

Sound Insulation

According to
ISO 140/3

A5

Authorizing Company: ETEM S.A.

Dimensions in mm

Specimen description:

Single sash side/bottom hung
aluminium window E-45 series

Area : $1,9 \text{ m}^2$

Total glazing thickness: 25 mm

Layers:

Thermal insulating glazing
4+17+4 mm

Two rubber seals between
sash frame and glazing

Three rubber seals between
sash and frame

Test rooms:

Volumes:

$V_{\text{source}} = 29,7 \text{ m}^3$

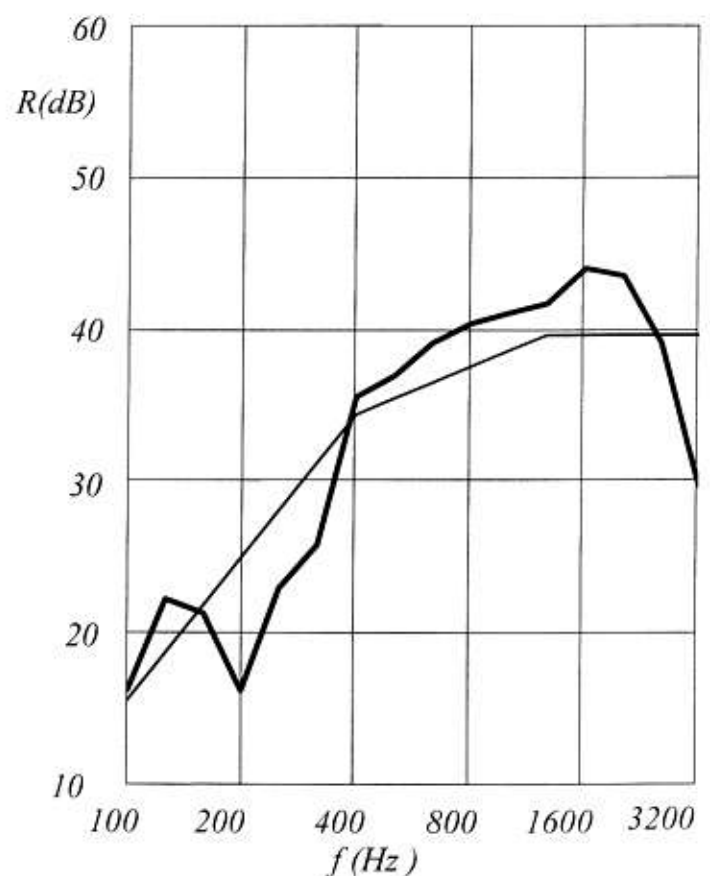
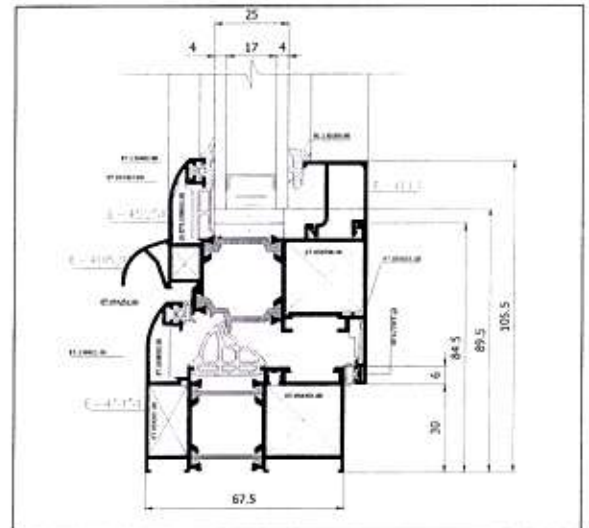
$V_{\text{receiving}} = 43,8 \text{ m}^3$

Type of room : Laboratory test room

Room condition: Empty

Excitation : White noise

Filter : 1/3 octave



Evaluation according to ISO 717/1

Weighted Sound Reduction Index

$R_w = 36 \text{ dB}$

f(Hz): 100 125 160 200 250 315 400 500 630 800 1000 1250 1600 2000 2500 3150
R(dB): 17,6 23,4 22,5 17,6 24,1 26,8 36,1 37,4 39,5 40,7 41,4 42,0 44,2 43,7 39,5 30,5

Test number: **A5.374.05**

Date of test: 16.05.2005 C

School of Architecture – Faculty of Technology – A.U.TH.
Architectural Technology Laboratory
Director: E.Tzekakis

Signature