Metcut Research Inc.

PROGLASS, INC
WAUNA, WA

Date:09/28/2009
Project: 4453-88857-3
Authorization: J04868

Materials & Structures Fatigue Laboratory Procedure: 500.7

Proof Load Testing - Fiberglass Trench Covers

All testing is conducted in accordance with the specifications referenced below.
Exceptions to the specifications, if any, are noted in the report.

Material Identity: Proglass Deck Plate
Testing Specification: AASHTO M-306 Section 5.1
Specimen Drawing No.: —
Machining Finish: —

TEST CONDITIONS:

Test Control Mode: Axial Load Control
Test Temperature: 75°F
Dynamic Ratio: —

Test Loading Rate: 5000 lbf/min

Test Station Axis 1: 60303 Load Capacity(lbf): **50000**
Test Station Axis 2: Load Capacity(lbf):

William T Grieszmer
Manager,
Materials & Structures Fatigue Laboratory

per
Daniel . Werner
Supervisor,
Materials & Structures Fatigue Laboratory

The results presented in this report relate only to the items tested.

Metcut Project: 4453-88857-3

Test Procedure

The concentrated bend loading of your supplied Trench Covers in accordance with AASHTO M-306 section 5.1 was conducted as follows.

The Trench covers were assembled to our test bed, set upon S8 I-beams for end support as depicted in Figure I. The load was applied on the top center face through a 9" square loading ram. Deflection was monitored by a LVDT mounted in line with the loading axis. Each of the Trench Covers were loaded at a rate of 5000 lbf / minute to 40,000 lbf, held for 1 minute then the load was released. Cover HT-6049 was additionally loaded to 50,000 lbf. The peak deflection and permanent deflection is listed in Table I for each cover.

The trench covers were disposed of by Metcut after testing.

METCUT

Project No. : 4453-88857-3

Table I
Static Test Data
AASHTO M-306 Section 5.1

Dynamic Ratio : ~ Mean Cyclic Frequency: ~
Test Temperature : 75°F Spectra Waveform: ~

Test Number	Specimen Number		Load Maximum (lbf)	Peak Deflection (in)	Permanent Deflection (in)	Results	Test Hours	Test Machine
3-280-01	HT 6031		40000	0.327	0.024	Sustained Required Test Load	0.3	60303
2-280-01	HT 6027		40000	0.346	0.050	Sustained Required Test Load	0.3	60303
7-280-01	HT 6034		40000	0.379	0.034	Sustained Required Test Load (A)	0.3	60303
6-280-01	HT 6044		40000	0.506	0.026	Sustained Required Test Load (A)	0.3	60303
5-280-01	HT 6047-2		40000	0.523	0.027	Sustained Required Test Load	0.3	60303
4-280-01	HT 6049		40000	0.392	0.043	Sustained Required Test Load	0.3	60303

ProGlass HT Series

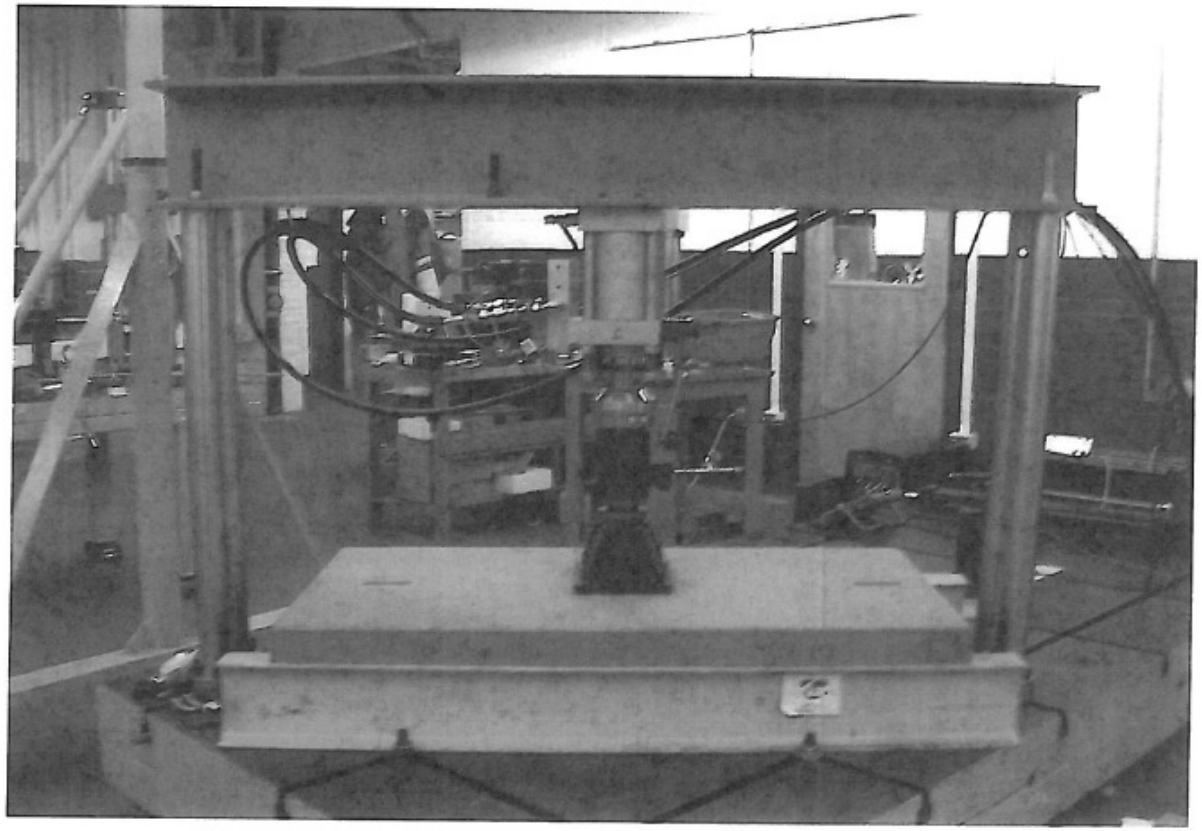

Figure I
Test Assembly