

Approval body for construction products  
and types of construction

Bautechnisches Prüfamt

An institution established by the Federal and  
Laender Governments



## European Technical Assessment

**ETA-13/0342**  
**of 4 June 2018**

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

DAMTEC estra

Product family  
to which the construction product belongs

rubber granulate fibre mat for impact sound insulation  
under floating screed

Manufacturer

KRAIBURG Relastec GmbH & Co. KG  
Fuchsberger Straße 4  
29410 Salzwedel  
DEUTSCHLAND

Manufacturing plant

KRAIBURG Relastec GmbH & Co. KG  
Fuchsberger Straße 4  
29410 Salzwedel  
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

EAD 040048-00-0502

This version replaces

ETA-13/0342 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This European Technical Assessment may be withdrawn by the issuing Technical Assessment Body, in particular pursuant to information by the Commission in accordance with Article 25(3) of Regulation (EU) No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 rubber granulate fibre mat "DAMTEC estra" for impact sound insulation under floating screeds, hereinafter referred to as impact sound insulation mat.

The mat manufactured using rubber granulate based on recycling material and a binding agent based on polyurethane (PU elastomer) is delivered in the form of rolls.

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

Nominal length: 3000 mm to 10000 mm

Nominal width: 1250 mm

Nominal thickness  $d_L$ : 6.0 mm

The European Technical Assessment has been issued for the product 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 mats are used as insulation material on solid floor slabs for the improvement of impact sound insulation inside buildings. In this connection the impact sound insulation mats are placed in one layer under floating screeds.

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

The verifications and assessment methods on which this European Technical Assessment is based lead to the assumption of a working life of the impact sound insulation mats of at least 25 years. The indications given on the working life cannot be interpreted as a guarantee given by the producer, but are to be regarded only as a means for choosing the right products in relation to the expected economically reasonable working life of the works.

English translation prepared by DIBt

### 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 <sup>a)</sup> test acc. to EN 29052-1:1992	$s' \leq 90 \text{ MN/m}^3$
Impact sound reduction with a structural assembly in accordance with annex A <sup>b)</sup> Rating acc. to EN ISO 10140:2010 (category II acc. to EN ISO 10140-1, annex H) assessment acc. to EN ISO 717-2:2013	$\Delta L_w \geq 17 \text{ dB}$
Nominal length test acc. to EN 822:2013 dimensional deviation	3000 mm to 10000 mm L1 acc. to EN 16069:2012 + A1:2015
Nominal widths test acc. to EN 822:2013 dimensional deviation	1250 mm W1 acc. to EN 16069:2012+ A1:2015
Squareness test acc. to EN 824:2013 dimensional deviation	$S_b \leq 5 \text{ mm/m}$
Thickness test acc. to EN 12431:2013	$d_L \geq 6.0 \text{ mm}$
Compressibility test acc. to EN 12431:2013	(with $c = d_L - d_B$ ) $c \leq 1.0 \text{ mm}$
Mass per unit area test in line with EN 1602:2013	3.8 kg/m <sup>2</sup> to 4.8 kg/m <sup>2</sup>
Compressive creep	No performance assessed.

Essential characteristic	Performance
Compressive stress at 10 % deformation test acc. to EN 826:2013	$\sigma_{10\%} \geq 15.0 \text{ kPa}$
Deformation under specified load and temperature test acc. to EN 1605:2013 with test condition 2 step A: $(23 \pm 5)^\circ\text{C} / (48 \pm 1) \text{ h} / 40 \text{ kPa}$ step B: $(70 \pm 1)^\circ\text{C} / (168 \pm 1) \text{ h} / 40 \text{ kPa}$	(difference between the relative deformation $\epsilon_1$ after step A and $\epsilon_2$ after step B)  $\Delta \epsilon \leq 5.0 \%$
<p>a) Note: The dynamic stiffness is not used for calculation of impact sound reduction of a floor build-up. Only the declared impact sound reduction is to 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.</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

In accordance with the European Assessment Document EAD No 040048-00-0502 "rubber fibre mat to be used for impact sound insulation" the legal basis is:  
Commission Decision 2000/273/EC (including change)

The system to be applied is: system 3

## 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 4 June 2018 by Deutsches Institut für Bautechnik

Prof. Gunter Hoppe

*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 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 75 kg/m<sup>2</sup>.