

# COMPACT DECK



**SOUTHERN  
FOREST PRODUCTS  
ASSOCIATION**

6660 Riverside Dr., Suite 212  
Metairie, LA 70003

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## Compact Deck

**Project Plan #850 Sheet 1 of 6**

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This plan contains an attractive deck design that two handy persons with intermediate building skills can construct in a weekend. Build it with versatile pressure-treated Southern Pine lumber and your new deck will provide many years of outdoor living enjoyment. Designed for a level site, this deck includes comfortable seating. When built with pressure-treated Southern Pine lumber, the deck framing material is to be pressure-treated and quality-marked for “ground contact” applications. All decking, seating, and rail materials can be quality marked for “above ground” use.

Also, local soil conditions may warrant the installation of 4x4 corner posts, set in concrete beneath the deck frame, to minimize the effects of ground subsidence over time. An easier alternative is to place concrete block footers at the deck frame’s four corners. Ask a local builder if either support device is necessary.

### MATERIALS LIST

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

NUMBER OF PIECES	MATERIAL	LENGTH	TO MAKE
4	2x12	12'	Deck Framing (F1-F4)
5	2x12	10'	Deck Framing (J1-J5)
3	2x10	8'	12 Seat Supports (R)
6	2x6	12'	Deck Framing (F4,F5); Blocking
12	2x4	10'	Seat Frames, Rail Supports, Ledgers
22	2x2	17"	Railing Spindles
372 lin.ft.	5/4x6 R.E.D.	D1 16 pcs. 8'	D2 20 pcs. 10' (Deck, Seats & Back Rail) D3 4 pcs. 11' (Steps)

### OTHER MATERIALS NEEDED

- Hot-dip galvanized or stainless steel fasteners  
(See Fastener Advisory)
  - 8d (approx. 8 lbs.) to fasten decking, steps, seat, and rail
  - 12d (approx. 10 lbs.) to assemble deck framing
  - 11 hot-dip galvanized bolts, 5"x<sup>3</sup>/<sub>8</sub>" dia.,  
with 22 washers
- Construction adhesive for treated wood
- Water-repellent sealer

### TOOLS REQUIRED

- Hammer
- Crosscut or circular saw
- Carpenter’s level and square
- Miter saw
- Drill with 3/16" bit
- Small hand saw or sabre saw

## CONSTRUCTION STEPS

1. Build the deck frame. From the 12' 2x12 lumber, cut members F1, F2, F3, and F4 according to the Deck Framing Plan. Assemble with 12d nails and construction adhesive.
2. Complete step frame, cutting F5 (10'-10") and F6 (10'-7½") from 2x6 lumber. Attach to protruding ends of F1 and F2. Check for square. Overall dimensions of deck frame should be 10'-11½" by 10'-10½".
3. Carefully measure the inside distance between F1 and F3; it should be 9'-10". Cut five 2x12 joists, J1 through J5 to fit between F1 and F3. Refer to section A-A for joist location. Attach to deck frame with 12d nails and construction adhesive. As each joist is installed, recheck for square.
4. From the remaining 2x6 lumber, cut blocking to attach at midpoints of all joists and between J1 and F2 and J5 and F4. Align top edge of blocking with top of 2x12 joist. Attach blocking adjacent to seat frame locations between F2 and J1. Attach blocking at steps, between F4 and F5, and between F3 and F6. Add diagonal blocking at four deck corners and at the intersection of the steps. Refer to Deck Framing Plan for all blocking locations.
5. Cut all 2x10 lumber into two-foot lengths, making a total of 12 vertical seat supports (R). From two 10' 2x4s, cut 15" ledger pieces (S), making a total of 12. From four more 2x4s, cut a total of 20 seat frame members (W), each 21" long. From the remaining six 2x4s, cut 12 rail supports (T) 3'-8¼" long, plus four 21" seat frame members (W). Refer to Section A-A for end-cutting details of parts T (both ends cut at 45°) and W (one end at 60°); use miter box to make uniform cuts.
6. Construct seat framing as shown in Sections A-A and C-C. Using 12d nails and adhesive, attach 2x4 rail supports (T) to F1 and F2 at locations shown in Deck Framing Plan. Attach 2x10 vertical (R) to 2x12 joists and frame and 2x6 blocking with 12d nails and adhesive. Bottom of 2x10 should be 3" above ground level; vertically, the 2x10 is positioned 5½" in from the outer edge of the deck frame. NOTE: Use a single piece of decking (5½" wide) to aid positioning of 2x10 (R). Next, attach pairs of 2x4 seat supports (W) flush with top edge of 2x10 vertical (R).
7. Where the 2x4 seat supports (W) and rail support (T) intersect, drill a centered hole to receive 5"x¾" bolt with washers. NOTE: For optimum appearance, a 4½"x3/16" bolt can be used if countersunk ⅜" on both sides.
8. Pre-cut and pre-position all Radius Edge Decking (R.E.D.) before nailing in place. For the deck platform's four sides, three pieces of decking (D2) form a "picture frame" around 16 pieces of decking (D1) cut to a length of approximately 7'-2"; take actual measurement before cutting the 8' lengths of decking.  
  
At seat frame locations, some notching of D2 decking will be required. Use a small hand (keyhole) or sabre saw for notching. Use miter box saw to cut 45° decking and step joints at corners.
9. Once all R.E.D. pieces are in position, attach to deck frame with 8d nails and construction adhesive. The R.E.D. steps (D3) are completed in similar fashion. Decking on steps should overhang ½" beyond 2x6 framing (F5 and F6).
10. Attach R.E.D. seating to 2x4 frames (W) using 8d nails and adhesive. Use miter saw to cut ends where the two benches intersect. Attach R.E.D. rail to the top of 2x4 support (T) in similar fashion.  
  
NOTE: Do not nail R.E.D. seating into end of 2x10 (R).
11. From 2x2 material, cut 22 railing spindles (V) 17" in overall length. The top should be cut to 45°; the bottom cut straight. Equally space two spindles between each 2x4 support (T). Use 8d nails and construction adhesive to attach each spindle to the back of R.E.D. rail and seating. Pre-drill all holes in spindles.
12. Apply a water-repellent sealer to all exposed wood surfaces now that construction is complete. Properly dispose of treated lumber scraps.



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These plans and the information contained herein will help you achieve the best possible results in working with Southern Pine lumber products. The conditions under which lumber is used in construction vary widely, as does the quality of workmanship. Since neither the Southern Forest Products Association nor its members control the method of use or the quality of workmanship in structures built with lumber, they do not warrant lumber performance or design in completed structures.



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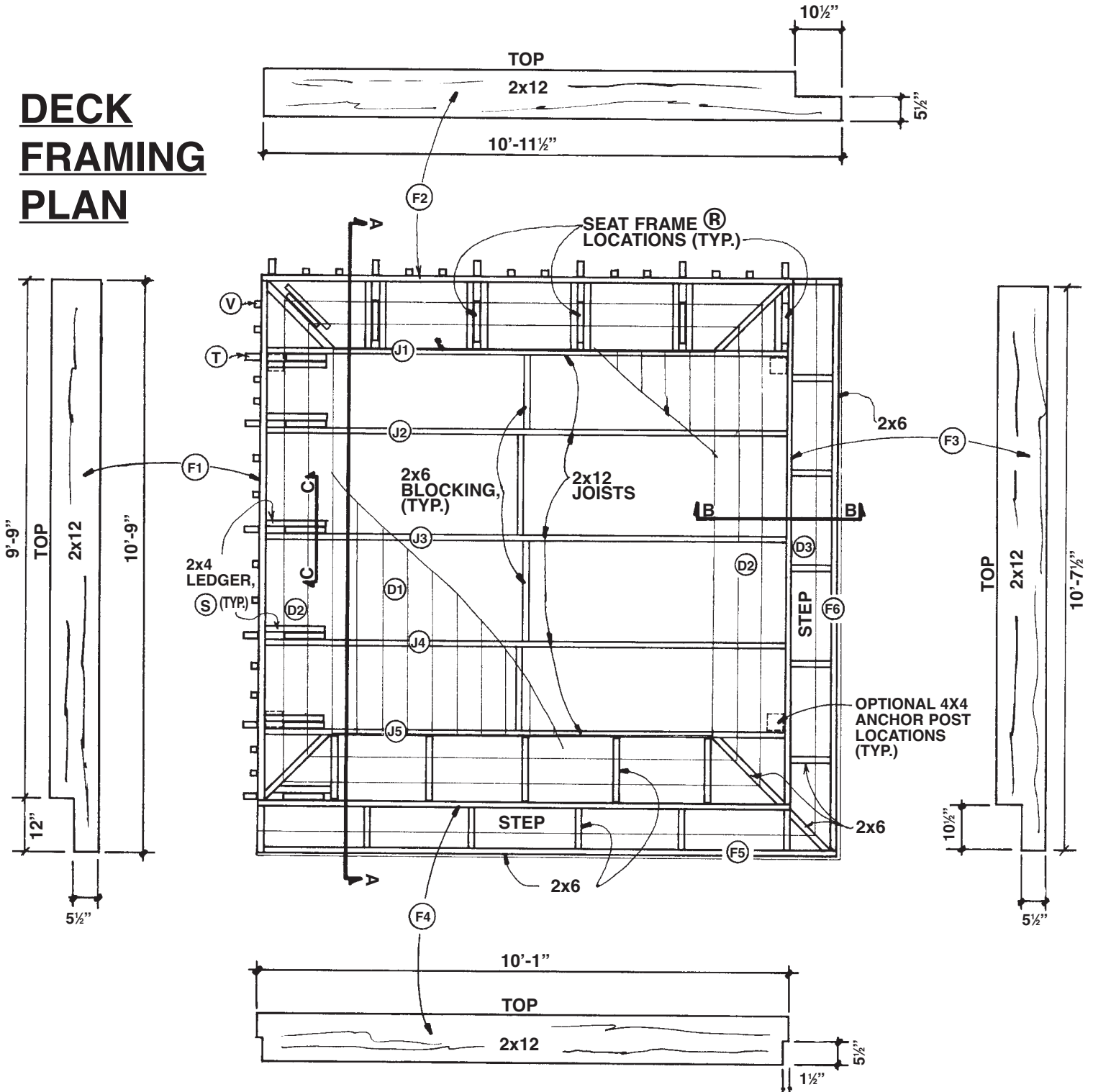
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# DECK FRAMING PLAN



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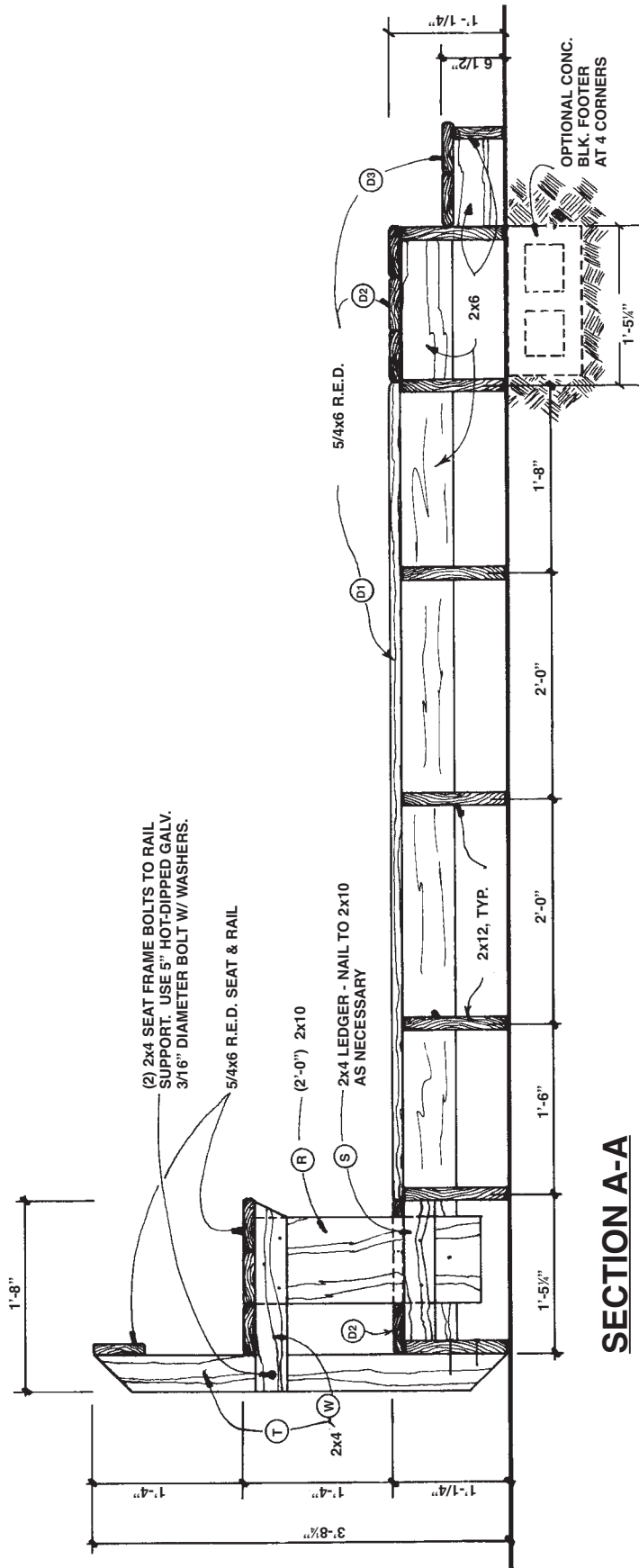
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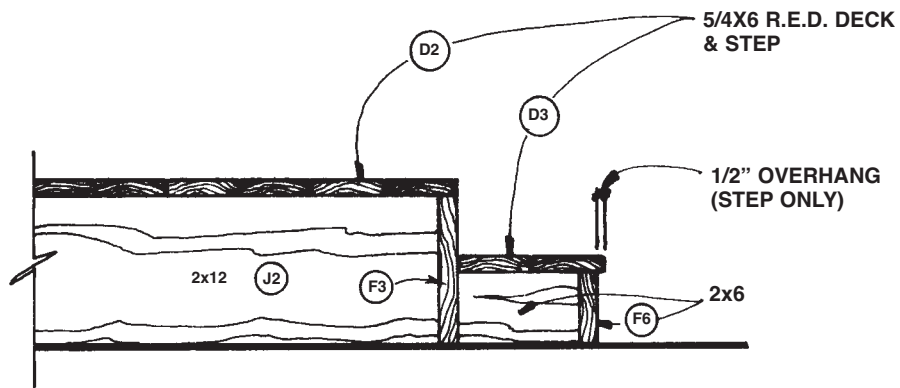
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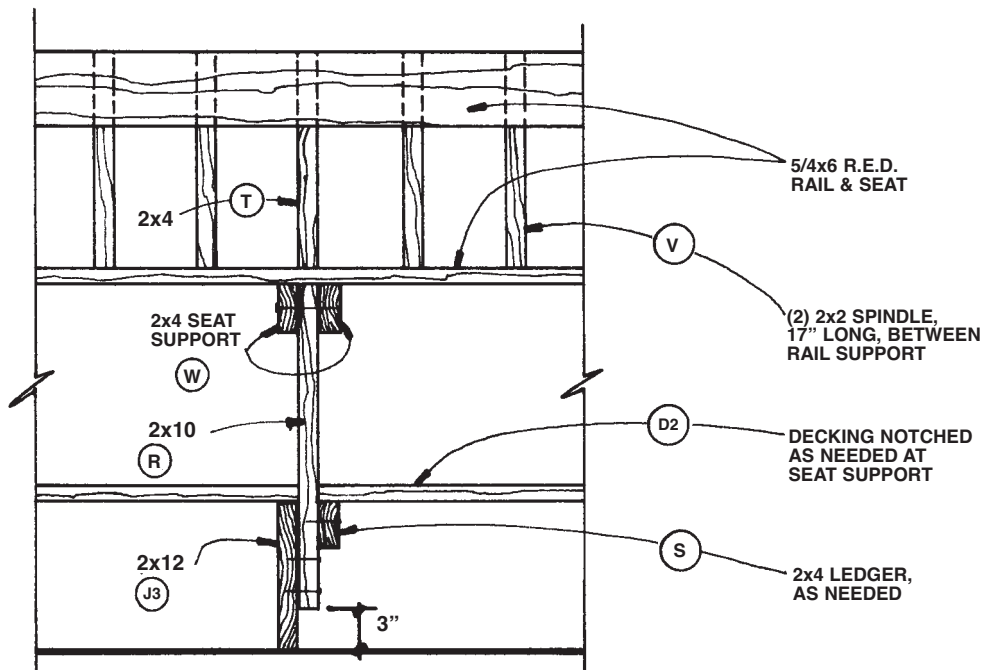
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**SECTION B-B**



**SECTION C-C**



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