

CITY OF SACRAMENTO

1231 I Street, Sacramento, CA 95814

Permit No: 9806837

Insp Area: 2

Site Address: 6241 NORTH POINT WY SAC

Parcel No: 0300760002

Sub-Type: RES

Housing (Y/N): N

CONTRACTOR

ZIMMERMAN ROOFING
3560 RAMONA AV
SACRAMENTO, CA

95826

OWNER

FOSTER GREGORY W/CAROL L
6241 NORTH POINT WY
SACRAMENTO CA

95831

ARCHITECT

Nature of Work: T/O AND REROOF 29 SQS WITH TILE

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 C39 License Number 557559 Date 7-24-98 Contractor Signature Billy Coy

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 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 7-24-98 Applicant/Agent Signature Billy Coy

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 713970002021 Exp- 10-1-98

_____, (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 7-24-98 Applicant Signature Billy Coy

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.

Paul Zacher-Structural Engineers

4701 Lakeside Way
Oak Oaks, CA 95628

TEL: 916.961.3960
FAX: 916.961.3960
e-mail: pzacher@softcom.net

July 7, 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 98139 FOSTER

Subject: Structural Investigation Report of the Roof for the Residence located at 6241 North
Pointe 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 July 7, 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 1980's vintage.
Occupancy: Residential.
No. of Stories: One.
Dimensions: Approximately 2600 square feet with a first story plate height of 8 feet.

CONSTRUCTION:

Roof:

The roof covering will consist of Pioneer Everwest Light Weight Shake Tile over 1/2" solid sheathing. The living area is conventionally framed with 2x6 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 over the vaulted ceiling areas. The vaulted ceiling in the living room is constructed of 4x6

DESIGN LOADING:

Roof Pitch	6	in 12
Pitch Adjustment Factor	1.12	

LOCATION: ROOF

<u>MATERIAL</u>	<u>WEIGHT</u>	
Pioneer Everwest Light Wt	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>1.29</u>	psf
Total Load	12.2	psf

LOCATION: VAULT

<u>MATERIAL</u>	<u>WEIGHT</u>	
Pioneer Everwest Light Wt	7.00	psf
Roofing felt	0.30	psf
1/2" OSB/ plywood	1.50	psf
1x4 skip sht'g	1.09	psf
2x8 rafters @ 16" oc	1.99	psf
Batt/blown insul	0.50	psf
1/2" Gypboard	<u>2.50</u>	psf
Load	14.9	psf
Roof Pitch Adjustment	<u>1.76</u>	psf
Total Load	16.6	psf

BEAM DESIGN FOR UNIFORM LOAD: 2x6 vault

(Values for DF Larch #2)

Width, b	1.5 inches
Depth, d	5.5 inches
Length of beam	10.42 feet
Dead load roof	16.6 psf
Live load roof	16 psf
Contributory width of roof load	2 feet
Dead load floor	0 psf
Live load floor	0 psf
Contributory width of floor load	0 feet
Dead load wall	0 plf
Live load defl ratio	360
Total load defl ratio	240
Total dead load	33.2 plf
Total live load	32 plf

Base design values:

Shear, F_v	95 psi
Bending, F_b	875 psi
Comp. perp. to grain, F_c	625 psi
Mod of Elasticity, E	1600000 psi
Load duration factor, C_d	1.25
Size Factor, C_f	1.30
Repetitive factor, C_r	1.15

Dead load reaction	173 lbs
Live load reaction	167 lbs
Total load reaction	340 lbs

Allowable shear, F_v'	119 psi	Horizontal Shear	OK
Actual shear, f_v	56 psi		
Allowable bending, F_b'	1635 psi	Bending	OK
Actual bending, f_b	1404 psi		
Allowable live load defl	0.35 inches	Live Load Deflection	OK
Actual live load defl	0.26 inches		
Allowable total load defl	0.52 inches	Total Load Deflection	OK
Actual total load defl	0.52 inches		

Bearing length req'd	0.36 inches
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BEAM DESIGN FOR UNIFORM LOAD: 6x14

(Values for DF Larch #1)

Width, b	5.5 inches
Depth, d	13.5 inches
Length of beam	21 feet
Dead load roof	14.4 psf
Live load roof	16 psf
Contributory width of roof load	9 feet
Dead load floor	0 psf
Live load floor	0 psf
Contributory width of floor load	0 feet
Dead load wall	0 plf
Live load defl ratio	360
Total load defl ratio	240
Total dead load	129.6 plf
Total live load	144 plf

Base design values:

Shear, Fv	85 psi
Bending, Fb	1350 psi
Comp. perp. to grain, Fc	625 psi
Mod of Elasticity, E	1600000 psi
Load duration factor, Cd	1.25
Size Factor, Cf	0.99

Dead load reaction	1361 lbs
Live load reaction	1512 lbs
Total load reaction	2873 lbs

Allowable shear, Fv'	106 psi	Horizontal Shear	OK
Actual shear, fv	52 psi		
Allowable bending, Fb'	1666 psi	Bending	OK
Actual bending, fb	1083 psi		
Allowable live load defl	0.70 inches	Live Load Deflection	OK
Actual live load defl	0.35 inches		
Allowable total load defl	1.05 inches	Total Load Deflection	OK
Actual total load defl	0.66 inches		
Bearing length req'd	0.84 inches		

Title :
 Dsgnr:
 Description :

Date:
 Job #

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Scope :

Rev 5/10/01

General Timber Beam

Page 1

Description 4x12

General Information

Section Name	4x12	Center Span	13.50 ftLu	2.00 ft
Beam Width	3.500 in	Left Cantilever	ftLu	0.00 ft
Beam Depth	11.250 in	Right Cantilever	ftLu	0.00 ft
Member Type	Sawn	Douglas Fir - Larch, No.1			
Bm Wt. Added to Loads		Fb Base Allow	1,000.0 psi		
Load Dur. Factor	1.250	Fv Allow	95.0 psi		
Beam End Fixity	Pin-Pin	Fc Allow	625.0 psi		
Wood Density	34.000 pcf	E	1,700.0 ksi		

Point Loads

Dead Load	1,361.0 lbs	lbs	lbs	lbs	lbs	lbs
Live Load	1,512.0 lbs	lbs	lbs	lbs	lbs	lbs
...distance	9.500 ft	0.000 ft	0.000 ft	0.000 ft	0.000 ft	0.000 ft

Summary

Beam Design OK

Span= 13.50ft, Beam Width = 3.500in x Depth = 11.25in, Ends are Pin-Pin

Max Stress Ratio 0.982 : 1

Maximum Moment	8.3 k-ft	Maximum Shear * 1.5	3.1 k
Allowable	8.4 k-ft	Allowable	4.7 k

Max. Positive Moment	8.26 k-ft	at 9.504 ft	Shear:	@ Left	0.91 k
Max. Negative Moment	0.00 k-ft	at 0.000 ft		@ Right	2.08 k

Max @ Left Support	0.00 k-ft	Camber:	@ Left	0.000 in
Max @ Right Support	0.00 k-ft		@ Center	0.218 in
			@ Right	0.000 in

Max M allow	8.41	Reactions...		
fb 1,341.83 psi		Left DL	0.47 k	Max 0.91 k
Fb 1,366.53 psi		Right DL	1.02 k	Max 2.08 k

Deflections

Center Span...	Dead Load	Total Load	Left Cantilever...	Dead Load	Total Load
Deflection	-0.145 in	-0.296 in	Deflection	0.000 in	0.000 in
Location	7.398 ft	7.398 ft	...Length/Defl	0.0	0.0
Length/Defl	1,113.8	546.88	Right Cantilever...		
			Deflection	0.000 in	0.000 in
			...Length/Defl	0.0	0.0

Title :
 Dsgnr:
 Description :

Date: Job #

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Scope :

Rev 51300*

General Timber Beam

Page 2

Description 4x12

Stress Calcs

Bending Analysis

Ck 29.908 Rb 6.714 Sxx 73.828 in3 Area 39.375 in2
 Cf 1.100

	Max Moment	Sxx Req'd	Allowable fb
@ Center	8.26 k-ft	72.49 in3	1,366.53 psi
@ Left Support	0.00 k-ft	0.00 in3	1,375.00 psi
@ Right Support	0.00 k-ft	0.00 in3	1,375.00 psi

Shear Analysis

	@ Left Support	@ Right Support
Design Shear	1.36 k	3.11 k
Area Required	11.438 in2	26.223 in2
Fv: Allowable	118.75 psi	118.75 psi

Bearing @ Supports

Max. Left Reaction	0.91 k	Bearing Length Req'd	0.418 in
Max. Right Reaction	2.08 k	Bearing Length Req'd	0.953 in

Query Values

M, V, & D @ Specified Locations		Moment	Shear	Deflection
@ Center Span Location =	0.00 ft	0.00 k-ft	0.91 k	0.0000 in
@ Right Cant. Location =	0.00 ft	0.00 k-ft	0.00 k	0.0000 in
@ Left Cant. Location =	0.00 ft	0.00 k-ft	0.00 k	0.0000 in



DEPARTMENT OF
PLANNING AND DEVELOPMENT

CITY OF SACRAMENTO
CALIFORNIA

1231 I STREET
ROOM 200
SACRAMENTO, CA
95814-2998

Permit Service
916-264-7619
FAX 916-264-7036

1000 1st St 91 Mark Point

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 Diagonal Shale
- 2 TILE WEIGHT PER SQUARE 730
- 3 WEIGHT OF ROOF SYSTEM PER SQUARE 180
- 4 TOTAL WEIGHT OF ROOF SYSTEM 910
- 5 DOES TOTAL WEIGHT OF ROOF SYSTEM EXCEED 750# PER SQUARE? YES NO
- 6 ROOF SLOPE 9/12

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

See attached
engineering
report