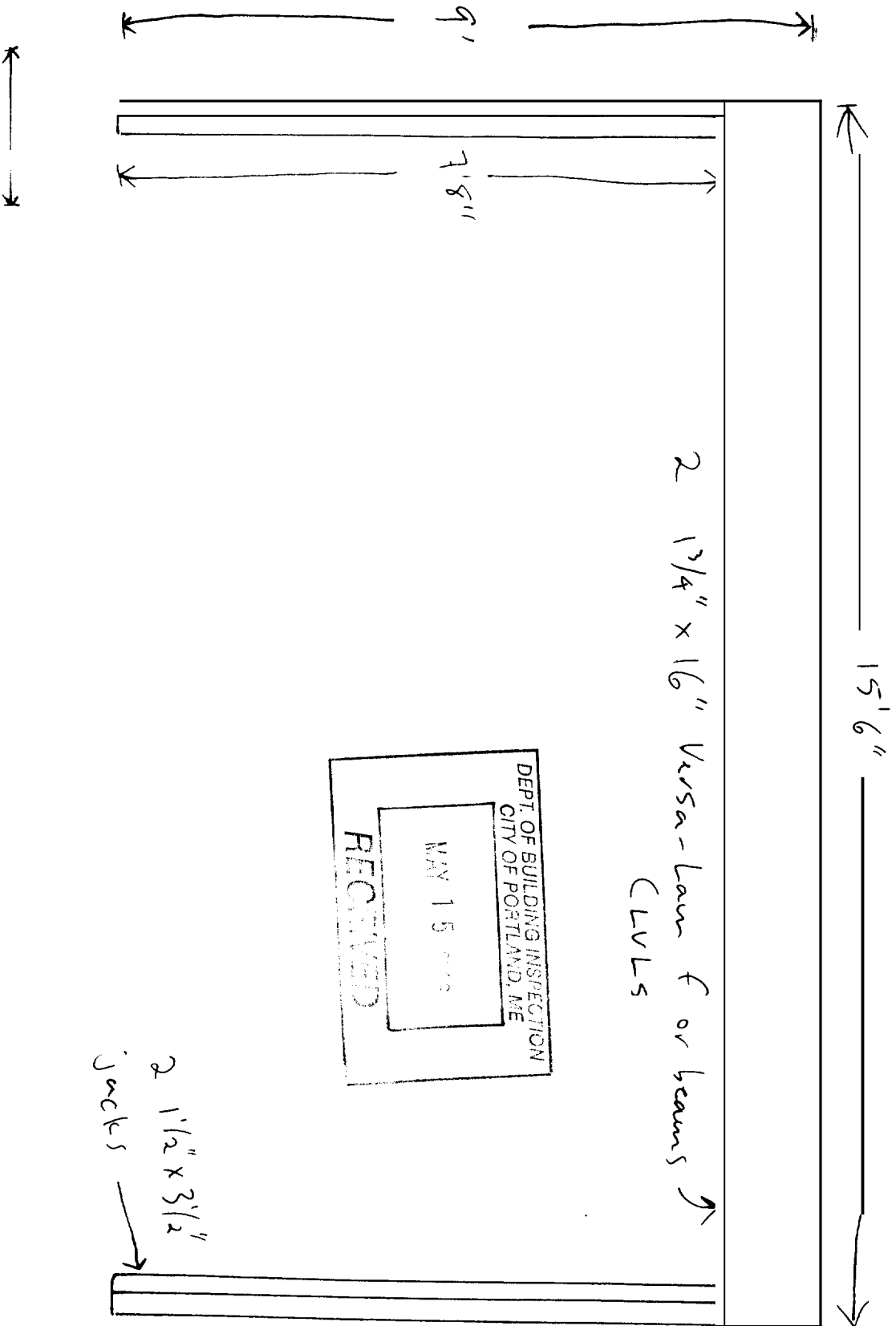


EXHIBIT A
PAGE 1

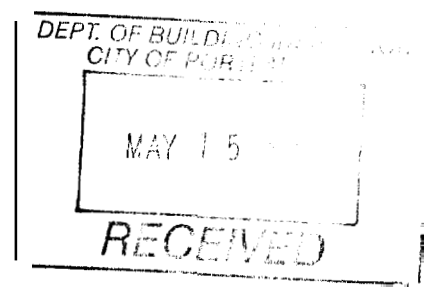
Dale Carlson building
16-18 Cumberland Avenue
Tim Boardman - builder

Second floor
Proposed structural header



Second floor structural header

An existing wall separating two rooms on the second floor will be removed and will be replaced by a structural header. The header will span a distance of 15'6", will consist of two 1 3/4" x 16" Versa-Lam floor beams (LVLs) and will support the third floor joists at distances of 12'9" and 12'2" from the nearest load bearing walls. The jacks supporting the header (two 2x4"s on each end) will be supported by a load bearing wall ~~on~~ between the first floor and second floor which falls directly below the jacks, and the first floor load bearing wall is supported by a 7" x 7" structural timber and brick columns in the cellar.



Job Name: *Carl's Restaurant*

File Name: BC CALC Project

Address: *16 Courtland Ave. + 1072*

Description: FB01

City, State, zip: *Portland, OR 97202*

Specifier:

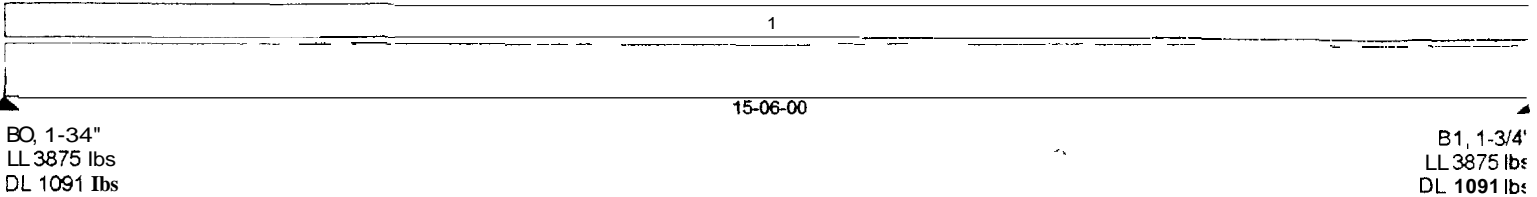
Customer: *Boardman*

Designer:

Code reports: ESR-1040

Company:

Misc:



Total of Horizontal Design Spans = 15-06-00

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Live	Dead	Snow	Wind	Roof Live	Trib.
1	Standard Load	Unf. Area	Left	00-00-00	15-06-00	40 psf	10 psf	115%	133%	125%	12-06-00

Controls Summary

Value	% Allowable	Duration	Load Case	Span Location
Pos. Moment 19243ft-lbs	51.5%	100%	1	1 - Internal
End Shear 4065 lbs	38.2%	100%	1	1 -Left
Total Load Defl. L/534 (0.348")	44.9%		1	1
Live Load Defl. U684 (0.272")	70.1%		1	1
Span/ Depth 11.6	n/a			1

Disclosure

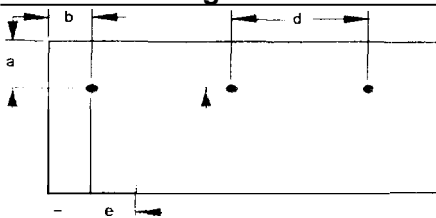
Completeness and accuracy of input must be verified by anyone who would rely on output as evidence of suitability for particular application. Output here based on building code-accepted design properties and analysis methods. Installation of BOISE engineered wood products must be in accordance with current Installation Guide and applicable building codes. To obtain Installation Guide or ask questions, please call (800)232-0788 before installation.

BC CALCQ, BC FRAMER@AJS™, ALLJOIST®, BC RIM BOARD™, BC®, BOISE GLULAM™, SIMPLE FRAMING SYSTEM®, VERSA-LAMB, VERSA-RIM PLUS®, VERSA-RIM®, VERSA-STRAND™, VERSA-STUD® are trademarks of Boise Wood Products, L.L.C.

Notes

Design meets Code minimum (L/240) Total load deflection criteria.
Design meets User specified (L/480) Live load deflection criteria.
Minimum bearing length for BO is 1-7/8".
Minimum bearing length for B1 is 1-7/8".
Entered/Displayed Horizontal Span Length(s) = Clear Span + 1/2 min. end bearing + 1/2 intermediate bearing

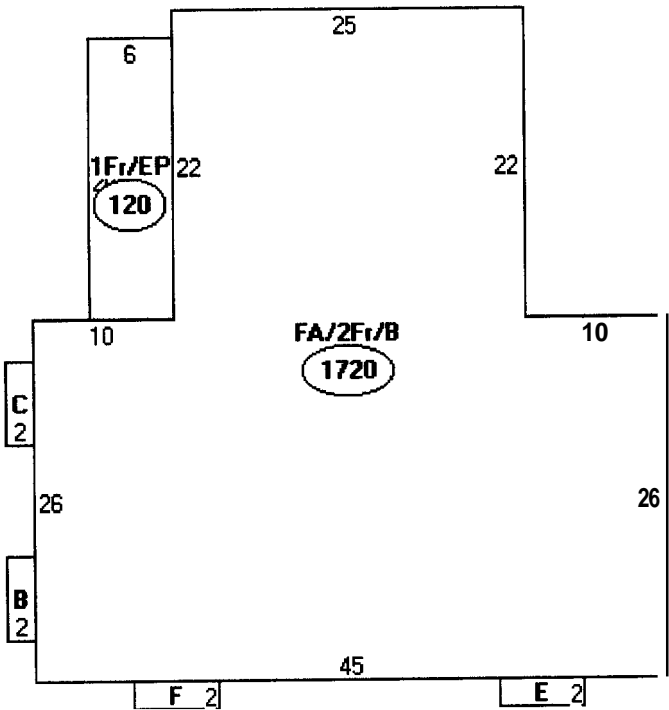
Connection Diagram



No knee wall

a minimum = 1-1/2" c = 13"
b minimum = 4" d = 24"
e minimum = 1"

Member has no side loads.
Connectors are: SDS 1/4 x 3-1/2



Descriptor/Area

- A: FA/2Fr/B
1720 sqft
- B: FEAY
12 sqft
- C: FBAY
12 sqft
- D: 1Fr/EP
120 sqft
- E: FBAY
12 sqft
- F: FBAY
12 sqft

