

# Builder Tips

## Minimize Nail Pops

**Why it Matters:** Nail pops can create aesthetic issues with roofing and thin flooring, and cause floor squeaks that can become a quality issue for the builder and homeowner.

Nail “pop” or “backout” describes the protrusion of nail heads above the surface sometime after they were originally driven into the wood (Figure 1). This sometimes happens when green (wet) lumber shrinks because of drying. The nail point stays put while the lumber shrinks along the shank, exposing the nail head.

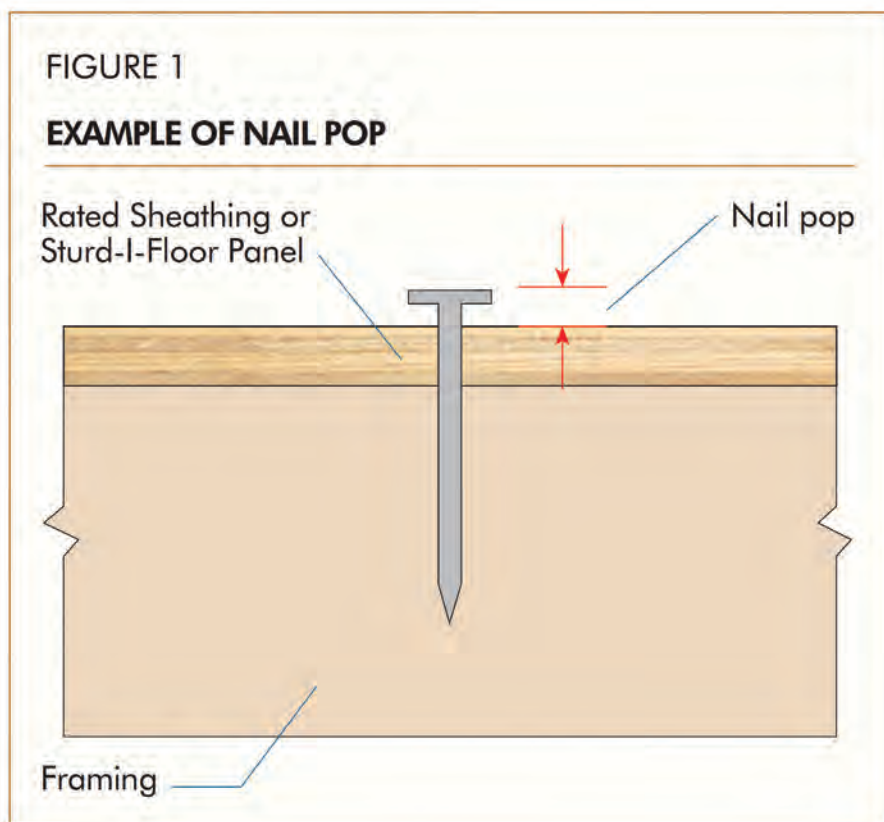
Repeated wetting and drying of the wood may also cause “cumulative pop” (the nail backs out of the wood incrementally). Staples can also “pop” or “backout” under these conditions.

### Tip 1: Choose the correct materials.

Use dry lumber or engineered wood framing such as I-joists, trusses, glulam, or structural composite lumber, which is manufactured in a dry condition. Remember that even kiln-dried lumber has enough water left in it to cause some shrinkage.

### Tip 2: Use the proper length of fasteners.

When attaching plywood underlayment to a subfloor (Figure 2), use nails having a length approximately equal to the total thickness of the subfloor and



underlayment layers. If pneumatically driven fasteners are used, foot pressure should be applied near the fastener to assure contact between the underlayment and subfloor. Do not overdrive or underdrive fasteners, which could result in “telegraphing” fastener or panel joint location through resilient tile or sheet flooring.

### Tip 3: Reduce nail pops.

Use of deformed-shank nails may help reduce cumulative pop. For fastening underlayment, APA recommends ring- or screw-shank nails.

### Tip 4: Prepare the framing surface.

Attach wood structural panel roof

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or floor sheathing to a clean, level framing surface. If framing hangers or connectors are attached to the top of supporting framing members, shims or furring strips made from wood structural panels may need to be placed between these hardware components, to make the framing surface flush. Otherwise, gaps between the sheathing and framing could result in nail pops when the sheathing is subjected to construction loads or foot traffic. **PB**

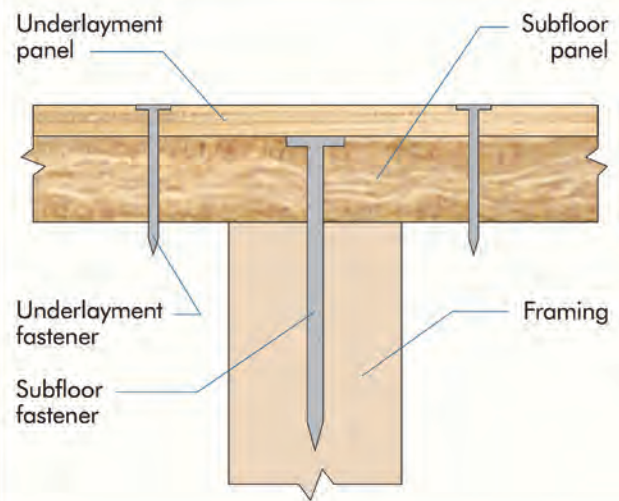
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FIGURE 2

### ATTACHING PLYWOOD UNDERLAYMENT TO SUBFLOOR



## New Product

### MWI Components Introduces X-Treme Series Ventilation Products

MWI Components has introduced its X-Treme Series of ventilation products, which includes X-Flex, X2, and XE. The products are designed to provide airflow while helping protect roof assemblies from moisture, insects, dirt, and debris.

X-Flex is a ridge ventilation product designed to promote airflow while helping prevent pests and debris from entering the roof system. It is available in multiple profiles to accommodate a variety of roofing applications.

X2 is a closure ventilation product constructed from non-woven modified PET fiber. The design provides airflow while helping reduce moisture buildup and freezing concerns. The material also helps keep dirt, insects, and debris out of the roof assembly. The product is designed for straightforward installation.

XE provides a ventilation option with durable construction and a focus on ease of installation. It is designed to provide dependable ventilation performance while offering an economical alternative for applications where budget considerations are important.

The X-Treme Series products are available for use in a range of roofing applications, giving contractors, builders, and distributors options for addressing ventilation requirements while considering airflow, moisture management, durability, and installation.

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**X-Flex X-Treme ridge vent closure.**



**X2 Classic Ag closure.** PHOTOS COURTESY OF MWI COMPONENTS