



Report for: THRUFLOW
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REVISED
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Customer P.O. #: 613

Attention: Derek McGivern

TEST REPORT

PROPERTIES OF THRUFLOW DECKING PANELS

CREEP RELAXATION

1. INTRODUCTION

On August 24th, 2006, CMTL received, a four (4) foot Thruflow Reinforced Polypropylene (RPP) dock panel to determine the creep relaxation properties at 73°F as per the request of AXIS Polymer Services Inc.

2. TEST METHOD

The Thruflow dock panel was tested according to the creep relaxation requirements outlined in ICC AC174 (Approved Feb. 2005) and ASTM D7032-05, Section 5.4. The testing was conducted using a support span of 16 inches on center for four (4) foot panels.

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Per *Steve Brown* QUALITY ASSURANCE

Per *Derek McGivern* TECHNICIAN



2. TEST METHOD (Cont'd)

Three (3) boards were tested as per ASTM D6109-05 modified for quarter point loading. The boards were placed across the support noses. A calibrated dial gauge was secured under the deck boards and the initial deflection at the mid-span was recorded. A pre-weighed loading nose assembly was placed on the boards. Weights were added to the assembly until a load corresponding to 100 psf, 120 psf, 140 psf, 160 psf and 200 psf (2x design load) were applied. The 200 psf load was left in place for 24 hours and the total deflection was recorded. The load was removed and deflection was recorded immediately. The boards were allowed to recover for 24 hours at which time the deflection was measured. The percent recovered deflection was calculated as follows:

Percent recovered deflection =

$$\frac{(\text{total deflection after 24hr loading period} - \text{residual deflection after 24hr recovery period})}{\text{total deflection after 24hr loading period}} \times 100$$

3. RESULTS

16" Support Span

	Deflection (inches)			Mean
	Board 1	Board 2	Board 3	
100 psf	0.0516	0.0539	0.0467	0.0507
120 psf	0.0653	0.0682	0.0605	0.0647
140 psf	0.0745	0.0783	0.0701	0.0743
160 psf	0.0857	0.0906	0.0812	0.0858
– total deflection after 24hr loading period	0.1244	0.1300	0.1212	0.1252
– residual deflection after 24hr recovery period	0.0010	0.0154	0.0063	0.0076
– percent recovered deflection	+99%	+88%	+95%	+94%