

Flame-retardant Insulating Underlay

# UZIN RR 189 Plus FR

Flame-retardant, bonded, resilient insulating underlay for use under textile and resilient floor coverings

## Description:

Bonded, resilient insulating underlay based on cork/foam granulate for use under bonded textile and resilient floor coverings in interior locations.

Especially for commercial projects with increased demand for flame-retardant properties.

Suitable for/under:

- ▶ textile floor coverings
- ▶ textile wall protection coverings in sports-halls
- ▶ PVC/cushioned vinyl coverings to EN 685 33-43 (K5)
- ▶ linoleum (on load distributing layer)
- ▶ tongue-and-groove wood flooring, on 3 mm UZIN RR 189 Plus FR
- ▶ absorbent and non-absorbent, level and, if necessary, prepared surfaces
- ▶ domestic and commercial locations, new-build, especially renovation and refurbishment projects and on surfaces with poor acoustic and thermal insulation properties

Suitability of the overall construction for use over warm water underfloor heating systems and for exposure to castor wheels in accordance with DIN EN 12 529, as well as the indentation properties, must be tested in each case (see "Important Notes").

## Product Properties / Benefits:

Flexible sheet underlay with good lay-flat properties. Allows tailored installation of underfoot comfort, acoustic and thermal insulation on poorly insulated surfaces. Makes flooring flexible and warm underfoot. In staircase areas, prevents transfer of sound and premature floor covering wear from impact.

Due to its distinctive surface finish, with its porous, vapour-permeable structure and sanded top surface, is also suitable for direct adhesion of synthetic coverings (see "Important Notes") without the usual intermediate skim-coat application.

Available in two thicknesses for different requirements and overall construction thickness.



**Material:** Bonded polyurethane granulate-mix of cork and soft PU foam with flame-retardant additives.

- ▶ Easy to cut and install
- ▶ Excellent lay-flat properties
- ▶ Distinctive surface finish
- ▶ Highly flexible indentation recovery
- ▶ Vapour permeable and diffusive
- ▶ Resistant to water and cleaning processes
- ▶ Flame-retardant
- ▶ Acoustically and thermally insulating
- ▶ Increases underfoot and ambient comfort

## Technical Data:

Format:	sheet in rolls		
Sheet width:	1 m		
Colour:	grey/brown mottled		
Shelf life:	min. 24 months		
Flammability:	flame-retardant treated. Meets flame-test requirements in acc. with DIN EN 13 238		
Weight by volume:	approx. 470 kg/m <sup>3</sup>		
Thickness:	mm	3	4
Roll length:	m	40	30
Weight by area:	kg/m <sup>2</sup>	1.4	1.9
AIV in acc. with DIN 52 221:*	dB	18	19
TTR in acc. with DIN 52 612:**	m <sup>2</sup> K/W	0.05	0.06

\* AIV = Acoustic Improvement Value without covering, see "Important notes".

\*\* TTR = Thermal Transfer Resistivity without covering

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## Substrate Preparation:

The substrate must be level, sound, free from cracks, dry, clean and free from materials that would impair adhesion. Test the substrate in accordance with applicable standards and notices and report any deficiencies.

Thoroughly vacuum the surface, then prime and apply smoothing compound. According to substrate type and occupational use, select suitable primer and smoothing compounds from the UZIN Product Guide.

Refer to the Product Data Sheets for the other products used.

## Application:

### Bonding the underlay:

Lay out the underlay parallel with the proposed direction of the floor covering, but with joints off-set by at least 20 cm, and then cut in. Cut in but-joints and side-seams as required.

Lay the sheet according to normal trade practice for floor coverings. Refer to the Product Data Sheets for the adhesives used (see Adhesives).

### Bonding the surface covering:

Leave covering installation at least 24 – 48 hours after installation of the underlay. Joints in the covering should be parallel with, but off-set by 20 cm from those in the underlay.

Before bonded multi-ply wood flooring onto UZIN RR 189 Plus FR, obtain technical advice.

## Adhesives:

Bonding the Insulating Underlay	Notch Size	Open Time	Consumption
On absorbent surfaces UZIN UZ 57 UZIN UZ 90	B 1 B 1	approx. 5 – 15 mins. 5 – 15 mins.	approx. 350 – 450 g/m <sup>2</sup> 250 – 350 g/m <sup>2</sup>
On non-absorbent surfaces UZIN KE 2000 S	A2	10 – 40 mins.	300 – 350 g/m <sup>2</sup>
Bonding the Covering onto UZIN RR 189 Plus (B 1)	Notch Size	Open Time	Consumption
Textile coverings UZIN UZ 57 UZIN UZ 90	B 1 B 1	5 – 15 mins. 5 – 15 mins.	350 – 400 g/m <sup>2</sup> 250 – 350 g/m <sup>2</sup>
PVC/Cushioned Vinyl UZIN KE 2000 S	A5/A2	20 – 40 mins.	200 – 350 g/m <sup>2</sup>
Linoleum on load-distributing layer of reinforcement webbing, PU compound and UZIN KE 603	B1/B2	0 – 15 mins.	400 – 450 g/m <sup>2</sup>

## Important Notes:

- ▶ Store rolls standing on end. Shelf life min. 24 months when stored in dry conditions.
- ▶ Optimum working conditions are 18 – 25 °C / 64 – 77 °F, floor temperature above 15 °C / 59 °F and relative humidity below 75 %. Low temperatures and high humidity lengthen, whilst high temperatures and low humidity shorten the working, setting, drying times of the adhesives used.
- ▶ The specified acoustic value is an approximate value determined under normed conditions. Due to the individual acoustics in each building and the used materials and compositions in each case the values can differ. To determine the real acoustic value the measurement and its evaluation have to take place at real conditions.
- ▶ The castor wheel resistance and indentation properties of floor coverings can change when used in conjunction with insulating underlays. For bonding onto UZIN RR 189 Plus FR, PVC/cushioned vinyl must meet wear classification EN 685 33-43 (K5). Despite the high indentation recovery of the underlay, some visible and residual indentation in textile and resilient coverings cannot be completely excluded. If in doubt, obtain technical advice.
- ▶ Before installing linoleum, the underlay must be strengthened for load distribution with UZIN Reinforcement Webbing and then smoothed with UZIN KR 410.
- ▶ Before installing linoleum, rubber or wood flooring onto the underlay, obtain technical advice.
- ▶ On underfloor heating systems, floor coverings should, in accordance with DIN EN 1264, not exceed a thermal transfer resistivity of 0.15 m<sup>2</sup>K/W. The TTR of the double layer of underlay and covering is the sum of their individual values.
- ▶ Observe the generally acknowledged rules of the industry and technology for the installation of floor covering and wood flooring as well as the respective applicable national standards (e. g. EN, DIN, VOB, Ö-NORM, SIA and others). The following standards and bulletins apply as well, amongst others, or are recommended for special consideration:
  - DIN 18 356 "Working with wood flooring", Ö-Norm B 2218
  - DIN 18 367 "Working with wood blocks"
  - DIN 18 365 "Working with floor coverings", Ö-Norm B 2236
  - ZDB publication "Resilient and textile floor coverings and wood flooring on heated floor constructions"
  - TKB publication "Assessment and preparation of substrates for floor covering and wood flooring installation"
  - BEB publication "Assessment and preparation of substrates"
  - TKB publication "Bonding of wood flooring"
  - TKB publication "Bonding of textile floor covering"

## Protection of the Workplace and the Environment:

No special measures are required. Refer to the notes on protection of the workplace and the environment in the Product Information Sheets for the other installation materials used.

## Disposal:

All product residues are treated as normal construction waste.