# TFI Report 442093-34

## impact sound insulation

**Report established for**

Uzin Utz AG
Dieselstraße 3
89079 Ulm
GERMANY

**Product**

Underlayer
UZIN RR 188

This report includes 2 pages and 1 annex(es)
This report is a translation of report no. 442093-29.

**Responsible at TFI**

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**Aachen, 07.11.2018**

Dr. Alexander Siebel
- Head of the testing laboratory -

The present document is provided with an advanced electronic signature

This report only applies to the tested samples and has been established to the best of our knowledge. Only the entire report shall be reproduced. Under no circumstances, extracts shall be used. Furthermore, we apply the "General Terms and Conditions for the Execution of Contracts" of the TFI Aachen GmbH, also with regard to the order execution.

## 1 Transaction

| | |
|---|---|
| Test order | Impact sound insulation according to EN ISO 10140-1 |
| Order date | 10.12.2014 |
| Your reference | F. Dylewski |
| Product designation | UZIN RR 188 |
| TFI sample number | 14-12-0352 |

## 2 Product Specification

| | |
|---|---|
| Description | underlay loose laid to the concrete floor |
| Material | PU foam with cork |
| Thickness | 4 mm* |
| Area density | 1,8 kg/m²* |

*customer information

## 3 Results

| | |
|---|---|
| Impact sound insulation | $\Delta L_w$ = 17 dB |

## 4 Annexes

| | |
|---|---|
| Impact sound insulation | TS 442093-34 |

The annexes marked [a] are based on tests accredited in accordance with EN ISO/IEC 17025.



Notified Body
No. 1658

Testing laboratory,
inspection and certification
body recognised by the DIBt
(Deutsches Institut für Bautechnik)

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# **Annex TS** - Impact Sound Insulation

## 1 Transaction

| | |
|---|---|
| Product designation | UZIN RR 188 |
| TFI sample number | 14-12-0352 |
| Testing period | 29.12.2014 |

## 2 Test Method / Requirements

| | |
|---|---|
| EN ISO 10140-3:2010 | Laboratory measurement of sound insulation of building elements – Part 3: Measurement of impact sound insulation |
| Deviations | None |
| EN ISO 717-2:2013 | Rating of sound insulation in buildings and of building elements – Part 2: Impact sound insulation |
| Deviations | None |

## 3 Results

cf. p. 2



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# Impact sound insulation according ISO 10140-1

Measurment of impact sound insulation by a floor covering on a solid concrete floor

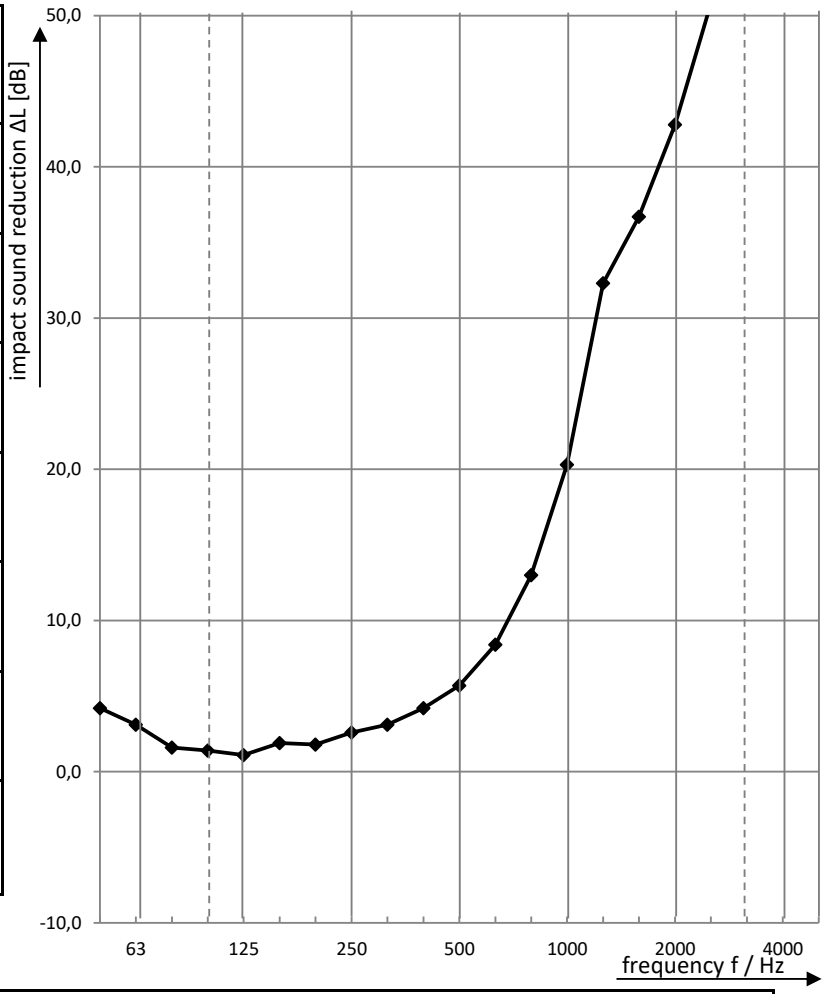
| | |
|---|---|
| **Product name** | **UZIN RR 188** |
| **TFI sample number** | 14-12-0352 |
| Construction (from top to bottom) | UZIN RR 188 |

| | |
|---|---|
| Category | I according to ISO 10140 |
| Installation | loose laid |
| Setting time | - |
| Installed by | laboratory |

| | |
|---|---|
| Reference floor | solid concrete floor |
| Note | - |
| Testing period | 29.12.2014 |

| | ϴ [°C] | r.h. [%] |
|---|---|---|
| in the source room | 20,1 | 53 |
| in the receiving room | 19,4 | 54 |

| **Frequency** f **[Hz]** | $L_{n,0}$ third-octave **[dB]** | **ΔL** third-octave **[dB]** |
|---|---|---|
| 50 | 56,5 | 4,2 |
| 63 | 62,7 | 3,1 |
| 80 | 57,4 | 1,6 |
| 100 | 57,2 | 1,4 |
| 125 | 67,5 | 1,1 |
| 160 | 62,6 | 1,9 |
| 200 | 64,1 | 1,8 |
| 250 | 67,1 | 2,6 |
| 315 | 65,3 | 3,1 |
| 400 | 64,7 | 4,2 |
| 500 | 65,0 | 5,7 |
| 630 | 65,3 | 8,4 |
| 800 | 66,4 | 13,0 |
| 1000 | 67,8 | 20,3 |
| 1250 | 67,7 | 32,3 |
| 1600 | 68,2 | 36,7 |
| 2000 | 68,8 | 42,8 |
| 2500 | 68,6 | |
| 3150 | 67,9 | |
| 4000 | 66,9 | |
| 5000 | | |




*Airborne noise correction for the measured value

**Evaluation according to ISO 717-2**

| | | | | | |
|---|---|---|---|---|---|
| **$\Delta L_w$ =** | **17 dB** | **$\Delta L_{lin}$ =** | **7 dB** | | |
| $C_{I,\Delta}$ = | -10 dB | $C_{I,r}$ = | -1 dB | $C_{I,r,50\text{-}2500}$ = | 0 dB |

The results are based on measurements, which were performed under laboratory conditions with artificial excitation (standard procedure).