FORTE®

JOB SUMMARY REPORT

Ahmed.4te

Reviewed for Code Compliance
Inspections Division
Approved with Conditions
Date: 07/24/17

01: Level			
Member Name	**Results**	**Current Solution**	**Comments**
Floor: eave side Beam	Passed	3 Piece(s) 1 3/4" x 14" 2.0E Microllam® LVL	
Floor: Gable Beam	Passed	2 Piece(s) 1 3/4" x 9 1/2" 2.0E Microllam® LVL	
Floor: Joist	Passed	1 Piece(s) 9 1/2" TJI® 110 @ 16" OC	

Forte Software Operator	Job Notes
Guy Poisson Hammond Lumber (207) 495-3303 gpoisson@hammondlumber.com	Abdullah Ahmed 18 x 16 Addition Portland, Me

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MEMBER REPORT *Level, Floor: eave side Beam*

3 piece(s) 1 3/4" x 14" 2.0E Microllam® LVL

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Overall Length: 18' 0.00"

All locations are measured from the outside face of left support (or left cantilever end).All dimensions are horizontal.;Drawing is Conceptual

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	4850 @ 2.00"	13322 (3.50")	Passed (36%)	--	1.0 D + 1.0 L (All Spans)
Shear (lbs)	4053 @ 1' 5.50"	13965	Passed (29%)	1.00	1.0 D + 1.0 L (All Spans)
Moment (Ft-lbs)	20968 @ 9'	36387	Passed (58%)	1.00	1.0 D + 1.0 L (All Spans)
Live Load Defl. (in)	0.312 @ 9' 0.00"	0.589	Passed (L/680)	--	1.0 D + 1.0 L (All Spans)
Total Load Defl. (in)	0.523 @ 9' 0.00"	0.883	Passed (L/405)	--	1.0 D + 1.0 L (All Spans)

System : Floor
Member Type : Flush Beam
Building Use : Residential
Building Code : IBC 2009
Design Methodology : ASD

- Deflection criteria: LL (L/360) and TL (L/240).
- Top Edge Bracing (Lu): Top compression edge must be braced at 15' 7.00" o/c unless detailed otherwise.
- Bottom Edge Bracing (Lu): Bottom compression edge must be braced at 18' 0.00" o/c unless detailed otherwise.

Supports	Bearing			Loads to Supports (lbs)				Accessories
	Total	Available	Required	Dead	Floor Live	Snow	Total	
1 - Column - HF	3.50"	3.50"	1.50"	1970	2880	31	4881	None
2 - Column - HF	3.50"	3.50"	1.50"	1957	2880	-	4837	None

Loads	Location (Side)	Tributary Width	Dead (0.90)	Floor Live (1.00)	Snow (1.15)	Comments
0 - Self Weight (PLF)	0 to 18' 0.00"	N/A	21.5			
1 - Uniform (PSF)	0 to 18' 0.00" (Front)	8' 0.00"	12.0	40.0	-	Residential - Living Areas
2 - Uniform (PLF)	0 to 18' 0.00" (Top)	N/A	100.0	-	-	Wall Load
3 - Uniform (PSF)	0 (Top)	8' 0.00"	20.0	-	46.2	Roof Load - Portland 60# GSL

Weyerhaeuser Notes

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The product application, input design loads, dimensions and support information have been provided by Forte Software Operator

SUSTAINABLE FORESTRY INITIATIVE

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Forte v5.3, Design Engine: V7.0.0.5
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MEMBER REPORT *Level, Floor: Gable Beam*

2 piece(s) 1 3/4" x 9 1/2" 2.0E Microllam® LVL

Reviewed for Code Compliance
Inspections Division
Approved with Conditions
Date: 07/24/17

Overall Length: 16' 0.00"

All locations are measured from the outside face of left support (or left cantilever end).All dimensions are horizontal.;Drawing is Conceptual

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	1021 @ 15' 8.50"	3938 (1.50")	Passed (26%)	--	1.0 D (All Spans)
Shear (lbs)	932 @ 1' 1.00"	5686	Passed (16%)	0.90	1.0 D (All Spans)
Moment (Ft-lbs)	4146 @ 8' 0.00"	10597	Passed (39%)	0.90	1.0 D (All Spans)
Live Load Defl. (in)	0.000 @ 3.50"	0.385	Passed (L/999+)	--	1.0 D (All Spans)
Total Load Defl. (in)	0.366 @ 8' 0.00"	0.771	Passed (L/505)	--	1.0 D (All Spans)

System : Floor
Member Type : Flush Beam
Building Use : Residential
Building Code : IBC 2009
Design Methodology : ASD

- Deflection criteria: LL (L/480) and TL (L/240).
- Top Edge Bracing (Lu): Top compression edge must be braced at 15' 5.00" o/c unless detailed otherwise.
- Bottom Edge Bracing (Lu): Bottom compression edge must be braced at 15' 5.00" o/c unless detailed otherwise.

Supports	Bearing			Loads to Supports (lbs)		Accessories
	Total	Available	Required	Dead	Total	
1 - Hanger on 9 1/2" HF beam	3.50"	Hanger[1]	1.50"	1050	1050	See note [1]
2 - Hanger on 9 1/2" HF beam	3.50"	Hanger[1]	1.50"	1051	1051	See note [1]

- At hanger supports, the Total Bearing dimension is equal to the width of the material that is supporting the hanger
- [1] See Connector grid below for additional information and/or requirements.

Connector: Simpson Strong-Tie Connectors

Support	Model	Seat Length	Top Nails	Face Nails	Member Nails	Accessories
1 - Face Mount Hanger	HHUS410	3.00"	N/A	30-16d common	10-16d double shear	
2 - Face Mount Hanger	HHUS410	3.00"	N/A	30-16d common	10-16d double shear	

Loads	Location (Side)	Tributary Width	Dead (0.90)	Comments
0 - Self Weight (PLF)	3.50" to 15' 8.50"	N/A	9.7	
1 - Tapered (PLF)	0 to 8' 0.00" (Top)	N/A	100.0 to 144.0	Gable Wall Load
2 - Tapered (PLF)	8' 0.00" to 16' 0.00" (Top)	N/A	144.0 to 100.0	Gable Wall Load

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MEMBER REPORT *Level, Floor: Joist*

1 piece(s) 9 1/2" TJI® 110 @ 16" OC

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Overall Length: 16' 0.00"

All locations are measured from the outside face of left support (or left cantilever end).All dimensions are horizontal.;Drawing is Conceptual

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	524 @ 5.25"	910 (1.75")	Passed (58%)	1.00	1.0 D + 1.0 L (All Spans)
Shear (lbs)	524 @ 5.25"	1220	Passed (43%)	1.00	1.0 D + 1.0 L (All Spans)
Moment (Ft-lbs)	1983 @ 8' 0.00"	2500	Passed (79%)	1.00	1.0 D + 1.0 L (All Spans)
Live Load Defl. (in)	0.346 @ 8' 0.00"	0.378	Passed (L/524)	--	1.0 D + 1.0 L (All Spans)
Total Load Defl. (in)	0.450 @ 8' 0.00"	0.756	Passed (L/403)	--	1.0 D + 1.0 L (All Spans)
TJ-Pro™ Rating	35	35	Passed	--	--

System : Floor
Member Type : Joist
Building Use : Residential
Building Code : IBC 2009
Design Methodology : ASD

- Deflection criteria: LL (L/480) and TL (L/240).
- Top Edge Bracing (Lu): Top compression edge must be braced at 3' 5.00" o/c unless detailed otherwise.
- Bottom Edge Bracing (Lu): Bottom compression edge must be braced at 15' 2.00" o/c unless detailed otherwise.
- A structural analysis of the deck has not been performed.
- Deflection analysis is based on composite action with a single layer of 23/32" Panel (24" Span Rating) that is glued and nailed down.
- Additional considerations for the TJ-Pro™ Rating include: 1/2" Gypsum ceiling.

Supports	Bearing			Loads to Supports (lbs)			Accessories
	Total	Available	Required	Dead	Floor Live	Total	
1 - Hanger on 9 1/2" HF beam	5.25"	Hanger[1]	1.75" / - [2]	128	427	555	See note [1]
2 - Hanger on 9 1/2" HF beam	5.25"	Hanger[1]	1.75" / - [2]	128	427	555	See note [1]

- At hanger supports, the Total Bearing dimension is equal to the width of the material that is supporting the hanger
- [1] See Connector grid below for additional information and/or requirements.
- [2] Required Bearing Length / Required Bearing Length with Web Stiffeners

Connector: Simpson Strong-Tie Connectors

Support	Model	Seat Length	Top Nails	Face Nails	Member Nails	Accessories
1 - Face Mount Hanger	IUS1.81/9.5	2.00"	N/A	8-10d x 1-1/2	N/A	
2 - Face Mount Hanger	IUS1.81/9.5	2.00"	N/A	8-10d x 1-1/2	N/A	

Loads	Location (Side)	Spacing	Dead (0.90)	Floor Live (1.00)	Comments
1 - Uniform (PSF)	0 to 16' 0.00"	16"	12.0	40.0	Residential - Living Areas

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