



ARDEX K 80

Thin screed

- For producing wear-resistant layers in commercial and industrial areas
- For coating thicknesses from 5 mm to 50 mm
- Self-levelling
- Crack-free even in thick layers
- Pumpable
- Quickly accessible and quickly loadable

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



Area of application

For indoor use, floors.

For levelling and smoothing concrete floors, cement screeds, calcium sulphate screeds, tile and slab coverings and other load-bearing substrates.

For creating level laying surfaces for tiles, natural stone and other floor coverings.

As a wear layer in cellars, hobby and play rooms, hallways, attics, storage rooms, warehouses and storage areas.

For producing wear layers in commercial and industrial areas.

Art

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

When mixed with water, it forms a smooth, self-levelling mortar that can be applied with a trowel or pump, can be worked for approx. 30 minutes and is walkable after approx. 2 hours.

The mortar hardens through hydration and drying to form a low tension mass that virtually eliminates the possibility of cracking.

With ARDURAPID effect, which causes rapid hydraulic hardening and complete crystalline water binding.

Preparation of the surface

The substrate must comply with the requirements of ÖNORM B 5236 Planning and execution of floor covering and wood flooring work. In particular, it must be level, permanently dry, solid, load-bearing, free of release agents and cracks, and resistant to tension and pressure, or it must be prepared accordingly.

Cracks and joints must be filled properly and professionally, e.g. with ARDEX P 10 SR 2-C Fast repair resin or ARDEX FB Pourable resin.

Primers must be used in accordance with the table in the ARDEX P 51 Primer and bonding agent technical data sheet.

On smooth and dense substrates, Ardex EP 2000 Multifunctional Epoxy Resin with quartz sand sprinkling should be used as a bonding agent.

When laying dense floor coverings, the substructure must be permanently dry.

Processing

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

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Approximately 4.75–5 litres of water are required to mix 25 kg of ARDEX K 80 powder.

The mortar can be worked for approx. 30 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.

Mortar application

ARDEX K 80 mortar can be applied with a spacer distributor squeegee and smoothed with a large-area handled leveller or filling trowel.

If smoothing filler is needed so that coverings can be laid, use ARDEX K 15 smoothing and levelling compound or ARDEX K 39 reactivating floor levelling compound, after priming with ARDEX P 51 bonding and priming dispersion diluted 1 : 3 with water.

Layer thicknesses

ARDEX K 80 mortar can be applied in layers up to 50 mm thick on concrete floors, cement screeds and smooth, dense substrates that have been treated with ARDEX EP 2000 bonding agent. For layers thicker than 10 mm, the mortar can be extended with sand.

On calcium sulphate self-levelling screeds primed with ARDEX P 51, the mortar can be applied unmixed in layers up to 10 mm thick. For layers over 10 mm and up to a maximum of 20 mm, the mortar must be mixed with sand.

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. Areas treated in this way must be primed with ARDEX P 51 diluted 1:1 with water.

In certain cases, priming with ARDEX EP 2000 Multifunctional Epoxy Resin followed by sanding may be necessary. ARDEX K 80 is suitable for stresses such as those assigned to cement screeds of strength classes C 30 to C 50 – without abrasive stress – in accordance with AGI worksheet A 12 "Industrial floors", part 1.

Examples of the classification of stresses and areas of application to strength classes based on AGI worksheet A 12:

Strength class	Stress	Areas of application
C 30	- low traffic 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 distribution and magazines
	- internal pedestrian traffic	
	- no abrasive stress	
	- no impact or shock loads	
C 40	- light vehicle traffic with soft tyres up to 10 km/h	- Production, assembly and storage halls for light and elastic goods - Workshops for light, non-sharp pieces
	- low pedestrian traffic	
	- low impact and shock loads	
	- distribution light goods	
C 50	- medium-duty vehicle traffic with soft tyres up to 20 km/h	- Production and assembly halls for light goods - Warehouses for medium-weight goods - Workshops for light items of all kinds
	- 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 coating systems can be used to protect against abrasion, de-icing salts, mineral oils and moisture. These systems should be permeable to diffusion on surfaces without a basement. ARDEX K 80 cannot be used outdoors or in permanently wet areas.

If in doubt, carry out a test on a small area.

Note

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

Additional information

Take care when handling: avoid the formation of dust and release into the environment.

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

Technical data according to ARDEX quality standard

	Component A	Component B
Mixing ratio approx.	4.75 - 5 l water 1 Part water	25 kg powder 4 RT powder
Material requirements	1.65 kg powder per m ² and mm	
Bulk density approx.	1,30 kg/l	
Fresh weight approx.	2,00 kg/l	

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Application properties

Processing time approx. 30 Minute(s)

Can be walked on after approx. 2 Hour(s)

Ready for laying after approx.	Covering	Thickness	Duration
	Permeable to diffusion coatings		1 Day
	Diffusion-tight coatings	10 mm	1 Day
	Diffusion-tight coatings	30 mm	3 Days
	Diffusion-tight coatings	50 mm	7 Days

Application Ambient conditions +20°C

Mechanical properties

Bending tensile strength approx.	Time	Bending tensile strength approx.
	After 1 day	3.8 N/mm ²
	After 7 days	5.8 N/mm ²
	After 28 days	9 N/mm ²

Compressive strength approx.	Time	Compressive strength of approx.
	After 1 day	14 N/mm ²
	After 7 days	20 N/mm ²
	After 28 days	30 N/mm ²

Ball pressure hardness approx.	Hardness	Time
	60 N/mm ²	After 1 day
	65 N/mm ²	After 7 days
	90 N/mm ²	After 28 days

Product details

Suitable for underfloor heating Yes

Chair castor suitability Yes

Labelling according to GHS/CLP See relevant safety data sheet

Labelling according to ADR See relevant safety data sheet

EMICODE EC 1 = very low emissions

Packaging Bags containing 25 kg net

Storage Can be stored in dry rooms for approx. 12 months in the original sealed container.

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ARDEX Baustoff GmbH Hürmer Straße 40 A-3382 Loosdorf Austria	
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53195	
EN 13813:2002	
ARDEX K 80 Cementitious screed for internal use EN 13813:CT-C30-F10-AR0.5; Polymer-modified	
Reaction to fire:	A2 _n s1
Release of corrosive substances:	CT
Water permeability:	NPD
Water vapour permeability:	NPD
Compressive strength:	C30
Flexural strength:	F10
Wear resistance according to BCA:	AR0.5
Sound insulation:	NPD
Sound absorption:	NPD
Thermal resistance:	NPD
Chemical resistance:	NPD