NOTES:
1. Ledger Bolts shall be 3/8" dia. x 6" long with 1/4" dia. pre drilled holes. Bolts are to be placed staggered.
2. All metal hardware & screws to be galvanized or of otherwise approved corrosion resistance.
3. Maximum 5' joist span if 2nd floor is cantilevered at ledger.
4. Shear walls may not be modified unless structural calculations are submitted and approved by the Building Department.
5. Use of this standard is limited to R-3 occupancies (Single Family Dwellings and Duplex).

DISCLAIMER:
Alternate deck designs may be possible when provided with an engineered analysis. Use of this conventional standard design is at the user’s risk and carries no implied or inferred guarantee against failure or defects.

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 6</td>
<td>12&quot; O.C.</td>
<td>10'-0&quot;</td>
</tr>
<tr>
<td></td>
<td>16&quot; O.C.</td>
<td>9'-0&quot;</td>
</tr>
<tr>
<td></td>
<td>24&quot; O.C.</td>
<td>7'-0&quot;</td>
</tr>
<tr>
<td>2 x 8</td>
<td>12&quot; O.C.</td>
<td>14'-0&quot;</td>
</tr>
<tr>
<td></td>
<td>16&quot; O.C.</td>
<td>12'-0&quot;</td>
</tr>
<tr>
<td></td>
<td>24&quot; O.C.</td>
<td>9'-0&quot;</td>
</tr>
<tr>
<td>2 x 10</td>
<td>16&quot; O.C.</td>
<td>15'-0&quot;</td>
</tr>
<tr>
<td></td>
<td>24&quot; O.C.</td>
<td>12'-0&quot;</td>
</tr>
<tr>
<td>2 x 12</td>
<td>24&quot; O.C.</td>
<td>14'-0&quot;</td>
</tr>
<tr>
<td>4 x 6</td>
<td>12&quot; O.C.</td>
<td>14'-0&quot;</td>
</tr>
<tr>
<td></td>
<td>16&quot; O.C.</td>
<td>13'-0&quot;</td>
</tr>
<tr>
<td></td>
<td>24&quot; O.C.</td>
<td>11'-0&quot;</td>
</tr>
<tr>
<td>4 x 8</td>
<td>24&quot; O.C.</td>
<td>15'-0&quot;</td>
</tr>
<tr>
<td>4 x 10</td>
<td>32&quot; O.C.</td>
<td>15'-0&quot;</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>JOIST SPAN</th>
<th>SIZE</th>
<th>SPAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>UPTO 8'-0&quot;</td>
<td>4 x 8</td>
<td>8'-0&quot;</td>
</tr>
<tr>
<td>8'-1&quot; - 10'-0&quot;</td>
<td>4 x 10</td>
<td>10'-0&quot;</td>
</tr>
<tr>
<td>10'-1&quot; - 12'-0&quot;</td>
<td>4 x 12</td>
<td>11'-0&quot;</td>
</tr>
<tr>
<td>12'-1&quot; - 15'-0&quot;</td>
<td>6 x 12</td>
<td>14'-0&quot;</td>
</tr>
</tbody>
</table>

TABLE “C”
LEDGER BOLT SPACING
(3/8 DIA. X 6" LAG BOLTS – SEE NOTE 1)

<table>
<thead>
<tr>
<th>DECK JOIST SPAN</th>
<th>SPACING</th>
</tr>
</thead>
<tbody>
<tr>
<td>8'-0&quot; OR LESS</td>
<td>8&quot; O.C.</td>
</tr>
<tr>
<td>8'-1&quot; TO 10'-0&quot;</td>
<td>6&quot; O.C.</td>
</tr>
<tr>
<td>10'-1&quot; TO 12'-0&quot;</td>
<td>5-1/2 O.C.</td>
</tr>
<tr>
<td>12'-1&quot; TO 14'-0&quot;</td>
<td>4-1/2 O.C.</td>
</tr>
<tr>
<td>14'-1&quot; TO 15'-0&quot;</td>
<td>4&quot; O.C.</td>
</tr>
</tbody>
</table>

NOTES:
1. Ledger Bolts shall be 3/8" dia. X 6" long with 1/4" dia. pre drilled holes. Bolts are to be placed staggered.
2. All metal hardware & screws to be galvanized or of otherwise approved corrosion resistance.
3. Maximum 5' joist span if 2nd floor is cantilevered at ledger.
4. Shear walls may not be modified unless structural calculations are submitted and approved by the Building Department.
5. Use of this standard is limited to R-3 occupancies (Single Family Dwellings and Duplex).
KNEE BRACE DETAIL A

NOTE:
1. END POSTS REQUIRE SINGLE KNEE BRACE. ALL INTERIOR POSTS TO HAVE DOUBLE BRACES.

LEDGER DETAIL B

LEDGER: (2X MEMBER SAME DEPTH AS DECK JOISTS OR DEEPER)

JOIST HANGER (SIZED TO JOIST)

For bolt size & spacing SEE TABLE"C"

Notch detail (typical)

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, A SPECIAL ENGINEERED DESIGN WILL BE REQUIRED. IT IS THE OWNER'S RESPONSIBILITY TO VERIFY THE PRESENCE OF THE APPROPRIATE RIM JOIST.

FOOTING DETAIL C

MIN 4 X 4 POST

1" STANDOFF FROM CONCRETE TO POST

MACHINE BOLTS PER MANUFACTURER’S SPECIFICATIONS

COLUMN BASE - USE SIMPSON CBSQ, PBS OR EQUAL

24" SQUARE

3 1/2"

18" DEEP

City of Jurupa Valley
Building Department

8930 Limonite Ave
Jurupa Valley, CA 92509

(951) 332-6464
Fax (951) 332-6995

6/12/2018

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**RAILING, POST, & BEAM DETAIL**

**OPTION #1**

- (2) 1/2” Dia. Machine bolts @ each post
- Post cap with machine bolts per manufacturer’s specifications

**OPTION #2**

- (2) #8 x 3” DECK SCREWS @ EA. 4x4
- (1) #8 x 3” DECK SCREW @ EA. 2x2
- (2) #8 x 3” DECK SCREWS @ EA. 2x2
- (2) 1/2” Dia. Machine bolts w/ nuts & washers @ each 4x4

**RAILING SECTION VIEWS**

**GUARDRAIL PERPENDICULAR TO JOISTS**

- 2x6
- 42” Min

**GUARDRAIL PARALLEL TO JOISTS**

- 2x6 w/ (2) #8 x 3” DECK SCREWS @ 4x4 POSTS
- 4x4 Posts @36” o.c.
- 2x2 Verticals @ <4” o.c.
- Double end joists or use 4x member
- Simpson “H3” or equal @ top and bottom
- 2x Blocking @ 32” o.c. w/ boundary nailing to block @6” o.c.

**Decking Options:**

- See notes below

**Floor Joists**

**Boundary nailing @ 6” o.c.**

(See notes below for nail sizes)

**Simpson “A35” or equal at ea. block**

**Simpson “H3” or equal @ 48” o.c.**

**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 resistant material, walking surface, and sloped for drainage.

2. 2x6” decking secured w/ (2) 16d nails @ ea. joist.

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**Western Riverside County Code Uniformity Program**

**City of Jurupa Valley**

**Building Department**

**Balcony/Deck Standard**

(951) 332-6464
8930 Limonite Ave
Jurupa Valley, CA 92509
Fax (951) 332-6995
**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 36" min - 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. ▲

**Handrail Details**

- Handrail to be adequately supported and returned to guardrail (see handrail details below).
- Height of handrail to be 34" to 38" above treads.

**Side View**

- Handrail/Guardrail to continue to grade.
- Simpson "A35" or equal.
- Approved angle bracket w/ lag bolts per manufacturer specs.
- 1/2" air gap between concrete and wood.
- 2x4 treated wood plate.
- (2) #4 rebar.
- 1/2" dia anchor bolt ▲
- Footing: 18" wide X 12" deep X stair width.

**Front View**

- 2x8 solid risers ▲
- (Closed risers required when tread is more than 30" above grade).
- 4x12 stringer @ ea. end of treads.
- (2) ¼" x 5" lag bolts @ ea 2x2.
- (2) ½" dia. machine bolts w/ nuts & washers @ ea 4x4 post.
- 4x12 stringer @ ea. end of treads.
- Handrail/Guardrail to continue to deck.
- 4x4 @ 48" o.c. max.
- 4x4 post.
- 2x2 rail.
- 4x12 treads.
- Handrail/Guardrail to be adequately supported and returned to guardrail (see handrail details below).
- 4" min ▲
- 7-3/4" max.
- Simpson "A35" or equal.
- 2x4 treated wood plate.
- (2) #4 rebar.
- 1/2" dia anchor bolt ▲
- Footing: 18" wide X 12" deep X stair width.

**Notes:**
- Other shapes may be acceptable if they provide an equivalent gripping surface.

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