Minimum Residential Deck Requirements
(Not applicable for spa over deck condition)

The following information is intended to provide GENERAL DECK CONSTRUCTION GUIDELINES ONLY. Alternate deck designs may be possible when accompanied by an engineered analysis and detailed plans. Use of this standard design is at the user's risk and carries no implied or inferred guarantee against failure or defects. **Note, the following conditions are considered to be beyond the scope of this guide and will require additional design from a licensed professional architect or engineer.**

1. Decks including more than one level in height.
2. Decks with walking surfaces more than ten feet above grade.
3. Deck ledgers attached to house overhang, bay window, brick, concrete block, stone, any veneer or hollow block.
4. Decks supporting large concentrated or distributed loads such as hot tubs or spas deviating in any respect from exact requirements outlined within this guide are beyond the scope of this document and shall not be allowed without design and approval from a licensed professional architect or engineer.

**General Requirements**
(May be used for a 100 psf snow load condition)

1. Deck length shall be equal to or less than overall deck width.
2. Standards denoted within this document shall only apply to single level residential wood decks attached to legally permitted existing residences.
3. Deck material shall be 2 inch nominal dimension lumber. Decking material shall be attached to deck joist with (2) 16d galvanized nails or (2) #8 screws. Deck boards shall be placed 1/4 inch apart minimum and shall span over (3) deck joists minimum.
4. All Deck and Spa or tub post shall be 6x6 nominal minimum and located centered on footing below.
5. All through bolts must included washers under bolt head and nut.
6. Deck, slab, and footings shall not be constructed over existing septic system, leach field, utility lines, or enclosed meters.
7. Existing exterior house siding or existing exterior wall finish shall be removed prior to installation of new ledger board and waterproof afterwards.
8. New deck footings located less than 5'-0" to existing house footing shall be placed at the same elevation as existing footing.
9. Decks more than 30" inches above adjacent grade shall require 42" inch high guard rail measured vertically above deck walking surface.
10. All work shall comply with current California Residential Code.
11. Footing and slab concrete mix shall have a minimum compressive strength f'c=3000 psi. *
12. Deck stairs shall be minimum 36" inch wide and have a minimum 36" inch long landing at top and bottom in direction to stair travel.
13. All fasteners, hangers, plates, and nails shall be stainless steel, hot-dipped galvanized, or of corrosive resistant protective coating. All steel shall conform to ASTM A36 (fy=36ksi) minimum.
14. Decking material shall comply with the following:
   a. 1/2" minimum wood deck surface thickness and / or ICC approved deck cover material.
   b. Decking shall be protected on the underside with materials approved for one hour fire resistive construction and / or ignition resistance pursuant to CRC section 337.4
   c. Decking shall be composed of noncombustible materials as defined in the California Residential Code or other materials approved by the responsible fire authority. (CRC Section 337.9.3)
15. All shop welding and steel fabrication shall be done in a shop approved by a special inspection agency and approved by Building Official. All field welding must be performed by a certified welder and a special inspector shall continuously inspect all field welding.

**No special inspection required. Contractor shall provide approved concrete mix design to inspector prior to concrete pour.**
NOTE: PROVIDE 5" MINIMUM EPDLY ENGRAFTMENT INTO EXISTING FOOTING TYPICAL

NEW #4 DOWELS x 3.4" AT 32"
C.G. IN SIMPSON SET EPDLY
(TYP. NEW SLAB TO EXISTING)

NEW 9" THK x 8" DEEP SLAB
THICKEN EDGE WITH (1) #4
CONC. BAR TYPICAL

NEW 2-1/2" SQ. x 18" DEEP
CONCRETE FOUNDATION
WITH (4) #6 BARS EACH WAY

TYPICAL WHERE EXISTING GRADE
SLOPES

A

3

2

1

PROPOSED DECK FOUNDATION PLAN

TYPICAL WHERE EXISTING GRADE
SLOPES

2

3

1

A

PROPOSED DECK FRAMING PLAN

6

5

4

3

2

1

NOTE:
DECK STANDARD NOT APPLICABLE
FOR SPA OVER DECK CONDITIONS.

DISCLAIMER:
ALTERNATE DECK DESIGNS MAY BE POSSIBLE
WHEN PROVIDED WITH AN ENGINEERED ANALYSIS.
USE OF THIS STANDARD IS AT THE USER'S
RISK AND CARRIES NO IMPLIED OR
INFERRRED GUARANTEE AGAINST FAILURE
OR DEFECTS.

COUNTY OF SAN BERNARDINO
COUNTY OF SAN BERNARDINO
Building & Safety Division
BALCONY / DECK STANDARD
(FORE MAXIMUM 100 psf SNOW AREAS TYPICAL)

(909) 387-8311
385 N. Arrowhead Ave.
San Bernardino, CA. 92415
1/26/2017
TABLE "A"
DECK JOIST SPAN & SPACING
DOUGLAS FIR #1 OR BETTER

<table>
<thead>
<tr>
<th>SIZE</th>
<th>SPACING</th>
<th>SPAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 x 6</td>
<td>12&quot; O.C.</td>
<td>10'-6&quot;</td>
</tr>
<tr>
<td>4 x 8</td>
<td>16&quot; O.C.</td>
<td>9'-0&quot;</td>
</tr>
<tr>
<td>4 x 10</td>
<td>24&quot; O.C.</td>
<td>7'-6&quot;</td>
</tr>
<tr>
<td>4 x 12</td>
<td>32&quot; O.C.</td>
<td>6'-0&quot;</td>
</tr>
</tbody>
</table>

SIDE VIEW

TABLE "B"
BEAM SIZE & SPAN
DOUGLAS FIR #1 OR BETTER

<table>
<thead>
<tr>
<th>JOIST SPAN</th>
<th>BEAM</th>
</tr>
</thead>
<tbody>
<tr>
<td>SIZE</td>
<td>SPAN</td>
</tr>
<tr>
<td>UPTO 8'-0&quot;</td>
<td>6 x 8 6'-6&quot;</td>
</tr>
<tr>
<td>8'-0&quot;</td>
<td>6 x 10 8'-6&quot;</td>
</tr>
<tr>
<td>8'-1&quot; TO 10'-0&quot;</td>
<td>6 x 12 10'-6&quot;</td>
</tr>
<tr>
<td>10'-0&quot;</td>
<td>6 x 12 12'-0&quot;</td>
</tr>
<tr>
<td>10'-1&quot; TO 12'-0&quot;</td>
<td>6 x 12 12'-6&quot;</td>
</tr>
<tr>
<td>12'-0&quot;</td>
<td>6 x 12 15'-0&quot;</td>
</tr>
<tr>
<td>12'-1&quot; TO 15'-0&quot;</td>
<td>6 x 12 15'-6&quot;</td>
</tr>
</tbody>
</table>

NOTE:
1. LEDGER BOLTS SHALL BE 1/2" DIA. x 6" LONG. BOLTS ARE TO BE PLACED staggerED.
2. ALL METAL HARDWARE & SCREWS TO BE GALVANIZED OR OF OTHERWISE APPROVED CORROSION RESISTANCE.
3. MAXIMUM 5 FOOT JOIST SPAN IF 2ND FLOOR IS CANTILEVERED AT LEDGER.

TABLE "C"
LEDGER BOLT SPACING
(1/2" DIA. x 6" LAG BOLT - SEE NOTE 1)

<table>
<thead>
<tr>
<th>DECK JOIST SPAN</th>
<th>SPAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>8'-0&quot; OR LESS</td>
<td>9&quot; o.c.</td>
</tr>
<tr>
<td>8'-1&quot; TO 10'-0&quot;</td>
<td>8&quot; o.c.</td>
</tr>
<tr>
<td>10'-1&quot; TO 12'-0&quot;</td>
<td>6&quot; o.c.</td>
</tr>
<tr>
<td>12'-1&quot; TO 14'-0&quot;</td>
<td>6&quot; o.c.</td>
</tr>
<tr>
<td>14'-1&quot; TO 15'-0&quot;</td>
<td>5 1/2&quot; o.c.</td>
</tr>
</tbody>
</table>

NOTE:
DECK STANDARD NOT APPLICABLE FOR SPA OVER DECK CONDITIONS.

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DISCLAIMER:

COUNTY OF SAN BERNARDINO
Building & Safety Division

SAN BERNARDINO

BALCONY / DECK STANDARD
(FOR MAXIMUM 100 psf SNOW AREAS TYPICAL)

(909) 387-8311
San Bernardino, CA. 92415

1/26/2017

COUNTY OF SAN BERNARDINO

IT IS THE OWNER'S RESPONSIBILITY TO VERIFY EXISTING CONDITIONS PRIOR TO START OF ANY AND ALL WORK.

COUNTY OF SAN BERNARDINO
SAN BERNARDINO COUNTY
Building & Safety Division
385 N. Arrowhead Ave.
San Bernardino, CA. 92415
(909) 387-8311

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DISCLAIMER:
OPTIONAL EXTERIOR STAIRWAY

NOTES:
1. THE TOLERANCE BETWEEN THE LARGEST AND SMALLEST TREAD DEPTH OR BETWEEN THE LARGEST AND SMALLEST RISER HEIGHT SHALL NOT EXCEED 3/8" IN THE STAIRWAY.
2. STAIRWAY WIDTH SHALL BE 36" MIN TO 48" MAX.
3. TREADS MUST HAVE APPROVED SLIP RESISTANT SURFACE.
4. ALTERNATE STAIRWAY DESIGNS MAY BE ACCEPTABLE PENDING BUILDING DEPARTMENT APPROVAL.
5. LIGHTING LEVEL AT ALL STAIR TREADS TO BE A MINIMUM OF 1 FOOT CANDLE.

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1/26/2017