



## Moss (and lichens) on roofs



Figure 1: Moss build up to a plain tile roof.



Figure 1: Moss build up to a profiled single lap tiled roof.

The principal cause for the growth of mosses and lichens on pitched roofs is their rough surface, which filters dirt out of rainwater. Decaying matter, in the form of dead leaves which fall on to the roof, also tend to lodge on the surface. Spores and seeds of mosses and lichens are also blown on to the roof, taking root and growing in the dirt. Inevitably, the surface of some concrete tiles, with a sanded or granule facing, are the first to attract moss growth.

Moss tends 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 damp longer may attract the growth of mosses and lichens.

The primary effect of moss on a roof is that it holds water. The flow of water off the roof and into gutters is slowed down and the water is held on the roof in contact with the tiling for a much longer time. If severe moss growth affects the drainage of water down the roof it should be carefully removed.

### How to identify a moss

Mosses typically form dense green clumps or mats, often in damp or shady locations. They are coloured green or they appear brown coloured when dry.

### How to identify a lichen

Lichens consist of leather-like incrustations on the surface or may be embedded into the substrate of the covering. They are coloured green, orange, grey or black.

### Scraping and brushing

Moss can be scraped off by hand, but this must be performed with caution. When scraping moss off roofs, it is important to use crawling boards or ladders that are properly supported. These provide stability and distribute weight evenly, minimising the risk of damaging or breaking slates or tiles. By using these tools, one can evenly distribute their weight across the roof, reducing the chances of causing any leaks or cracks.

Additionally, foot traffic should be avoided as much as possible. Walking directly on the roof can cause unnecessary pressure and lead to further damage. Instead, it is best to stay on the supported crawling boards or ladders.



#### Note

*Never scrape or brush what may appear to be an asbestos-cement type covering.*



### Note

*Working at height is dangerous and as such, only individuals that have the correct training and experience should undertake work at height utilising the correct work at height equipment.*

### Copper wire or strip

Once moss and lichen has been removed from the roof, copper strips can be attached across the high level of the roof to prevent regrowth.

One of the main reasons why copper strips are effective in preventing moss and algae growth is their ability to release copper ions when exposed to moisture. These ions act as a natural biocide, inhibiting the growth of microorganisms that thrive in damp environments. As rainwater runs over the copper strips, it carries these ions down the roof surface, effectively creating a barrier against moss and algae.



### Notes

*The use of surface treatments such as painting roof coverings after cleaning may invalidate manufacturers' guarantees of performance and life expectancy of the roof covering.*

*It is not recommended to remove moss by pressure washing as this can force water into the roof space, particularly if sprayed upward from ground level.*

*A chemical wash solution can be used to wash the roof, although care must be taken as the solution can be harmful to plants and animals. Care should also be taken to ensure chemicals do not enter the watercourse.*

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