



Test Report

Report No	285/7148074	This Report consists of 4 pages
Licence/Certificate No	KM 40638	
Client	Fibrelite Composites Limited Snaygill Industrial Estate Keighley Road Skipton North Yorkshire BD23 2QR	
Authority & date	BSI Product Services: Service Management Order No 7148074 dated 12 December 2007. Equipment Record number 10095574	
Items tested	Composite manhole top	
Specification	BS EN 124:1994 Limited Type test for product certification	
Results	Pass - See Summary of Results on page 2	
Prepared by	D J Newton 	Engineer
Authorized by	D Mackie 	Senior Engineer
Issue Date	26 February 2008	
Conditions of issue	This Test Report is issued subject to the conditions stated in current issue of PS082 'General conditions relating to acceptance of testing'. The results contained herein apply only to the particular sample/s tested and to the specific tests carried out, as detailed in this Test Report. The issuing of this Test Report does not indicate any measure of Approval, Certification, Supervision, Control or Surveillance by BSI of any product. No extract, abridgement or abstraction from a Test Report may be published or used to advertise a product without the written consent of the Managing Director, BSI Product Services, who reserves the absolute right to agree or reject all or any of the details of any items or publicity for which consent may be sought.	

TESTING, EXAMINATION AND ASSESSMENT OF A COMPOSITE MANHOLE TOP SUBMITTED AS A LIMITED TYPE TESTING SAMPLE

INTRODUCTION

For the purposes of product certification the manhole top detailed below, received on 08 February 2008, submitted on behalf of Fibrelite Composites Ltd, was tested and assessed against the requirements of limited clauses of BS EN 124:1994 as indicated on the following pages of this Report. This request was made on BSI Product Services SMO Number 7148074 dated 12 December 2007.

It is emphasized that assessments were not made against the other clauses of the Specification.

The tests and assessments contained in this Report were undertaken by BSI Product Services' at their Industrial Engineering Laboratory 25 February 2008.

TEST ITEMS

1 off Model FL760 composite manhole top.

Nominal clear opening, flat to flat was 762mm and the frame depth was 100 mm.

NOTE

The testing was conducted due to Load test failure in BSI Report number 258/7108874 dated 10 October 2007.

SUMMARY OF RESULTS

The FL760 manhole top met the requirements of those clauses of the Specification against which assessments were made.

Reference should be made to the comments on page 3 of this Report.

BS EN 124:1994

COMPONENT DESCRIPTION: Class: D 400 Model: FL 760
Manhole top (composite circular cover and frame)

EXAMINATION AND TEST

CLAUSE		ASSESSMENT
4.	CLASSIFICATION The manhole top was designated class D 400.	Pass
5.	PLACE OF INSTALLATION The manhole top was intended for installation in a Group 4 area.	Pass
6.	MATERIALS	
6.1	General	
6.1.3	Other materials The manhole top was made from a composite material.	Pass (1)
7.	DESIGN REQUIREMENTS	
7.1	General The manhole top was free of defects which might impair its fitness for use.	Pass (2)

Comments.

(1) The Manufacturer's representatives had provided a letter, dated 27 February 2007, for the testing of the previous sample on BSI Report 285/7108874. The letter stated that to achieve the D 400 class only the internal reinforcement would be increased and that the materials, construction, manufacturing process and the quality control system was the same as for the Kitemarked C 250 range. The internal reinforcement had been modified further for this product sample and therefore only limited testing was conducted.

(2) The cover submitted had some chipped raised pattern adjacent to the keyway slot. Rough areas of moulding were also present on the underside of the cover. These were not however considered likely to impair the products fitness for use.

EXAMINATION AND TEST (CONTINUED)

CLAUSE		ASSESSMENT												
8.	TESTING													
8.3.1	<p>Measurement of permanent set of the cover or grating after the application of 2/3 of the test load (267kN)</p> <p>Material of intermediate layer used: Rubber</p> <table border="1"> <thead> <tr> <th></th> <th>Specified</th> <th>Actual</th> <th></th> </tr> </thead> <tbody> <tr> <td>Permanent set (mm)</td> <td>2.54 max</td> <td>0.34</td> <td>Pass</td> </tr> </tbody> </table> <p>For information</p> <table border="1"> <tbody> <tr> <td>Clear opening (mm)</td> <td>-</td> <td>762</td> <td>-</td> </tr> </tbody> </table>		Specified	Actual		Permanent set (mm)	2.54 max	0.34	Pass	Clear opening (mm)	-	762	-	
	Specified	Actual												
Permanent set (mm)	2.54 max	0.34	Pass											
Clear opening (mm)	-	762	-											
8.3.2	<p>Application of the test load</p> <p>The unit was not capable of withstanding a test load of 400 kN for 30 seconds without cracking.</p>	Pass (3)												
9.	<p>MARKING</p> <p>Specified marking</p> <p>a) – EN 124</p> <p>b) – appropriate class</p> <p>c) – name or identification mark of manufacturer</p> <p>d) – mark of certification body</p>	<p>Not assessed</p> <p>Not assessed</p> <p>Not assessed</p> <p>Not assessed</p>												
	<p>The markings were clear and durable</p> <p>(marked on cover)</p> <p>FIBRELITE</p>	Not assessed												

Comment.

(3) With the manufacturers agreement the cover was fitted to a previously tested frame, submitted under Equipment Record no. 10091537, for load test purposes.