#	CONNECTION	FASTENING [a,g,h,i]		LOCATION
1.	JOIST TO SILL OR GIRDER	3 - 8d		TOENAIL
2.	BRIDGING TO JOIST	2 - 8d		TOENAIL EACH END
3.	1"x6" SUBFLOOR OR LESS TO EACH JOIST	2 - 8d		FACE NAIL
4.	1"x6" SUBFLOOR OR GREATER TO EACH JOIST	3 - 8d		FACE NAIL
5.	2" SUBFLOOR TO JOIST OR GIRDER	2 - 16d		BLIND & FACE NAIL
6.	SOLE PLATE TO JOIST OR BLOCKING	16d @ 16" o.c.		TYPICAL FACE NAIL
	SOLE PLATE TO JOIST OR BLOCKING AT BRACED WALL PANEL	3 - 16d @ 16"o.c.		BRACED WALL PANELS
7.	TOP PLATE TO STUD	2- 16d		END NAIL
8.	STUD TO SOLE PLATE	4 - 8d 2 - 16d		TOENAIL END NAIL
9.	DOUBLE STUDS	16d @ 24" o.c.		FACE NAIL
10.	DOUBLE 2x TOP PLATE	16d @ 16" o.c. 8 - 16d		FACE NAIL LAP SPLICE
	3x TOP PLATE OVER 2X PLATE	20d @ 16"o.c. 8 - 20d		FACE NAIL LAP SPLICE
11.	BLOCKING BETWEEN JOISTS OR RAFTERS TO TOP PLATE	3 - 8d		TOENAIL
12.	RIM JOIST TO TOP PLATE	8d @ 6" o.c.		TOENAIL
13.	TOP PLATES, LAPS & INTERSECTIONS	2 - 16d		FACE NAIL
14.	CONTINUOUS HEADER, TWO PIECES	16d		16" O.C. @ EDGE
15.	CEILING JOISTS TO PLATE	3 - 8d		TOENAIL
16.	CONTINUOUS HEADER TO STUD	4 - 8d		TOENAIL
17.	CEILING JOISTS LAPS OVER PARTITIONS	3 - 16d MIN. TABLE 2308.10.4.1		FACE NAIL
18.	CEILING JOISTS TO PARALLEL RAFTERS	3 - 16d TABLE 2308.10.4.1		FACE NAIL
19.	RAFTER TO PLATE	3 - 8d		TOENAIL
20.	1" DIAGONAL BRACE TO EACH STUD AND PLATE	2 - 8d		FACE NAIL
21.	1"x8" SHEATHING TO EA. BEARING	3 - 8d		FACE NAIL
22.	WIDER THAN 1"x8" SHEATHING TO EACH BEARING	3 - 8d		FACE NAIL
23.	BUILT-UP CORNER STUDS	16d		24" O.C.
24.	BUILT-UP GIRDER AND BEAMS	20d @ 32" o.c.		FACE NAIL @ TOP AND BOT. STAG. ON OPPOSITE SIDES
		2 - 20d		FACE NAIL @ ENDS AND @ EA. SPLICE
25.	2" PLANKS	16d		@ EACH BEARING
26.	COLLAR TIE TO RAFTER	3 - 10d		FACE NAIL
27.	JACK RAFTER TO HIP	3 - 10d 2 - 16d		TOENAIL FACE NAIL
28.	ROOF RAFTER TO 2x RIDGE BEAM	2 - 16d 2 - 16d		TOENAIL FACE NAIL
29.	JOIST TO BAND JOIST	3 - 16d		FACE NAIL
30.	LEDGER STRIP	3 - 16d		FACE NAIL
31.	WOOD STRUCTURAL PANELS AND PARTICLEBOARD, SUBFLOOR, ROOF AND WALL SHEATHING (TO FRAMING) [b]	1/2" & LESS " 19/32" to 3/4" " 7/8" to 1" 1 1/8" to 1 1/4"	6d [f] 1 3/4" 16GA.[k] 8d, 6d 2" 16 GA. [m] 8d 10d, 8d	-
	SINGLE FLOOR (COMBINATION SUBFLOOR-UNDERLAYMENT TO FRAMING) [b]	3/4" & LESS 7/8" to 1" 1 1/8" to 1 1/4"	6d 8d 10d / 8d	-
32.	PANEL SIDING (TO FRAMING)	1/2" & LESS 5/8"	6d [c] 8d [c]	-
33.	FIBERBOARD SHEATHING [d]	1/2"	6d NO.16 GA. STAPLE [j]	-
		25/32"	8d NO.16 GA. STAPLE [j]	-
34.	INTERIOR PANELING [e]	1/4" to 3/8"	6d	-

a. COMMON NAILS ARE REQUIRED TO BE USED U.N.O. COMMON NAIL PROPERTIES ARE AS FOLLOWS:
- 6d = 0.113"Φ x 2" LONG
- 8d = 0.131"Φ x 2 1/2" LONG
- 10d = 0.148"Φ x 3" LONG
- 16d = 0.162"Φ x 3 1/2" LONG
- 20d = 0.192"Φ x 4" LONG

b. NAILS SPACED AT 6" o.c. AT EDGES, 12" AT INTERMEDIATE SUPPORTS EXCEPT 6" AT SUPPORTS WHERE SPANS ARE 48" OR MORE. FOR NAILING OF WOOD STRUCTURAL PANEL AND PARTICLEBOARD DIAPHRAGMS AND SHEAR WALLS, REFER TO SECTION 2305.

c. CORROSION-RESISTANT SIDING (6d - 1 7/8"x0.106"; 8d - 2 3/8"x0.128") OR CASING (6d - 2"x0.099"; 8d - 2 1/2"x0.113") NAIL.

d. FASTENERS SPACED 9" o.c. AT EXTERIOR EDGES AND 6" o.c. AT INTERMEDIATE SUPPORTS, WHEN USED AS STRUCTURAL SHEATHING. SPACING SHALL BE 6" o.c. E.N. & 12" o.c. F.N. FOR NONSTRUCTURAL APPLICATIONS.

e. NAILS SPACED 6" ON PANEL EDGES, 12" AT INTERMEDIATE SUPPORTS.

f. ROOF SHEATHING APPLICATIONS, 8d ARE THE MINIMUM REQUIRED FOR WOOD STRUCTURAL PANELS.

g. NAILING DRIVEN INTO PRESERVATIVE TREATED WOOD SHALL BE HOT DIPPED GALVANIZED OR EQUIVALENT.

h. STAPLES SHALL HAVE A MINIMUM CROWN WIDTH OF 7/16".

i. FASTENERS USED FOR THE ATTACHMENT OF EXTERIOR WALL COVERINGS SHALL BE OF HOT-DIPPED ZINC-COATED GALVANIZED STEEL, WITH COATING PER A.S.T.M. A153.

j. CORROSION-RESISTANT STAPLES WITH NOMINAL 7/16" CROWN AND 1 1/8" LENGTH FOR 1/2" LENGTH SHEATHING AND 1 1/2" LENGTH FOR 25/32" SHEATHING. PANEL SUPPORTS @ 16" (20" IF STRENGTH AXIS IN THE LONG DIRECTION OF THE PANEL, UNLESS OTHERWISE MARKED).

k. FASTENERS SPACED 4" o.c. E.N., 8" o.c. F.N. FOR SUBFLOOR AND WALL SHEATHING AND 3" o.c. E.N. AND 6" o.c. F.N. FOR ROOF SHEATHING.

m. FASTENERS SPACED 4" o.c. E.N. AND 8" o.c. F.N.

n. THIS SCHEDULE WILL GOVERN UNLESS NOTED OTHERWISE ON PLANS.

TYP02202
SIZE 1/4"X 3H

– NAILING SCHEDULE

PER CBC TABLE 2304.9.1 — SCALE: N.T.S.

1. ALL BOLTS SHALL BE MACHINE MADE TYPE F1554 GRADE 36 U.N.O.
2. BOLT HOLES IN WOOD SHALL BE OVERSIZED BY NOT MORE THAN 1/32".
3. ALL BOLTS AND LAG SCREWS SHALL BE PROVIDED WITH STANDARD STEEL WASHERS UNDER HEAD AND NUTS WHICH BEAR ON WOOD ACCORDING TO THE WASHER SCHEDULE BELOW, U.N.O.

WASHER SCHEDULE

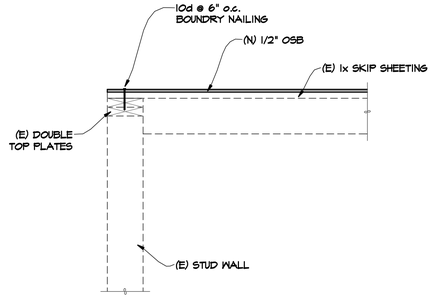
BOLT SIZE	STEEL PLATE SQUARE	MALLEABLE IRON ROUND	STANDARD CUT WASHER
1/2"Φ	2 x 2 x 1/4"	2 1/2"Φ x 1/4"	1 3/8"Φ x 7/64"
5/8"Φ	2 1/2 x 2 1/2 x 1/4"	2 3/4"Φ x 5/16"	1 3/4"Φ x 1/8"
3/4"Φ	3 x 3 x 5/16"	3"Φ x 3/8"	2"Φ x 5/32"
7/8"Φ	3 1/2 x 3 1/2 x 5/8"	3 1/2"Φ x 7/16"	2 1/4"Φ x 11/64"
1"Φ	3 3/4 x 3 3/4 x 7/16"	4"Φ x 1/2"	2 1/2"Φ x 11/64"
1 1/8"Φ	4 x 4 x 7/16"	4 1/2"Φ x 9/16"	2 3/4"Φ x 11/64"
1 1/2"Φ	4 1/4 x 4 1/4 x 1/2"	5"Φ x 5/8"	3 1/2"Φ x 3/16"

4. BOLTS AND SCREWS SHALL BE TIGHTENED AT TIME OF ERECTION AND RETIGHTENED BEFORE CLOSING IN OR AT COMPLETION OF JOB.
5. ANCHOR AND/OR SILL BOLTS WITH UPSET THREADS ARE NOT PERMITTED.
6. SILL PLATES UNDER ALL EXTERIOR WALLS, BEARING WALLS AND SHEAR WALLS SHALL BE BOLTED TO MASONRY OR CONCRETE WITH 5/8"Φ x 12" BOLTS SPACED NOT MORE THAN 5'-0" ON CENTER, WITH A MIN. OF 2 BOLTS FOR EACH PIECE OF SILL PLATE, U.N.O. ALL SILL PLATE ANCHOR BOLTS SHALL HAVE 3" SQ. x 1/4" SLOTTED PLATE WASHERS (OR SIMPSON BPS), U.N.O.
7. ALL ANCHOR BOLTS IN WOOD SHALL BE SPACED 4 INCH MINIMUM AND 12 INCH MAXIMUM FROM END OF THE SILL PLATE, AND HAVE 7 INCH MINIMUM EMBEDMENT INTO CONCRETE OR MASONRY. ANY LOACTION WHERE A HOLE OR NOTCH LARGER THAN THE SILL PLATE THICKNESS OCCURS, SHALL HAVE ADDITIONAL ANCHOR BOLTS PLACED 4 INCHES TO 12 INCHES ON EACH SIDE OF THE HOLE OR NOTCH.
8. SILL PLATES AT ALL WALLS SHALL BE PRESERVATIVE-TREATED D.F. 2X OF THE SAME WIDTH AS STUDS, U.N.O. ALL PRESERVATIVE-TREATED D.F. SHALL BEAR THE AWPB QUALITY MARK. ALL CUTS OR HOLES SHALL BE PRE-TREATED PRIOR TO INSTALLATION.
9. NO SILL PLATE PIECE SHALL END WITHIN THE LENGTH OF SHEAR PANEL UNLESS SPECIFICALLY SHOWN AND DETAILED ON THE PLANS.
10. ALL EXPOSED FASTENERS SHALL HAVE ZINC-COATING CORROSION RESISTANCE.
11. ALL FASTENERS AND HARDWARE IN CONTACT WITH PRESERVATIVE-TREATED OR FIRE RETARDANT WOOD SHALL BE HOT DIPPED ZINC-COATED GALVANIZED STEEL, STAINLESS STEEL, SILICON BRONZE OR COPPER. THE COATING WEIGHT FOR ZINC-COATED FASTENERS SHALL BE IN ACCORDANCE WITH A.S.T.M. A 153. EXCEPTION: FASTENERS OTHER THAN NAILS, TIMBER RIVETS, WOOD SCREWS AND LAG SCREWS SHALL BE PERMITTED TO BE OF MECHANICALLY DEPOSITED ZINC COATED STEEL WITH COATING WEIGHTS IN ACCORDANCE WITH A.S.T.M. B 695, CLASS 55 MIN.
12. BEARING WALLS AND PARTITIONS SHALL HAVE DOUBLE TOP PLATES.
13. ALL FASCIA BOARDS MUST BE CONTINUOUS WITH NO SPLICES ALLOWED WITHIN 12'-0" MINIMUM FROM FRAMING CORNERS, UNLESS NOTED OTHERWISE.
14. PLYWOOD NOTES:
    - IN HORIZONTAL PLYWOOD DIAPHRAGMS, NO PANEL LESS THAN 24" WIDE SHALL BE USED. IN VERTICAL PLYWOOD SHEAR WALLS, NO PANEL LESS THAN 12" WIDE SHALL BE USED.
    - ANY PIECE OF PLYWOOD SPANNING ACROSS FEWER THAN 3 SUPPORTS SHALL BE BLOCKED ON ALL EDGES.
    - SHEAR WALL PLYWOOD SHALL BE BLOCKED AT ALL EDGES.
    - DIAPHRAGM AND SHEAR WALL NAILING SHALL CONFORM TO TABLE 2306.3.1 & 2306.4.1 OF CBC 2007.
15. ALL STRUCTURAL WOOD SHALL CONFORM WITH THE FOLLOWING SPECIFICATIONS:
    - DOUGLAS FIR - LARCH . . . . . NCLIB OR WWPA RULES
    - PLYWOOD . . . . . U.S. PRODUCT STANDARD PS1-07 FOR SOFTWOOD PLYWOOD
16. MINIMUM GRADES SHALL BE AS FOLLOWS U.N.O. ON DRAWINGS:
    - STRUCTURAL FRAMING — DF NO. 1 OR BETTER
    - 4x AND LARGER AND POST — DF NO. 1 OR BETTER
    - STRUCTURAL PLYWOOD — PLYWOOD SHEATHING, GROUP 1, EXP. 1, U.N.O.
17. PREDRILL HOLES WHERE WOOD TENDS TO SPLIT.
18. FOR LAG SCREWS, LEAD HOLE FOR THE THREADED PORTION SHALL HAVE A DIAMETER EQUAL TO 65% OF THE SHANK DIAMETER. MIN. PENETRATION (NOT INCLUDING THE LENGTH OF TAPERED TIP) OF THE LAG SCREW INTO MAIN MEMBER SHALL BE EIGHT TIMES THE DIAMETER.
19. SEE NAILING SCHEDULE FOR MINIMUM NAILING REQUIREMENTS.
20. USE OF MACHINE NAILING IS SUBJECT TO A SATISFACTORY JOB SITE DEMONSTRATION FOR EACH PROJECT AND THE APPROVAL BY THE PROJECT ARCHITECT OR STRUCTURAL ENGINEER AND THE LOCAL BUILDING DEPARTMENT. THE APPROVAL IS SUBJECT TO CONTINUED SATISFACTORY PERFORMANCE. MACHINE NAILING WILL NOT BE APPROVED IN 5/16" PLYWOOD. IF NAIL HEADS PENETRATE THE OUTER PLY MORE THAN WOULD BE NORMAL FOR A HAND HAMMER OR IF MIN. ALLOWABLE EDGE DISTANCES ARE NOT MAINTAINED, THE PERFORMANCE WILL BE DEEMED UNSATISFACTORY.

TYP01201
SIZE 1/4"X 3H

9 WOOD NOTES

– — SCALE: N.T.S.



4 DETAIL

– — SCALE: N.T.S.

1) THESE PLANS ARE INTENDED TO SHOW THE INSTALLATION OF A NEW 1/2" OSB ROOF DIAPHRAGM. THE DIAPHRAGM WILL OVERLAY THE EXISTING 1x SKIP SHEETING. THE NEW DIAPHRAGM IS BEING PROVIDED AS A PART OF A RE-ROOFING PROJECT SO THAT THE DIAPHRAGM CAN BE PLACED NOW IN ANTICIPATION OF A POSSIBLE FUTURE SEISMIC UPGRADE OF THE BUILDING.

2) THE INSTALLATION OF THE ROOF DIAPHRAGM IS INTENDED TO INCLUDE THE ADDITION OF ALL BLOCKING, INFILL SKIP SHEETING, AND FRAMING CLIPS AS IS REQUIRED TO COMPLETE THE DIAPHRAGM FOR A POSSIBLE FUTURE SEISMIC UPGRADE OF THE BUILDING.

3) THE FRAMING AND BLOCKING DETAILS ARE BASED UPON A LIMITED SAMPLING OF SPECIFIC AREAS IN THE PROJECT. THE DETAILS SHOWN ARE BASED ON AN EXTRAPOLATION OF THIS INFORMATION. IT IS POSSIBLE THAT THE ACTUAL FRAMING CONDITIONS FOUND DURING THE ACTUAL CONSTRUCTION MAY NOT MATCH THOSE CONDITIONS SHOWN IN THE THESE PLANS. IN THIS CASE THE CONTRACTOR IS TO TAKE PHOTOGRAPHS OF THE ACTUAL CONDITIONS, PREPARE A SKETCH NOTING THE MEMBER AND CONNECTOR SIZES, AND SEND THESE TO THE ENGINEER. THE ENGINEER WILL TAKE THE INFORMATION PROVIDED BY THE CONTRACTOR AND PREPARE REVISED DETAILS TO FIT THE FIELD CONDITIONS.

4) ANY FRAMING INSTALLED BY THE CONTRACTOR WHICH DEVIATES FROM THESE PLANS, AND WHICH HAS NOT BEEN APPROVED BY THE ENGINEER, MAY BE REQUIRED TO BE REMOVED AND REPLACED WITH OTHER FRAMINGS AT THE CONTRACTORS EXPENSE.

5) ANY CHANGES MADE TO THE APPROVED PLANS SHALL BE SUBMITTED TO THE ENGINEER AND THE ARCHITECT FOR APPROVAL, AND THEN SENT TO THE CITY FOR APPROVAL. NO UNAPPROVED FRAMING SHALL BE INSTALLED BY THE CONTRACTOR.

6) THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND THE CONTRACTOR OF ALL FRAMING CONDITIONS WHICH ARE COMPLETE, AND THE ENGINEER (OR THE TESTING LABORATORY) SHALL INSPECT AND APPROVE THE FRAMING BEFORE THE ROOF SHEETING IS INSTALLED.

7) THERE SHALL NO SUBSTITUTION OF THE MATERIALS OR PRODUCTS SHOWN ON THE PLANS WITHOUT THE CONTRACTORS SUBMISSION OF A CHANGE ORDER AND THE APPROVAL OF THE SAME BY THE ENGINEER OR THE ARCHITECT.

8) ALL CONSTRUCTION SHALL COMPLY WITH THE 2013 EDITION OF THE CALIFORNIA BUILDING CODE.

9) ALL CONSTRUCTION SHALL COMPLY WITH ALL OTHER LOCAL, CITY, AND STATE REQUIREMENTS WHICH ARE APPLICABLE TO THIS PROJECT.

10) REFER TO THE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION NOTE SHOWN ONTHE STRUCTURAL DRAWINGS.

1 PROJECT NOTES

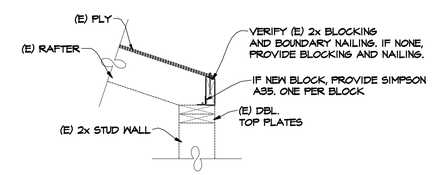
– — SCALE: N.T.S.

5 DETAIL

– — SCALE: N.T.S.

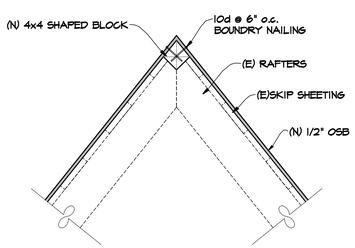
2 DETAIL

– — SCALE: N.T.S.



6 DETAIL

– — SCALE: N.T.S.



3 DETAIL

– — SCALE: N.T.S.

ENGINEER: RANSOM
DRAWN BY: grr
DATE: 20 SEPT 2018
REVISIONS: 9/25/18 ARCHITECT REVIEW; 9/26/18 TEAM REVIEW

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PROJECT NUMBER 17852

SHEET NUMBER S-2