

# Repair or replace?



**T**HE WINTER MONTHS BRING cold temperatures, freeze/thaw cycles, and wind. These conditions can damage more than our morale. They can do quite a number on roofs, too. As we begin to look forward to spring, it's not too early to start preparing for those spring roof repairs.

Even though steep-slope roofs are most common in residential architecture, many homes have flat sections over porches, dormers, carports or garages. There are distinct differences in how to address low-slope (flat) roof issues and extend the life and performance of a homeowner's investment.

Help contractors and homeowners care for their flat roofs by asking three basic questions:

### 1. Should the roof be repaired or replaced?

A primary factor is the age of the roof. The lifespan of a low-slope roof varies significantly based on the components of the roof assembly. A well-installed roof should perform as stated by the manufacturer, so refer to the warranty for the best indication of how long it should last. Most warranties are good for 10 years, but some products offer no warranty, while some new commercial-grade products come with a lifetime warranty.

Along with the age of the roof, con-

sider the recurrence of the problem and ask if other solutions have been tried. The key to a successful repair is using similar materials to those already on the roof. Using a product that is drastically different from the existing material won't provide a permanent fix, as the solvents and chemical makeup of the products will work against each other. A mineral surface roll or torch down roof should be repaired with asphalt-based products. Roofs with single-ply membranes such as TPO or EPDM require thermoplastic or rubber products, respectively, for repairs.

If the homeowner has attempted to repair the roof several times, in the appropriate way, and still has a problem, it may be necessary to reroof. The common options are:

- *EPDM* is a rubber-based single-ply membrane roofing material. It's available in a commercial grade and is easy to install.

- *TPO* (thermoplastic polyolefin) is a single-ply product ideal for warmer climates, as the white surface reflects the sun to reduce energy costs.

- Asphalt-based *torch down roofing* can create a weather-tight roof surface. Safety precautions are critical, as installation involves open flame.

- A *mineral surface roll* is a low-

slope alternative. The lifespan is shorter, but the price point is significantly lower.

### 2. Is the roof subject to a significant amount of foot traffic?

Most roofs are not expected to have heavy foot traffic. If the roof will have a lot of traffic, there are two options: installing a thicker membrane or placing a deck over the roof. A thicker membrane better resists punctures, the most common cause of roof leaks. Commercial-grade EPDM and TPO membranes are available in thicknesses of 45 or 60 mil for the best resistance to punctures.

A better option is to install a deck over the roof. The roofing material itself will protect against freezing, thawing and the sun, while the deck will protect the roofing material.

### 3. Has the homeowner established a maintenance routine?

Proper maintenance is critical to getting the longest life from the roof. Always reference the manufacturer's recommendations and warranty information for specific maintenance guidelines. Following them will keep the roof's warranty intact.

Every year, the homeowner should visually inspect the roof for black or discolored streaks, which indicate mold, algae or fungus. Spots should be cleaned with a household cleaner to stop them from spreading and to prevent roof damage.

Inspect all membrane seams, paying particular attention to flashings around curbs and penetrations. Finally, trim overhanging limbs to prevent branches from sweeping against the roof, gutter, soffit and/or flashing. This will minimize leaf debris and increase the roof's ability to withstand severe weather.

— Dan Thomas, business development manager for GenTite Residential Roofing Systems. Reach him via [www.gentite.com](http://www.gentite.com).

## Add-On Sales to Roof Inspectors

- **Safety Barrier** or harness to prevent falling
- **Safety Boots** to deter slipping and prevent foot injury from dropped items
- **Gloves** to protect skin from chemicals and sharp objects
  - **Knee Pads**
  - **Safety Glasses**