

# Airflow resistance in the sense\* of EN 29053 (ISO 9053)

## Measurement of specific airflow resistance

A 03-2 E

**Test subject:**

Name: UNOS

Description: acoustic fabric, 100% PLF Trevira CS

Manufacturer: création baumann Weberei und Färberei AG  
CH-4901 Langenthal

Client of measurement: manufacturer



**Measurement conditions:**

Standard: EN 29053: Materials for acoustical applications; Determination of airflow resistance (ISO 9053)

Method: direct-airflow method, measurement at 10 different airflow velocities and extrapolation to an airflow velocity of 0,5 mm/s

Specimen holder: round, diameter 112,8 mm

Temperature: 21 °C

Relative humidity: 45 %

Date of measurement: 2012-03-07

**Specimen:**

Number of specimen: 2 of 2

Diameter of specimen: 112,8 mm

Effective cross section: 100,00 cm<sup>2</sup>

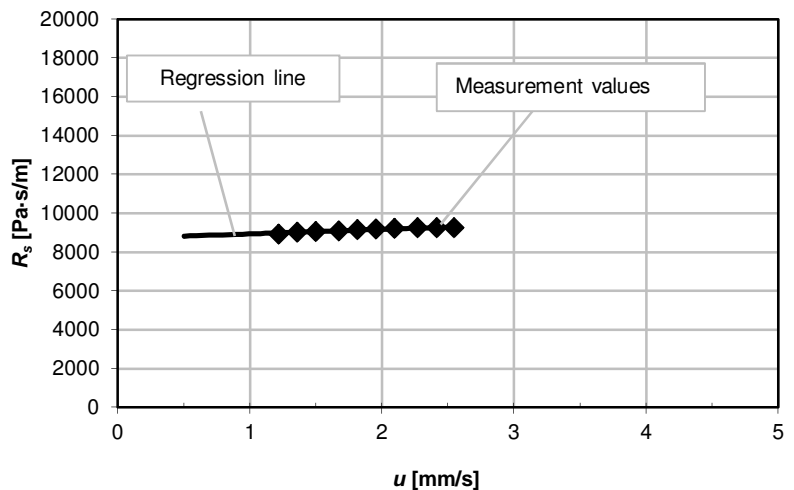
Thickness of specimen: -

Measurement setup: specimen fit in specimen holder

\* required number of specimens according to EN 29053: 3 x 3 = 9

**Measurement result:**

	$u$	$\Delta p$	$R_s$
Measurement values	2,5	23,5	9244,9
	2,4	22,3	9244,1
	2,3	21,0	9261,4
	2,1	19,3	9228,9
	2,0	17,9	9188,5
	1,8	16,6	9144,9
	1,7	15,2	9101,8
	1,5	13,6	9058,3
	1,4	12,2	9016,3
1,2	10,9	8940,5	
Extrapolation	0,5		8818,2



Airflow velocity  $u$  in mm/s  
 Pressure drop across the specimen  $\Delta p$  in Pa  
 Specific airflow resistance in Pa·s/m

**Single value:**      **Specific airflow resistance  $R_s$  = 8818,2 Pa·s/m**

Gesellschaft für Akustikforschung Dresden mbH  
 Blumenstraße 80  
 01307 Dresden  
 Phone: +49 (0)351 811309-40, Fax: -50

Report-No.: 120080077101-A03-2E  
 Editor: M. Ruhнау, V. Bormann  
 Date: 2012-04-02