CENTRUM STAVEBNÍHO INŽENÝRSTVÍ a. s.
CENTRE OF BUILDING CONSTRUCTION ENGINEERING plc.
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Testing laboratory of physical properties of materials, structures and buildings – Zlín, Testing laboratory No. 1007.1, accredited by the CAI according to ČSN EN ISO/IEC 17025:2005

L 1007.1

Test Report No. 284/18

Laboratory Measurement of Airborne Sound Insulation according to ČSN EN ISO 10140-2

Test subject: insulating triple glass unit 44.2 Thermofloat Phon/12/FL 6/12/Thermofloat 4

Contract No: 863 735

Number of pages: 7
Number of copies: 2
Copy No.: 2

Customer: **PRESS GLASS SA**
Nowa Wieś, ul. Kopalniana 9
42-262 Poczesna
Poland

Sample accepted on: 10.07 2018
Tested on: 20.07.2018
Tested by the Building Acoustics Laboratory
Technical head of laboratory: Ing. Miroslav Figalla
Head of testing laboratory No. 1007.1:
Ing. Miroslav Figalla .....

The Accredited Testing Laboratory hereby declares that test results cover the tested object only and does not imply approval or certification of the tested product. Without a written consent by the Testing Laboratory, the Test Report may not be reproduced otherwise than in full.

Date: 17.09.2018

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The size of the equivalent absorption area is determined from reverberation time measured according to the ČSN ISO 3382-2 standard using the Sabine´s formula

$$A = \frac{0,16\,V}{T}$$

where V is the volume of the receiving room in m^3,
T ... reverberation time in the receiving room in seconds.

A single-number quantity, weighted sound reduction index R_w, and spectrum adaptation terms C, C_{tr} are determined from the values of sound reduction index R in third-octave bands 100 to 3150 Hz, using the reference curve and method according to ČSN EN ISO 717-1. Furthermore, single-number quantities according to ASTM E413-16 and ASTM E1332-16 are determined, see page 5.

6. Test Results

Reg. No.	Structure of Insulating glass unit	Weighted sound reduction index R_w (C; C_{tr}) dB
141/18	– laminated glass 44.2 Thermofloat Phon, – aluminium spacer 12 mm, argon, – Float 6 mm, – aluminium spacer 12 mm, argon, – Thermofloat 4	**41 (-1; -5)**

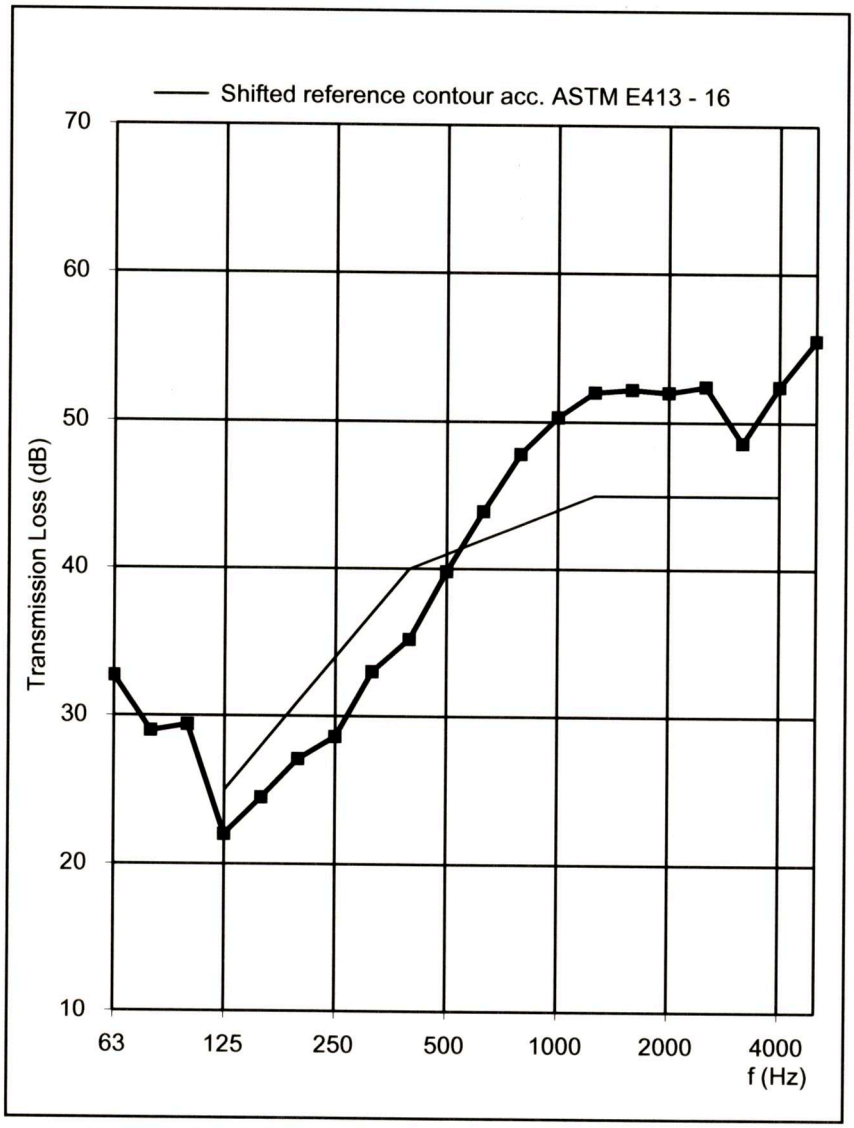
The course of sound insulation depend on the frequency and further measurement data are shown in standard measuring record on page 4.

7. Measurement Uncertainty

The measurement uncertainty is expressed in accordance with ČSN EN ISO 12999-1 using a reproducibility standard deviation. Standard uncertainty of the single-number quantity R_w, determined according to the mentioned standard, is 1,2 dB, expanded uncertainty is 2 dB (coverage factor k = 1,65, 90% confidence level for the two-sided test).

In charge for the test: Ing. Miroslav Figalla

8. Classification according to ASTM standards



Standard	Quantity	Rating
ASTM E413 – 16	Sound transmission class	STC 41
ASTM E1332 – 16	Outdoor-indoor transmission class	OITC 33

In charge for the test: Ing. Miroslav Figalla