



TEST REPORT

AASHTO M 306-04 Cover Test FL90 Class H20

Date: 12/04/13

Client: Fibrelite Composites Ltd.

Cover

The cover supplied is a round FL90 and of composite construction. (See photo. 1)
No. on cover – No Number

The cover was tested in a composite frame.
Frame No. 34486



Photo. 1

Test Rig

The test rig consists of a 'giant mecano' frame bolted to the floor and supporting the Enerpac 50 ton 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 H20

The H20 test consists of proof loading the cover to 40,000lb (178kN) 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	
40,000 (178)	0.511 (12.97)	
0	0.013 (0.34)	

H20 Test

The cover held the proof test load of 40,000 lbs (178kN) 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 0.013 in. (0.34mm) and is within the 1/8 in. (3.2mm) that is allowed.

The cover therefore passed the H20 test.

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