



CODE ENFORCEMENT AGENCY

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2026 Residential Deck Construction Guidelines & Answers



Code Reference

- **PA UCC & IRC 2018 Edition**
- Refer to **Section R507** of the IRC for deck-specific code.
- Consult with a PA Design Professional should you need help or assistance.



Minimum Plan Requirements

1. Deck Layout- (As detailed as possible)

- Dimensions & footprint (including height from grade)
- Materials (wood, composite, etc.)
- Footing details
- Rail/barrier info
- Fasteners & connectors
- Beam bearing & lateral supports
- Joists & ledger details
- Band joist & flashing
- Stair dimensions & handrails
- Stairway landing (if applicable)



Load Requirements

- **Live Load:** 40 psi
- **Dead Load:** 10 psi
- **Snow Load:** 40 psi

Footing Details

- **Minimum Depth:** 36"
 - **Materials Used:** Specify
 - **Backfill Description:** Required for post supports
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Deck Framing

- Type of framing & materials
 - Height & span of framing
 - Joist span & connections
 - Lateral load connectors
 - Bridging (if applicable)
 - Deck flooring & flashing
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Deck Flashing

- Method of flashing
 - Water & debris diversion from ledger
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Fasteners & Hardware

- Type of fasteners (NO screws unless approved)
 - Placement in ledger & band joists
 - Lateral load connectors
 - Braces, brackets, hangers
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Post & Beam Details

- Beam type, material, span
- Beam-to-post connection
- Beam-to-joist fasteners (e.g., hurricane straps)

Beam Span Chart (Table R507.5)

- Example: 2x10 beam with 18' joist span = 5' beam length (1' cantilever max)

Deck Post Maximum Heights

Post Size Max Height

4x4	6'-9"
4x6	8'-0"
6x6	14'-0"
8x8	14'-0"

Steps, Barriers, Guards & Handrails

- Affixation details to deck/posts
- Rise & tread dimensions
- Handrails must be:
 - Treated material
 - Graspable or rounded
 - **No squared 2x4s or untreated wood**

Exterior Electrical Outlet- *REQUIRED*

- Required if none present
 - Must be exterior-rated
 - Located within 6'6" of deck surface
(IRC E3901.7 / NEC 210.52(E))
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Common Application Failures

Before submitting, ensure you've addressed:

- Structure composition
- Deck attachment method
- Wood species
- Fastener types
- Grade projection
- Gross area (including steps)
- Landing requirements
- Handrail & lateral support details
- Flashing & hurricane ties
- Electrical outlet presence
- Proof of Workman's Compensation or Notarized Affidavit Waiver



Important Notes

- **Material lists/contracts are NOT sufficient**
- Provide descriptive layout or narrative
- **Plans must be LEGIBLE**
- **No permit issued without full details**
- **Building Department & CEA cannot assist with design**
- Consult a **PA design professional** if needed
- Registration in the Pennsylvania Attorney General's Database is **NOT** a license to perform construction in the Commonwealth of Pennsylvania. This HIP# is solely for a contractor's protection Act.
- The above captioned are the minimum code requirement for residential plans review for permitting and subject to a PA UCC Residential Permit for a Deck or Roof over a Deck.

Go to: <https://codes.iccsafe.org/content/IRC2018P7>
ICC Residential Code. Decks Section 507.