Airflow resistance in the sense* of EN 29053 (ISO 9053)
Measurement of specific airflow resistance

A 05-2 E

AKUSTIK FORSCHUNG
Research & Development - Test - Consultancy

Test subject:

Name:	HENRY
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

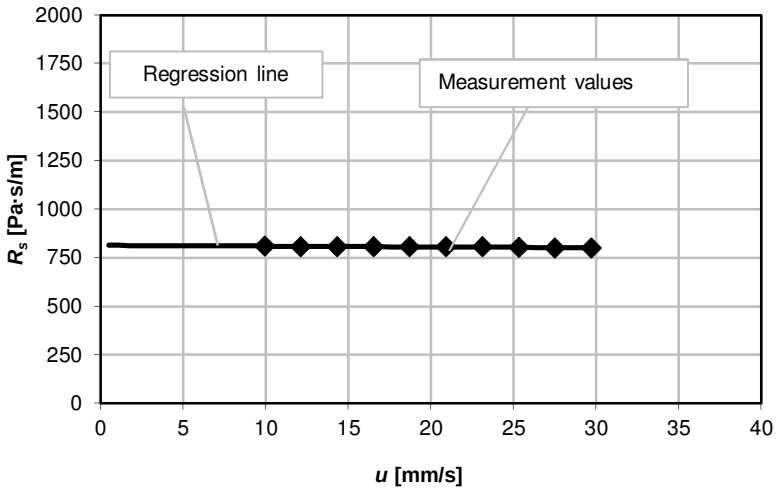
Specimen:

Number of specimen:	2 of 2
Diameter of specimen:	112,8 mm
Effective cross section:	100,00 cm²
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	Δp	R_S
Measurement values	29,7	23,7	798,6
	27,5	22,0	801,5
	25,3	20,4	804,6
	23,1	18,6	806,4
	20,9	16,9	807,9
	18,7	15,1	806,5
	16,5	13,4	808,0
	14,3	11,6	806,8
	12,1	9,8	807,9
	9,9	8,0	808,9
Extrapolation	0,5		813,8



Airflow velocity u in mm/s
Pressure drop across the specimen Δp in Pa
Specific airflow resistance in Pa·s/m

Single value: **Specific airflow resistance R_S = 813,8 Pa·s/m**

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