



Confidential Technical Report 50615

Date: 5th October 2009

PROPOSAL NO: 100571EC
PROJECT NO: GR0338

EVALUATION OF A BOARDWALK

ENVIROLINK NORTHWEST,
Spencer House,
91 Dewhurst Road,
Birchwood,
Warrington,
WA3 7PG.

For the attention of: Mr. David Taylor
e-mail: D.Taylor@envirolinknorthwest.co.uk

CENTRIFORCE PRODUCTS LIMITED,
14-16 Derby Road,
Liverpool,
L20 8EE,

For the attention of: Mr. Barry Keeling
e-mail: BarryKeeling@centriforce.co.uk

**Chris
Hughes**

Digitally signed by Chris Hughes
DN: cn=Chris Hughes, o=Smithers
Rapra, ou,
email=chughes@rapra.net, c=GB
Date: 2009.10.05 13:38:40 +01'00'

Author - Chris Hughes
Senior Test Engineer
Physical Testing

**Alec
Blakemore**

Digitally signed by Alec Blakemore
DN: cn=Alec Blakemore, o=Smithers
Rapra, ou,
email=ablakemore@rapra.net, c=GB
Date: 2009.10.05 10:25:47 +01'00'

Alec Blakemore
Assistant Test Engineer
Physical Testing

Page 1 of 3 pages – CTR 50615

Registered Office;

Smithers Rapra Technology Limited

Shawbury, Shrewsbury

Shropshire, SY4 4NR

United Kingdom

T: +44 (0)1939 250383

F: +44 (0)1939 251118

E: info@rapra.net

W: www.rapra.net

Smithers Rapra Technology Limited,

18 Belasis Court

Belasis Hall Technology Park

Billingham, Cleveland, TS23 4AZ

United Kingdom

T: +44 (0)1642 370406

F: +44 (0)1642 564551

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This report replaces Confidential Technical Report 50606, which is hereby withdrawn.

1. INTRODUCTION

Details of the samples supplied and the tests requested are as follows:-

Sample Designations: Boardwalk (no designation given).

Description of Materials Received: A section 1.2 m by 1.04 m.

Date Received: July 2009.

Date Tested: 27th September 2009.

Tests Requested: Load bearing test.

2. LIMITATIONS

This report has been prepared solely on the basis of information supplied up to the point of its completion and has been accepted in good faith.

The results relate only to the samples tested and to the particular tests carried out and can not prove that the product is generally fit for any intended purpose.

The samples were tested as received and to the supplier's instructions and no responsibility can be taken for them being unrepresentative.

Smithers Rapra Technology Limited will destroy all the supplied materials relating to this contract six months after the work is completed unless a written request is received within that time that the client wishes to have the material returned.

Unless a test is specifically stated to be included within the scope of our accreditation to ISO/IEC 17025, it should be assumed not to be so. Note that any opinions or interpretations given are outside the scope of our UKAS accreditation.

3. EXPERIMENTAL DETAILS

The samples were tested in accordance with the following standards, except as otherwise noted. Ambient temperature was maintained at $23^{\circ}\text{C} \pm 2^{\circ}\text{C}$ and all equipment used was calibrated to the accuracy required in the appropriate standard.

3.1 Load bearing test (Not accredited)

The boardwalk was evaluated using the principles of BS 6399 Part1: 1996 Loading for buildings —Part 1: Code of practice for dead and imposed loads. Table 1 of BS 6399 – 1:1996 specified a concentrated load of 4.5 kN for heavy duty walkway. A 50 mm square block was positioned centrally on the boardwalk. The load was applied to this block via a cantilever system and lead ingots giving a total dead load of 4.5kN and visually inspected for any detrimental effect. In order to ensure the correct loading was applied the six feet of the boardwalk were individually placed on load platforms.

4. RESULTS

Loading the board walk with 4.5 kN via a right 50 x 50 mm section loading nose gave a deflection of 12.7 mm after a period of 5minutes with no other visible detrimental effect.

5. DISCUSSION

Loading the boardwalk with 4.5 kN is the minimum imposed load for a "Heavy duty walkway (high density pedestrian traffic including escape routes). General duty walkways (regular two way pedestrian traffic) only require a concentrated load of 3.6 kN which is 25% less and possibly more applicable.

End of Report