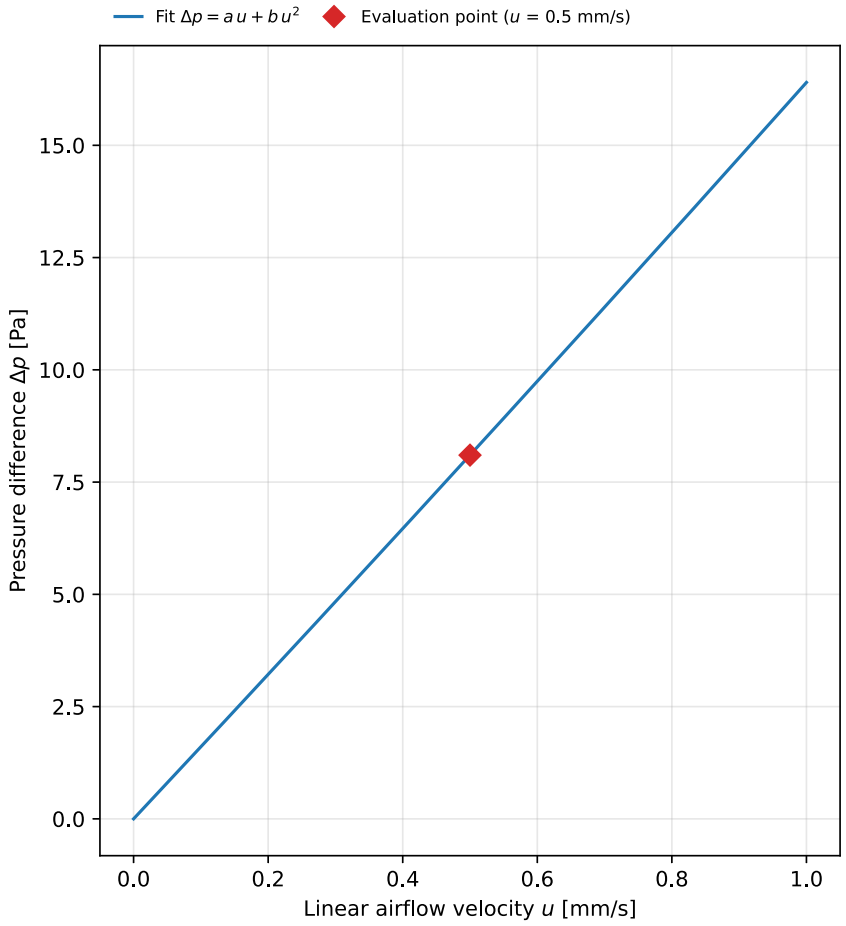
Airflow resistance of porous materials

ISO 9053-1 static-method determination of the airflow resistance of a porous material by a steady unidirectional (DC) flow per ISO 9053-1:2018.

Client:	Example client	Manufacturer:	Example insulation works
Description:	50 mm porous absorber (open-cell)	Thickness d [mm]:	50
Test facility:	Static airflow rig (example), 100 mm cell	Date of test:	2026-07-21
Temperature [°C]:	23	Relative humidity [%]:	50

Static airflow-resistance results

Evaluation velocity u [mm/s]	0.5
Fitted pressure difference Δp [Pa]	8.1
Airflow resistance R [Pa·s/m^3]	2062648
Specific airflow resistance R_s [Pa·s/m]	16200
Airflow resistivity σ [Pa·s/m^2]	324000
Zero-velocity resistance a [Pa·s/m]	16000
Quadratic coefficient b [Pa·s^2/m^2]	400000



Specific airflow resistance R_S = 16200 Pa·s/m

Airflow resistance R = 2062648 Pa·s/m^3
Airflow resistivity σ = 324000 Pa·s/m^2
Evaluated at u = 0.5 mm/s

Laboratory: Phonometry reference example
Report no.: EXAMPLE-9053-1
Date: 2026-07-21
Operator: phonometry Signature: _____

■ The results relate only to the tested specimen.

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