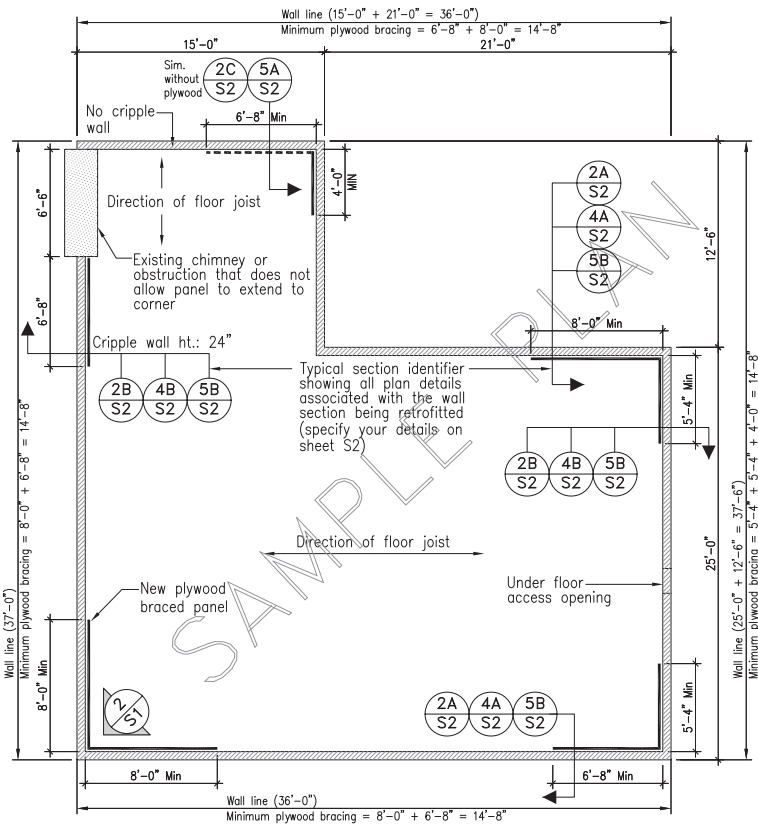
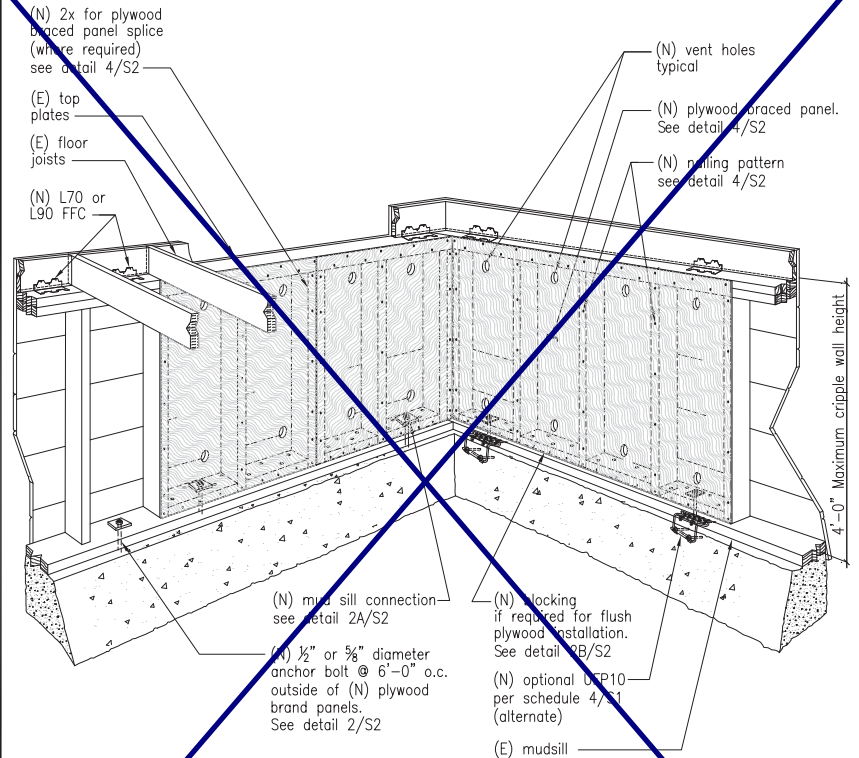




- NOTES:**
- This is a sample plan of a 1200 SF one story home of "light construction"
 - homeowner to choose most appropriate detail.

1 SAMPLE FOUNDATION AND PLYWOOD LAYOUT PLAN

SCALE: 3/16"=1'-0"



- NOTES:**
- This detail shows a sample cripple wall which has undergone a typical seismic retrofit.
 - This detail is not intended to supersede requirements contained in the specific installation details on sheet S2.
 - This isometric is viewed from the interior of the crawl space.

2 TYPICAL CRIPPLE WALL BRACING DETAIL

A. GENERAL:

- All existing concrete and wood material which will be part of the strengthening work shall be in sound condition and free from defects which would substantially reduce the capacity of the material. Any substandard material shall be repaired or replaced to meet minimum building code requirements. New foundations shall meet current Building Code requirements.
- All metal connectors and hardware shall meet an approved standard for its intended use and be installed per manufacturer's instructions, and in accordance with the requirements of these standards. Alternate details may be approved by the building official provided detailed information and calculations are submitted and approved.
- All existing under floor ventilation shall be maintained.
- Due to the corrosive nature of new pressure treated wood which can cause premature failure of the metal hardware, fasteners in new pressure treated wood shall be hot dipped galvanized fasteners (meeting ASTM A153) and connectors (ASTM A 653 class G185 sheet), or better.
- LEGEND:**
(E) = Existing construction; (N) = New construction
4/S1 = Refer to detail 4 on sheet S1
NTS = Not to scale ; Min = Minimum
FFC = Floor Framing Clip

B. MUDSILL CONNECTIONS:

- New bolts or UFP10 anchors required by reinforcement schedule 4/S1 shall be installed within plywood braced panels. See detail 2/S2.
- Where an existing continuous rim joist, end joist, or solid blocking between joists, does not exist above the perimeter cripple wall or mud sill, new blocking and/or supplemental connections shall be provided and subject to approval by the building official.
- All new mud sill bolts shall have a 3" X 3" X 1/4" plate washer installed between the mud sill (or blocking) and the nut.
- New bolts shall be 1 1/2" inches minimum from the edges of the mud sill and 6" from the ends.
- Existing anchor bolts are generally not reliable and should not be considered as meeting the requirements of this plan set.

3 TECHNICAL NOTES

REINFORCEMENT SCHEDULE									
GENERAL INFORMATION			PLYWOOD BRACING	MUDSILL ANCHORAGE			FLOOR TO CRIPPLE WALL / MUDSILL CONNECTION		
CHECK THE BOX WHICH APPLIES TO YOUR HOME	TOTAL FLOOR AREA (SF) (1)	HEAVY OR LIGHT CONSTRUCTION	MINIMUM TOTAL BRACING LENGTH ALONG EACH WALL LINE	MINIMUM SILL ANCHORS ALONG EACH WALL LINE			MIN. NO. OF FLOOR FRAMING CLIPS (FFC)(3) ALONG EACH WALL LINE (4)		
				UFP10 (2)	1/2" BOLT	5/8" BOLT	NO. OF L70	NO. OF H10 (5)(6)	NO. OF L90
1-STORY REQUIREMENTS	800	Heavy	16'-0"	5	8	6	13	10	10
	800	Light	12'-0"	4	6	5	11	8	8
	1000	Heavy	17'-4"	6	9	6	15	12	12
	1000	Light	14'-8"	4	7	5	12	9	9
	1200	Heavy	20'	6	9	7	17	13	13
	1200	Light	14'-8"	5	7	5	13	10	10
	1500	Heavy	22'-8"	7	11	8	19	15	15
	1500	Light	17'-4"	5	8	6	15	11	11
	2000	Heavy	28'	8	13	9	24	18	18
	2000	Light	21'-4"	6	10	7	18	14	14
2-STORY REQUIREMENTS	1500	Heavy	17'-4"	5	8	6	15	11	11
	1500	Light	14'-8"	4	7	5	12	9	9
	1800	Heavy	24'-0"	7	12	8	21	16	16
	1800	Light	18'-8"	6	9	7	16	12	12
	2400	Heavy	29'-4"	9	14	10	25	19	19
	2400	Light	22'-8"	7	11	8	20	15	15
	3000	Heavy	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3000	Light	26'-8"	8	13	9	23	17	17

FOOTNOTES FROM TABLE:

- See total floor area retrofit Construction Data.
- When UFP anchors and bolts are used in a single wall line, UFP anchors maybe substituted for the number of bolts.
- Not more than one angle per joist bay unless joists are spaced 24 inches on center. Where practicable install angles between joists above plywood braced panel locations.
- Install L70 & L90 W/ 10d x 1 1/2" nails (.148 x 1 1/2").
- H10 uses (8) 8d (.131" dia.) x 1 1/2" into joist and (8) 8d (.131" dia.) x 1 1/2" into top plates.
- H10 floor framing clip should be used as an alternate only where accessibility makes the use of L70 or L90 impractical. L70 and L90 clips are preferred over H10 FFC.

4 REINFORCEMENT SCHEDULE

GENERAL HOME INFORMATION:

A. Square footage calculation

- No. of stories above cripple wall/mud sill: 1
- Approximate 1st floor area over crawl space: 1935 sf (Do not include areas above garage slab)
- Approximate 2nd floor area over crawl space: NA sf (Do not include areas above garage slab)

Total floor area: 1935 sf

An alternative to the 600 lb. Simpson L90 are the 715 lb Simpson LTP4 and the 680 lb Simpson A23

B. Is your home of "Light" or "Heavy" construction?

- See detail 4/S1 for definition of heavy versus light construction

☒ - HEAVY construction ☐ - LIGHT construction

FLOOR FRAMING CONNECTION:

to Mudsill or Top Plate

☒ FRAMING CLIP:

Manufacturer

Part No.

Load Value parallel to cripple wall and/or mud sill

SIMPSON L90

L90

500 LBS CURRENT VALUE IN CATALOG IS 925 LBS

MUDSILL ANCHORAGE:

EXISTING

☐ BOLTS: Diameter NA Spacing

NEW

☐ BOLTS: Diameter Spacing See Plan

Type: ☐ Chemical ☐ Expansion/Mechanical

ANCHOR PLATE: Manufacturer Simpson

Part No. UFRP

Bolt Type: ☐ Chemical ☐ Expansion/Mechanical

DEFINITIONS- "LIGHT" AND "HEAVY" CONSTRUCTION

HEAVY CONSTRUCTION is your home constructed using any of the following:

- Stucco exterior wall finish
- Heavy roofing consisting of concrete or clay tiles (Weighing up to 11 pounds per square foot)

NOTE:

Clay tile weighing more than 11 pounds per square foot may be considered on an individual basis. Check w/ your local Building Department.

LIGHT CONSTRUCTION is any building constructed using only the following.

ROOFING MATERIALS:

- Wood shakes or shingles
- Composition or asphalt shingles
- Metal roofing (Weighing 5 pounds per square foot or less)

EXTERIOR WALL FINISHES:

- Wood panel sheathing
- Wood board siding
- Similar light board siding

INTERIOR WALL FINISHES:

- Gypsum board
- Gypsum or plaster lath

CONNECTOR CAPACITY (Pounds) and Connection Description	
458 lbs.	L70 is 16 ga X 7" long uses (8) - 10d X 1-1/2" nails (.148 x 1 1/2")
600 lbs.	L90 is 16 ga X 9" long uses (10) - 10d X 1-1/2" nails (.148 x 1 1/2")
505 lbs.	H10 anchor uses (8) - 8d X 1-1/2" nails (.131 x 1 1/2")
820 lbs.	1/2" dia. bolt
1170 lbs.	5/8" dia. bolt
1340 lbs.	UFP10- Universal plate anchor

GENERAL INSTRUCTIONS

READ FIRST:

To determine if your home qualifies please answer the following questions. If you answer yes to all of the following questions your home qualifies to use this standard. IF YOU ANSWER YES TO EACH OF THESE QUESTIONS, PROCEED TO APPLICANT INSTRUCTIONS.

DOES THIS PLAN SET APPLY TO YOUR HOME?

- | | | |
|---|-------------------------------------|--------------------------|
| 1. Is your home a one or two family residential structure? | ☒ | ☐ |
| 2. Is your home two stories or less? | ☒ | ☐ |
| 3. Is your home wood-framed construction? | ☒ | ☐ |
| 4. Does the building have a continuous perimeter concrete foundation (ignoring the immediate area surrounding the fireplace? porches?) | ☒ | ☐ |
| 5. Does your house have a crawl space? | ☒ | ☐ |
| 6. Are all the cripple walls less than 4 feet in height? (See detail 2/S1 in lower left corner of plan set for an example of a cripple wall) | ☒ | ☐ |
| 7. If your home has brick or stone veneer along the exterior walls (excluding any chimneys), is the maximum height of the veneer 4 feet above the foundation? (If your home does not have any brick or stone veneer, you should answer this question as a YES.) | ☒ | ☐ |
| 8. If the roofing of your home is clay tile, are the tiles installed without the use of mortar along the tile edges. (If your home's roofing is a material other than clay tile you should answer this question as a YES.) | ☒ | ☐ |

IF YOU ANSWER NO TO ANY OF THESE QUESTIONS CONTACT YOUR LOCAL BUILDING DEPARTMENT FOR ASSISTANCE.

PURPOSE:

- These plan set standards for strengthening may be approved by the building official without requiring additional plans or calculations. They provide an economical method to help improve your home's chances of surviving an earthquake.
- The intent of these standards is to promote public safety and welfare by reducing the risk of earthquake damage to existing wood-framed residential buildings.
- The requirements contained herein are prescriptive minimum standards intended to improve the seismic performance of residential buildings. They will not necessarily prevent earthquake damage, nor make your home earthquake proof. These recommendations are based on assumptions that apply to houses of average construction. You are encouraged to have a competent licensed engineer or architect review the plans & modify them as appropriate for your home.
- The prescriptive details and provisions are not intended to be the only acceptable strengthening methods permitted (alternate details and methods may be used when approved by the building official).
- When the building official determines that conditions exist that are beyond the scope of these prescriptive standards, analysis and documentation shall be prepared by a California licensed architect or engineer.
- This prescriptive plan addresses only seismic strengthening work. Alternative designs will be considered on a case-by-case basis. Work done under permit pursuant to this prescriptive plan does not legalize any previous work done without a permit.

APPLICATION INSTRUCTION:

- Draw a scaled foundation plan of the house in the graph space provided on sheet S2 (refer to the "sample foundation and plywood layout plan". Detail 1/S1 for guidance).
- Provide appropriate construction information in the "Construction Data", detail 5/S1. Determine the spacing requirements for the mudsill bolts or anchor plates to be used and identify the type of FFC clip to be used.
- Based upon the homes square footage, number of stories and type of construction "heavy" or "light", determine the requirements for "plywood bracing, mudsill anchorage" and floor to cripple wall/mudsill connections". Based on the "Reinforcement Schedule". See detail 4/S1.
- Identify on the "Foundation plan" the direction of run of all your floor joists.
- Identify on the "foundation plan" (along the perimeter walls) the location of all fireplaces.
- For each wall segment on the foundation plan indicate the plan details which represent:
step1: the mud sill anchoring method. See detail 2/S2.
step2: the floor-to-cripple wall/mudsill attachment. See det. 5/S2.
step3: the cripple wall bracing method to be used. See detail 4/S2.
- For each wall segment on the foundation plan indicate the maximum cripple wall height and the length and location of all plywood braced panels to be installed (identify all wall sections that do not have cripple walls).

APPLICANT INFORMATION

APPLICANT: Howard Cook

ADDRESS: 427 San Pabloe Ave
Alhany, CA 94706

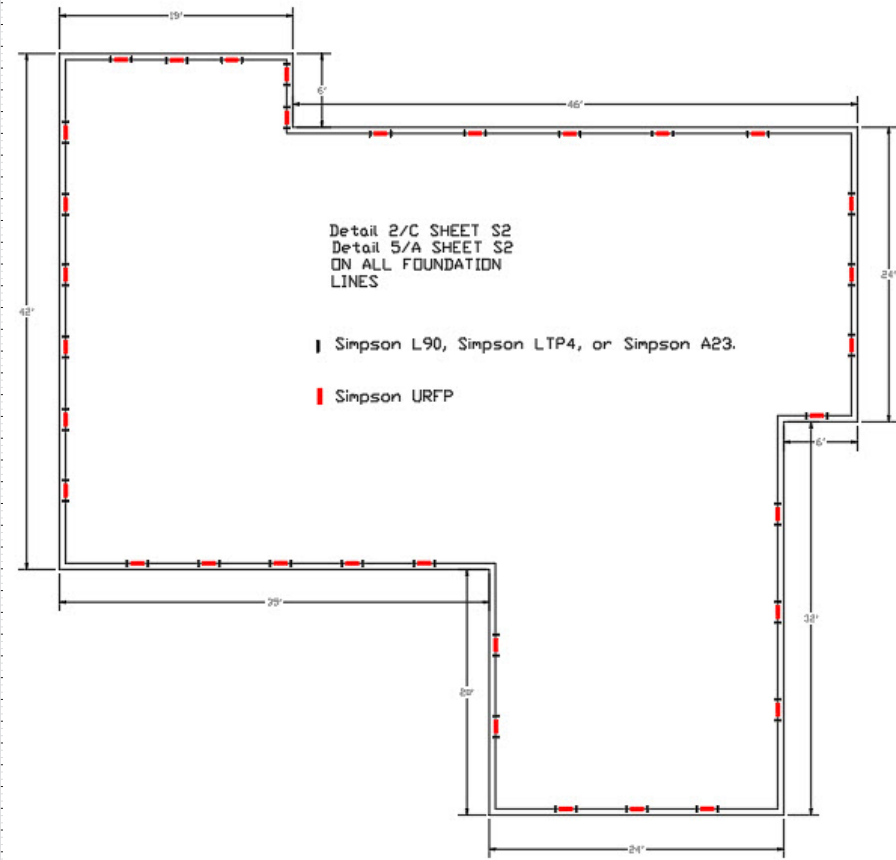
TELEPHONE: 510-418-1676

PROPERTY ADDRESS:
419 Covington Dr.
Fremond, CA
Owner: John Doe

Howard Cook
APPLICANT'S SIGNATURE

STANDARD PLAN A (2008) RESIDENTIAL SEISMIC STRENGTHENING PLAN PRESCRIPTIVE SEISMIC STRENGTHENING PLAN FOR CRIPPLE WALL BRACING AND FOUNDATION SILL PLATE ANCHORAGE OF LIGHT WOOD FRAMED RESIDENTIAL STRUCTURES.

S1



Detail 2/C SHEET S2
Detail 5/A SHEET S2
ON ALL FOUNDATION
LINES

Simpson L90, Simpson LTP4, or Simpson A23.

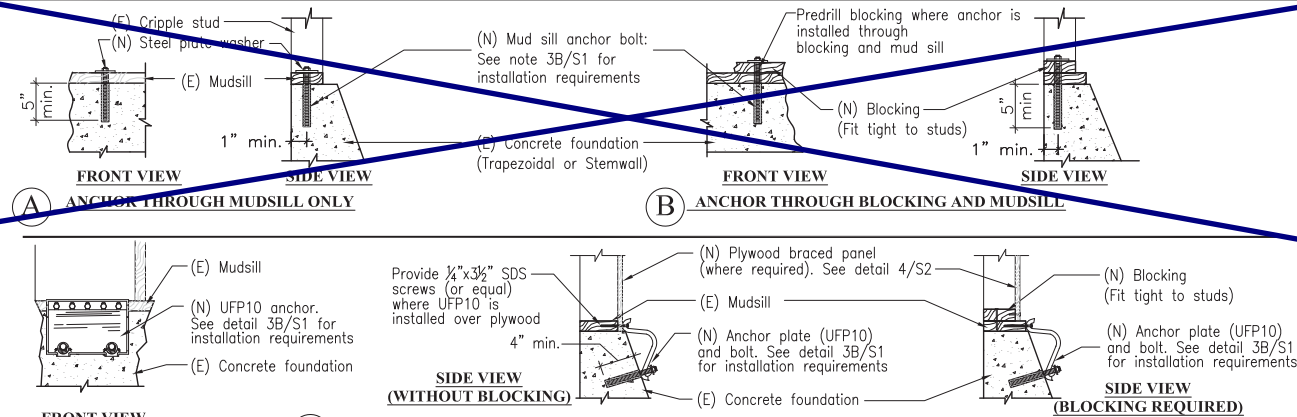
Simpson URFP

1 FOUNDATION PLAN

CHECK SCALE: ONE SQUARE (1/4") = ONE FOOT

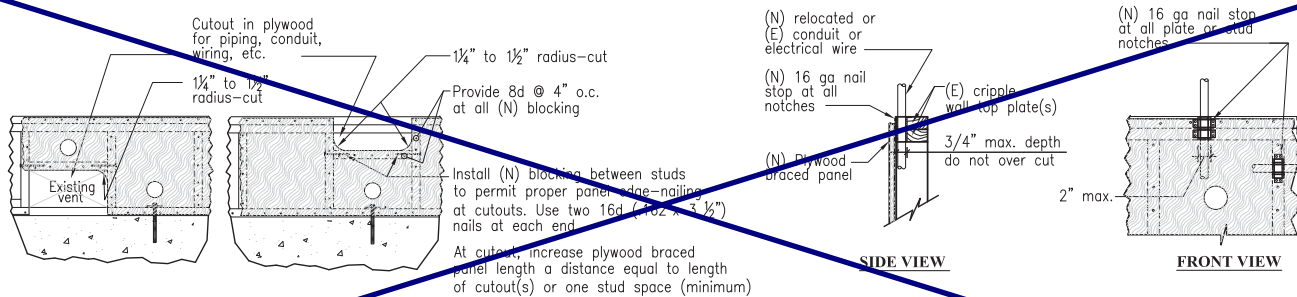
Street side

1/4" = 1'
1/3 x 1/4" = 4"
1/4" = 1'



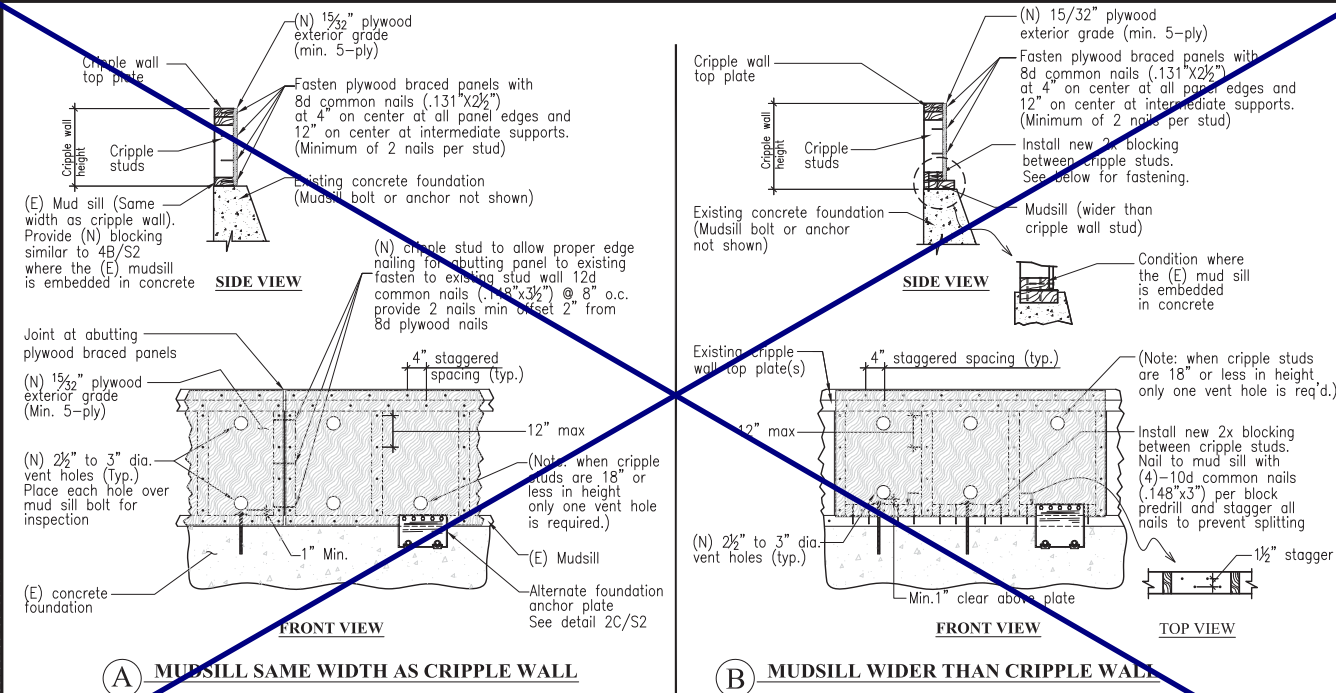
2 TYPICAL MUDDSILL TO CONCRETE FOUNDATION CONNECTIONS

SCALE: NTS



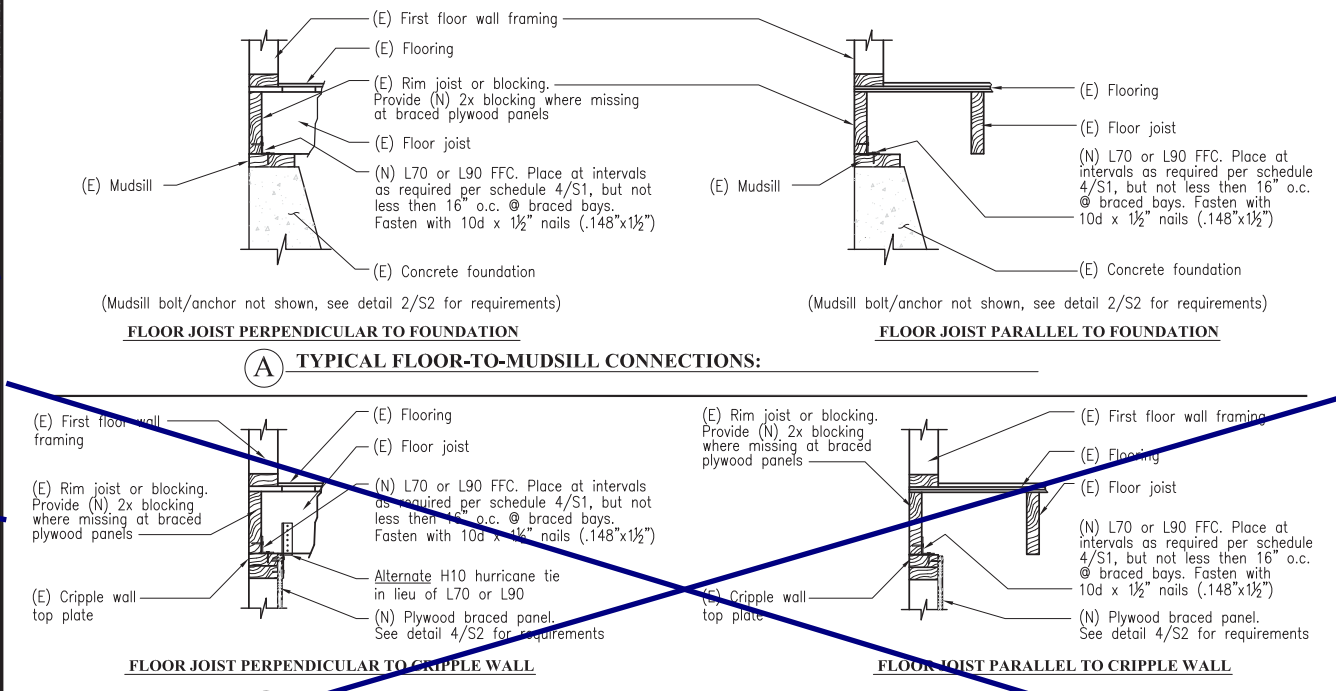
3 TYPICAL PANEL CUTOUTS & NOTCHING REQUIREMENTS

SCALE: NTS



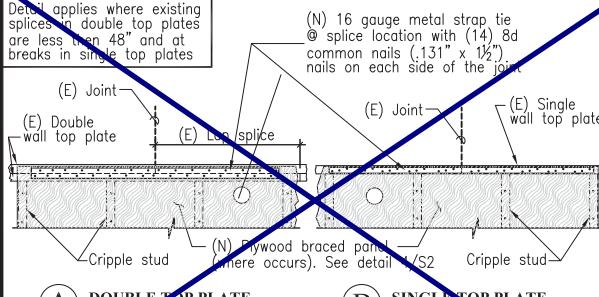
4 PLYWOOD BRACED PANEL INSTALLATION DETAIL

SCALE: NTS



5 TYPICAL FLOOR-TO-CRIPPLE WALL OR FLOOR-TO-MUDDSILL CONNECTIONS

SCALE: NTS



6 TYPICAL TOP PLATE SPLICE DETAILS

SCALE: NTS

ACKNOWLEDGMENTS

This prescriptive plan set and the provisions for voluntary seismic retrofit of wood-frame homes were developed by a committee representing the East Bay and Peninsula chapters of the international code council (ICC). In addition, the plan development committee consisted of representatives from the following organizations who provided contributions and peer review:

- Association of bay area governments (ABAG) earthquake program.
- Building contractors specializing in home retrofitting.
- California building officials (CALBO) emergency preparedness committee.
- California building officials (CALBO) seismic safety committee.
- Earthquake engineering research institute, Northern California chapter (EERI-NC)
- ICC, TRI-chapter (East Bay, Peninsula, Monterey Bay) plan check standards committee.
- Seismology & Structural standards, Light-Frame subcommittee, Existing building committee, Structural engineers association of Northern California (SEAONC)

NOTE - The professional organizations, governmental agencies and others involved in this process, including ICC and its chapters, SEAONC, CALBO, EERI-NC, their committees, and their individual members do not make any warranty or assume any legal liability or responsibility for the use of or reference to opinions, findings, conclusions or recommendations included in these drawings, plan sets, or booklets.

NOTE - Technical changes may not be made without the express permission of the committee.

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S2

2 OF 2