



Karlsruhe Institute of Technology

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**Institute of Concrete Structures and Building Materials**  
Building Materials and Concrete Construction

**MPA Karlsruhe**  
**CMM Karlsruhe**

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Expert: KW  
Our reference: -  
Date: 2024-06-09

KIT | IMB/MPA/CMM | Gotthard-Franz-Str. 3 | 76131 Karlsruhe, Germany

REGUPOL Germany GmbH & Co. KG  
Am Hilgenacker 24  
57319 Bad Berleburg

**Confirmation of Certification Body concerning REGUPOL vibration and REGUFOAM vibration**

Dear Mr. Mazraani,

we herewith confirm, acting as third party testing laboratory carrying out all approval tests, as inspection body and as certification body in accordance with the German building law LBO (Landesbauordnungen) for both product series REGUPOL vibration and REGUFOAM vibration, that there are absolutely no doubts concerning the quality and performance of all types of both product series.

The depiction with reduced content in the current edition of the approvals (abZ/aBG allgemeine bauaufsichtliche Zulassung) for both product series REGUPOL vibration and REGUFOAM vibration is caused by formal reasons only.

Yours sincerely,

Dipl.-Ing. L. Gerlach  
Head of Certification Body



Notified body 0754 in accordance with Construction Products Regulation  
Approved testing laboratory, inspection body and certification body BWU01 in accordance with the State Building Codes.  
Accreditation applies to the test and certification procedures listed in the certificates.



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Executive Board:  
Prof. Dr. Oliver Kraft (Acting President of KIT),  
Prof. Dr. Alexander Wanner, Prof. Dr. Thomas Hirth,  
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LBBW/BW Bank  
IBAN: DE44 6005 0101 7495 5001 49  
BIC/SWIFT: SOLADEST600

LBBW/BW Bank  
IBAN: DE18 6005 0101 7495 5012 96  
BIC /SWIF: SOLADEST600

**National Technical  
Approval/  
General Construction  
Technique Permit**

**Date:** 12.04.2024  
**Reference:** I 32-1.16.32-19/23

**Number:**  
**Z-16.32-500**

**Validity period:**

**from:** 12th April 2024  
**until:** 12th April 2029

**Applicant:**  
**REGUPOL Germany GmbH & Co. KG**  
Am Hilgenacker 24  
57319 Bad Berleburg, Germany

**REGUPOL vibration (flat)**

The above-mentioned subject of regulation is generally approved/authorised by the building authorities.

This Notice is comprised of seven pages.

This National Technical Approval/General Construction Technique Permit, in conjunction with Deutsches Institut für Bautechnik (German Institute for Structural Engineering) National Technical Approval/General Construction Technique Permit Z-16.32-527, replaces National Technical Approval/General Construction Technique Permit Z-16.32-500 dated 18th April 2019.

The building authorities first approved the product on 18th April 2019.

## **I GENERAL PROVISIONS**

- 1 This Notice is proof of the usability or applicability of the subject of regulation within the meaning of the state building regulations.
- 2 This Notice does not replace the permits, approvals and certificates required by law to execute building projects.
- 3 This Notice is issued without prejudice to the rights of third parties, particularly private property rights.
- 4 Copies of this Notice must be made available to the user or user of the subject of regulation, notwithstanding any further provisions in "Special Provisions". In addition, the user of the subject of regulation must be informed that this Notice must be available at the place of use or application. Copies must also be made available to the relevant authorities on request.
- 5 This Notice may only be reproduced in full. Publication of extracts requires the approval of the Deutsches Institut für Bautechnik. Texts and drawings of promotional literature may not contradict this Notice; translations must contain the note "Translation of the original German version not approved by the Deutsches Institut für Bautechnik".
- 6 This Notice is revocable. The provisions may be supplemented and amended later, particularly if new technical findings make this necessary.
- 7 This Notice is based on the information and documents provided by the applicant. Any change to this basis is not covered by this Notice and must be notified immediately to the Deutsches Institut für Bautechnik.

## II SPECIAL PROVISIONS

### 1 Subject of regulation and scope of use and application

#### 1.1 Subject of approval

The subjects of approval are compact, flat, unreinforced elastomeric bearings (bearings) made of elastomeric fibres or granules (mixture of NR, SBR, PU, EPDM), which are bonded with polyurethane binders and used for flat bearings in building construction. This Notice does not cover point, strip and round bearings.

#### 1.2 Subject

The bearings are used to absorb forces and compensate for deformations perpendicular to the bearing plane; torsion is not permitted. Although elastomeric bearings allow shear deformation, they must not be used to absorb permanent external shear forces.

The bearings can be used in temperatures between -25 °C and 50 °C. The bearings may be exposed to temperatures of up to +70 °C for short, recurring periods of less than 8 hours.

The assessment of vibration isolation is not the subject of this Notice.

The bearings can be used indoors and outdoors. The bearings can be used in multiple layers without glueing, whereby only the same bearing types may be stacked on top of each other.

### 2 Provisions for unreinforced elastomeric bearings

#### 2.1 Properties and composition

##### 2.1.1 Dimensions

The following conditions must be observed for the dimensions of the bearings:

Thickness of the single-layer bearing:	Max. thickness of the stacked bearing:
Regupol 480: t = 15 mm	t = 60 mm
Regupol 1000: t = 10 mm	t = 60 mm

$t \geq a/30$

$a \geq 300 \text{ mm}$ ,  $b \geq 300 \text{ mm}$ .

With:

t	Thickness of the unloaded bearing	[mm]
a	Shorter side of the bearing	[mm]
b	Longer side of the bearing	[mm]

The following tolerances must be observed:

Regupol 480:	t = 15 mm:	± 0.8 mm
	t = 30 mm:	± 1.0 mm
	t = 45 mm:	± 1.5 mm
	t = 60 mm:	± 1.5 mm
Regupol 1000:	t = 10 mm:	± 0.6 mm
	t = 20 mm:	± 0.8 mm
	t = 30 mm:	± 1.0 mm
	t = 40 mm:	± 1.5 mm
	t = 50 mm:	± 1.5 mm
	t = 60 mm:	± 1.5 mm

##### 2.1.2 Materials

The physical characteristics, chemical composition and material properties of the bearing are deposited with the Deutsches Institut für Bautechnik.

The properties of the raw materials used must be verified by a 3.1 certificate in accordance with DIN EN 10204:2005-01.

## **2.2 Production, transport and marking**

### **2.2.1 Production, transportation**

The bearings are manufactured in a pressing process in sheets or rolls and then cut to size. Detailed information on the manufacturing process is available from the Deutsches Institut für Bautechnik.

The manufacturer's instructions must be observed when transporting and installing the bearings.

### **2.2.2 Marking**

The construction product must be marked by the manufacturer with the conformity mark ("Ü-mark") in accordance with the conformity mark regulations of the federal states. Marking may only be carried out if the requirements in section 2.3 are met. Similarly, the marking shall be permanent and continuous on the sheets or rolls produced in accordance with section 2.2.1.

## **2.3 Certificate of conformity**

### **2.3.1 General information**

Confirmation of the conformity of the bearings with the provisions of the National Technical Approval covered by this Notice must be provided for each manufacturing plant with a certificate of conformity based on in-house production control and regular external monitoring, including an initial inspection of the bearings in accordance with the following provisions.

For the issue of the certificate of conformity and the external monitoring, including the product tests to be carried out, the bearing manufacturer must involve a recognised certification body and a recognised monitoring body.

The manufacturer must provide the declaration of conformity by marking the construction products with the conformity mark ("Ü-mark") with reference to the intended use. If, in exceptional cases, this is not possible, the instruction leaflet for the bearing must be marked with the conformity mark in accordance with the conformity mark regulations of the German federal states.

The certification body shall provide the Deutsches Institut für Bautechnik with a copy of the certificate of conformity issued.

The Deutsches Institut für Bautechnik must also be provided with a copy of the initial test report.

### **2.3.2 In-house production control**

An in-house production control system must be set up and implemented in each manufacturing plant. In-house production control means the continuous monitoring of production to be carried out by the manufacturer to ensure that the construction products manufactured by them comply with the provisions of the National Technical Approval covered by this Notice.

The in-house production control must be carried out in accordance with the test plan deposited with the Deutsches Institut für Bautechnik.

The results of the in-house production control must be recorded and evaluated. The records must contain at least the following information:

- description of the construction product or the source material and components,
- type of inspection or test,
- date of manufacture and testing of the construction product or the starting material or components,
- result of the checks and tests and, where applicable, comparison with the requirements,
- signature of the person responsible for in-house production control.

The records must be kept for at least five years. They must be submitted to the Deutsches Institut für Bautechnik and the highest competent building supervisory authority on request.

If the test result is unsatisfactory, the manufacturer must immediately take the necessary measures to rectify the defect. Non-compliant construction products must be handled in such

a way as to avoid confusion with compliant products. Once the defect has been rectified, the relevant test must be repeated immediately, insofar as this is technically possible and necessary to prove that the defect has been rectified.--

### 2.3.3 External monitoring

In each bearing manufacturing plant, internal production control must be verified by external monitoring on a regular basis (at least twice a year). The results of the tests carried out by the manufacturer in accordance with section 2.3.2 shall be statistically evaluated.

An initial inspection of the bearing must be carried out as part of the external inspection. Samples must also be taken for random testing. Sampling and testing are the responsibility of the recognised monitoring body.

The scope and frequency of external monitoring can be found in the test plan deposited with the Deutsches Institut für Bautechnik.

The certification and external monitoring results must be kept for at least five years. They must be submitted by the certification body or the monitoring body to the Deutsches Institut für Bautechnik and the competent supreme building supervisory authority on request.

## 3 Provisions for design, dimensioning and execution

### 3.1 Design

The surface bearings can be installed in single or multiple layers. Glueing is not required when using multi-layer bearings. Only identical bearing types may be stacked on top of each other.

In each case, the structural safety of the bearings in the ultimate limit state must be verified for all relevant design situations and load cases using structural analysis.

The verification concept in accordance with DIN EN 1990:2010-12 in conjunction with the National Annex applies. The bearings may only be used for components subject to static or quasi-static loads.

The type, dimensions and arrangement of the bearings are determined by the structural requirements and the load-bearing capacity of the adjacent components. Based on the selection of the bearings, an installation plan must be drawn up, if required by the installation situation, showing the exact position of the bearings in the building layout.

Installation must be carried out in accordance with the manufacturer's instructions.

### 3.2 Dimensioning

The possible load combinations can be found in DIN EN 1990:2010-12.

The design values of the effects of the actions (loads)  $E_d$  must be determined from the characteristic values of the actions, taking into account the partial safety factors  $\gamma_f$  and the combination values  $\psi$  in accordance with the Technical Building Regulations.

The following verification must be carried out in the ultimate limit state:

$$\frac{E_{\perp d}}{R_{\perp d}} \leq 1$$

With:

$E_{\perp d}$  Load on the bearings perpendicular to the bearing plane [N/mm<sup>2</sup>]

$R_{\perp d}$  Design value of the associated load-bearing capacity of the bearing [N/mm<sup>2</sup>] perpendicular to the bearing plane as a function of the shape factor S with static permanent load according to Table 1

S Shape factor for rectangular bearings:  $S = \frac{a \cdot b}{2 \cdot t \cdot (a+b)}$

**Table 1:** Design value of the load-bearing capacity  $R_{\perp,d}$  [N/mm<sup>2</sup>]

Type	Shape factor range S	Design value of load-bearing capacity [N/mm <sup>2</sup> ]
RP 480	$\geq 1.25$	0.3
RP 1000	$\geq 1.25$	3

The function for determining the design value of the load-bearing capacity applies to bearings without holes.

The components adjacent to the bearing must be dimensioned in such a way that the interaction with the load-bearing behaviour of the bearing is taken into account. It should be noted that the load on an elastomeric bearing leads to load concentration. The transverse tensile force resulting from the restraint of expansion of the unreinforced elastomeric bearing in the adjacent components must be verified and absorbed by appropriate measures.

When determining the effects on the overall structure, the compression of the bearing must be taken into account as a product-specific value. If the contact surfaces of the adjacent components deviate from the plane parallelism, e.g. due to manufacturing and assembly tolerances, these must be taken into account when dimensioning the bearing. If no more precise verification is provided, the angle of rotation of the adjacent components must be determined by adding the following influences:

- Skewness with 10 ‰
- Unevenness with  $625/a$  ‰

The unevenness may be halved if the adjacent components are made of steel or in-situ concrete.

Proof of positional stability must be provided.

In the structural design, proof must be provided that edge contact of the adjoining components is avoided.

The transverse tensile force acting on the adjacent components due to a centric load on the bearing is determined as follows:

$$Z_a = 1.5 \cdot E_{\perp,d} \cdot a \cdot t$$

$$Z_b = 1.5 \cdot E_{\perp,d} \cdot b \cdot t$$

With:

$Z_a$  Transverse tensile force perpendicular to the shorter side of the bearing, a [N]

$Z_b$  Transverse tensile force perpendicular to the longer side of the bearing, b [N]

The width of the bearing depends on the format. When designing the supporting structure (edge distances, etc.), the bearing's flow spread must be taken into account and requested from the manufacturer in advance.

The lateral surfaces of the bearing must not be hindered in their ability to deform as designed.

### 3 Installation

The bearings must be stored and installed in a dry place. The bearings must be protected from direct sunlight. The substrate must be smooth and even. The bearing surfaces must be carefully deburred to protect the bearing. Blowholes in the adjacent concrete surfaces must be avoided. If necessary, the height can be levelled using a suitable mortar bed. The adjacent components must be compatible with the bearing material. Ensure that the bearing and

adjacent components are kept free from chemical and physical influences and contamination. The surfaces of the adjacent components must be swept clean and free of snow, ice, grease and separating agents. Avoid standing water.

The manufacturer's instructions for installation must be observed.

The building contractor must submit a declaration of conformity in accordance with sections 16a para. 5 and 21 para. 2 of the German Model Building Regulation ("MBO") to confirm that the bearing installation complies with the General Construction Technique Permit covered by this Notice.

#### **4 Provisions for use, maintenance, servicing**

The bearings must be installed maintenance-free.

Andreas Schult  
Head of Division

Notarized by  
Hoppe

Certificate of REGUPOL Germany GmbH & Co. KG



**National Technical  
Approval/  
General Construction  
Technique Permit**

**Date:**

12.04.2024

**Reference:**

I 32-1.16.32-1/24

**Nummer:**

**Z-16.32-527**

**Validity period:**

**from: 19th April 2024**

**until: 19th April 2029**

**Applicant:**

**REGUPOL Germany GmbH & Co. KG**

Am Hilgenacker 24

57319 Bad Berleburg, Germany

**REGUPOL vibration (dimpled)**

The above-mentioned subject of regulation is generally approved/authorised by the building authorities.

This Notice is comprised of seven pages.

The product was first approved by the building authorities on 18th April 2019 with approval no. Z-16.32.500.

Certificate of REGUPOL Germany GmbH & Co. KG

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- 7 This Notice is based on the information and documents provided by the applicant. Any change to this basis is not covered by this Notice and must be notified immediately to the Deutsches Institut für Bautechnik.

## II SPECIAL PROVISIONS

### 1 Subject of regulation and scope of use and application

#### 1.1 Subject of approval

The subjects of approval are one-sided dimpled, unreinforced elastomeric bearings made of elastomeric fibres or granules (mixture of NR, SBR, PU, EPDM), which are bonded with polyurethane binders and used for flat bearings in building construction. This Notice does not cover point, strip and round bearings.

#### 1.2 Subject

The bearings are used to absorb forces and compensate for deformations perpendicular to the bearing plane; torsion is not permitted. Although elastomeric bearings allow shear deformation, they must not be used to absorb permanent external shear forces.

The bearings can be used in temperatures between -25 °C and 50 °C. The bearings may be exposed to temperatures of up to +70 °C for short, recurring periods of less than 8 hours.

The assessment of vibration isolation is not the subject of this Notice.

The bearings can be used indoors and outdoors. The bearings can be used in multiple layers without glueing, whereby only the same bearing types may be stacked on top of each other.

### 2 Provisions for unreinforced elastomeric bearings

#### 2.1 Properties and composition

##### 2.1.1 Dimensions

The following conditions must be observed for the dimensions of the bearings:

Thickness of the single-layer bearing:	Max. thickness of the stacked bearing:
Regupol 200: $t = 17 \text{ mm}$	$t = 51 \text{ mm}$

$t \geq a/30$

$a \geq 300 \text{ mm}$ ,  $b \geq 300 \text{ mm}$ .

With:

t	Thickness of the unloaded bearing	[mm]
a	Shorter side of the bearing	[mm]
b	Longer side of the bearing	[mm]

The following tolerances must be observed:

Regupol 200:  $t = 17 \text{ mm}$ :  $\pm 0.8 \text{ mm}$

$t = 34 \text{ mm}$ :  $\pm 1.0 \text{ mm}$

$t = 51 \text{ mm}$ :  $\pm 1.5 \text{ mm}$

##### 2.1.2 Materials

The physical characteristics, chemical composition and material properties of the bearing are deposited with the Deutsches Institut für Bautechnik.

The properties of the raw materials used must be verified by a 3.1 certificate in accordance with DIN EN 10204:2005-01.

## **2.2 Production, transport and marking**

### **2.2.1 Production, transportation**

The bearings are manufactured in a pressing process in sheets or rolls and then cut to size. Detailed information on the manufacturing process is available from the Deutsches Institut für Bautechnik.

The manufacturer's instructions must be observed when transporting and installing the bearings.

### **2.2.2 Marking**

The construction product must be marked by the manufacturer with the conformity mark ("Ü-mark") in accordance with the conformity mark regulations of the federal states. Marking may only be carried out if the requirements in section 2.3 are met. Similarly, the marking shall be permanent and continuous on the sheets or rolls produced in accordance with section 2.2.1.

## **2.3 Certificate of conformity**

### **2.3.1 General information**

Confirmation of the conformity of the bearings with the provisions of the National Technical Approval covered by this Notice must be provided for each manufacturing plant with a certificate of conformity based on in-house production control and regular external monitoring, including an initial inspection of the bearings in accordance with the following provisions.

For the issue of the certificate of conformity and the external monitoring, including the product tests to be carried out, the bearing manufacturer must involve a recognised certification body and a recognised monitoring body.

The manufacturer must provide the declaration of conformity by marking the construction products with the conformity mark ("Ü-mark") with reference to the intended use. If, in exceptional cases, this is not possible, the instruction leaflet for the bearing must be marked with the conformity mark in accordance with the conformity mark regulations of the German federal states.

The certification body shall provide the Deutsches Institut für Bautechnik with a copy of the certificate of conformity issued.

The Deutsches Institut für Bautechnik must also be provided with a copy of the initial test report.

### **2.3.2 In-house production control**

An in-house production control system must be set up and implemented in each manufacturing plant. In-house production control means the continuous monitoring of production to be carried out by the manufacturer to ensure that the construction products manufactured by them comply with the provisions of the National Technical Approval covered by this Notice.

The in-house production control must be carried out in accordance with the test plan deposited with the Deutsches Institut für Bautechnik.

The results of the in-house production control must be recorded and evaluated. The records must contain at least the following information:

- description of the construction product or the source material and components,
- type of inspection or test,
- date of manufacture and testing of the construction product or the starting material or components,
- result of the checks and tests and, where applicable, comparison with the requirements,
- signature of the person responsible for in-house production control.

The records must be kept for at least five years. They must be submitted to the Deutsches Institut für Bautechnik and the highest competent building supervisory authority on request.

If the test result is unsatisfactory, the manufacturer must immediately take the necessary measures to rectify the defect. Non-compliant construction products must be handled in such

a way as to avoid confusion with compliant products. Once the defect has been rectified, the relevant test must be repeated immediately, insofar as this is technically possible and necessary to prove that the defect has been rectified.--

### **2.3.3 External monitoring**

In each bearing manufacturing plant, internal production control must be verified by external monitoring on a regular basis (at least twice a year). The results of the tests carried out by the manufacturer in accordance with section 2.3.2 shall be statistically evaluated.

An initial inspection of the bearing must be carried out as part of the external inspection. Samples must also be taken for random testing. Sampling and testing are the responsibility of the recognised monitoring body.

The scope and frequency of external monitoring can be found in the test plan deposited with the Deutsches Institut für Bautechnik.

The certification and external monitoring results must be kept for at least five years. They must be submitted by the certification body or the monitoring body to the Deutsches Institut für Bautechnik and the competent supreme building supervisory authority on request.

## **3 Provisions for design, dimensioning and execution**

### **3.1 Design**

The surface bearings can be installed in single or multiple layers. Glueing is not required when using multi-layer bearings. Only identical bearing types may be stacked on top of each other.

In each case, the structural safety of the bearings in the ultimate limit state must be verified for all relevant design situations and load cases using structural analysis.

The verification concept in accordance with DIN EN 1990:2010-12 in conjunction with the National Annex applies. The bearings may only be used for components subject to static or quasi-static loads.

The type, dimensions and arrangement of the bearings are determined by the structural requirements and the load-bearing capacity of the adjacent components. Based on the selection of the bearings, an installation plan must be drawn up, if required by the installation situation, showing the exact position of the bearings in the building layout.

Installation must be carried out in accordance with the manufacturer's instructions.

### **3.2 Dimensioning**

The possible load combinations can be found in DIN EN 1990:2010-12.

The design values of the effects of the actions (loads)  $E_d$  must be determined from the characteristic values of the actions, taking into account the partial safety factors  $\gamma_f$  and the combination values  $\psi$  in accordance with the Technical Building Regulations.

The following verification must be carried out in the ultimate limit state:

$$\frac{E_{\perp d}}{R_{\perp d}} \leq 1$$

With:

$E_{\perp d}$  Load on the bearings perpendicular to the bearing plane [N/mm<sup>2</sup>]

$R_{\perp d}$  Design value of the associated load-bearing capacity of the bearing [N/mm<sup>2</sup>] perpendicular to the bearing plane as a function of the shape factor S with static permanent load according to Table 1

S Shape factor for rectangular bearings:  $S = \frac{a \cdot b}{2 \cdot t \cdot (a+b)}$

**Table 1:** Design value of the load-bearing capacity  $R_{\perp d}$  [N/mm<sup>2</sup>]

Type	Shape factor range S	Design value of the load-bearing capacity [N/mm <sup>2</sup> ]
RP 200	≥ 1.47	0.03

The function for determining the design value of the load-bearing capacity applies to bearings without holes.

The components adjacent to the bearing must be dimensioned in such a way that the interaction with the load-bearing behaviour of the bearing is taken into account. It should be noted that the load on an elastomeric bearing leads to load concentration. The transverse tensile force resulting from the restraint of expansion of the unreinforced elastomeric bearing in the adjacent components must be verified and absorbed by appropriate measures.

When determining the effects on the overall structure, the compression of the bearing must be taken into account as a product-specific value. If the contact surfaces of the adjacent components deviate from the plane parallelism, e.g. due to manufacturing and assembly tolerances, these must be taken into account when dimensioning the bearing. If no more precise verification is provided, the angle of rotation of the adjacent components must be determined by adding the following influences:

- Skewness with 10 ‰
- Unevenness with 625/a ‰

The unevenness may be halved if the adjacent components are made of steel or in-situ concrete.

Proof of positional stability must be provided.

In the structural design, proof must be provided that edge contact of the adjoining components is avoided.

The transverse tensile force acting on the adjacent components due to a centric load on the bearing is determined as follows:

$$Z_a = 1.5 \cdot E_{\perp d} \cdot a \cdot t$$

$$Z_b = 1.5 \cdot E_{\perp d} \cdot b \cdot t$$

With:

$Z_a$  Transverse tensile force perpendicular to the shorter side of the bearing, a [N]

$Z_b$  Transverse tensile force perpendicular to the longer side of the bearing, b [N]

The width of the bearing depends on the format. When designing the supporting structure (edge distances, etc.), the bearing's flow spread must be taken into account and requested from the manufacturer in advance.

The lateral surfaces of the bearing must not be hindered in their ability to deform as designed.

### **3 Installation**

The bearings must be stored and installed in a dry place. The bearings must be protected from direct sunlight. The substrate must be smooth and even. The bearing surfaces must be carefully deburred to protect the bearing. Blowholes in the adjacent concrete surfaces must be avoided. If necessary, the height can be levelled using a suitable mortar bed. The adjacent components must be compatible with the bearing material. Ensure that the bearing and adjacent components are kept free from chemical and physical influences and contamination. The surfaces of the adjacent components must be swept clean and free of snow, ice, grease and separating agents. Avoid standing water.

The manufacturer's instructions for installation must be observed.

The building contractor must submit a declaration of conformity in accordance with sections 16a para. 5 and 21 para. 2 of the German Model Building Regulation ("MBO") to confirm that the bearing installation complies with the General Construction Technique Permit covered by this Notice.

### **4 Provisions for use, maintenance, servicing**

The bearings must be installed maintenance-free.

Andreas Schult  
Head of Division

Notarized by  
Hoppe