

CITY OF SACRAMENTO

1231 I Street, Sacramento, CA 95814

Permit No: 0401091

Insp Area: 2

Thos Bros: 337 A2

Site Address: 7419 RIO MONDEGO DR SAC

Parcel No: 031-1130-017

HOUSE & GARAGE

Sub-Type: RES

Housing (Y/N): N

CONTRACTOR

DAVID KNUTSON ROOFING
1520 MAIN AV
SAC CA. 95838

OWNER

PRAKASH ARAVINDA/SAROJANI S
7419 RIO MONDEGO DR
SACRAMENTO CA 95831

ARCHITECT

Nature of Work: T/O SHAKE, REROOF W/ 38 SQ. LIGHTWEIGHT TILE. ENGINEERING LETTER STATING STRUCTURAL ADEQUACY.

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 C-39 License Number 453373 Date 1/23/04 Contractor Signature [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 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 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 _____

PAID
CITY OF SACRAMENTO
JAN 23 2004
NORTH PERMIT CENTER

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(s) of this city to enter upon the abovementioned property for inspection purposes.

Date 1/23/04 Applicant/Agent Signature [Signature]

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 1677234 Exp Date 01/01/2005

(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 1/23/04 Applicant Signature [Signature]

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.

Anderson Engineering Consultants

16790 Placer Hills Road, Suite A Phone: (530) 878-4770
Meadow Vista, CA. 95722 Fax: (530) 878-1579

David Knutson Roofing
1520 Main Avenue
Sacramento, CA. 95838

January 5, 2004

Subject: Lightweight Tile Re-roof
7419 Rio Mondego Drive
Sacramento, CA. 95831

Dear David,

Pursuant to your request, Anderson Engineering Consultants has reviewed the roof framing of the structure at the above address for structural adequacy. The house is approximately 15 to 20 years old and is comprised of the following:

- 2x4 gangnail trusses at 24" o.c. over the house.
- 2x8 rafters @ 16" o.c. over living room, maximum span is 17'-5".
- 2x6 rafters @ 24" o.c. over front of garage, maximum span 7'-6".

CITY COPY

The roof has a pitch of 6:12 and appears to be in sound condition. The trusses have top and bottom chord grade of No. 1. The plates appear to be of adequate size for the proposed load. Calculations show the rafters are adequate. The total dead load on the rafters including roofing material does not exceed 9 psf.

It is our opinion that using your proposed re-roof system consisting of the following will not compromise the structural integrity of the roof system:

- 7/8" - 22 gage hat channel fastened to the rafters with 10d-galvanized nails (or equal) at 24" o.c.
- "Thermo-ply" underlayment fastened to the hat channel with #10 self-tapping screws (or equal).
- 7/8" - 22 gage steel hat channel battens over the "Thermo-ply" underlayment fastened with #10 self tapping screws (or equal) at every rafter.
- Lightweight concrete Eaglelite tile weighing 7.0 psf or less.

The determination of the roof's structural integrity is based on framing that is directly observable.

After re-roofing minor cracking of the ceiling and interior and exterior walls may occur. In addition, a small amount of deflection in the rafters may be observed. These conditions are cosmetic only and do not affect the structural integrity of the roof framing. Should you have any questions, please do not hesitate to contact us.

Sincerely,



Carl Anderson, P.E.

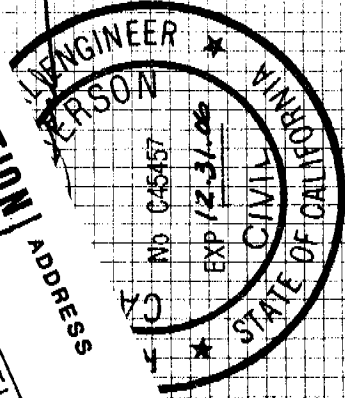


COPY COPY

RESIDENCE
WINDWARD DRIVE
10, CA.

700

INSPECTION REQUEST



AREA
RR

- B10 FORM
- B11 UFER (RES)
- B12 SLAB
- B13 JOIST/GIRDER
- B14 INS. WALL
- B15 INS. FLOOR
- B16 ROOF PLYNAIL
- B17 ROOF LATH/SIDE
- B18 EXT. LATH/SIDE
- B19 FRAME (WALLS ONLY)
- B20 FRAME CEIL (T-BAR)
- B21 SHTRCK NAIL
- B22 B.B.
- B23 TILTUP
- B24 FIRE SPR. LOC
- B25 SHEAR NAIL
- B26 FINAL

BUILDING

OWNER OR CONTRACTOR

MON.

INSPECTION DATE

ADDRESS

1299 Julia

1288 Rio

1299 Mendenhall

1470 PR

1091

1091

1091

1091

MECHANICAL

- M30 UNDR FLR/SLAB
- M31 TOP/ROUGH
- M32 CONDENSATE
- M33 GAS TEST
- M34
- M35

TUES.

REQUEST DATE

WED.

PLUMBING

- P40 UNDR FLR/SLAB
- P41 TOP/ROUGH
- P42 WATER SERVICE
- P43 SEWER DRAIN
- P44 STORM DRAIN
- P45 IRR. SVC. PIPING
- P46 FIRE SPR. SYS.
- P47 GAS TEST
- P48 TEMP GAS
- P49
- P50

THURS.

PERMIT NO.

REQUEST TIME

FRI.

ELECTRICAL

- E60 UFER (COMM)
- E61 CONDUIT/UNDERGR.
- E62 CONDUIT/SLAB
- E63 ROUGH ELECT.
- E64 ROUGH (WALLS ONLY)
- E65 ROUGH (CEIL. ONLY)
- E66 SERVICE UNDER. CONDUIT
- E67 TEMP POWER
- E68
- E69

CLERK

E70 FINAL

- E70 PREGUNITE
- E71 PREDECK
- E72 CONDUIT/UNDERGR.
- E79 POOLS ONLY
- E79 FINAL



Roof Rafter[97 Uniform Building Code (91 NDS) | Ver: 5.01b

By: Carl Anderson , Anderson Engineering Consultants on: 01-05-2004 : 4:41:51 PM

Project: PIRAKASH - Location: MAX RAFTER SPAN - 2X6

Summary:

1.5 IN x 5.5 IN x 7.5 FT (Actual 8.4 FT) @ 16 O.C. / #2 - Douglas Fir-Larch - Dry Use
 Section Adequate By: 288.4% Controlling Factor: Section Modulus / Depth Required 3.11 In

Rafter Span Deflections:

Dead Load:	DLD-Interior=	0.04	IN
Live Load:	LLD-Interior=	0.06	IN = L/1764
Total Load:	TLD-Interior=	0.10	IN = L/997

Rafter End Loads and Reactions:

Upper Live Load:	LOADS:	RXNS:	
Upper Dead Load:	60 PLF	80 LB	
Upper Total Load:	46 PLF	61 LB	
Lower Live Load:	106 PLF	141 LB	
Lower Dead Load:	60 PLF	80 LB	
Lower Total Load:	46 PLF	61 LB	
Upper Equiv. Tributary Width:	106 PLF	141 LB	
Lower Equiv. Tributary Width:	UTWeq=	3.75	FT
	LTWeq=	3.75	FT

Rafter Data:

Interior Span:	L=	7.5	FT
Eave Span:	L-Eave=	0.0	FT
Rafter Spacing:	Spacing=	16	IN O.C.
Rafter Pitch:	RP=	6	: 12
Roof sheathing applied to top of joists-Top of rafters fully braced.			
Live Load Deflect. Criteria:	L/	240	
Total Load Deflect. Criteria:	L/	180	

Non-Snow Live Load:

Roof Loaded Area:	RLA=	10	SF
Live Load Method:	Method =	One	

Rafter Loads:

Roof Live Load:	LL=	16	PSF
Roof Dead Load:	DL=	11	PSF
Roof Duration Factor:	Cd=	1.25	

Slope Adjusted Spans And Loads:

Interior Span:	L-adj=	8.4	FT
Rafter Live Load:	wL-adj=	17	PLF
Rafter Dead Load:	wD-adj=	13	PLF
Rafter Total Load:	wT-adj=	30	PLF

Properties For: #2- Douglas Fir-Larch

Bending Stress:	Fb=	875	PSI
Shear Stress:	Fv=	95	PSI
Modulus of Elasticity:	E=	1600000	PSI
Stress Perpendicular to Grain:	Fc-perp=	625	PSI

Adjusted Properties

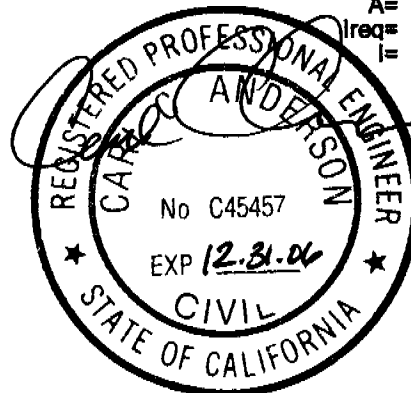
Fb' (Tension):	Fb'=	1635	PSI
Adjustment Factors: Cd=1.25 Cf=1.30 Cr=1.15			
Fv:	Fv'=	119	PSI
Adjustment Factors: Cd=1.25			

Design Requirements:

Controlling Moment:	M=	265	FT-LB
4.193 Ft from Left Support of Span 2 (Center Span)			
Critical moment created by combining all dead loads and live loads on span(s) 2			
Maximum Shear:	V=	127	LB
At left support of span 2 (Center Span)			
Critical shear created by combining all dead loads and live loads on span(s) 2			

Comparisons With Required Sections:

Section Modulus:	Sreq=	1.95	IN3
	S=	7.56	IN3
Area:	Areq=	1.60	IN2
	A=	8.25	IN2
Moment of Inertia:	Ireq=	3.75	IN4
	I=	20.80	IN4



Roof Rafter 97 Uniform Building Code (91 NDS) | Ver: 5.01b

By: Carl Anderson, Anderson Engineering Consultants on: 01-05-2004 : 4:41:10 PM

Project: PIRAKASH - Location: MAX RAFTER SPAN - 2x8

Summary:

1.5 IN x 7.25 IN x 17.42 FT (Actual 19.5 FT) @ 16 O.C. / #2 - Douglas Fir-Larch - Dry Use
 Section Adequate By: 1.3% Controlling Factor: Moment of Inertia / Depth Required 7.22 In

Rafter Span Deflections:

Dead Load:	DLD-Interior=	0.56	IN
Live Load:	LLD-Interior=	0.72	IN = L/322
Total Load:	TLD-Interior=	1.28	IN = L/182

Rafter End Loads and Reactions:

Upper Live Load:	LOADS:	RXNS:	
Upper Dead Load:	139 PLF	186 LB	
Upper Total Load:	107 PLF	143 LB	
Lower Live Load:	246 PLF	329 LB	
Lower Dead Load:	139 PLF	186 LB	
Lower Total Load:	107 PLF	143 LB	
Upper Equiv. Tributary Width:	246 PLF	329 LB	
Lower Equiv. Tributary Width:	UTWeq=	8.71	FT
	LTWeq=	8.71	FT

Rafter Data:

Interior Span:	L=	17.42	FT
Eave Span:	L-Eave=	0.0	FT
Rafter Spacing:	Spacing=	16	IN O.C.
Rafter Pitch:	RP=	6	: 12
Roof sheathing applied to top of joists-Top of rafters fully braced.			
Live Load Deflect. Criteria:	L/	240	
Total Load Deflect. Criteria:	L/	180	

Non-Snow Live Load:

Roof Loaded Area:	RLA=	23	SF
Live Load Method:	Method =	One	

Rafter Loads:

Roof Live Load:	LL=	16	PSF
Roof Dead Load:	DL=	11	PSF
Roof Duration Factor:	Cd=	1.25	

Slope Adjusted Spans And Loads:

Interior Span:	L-adj=	19.5	FT
Rafter Live Load:	wL-adj=	17	PLF
Rafter Dead Load:	wD-adj=	13	PLF
Rafter Total Load:	wT-adj=	30	PLF

Properties For: #2- Douglas Fir-Larch

Bending Stress:	Fb=	875	PSI
Shear Stress:	Fv=	95	PSI
Modulus of Elasticity:	E=	1600000	PSI
Stress Perpendicular to Grain:	Fc-perp=	625	PSI

Adjusted Properties

Fb' (Tension):	Fb'=	1509	PSI
Adjustment Factors: Cd=1.25 Cf=1.20 Cr=1.15			
Fv':	Fv'=	119	PSI
Adjustment Factors: Cd=1.25			

Design Requirements:

Controlling Moment:	M=	1431	FT-LB
9.738 Ft from Left Support of Span 2 (Center Span)			
Critical moment created by combining all dead loads and live loads on span(s) 2			
Maximum Shear:	V=	294	LB
19.476 Ft from Left Support of Span 2 (Center Span)			
Critical shear created by combining all dead loads and live loads on span(s) 2			

Comparisons With Required Sections:

Section Modulus:	Sreq=	11.38	IN3
	S=	13.14	IN3
Area:	Areq=	3.71	IN2
	A=	10.88	IN2
Moment of Inertia:	Ireq=	47.03	IN4
	I=	47.63	IN4

