

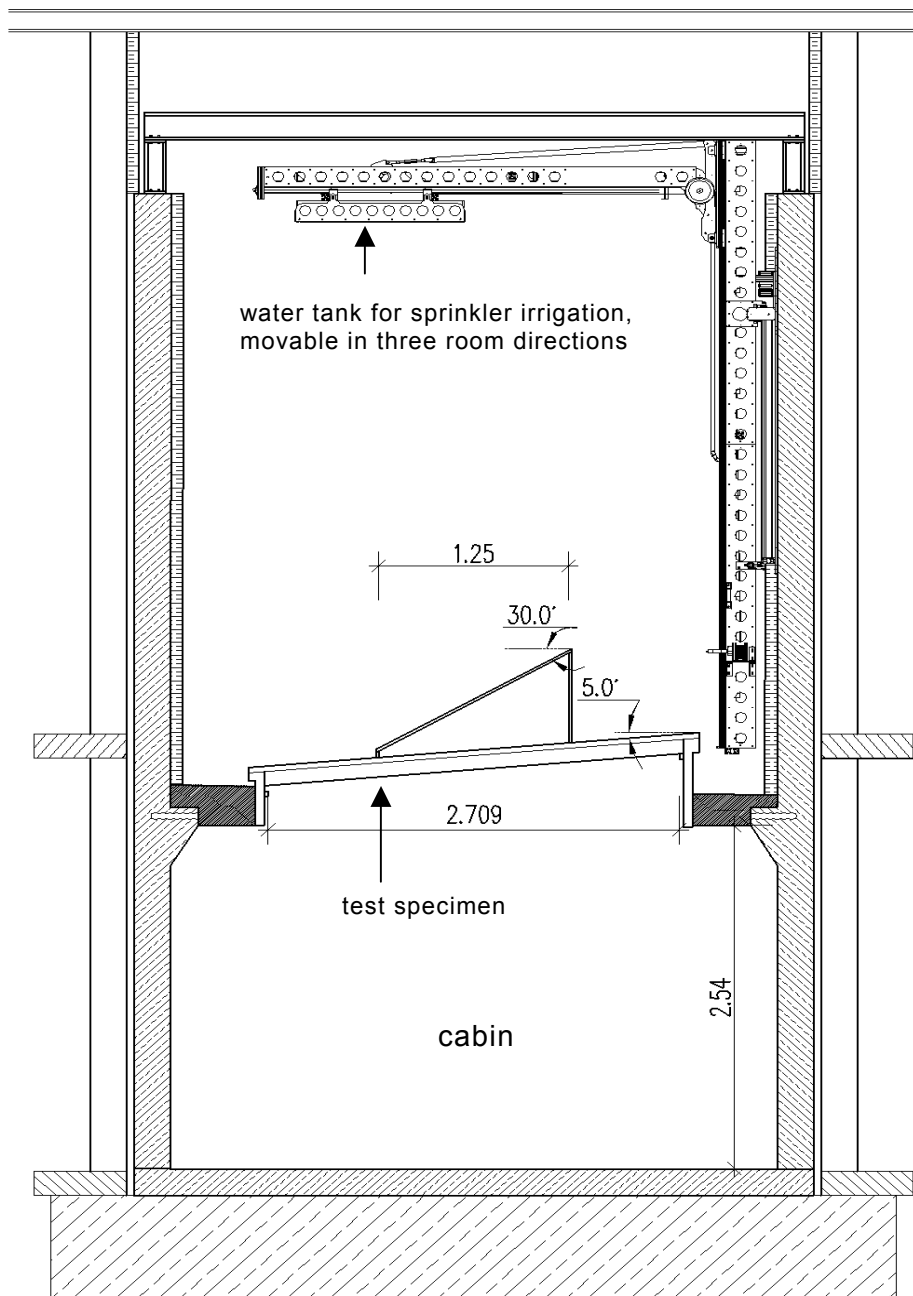


Acoustic Test Facility
Rain Noise
of roof constructions,
skylights,
foils and membranes,
automotive parts

Technical Data

Rain noise test facility P7

Standardized installation frame for	roofs	skylights
length	3.71 m	1.500 mm
width	2.71 m	1.250 mm
inclination	5°	30°
Maximum dimensions of test specimen		
length	3.71 m	
width	2.71 m	
Room volumes		
A (ground floor)	approx. 100 m ³	
B (basement)	approx. 50 m ³	
Free access through the test facility doors		
A (ground floor)	width	1.91 m
	height	2.05 m
B (basement)	width	1.91 m
	height	2.05 m
electric power available		



The test facility of the test laboratory, flexibly accredited according to DIN EN ISO/IEC 17 025, complies with the requirements of DIN EN ISO 140-18. Roof elements and roof constructions, roof windows, skylights, foils and membranes, components of automotive envelopes, systems for rain noise control as well as other components in relation to noise caused by rain can be tested in this test facility. The standardized maximum dimensions of the test specimens to be installed is a surface area of 2.71 m x 3.71 m as well as for smaller test specimens with a surface area of 1.250 mm x 1.500 mm (requirements of DIN EN 140-18). In addition, the opening of the test facility can be adjusted to test specimens with irregular forms or dimensions up to a maximum of 2.71 m x 3.71 m.

Measurement Methods for the Determination of Rain Noise

Measurements are carried out according to DIN EN ISO 140, part 18, by exciting the test specimen from above by simulated rain and then measuring the resulting sound level in the subjacent room. The test facility allows irrigation with heavy or moderate rain (amount of rain 40 or 15 mm/h). In addition to the requirements of DIN EN ISO 140-18, the amount of rain and the impact velocity of the rain drops can be diversified within a large range, allowing further information on the acoustic behaviour of the different types of rain and the acoustic optimization of roof constructions.