



The growth of mosses & lichens on tiled roofs

Causes

The principle cause of the growth of mosses and lichens on tiled roofs is that the surface of the tiles filters dirt out of rain water. In addition, decaying matter in the form of dead leaves etc falls on to the roof and a proportion will remain lodged there. Spores and seeds of mosses and lichens are blown on to the roof, or get carried there by birds, and sooner or later take root in the dirt and begin to grow.

Mosses tend to flourish on roofs where trees are nearby and where there are shady, damp conditions. Steeper pitched roofs are less likely to support moss and lichen growth as they shed water more quickly than low pitched roofs. By contrast, north facing slopes that remain damper longer may attract the growth of mosses and lichens.

Effects

The primary effect of moss on a roof is that it holds water. Thus, the flow of water into the gutters is slowed down and the water is held on the roof in contact with the tiling for a much longer time.

If the mosses and lichens affect the drainage of water down valleys, abutment gutters and the interlocking drainage channels of the roof tiles, they should be removed.

In normal circumstances the growths are not deleterious to the tile and, in some circumstances, can impart a mellow and pleasing appearance. In circumstances where they are considered undesirable, there are several methods of removal.

Methods of removal

Spraying with a toxic wash

This is perhaps the least expensive, but very great care has to be taken. Any spray that is toxic to moss can also be dangerous to garden plants in the vicinity of the roof and perhaps to the plants in adjoining gardens. There is also the possibility of ill effects to animals and birds.

Toxic washes take a few days to be fully effective and should preferably be applied during a spell of dry weather, since rain may wash them off before they have time to act. The action is hastened if thick growths are removed and the wash is well brushed on.

Normally, one treatment is sufficient to kill the growths, but sometimes repeat applications are necessary. The dead growths will eventually weather off and disappear. If rapid removal of the dead growths is required this can be achieved by a low pressure jet of water, taking care not to spray up, but down the roof. This is a job best suited to experienced and qualified personnel using a proprietary toxic chemical.



Some toxic washes leave a residue which discourages subsequent growth, but even under favourable circumstances the residual effect is unlikely to last for more than two or three years.

A wide range of toxic washes are available, but care must be taken with regard to Environmental and Health & Safety Regulations. A useful summary of some of these materials and their effectiveness can be found in Building Research Establishment (BRE) Digest 139, *Control of lichens, moulds and similar growths*.

Copper Wire

A more permanent answer to the problem of maintaining a clear roof can be obtained by trailing copper wires across the roof surface. These can be fixed at intervals up the roof slope, directly below the front edge of the tiles, so that with every shower of rain the copper slowly oxidizes in the atmosphere and provides the roof with a wash of copper salt which prevents renewed growth. For further details please e-mail The Copper Development Association on mail@copperdev.co.uk or visit www.cda.org.uk.

Scraping

This is not recommended as it will inevitably result in broken or damaged tiles and consequent roof leaks. In addition, it leaves behind a trail of ugly looking scrape mark on the tiles. No matter how carefully it is done, it will have to be done again in due course because the moss will return.

Summary

- Generally, moss and lichen growths are not unsightly and in some cases give a weathered appearance to the roof. However, if they are effecting the discharge of water from the roof they should be removed.
- Removal is best undertaken using a suitable toxic chemical wash. Sandtoft does not have any experience of toxic washes but suitable products can be obtained from garden centres.
- Copper strips or wires can be trailed across the roof to prevent unwanted moss and lichen growth or re-growth. Sandtoft has no formal recommendations, but it is suggested that strips or wire are placed at intervals up the roof face.

For further information please contact Sandtoft Technical Support on 0870 145 2021.

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