## **TEST REPORT**

**Report No:** 2009/107

Client: Structural Science Composites Ltd Phoenix Business Centre Phoenix Court Phoenix Road Barrow in Furness Cumbria LA14 2UA



**Engineering Department** 

Faculty of Applied Sciences

Item tested: Composite Manhole Top

Test carried out: Water Ingress Resistance

**Results:** Pass – see below

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5 June 2009

## TESTING OF A COMPOSITE MANHOLE COVER TOP

INTRODUCTION: The manhole cover top detailed below was received on 22nd May 2009 from Structural Science Composites Ltd. It was tested as described below by the Engineering Department at Lancaster University, as an independent test facility.

TEST ITEM: 1 off 770mm x 670mm rectangular composite manhole top complete with composite frame. Nominal clear opening - 700mm x 600mm.

TEST: Create a water reservoir over the sealing arrangement of the manhole top to a depth of  $(50 \pm 5)$  mm for 7 hours. The sealing arrangement shall show no visible sign of leakage through the seal.

With the reservoir remaining above the sealing arrangements, apply a load of  $(5 \pm 0.2)$  tonnes at a rate of between 1kN/s and 5kN/s through a 240mm diameter test block. Once the load is achieved, it shall be released immediately.

The sealing arrangement shall show no visible signs of leakage.

RESULT No sign of leakage. PASS