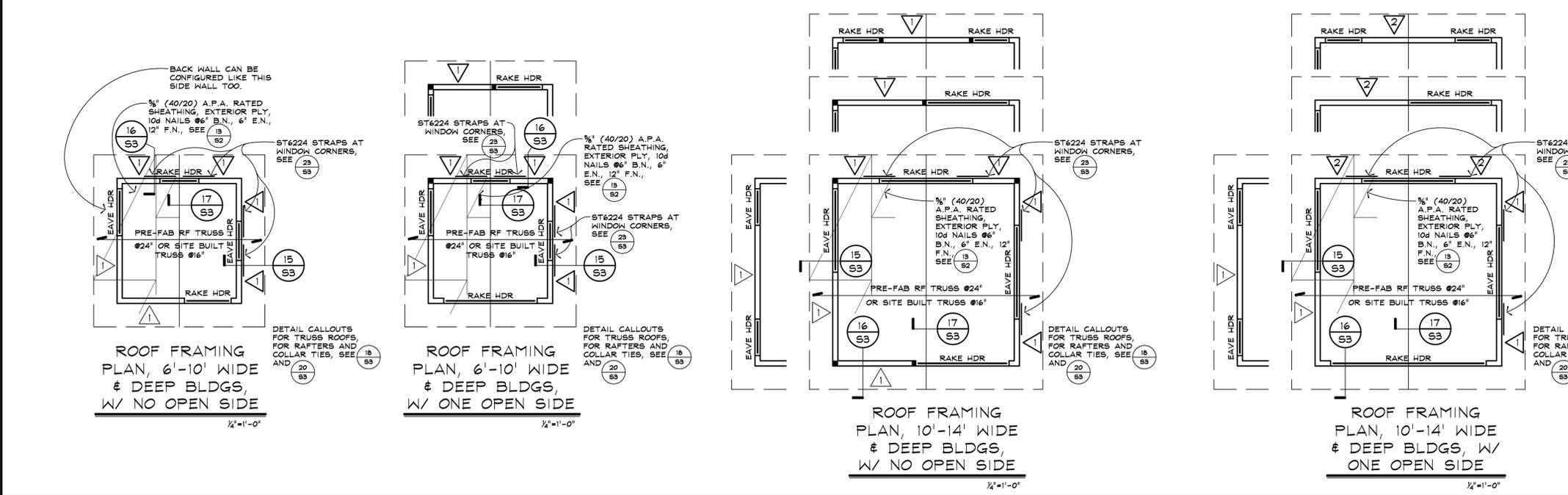
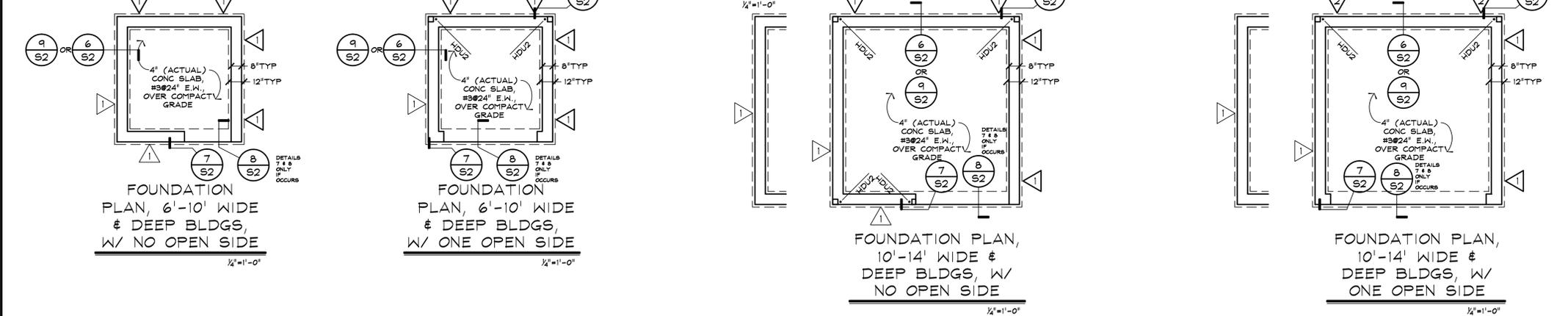
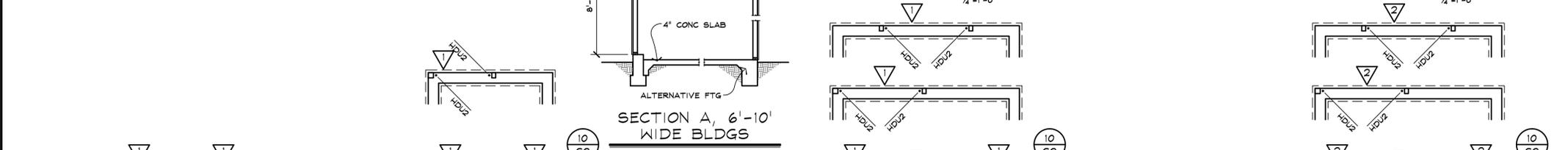
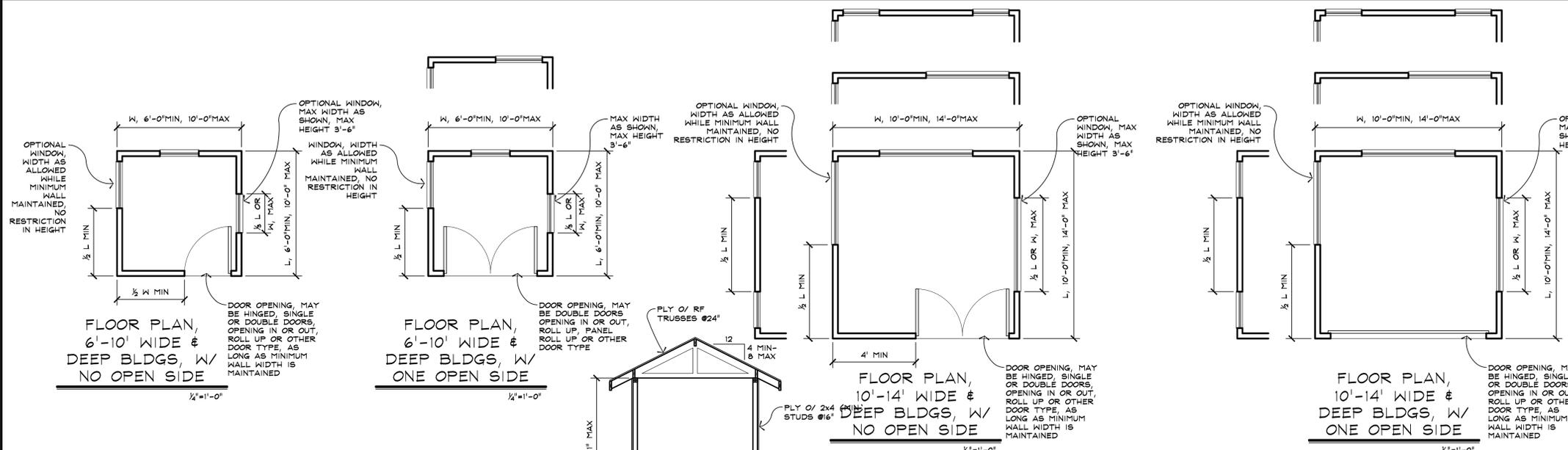


MONO COUNTY PROVIDES THESE PLANS TO THE PUBLIC AS A COURTESY AND WITHOUT ANY WARRANTIES, EXPRESS OR IMPLIED, REGARDING THEIR FITNESS FOR ANY PARTICULAR APPLICATION. AMONG OTHER THINGS, MONO COUNTY DOES NOT REPRESENT OR WARRANT THAT THE DESIGNS WITHIN SAID PLANS ARE FREE FROM FLAWS OR DEFECTS. ANYONE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

REVISIONS	BY



HEADER SPANS, EAVE WALLS, 6'-10' WIDE OUTBUILDINGS, 81 PSF SNOWLOAD			HEADER SPANS, EAVE WALLS, 10'-14' WIDE OUTBUILDINGS, 81 PSF SNOWLOAD			HEADER SPANS, RAKE WALLS, 6'-14' WIDE OUTBUILDINGS, 81 PSF SNOWLOAD		
HEADER SIZE	MAXIMUM ROUGH OPENING WIDTH	# OF TRIMMERS E.S.	HEADER SIZE	MAXIMUM ROUGH OPENING WIDTH	# OF TRIMMERS E.S.	HEADER SIZE	MAXIMUM ROUGH OPENING WIDTH	# OF TRIMMERS E.S.
4x6	4'-0"	1-2x4	4x6	3'-0"	1-2x4	4x6	4'-0"	1-2x4
4x8	5'-6"	1-2x4	4x8	4'-6"	1-2x4	4x8	5'-0"	1-2x4
4x10	6'-6"	1-2x4	4x10	5'-6"	1-2x4	4x10	10'-0"	1-2x4
4x12	8'-0"	1-2x4	4x12	7'-0"	1-2x4	4x12	11'-6"	1-2x4
6x6	5'-6"	1-2x6	6x6	9'-6"	2-2x4	3x6x9/16 PARALLAM	13'-0"	1-2x4
6x8	8'-0"	1-2x6	6x8	12'-0"	2-2x4	6x8	8'-6"	1-2x6
6x10	9'-0"	1-2x6	6x10	11'-0"	1-2x6	6x10	12'-0"	1-2x6
			6x12	13'-0"	2-2x6	6x10	13'-0"	1-2x6

**NOTES TO SUBMITTER**

THESE PRESCRIPTIVE DESIGNS ARE INTENDED TO APPLY TO THE MOST COMMON SITUATIONS ENCOUNTERED IN MONO COUNTY. HOWEVER, UNIQUE SITE CONDITIONS OR SUBSTANTIAL DEVIATIONS FROM THESE DESIGNS AS DETERMINED BY THE BUILDING OFFICIAL MAY WARRANT ADDITIONAL ARCHITECTURAL OR STRUCTURAL DESIGN REQUIREMENTS.

THESE PLANS ARE PRIMARILY FOR THE STRUCTURAL REQUIREMENTS OF OUTBUILDINGS. THE SUBMITTER IS RESPONSIBLE FOR PREPARING AN ARCHITECTURAL PLAN, SHOWING THE ACTUAL LAYOUT OF THE OUTBUILDING. THE PLAN SHALL ALSO SHOW A STRUCTURAL LAYOUT BASED UPON THE REQUIREMENTS OF THESE PLANS. NOTE THAT THE CALIFORNIA RESIDENTIAL CODE REFERS TO ACCESSORY STRUCTURES, AND GENERALLY, THESE OUTBUILDINGS WILL BE ACCESSORY STRUCTURES, SUBJECT TO ANY REQUIREMENTS AND EXCEPTIONS DESIGNATED FOR ACCESSORY STRUCTURES.

LASTLY THE SUBMITTER IS RESPONSIBLE FOR ALL SITE SPECIFIC REQUIREMENTS, INCLUDING FLOOD PLAIN ZONES, CAL-FIRE WILDLAND URBAN INTERFACE REQUIREMENTS, LAHONTAN EROSION CONTROL REQUIREMENTS AND ANY SIMILAR REQUIREMENTS.

WHILE SUBMITTER IS RESPONSIBLE FOR ARCHITECTURAL REQUIREMENTS, A FEW KEY REQUIREMENTS ARE HIGHLIGHTED IN SHEET S3. THESE NOTES ARE NOT EXHAUSTIVE, AND THE SUBMITTER IS STILL RESPONSIBLE FOR ANY ARCHITECTURAL ISSUES NOT ADDRESSED ON THESE PLANS.

**NOTES ABOUT THESE PLANS**

LAYOUTS ARE SHOWN TO ILLUSTRATE POTENTIAL SITUATIONS. PRIMARILY OPENINGS NEAR THE CENTER OF WALLS, OPENINGS NEAR THE EDGES OF 1 WALL OR OPENINGS NEAR EDGES OF 2 WALLS. ALL OF THESE OPENINGS ARE OPTIONAL, AND AN OUTBUILDING CAN HAVE AS LITTLE AS ONE DOOR FOR AN OPENING.

OPENINGS CENTERED IN WALLS, SHOWN WITH ST6224 STRAPS AT THE CORNERS CAN ONLY BE WINDOWS. OPENINGS NEAR EDGES OF WALLS CAN BE WINDOWS OR DOORS. WITHIN A SPACE DESIGNATED FOR WINDOWS, THE OPENING CAN CONSIST OF ONE, OR MULTIPLE OPENINGS.

FOR PURPOSES OF THESE PLANS, THE WALL WITH THE MAIN DOOR SHALL BE CONSIDERED THE FRONT. THE WALL OPPOSITE THE MAIN DOOR SHALL BE CONSIDERED THE BACK, AND THE OTHER TWO WALLS SHALL BE CONSIDERED THE SIDE WALLS.

PLANS ASSUME GABLE ROOFS. EAVE WALL LINES ARE THE WALLS THAT ARE BELOW THE BOTTOM OF THE ROOF OF THE ROOF (THE EAVE). RAKE WALLS ARE WALLS THAT ARE AT THE ENDS OF THE GABLES, (ALSO SOMETIMES REFERRED TO AS GABLE END WALLS). ALTERNATIVELY, A TRUSS HIP ROOF CAN BE USED (DESIGNED BY A TRUSS MANUFACTURER). IN THIS CASE CONSIDER ALL WALLS EAVE WALLS.

PRE-MANUFACTURED TRUSSES ARE RECOMMENDED, AND SHOULD USE DETAILS 15/S2, 16/S2, AND 17/S2. HOWEVER, RAFTERS AND COLLAR TIES ARE ALLOWED, AND USE DETAILS 18/S2 AND 20/S2. NOTE THAT RAKE WALLS ARE TO BE BALLOON FRAMED TO BOTTOM OF RAFTERS.

THE RAKE WALLS ARE SHOWN AS THE FRONT AND BACK WALLS. HOWEVER THE ROOF CAN BE TURNED 90 DEGREES, WITH THE RAKE WALLS AS THE SIDE WALLS. BE SURE AND USE EAVE HEADERS AT THE FRONT IN BACK IN THIS CASE. SIDE WALLS MUST MEET THE REQUIREMENTS FOR SHEAR AND HOLD-DOWNS OF THE BACK WALL (AND THE BACK WALL CAN INSTEAD BE A SIDE WALL) FOR BUILDINGS WITH NO OPEN SIDES. FOR BUILDINGS WITH ONE OPEN SIDE, ALL THREE WALLS ARE TO BE TREATED AS BACK WALLS IN REGARDS TO SHEAR PANELING AND HOLD-DOWNS.

BUILDINGS WITH ONE OPEN SIDE ARE BUILDINGS WHERE ONE SIDE IS DOMINATED BY A DOOR, A SERIES OF DOORS, OR A COMBINATION OF DOORS AND WINDOWS. NOTE THAT THESE BUILDINGS HAVE SPECIAL ADDITIONAL REQUIREMENTS (AS SHOWN ON THE PLAN) FOR THE BACK WALLS.

THESE ARE INTENDED AS NON-HABITABLE OUTBUILDINGS. SHOULD ANY BUILDING BE IN THE FUTURE UPGRADED TO HABITABLE SPACE, THIS WILL REQUIRE A NEW BUILDING PERMIT FROM MONO COUNTY FOR THAT UPGRADE. NOTE THAT BUILDINGS WITH ONE OPEN SIDE CANNOT BE UPGRADED TO HABITABLE SPACE WITHOUT STRUCTURAL UPGRADES BEING MADE AT THE TIME OF THE USE CHANGE.

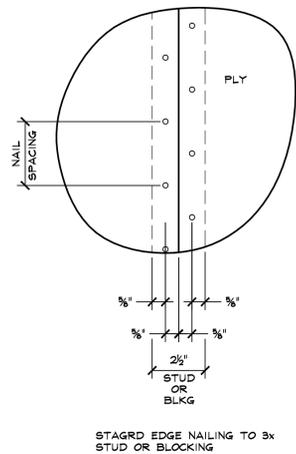
STANDARD STRUCTURAL REQUIREMENTS  
 SMALL OUTBUILDINGS WITH 81 PSF SNOW LOAD  
 MONO COUNTY, CALIFORNIA

COUNTY OF MONO  
 COMMUNITY DEVELOPMENT DEPARTMENT  
 BUILDING DIVISION  
 P.O. BOX 5669  
 MANKROT, CALIFORNIA 93546  
 (760) 924-1800; FAX: 924-1801

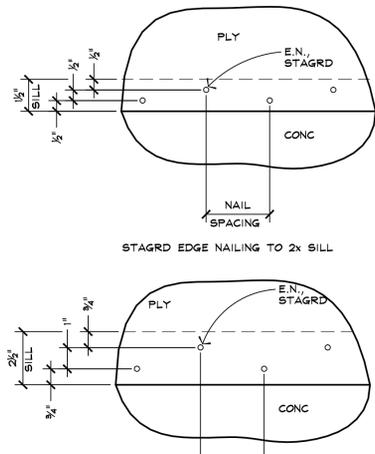


DATE  
 SCALE 3/4"=1'-0"  
 DRAWN  
 JOB  
 SHEET  
 51  
 OF 4 SHEETS

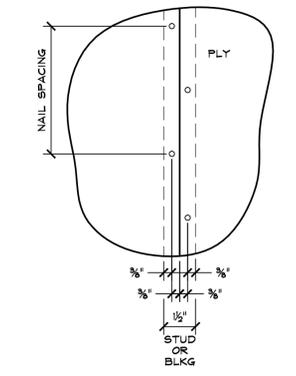




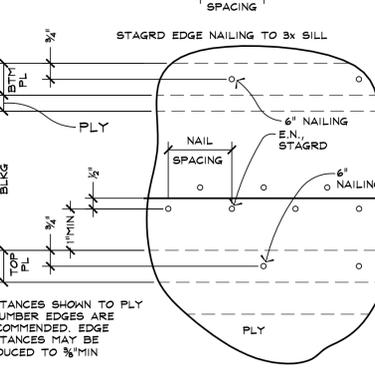
STAGRD EDGE NAILING TO 2x STUD OR BLOCKING



STAGRD EDGE NAILING TO 2x SILL



STAGRD EDGE NAILING TO 3x STUD OR BLOCKING

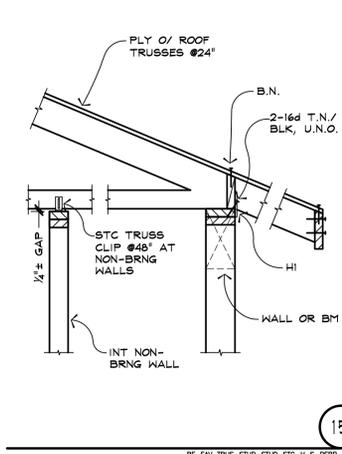


STAGRD EDGE NAILING TO 3x SILL

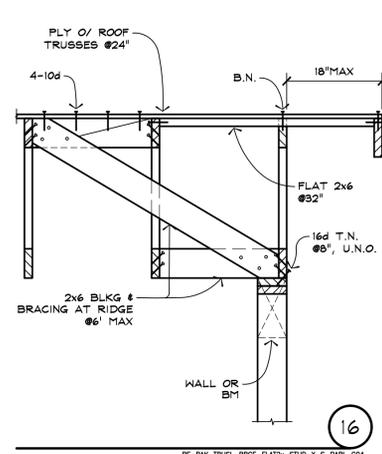
DISTANCES SHOWN TO PLY & LUMBER EDGES ARE RECOMMENDED. EDGE DISTANCES MAY BE REDUCED TO 3/8" MIN

STAGRD EDGE NAILING TO 2x STUD OR 2x BLOCKING

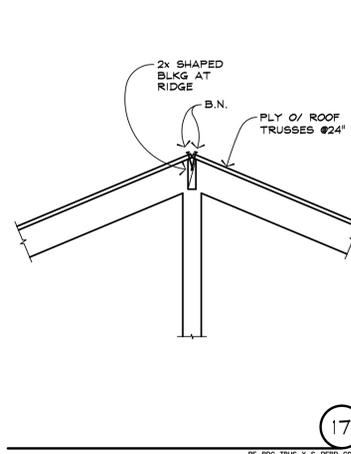
STAGRD EDGE NAILING TO RAFTER, JOIST OR BLOCKING



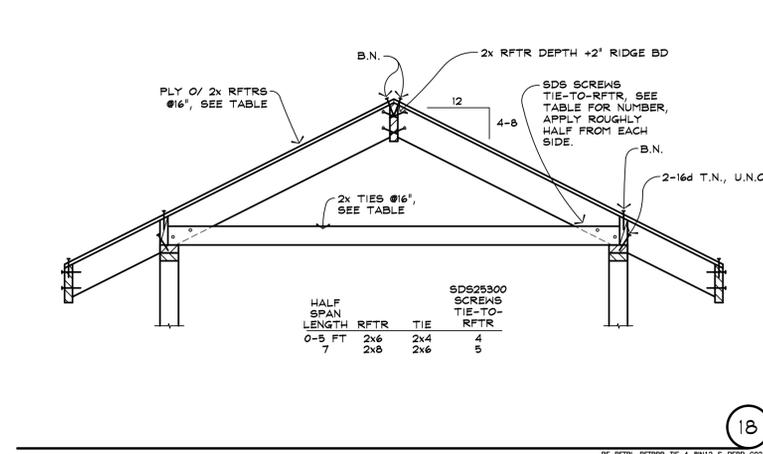
15



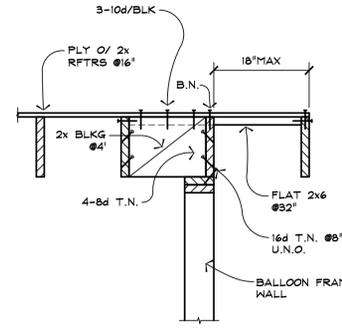
16



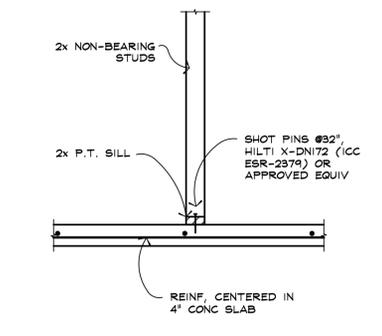
17



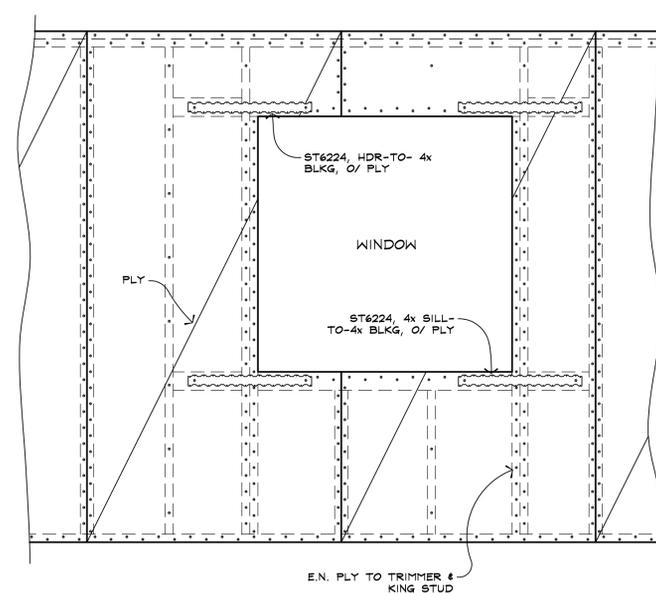
18



19

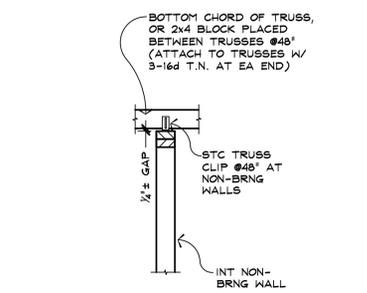


20

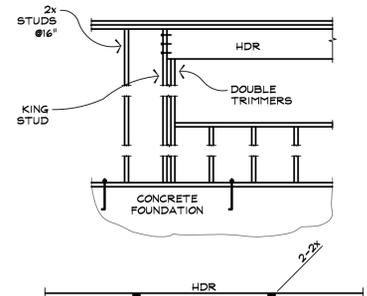


SPECIAL FRAMING AT WINDOWS IN DESIGNATED SHEAR WALLS

21

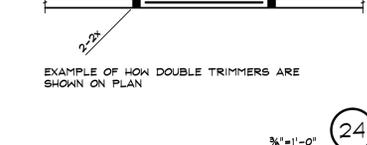


22



EXAMPLE OF HOW DOUBLE TRIMMERS ARE SHOWN ON PLAN

23



24

**ADDITIONAL ARCHITECTURAL AND SITE SPECIFIC REQUIREMENTS**

IF A PROPOSED OUTBUILDING IS WITHIN 5' OF A PROPERTY LINE, ADDITIONAL FIRE PROTECTION REQUIREMENTS WILL NEED TO BE ADDRESSED. THESE REQUIREMENTS ARE BEYOND THE SCOPE OF THESE PLANS AND NEED TO BE ADDRESSED BY THE SUBMITTER.

THERE IS A HIGH LIKELIHOOD THAT THESE STRUCTURES WILL NEED TO COMPLY WITH CALIFORNIA WILDLAND URBAN INTERFACE REQUIREMENTS AND OTHER REQUIREMENTS FOR FIRE RESISTIVE CONSTRUCTION. THESE REQUIREMENTS ARE DEFINED IN C.B.C. CHAPTER 7A AND C.R.C. SECTION R327. THERE ARE POSSIBLE EXCEPTIONS FOR OUTBUILDINGS THAT MAY APPLY. THE SUBMITTER IS ULTIMATELY RESPONSIBLE FOR SELECTING MATERIALS AND METHODS THAT MEET THESE REQUIREMENTS, OR SHOWING THAT THIS STRUCTURE IS EXEMPT UNDER ONE OF THE LISTED EXCEPTIONS.

IF THE OUTBUILDING IS TO HAVE A CEILING UNDER THE TRUSS OR COLLAR TIES, FORMING AN ATTIC, THE FOLLOWING ATTIC REQUIREMENTS SHALL BE MET. THE ATTIC MUST HAVE A NET VENTILATION OF 1 SQUARE FOOT PER 150 SQUARE FOOT OF AREA. IF THE ATTIC AREA EXCEEDS 30 SQUARE FEET AND HAVE A CLEAR HEIGHT OF OVER 30' AN OPENING OF 20'X30' SHALL BE PROVIDED. 30' MINIMUM CLEAR HEADROOM SHALL BE PROVIDED AT OR ABOVE THE ACCESS OPENING.

ACCESSORY STRUCTURES PLACED ADJACENT TO DESCENDING SLOPES STEEPER THAN 1:3 SHALL BE SET BACK FROM THE SLOPE A DISTANCE EQUAL TO THE HEIGHT OF THE SLOPE DIVIDED BY 3, BUT NOT TO EXCEED 40'. IF THESE REQUIREMENTS CANNOT BE MET, AN ENGINEERED SOLUTION MAY NEED TO BE PROVIDED.

ACCESSORY STRUCTURES PLACED ADJACENT TO ASCENDING SLOPES STEEPER THAN 1:3 SHALL BE SET BACK FROM THE SLOPE A DISTANCE EQUAL TO THE HEIGHT OF THE SLOPE DIVIDED BY 2, BUT NEED NOT EXCEED 15'. IF THESE REQUIREMENTS CANNOT BE MET, AN ENGINEERED SOLUTION MAY NEED TO BE PROVIDED.

ACCESSORY STRUCTURES WITH ELECTRICAL SERVICE IS BEYOND THE SCOPE OF THESE PLANS. WHERE ELECTRICAL SERVICE IS REQUESTED, PLANS FOR OUTLET AND LIGHTING LOCATIONS, WIRE, CONDUIT SIZES, ETC SHALL BE SUBMITTED WITH THE PERMIT APPLICATION. THE ELECTRICAL PLANS SHALL INDICATE SIZE OF THE ELECTRICAL SERVICE PANEL AND THE MAIN SOURCE OF THE POWER.

**REQUIRED UPGRADES TO HAZARD DETECTORS**

IN EXISTING RESIDENCES WHERE THE COST OF ALTERATIONS, REPAIRS OR ADDITIONS (INCLUDING OUTBUILDINGS/ACCESSORY STRUCTURES) EXCEEDS \$1,000 SMOKE DETECTORS MUST BE BROUGHT UP TO CODE AND CARBON MONOXIDE DETECTORS MUST BE INSTALLED.

INSTALL SMOKE DETECTORS AS REQUIRED BY SECTION 314 OF THE 2010 C.R.C. BATTERY OPERATED NON-INTERCONNECTED, SMOKE DETECTORS ARE PERMITTED IN PORTIONS OF THE RESIDENCE WHERE WALLS ARE NOT BEING FRAMED OR REFRAMED (AS SHOULD BE THE CASE FOR A DECK ADDITION). SMOKE DETECTORS MUST BE PROVIDED FOR THE ENTIRE RESIDENCE, AT CENTRAL LOCATIONS OUTSIDE SLEEPING AREAS AND ONE PER SLEEPING ROOM. THERE MUST ALSO BE AT LEAST ONE SMOKE DETECTOR ON EVERY LEVEL, REGARDLESS OF WHETHER THERE ARE SLEEPING ROOMS ON THAT LEVEL. EXISTING SMOKE DETECTORS MUST MEET THE STANDARDS SPELLED OUT IN THE C.R.C. OR MUST BE UPGRADED.

INSTALL CARBON MONOXIDE DETECTORS AS REQUIRED BY SECTION R315 OF THE 2010 C.R.C. (REQUIRED IF THE RESIDENCE HAS ANY FUEL BURNING APPLIANCES OR AN ATTACHED GARAGE). BATTERY OPERATED NON-INTERCONNECTED, CARBON MONOXIDE DETECTORS ARE PERMITTED IN PORTIONS OF THE RESIDENCE WHERE WALLS ARE NOT BEING FRAMED OR REFRAMED (AS SHOULD BE THE CASE FOR A DECK ADDITION). ONE CARBON MONOXIDE DETECTOR IS REQUIRED PER UNIT AT A CENTRAL LOCATION NEAR SLEEPING ROOMS, AND ONE IS REQUIRED ON EVERY LEVEL, REGARDLESS WHETHER THERE ARE SLEEPING ROOMS ON THAT LEVEL.

REVISIONS	BY

**STANDARD STRUCTURAL REQUIREMENTS  
SMALL OUTBUILDINGS WITH 81 PSF SNOW LOADS  
MONO COUNTY, CALIFORNIA**

**COUNTY OF MONO  
COMMUNITY DEVELOPMENT DEPARTMENT  
BUILDING DIVISION**  
P.O. BOX 3669  
MAMMOTH LAKE, CALIF. 93546  
(760) 924-1800, FAX: 924-1801



comdev@mono.ca.gov  
www.monocounty.ca.gov

DATE	
SCALE	3/4"=1'-0"
DRAWN	
JOB	
SHEET	

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, IS ANY, SHALL BE MADE ONLY BY THE SUBMITTER OR HIS REPRESENTATIVE.
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:

Table listing various organizations and their abbreviations: ACI AMERICAN CONCRETE INSTITUTE, AFPA AMERICAN FOREST AND PAPER ASSOCIATION, AISC AMERICAN INSTITUTE OF STEEL CONSTRUCTION, etc.

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 1/2 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-DRAINED 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 SPLICE 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, WMPA.
JOISTS, BEAMS, PURLINS AND POSTS 4" AND WIDER GRADE NO. 1
JOISTS AND SUB-PURLINS 2" WIDE, 2x6 OR DEEPER 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 1/8" 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 PLATE.
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:

Table showing Bolt sizes and corresponding washer sizes: BOLT #, M.I.WA., PL.WA.

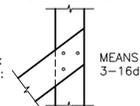
- 11. SEE NOTES BELOW SHEAR PANEL SCHEDULE FOR REQUIREMENTS FOR WASHERS AT SILL PLATE ANCHOR BOLTS.
12. ALL STRUCTURAL PLYWOOD NAILING (ROOF, FLOOR AND WALLS) SHALL BE INSPECTED BY THE BUILDING INSPECTOR PRIOR TO COVERING.
13. STUDS IN BEARING WALLS SHALL NOT BE NOTCHED UNLESS SPECIFICALLY DETAILED BY 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
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 - GDB 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.):

Table detailing nailing requirements for various wood members: JOIST TO SILL OR GIRDER, TOENAIL, BRIDGING TO JOIST, TOENAIL EACH END, etc.

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:

Table listing abbreviations and their corresponding full names: A.B. ANCHOR BOLT, ALT ALTERNATE(ING), ARCHL ARCHITECTURAL, etc.

Small table with columns REVISIONS and BY.

STANDARD STRUCTURAL REQUIREMENTS SMALL OUTBUILDINGS WITH 81 PSF SNOW LOADS MONO COUNTY, CALIFORNIA

COUNTY OF MONO COMMUNITY DEVELOPMENT DEPARTMENT BUILDING DIVISION P.O. BOX 3669 MAMMOTH LAKE, CALIF. 93546 (760) 924-1800 FAX: 924-1801



comdev@mono.ca.gov www.monocounty.ca.gov

DATE SCALE 3/4"=1'-0" DRAWN JOB SHEET

S4 OF 4 SHEETS