

Prepared by GMI Composites Inc.
FATIGUE and PROOF LOAD TEST
 Ref. AASHTO M306-10 Load Testing specification

Date of test: 11.9.12
 Tested by: Tim Johnson
 Carrie Ross

Cover being tested:

Frame used for test:

Product #: 3800 Cover&Frame
 Part #: 3800CAXI01
 Material: Composite
 Grade: Heavy Duty - PU
 Machine Bearing Surface: No
 Cover Weight: 80
 Date Molded: 2/21/2012
 Cover Pad Size: n/a
 Load Rating for test cover: HEAVY DUTY

Product # 3800FEXX00
 Catalog #: 3800 Series
 Material: Composite
 Grade: Heavy Duty - E
 Machine Bearing Surface: No
 Frame Weight: 70
 Date molded: 5/1/2012
 Frame Pad Size: n/a
 Load Rating for frame: HEAVY DUTY

Number Cycles Without Failure	<u>2.8M Cover/2M Frame</u>	Cycles	<u>16000</u>	Lbs (Equivalent)
Amount of Load Applied Without Failure for 30 secs:		PSI	<u>50000</u>	Lbs (Equivalent)
Max Deflection	<u>2.34"</u>	" @	<u>89140</u>	Lbs (Equivalent)
Unit Cracked or failed at:	<u>2.37"</u>	PSI	<u>90170</u>	Lbs (Equivalent)
1/8" Permanent Deformation:	<u>n/a</u>	PSI	<u>n/a</u>	Lbs (Equivalent)
Unit Destructed at:		PSI	<u>90170</u>	Lbs (Equivalent)

Reason For Test & Comments: Product Validation - Fatigue test cover and frame set for 2 Million cycles at 16,000 lbs

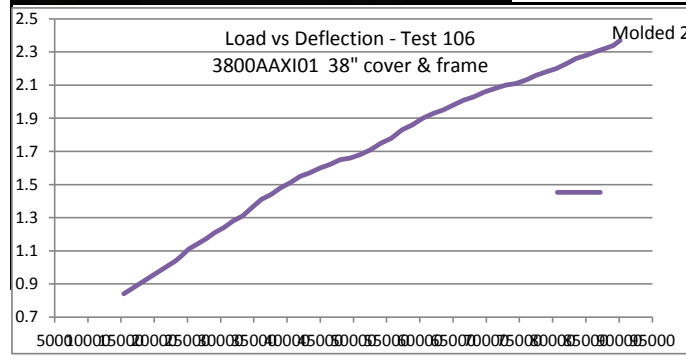
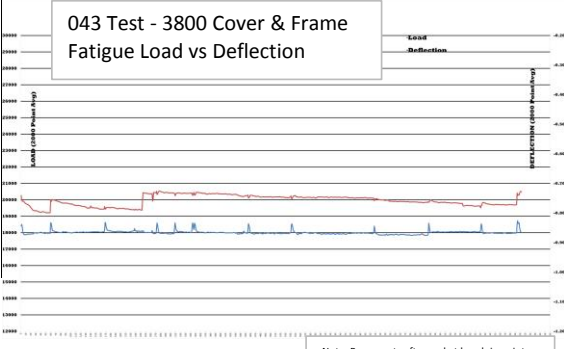
then proof load test to the AASHTO M-305 H-25 load rating of 50,000 lbs, then test to failure

Cover & Frame tested per std of 16,000 lbs for 2 Million cycles without failure, met H-25 load 50K lbs before failure at 90K lbs

Frame failed, when cover pressed through the frame bearing surface flange. Cover broke along side in compression.



Start	Stop				
Time	5/24/12- 13:55:01	Pounds	17873	Deflection	-0.736
TEST NAME			-199	-0.032	Position
	043 Fatigue sheet 1				0.00
					Count
					900463
					Hyd On
					1
					SAVE
					000469
					ZERO POS



AASHTO SPEC. M306
 FEDERAL SPEC.
 9" x 9" Plate
 Load Centered On Unit
 1/2" Thick Rubber Pad
 Load = 78.54 X Pressure

Note: Re-zero pts after gasket break-in point

DOC # GMI LOAD TEST DATA SHEET
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