SECOND STORY DECK
(ATTACHED TO A RESIDENTIAL DWELLING)

TABLE “A”
DECK JOIST SPANS
(DOUGLAS FIR #2 OR BETTER)

<table>
<thead>
<tr>
<th>SIZE</th>
<th>SPACING</th>
<th>SPAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 x 8</td>
<td>12&quot; O.C.</td>
<td>12'-0&quot;</td>
</tr>
<tr>
<td>2 x 10</td>
<td>16&quot; O.C.</td>
<td>12'-0&quot;</td>
</tr>
<tr>
<td>2 x 12</td>
<td>16&quot; O.C.</td>
<td>12'-0&quot;</td>
</tr>
</tbody>
</table>

TABLE “B”
HEADER SIZING & SPANS
(DOUGLAS FIR #2 OR BETTER)

<table>
<thead>
<tr>
<th>DECK JOIST SPAN</th>
<th>HEADER SPAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>UP TO 8'-0&quot;</td>
<td>4 x 8</td>
</tr>
<tr>
<td></td>
<td>4 x 10</td>
</tr>
<tr>
<td></td>
<td>4 x 12</td>
</tr>
<tr>
<td>8'-1&quot; TO 10'-0&quot;</td>
<td>4 x 8</td>
</tr>
<tr>
<td></td>
<td>4 x 10</td>
</tr>
<tr>
<td></td>
<td>4 x 12</td>
</tr>
<tr>
<td>10'-0&quot; TO 12'-0&quot;</td>
<td>4 x 8</td>
</tr>
<tr>
<td></td>
<td>4 x 10</td>
</tr>
<tr>
<td></td>
<td>4 x 12</td>
</tr>
</tbody>
</table>

NOTES:
1. ALL METAL HARDWARE & SCREWS TO BE GALVANIZED OR OF OTHERWISE APPROVED CORROSION RESISTANCE.
2. DECK CANNOT BE ATTACHED TO CANTILEVERED 2ND FLOOR UNLESS STRUCTURAL CALCULATIONS ARE SUBMITTED AND APPROVED BY THE BUILDING DEPARTMENT.
3. SHEAR WALLS MAY NOT BE MODIFIED UNLESS STRUCTURAL CALCULATIONS ARE SUBMITTED AND APPROVED BY THE BUILDING DEPARTMENT.

DISCLAIMER:
ALTERNATE DECK DESIGNS ARE POSSIBLE WHEN DESIGNED BY A LICENSED ENGINEER. USE OF THIS CONVENTIONAL STANDARD DESIGN IS AT THE USER’S RISK AND CARRIES NO IMPLIED OR INFERRED GUARANTEE AGAINST FAILURE OR DEFECTS.

www.fontana.org
NOTE:
1. End posts require single Knee brace. All interior posts to have double braces.

LEDGER DETAIL

LEDGER BOLTS SHALL BE: 3/8" DIA. X 6" LONG; INSTALLED IN 1/4" DIA. PRE-DRILLED HOLES; AND PLACED A MAXIMUM OF 6" O.C. IN A STAGGERED PATTERN

SECTION VIEW

FOOTING DETAIL

MACHINE BOLTS PER MANUFACTURER'S SPECIFICATIONS

COLUMN BASE - USE SIMPSON CBSQ. PBS OR EQUAL

16" DEEP

24" SQUARE

2 5/8" MIN

1" MIN

1" STANDOFF FROM CONCRETE TO POST

MIN 4 X 4 POST

NOTE:
This deck connection detail is based on the assumption that a minimum 1-1/2" thick wood member is adequately installed at all edges of the 2nd floor diaphragm. If any other material is used, such as TJI joists, an engineered design by a licensed engineer will be required. It is the owner’s responsibility to verify the presence of the appropriate rim joist.
NOTE – DECKING OPTIONS ARE AS FOLLOWS:

1. 5/8” TONGUE AND GROOVE JOINTED PLYWOOD SECURED WITH 8D NAILS. ALL EDGE NAILING AT 6” O.C. MUST BE COVERED WITH AN APPROVED WEATHER RESISTIVE MATERIAL WALKING SURFACE AND SLOPED FOR POSITIVE DRAINAGE.

2. 2X6 DECKING SECURED WITH 2 – 16D NAILS AT EACH JOIST.
SECOND STORY DECK

OPTIONAL EXTERIOR STAIRWAY

NOTES:
1. THE LARGEST TREAD RUN SHALL NOT EXCEED THE SMALLEST BY MORE THAN 3/8”.
2. STAIRWAY WIDTH 36” MIN – 48” MAX.
3. TREADS MUST HAVE APPROVED SLIP RESISTANT SURFACE.
4. ALTERNATE STAIRWAY DESIGNS MAY BE ACCEPTABLE PENDING BUILDING DEPARTMENT APPROVAL.

HANDRAIL TO BE ADEQUATELY SUPPORTED AND RETURNED TO GUARDRAIL (SEE HANDRAIL DETAILS BELOW).

HEIGHT OF HANDRAIL TO BE 34” TO 38” ABOVE STEPS

4X12 STRINGER
2X12 RAIL
4X4 POST

4X12 TREADS
8” MAX

4X4 @ 48” O.C. MAX
2X2 AT 4’ O.C. MAX

6” MIN HEADROOM
LENGTH TO CONTINUE TO DECK
LENGTH TO CONTINUE TO GRADE

"4X12 STRINGER @ EA. END OF TREADS"

(2) 1/4” x 6” LAG BOLTS @ EA 2X2
(2) 1/2” DIA. MACHINE BOLTS W/ NUTS & WASHERS @ EA 4X4 POST

APPROVED ANGLE BRACKET W/ LAG BOLTS PER MANUFACTURERS SPECIFICATIONS

4X12 TREADS (OPPOSITE FACE OF STRINGER)

1/8” AIR GAP BETWEEN CONCRETE AND WOOD.

2X4 TREATED WOOD PLATE

5/8” DIA ANCHOR BOLT

FOOTING: 18” WIDE X 12” DEEP X STAIR WIDTH.

6#4 REBAR

FRONT VIEW

SIDE VIEW

HANDRAIL DETAILS

NOTE: OTHER SHAPES MAY BE ACCEPTABLE IF THEY PROVIDE AN EQUIVALENT GRIPPING SURFACE.

These designs are not acceptable.
NOTE: This form is to be used only when the second story deck is being built in accordance with the CITY STANDARD specifications shown in this handout. All non-standard second story decks require formal plans submitted for plan check.

Specify the following information on the attached blank Site Plan:

1. Existing Building Footprint

2. All setbacks to Property Line(s)

3. Deck Size:
   ______ x ______ = ________ s.f.

4. Type of Decking:
   [ ] Spaced
   [ ] Solid

5. Posts:
   Size: ______ x ______
   Spacing: ______ o.c.

6. HEADER / BEAM SIZE:
   ______ x ______

PROPERTY ADDRESS: _____________________________________________________

PROPERTY OWNER: ______________________________________________________

ADDRESS: ______________________________________________________________

APN or Tract # & Lot #: __________________________________________________