

Approval body for construction products
and types of construction

Bautechnisches Prüfamt

An institution established by the Federal and
Laender Governments



European Technical Assessment

ETA-10/0056
of 16 July 2015

English translation prepared by DIBt - Original version in German language

General Part

Technical Assessment Body issuing the
European Technical Assessment:

Deutsches Institut für Bautechnik

Trade name of the construction product

Regupol sound 47

Product family
to which the construction product belongs

Rubber fibre mat for impact sound insulation under
floating screed

Manufacturer

BSW
Berleburger Schaumstoffwerk GmbH
Am Hilgenacker 24
57319 Bad Berleburg
DEUTSCHLAND

Manufacturing plant

BSW GmbH (Werk II)
Industriestraße 6
57319 Bad Berleburg
DEUTSCHLAND

This European Technical Assessment
contains

6 pages including 1 annex which form an integral part of
this assessment

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

European Assessment Document (EAD)
040048-00-0502 "Rubber fibre mat to be used for impact
sound insulation".

This version replaces

ETA-10/0056 issued on 5 June 2013

The European Technical Assessment is issued by the Technical Assessment Body in its official language. Translations of this European Technical Assessment in other languages shall fully correspond to the original issued document and shall be identified as such.

Communication of this European Technical Assessment, including transmission by electronic means, shall be in full. However, partial reproduction may only be made with the written consent of the issuing Technical Assessment Body. Any partial reproduction shall be identified as such.

This European Technical Assessment may be withdrawn by the issuing Technical Assessment Body, in particular pursuant to information by the Commission in accordance with Article 25(3) of Regulation (EU) No 305/2011.

Specific Part

1 Technical description of the product

This European Technical Assessment applies to the single-sided profiled rubber fibre mat "Regupol sound 47" for impact sound insulation under floating screed, hereinafter referred to as impact sound insulation mat.

The mat manufactured using rubber fibre of tyre retreading and a binding agent based on polyurethane is delivered in the form of rolls.

The impact sound insulation mat is made with the following dimensions:

Nominal length: 13000 mm

Nominal width: 1150 mm

Nominal thickness d_L : 8.0 mm

The European Technical Assessment has been issued for the products on the basis of agreed data/information, deposited with Deutsches Institut für Bautechnik, which identifies the product that has been assessed. The European Technical Assessment applies only to products corresponding to this agreed data/information.

2 Specification of the intended use in accordance with the applicable European assessment Document

The impact sound insulation mat is used as insulation material on solid floor slabs for the improvement of impact sound insulation inside buildings. In this connection the impact sound insulation mat is placed in one layer under floating screed.

As to the application of the impact sound insulation mat, the respective national regulations shall additionally be observed.

The performance according to section 3 only applies if the impact sound insulation mat is installed according to the manufacture's installation instructions and according to annex A and if it is protected from precipitation, wetting or weathering in built-in state and during transport, storage and installation.

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

For sampling, conditioning and testing the provisions of the EAD No 040048-00-0502 "Rubber fibre mat to be used for impact sound insulation" apply.

3.1 Mechanical resistance and stability (BWR 1)

Not applicable.

3.2 Safety in case of fire (BWR 2)

Essential characteristic	Performance
Reaction to fire test acc. to EN ISO 11925-2:2010	Class E acc. to EN 13501-1:2007 + A1:2009

3.3 Hygiene, health and the environment (BWR 3)

No performance assessed.

3.4 Safety and accessibility (BWR 4)

Not applicable.

3.5 Protection against noise (BWR 5)

Essential characteristic	Performance
Dynamic stiffness ^{a)} test acc. to EN 29052-1:1992	$s'_i \leq 50 \text{ MN/m}^3$
Impact sound reduction with a structural assembly in accordance with annex A Rating acc. to EN ISO 10140:2010 (category II) assessment acc. to EN ISO 717-2:2013	$\Delta L_w \geq 22 \text{ dB}^b$
Nominal length test acc. to EN 822:2013	13000 mm
dimensional deviation	L1 acc. to EN 16069:2012
Nominal widths test acc. to EN 822:2013	1150 mm
dimensional deviation	W1 acc. to EN 16069:2012
Squareness test acc. to EN 824:2013	$S_b \leq 5 \text{ mm/m}$
dimensional deviation	
Thickness test acc. to EN 12431:2013	$d_L \geq 8.0 \text{ mm}$
Compressibility test acc. to EN 12431:2013	$c \leq 1.0 \text{ mm}$ (with $c = d_L - d_B$)
Mass per unit area test in line with EN 1602:2013	3.30 kg/m ² to 3.80 kg/m ²
Compressive creep	No performance assessed.
Compressive stress at 10 % deformation test acc. to EN 826:2013	$\sigma_{10\%} \geq 10 \text{ kPa}$

Essential characteristic	Performance
Deformation under specified load and temperature test acc. to 1605:2013 with test condition 2 (40 kPa, 70 °C, 168 h)	$\Delta \varepsilon \leq 5.0 \%$ (difference between the relative deformation ε_1 after step A and ε_2 after step B)
<p>a) Note: The dynamic stiffness is not intended for calculation of impact sound reduction of a floor build-up. Only the declared impact sound reduction shall be used for the design of protection against noise.</p> <p>b) The design of the sound protection is to be performed according to the national provisions taking account of the structural assembly according to annex A with the design value of the impact sound reduction. The design value of the impact sound reduction shall be laid down based on the nominal value given in clause 3.5 according to the respective national regulations.</p>	

3.6 Energy economy and heat retention (BWR 6)

Not applicable.

3.7 Sustainable use of natural resources (BWR 7)

For the sustainable use of natural resources no performance was investigated for this product.

4 Assessment and verification of constancy of performance (AVCP) system applied, with reference to its legal base

According to Decision of the Commission 2000/273/EC as amended by Decision of the Commission 2001/596/EC, the system 3 of assessment and verification of constancy of performance (see Annex V and Article 65 Paragraph 2 to Regulation (EU) No 305/2011) shall be applied.

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

Technical details necessary for the implementation of the AVCP system are laid down in the control plan deposited at Deutsches Institut für Bautechnik.

Issued in Berlin on 16 July 2015 by Deutsches Institut für Bautechnik

Dirk Brandenburger
Head of Department

beglaubigt:
Getzlaff

ANNEX A

The given values for the impact sound reduction in clause 3.5 apply, if the following is taken into account regarding the structural assembly:

- The impact sound insulation mats are loosely laid with the profiled side down on the even solid floor slab to be insulated. If necessary unevenness is leveled off.
- The impact sound insulation mats are laid with edges tightly abutted and fixed with a suitable adhesive tape against displacement in such a way that no gaps will occur in the joint area.
- Appropriate insulating edge strips are used at the boundary area on rising walls in order to avoid sonic bridges.
- The impact sound insulation mats are protected by a suitable foil before the screed will be built in.
- The floating screed, to be executed according to the national provisions, has a mass per unit area of at least 135 kg/m².