**Deck Layout**

**Maximum 2-Ply Beam Length**

<table>
<thead>
<tr>
<th>Supported Joist Length</th>
<th>2 x 8</th>
<th>2 x 10</th>
<th>2 x 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>4'-0&quot;</td>
<td>11'-7&quot;</td>
<td>14'-10&quot;</td>
<td>17'-4&quot;</td>
</tr>
<tr>
<td>6'-0&quot;</td>
<td>9'-10&quot;</td>
<td>12'-1&quot;</td>
<td>14'-0&quot;</td>
</tr>
<tr>
<td>8'-0&quot;</td>
<td>8'-7&quot;</td>
<td>10'-6&quot;</td>
<td>12'-3&quot;</td>
</tr>
<tr>
<td>10'-0&quot;</td>
<td>7'-8&quot;</td>
<td>9'-4&quot;</td>
<td>10'-8&quot;</td>
</tr>
</tbody>
</table>

**Maximum 3-Ply Beam Length**

<table>
<thead>
<tr>
<th></th>
<th>8'-0&quot;</th>
<th>10'-8&quot;</th>
<th>13'-0&quot;</th>
<th>15'-1&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>10'-0&quot;</td>
<td>9'-6&quot;</td>
<td>11'-8&quot;</td>
<td>13'-6&quot;</td>
<td></td>
</tr>
</tbody>
</table>

**Maximum Floor Joist Length**

<table>
<thead>
<tr>
<th>Joist Size</th>
<th>Max. Span</th>
<th>Max. Cantilever</th>
</tr>
</thead>
<tbody>
<tr>
<td>2x8 @ 12&quot; O.C.</td>
<td>12'-6&quot;</td>
<td>20&quot;</td>
</tr>
<tr>
<td>2x8 @ 16&quot; O.C.</td>
<td>11'-9&quot;</td>
<td>16&quot;</td>
</tr>
<tr>
<td>2x8 @ 24&quot; O.C.</td>
<td>11'-0&quot;</td>
<td>14&quot;</td>
</tr>
<tr>
<td>2x10 @ 12&quot; O.C.</td>
<td>14'-6&quot;</td>
<td>28&quot;</td>
</tr>
<tr>
<td>2x10 @ 16&quot; O.C.</td>
<td>13'-8&quot;</td>
<td>24&quot;</td>
</tr>
<tr>
<td>2x10 @ 24&quot; O.C.</td>
<td>12'-10&quot;</td>
<td>20&quot;</td>
</tr>
<tr>
<td>2x12 @ 12&quot; O.C.</td>
<td>16'-5&quot;</td>
<td>28&quot;</td>
</tr>
<tr>
<td>2x12 @ 16&quot; O.C.</td>
<td>15'-6&quot;</td>
<td>24&quot;</td>
</tr>
<tr>
<td>2x12 @ 24&quot; O.C.</td>
<td>14'-6&quot;</td>
<td>20&quot;</td>
</tr>
</tbody>
</table>

**All decking is to be 5/4 x 6 wood material or approved equal.**

*Install solid blocking when floor joist span exceeds 6'-10". Blocking required to be of the same material and size as the floor joist and located not more than 6'-10" from each support and other rows of blocking.*
Guard Details

Option A

- 2 x ___ BEAM
- 2 - 3/8"Ø ANCHOR BOLTS THROUGH THE - 2 x ___ BEAM AND PART OF 6 x 6 POST
- 6 x 6 POST FOR DECKS GREATER THAN 4'-0" ABOVE GRADE.

Guard Post Detail

- MINIMUM 3/8"Ø ANCHOR BOLTS @ 16" CENTERS STAGGERED, ANCHOR BOLTS MUST BE INTO WOOD FRAMING OR FOUNDATION WALL, DO NOT SECURE INTO BRICK VENEER ALONE.

Option B

- 2 x 4 MIN.
- 2 x 6 RECOMMENDED
- 2 - 3" SCREWS
- RIM JOIST

Post Detail

- MINIMUM 4'-0"
- GRADE
- SONOTUBE ___" Ø

Guard Details

- 3" SCREWS @ 12" O.C.
- 2 x 4 MIN.
- 2 x 6 RECOMMENDED
- 2 x 4
- 1 - 2 1/2" SCREW
- MIN. 2 x 2 PICKETS (2x2 TURNED PICKETS NOT PERMITTED)
- 2 - 3" SCREWS
- RIM JOIST

**SOLID BLOCKING REQUIRED FOR BEAMS @ 18" O.C.

**ADDITIONAL LATERAL BRACING MAY BE REQUIRED. CONFIRM WITH BUILDING INSPECTOR @ FRAMING INSPECTION.
**Sonotube Sizes**

<table>
<thead>
<tr>
<th>Diameter</th>
<th>*Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>8&quot;Ø</td>
<td>1047 lbs</td>
</tr>
<tr>
<td>10&quot;Ø</td>
<td>1635 lbs</td>
</tr>
<tr>
<td>12&quot;Ø</td>
<td>2355 lbs</td>
</tr>
<tr>
<td>14&quot;Ø</td>
<td>3207 lbs</td>
</tr>
<tr>
<td>16&quot;Ø</td>
<td>4189 lbs</td>
</tr>
</tbody>
</table>

*Weight = (supported joist length each side of post x half beam length each side of post) x 40 lbs/SF

**Stair Dimensions**

<table>
<thead>
<tr>
<th>Type</th>
<th>Max.</th>
<th>Min.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rise</td>
<td>7 7/8&quot;</td>
<td>4 7/8&quot;</td>
</tr>
<tr>
<td>Run</td>
<td>14&quot;</td>
<td>8 1/4&quot;</td>
</tr>
<tr>
<td>Tread</td>
<td>14&quot;</td>
<td>9 1/4&quot;</td>
</tr>
</tbody>
</table>

**Notes:**
- Risers shall have a uniform height in any one flight of stairs.
- Treads shall have a uniform run and tread depth in any one flight of stairs.
**DECK NOTES**

Footings:
- Footings to be concrete filled sonotubes extending a minimum of 4'-0" below grade and 6" above grade. See the minimum diameters noted on the drawing.
- All footings to bear on undisturbed soil.

Columns:
- Minimum column size:
  
  4"x4" for decks < 4'-0" above grade
  6"x6" for decks > 4'-0" above grade

Beam/Joist Framing:
- 2x__ ledger board fastened to the house wood structure, NOT the brick veneer, with minimum 3/8"綈 bolts @ 16" o.c. staggered.
- If the beam is fastened on each side of the column, provide solid blocking @ 18" o.c. between plys of the beam.
- Max ___" joist cantilever.
- Max ___" beam cantilever.
- Joist hanger nails shall be used to attach all joist hangers. Do not use screws.
- Where the joists span > 6'-10", provide solid blocking at mid span (6'-10" o.c. max.)

**GUARD/RAILING NOTES:**

- Guard posts are not permitted to be notched or sit outside the rim joist
- The maximum post spacing is 5'-1" for pressure treated S.P.F. guard posts.
- Minimum guard height:
  
  35" for decks < 5'-11" above grade
  42" for decks > 5'-11" above grade

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**TYPICAL LEDGER BOARD BOLT LENGTHS:**

Siding - Minimum 8"
Concrete - Minimum 6" Sleeve Anchor
Brick - Minimum 10"

For other types of cladding, verify minimum bolt length with inspector prior to installation. The bolt must be able to be tightened without withdrawing. Both Lag Bolts and Lag Screws are permitted.

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**PRIVATE STAIRS:**

MAX. RISE 7'/8"
MIN. RISE 4'/6"
MAX. RUN 14"
MIN. RUN 8'/6"
MAX TREAD 14"
MIN TREAD 9'/3"

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**IT IS THE CONTRACTOR’S RESPONSIBILITY TO ENSURE THAT ALL CONSTRUCTION CONFORMS TO THE REQUIREMENTS OF THE ONTARIO BUILDING CODE. NOTATIONS MADE ON THESE DRAWINGS ARE FOR YOUR INFORMATION AND ASSISTANCE ONLY AND DO NOT NECESSARILY COMMENT ON ALL AREAS OF CONSTRUCTION.**

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**ALL GUARDS MUST BE NON-CLIMBABLE WITH NO HORIZONTAL MEMBERS BETWEEN 5'/4" AND 35" ABOVE THE FLOOR OR WALKING SURFACE.**

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**THE ONTARIO BUILDING CODE REQUIRES THAT A COPY OF THE DRAWINGS ARE SPECIFICATIONS THAT HAVE BEEN REVIEWED BY OUR DEPARTMENT BE KEPT AT THE CONSTRUCTION SITE AT ALL TIMES.**