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

Measurement of specific airflow resistance R_s

AKUSTIK FORSCHUNG
Research & Development - Test - Consultancy

Measuring sample:

Name:	CALVADOS 106
Description:	acoustic fabric
Manufacturer:	création baumann Weberei und Färberei AG CH-4901 Langenthal
Client of measurement:	manufacturer

Measuring conditions:

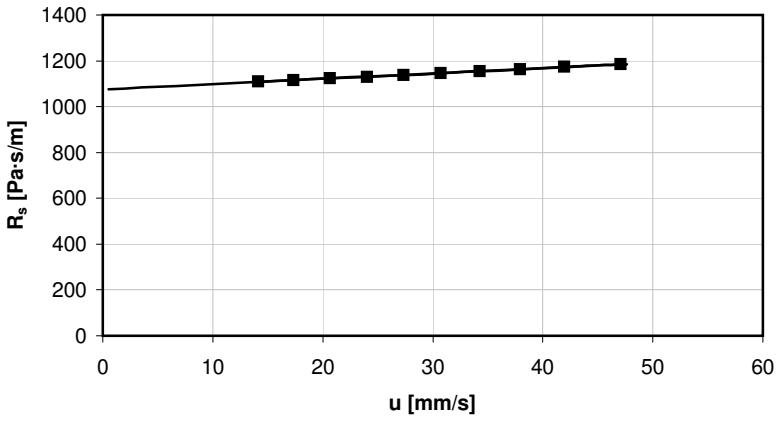
Standard:	DIN EN 29053: Materials for acoustical applications; Determination of airflow resistance (ISO 9053)
Method:	direct-airflow method, measurement at 10 different airflow velocities and extrapolation to an airflow velocity of 0,5 mm/s
Specimen holder:	round, 100 mm diameter
Temperature:	21 °C
Relative humidity:	61%
Measurement date:	2007-08-01

Specimen:

Total number:	1
Shape:	specimen (ca. 200 mm x 180 mm) fit in specimen holder
Effective cross section:	78,54 cm²

Single results:

Specimen	Nr.1		
	u	Δp	R_s
Measuring values	47,1	55,8	1186
	41,9	49,2	1174
	37,9	44,1	1163
	34,3	39,5	1154
	30,7	35,2	1145
	27,3	31,1	1137
	24,0	27,1	1129
	20,6	23,2	1123
	17,4	19,3	1114
	14,1	15,7	1110
Extrapolation	0,5		1075



Airflow velocity u in mm/s, pressure difference Δp over specimen in Pa, specific airflow resistance R_s in Pa·s/m

Measuring result: **Specific airflow resistance R_s = 1075 Pa·s/m**

Gesellschaft für Akustikforschung Dresden mbH
Stauffenbergallee 15
01099 Dresden
Phone: +49 (0)351 811309-0, Fax: -9

Report-No.: 007106-01
Editor: C. Schulze
Date: 2007-01-22