2

ORIGINAL

John Moist Designs.

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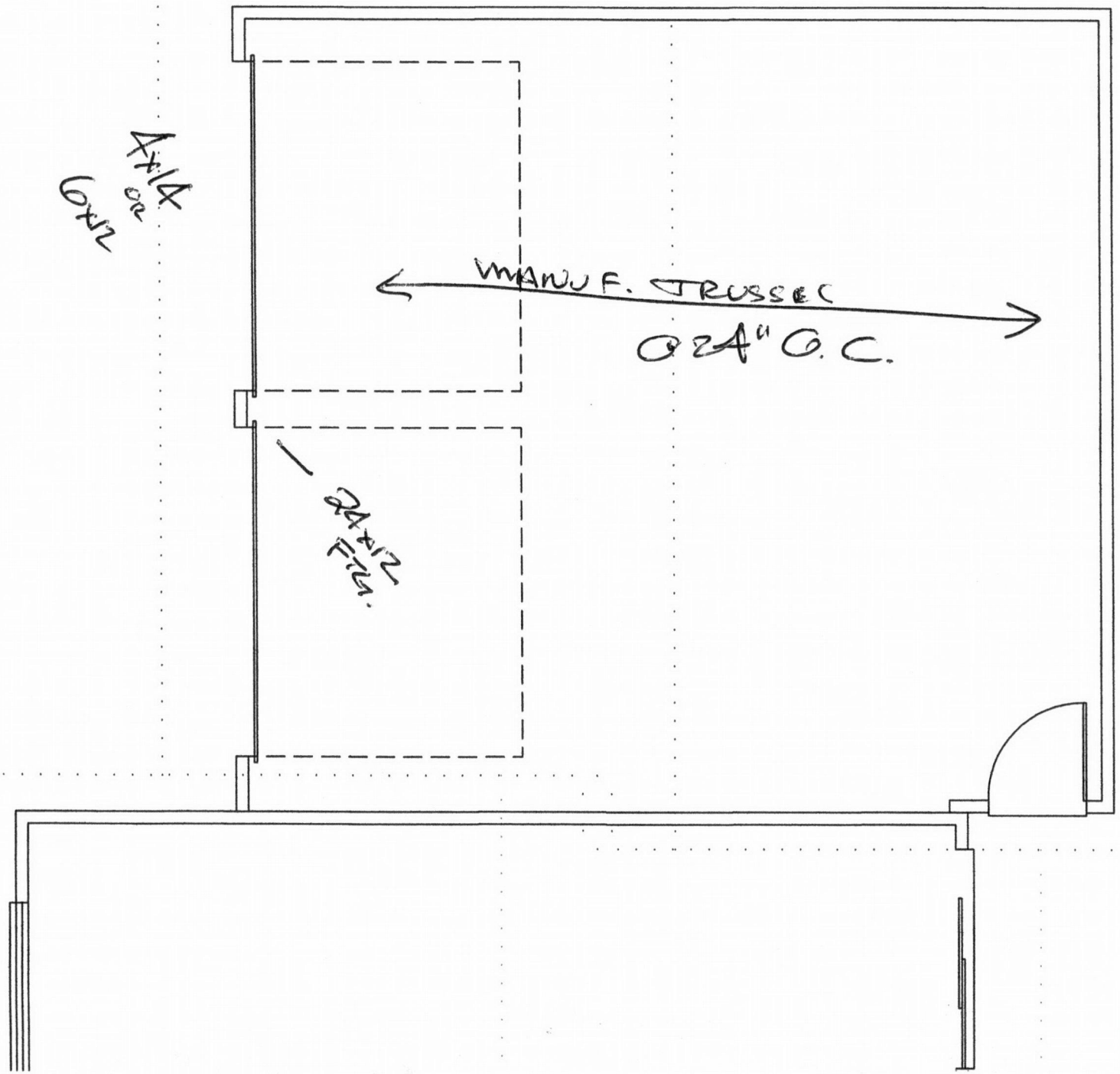
City of Portland
REVIEWED FOR CODE COMPLIANCE
JUN 25 2013
STR
Permit Number

13-170987 RS

VERTICAL STRUCTURE DESIGN & PRESCRIPTIVE PATH LATERAL DESIGN

PROJECT:
134th & Burnside

ROOF TYPE:	COMP (25/10/7)
FLOOR TYPE	Concrete Slab
DATE COMPLETED:	Tuesday, June 11, 2013
DESIGN SPECS:	N.D.S. 2005
LUMBER GRADE:	D.F.-LARCH


4x14
OR
6x12
MANUF. TRUSSES
@24" O.C.
24x12
FTG.

JOHN MOIST DESIGNS

BeamChek v2012 licensed to: John Moist Designs Reg # 7077-3140

134 & BURNSIDE GARAGE DOOR HDR

Date: 6/11/13

Selection **4x 14 DF-L #2** Lu = 0.0 Ft

Conditions NDS 2012

Min Bearing Area R1= 4.6 in² R2= 4.6 in² (1.5) DL Defl= 0.06 in

Data

Beam Span	9.5 ft	Reaction 1 LL	1663 #	Reaction 2 LL	1663 #
Beam Wt per ft	11.27 #	Reaction 1 TL	2847 #	Reaction 2 TL	2847 #
Bm Wt Included	107 #	Maximum V	2847 #		
Max Moment	6761 '#	Max V (Reduced)	2185 #		
TL Max Defl	L / 240	TL Actual Defl	L / 934		
LL Max Defl	L / 360	LL Actual Defl	L / >1000		

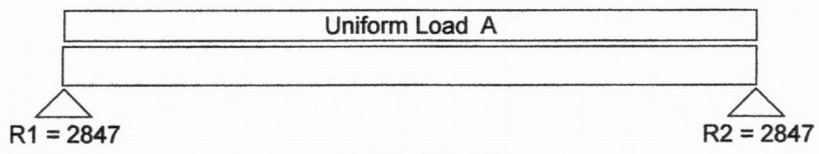
Attributes

	Section (in³)	Shear (in²)	TL Defl (in)	LL Defl
Actual	102.41	46.38	0.12	0.06
Critical	90.14	18.21	0.48	0.32
Status	OK	OK	OK	OK
Ratio	88%	39%	26%	19%

Values / *Adjustments*

	Fb (psi)	Fv (psi)	E (psi x mil)	Fc⊥ (psi)
Reference Values	900	180	1.6	625
Adjusted Values	900	180	1.6	625
CF Size Factor	1.000			
Cd Duration	1.00	1.00		
Cr Repetitive	1.00			
Ch Shear Stress		N/A		
Cm Wet Use	1.00	1.00	1.00	1.00
Cl Stability	1.0000	Rb = 0.00	Le = 0.00 Ft	

Loads Uniform LL: 350 Uniform TL: 588 = A



SPAN = 9.5 FT

Uniform and partial uniform loads are lbs per lineal ft.

JOHN MOIST DESIGNS

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134 & BURNSIDE GARAGE DOOR HDR

Date: 6/11/13

Selection **6x 12 DF-L #2** Lu = 0.0 Ft

Conditions NDS 2012

Min Bearing Area R1= 4.6 in² R2= 4.6 in² (1.5) DL Defl= 0.08 in

Data

Beam Span	9.5 ft	Reaction 1 LL	1663 #	Reaction 2 LL	1663 #
Beam Wt per ft	15.37 #	Reaction 1 TL	2866 #	Reaction 2 TL	2866 #
Bm Wt Included	146 #	Maximum V	2866 #		
Max Moment	6807 '#	Max V (Reduced)	2288 #		
TL Max Defl	L / 240	TL Actual Defl	L / 773		
LL Max Defl	L / 360	LL Actual Defl	L / >1000		

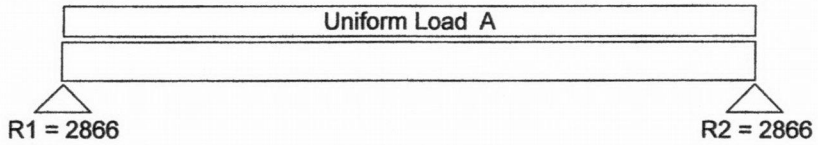
Attributes

	Section (in³)	Shear (in²)	TL Defl (in)	LL Defl
Actual	121.23	63.25	0.15	0.07
Critical	93.35	20.19	0.48	0.32
Status	OK	OK	OK	OK
Ratio	77%	32%	31%	22%

Values / *Adjustments*

	Fb (psi)	Fv (psi)	E (psi x mil)	Fc⊥ (psi)
Reference Values	875	170	1.3	625
Adjusted Values	875	170	1.3	625
CF Size Factor	1.000			
Cd Duration	1.00	1.00		
Cr Repetitive	1.00			
Ch Shear Stress		N/A		
Cm Wet Use	1.00	1.00	1.00	1.00
Cl Stability	1.0000	Rb = 0.00	Le = 0.00 Ft	

Loads Uniform LL: 350 Uniform TL: 588 = A



SPAN = 9.5 FT

Uniform and partial uniform loads are lbs per lineal ft.

4' BP
7' REQ
22' WALL
8' PROVIDED
4' BP
7' BP
14' BP CLEAR
191' PROVIDED
PORTAL FRAME
8' PROVIDED
4' BP
7' REQ
24' WALL
4' BP