

Leading Engineering University Rolls Out Campus-Wide Installation of Fibrelite's Composite Steam Manhole Covers



Leading Engineering

Operators of district energy heating systems have become increasingly aware of the dangers posed by hot cast iron manholes. This concern is even more pronounced in campus environments where steam manholes are located throughout the campus and many students tend to wear sandals and "flip flops" in warmer weather.

In 2010, these concerns lead the utilities department of a leading engineering university based in Cambridge, Massachusetts to consider replacing traditional, steel manhole covers with Fibrelite's composite alternative.

After performing testing on their existing steel covers, the system managers concluded that the surface temperature of these manhole covers was dangerously high wherever the underground piping lacked sufficient thermal insulation. Furthermore, during the warmer summer months the heat from the sun would also result in significant temperature increases on the exposed metal covers.

Fibrelite's Composite Manhole Covers - Cool to Touch!

The thermal gradient properties of Fibrelite's composite steam covers significantly reduce the heat transfer from a steam vault to the surface of the cover. Typically, the surface temperature of the cover will be slightly above the ambient temperature at street level even when subjected to extremely hot temperatures on the underside. Fibrelite's composite access covers have been tested to temperatures up to 400°F while still maintaining their "cool to touch" properties and ability to support vehicular loads.



Lightweight composite steam covers

Fibrelite's Composite Manhole Covers - Proven Results

Since installing Fibrelite's composite manhole covers across the campus, the operators of the university heating system have reported seeing steam covers covered with snow (normally, hot steam covers quickly melt off accumulated snow). Additional surveying has been carried out by flying over the campus with an infra-red camera to locate 'hot-spots'. The areas where Fibrelite covers had been installed were not visible to the infra-red camera, hence were not radiating any significant amount of heat.

For more information on Fibrelite's product range please contact us:

UK Office:

Tel: + 44 (0) 1756 799 773

Email: covers@fibrelite.com

US Office:

Tel: + 1 919 209 2404

Email: covers@fibrelite.com

Malaysia Office (Asia Pacific):

Tel: + 44 (0) 1756 799 773

Email: covers@fibrelite.com