



RESIDENTIAL INFORMATION BULLETIN

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SHINGLE STAINING

All asphalt shingles are susceptible to discoloration of the colored granules. There are two causes for what is typically seen as 'staining' resulting from this discoloration process. One is from the processing oil used for dust control in the granule manufacturing process. A tight control of the amount of this oil used will greatly minimize complaints from this cause. The second, and most problematic, cause is due to the lightest fraction of the compounds found in asphalt – a class of organic molecules collectively known as 'saturants'. These saturants can migrate and eventually present a discoloration to all the granules. The time required for this discoloring to occur is dependent on a number of variables which include temperature, the amount of surface moisture present, and the chemistry of the asphalt used in the shingle. Asphalt chemistry is a complex matrix of thousands of organic compounds, but the higher quality, longest lasting asphalts have a proportionately greater fraction of the saturant molecules that cause staining. At IKO, we actively seek out such asphalts because of their superior performance properties.

As discoloration occurs over time, the first approach that can be taken to minimize any issues with staining is a FIFO method of inventory management. This is the practice at all IKO production facilities and we strongly encourage our distributors and retailers to do the same. Minimizing time in storage is the single most effective technique to control the occurrence of staining.

However, we recognize that good inventory management is not always sufficient. Accordingly, two other approaches to the problem can be considered:

- 1) Use an asphalt with a lower saturant content. We reject this approach since these asphalts are inherently inferior for the shingle's performance.
- 2) Identify and use an additional ingredient that can effectively retard the saturant migration onto the granule. This is the focus of our efforts.

As mentioned, time is an important factor in the development of staining. Older stock is more likely to have more discoloration than recently produced product, although once on a roof, the older and newer shingles will eventually reach a comparable appearance as staining will typically weather off. However, until that occurs, the initial variation in appearance may be a cause of concern for the homeowner. Developing a long-lasting solution is a top priority at IKO. We are confident that we will be successful in our efforts, but at this point we cannot project a date when our efforts will be rewarded with an answer. However, in the interim, you can be assured that we are taking the logistical steps necessary to contain this temporary appearance issue. Most importantly, be assured that none of our actions will compromise IKO's commitment to produce the highest quality shingle product on the market.

Thank you for considering IKO products.