

Building Designers Benefit from Fullflow Syphonic Roof Drainage



The hydraulic operation of syphonic roof drainage has been discussed in many forums ranging from company web sites to academic institutions. As a result of this, and following the publication of BS 8490:2007 the hydraulic workings of these tried and tested systems have become well known. Perhaps what is less well known or appreciated are the advantages that syphonic systems present to the designers of buildings. This includes:

- Syphonic systems require fewer outlets and downpipes than a gravity equivalent.
- Design flexibility / aesthetically pleasing designs - Collection mains can be routed horizontally throughout the building, no need for pipes to be fitted on a gradient
- Acceleration of construction programme due to reduced installation time.

One particular characteristic which often fails to be appreciated or recognised is that of the ability of syphonic systems to provide the designer with the option of locating downpipes to any position within a building. Should the designer wish to drain all the rainwater run off from a roof to one end of a building, then syphonic roof drainage provides this option. Should the designer require that all the rainwater run off enters a rainwater harvesting tank, this is also an option.

A pointing case which highlights the flexibility that syphonic roof drainage provides to a designer, is that of the systems installed at the new ALDI distribution warehouse in Sawley, Derbyshire. There was a requirement to drain the rainwater run off from the roof to one particular area of the building. From which, the syphonic systems would enter a manhole which in turn would drain into a collection pond. The roof is drained through 4



Syphonic action continues underground

unobtrusive downpipes 'hidden' within the corner of the building, with the syphonic flow being continued underground into a manhole. Through the adoption of this method of drainage, the designer of the building as maximised the space to the advantage of the end user. More space = more storage!



The rainwater drains to one