

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
C	24"SQ x 12"THK	2-#4 S.E.E.W.	12" SQ	7.3k
D	27"SQ x 12"THK	3-#4 S.E.E.W.	12" SQ	9.3k
E	30"SQ x 12"THK	3-#4 S.E.E.W.	12" SQ	11.5k

DECKS WITH SNOW SHEDDING ON THEM
 IF DECK IS IN A LOCATION WHERE IT IS SHED UPON BY A ROOF ABOVE (IF IT IS UNDER AND EAVE ROOF OVERHANG), IT MUST CONFORM TO THE FOLLOWING: IF THE EAVE LINE OF THE ROOF ABOVE IS LESS THAN 9 FEET ABOVE THE DECK, NO CHANGE NEED BE MADE. IF THE EAVE LINE OF THE ROOF ABOVE IS BETWEEN 9 FEET AND 18 FEET ABOVE THE DECK, REDUCE THE ALLOWED SPAN OF ALL JOISTS AND GIRDERS TO 75% OF THE VALUES IN THE TABLE (I.E. 10'-0" WOULD BECOME 7'-6").

DECK FRAMING AND FOUNDATION PLANS

JOIST & GIRDERS SPANS, 81 PSF SNOW LOAD

JOIST SIZE	SPAN	6x6 GIRDER SPAN	6x10 GIRDER SPAN	6x12 GIRDER SPAN
2x6 @16"	7'-0"	8'-0"	10'-6"	12'-6"
2x8 @16"	9'-0"	7'-0"	9'-0"	11'-0"
2x10 @16"	11'-0"	6'-6"	8'-0"	10'-0"

DEFINITION OF A LOW DECK

A LOW DECK SHALL NOT HAVE AN AVERAGE HEIGHT GREATER THAN 6" (TOP OF DECK TO GRADE) NOR SHALL ANY POST EXCEED 7' (FOUNDATION TO GIRDER).

NOTES

- OPTION 1: OPTION 1 IS FOR DECKS ATTACHED DIRECTLY TO BUILDINGS. OPTION 1 IS ONLY AVAILABLE IF THE FOUNDATION AT THE BUILDING IS CONTINUOUS AND SOUND, AND MADE FROM CONCRETE OR CONCRETE BLOCK. THAT THE CONNECTION IS MADE AT THE RIM RIGHT OVER THE FOUNDATION (DETAIL 5), AT THE RIM OVER A SMALL CRIPPLE WALL (DETAIL 6) OR AT THE CRIPPLE WALL (DETAIL 7). LASTLY, THAT ANY CRIPPLE WALL THAT SUPPORTS THE FLOOR AND NOW THE DECK IS RELATIVELY FREE OF OPENINGS. IF THESE CONDITIONS CANNOT BE MET, OPTION 2 MUST BE USED.
- OPTION 2: OPTION 2 CREATES A DECK THAT DOES NOT RELY ON THE EXISTING BUILDING FOR VERTICAL SUPPORT. IT IS STILL ATTACHED TO THE BUILDING FOR GENERAL LATERAL SUPPORT. IF DETAIL 7 IS USED IN OPTION 2, THE ATTACHMENT TO THE BUILDING CAN BE DOWNGRADED FROM THE SDS SCREENS CALLED FOR TO 3-16d NAILS.
- OPTION 3: OPTION 3 IS SHOWING MULTIPLE SPANS. THE OVERALL DEPTH OF A DECK IS LIMITED TO 16', UNLESS IT IS SUPPORTED DIRECTLY BY FOUNDATIONS (DETAIL 4) ON AT LEAST 1/3 OF ITS SUPPORT POINTS.
- OPTION 4: OPTION 4 IS FOR FRAMING THE DECK GIRDER FLUSH. IF THE OWNER OR BUILDER DOES NOT WANT THE BEAM TO DROP DOWN, THIS IS HOW IT SHOULD BE FRAMED.

NOTE THAT FEATURES OF OPTIONS MAY BE COMBINED, FOR EXAMPLE A DECK COULD HAVE A FLUSH BEAM AT ITS OUTER EDGE AND A BEAM LINE SUPPORTING NEXT TO THE BUILDING (COMBINING OPTIONS 4 AND 2), OR A FLUSH BEAM WITH MULTIPLE SPANS, POSSIBLE WITH FLUSH INTERMEDIATE BEAMS (COMBINING OPTIONS 4 AND 3).

ALL DECKS SHOWN ARE ATTACHED TO BUILDINGS. FREE STANDING DECKS ARE PERMITTED IF AT LEAST 1/3 OF THE SUPPORTS ARE DIRECT TO THE FOUNDATION (DETAIL 4). IF A DECK WITH POSTS IS REQUIRED, THE DETAILS FOR A HIGH DECK (WITH LATERAL BRACING BETWEEN POSTS) IS REQUIRED.

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

IF A PROPOSED DECK 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.

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 IN RECORDS TO FIRE RESISTIVE REQUIREMENTS FROM C.B.C. CHAPTER 7A AND C.R.C. SECTION R327. THESE REQUIREMENTS MUST BE COMPLIED WITH IF THE ORIGINAL RESIDENCE HAS SUBMITTED FOR PERMIT ON OR AFTER JULY 1, 2008.

NOTES ON COMPOSITE DECKING

THE SUBMITTER IS RESPONSIBLE FOR CHECKING THE SPECIFICATIONS AND SPAN REQUIREMENTS FOR ANY COMPOSITE DECKING THAT IS SELECTED AND GENERALLY INSTALLING IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. INSTALLED COMPOSITE DECKING MUST HAVE A LABEL, IN COMPLIANCE WITH CRC 917.4, INDICATING THE REQUIRED DEPTH SHALL CONTINUE FOR AT LEAST 3/4" TO A LEVEL THAT IS NOT LESS THAN 1/2" BELOW THE TALLEST PORTION OF THE PROFILE. THE MINIMUM WIDTH OF THE HANDRAIL ABOVE THE RECESS SHALL BE 1/2" TO A MAXIMUM OF 2 1/4". EDGES SHALL HAVE A MINIMUM RADIUS OF 0.01 INCHES.

ADDITIONALLY, SOME COMPOSITE DECKING SYSTEMS HAVE A PROPRIETARY ATTACHMENT SYSTEM. IF THE SUBMITTER HOPES TO USE A PROPRIETARY ATTACHMENT SYSTEM IN PLACE OF THE SCREENS CALLED OUT, THE SUBMITTER IS TO SUBMIT WITH THE PLANS THE INSTALLATION GUIDELINES FOR THE PROPRIETARY SYSTEM WHEN SUBMITTING FOR A BUILDING PERMIT. UPON APPROVAL OF THE BUILDING DEPARTMENT PROPRIETARY ATTACHMENT SYSTEMS MAY BE USED.

STRUCTURAL NOTES

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

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).

PB, CC, ETC ARE SIMPSON STRONG-TIE HARDWARE. REFER TO SIMPSON CATALOG C-2018 FOR INSTALLATION INFORMATION. USE EXACT TYPE, SIZE, AND NUMBER OF FASTENERS SPECIFIED IN CATALOG.

SEE (14) AND (15) FOR FRAMING OF STAIRS IF REQ'D

DECKS MUST HAVE DETAILING TO RESIST TRANSVERSE LATERAL FORCES (FORCES THAT WOULD PULL THE DECK AWAY FROM THE BUILDING). TO RESIST THESE FORCES THE DECKS ARE ATTACHED WITH LUS HANGERS, EITHER TO A RIM OR TO A LEDGER. THESE HANGERS MUST USE SIMPSON SD922 SCREENS, OR SIMILAR #8 SCREENS SHOWN TO HAVE EQUIVALENT VALUES. THE HANGERS ATTACHED WITH SCREENS HAVE A WITHDRAWAL VALUE OF AT LEAST 920# PER HANGER. THE LEDGER USES 3-1/2"x3/4" SIMPSON SDS SCREENS, GIVING IT A VALUE OF 516# PER STUD. OTHER ALTERNATIVE DETAILS FOR RESISTANCE OF TRANSVERSE LATERAL FORCES CAN BE CONSIDERED, IF THE SUBMITTER CAN DEMONSTRATE THAT THEY CAN RESIST EQUIVALENT LOADS. FREE STANDING DECKS ARE EXEMPT OF THIS REQUIREMENT.

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.

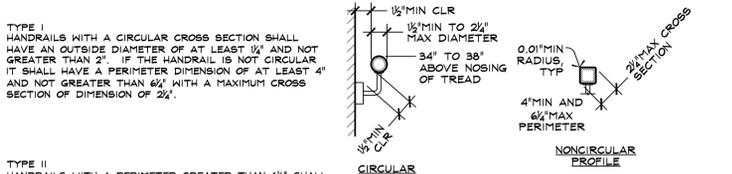
GUARD, STAIR AND HANDRAIL NOTES

GUARDS (FORMERLY KNOWN AS GUARDRAILS) SHALL BE 42" HIGH. INTERMEDIATE RAILS, BALUSTERS OR OTHER BARRIERS SHALL BE SPACED SO THAT A 4" DIAMETER SPHERE CANNOT PASS THROUGH. GUARDS ARE REQUIRED AT ALL OPEN SIDED WALKING SURFACES, MEZZANINES, STAIRWAYS, RAMP AND LANDINGS THAT ARE MORE THAN 30" ABOVE THE FLOOR OR GRADE BELOW.

STAIRS SHALL HAVE A MAXIMUM RISE OF 7.75" AND A MAXIMUM RUN OF 10" AND A MINIMUM WIDTH OF 36". OPENINGS AT TOES SHALL BE SUCH THAT A 4" DIAMETER SPHERE CANNOT PASS THROUGH. A LANDING OF NO LESS THAN THE STAIR WIDTH SHALL BE PROVIDED AT THE TOP AND BOTTOM OF ALL STAIRS (MINIMUM 36" IN DIRECTION OF TRAVEL). FLIGHTS OF STAIRS SHALL NOT HAVE A VERTICAL RISE BETWEEN FLOOR LEVELS OR LANDINGS GREATER THAN 12'.

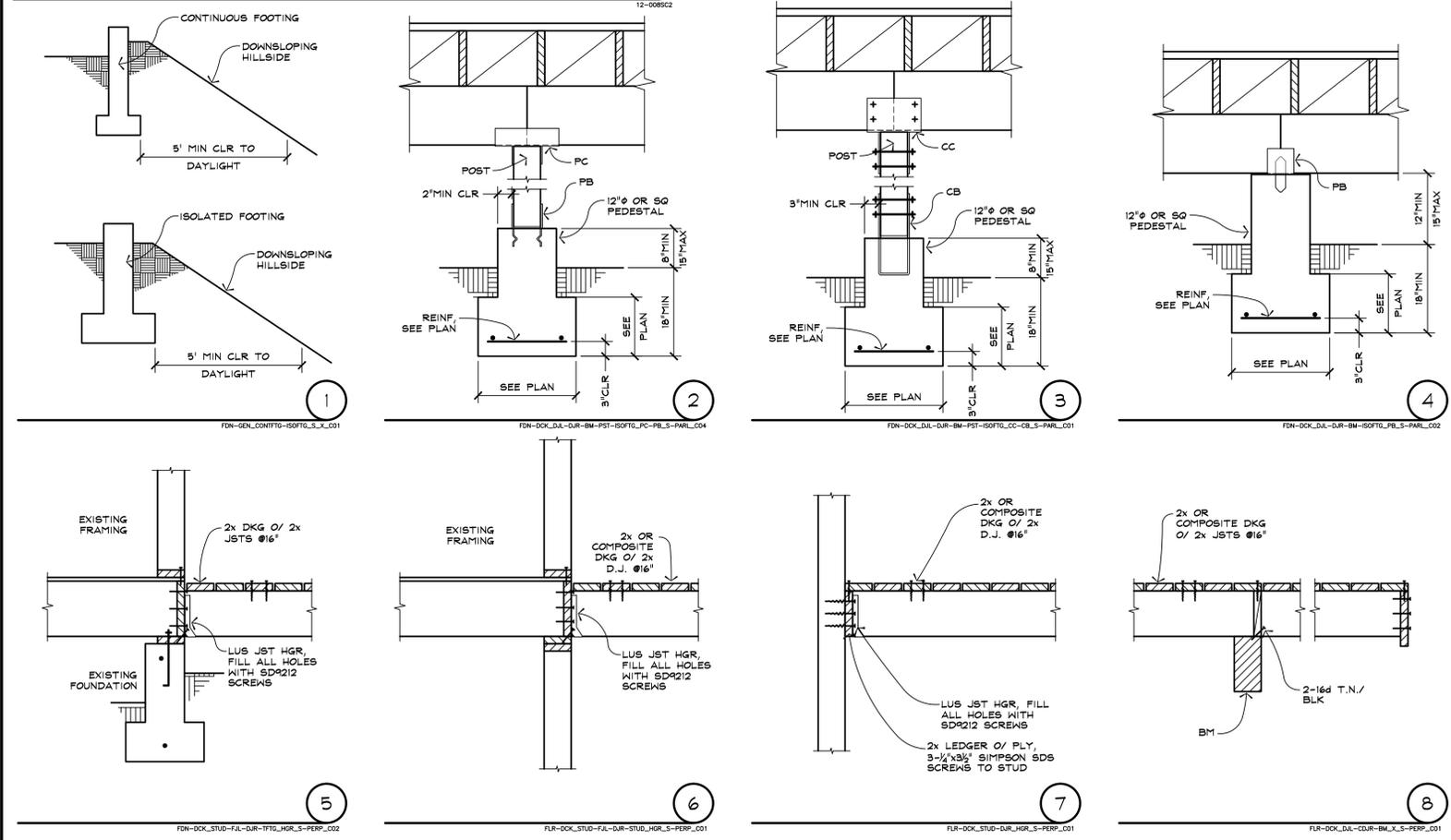
AT EXTERIOR STAIRWAYS A MEANS SHALL BE PROVIDED TO ILLUMINATE THE STAIRS, INCLUDING LANDINGS TREADS AND THE TOP LANDING AREA. A LIGHT THAT IS OVER THE ENTIRE STAIRWAY MAY MEET THIS REQUIREMENT. CONTROL FOR THESE LIGHTS SHALL BE EITHER WITHIN THE RESIDENCE, OR SHALL BE AUTOMATIC (MOTION OR PHOTO-SENSITIVE CONTROLLED).

HANDRAILS ARE REQUIRED ON AT LEAST ONE SIDE OF A STAIRWAY THAT HAS FOUR OR MORE RISERS. THE TOP OF THE HANDRAIL SHALL BE 34" MINIMUM TO 38" MAXIMUM HEIGHT MEASURED VERTICALLY FROM THE NOSING OF THE TREAD. HANDRAILS SHALL EXTEND FROM A POINT DIRECTLY ABOVE THE TOP RISER OF FLIGHT TO A POINT DIRECTLY ABOVE THE LOWEST RISER OF THE FLIGHT. THE ENDS OF A HANDRAIL ARE TO BE RETURNED OR TERMINATED IN A NEVEL POST OR SAFETY TERMINALS. THE USE OF A VOLUTE, TURNOUT OR STARTING EASING IS ALLOWED OVER THE LOWEST TREAD. HANDRAILS ADJACENT TO A WALL OR GUARD NEED TO HAVE A SPACE NOT LESS THAN 1 1/2 INCHES BETWEEN THE WALL AND THE HANDRAIL. HANDRAILS SHALL BE CONTINUOUS FOR THE ENTIRE RUN, EXCEPT A NEVEL POST CAN INTERRUPT HANDRAILS AT A TURN. HANDRAIL GRIPS SHALL BE AS SPECIFIED BELOW FOR A TYPE I OR A TYPE II HANDRAIL, OR OF ANOTHER DESIGN APPROVED BY THE BUILDING OFFICIAL AS PROVIDING AN EQUIVALENT GRASPABILITY. VISUAL EXAMPLES OF EACH TYPE ARE PROVIDED, BUT NOTE THAT THESE ARE REPRESENTATIVE OF COMPLIANT CONCEPTS, BUT MANY OTHER PROFILES CAN BE COMPLIANT.



TYPE I HANDRAILS WITH A CIRCULAR CROSS SECTION SHALL HAVE AN OUTSIDE DIAMETER OF AT LEAST 1 1/2" AND NOT GREATER THAN 2". IF THE HANDRAIL IS NOT CIRCULAR IT SHALL HAVE A PERIMETER DIMENSION OF AT LEAST 4" AND NOT GREATER THAN 6 1/2" WITH A MAXIMUM CROSS SECTION OF DIMENSION OF 2 1/4".

TYPE II HANDRAILS WITH A PERIMETER GREATER THAN 6 1/2" SHALL PROVIDE A GRASPABLE FINGER RECESS AREA ON BOTH SIDES OF THE PROFILE. THE FINGER RECESS SHALL BEGIN WITHIN A DISTANCE OF 3/4" MEASURED VERTICALLY FROM THE TALLEST PORTION OF THE PROFILE AND ACHIEVE A DEPTH OF AT LEAST 3/4" WITHIN 3/4" BELOW THE HIGHEST PORTION OF THE PROFILE. THIS REQUIRED DEPTH SHALL CONTINUE FOR AT LEAST 3/4" TO A LEVEL THAT IS NOT LESS THAN 1/2" BELOW THE TALLEST PORTION OF THE PROFILE. THE MINIMUM WIDTH OF THE HANDRAIL ABOVE THE RECESS SHALL BE 1/2" TO A MAXIMUM OF 2 1/4". EDGES SHALL HAVE A MINIMUM RADIUS OF 0.01 INCHES.



REVISIONS

NO.	DATE	BY

STANDARD STRUCTURAL REQUIREMENTS
 LOW RESIDENTIAL DECKS WITH 81 PSF SNOW LOAD
 MONO COUNTY, CALIFORNIA

COUNTY OF MONO
 COMMUNITY DEVELOPMENT DEPARTMENT
 BUILDING DIVISION
 P.O. BOX 2669 93546
 MANKAMOTT, CALIFORNIA
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DATE
 SCALE 3/4"=1'-0"
 DRAWN
 JOB
 SHEET
 OF 2 SHEETS

