ASPHALT ROOFING MANUFACTURERS ASSOCIATION

technical bulletin

ASPHALT ROOFING
MANUFACTURERS ASSOCIATION
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COLOR SHADING OF ASPHALT SHINGLE ROOFS

DEFINITION:

As the roof is viewed from different angles or under different light conditions, certain areas sometimes appear darker or lighter. This difference in appearance is commonly called shading.

PRIMARY CAUSE OF SHADING:

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

When light is reflected from these roofs the 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 or dark color shingles. Since only a small part of the light is reflected from a dark roof, very slight differences in texture of the shingles may cause this problem.

In the case of white and light colored shingles, the total amount of light reflected is considerably greater and observable differences are diminished.

Blends made of a variety of colors actually tend to camouflage this effect and observable differences are further reduced. Lighter colored blends reduce this effect more than darker blends.

SHADING OCCASIONALLY CAN BE CAUSED BY:

1. Backing Material

The backing material used to keep the shingles from sticking together in the bundle can rub off or transfer to the surfacing material. Natural wash from rains should eventually remove this loose backing material.

2. Storage

Shingles that have been stored too high or over long periods of time can develop minor staining from the lighter oils contained in the asphalt coating. Natural weathering will eliminate this.

3. Application

Manufacturers recommend that shingles be applied by starting at the bottom of the roof, working across and up. This will blend shingles from one bundle into the next and minimize any shade variation from one bundle to the next.

SUGGESTIONS:

(1) Some shading should be accepted as normal in the manufacture of asphalt roofing.
(2) Allow sufficient time to wash off loose backing material and to permit any oil stains to weather out.
(3) Use blends. In blends shading is less apparent.
(4) Insist upon recommended application methods.

CONCLUSION:

Shading is an optical problem and in no way affects the durability of asphalt roofings. Some shading is normal and unavoidable.

The data herein contained were compiled by the Engineering & Systems and the Research Committees of the Asphalt Roofing Manufacturers Association, to whom the Association is indebted for being able to make this bulletin available generally to asphalt roofing manufacturers.

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