GROUND-LEVEL DECK

Ground-Level Deck

Project Plan #857  Sheet 1 of 6

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Decks can work wonders in many different ways...contemporary in style, yet simple and natural. They blend home and landscape with broad, inviting vistas creating a feeling of freedom and expansiveness and offer an oasis of comfort in the open air. Sometimes the best room of the house is outside on the wood deck.

Naturally versatile, a deck can be a breakfast room on sunny mornings, a play area for children, a sitting room for reading, a kitchen for cookouts, or a living room for garden parties.

Pressure-treated Southern Pine is the ideal material for building your new deck. Its inherent properties — exceptional strength, treatability, fastener and nail-holding ability, and high resistance to wear — provide excellent durability.

This ground-level deck plan will take you step by step through the construction process. The design uses Southern Pine Radius Edge Decking (R.E.D.) in a parquet configuration for a great-looking addition to your outdoor living space.

**MATERIALS LIST**

To build this deck, you will need the following quantities of pressure-treated Southern Pine lumber:

<table>
<thead>
<tr>
<th>NUMBER OF PIECES</th>
<th>MATERIAL</th>
<th>LENGTH</th>
<th>SERVICE CONDITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>2x8</td>
<td>20'</td>
<td>Ground Contact</td>
</tr>
<tr>
<td>4</td>
<td>2x4</td>
<td>20'</td>
<td>Above Ground</td>
</tr>
<tr>
<td>2</td>
<td>2x8</td>
<td>12'</td>
<td>Ground Contact</td>
</tr>
<tr>
<td>2</td>
<td>2x8</td>
<td>10'</td>
<td>Ground Contact</td>
</tr>
<tr>
<td>32</td>
<td>2x6</td>
<td>10'</td>
<td>Above Ground</td>
</tr>
<tr>
<td>8</td>
<td>2x2</td>
<td>10'</td>
<td>Ground Contact</td>
</tr>
<tr>
<td>84</td>
<td>5/4x6* R.E.D.</td>
<td>10'</td>
<td>Above Ground</td>
</tr>
</tbody>
</table>

*Specify Southern Pine Radius Edge Decking, either Premium R.E.D. or Standard R.E.D. grade.

**OTHER MATERIALS NEEDED:**

- 8d, 10d & 12d hot-dip galvanized nails
  (See Fastener Advisory)
- 40 1/4” x 3” hot-dipped galvanized lag screws
- 21 concrete blocks, 4” x 8” x 16”
- Concrete or gravel for footings
- Construction adhesive for pressure-treated lumber.
- Water repellent sealer

**TOOLS REQUIRED**

- Hammer
- Carpenter’s rule or tape
- Drill with 3/16” bit
- 1/2” hex wrench or socket wrench
- Crosscut or circular saw
- Square
- Stakes, line, level
CONSTRUCTION STEPS

1. Determine exact location of the deck. On the sides that will adjoin your house or other building, omit 2x4 trim pieces.

2. Choose one of the footing options for support of the concrete blocks. Refer to plan for footing locations; the top of the blocks should be at ground level. Use stakes, line, and level to aid positioning of footings and blocks.

3. Build perimeter deck frame by cutting two 2x8s to 19'-6" and two more to 19'-3". Make a square frame using 12d nails and construction adhesive.

4. Install center support using two 12’ 2x8s overlapping them at the center. Position them along the centerline of the deck frame. Use 10d nails and construction adhesive to nail the overlapping sections together and to attach this center support to the deck frame.

5. Complete the basic support frame by cutting two 2x8s to fit between the deck frame and the center support. Use 10d nails and construction adhesive to attach them to the deck frame along the centerline. Use 12d nails to toe-nail these members to the overlapping 2x8 sections of the center support. Make sure entire deck frame assembly remains square.

6. Determine the deck board direction for your parquet pattern in each of the four quadrants.

7. Attach 2x2 ledgers to the 2x8 deck frame and center supports. Ledgers support both ends of the 2x6 joists. Be sure combined ledger and 2x6 joist height is flush with top of 2x8s. Attach ledger to 2x8s using construction adhesive and the galvanized lag screws. Use 5 screws per ledger, spacing them about 18” apart. Predrill 3/16” holes to receive lag screws.

8. Install 2x6 joists 16” on center perpendicular to deck board direction in each quadrant. Use 10d nails. Refer to plan for exact joist positioning. Check for square.

9. Along the centerline of each quadrant, install 2x6 bridging between the joists. Stagger their placement to aid nailing; use 10d nails. Tops of bridging and joists should be flush.

10. Begin arranging 10’ 1x6 deck boards. Start at the center of the deck and build the parquet pattern out to each edge, allowing the board length to hang over the 2x8 perimeter deck frame.

11. Attach deck boards to frame and joists using 8d nails and construction adhesive. When nailing near the end of the boards, remember to either blunt nail points or predrill holes to avoid splitting.

12. When all 21 deck boards per quadrant have been attached, evenly cut all the ends flush with the 2x8 perimeter frame.

13. Attach the 2x4 trim pieces to the 2x8 frame using 10d nails. The top edge of the 2x4 trim should align with the deck boards’ surface.

14. Construction is complete. Apply a coat of water-repellent sealer to all exposed surfaces.
Note: Attach ledger to 2x8 w/ 5 1/4" x 3" galvanized lag screws (approx. 18" apart) & construction adhesive.
FOOTING OPTIONS BENEATH CONCRETE BLOCKS

CONCRETE FOOTING

COMPACTED GRAVEL FOOTING