

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

Measurement of specific airflow resistance R_s

A 01 E

Measuring sample:

Name: CALMA

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: 21 °C

Relative humidity: 67 %

Measurement date: 2009-03-09

Specimen:

Number of specimen: 1 of 1

Diameter: 112,8 mm

Effective cross section: 100,00 cm²

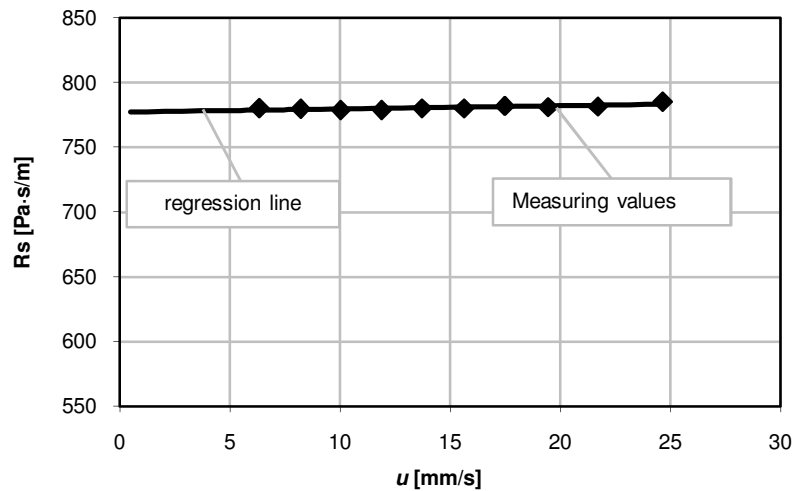
Thickness: -

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

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

Measurement result:

	u	Δp	R_s
Measuring values	24,6	19,4	785,2
	21,7	17,0	781,3
	19,4	15,2	780,9
	17,5	13,7	781,8
	15,6	12,2	779,9
	13,7	10,7	780,2
	11,9	9,3	778,7
	10,0	7,8	778,8
	8,2	6,4	779,7
	6,3	4,9	780,2
Extrapolation	0,5		777,2



Airflow velocity u in mm/s
 Pressure difference over specimen Δp in Pa
 Specific airflow resistance R_s in Pa·s/m

Measuring result:

Specific airflow resistance $R_s = 777,2 \text{ Pa·s/m}$

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