

třída Tomáše Bati 299, Louky, 763 02 Zlín



# **CSI Division – Centre of Civil Engineering**

Construction Testing Laboratory Zlín, K Cihelně 304, 763 02 Zlín - Louky



Testing laboratory No. 1007.1 accredited by ČIA according to ČSN EN ISO/IEC 17025:2018

Page: 1/4

No. 415600787-01

# **ACCREDITED LABORATORY TEST REPORT** No. 415600787-01

Client:

STINN - Steel Innovation s.r.o.

VAT: CZ10722220

Address:

Korunní 2569, 101 00 Praha – Vinohrady, Czech Republic

Subject of the test:

Sound insulation measurement according to EN ISO 11456-2

Tested material:

Acoustic box KBS01

Sample received on:

12.04.2023

Report elaborated by:

Ing. Miroslav Figalla

Place and date of issue:

Zlín, 29.06.2023

Annex:

Box drawing - 1 page

Ing. Jiří Růžičk Head of Construction Testing Laboratory Zlín

Ing. Petra Hrdinová Head of Accredited Testing Laboratory

Note: The results given in this Test Report apply only to the sample tested by our laboratory! Without a written consent by Institut pro testování a certifikaci, a.s. Zlín, the Test Report may not be reproduced unless as a whole! Phone number: +420 577 604 335, 572 779 901 e-mail:itc@itczlin.cz www.itczlin.cz



třída Tomáše Bati 299, Louky, 763 02 Zlín



# **CSI Division – Centre of Civil Engineering**

Construction Testing Laboratory Zlín, K Cihelně 304, 763 02 Zlín - Louky





Testing laboratory No. 1007.1 accredited by ČIA according to ČSN EN ISO/IEC 17025:2018

Page: 2/4

No. 415600787-01

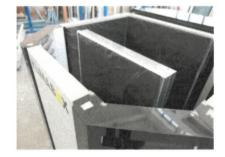
#### Subject of the test:

Table No. I – Description and identification of the test Subject

ITC's identification number	Identification of the test Subject/sample by client	Description	
number 415600787/1	Acoustic box KBS01	Anti-noise cover, dimensions 1700 mm x 1400 mm, height 1235 mm. The shell of the cover is made of sheet metal, lined on the inside with mineral wool boards. Inside the cover there are two bulkheads, made of sheet metal and mineral wool plates. On the three narrower walls of the cover, there are 13 holes of rectangular cross-section with dimensions of 50 mm x 300 mm with slanted slats. Slats are made of polystyrene thickness 20 mm. A layer of backfill with a thickness of 50 mm made of light granular aggregate is poured on the floor.	

#### Fotodocumentation od tested sample







### Sampling method used:

The test sample was collected and supplied to the laboratory by the client. The Laboratory is not responsible for this way of sampling.

#### Documentation delivered by the client:

Drawing of tested sample - Annex page 1

#### Work requested:

Sound insulation measurement of acoustic box

## Testing method used:

Sound insulation measurement according to EN ISO 11456-2

#### **Test conditions:**

Test date: 12.04.2023, air temperature: 12 °C, rel. humidity 58 %.

Test location: hall of the acoustics laboratory, acoustic box placed on a concrete floor.

Measured variable: sound pressure insulation Dp, according to ČSN EN ISO 11456-2, Article 6.3.

Sound pressure levels were measured in 8 places at a distance of 1.5 m from the walls of the acoustic box, the height of the microphone 1.3 m above the floor, see drawing on page 3.

Average sound pressure levels were determined according to ČSN EN ISO 11456-2, Article 3.4.

An omnidirectional speaker system with 12 speakers was used as the sound source.



třída Tomáše Bati 299, Louky, 763 02 Zlín



# **CSI Division – Centre of Civil Engineering**

Construction Testing Laboratory Zlín, K Cihelně 304, 763 02 Zlín - Louky



Testing laboratory No. 1007.1 accredited by ČIA according to ČSN EN ISO/IEC 17025:2018

Page: 3/4

No. 415600787-01

#### Measuring equipment

- Norsonic RTA 840 analyser
- B.K. measuring microphone
- power amplifier AM-39
- omnidirectional sound source

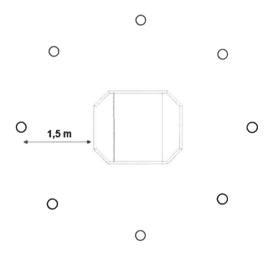
A-P/024

A-P/002

3/A

2/A

#### Drawing of the location of measuring points



The laboratory is not responsible for information received from customer, which could have influence on the validity of the results.

#### **Testing laboratory:**

Workplace no. 1 - K Cihelně 304, 764 32, Zlín - Louky.

#### Test results:

The test results are shown in Table II.

Table No. II - Sample No. 415600787/1

Measured variable	Measurement results		Uncertainty 1)
	Frequency (Hz)	D <sub>p</sub> (dB)	(dB)
	125	8	2
	250	16	2
Inculation of accustic	500	23	2
Insulation of acoustic	1000	22	2
pressure	2000	21	2
	4000	22	2
	8000	24	2

<sup>&</sup>lt;sup>1)</sup>The measurement uncertainty was determined for an extension factor of k = 2, which corresponds to a confidence level of 95% for two-sided interval.



třída Tomáše Bati 299, Louky, 763 02 Zlín



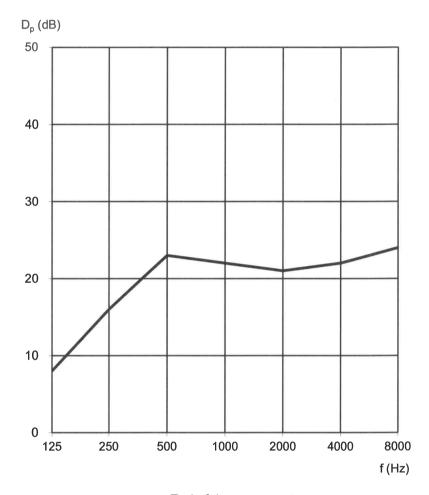
# **CSI Division – Centre of Civil Engineering**

Construction Testing Laboratory Zlín, K Cihelně 304, 763 02 Zlín - Louky



Testing laboratory No. 1007.1 accredited by ČIA according to ČSN EN ISO/IEC 17025:2018

Page: 4/4 No. 415600787-01



...... End of the test report.....



třída Tomáše Bati 299, Louky, 763 02 Zlín



CSI Division – Centre of Civil Engineering
Construction Testing Laboratory Zlín, K Cihelně 304, 763 02 Zlín - Louky



Testing laboratory No. 1007.1 accredited by ČIA according to ČSN EN ISO/IEC 17025:2018

Annex-Page: 1/1 No. 415600787-01

