

YOUR FREE READER'S COMPANION

The Deck Build Pack

A companion to The Backyard Deck Building Bible · by Levi Sutton

Thanks for picking up the book. This is the companion you take out to the yard with the string line and the post-hole digger: footing depths, span tables, a fastener and flashing guide, and an inspection-ready checklist. Print it, fold it into your tool belt.

A deck fails in one of three places: the footings, the ledger, or the fasteners. Get those three right and you've built something that outlives the house. These pages are those three things. — Levi

Footings Depth by Region

Footings must reach below the frost line, or the deck heaves every winter. Check your local code — these are typical minimums.

Region / climate	Frost line	Typical footing depth
Deep South (no frost)	0	12 in (bearing only)
Mid-Atlantic / transition	24-30 in	30-36 in
Midwest / Northeast	36-48 in	42-48 in
Northern plains / Canada border	48-60 in	60 in
Mountain West	varies	36-48 in (verify locally)

Rules:

- Footing diameter sized to soil + load — 12 in for most residential, bigger for soft soil.
- Bell the bottom or use a footing form for bearing.
- Always call 811 (or your locator) before you dig. Always.

Joist & Beam Span Tables (quick reference)

Southern Pine / Douglas Fir, 40 psf live + 10 psf dead. Always confirm against your local code and lumber grade.

Joist span (max) by size & spacing

Joist	12 in OC	16 in OC	24 in OC
2x6	9'-11"	9'-0"	7'-7"
2x8	13'-1"	11'-10"	9'-8"
2x10	16'-2"	14'-0"	11'-5"
2x12	18'-0"	16'-6"	13'-6"

Beam span (max) — built-up, by ply & size

Beam	Max span
(2) 2x8	~6 ft
(3) 2x10	~9 ft
(3) 2x12	~11 ft

When in doubt, go one size up. Bounce-free decks make happy clients (and happy knees).

Fasteners, Flashing & Ledger Guide

This is where most DIY decks fail — and where inspectors look first.

The ledger (deck-to-house connection)

- Bolt with 1/2 in lag screws or through-bolts — NEVER nails, NEVER deck screws.
- Stagger bolts top and bottom, ~16 in OC, 2 in from edges.
- Z-flashing over the ledger, tucked under the house siding/wrap, lapped over the ledger face. Water must shed OUT.
- Use spacers (washers or DeckLok) so water can't sit between ledger and house.

Fasteners by job

Job	Fastener
Ledger to rim	1/2 in hot-dip or structural lag/through-bolt
Joist to beam	Hurricane ties / joist hangers (galvanized)
Decking boards	Hidden clips or coated/stainless deck screws
Post to footing	Galvanized post base (never bury wood in concrete)
Post to beam	Through-bolt + post cap, not toenails

Every metal connector and fastener in contact with treated lumber must be hot-dipped galvanized or stainless. Treated wood eats regular steel.

Inspection-Ready Checklist

Walk this before you call the inspector — it's the list they actually use.

- Footings below frost line, correct diameter, post bases not buried
- Ledger bolted (not nailed/screwed), flashed, spaced off the house
- Joist hangers fully nailed with the correct hanger nails (not roofing nails)
- Beam properly sized and supported; posts capped, not toenailed
- Guardrail 36 in min, balusters spaced so a 4 in sphere won't pass
- Stairs: consistent rise/run, graspable handrail, solid stringers
- All hardware galvanized/stainless; no rust-bleeding fasteners
- Lateral load connectors at the house if required by your code

That's the pack. Set your footings right and square your ledger before anything else — everything above it depends on those two. When your deck's done and you're standing on it with a cold drink, I'd love to hear about it, and in a couple of emails I'll tell you how a quick word from you helps this book reach the next

builder.

Square and level,

Levi Sutton