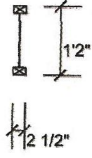
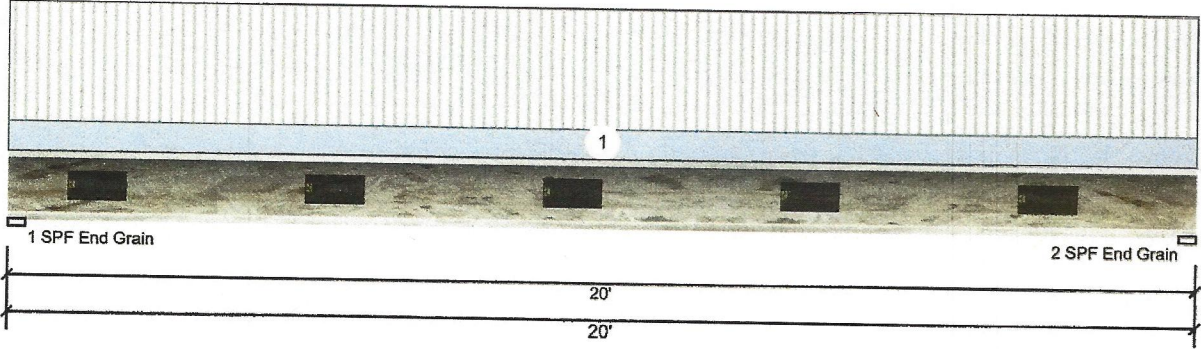




**B1 RFPI 40S 14.000" - PASSED**

Level: Level



**Member Information**

**Reactions UNPATTERNED lb (Uplift)**

Type:	Joist
Spacing:	16" o.c.
Moisture Condition:	Dry
Deflection LL:	480
Deflection TL:	240
Importance:	Normal
Temperature:	Temp <= 100°F
General Load	
Floor Live:	40 PSF
Dead:	10 PSF

Application:	Floor
Design Method:	ASD
Building Code:	IBC/IRC 2015
Load Sharing:	No
Deck:	Not Checked

Brg	Live	Dead	Snow	Wind	Const
1	533	133	0	0	0
2	533	133	0	0	0

**Bearings**

Bearing	Length	Cap. React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.500"	45% 133 / 533	667	L	D+L
2 - SPF End Grain	3.500"	45% 133 / 533	667	L	D+L

**Analysis Results**

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	3182 ft-lb	10'	4270 ft-lb	0.745 (75%)	D+L	L
Unbraced	3182 ft-lb	10'	3195 ft-lb	0.996 (100%)	D+L	L
Shear	651 lb	2 3/4"	1710 lb	0.381 (38%)	D+L	L
LL Defl inch	0.397 (L/591)	10' 1/16"	0.489 (L/480)	0.810 (81%)	L	L
TL Defl inch	0.496 (L/473)	10' 1/16"	0.977 (L/240)	0.510 (51%)	D+L	L

**Design Notes**

- 1 Top flange must be laterally braced at a maximum of 3'8" o.c.
- 2 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	10 PSF	40 PSF	0 PSF	0 PSF	0 PSF	

*14" LVL 16" O.C. #44 40 EACH*

**Notes**  
Calculated Structural 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.

**Lumber**  
1. Dry service conditions, unless noted otherwise.  
2. Ljoist not to be treated with fire retardant or corrosive chemicals.

**Handling & Installation**

1. Ljoist flanges must not be cut or drilled.
2. Refer to latest copy of the Ljoist product information details for framing details, stiffener tables, web hole chart, bridging details, multi-ply fastening details and handling/connection details.
3. Damaged Ljoists must not be used.
4. 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

Diamond Hill Plywood  
2706 White Horse road, SC  
US  
29611  
866-846-2715

This design is valid until 7/10/2021

