

Schweizerische Eidgenossenschaft Confédération suisse Confederazione Svizzera Confederaziun svizra

Swiss Confederation

## **STS Directory**

International standard:

Federal Department of Economic Affairs, Education and Research EAER

State Secretariat for Economic Affairs SECO Swiss Accreditation Service SAS

### Accreditation number: STS 0179

Swiss standard:	SN EN ISO/IEC 17025:2018	
Hochschule Luzern - Technik & Architektur (HSLU T&A) Institut für Gebäudetechnik und Energie (IGE) Prüfstelle Gebäudetechnik Technikumstrasse 21 6048 Horw	Head: Responsible for MS: Telephone: E-Mail: Internet: Initial accreditation: Current accreditation: Scope of accreditation see:	Johan Verbiest Erich Stauffer +41 41 349 39 56 johan.verbiest@hslu.ch www.hslu.ch/ige 05.08.1997 05.08.2022 to 04.08.2027 www.sas.admin.ch (Accredited bodies)

ISO/IEC 17025:2017

#### Scope of accreditation as of 05.08.2022

# Testing laboratory for thermic, fluidic and acoustic measurements of components and installations for building services equipment and acoustic material testing

Group of products or materials, field of activity	Principle of measurement <sup>2) and 3)</sup> (characteristics, measuring ranges, type of test)	Test methods, remarks (national, international standards, in-house test methods)
Thermic and fluidic measurements of components for building services equipment		
Heat exchangers – air to air – heat recovery compo- nents and devices	Measurement of thermal perfor- mance, pressure loss, temperature and humidity ratios and leakage <sup>3)</sup>	EN 308
	<ul> <li>air volume flow,</li> <li>0.05 to 1.9 m<sup>3</sup>/s</li> </ul>	Eurovent Certification Company - RS 8/C/001
	- outdoor air, -5 to 35 °C	- RS 8/C/002
	- extract air, 20 to 25 °C	AHRI Standard 1060
Heat exchanger for water to air	Thermal performance and pres- sure loss measurements <sup>3)</sup>	EN 1148 EN 1216
	- air volume flow, up to 8.0 m <sup>3</sup> /s	



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Heat exchanger for water to air	<ul> <li>water mass flow, up to 4 kg/s, from 6 to 95 °C</li> </ul>	
Air handling units	Testing of <sup>3)</sup>	EN 1886
	- casing air leakage	
	- filter bypass leakage	
	- thermal transmittance	
	- thermal bridging	
Residential ventilation units	Performance testing of aerody- namic characteristics and electri- cal power <sup>3)</sup>	EN 13141-4
	Testing of <sup>3)</sup> - leakage - thermal efficiency - effective power input	EN 13141-7 EN 13141-8 for units combined with heat pump EN 16147 and EN 14511-1 to -4 Testing rules of Passiv House In- stitute
Damper and valves	Aerodynamic testing <sup>3)</sup>	EN 1751
Industrial valves	Test of flow resistance using water as test fluid $^{\rm 3)}$	EN 1267
Condenser tumble dryers for household use	Measuring of the energy perfor- mance per laundry mass and dry- ing performance <sup>3)</sup>	BFE Messverfahren für Raumluft- Wäschetrockner, Aug. 1999
Ergonomics of the thermal environment	Analytical determination and inter- pretation of thermal comfort using calculation of the PMV and PPD indices and local thermal comfort criteria <sup>3)</sup>	EN ISO 7730 ASHRAE 55
Acoustic material testing	Measurement of sound absorption in a reverberation room <sup>2</sup> )	EN ISO 354
Acoustic measurements of com- ponents for building services equipment		
Air-terminal devices, air-terminal units, dampers and valves	Determination of sound power levels by measurement in a rever- beration room <sup>2)</sup>	EN ISO 5135
Ducted silencers without flow	Measurement of insertion loss, laboratory substitution method <sup>2)</sup>	EN ISO 11691
Ducted silencers with flow	Measurement of <sup>2)</sup>	EN ISO 7235
	- insertion loss	
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1) Scope of accreditation type A (fix)

2) Scope of accreditation type B (flexible)3) Scope of accreditation type C (flexible)

Definition of flexibilty see SAS Document 741



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Ducted silencers with flow	- flow noise	
	- total pressure loss	
Residential ventilation units	Measurement of sound power level <sup>2)</sup>	EN 13141-7 EN 13141-8 Testing rules of Passive House In- stitute
Components for building services equipment	Principles of measurement	
	<b>Measurement of air flow</b> <sup>3)</sup> 0.50 – 35'000 m <sup>3</sup> /h	
	<ul> <li>differential and dynamic pres- sure</li> </ul>	
	- turbine gas meter	EN 12261
	- rotary displacement gas meter	EN 12480
	- diaphragm meter	EN 1359
	- tracer gas dilution method	EN ISO 12569
	Measurement of water flow <sup>3)</sup> up to 10 kg/s, 6 to 90 °C	
	- differential pressure, MID	EN ISO 20456
	- water meter, up to 2.5 kg/s	
	<ul> <li>weighing method, up to 2.5 kg/s</li> </ul>	ISO 4185
	- Coriolis principle, up to 5 kg/s	
	<b>Pressure loss</b> <sup>3)</sup> 5 Pa up to 16 bar	
	- manometric	EN 12599
	- piezoresistive	
	- capacitive	
	Tracer gas dilution method <sup>3)</sup>	EN ISO 12569
	- leakage	
	- air exchange rate, air age	
	- ventilation efficiency	

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1) Scope of accreditation type A (fix) 2) Scope of accreditation type B (flexible)3) Scope of accreditation type C (flexible)



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Components for building services equipment	Determination of sound power levels of noise sources <sup>2)</sup>	
	Precision methods for reverbera- tion test rooms, for broadband sound sources	EN ISO 3741

The testing laboratory maintains a list with detailed information on the activities within the scope of accreditation. The list is available upon request at the laboratory.

In case of contradictions in the language versions of the directories, the German version shall apply.

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2) Scope of accreditation type B (flexible)

1) Scope of accreditation type A (fix)

3) Scope of accreditation type C (flexible)

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