Client:

Project: Goldenstein

Address:

10685 E. Rocky Hill Rd.

Date: 6/13/2018 Designer: Stewart

Project #:

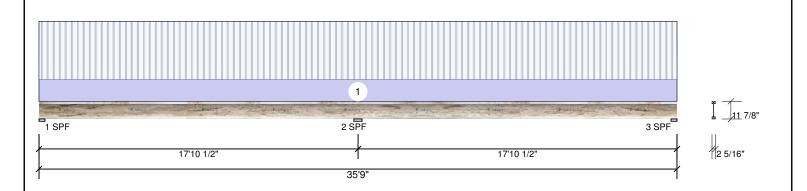
Job Name: Goldenstein 18-128

Level: Floor

Roseburg #4692

Page 1 of 17

11.875" - PASSED **RFPI 70** J1



ember Information Fype: Joist Application: Floor					Reactions UNPATTERNED lb (Uplift)						
Joist	Application:	Floor	Brg	Live	Deac	l Snow	,	Wind	Const		
16" o.c.	Design Method:	ASD	1	372	139	9 0		0	0		
n: Dry	Building Code:	IBC/IRC 2015	2	1163	436	0		0	0		
480	Load Sharing:	No	3	372	139	9 0		0	0		
360	Deck:	23/32 APA Rated Sturd-									
Normal											
Temp <= 100°F		Giueu									
			Bearings	;							
40 PSF			Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.		
15 PSF			1 - SPF	4.000"	37%	139 / 427	567	L_	D+L		
20 PSF			2 - SPF	5.500"	60%	437 / 1165	1601	LL	D+L		
20 PSF			3 - SPF	4.000"	37%	139 / 427	567	L	D+L		
	Joist 16" o.c. n: Dry 480 360 Normal Temp <= 100°F 40 PSF 15 PSF 20 PSF	Joist 16" o.c. Design Method: n: Dry Building Code: 480 Load Sharing: 360 Deck: Normal Temp <= 100°F 40 PSF 15 PSF 20 PSF	Joist Application: Floor Temp	Joist	Application: Floor Design Method: ASD 1 372 37	Application: Floor Brg Live Deach	Joist	Joist	Application: Floor Design Method: ASD 1 372 139 0 0 0		

Analysis Results

Γ	Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
	Neg Moment	-2733 ft-lb	17'10 1/2"	6645 ft-lb	0.411 (41%)	D+L	LL
	Unbraced	-1739 ft-lb	17'10 1/2"	1739 ft-lb	1.000 (100%)	D+L	_L
	Pos Moment	2038 ft-lb	7'8 11/16"	6645 ft-lb	0.307 (31%)	D+L	L_
	Shear	801 lb	17'10 1/2"	1550 lb	0.517 (52%)	D+L	LL
	LL Defl inch	0.186 (L/1134)	8'8 1/8"	0.440 (L/480)	0.420 (42%)	L	L_
L	TL Defl inch	0.233 (L/905)	8'6 3/8"	0.587 (L/360)	0.400 (40%)	D+L	L_

Design Notes

1 Bottom flange must be laterally braced at a maximum of 6'9" o.c.

ID Load Type Location Trib Width Dead 0.9 Live 1 Snow 1.15 Wind 1.6 Const. 1.25 Comments 15 PSF 40 PSF 0 PSF 0 PSF 0 PSF Uniform 1-4-0 SIONAL

Certification is to verify the joist/beam/truss to carry the loads shown and/or for repair design. The applied loads dimensions, and field conditions info was provided by others. The loads and dimensions must be verified and approved for the specific application by the project design professional.

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

Dry service conditions, unless noted otherwise
 Idoist not to be treated with fire retardant or corrosive

Handling & Installation

- Handling & Installation

 I. Julist flanges must not be cut or drilled

 Pareler to latest copy of the Lloist product information details for framing details, stiffener tables, web hole chart, bridging details, multi-ply fastening details and handling/erection details

 Damaged Lloists must not be used

 Design assumes top flange to be laterally restrained by attached sheathing or as specified in engineering notes.

Provide lateral support at bearing points to avoid lateral displacement and rotation
 Web stiffeners for point load as shown Minimum point load bearing lengths—3.5 inches
 For flat roofs provide proper drainage to prevent pondring.

Manufacturer Info

Roseburg Forest Products 4500 Riddle By-pass Rd Riddle, OR 97469 (541) 784-4005 www.roseburg.com APA: PR-L259, ICC-ES: ESR-1251 Capital 33 N. 45th Ave , AZ 85043 602-269-6225

U.S.A

16045 AARON M REED

P. 03-31



Digitally sealed June 14, 2018



Client:

Project:

Goldenstein Address:

10685 E. Rocky Hill Rd.

Designer: Stewart Job Name: Goldenstein Project #: 18-128

6/13/2018

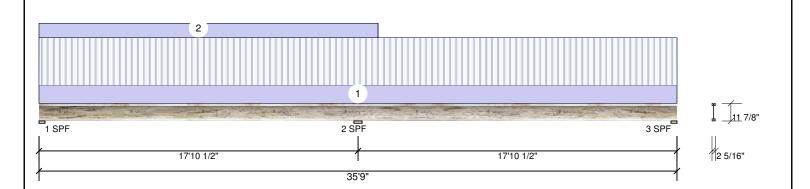
Level: Floor

Date:

Roseburg #4692

Page 2 of 17

11.875" - PASSED **RFPI 70** J1a



Member Info	rmation			Reactions UNPATTERNED Ib (Uplift)						
Type:	Joist	Application:	Floor	Brg	Live	Dead	Snow	Wind	Const	
Spacing:	16" o.c.	Design Method:	ASD	1	372	267	0	0	0	
Moisture Condition	on: Dry	Building Code:	IBC/IRC 2015	2	1163	629	0	0	0	
Deflection LL:	480	Load Sharing:	No	3	372	123	0	0	0	
Deflection TL:	360	Deck:	23/32 APA Rated Sturd-		-					
Importance:	Normal		I-FloorOSB Nailed and Glued							
Temperature:	Temp <= 100°F		Glueu							
General Load				Bearing	S					
Floor Live:	40 PSF			Bearing	Length	Cap. R	eact D/L lb	Total Ld. Ca	ase Ld. Comb.	
Dead:	15 PSF			1 - SPF	4.000"	45%	267 / 427	695 L_	D+L	
Snow:	20 PSF			2 - SPF	5.500"	67%	629 / 1165	1794 LL	D+L	
Construction:	20 PSF			3 - SPF		35%	123 / 427	550 _L	D+L	
Analysis Resu	ılts			_			OFESSION		7	
Analysis A	Actual Location	Allowed Capac	ity Comb. Case			//s	ROTELOA		7	

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Neg Moment	-3035 ft-lb	17'10 1/2"	6645 ft-lb	0.457 (46%)	D+L	LL
Unbraced	-2042 ft-lb	17'10 1/2"	2051 ft-lb	0.995 (100%)	D+L	L_
Pos Moment	2515 ft-lb	7'9 5/16"	6645 ft-lb	0.378 (38%)	D+L	L_
Shear	959 lb	17'10 1/2"	1550 lb	0.619 (62%)	D+L	LL
LL Defl inch	0.186 (L/1134)	8'8 1/8"	0.440 (L/480)	0.420 (42%)	L	L_
TL Defl inch	0.289 (L/731)	8'6 3/4"	0.587 (L/360)	0.490 (49%)	D+L	L_



1	1 B	ottom	flange	must be	laterally	braced	at a	maximum	of	6'3"	o.c.

ID	Load Type	Location	Trib Width	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform		1-4-0	15 PSF	40 PSF	0 PSF	0 PSF	0 PSF	
2	Part. Uniform	0-0-0 to 19-0-0		12 PSF	0 PSF	0 PSF	0 PSF	0 PSF	Tile at Kitchen / Utility

Certification is to verify the joist/beam/truss to carry the loads shown and/or for repair design. The applied loads, dimensions, and field conditions info was provided by others. The loads and dimensions must be verified and approved for the specific application by the project design professional.

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

- Dry service conditions, unless noted otherwise
 Idoist not to be treated with fire retardant or corrosive
- Handling & Installation
- Handling & Installation

 1. Noist flanges must not be cut or drilled

 2. Refer to latest copy of the Lloist product information details for framing details, stiffener tables, web hole chart, bridging details, multi-ply fastening details and handling/erection details

 3. Damaged Lloists must not be used

 4. Design assumes top flange to be laterally restrained by attached sheathing or as specified in engineering notes.

4500 Riddle By-pass Rd Riddle, OR 97469 (541) 784-4005 www.roseburg.com APA: PR-L259, ICC-ES: ESR-1251

Manufacturer Info

16045 AARON M. REED

RIZONA, U.S.A

Capital 33 N. 45th Ave , AZ 85043 602-269-6225

Digitally sealed







Client:

Project:

Goldenstein

Address: 10685 E. Rocky Hill Rd.

Dewey, AZ.

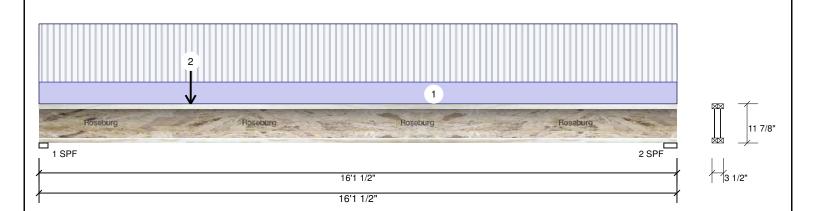
Date: 6/13/2018 Designer: Stewart Job Name: Goldenstein Project #: 18-128

Level: Floor

Roseburg #4692

Page 3 of 17

RFPI 20 11.875" 2-Ply - PASSED J2



Member Info	rmation			Reaction	Reactions UNPATTERNED Ib (Uplift)							
Type:	Girder	Application:	Floor	Brg	Live	Dead	Snow	V	Vind	Const		
Plies:	2	Design Method:	ASD	1	734	275	0		0	0		
Moisture Condition	on: Dry	Building Code:	IBC/IRC 2015	2	526	197	0		0	0		
Deflection LL:	480	Load Sharing:	No									
Deflection TL:	360	Deck:	Not Checked									
Importance:	Normal											
Temperature:	Temp <= 100°F											
General Load				Bearings	5							
Floor Live:	40 PSF			Bearing	Length	Cap. F	React D/L lb	Total	Ld. Case	Ld. Comb.		
Dead:	15 PSF			1 - SPF	2.750"	44%	275 / 734	1009	L	D+L		
Snow:	20 PSF			2 - SPF	4.000"	25%	197 / 526	724	L	D+L		
Construction:	20 PSF											

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	3377 ft-lb	6'3 1/8"	7280 ft-lb	0.464 (46%)	D+L	L
Unbraced	3377 ft-lb	6'3 1/8"	3387 ft-lb	0.997 (100%)	D+L	L
Shear	997 lb	2"	2840 lb	0.351 (35%)	D+L	L
LL Defl inch	0.211 (L/891)	7'7 7/16"	0.392 (L/480)	0.540 (54%)	L	L
TL Defl inch	0.291 (L/648)	7'7 7/16"	0.523 (L/360)	0.560 (56%)	D+L	L

Design Notes

- 1 Girders are designed to be supported on the bottom edge only.
- 2 Multiple plies must be fastened together as per manufacturer's details.
- 3 Top loads must be supported equally by all plies.
- 4 Top flange must be laterally braced at a maximum of 7'5" o.c.
- 5 Bottom flange braced at bearings.

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform		1-4-0	Тор	15 PSF	40 PSF	0 PSF	0 PSF	0 PSF	
2	Point	3-10-0		Top	150 lb	400 lb	0 lb	0 lb	0 lb	J5

Certification is to verify the joist/beam/truss to carry the loads shown and/or for repair design. The applied loads dimensions, and field conditions info was provided by others. The loads and dimensions must be verified and approved for the specific application by the project design professional.

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

- Dry service conditions, unless noted otherwise
 Idoist not to be treated with fire retardant or corrosive
- Handling & Installation
- Handling & Installation

 I. Julist flanges must not be cut or drilled

 Pareler to latest copy of the Lloist product information details for framing details, stiffener tables, web hole chart, bridging details, multi-ply fastening details and handling/erection details

 Damaged Lloists must not be used

 Design assumes top flange to be laterally restrained by attached sheathing or as specified in engineering notes.

Provide lateral support at bearing points to avoid lateral displacement and rotation
 Web stiffeners for point load as shown Minimum point load bearing lengths—3.5 inches
 For flat roofs provide proper drainage to prevent pondring.

Manufacturer Info

Roseburg Forest Products 4500 Riddle By-pass Rd Riddle, OR 97469 (541) 784-4005 www.roseburg.com APA: PR-L259, ICC-ES: ESR-1251

16045 AARON M REED

U.S.A

Capital 33 N. 45th Ave , AZ 85043 602-269-6225

Digitally sealed





Client:

Project:

Goldenstein

Address:

10685 E. Rocky Hill Rd.

Date: 6/13/2018 Designer: Stewart

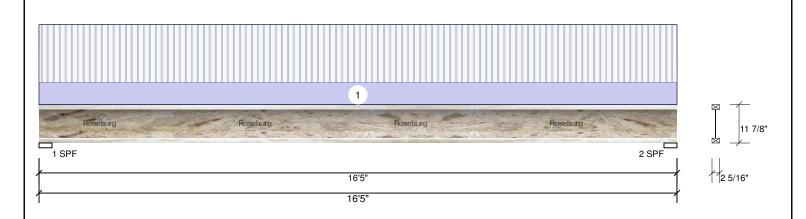
Project #:

Job Name: Goldenstein

18-128 Level: Floor Roseburg #4692

Page 4 of 17

11.875" - PASSED **RFPI 70** J3



Member Infor	rmation			Reactions UNPATTERNED lb (Uplift)							
Type:	Joist	Application:	Floor	Brg	Live	Dead	Snow	V	Vind	Const	
Spacing:	16" o.c.	Design Method:	ASD	1	438	164	0		0	0	
Moisture Condition	on: Dry	Building Code:	IBC/IRC 2015	2	438	164	0		0	0	
Deflection LL:	480	Load Sharing:	No								
Deflection TL:	360	Deck:	23/32 APA Rated Sturd-								
Importance:	Normal		I-FloorOSB Nailed and Glued								
Temperature:	Temp <= 100°F		Giueu								
General Load				Bearings	5						
Floor Live:	40 PSF			Bearing	Length	Cap. F	React D/L lb	Total	Ld. Case	Ld. Comb.	
Dead:	15 PSF			1 - SPF	4.000"	39%	164 / 438	602	L	D+L	
Snow:	20 PSF			2 - SPF	4.000"	39%	164 / 438	602	L	D+L	
Construction:	20 PSF										

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	2310 ft-lb	8'2 1/2"	6645 ft-lb	0.348 (35%)	D+L	L
Shear	582 lb	3 1/4"	1550 lb	0.376 (38%)	D+L	L
LL Defl inch	0.169 (L/1130)	8'2 9/16"	0.397 (L/480)	0.420 (42%)	L	L
TL Defl inch	0.232 (L/822)	8'2 9/16"	0.529 (L/360)	0.440 (44%)	D+L	L

Design Notes

1 Bottom flange braced at bearings.

ID	Load Type	Location	Trib Width	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform		1-4-0	15 PSF	40 PSF	0 PSF	0 PSF	0 PSF	



The loads and dimensions must be verified and approved for the specific application by the project design professional.

Certification is to verify the joist/beam/truss to carry the loads shown and/or for repair design. The applied loads,

dimensions, and field conditions info was provided by others.

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

- Dry service conditions, unless noted otherwise
 Idoist not to be treated with fire retardant or corrosive
- Handling & Installation
- Handling & Installation

 1. Noist flanges must not be cut or drilled

 2. Refer to latest copy of the Lloist product information details for framing details, stiffener tables, web hole chart, bridging details, multi-ply fastening details and handling/erection details

 3. Damaged Lloists must not be used

 4. Design assumes top flange to be laterally restrained by attached sheathing or as specified in engineering notes.

Provide lateral support at bearing points to avoid lateral displacement and rotation
 Web stiffeners for point load as shown Minimum point load bearing lengths—3.5 inches
 For flat roofs provide proper drainage to prevent poorling.

Manufacturer Info

Roseburg Forest Products 4500 Riddle By-pass Rd Riddle, OR 97469 (541) 784-4005 www.roseburg.com APA: PR-L259, ICC-ES: ESR-1251





Client:

Project: Goldenstein

Address: 10685 E. Rocky Hill Rd.

Date: 6/13/2018 Designer: Stewart Job Name: Goldenstein

18-128

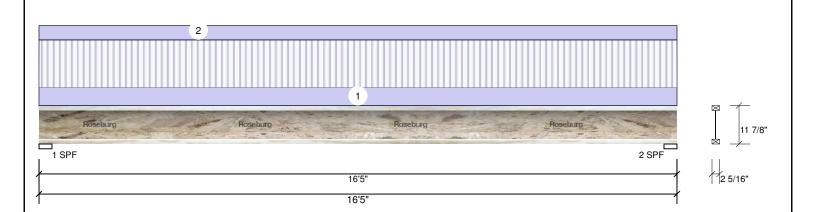
Level: Floor

Project #:

Roseburg #4692

Page 5 of 17

11.875" - PASSED **RFPI 70** J3a



Member Infor	rmation			Reactions UNPATTERNED lb (Uplift)							
Type:	Joist	Application:	Floor	Brg	Live	Dead	l Snow	١	Wind	Const	
Spacing:	16" o.c.	Design Method:	ASD	1	438	296	0		0	0	
Moisture Condition	on: Dry	Building Code:	IBC/IRC 2015	2	438	296	0		0	0	
Deflection LL:	480	Load Sharing:	No								
Deflection TL:	360	Deck:	23/32 APA Rated Sturd-								
Importance:	Normal		I-FloorOSB Nailed and Glued								
Temperature:	Temp <= 100°F		Ciueu								
General Load				Bearings	5						
Floor Live:	40 PSF			Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.	
Dead:	15 PSF			1 - SPF	4.000"	47%	296 / 438	733	L	D+L	
Snow:	20 PSF			2 - SPF	4.000"	47%	296 / 438	733	L	D+L	
Construction:	20 PSF										

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	2814 ft-lb	8'2 1/2"	6645 ft-lb	0.424 (42%)	D+L	L
Shear	709 lb	3 1/4"	1550 lb	0.457 (46%)	D+L	L
LL Defl inch	0.169 (L/1130)	8'2 9/16"	0.397 (L/480)	0.420 (42%)	L	L
TL Defl inch	0.282 (L/674)	8'2 9/16"	0.529 (L/360)	0.530 (53%)	D+L	L

Design Notes

 Bottom flange braced at bearings.

ID	Load Type	Location	Trib Width	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform		1-4-0	15 PSF	40 PSF	0 PSF	0 PSF	0 PSF	
2	Uniform		1-4-0	12 PSF	0 PSF	0 PSF	0 PSF	0 PSF	Tile ar Master Bath



Certification is to verify the joist/beam/truss to carry the loads shown and/or for repair design. The applied loads, dimensions, and field conditions info was provided by others.

The loads and dimensions must be verified and approved for the specific application by the project design professional.

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

- Dry service conditions, unless noted otherwise
 Idoist not to be treated with fire retardant or corrosive
- Handling & Installation
- Handling & Installation

 1. Noist flanges must not be cut or drilled

 2. Refer to latest copy of the Lloist product information details for framing details, stiffener tables, web hole chart, bridging details, multi-ply fastening details and handling/erection details

 3. Damaged Lloists must not be used

 4. Design assumes top flange to be laterally restrained by attached sheathing or as specified in engineering notes.

Provide lateral support at bearing points to avoid lateral displacement and rotation
 Web stiffeners for point load as shown Minimum point load bearing lengths—3.5 inches
 For flat roofs provide proper drainage to prevent pondring.

Roseburg Forest Products 4500 Riddle By-pass Rd Riddle, OR 97469

Manufacturer Info

(541) 784-4005 www.roseburg.com APA: PR-L259, ICC-ES: ESR-1251





Client:

Project: Goldenstein

Address:

10685 E. Rocky Hill Rd. Dewey, AZ.

Date: 6/13/2018 Designer: Stewart Job Name: Goldenstein

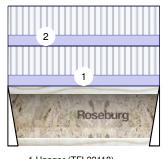
18-128

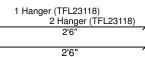
Level: Floor

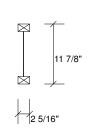
Project #:

Roseburg #4692

11.875" - PASSED **RFPI 70** J5







Page 6 of 17

Member Info	mation			Reaction	is UNPAT	TTERNED	lb (Uplift))	
Type:	Girder	Application:	Floor	Brg	Live	Dead	Snow	Wind	Const
Plies:	1	Design Method:	ASD	1	400	150	0	0	0
Moisture Condition	n: Dry	Building Code:	IBC/IRC 2015	2	400	150	0	0	0
Deflection LL:	480	Load Sharing:	No						
Deflection TL:	360	Deck:	Not Checked						
Importance:	Normal								
Temperature:	Temp <= 100°F								
General Load				Bearings	5				
Floor Live:	40 PSF			Bearing	Length	Cap. Re	act D/L lb	Total Ld. Case	Ld. Comb.
Dead:	15 PSF			1 -	2.000"	44%	150 / 400	550 L	D+L
Snow:	20 PSF			Hanger					
Construction:	20 PSF			2 -	2.000"	44%	150 / 400	550 L	D+L
Analysis Resu	nalysis Results								

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	289 ft-lb	1'3"	6645 ft-lb	0.043 (4%)	D+L	L
Unbraced	289 ft-lb	1'3"	6236 ft-lb	0.046 (5%)	D+L	L
Shear	504 lb	1 1/4"	1550 lb	0.325 (33%)	D+L	L
LL Defl inch	0.004 (L/7433)	1'3"	0.057 (L/480)	0.060 (6%)	L	L
TL Defl inch	0.005 (L/5406)	1'3"	0.076 (L/360)	0.070 (7%)	D+L	L

Design Notes

- 1 Fill all hanger nailing holes.
- 2 Girders are designed to be supported on the bottom edge only.
- 3 Top flange unbraced.
- 4 Bottom flange braced at bearings.



ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform		6-0-0	Far Face	15 PSF	40 PSF	0 PSF	0 PSF	0 PSF	
2	Uniform		2-0-0	Near Face	15 PSF	40 PSF	0 PSF	0 PSF	0 PSF	

Certification is to verify the joist/beam/truss to carry the loads shown and/or for repair design. The applied loads, dimensions, and field conditions info was provided by others. The loads and dimensions must be verified and approved for the specific application by the project design professional.

Notes

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

- Dry service conditions, unless noted otherwise
 Idoist not to be treated with fire retardant or corrosive
- Handling & Installation
- Handling & Installation

 1. Noist flanges must not be cut or drilled

 2. Refer to latest copy of the Lloist product information details for framing details, stiffener tables, web hole chart, bridging details, multi-ply fastening details and handling/erection details

 3. Damaged Lloists must not be used

 4. Design assumes top flange to be laterally restrained by attached sheathing or as specified in engineering notes.

Provide lateral support at bearing points to avoid lateral displacement and rotation
 Web stiffeners for point load as shown Minimum point load bearing lengths—3.5 inches
 For flat roofs provide proper drainage to prevent pondring.

Manufacturer Info

Roseburg Forest Products 4500 Riddle By-pass Rd Riddle, OR 97469 (541) 784-4005 www.roseburg.com APA: PR-L259, ICC-ES: ESR-1251





Client:

Project: Goldenstein

Address:

10685 E. Rocky Hill Rd.

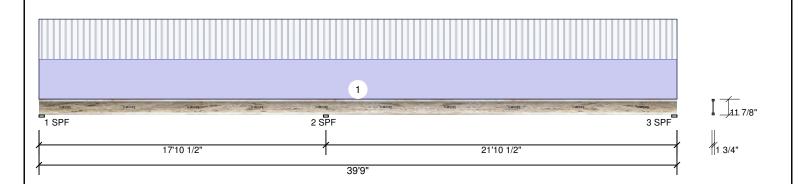
Date: 6/13/2018 Designer: Stewart Job Name: Goldenstein Project #: 18-128

Level: Ceiling

Roseburg #4692

Page 7 of 17

11.875" - PASSED **RFPI 20** J1



Member Info	rmation			Reaction	Reactions UNPATTERNED lb (Uplift)							
Type:	Joist	Application:	Roof	Brg	Live	Dead	Snow	Wi	nd	Const		
Spacing:	24" o.c.	Slope:	0/12	1	126	126	0		0	0		
Moisture Condition	on: Dry	Design Method:	ASD	2	492	492	0		0	0		
Deflection LL:	360	Building Code:	IBC/IRC 2015	3	176	176	0		0	0		
Deflection TL:	240	Load Sharing:	No									
Importance:	Normal	Deck:	Not Checked									
Temperature:	Temp <= 100°F	Ceiling:	Gypsum 5/8"									
General Load				Bearing	gs							
Floor Live:	40 PSF			Bearing	g Length	Cap. Rea	act D/L lb	Total L	d. Case	Ld. Comb.		
Dead:	15 PSF			1 - SPF	4.000"	20%	126 / 162	288 L	_	D+L		
Snow:	20 PSF			2 - SPF	3.500"	51%	492 / 492	984 L	L	D+L		
Construction:	20 PSF			3 - SPE	4.000"	26%	176 / 192	369	L	D+L		

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Neg Moment	-1943 ft-lb	17'10 1/2"	3640 ft-lb	0.534 (53%)	D+L	LL
Pos Moment	1602 ft-lb	30'6 3/8"	3640 ft-lb	0.440 (44%)	D+L	_L
Unbraced	1602 ft-lb	30'6 3/8"	1621 ft-lb	0.988 (99%)	D+L	_L
Shear	522 lb	17'10 1/2"	1420 lb	0.368 (37%)	D+L	LL
LL Defl inch	0.253 (L/1023)	29'3 9/16"	0.720 (L/360)	0.350 (35%)	L	_L
TL Defl inch	0.448 (L/579)	29'6 1/2"	1.080 (L/240)	0.410 (41%)	D+L	_L

Design Notes

1 Top flange must be laterally braced at a maximum of 3'10" o.c.

Load Type Location Trib Width Dead 0.9 Snow 1.15 Wind 1.6 Const. 1.25 Uniform 2-0-0 10 PSF 10 PSF 0 PSF 0 PSF Non Habiital Space

Certification is to verify the joist/beam/truss to carry the loads shown and/or for repair design. The applied loads, dimensions, and field conditions info was provided by others. The loads and dimensions must be verified and approved for the specific application by the project design professional.

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

Dry service conditions, unless noted otherwise
 Idoist not to be treated with fire retardant or corrosive

Handling & Installation

- Handling & Installation

 1. Noist flanges must not be cut or drilled

 2. Refer to latest copy of the Lloist product information details for framing details, stiffener tables, web hole chart, bridging details, multi-ply fastening details and handling/erection details

 3. Damaged Lloists must not be used

 4. Design assumes top flange to be laterally restrained by attached sheathing or as specified in engineering notes.

- Provide lateral support at bearing points to avoid lateral displacement and rotation
 Web stiffeners for point load as shown Minimum point load bearing lengths—3.5 inches
 For flat roofs provide proper drainage to prevent pondring.

Manufacturer Info

Roseburg Forest Products 4500 Riddle By-pass Rd Riddle, OR 97469 (541) 784-4005 www.roseburg.com APA: PR-L259, ICC-ES: ESR-1251 Capital 33 N. 45th Ave , AZ 85043 602-269-6225

ESSIONAL

16045 AARON M REED

tp. 03-31



Digitally sealed



Client:

Project: Goldenstein

Address:

10685 E. Rocky Hill Rd.

Date: 6/13/2018 Designer: Stewart

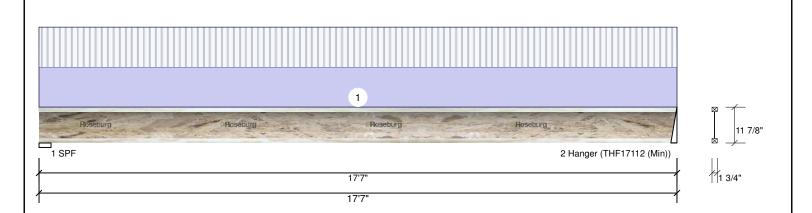
Job Name: Goldenstein Project #: 18-128

Roseburg #4692

Page 8 of 17

11.875" - PASSED **RFPI 20** J2

Level: Ceiling



Member Infor	rmation			Reactions UNPATTERNED lb (Uplift)							
Type:	Joist	Application:	Floor	Brg	Live	Dead	Snow	W	/ind	Const	
Spacing:	24" o.c.	Design Method:	ASD	1	178	178	0		0	0	
Moisture Condition	on: Dry	Building Code:	IBC/IRC 2015	2	174	174	0		0	0	
Deflection LL:	360	Load Sharing:	No								
Deflection TL:	240	Deck:	Not Checked								
Importance:	Normal	Ceiling:	Gypsum 5/8"								
Temperature:	Temp <= 100°F										
General Load				Bearing	S						
Floor Live:	40 PSF			Bearing	Length	Cap. R	eact D/L lb	Total L	Ld. Case	Ld. Comb.	
Dead:	15 PSF			1 - SPF	4.000"	25%	178 / 178	355 L	L	D+L	
Snow:	20 PSF			2 -	2.000"	35%	174 / 174	348 L	L	D+L	
Construction:	20 PSF			Hanger							

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	1481 ft-lb	8'10 1/2"	3640 ft-lb	0.407 (41%)	D+L	L
Unbraced	1481 ft-lb	8'10 1/2"	1488 ft-lb	0.995 (100%)	D+L	L
Shear	344 lb	3 1/4"	1420 lb	0.242 (24%)	D+L	L
LL Defl inch	0.151 (L/1368)	8'10 9/16"	0.574 (L/360)	0.260 (26%)	L	L
TL Defl inch	0.302 (L/684)	8'10 9/16"	0.860 (L/240)	0.350 (35%)	D+L	L

Design Notes

- 1 Fill all hanger nailing holes.
- 2 Top flange must be laterally braced at a maximum of 4' o.c.

ID	Load Type	Location	Trib Width	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform		2-0-0	10 PSF	10 PSF	0 PSF	0 PSF	0 PSF	Non Habital Space

Certification is to verify the joist/beam/truss to carry the loads shown and/or for repair design. The applied loads dimensions, and field conditions info was provided by others The loads and dimensions must be verified and approved for the specific application by the project design professional.

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

Dry service conditions, unless noted otherwise
 Idoist not to be treated with fire retardant or corrosive

Handling & Installation

- Handling & Installation

 1. Noist flanges must not be cut or drilled

 2. Refer to latest copy of the Lloist product information details for framing details, stiffener tables, web hole chart, bridging details, multi-ply fastening details and handling/erection details

 3. Damaged Lloists must not be used

 4. Design assumes top flange to be laterally restrained by attached sheathing or as specified in engineering notes.

Provide lateral support at bearing points to avoid lateral displacement and rotation
 Web stiffeners for point load as shown Minimum point load bearing lengths—3.5 inches
 For flat roofs provide proper drainage to prevent pondring.

Manufacturer Info

Roseburg Forest Products 4500 Riddle By-pass Rd Riddle, OR 97469 (541) 784-4005 www.roseburg.com APA: PR-L259, ICC-ES: ESR-1251 Capital 33 N. 45th Ave , AZ 85043 602-269-6225

U.S.

OFESSIONAL

16045 AARON M. REED



Digitally sealed June 14, 2018



Client:

Project: Goldenstein

Address:

10685 E. Rocky Hill Rd.

Date: 6/13/2018 Designer: Stewart Job Name: Goldenstein

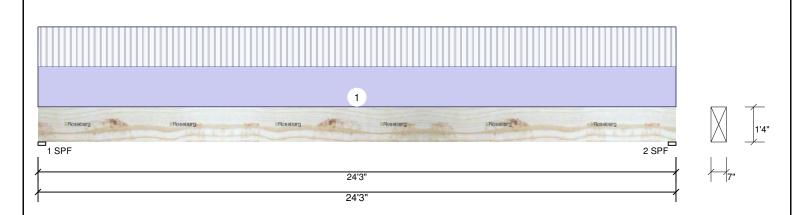
> 18-128 Level: Ceiling

Project #:

Roseburg #4692

Page 9 of 17

7.000" X 16.000" - PASSED 2.0E Rigidlam LVL **B1**



Member Info	rmation			Reaction	ns UNPA	TTERNED Ib	(Uplift)		
Type:	Girder	Application:	Floor	Brg	Live	Dead	Snow	Wind	Const
Plies:	1	Design Method:	ASD	1	2110	2468	0	0	0
Moisture Condition	on: Dry	Building Code:	IBC/IRC 2015	2	2110	2468	0	0	0
Deflection LL:	360	Load Sharing:	No						
Deflection TL:	240	Deck:	Not Checked						
Importance:	Normal								
Temperature:	Temp <= 100°F								
General Load				Bearings	5				
Floor Live:	40 PSF			Bearing	Length	Cap. React	D/L lb	Total Ld. Case	Ld. Comb.
Dead:	15 PSF			1 - SPF	3.500"	44% 2468	3 / 2110	4578 L	D+L
Snow:	20 PSF			2 - SPF	3.500"	44% 2468	3 / 2110	4578 L	D+L
Construction:	20 PSF								

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	26714 ft-lb	12'1 1/2"	74430 ft-lb	0.359 (36%)	D+L	L
Unbraced	26714 ft-lb	12'1 1/2"	72108 ft-lb	0.370 (37%)	D+L	L
Shear	3988 lb	1'6 3/4"	21653 lb	0.184 (18%)	D+L	L
LL Defl inch	0.262 (L/1088)	12'1 9/16"	0.793 (L/360)	0.330 (33%)	L	L
TI Deflinch	0.570 (L/501)	12'1 9/16"	1.190 (L/240)	0.480 (48%)	D+L	L

Design Notes

- 1 Girders are designed to be supported on the bottom edge only.
- 2 Top braced at bearings.
- 3 Bottom braced at bearings.

ID Load Type Location Trib Width Side Dead 0.9 Live 1 Snow 1.15 Wind 1.6 Const. 1.25 Comments Uniform 174 PLF 174 PLF 0 PLF 0 PLF 0 PLF Top Self Weight 30 PLF

Certification is to verify the joist/beam/truss to carry the loads shown and/or for repair design. The applied loads, dimensions, and field conditions info was provided by others. The loads and dimensions must be verified and approved for the specific application by the project design professional.

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corrosive

Handling & Installation

LVL beams must not be cut or drilled
Refer to manufacturer's product information regarding installation requirements, multi-ply fastering details, beam strength values, and code approvals
Damaged Beams must not be used

Design assumes top edge is laterally restrained
Provide lateral support at bearing points to avoid
lateral displacement and rotation

6. For flat roofs provide proper drainage to prevent ponding

Manufacturer Info Roseburg Forest Products

4500 Riddle By-pass Rd Riddle, OR 97469 (541) 784-4005 www.roseburg.com APA: PR-L289, PR-L270, ICC-ES: ESR-1210

16045 AARON M. REED

> Capital 33 N. 45th Ave , AZ 85043 602-269-6225

Digitally sealed





J1

15/16"

Client:

Project: Goldenstein

Address:

10685 E. Rocky Hill Rd.

16'8 1/4'

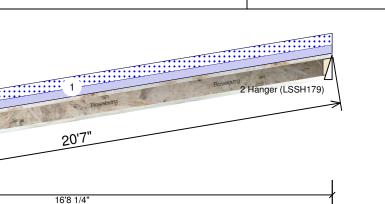
Date: 6/13/2018 Designer: Stewart Job Name: Goldenstein

> 18-128 Level: Roof

Project #:

Roseburg #4692

9.500" - PASSED RFPI 20



1

Hanger



Page 10 of 17

Const

0

Wind

0

Member Information

Type:	Joist	Application:	Roof
Spacing:	16" o.c.	Slope:	8/12
Moisture Condition:	Dry	Design Method:	ASD
Deflection LL:	360	Building Code:	IBC/IRC 2015
Deflection TL:	240	Load Sharing:	No
Importance:	Normal	Deck:	15/32 APA Rated
Temperature:	Temp <= 100°F		SheathingOSB Nailed and Glued
General Load			and Cided
Floor Live:	40 PSF		

Reactions UNPATTERNED lb (Uplift) Brg Live Dead Snow

200

0

2	0	199	222		0	0
Bearings						
Bearing L	ength C	ap. Rea	act D/L lb	Total	Ld. Case	Ld. Comb.
1 - D. Fir 3	.500" 3	2%	200 / 223	423	L	D+S
2 - 3	.000" 3	1%	199 / 222	421	L	D+S

16045 AARON M.

REED

live loads

223

Analysis Results

Construction:

Dead:

Snow:

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	1678 ft-lb	8'4 3/8"	3243 ft-lb	0.517 (52%)	D+S	L
Shear	343 lb	2 3/4"	1403 lb	0.245 (24%)	D+S	L
LL Defl inch	0.385 (L/609)	8'4 7/16"	0.652 (L/360)	0.590 (59%)	S	L
TL Defl inch	0.733 (L/320)	8'4 7/16"	0.978 (L/240)	0.750 (75%)	D+S	L

Design Notes

- 1 Fill all hanger nailing holes.
- 2 Use solid wedge bearings or metal variable pitch connector at each bearing.
- 3 Attach with enough nails to prevent sliding between the joist and the sloped bearing wedge at

Location

- 4 No composite deck properties were used to calculate deflection.
- 5 Bottom flange braced at bearings.
- 6 Web stiffeners required at Bearing 2.

Load Type

Uniform

Moving Concentrated

15 PSF

20 PSF

20 PSF

loped bearing we	age at			ARIZON EXP. 03	VA, U.S.A. June 14, 2018	
Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments	
15 PSF	0 PSF	20 PSF	0 PSF	0 PSF		
	300 lb.	Moved in	2'6"	steps	Moving load check is non- concurrent with any other	

Certification is to verify the joist/beam/truss to carry the loads shown and/or for repair design. The applied loads dimensions, and field conditions info was provided by others. The loads and dimensions must be verified and approved for

the specific application by the project design professional.

Notes

ID

1

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

- Dry service conditions, unless noted otherwise
 IJoist not to be treated with fire retardant or corrosive
- Handling & Installation
- Identifing & Installation

 . Noist flanges must not be cut or drilled

 . Refer to latest copy of the Lloist product information
 details for framing details, stiffener tables, web hole
 chart, bridging details, multi-ply fastening details and
 handling/erection details

 . Damaged bloists must not be used
 . Design assumes top flange to be laterally restrained
 by attached sheathing or as specified in engineering
 notes.

Trib Width

1-4-0

- 5. Provide lateral support at bearing points to avoid

- lateral displacement and rotation
 6. Web stiffeners for point load as shown Minimum point load bearing length>= 3.5 inches
 7. For flat roofs provide proper drainage to prevent

Manufacturer Info

Roseburg Forest Products 4500 Riddle By-pass Rd Riddle, OR 97469 (541) 784-4005 www.roseburg.com APA: PR-L259, ICC-ES: ESR-1251 Capital 33 N. 45th Ave , AZ 85043 602-269-6225

Digitally sealed





Client:

Goldenstein Project:

Address:

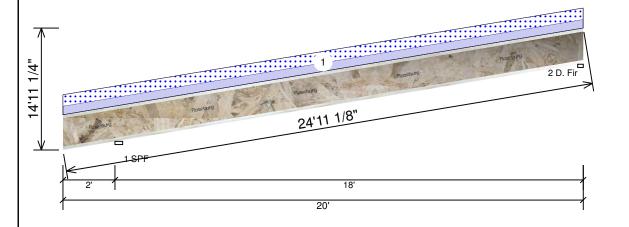
10685 E. Rocky Hill Rd. Dewey, AZ.

Date: 6/13/2018 Designer: Stewart Job Name: Goldenstein

Roseburg #4692

16.000" - PASSED J6 **RFPI 400**

Project #: 18-128 Level: Roof





Page 11 of 17

Member Information

24" o.c. Spacing: Moisture Condition: Dry Deflection LL: 360 Deflection TL: 240 Importance: Temperature: Temp <= 100°F

Normal

General Load 40 PSF Floor Live: Dead: 15 PSF Snow: 20 PSF Construction: 20 PSF

Application: Roof Slope: 8/12 Design Method: ASD

Building Code: IBC/IRC 2015

Load Sharing: Nο

Deck:

15/32 APA Rated SheathingOSB Nailed and Glued

Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind	Const
1	0	399	443	0	0
2	0	321	357	0	0

Bearings

Bearing Length	Cap. R	eact D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF 3.500"	33%	399 / 443	842	LL	D+S
2 - D. Fir 2.563"	48%	321 / 358	679	_L	D+S

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Neg Moment	-152 ft-lb	2'	6762 ft-lb	0.022 (2%)	D+S	L_
Unbraced	-152 ft-lb	2'	6711 ft-lb	0.023 (2%)	D+S	L_
Pos Moment	2927 ft-lb	11'1"	6762 ft-lb	0.433 (43%)	D+S	_L
Shear	568 lb	2'1 3/4"	2266 lb	0.251 (25%)	D+S	LL
LL Defl inch	0.208 (L/1230)	11' 1/4"	0.710 (L/360)	0.290 (29%)	S	_L
TL Defl inch	0.392 (L/652)	11' 5/16"	1.064 (L/240)	0.370 (37%)	D+S	_L
LL Cant	-0.067 (2L/860)	Lt Cant	0.200 (2L/360)	0.336 (34%)	S	_L
TL Cant	-0.125 (2L/460)	Lt Cant	0.300 (2L/240)	0.418 (42%)	D+S	_L



Design Notes

- 1 Use solid wedge bearings or metal variable pitch connector at each bearing.
- 2 Attach with enough nails to prevent sliding between the joist and the sloped bearing wedge at
- 3 No composite deck properties were used to calculate deflection.
- 4 Bottom flange must be laterally braced at a maximum of 8'7" o.c. along the slope.

ID Load Type Location Trib Width Dead 0.9 Live 1 Snow 1.15 Wind 1.6 Const. 1.25 Comments 15 PSF 0 PSF 20 PSF 0 PSF 0 PSF Uniform 2-0-0

Certification is to verify the joist/beam/truss to carry the loads shown and/or for repair design. The applied loads, dimensions, and field conditions info was provided by others. The loads and dimensions must be verified and approved for the specific application by the project design professional.

Notes

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

Dry service conditions, unless noted otherwise
 IJoist not to be treated with fire retardant or corrosive

Handling & Installation

- Identifing & Installation

 . Noist flanges must not be cut or drilled

 . Refer to latest copy of the Lloist product information
 details for framing details, stiffener tables, web hole
 chart, bridging details, multi-ply fastening details and
 handling/erection details

 . Damaged bloists must not be used
 . Design assumes top flange to be laterally restrained
 by attached sheathing or as specified in engineering
 notes.
- 5. Provide lateral support at bearing points to avoid

lateral displacement and rotation

6. Web stiffeners for point load as shown Minimum point load bearing lengths= 3.5 inches

7. For flat roofs provide proper drainage to prevent

Manufacturer Info

Roseburg Forest Products 4500 Riddle By-pass Rd Riddle, OR 97469 (541) 784-4005 www.roseburg.com APA: PR-L259, ICC-ES: ESR-1251





Client:

Project: Goldenstein

Address:

10685 E. Rocky Hill Rd.

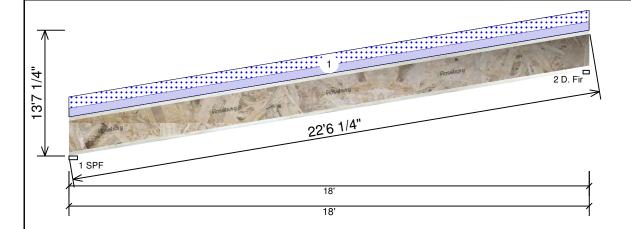
Date: 6/13/2018 Designer: Stewart Job Name: Goldenstein

> 18-128 Level: Roof

Project #:

Roseburg #4692

16.000" - PASSED J7 **RFPI 400**





Page 12 of 17

Member Information

Type:	Joist
Spacing:	24" o.c.
Moisture Condition:	Dry
Deflection LL:	360
Deflection TL:	240
Importance:	Normal
Temperature:	Temp <= 100°F
General Load	

40 PSF Floor Live: Dead: 15 PSF Snow: 20 PSF Construction: 20 PSF

Application: Roof Slope: 8/12 Design Method: ASD

Building Code: IBC/IRC 2015

Load Sharing: Nο Deck:

15/32 APA Rated SheathingOSB Nailed and Glued

Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind	Const
1	0	325	362	0	0
2	0	322	358	0	0

Bearings

Bearing Length	Cap. R	eact D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF 3.500"	41%	325 / 362	686	L	D+S
2 - D. Fir 2.563"	48%	322 / 358	681	L	D+S

16045 AARON M REED

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Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	2958 ft-lb	9' 1/2"	6762 ft-lb	0.438 (44%)	D+S	L
Shear	558 lb	21'5 1/16"	2266 lb	0.246 (25%)	D+S	L
LL Defl inch	0.207 (L/1227)	9' 1/2"	0.707 (L/360)	0.290 (29%)	S	L
TL Defl inch	0.394 (L/646)	9' 1/2"	1.060 (L/240)	0.370 (37%)	D+S	L

Design Notes

- 1 Use solid wedge bearings or metal variable pitch connector at each bearing.
- 2 Attach with enough nails to prevent sliding between the joist and the sloped bearing wedge at each support.

	flange braced at bearings.	used to calculate				v: 03-	31-20		
ID	Load Type	Location	Trib Width	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform		2-0-0	15 PSF	0 PSF	20 PSF	0 PSF	0 PSF	

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The loads and dimensions must be verified and approved for the specific application by the project design professional.

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

Dry service conditions, unless noted otherwise
 IJoist not to be treated with fire retardant or corrosive

Handling & Installation

- Identifing & Installation

 . Noist flanges must not be cut or drilled

 . Refer to latest copy of the Lloist product information
 details for framing details, stiffener tables, web hole
 chart, bridging details, multi-ply fastening details and
 handling/erection details

 . Damaged bloists must not be used
 . Design assumes top flange to be laterally restrained
 by attached sheathing or as specified in engineering
 notes.
- 5. Provide lateral support at bearing points to avoid

lateral displacement and rotation
6. Web stiffeners for point load as shown Minimum point load bearing length>= 3.5 inches
7. For flat roofs provide proper drainage to prevent ponding.

Manufacturer Info

Roseburg Forest Products 4500 Riddle By-pass Rd Riddle, OR 97469 (541) 784-4005 www.roseburg.com APA: PR-L259, ICC-ES: ESR-1251 Capital 33 N. 45th Ave , AZ 85043 602-269-6225

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Project: Goldenstein

Address:

Dewey, AZ.

10685 E. Rocky Hill Rd.

Date: 6/13/2018 Designer: Stewart Job Name: Goldenstein

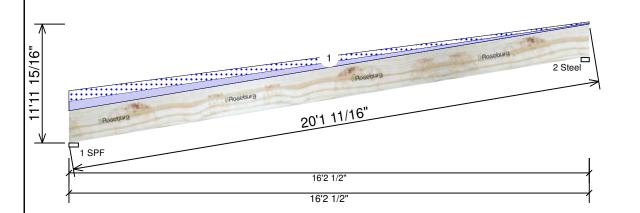
Level: Roof

Project #:

18-128

Roseburg #4692

3.500" X 11.875" - PASSED 2.0E Rigidlam LVL **B1**





Page 13 of 17

Member Information

Type:	Girder	Application:	Roof
Plies:	1	Slope:	8/12
Moisture Condition:	Dry	Design Method:	ASD
Deflection LL:	360	Building Code:	IBC/IRC 2015
Deflection TL:	240	Load Sharing:	No
Importance:	Normal	Deck:	Not Checked
Temperature:	Temp <= 100°F		
General Load			
Floor Live:	40 PSF		
Dead:	15 PSF		

Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind	Const
1	0	1124	980	0	0
2	0	679	560	0	0
1					

Bearings

Bearing Length	Cap. R	eact D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF 3.500"	40%	1124 / 980	2103	L	D+S
2 - Steel 3.000"	16%	679 / 560	1239	L	D+S

Analysis Results

Construction:

Snow:

_							
	Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
	Moment	6525 ft-lb	7'2 3/8"	24470 ft-lb	0.267 (27%)	D+S	L
	Unbraced	6525 ft-lb	7'2 3/8"	20476 ft-lb	0.319 (32%)	D+S	L
	Shear	1494 lb	1'2 5/8"	9241 lb	0.162 (16%)	D+S	L
	LL Defl inch	0.196 (L/1160)	7'10 5/8"	0.633 (L/360)	0.310 (31%)	S	L
	TL Defl inch	0.427 (L/533)	7'10 13/16"	0.949 (L/240)	0.450 (45%)	D+S	L

Design Notes

1 Refer to manufacturer's literature for sloped bearing detail.

20 PSF

20 PSF

- 2 Attach with enough nails to prevent sliding between the joist and the sloped bearing wedge at
- 3 Girders are designed to be supported on the bottom edge only.
- 4 Top braced at bearings
- 5 Bottom braced at bearings.

	ARIZ EXP.		Digitally seale June 14, 2018
Snow 1.15	Wind 1.6	Const. 1.25	Comments
170 PLF	0 PLF	0 PLF	

16045 AARON M REED

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Tapered Start	0-0-0		Far Face	149 PLF	0 PLF	170 PLF	0 PLF	0 PLF	
	End	16-2-8			15 PLF	0 PLF	20 PLF	0 PLF	0 PLF	
	Self Weight				11 PLF					

Certification is to verify the joist/beam/truss to carry the loads shown and/or for repair design. The applied loads, dimensions, and field conditions info was provided by others. The loads and dimensions must be verified and approved for the specific application by the project design professional.

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corrosive

Handling & Installation

- LVL beams must not be cut or drilled
 Refer to manufacturer's product information regarding installation requirements, multi-ply fastering details, beam strength values, and code approvals
 Damaged Beams must not be used

- Design assumes top edge is laterally restrained
 Provide lateral support at bearing points to avoid
 lateral displacement and rotation

6. For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

Roseburg Forest Products 4500 Riddle By-pass Rd Riddle, OR 97469 (541) 784-4005 www.roseburg.com APA: PR-L289, PR-L270, ICC-ES: ESR-1210





Project: Goldenstein

Address:

Dewey, AZ.

10685 E. Rocky Hill Rd.

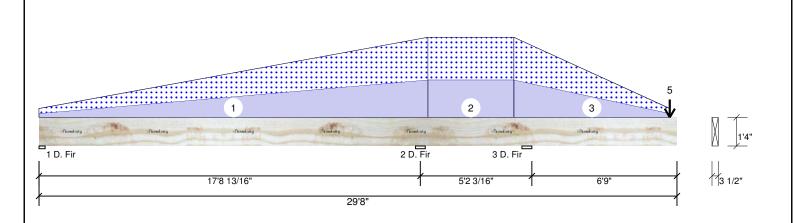
Date: 6/13/2018 Designer: Stewart Job Name: Goldenstein

Roseburg #4692

Page 14 of 17

3.500" X 16.000" - PASSED 2.0E Rigidlam LVL **B2**





Member Info	lember Information R				Reactions UNPATTERNED Ib (Uplift)						
Type:	Girder	Application:	Roof	Brg	Live	Dead	Snow	Wind	Const		
Plies:	1	Slope:	0/12	1	0	930	950	0	0		
Moisture Condition	on: Dry	Design Method:	ASD	2	0	1585	2235	0	0		
Deflection LL:	360	Building Code:	IBC/IRC 2015	3	0	4628	4109	0	0		
Deflection TL:	240	Load Sharing:	No								
Importance:	Normal	Deck:	Not Checked								
Temperature:	Temp <= 100°F										
General Load				Bearing	gs						
Floor Live:	40 PSF			Bearing	g Length	Cap. Rea	ct D/L lb	Total Ld. Cas	e Ld. Comb.		
Dead:	15 PSF			1 - D. F	Fir 3.375"	26%	930 / 956	1886 L_L	D+S		
Snow:	20 PSF			2 - D. F	Fir 5.500"	41% 158	35 / 3376	4961 LL_	D+S		
Construction:	20 PSF			3 - D F	Fir 5.500"	78% 462	28 / 4708	9336 LL	D+S		

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Neg Moment	-21283 ft-lb	22'11"	42797 ft-lb	0.497 (50%)	D+S	LLL
Unbraced	-21283 ft-lb	22'11"	40275 ft-lb	0.528 (53%)	D+S	_LL
Pos Moment	9345 ft-lb	8'7 1/16"	42797 ft-lb	0.218 (22%)	D+S	L_L
Unbraced	9345 ft-lb	8'7 1/16"	31192 ft-lb	0.300 (30%)	D+S	L_L
Shear	3926 lb	24'3"	12451 lb	0.315 (32%)	D+S	LLL
LL Defl inch	0.099 (L/2126)	8'7 7/16"	0.584 (L/360)	0.170 (17%)	S	L_L
TL Defl inch	0.194 (L/1084)	8'7 7/16"	0.876 (L/240)	0.220 (22%)	D+S	L_L
LL Cant	0.192 (2L/845)	Rt Cant	0.450 (2L/360)	0.430 (43%)	S	L_L
TL Cant	0.407 (2L/398)	Rt Cant	0.675 (2L/240)	0.600 (60%)	D+S	L_L

16045 AARON M. REED Digitally sealed June 14, 2018

Design Notes

- 1 Warning Note: right cant exceeds 1/3 of back span, wind uplift may need to be checked.
- 2 Girders are designed to be supported on the bottom edge only.
- 3 Top braced at bearings.
- 4 Bottom braced at bearings

Certification is to verify the joist/beam/truss to carry the loads shown and/or for repair design. The applied loads dimensions, and field conditions info was provided by others. The loads and dimensions must be verified and approved for the specific application by the project design professional.

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Tapered Start	0-0-0		Тор	30 PLF	0 PLF	40 PLF	0 PLF	0 PLF	
	End	18-1-0			298 PLF	0 PLF	340 PLF	0 PLF	0 PLF	
2	Part. Uniform	18-1-0 to 22-1-0		Тор	298 PLF	0 PLF	340 PLF	0 PLF	0 PLF	

Continued on page 2...

Notes

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

- Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corrosive
- Handling & Installation
- LVL beams must not be cut or drilled Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals Damaged Beams must not be used

- Design assumes top edge is laterally restrained
 Provide lateral support at bearing points to avoid
 lateral displacement and rotation

6. For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

Roseburg Forest Products 4500 Riddle By-pass Rd Riddle, OR 97469 (541) 784-4005 www.roseburg.com APA: PR-L289, PR-L270, ICC-ES: ESR-1210





Client:

Project: Goldenstein

Address:

10685 E. Rocky Hill Rd. Dewey, AZ.

Date: 6/13/2018 Designer: Stewart Job Name: Goldenstein

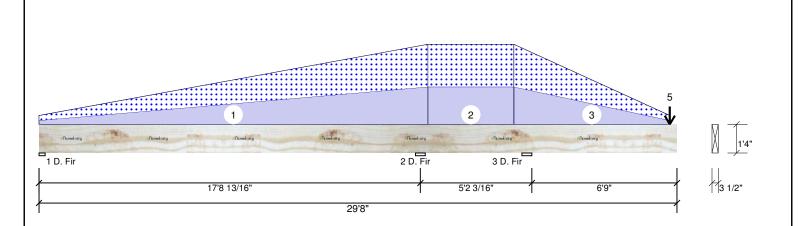
Project #:

Roseburg #4692

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3.500" X 16.000" - PASSED 2.0E Rigidlam LVL **B2**

18-128 Level: Roof



ŀ	Continued from page	age 1									
l	ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
l	3	Tapered Start	22-1-0		Тор	298 PLF	0 PLF	340 PLF	0 PLF	0 PLF	
l		End	29-4-0			30 PLF	0 PLF	40 PLF	0 PLF	0 PLF	
l	4	Point	29-4-0		Near Face	679 lb	0 lb	560 lb	0 lb	0 lb	
l	5	Point	29-4-0		Far Face	679 lb	0 lb	560 lb	0 lb	0 lb	
١		Self Weight				15 PLF					
ı											



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- Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corrosive
- Handling & Installation
- LVL beams must not be cut or drilled
 Refer to manufacturer's product information
 requirements, multi-ply
 fastening details, beam strength values, and code
 approvals
 Damaged Beams must not be used

- Damaged Beams must not be used
 Design assumes top edge is laterally restrained
 Provide lateral support at bearing points to avoid
 lateral displacement and rotation

6. For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

Roseburg Forest Products 4500 Riddle By-pass Rd Riddle, OR 97469 (541) 784-4005 www.roseburg.com APA: PR-L289, PR-L270, ICC-ES: ESR-1210





Project:

Goldenstein Address:

Dewey, AZ.

10685 E. Rocky Hill Rd.

Date: 6/13/2018 Designer: Stewart

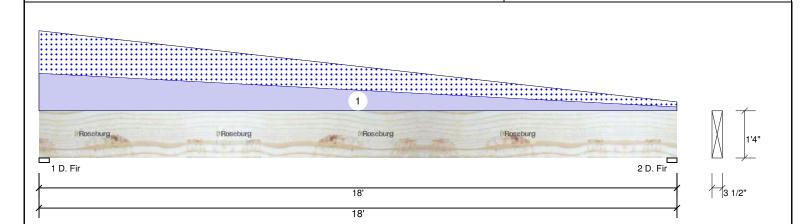
Job Name: Goldenstein Project #: 18-128

Level: Roof

Roseburg #4692

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3.500" X 16.000" - PASSED 2.0E Rigidlam LVL **B3**



Member Information Reactions UNPATTERNED lb (Uplift) Type: Application: Roof Live Wind Brg Dead Snow Const Plies: Slope: 0/12 2022 2172 0 0 0 1 Moisture Condition: Dry Design Method: ASD 2 0 1196 1248 0 0 Deflection LL: 360 **Building Code: IBC/IRC 2015** Deflection TL: 240 Load Sharing: Nο Importance: Normal Deck: Not Checked Temperature: Temp <= 100°F **Bearings** General Load 40 PSF Floor Live: Bearing Length Cap. React D/L lb Total Ld. Case Ld. Comb. 1 - D. Fir 3.500" Dead: 15 PSF 2022 / 2172 4194 I D+S Snow: 20 PSF 2 - D. Fir 3.375" 33% 1196 / 1248 2444 D+S

Analysis Results

20 PSF

Construction:

L							
	Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
	Moment	14411 ft-lb	7'11 7/16"	42797 ft-lb	0.337 (34%)	D+S	L
l	Unbraced	14411 ft-lb	7'11 7/16"	28170 ft-lb	0.512 (51%)	D+S	L
	Shear	3212 lb	1'6 3/4"	12451 lb	0.258 (26%)	D+S	L
	LL Defl inch	0.170 (L/1240)	8'8 7/8"	0.585 (L/360)	0.290 (29%)	S	L
l	TL Defl inch	0.330 (L/639)	8'9"	0.878 (L/240)	0.380 (38%)	D+S	L

Design Notes

- 1 Girders are designed to be supported on the bottom edge only.
- 2 Top braced at bearings.
- 3 Bottom braced at bearings

o Bottom braced at bearings.									0 0 .	
ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Tapered Start	0-0-0		Тор	298 PLF	0 PLF	340 PLF	0 PLF	0 PLF	
	End	18-0-0			30 PLF	0 PLF	40 PLF	0 PLF	0 PLF	
	Self Weight				15 PI F					

Certification is to verify the joist/beam/truss to carry the loads shown and/or for repair design. The applied loads dimensions, and field conditions info was provided by others. The loads and dimensions must be verified and approved for the specific application by the project design professional.

Notes

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corrosive

Handling & Installation

- LVL beams must not be cut or drilled Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals Damaged Beams must not be used
- Design assumes top edge is laterally restrained
 Provide lateral support at bearing points to avoid
 lateral displacement and rotation

6. For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

Roseburg Forest Products 4500 Riddle By-pass Rd Riddle, OR 97469 (541) 784-4005 www.roseburg.com APA: PR-L289, PR-L270, ICC-ES: ESR-1210

OFESSIONAL

16045 AARON M REED

> Capital 33 N. 45th Ave , AZ 85043 602-269-6225





Project: Goldenstein

Address:

Dewey, AZ.

10685 E. Rocky Hill Rd.

Date: 6/13/2018 Designer: Stewart

Project #:

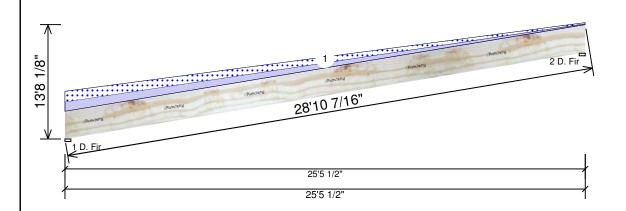
Job Name: Goldenstein

Roseburg #4692

5.250" X 16.000" - PASSED 2.0E Rigidlam LVL **B4**

Level: Roof

18-128





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Member Information

Type:	Girder
Plies:	1
Moisture Condition:	Dry
Deflection LL:	360
Deflection TL:	240
Importance:	Normal
Temperature:	Temp <= 100°F
General Load	

40 PSF

15 PSF

20 PSF

20 PSF

Application: Roof Slope: 5.75/12 Design Method: ASD

Building Code: **IBC/IRC 2015** Load Sharing: Nο

Deck:

Not Checked

Reactions UNPATTERNED Ib (Uplift)

Brg	Live	Dead	Snow	Wind	Const
1	0	3488	3237	0	0
2	0	2097	1855	0	0

Bearings

Bearing Length	Cap. React D/L lb	Total Ld. Case	Ld. Comb.
1 - D. Fir 3.500"	59% 3488 / 3237	7 6725 L	D+S
2 - D. Fir 3.500"	34% 2097 / 1855	3951 L	D+S

16045 AARON M. REED

ZONA, U.S.A

Analysis Results

Floor Live: Dead:

Construction:

Snow:

L	, ,						
ſ	Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
	Moment	33294 ft-lb	11'2 3/4"	64196 ft-lb	0.519 (52%)	D+S	L
	Unbraced	33294 ft-lb	11'2 3/4"	55682 ft-lb	0.598 (60%)	D+S	L
	Shear	5138 lb	1'6 3/4"	18676 lb	0.275 (28%)	D+S	L
	LL Defl inch	0.604 (L/551)	12'4 1/4"	0.924 (L/360)	0.650 (65%)	S	L
	TL Defl inch	1.267 (L/263)	12'4 3/8"	1.386 (L/240)	0.910 (91%)	D+S	L

Design Notes

- 1 Refer to manufacturer's literature for sloped bearing detail.
- 2 Attach with enough nails to prevent sliding between the joist and the sloped bearing wedge at
- 3 Girders are designed to be supported on the bottom edge only.
- 4 Top braced at bearings.

5 Bottom braced at bearings.										
ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Tapered Start	0-0-0		Тор	322 PLF	0 PLF	360 PLF	0 PLF	0 PLF	
	End	25-5-8			30 PLF	0 PLF	40 PLF	0 PLF	0 PLF	
	Self Weight				22 PLF					

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- Handling & Installation
- LVL beams must not be cut or drilled
 Refer to manufacturer's product information regarding installation requirements, multi-ply fastering details, beam strength values, and code approvals
 Damaged Beams must not be used

- Design assumes top edge is laterally restrained
 Provide lateral support at bearing points to avoid
 lateral displacement and rotation

6. For flat roofs provide proper drainage to prevent ponding

Manufacturer Info Roseburg Forest Products

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