



ARDEX EB 2™

Fast Setting Screed Cement

Use for interior and exterior bonded, unbonded and floating screed beds

Ideal as a screed bed for tile and stone installations (TCA Handbook F111-07 & F112-07)

Walk on and install tile in as little as 3 hours

Use with ARDEX Self-Leveling Toppings and Underlayments

Use with the ARDEX MC™ MOISTURE CONTROL SYSTEM

Use with all types of floor coverings

Up to 60 minutes working time

Ideal for high traffic installations

High strength: up to 4300 psi at 1 day; 8400 psi at 28 days

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ARDEX EB 2™

Fast Setting Screed Cement

Description And Usage

ARDEX EB 2 is a fast-setting polymer-modified Portland cement-based hydraulic cement for producing bonded, unbonded or floating screed beds for use with all types of flooring systems. ARDEX EB 2 can be installed on interior and exterior surfaces in three screed mix configurations. Depending on the installation configuration, ARDEX EB 2 can receive tile in as little as 3 hours, and most other floor coverings in just 24 hours depending on the results of a plastic sheet test at 70°F (21°C).

ARDEX EB 2 should be installed over concrete or cementitious surfaces of suitable strength (min. 2500 psi compressive strength, min. 100 pcf density).

ARDEX EB 2 can be used in three service grades, depending on the type of service expected.

Service Grade	Application Type
Industrial	Warehouses, manufacturing, forklift traffic
Commercial	Airports, shopping malls, heavy foot traffic, polished concrete finishes, deep fill for ARDEX Engineered Cements
Light Commercial & Residential	Offices, homes

Mixing Proportions, Sand and Water Ratios For Service Grades

Service Grade	Mix	ARDEX EB 2 by weight	Sand* by weight	Water (including water contained in sand)	Compressive Strength (expected 28 days)
Industrial	1:3	100 lbs. (2 bags)	300 lbs. clean screed sand	Not to exceed 20 qts.	8400 psi
Commercial	1:4	100 lbs. (2 bags)	400 lbs. clean screed sand	Not to exceed 23 qts.	6500 psi
Light Commercial & Residential	1:5	100 lbs. (2 bags)	500 lbs. clean screed sand	Not to exceed 26 qts.	5200 psi

*The sand used should be good quality properly graded masonry sand conforming to ASTM C144 with a grading size of #4 down to 200. The sand should be reasonably dry (less than 1 gallon of water per 90 lb of sand) and should not contain lime or other materials that could be detrimental to the workability of the screed mortar during application or to the performance of the set and hardened screed.

Substrate Preparation

Bonded Screed – For concrete and masonry
All substrates must be solid, thoroughly clean and free of oil, wax, grease, asphalt, existing patching materials, curing and sealing compounds, and any contaminant that might act as a bond breaker. Over watered, frozen or otherwise weak concrete surfaces must also be cleaned down to sound, solid concrete by mechanical methods. Mechanically prepare the substrate down to a sound, solid surface by shot blasting, scarifying or similar method. Acid etching, adhesive removers, solvents and sweeping compounds are not acceptable means of cleaning the substrate. Sanding equipment is not an effective method to prepare the substrate. The concrete must then be mechanically roughened to a minimum ICRI surface profile of CSP 3. Substrate and ambient temperatures must be a minimum of 50°F (10°C) during and for 48 hours after the installation of ARDEX EB 2. For further information, please refer to the ARDEX Substrate Preparation Brochure or call the ARDEX Technical Service Department at 1-888-512-7339.

Unbonded Screeds

For unbonded screeds it is good practice to ensure that the concrete slab surface is reasonably flat prior to installing a vapor retarder. Substrate and ambient temperatures must still be a minimum of 50°F (10°C) during and for 48 hours after the installation of ARDEX EB 2.

Bonding Slurry For Bonded Screeds

For **bonded screeds**, a bonding slurry must be used. To make the bonding slurry, dilute ARDEX P 51™ PRIMER 1:1 with water. Separately, mix 1 part of ARDEX EB 2 powder with 1 part of the masonry sand by volume (#4 down to 200). Using the same part measuring container, combine 1 part of the diluted ARDEX P 51 with all of the blended ARDEX EB 2/sand mix. For best results, use a drill and mixing paddle to mix the slurry. Scrub the bonding slurry into the prepared surface with a stiff bristle brush, and immediately place ARDEX EB 2 mixed to the appropriate service grade onto the slurry while it is still wet. The bonding slurry must be wet when applying the ARDEX EB 2; therefore, only brush an area of a size that can easily be covered before the bonding slurry dries. Do not apply the bonding slurry to an area until you are also ready to install the ARDEX EB 2. If the bonding coat dries before the ARDEX EB 2 is applied, mechanically remove the dried material and reapply. **Unbonded screeds** do not require bonding slurry.

Mixing And Application

Mix the ARDEX EB 2 mortar to a workable and compactible consistency. The mixer used should be of a “forced action” type such as a pan, trough or paddle mixer. Normal “free-fall” mixers are not suitable for mixing screeds. Do not use other cements, screed additives or admixtures in the mix. Apply at temperatures above 50°F (10°C).

The working time of the mixed screed is approximately 60 minutes at 70°F (21°C). Judge the amount of screed mixed so that mixing, placing, compaction and finish troweling are completed within this time. Where a new section is placed against a set and hardened screed, it is recommended that the ARDEX EB 2 bonding slurry be used to join the adjacent areas.

To obtain maximum surface hardness and abrasion resistance for heavy duty/industrial uses, the ARDEX EB 2 screed should be cured by covering with polyethylene sheeting (min. 6 mil.) for at least 24 hours.

Note: Where vinyl and other floorings that require a dry base are to be applied to an ARDEX EB 2 screed, do not cover cure. Allow the screed to dry for 24 hours and then evaluate dryness by using the plastic sheet method described in ASTM D4263.

Thickness Of Application

Application Method	Minimum Thickness	Maximum Thickness
Bonded Screed Bed	3/4"	2"
Unbonded Screed Bed	2"	No Limit
Floating Screed Bed	3"	No Limit

Installation Of Flooring

Ceramic tile can be installed after the ARDEX EB 2 has cured for approximately 3 hours at 70°F (21°C). For all other floor coverings, once the ARDEX EB 2 has cured for a minimum of 24 hours, the installation should be tested for dryness by placing a piece of heavy plastic or a smooth rubber mat down over a 2' x 2' area. After 24 hours, lift the barrier material and inspect for surface darkening. A darkened area indicates excessive moisture is still present, and further drying time is required. Repeat the above test at regular intervals until no darkening is observed.

Notes

The working time of ARDEX EB 2 is approximately 60 minutes at 70°F (21°C). Working time will vary with temperature, humidity and airflow.

ARDEX EB 2 is intended for interior and exterior concrete subject to foot and rubber-wheeled traffic. Suitable for use in fountains, inside swimming pools or any areas that will be permanently submerged in water.

Always install an adequate number of properly located test areas, including the sealer or finish flooring, to determine the suitability of the products for the intended use. As floor coverings and sealers vary, always contact and rely upon the floor covering or sealer manufacturer for specific directives such as maximum allowable moisture content, adhesive selection and intended end use of the product.

Precautions

ARDEX EB 2 contains Portland cement. Avoid eye and skin contact. Mix in a well-ventilated area and avoid breathing powder or dust. KEEP OUT OF REACH OF CHILDREN. Carefully read and follow all cautions and warnings on the product label. For complete safety information, please refer to the Material Safety Data Sheet or visit our website at www.ardex.com.

Never mix with cement or additives other than ARDEX approved products. Observe the basic rules of concrete work. Do not install below 50°F (10°C) surface temperature. Install quickly if substrate is warm and follow warm weather instructions available from the ARDEX Technical Service Department.

All moving joints, such as expansion, isolation and construction joints, must be carried up through the screed bed and finished flooring. **Honor all moving joints!**

Technical Data According To ARDEX Quality Standards

All data at 70°F (21°C).

Mixing Ratio: See Mixing Proportions Table

Coverage: Approximate sq. ft. per 50 lb bag of ARDEX EB 2 mixed with sand			
Thickness	1:3 Mix	1:4 Mix	1:5 Mix
3/4"	28	35	40
1"	21	26	30
1 1/2"	14	17	20
2"	10	13	15
3"	7	9	10
* 1/4" thickness for calculation purposes only. Not a recommended thickness.			
1/4"	85	105	120

Compressive Strength (psi per ASTM C109)			
Dry Time	1:3 Mix	1:4 Mix	1:5 Mix
4 hours	1400	1000	850
1 day	4300	2400	1900
2 days	6400	4200	3200
7 days	7500	5800	4500
28 days	8400	6500	5200

Flexural Strength (psi per ASTM C348):			
Dry Time	1:3 Mix	1:4 Mix	1:5 Mix
4 hours	435	362	290
1 day	798	725	508
2 days	870	798	580
7 days	942	870	652
28 days	1160	1015	942

Working Time: Approx. 60 minutes
Walkable: Approx. 3 hours
Install Floor Covering: *Ceramic tile:* 3 hours
Other floor coverings: Pending plastic sheet test after 24 hours
Packaging: 50 lbs./22.7 kg bag net weight
Storage: Cool and dry. Do not expose to sun.
Shelf Life: One year if unopened
Warranty: ARDEX Standard Limited Warranty

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