**Suraflow-GutterGuard provides the final piece in the rainwater harvesting solution.**

Without Suraflow-GutterGuard rainwater harvesting systems are limited in their reach. Enabling them to work in properties that have deciduous trees is problematical and impossible in ones with pine trees, simply because the guttering will block up regularly. With deciduous trees this will happen around spring and autumn time and with pine trees about every 2-3 months. If the gutters are blocked then water cannot get from the roof into the rainwater harvesting system, how good the filtration system is irrelevant in this circumstance. Thus, the take up of rainwater harvesting is limited in the UK. Suraflow-GutterGuard provides a permanent and effective solution to this problem.

**Solution Description**

Suraflow-GutterGuard provides a complete covering to a gutter. By keeping debris, leaves and even pine needles out of the gutter, it ensures that the guttering system works without blockages and that the water reaches the rainwater harvesting system or the water butt in the best possible condition. It is the only gutter protection design that can do this permanently.

Suraflow-GutterGuard is made of anodised aluminium. It provides a flat covering to the gutter but, by clever use of the principle of water tension, the water is enabled to flow into the gutter. The guard has a specially curved edge which the water “adheres” to and runs round. The low-wax anodised surface of the aluminium profile ensures that the water “wets out” promoting laminar flow rather than beading as it crosses the surface. Larger objects such a leaves, that are likely to have been washed down from the roof, are unable to remain in suspension as the water travels around the bend, because of the ‘thinness’ of the layer of water, and as such are expelled from the surface onto the floor below. Leaves, debris and pine needles will also remain on the flat surface of the guard until blown away by the wind.

At present Suraflow-GutterGuard fits the majority of domestic guttering with the exception of cast iron. It is best to check with Suraflow if guttering, that has a lip at the front, is to be installed. It fits on guttering up to 130mm but no wider.

**Test Methodologies**

Water handling capacity is measured in litres per millimetre per metre width. In the UK it is generally accepted that existing gutter systems will handle a maximum rainfall of 75mm/hour. The SuraFlow-GutterGuard system has been tested and proved to handle 40 litres/min/m, which on a 10m roof length equates to 40mm/min (2400mm/hour), or 32 times the accepted maximum rainfall for mainland UK.

There are no test methodologies for testing how much debris is kept out of the gutter, so it is only over time that the effectiveness of a solution can be gauged. There are other gutter protection systems on the market, however Suraflow-GutterGuard is the only completely covered system widely available. Other systems are made of brushes, or a series of slots and holes on a sloping surface. These systems tend to solve the problem initially but not for any length of time and certainly not in challenging areas with pine trees or many deciduous trees. This is because the debris and leaves tend to get caught on the slots so the water overflows the gutter or sits in the brushes and clogs up the gutter. Suraflow-GutterGuard has been installed in numerous properties across the UK and we have never received a complaint about the gutters becoming blocked even in challenging environments. When we have inspected our earlier installations we have found the gutter to be clear and free flowing with only a small inconsequential amount waiting to be washed away down the drainpipe in the next rainfall.

Suraflow has, on a number of occasions, supplied Suraflow-GutterGuard to properties that have rainwater harvesting systems fitted and that simply don’t work because the water cannot get through the debris in the gutters. If take up of rainwater harvesting is to be successful in the UK then Suraflow-GutterGuard should be seen as an essential component of such systems because it makes it available to all.

**Further Information**

Suraflow would be happy to send you a sample of Suraflow-GutterGuard so you can better understand how it works. Please contact us with an address. Or visit [www.suraflow.co.uk](http://www.suraflow.co.uk) for more information or call 01794 389589 or email enquiries@suraflow.co.uk.