MYERHILL
CONSULTING

January 16, 2019

John Turner
U.S. Lumber
3312 North Berkeley Lake Road
Duluth, GA 30096

Client: Guy C Lee - Clayton
Project: 201811-5003 Kensington Park
Address: 460 Carolina Way, Sanford, NC 27332

TO WHOM IT MAY CONCERN:

I have reviewed attached isDesign™ Member Design Report and Field Damage Report provided by U.S. Lumber for the client and project listed above.

My professional engineer's seal on this letter verifies that:

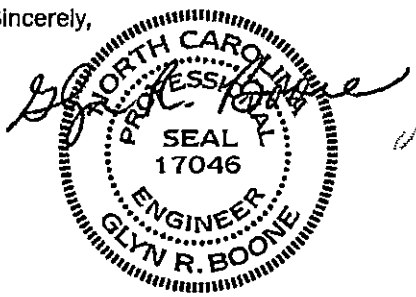
- The EverEdge™ joist or beam as originally designed can structurally support the loads shown.
- The modified member as described and detailed in the attached Field Damage Report can structurally support the loads shown without reinforcement – **NO REPAIR REQUIRED.**

My review is limited to the building components shown in these reports. I have not verified the applicability of components with the project plans or jobsite conditions. All notes and design load information shown in these reports should be reviewed with the building designer and/or the local code official to ensure that the loads, spans, and other conditions are correct and acceptable for the specific application. Verification of end use conditions is the responsibility of the building designer and/or local code official.

Alternate materials shall not be substituted for the products and/or repairs shown on the attached documents. Product substitution renders my review null and void.

This PDF document containing a cover letter and attached design reports has been digitally signed, dated and certified as indicated by my seal and signature below and a certification banner when viewed electronically. A printed copy of this electronic document is suitable for archival purposes, but it is not considered to be an original signed, dated, and sealed document.

Sincerely,



c=US, st=Pennsylvania, l=Leola, o=Glyn Boone,
cn=Glyn Boone, email=glynboone@myerhill.com
2019.01.16 13:36:26 -05'00'

Glyn R. Boone, P.E.
Owner/Principal
Myer Hill Consulting
NC PE# 17046 - NC COA# P-1898

Attachments: Field Damage Report with Repair Detail
isDesign™ Member Report dated 1/16/19

FIELD DAMAGE REPORT

U.S. LUMBER

Weyerhaeuser

EverEdge™ Series

2160 Satellite Blvd., Suite 450
Duluth, GA 30097
Phone: 888-613-5078
Email: EWPTeam@uslumber.com

Job Information:

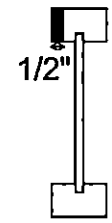
Name:	Kensington Park- 201811-5003- J4 / NC	Date:	1/16/2019
Address:	460 Carolina Way, Sanford, NC		
Contact Phone:	919-553-6699	Contact Name:	Shawn Norris
Contact Company:	Guy C Lee - Clayton		

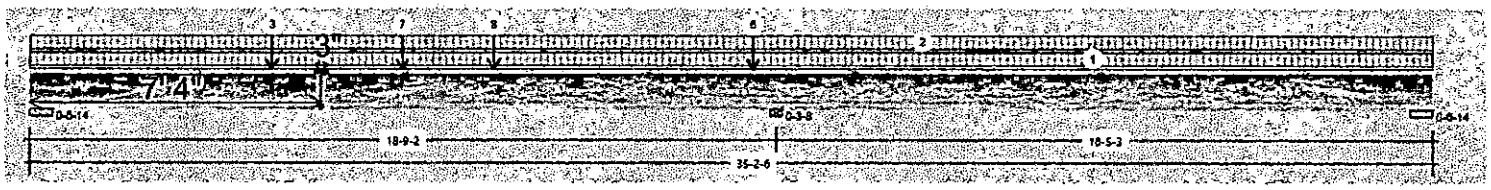
Member Info:

Series: EEI30 Depth: 11 7/8" O.C.: 19.2" Plys: 1

Description:

Attached is a jost that had had a notch made in the top flange. Located 7' 4" from the left end, the notch goes into the flange 1/2", and is 3" long. Need repair if necessary, and NC seal.





ENGINEERING REVIEW:

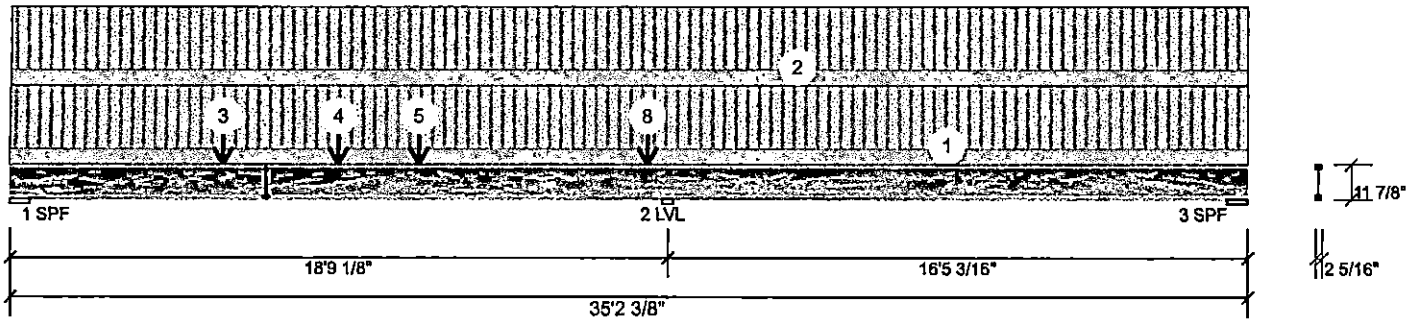
NO REPAIR REQUIRED – Member OK as is

isDesign™

Client:	Guy C Lee-Clayton	Date:	1/16/2019
Project:	Kensington Park	Designer:	Jeff Daugherty
Address:	460 Carolina Way Sanford, NC	Job Name:	201811-5003
		Project #:	5003

J4 EEI™ 30 Joist 11.875" - PASSED

Level: 1st Flr



Member Information

Type:	Joist	Application:	Floor
Spacing:	19" o.c.	Design Method:	ASD
Moisture Condition:	Dry	Building Code:	IBC/IRC 2015
Deflection LL:	480	Load Sharing:	No
Deflection TL:	240	Deck:	23/32 APA Rated Sturd-I-FloorOSB Nailed and Glued
Importance:	Normal		
Temperature:	Temp <= 100°F		
General Load			
Floor Live:	40 PSF		
Dead:	10 PSF		

Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind	Const
1	391	213	0	0	0
2	1408	683	0	0	0
3	307	49	0	0	0

Bearings

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	6.875"	43%	212 / 429	641	L_	D+L
2 - LVL	3.500"	85%	683 / 1410	2093	LL	D+L
3 - SPF	6.875"	28%	48 / 379	427	_L	D+L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Neg Moment	-2787 ft-lb	18'9 1/8"	5880 ft-lb	0.474 (47%)	D+L	LL
Unbraced	-2787 ft-lb	18'9 1/8"	2792 ft-lb	0.998 (100%)	D+L	LL
Pos Moment	2679 ft-lb	8'11 1/16"	5880 ft-lb	0.456 (46%)	D+L	L_
Shear	1421 lb	18'9 1/8"	1620 lb	0.877 (88%)	D+L	LL
LL Defl inch	0.219 (L/999)	9'3 3/8"	0.456 (L/480)	0.480 (48%)	L	L_
TL Defl inch	0.354 (L/619)	9'3 9/16"	0.913 (L/240)	0.390 (39%)	D+L	L_

Location Analysis

Analysis Type	Location	Max Value	Ld. Comb.	Ld. Case
Pos Moment	7'4"	2600 ft-lb	D+L	L_
Shear	7'4"	99 lb	D+L	L_
Down Defl	7'4"	0.334	D+L	L_

Design Notes

1 Bottom flange must be laterally braced at a maximum of 5'6" o.c.

ID	Load Type	Location	Trib Width	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Part. Uniform	0-0-0 to 35-2-6	0-5-8	10 PSF	40 PSF	0 PSF	0 PSF	0 PSF	
2	Part. Uniform	0-0-0 to 35-2-6	0-9-8	10 PSF	40 PSF	0 PSF	0 PSF	0 PSF	
3	Point	6-1-2		84 lb	0 lb	0 lb	0 lb	0 lb	Partition Wall Self Weight
4	Point	9-4-11		84 lb	0 lb	0 lb	0 lb	0 lb	Partition Wall Self Weight
5	Point	11-8-3		84 lb	0 lb	0 lb	0 lb	0 lb	Partition Wall Self Weight
6	Point	18-2-2		100 lb	161 lb	0 lb	0 lb	0 lb	J13
7	Point	18-2-2		118 lb	186 lb	0 lb	0 lb	0 lb	J13
8	Point	18-2-2		34 lb	0 lb	0 lb	0 lb	0 lb	Wall Self Weight

NO REPAIR REQUIRED – Member OK as is

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.

Lumber

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

Handling & Installation

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

This design is valid until 11/15/2021

Manufacturer Info

Weyerhaeuser
Seattle, WA
www.weyerhaeuser.com/everedge/

US Lumber
2160 Satellite Blvd, Suite 450, GA 30097
888-613-5078

U.S. LUMBER