

Organic Growth Fact Sheet

Introduction

Algae is a natural phenomenon that grows on all external surfaces. In recent years it has become more prevalent on buildings due to:

- Clean Air Act: Reduced air pollution, resulting in increase of airborne algae spores
- Climate Change
- Prolonged wet weather coupled with a mild climate
- Poor detailing on the building

In the construction industry the term “algae” is frequently used to describe the occurrence of various organic growths which are commonly found on buildings. These organic growths include a range of algae, moss, lichens and fungi. All of which can be found on any external surface.

How do they colonise surfaces?

In our climate algae only requires high moisture levels or high humidity for growth to occur. The colony is usually spread by the wind, with the initial spores being blown onto the building surfaces, as air borne dust. The damper northern sides of buildings are usually those worst affected; however once established, some can flourish on drier more southern surfaces.

The infections usually occur where there is frequent wetting of the building surface. This may be caused by maintenance faults or design features which result in poor water shedding or repeated exposure to rain. In many cases localised growths occur at leaking water pipes or gutters.

In general these infections are unlikely to cause major structural damage, with their principal effect being to negatively alter the aesthetic qualities of a building due to unsightly staining of the surface.

Treatment and removal

Regular maintenance of buildings can help minimise infection in the first instance and reduce growth.

Once established, the best way to treat and remove any growth is to use a surface biocide or algaecide (available from any good builder’s merchant or hardware store). There are a wide variety of such chemicals available; therefore it is important to follow the manufacturer’s instructions closely during use.

Most surface biocides/algaecides will require a few days to be fully effective and are best used during a dry spell to avoid rain diluting the chemical before it has time to act. After treatment is complete the dead growth can be left to weather away, however we would recommend a light brushing or mild power wash to remove any residue. In some cases repeated treatments may be necessary.

Although there is no evidence to suggest that surface biocides/algaecides can damage render when used correctly, it is advisable to carry out a trial in an obscure area to gauge effectiveness and to check the chemical does not damage the surface.



Typical Algae Varieties

The following photos show the three most common types of algae, all three can appear on any building material and are particularly prevalent on damp surfaces of high humidity.



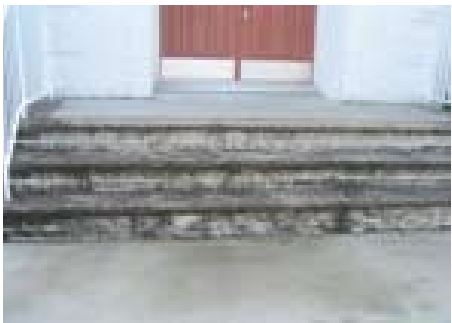
Green Algae

This is the most common type of algae and can generally be removed with gentle power hosing.



Red Algae

This is becoming more common as the climate gets milder and damper. It is already common in Northern Ireland & Scotland and is on the increase in England. Red algae is more difficult to remove than green algae and will require a good algaecide/biocide for removal.



Black Algae

Another common type of growth; black algae is very stubborn to remove and may require more than one treatment of algaecide.

Summary

Power hosing will generally remove the green and reduce the red but a stronger treatment will most likely be required for the black. The problem is that algae will typically return fairly quickly unless an algaecide/biocide with a residual effect is used.

All algae can be removed with algaecide; the black variety however will probably require more than one treatment.

There are a number of brands of algaecide available; We would recommend using one that has a continuing residual effect to prevent re-growth. As with all products of this type we recommend a small area is trialed following manufacturers instructions to confirm there are no adverse effects.

A good quality algaecide will give a significant period of protection dependant on local conditions.