

Creep Testing for Polystyrene_NPS_QLD_225

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on behalf of accessUTS Pty Ltd

for Superslab Tech Pty Ltd

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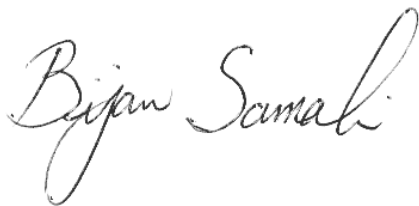
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A handwritten signature in black ink that reads 'Bijan Samali'. The signature is written in a cursive, flowing style.

Professor Bijan Samali

1. AIM

The aim of the tests was to measure the capacity of the Polystyrene NPS_QLD_225 (1090*1090*225) to creep testing.

2. INTRODUCTION

The testing of the Polystyrene was requested by Mr. Jim Prior, the National Operations Manager from SuperSlab Tech. The tests were conducted in the Structural Testing Laboratory at UTS - Faculty of Engineering and Information Technology at the Broadway Campus.

The logging of force and displacement data during the compression testing was carried out by officers of the Faculty of Engineering and IT, UTS.

3. EQUIPMENT USED

The following data acquisition system, force and displacement instrumentation and crack detecting devices were provided by the Faculty of Engineering and IT, UTS.

- Displacement (The Stroke) - 1 LVDT (Linear Voltage Differential Transducer). 1) S/N 42687,
- Data acquisition system, DataTaker-Geologer (DT 600) S/N 58046

4. SPECIMEN DETAILS

The configuration of the Polystyrene (1090 mm x 1090 mm x 225 mm) are shown in Figure 1



Figure 1

5. TEST DETAILS

The NPS_QLD_225_CR0001 was placed onto a flat surface and was loaded with 800 kg of dead load as shown in Figure 2. The corresponding displacement data (The stroke) was monitored on digital displays and also sampled by the data logging equipment. The logged data was stored on a computer for post test processing. The product was loaded till a complete failure had occurred.



Figure 2 - Set up of the test

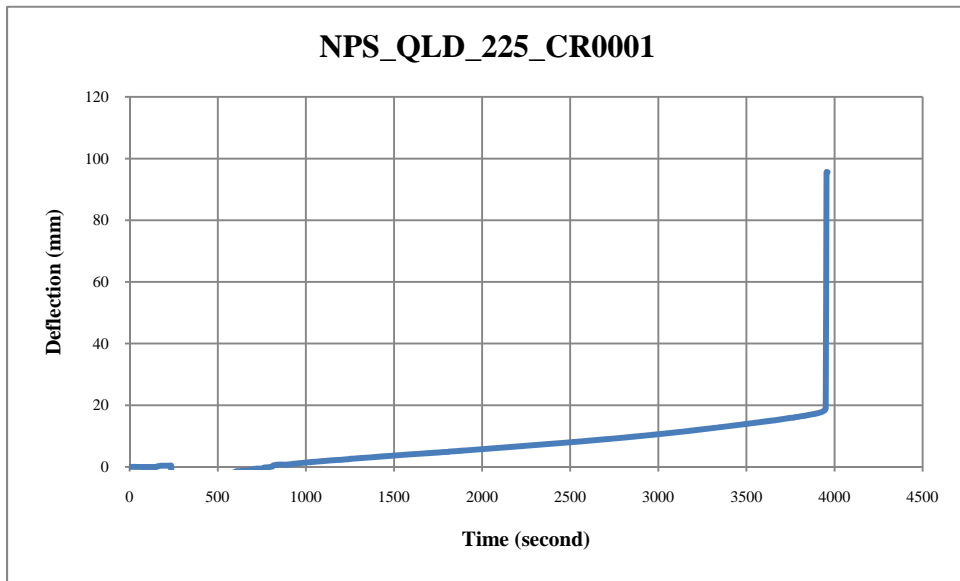
6. RESULTS

Summary Table:

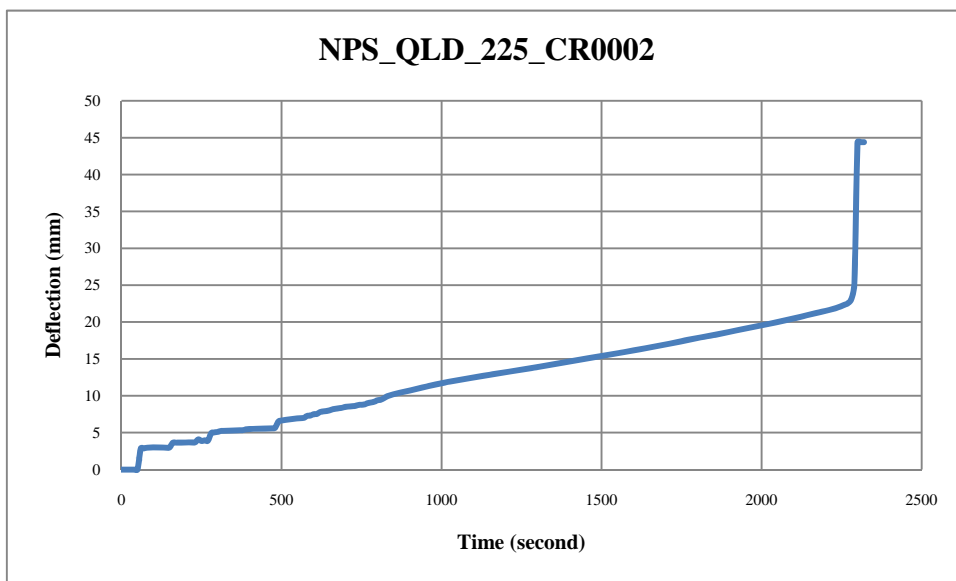
Test No.	Test Date	Product	Loaded Face	Load (kg)	Failure time (hr:min)	*Thickness at corner (A) (mm)	Thickness at corner (B) (mm)	Thickness at corner (C) (mm)	Thickness at corner (D) (mm)
1	7-July-11	Polystyrene NPS_QLD_225_CR000 1 (1090 x1090 x 225)	1090 x 1090	800	1:06	95	100	115	110
2	26-Sep-11	Polystyrene NPS_QLD_225_CR000 2 (1090 x1090 x 225)	1090 x1090	800	0:39	130	136	75	80
3	30-Sep-11	Polystyrene NPS_QLD_225_CR000 3 (1090 x1090 x 225)	1090 x1090	800	1:20	138	135	80	90

* Deflection was measured after failure had occurred and it is the distance from the floor to the top side of the polystyrene

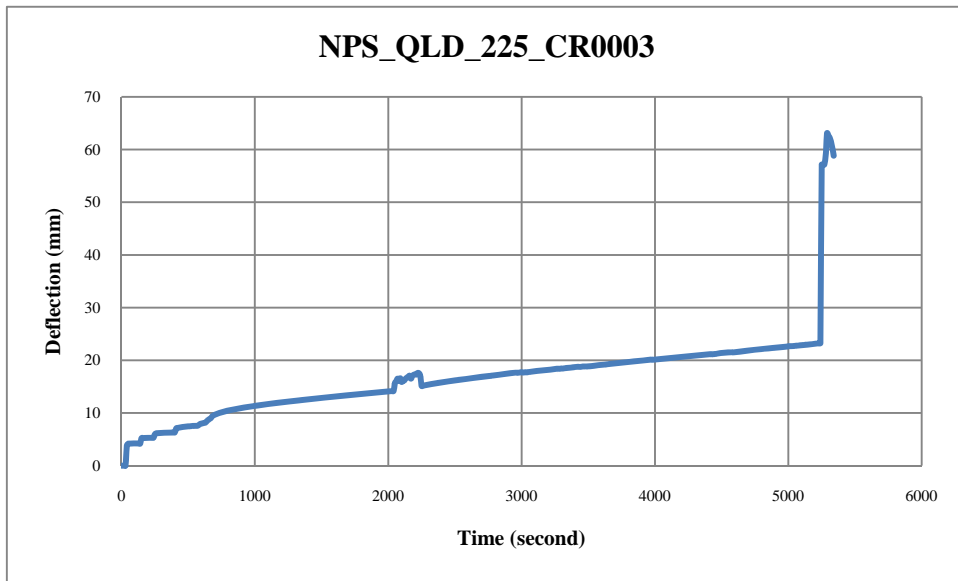
APPENDIX A - GRAPHIC RESULTS



Graph 1. NPS_QLD_225_CR0001



Graph 2. NPS_QLD_225_CR0002



Graph 3. NPS_QLD_225_CR0003