



**INSTITUTE FOR TESTING AND CERTIFICATION, a.s.**  
Třída Tomáše Bati 299, Louky, 763 02 Zlín, Czech Republic  
CSI division – Centre of Civil Engineering



**AUTHORIZED BODY No. 224**  
*Authorisation Decision No. 1/2021 od 28 January 2021*

Issues to

## **CONSTRUCTION TECHNICAL APPROVAL**

### **No. STO – AO 224 – 1261/2022**

pursuant to §2 and §3 of Czech Government regulation No. 163/2002 Coll., as amended by Government regulation No. 312/2005 Coll. and Government regulation No. 215/2016 Coll.

**The Authorized Body certifies the suitability of the construction product**

**Acoustic panel Silentmax**

**Type: Acoustic panel made of PET fibers, thickness 12 mm**

**Introduced to the market by**

**RDacoustic s.r.o.**  
**Svazarmovská 1011**  
**756 61 Rožnov pod Radhoštěm**  
Company Registration No.: 04485445  
VAT Reg. No.: CZ04485445

**from the manufacturing site:**

**Svazarmovská 1011**  
**756 61 Rožnov pod Radhoštěm , Czech Republic**

**with respect to the essential requirements for constructions and to the intended product use in the construction.**

Contract No.: 785200108

**Number of pages: 9**  
**Place and date of issue: Zlín, 2022-08-09**  
**This Certificate shall be valid till: 2025-08-09**



  
Mgr. Jiří Heš  
Representative of the authorized body No. 224

## 1. Introduction

This Construction Technical Approval (hereinafter referred to as CTA) was issued by Authorized Body AO 224 based on the application of the applicant for conformity assessment of the construction product pursuant to Government Decree No. 163/2002 Coll., as amended by Government Decrees No. 312/2005 Coll. and No. 215/2016 Coll. (hereinafter referred to as Government Decree 163), due to non-existence of specific standards or technical regulations specifying applicable essential requirements with respect to the intended use of the product in the construction. In this document, the Authorized Body AO 224 specifies the technical properties of the product, their performances and procedures to examine the properties in relation to the essential requirements for constructions specified in Annex 1 to Government Decree 163 and to the intended product use in the construction. This document is a technical specification intended for use within product conformity assessment.

## 2. Identification of the Authorized Body

This Construction Technical Approval is issued by Authorized Body AO 224, – Institute for Testing and Certification in Zlín. Authorization for this construction product type was granted to this Authorized Body by the Office for Standards Metrology and Testing (ÚNMZ), Decision No. 1/2021 on 28 January 2021. The identification data of the Authorized Body are as follows:

*Institut pro testování a certifikaci, a.s.*  
*Třída Tomáše Bati 299, Louky*  
*763 02 Zlín*  
*Czech Republic*  
*Company Registration No.: 47910381*  
*VAT Reg. No.: CZ47910381*  
*Phone: +420 572 779 922, e-mail [director@itczlin.cz](mailto:director@itczlin.cz)*

## 3. Identification of the applicant and the manufacturer

### 3.1. Identification of the applicant

The application for cooperation on the conformity assessment was issued by a company, also engaged in production of the construction elements. The identification data of the applicant are as follows:

*RDacoustic s.r.o.*  
*Svazarmovská 1011*  
*756 61 Rožnov pod Radhoštěm, Czech Republic*  
*IČ: 04485445*  
*DIČ: CZ 04485445*  
*telefon: +420 603 775 298, email: [rdacoustic@rdacoustic.cz](mailto:rdacoustic@rdacoustic.cz)*

### 3.2. Identification of the manufacturer

The product is manufactured by the company *RDacoustic s.r.o.* The production takes place in the production plant.

*Svazarmovská 1011*  
*756 61 Rožnov pod Radhoštěm, Czech Republic*

## **4. Identification of the product and specification of its use in the construction**

### **4.1. Product identification and description**

Acoustic panels Silentmax are characterized by excellent acoustic absorption in a very wide spectrum of frequencies. Acoustic panels effectively reduce echo and reverberation inside the space, reduce unwanted noise and improve the overall acoustic parameters of the space.

Recycled PET fibers with a thickness of 18 to 22 µm are pressed under a strictly defined temperature and pressure so that the fibers melt and join at the point of their mutual contact. The internal structure and precisely defined density (ratio of fibers, their gaps, the free space between them) of the panels predetermine the property of extreme acoustic absorption. The panels are harmless to health, do not retain odors, are non-flammable and maintenance-free.

Technical parameters:

- dimensions: 2440 mm x 1220 mm, thickness 12 mm
- panel weight: 6.9 kg
- area weight: 2.3 kg/m<sup>2</sup>



### **4.2. Marking on the product**

Products are labeled with data including the full name of the product, manufacturer, dimensions, number of pieces in the package.

### **4.3. Intended use of the product in the construction**

Sound-insulating tiling for internal walls, ceilings and false ceilings, serving to effectively solve acoustic conditions in industrial, social and sports interiors and increasing the aesthetic value of the interior. Installation is carried out using spacer screws, on the wall by gluing or using Velcro, on the ceiling by gluing or anchoring, hanging under the ceiling.

#### 4.4. Restrictions on the product use

The product is not declared as a thermal insulation coating.  
The fire requirements are specified in particular by the standard ČSN 73 0810.

### **5. Documents submitted by the manufacturer**

The application was accompanied by the following documents:

- Technical Data Sheet
- Classification of reaction to fire in accordance with ČSN EN 13501-1:2019, Report No. PK-22-057
- Determination of flame propagation along the surface of building materials according to the standard ČSN 73 0863
- Test report on health safety No. 412111311-01
- Test report on sound absorption No. 415600438-01
- Test report according to the standard ČSN EN 823:2013 – Determination of thickness
- Test report according to the standard ČSN EN 822:2013 – Determination of length and width

### **6. Used technical regulations, standards, sources of scientific and technical knowledge, information gained by practical experience**

The following documents were used to develop and issue this CTA:

- |                      |   |
|----------------------|---|
| - ČSN 73 0810        | Fire protection of buildings – General requirements   |
| - ČSN 73 0863        | Fire technical properties of materials - Determination of flame propagation along the surface of building materials                         |
| - ČSN 73 0865        | Fire protection of buildings. Evaluation of materials drainage of the soffits of ceilings and roofs   |
| - ČSN 73 0802        | Fire protection of buildings. Non-industrial buildings  |
| - ČSN 73 0831        | Fire protection of buildings. Assembly rooms  |
| - ČSN EN 13501-1+A1  | Fire classification of construction products and building elements – Part 1: Classification using test data from reaction to fire tests     |
| - ČSN EN 13823+A1    | Reaction to fire tests for building products – Building products excluding floorings exposed to the thermal attack by a single burning item |
| - ČSN EN ISO 1716    | Reaction to fire tests for products – Determination of the cross heat of combustion (calorific value)                                       |
| - ČSN EN ISO 11925-2 | Reaction to fire tests - Ignitability of products subjected to direct impingement of flame - Part 2: Single-flame source test               |
| - ČSN EN ISO 354     | Acoustics – Measurement of sound absorption in a reverberation room   |
| - ČSN EN ISO 11654   | Acoustics - Sound absorbers for use in buildings - Rating of sound absorption   |
| - ČSN EN 822         | Thermal insulating products for building applications – Determination of length and width   |
| - ČSN EN 823         | Thermal insulating products for building applications – Determination of thickness  |

- MMR Decree No. 268/2009 Coll., on general technical requirements for constructions, as amended
- Regulation of the European Parliament and of the Council (EC) No. 1907/2006" as amended - Title VIII and Annex XVII (Restrictions on the production, placing on the market and use of certain dangerous substances, preparations and articles)
- Act No. 477/2001 Coll., on packaging, as amended

## **7. Product classification and conformity assessment in accordance with Government regulation 163**

### 7.1. Product classification in accordance with Government regulation 163

According to the Annex 2 to Government regulation 163, the product belongs to the product category no. 11 *Construction products for internal and external finishing of walls, ceilings, floors*, subgroups 04 *External and internal cladding elements, boards, profiles, panels, facade cladding*.

### 7.2. Prescribed conformity assessment procedures

For products of Group 11, Sub-group 04 the Annex 2 of Government regulation 163 establishes the conformity assessment procedure under § 7 (verification of conformity). Under § 10 of Government regulation 163, at the request of the manufacturer or importer, this procedure may be replaced by the procedure under § 5 (certification).

### 7.3. Applied Technical Guidelines

Within its coordination activities, the Office for Standards, Metrology and Testing developed the Technical Guideline 11\_04\_05 for this product category. This Guideline served as the basis for definition of the scope of properties examined and methods of their measurement.

### 7.4. Deviations from the Technical Guideline

The technical guidance given in Article 7.3 of this Technical Certificate was applied.

The product is not declared as thermal insulation, but as a sound-absorbing and visual ceiling covering. The manufacturer does not declare the product as a suspended ceiling in the sense of the harmonized standard ČSN EN 13964.

For that reason, air sound insulation and thermal resistance were not assessed.

Diffusion resistance, dimensional stability, cold impact strength were not assessed with respect to the place of attachment of the product.

In addition, the dimensions of the product were assessed.

## **8. Specification of the technical properties with respect to the basic requirements and procedures of measurement**

### 8.1. Basic requirements and specification of the technical properties

Specification of the technical properties examined with respect to the basic requirements is described in the second column of Table 1 in compliance with sections 7.3 and 7.4 above,

**Table 1: Basic requirements and specification of the technical properties**

No	Name of technical property	Testing procedure	Subject of the test	Quantity of samples		Required (declared) value:
				C/T	D	
1	Dimensions	ČSN EN 822 ČSN EN 823	product sample	Quantity according to the test standard	Quantity according to the test standard	According to the declared nominal dimensions (width / length / thickness)
2	Index of flame propagation	ČSN 73 0863	product sample	Quantity according to the test standard	-	$\leq 50 \text{ mm.min}^{-1}$
3	Reaction to fire	ČSN EN 13501-1 ČSN EN 13823 ČSN EN ISO 11925-2	product sample	Quantity according to the test standard	-	C-s1, d0
4	Heavy metal content: Cadmium Lead Quicksilver Hexavalent chromium	ČSN EN 62321-3-1	product sample	Quantity according to the test standard	-	Max. 0,01 hm.% <sup>a)</sup> Max. 0,1 hm.% <sup>a)</sup> Max. 0,1 hm.% <sup>a)</sup> Max. 0,1 hm.% <sup>a)</sup>
5	Sound absorption coefficient - weighted sound absorption coefficient ( $\alpha_w$ ) / sound absorption rating	ČSN EN ISO 354 ČSN EN ISO 11654	product sample	Quantity according to the test standard	-	0,55 (MH) / D

**Note:** <sup>a)</sup> Limit values according to Annex II (RoHS) Directive 2011/65/EU of the European Parliament and of the Council of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment, as amended.

## 8.2 Definition of the method of assessment of technical properties

The above table also contains a list of normative regulations used to define the method of assessment of individual monitored technical properties and the necessary number of samples for certification or type test (C/T) and supervision of the production control system and control of compliance with the specified requirements for products (D).

## 8.3. Required values of technical properties

Required values for the specified uses of the product in construction described in the Section 4.3. and 4.4. of this CTA were set for the separate properties. The values are given in the last column of the above table.

## 8.4. Other technical regulations related to the given product

The requirements of Act No. 477/2001 Coll., on packaging, as amended, apply to consumer, group and transport packaging of the product.

The product is also subject to Regulation (EC) 1907/2006, as amended (REACH), in particular Annex XVII, which establishes lists of hazardous chemical substances and hazardous chemical preparations, the placing on the market of which is prohibited or whose placing on the market, until circulation or use is restricted. The manufacturer may only apply additives (stabilizers, flame retardants, pigments, etc.) whose use is not restricted by the REACH Regulation.

## 9. Detailed requirements for assessment of factory production control system

The requirements for the production control system are set out in Annex 3 to the Government regulation 163, as amended, and are binding for the manufacturers of selected construction products.

### 9.1. Obligations of the manufacturer related to the Factory Production Control system

The manufacturer is required to set up a Factory Production Control system (hereinafter referred to as "FPC") so that all products it markets correspond to the technical documentation and meet the essential requirements.

The minimum scope of requirements for provision of the FPC by the manufacturer is provided in the following Table 2.

**Table 2: Minimum scope of requirements for provision of the FPC**

No.	Quality system area	Specifying requirements
1	Responsibility for manufacture	The manufacturer has delegated employees responsible for purchasing raw materials, materials and products affecting product quality, for production process control, inspection and testing, control, measurement and testing equipment, and for release of the product for shipment.
2	Responsibility for total quality control	A member of the management team responsible for total product quality control, including review and responsibility for corrective and preventive measures has been appointed.
3	Technological production process	The manufacturer has elaborated the technological process of manufacture in a sufficiently detailed manner. Current technological or manufacturing regulations are available at the appropriate work locations.
4	Technical specification	The manufacturer has established technical specifications and a detailed description of technical properties for the product, and a method of product use in the construction.
5	Record keeping	The manufacturer keeps records of the properties of initial raw materials, materials and products, production, production and inspection tests, gauge verification and calibration, and of complaints about product quality. The records are identifiable and legible and securely archived.
6	Production and handling equipment	The manufacturer ensures that the required production equipment is in good condition.
7	Inspection and testing	The manufacturer has drawn up an inspection and testing plan (incoming, in-process, outgoing inspection and testing). It carries out inspections and tests in accordance with this plan. Current inspection and testing procedures are available at appropriate places. The manufacturer keeps records of the tests and inspections performed.

No.	Quality system area	Specifying requirements
8	Gauges used in the production, inspection and testing processes	The manufacturer has specified suitable gauges for the production, inspection and testing processes, keeps records of them and keeps them in good condition. The manufacturer keeps records of the verification and calibration of the measuring gauges in accordance with the Act on Metrology.
9	Product packaging and marking	The manufacturer has set up the process of packaging and marking of the products to the extent necessary to ensure compliance of the products with the specified requirements.
10	Storage spaces	The manufacturer has the necessary facilities for storing raw materials materials and products and for storing and dispatching of finished products.
11	Product usage instructions	The manufacturer has instructions for use and maintenance of the product in the Czech language.
12	Basic preventive measures	The manufacturer takes basic preventive measures (e.g. employee training for functions affecting product quality, use of quality records, and customer complaints).

## 9.2. Responsibility for supervision of the factory production control sys

### *9.2.1. Procedure according to Sections 7 of the Government Order No. 312 – Conformity verification*

In assessing by way of verification of conformity according to Section 7 the sole responsibility for implementation, documentation and operation of the factory production control system including internal supervisions lies with the manufacturer.

With respect to the Authorized Body, only the inspection mechanism based on tests of the product samples demonstrating conformity with the parameters and criteria specified in Article 6 of the present Construction Technical Approval shall be applied. After the test, the Authorized Body will issue a Test Report with a period of validity limited to 3 years.

Before termination of validity of the Test Report, the manufacturer shall request the Authorized Body that issued the Test Report to retest the product and issue a new Test Report containing current test results.

### *9.2.2. A procedure according to Article 5 of the Government Order No. 312 - Certification*

The sole responsibility for implementation, documentation and operation of the factory production control system lies with the manufacturer, in case of distribution of the construction products the responsibility for inspection of the distributed products lies with the distributor.

Manufacturer shall conduct tests of at least the following properties using his/her own means or shall have the tests performed by an accredited testing laboratory within the final (outgoing) inspection:

- Dimensions

Samples are taken randomly by the manufacturer at the exit from the technological line.

No less than once in 12 months, the authorized body – within its participation in the conformity assessment process – shall conduct regular supervisions of the due operation of the factory production control system or of the proper operation of the product inspection system at the importer's facility and a check whether the specified requirements for the product have been met. Validity of the Certificate and the possibility to continue placing the products on the



market are subject to positive inspection results as described in the report provided to the manufacturer or the applicant.

The authorized body shall select the scope of the supervision over the operation of the factory production control system so that all elements of the factory production control system specified in Section 9.1 are verified over the period of three years.

In the course of the supervision, procedure according to Section 5, a worker of the authorized body shall take samples the amounts of which are given in column "D" of Table in Section 8.1, in order to check whether the specified requirements have been met. The check shall be based on tests performed by laboratories of the authorized body. The product characteristics tested shall be at least those shown below:

- Dimensions

## **10. Verification tests**

The results of the verification tests carried out by the authorized person of AO 224 in its testing laboratory are given in the Report of the verification of conformity of product type No. 785200108/2022, issued on 09.08.2022.

Elaborated by: Mr. Jaroslav Mikulík