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FG Bitumen und
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Notified body No. 1211

Munich, 17.07.06

TEST REPORT

No.: Ta 51023/06e

Commissioned by: See above

Subject: Determination of water vapour transmission
properties of the product group "EXTRASEC"
according to EN 1931: Subgroup 2:
"Sagitta V 3 kg" / "Supratech V 3 kg"
"Sagitta P 3 kg" / "Supratech P 3 kg"

Reference: EN 13970: Flexible sheets for waterproofing -
bitumen water vapour barriers - definitions and
properties
Contract dated 09.03.2006

This report contains: 3 pages of text and
1 page in an appendix

1 General

On 09.03.2006 the MPA BAU of the Technical University of Munich was commissioned by the manufacturer with the initial testing of the water vapour transmission of the product group "EXTRASEC" according to EN 1931 with regard to conformity approval for water vapour barriers according to EN 13970. Based on information provided by the manufacturer, the product group "EXTRASEC" contains the following products:

- Sagitta V 2 kg,
- Sagitta V 3 kg / Supratech V 3 kg,
- Sagitta P 3 kg / Supratech P 3 kg,
- Sagitta P 3 mm.

Since the members of the product group "EXTRASEC" have different water vapour transmission properties, the water vapour transmission of the following subgroup products was to be investigated:

Group "EXTRASEC"		
Subproduct 1	Subgroup 2	Subproduct 3
- Sagitta V 2 kg	- Sagitta V 3 kg / Supratech V 3 kg, - Sagitta P 3 kg / Supratech P 3 kg,	- Sagitta P 3 mm.

The manufacturer assumes the same water vapour transmission property for the products within the subgroups of the "EXTRASEC" products. The product investigated for subgroup 2 was "Sagitta V 3 kg".

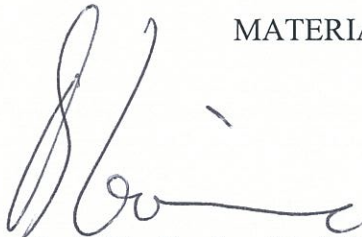
The sample rolls of the products in subgroup 2 were delivered on 08.03.2006 at MPA BAU.

2 Test Results

The tests results are summarised in the table contained in the appendix.

The investigation of water vapour transmission was performed according to DIN EN 1931:2001-03 (method A) on 4 samples (3 samples, 1 reference sample) in a climatic chamber at 23°C/75 %RH. The dessicant calcium chloride was used to maintain the inside of the diffusion cup at a relative humidity 0%. The exposed surface area of the samples was 0.005 m². The samples were weighed at intervals of 7 days over a total storage period of 63 days. Temperature and atmospheric pressure were recorded continuously over the storage period. The corresponding mean values were taken into account during the evaluation of the data.

The measured water vapour current densities are below the recommended value of $g \geq 5.7870 \cdot 10^{-9} \text{ kg}/(\text{m}^2 \cdot \text{s})$ for measurements performed according to DIN EN 1931.


Akad. Dir. Dr.-Ing. Th. Wörner
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Bitumenhaltige Baustoffe und Gesteine

MATERIALPRÜFUNGSAMT FÜR DAS BAUWESEN
ABTEILUNG BAUSTOFFE





Dr.-Ing. Bernd Wallner
Leiter der Fachgruppe
Bitumen und Abdichtungen

Table: Investigation of the bitumen water vapour barrier „Sagitta V 3 kg“

No.	Measurement		Test results		
1	Determination of water vapour transmission				
	DIN EN 1931		<u>Sample 1</u>	<u>Sample 2</u>	<u>Sample 3</u>
	Sample thickness	[mm]	2.25	2.25	2.25
	Water vapour transmission rate g:				
	Single value	[kg/m ² ·s]	1.5290·10 ⁻⁹	1.5329·10 ⁻⁹	1.6000·10 ⁻⁹
	Mean value	[kg/m ² ·s]		1.5539·10 ⁻⁹	
Standard deviation	[kg/m ² ·s]		3.2582·10 ⁻¹¹		
Water vapour diffusion resistance coefficient μ	[-]		120000		