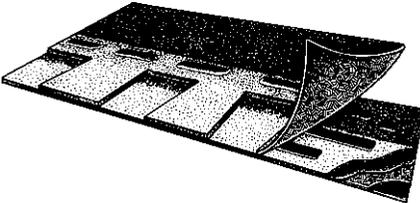


ASPHALT SHINGLES PREVAIL IN AMERICA

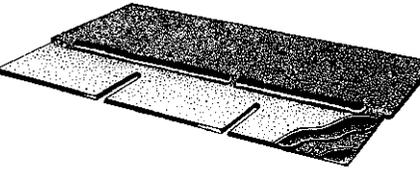
Asphalt shingles are used on four out of five homes in the United States, making them the leading choice for residential roofing. It's not surprising when you consider their many advantages. Asphalt shingles offer the broadest array of colors, shapes and textures available—and they do it affordably.

TAMKO® manufactures a full line of asphalt shingles, including 3-tab and laminated varieties. Each will undergo a natural aging process over time.

The purpose of this brochure is to help you recognize the signs of asphalt shingle aging. By doing so, you'll be able to distinguish between natural processes that are no cause for alarm and issues that do require attention and repair.



Laminated shingles consist of two or more layers bonded together, giving them added dimension for a shake-like appearance.



3-tab shingles are made with a single layer of fiberglass mat.

WHAT'S NORMAL? WHAT'S NOT?

Normal Aging	In Need of Repair
Curling	Open blisters
Surface cracking	
Closed blisters	Cracks visible through the fiberglass or organic mat
Algae stains	
Slight granule loss	Exposed asphalt due to granule loss

SHINGLES BEGIN TO AGE AS SOON AS THEY ARE EXPOSED TO NATURE. BUILDINGS EXPERIENCE AGING FACTORS DIFFERENTLY, SO IT IS DIFFICULT TO PREDICT HOW LONG SHINGLES WILL LAST. THAT'S WHY TAMKO PROVIDES A LIMITED WARRANTY THAT INCLUDES A BINDING ARBITRATION CLAUSE AND OTHER TERMS AND CONDITIONS WHICH ARE INCORPORATED HEREIN BY REFERENCE. YOU MAY OBTAIN A COPY OF THE LIMITED WARRANTY AT TAMKO.COM OR BY CALLING 1-800-641-4691.



tamko.com

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HOW TO READ YOUR ROOF



UNDERSTANDING THE NATURAL AGING PROCESS OF ASPHALT SHINGLES



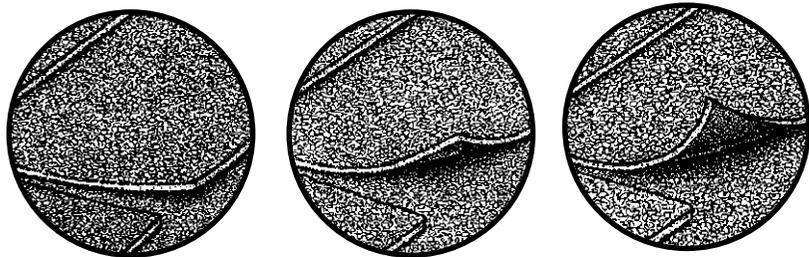
AGING IS NATURAL

It is natural for your roof to age. The process begins as soon as your shingles are exposed to nature. The sun can raise rooftop temperatures as high as 50–70 degrees above ambient temperature. The excessive heat and ultraviolet radiation from the sun has been shown to accelerate the aging of the shingles' asphalt layers. Other factors, such as pollution, hail, snow loads, tree limbs and people walking on your roof, also contribute to the natural aging process.

Asphalt shingles will begin to age as soon as they are applied to your roof. Minor curling, surface cracking, blisters, algae stains, granule loss and buckling are all signs of aging.

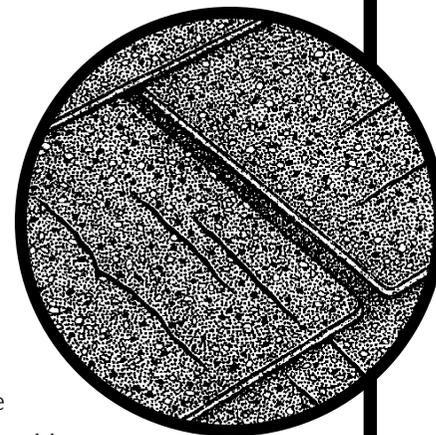
CURLING

Curling is a common phenomenon in some shingles and is not a defect. It is natural for asphalt to age and asphalt layers to shrink with time. This shrinkage may result in the slight curling of the edges of the shingle.



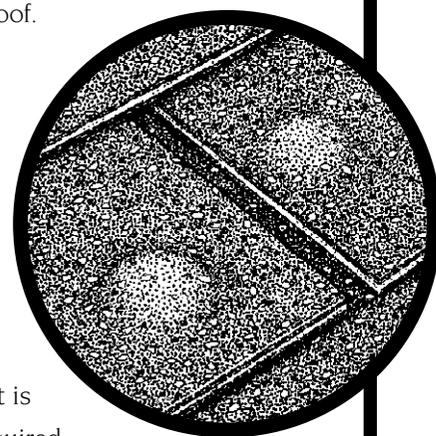
SURFACE CRACKING

While minor cracks may not be noticeable from the ground, you might spot them while hanging your Christmas lights. Intense heat from the sun often allows protective asphalt oils to deplete, causing minor cracks. Keep in mind that these normal weathering characteristics are not cause for alarm as long as your shingles are still performing their intended purpose of shedding water. Cracks that penetrate through the fiberglass or organic mat should be investigated.



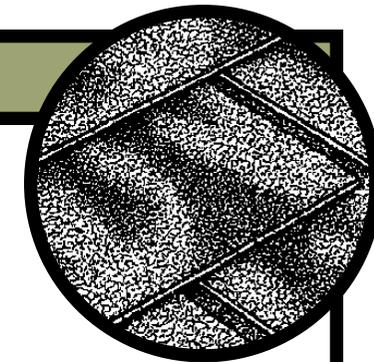
BLISTERS

Occasionally, naturally occurring small, circular raised areas known as blisters may appear on your roof. These pockets may vary in size and be open (exposing the asphalt) or closed. Blisters are often a direct result of underventilated attics or excessive use of plastic cement. Closed blisters are not reason for concern as long as your shingles are still performing their intended purpose of shedding water. However, open blisters do mean asphalt is exposed and immediate attention is required.



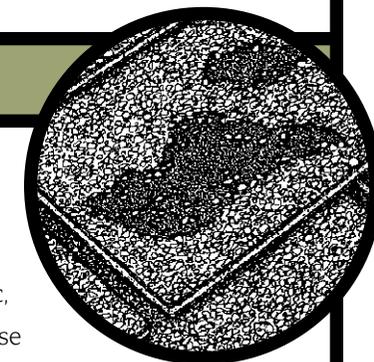
ALGAE STAINS

In moist, humid areas, dark brown or black patches may appear on roofs. These streaks result in a dirty rooftop, often more visible on lighter-colored shingles. This naturally occurring stain is caused by algae growth and will not affect your shingles' ability to shed water. Algae discoloration should not be confused with moss or tree droppings, which typically produce only localized discoloration.



GRANULE LOSS

Since extra granules are used in the manufacturing process, some granule loss is to be expected during the early years of your roof. Other factors, such as foot traffic, hail, snow or brushing tree limbs, may cause loose granules. However, exposed asphalt due to granule loss is a reason for concern and requires immediate attention.



BUCKLING

While not technically a sign of aging, a distortion of shingles known as buckling can occur months after original application. Lack of adequate attic ventilation can increase the moisture content of the decking material. This may cause expansion and movement of the wood deck to buckle shingles.

