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Authorized and notified according
to Article 29 of the Regulation (EU)
No 305/2011 of the European
Parliament and of the Council of
9 March 2011

MEMBER OF EOTA



European Technical Assessment ETA-20/0743 of 2020/10/19

General Part

Technical Assessment Body issuing the ETA and designated according to Article 29 of the Regulation (EU) No 305/2011: ETA-Danmark A/S

Trade name of the
construction product:

Phonotherm® RG 550 and Phonotherm® RG 700

Product family to which the
above construction product
belongs:

Thermal insulation in buildings

Manufacturer:

BOSIG Baukunststoffe GmbH
Roland-Schmid-Straße 1
DE-04910 Elsterwerda
Tel.+49 (0) 35 33/700 0
www.bosig.de

Manufacturing plant:

BOSIG Baukunststoffe GmbH
Roland-Schmid-Straße 1
DE-04910 Elsterwerda

This European Technical
Assessment contains:

8 pages including 1 annex which form an integral part of
the document

This European Technical
Assessment is issued in
accordance with Regulation
(EU) No 305/2011, on the
basis of:

EAD 041369-00-1201: "Insulating boards made of
recycled PUR (Polyurethane) to be used as acoustic
and thermal insulation"

This version replaces:

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II SPECIFIC PART OF THE EUROPEAN TECHNICAL ASSESSMENT

1 Technical description of product and intended use

Technical description of the product

Phonotherm® RG 550 and Phonotherm® RG 700 are thermal insulation boards produced from recycled PUR/PIR-rigid foam flakes, combined with polyisocyanate bonding agents in a hot press process.

The polyurethane (PUR/PIR) rigid foam material is ground PUR/PIR-residue (milling and cutting residues) from the production.

For both Phonotherm® RG 550 and Phonotherm® RG 700, residue from the production of PUR/PIR-strip foam with aluminium lamination is used.

Specification of the intended use in accordance with the applicable European Assessment Document (hereinafter EAD)

The construction product Phonotherm® RG 550 and Phonotherm® RG 700 are intended to be used for thermal insulation for walls, ceiling and roofs, the boards are not subject weathering.

The products can be processed by e.g. milling, grinding, or drilling, and the panels are fully supported on the substrate, installed by using a glue or screws, as of the instructions of the manufacturer.

Product	Density [kg/m ³]	Thickness [mm]	Size [mm]
Phonotherm® RG 550	550	20-60	2400 x 1500/1350 3600 x 1500/1350
Phonotherm® RG 700	700	10-30	7200 x 1500/1350

Table 1: Product information's

This ETA covers assemblies installed in accordance with the provisions given in Annex 1.

The provisions made in this European Technical Assessment are based on an assumed intended working life of 25 years, when installed in the works, provided that the insulation board is subject to appropriate installation.

The indications given as to the working life of the construction product cannot be interpreted as a guarantee neither given by the product manufacturer or his representative nor by the Technical Assessment Body but are regarded only as a means for expressing the expected economically reasonable working life of the product.

3 Performance of the product and references to the methods used for its assessment

Characteristic	Assessment of characteristic					
	Phonotherm® RG 550	Phonotherm® RG 700				
3.2 Safety in case of fire (BWR 2)						
Reaction to fire	The insulation boards are classified as Euroclass E in accordance with EN 13501-1.					
3.5 Protection against noise (BWR 5)						
Airflow resistance	No Performance Assessed					
Sound absorption	No Performance Assessed					
3.6 Energy economy and heat retention (BWR 6)						
Geometry	Length: 2400/3600 mm ± 2 mm/m Width: 1350 mm ± 2 mm/m 1500 mm ± 2 mm/m					
- Length	Thickness:					
- Width	<table border="1"> <tr> <td>Phonotherm® RG 550</td> <td>Phonotherm® RG 700</td> </tr> <tr> <td>20-60 ± 0,4 mm</td> <td>10-30 ± 0,4 mm</td> </tr> </table>		Phonotherm® RG 550	Phonotherm® RG 700	20-60 ± 0,4 mm	10-30 ± 0,4 mm
Phonotherm® RG 550	Phonotherm® RG 700					
20-60 ± 0,4 mm	10-30 ± 0,4 mm					
- Thickness	Squareness: 3 mm/m					
- Squareness	Flatness: 4 mm					
- Flatness						
Density	550 ± 25 kg/m ³	700-70 ± 25 kg/m ³				
Compressive strength	≥ 7000 kPa	≥ 8100 kPa				
Water vapour transmission (μ)	25	25				
Dimensional stability (ε _l ;ε _b ;ε _d)	Overall: Dimensional stability at 70°C and 90%RF (70,90) Length / Width: 1% Thickness 5% <table> <tr> <td>Board 20 mm: ε_l: 0,06 % ε_b: 0,08 % ε_d: 3,18 %</td> <td>Board 10 mm: ε_l: 0,18 % ε_b: 0,18 % ε_d: 2,84 %</td> </tr> <tr> <td>Board 60 mm: ε_l: 0,03 % ε_b: 0,02 % ε_d: 0,65 %</td> <td>Board 30 mm: ε_l: 0,18 % ε_b: 0,18 % ε_d: 2,38 %</td> </tr> </table>		Board 20 mm: ε _l : 0,06 % ε _b : 0,08 % ε _d : 3,18 %	Board 10 mm: ε _l : 0,18 % ε _b : 0,18 % ε _d : 2,84 %	Board 60 mm: ε _l : 0,03 % ε _b : 0,02 % ε _d : 0,65 %	Board 30 mm: ε _l : 0,18 % ε _b : 0,18 % ε _d : 2,38 %
Board 20 mm: ε _l : 0,06 % ε _b : 0,08 % ε _d : 3,18 %	Board 10 mm: ε _l : 0,18 % ε _b : 0,18 % ε _d : 2,84 %					
Board 60 mm: ε _l : 0,03 % ε _b : 0,02 % ε _d : 0,65 %	Board 30 mm: ε _l : 0,18 % ε _b : 0,18 % ε _d : 2,38 %					
Water absorption (W _p)	Board 20 mm: 0,14% Board 60 mm: 0,41%	Board 10mm: 0,14% Board 30 mm: 0,22%				
Thermal conductivity	λ (23,80) =	λ (23,80) =				
Durability of thermal resistance against high temperature	0,083 W/(m·K)	0,106 W/(m·K)				
Conversion factor F _m for the conversion of λ _{23,50} to λ _{23,80}	No Performance Assessed					

Characteristic	Assessment of characteristic	
Deformation under specified load and temperature	Phonotherm® RG 550	Phonotherm® RG 700
	DLT(1)5	DLT(1)5
Compressive creep (X_{ct})	No Performance Assessed	

*) See additional information in section 3.7-3.8

3.7 Methods of verification

The characteristic values of the Phonotherm® RG 550 and Phonotherm® RG 700 are based on the EAD 041369-00-1201: "Insulating boards made of recycled PUR (Polyurethane) to be used as acoustic and thermal insulation", version 2019.

3.8 General aspects related to the fitness for use of the product

The European Technical Assessment is issued for the product based on agreed data/information, deposited with ETA-Danmark, which identifies the product that has been assessed and judged. Changes to the product or production process, which could result in this deposited data/information being incorrect, should be notified to ETA-Danmark before the changes are introduced. ETA-Danmark will decide if such changes affect the ETA and consequently the validity of the CE marking based on the ETA and if so whether further assessment or alterations to the ETA, shall be necessary. Phonotherm® RG 550 and Phonotherm® RG 700 are manufactured in accordance with the provisions of this European Technical Assessment using the manufacturing processes as identified in the inspection of the plant by the notified inspection body and laid down in the technical documentation.

4 Assessment and verification of constancy of performance (AVCP)

4.1 AVCP system

According to the decision 1999/91/EC of the European Commission, as amended by 2001/596/EC, the system(s) of assessment and verification of constancy of performance (see Annex V to Regulation (EU) No 305/2011) is 3.

5 Technical details necessary for the implementation of the AVCP system, as foreseen in the applicable EAD

Technical details necessary for the implementation of the AVCP system are laid down in the control plan deposited at ETA-Danmark prior to CE marking

Issued in Copenhagen on 2020-10-19 by



Thomas Bruun
Managing Director, ETA-Danmark

Annex 1
Example of installation

