CITY OF SACRAMENTO

1231 I Street, Sacramento, CA 95814

Permit No: 9906997

Insp Area: 2

Site Address: 857 WEST COVE WY SAC

Parcel No 031-1410-029

Sub-Type: NSFR

Housing (Y/N): N

CONTRACTOR

GILEVICH CONSTRUCTION, INC.
P O BOX 22690
SACRAMENTO CA 95822

OWNER

ZAMPATHAS
SAC CA

ARCHITECT

Nature of Work: NEW 1 STORY 2615/700 SFR

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 STOCKMANS BANK Lender'sAddress ELK GROVE

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 B License Number 524787 Date 10/13/99 Contractor 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 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 herby authorize representative(s) of this city to enter upon the above-mentioned property for inspection purposes.

Date 10-13-99 Applicant/Agent 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, forthe 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 10-13-99 Applicant 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.

DIAMOND WALL INSULATING STUCCO SYSTEM

JOB ADDRESS:

Lot 30 857 West Cove
Sacramento Ca

ICBO Report #4004

Date of Job Completion 6-30-01

PLASTERING CONTRACTOR:

Name: McCann Plastering Inc

Address: 39 Golden Gate Court Roseville, CA 95678

Telephone No: (916) 784-2276

Contractor Number of Diamond Wall System #2264

This is to certify that the exterior coating system on the building exterior at the above address has been installed in accordance with the evaluation report specified above and the manufacturer's instructions.

6-29-01
Date

Signature of authorized representative of Plastering Contractor

This installation card must be presented to the building inspector after completion of work and before final inspection.

WES PAC INSULATION, INC.

INSULATION CERTIFICATE

THIS IS TO CERTIFY THAT INSULATION HAS BEEN INSTALLED IN CONFORMANCE WITH CURRENT ENERGY REGULATIONS, CALIFORNIA ADMINISTRATIVE CODE, TITLE 24, STATE OF CALIFORNIA, IN THE BUILDING LOCATED AT;

LOT 30 WEST SHORE LOT # _____ TRACT # _____

STREET 857 WEST COVE WAY CITY SACRAMENTO, CA

EXTERIOR WALLS:

MANUFACTURER JM THICKNESS/TYPE 3 1/2" R-VALUE 13

CEILINGS:

BATTS:

MANUFACTURER JM THICKNESS/TYPE 12" R-VALUE 38

BLOWN IN:

MANUFACTURER GREENSTONE THICKNESS/TYPE 10.3" R-VALUE 38

SQUARE FOOTAGE COVERED 2000 NUMBER OF BAGS USED 75

FLOORS:

MANUFACTURER JM THICKNESS/TYPE 6" R-VALUE 19

SLAB ON GRADE:

MANUFACTURER _____ THICKNESS/TYPE _____ R-VALUE _____

WIDTH OF INSULATION _____ INCHES

FOUNDATION WALLS:

MANUFACTURER _____ THICKNESS/TYPE _____ R-VALUE _____

GENERAL CONTRACTOR _____

CALIFORNIA CONTRACTORS LICENSE # _____

DATE _____

SIGNATURE _____ TITLE _____

INSULATION CONTRACTOR WES PAC INSULATION, INC.

CALIFORNIA CONTRACTORS LICENSE # #487478

DATE 6/26/00

P Smalls
SIGNATURE

Pres
TITLE

SACRAMENTO CITY UNIFIED SCHOOL DISTRICT

CERTIFICATION OF COMPLIANCE

SCHOOL DISTRICT DEVELOPMENT FEES

PART I: To be completed by APPLICANT

PROPERTY OWNER'S NAME

OWNER'S ADDRESS

PROJECT ADDRESS 857 West Cove Wy

PARCEL NUMBER LOT NUMBER 30

SUBDIVISION NAME

NUMBER OF UNITS 1

APPLICANT'S SIGNATURE

TITLE OF APPLICANT

DATE 10-13-99 TELEPHONE NUMBER

PART II: To be completed by BUILDING DEPARTMENT

PLAN IDENTIFICATION NUMBER

BUILDING TYPE (CHECK ONE)

☐ RESIDENTIAL ☐ APARTMENT/CONDOMINIUM ☐ COMMERCIAL/INDUSTRIAL

SQUARE FEET OF CHARGEABLE BUILDING AREA

SIGNATURE

TITLE DATE

PART III: To be completed by SACRAMENTO CITY UNIFIED SCHOOL DISTRICT

DISTRICT CERTIFICATION NUMBER

EXEMPT COMMENTS

RESIDENTIAL / APARTMENT / ETC.	4710	SQ. FT. X	$ 1.72	=	$	8101.20
COMMERCIAL / INDUSTRIAL		SQ. FT. X	$	=	$	
OTHER FEE MELLO ROOS TYPE CREDIT		SQ. FT. X	$	=	$	-907-
TOTAL FEES COLLECTED					$	7194.20

This certification covers only the amount of square footage indicated above. Any additions or corrections to the square footage for this project will require an amendment to the Certificate of Compliance.

As the authorized school district official, I hereby certify that the requirements of Government Code Section 65995 and any other authorized requirements have been complied with by the above signed applicant.

AUTHORIZED SCHOOL DISTRICT OFFICIAL

SIGNATURE

TITLE DATE 10/13/99

4/a:certcomp

Distribution: *Original*--School District; *1st Copy*--School District; *2nd Copy*--Building Department; *3rd Copy*--Applicant

DATE OF REQUEST _____

BY _____

City of Sacramento Development Services Division
Planning and Zoning Information Request

Project Address: 857 WEST COVE WAY

Assessor's Parcel Number: 031-1410-029

PREVIOUS USE: VACANT RESIDENTIAL LOT

Current Land Use: _____

Description of Request/Proposed Use: CONSTRUCT SINGLE FAMILY RESIDENCE WITH ATTACHED 3-CAR GARAGE

IS THIS A CHANGE OF USE? NO

Zoning Designation: R1 PUD

Prior Applications for Project Site(P#,Z#,DRPS#): _____

Comments: lot coverage, setback

Are There Any Planning Issues?: (Circle One) YES (NO)

STAFF Site Plan Check Required? (Circle One) YES (NO)

FIELD INSPECTION REQUIRED (CIRCLE ONE) YES (NO)

Design Review/ Preservation Required?: (Circle One) YES (NO)

Planning Review by/Date: [signature] 6/30/99

* List of items that must be addressed by Planning is provided on the reverse side of this form.

P.C.# 9906997R

Department of Planning and Development
Building Inspection Division

Grading and Erosion Control Questionaire

To be completed for all residential new construction and additions

PART I (To be completed by applicant)

Site Address 857 West Cove Way A.P.N. 031-1410-029

Applicant Information

Name Michael J. Caldwell
Address P.O. Box 660
Sacramento CA 95822
Phone 916 395 0355

Project Information (Check One)

Single Family Dwelling ✓
Duplex
Triplex
Deep Lot Development

PART II (To be completed by the applicant when the project is not a part of a larger subdivision)

Are there existing structures on site?	☐ Y	☐ N
Does the site front on a paved road?	☐ Y	☐ N *
Is the site higher than the crown of adjacent road?	☐ Y	☐ N *
Is the proposed building site higher than the back of the sidewalk or curb?	☐ Y	☐ N *

Describe existing frontage improvements along road.

☐ Ditch * ☐ Curb and Gutter ☐ Curb, Gutter, and Sidewalk

The direction of drainage on this site is:

☐ Front to Rear * ☐ Rear to Front ☐ Side to Side *

Does an adjacent site drain across this parcel?	☐ Y *	☐ N
Does this site have an existing low area or drainage swale?	☐ Y *	☐ N
Will construction require cut or fill on site? (* >50FT3 or >2FT)	☐ Y	☐ N
- How much cut? _____ Yards _____ Depth		
- How much fill? _____ Yards _____ Depth		
Has building site been previously been filled?	☐ Y *	☐ N
Will existing drainage be re-routed?	☐ Y *	☐ N
Do you plan to construct or modify culverts or drainage ditches?	☐ Y *	☐ N

Print Name Michael J. Caldwell Title Contractor

Signature _____ Date 10/13/99

Owner or Contractor

PART III (To be completed by staff)

What is the acreage of the parcel to be built on? 0.2 Acres.

If greater than 1/2 acre has an approved erosion and sediment control plan been provided?	☐ Y	☐ N
If greater than 5 acres has the applicant provided a copy of the State General Permit NOI and the SWPPP?	☐ Y	☐ N
Is the parcel to be built on part of a larger subdivision?	☐ Y	☐ N
Subdivision Name: Westshore at Riverlake		
If yes has an approved erosion and sediment control plan been provided?	☐ Y	☒ N
If the original subdivision is greater than 5 acres has the applicant provided a copy of the State General Permit NOI and the SWPPP?	☐ Y	☒ N
Is grading and drainage approval required prior to permit issuance?	☐ Y	☒ N

Approved by: Matt Borisat Date: 10/13/99

Building permit #: 9906997R

lnfgrdg.wk1

MICROFILM THIS DOCUMENT

White Copy - Permit Jacket
Yellow - Utilities
Pink - Bldg. Div.

City of Sacramento
Building Department
Sacramento, CA

Feb. 16, 2000

Attention: Building Inspector

Project: Permit # 9906997
857 West Cove Way
Sacramento

Subject: Correction Notice Dated 2/3/00

I am writing this letter to inform you that I have checked my shear wall structural calculations based on the field measurements, and the response to your comments are as follows:

All shear wall nailing are to be complied with permit plans Shear Wall Schedule.

1. Wet bar room HD10A to 4x4 post.
2. Use MST60 on each side where top plates notched.
3. Living room east wall 3'-6" on both sides of fire place and west wall 10'-4"
4. Family room southeast corner wall 2'10" is ok.
5. Bonus room exterior wall 5'-6" is ok.
6. Blank.
7. Porch east wall 1'-7" is ok.
8. Single car garage exterior wall 1'-6" and 4'-11" are ok.
9. Second floor Rec. room east wall 6'-9" and 5'-3" are ok.
10. Opened living room both sides wall 10'-4" is ok.
11. Bedroom suite west wall 18'-6" is ok.
12. Wardrobe west wall 9'-6" is ok.

Should you have any questions, please call me at 421-4800. Thank you in advance for your service and inspection.

Sincerely,

REGISTERED PROFESSIONAL ENGINEER
TIMOTHY E. CHEN
No. 32379
Exp. 12/31/00
STATE OF CALIFORNIA

Timothy E. Chen
CE 32379
Exp. 12/31/00

cc: Mike Gilevich

City of Sacramento
Building Department
Sacramento, CA

January 17, 2000

Attention: Building Inspector

Project: Permit # 9906097
857 West Cove Way
Sacramento

Subject: Hold Down Anchor Bolts

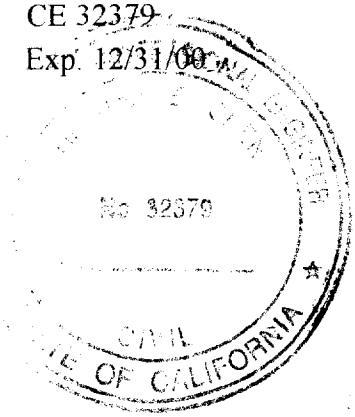
I was informed by the framing sub-contractor, Mr. Bruce Nelson that the hold down anchor bolts were off placed, per Simpson catalog, varied from ¾" to 1½".
I have run a calculation and I would like to make a suggestion to accommodate the field condition and still be capable to develop the designed required tie down force.

1. PHD2 may be used in lieu of HD2A, which was shown on plans.
2. If HD2A 5/8" anchor bolt is missing, 5/8" threaded rod with minimum 10" embedment in predrilled hole and SET High Strength Epoxy may be used. Special inspection is required
3. If anchor bolt for PHD2 is off ¾", a ¾" plywood shim with 2' in length with 6-10d common nails to main member is required.
4. If anchor bolt for HD 14A, HD10A or HD8A was misplaced up to 1 ½", a 2x filler w/3 ft. minimum in length and 18-16d common nails to main member is required

Should you have any questions, please call me at 421-4800. Thank you in advance for your inspection

Sincerely,

Timothy E. Chen
CE 32379
Exp. 12/31/00



Attachment
cc: Bruce Nelson
Framing Sub-Contractor

[illegible] Cave Way

[illegible] allow. loads

[illegible]

*HD2 will be used in lieu of HD2A

[illegible] size is 5/8" ϕ

[illegible] anchor rod min. embed 10" allow load = 7665#

5/8" ϕ threaded rod min embed 10" may be used if 3/8" anchor bolts missing for HD2A.

[illegible] @ HD14A w/ 6x vert

[illegible] = 12581# per calcs. pg 14 of 16

[illegible] = 12.83' = 3145#

= 3145/5.5 + 1.5 ← Either

= 449#/'

[illegible] = 449 x 1.5 x (4)/12" x 33

= 14.36 x 1.2 ← safety factor

= 17.23 use 18-16d for 2x filler w/ 3" length

[illegible] @ HD10A w/ 4 vert

[illegible] = 2.96" per calcs pg 14 of 16

[illegible] = 4.28#/'

[illegible]

use 16-16d [illegible] w/ 3" [illegible]

Pg 2 of 2

[illegible] HD 8A W/ 4x TETHECL

Post [illegible] load = 6710# per Calc Pg 15 of 16 12-31-00

[illegible] 2/3 x 1/3.5 = 448#/l

[illegible] = 448 x 1.5 x 3/1.41 x 1.33 x 1.2 = 1359 CANIA

Use 13-16d for 2 x filler
w/ 3' length min

SIMPSON Strong-Tie CONNECTORS

ANCHORS

SET HIGH STRENGTH EPOXY

Request our Anchoring Systems Catalog for complete information.

Epoxy-Tie SET epoxy is a two-component, low odor, 1:1 ratio, 100% solids epoxy-based adhesive for use as a high strength, non-shrink anchor grouting material. Resin and hardener are dispensed and mixed simultaneously through the mixing nozzle. SET meets the ASTMC-881-90 specification for Type I, II, IV and V, Grade 3, Class B, C and D.

SET is the first material to meet ICBO AC58 standards.

APPLICATION:

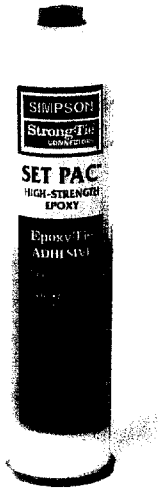
- Surfaces to receive epoxy must be clean and dry surfaces
- Epoxy should not be installed in or through standing water.
- The base material temperature must be 40° F or above at the time of installation. For best results, material should be 70° - 80° F at the time of application.
- Cartridges should not be immersed in water to facilitate warming. To warm cold material, the cartridges should be stored in a warm, uniformly heated area or storage container for a sufficient time to allow epoxy to warm completely.
- Mixed material in nozzle will harden in 7 to 10 minutes at a temperature of 40° F or above.

INSTALLATION: • Drill hole to the specified diameter and depth.

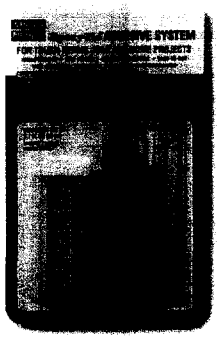
- Remove dust from hole with oil-free compressed air. Clean with nylon brush and blow out remaining dust. Dust left in hole will reduce the epoxy's holding capacity.
- Dispense a bead of Epoxy-Tie off to the side to check for proper mixture, shown by a uniform gray color before using. Fill hole halfway, starting from the bottom of the hole to avoid air pockets. Withdraw nozzle as hole fills up.
- Anchors must be clean and oil free. Insert anchor, turning slowly until anchor hits the bottom of the hole. Do not disturb while setting.

CODES: ICBO ER 5279; SBCCI 9706; City of L.A. RR25279; Caltrans BCM145-5.1.

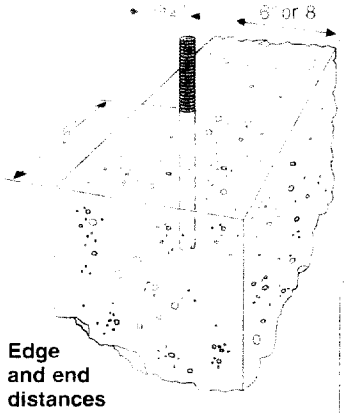
SET Epoxy Adhesive



SET-PAC™
Patent Pending



SET-KIT



Edge and end distances for threaded rod in concrete stemwall corner installation

Tension Loads for Threaded Rod Anchors in Concrete Foundation Stemwall Installation

Stud Dia	Drill Bit Dia	Min Embed	Min Wall Thickness	Min Edge Dist	Min End Dist	Avg Ult Tension Load	Allowable Tension Load f'c ≥ 2000 psi (100)	Allowable Tension Load f'c ≥ 2000 psi (133)
⅜	¾	10	6	1¾	5	23000	5750	7665
⅜	1	15	9	1¾	5	33600	8400	11200

Sill Plate Shear Loads

Stud Dia	Drill Bit Dia	Min Embed	Edge Dist	End Dist	Avg. Ult Shear Load	Allow. Shear Load f'c ≥ 2000 psi
Parallel to Plate						
½	⅝	4½	1¾	6½	8000	2000
⅜	¾	5	1¾	7½	8000	2000
Perpendicular to Plate						
½	⅝	4½	1¾	6½	2240	560
⅜	¾	5	1¾	7½	2360	590

Stud Dia	Drill Bit Dia	Embed Depth	Spacing	Edge Dist	Tension Loads (lbs) Based on Bond Strength f'c = 2000 psi Ultimate Load	Allowable Load [5]	Allowable Load (133)	Tension Loads (lbs) Based on Steel Strength A307 (SAE 1018) Allowable Load	Shear Loads (lbs) Based on Steel Strength f'c ≥ 2000 psi A307 (SAE 1018) Allowable Load
⅜	½	1¾	6⅛	5¼	1900	475	635	2105	1085
		2½			—	1365	1820		
		3½			10200	2550	3400		
½	⅝	2⅛	7½	6⅜	7216	1805	2405	3750	1930
		2¾			—	2575	3435		
		3½			—	3500	4665		
		4¼			17700	4425	5900		
⅝	¾	2½	8¾	7½	6780	1695	2260	5875	3025
		3½			—	3690	4920		
		4¼			—	5185	6915		
		5			26700	6680	8905		
¾	⅞	3⅜	12	10⅛	15456	3865	5155	8460	4360
		4½			—	6085	8115		
		5¾			—	8550	11400		
		6¼			—	9540	12720		
		6¾			42100	10525	14035		
⅞	1	3⅞	13⅝	11⅝	19120	4780	6375	11500	5925
		5			—	6960	9280		
		6¼			—	9380	12505		
		7			—	10840	14455		
		7¾			49160	12290	16345		
1	1⅛	4½	15¾	13½	20076	5020	6695	15025	7740
		5¾			—	7795	10395		
		7			—	10570	14095		
		8			—	12795	17060		
		9			60060	15015	20020		

1. Allowable loads are based on a safety factor of 4.
2. Allowable load is the lesser of the load based on bond strength or steel strength.
3. Allowable loads have been increased 33% for earthquake or wind loading, no further increase allowed.
4. The anchors cannot be used to resist pullout forces in overhead and wall installations, unless proper consideration is given to fire conditions.

HDA/HD HOLDOWNS

SIMPSON Strong-Tie CONNECTORS

Holdowns are used to transfer tension loads between floors, to tie purlins to masonry or concrete, etc. Use HDAs and HDs for overturn requirements and other applications to transfer tension loads. All HDAs and the HD15 are self-jigging, ensuring code-required minimum ⅞" bolt diameter spacing from the end of the wood member.

HD6A, HD8A, HD10A and HD14A's seat design allows greater installation adjustability. An overall width of 3¼" for the HD6A, HD8A and HD10A, and 3½" for the HD14A provides an easy fit in a standard 4x wall.

HDA SPECIAL FEATURES

- Single piece non-welded design results in higher capacity
- Load Transfer Plate eliminates the need for a seat washer
- Fewer inspection problems.

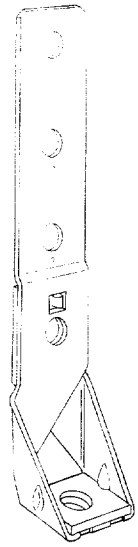
MATERIAL: See table

FINISH: HD2A, 5A, 6A, 8A, 10A—galvanized. HD8A may be ordered HDG; check with factory. HD14A, HD15, HD20A—Simpson gray paint

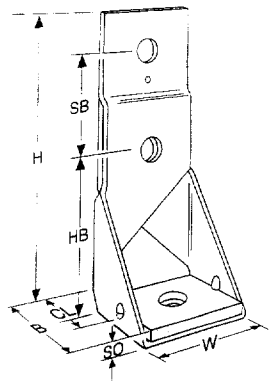
INSTALLATION: • Use all specified fasteners. See General Notes.

- For an improved connection, use a steel nylon locking nut or a thread adhesive on the anchor bolt.
- Bolt holes shall be a minimum of 1/32" to a maximum of 1/16" larger than the bolt diameter (per 1997 NDS, section 8.1.2.1.).
- Standard washers are required between the base plate and anchor nut (HD15 only), and on stud bolt nuts against the wood. The Load Transfer Plate is an integral part of the HDA Holdown and no washer is required. See page 24 for BP/LBP Bearing Plates
- See SSTB Anchor Bolts, Simpson's Anchoring Systems and Additional Anchorage Designs for anchorage options. The design engineer may specify any alternate anchorage calculated to resist the tension load for a specific job.
- Locate on wood member to maintain a minimum distance of seven bolt diameters from the end of the member to the centerline of the first bolt hole (HDAs and the HD15 are self-jigging; minimum required distance is automatically maintained when end of wood member is flush with the bottom of the holdown).
- To tie double 2x members together, the designer must determine the fasteners required to bind members to act as one unit without splitting.
- For holdowns installed on the mudsill, anchor bolt nuts should be finger-tight plus ⅓ to ½ turn with a wrench, with consideration given to possible future wood shrinkage. Care should be taken to not over-torque the nut, which may lead to premature anchor bolt failure.
- Stud bolts should be snugly tightened (1997 NDS, section 8.1.2.4).

CODES: BOCA, ICBO, SBCCI NER-393, NER-469; City of L.A. RR 24818, RR 25158 and RR 25293.

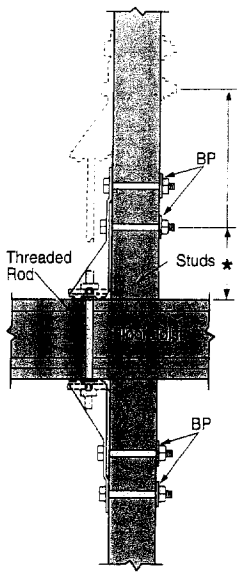


HD10A
HD6A, HD8A HD14A and HD20A similar)



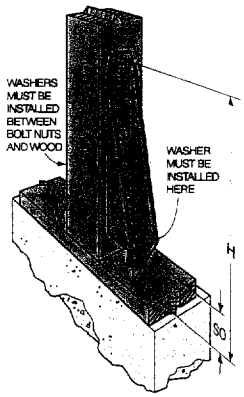
HD5A
(HD2A similar)

U.S. Patent 4,665,672
Canada Patent 1,253,481

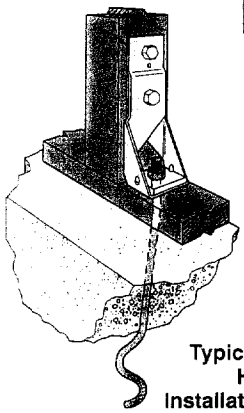


Typical HD5A
*** Tie between Floors**

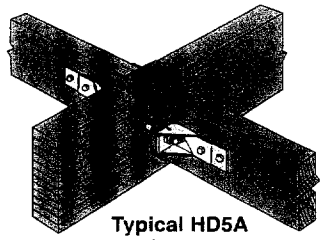
To achieve table loads, the minimum bolt end distance is seven bolt diameters. This distance is designed into holdowns. Bolt end distance may be increased, provided the anchor nut is not over-torqued, which could split the stud. Deflection values may be higher.



Typical HD15 Holdown Installation



Typical HD5A Holdown Installation with SSTB anchor bolt. Washers are not required at the base.

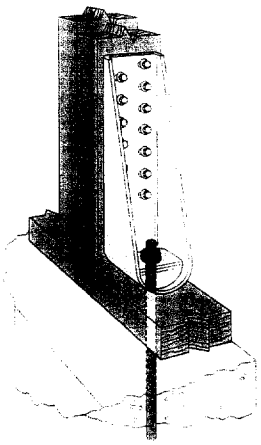


Typical HD5A Purlin Anchor Installation

Model No.	Material		Dimensions							Fasteners			Avg Ult	Allowable Loads[1,8,9,11] (133)						Holdown[12] Deflection at Highest Allowable Design Load
											Stud Bolts			Length of Bolt[2,3,4] in Vertical Wood Member						
	Base Ga	Body Ga	HB[5]	SB	W	H	B	SO	CL	Anchor Dia[6,10]	Qty	Dia		1½	2	2½	3	3½	5½	
HD2A	7	12	4⅜	2½	2¾	8	2⅜	⅞	1⅛	⅝	2	⅝	12150	1555	2055	2565	2775	2775	2760	0.058
HD5A	3	10	5½	3	3⅛	9⅞	3⅜	⅞	2⅜	⅝ or ¾	2	¾	20767	1870	2485	3095	3705	4010	3980	0.067
HD6A	3/8	7	6⅜	3½	3¼	11⅞	3⅞	⅝	2⅛	⅞	2	⅞	27333	2275	2980	3685	4405	5105	5510	0.041
HD8A	3/8	7	6⅜	3½	3¼	14⅜	3⅞	⅝	2⅛	⅞	3	⅞	28667	3220	4350	5415	6465	7460	7910	0.111
HD10A	3/8	7	6⅜	3½	3¼	18⅞	3⅞	⅝	2⅛	⅞	4	⅞	28667	3945	5540	6935	8310	9540	9900	0.269
HD14A	⅜	3	7	4	3½	20⅜	3⅝	1	2⅜	1	4	1	38167	—	—	—	—	11080	13380	0.215
HD20A	⅜	3	7	4	4¼	20⅜	4⅛	1	2⅜	1¼	4	1	51333	—	—	—	—	11080	13380	0.250
HD15	⅜	3	7	4	3½	24½	4⅛	3⅝	2½	1¼	5	1	55333	—	—	—	—	—	15305	0.082

1. Allowable loads have been increased 33% for earthquake or wind loading with no further increase allowed; reduce where other loads govern.
2. HD15 requires a minimum 6x6 nominal post.
3. Use a minimum 4x6 nominal post for the HD14A and the HD20A.
4. The wood member must be sized for the load-carrying capacity at the critical net section, reducing the gross section area for holes or other removed wood as specified in the code.
5. HB is the required minimum distance from the end of the stud to the center of the first stud bolt hole. End distance may be increased as necessary for installation.
6. The anchor embedment and configuration must be specified. See SSTB Anchor Bolts and Additional Anchor Designs.
7. See pg 24 for anchor bolt retrofit.
8. Lag bolts will not develop the listed loads.
9. Holdowns installed raised off the mudsill may have larger deflection values.
10. Full tension loads apply when HD5A is used with a ⅝" anchor bolt.
11. See pgs 4, 5 for testing and other important information.
12. Deflection at Highest Allowable Design Load: The deflection of a holdown measured between the anchor bolt and the strap portion of the holdown when loaded to the highest allowable load listed in the catalog table. This movement is strictly due to the holdown deformation under a static load test conducted on a steel jig.

PHD PREDEFLECTED HOLDOWNS



Typical PHD Installation as a Holdown

PHD5 (others similar)

Patent Pending

The Predeflected Holdown (PHD) is a revolutionary development in holdown connections. This connector is predeflected during manufacturing, to virtually eliminate deflection from material stretch.

SPECIAL FEATURES:

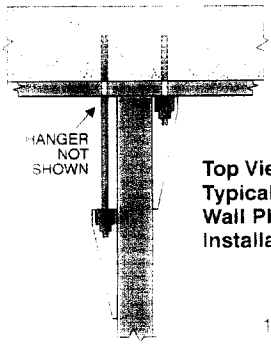
- Wood screws reduce slip due to overdrilled bolt holes.
- Smaller centerline reduces eccentricity in the stud.
- No stud bolts to countersink.
- The slot in the seat provides anchor bolt adjustment.
- Fits easily on a 4x stud.

MATERIAL: See table **FINISH:** Galvanized

INSTALLATION:

- Use all specified fasteners. See General Notes.
- Place the PHD over the anchor bolt.
- **Install Simpson's code-recognized SDS¼X3 wood screws, which are provided with the holdown.**
- For an improved connection, use a steel nylon locking nut or a thread adhesive on the anchor bolt.
- See SSTB Anchor Bolts for anchorage options. The design engineer may specify any alternate anchorage calculated to resist the tension load for a specific job. Anchorage length should take the bearing plate height of 1⅝" into account, to ensure adequate length of threads to engage the nut.
- To tie double 2x members together, the designer must determine the fasteners required to bind members to act as one unit without splitting the wood.

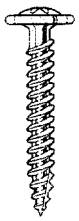
CODES City of L.A. RR 25300; ICBO 5328.



Top View Typical Concrete Wall PHD Offset Installation

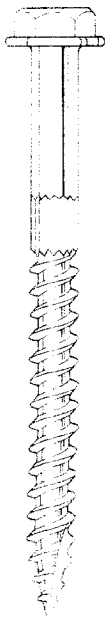
Model No.	Ga	Dimensions W	H	B	CL	Fasteners Anchor Diameter	No. of Simpson SDS¼X3 Wood Screws	Avg Ult	Allowable Loads 2-2x and Greater Vertical Wood Member	Holdown[4] Deflection at Highest Allowable Design Load
PHD2	14	3	9 5/16	2 7/8	1 3/8	5/8	10	12,520	3610	.033
PHD5	14	3	11 9/16	2 7/8	1 3/8	5/8	14	15,670	4685	.047
PHD6	12	3 1/8	13 13/16	2 7/8	1 3/8	7/8	18	18,250	5860	.045
PHD8	10	3 1/8	17 3/16	2 7/8	1 3/8	7/8	24	21,243	6730	.051

1. Allowable loads have been increased 33% for earthquake or wind loading with no further increase allowed. Reduce where other loads govern.
2. The anchor embedment and configuration must be specified. See the SSTB Anchor Bolts.
3. See pg 24 for anchor bolt retrofit
4. Loads are based on static tests on wood studs, limited by the lowest of 0.125" deflection, ultimate divided by 3, or the wood screw value.
5. Deflection at Highest Allowable Design Load: The deflection of a holdown measured between the anchor bolt and the strap portion of the holdown when loaded to the highest allowable load listed in the catalog table. This movement is strictly due to the holdown deformation under a static load test conducted on a steel jig.
6. Installs best with a low speed ½" right angle drill with a ⅜" hex head driver.
7. PHD installed raised off the sill plate may have greater deflection values



SD8X1.25

Identification on all screw heads



SDS¼X3 Screw Patent Pending

NEW SCREWS

The Simpson Strong-Drive® wood screw has a hex washer head for easy driving with a socket wrench. The built-in reamer and type 17 tip cuts a hole to allow installation without predrilling. Predrilling may be necessary depending on the type and moisture content of wood.

The Strong-Drive SD8X1.25 screw has a needle point for fast starts; a double thread shank that reduces installation time and cost; a #2 deep Phillips drive to reduce stripping, and a wafer head with low profile finish.

CODES: ICBO No 5268; City of L.A. RR 25281.

TO ORDER DISPLAY PACKS:
SD8X1.25 MSTR CTN—24 packs of 100 screws.
SDS¼x3 MSTR CTN—12 packs of 50 screws.
35lb Bulk Boxes—available for 950 SDS¼x3 screws.

Model No.	Description	Metric Equivalent (mm)	Finish[3]	Fasteners per carton	Doug Fir-Larch/So. Pine Allowable Loads[1] Light Gauge Shear (100)	Light Gauge Gauge	3 Gauge Shear (100)	Spruce-Pine-Fir Allowable Loads[1] Light Gauge Shear (100)	Light Gauge Gauge	3 Gauge Shear (100)
SDS¼x1½	¼" x 1½" Wood screw	6.1 x 38	ZINC	1500	268	10	290	231	10	251
SDS¼x1¾	¼" x 1¾" Wood screw	6.1 x 44.5	ZINC	1400	303	10	327	261	10	284
SDS¼x2	¼" x 2" Wood screw	6.1 x 50.8	ZINC	1300	303	10	327	261	10	284
SDS¼x2½	¼" x 2½" Wood screw	6.1 x 63.5	ZINC	1100	303	10	327	261	10	284
SDS¼x3	¼" x 3" Wood screw	6.1 x 76.2	ZINC	950	303	10	327	261	10	284
SDS¼x6	¼" x 6" Wood screw	6.1 x 152.4	ZINC	600	303	10	327	261	10	284
SD8X1.25	#8 x 1¼" Tapping Screw	4.1 x 31.7	EG	—	76	18	—	65	18	—

1. Allowable loads are based on the 1997 NDS. Adjustments are made for use with metal side plates. Fes = 45 ksi. Loads under light gauge are for gauges listed through 22 gauge. Allowable loads for gauges not indicated must be calculated according to the code. Contact factory for more details.
2. Metric equivalents are listed by Diameter x Length
3. ZINC = Yellow zinc dichromate
4. Installs best with a low speed ½" right angle drill with a ⅜" hex head driver.
5. **For wood-to-wood applications, call Simpson for load values and minimum required penetration.**
6. **SDS¼X3 are required for PHD's. Call Simpson for PHD values using SDS¼X1½" screws for 2x application.**

City of Sacramento
Building Department
Sacramento, CA

Feb. 01, 2000

Attention: Building Inspector

Project: Permit # 9906997
857 West Cove Way
Sacramento

Subject: Clarification/Modification of Construction Details

I am writing this letter to inform you that I have checked several details of the above project and the clarification/modification of construction details are as follows:

1. For 2x filler and ¾" plywood shim at HD locations, 16ds and 8ds may be nailed randomly per guideline on attachment, pg.1 of 6.
2. Lower floor connection detail, please see pg.2 of 6.
3. Upper floor connection detail, please see pg.3 of 6.
4. Roof bracing plan above garage and bracing detail, pg.4 and 3 of 6.
5. 5 1/2"x18" balcony Glulam at 2x4 studs support, the width could be trimmed down to 3 1/2", since the beam is controlled by moment and deflection. Please see pg.5 of 6.
6. Upper floor shear wall panel which is less than 6', use Simpson MST48 strap for vertical tie down, similar to detail 1 on sheet 3 of 9.
7. Chimney framing to roof framing, please see pg. 5 of 6.
8. Detail of shear wall continuation at Living Room, please see pg. 6 of 6.
9. Simpson MST 48 or 60's nails, 10d common or 16d sinker may be used, for designed load is less than .80 of catalog loads.
10. If 5/8" dia. HD anchor bolt which is no more than 1.5" off plumb in 6.5" projection above concrete, it will be acceptable per design loads.

Should you have any questions, please call me at 421-4800. Thank you in advance for your inspection.

Sincerely,

Timothy E. Chen
CE 32379
Exp. 12/31/00

Attachments
cc: Bruce Nelson

Check 2x Filler + of total 16d @ HD8A W/ 4x

Roof Design Load = 6710# per Calcs Pg 15 of 16

$6710/3 \times 1/3.5+1.5 = 448\#/'$

# of 16d req'd = $448. \times 1.5 \times 3/141 \times 1.33 \times 1.2 = 12.9$

use 13-16d for 2x filler
w/ 3' length min

d = 0.162

" × 0.162 ≤ end distance ≤ 18 × 0.162

4.3 ≤ End distance ≤ 2.92

20 × 0.162 ≤ spacing between adjacent nails in a row ≤ 60 × 0.162

3.24 ≤ " " ≤ 9.0

10 × 0.162 ≤ spacing between rows of nail ≤ 20 × 0.162

1.62 ≤ " " ≤ 3.24

5 × 0.162 ≤ edge distance ≤ 20 × 0.162

0.81 ≤ edge distance ≤ 3.24

common 16d nails: end distance 2½" ~ 2¾"

edge distance 1" ~ 3"

spacing between rows of nails 2" ~ 3"

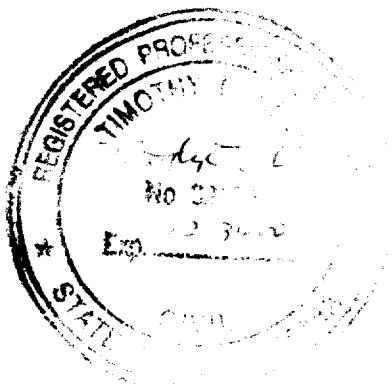
spacing between adjacent nails in a row 3½" ~ 9"

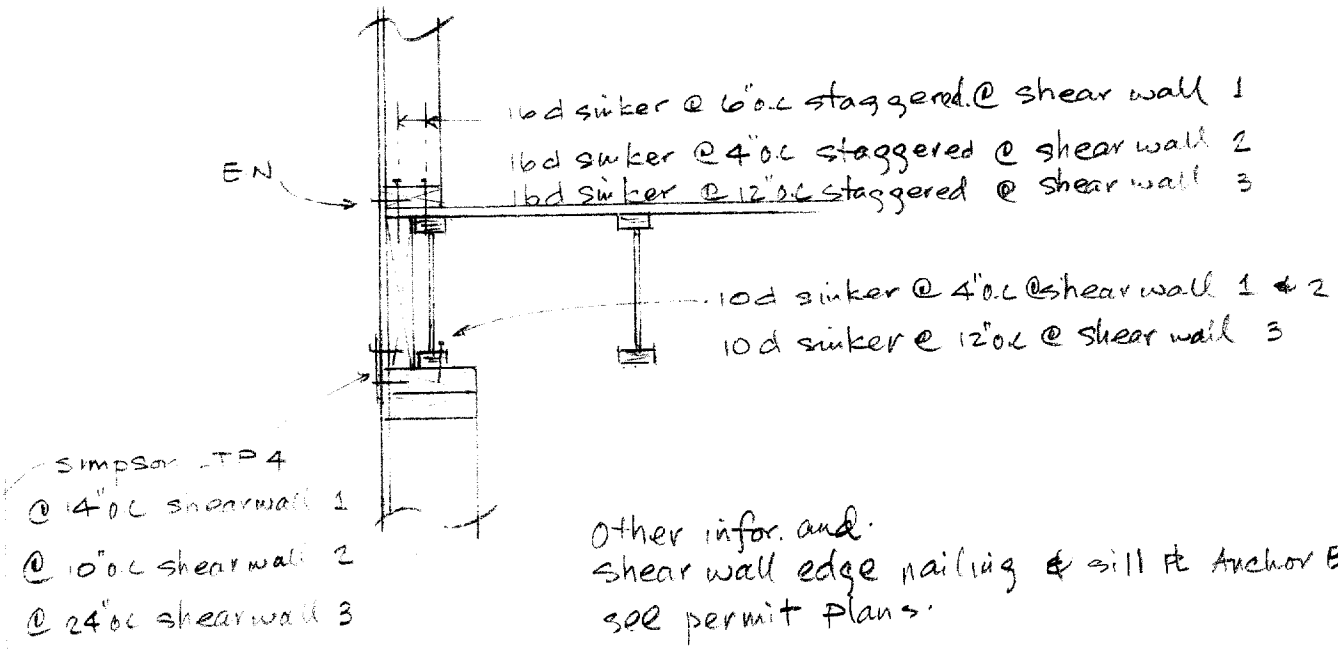
Common 8d nails: end distance 2" ~ 2¼"

edge distance 0.75" ~ 2½"

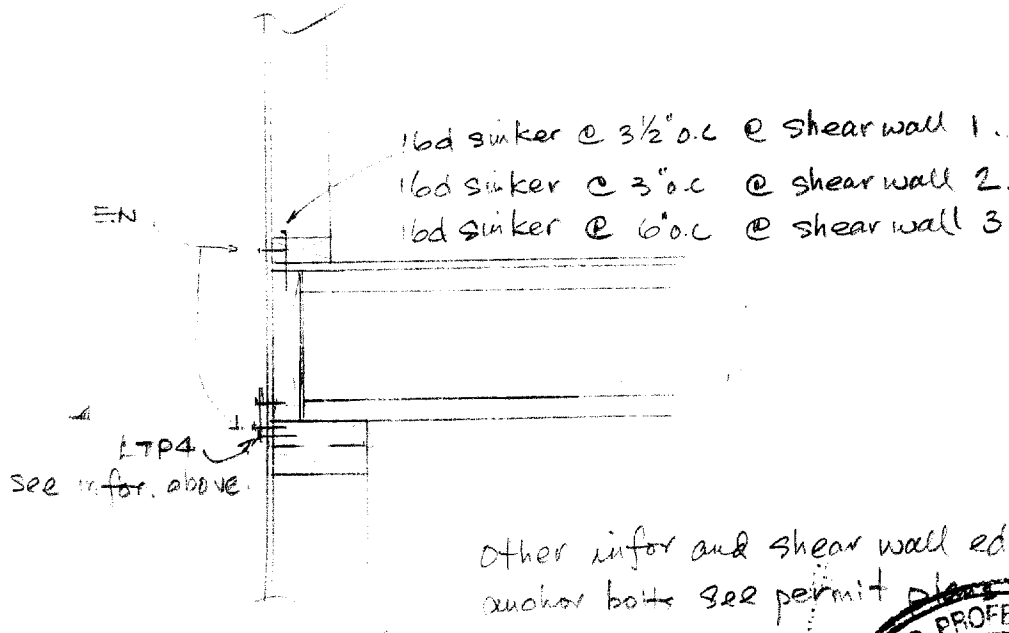
spacing between rows of nails 1½" ~ 2½"

spacing betwn adjacent nails in a rows 2¾" ~ 4½"



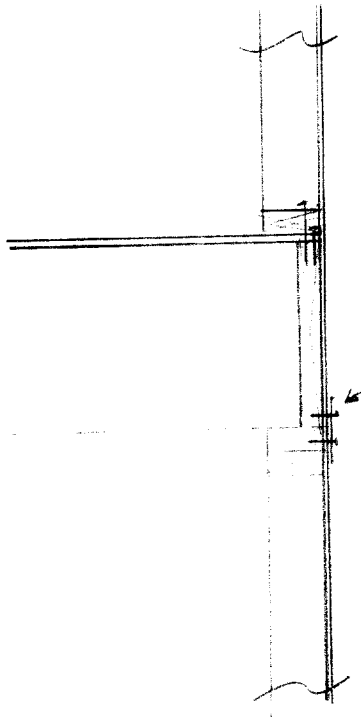


LOWER FLOOR CONN. DETAIL

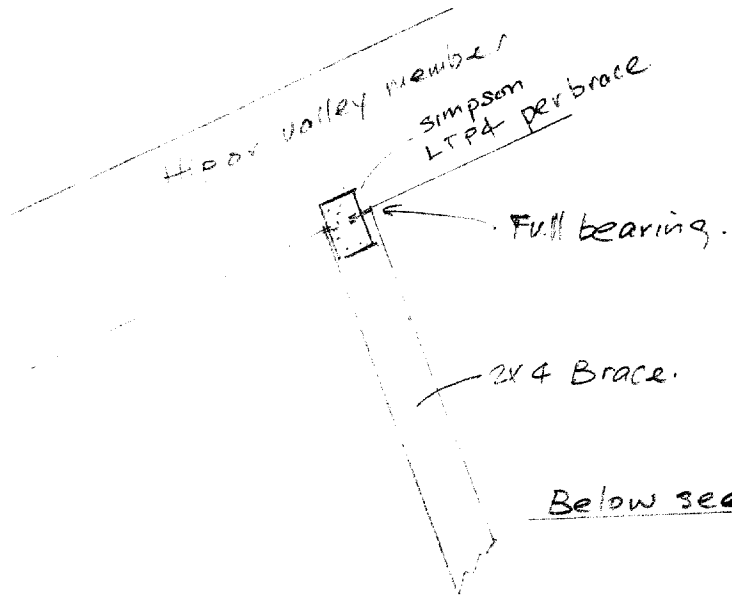


LOWER FLOOR CONN. DETAIL

REGISTERED PROFESSIONAL ENGINEER
TIMOTHY E O'CONNELL
No 58870
Exp. 12-31-00
CIVIL
STATE OF CALIFORNIA

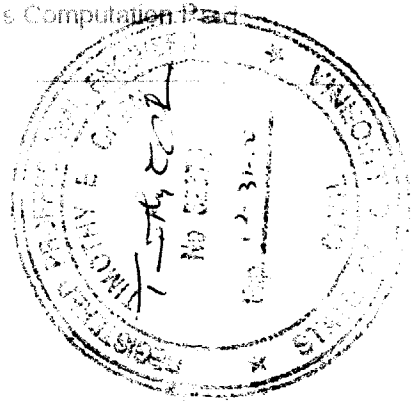


UPPER FLR CONN. DETAIL



Below see permit plan

ROOF BRACING DETAIL



ROOF BRACING Plan

above Garage

1/4" = 1'-0" scale

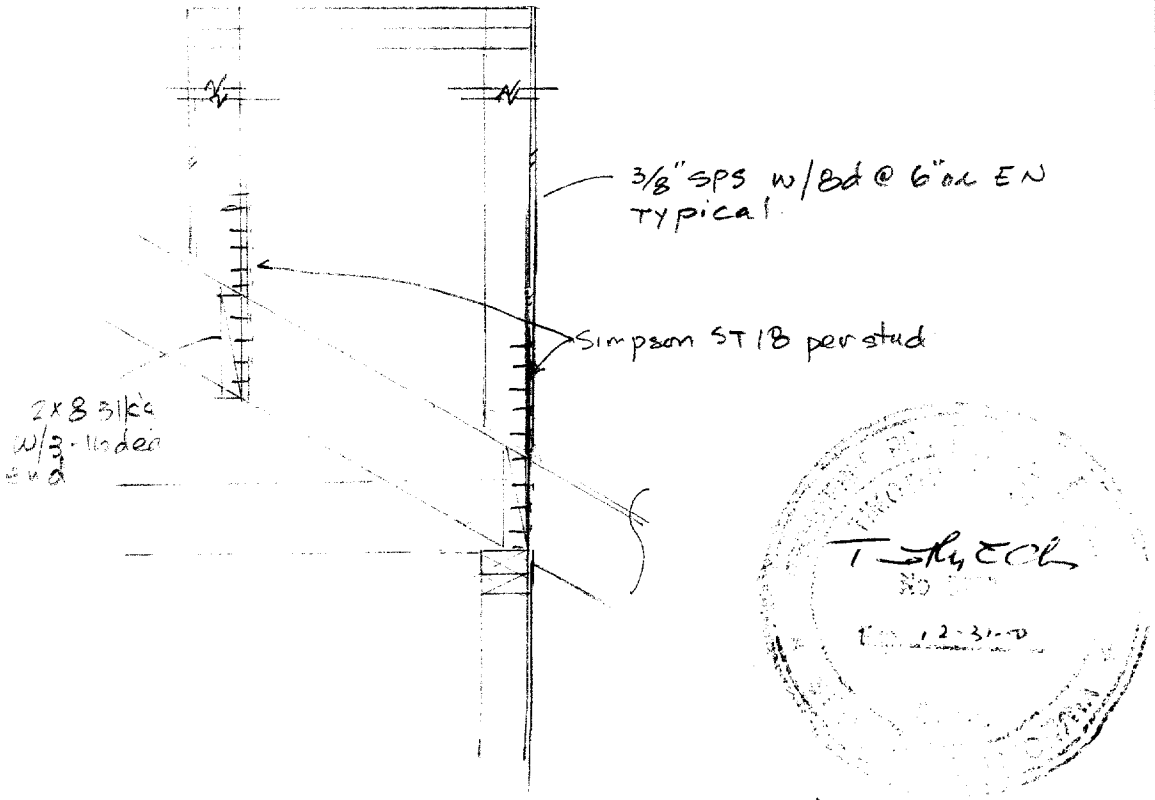
$F_{req} = 1144^{\#}$ See Calcs 8 of 16 dated 9-18-98

$F_v = 200$ psi per Willamette Industries Inc.

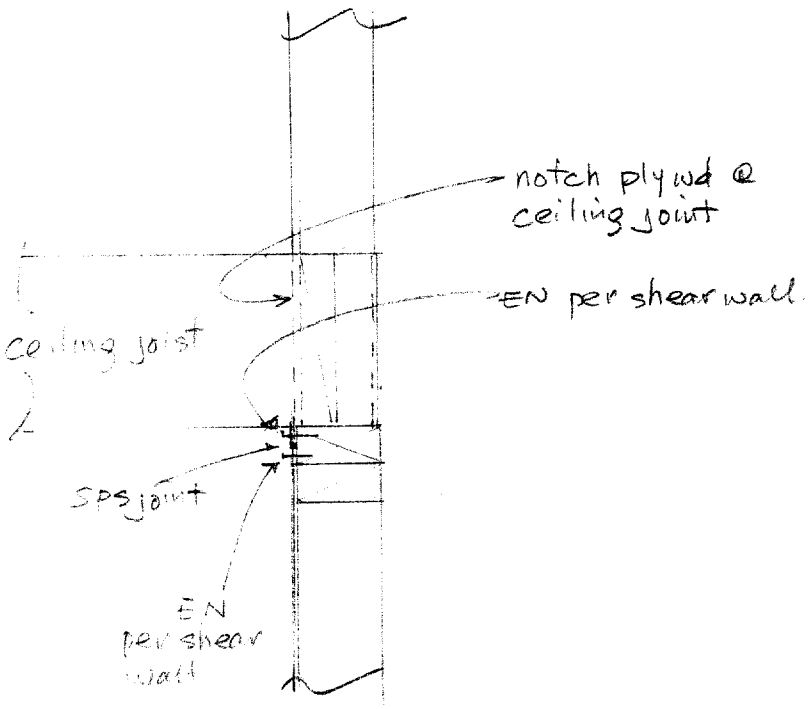
$A_{req} = 1.44/200 \times 1.25 \quad 16.57^{in^2} << 3\frac{1}{2} \times 18" \quad A = 63^{in^2}$

Deflection & Moment controls for $5\frac{1}{2} \times 18"$ LVL Blu-Lam

- Use MST48 vertical strap similar to Detail 1 on sht 3 of @ wall brace less than 6'-0" on upper level.



Chimney Framing to Roof Framing



Shear Wall Continuation @ Living Room Wall