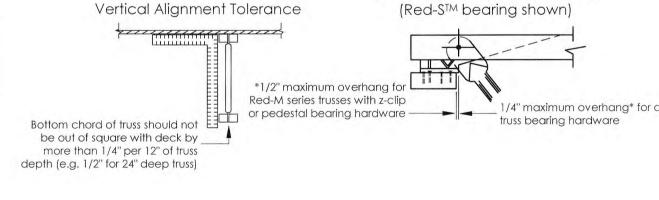




WARNING 7 STACKING MATERIAL **DO NOT** allow workers or materials on the trusses until all truss bearings and bracing have been permanently attached. See section 5. sheets of sheathing per 10

6 INSTALLATION TOLERANCES PERMITTED

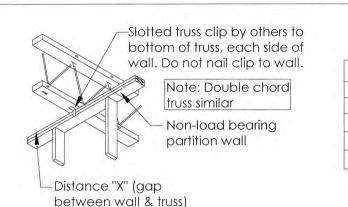




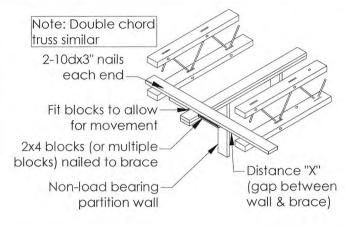
FIELD MODIFICATION OF TRUSSES NOT PERMITTED

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™.

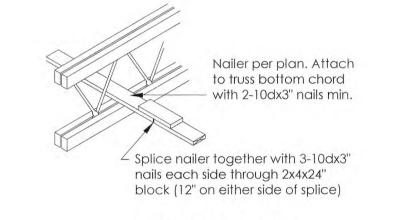
8 STANDARD INSTALLATION DETAILS



Spacing of clips and blocks per EOR Distance "X" Span 0'-20' 3/4" 1 1/4" 2 1/2" 20'-40' 40'-60' Recommended Attachment for Non-load Bearing Partitions



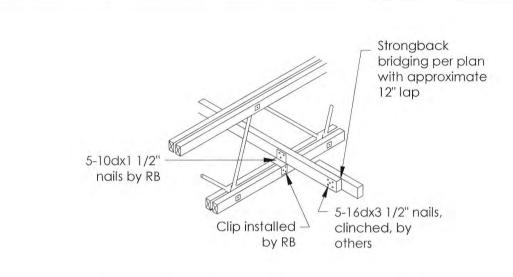
Support member Note: Double chord (spanning a min. of 2 panel (Maximum load and location points). Install one bolt above shall be in accordance with hold 2x's in place. Support Detail for Loads Supported

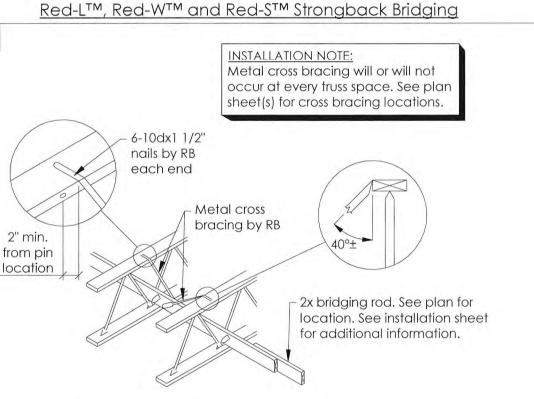


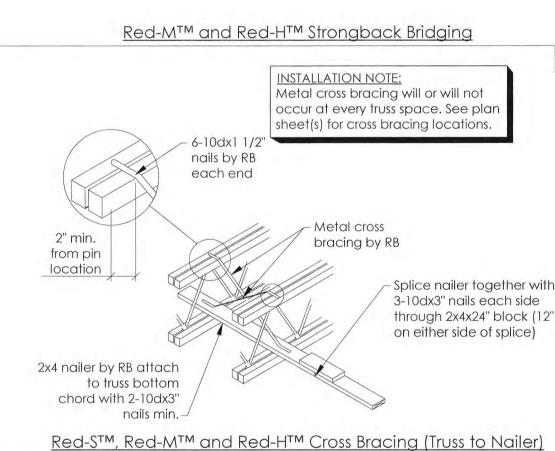
Bottom Chord Nailer

Field bend bridging clip before nailing Note: Double (Red-S) similar bridging per plan with approximate 12" lap 5-10dx1 1/2" nails by RB-5-16dx3 1/2" nails, clinched, by others

from Bottom Chord







Tangential load Brace (or direct attached ceiling) reg'd to resist tangential component of hanging load Hanging Tension bridging

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

1. The joists are designed for the normal component of the vertical load only.

The tangential component of the vertical load must be designed into the roof diaphragm.

2. The top flange alignment must remain straight within 1/2"

3. Top and bottom flange must be aligned in a plane perpendicular to the roof deck. Depending on slope and span, temporary bracing may be req'd to maintain alignment until

4. The roof system is unstable until sheathed. do not stack sheathing materials on unsheathed

5. Tracing is req'd for the support of any loads connected to the flange of any joist.

Guidelines for Hanging Loads at Oblique Trusses

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/wp-content/uploads/2019/06/Product-Warranty-Letter.pd

https://www.redbuilt.com/wp-content/uploads/2019/06/RedBuilt_Sprinkler_Guide.pdf For product warranty information please scan the QR code or use the link below to access the form scan the QR code or use the link below to

If you have questions or concerns: Call your RedBuilt™ Representative directly,

or for general customer service call (866) 859-6757

Sheet R001

Red-ITM, Red-I45TM, Red-I45TM, Red-I58TM, Red-I65TM, Red-I90TM, Red-I90HTM, Red-I90HSTM, Red-WTM, Red-WTM, Red-MTM, Red-HTM, Red-HTM, Red-I65TM, Red-I90HTM, Red-I90HTM

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 REDBUILTTM" HEREIN.

• STRAPS, ANCHORS, CLIPS, AND OTHER HARDWARE NOT SHOWN ARE TO BE PROVIDED BY OTHERS. HARDWARE SHOWN IS TO BY 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.

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
10d	.148" x 3"	N10	.148" x 1.5"	#10SD (2)	.162" x 1.5'
12d	.148" x 3.25"	N16	.162" x 2.5"		
16d	.162" x 3.5"			•	

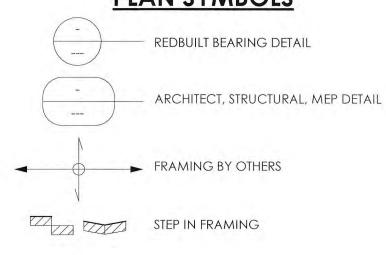
NOTE: ALL NAILS ARE COMMON UNO

(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

ABBREVIATIONS	TERMS
AFP	APPROVED FOR PRODUCTION
AOR	ARCHITECT OF RECORD
BLKG	BLOCKING
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



SLOPE IN FRAMING

FOR PRODUCT WARRANTY INFORMATION PLEASE SCAN THE QR CODE TO ACCESS THE FORM.



FOR ATTACHMENT OF SPRINKLER LINES, MECHANICAL DUCTS, ETC... TO JOIST OR TRUSSES, PLEASE SEE "SPRINKLER SYSTEM INSTALLATION GUIDELINES". IF ADDITIONAL COPIES ARE REQUIRED, PLEASE CONTACT REDBUILT OR USE THE LINK BELOW TO ACCESS THE INFORMATION.



FOR ALLOWABLE HOLES AND FASTENER INFORMATION PLEASE SCAN THE QR CODE TO ACCESS PAGE NUMBER 3 OF THE SPRINKLER SYSTEM INSTALLATION GUIDE.

DRAWING NOTES & LEGEND

XX(##) PRODUCT CALLOUT AND QUANTITY ON PLAN.

"XX" - STRUCTURAL MEMBER TYPE CALLOUT (##) - QUANTITY OF STRUCTURAL MEMBERS IN BAY

FOR STANDARD DETAILS SEE INSTALLATION COVERSHEET(S)

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

RIM BOARD/FASCIA MATERIAL WILL BE SUPLIED @ "STANDARD" 16'-0" LENGTHS AND AS EITHER LSL OR LVL

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%).

OPEN-WEB NOTES & LEGEND

NO MORE THAN 18 TRUSSES PER BAY ARE TO BE INSTALLED BEFORE TOP CHORD SHEATHING IS REQUIRED.

2x4 STARTER STRUT BY OTHERS, REQUIRED DURING TRUSS INSTALLATION. SEE INSTALLATION COVERSHEET, SECTION 5D. ----+---**-**

> CONTINUOUS ROW OF METAL STRUT BRACING BY RB, REQUIRED FOR LATERAL SUPPORT DURING TRUSS INSTALLATION. SEE INSTALLATION COVERSHEET, SECTION 5D. CONTINUOUS ROW OF 2x4 FLAT BOTTOM CHORD NAILER. SEE DETAILS AND

INTERMITTENT ROW(S) OF METAL CROSS BRACING BY RB. FOR ADDITIONAL INFORMATION, SEE DETAILS AND MATERIAL LIST. "#.#" - METAL BRACE LENGTH FROM TIP TO TIP.

MATERIAL LIST FOR MORE INFORMATION.

RECTANGULAR SECTIONS

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

ALL REDLAM LVL MATERIAL AND 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.

DESIGN INFORMATION

PROJECT ASSUMPTIONS

NET WIND UPLIFT (ASD @ 160%):

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: (2021 IBC)

ROOF DESIGN

SNOW LOAD (@ 115%):	20 PSF
DEAD LOAD*:	20 PSF
GROUND SNOW:	25 PSF
esign wind pressure:	98 MPH EXP. B (ULT)

* NOTE: THE DRAFT STOP, SOFFIT, & MENU VALENCE LOADS ARE INCLUDED IN THE 20 PSF DESIGN DEAD LOAD

ADDITIONAL LOADING

-SNOW DRIFT LENGTH



XXX# -MECHANICAL WEIGHT

X'-XX''

PRODUCT CALLOUT LEGEND

RED-I JOISTS: • A# - 145 B# - 145L C# - 153

D# - 158 E# - 165 F# - 190 J# - 190H

K# - 190HS X# - TAPERED 145

Y# - TAPERED 165

 Z# - TAPERED 190 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. L3W):

- 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

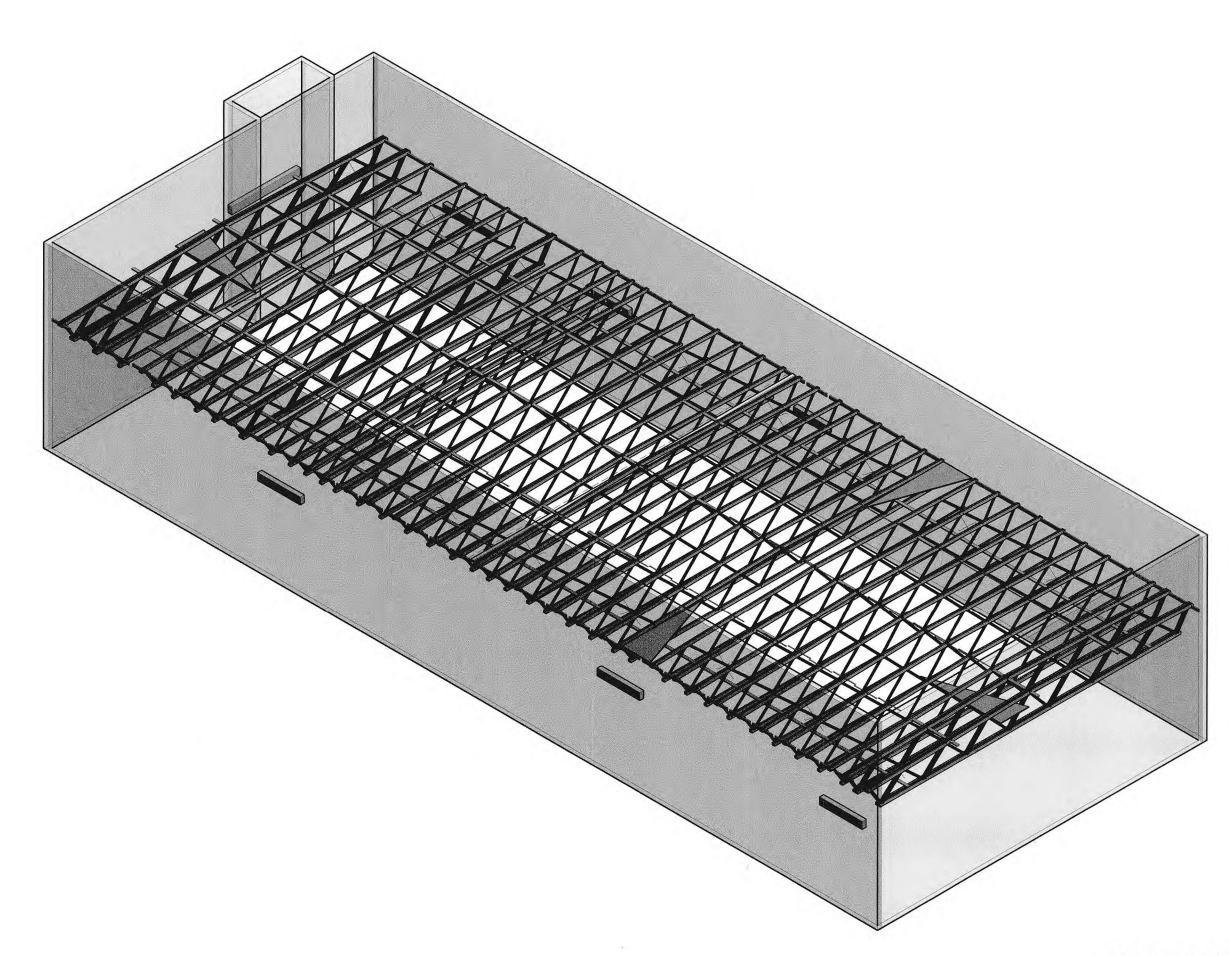
RECTANGULAR SECTION PRODUCTS:

- 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

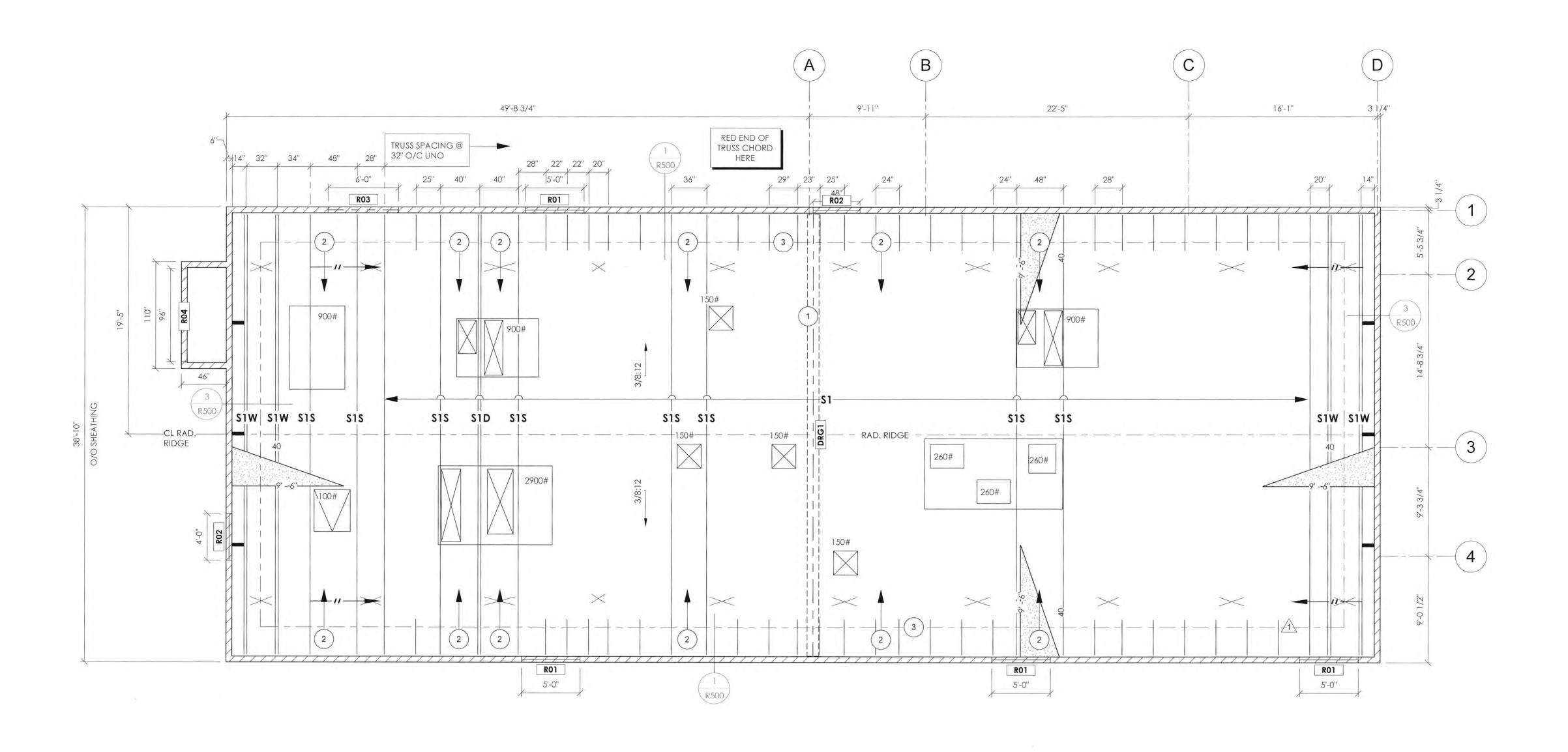
R010

THINK SAFETY -- READ INSTALLATION INFORMATION BEFORE PROCEEDING Red-ITM, Red-I^{45TM}, Red-I^{45TM}, Red-I^{55TM}, Red-I^{65TM}, Red-I^{90TM}, Red-I^{90TM}, Red-I^{90HTM}, Red-I^{90HTM}

DRAWN BY: VR DATE: 1/16/25

CHK'D BY: AW DATE: 1/16/25 REDBUILT PROJECT # 142875

PROJECT INFORMATION SHEET



KEY NOTES

DENOTES "DRG1" 40'x1 3/4"x3 1/2" LONG DRAG STRUT BY RB. RUN CONTINUOUS FROM TRUSS BEARING TO MATCH ROOF SLOPE. DO NOT SPLICE.

DENOTES 2X LADDER FRAMING BY OTHERS AS REQUIRED TO SUPPORT SHEATHING AT LARGE TRUSS SPACING. SEE DETIAL 7/R500 FOR MORE INFORMATION.

3 DENOTES BRACE BY OTHERS. DESIGN LOAD -320 plf (WL) IN UPLIFT, +275 plf (WL) (ASD).



		RedBuilt™ Open Web Products - Trusse	es
QTY	Туре	Description	Clear Span
25	S1	28.00"/35.10"/28.00"/Radius Pitched Red-S	37' - 10"
8	S1S	28.00"/35.10"/28.00"/Radius Pitched Red-S	37' - 10''

	RedI	dBuilt™ Open Web Products - DBL TRUSSES			
DBL QTY	Туре	Description	Clear Span		
1	SID	28.00"/35.10"/28.00"/Radius Pitched Red-S	37' - 10''		
4	SIW	28.00"/35.10"/28.00"/Radius Pitched Red-S	37' - 10''		

RedLam™ LVL Products - LVL Beams							
QTY	Туре	Series	Length	Notes			
4	R01	5 1/4"x9 1/2" 2.0E RedLam LVL	5' - 0''				
2	R02	5 1/4"x9 1/2" 2.0E RedLam LVL	4' - 0''				
1	R03	5 1/4"x9 1/2" 2.0E RedLam LVL	6' - 0''				
1	R04	5 1/4"x9 1/2" 2.0E RedLam LVL	8' - 0"				
1	DRG1	1 3/4"x3 1/2" 2.0E RedLam LVL	40' - 0''				





| Name | Project | Project

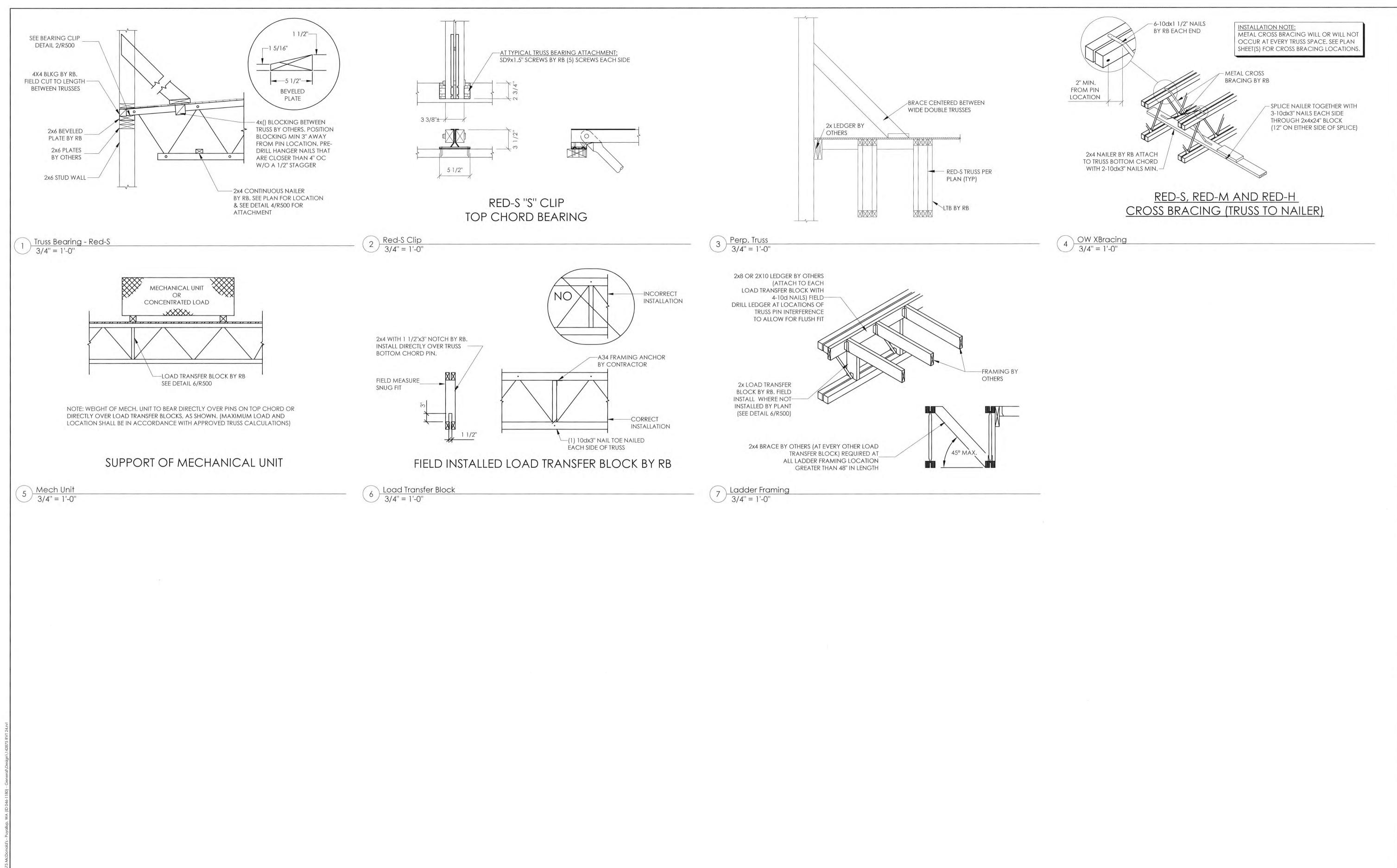
ROOF PLACEMENT

PLAN

R130

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RedBuilt, LLC 2/13/2025 5:25:37 PM C:\L



- 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

DR.	AWN BY: K'D BY:	VR AW	1/16/25		
				#	11124
				by	
				Description	Revisions
				Date	

R500