



ARDEX K 301

External levelling compound

- For layer thicknesses from 3 to 20 mm
- Self-levelling
- Pumpable
- Quickly accessible and quickly loadable
- 30 litres

ARDEX system product: Particularly secure bonding properties with ARDEX floor adhesives.



Area of application

For indoor and outdoor use, floors.

For filling, levelling and smoothing floor areas made of concrete, cement screed, tiles and slab coverings as well as other suitable substrates.

For producing wear layers in warehouses, workshops, production halls, garages on parking decks, courtyards and passages.

For levelling floor areas in wet areas, permanently wet areas, on balconies and terraces, for laying tile and slab coverings, paint coatings and coatings.

Art

Grey powder with special cement, easily dispersible plastics, selected fillers and special additives.

Preparation of the surface

The substrate can be dry or damp (without standing moisture), but must be solid, load-bearing, frost-resistant and free of dust and release agents.

Cracks and joints must be filled properly and professionally, e.g. with ARDEX P 10 SR 2-K rapid repair resin or ARDEX FB casting resin.

Insufficiently solid surface areas must be removed mechanically, e.g. by milling, shot blasting, grinding or similar.

On dense and smooth substrates, ARDEX EP 2000 Multifunctional Epoxy Resin with sanding should be used as a bonding agent.

For subsequent application of coatings, the substrate must have a surface tensile strength of at least 1.5 N/mm² before the primer is applied. ARDEX EP 2000, including sanding, must be used in excess as a primer under ARDEX K 301.

In permanently dry and secondary areas without coatings, such as cellars or storage rooms without significant stress, ARDEX P 51 Adhesive and Priming Dispersion or ARDEX P 52 Priming Concentrate diluted in a mixing ratio of 1 : 1 can be used as a primer.

Observe the technical data sheets for the primers.

Processing

Pour clear water into a clean mixing container and stir vigorously, adding enough powder to produce a lump-free, flowing mortar.

Approximately 5.5 litres of water are required to mix 25 kg of ARDEX K 301 powder.

The mortar can be worked for approx. 30–45 minutes at +18°C to +20°C, with lower temperatures extending the working time and higher temperatures shortening it.

The mortar is easy to spread and smoothes itself seamlessly. ARDEX K 301 should be applied in a layer at least 3 mm and no more than 20 mm thick. To fill areas with a slope of max. 2%, reduce the amount of water added.

ARDEX K 301 External levelling compound should be applied at temperatures above +5°C.

The levelling layer must be protected from premature drying due to solar radiation and drafts.

If in doubt, apply to test areas.

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Pumps

Spiral pumps, reciprocating pumps and continuously working mixing pumps with a delivery rate of approx. 20–40 litres of mortar per minute are suitable for pumping the mortar. Cement slurry must not be used as a lubricating fluid. The machine and hoses must be cleaned after periods of inactivity exceeding 30 minutes.

Production of wear layers in commercial and industrial areas

The substrate, cement screed (C 30 to C 50) or concrete (B 25 to B 35), must be suitable in terms of its load-bearing capacity for the loads that will occur.

To remove contaminants, release agents, loose surface layers and binder accumulations, the substrate must be shot-blasted, sand-blasted or milled. Depending on the load and possible moisture exposure, surfaces prepared in this way must be primed with ARDEX P 51 diluted 1:1 with water or ARDEX EP 2000.

ARDEX K 301 External levelling compound is suitable for loads as assigned to cement screeds of strength classes C 30 to C 50 – without abrasive loads – in accordance with AGI worksheet A 12 "Industrial floors", part 1.

ARDEX K 301 is classified in evaluation group R 12 for slip resistance according to DIN 51130.

Examples of the classification of stresses and areas of application to strength classes based on AGI worksheet A12:

Strength class	Stress	Areas of application
C 30	- low traffic of light vehicles with soft tyres up to 10 km/h	- Warehouses for light and elastic goods (wood, paper, rubber, soft plastics, etc.) - subordinate workshops for small workpieces, company tool rooms and magazines
	- internal pedestrian traffic	
	- no abrasive stress	
	- no impact or shock loads	
C 40	- distribution of light goods	- Manufacturing, assembly and storage halls for light and elastic goods - Workshops for light, non-sharp pieces
	- light vehicle traffic with soft tyres up to 10 km/h	
	- low pedestrian traffic	
	- low impact and shock loads	
C 50	- distribution light goods	- Production and assembly halls for light goods - Warehouses for medium-weight goods - Workshops for light items of all kinds
	- medium-duty traffic of vehicles with soft tyres up to 20 km/h	
	- light forklift traffic with soft tyres up to 10 km/h	
	- moderate pedestrian traffic	
	- setting down medium-weight goods	
	- rolling of light, non-sharp goods	
	- moderate impact and shock loads	

Please note

Suitable paint coatings and coating systems can be applied to protect against abrasion, mineral oils, etc. and to facilitate cleaning.

Due to the wide variety of systems available on the market, it is not possible to make a definitive statement regarding their suitability. We therefore recommend consulting the manufacturer or carrying out a suitability and compatibility test.

ARDEX A 46 Stable Exterior Filler is suitable for filling holes and depressions, levelling out severe unevenness and smoothing transitions.

Note

The information in our safety data sheets must be observed.
For commercial use only!

Zusatzinformation

Handle with care during processing: avoid dust formation and release into the environment.

Dispose of the container and its contents in a sealed state in accordance with applicable local/regional/national/international regulations.

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Technical data according to ARDEX quality standard

Mixing ratio approx.	Component A 5.5 l Water 1 Part water	Component B 25 kg powder 3.25 RT powder
Material requirements	1.6 kg powder per m ² and mm	
Bulk density approx.	1,40 kg/l	
Fresh weight approx.	1,90 kg/l	

Application properties

Processing time approx.	30 - 45 Minute(s)		
Can be walked on after approx.	2 - 3 Hour(s)		
Ready for laying after approx.	Covering Paint coatings, coatings Paint coatings, coatings Paint coatings, coatings Moisture-resistant coatings	Thickness 5 mm 10 mm 20 mm	Duration 2 Days 5 Days 7 Days 1 Day
Application Ambient conditions	+20°C		

Mechanical properties

Adhesive tensile strength approx.	Bond strength 1.5 N/mm ² 1.7 N/mm ²	Time After 3 days After 7 days
Bending tensile strength approx.	Time After 1 day After 7 days After 28 days	Bending tensile strength approx. 2 N/mm ² 4 N/mm ² 7 N/mm ²
Compressive strength approx.	Time After 1 day After 7 days After 28 days	Compressive strength of approx. 8 N/mm ² 20 N/mm ² 30 N/mm ²

Product details

Suitable for underfloor heating	Yes
Chair castor suitability	Yes
Frost/de-icing salt resistance	Yes
Slip resistance according to DIN 51130	R 12
Labelling according to GHS/CLP	See relevant safety data sheet
Labelling according to ADR	See relevant safety data sheet
GISCODE	ZP1 = cementitious product, low chromate content
Packaging	Sacks containing 25 kg net
Storage	Can be stored in dry rooms for approx. 12 months in the original sealed container.

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CE	
0956	
ARDEX Baustoff GmbH Hürmer Straße 40 A-3382 Loosdorf Austria	
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53145	
EN 13813:2002	
ARDEX K 301	
Cementitious screed for internal and external use	
EN13813:CT-C30-F7-A22; Polymer-modified	
Reaction to fire:	A1 _{fl}
Release of corrosive substances:	CT
Water permeability:	NPD
Water vapour permeability:	NPD
Compressive strength:	C30
Flexural strength:	F7
Wear resistance according to Böhme:	A22
Sound insulation:	NPD
Sound absorption:	NPD
Thermal resistance:	NPD
Chemical resistance:	NPD