

Case Study

Hartshill Pavillion



Hinckley & Bosworth
Borough Council



envirogen
renewable solutions

Project Value – £35k

Completed – November 2012

Challenge

When a local builder approached Envirogen with a project to build a sustainable sports pavilion linked to a local school we were happy to provide a solution. The building itself was designed to be energy efficient in its operation however the heating system was an area for concern as the requirements for hot water to operate 11 showers, 6 toilets and a kitchen are quite high. The heating requirements for the building itself were relatively low due its energy efficient construction.



Solution

Our design team opted to use an Altherma HT system supplied by Daikin UK Ltd offering maximum flow temperatures of 80°C.

The difference in this application was that we employed two Daikin 260L cylinders to give a total storage volume of 520L at 70°C. When blended at the hot water outlets this gives a total water capacity of almost 1000L which is more than adequate to serve the building when in full use.



The Altherma ERSQ14AAV1 unit provides a nominal 14kW of heating and a predicted SCOP of 2.9.

The system was designed to operate at a flow temperature of 65°C to serve a mixture of standard radiators and under-bench tubular radiators.