



# technical bulletin

ASPHALT ROOFING  
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## ALGAE DISCOLORATION OF ROOFS

For many years a type of roof discoloration which is caused by algae and has been referred to in the trade as "fungus growth" has been observed throughout the United States and Canada. This discoloration usually has a brown to black appearance and may be mistaken for soot, dirt, moss or tree droppings.

One primary species of algae has been identified as *Gloeocapsa*, which is transferred through the air and deposited on a roof where it grows. Natural pigments produced by the algae result in the dark discoloration of the roof. The algae may gradually turn a white or light colored roof to dark brown or black over a period of years. This is not to be confused with moss or tree droppings which may produce localized discoloration.

This type of roof discoloration has been widespread in the Gulf States area and along the Northwest and Eastern Seaboard. It is not, however, confined to these regions and has been observed in all parts of the country, especially those areas subjected to warm, humid conditions.

Algae discoloration can be found on most types of roofing. It may become readily visible on white or pastel colored roofs, but is not as noticeable on the darker shades.

Algae discoloration is difficult to remove from roofing surfaces, but it may be lightened with a diluted solution of chlorine bleach, trisodium phosphate and water. Gently place the solution on the roofing; scrubbing will loosen and remove granules. Apply the solution carefully to avoid damaging other parts of the building or the shrubbery below. If possible, work from a ladder or walkboards to avoid walking directly on the roof surface. Observe safety precautions whenever working on or near the roof. Rinse the solution off the roof with a gentle spray from a hose. This solution will make the roof surface slippery and potentially hazardous to walk on during treatment.

The effectiveness of such cleaning is only temporary and the discoloration may recur. However, several types of algae resistant roofing products have been developed and are now commercially available. These asphalt roofing products are specifically designed to inhibit algae growth for extended periods of time.

**Caution:** The use of high pressure washing systems to remove algae should only be done by an authorized professional, as this process may remove roofing granules which will shorten the life of the roofing.