EZ Permit Standards: Deck

Obtain zoning and building permits for building a deck without submitting plans by meeting the Conditions and Construction Requirements below. The deck must be attached to a single-family dwelling. Deviations will require submission of new permit applications and plans to the Department.

Conditions

- Deck must be attached to an existing single-family dwelling.
- Deck may not be located above the 1st floor.
- Deck must be in the rear yard. The deck cannot be in the front or side yards.
- Maximum size of deck: 160 sq ft [or 216 sq. ft. with intermediate post installations]
- A minimum distance of 3'-0” must be maintained from the deck to the rear property line or common driveway.
- All support columns must be located at least 1'-6” from all property lines.
- Deck supports may not prevent vehicular access to a garage, regardless of the use of garage.
- Maximum height shall be 14'-0” from the top of the footing to the underside of the beam.
- Area below the deck shall not be enclosed with solid walls.
- Clearance below decks, that are open to pedestrian access, shall be a minimum of 6’-0”.
- Deck may not have a roof or wall enclosures.
- Door to deck may only be installed in existing width openings.
- No new windows or wider openings permitted to be made in the rear wall. (Separate permits to be required for new or enlarged openings.)
- Decks attached to buildings located on a corner property may not extend beyond the building line.
- Deck may not support a spa or hot tub.
- Stairs leading to grade are only permitted to be erected for decks installed on a detached or semi-detached single-family dwelling.

Construction Requirements

Materials

- Structural framing lumber used in construction must be pressure treated wood, and of Southern Pine species.
- Hardware and fasteners must be hot-dipped galvanized or stainless steel and compatible with pressure treated wood.

Concrete Footings

- All footings shall be placed 30” below grade (the frost line) on undisturbed natural soil.
- Minimum footing thickness = Six (6)-inches
- Minimum size of footing: 16” diameter at end posts [19” diameter at intermediate posts]
- Maximum area of deck = 160 SF [or 216 SF with intermediate post installations]

Framing (See Detail A)

Attachment to Primary Structure:

- Decks must be securely anchored to the house through the attachment of a ledger board using either Detail B or Detail C in this document. (Other options are permissible by the Code, but not through this EZ Permit.)
- Fasteners – Shall be minimum ½” diameter; spaced maximum of 16” O.C.; staggered top and bottom
  - Detail B – attaching to wood framed walls (ledger board must be greater than or equal to the size of the joists)
  - Detail C – attaching to masonry walls (ledger board shall not be solely attached to a masonry veneer)

Note: Poor connections of ledgers often result in collapse of the deck!
Vertical Columns: Posts must be minimum nominal size 6” x 6”.
- Posts must bear on footings and shall be restrained to prevent lateral displacement at the bottom support. That support must be provided by manufactured connectors or minimum post embedment to the frost line.
- Diagonal bracing must be installed using a minimum 2”x4” located at all posts and must be bolted to posts, beams, and joists with ½” lag screws.

Deck Post to Deck Beam:
- Deck beams shall be attached to deck posts using “notched” posts or manufactured post-to-beam connectors that are properly sized for the post and beam sizes. All bolts shall have washers under the head and nut.

Beams:
- Beam plies shall be fastened with two rows of minimum 10d (3-inch x 0.128-inch) nails at 16-inches on center along each edge.
- Minimum beam end-bearing length = 1.5-inches bearing on wood
- Beams shall be permitted to cantilever at each end up to one-fourth of the allowable beam span.

Maximum deck beam span (post to post) limitations are as follows:

<table>
<thead>
<tr>
<th>Joist Span</th>
<th>Maximum Deck Beam Span (3 – 2 x 12 Beam)</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤ 12’-0”</td>
<td>10’-9”</td>
</tr>
<tr>
<td>≤ 14’-0”</td>
<td>10’-0”</td>
</tr>
<tr>
<td>≤ 16’-0”</td>
<td>9’-4”</td>
</tr>
<tr>
<td>≤ 18’-0”</td>
<td>8’-10”</td>
</tr>
</tbody>
</table>

Joists:
- Joists framing into the side of the ledger board or beam must be supported by approved joist hangers.
- Joists bearing on a beam shall be properly connected to the beam to resist lateral displacement.
- Minimum joist end-bearing length = 1.5-inch bearing on wood
- Joists are permitted to cantilever over the beam, but not more than ¼ of the joist span.
- Joists shall be solidly blocked at beam when cantilevered

Joist spans shall be based on the following table:

<table>
<thead>
<tr>
<th>Maximum Deck Joist Span</th>
<th>Maximum Cantilever Span</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joist Size</td>
<td>16” O.C. Spacing</td>
</tr>
<tr>
<td>2 x 8</td>
<td>11’-10”</td>
</tr>
<tr>
<td>2 x 10</td>
<td>14’-0”</td>
</tr>
<tr>
<td>2 x 12</td>
<td>16’-6”</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Maximum Cantilever Span</th>
</tr>
</thead>
<tbody>
<tr>
<td>2’-3”</td>
</tr>
<tr>
<td>3’-6”</td>
</tr>
<tr>
<td>4’-2”</td>
</tr>
</tbody>
</table>

Where lateral restraint is provided by rim joists, they must be secured to the end of each joist with no less than three (3) 10d (3-inch x 0.128-inch) nails or three (3) No. 10 x 3-inch long wood screws.

Decking:
- Must be installed perpendicular to joist framing with minimum nominal thickness of 5/4” x 6” for joist spacing of 16-inch O.C.
- Composite decking must be installed per the manufacturer’s instructions.
- Each decking board must bear on a minimum of three joists, or there must be blocking installed between joists.
Guard Rail:
- Guard rail is required around deck perimeter for decks greater than 30-inches above grade.
- Height: minimum 36”; maximum 42”.
- No opening greater than 4” is permitted in the railing design.

Stair Construction (for semi-detached and detached structures only):
- Stairways – minimum width = 36 inches; landing area at top and bottom of at least 36” X 36”.
- Minimum tread depth = 9 inches; maximum riser height = 8 ¼ inches;
- Railing/handrail height: minimum 34 inches; maximum 38 inches

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Detail A: Framing Requirements
Detail B:
Attachment of Ledger to Wood Framed Wall and Fasteners for Lateral Support

Detail C: Attachment of Ledger Board to Masonry Wall
Note: Ledger Board is NOT permitted to be supported on Stone/Masonry Veneer Exterior Wall Coverings.