



technical bulletin

**Asphalt Roofing
Manufacturers Association**

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Color Shading of Asphalt Shingle Roofs



Definition

As a roof is viewed from different angles, and/or under different lighting conditions, certain areas may appear darker or lighter. This inconsistency in color is commonly called shading.

Primary Cause

Shading usually results from slight variations in texture, which normally occur during shingle production. The variations necessary to cause shading with black, or other dark colors, are so slight that they cannot be detected during the manufacturing process.

When light is reflected from a given roof, its appearance will vary as the viewer walks past the building. The impact will depend on the position of the sun and the overall light intensity. When the sun is directly overhead, the shading may disappear.

Shading is most frequently a problem in the case of black and other dark colored shingles. Since only a small amount of light is reflected from a dark surface, even the slightest differences in shingle texture may cause this problem.

In the case of white and other light colored shingles, the total amount of light reflected is considerably greater. This results in a decrease in observable shading differences.

Blends, made of a variety of colors, tend to camouflage this effect, and make observable differences even less noticeable. Lighter blends will reduce shading more effectively than darker blends.

Secondary Causes

Backing Material

The backing material, used to keep the shingles from sticking together in the bundle, can rub off onto the surfacing material. Natural wash from rainfall should eventually remove this loose backing material from the shingle surface.

Storage

Shingles can develop minor staining when stacked too heavily and/or when stored for extensive periods. Under these conditions, the lighter oils, contained in the asphalt coating, simply seep between and permeate neighboring shingles. Natural weathering will eliminate this.

Note: These recommendations were prepared by and have the approval of the Asphalt Roofing Manufacturers Association for informational purposes only. They are not intended to revoke or change the requirements or specifications of the individual roofing material manufacturers or local, state and federal building officials that have jurisdiction in your area. Any question, or inquiry, as to the requirements, or specifications of a manufacturer, should be directed to the roofing manufacturer concerned.

Suggestions

- Manufacturers recommend that shingles be applied starting from the bottom of the roof, then working across and up. This will blend shingles from one bundle to the next and minimize any shade variations from one bundle to the next.
- Allow sufficient time for loose backing materials and oil stains to weather out.
- Use blends to reduce observable shading.
- Insist upon recommended application methods.
- Realize that some shading should be accepted as being normal in the manufacture of asphalt roofing materials.

Conclusion

Shading is an optical problem, and in no way affects the durability of asphalt roofing systems. Some shading is normal and simply unavoidable.
