

CITY OF SACRAMENTO

1231 I Street, Sacramento, CA 95814

Permit No: 0416867

Insp Area: 2

Thos Bros: 337A3

Site Address: 7646 GREENHAVEN DR SAC

Sub-Type: REP

Parcel No: 031-0480-007

2 RESIDENTS ON THIS PROPERTY

Housing (Y/N):

N

CONTRACTOR

WEATHERITE ROOFING
4661 SUMMER CREEK CT
SHINGLE SPRINGS, CA 95682

OWNER

YEE OCK TING/GIM HA
7646 GREENHAVEN DR
SACRAMENTO, CA 95831

ARCHITECT

Nature of Work: RE-ROOF, TEAR OFF, RESHEET, INSTALL 50 SQ LIGHT WEIGHT TILE, 2 STORIES

CONSTRUCTION LENDING AGENCY: I hereby affirm under penalty of perjury that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3097, Civ. C).

Lender's Name

Lender's Address

LICENSED CONTRACTORS DECLARATION: I hereby affirm under penalty of perjury that I am licensed under provisions of Chapter 9 (commencing with section 7000) of Division 3 of the Business and Professions Code and my license is in full force and effect.

License Class CP License Number 420375 Date 10/7/04 Contractor Signature Carolyn Peen

OWNER-BUILDER DECLARATION: I hereby affirm under penalty of perjury that I am exempt from the contractors License Law for the following reason (Sec. 7031.5, Business and Professions Code; any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he or she is licensed pursuant to the provisions of the Contractors License Law (Chapter 9 (commencing with Section 7000) of Division 8 of the Business and Professions Code) or that he or she is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars (\$500.00);

I, as a owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business and Professional Code: The Contractors License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or herself or through his/her own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he/she did not build or improve for the purpose of sale.)

I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, Business and Professions Code: The Contractors License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractors License Law).

I am exempt under Sec. _____ B & PC for this reason: _____

Date _____ Owner Signature _____

IN ISSUING THIS BUILDING PERMIT, the applicant represents, and the city relies on the representation of the applicant, that the applicant verified all measurements and locations shown on the application or accompanying drawings and that the improvement to be constructed does not violate any law or private agreement relating to permissible or prohibited locations for such improvements. This building permit does not authorize any illegal location of any improvement or the violation of any private agreement relating to location of improvements.

I certify that I have read this application and state that all information on this project is true and correct. I agree to comply with all city and county ordinances and state laws relating to building construction and hereby authorize representative(s) of this city to enter upon the abovementioned property for inspection purposes.

Date 10/7/04 Applicant/Agent Signature Carolyn Peen

WORKER'S COMPENSATION DECLARATION: I hereby affirm under penalty of perjury one of the following declarations:

I have and will maintain a certificate of consent to self-insure for workers' compensation as provided for by Section 3700 of the Labor Code, for the performance of work for which the permit is issued.

I have and will maintain workers' compensation insurance, as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. My workers' compensation insurance carrier and policy number are:

Carrier STATE FUND

Policy Number 1271896-2003

Exp Date 10/01/2005

(This section need not be completed if the permit is for \$100 or less) I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the workers' compensation laws of California and agree that if I should become subject to the workers' compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions.

Date 10/7/04 Applicant Signature Carolyn Peen

WARNING: FAILURE TO SECURE WORKER'S COMPENSATION COVERAGE IS UNLAWFUL AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS (\$100,000) IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3706 OF THE LABOR CODE, INTEREST AND ATTORNEY'S FEE.

THIS PERMIT SHALL EXPIRE BY LIMITATION IF WORK IS NOT COMMENCED WITHIN 180 DAYS.

7646/7650 GREENHAVEN DR

7646

0416867



Paul Zacher - Structural Engineers, Inc
4701 Lakeside Way
Fair Oaks, CA 95628

TEL: 916.961.3960
FAX: 916.961.6552

ISSUED

OCT 9 2004

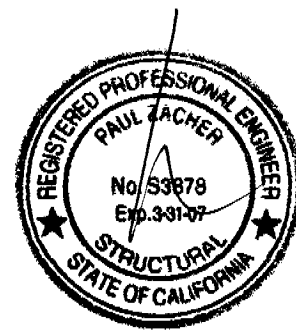
September 24, 2004

Weather-Tite Roofing Company
P.O. Box 6068
Folsom, CA 95673
TEL: (916) 635-9810; M: (916) 849-1977
FAX: (916) 635-9810

Attn.: Mr. Larry Peer,

re: Job 2004551: YEE

Subject: Structural Investigation Report of the Roof for the Residence located at 7646 Greenhaven Drive, Sacramento, CA 95831.



7646 GREENHAVEN DRIVE SACRAMENTO, CA 95831

As requested by Mr. Larry Peer, this is a report to determine what needs should be addressed to correct any structural deficiencies of the roof. Paul Zacher visited the site September 22, 2004. The investigation was made to determine the existing condition of the structure. All information, data and analysis contained within this report are based on the 1997 Uniform Building Code with 2001 CBC Title 24 Amendments.

The following is based on visual observations with no subsurface investigation being made.

DESCRIPTION:

Type of Facility: Residence.
Year Built: Estimated 1980's vintage.
Occupancy: Residential.
No. of Stories: Two.
Dimensions: Approximately 3000 square feet.

CONSTRUCTION:

Roof:

The roof covering will consist of a Light Weight Concrete Tile over 7/16" solid sheathing. The roof structure is conventionally framed with 2x6 and 2x8 rafters spaced at 24" on center with 2x6 purlins supported at no more than 6'-0" on center by 2x4 struts bearing on walls below except for the vaulted ceiling areas. The vaulted ceiling is constructed of 2x8 rafters spaced at 24" on center supported mid-span by a 6x beam.

CONCLUSIONS:

Roof:

The roof structure has sufficient structural capacity for the applied live and dead loads.

CITY COPY



Paul Zacher - Structural Engineers, Inc
4701 Lakeside Way
Fair Oaks, CA 95628

TEL: 916.961.3980
FAX: 916.961.6552

RECOMMENDATIONS:

None.

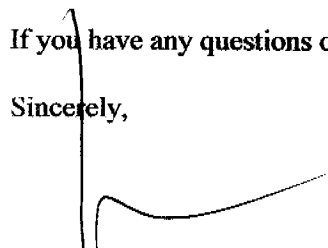
It shall be noted that small hairline cracking may occur at exterior stucco and interior gypboard finished walls that are load bearing or distributing roof strut loads. These cracks are a natural occurrence as the existing structure re-distributes the new roof weight. They are cosmetic in nature and are not an indication of a structural hazard or failure.

It shall be noted that some deflection of the rafters may be evident after installation of the tile. The existing roof framing has deflected but this may not be readily evident due to the uneven nature of the existing roofing material. Concrete tile is a very consistent and uniform product and when installed in an even plane, even small deflections can become apparent. This is only a cosmetic issue and not a structural concern.

The inspection consisted of visual observation only, made solely to determine the structural capacity of the existing roof. Analysis does not determine any effects on the overall structure under lateral forces or effects on the foundation unless specifically noted in the calculations and in this document. No warranties, expressed or implied, are made or intended in conjunction with this report. The inspection was made only to the portions that were accessible. The specific items noted were those that were observable and there may be defects that are not observable, or are hidden by architectural and structural materials.

If you have any questions on the above, do not hesitate to call.

Sincerely,



Paul Zacher, P.E., S.E.
file

DESIGN LOADING:

Roof Pitch 6 in 12
Pitch Adjustment Factor 1.12

LOCATION: ROOF

<u>MATERIAL</u>	<u>WEIGHT</u>	
Light Weight Tile	7.30	psf
Roofing felt	0.30	psf
1x4 skip sht'g	1.09	psf
7/16" OSB/ plywood	1.30	psf
2x8 rafters @ 24" oc	<u>1.32</u>	psf
Load	11.3	psf
Roof Pitch Adjustment	<u>1.34</u>	psf
Total Load	12.7	psf

LOCATION: VAULT

<u>MATERIAL</u>	<u>WEIGHT</u>	
Light Weight Tile	7.30	psf
Roofing felt	0.30	psf
1x4 skip sht'g	1.09	psf
7/16" OSB/ plywood	1.30	psf
2x8 rafters @ 24" oc	1.32	psf
Batt/blown insul	0.50	psf
1/2" Gypboard	<u>2.50</u>	psf
Load	14.3	psf
Roof Pitch Adjustment	<u>1.69</u>	psf
Total Load	16.0	psf

Job #: 04 551

Date: 09/24/2004

LOADING:

Rafter: 25.2 / 32.0
 Dr = 12.7 psf x 2'-0" = 25.2 plf 2x6 #2 12'-0"
 Lr = 16.0 psf x 2'-0" = 32.0 plf

Rafter: 25.2 / 32.0
 Dr = 12.7 psf x 2'-0" = 25.2 plf 2x8 #2 15'-0"
 Lr = 16.0 psf x 2'-0" = 32.0 plf

Vault: 32.0 / 32.0
 Dr = 16.0 psf x 2'-0" = 32.0 plf 2x8 #2 13'-9"
 Lr = 16.0 psf x 2'-0" = 32.0 plf

B1: 64 / 80
 Dr = 12.7 psf x 5'-0" = 64 plf 4x12 #2 16'-0"
 Lr = 16.0 psf x 5'-0" = 80 plf

B2: 144 / 144
 Dr = 16.0 psf x 9'-0" = 144 plf 6x14 #1 16'-6"
 Lr = 16.0 psf x 9'-0" = 144 plf

Pául Zacher - Structural Engr's
 4701 Lakeside Way
 Fair Oaks, CA 95628
 TEL: (916) 961-3960
 FAX: (916) 961-6552

Title :
 Dsgnr:
 Description :
 Scope :

Job #
 Date: 2:42PM, 25 SEP 04

Rev: 560100
 User: KW-0602844, Ver 5.6.1, 25-Oct-2002
 (c)1983-2002 ENERCALC Engineering Software

Timber Beam & Joist

c:\documents and settings\paul zacher\desktop

Description RAFTERS AND BEAMS

Timber Member Information Calculations are designed to 1997 NDS and 1997 UBC Requirements

	rafter	rafter	vault	B1	B2
Timber Section	2x6	2x8	2x8	4x12	6x14
Beam Width	in 1.500	1.500	1.500	3.500	5.500
Beam Depth	in 5.500	7.250	7.250	11.250	13.500
Le: Unbraced Length	ft 0.00	0.00	0.00	0.00	0.00
Timber Grade	Douglas Fir - Larch, Douglas Fir - Larch, Douglas Fir - Larch, Douglas Fir - Larch, Douglas Fir - Larch,				
Fb - Basic Allow	psi 875.0	875.0	875.0	875.0	1,350.0
Fv - Basic Allow	psi 95.0	95.0	95.0	95.0	85.0
Elastic Modulus	ksi 1,600.0	1,600.0	1,600.0	1,600.0	1,600.0
Load Duration Factor	1.250	1.250	1.250	1.250	1.250
Member Type	Sawn	Sawn	Sawn	Sawn	Sawn
Repetitive Status	Repetitive	Repetitive	Repetitive	No	No

Center Span Data

		11.99	15.00	13.75	16.00	16.50
Span	ft					
Dead Load	#/ft	25.20	25.20	32.00	64.00	144.00
Live Load	#/ft	32.00	32.00	32.00	80.00	144.00

Results Ratio =

		0.9975	0.9733	0.9151	0.6225	0.4227
Mmax @ Center	in-k	12.33	19.30	18.15	55.30	117.61
@ X =	ft	5.99	7.50	6.87	8.00	8.25
f _b : Actual	psi	1,631.0	1,469.1	1,381.2	749.0	704.0
F _b : Allowable	psi	1,635.2	1,509.4	1,509.4	1,203.1	1,665.6
		Bending OK	Bending OK	Bending OK	Bending OK	Bending OK
f _v : Actual	psi	57.9	54.4	55.8	39.0	41.5
F _v : Allowable	psi	118.8	118.8	118.8	118.8	106.3
		Shear OK	Shear OK	Shear OK	Shear OK	Shear OK

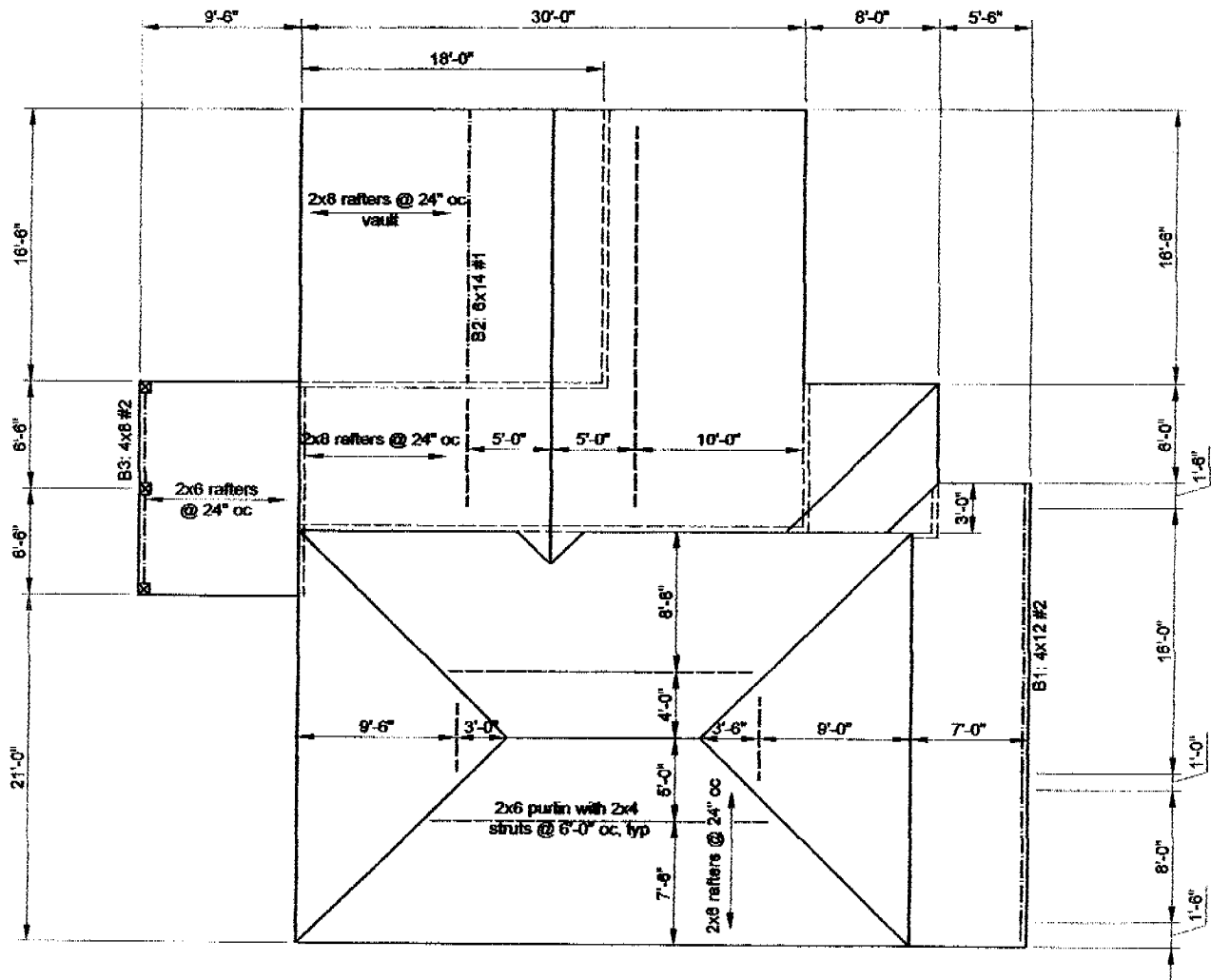
Reactions

		151.07	189.00	220.00	512.00	1,188.00
@ Left End	DL	lbs				
	LL	lbs	191.84	240.00	220.00	640.00
	Max. DL+LL	lbs	342.91	429.00	440.00	1,152.00
@ Right End	DL	lbs	151.07	189.00	220.00	512.00
	LL	lbs	191.84	240.00	220.00	640.00
	Max. DL+LL	lbs	342.91	429.00	440.00	1,152.00

Deflections Ratio OK Deflection OK Deflection OK Deflection OK Deflection OK

		-0.352	-0.377	-0.338	-0.142	-0.133
Center DL Defl	in					
L/Defl Ratio		408.6	477.9	488.6	1,351.9	1,487.6
Center LL Defl	in	-0.447	-0.478	-0.338	-0.178	-0.133
L/Defl Ratio		321.8	376.4	488.6	1,081.5	1,487.6
Center Total Defl	in	-0.799	-0.855	-0.675	-0.320	-0.266
Location	ft	5.995	7.500	6.875	8.000	8.250
L/Defl Ratio		180.0	210.6	244.3	600.8	743.8

5



NOTES:

- A. This is a reroof project. The new roofing material shall be a Light Weight Concrete Tile. The tile shall weigh less than or equal to 7.3 psf.
- B. All rafters are 2x6 DF#2 and hips and valleys are 2x8 DF#2 unless otherwise noted.
- C. All existing rafter, hips, valleys, rafter ties, and purlins are braced per UBC Section 2320.1 "Roof and Ceiling Framing" unless otherwise shown.
- D. All structural wood members that were observed appear to be in sound condition and without structural defect.

1

ROOF PLAN - YEE - 7646 GREENHAVEN

Not to Scale

6

7646/7650 GREENHAVEN DR.
0416867

7650



Paul Zacher - Structural Engineers, Inc
4701 Lakeside Way
Fair Oaks, CA 95628

TEL: 916.961.3960
FAX: 916.961.6552

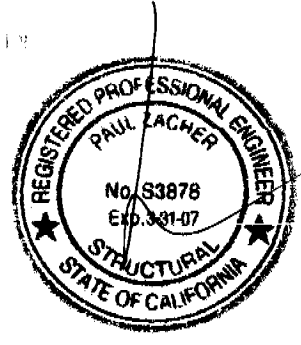
ISSUED

SEP 24 2004

September 24, 2004

Weather-Tite Roofing Company
P.O. Box 6068
Folsom, CA 95673
TEL: (916) 635-9810; M: (916) 849-1977
FAX: (916) 635-9810

Sacramento Building Dept



Attn.: Mr. Larry Peer,

re: Job 2004551: YEE

Subject: Structural Investigation Report of the Roof for the Residence located at 7650 Greenhaven Drive, Sacramento, CA 95831.

As requested by Mr. Larry Peer, this is a report to determine what needs should be addressed to correct any structural deficiencies of the roof. Paul Zacher visited the site September 22, 2004. The investigation was made to determine the existing condition of the structure. All information, data and analysis contained within this report are based on the 1997 Uniform Building Code with 2001 CBC Title 24 Amendments.

The following is based on visual observations with no subsurface investigation being made.

DESCRIPTION:

Type of Facility: Residence.
Year Built: Estimated 1980's vintage.
Occupancy: Residential.
No. of Stories: One.
Dimensions: Approximately 1500 square feet.

CONSTRUCTION:

Roof:

The roof covering will consist of a Light Weight Concrete Tile over 7/16" solid sheathing. The roof structure is conventionally framed with 2x6 and 2x8 rafters spaced at 24" on center with 2x6 purlins supported at no more than 6'-0" on center by 2x4 struts bearing on walls below. The garage area is framed with 2x6 rafters spaced at 24" on center and 2x6 cross ties spaced at 4'-0" on center.

CONCLUSIONS:

Roof:

The roof structure currently lacks sufficient structural capacity for the applied live and dead loads. See "Recommendations" for location and repair to bring the roof structure up to the required capacity.

This set of plans and reports shall remain the property of Paul Zacher - Structural Engineers, Inc. and shall not be used for any other project without the written permission of Paul Zacher - Structural Engineers, Inc. or the City Engineer of State law.

7646/7650 GREENHAVEN DR. - 0416867

CITY COPY



Paul Zacher - Structural Engineers, Inc.
4701 Lakeside Way
Fair Oaks, CA 95628

TEL: 916.961.3960
FAX: 916.961.6552

RECOMMENDATIONS:

If any of the following recommendations do not correspond to actual field conditions, the engineer of record shall be notified for further investigation and evaluation before continuing work.

Roof Structure:

1. Add a 2x6 DF#2 x 6'-0" long purlin with 2x4 struts to the bearing walls below. The unbraced length of the struts shall not exceed 8'-0" and the minimum slope of the struts shall not be less than 45 degrees from the horizontal. See detail 1.

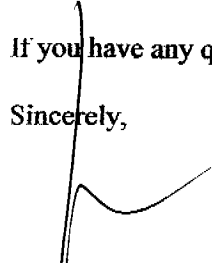
It shall be noted that small hairline cracking may occur at exterior stucco and interior gypboard finished walls that are load bearing or distributing roof strut loads. These cracks are a natural occurrence as the existing structure re-distributes the new roof weight. They are cosmetic in nature and are not an indication of a structural hazard or failure.

It shall be noted that some deflection of the rafters may be evident after installation of the tile. The existing roof framing has deflected but this may not be readily evident due to the uneven nature of the existing roofing material. Concrete tile is a very consistent and uniform product and when installed in an even plane, even small deflections can become apparent. This is only a cosmetic issue and not a structural concern.

The inspection consisted of visual observation only, made solely to determine the structural capacity of the existing roof. Analysis does not determine any effects on the overall structure under lateral forces or effects on the foundation unless specifically noted in the calculations and in this document. No warranties, expressed or implied, are made or intended in conjunction with this report. The inspection was made only to the portions that were accessible. The specific items noted were those that were observable and there may be defects that are not observable, or are hidden by architectural and structural materials.

If you have any questions on the above, do not hesitate to call.

Sincerely,



Paul Zacher, P.E., S.E.
file

DESIGN LOADING:

Roof Pitch 6 in 12
Pitch Adjustment Factor 1.12

LOCATION: ROOF

<u>MATERIAL</u>	<u>WEIGHT</u>	
Light Weight Tile	7.30	psf
Roofing felt	0.30	psf
1x4 skip sht'g	1.09	psf
7/16" OSB/ plywood	1.30	psf
2x6 rafters @ 24" oc	<u>1.00</u>	psf
	Load	11.0 psf
Roof Pitch Adjustment	<u>1.30</u>	psf
Total Load	12.3	psf

LOADING:

Rafter:

Dr = 12.3 psf x 2'-0" = 24.6 plf

2x6 #2

24.6 / 32.0

Lr = 16.0 psf x 2'-0" = 32.0 plf

12'-0"

B1:

Dr = 12.3 psf x 7'-0" = 86 plf

4x12 #2

86 / 112

Lr = 16.0 psf x 7'-0" = 112 plf

16'-0"

Paul Zacher - Structural Engr's
 4701 Lakeside Way
 Fair Oaks, CA 95628
 TEL: (916) 961-3960
 FAX: (916) 961-6552

Title :
 Dsgnr:
 Description :
 Scope :

Job #
 Date: 2:48PM, 25 SEP 04

Rev: 550100
 User: KW-0602844, Ver 5.6.1, 25-Oct-2002
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Timber Beam & Joist

c:\documents and settings\paul zacher\desktop

Description RAFTERS AND BEAMS

Timber Member Information Calculations are designed to 1997 NDS and 1997 UBC Requirements

		rafter	B1
Timber Section		2x6	4x12
Beam Width	in	1.500	3.500
Beam Depth	in	5.500	11.250
Le: Unbraced Length	ft	0.00	0.00
Timber Grade		Douglas Fir - Larch,	Douglas Fir - Larch,
Fb - Basic Allow	psi	875.0	875.0
Fv - Basic Allow	psi	95.0	95.0
Elastic Modulus	ksi	1,600.0	1,600.0
Load Duration Factor		1.250	1.250
Member Type		Sawn	Sawn
Repetitive Status		Repetitive	No

Center Span Data

Span	ft	12.00	16.00
Dead Load	#/ft	24.60	86.00
Live Load	#/ft	32.00	112.00

Results Ratio = 0.9887 0.8560

Mmax @ Center	in-k	12.23	76.03
@ X =	ft	6.00	8.00
fb : Actual	psi	1,616.6	1,029.9
Fb : Allowable	psi	1,635.2	1,203.1
		Bending OK	Bending OK
fv : Actual	psi	57.3	53.6
Fv : Allowable	psi	118.8	118.8
		Shear OK	Shear OK

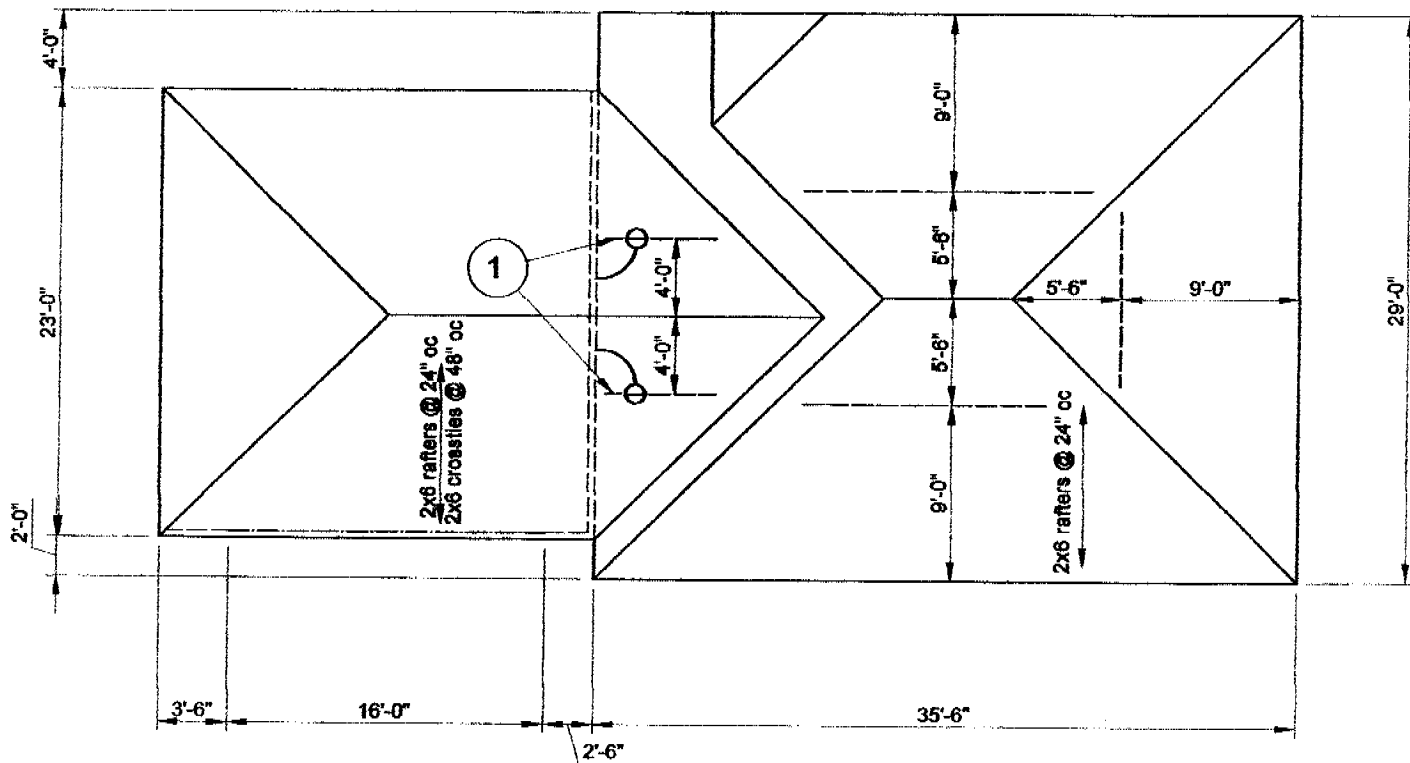
Reactions

@ Left End DL	lbs	147.60	688.00
LL	lbs	192.00	896.00
Max. DL+LL	lbs	339.60	1,584.00
@ Right End DL	lbs	147.60	688.00
LL	lbs	192.00	896.00
Max. DL+LL	lbs	339.60	1,584.00

Deflections Ratio OK Deflection OK

Center DL Defl	in	-0.345	-0.191
L/Defl Ratio		417.5	1,006.0
Center LL Defl	in	-0.449	-0.249
L/Defl Ratio		320.9	772.5
Center Total Defl	in	-0.794	-0.439
Location	ft	6.000	8.000
L/Defl Ratio		181.5	437.0

5



FRAMING NOTES:

1. Add a 2x6 DF#2 x 6'-0" long purlin with 2x4 struts to bearing below.

NOTES:

- A. This is a reroof project. The new roofing material shall be a Light Weight Concrete Tile. The tile shall weigh less than or equal to 7.3 psf.
- B. All rafters are 2x6 DF#2 and hips and valleys are 2x8 DF#2 unless otherwise noted.
- C. All existing rafter, hips, valleys, rafter ties, and purlins are braced per UBC Section 2320.1 "Roof and Ceiling Framing" unless otherwise shown.
- D. All structural wood members that were observed appear to be in sound condition and without structural defect.

1 ROOF PLAN - YEE - 7650 GREENHAVEN

Not to Scale

ROOFING QUESTIONNAIRE

Applicant's name: Legacy Roofing & Waterproofing, Inc. Phone: 736-3015

Project Address: 2601 J St.

Please check the appropriate boxes. Only check a box if it accurately and completely describes your proposed work, otherwise leave boxes blank.

1. ROOFING TYPE

a. The existing roofing material is composition shingle, wood shake or shingle, tile or metal. The new roofing material shall be:

Existing	Proposed	
<input type="checkbox"/>	<input type="checkbox"/>	30-year laminated dimensional composition
<input type="checkbox"/>	<input type="checkbox"/>	wood shake or shingle
<input type="checkbox"/>	<input type="checkbox"/>	tile
<input type="checkbox"/>	<input type="checkbox"/>	metal that simulates one of the above listed materials

b. The existing roofing material is built up, foam or membrane with a roof pitch of 2:12 or less. The new roofing material shall be:

Existing	Proposed	
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Built up
<input type="checkbox"/>	<input type="checkbox"/>	Foam
<input type="checkbox"/>	<input type="checkbox"/>	Membrane

2. GUTTERS

a. The existing gutters are fascia gutters.

There is no change proposed to existing gutters.

New fascia gutters shall be provided. (If located in Alhambra Corridor, Oak Park, Central City or applicant proposes replacement of ogee with fascia in any DR area, route to DR staff).

Gutters shall be repaired and/or replaced to match existing.

b. The existing gutters are Ogee gutters.

There is no change proposed to existing gutters.

New Ogee gutters shall be provided.

Gutters shall be repaired and/or replaced to match existing.

c. There are no existing gutters.

No new gutters are proposed.

New Ogee gutters shall be provided.

3. RAFTER TAILS

a. There are no exposed rafter tails.

b. There are exposed rafter tails.

There is no change or cutting proposed to existing rafter tails.

Rafter tails shall be repaired and replaced to match existing. (If checked and project address is in any DR area route to DR staff).

By signing below, the applicant certifies that this form accurately describes the proposed work.

Applicant's signature: James J. Hayward Date: 10-7-04

For City Staff use only

Counter Staff MAB

- In a DR District Meets DR criteria? Yes No (route to DR staff)
 In a P area or listed (route to P staff)
 Not in DR/P area