

# Airflow resistance on the base\* of DIN EN 29053 (ISO 9053)

## Measurement of specific airflow resistance $R_s$

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**Measuring sample:**

Name: TONY 61

Description: acoustic fabric

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

Client of measurement: manufacturer



**Measuring conditions:**

Standard: DIN 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: 23 °C

Relative humidity: 40 %

Measurement date: 2010-03-01

**Specimen:**

Number of specimen: 1 of 2

Diameter: 112,8 mm

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

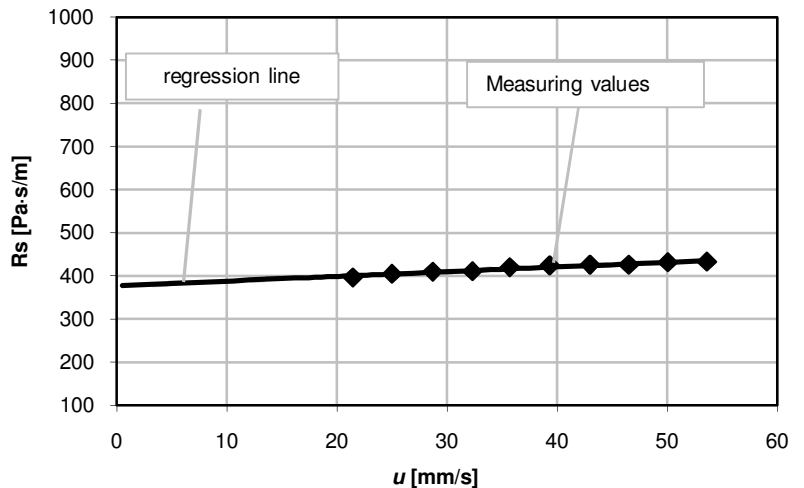
Thickness: -

Measurement setup: specimen (ca. 200 mm x 180 mm) fit in specimen holder

\* required number of specimens according to ISO 9053: 3 x 3 = 9

**Measurement result:**

	$u$	$\Delta p$	$R_s$
Measuring values	53,6	23,2	432,8
	50,0	21,6	431,6
	46,5	19,8	426,0
	43,0	18,3	426,5
	39,3	16,7	424,3
	35,7	15,0	420,3
	32,3	13,3	410,6
	28,7	11,8	409,7
	25,0	10,1	404,5
	21,4	8,5	396,4
Extrapolation	0,5		377,4



Airflow velocity  $u$  in mm/s  
 Pressure difference over specimen  $\Delta p$  in Pa  
 Specific airflow resistance  $R_s$  in Pa·s/m

**Measuring result:**

**Specific airflow resistance  $R_s = 377,4 \text{ Pa}\cdot\text{s/m}$**

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Report-No.: 100050053501-A05E  
 Editor: C. Schulze, V. Bormann  
 Date: 2010-03-05