Reviewed for Code Compliance
Inspections Division
Department of Building Safety
Date: 12/06/16

STRUCTURAL LOADS

GROUND SNOW LOAD 50 LBS/FT²
DIMENSIONAL LUMBER MOE=1,400,000
ENGINEERED LVL LUMBER MOE=2,000,000
DEFLECTION AT ALL ROOMS = L/480

FRAMING DESIGNED TO MEET OR EXCEED IRC 2009

ENGINEERED LUMBER DESIGNED TO WEYERHAUSER TRUS JOIST "2.0E MICROLAM LVL" USING WEYERHAUSER #TJ-9000 SPECIFIER'S GUIDE, MAY 2015, SUBMITTED WITH THIS DRAWING.

BEAM 1
2ND FLOOR
JOIST SPAN: 24'/2 = 12'
30LL+10DL = 40 LBS/FT²
CONTRIBUTARY LOAD: 12 x 40 = 480 LBS/FT

3RD FLOOR
JOIST SPAN: 24'/2 = 12'
40LL+10DL = 50 LBS/FT²
CONTRIBUTARY LOAD: 12 x 50 = 600 LBS/FT

ROOF LOAD: N/A (BEARS ON EXTERIOR WALL)

TOTAL UNIFORM LOAD: 480 LBS/FT + 600 LBS/FT = 1080 LBS/FT
BEAM LENGTH 15'-4"

BEAM SIZE FROM WEYERHAUSER TJ-9000 SPECIFIERS' GUIDE P. 19:
3 ½" X 20" 2.0E MICROLLAM LVL (RATED FOR 1365 LBS/FT AT 16'-6" SPAN WITH ≤L/360 DEFLECTION BELOW 1330 LBS/FT)
MINIMUM SPECIFIED END BEARING: 4.4" (**USE 3 ½" X 5 ¼" LVL POST ORIENTED AS SHOWN**)

BEAM 2
2ND FLOOR
JOIST SPAN: 24'/2 = 12'
30LL+10DL = 40 LBS/FT²
CONTRIBUTARY LOAD: 12 x 40 = 480 LBS/FT

3RD FLOOR
JOIST SPAN: 24'/2 = 12'
40LL+10DL = 50 LBS/FT²
CONTRIBUTARY LOAD: 12 x 50 = 600 LBS/FT

ROOF LOAD: N/A (BEARS ON EXTERIOR WALL)

TOTAL UNIFORM LOAD: 480 LBS/FT + 600 LBS/FT = 1080 LBS/FT
BEAM LENGTH 7'-0"

BEAM SIZE FROM WEYERHAUSER TJ-9000 SPECIFIERS' GUIDE P. 18:
3 ½" X 9 ¼" 2.0E MICROLLAM LVL (RATED FOR 1391 LBS/FT AT 8' SPAN WITH ≤L/360 DEFLECTION BELOW 1169 LBS/FT)
MINIMUM SPECIFIED END BEARING: 2.1" (**USE DOUBLE 2X4 POST EACH END**)

1 SECOND FLOOR FRAMING PLAN
¼" = 1'-0"

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MM MICHAEL MAINES RESIDENTIAL DESIGN
336 N PALERMO RD
PALERMO, ME 04354
207-318-6224
mike@michaelmaines.com

R E N O V A T I O N S T O T H E
S W E E T - H O L D E N R E S I D E N C E
37 ST. LAWRENCE STREET - PORTLAND, MAINE 04101

PERMIT SET
ISSUED FOR CONSTRUCTION

DATE	October 6, 2016
REV	November 4, 2016
REV	

SHEET
S102