



COE: Witten  
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# ARDEX K 301

## Exterior Levelling compound

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Cement-based

Levelling and smoothing of floor areas exterior and interior

Produces wearing surfaces in commercial, industrial, parking areas access galleries, courtyards and access paths and garages

Levellig of floors in permanent wet areas, balconies, terraces prior to the installation of tiles and coatings.

For thickness from 2 – 20 mm

Self-smoothing

Pumpable

Early trafficable

Early strength

Crack free



Reg. Nr. 37344

Hersteller  
mit zertifiziertem QM-  
System nach DIN EN  
ISO 9001

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ARDEX GMBH

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### Areas of application:

Internal external floor.

Filling, smoothing and levelling of concrete and cement screeds prior to tiling and coating and all other suitable substrates.

Wearing surfaces in storage areas, workshops, light industrial areas, domestic garages, parking decks courtyards and access paths.

For subsequent tiling and natural stones, paints and coatings.

### Description:

Grey powder with special cements, easily dispersible resin powders and selected fillers and Special additives.

### Substrate preparation:

The substrate can be dry or moist (**without ponding water**), but must be firm load bearing sound free from dust and release agents and must be frost-resistant.

Loose particles should be removed mechanically by shot blasting, abrading with a diamond grinder dense concrete surfaces (sintered) have to be roughened.

In exterior areas and moist interior areas, absorbent substrates should be primed with ARDEX P 51 mixed in the ratio of 1 : 7 (P51 to water) avoiding ponding. Very dense, smooth impervious surfaces should be primed with Ardex EP 2000 multi functional Epoxy Resin which should than be sprinkled with sand.

In dry internal areas onto non absorbent substrates ARDEX P 51 in the ratio 1 : 0,5 or ARDEX EP 2000 sprinkled with sand should be used as primer.

If it is necessary to apply a second layer of ARDEX K 301 over an existing layer, the existing layer must be ground with a single-wheel grinding machine using a 16 and a 36 sandpaper. Subsequent priming must than be carried out using ARDEX P 51 in the ratio 1:1 in interior areas or ARDEX P 51 in the ratio 1:7 in exterior areas.

### Application:

Clear water is put into a clean mixing container and whilst stirring vigorously as much powder is mixed in, to give a lump free mortar.

Approximately 5 liters of water are needed to mix 25 kg of Ardex K 301. At +18-20 °C the

mortar workable for approx. 30 – 45 minutes. Lower temperatures lengthen the working time, higher temperatures shorten it.

The mortar is easy spreadable and does not leave a wet edge.

ARDEX K 301 has to be applied at a minimum thickness of 2 mm to max. 20 mm.

If gradient levelling has to be done the water content has to be reduced by 2 %.

### Larger sites:

To pump the mortar all suitable pumps such as auger, piston and continuously working pumps with a capacity from 20 to 40 liters of mortar per minute can be used.

If the pumps are not in operation over 30 minutes the hose has to be cleaned.

Apply ARDEX K 301 at temperatures above + 5°C. **The finished surface has to be Protected against direct sunlight and draught which could lead to a rapid drying of the surface.**

In doubt apply trial areas.

### Installation of wearing surfaces for parking areas and light industrial areas:

The minimum floor requirement for the substrate (screed) should be C30 – C50 or concrete B25 to B35 the substrate should be withstand the above mentioned readings.

In order to remove impurities, release agents, weak upper zones and effects of other barrier materials, the substrate must be shot-blasted or ground. The so prepared areas are to be primed with ARDEX P 51, 1:1 diluted with water. In special cases a priming with ARDEX EP 2000 with additional sprinkling of sand could be necessary.

ARDEX K 301 is suitable for loads as determined for cement screeds C30 – C50 no draggle load acc. to the AGI-working sheet A12 "industrial floors" part 1.

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Examples for classification of use and application areas of strength classes

Strength class	Use	Application area
C30	low traffic of light vehicles with soft wheels up to 10 km/h foot traffic no drag use no impact stress	storage areas for light and elastic goods (wood, paper rubber, soft synthetic materials etc. small work halls, tool magazine
C40	light traffic of vehicles with soft wheels up to 10 km/h low foot traffic, low impact stress and setting down of pallets	manufacture, mounting and storage areas for light and elastic goods Working areas for goods without sharp edges
C50	medium traffic of vehicles with soft wheels up to 20 km/h. light forklift traffic, setting down of medium weight goods, rolling light goods without sharp edges, moderate use of impact stress	manufacturing and installation areas for light goods, storage for medium weight goods, and workshops for light good of any nature

### Pay attention to the following:

To protect the surface against dirt, dust, abrasion and mineral oils etc. and to clean the areas easier suitable coatings can be applied.

Due to the large amount of available coating systems on the market we can not give a binding recommendation. We recommend to get in contact with the suppliers and To prepare trial areas.

For filling cavities, holes, unevenness, grooves, etc we recommend to use ARDEX A 46 exterior filling compound.

### Note:

Contains cement, Reacts alkaline – so protect skin and eyes, In case of contact wash thoroughly with water. In case of eye contact also consult a doctor.  
Wear appropriate protection gear such as safety glasses.  
Physiologically and ecologically save when in cured state.

Giscode ZP1 = product contains cement, low chromate content.

### Technical data

#### According to ARDEX quality standards:

<b>Mixing ratio::</b>	approx. 5 l water 25 kg powder is equivalent to approx.1 vol. of water : 3,5 vol. of powder
<b>Bulk density:</b>	approx. 1,4 kg/l
<b>Fresh mortar</b>	approx. 1,9 kg/l
<b>Weight:</b>	
<b>Material requirement</b>	approx. 1,6 kg of powder per m <sup>2</sup> and mm
<b>Working time:</b>	approx. 30 – 45 minutes
<b>Walkability:</b>	approx. 2-3 hours
<b>Ready to receive</b>	approx. 1 day (not sensitive to moisture, 20 °C)
<b>Floorcoverings</b>	Coating at 20 °: after drying
	up to 5 mm approx. 2 days up to 10 mm approx. 5 days up to 20 mm approx. 7 days up to 30 mm approx. 10 days
<b>compressive strength:</b>	after 1 day approx. 8 N/mm <sup>2</sup> after 7 days approx. 20 N/mm <sup>2</sup> after 28 days approx. 30 N/mm
<b>Tensile bending strength:</b>	after 1 day approx. 2,0 N/mm <sup>2</sup> after 7 days approx. 4,0 N/mm <sup>2</sup> after 28 days approx. 7,0 N/mm <sup>2</sup>
<b>Adhesionstrength:</b>	after 3 days approx. 1,5 N/mm <sup>2</sup> after 7 days approx. 1,7 N/mm
<b>PH Value:</b>	Fresh mortar approx. 12
<b>Frost-Thawsalt resistant:</b>	Yes
<b>Resistant to chair castors:</b>	Yes
<b>Suited for floorheating:</b>	Yes
<b>Packaging:</b>	bags with 25 kg net
<b>Storage:</b>	can be stored for approx. 12 month in dry rooms in originally sealed packaging

We assume the warranty for the perfect quality of our products. Our handling recommendations are based on trials and practical experience; they can, however, only be regarded as general advice without a quality warranty, as we have not influence on work site conditions and the execution of the work.

Country specific recommendations, depending on local standards, codes of practice, building regulations or industry guidelines, may effect specific installation recommendations

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