



REPAIRING GARAGE ROOFS

When you stop to think about it, the real reason that there's a building stuck out in your back yard is to put a roof over your car. (Some of the older garages in northeast Ohio even date back to that simpler time when their purpose was to cover a horse!) Over the life span of a garage, the roof is usually the area that needs the most attention.

If your garage roof hasn't been replaced in a while, it will most likely be covered with **shingles** (on *gabled roofs* with a steeper pitch) or **roll roofing** (on *flat roofs* with a slighter pitch). If your flat roof was replaced more recently, it may have been covered with **modified bitumen roofing**, which looks like traditional roll roofing but has a rubberized base. While the life span of shingles and modified bitumen roofing is far longer than that of roll roofing, all these materials have an asphalt-type tar base, which means that – over time, as they are exposed to the elements – they slowly lose the oils, chemicals, and stones that make them work. Eventually, they dry up and start to crack. Things progress downhill fairly rapidly after that. Moisture, in the form of rain, dew, snow, and fog, gets into the cracks and starts to work; the cracks get larger; the roofing material becomes stiff; and then one morning, you find that you have a roof leak.

By the time you see water in your garage, there is a good chance it has been trapped for quite a while between the roofing material and the boards that make up your roof. In fact, the wood framing may have been absorbing water from small leaks for some time, never really drying out. In such cases, the wood can begin to rot, losing its structural strength. If the situation is not repaired, this rotting wood will eventually fall into your garage.

Preventative maintenance on a roof is very valuable in terms of stopping this domino effect and saving money on expensive repairs. Garage roofs are usually fairly close to the ground, so height usually isn't a problem. A twenty-minute inspection once a year should be all you'll need to make sure your roof is in good shape. This is what you'll want to look for:

1. Check for cracks in the roofing material. A smaller percentage of cracks to the area of the roof means you have caught the deterioration in its early stages. A larger percentage of cracks probably means replacement is in order (*see below.*)
2. Check for loose nails or nails that have popped up. Pull these out, and put in a longer nail of the same type; then, tar over the nail head.
3. On flat roofs, look at the outer edges to make sure the wind hasn't pulled the roofing material up. Re-nail as needed, spacing the nails about 4" apart along the edge.
4. Also with flat roofs, look for cracks along the seams. Re-nail and tar as needed.

If you catch the deterioration in its early stages, there are two roof care products that can help you preserve your existing materials: roof cement (for use with shingles, roll roofing, and modified bitumen roofing) and roof coating (to be used *only* with roll roofing or modified bitumen roofing.) Roof cement is thicker, and it must be applied with some type of putty knife. It can be

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used to go over seams, cracks, or nail heads, or to patch holes. Roof coating is fairly runny and is used to fill in the small cracks that appear as the roll roofing or modified bitumen roofing dries out. It is usually spread over the entire roof to replenish the oils and chemicals that have been bleached out by the weather. It can only be applied once, so if you have already put it on, it won't work again to stop a leak. However, if you haven't used it yet, roof coating can be applied as soon as you see more than a few isolated cracks. Dressing with roof coating will probably extend the life of your roof for a year or two.

When it's time to replace the roofing materials themselves, you'll find that installing new roofing can generally be done on a do-self basis. If your garage has only one layer of roofing material, you can add a second layer without stripping off the original roofing. However, be aware that installing roofing atop an existing layer may shorten the life of the new material somewhat, since creases and cracks in the old roofing can telegraph up through the new layer. Before you install new roofing material, make sure the wood deck under the roofing is sound (*see separate handout on "Roof Sheathing" if you need to replace all or part of the plywood deck*) and that the rafters that support the roof deck aren't deteriorated.

If your garage has a gabled roof, the new shingles will be installed the same way as they are on a house roof – except that you're not as far off the ground. (*See separate handout on shingled roofs for installation instructions.*) For a flat garage roof, modified bitumen roofing is a better choice than traditional roll roofing, since the roll roofing now being manufactured is simply not as thick as it used to be, and seldom provides much longevity. The **cold-process** type is easily installed on a do-self basis (*see separate handout*); installing the **hot-process** type is a contracted job.

A new shingled roof will generally last about 20-25 years, and cold-process modified bitumen roofing, about 20 years. As with most repairs, a quality installation will go hand-in-hand with longer life.