

Test report no.: 205456/19

Client: TenCate Geosynthetics Austria GmbH
Schachermayerstr. 18
4021 Linz
AUSTRIA

Order: Determination of resistance to root penetration according to CEN/TS 14416 of the composite "Bamboo Stop Pro"

Letter of: 2019-11-04 **Ref.:** Anton Puchner
Sample received: 2019-10-30
Test period: 2020-01-08 till 2020-03-03

This test report comprises 3 pages.

This test report replaces the test report of 10 March 2020.

Würzburg, 2020-03-27
Har/wet/

i. V.



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i. A.



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Die auszugsweise Wiedergabe, Vervielfältigung und Übersetzung dieses Berichtes bedarf der schriftlichen Genehmigung der SKZ - Testing GmbH. Die Ergebnisse beziehen sich auf die geprüften Produkte. Der Akkreditierungsumfang kann im Internet unter www.skz.de eingesehen werden.

1 Order

The TenCate Geosynthetics Austria GmbH, Schachermayerstr. 18, 4021 Linz, Austria, ordered the SKZ - Testing GmbH with letter dated 2019-11-04 with the determination of resistance to root penetration according to CEN/TS 14416 of the composite "Bamboo Stop Pro".

2 Test material

On 2019-10-30 SKZ – Testing GmbH received the following samples for testing:

- one segment (2 m x 1 m) of a black coloured composite made from a nonwoven geotextile combined with a black coloured impermeable coating on top side and a grey coloured coating on back side, labelling "TENCATE POLYFELT® WPC"

SKZ – Testing GmbH had no influence on the selection of the test material.

3 Execution of test

Usually we carry out tests according to standards for which we have an accreditation. The list of all standards for which we are accredited is shown on the homepage at www.skz.de. In case of non-accredited procedures they are marked with *.

Determination of resistance to root penetration was carried out according to CEN/TS 14416:2014-02 "Geosynthetic barriers - Test method for determining the resistance to roots".

The following test parameters have been applied:

Soil:	lime-free soil (pH 5.7)
Seeds:	Lupin (lupinus alba)
Test duration:	8 weeks
Number of specimens:	3 test specimens and 1 reference specimen (bituminous sheet 85/40)



4 Test results

In the pot with a 20 mm thick layer of reference specimen (bituminous sheet 85/40), the roots penetrated through the sheet at several spots. Therefore the vitality of plants is proven.

The specimens of the membrane were not penetrated by roots.

According to CEN/TS 14416 the composite "Bamboo Stop Pro" are therefore resistant to roots.