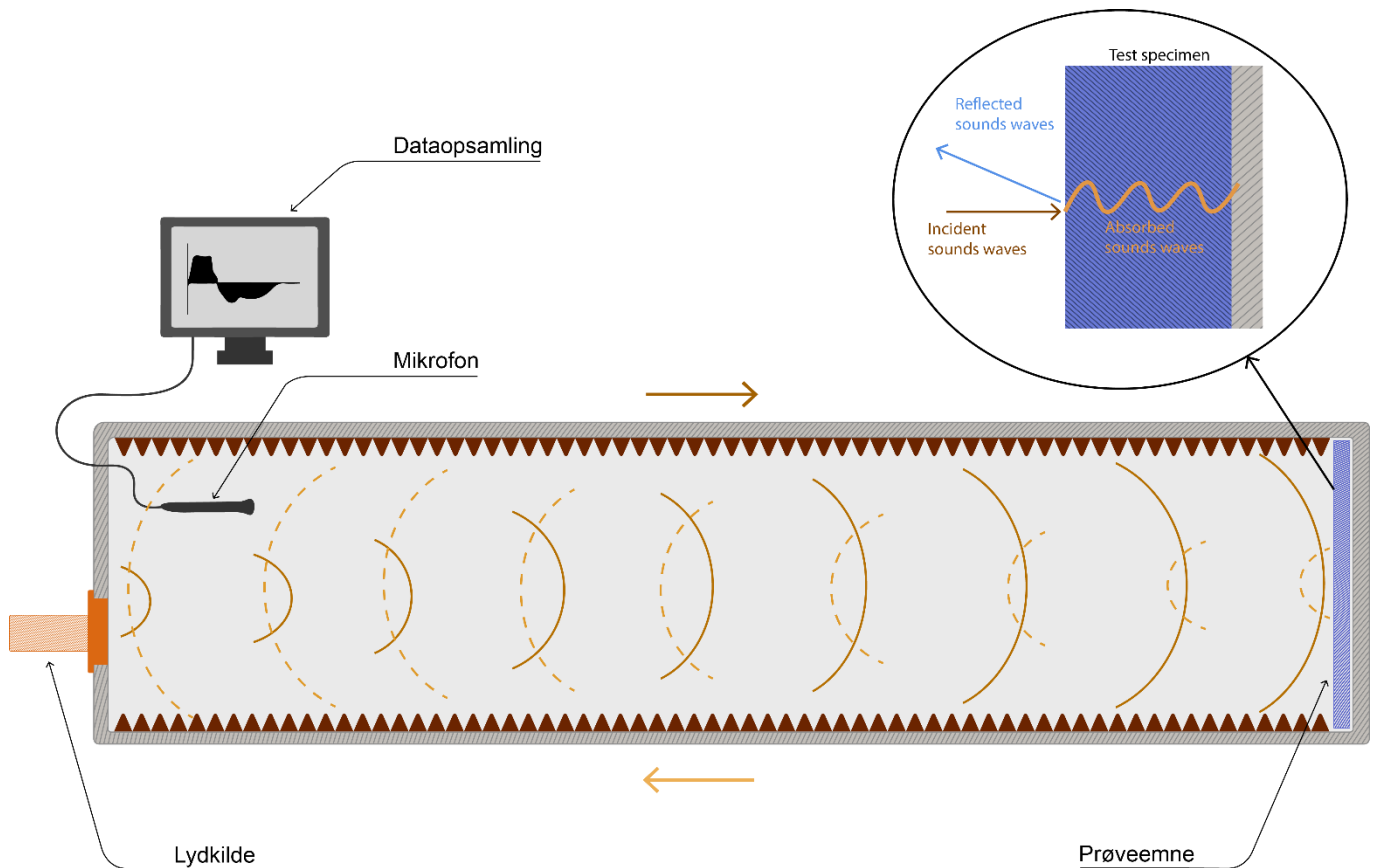


Base data

Task No:	SA
Task requester/Customer	
Contact	
Task responsible	Morten Dahl
Test responsible	Okan Özcelik
Date for request	
Date for completion	

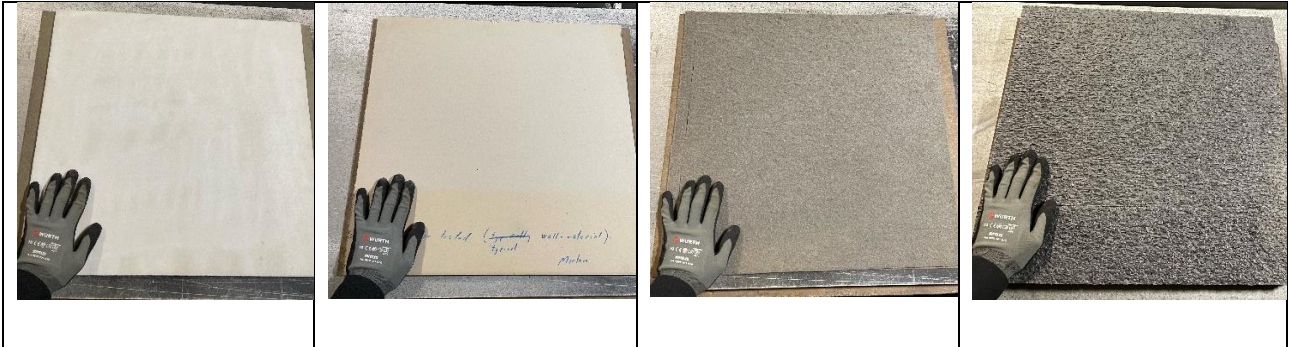
General test description

The sound chamber is used to measure a materials ability to absorb and reflect from an incident sound. The general acknowledgment is when incident sound waves penetrate a material, parts of the sound waves are reflected while other parts are absorbed by the material. A well-defined sound is sent through the sound chamber and reflected by the test specimen in which the reverberation is recorded on a microphone. The encapsulated soundproof sound chamber produces reliable results as the level and characteristics from the reflected sound wave is obtained. This knowledge of the reflected sound wave makes it possible to determine which materials are effective in order to reduce the reverberation in a room.



Configuration overview - test example

The sound chambers inner dimensions are 300x54x59 cm. Whereas the test specimens are cutout to 52x55 cm for it to fit the specimen holster. The sound chamber can accommodate for a wide variety in sample thickness and is mostly configured according to application. Examples of test samples are presented in the table below.



Purpose of the test - test example

The purpose of this test is to see how distinct types of akustikvlies compare to a material with high sound wave reflectance (plasterboard) and a lower sound reflectance (Basotect).

Test material - test example

Raw materials	QTY	Unit	Batch number
Plasterboard	1	1	
Basotect	1	1	
Akustikvlies	1	6	

Test results - test example

The test results are presented in a barplot as shown in Figure 1. From the test results Akustikvlies improved the sound dampening effect in comparison to plasterboard by around 40%.

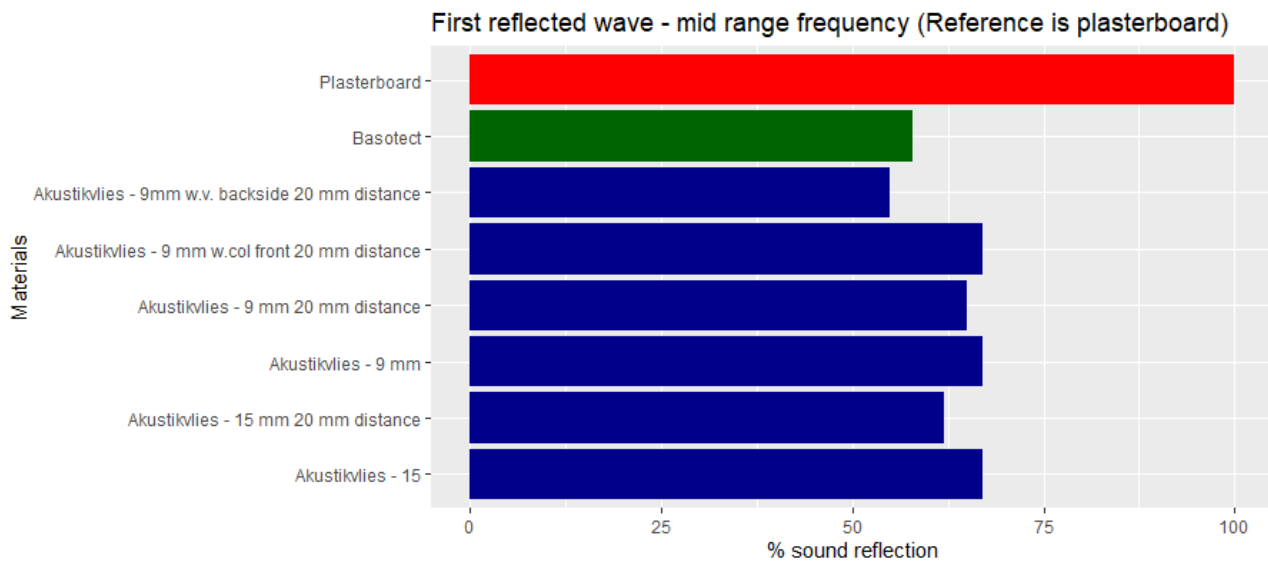


Figure 1: Comparison of akustikvlies with plasterboard as reference and Basotect.