



RedSpec™ by RedBuilt™
v7.1.14

Project: 124289-CASCADE SCHL
Location: PUYALLUP, WA
Folder: ROOF
Date: 8/11/22 8:17 AM
Designer: JOHN R SELVAGE JR.
Comment:

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

B-21-0727

Type: AR1 REV

11.875" Red-I45™ @ 24" o.c.

This product meets or exceeds the set design controls for the application and loads listed

DESIGN CONTROLS	%	Design	Allow.	DOL	Combination	Pattern	Pass/Fail
Shear (lb)	44%	894	2053	Snow(115%)	1.0D+1.0S	All Spans	PASS
Positive Moment (ft-lb)	37%	2014	5388	Snow(115%)	1.0D+1.0S	All Spans	PASS

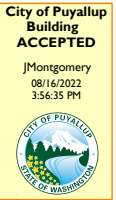
DEFLECTIONS (in)	%	Design	Allow.	Design	Allow.	Combination	Pattern	Pass/Fail
Span Live	7%	0.032	0.450	L / 999+	L / 240	1.0D+1.0S	All Spans	PASS
Span Total	22%	0.133	0.601	L / 810	L / 180	1.0D+1.0S	All Spans	PASS

SUPPORTS	Support 1	Support 2
Live Reaction, Critical (lb) (DOL%)	225 (115)	225 (115)
Dead Reaction (lb)	670	670
Total Reaction (lb) (DOL%)	895 (115)	895 (115)
Bearing Support	Flush	Flush
Req'd Bearing, No Stiffeners (in)	1.75	1.75
Req'd Bearing, Stiffeners (in)	-	-

Approval of submitted plans is not an approval of omissions or oversights by this office or noncompliance with any applicable regulations of local government. The contractor is responsible for making sure that the building complies with all applicable codes and regulations of the local government.

THE APPROVED CONSTRUCTION PLANS, DOCUMENTS AND ALL ENGINEERING MUST BE POSTED ON THE JOB AT ALL INSPECTIONS IN A VISIBLE AND READILY ACCESSIBLE LOCATION.

FULL SIZED LEDGIBLE COLOR PLANS ARE REQUIRED TO BE PROVIDED BY THE PERMITEE ON SITE FOR INSPECTION

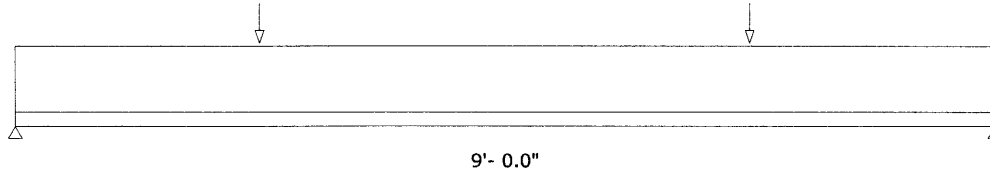


HANGERS	Model	Top	Face	Member	Header	Size
Left	U14* Slope: 0 None, Skew: 0 None		14-16d	6-10dx1.5"	LVL DF/SP	1.75x11.875
Right	U14* Slope: 0 None, Skew: 0 None (* = Web stiffeners required)		14-16d	6-10dx1.5"	LVL DF/SP	1.75x11.875

SPANS AND LOADS

Dimensions represent horizontal design spans.

Member Slope: -0.5/12 ↘



APPLICATION LOADS

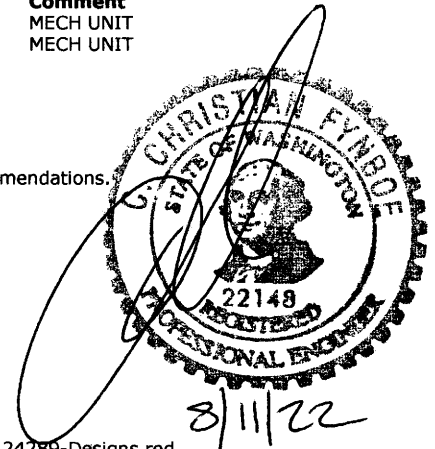
Type	Units	DOL	Live	Dead	Partition	Tributary	Member Type
Uniform	psf	Snow(115%)	25	20	0	24"	Snow Roof Joist

ADDITIONAL LOADS

Type	Units	DOL	Live	Dead	Location from left	Application	Comment
Point	lb	Snow(115%)	0	490	2'-3.0"	Adds To	MECH UNIT
Point	lb	Snow(115%)	0	490	6'-9.0"	Adds To	MECH UNIT

NOTES

- Building code and design methodology: 2018 IBC ASD (US).
- Product Acceptance: ICC-ES ESR-2994 and LABC/LARC Supplement.
- Birdsmouth and beveled plate conditions require additional consideration.
- Continuous lateral support required at top edge. Lateral support at bottom edge shall be per RedBuilt recommendations.
- Sloped length multiplier = 1.001. Bevel cut add = 0.49".

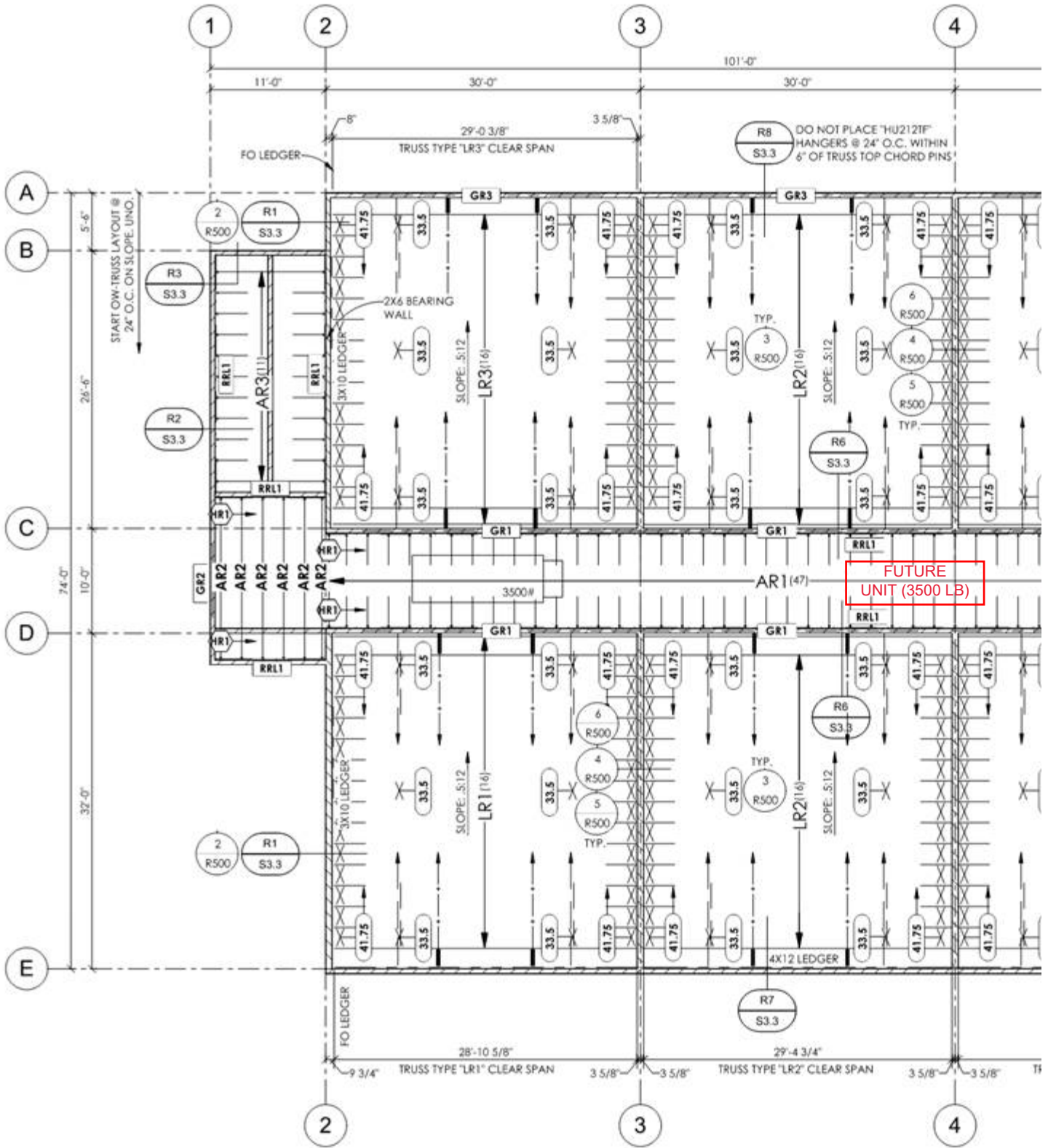


S:_Sold Projects\12xxxx\1242xx\124289 Cascade Christian School Phase III\Design\124289-I-JOIST CALCS PDF\124289-Designs.red

The products noted are intended for interior, untreated, non-corrosive applications with normal temperatures and dry conditions of use, and must be installed in accordance with local building code requirements and RedBuilt™ recommendations. The loads, spans, and spacing have been provided by others and must be approved for the specific application by the design professional for the project. Unless otherwise noted, this output has not been reviewed by a RedBuilt™ associate. PRODUCT SUBSTITUTION VOIDS THIS ANALYSIS.

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Fire	Traffic



1 ROOF FRAMING PLACEMENT PLAN
1/8" = 1'-0"