

USE BLACK INK BALL POINT PEN — PRESS FIRMLY

BUILDING SITE ADDRESS 809 Klein Way		SUITE		INSP. AREA	
ASSESSOR PARCEL NO.	COMMUNITY PLAN NO.	ADDRESS		PHONE NO.	PLAN CHECK NO.
LICENSED CONTRACTOR Zimmerman Roofing	ZIP CODE 95826	ADDRESS 3560 Ramona Ave.		PHONE NO. 454-3667	
PROPERTY OWNER Tammy O'fook	ZIP CODE 95887	ADDRESS 809 Klein Way		PHONE NO. 427-7522	
ARCH. ENGR.	LICENSE NO.	NO. OF STORIES	NO. OF ROOMS	ROOF COVERING	AREA 1ST FLOOR
		1		36	
TOTAL AREA		GARAGE AREA		USE ZONE	
THIS PERMIT IS FOR:		ELECTRICAL		FIRE	
<input checked="" type="checkbox"/> BUILDING		<input type="checkbox"/> MECHANICAL		<input type="checkbox"/> PLUMBING	
NATURE OF WORK IN DETAIL		VALUATION		ISSUED BY:	
Remove old log & Re-log w/ Pioneer tile		\$ 13,000.00		W-AB	
1/2 pith single family residence		DATE ISSUED		FED. CODE	
(SPECIAL CONDITIONS ATTACHMENTS)		1-4-99		HA	
CITY OF SACRAMENTO PERMIT SERVICES BUILDING INSPECTION DIVISION 264-7619		BUILDING PERMIT FEE \$		PLANNING PERMIT FEE \$	
WORKER'S COMPENSATION DECLARATION		\$ 175.00		\$	
I hereby affirm under penalty of perjury one of the following declarations:		S.M.I. FEE \$		CONST. EXCISE TAX \$	
<input type="checkbox"/> 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.		\$ 1.30		\$	
<input checked="" type="checkbox"/> 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:		CITY BUS LICENSE \$		TECH. FEE \$	
		State Fund		7.00	
Carrier		WATER DEV. FEE \$		CITY SEWER DEV. FEE \$	
Policy Number		\$		\$	
713 98 002021		\$		\$	
<input type="checkbox"/> This section need not be completed if the permit is for one hundred dollars (\$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.		REG. SEWER FEE \$		RESIDENTIAL CONST. TAX \$	
Date: 1-4-99 Applicant: Tammy O'fook (Signature)		\$		\$	
WARNING: FAILURE TO SECURE WORKERS' COMPENSATION COVERAGE IN THE ABOVE MANNER SUBJECTS AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL PENALTIES TO THE EXTENT OF THOUSAND DOLLARS AND DAMAGES ADDITIONAL TO THE COST OF COMPENSATION. DAMAGES AS PROVIDED FOR IN SECTION 3706 OF THE LABOR CODE. INTEREST ON UNPAID PENALTIES.		TOTAL FEES \$			

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.)

Lenders Name _____
Lenders 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 **C39** Lic. Number **557559**
Date **1-4-99** Contractor **Tammy O'fook** (Signature)

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 3 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 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 Professions 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 or 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 or 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 & P C 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 is correct. I agree to comply with all city and county ordinances and state laws relating to building construction and hereby authorize representative of this city to enter upon the abovementioned property for inspection purposes.

1-4-99 **Tammy O'fook** (Signature) Applicant or Agent

THIS PERMIT QUALIFIES FOR A 180 DAY PERIOD OF EXTENSION IF WORK IS NOT COMMENCED WITHIN 180 DAYS.



DEPARTMENT OF
PLANNING AND DEVELOPMENT

CITY OF SACRAMENTO
CALIFORNIA

1231 I STREET
ROOM 200
SACRAMENTO, CA
95814-2998

Permit Service
916-264-7619
FAX 916-264-7096

Tanny Oatfok
809 Klein Way
95831

TILE ROOF WORKSHEET

This worksheet must be filled out whenever any type of tile roof is applied for.

If the answer to question #5 is yes, a written engineering report from a registered engineer must be provided with each application.

1. BRAND AND MODEL OF TILE Pioneer Hacienda
2. TILE WEIGHT PER SQUARE 595
3. WEIGHT OF ROOF SYSTEM PER SQUARE 180
4. TOTAL WEIGHT OF ROOF SYSTEM 775
5. DOES TOTAL WEIGHT OF ROOF SYSTEM EXCEED 750# PER SQUARE? YES NO
6. ROOF SLOPE 4/12

PLEASE PROVIDE A SEPARATE WORKSHEET FOR EACH APPLICATION INVOLVING A TILE ROOF.

see attached engin. report

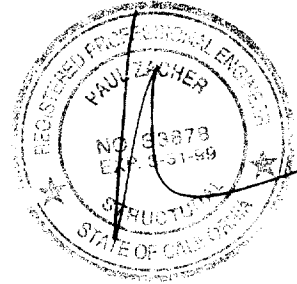
Owfook

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

TEL: 916.961.3960
FAX: 916.961.3960

December 16, 1998

Zimmerman Roofing
3560 Ramona Avenue
Sacramento, CA 95826
TEL: 916.454.3667
FAX: 916.455.3784
TEL (Jeff): 916.392.1971
FAX (Jeff): 916.392.6853
FAX (Framer) : 916.383.5308



Attn: Mr. Jeff Tucker,

re: Job 98307: OWFOOK

Subject: Structural Investigation Report of the Roof for the Residence located at 809 Klein Way, Sacramento, CA 95831.

As requested by Mr. Jeff Tucker, this is a report to determine what needs should be addressed to correct any structural deficiencies of the roof. Paul Zacher visited the site December 16, 1998. The investigation was made to determine the existing condition of the structure. All information, data and analysis contained within this report is based on the 1994 Uniform Building Code.

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

DESCRIPTION:

Type of Facility: Residence.
Year Built: Estimated 1970's vintage.
Occupancy: Residential.
No. of Stories: One.
Dimensions: Approximately 2000 square feet with a first story plate height of 8 feet.

CONSTRUCTION:

Roof:
The roof covering will consist of Pioneer Light Weight Concrete Tile over 1/2" solid sheathing.
The living area and garage are framed with per-engineered wood trusses spaced at 24" on center.

Owfook

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

TEL: 916.961.3960
FAX: 916.961.3960

CONCLUSIONS:

Roof

The living and garage areas have sufficient structural capacity for the applied live and dead loads

RECOMMENDATIONS:

None.

It shall be noted that small hairline cracking may occur at exterior stucco and interior gypboard finished walls which 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 which 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	4	in 12
Pitch Adjustment Factor	1.05	

LOCATION: TOP CHORD

<u>MATERIAL</u>	<u>WEIGHT</u>	
Pioneer Light Weight	7.00	psf
Roofing felt	0.30	psf
1/2" OSB/ plywood	1.50	psf
1x4 skip sht'g	1.09	psf
2x4 truss @ 24" oc	<u>1.28</u>	psf
Load	11.2	psf
Roof Pitch Adjustment	<u>0.60</u>	psf
Total Load	11.8	psf

LOCATION: BOTTOM CHORD

<u>MATERIAL</u>	<u>WEIGHT</u>	
Batt/blown insul	0.50	psf
2x4 truss @ 24" oc	0.64	psf
1/2" Gypboard	<u>2.50</u>	psf
Load	3.6	psf

LOCATION: ROOF

<u>MATERIAL</u>	<u>WEIGHT</u>	
Pioneer Light Weight	7.00	psf
Roofing felt	0.30	psf
1x4 skip sht'g	1.09	psf
1/2" OSB/ plywood	1.50	psf
2x6 rafters @ 24" oc	<u>1.00</u>	psf
Load	10.9	psf
Roof Pitch Adjustment	<u>0.59</u>	psf
Total Load	11.5	psf

Title :
 Dsgnr:
 Description :

Date:
 Job #

Scope :

Rev 510001

Timber Beam & Joist

Page 1

Description RAFTERS AND BEAMS

Timber Member Information

		2x6	4x14
Timber Section		2x6	4x14
Beam Width	in	1.500	3.500
Beam Depth	in	5.500	13.250
Le: Unbraced Length	ft	2.00	2.00
Timber Grade		Douglas Fir - Larch	Douglas Fir - Larch
Fb - Basic Allow	psi	875.0	1,000.0
Fv - Basic Allow	psi	95.0	95.0
Elastic Modulus	ksi	1,700.0	1,700.0
Load Duration Factor		1.250	1.250
Member Type		Sawn	Sawn
Repetitive Status		Repetitive	No

Center Span Data

		2x6	4x14
Span	ft	12.25	16.00
Dead Load	#/ft	23.00	127.00
Live Load	#/ft	32.00	176.00

Cantilever Span

		2x6	4x14
Span	ft	2.00	
Uniform Dead Load	#/ft	23.00	
Uniform Live Load	#/ft	32.00	

Results

		Ratio =	0.9946	0.9157
Mmax @ Center	in-k		12.11	116.35
@ X =	ft		6.08	8.00
Mmax @ Cantilever	in-k		-1.32	0.00
fb Actual	psi		1,600.7	1,136.1
Fb Allowable	psi		1,609.4	1,240.7
			Bending OK	Bending OK
fv Actual	psi		58.5	67.7
Fv Allowable	psi		118.8	118.8
			Shear OK	Shear OK

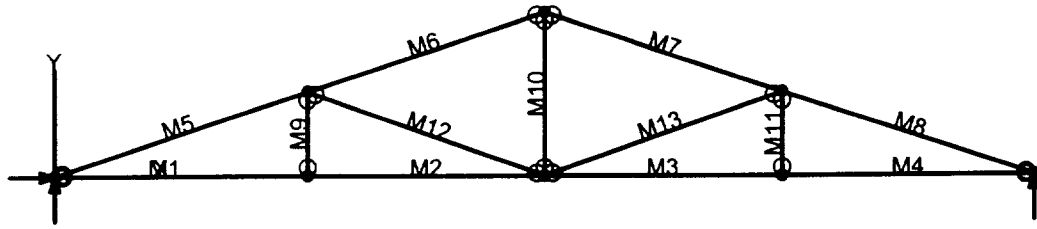
Reactions

@ Left End	DL	lbs	137.12	1,016.00
	LL	lbs	196.00	1,408.00
	Max. DL+LL	lbs	333.12	2,424.00
@ Right End	DL	lbs	190.63	1,016.00
	LL	lbs	265.22	1,408.00
	Max. DL+LL	lbs	455.85	2,424.00

Deflections

Center DL Defl	in	-0.309	-0.162
L/Defl Ratio		476.4	1,182.6
Center LL Defl	in	-0.459	-0.225
L/Defl Ratio		320.6	853.3
Center Total Defl	in	-0.767	-0.387
Location	ft	6.125	8.000
L/Defl Ratio		191.6	495.7
Cantilever DL Defl	in	0.151	
Cantilever LL Defl	in	0.210	
Total Cant. Defl	in	0.362	
L/Defl Ratio		132.7	

4



VisualAnalysis 3.50.c Report

12/16/98 13:41:40

Project:

File: D:\Paul\d_and_d\aaafolder\truss1.vap

Company: PK Associates Engineers

Engineer: Paul Zacher

Default Units Feet, Pounds, Degrees, °Fahrenheit, Seconds.

Nodes

Node	X ft	Y ft	Fix	DX ft	Fix	DY ft	Fix	RZ
N1	0.00	0.00	Yes		Yes		No	
N2	9.00	0.00	No		No		"	
N3	17.50	0.00	"		"		"	
N4	26.00	0.00	"		"		"	
N5	35.00	0.00	"		Yes		"	
N6	9.00	3.00	"		No		"	
N7	26.00	3.00	"		"		"	
N8	17.50	5.83	"		"		"	

Member Elements

Member	Section	Material	Length ft	Weight lbs	Theta deg
M1	SS2x4	Wood	9.00	13.28	0.00
M2	"	"	8.50	12.54	0.00
M3	"	"	8.50	12.54	0.00
M4	"	"	9.00	13.28	0.00
M5	"	"	9.49	14.00	0.00
M6	"	"	8.96	13.22	0.00
M7	"	"	8.96	13.22	0.00
M8	"	"	9.49	14.00	0.00
M9	"	"	3.00	4.43	0.00
M10	"	"	5.83	8.60	0.00
M11	"	"	3.00	4.43	0.00
M12	"	"	9.01	13.30	0.00
M13	"	"	9.01	13.30	0.00

Section Properties

Category	Section	Ax in ²	Iz in ⁴	Sy+ in ³	Sy- in ³
Wood Sha	SS2x4	5.25	5.36	3.06	3.06

Material Properties

Material	Strength ksi	Elasticity ksi	Poisson	Density lb/ft ³	Therm. /F
Wood	-NA-	1200.00	0.36	40.47	0.00

VisualAnalysis 3.50.c Report

12/16/98 13:41:50

Project:

File: D:\Paul\d_and_d\aafolder\truss1.vap

Company: PK Associates Engineers

Engineer: Paul Zacher

Default Units: Feet, Pounds, Degrees, °Fahrenheit, Seconds.

Load Cases

Load Case	Strength Service Results		
(1)Service Case 1	Yes	Yes	None
(2)Service Case 2	"	"	"
(3)Equation Case 1	"	"	1st Ord

Service Load Cases

Load Case	Load Source	Self Weight	Loads
Service Case 1	Dead loads	None	
Service Case 2	Roof Live 1	"	

Load Combination Summary

Equation Case: Equation Case 1

Combination: +1D+1L+1Lr+1R+1W+1S+1E+1H+1F+1TS+1T+1TC+1I+1U+1LE

Contributing Cases & Source

Service Case 1 (Dead loads)

Service Case 2 (Roof Live loads)

Equation Case Combinations

Load Case	Cases Equation	
Equation Case 1	0.00	0.00

Member Uniform Loads

Load Case	Member	Direction	Offset ft	End Off ft	Magnitude
Service Case 1	M1	DY proj.	0.00	9.00	-0.01 K/ft
"	M2	"	0.00	8.50	-0.01 K/ft
"	M3	"	0.00	8.50	-0.01 K/ft
"	M4	"	0.00	9.00	-0.01 K/ft
"	M5	"	0.00	9.49	-0.02 K/ft
"	M6	"	0.00	8.96	-0.02 K/ft
"	M7	"	0.00	8.96	-0.02 K/ft
"	M8	"	0.00	9.49	-0.02 K/ft
Service Case 2	M5	"	0.00	9.49	-0.03 K/ft
"	M6	"	0.00	8.96	-0.03 K/ft
"	M7	"	0.00	8.96	-0.03 K/ft
"	M8	"	0.00	9.49	-0.03 K/ft

VisualAnalysis 3.50.c Report

12/16/98 13:42:02

Project:

File: D:\Paul\d_and_d\aafolder\truss1.vap

Company: PK Associates Engineers

Engineer: Paul Zacher

Default Units: Feet, Pounds, Degrees, °Fahrenheit, Seconds.

Load Cases

Load Case	Strength Service Results		
(1)Service Case 1	Yes	Yes	None
(2)Service Case 2	"	"	"
(3)Equation Case 1	"	"	1st Ord

Member Extreme Results

Member	Fx(lc) K	Fy(lc) K	Mz(lc) K-ft	fc max(lc) ksi	fc min(lc) ksi	Dx(lc) in	Dy(lc) in
M1	2.62(3)	-0.03(3)	-0.02(3)	0.50(3)	0.26(3)	0.00(3)	-0.50(3)
"	2.62(3)	0.03(3)	0.06(3)	0.74(3)	0.50(3)	0.04(3)	-0.00(3)
M2	2.62(3)	-0.03(3)	-0.05(3)	0.51(3)	0.30(3)	0.04(3)	-0.55(3)
"	2.62(3)	0.03(3)	0.03(3)	0.70(3)	0.49(3)	0.09(3)	-0.50(3)
M3	2.62(3)	-0.03(3)	-0.05(3)	0.51(3)	0.30(3)	0.09(3)	-0.55(3)
"	2.62(3)	0.03(3)	0.03(3)	0.70(3)	0.49(3)	0.13(3)	-0.50(3)
M4	2.62(3)	-0.03(3)	-0.02(3)	0.50(3)	0.26(3)	0.13(3)	-0.50(3)
"	2.62(3)	0.03(3)	0.06(3)	0.74(3)	0.50(3)	0.17(3)	-0.00(3)
M5	-2.83(3)	-0.29(3)	-0.50(3)	-0.54(3)	-2.47(3)	-0.05(3)	-0.92(3)
"	-2.67(3)	0.18(3)	0.34(3)	1.46(3)	-0.54(3)	-0.00(3)	-0.00(3)
M6	-1.84(3)	-0.17(3)	-0.50(3)	-0.34(3)	-2.31(3)	-0.08(3)	-0.98(3)
"	-1.69(3)	0.28(3)	0.28(3)	1.61(3)	-0.32(3)	-0.05(3)	-0.51(3)
M7	-1.84(3)	-0.28(3)	-0.50(3)	-0.34(3)	-2.31(3)	0.22(3)	-0.93(3)
"	-1.69(3)	0.17(3)	0.28(3)	1.61(3)	-0.32(3)	0.25(3)	-0.46(3)
M8	-2.83(3)	-0.18(3)	-0.50(3)	-0.54(3)	-2.47(3)	0.17(3)	-0.86(3)
"	-2.67(3)	0.29(3)	0.34(3)	1.46(3)	-0.54(3)	0.22(3)	0.06(3)
M9	0.06(3)	-0.00(3)	-0.00(3)	0.01(3)	0.01(3)	0.50(3)	0.04(3)
"	0.06(3)	-0.00(3)	0.00(3)	0.01(3)	0.01(3)	0.50(3)	0.11(3)
M10	0.75(3)	0.00(3)	0.00(3)	0.14(3)	0.14(3)	0.51(3)	0.09(3)
"	0.75(3)	0.00(3)	0.00(3)	0.14(3)	0.14(3)	0.52(3)	0.09(3)
M11	0.06(3)	0.00(3)	0.00(3)	0.01(3)	0.01(3)	0.50(3)	0.06(3)
"	0.06(3)	0.00(3)	0.00(3)	0.01(3)	0.01(3)	0.50(3)	0.13(3)
M12	-1.02(3)	0.00(3)	0.00(3)	-0.20(3)	-0.20(3)	0.26(3)	-0.46(3)
"	-1.02(3)	0.00(3)	0.00(3)	-0.20(3)	-0.20(3)	0.27(3)	-0.43(3)
M13	-1.02(3)	-0.00(3)	-0.00(3)	-0.20(3)	-0.20(3)	-0.11(3)	-0.52(3)
"	-1.02(3)	-0.00(3)	0.00(3)	-0.20(3)	-0.20(3)	-0.09(3)	-0.49(3)

BENDING & COMP: TRUSS 1; MEMBER 5

Buckling Factor, CT is
 negelected due to small contribution

Grading:

2x or 4x Doug-fir larch: No. 2

Assumptions:

Lateral support at points of bearing
 SPS or gypboard attached to compression face
 Maximum center-center spacing = 24"

Width, b	1.5 inches
Depth, d	3.5 inches
Length	8.49 feet
Max Axial Comp, C	2830 lbs
Max Reaction, R	290 lbs
Max Moment, M	500 ft-lbs
Max LL Deflection	0.36 inches
Max TL Deflection	0.50 inches
LL Defl Criteria = L/	240
TL Defl Criteria = L/	180
Duration factor, Cd	1.25
Repetitive Factor, Cr	1.15
fc =	539 psi
Fce=	885 psi
Fc*=	1094 psi
F'c=	672 psi
fb=	163 psi
F'b=	1258 psi
Shear D/C ratio	0.70 < 1.0, Member OK
Interaction equation:	
(fc/F'c)^2 +	
fb/ (F'b(1-fc/Fce)) =	0.98 < 1.0, Member OK
Live Load defl ratio	0.85 < 1.0, Member OK
Total Load defl ratio	0.88 < 1.0, Member OK