0115-L-18/1 30 July 2018

Test report

Terrabarrier BL 365 C3, article 0026839





BDA TESTING expertise in façades and roofs

Trust Quality Progress



0115-L-18/1 30 July 2018

Test report

Terrabarrier BL 365 C3, article 0026839

© 2018 Kiwa N.V. All rights reserved. No part of this report may be reproduced, stored in a database or retrieval system, or published, in any form or in any way, electronically, mechanically, by print, photoprint, microfilm or any other means without prior written permission from the publisher.

Kiwa BDA Testing B.V. Avelingen West 35-37 P.O. Box 389 4200 AJ Gorinchem The Netherlands

Tel. +31 183 669 690 testing@bda.nl www.kiwabda.nl

Commercial register Registered by Chamber of Commerce Midden Nederland 23059445

Details

Principal

Contact person Email Date of order Project number Author Subject Beaulieu Technical Textiles SA Boulevard Industriel 3 B-7780 COMINES-WARNETON S. Vandewalle sophie.vandewalle@bintg.com 18 January 2018 0115-L-18/1 K. van Zee determination of resistance to root penetration

All assignments accepted by Kiwa BDA Testing B.V. are subject to our general terms and conditions. The report may only be reproduced in full.



Contents

	Contents	1
1	Introduction	2
2	Investigation	3
3	Results	4

- I Sampling form, photos of the delivered sample
- II Buildup of the test specimens
- III Photos of the test



1 Introduction

By order of Beaulieu Technical Textiles SA, Kiwa BDA Testing B.V. has determined the resistance to root penetration of **Terrabarrier BL 365 C3, article 0026839**, thickness 1,0 mm.

On 24 January 2018 a sample, provided by Mrs S. Vandewalle of Beaulieu Technical Textiles SA, has been received at Kiwa BDA Testing B.V. for the purpose of testing.

On the sample the following data were found.

2

Description

- Product
- Terrabarrier BL 365 C3, article 0026839 Beaulieu Technical Textiles SA
- Manufacturer : Be
 Production date / code : no
 - not revealed

The bitumen 85/40, the plant seeds (lupinus alba) and other necessities for the test have been set at disposal by Kiwa BDA Testing B.V.

See annex I for photos of the delivered sample.



2 Investigation

The resistance to root penetration has been determined according to CEN/TS 14416:2014 – Geosynthetic barriers – Test method for determining the resistance to roots.

Three test specimens and one reference specimen have been built up by Mr P. Golverdingen of Kiwa BDA Testing B.V. on 29 may 2018. See annex II for photos of the buildup of the test specimens.

The test duration has been determined at six weeks. After this period the seeds appeared to have been developed to healthy young plants.

The investigation has been performed in period from week 22 up to and including week 28, 2018.



3 Results

After the growing period of six weeks no penetration into or through the test specimens is observed. The reference with the 20 mm thick layer of bitumen 85/40 showed root penetration.

See also photos in annex III.

Remarks:

The results are only related to the investigated samples, products and/or systems. Kiwa BDA Testing B.V. is not liable for interpretations or conclusions that are made in consequence of the results obtained.

The uncertainty of measurement can be retrieved at Kiwa BDA Testing B.V.

If sampling was not performed by Kiwa BDA Testing B.V., no judgement can be given with regard to the origin and representativeness of the samples.

Gorinchem, 30 July 2018 The laboratory

1.0 Thy

K. van Zee manager

Kiwa BDA Testing B.V.

C.W. van der Meijden MSc

technical director

I Sampling form, photos of the delivered sample



II Buildup of the test specimens

Photo 1

Three test specimens has been placed in the flower pot and has been sealed with a silicone mastic sealant.



Photo 2 Bitumen 85/40 and reference test specimen.



Photo 3 Label plant seeds (lupinus alba).



Photo 4 Plant seeds.



Photo 5 Plant seeds have been laid on the soil.



Photo 6

Seeds have been covered with soil and the tube has been positioned in the middle of the pot.



III Photos of the test

Photo 1

Plants after the growing period (six weeks).



Photo 2 The upper surface of the test specimens after the growing period.



Photo 3

The lower surface of the test specimens after the growing period.



Photo 4

Root penetration through the bitumen layer of the reference specimen.

