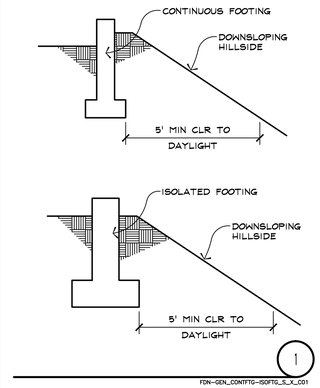
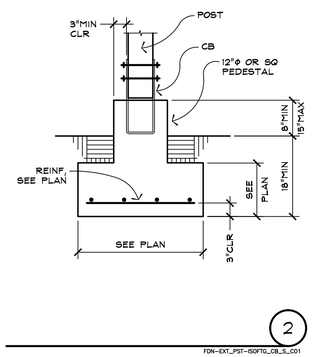


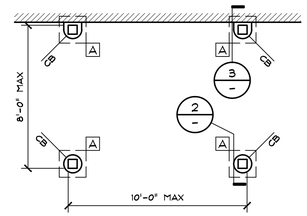


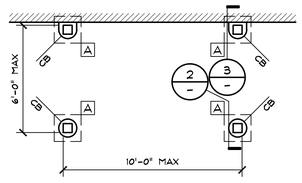
IF PORCH ROOF IS IN A LOCATION WHERE IT IS SHED UPON BY A ROOF ABOVE, IT MUST CONFORM TO THE FOLLOWING: IF THE EAVE LINE OF THE ROOF ABOVE IS LESS THEN 4 FEET ABOVE THE PORCH ROOF, NO CHANGE NEED BE MADE. IF THE EAVE LINE OF THE ROOF ABOVE IS BETWEEN 4 FEET AND 10 FEET ABOVE THE PORCH ROOF, INCREASE THE NOMINAL DEPTH FOR ALL RAFTERS AND BEAMS BY 2" (I.E. 6x8 BECOMES A 6x10, 2x6 BECOMES A 2x8, ETC.). IF THE EAVE LINE OF THE ROOF ABOVE IS MORE THAN 10' ABOVE THE PORCH ROOF, THIS PRESCRIPTIVE DESIGN CANNOT BE USED, AND A LICENSED PROFESSIONAL MUST PROVIDE ENGINEERING FOR THE DESIGN.

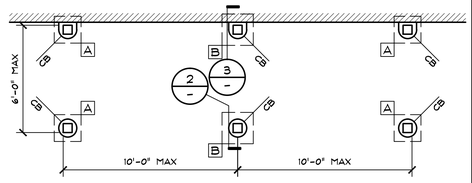
PLANS SHOW CB AND CC HARDWARE, BUT DETAILS GIVE ALTERNATIVE USING PINNED CONNECTIONS. ALSO, OTHER SIMPSON HARDWARE MAY BE SUBSTITUTED. PB AND CBSG MAY BE SUBSTITUED FOR CB'S AND PC AND CCQ MAY BE SUBSTITUTED FOR CC'S

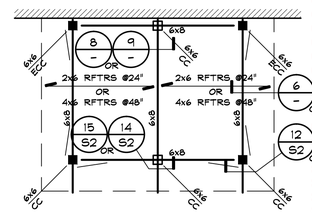
AT 2x RFTRS: ⅜" (40/20) A.P.A. RATED SHEATHING, EXTERIOR PLY, 10d NAILS @6" B.N., 6" E.N., 12" F.N., SEE 18/S2

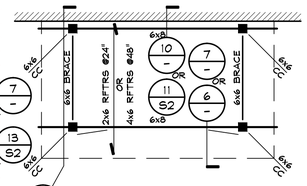
AT 4x RFTRS: ¾" (24 /0) A.P.A. RATED SHEATHING, EXTERIOR PLY, 8d SHORTS @6" B.N., 6" E.N., 12" E.W. F.N., OVER 2x6 T&G DKG, 2-16D/BOAR/BRNG, SEE 18/S2

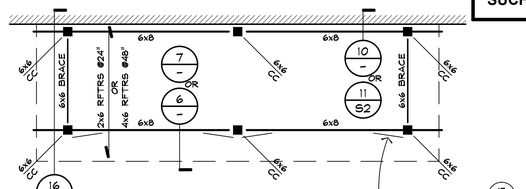


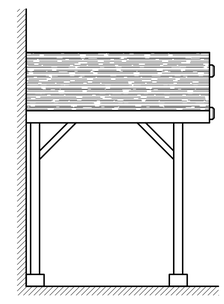


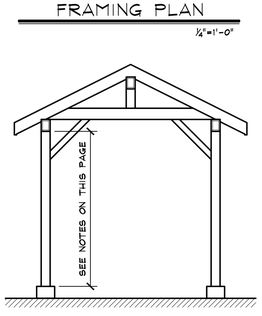


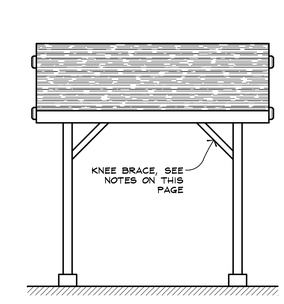


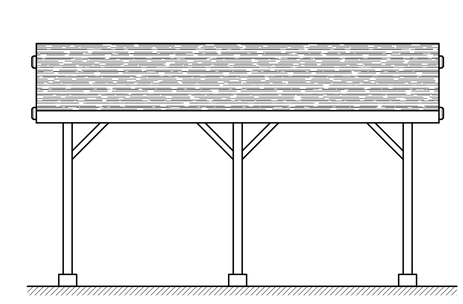


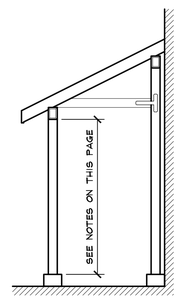




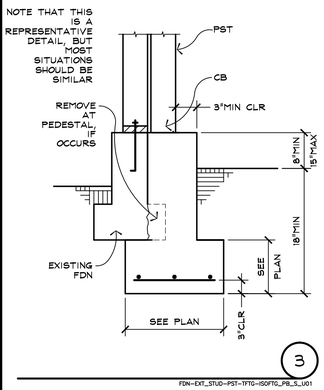


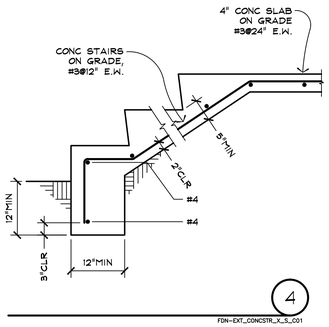


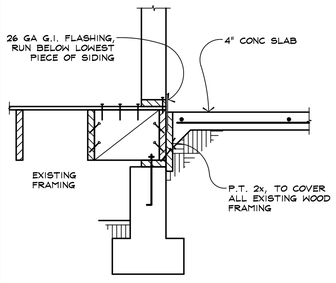


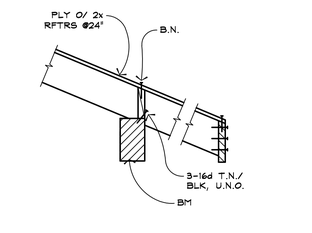


MONO COUNTY PROVIDES THESE PLANS TO THE PUBLIC AS A COURTESY AND WITHOUT ANY WARRANTIES, EXPRESS OR IMPLIED, REGARDING THEIR FITNESS FOR ANY PARTICULAR APPLICATION. AMONG OTHER THINGS, MONO COUNTY DOES NOT REPRESENT OR WARRANT THAT THE DESIGNS WITHIN SAID PLANS ARE FREE FROM FLAWS OR DEFECTS. ANYONE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









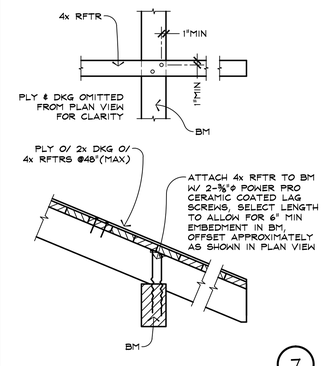
SCHEDULE

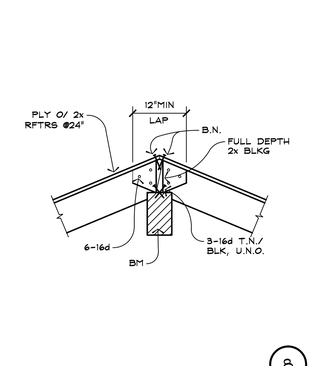
ISOLATED AND WIDENED FOOTINGS

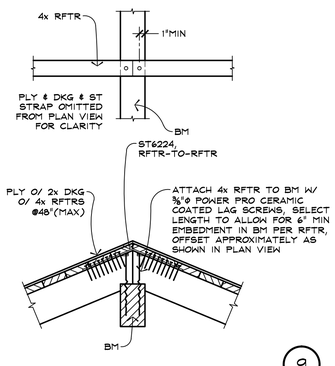
MARK	FOOTING DIMENSIONS	REINFORCING STEEL	PEDESTAL @ ISOLATED FTGS	ALLOW. LOAD @2000 PSF BRNG
A	18"SQ x 12"THK	2-#4 S.E.E.W.	12" SQ	3.9k
B	21"SQ x 12"THK	2-#4 S.E.E.W.	12" SQ	5.6k

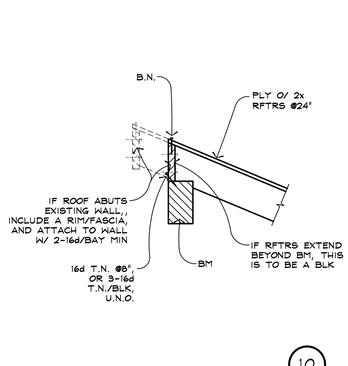
A

12-008-PORCH81-SC1









DEFINITION OF A PORCH ROOF

A PORCH ROOF IS A SMALL STRUCTURE THAT COVERS AN ENTRY OR OTHER SMALL AREA NEEDING PROTECTION. ONE SIDE IS AGAINST AN EXISTING BUILDING AND THE OTHER THREE SIDES ARE OPEN.

FLOOR OF THE PORCH

THE PORCH MAY JUST BE OVER GRADE, OR A 4" SLAB ON GRADE MAY BE USED AS THE FLOOR OF THE PORCH. IF A SLAB IS USED, IT SHOULD BE REINFORCED WITH #3@24" S.E.E.W. IF THE DESIRE IF FOR A RAISED PORCH/ENTRY, STILL OF CONCRETE, WITH STAIRS, SEE DETAIL 4/S1 AND 5/S1 FOR STAIRS AND PROTECTION OF CONCRETE IN CONTACT WITH EXISTING FRAMING. IF A DECK IS DESIRED, THAT IS BEYOND THE SCOPE OF THESE PLANS. HOWEVER, MONO COUNTY BUILDING DIVISION HAS PRESCRIPTIVE DESIGNS FOR DECKS THAT CAN BE COMBINED WITH THIS PORCH ROOF DESIGN.

HEIGHT OF POSTS

MAXIMUM HEIGHT OF SUPPORT POSTS (OR LOW POSTS IN THE CASE OF THE SHED PORCH ROOFS) IS 10' AS DRAWN. HOWEVER, IF THERE IS A DECK, AND THE DECK IS TIED IN (NAILING OR SCREWING A DECK JOIST TO A POST IS SUFFICIENT) TO THE POST, THEN THE POST MAY HAVE A MAXIMUM HEIGHT OF 14', BUT THE MAXIMUM UNRESTRAINED HEIGHT OF THE POST (FROM THE DECK TO THE BEAM) IS STILL 10'

KNEE BRACING

THE KNEE BRACING IS INCLUDED TO PROVIDE LATERAL SUPPORT TO THESE MINOR STRUCTURES AND ELIMINATE OR MITIGATE ANY LATERAL LOADING THIS STRUCTURE MIGHT IMPOSE ON AN EXISTING STRUCTURE. IT IS ASSUMED THAT FOR THE PURPOSES OF THIS PRESCRIPTIVE DESIGN THE KNEE BRACES WILL BE USED. HOWEVER, THEY MAY BE ELIMINATED, IF THE OWNER HIRES A LICENSED PROFESSIONAL (AN ENGINEER OR ARCHITECT) TO VERIFY THAT THE EXISTING STRUCTURE HAS ADEQUATE RESISTANCE TO ANY LOADS IMPOSED BY THE NEW PORCH ROOF AND IF THAT LICENSED PROFESSIONAL DESIGNS A TRANSFER CONNECTION BETWEEN THE NEW PORCH ROOF AND THE EXISTING STRUCTURE.

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 PORCH ROOFS. THE SUBMITTER IS RESPONSIBLE FOR PREPARING AN ARCHITECTURAL PLAN, SHOWING THE ACTUAL LAYOUT OF THE PORCH AND ROOF. THE PLAN SHALL ALSO SHOW A STRUCTURAL LAYOUT BASED UPON THE REQUIREMENTS OF THESE PLANS.

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.

NEW ROOFS THAT COULD INCREASE SNOW LOADING BY ADDING A VALLEY(S)

THIS DESIGN IS INTENDED NOT TO ADD ADDITIONAL LOADS TO AN EXISTING ROOF. IT IS INTENDED TO GO ON A GABLE END WALL (A RAKE WALL), OR ON A LOWER STORY OF A 2 STORY STRUCTURE WHERE POSSIBLE. IF THIS DESIGN NEEDS TO BE INSTALLED SUCH THAT IT IS EITHER AN EXTENSION OF AN EXISTING EAVE LINE, OR A GABLE COMING FROM AN EXISTING EAVE LINE, ONE OF THE FOLLOWING CONDITIONS MUST BE MET. THE EXISTING ROOF STRUCTURE MUST BE EVALUATED BY A LICENSED PROFESSIONAL (ARCHITECT OR ENGINEER) TO EVALUATE ITS STRUCTURAL INTEGRITY AND ABILITY TO HANDLE ADDITIONAL LOADS IMPOSED BY VALLEYS, CHANGES IN PITCH, ETC. THE LICENSED PROFESSIONAL THEN MUST EITHER CERTIFY THAT THE EXISTING STRUCTURE IS ADEQUATE OR PROVIDE A DESIGN TO REINFORCE THE EXISTING STRUCTURE. ALTERNATIVELY, IF THERE ARE EXISTING PLANS FOR THE STRUCTURE AVAILABLE, AND THE APPLICANT CAN DEMONSTRATE (FROM EITHER ORIGINAL PLANS OR CALCULATIONS) THAT THE EXISTING ROOF STRUCTURE MEETS CURRENT MONO COUNTY SNOW AND DEAD LOAD REQUIREMENTS FOR ROOFS, WITH NO REDUCTIONS FOR PITCH OR DURATION, THEN THE NEW PORCH ROOF SHOULD NOT CAUSE DISTRESS BEYOND DESIGN LIMITS FOR THE EXISTING ROOF STRUCTURE.

IF A NEW ROOF IS GOING TO INTERFACE WITH AN EXISTING EAVE ROOF CONDITION (AFTER ANALYSIS BY THE LICENSED PROFESSIONAL), THEN SEE DETAIL 20/S2 AT GABLE ROOFS AND 21/S2 AT SHED ROOFS.

STRUCTURAL NOTES

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 2008 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.

ALL FOOTINGS SHALL ALSO BE EMBEDDED DEEP ENOUGH THAT A 5' MIN HORIZONTAL DISTANCE TO DAYLIGHT IS ATTAINED. SEE 1/-

WHERE SOLID-FILLED POSTS ARE CALLED OUT, THE SOLID FILL REPRESENTS A POST BELOW.

WHERE OPEN NON-FILLED POSTS ARE CALLED OUT, THE OPEN POST REPRESENTS A POST ABOVE.

PB, CC, ETC ARE SIMPSON STRONG-TIE HARDWARE. REFER TO SIMPSON CATALOG C-2011 FOR INSTALLATION INFORMATION. USE EXACT TYPE, SIZE, AND NUMBER OF FASTENERS SPECIFIED IN CATALOG.

DETAILS ON ACCOMPANYING DETAIL SHEETS ARE DRAWN TO THE SCALE NOTED IN THE TITLE BLOCK OF THE SHEET, U.N.O. HOWEVER, THE SIZE OF EACH SCALED ELEMENT SHOWN ON THE DETAILS DOES NOT NECESSARILY REPRESENT THE SIZE OF THE MEMBERS CALLED OUT ON THE PLAN, OR EXISTING IN THE STRUCTURE.

REVISIONS	BY

STANDARD STRUCTURAL REQUIREMENTS PORCH ROOFS WITH 81 PSF SNOW LOAD MONO COUNTY, CALIFORNIA

COUNTY OF MONO
COMMUNITY DEVELOPMENT DEPARTMENT
BUILDING DIVISION

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

DATE

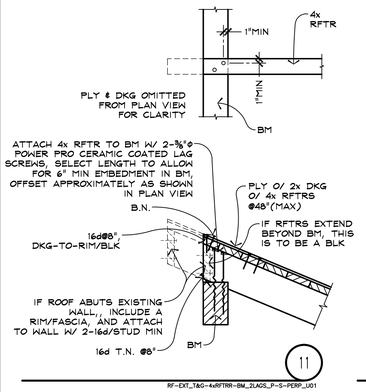
SCALE 3/4"=1'-0"

DRAWN

JOB

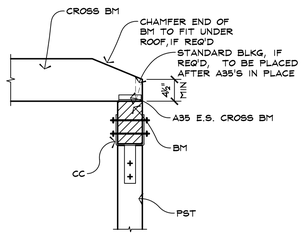
SHEET S1

OF 3 SHEETS



11

RF-EXT_TAG-4x8RTRR-BM_2LAGS_P-S-PERP_U01



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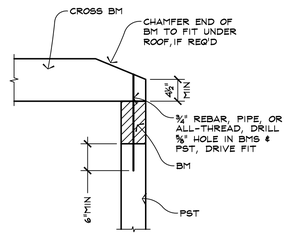

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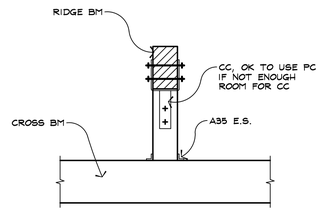

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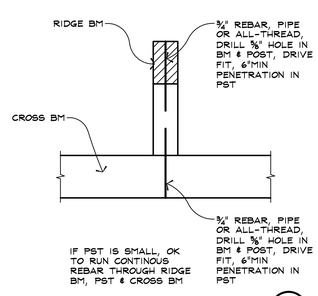

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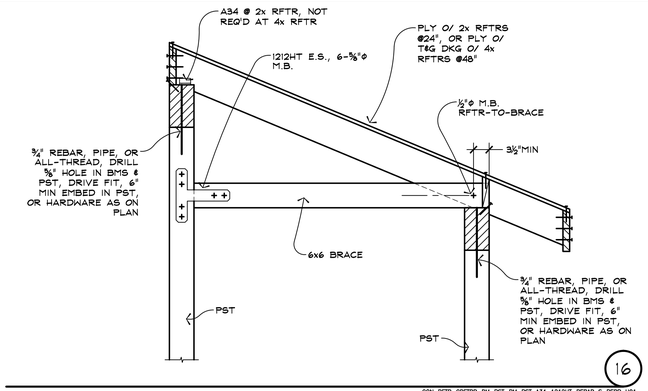

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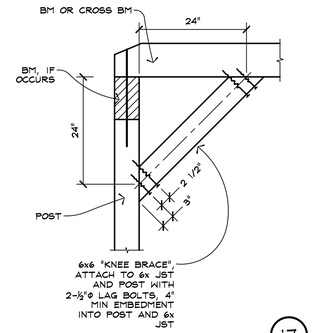

17

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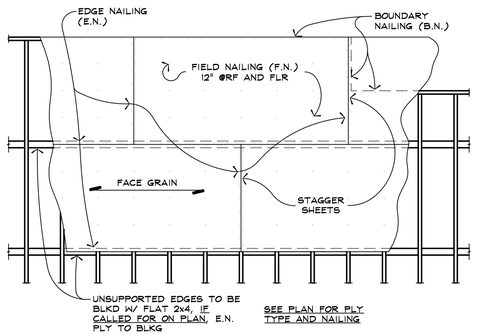
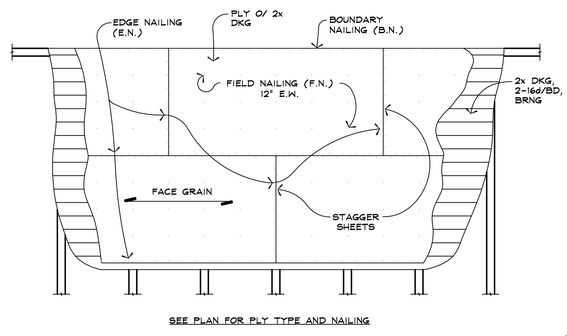


⅜"=1'-0"

18

CON_DIAPH_BLK_P_C01



⅜"=1'-0"

19

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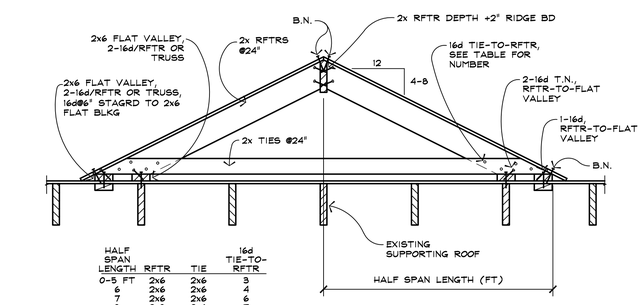
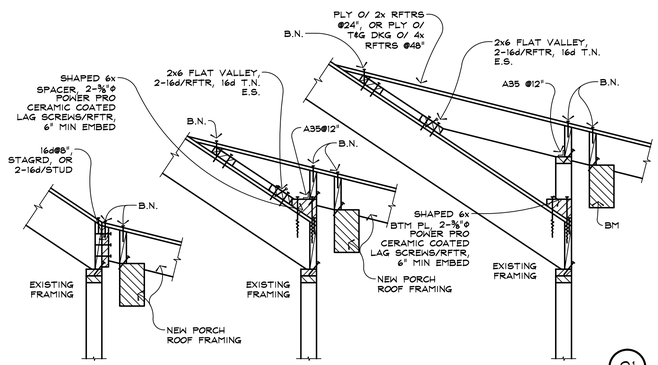


HALF SPAN LENGTH	RFTR	TIE	16d TIE-TO-RFTR
0-5 FT	2x6	2x6	3
6	2x6	2x6	4
7	2x6	2x6	6
8	2x8	2x6	7
9	2x8	2x8	8
10	2x10	2x8	10
11	2x10	2x10	11
12	2x12	2x10	12
13	2x12	2x10	13

20

RF-BO_RFTRL-RFTRRR-TIE-RFTR_5IN12_S-PERP-PARL_C01



21

RF-BO_RFTR-RFTRL-RFTRR-BM_A35_S-PERP_U01

REVISIONS	BY

STANDARD STRUCTURAL REQUIREMENTS
PORCH ROOFS WITH 81 PSF SNOW LOADS
MONO COUNTY, CALIFORNIA

COUNTY OF MONO
COMMUNITY DEVELOPMENT DEPARTMENT
BUILDING DIVISION

P.O. BOX 8
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DATE	
SCALE	3/4"=1'-0"
DRAWN	
JOB	
SHEET	S2

OF 3 SHEETS

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. ONCE THE BUILDING PERMIT HAS BEEN ISSUED NO CHANGES OR DEVIATIONS SHALL BE MADE WITHOUT THE WRITTEN APPROVAL OF THE SUBMITTER, LEST AN UNSAFE OF 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 GENERAL 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-DRANED OR SAND-GRAVEL MIXTURE CLASSIFIED AS GROUP I ACCORDING TO THE UNITED SOL 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 7⅕ 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 ⅛" 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 2½ 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.
1½"	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.
¾"	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.

	GRADE
JOISTS, BEAMS, PURLINS AND POSTS 4" AND WIDER	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 ⅝" 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 ⅛" SPACE BETWEEN ALL JOINTS.
8. LAGBOLTS (AND SCREWS) SHALL BE PRE-DRILLED $\frac{X}{16}$" 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.
½"	$\frac{1}{4}$"x$\frac{2\frac{1}{2}}{16}$"ø	$\frac{3}{16}$"x2" SQ
⅝"	$\frac{5}{16}$"x$\frac{2\frac{3}{4}}{16}$"	$\frac{1}{4}$"x$\frac{2\frac{1}{2}}{16}$"
¾"	$\frac{7}{16}$"x3"	$\frac{5}{16}$"x$\frac{2\frac{3}{4}}{16}$"
⅞"	$\frac{7}{16}$"x$\frac{3\frac{1}{2}}{16}$"	$\frac{5}{16}$"x3"
1"	½"x$\frac{3\frac{3}{4}}{16}$"	$\frac{3}{8}$"x$\frac{3\frac{1}{2}}{16}$"

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 ENGINEEER.
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- CBSQ-SDS2 AND CBQ-SDS2 COLUMN BASE CONNECTORS AND ECCQ/CCQ-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, MPAI, HPA, HPAT28/35
    - 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- 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.):

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 THAT 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 BLOCKING, TYPICAL FACE NAIL	16d AT 16" O.C.
SOLE PLATE TO JOIST OR BLOCKING, AT BRACED WALL PANELS	3-16d PER 16"
7. TOP PLATE TO STUD, END NAIL	2-16d
8. STUD TO SOLE PLATE	4-8d, TOENAIL OR 2-16d, END NAIL
9. DOUBLED STUDS, FACE NAIL	16d AT 24" O.C.
10. DOUBLED TOP PLATES, FACE NAIL	16d AT 16" O.C.
DOUBLED TOP PLATES, LAP SPLICE	8-16d
11. BLOCKING BETWEEN JOISTS OR RAFTERS TO TOP PLATE, TOENAIL	3-8d
12. RIM JOIST TO TOP PLATE, TOENAIL	8d AT 6" O.C.
13. TOP PLATES, LAPS AND INTERSECTIONS, FACE NAIL	2-16d
14. CONTINUOUS HEADER, TWO PIECES	16d AT 16" O.C. ALONG EACH EDGE
15. CEILING JOISTS TO PLATE, TOENAIL	3-8d
16. CONTINUOUS HEADER TO STUD, TOENAIL	4-8d
17. CEILING JOISTS, LAPS OVER PARTITIONS, FACE NAIL	3-16d
18. CEILING JOISTS TO PARALLEL RAFTERS, 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"x8" SHEATHING OR LESS TO EACH BEARING, FACE NAIL	2-8d
22. WIDER THAN 1"x8" 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
25. 2" PLANKS	2-20d AT ENDS AND AT EACH SPLICE 2-16d AT EACH BEARING

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:  MEANS 3-16d

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
BM	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
EX, EXIST	EXISTING
EXT	EXTERIOR
FLG	FLANGE
F.F.	FINISH FLOOR
F.G.	FINISH GRADE
F.J.	FLOOR JOIST
F.N.	FIELD NAILING
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
JST	JOIST
K.S.	KING STUD
L	ANGLE SHAPE
LAG	LAGBOLT
LAM	LAMINATED
LDGR	LEDGER
LG	LONG
M.B.	MACHINE BOLT
MAX	MAXIMUM
MIN	MINIMUM
MISC	MISCELLANEOUS
N.T.S.	NOT TO SCALE
O/	OVER
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
RFTR	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
TS	STRUCTURAL TUBE
TYP	TYPICAL
U.N.O.	UNLESS NOTED OTHERWISE
V, VERT	VERTICAL
W	WIDE FLANGE SHAPE
W/	WITH
W/O	WITHOUT
WD	WOOD

REVISIONS	BY

STANDARD STRUCTURAL REQUIREMENTS PORCH ROOFS WITH 81 PSF SNOW LOADS MONO COUNTY, CALIFORNIA

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DATE	
SCALE	-
DRAWN	
JOB	
SHEET	S3
OF 3 SHEETS	