

Nail Application Guide

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

Application Quick Reference

Application	Nail Type	Size	Material/Finish	Key Notes
Wall Framing	Common or Sinker	16d (3-1/2")	Bright or coated	Two nails per connection, 16" o.c. typical
Roof Sheathing	Common or ring shank	8d (2-1/2")	Bright or HDG	6" edges, 12" field pattern
Subflooring	Ring shank	10d (3")	Coated or HDG	6" edges, 10" field, glue + nail best
Asphalt Shingles	Roofing	1-1/4"	HDG with large head	4 nails per shingle, never overdrive
Wood Siding	Ring shank siding	2" to 2-1/2"	HDG or stainless	16" o.c., 1" above bottom edge
Fiber Cement Siding	Siding	2" to 2-1/2"	HDG or coated	Follow manufacturer spacing specs
Baseboard	Finish	6d to 8d (2" to 2-1/2")	Bright or coated	Into studs, set below surface, fill
Crown Molding	Finish	6d (2")	Bright finish	Angle into studs/joists, nail backing helps
Door Casing	Casing or finish	6d (2")	Bright	Into jamb and studs, set and fill
Hardwood Floor	Flooring cleats or cut nails	2"	Bright	Blind nail 45° through tongue, 8-10" o.c.
PT Deck Boards	Ring shank	3" (10d)	HDG or stainless (required)	Two per joist, 1" from edge, pre-drill ends
Fencing	Ring shank	2-1/2" to 3"	HDG required	Two nails per picket, stagger for strength

Nail Application Guide

Installation Best Practices

Preventing Wood Splits

- Keep nails 3/4" from edges, 2" from board ends
- Pre-drill hardwoods and near ends (70-75% of nail diameter)
- Use thinner nails (box vs. common) in thin or brittle wood
- Blunt nail point slightly to crush fibers instead of wedging

Proper Driving Technique

- Hold nail perpendicular to surface for straight penetration
- Start with light taps to set nail without bending
- Drive with firm, controlled strokes - avoid glancing blows
- Stop when head is flush - overdriving crushes wood fibers
- For finish nails, use nail set to sink 1/16" below surface

Maximizing Holding Power

- Ensure penetration of at least 2/3 into second piece (1" minimum)
- Drive nails at slight angle (dovetail effect) for better grip
- Alternate nail angles in critical connections
- Use ring shank nails where nails might back out over time
- Space nails appropriately - too close reduces holding power

Common Mistakes to Avoid

- **X Under-penetration:** Nail doesn't reach deep enough into second piece
- **X Over-driving:** Crushing wood around nail reduces holding power by 30%
- **X Wrong material:** Using bright nails in treated lumber causes rapid failure
- **X Undersized nails:** Using 6d where 16d needed creates weak connections
- **X Missing framing:** Nailing into sheathing only provides no holding power

Quality Products That Last - Right Off the Rack®

www.albanycountyfasteners.com

© 2025 Albany County Fasteners. All rights reserved.