

# **TEST REPORT**

# AASHTO M 306-04 Cover Test FL760 Class H25

Date: 12/04/13

**Client: Fibrelite Composites Ltd.** 

## **Cover**

The cover supplied is a round FL760 and of composite construction. (See photo. 1) No. on cover-381

The cover was tested in a composite frame. Frame No. 12 15357



Photo. 1

### **Test Rig**

The test rig consists of a 'giant mecanno' frame bolted to the floor and supporting the Enerpac 50 tonne hydraulic cylinder. (Photo 2)



Photo. 2

The cover and frame were sat on steel channels and plates with steel shims to pack and level.

#### **Test**

The test was carried out in accordance with AASHTO M 306-04, Clauses 5.1 and 5.2.

The load was applied to the cover through a 9 in. x 9 in. (229mm X 229mm) by 0.75 in. thick steel plate with a 9 in. x 9 in. MDF pad between the plate and cover.

The load was measured using a 100 ton (1000kN) load cell (serial no. 3243N) and digital load indicator (serial no. D.I.B.1).

The deflection was measured at the centre on the underside of the cover using a dial indicator.

#### The cover was tested to H25

The H25 test consists of proof loading the cover to 50,000lb (222kN) and holding the load for 1 minute.

The load was then released, the permanent deformation measured and the cover inspected for any damage.

## **Results**

LOAD lbs (kN)	DEFLECTION inches (mm)	REMARKS
0	0.00	
50,000 (222)	0.696 (17.67)	
0	0.052 (1.33)	

#### **H25 Test**

The cover held the proof test load of 50,000 lbs (222kN) for the required 1 minute and with no visible signs of any cracking.

In accordance with Clause 5.1 of the AASHTO M306-04 standard the permanent deformation was 0.052 in. (1.33mm) and is within the 1/8 in. (3.2mm) that is allowed.

The cover therefore passed the H25 test.

M.A.Salisbury Senior Technician

M. A. Salidan