

# Measuring protocol airflow resistance according to DIN EN 29053 (ISO 9053)

## Measurement of specific airflow resistance $R_s$

### Measuring sample:

Name: LORD II 166  
 Description: acoustic fabric  
 Manufacturer: création baumann Weberei und Färberei AG  
 CH-4901 Langenthal  
 Client of measurement: manufacturer



### Measuring conditions:

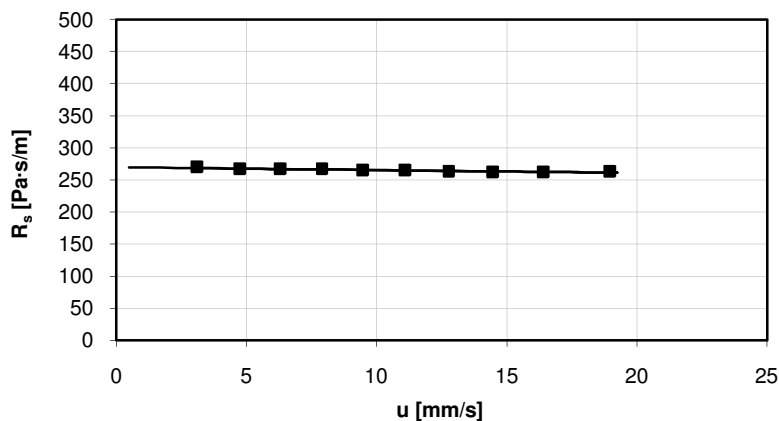
Standard: DIN EN 29053: Materials for acoustical applications; Determination of airflow resistance (ISO 9053)  
 Method: direct-airflow method, measurement at 10 different airflow velocities and extrapolation to an airflow velocity of 0,5 mm/s  
 Specimen holder: round, 100 mm diameter  
 Temperature: 19°C  
 Relative humidity: 58%  
 Measurement date: 2008-01-18

### Specimen:

Total number: 1  
 Shape: specimen (ca. 200 mm x 180 mm) fit in specimen holder  
 Effective cross section: 78,54 cm<sup>2</sup>

### Single results:

Specimen	Nr.1		
	u	$\Delta p$	$R_s$
Measuring values	19,0	5,0	263
	16,4	4,3	262
	14,5	3,8	262
	12,8	3,4	263
	11,1	2,9	265
	9,5	2,5	265
	7,9	2,1	267
	6,3	1,7	267
	4,8	1,3	267
	3,1	0,8	270
Extrapolation	0,5		270



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

### Measuring result:

Specific airflow resistance  $R_s = 270 \text{ Pa·s/m}$