

Success Story In Sweden

March 2006

Noise Measurement Results

Our sales partner in Sweden, Christian Berner AB, solved in May 2005 the acoustic challenges of an ancient building by implementing components of the vast array of our Akustik 1 + Sylomer® series.

The purpose of renovating the building, situated in the city centre, was the set up of an exclusive modern restaurant called Wasa Allé. As the main part of the building is used residentially it was essential to meet the demanding standards required by Swedish laws.

Therefore Gärdhagen Akustik AB, the assigned acoustic consultant recommended to use anti vibration mounts for the suspension of the false ceiling to maximize the attenuation from low frequencies.

The ordered product was Akustik 1 + Sylomer® 30 Type A (Ref. AMC: 23501) which has at its optimum loading point a natural frequency of 7,2 Hz.

The installation work has been accomplished by Astor Bygg AB, using a Gyproc GK suspension. The works have been achieved without delay as our products have been in stock.

Our products have been assembled with 3 x 13 mm gypsum boards hanging at least 200 mm from the existing double flooring slab. The gap was filled with mineral wool. The flanking construction consists of two stone brick walls.

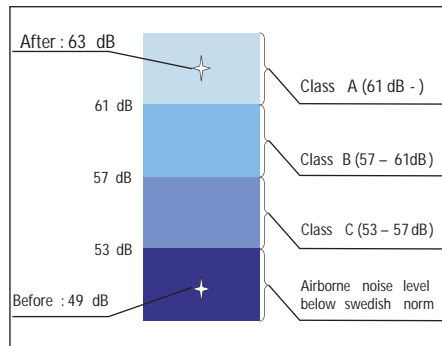
The acoustic consultant Gärdhagen Akustik AB carried out two airborne noise insulation measurements one before the installation process and one after. The results of the recorded measurements show an extraordinary improvement of the noise attenuation.

The measurement results before the implementation of our products resulted in about $R'w = 48 - 49$ dB. This value is 4 to 5 dB below the lowest Swedish Norm (C) for the insulation of airborne noise.

The measurement results after the implementation of our products resulted in $R'w = 63$ dB and $R'w+C50-3150 = 61$ dB. The measured value is sufficient to meet the highest Swedish sound classification (A) for the sound insulation of airborne noise between dwellings.

With the implementation of our products it was possible to increase the insulation by 14 to 15 dB and thus achieve a sufficient sound insulation between a restaurant and a dwelling.

Swedish Norm SS 25267 (3) for the insulation of airborne noise in residential buildings (01-02-2004)	
Classification	Level of permitted airborne noise $RW + C50-3150$
A	61 dB
B	57 dB
C	53 dB



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