#### Technical Datasheet Smoothing & Levelling Compounds



# ARDEXA440

### **High Strength Filling & Smoothing Mortar**

- For finisging the surface from 0 up to 20mm thickness.
- Ideal for filling, repairing and finishing concrete substrates
- Rapid hardening and drying
- Easy application



The ARDURAPID technology of ARDEX A 440 (Also known as ARDEX A 45 FEIN) completely binds the water used for mixing. Since the mortar doesn't release any water it quickly gets ready for coverings without any damage.

#### DESCRIPTION

ARDEX A 440 is a rapid setting and drying, slump free repairing, filling and smoothing mortar for internal walls and floors. The mixed mortar can be trafficked and gets ready for coverings in only 60 minutes.

ARDEX A 440 is multi-purpose smoothing mortar that allows finishing/ smoothing in only 10-15 minutes by slightly wetting the surface.

#### SUBSTRATE PREPARATION

The substrate must be hardened, sound and free of dust, grease, oil and other surface contamination. Worn or trafficked surfaces should be abraded (wire brush, angle grinder etc.) to remove contamination and expose a clean surface to ensure good adhesion.

The substrate must be permanently dry if will be covered with parquets, PVC or similiar coverings.

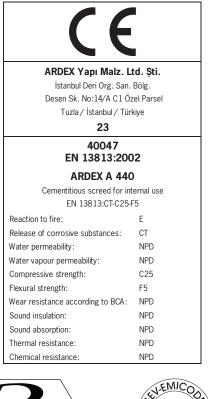
ARDEX A 440 can be used on almost all non-slip and water-resistant surfaces. Calcium sulphate screeds require priming with ARDEX P51 prior to the application. Mix 1 part ARDEX P51 with 3 parts water and apply evenly using a bristle broom, or use ARDEX P51 MIX Ready for use without any dilution.

Non-absorbent substrates like glazed ceramic tiles, terrazo etc. must be primed using undiluted ARDEX P 51 or ARDEX P 82.

Non-sandblasted asphalt surfaces of paint like coatings must be primed with ARDEX P 21.

Water soluble adhesive residudes must be completely removed from the surface if there are any.







## ARDEXA 440 High Strength Filling & Smoothing Mortar

#### **MIXING**

ARDEX A 440 powder is added to the required amount of clean water in a clean mixing container and mixed thoroughly to obtain a lump free and slump resistant mortar. The mix proportions are:

25 kg ARDEX 440 powder to 6,5 - 7,5 litres of water, i.e. approx. 3 parts powder to 1 part water by volume.

Avoid using too much water. The mixed mortar has a working time of 10 to 15 minutes at 20°C, this time being extended at lower, and reduced at higher temperatures.

#### **APPLICATION**

#### Repair

Apply the mortar with a trowel to holes, cracks, damaged and worn areas, ensuring that the mortar "wets" the surface by trowelling in firmly, leaving the repair proud. After about 15 minutes trim off excess and finish off with a wet trowel, sponge or sponge float to obtain a smooth surface. As soon as the ARDEX A 440 has hardened, the surface of the floor, stairtread etc., can be levelled, if necessary, with the appropriate ARDEX levelling and smoothing compound.

#### **Smoothing and Refacing**

Apply the mixed mortar with a trowel to the required thickness. The material may be finished with a wet trowel after 15 to 20 minutes to provide a finish suitable for direct application of floorcoverings. Apply at temperatures above 5°C.

#### THICKNESS

The ARDEX A 440 can be applied up to 20mm neat. Don't go over 5mm if there are old asphalt screed or adhesive residues on the substrate.

A minimum thickness of 2 mm is required for parquet applications.

For non-absorbent and painted surfaces ensure a minimum thickness of 1.5mm.

For thicknesses over 20mm, and up to 50mm, for holes etc., an equal volume of coarse screed sand must be used. For localised thicknesses exceeding 20mm e.g. filling deep holes and wide cracks, incorporate aggregate in the ARDEX A 45 Mortar as defined in the following table.

Well washed and dried	Grain size	Mixing ratio by volume	
aggregate		Mortar	Sand
For 20 - 30 mm, quarz sand	0 - 4 mm	1,0 part	0,3 part
For 30 - 50 mm, screed sand	0 - 8 mm	1,0 part	1,0 part

#### NOTES

ARDEX A 440 gets walkable in approx. 60 minutes at +20°C. Succeeding applications can be made after its gets walkable.

We recommended priming the surface with ARDEX P 51 before installing any coverings over it.

Protect the surface from direct sunlight and wind until it completely dries.

Do not apply ARDEX A 440 in exterios or permanently wet interiors. For this purpose ARDEX recommends the use of ARDEX A 46.

Make trials in case of doubt, and consult to ARDEX Technical Department if required.

#### PRECAUTIONS

ARDEX A 440 is considered non-hazardous in normal usage.

The presence of cement in the product gives an alkaline mortar which may cause some local irritation if prolonged contact with the skin takes place. Care should be taken to avoid inhalation or ingestion of dust and prevent contact with the eyes. For further information, consult the relevant health and safety data sheet

#### DISPOSAL

Don't let it enter to drains, watercourses or soil. The packaging is recycable when it is completely empited. Material residues should be collected, mixed with water and dispsed as construction waste after hardening. Not harmfull to health or environment it is hardened form.

#### TECHNICAL DATA ACCORDING TO ARDEX QUALITY STANDARDS

Mixing ratio:	6,50 - 7,50 liters of water per 25 kg bag	
Bulk density:	approx. 1,3 kg/L	
Fresh weight of mortar:	approx. 1,9 kg/L	
Consumption:	approx. 1,25 kg/m <sup>2</sup> -mm	
Working time *:	approx. 15 minutes	
Walkability *:	approx. 60 minutes	
Subsequent Processing *:	approx. 60 minutes	
Ready to accept coverings *:	For 0-10 mm thickness 60 mins. For 10-20 mm thickness 90 mins. For 20-50 mm thickness 180 mins.	

\*Values calculated under lab conditions (+20°C room temperature 65% relative humidty). Weather and environmental conditions may affect the values. Higher temperatures and low humidty decreases the time required, whereas lower tetemperatures and high humidty increases it..

Compressive strength:	After 28 days approx. 25 N/mm <sup>2</sup>	
Flexural strength:	After 28 days approx. 5,0 N/mm <sup>2</sup>	
Resistant to chair castors:	Yes (According to EN 12529)	
Suitable for underfloor heating:	Yes	
EMICODE:	EC 1 <sup>PLUS</sup> - Very low emissions	
GHS/CLP classification:	GHS05, Corrosive	
GGVSEV/ADR classification:	None	
Packaging:	25 kg paper bag	
Storage and Shelf life	Can be stored up to 12 months in its original unopened package, in a cool dry area. Do not expose bags	

to direct sunlight.

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The information supplied in our literature or given by our employees is based upon extensive experience and, together with that supplied by our agents or distributors, is given in good faith in order to help you. Our Company policy is one of continuous Research and Development; we therefore reserve the right to update this information at any time without prior notice. We also guarantee the consistent high quality of our products; however, as we have no control over site conditions or the execution of the work, we accept no liability for any loss or damage which may arise as a result thereof. Country specific recommendations, depending on local standards, codes of practice, building regulations or industry guidelines, may affect specific installation recommendations.