



# ARDEX A 35

## Rapid - Hardening Cement

### Advantages

- With ARDURAPID-Effect
- With ideal application properties
- Walk ability after 3 hours
- Subsequent application may proceed after 24 hours



### Description

Manufacture of cement screeds with the special cement ARDEX A35, which has been improved with synthetic resin and is mixed with sand of grain size 0-8 mm and water to give an earth-moist to soft-moldable screed mortar. ARDEX A35 cannot be used outdoors or in permanently wet areas.

### Areas of Application

#### ARDEX A35 cement screed flooring

Can be walked upon after only 3 hours are ready to receive flooring covering after 1 day when laid as a floating floor on a separating foil, achieve the minimum strengths specified in din 18 560 after 1 day. Din 18 560 and Din 18 353, the general guidelines for screed- floating, on separating foil or bonded screed are applicable when implementing screeds. In so doing, attention must be paid to the rapid hardening of the ARDEX A35 screed mortar.

For indoors only.

#### Application on a floor heating system

When using ARDEX A35 on a hot-water floor heating system the waiting time until further floor coverings are possible can be reduced to less than 2 weeks, as ARDEX A35 has already achieved its own residual moisture after one day.

Three days after application warm-up heating begins at a flow temperature of +25°C, which must be maintained for 3 days.

Then the maximum flow temperature is set and maintained for a further 4 days. In so doing, draughts must be avoided.

Surface temperature of the heated screeds should not sink below +15°C when laying floor coverings.

ARDEX A35 can be thermally loaded up to +65°C.

### Mixing

Mixing ratio 1:4

25 kg ARDEX A35 (1 original sack) : 100 kg sand of grain size 0-8 mm : 6-11 liters water (depending on the moisture of the sand)

Mixing ratio 1:5

25 kg ARDEX A35 (1 original sack) : 125 kg sand of grain size 0-8mm : 6-11 liters water (depending on the moisture of the sand)

Standard mixing machine are used to mix the mortar. Load-bearing capacity and the ability to receive floor coverings are achieved after 1 day if aggregate sand of grain size 0-8 according to din 4226 with constant granulometric composition in the favorable to usable range between the mortar is not mixed with excessive amounts of water. The total amount of water per mortar mixture, in other words the moisture of the sand and the amount of mixing water, should not exceed 11 and 22 l respectively. Do not use any screed admixtures such as compound oils, etc. Do not mix with other cements.

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### Installation

The working time of the ARDURAPID screed mortar is approximately 1 hour. Mixing, application, leveling and smoothing must succeed each other at a brisk pace. The surfaces should only be of such a size that they can be completed within this working time. Higher temperatures shorten, lower ones lengthen working and hardening time.

Screeds connections or partial surfaces are anchored to each other with round reinforcing steel bars. Dummy and expansion joints must be provided and implemented as in conventional cement screeds.

With bonded screeds prime the concrete substrate with ARDEX P51 or ARDEX E100. to make the slurry substrate ARDEX A35 is mixed with sand at a mixing ratio of 1:1, in water at 1:1. the slurry substrate must be applied to the primed substrate wet-to-wet and brushed in well.

The screed mortar is then applied to the still damp slurry substrate. If in doubt, carry out a test.

ARDEX A35 screed mortar must be worked at temperatures above +5°C.

### Application Thickness

Depending on the compressibility of the insulating layer a nominal thickness of at least 35 mm is applicable for cement screed on insulating layer for evenly spread workloads in domestic construction up to 1.5kn/m<sup>2</sup>. The nominal screed thickness for cement screed on an insulating layer is also at least 35 mm; for cement bonded screed at least 10 mm.

### Curing & Drying Times

Walk ability

Allow approximately 3 hours at 20°C before foot traffic.

#### Application of Floor Coverings

ARDEX A35 is suited for immediate laying of floor coverings after only 3 hours when the filling is done with ARDEX A35 flexible leveling compound. ARDEX A35 can be fully used as early as after 1 day.

Filling and leveling work can also be performed as with floor covering – even for parquet or tiles and slabs. With bonded screeds, which were applied with a slurry on the concrete bottom, it is necessary to wait for the entire construction to dry prior to laying floor coverings.

#### Readiness to Receive Floor Coverings

To check whether the surface is ready to receive floor coverings – which is normally the case after one day when ARDEX A35 has been applied according to the rules – one has to carry out moisture tests.

Because of the specific characteristics and composition of the ARDEX A35, its moisture content cannot be assessed by using electrical measuring appliances. One has to use a cm (carbide method) appliance.

The gauge pressure must be read about 1 minute after destroying the ampoule, if one waits for a longer period of time the chemically bonded water would also be included,

which is of no importance for the following floor covering.

The Readiness to Receive Floor Coverings is Given When the Following Moisture Contents are Achieved

ARDEX A35 cement screed

Floor covering

≤2.0% stones and ceramic tiles in thin bed layers

≤2.0% stones and ceramic tiles in mortar bed on

separating foil

≤3.0% stones and ceramic tiles in thick bed layers

≤3.0% vapor permeable textile floor coverings

≤2.5% vapor sealing textile floor coverings

≤2.0% flexible floor coverings, like PVC, rubber, linoleum

≤2.0% parquet

To check on the measurement the gauge pressure is read again after 20 minutes, as it is the case for normal cement screeds. One deducts the approx.1.5% from the moisture content assessed.

### Consumption

Approx.3.7 kg powder per m<sup>2</sup> and cm at a mixing ratio of 1:4 and approx.

3.1 kg powder per m<sup>2</sup> and cm at a mixing ratio of 1:5.

### Packaging

25kg per bag

### Storage & Shelf Life

Can be stored for approximately 12 months in dry rooms in originally sealed packaging.

### Technical Data

Freshly mixed	approx.2.0 kg/l	
Working time(+20°C)	approx.1 hour	
Suited for floor heating	yes	
Compressive strength	1:4	1:5
After 1 day	25 MPa	20 MPa
After 7 days	35 MPa	30 MPa
After 28 days	45 MPa	35 MPa
Flexural strength	1:4	1:5
After 1 day	5 MPa	4 MPa
After 7 days	6 MPa	5 MPa
After 28 days	7 MPa	6 MPa

Corrosion tendency: contains no ingredients with a corrosive influence on steel

### Health & Safety

This product is non-toxic but avoid contact with skin and eyes. In case of eye contact, rinse immediately with plenty of clean water and seek medical attention. Wear appropriate gloves and eye protection during use. Keep out of reach of children. Avoid dust generation during mixing; if swallowed without vomiting, rinse mouth with water, then drink as much water as possible and seek medical attention. For more information on material safety, please refer to the latest Material Safety Data Sheet (MSDS).