



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, some 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 may occur during shingle production. The variations necessary to cause shading with black, or other dark colors, are so slight they are difficult to detect during the manufacturing process.

When light is reflected from a given roof, its appearance may vary when viewed from different angles of 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 with 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 color shading to be visible.

With white and other light colored shingles, the total amount of light reflected is considerably greater, resulting in decreased color shading.

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

Secondary Causes

Backing Material

The backing material that keeps the shingles from sticking together in the bundle can rub off on to the colored granules. Natural wash from rainfall should eventually remove this loose backing material from the shingle surface.

Storage

Shingles can develop minor staining when stacked/stored for extended periods. Under these conditions, lighter oils contained in the asphalt coating may seep between and permeate onto neighboring granules. Natural weathering will eliminate this.

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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.
- Realize that some shading is normal in the manufacture of roofing materials.

Conclusion

Shading is an optical condition, and in no way affects the durability of asphalt roofing systems.
