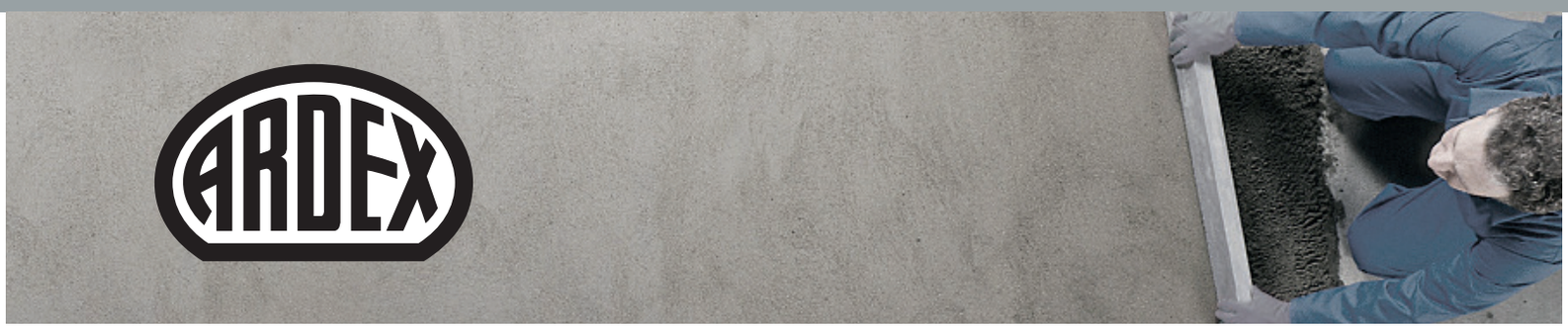

ARDEX A 29

Rapid Hardening Cement for Internal and External Screeds

- 90 minute working time
- Rapid hardening, walkable after approximately 8 hours
- Install ceramic tiles in as little as 24 hours and natural stone after 7 days
- Install resilient and wood floor finishes in as little as 7 days
- Apply as a bonded, unbonded or floating screed
- Can be used with underfloor heating systems
- Can be pumped for fast application
- For internal and external use

DESCRIPTION

ARDEX A 29 is a special cement for producing a rapid hardening floor screed for internal and external use which allows ceramic tiles to be fixed in as little as 24 hours, and natural stone and resilient floor coverings in as little as 7 days.

USE

ARDEX A 29 is used to produce bonded, unbonded and floating screeds in internal or external locations. A 1:7 mix is suitable for mostnormal screeding situations. An ARDEX A 29 Screed passes the BRE Screed (ISCR) after 24 hours (tested on 50mm unbonded at 20°C).

THICKNESS

ARDEX A 29 should be applied at the conventional thicknesses for normal cement/sand screeds i.e. Minimum 20mm at 1:5 ratio and minimum 25mm at 1:7 ratio, (design thickness up to 40mm) for bonded screeds. Minimum 50mm for unbonded screeds. Minimum 75mm for floating screeds. 65mm in lightly loaded (domestic) locations.

SUBSTRATE PREPARATION

Bonded Screeds

An ARDEX A 29 Screed can be laid as a bonded screed by applying either ARDEX A 18 Screed Bonding Cement or an ARDEX A 29 grouting slurry to a dry and suitably prepared concrete base.

To prepare the grouting slurry for use in internal dry locations, dilute ARDEX P 51 Primer and Bonding Agent with an equal volume of water. Mix the ARDEX A 29 cement with an equal volume of screeding sand and then mix with the diluted bonding agent, to produce a grouting slurry of creamy consistency. The ARDEX A 29 Screed

CE

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24

40054
EN 13813:2002

40054 ARDEX A 29 Screed Mix
EN 13813:CT-C30-F4

Cementitious screed for indoor and outdoor use

Reaction to fire	: $A1_{fl}$
Release of corrosive substances	: CT
Water permeability	: NPD
Water vapour permeability	: NPD
Compressive strength	: C30
Flexural strength	: F4
Wear resistance according to Böhme	: NPD
Sound insulation	: NPD
Sound absorption	: NPD
Thermal resistance	: NPD
Chemical resistance	: NPD

GEV-EMICODE EC 1 PLUS very low emission

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ARDEX Turkey is a subsidiary of the international ARDEX Group.

ARDEX A 29

Rapid Hardening Cement for Internal and External Screeds

Mortar must be compacted onto the base fresh in fresh, whilst the grouting slurry is still wet and workable.

For external locations, wet areas and damp concrete, use ARDEX A 18 Screed Bonding Cement or prepare the ARDEX A 29 grouting slurry as above using ARDEX E 100 Additive for Bonding/Slurry Grouts diluted with an equal volume of water.

NOT: The concrete surface must be prepared using suitable mechanised equipment to expose the coarse aggregate and be free from all barriers to adhesion.

Unbonded Screeds

For unbonded screeds, it is good practice to ensure that the concrete slab surface is reasonably true and flat prior to applying a proprietary damp proof/slip membrane.

Floating Screeds

For floating screeds, place a suitable separating layer or damp proof membrane over the insulation before applying the screed mortar.

Not: An ARDEX A 29 Screed is suitable for direct application to concrete bases which are insufficiently dry (above 75% RH), direct to ground or ground supported without an effective damp proof membrane, as well as areas which are subject to rising damp. It is however recommended for projects installing resilient floor finishes such as carpet, vinyl, rubber & wood that the use of a damp-proof membrane is incorporated as follows to protect the finish from moisture in the underlying substrate. For unbonded and floating screeds, install a proprietary damp proof/ slip membrane before laying the screed; for bonded screeds, it is recommended screeding is followed by an application of a damp proof membrane, when the screed is walkable after approximately 8 hours.

MIX PROPORTIONS

Mix a maximum of 1 part by weight of ARDEX A 29 Cement to 7 parts by weight screeding sand. The sand used should be good quality, well-graded 0/8mm sand. BS 8204-1:2003 recommends that screeding sands are classified to BS EN 13139. Alternatively, a 0/8mm fine aggregate with fines category 1 with range MP should be used. Experience has shown that sand complying with the following grading table provides a workable screeding mortar with good compactability.

Sieve size (BS 410)	Proportion by dry mass passing nominal mesh size.
10.00 mm	%100
5.00 mm	%90 - %100
2.36 mm	%65 - %97
1.18 mm	%40 - %90
600 µm	%24 - %75
300 µm	%8 - %40
150 µm	%0 - %10
70 µm	%0 - %3

Where the available screeding sand is good quality, but does not have the required coarse fraction, a nominal 6mm aggregate can be mixed with the screeding sand. The ratio of screeding sand to 6mm aggregate will depend upon the actual gradings involved and the workability of the mix, however approximately 10% of 6mm aggregate by mass of aggregate can be used as a starting guide. Where the screed thickness is consistently greater than 50mm, a fine concrete mix can be used by partially replacing some of the screeding sand with a suitable amount of 8mm or 10mm single sized aggregate. The optimum proportions of cement to sand, or to sand plus aggregate, should be determined within the mix proportions of 1 part ARDEX A 29 Cement with 7 parts by weight of sand, or sand plus aggregate, to obtain good workability and achieve the required soundness category. The sand, fine or coarse aggregates used should not contain lime or other materials that could be detrimental to the workability of the screed mortar during application, or the performance of the set and hardened screed. Do not add any other cement or lime materials to ARDEX A 29 mixes.

WATER

Add sufficient water to obtain a workable mix. With an evenly graded, fairly dry sand, the water requirement will normally be up to a maximum of 11 litres per 20kg bag of ARDEX A 29 (including the water contained in the sand/ aggregate).

MIXING

When a sample of mixed mortar is squeezed in the hand the sample should retain its shape and not crumble, the hand being left slightly moist. When a sample is compacted on the base, no film of water should form on the surface. Mix to a normal screed mortar consistency. If a mixer is used it should be a pan, trough or other forced action type. Normal 'free-fall' mixers are not suitable for mixing semi-dry screed mortars. Use clean equipment and do not use other cements, lime or screed additives etc., in the mix.

APPLICATION

When an ARDEX A 29 screed has been laid on a hot water floor system, 7 days should be allowed to elapse before heating the water up to a temperature of 25°C and maintained for a further 3 days. The maximum floor temperature should then be used and maintained for a further 4 days. In doing so draughts must be avoided. The floor should then be allowed to cool down to room temperature (above 15°C) before laying floorcoverings.

Application on a floor heating system

ARDEX A 29 sıcak suyla çalışan bir yerden ısıtma sistemi üzerine uygulandığında 7 gün beklenmeli ve daha sonra sıcaklık 25°C'ye kadar çıkartılarak 3 gün beklenmelidir. Sistem sonraki 4 günde azami sıcaklıkta çalıştırılmalıdır. Böyle yaparak ani çekmeler önlenir. Zemin kaplama uygulanmadan önce oda sıcaklığına (15°C üzeri) kadar soğumaya bırakılmalıdır.

SURFACE FINISH

For fixing ceramic tiles and quarry tiles, etc., the screed should be finished with a wood float. Prior to laying thin floorcoverings e.g. vinyl sheet, a very smooth surface may be obtained using and ARDEX Levelling and Smoothing Compound, which should be selected with the final floor finish in mind. Please refer to the relevant ARDEX Technical Datasheet for further information.

Drying Times

A bonded ARDEX A 29 Screed is normally ready to receive ceramic tiles after 24 hours. For unbonded and floating screeds, 7 days drying-time is required, or a moisture reading of <2% by the Carbide method, before fixing ceramic tiles.

Natural stone tiles can be fixed after 7 days. An ARDEX Screed can usually receive resilient and wood floorcoverings after 7 days, or when a moisture reading of <2% by the Carbide method is recorded.

The time taken to harden, and the drying time of the ARDEX A 29 Screed, is determined by screed thickness and ambient conditions on site. Low temperatures will slow down the rate of hardening whilst high temperatures will accelerate hardening, thus reducing the working time.

ARDEX A 29

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Not: High or low relative humidity will slow or accelerate the drying time respectively. Drying times apply to 23°C and 50% relative humidity for screeds up to 50mm thick. The use of a Speedy moisture tester is recommended to determine the moisture content prior to applyingthe appropriate floorcovering. For ultra rapid drying screeds that dry uniformly, irrespective of thickness, consult the ARDEX A 38 or ARDEX A 35 data sheets. Where higher early and late strength development is required, a 1:5 mix may be used. Note the maximum mix water content that should be used, including the moisture in the aggregate, is 11 litres per 20kg bag of ARDEX A 29.

Not: Screeds are not designed as wearing surfaces and the screed surface should be given adequate protection once dry, against damage water ingress, wear and contamination during subsequent building operations. Protective coverings will also minimise any curling and lipping at joints in unbonded screeds.

PUMPING

It is possible to pump ARDEX A 29 screed mixes using a proprietary screed pump. Contact our Technical Services Department for further details.

SAFETY PRECAUTIONS

Product contains cement. Irritates the skin. Can cause severe eye damage. Should not be accessible to children. Gloves and protective goggles must be worn. Care should be taken to avoid contact with eyes, skin, and clothing. IN CASE OF CONTACT WITH EYES: Rinse thoroughly with plenty of water for at least one minute. If wearing contact lenses, remove them immediately and continue rinsing. In case of potential eye damage, seek medical attention immediately. In case of ingestion, seek medical attention immediately and present the product label. Refer to the product safety data sheet for more information.

Dispose of packaging and contents in accordance with local, national, and international regulations.

GISCODE ZP1 = product containing cement, does not contain chromate.

ARDEX Kalite Standartlarına Göre Teknik Özellikler

Mixing ratio	Please review the sections on mixing ratio and water quantity on the previous page.
Fresh mortar weight:	Approximately 2.0 kg/l
Material requirement:	For a 1:7 mixing ratio, approximately 0.27 kg of ARDEX A 29 cement is required per m² and mm.
Working time/Pot Life *	Approximately 90 minutes
Compressive strength	Values after 28 days: With a 1:7 mixing ratio, 30 N/mm² With a 1:5 mixing ratio, 40 N/mm²
Suitable to underfloor heating	Yes
EMICODE:	EC 1 Plus - Very low emission
GHS/CLP classification:	GHS 05 “corrosive” Signal word: Danger
GGVSEV/ADR classification:	None
Packaging:	25 kg paper bag
Storage and shelf life:	Can be stored for approx. 12 months in dry rooms in originally sealed packaging.

Recommended Collomix Mixing Paddle

MKD

MK Serisi

Recommended automated collomix mixer

TMX 1000

POX-S

12.03.2024/EB