



**CENTRUM STAVEBNÍHO INŽENÝRSTVÍ a. s.**  
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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



## Test Report No. 286/18

**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 6/12/44.2 Thermofloat Phon**

Contract No: 863 735

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

Sample accepted on: 10.07 2018  
Tested on: 23.07.2018  
Tested by the Building Acoustics Laboratory  
Technical head of laboratory: Ing. Miroslav Figalla  
Head of testing laboratory No. 1007.1:  
Ing. Miroslav Figalla

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A ... equivalent absorption area in the receiving room in m<sup>2</sup>.

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<sup>3</sup>,

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
143/18	<ul style="list-style-type: none"> <li>– laminated glass 44.2 Thermofloat Phon,</li> <li>– aluminium spacer 12 mm, argon,</li> <li>– Float 6 mm,</li> <li>– aluminium spacer 12 mm, argon,</li> <li>– laminated glass 44.2 Thermofloat Phon</li> </ul>	<b>47 (-2; -6)</b>

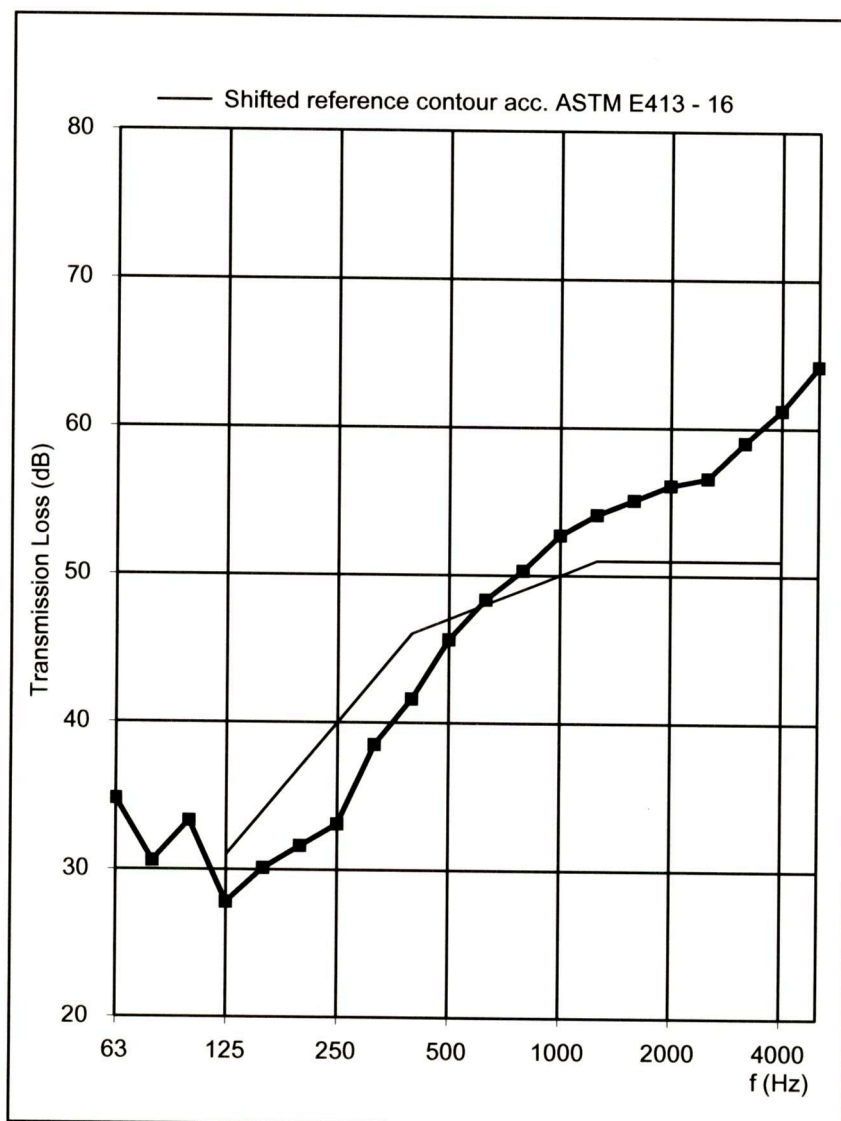
The course of sound insulation depend on the frequency and further measurement data are shown in standard measuring record on page 4.

## 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 47
ASTM E1332 – 16	Outdoor-indoor transmission class	OITC 38

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