

Deck Board Fastening Patterns

Tip: Set your PDF viewer to "**Actual size**" before printing to maintain scale.

Pattern Type	Screw Placement	When to Use	Important Notes
Standard 2-Screw	2 screws per joist 3/4"-1" from edges	Boards up to 6" wide Most common pattern	<ul style="list-style-type: none"> • Most economical • Adequate for standard loads • Quick installation
3-Screw Pattern	3 screws per joist Evenly spaced	Boards wider than 6" Cupping prevention	<ul style="list-style-type: none"> • Prevents board cupping • Required for wide boards • Increases material cost
End Joint Pattern	2 screws per board end Both on joist center	All board end joints	<ul style="list-style-type: none"> • Both board ends on one joist • Stagger joints across deck • Critical for stability
Picture Frame Border	Screws hidden by border 2-3 screws per joint	Decorative borders Miter corners	<ul style="list-style-type: none"> • Face screws covered by border • Requires extra blocking • Toe-screwing at corners
Diagonal Decking	2 screws per joist 1" from edges	Diagonal/herringbone patterns	<ul style="list-style-type: none"> • More cuts = more waste • Beautiful appearance • Requires blocking between joists
Hidden Fastener	Per clip manufacturer Edge-mount clips	Clean surface Composite decks	<ul style="list-style-type: none"> • No visible fasteners • Follows clip system specs • Premium appearance

Spacing & Distance Requirements:

- Joist spacing: Typically 16" on center (12" for composite, check manufacturer specs)
- Edge distance: Minimum 3/4" from long edges, 1" recommended
- End distance: Minimum 2" from board ends (pre-drill if closer)
- Screw spacing along board: Match joist spacing (typically every 16")
- Gap between boards: 1/8" for treated lumber, 1/4"-1/2" for composite (expansion)
- First board to house: 1/4" gap minimum for water drainage and expansion

Screw Quantity Estimator:

Formula: (Deck sq ft ÷ Board width in ft) × (Deck length ÷ Joist spacing) × Screws per joist

Example: 12×16 deck, 16" joists, 5.5" boards, 2 screws: $(192 \div 0.458) \times (16 \div 1.33) \times 2 \approx 1,008$ screws

Always add 10-15% extra for waste, mistakes, and cut pieces!

