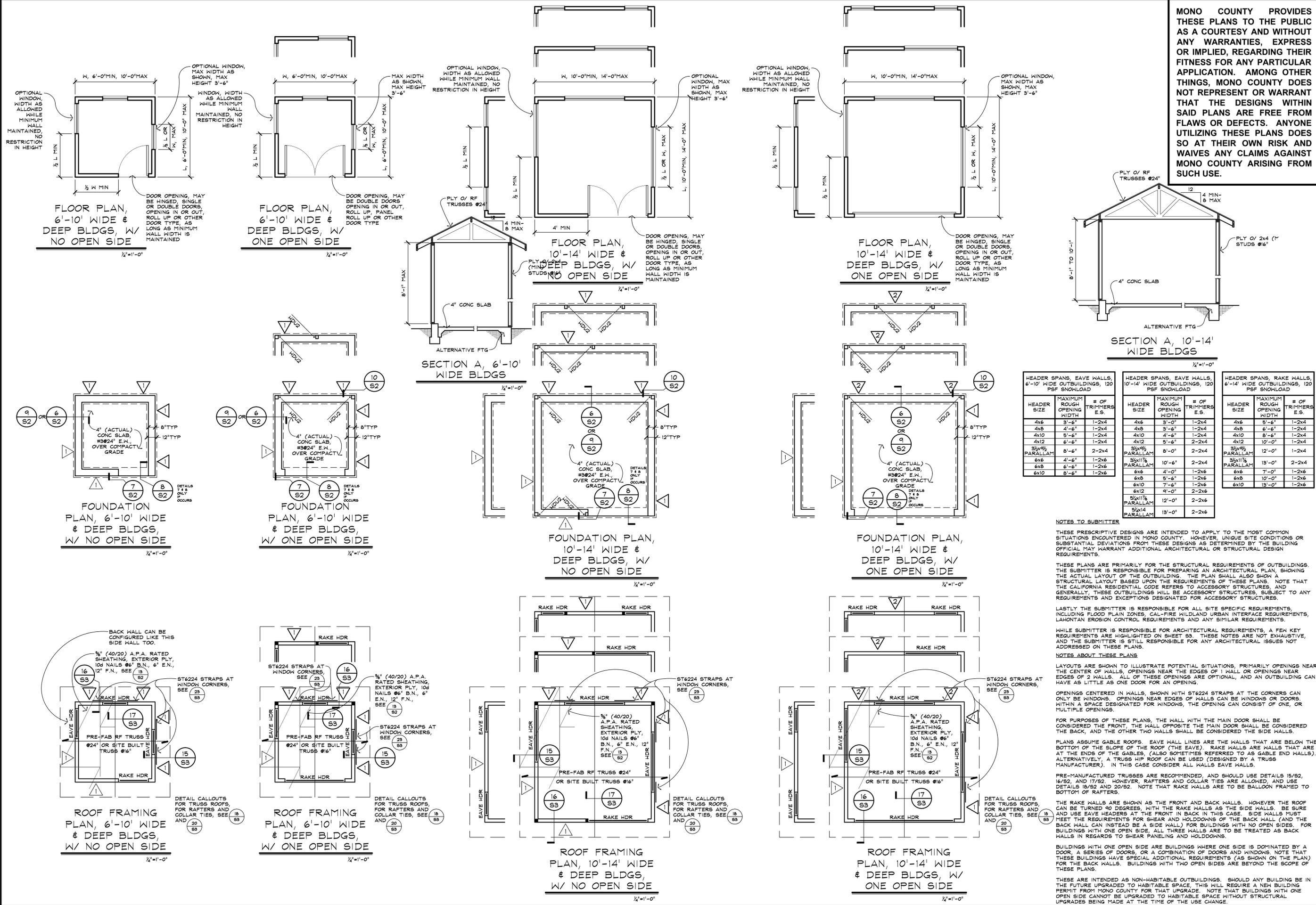
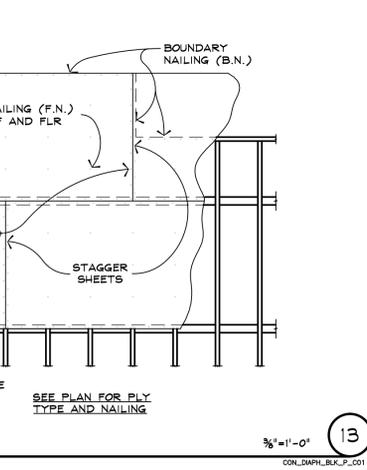
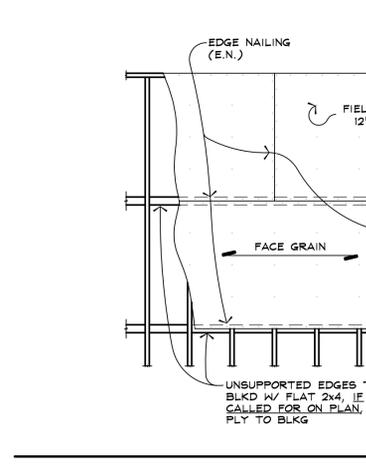
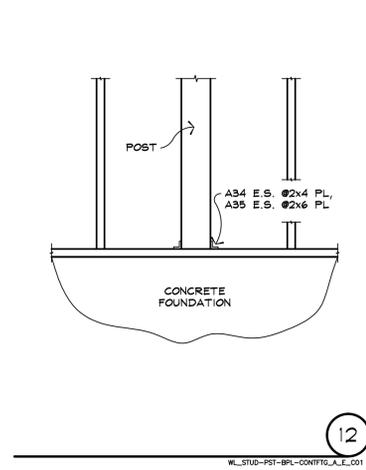
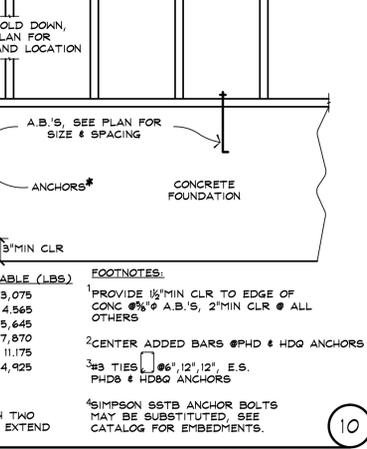
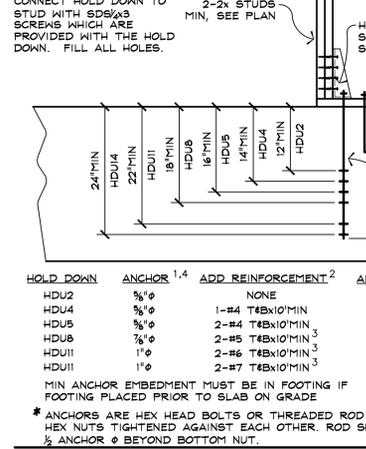
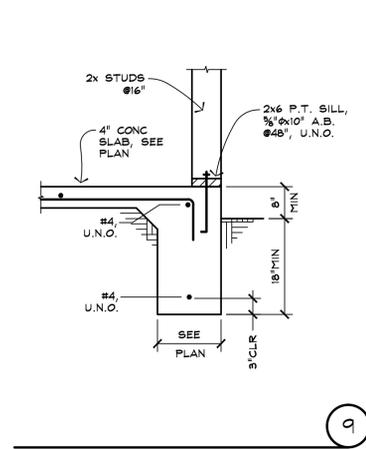
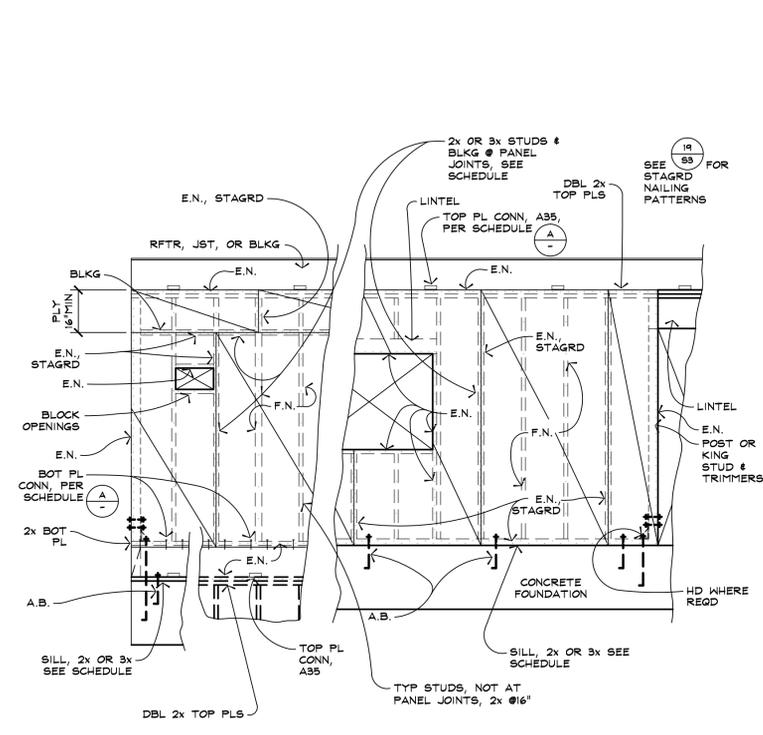
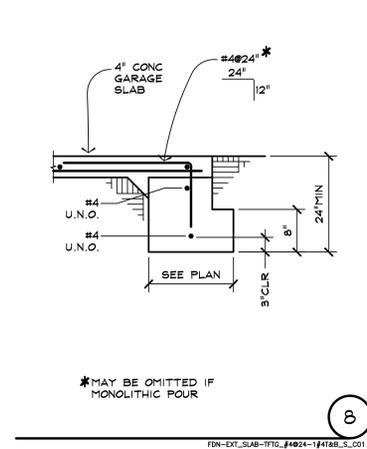
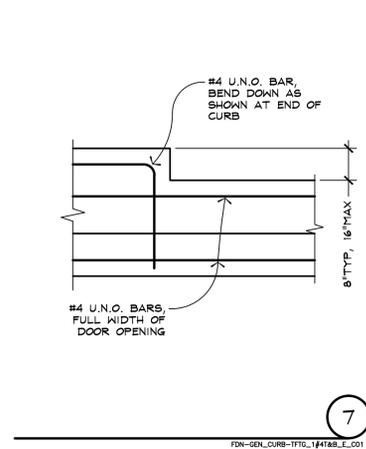
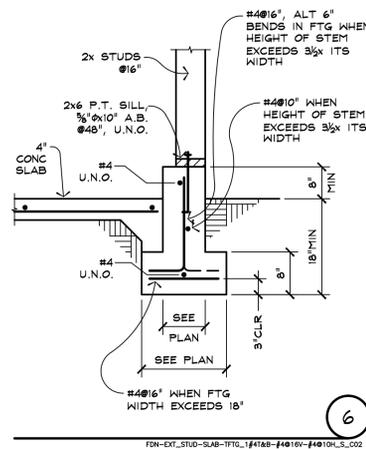
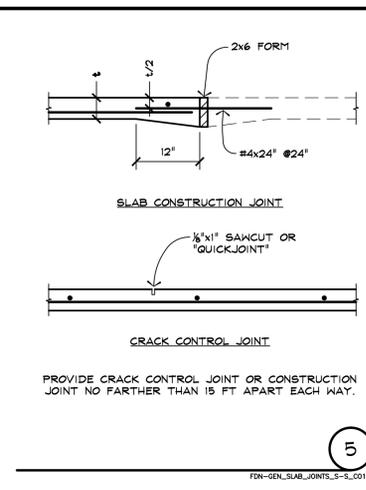
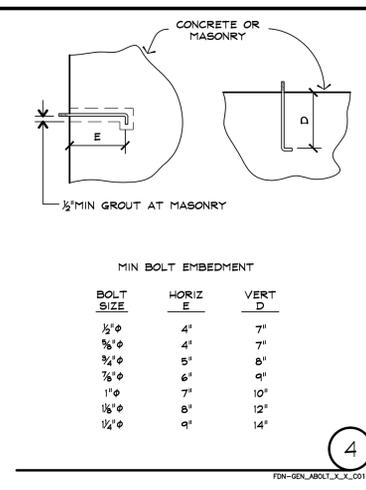
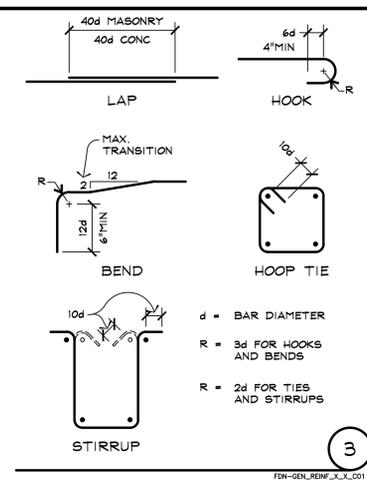
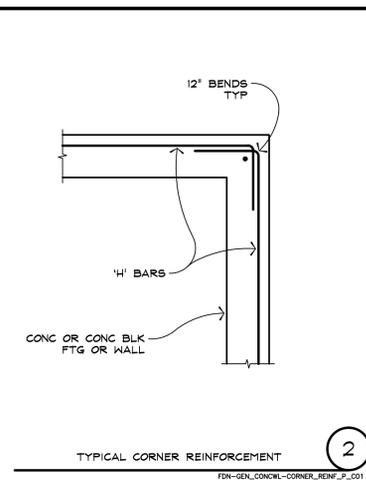
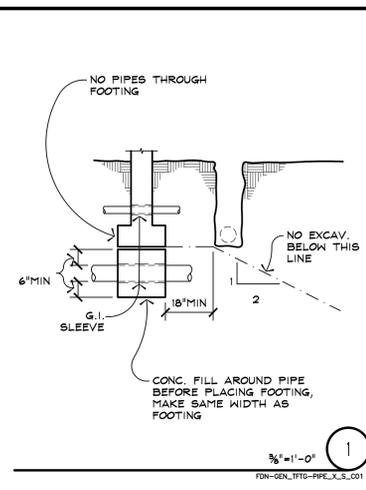


MONO COUNTY PROVIDES THESE PLANS TO THE PUBLIC AS A COURTESY AND WITHOUT ANY WARRANTIES, EXPRESS OR IMPLIED, REGARDING THEIR FITNESS FOR ANY PARTICULAR APPLICATION. AMONG OTHER THINGS, MONO COUNTY DOES NOT REPRESENT OR WARRANT THAT THE DESIGNS WITHIN SAID PLANS ARE FREE FROM FLAWS OR DEFECTS. ANYONE UTILIZING THESE PLANS DOES SO AT THEIR OWN RISK AND WAIVES ANY CLAIMS AGAINST MONO COUNTY ARISING FROM SUCH USE.

REVISIONS	BY





PROJECT SHALL COMPLY WITH THE 2010 CALIFORNIA CODES, WHICH ARE BASED UPON THE 2009 INTERNATIONAL BUILDING CODE, THE 2009 INTERNATIONAL RESIDENTIAL CODE, THE 2009 UNIFORM PLUMBING CODE, THE 2009 UNIFORM MECHANICAL CODE, THE 2009 NATIONAL ELECTRICAL CODE, AND THE 2008 TITLE 24 ENERGY STANDARDS.

SOIL BEARING ALLOWABLE ASSUMED TO BE 2000 PSF. ALL EXTERIOR FOOTINGS SHALL HAVE 18" MIN EMBEDMENT. MINIMUM FOOTING REINFORCEMENT IS 1-#4 AT TOP AND BOTTOM OF CONTINUOUS FOOTING.

ALL FOOTINGS SHALL ALSO BE EMBEDDED DEEP ENOUGH THAT A 5' MIN HORIZONTAL DISTANCE TO DAYLIGHT IS ATTAINED.

SEE (1) FOR PIPES UNDER FOOTINGS.

SEE (2) FOR TYPICAL REINFORCEMENT AT CORNERS OF FOOTINGS.

SEE (3) FOR LAPS AND BENDS IN REINFORCING STEEL.

SEE (4) FOR EMBEDMENT OF ANCHOR BOLTS.

SEE (5) FOR JOINTS IN CONCRETE.

SILL ANCHOR BOLTS ARE 3/8"x10" @48" WITH 0.229" THK x 3" SQ PLATE WASHERS UNLESS NOTED OTHERWISE (SEE SHEAR PANEL SCHEDULE (A) FOR EXCEPTIONS).

HD, ST, ETC ARE SIMPSON STRONG-TIE HARDWARE. REFER TO SIMPSON CATALOG C-2009 FOR INSTALLATION INFORMATION. USE EXACT TYPE, SIZE, AND NUMBER OF FASTENERS SPECIFIED IN CATALOG.

HOLDDOWN ANCHORS SHALL BE SECURED IN PLACE PRIOR TO FOUNDATION INSPECTION.

MINIMUM HOLDDOWN STUDS  
HDU2 2-2x  
(12) TYPICAL ALL POSTS, U.N.O.

WHEN DOUBLE OR TRIPLE HEADERS ARE INDICATED IN THE HEADER SCHEDULE, SEE (24) (25)

(1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11) (12) (13) (14) (15) (16) (17) (18) (19) (20) (21) (22) (23) (24) (25) (26) (27) (28) (29) (30) (31) (32) (33) (34) (35) (36) (37) (38) (39) (40) (41) (42) (43) (44) (45) (46) (47) (48) (49) (50) (51) (52) (53) (54) (55) (56) (57) (58) (59) (60) (61) (62) (63) (64) (65) (66) (67) (68) (69) (70) (71) (72) (73) (74) (75) (76) (77) (78) (79) (80) (81) (82) (83) (84) (85) (86) (87) (88) (89) (90) (91) (92) (93) (94) (95) (96) (97) (98) (99) (100)

PRE-FAB ROOF TRUSSES @24" ENGINEERED BY OTHERS FOR:  
TOP CHORD SNOW LOAD, 82-120 PSF AS REQUIRED BY MONO COUNTY AT THE SPECIFIC SITE  
TOP CHORD DEAD LOAD, 10 PSF  
BOTTOM CHORD DEAD LOAD, 5 PSF  
I.C.B.O. APPROVED FABRICATOR IS REQUIRED.  
STRESS INCREASE FOR DURATION IS NOT ALLOWED.

SHOP DRAWINGS FOR THE ROOF TRUSSES SHALL BE SUBMITTED TO THE BUILDING DEPARTMENT FOR REVIEW AND APPROVAL PRIOR TO FABRICATION OF THE TRUSSES. SUBMITTALS SHALL INCLUDE STRUCTURAL CALCULATIONS AND SHALL SHOW LAYOUT, INDIVIDUAL TRUSS DESIGN AND ALL OTHER ELEMENTS AS REQUIRED IN C.R.C. SECTION 802.10. SUBMITTALS SHALL BE SIGNED BY THE CALIFORNIA REGISTERED ARCHITECT OR ENGINEER RESPONSIBLE FOR THEIR DESIGN.

PRE-FAB ROOF TRUSSES @24" ENGINEERED BY OTHERS FOR:  
TOP CHORD SNOW LOAD, 82-120 PSF AS REQUIRED BY MONO COUNTY AT THE SPECIFIC SITE  
TOP CHORD DEAD LOAD, 10 PSF  
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**SCHEDULE SHEAR PANELS**

MARK	MATERIAL	EDGE NAILING	FIELD NAILING	2x SILL ANCHORS	3x SILL ANCHORS	STUDS & BLKG @ PANEL JOINTS	BOT PL CONN.	TOP PL CONN. AT FLOOR & ROOF	VALUE (LBS/FT)
(1)	3/8" (24/0) STR 1 PLY, 1 SIDE	8d @6"	8d @12"	3/8"x10" @48"	-	2x	16d @7"	A35 @19" OR LTP4 @28"	280
(2)	3/8" (24/0) STR 1 PLY, 1 SIDE	8d @4"	8d @12"	3/8"x10" @17"	3/8"x12" @42"	3x	16d @4"	A35 @12" OR LTP4 @18"	430

PRE-FAB ROOF TRUSSES @24" ENGINEERED BY OTHERS FOR:  
TOP CHORD SNOW LOAD, 82-120 PSF AS REQUIRED BY MONO COUNTY AT THE SPECIFIC SITE  
TOP CHORD DEAD LOAD, 10 PSF  
BOTTOM CHORD DEAD LOAD, 5 PSF  
I.C.B.O. APPROVED FABRICATOR IS REQUIRED.  
STRESS INCREASE FOR DURATION IS NOT ALLOWED.

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I.C.B.O. APPROVED FABRICATOR IS REQUIRED.  
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BOTTOM CHORD DEAD LOAD, 5 PSF  
I.C.B.O. APPROVED FABRICATOR IS REQUIRED.  
STRESS INCREASE FOR DURATION IS NOT ALLOWED.

SHOP DRAWINGS FOR THE ROOF TRUSSES SHALL BE SUBMITTED TO THE BUILDING DEPARTMENT FOR REVIEW AND APPROVAL PRIOR TO FABRICATION OF THE TRUSSES. SUBMITTALS SHALL INCLUDE STRUCTURAL CALCULATIONS AND SHALL SHOW LAYOUT, INDIVIDUAL TRUSS DESIGN AND ALL OTHER ELEMENTS AS REQUIRED IN C.R.C. SECTION 802.10. SUBMITTALS SHALL BE SIGNED BY THE CALIFORNIA REGISTERED ARCHITECT OR ENGINEER RESPONSIBLE FOR THEIR DESIGN.



**SPECIFICATIONS AND GENERAL CONSTRUCTION NOTES**

**GENERAL REQUIREMENTS:**

**1. CODES AND REFERENCES**

- A. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE REQUIREMENTS OF THE 2010 CALIFORNIA BUILDING CODE (C.B.C.) AND 2010 CALIFORNIA RESIDENTIAL CODE (C.R.C.) BASED UPON THE 2009 INTERNATIONAL BUILDING CODE (I.B.C.) AND 2009 INTERNATIONAL RESIDENTIAL CODE (I.R.C.)
- B. A THOROUGH PLANCHECK SHALL BE MADE BY A QUALIFIED REPRESENTATIVE OF THE BUILDING DEPARTMENT PRIOR TO THE ISSUANCE OF A BUILDING PERMIT. CORRECTIONS, IF ANY, SHALL BE MADE ONLY BY THE SUBMITTER OR HIS REPRESENTATIVE. ONCE THE BUILDING PERMIT HAS BEEN ISSUED NO CHANGES OR DEVIATIONS SHALL BE MADE WITHOUT THE WRITTEN APPROVAL OF THE SUBMITTER, LEST AN UNSAFE OR UNLAWFUL CONDITION BE CREATED. CONTRACTOR SHALL COMPLY WITH ANY CODE OR LEGAL VIOLATION WHICH MIGHT BE POINTED OUT BY THE BUILDING INSPECTOR.
- C. WHERE REFERENCE IS MADE TO VARIOUS TEST STANDARDS FOR MATERIALS, SUCH STANDARDS SHALL BE THE LATEST EDITION, AND/OR ADDENDUM. THESE STANDARDS WILL BE REFERRED TO IN ABBREVIATED FROM AS LISTED BELOW:

ACI	AMERICAN CONCRETE INSTITUTE
AFPA	AMERICAN FOREST AND PAPER ASSOCIATION
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION
AITC	AMERICAN INSTITUTE OF TIMBER CONSTRUCTION
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
APA	AMERICAN PLYWOOD ASSOCIATION
ASTM	AMERICAN SOCIETY OF TESTING MATERIALS
AWS	AMERICAN WELDING SOCIETY
ICC	INTERNATIONAL CODE COUNCIL
WCLIB	WEST COAST LUMBER INSPECTION BUREAU
WWPA	WESTERN WOOD PRODUCTS ASSOCIATION

- D. CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS AND CONDITIONS ON THE JOB SITE AND REPORT ANY ERRORS, OMISSIONS, OR POSSIBLE DISCREPANCIES TO THE SUBMITTER PRIOR TO PROCEEDING WITH THE WORK. SPECIAL CARE SHALL BE GIVEN SITE AND BUILDING LAYOUT THEREUPON.
- E. TYPICAL DETAILS AND NOTES SHALL APPLY UNLESS SHOWN OTHERWISE ON THE PLANS.

**2. SPECIAL INSPECTION**

WHERE "SPECIAL INSPECTION" IS REQUIRED ON THE PLANS, A REGISTERED DEPUTY INSPECTOR APPROVED BY, AND RESPONSIBLE TO, THE OWNER AND THE BUILDING DEPARTMENT, SHALL BE EMPLOYED BY THE OWNER. SPECIAL INSPECTION IS REQUIRED FOR:

- A. PLACING OF ALL CONCRETE WITH AND  $f'_c$  IN EXCESS OF 2500 PSI.
- B. ALL FIELD WELDING, OR WELDING PERFORMED IN AN UNLICENSED FABRICATING SHOP.
- C. ALL CERTIFIED COMPACTED FILL.
- D. SUCH OTHER ITEMS AS MAY BE REQUIRED BY CHAPTER 17 OF THE C.B.C. OR BY THE LOCAL BUILDING DEPARTMENT.

**3. TEMPORARY BRACING**

THE CONTRACTOR SHALL PROVIDE SAFE AND ADEQUATE BRACES AND CONNECTIONS TO SUPPORT THE COMPONENT PARTS OF THE STRUCTURE UNTIL THE STRUCTURE ITSELF (INCLUDING THE FLOOR AND ROOF DIAPHRAGMS) IS COMPLETE ENOUGH TO ADEQUATELY SUPPORT ITSELF. CONCRETE OR MASONRY WALLS ARE NOTED IN PARTICULAR.

**4. SHOP (OR FABRICATION) DRAWINGS, DESIGNS**

- A. WE RECOMMEND THE SUBMITTER REVIEW ALL REQUIRED SHOP DRAWINGS AS TO THEIR LONG TERM CONFORMANCE TO THE DESIGN CONCEPT. CONTRACTOR SHALL BE RESPONSIBLE, NONETHELESS, FOR COMPLIANCE AND DIMENSIONS AND SHALL SUBMIT SHOP DRAWINGS, IF APPLICABLE, FOR THE FOLLOWING: (REBAR PLACING DRAWINGS NOT REQUIRED)

- 1. GLULAM BEAMS AND PANELIZED ROOF FRAMING.
- 2. STRUCTURAL STEEL AND TAPERED STEEL GIRDERS.
- 3. ERECTION BRACING AND SEQUENCE.
- 4. PRECAST CONCRETE ELEMENTS, INCLUDING PICKUP POINTS, STRONG BACKS AND BRACING, ALL CERTIFIED BY A REGISTERED CIVIL OR STRUCTURAL ENGINEER.
- 5. CONCRETE POURING SEQUENCE, SHORING DETAILS AND SPECIAL CONSTRUCTION TECHNIQUES (ARCHITECT OR CIVIL OR STRUCTURAL ENGINEER'S CERTIFICATION MAY BE REQUIRED).
- 6. SUCH OTHER ITEMS AS MAY BE REQUIRED ON PLANS.

CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND COMPLIANCE CERTIFICATES TO THE BUILDING DEPARTMENT WHEN REVIEWED.

- B. WHERE DESIGN AND DETAILS OF PLATE GIRDERS, TRUSSES, etc. ARE TO BE PROVIDED BY FABRICATOR, CONTRACTOR SHALL SUBMIT CALCULATIONS AND DRAWINGS PREPARED AND CERTIFIED BY AN ARCHITECT, OR A CIVIL OR STRUCTURAL ENGINEER TO THE SUBMITTER AND TO THE BUILDING DEPARTMENT FOR REVIEW PRIOR TO FABRICATION.

**5. OPTIONS AND SUBSTITUTIONS**

- A. OPTIONS, IF PROVIDED HEREIN, ARE BOTH FOR CONTRACTOR'S CONVENIENCE AND THE OWNER'S ADVANTAGE. "SUBSTITUTIONS," IF SUGGESTED BY THE CONTRACTOR, MUST BE APPROVED BY BOTH THE SUBMITTER AND THE OWNER (IF DIFFERENT) AND SHALL NOT DIMINISH THE DEGREE OF QUALITY INTENDED ON THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CHANGES NECESSARY, SHALL COORDINATE ALL DETAILS, AND SHALL OBTAIN ALL REQUIRED APPROVALS.

**6. PROTECTION BY CONTRACTOR**

- A. CONTRACTOR SHALL LOCATE ALL EXISTING UTILITIES WHETHER OR NOT SHOWN ON THE DRAWINGS AND PROTECT THEM FROM DAMAGE.
- B. HE SHALL COMPLY WITH ALL LAWS AND REGULATIONS REGARDING PROTECTION OF THE PUBLIC AND THE WORKMEN DURING CONSTRUCTION.
- C. HE SHALL BEAR ALL EXPENSE OF REPAIR OR REPLACEMENT RELATIVE TO THE PROSECUTION OF THIS WORK.

**FOUNDATION (C.B.C. CHAPTER 18):**

- 1. SEE FOUNDATION PLAN FOR COMPLETE DATA: DESIGN SOIL PRESSURE, FOUNDATION DEPTH etc. IF A SOIL REPORT EXISTS FOR A PROPERTY AND PROJECT, IT SHALL BE A PART OF THESE PLANS AND ALL OF ITS REQUIREMENTS AND RECOMMENDATIONS SHALL BE PERFORMED BY THE CONTRACTOR WHO SHALL OBTAIN A COPY OF SAID REPORT. IN ABSENCE OF SOIL REPORT AND INSPECTION BY SOIL ENGINEER, CONTRACTOR SHALL NOTIFY OWNER IF HE ENCOUNTERS ANY UNUSUAL SOIL CONDITIONS (SOFT OR UNSTABLE SOIL, WET SOIL, etc).

- 2. SLABS ON GRADE: PROVIDE CONSTRUCTION OR CRACK-CONTROL JOINTS SPACED NO FARTHER THAN 15' APART. SLAB AREAS PLACED SHALL NOT EXCEED 225 SQUARE FEET. FILL MATERIAL SHALL BE FREE OF VEGETATION AND FOREIGN MATERIAL. FILL SHALL BE COMPACTED TO ASSURE UNIFORM SUPPORT FOR THE SLAB. EXCEPT WHERE APPROVED, THE FILL DEPTHS SHALL NOT EXCEED 24" FOR CLEAN SAND OR GRAVEL AND 8" FOR EARTH. A BASE COURSE OF 4 INCHES, CONSISTING OF CLEAN GRADED SAND, GRAVE OR CRUSHED STONE PASSING A 2 INCH SIEVE SHALL BE PLACED ON THE PREPARED SUBGRADE WHEN THE SLAB IS BELOW GRADE, UNLESS THE EXISTING SOIL IS A WELL-DRAINER OR SAND-GRAVEL MIXTURE CLASSIFIED AS GROUP 1 ACCORDING TO THE UNITED SOIL CLASSIFICATION SYSTEM. A 6 MIL POLYETHYLENE OR OTHER APPROVED VAPOR RETARDER WITH JOINTS LAPPED NOT LESS THAN 6" SHALL BE PLACED BETWEEN THE CONCRETE FLOOR SLAB AND THE BASE COURSE OR PREPARED SUBGRADE. VAPOR RETARDER MAY BE OMITTED FOR DETACHED, UNHEATED ACCESSORY STRUCTURES, FROM EXTERIOR FLATWORK AND AS APPROVED BY THE BUILDING OFFICIAL.

**CONCRETE AND EMBEDDED ITEMS (C.B.C. CHAPTER 19):**

- 1. ALL CONCRETE SHALL BE MIXED, FORMED AND PLACED ACCORDING TO THE AMERICAN CONCRETE INSTITUTE (ACI) BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE, ACI 318-08.
- 2. CONCRETE SHALL HAVE A MINIMUM ULTIMATE COMPRESSIVE STRENGTH OF 2500 PSI AT 28 DAYS. USE 6 SACKS OF CEMENT (MINIMUM) PER YARD OF CONCRETE FOR WEATHER DURABILITY. EXCEPTIONS SHALL BE NOTED HEREIN OR ON PLANS.
- 3. CEMENT FOR CONCRETE SHALL BE A STANDARD BRAND "PORTLAND CEMENT," MEETING THE REQUIREMENTS OF ASTM C150, TYPE I OR II, LOW ALKALI.
- 4. AGGREGATES FOR CONCRETE SHALL MEET THE REQUIREMENTS OF ASTM C33.
- 5. CONCRETE SHALL BE MACHINE-MIXED USING A MAXIMUM OF 7 1/2 GALLONS OF WATER PER SACK OF CEMENT. READYMIX CONCRETE SHALL BE MIXED AND DELIVERED IN ACCORDANCE WITH ASTM C94.
- 6. CONTRACTOR MAY USE A WATER REDUCING ADMIXTURE CONFORMING TO ASTM C494, PROVIDED OWNER IS NOTIFIED IN WRITING IN ADVANCE AND APPROVES OF ITS USE.
- 7. ALL REINFORCING STEEL, ANCHOR BOLTS, DOWELS EMBEDDED PIPES AND CONDUIT SHALL BE SECURELY FASTENED IN THE FORMS BEFORE CONCRETE IS POURED. ADEQUATE CLEANOUTS SHALL BE PROVIDED IN THE BOTTOM OF THE CONCRETE FORMS FOR PROPER CLEANING AND INSPECTION.
- 8. SLABS POURED ON GRADE SHALL BE LEVEL (OR PLANAR) TO WITHIN 1/8" IN 8'-0" IN ANY DIRECTION EXCEPT AS NOTED OTHERWISE ON PLANS. WALLS SHALL BE SIMILARLY ACCURATE, AS SHALL OTHER SLABS SUPPORTED ON FORMS.
- 9. AT ALL OPENINGS IN CONCRETE PROVIDE TWO #4 BARS, UNLESS NOTED OTHERWISE, AT JAMBS, HEAD AND SILL, EXTENDING 2'-0" BEYOND EDGES OF OPENING.
- 10. MINIMUM EMBEDMENT OF ANCHOR BOLTS (A.B.) SHALL BE 7" IN HORIZONTAL CONCRETE SURFACES (FOOTINGS, etc) AND 4" INTO VERTICAL CONCRETE SURFACES (WALLS, etc). ALL BOLTS SHALL HAVE A 4 DIAMETER, 90° BEND AT EMBEDDED END. ANCHOR BOLTS SHALL BE SPACED 12 DIAMETERS, MINIMUM.
- 11. EXPANSION BOLTS, ITW RAMSET/RED HEAD, etc. MAY BE USED IN LIEU OF CAST-IN-PLACE BOLTS WHERE SPECIAL CONDITIONS WARRANT THEIR USE, IF APPROVED BY THE LOCAL BUILDING DEPARTMENT
- 12. FOOTING DOWELS SHALL MATCH VERTICAL WALL STEEL. LAP 36 DIAMETERS, MINIMUM.
- 13. CEMENT GROUT AND DRY-PACK GROUT SHALL CONSIST OF 1 PART CEMENT TO 2 1/2 PARTS FINE AGGREGATE BY VOLUME. ADD SUFFICIENT WATER TO MAKE THE MIXTURE FLOW UNDER ITS OWN WEIGHT. FOR USE AS DRY-PACK CONCRETE (HAND-PLACED BELOW METAL OR WOOD PLATES) ADD WATER TO MAKE A STIFF MIXTURE WHICH CAN BE MOLDED INTO A SPHERE. GROUT SHALL ATTAIN A MINIMUM ULTIMATE COMPRESSIVE STRENGTH OF 2500 PSI AT 28 DAYS.
- 14. RETAINING WALLS SHALL NOT BE BACKFILLED UNTIL 7 DAYS AFTER PLACEMENT OF CONCRETE.

**REINFORCING STEEL (C.B.C. CHAPTER 19):**

- 1. ALL REINFORCING STEEL SHALL MEET THE REQUIREMENTS OF, AND BE PLACED IN ACCORDANCE WITH, THE AMERICAN CONCRETE INSTITUTE (ACI) BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE, ACI 318-08.
- 2. REINFORCING STEEL SHALL BE INTERMEDIATE GRADE DEFORMED U.N.O. (EXCEPT #2 TIES OR STIRRUPS) BARS CONFORMING TO ASTM A615, GRADE 40 TYPICALLY. LAP BARS A MINIMUM OF 30 DIAMETERS. WHERE GRADE 60 (HARD GRADE) IS REQUIRED ON PLANS, LAP 36 DIAMETERS. STAGGER LAPS WHERE PERMISSIBLE.
- 3. ALL WELDED REBAR TO BE GRADE A706.
- 4. WIRE MESH SHALL CONFORM TO ASTM A185. LAP 8" MINIMUM.
- 5. LOW HYDROGEN, E70 SERIES, WELDING RODS SHALL BE USED FOR ALL WELDING OF REINFORCING BARS COMPLYING WITH AWS D1.4.
- 6. PROVIDE DOWELS IN FOOTINGS AND/OR GRADE BEAMS THE SAME SIZE AND NUMBER AS VERTICAL WALL REINFORCING. PROJECT DOWELS EQUAL TO STANDARD LAP SPICE AND WIRE TO VERTICAL STEEL.
- 7. #5 OR LARGER REBAR SHALL NOT BE RE-BENT WITHOUT APPROVAL.
- 8. MINIMUM CONCRETE COVER SHALL BE:
 

3"	CONCRETE POURED AGAINST EARTH, BOTTOM AND SIDES.
2"	FORMED CONCRETE WHICH WILL REMAIN IN CONTACT WITH EARTH, INCLUDING STEEL IN TOP SURFACES OF FOOTINGS AND WALL SURFACES IN CONTACT WITH EARTH.
1 1/2"	BEAMS, MEASURED TO MAIN STEEL; COLUMNS, MEASURED TO TIES OR SPIRALS; EXPOSED FACES OF WALLS ABOVE GRADE OR THEIR SURFACES NOT IN CONTACT WITH EARTH.
1"	TOP SURFACES OF SLABS DIRECTLY EXPOSED TO THE ELEMENTS.
3/4"	INTERIOR SLABS; INSIDE FACES OF WALLS.

**WOOD CONSTRUCTION (C.B.C. CHAPTER 23):**

- 1. STRUCTURAL LUMBER SHALL BE GRADE-MARKED DOUGLAS FIR-LARCH (DF-L) PER STANDARD GRADING RULES NO. 17, WCLIB, AND STANDARD GRADING RULES, WWPA.
 

JOISTS, BEAMS, PURLINS AND POSTS 4" AND WIDER	GRADE NO. 1
JOISTS AND SUB-PURLINS 2" WIDE, 2x6 OR DEEPER STUDS, TOP PLATES, SILL PLATES AT BEARING WALLS, AND LEDGERS OF ALL WIDTHS	NO. 2
2x4 AND 3x4 STUDS	STUD
BLOCKING, NON-BEARING SILL PLATES AND MISC.	NO. 3
- 2. COMMON NAILS SHALL BE USED. BOX NAILS, IF INCREASED IN NUMBER BY 33%, MAY ALSO BE USED.
- 3. SILLS OR PLATES BEARING ON CONCRETE OR MASONRY WHICH IS WITHIN 48" OF EARTH SHALL BE PRESSURE TREATED (P.T.). SILLS SHALL BE BOLTED TO THE FOUNDATION WITH 3/8" DIAMETER x 10" BOLTS AT 4'-0" O.C., 12" MIN, FROM ENDS, OR 2 BOLTS MIN PER PIECE, U.N.O.
- 4. FIREBLOCKING, 2" THICK, SHALL BE PLACED IN STUD WALLS AT CEILING AND FLOOR LEVELS, AT EACH 10' HEIGHT OF STUDS, AND BETWEEN STAIR STRINGERS AT SUPPORTS.
- 5. JOISTS AND RAFTERS SHALL BE BLOCKED AT SUPPORTS AND BRIDGED OR BLOCKED AT INTERVALS OF 8' WHERE JOISTS ARE 2x12'S OR DEEPER.
- 6. JOISTS UNDER BEARING PARTITIONS (ONE STORY ABOVE) SHALL BE DOUBLED; TRIPLED FOR TWO STORIES ABOVE.
- 7. PLYWOOD SHALL BE PER APA PS 1-07. PROVIDE A 1/2" SPACE BETWEEN ALL JOINTS.
- 8. LAGBOLTS (AND SCREWS) SHALL BE PRE-DRILLED 1/8" LESS THAN SHANK DIAMETER TO FULL DEPTH AND SCREWED (NOT DRIVEN) INTO PLACE.
- 9. CUT WASHERS SHALL BE PLACED UNDER HEADS AND NUTS OF ALL BOLTS AND UNDER HEADS OF LAGBOLTS. CUT WASHER SHALL BE USED FOR BOLTS CONNECTING WOOD LEDGERS TO CONCRETE OR MASONRY WALLS.

- 10. WHERE REQUIRED IN ALL CONDITIONS EXCEPT SILL PLATE ANCHOR BOLTS, MALLEABLE IRON (M.I.WA.) OR PLATE (PL.WA.) WASHERS SHALL BE SIZED AS FOLLOWS:

BOLT Ø	M.I.WA.	PL.WA.
1/2"	1/4" x 2 1/2" Ø	3/8" x 2" SQ
3/8"	3/16" x 2 3/4" Ø	1/2" x 2 1/2" "
1/2"	1/4" x 3" Ø	3/8" x 2 3/4" "
3/4"	3/8" x 3 1/2" Ø	1/2" x 3" "
1"	1/2" x 3 3/4" Ø	3/4" x 3 1/2" "

- 11. SEE NOTES BELOW SHEAR PANEL SCHEDULE FOR REQUIREMENTS FOR WASHERS AT SILL PLATE ANCHOR BOLTS.
- 12. ALL STRUCTURAL PLYWOOD NAILING (ROOF, FLOOR AND WALLS) SHALL BE INSPECTED BY THE BUILDING INSPECTOR PRIOR TO COVERING.
- 13. STUDS IN BEARING WALLS SHALL NOT BE NOTCHED UNLESS SPECIFICALLY DETAILED BY IN THESE PLANS, OR BY A LICENSED ARCHITECT OR PROFESSIONAL ENGINEER.
- 14. FRAMING HARDWARE SHALL BE SIMPSON STRONG-TIE®. REFER TO SIMPSON CATALOG C-2013 FOR INSTALLATION INFORMATION. USE EXACT TYPE, SIZE AND NUMBER OF FASTENERS SPECIFIED IN CATALOG.
- 15. REFER TO THE FOLLOWING ICC REPORTS FOR SIMPSON CONNECTORS
 

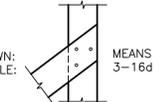
ER4935-	SSTB, HCA, MSTC
ER4945-	EPOXY TIE ANCHORING SYSTEMS WITH ET, ETF, AND ETR ANCHORING ADHESIVES
ER5090-	ANCHOR TIEDOWN SYSTEMS
ER5952-	CBQO-SDS2 AND CBQO-SDS2 COLUMN BASE CONNECTORS AND ECCO/COQ-SDS2 COLUMN CAP CONNECTORS
NER393-	ETA/TSS, MAB, HIT, JB/LB, PF, LU, LUP, LTT/LTTI, HA/H2/H2.5/H3/H4/H5, AB, EPB, LCB/CB, PA/PAI/PAT/PATM/PAR/PARP, MPAL, HPA, HPA28/35
NER432-	ABE, CBA, EPB44T, H2.5, H10-2, H15, H15-2, HGT-2, HGT-3, HGT-4, LSSU, LTHMA, LTHJ, LTP4, LTT131, MSC, RSP4, SP, SS, THG2A, TWB
ESR-1056-	TITEN HD
ESR-1267-	STRONG-WALL SHEAR PANELS
ESR-1396-	WEDGE-ALL ANCHORS
ESR-1472-	QUICK DRIVE WSNTL WOOD SCREWS
ESR-1679-	STEEL STRONG-WALL SHEAR PANELS
ESR-1771-	STRONG-BOLT WEDGE ANCHOR
ESR-1772-	SET EPOXY
ESR-1886-	LBV, B, HB, AND BA SERIES JOIST HANGERS
ESR-2105-	TIE STRAPS
ESR-2138-	POWDER-ACTUATED FASTENERS
ESR-2236-	STRONG-DRIVE SDS SERIES WOOD SCREWS
ESR-2320-	COUPLING TAKE-UP DEVICE (CTUD) AND TAKE-UP DEVICE (TUD AND ATUD)
ESR-2508-	HOLD-DOWN CONNECTORS
ESR-2523-	SET-XP EPOXY ADHESIVE ANCHORS FOR CRACKED AND UNCRACKED CONCRETE
ESR-2549-	FACE-MOUNT HANGERS FOR WOOD FRAMING
ESR-2551-	ADJUSTABLE HANGERS AND HIP CONNECTORS FOR WOOD FRAMING
ESR-2552-	FACE-MOUNT HANGERS SUPPORTING STRUCTURAL COMPOSITE LUMBER (SCL) AND PREFABRICATED WOOD I-JOISTS (ENGINEERED WOOD PRODUCTS).
ESR-2553-	TOP-FLANGE HANGERS FOR SAWN LUMBER.
ESR-2554-	MULTIPLE TRUSS HANGERS.
ESR-2555-	MASA/MASAP CAST-IN-PLACE FOUNDATION ANCHOR STRAPS.
ESR-2604-	COLUMN CAPS FOR WOOD CONSTRUCTION.
ESR-2605-	CONNECTORS FOR METAL PLATE CONNECTED WOOD TRUSS CONSTRUCTION.
ESR-2606-	STRUCTURAL ANGLES, CLIPS, AND PLATES FOR WOOD FRAMING.
ESR-2607-	CONNECTORS FOR PANELIZED ROOF CONSTRUCTION.
ESR-2608-	STUD SHOES, PLATE TIES, WALL BRACING, AND JOIST BRIDGING FOR WOOD CONSTRUCTION.
ESR-2611-	STUD SHOES, PLATE TIES, WALL BRACING, AND JOIST BRIDGING FOR WOOD CONSTRUCTION.
ESR-2613-	SSTB SERIES AND SB SERIES CAST-IN-PLACE ANCHOR BOLTS.
ESR-2614-	MISCELLANEOUS CONNECTORS.
ESR-2615-	TOP-FLANGE HANGERS FOR ENGINEERED WOOD PRODUCTS (EWP).
ESR-2616-	CONNECTORS FOR WOOD MEMBERS SUPPORTED BY CONCRETE OR MASONRY CONSTRUCTION.
ESR-2713-	TITEN HD SCREW ANCHOR AND TITEN HD ROD HANGER FOR CRACKED AND UNCRACKED CONCRETE.
ESR-2811-	QDB AND GDPS GAS-ACTUATED FASTENERS.
ESR-2877-	WOOD FRAMING CONNECTORS FOR MASONRY CONSTRUCTION.
ESR-2920-	CAST-IN-PLACE STRAP STYLE HOLDDOWNS (STHD'S)
ESR-2992-	PUNCHING SHEAR RESISTOR RAILS (PSRR)
ESR-3006-	QUIK DRIVE X SERIES SELF-DRILLING TAPPING SCREWS.
ESR-3037-	STRONG-BOLT 2 WEDGE ANCHORS.
ESR-3046-	STRONG-DRIVE SD SCREWS FOR STRUCTURAL CONNECTORS.
ESR-3096-	CONNECTORS USING SD-SERIES SCREWS.

**NAILING SCHEDULE, MINIMUM (TABLE 2304.9.1, 2010 C.B.C.):**

- 1. JOIST TO SILL OR GIRDER, TOENAIL 3-8d
- 2. BRIDGING TO JOIST, TOENAIL EACH END 2-8d
- 3. 1"x6" SUBFLOOR OR LESS TO EACH JOIST, FACE NAIL 2-8d
- 4. WIDER THAN 1"x6" SUBFLOOR TO EACH JOIST, FACE NAIL 3-8d
- 5. 2" SUBFLOOR TO JOIST OR GIRDER, BLIND AND FACE NAIL 2-16d
- 6. SOLE PLATE TO JOIST OR GIRDER, TYPICAL FACE NAIL 16d AT 16" O.C.
- 7. TOP PLATE TO JOIST OR BLOCKING, AT BRACED WALL PANELS 3-16d PER 16"
- 8. STUD TO SOLE PLATE 2-16d
- 9. DOUBLED STUDS, FACE NAIL 4-8d, TOENAIL OR 2-16d, END NAIL
- 10. DOUBLED TOP PLATES, FACE NAIL 16d AT 16" O.C.
- 11. DOUBLED TOP PLATES, LAP SPICE 8-16d
- 12. BLOCKING BETWEEN JOISTS OR RAFTERS TO TOP PLATE, TOENAIL 3-8d
- 13. RIM JOIST TO TOP PLATE, TOENAIL 8d AT 6" O.C.
- 14. TOP PLATES, LAPS AND INTERSECTIONS, FACE NAIL 2-16d
- 15. CONTINUOUS HEADER, TWO PIECES 16d AT 16" O.C. ALONG EACH EDGE 3-8d
- 16. CEILING JOISTS TO PLATE, TOENAIL 4-8d
- 17. CONTINUOUS HEADER TO STUD, TOENAIL 3-16d
- 18. CEILING JOISTS, LAPS OVER PARTITIONS, FACE NAIL 3-16d
- 19. RAFTER TO PLATE, TOENAIL 3-8d
- 20. 1" BRACE TO EACH STUD AND PLATE, FACE NAIL 2-8d
- 21. 1"x6" SHEATHING OR LESS TO EACH BEARING, FACE NAIL 2-8d
- 22. WIDER THAN 1"x6" SHEATHING TO EACH BEARING, FACE NAIL 3-8d
- 23. BUILT-UP CORNER STUDS 16d AT 24" O.C.
- 24. BUILT-UP GIRDER AND BEAMS 20d AT 32" O.C. AT TOP & BOTTOM AND STAGGERED 2-20d AT ENDS AND AT EACH SPLICE 2-16d AT EACH BEARING
- 25. 2" PLANKS 3-8d

**SUPPLEMENTAL NAILING NOTES:**

- 1. ALL NAILS TO BE COMMON WIRE NAILS. WHERE BOX NAILS ARE USED, THERE NUMBER MUST BE INCREASED BY 33%.
- 2. WHERE 2" MEMBER IS DETAILED USE THE NUMBER OF 16d SHOWN: FOR EXAMPLE:



**ABBREVIATIONS:**

A.B.	ANCHOR BOLT
ALT	ALTERNATE(ING)
ARCHL	ARCHITECTURAL
B. BOT	BOTTOM
B.C.	BOTTOM CHORD
B.N.	BOUNDARY NAILING
BLK	BLOCK
BLKD	BLOCKED
BLKG	BLOCKING
BN	BEAM
BRNG	BEARING
C.B.C.	CALIFORNIA BUILDING CODE
CLR	CLEAR
COL	COLUMN
CONC	CONCRETE
CONT	CONTINUOUS
CONST	CONSTRUCTION
CSK	COUNTERSUNK
DBL	DOUBLE
DET	DETAIL
DIAM. Ø	DIAMETER
DIM	DIMENSION
DKG	DECKING
do	DITTO
DF-L	DOUGLAS FIR-LARCH
DWG	DRAWING
EA	EACH
E.F.	EACH FACE
E.N.	EDGE NAILING
E.S.	EACH SIDE
E.W.	EACH WAY
EMBED	EMBEDMENT
ETC	ET CETERA
EQ	EQUAL
EXT	EXISTING
EXT	EXTERIOR
FLG	FLANGE
F.F.	FINISH FLOOR
F.G.	FINISH GRADE
F.J.	FLOOR JOIST
FLR	FLOOR
FT	FOOT
G.I.	GALVANIZED IRON
GA	GAUGE
GLB	GLUE-LAMINATED BEAM
GLULAM	GLUE-LAMINATED
GRD	GRADE
HDR	HEADER
HGR	HANGER
HT	HEIGHT
H. HOR	HORIZONTAL
I.D.	INSIDE DIAMETER
INT	INTERIOR
JOIST	JOIST
K.S.	KING STUD
L	ANGLE SHAPE
LAG	LAGBOLT
LAM	LAMINATED
LDGR	LEDGER
LOG	LOGS
M.B.	MACHINE BOLT
MAX	MAXIMUM
MIN	MINIMUM
MISC	MISCELLANEOUS
N.T.S.	NOT TO SCALE
O.V.	ON CENTER
O.C.	ON CENTER
O.D.	OUTSIDE DIAMETER
OK	OKAY
OPT	OPTIONAL
PARTN	PARTITION
PLAS	PLASTER
P.C.	PIPE COLUMN OR PORTLAND CEMENT
PEN	PENETRATION
PL	PLATE
PLY	PLYWOOD
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
P.T.	PRESSURE TREATED
R. RAD	RADIUS
REQD	REQUIRED
RFRTR	RAFTER
REINF	REINFORCE(ING)
RET	RETAINING
S.E.	SPACED EQUALLY
S.E.E.W.	SPACED EQUALLY EACH WAY
S.S.	SELECT STRUCTURAL
SHT	SHEET
SIM	SIMILAR
SPECS	SPECIFICATIONS
SQ	SQUARE
STAGRD	STAGGERED
STD	STANDARD
STL	STEEL
STR	STRUCTURAL
SYM	SYMMETRICAL
T	TOP
T.B.	TOP OF BEAM
T.C.	TOP CHORD
THK	THICK
T & B	TOP AND BOTTOM
T & G	TONGUE AND GROOVED
TSP	STRUCTURAL TUBE
TYP	TYPICAL
U.N.O.	UNLESS NOTED OTHERWISE
V. VERT	VERTICAL
W	WIDE FLANGE SHAPE
W/O	WITH
W/O	WITHOUT
WD	WOOD

REVISIONS	BY

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DATE
SCALE 3/4"=1'-0"
DRAWN
JOB
SHEET
<b>S4</b>
OF 4 SHEETS