

CITY OF SACRAMENTO

1231 I Street, Sacramento, CA 95814

Permit No: 0116064

Insp Area: 2

Thos Bros: 316 H6

Site Address: 6 SHELTER POINT CT SAC

Parcel No: 030-0660-045

Sub-Type: RES

Housing (Y/N): N

CONTRACTOR

CURTIS ELECTRIC
8371 JACKSON RD
SACRAMENTO CA 95826

OWNER

FONG ERNEST O/LAUREN K
6 SHELTER POINT CT
SACRAMENTO CA 95831

ARCHITECT

Nature of Work: TEAR OFF, RESHEET & REROOF 42 SQ'S WITH LIGHT WEIGHT 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 557406 Date 12/21/01 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 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 12/21/01 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 _____ Policy Number _____ Exp Date _____

(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 12/21/01 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.



DEPARTMENT OF
PLANNING AND DEVELOPMENT

CITY OF SACRAMENTO
CALIFORNIA

1231 I STREET
ROOM 200
SACRAMENTO, CA
95814-2998

Permit Service
916-264-7619
FAX 916-264-7066

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 BarTile Legacy
2. TILE WEIGHT PER SQUARE 695
3. WEIGHT OF ROOF SYSTEM PER SQUARE 105
4. TOTAL WEIGHT OF ROOF SYSTEM 800
5. DOES TOTAL WEIGHT OF ROOF SYSTEM EXCEED 750# PER SQUARE? YES NO
6. ROOF SLOPE 5/12

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

SCHOEN ENGINEERING
9524 BEDINGTON WAY
SACRAMENTO, CA 95827

ISSUED by the California State
Board for Engineers and Land Surveyors

DEC 21 2001 (16) 369 6866

LIC.# C042913

Sacramento Building Division



November 15, 2001

Ernest & Lauren Fong
6 Shelter Point Court
Sacramento, CA 95831

This set of plans and specifications must be kept on the job at all times and it is unlawful to make any changes or alterations from the same without written permission from the Building Inspection Division.

SUBJECT: Reroof at 6 Shelter Point Court, Sacramento, CA 95831

Ernest & Lauren:

The approval of this plan and specification is given to permit or authorize the violation of any City Ordinance or State Law.

On October 30th 2001 I inspected the roof structure of the residence at the above mentioned address. The roof was made up of 2x8 D.F. No. 2 rafters @ 16" o.c. with a max. span of 10' in the attic areas of the second story roof 2x8 @ 2' o.c. with a max span of 13' in the garage. There were 2x10's @ 16" o.c. in the vault ceiling area of the living room. There were the following roof support beams: a 4x14 D.F. No. 2 with a span of 15' in the garage entry area, a 6x16 full dimension D.F. No. 2 ridge beam in the living room with a span of 17'. Roof slope was 5:12.

Note: A GluLam to support second story roof and floor loads was designed by others.

The following modifications will be necessary prior to reroofing:

* Some of the 2x4 purlin braces over the master bedroom in the second story are constructed so the brace runs to the side of the purlin and is nailed to it with a block nailed to the brace just under the joist. This is inadequate and should be redone so that the purlin bears directly on a full length 2x4 that extends full length to the bearing wall. Also, additional braces should be installed to insure the purlin spans do not exceed 6'(see sketch for bracing details and plan for location).

It is my finding that with the above mentioned modifications that this structure is adequate for the following: 1/2" plywood or 7/16" OSB installed over the existing skip sheathing; 30-40 lb. underlayment installed over the new sheathing; Lightweight concrete tile weighing 7.3 lbs./sq.ft. or less.

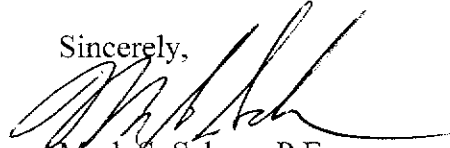
NOTE: it is possible when reroofing that the increased load to structural elements also supporting wall, ceiling and floor finishes could cause some minor cosmetic cracking of these finishes. This is typical of wood framed structures and does not of itself indicate structural inadequacy of these members.

This report deals with the structural adequacy of roof supporting members that were readily observable. It does not address any structure that was covered by wall finishes, buried in the ground or was otherwise not observable. Any such structures were assumed to conform to standard construction specifications in the Uniform Building Code. Also, it does not address any existing deflection or warping of roof surfaces, nor is it guaranteed that any structural modifications that may be listed in this report will remove such deflections or warping. The

repair of such deflections or warping to improve architectural appearance is at the option of the building owner and the roofing contractor.

I would like to thank you for allowing me to provide my services in this matter. Please let me know if I may be of further assistance.

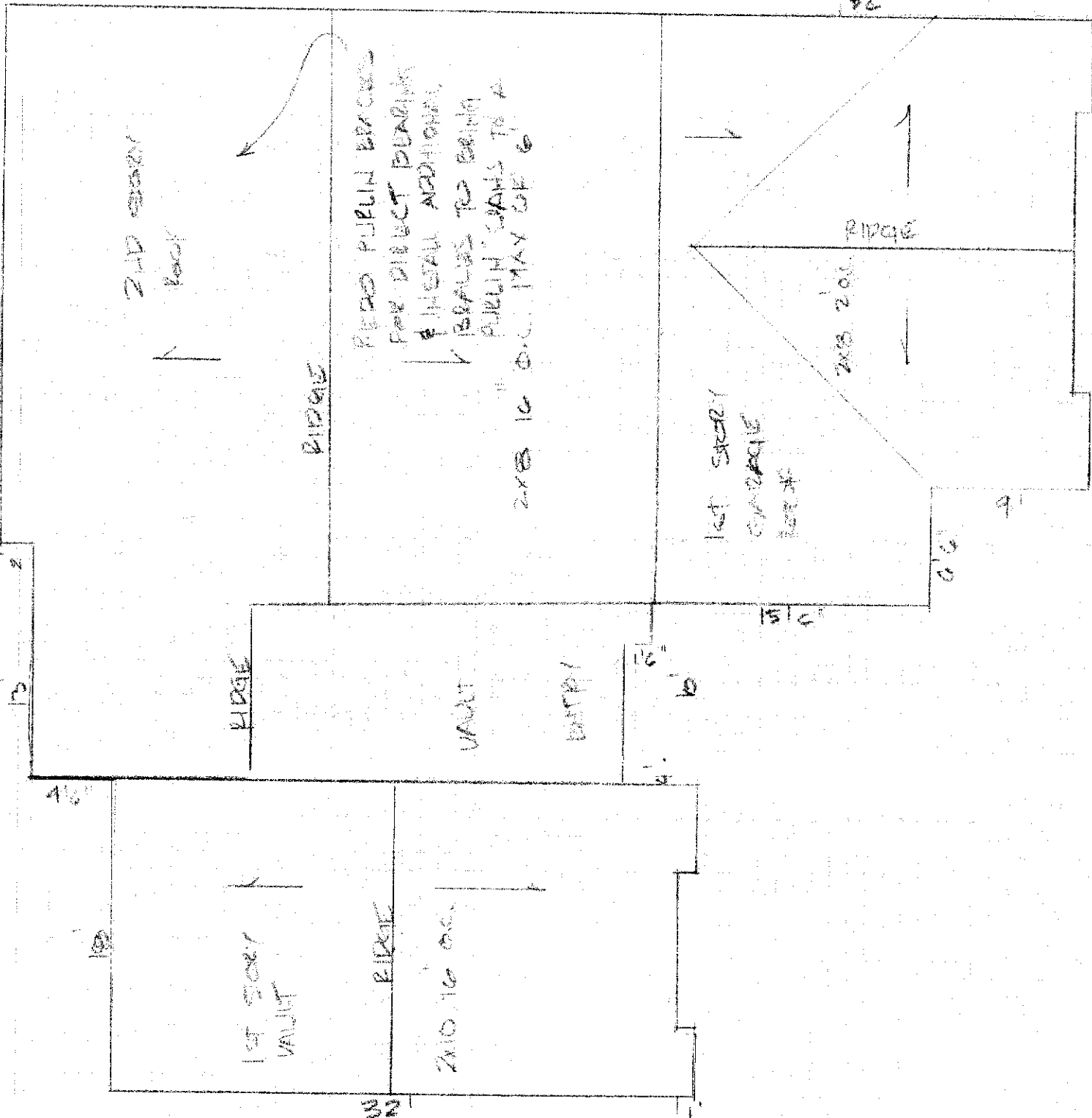
Sincerely,

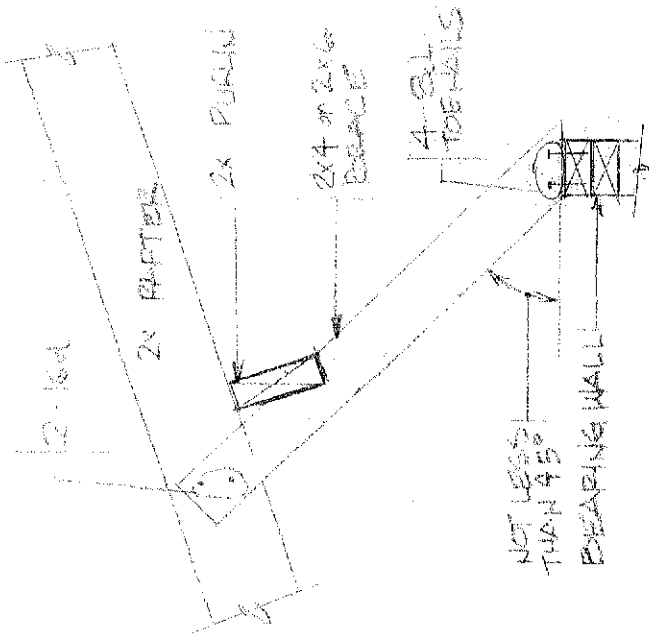


Handwritten signature of Mark S. Schoen in cursive script.

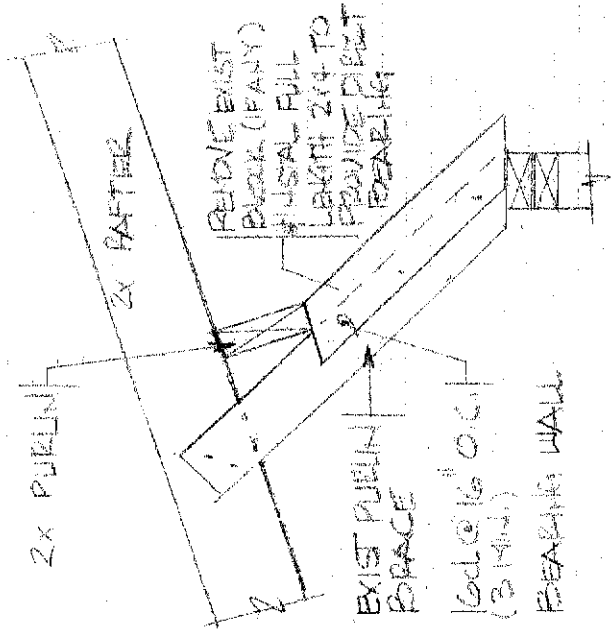
Mark S. Schoen P.E.

MSS:mss
S-ENG2001/EF001

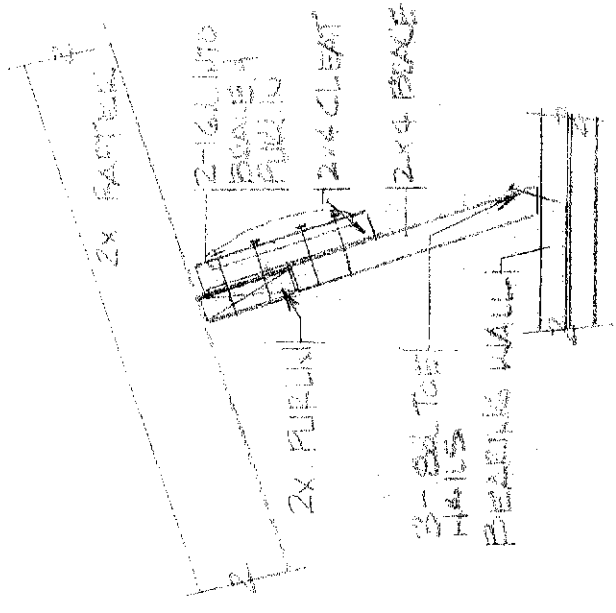




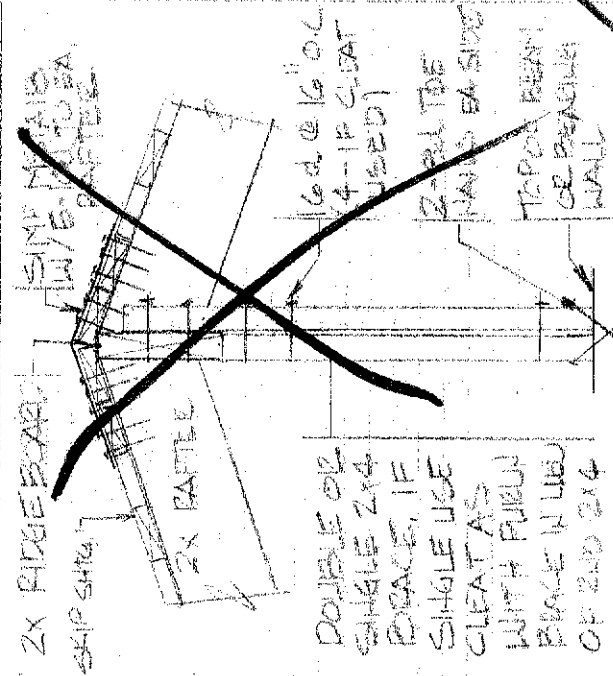
NOTCHED PURLIN BRACE



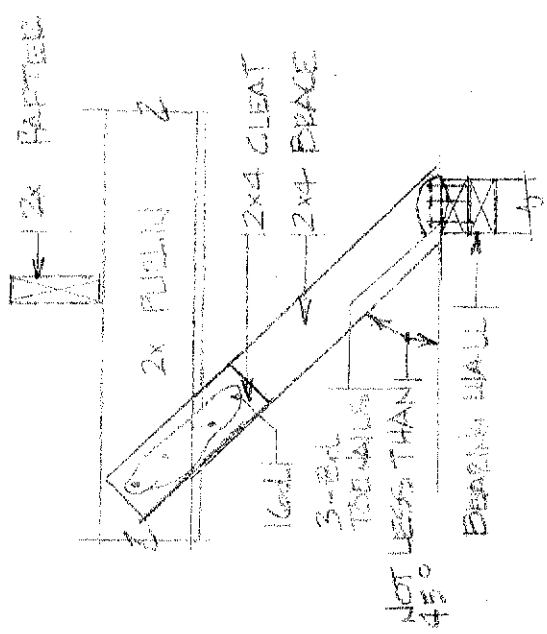
EXISTING BRACE MODIFIED



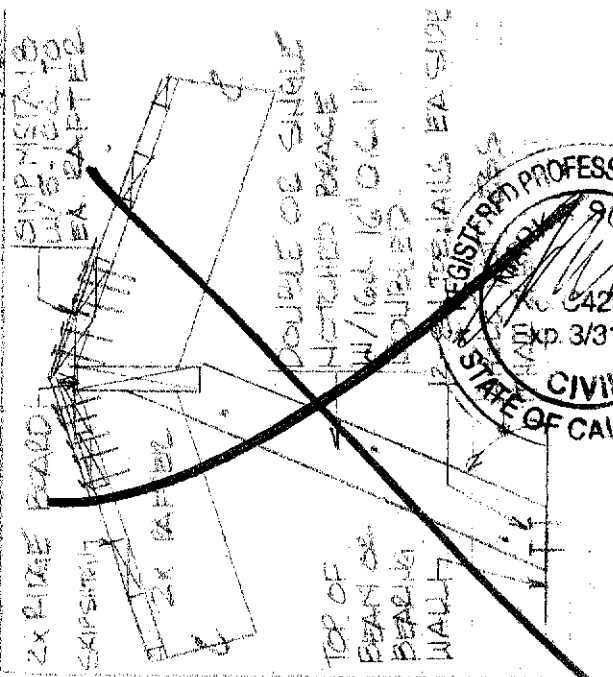
CLEATED PURLIN BRACE (VIEW 1)



CLEATED PURLIN BRACE (VIEW 2)



CLEATED PURLIN BRACE (VIEW 3)



CLEATED PURLIN BRACE (VIEW 4)



NOTE: BRACE MAY LEAN IN LINE W/ RIDGE BUT @ ANGLE NOT FLATTER THAN 45°

EXISTING BRACE MODIFIED / RIDGE BRACE IN / BEARING WALL / NOTCHED BRIDGE BRACE W/ BRACE / CLEATED PURLIN BRACE (VIEW 1) / CLEATED PURLIN BRACE (VIEW 2) / CLEATED PURLIN BRACE (VIEW 3) / CLEATED PURLIN BRACE (VIEW 4)

Calculation for the required area, section modulus and moment of inertia for simple span wood beams. Dead load(dl) and Live load(ll) are in pounds per square ft., Spans(l) and Tributary load length or spacing(sp) are in ft., Areas are in sq.in., Section moduli are in inches cubed and Moments of inertia are in inches to the 4th power. Allowable stresses (Fy),(Fb),(Fv) are in lbs./sq.in. per 1991 U.B.C. (based on time of original construction)



4x14 DOUGLAS FIR NO. 1 GARAGE SUPPORT BEAM

Loads: ---

Frame(2x8 rafters): fr := 1.5 skip sht: pur := 1 Plywood: ply := 1.5

Roofing: rf := 7.3 misc := 1 Ceiling: clg := 0

Total roof dead load: rdl := fr + pur + ply + rf + misc + clg

Beam weight: Wdl := 13.25 * $\frac{3.5}{144}$ * 35 Wdl = 11.272 Beam length: l := 15

Roof trib area per ft.: rta := 17

Total area for live load determination: rta * l = 255 Roof live load: rll := 14

fdl := 30 fl := 40 fta := 0

wt := (rta * (rdl + rll) + fta * (fdl + fl)) + Wdl Cd := 1.25

Fb := 1250 Fbp := Fb * Cd Fbp = 1562.5 Ew := 1700000 Fv := 95 * Cd

A min. required =
$$\frac{l \cdot \frac{wt}{2} \cdot \left(\frac{3}{2}\right)}{Fv} = 43.425$$

S min. required =
$$wt \cdot l^2 \cdot \frac{1.5}{Fbp} = 99.008$$

l min. required =
$$5 \cdot wt \cdot \frac{(1 \cdot 12)^4}{12 \cdot 384 \cdot Ew \cdot l \cdot \frac{12}{240}} = 409.501$$

Check Beam properties:

w := 3.5 d := 13.25

CP := $\frac{12 \cdot \frac{1}{9}}{d}$ A := w * d S := w * CF * $\frac{d^2}{6}$ I := w * $\frac{d^3}{12}$ Stiffw := I * Ew

--- A = 46.375 > 43 S = 101.29 > 99 I = 678.476 > 410 therefore O.K. ---

6x16 FULL DIMENSION DOUGLAS FIR NO. 2 VAULT RIDGE BEAM

Loads: ---

Frame(2x10 rafters): fr := 2 skip sht: pur := 1 Plywood: ply := 1.5

Roofing: rf := 7.3 misc := 1 Ceiling: clg := 2.5

Total roof dead load: rdl := fr + pur + ply + rf + misc + clg

Beam weight: Wdl := $16 \cdot \frac{6}{144} \cdot 35$ Wdl = 23.333 Beam length: l := 17

Roof trib area per ft.: rta := 17

Total area for live load determination: rta · l = 289 Roof live load: rll := 14

fdl := 30 fll := 40 fta := 0

wt := (rta · (rdl + rll) + fta · (fdl + fll)) + Wdl Cd := 1.25

Fb := 1500 Fbp := Fb · Cd Fbp = 1875 Ew := 1700000 Fv := 95 · Cd

A min. required =

$$\frac{l \cdot \frac{wt}{2} \cdot \left(\frac{3}{2}\right)}{Fv} = 55.985$$

S min. required =

$$wt \cdot l^2 \cdot \frac{1.5}{Fbp} = 120.555$$

I min. required =

$$5 \cdot wt \cdot \frac{(l \cdot 12)^4}{12 \cdot 384 \cdot Ew \cdot l \cdot \frac{12}{240}} = 678.124$$

Check Beam properties:

w := 6 d := 16

$$CF := \frac{12}{d} \cdot \frac{1}{9} \quad A := w \cdot d \quad S := w \cdot CF \cdot \frac{d^2}{6} \quad I := w \cdot \frac{d^3}{12} \quad Stiffw := I \cdot Ew$$

--- A = 96 > 56 S = 247.946 > 121 I = 2048 > 678 therefore O.K. ---

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