

ARDEX V 1200[™] Self-Leveling Underlayment

Portland cement-based

Smooth new or existing concrete

Use over concrete, ceramic tile, terrazzo and non-water soluble adhesive residues on concrete

Walk on in 2 to 3 hours

Install up to $1 \frac{1}{4}$, can be feather edged to meet existing elevations

Accepts most floor coverings in 1 to 3 days

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ARDEX V 1200[™] Self-Leveling Underlayment

Description And Usage

ARDEX V 1200 is a self-leveling, no troweling, Portland cement-based underlayment with re-dispersible synthetic polymers. Use to level and smooth interior concrete, terrazzo and ceramic tile substrates, as well as non-water soluble adhesive residue on concrete, prior to the installation of finished flooring on, above or below grade. Pourable or pumpable when mixed with water. Seeks its own level and produces a smooth, flat, hard surface. Walkable in 2 to 3 hours, and most floor covering installations can proceed in 1 to 3 days.

Subfloor Preparation

Concrete: All concrete substrates must be solid, thoroughly clean and free of oil, wax, grease, asphalt, latex and gypsum compounds, curing compounds*, sealers and any contaminant that might act as a bond breaker. If necessary, mechanically clean the floor down to sound, solid concrete by shot blasting, scarifying or similar. Over-watered, frozen or otherwise weak concrete surfaces must also be cleaned down to sound, solid concrete by mechanical methods. Acid etching, adhesive removers, solvents and sweeping compounds are not acceptable means for cleaning the substrate. Sanding is not an effective method to remove curing and sealing compounds. Substrate and ambient temperatures must be a minimum of 50°F (10°C) for the installation of ARDEX products.

*Notes on curing compounds: Test areas of ARDEX V 1200 can be installed and evaluated over concrete slabs that have been treated with either silicate or acrylic resin curing compounds. These compounds must be installed in strict accordance with the compound manufacturer's written recommendations. If a silicate type has been used, all residual salts must be removed. For instructions on priming concrete with acceptable curing compounds, please refer to the Priming section of this brochure.

Please be advised, however, that there are a number of curing compounds sold today that are wax- or petroleum-based emulsions. These are permanent bond breakers that must be completely removed prior to patching or leveling. Dissipating compounds must also be completely removed by mechanical means prior to installing any ARDEX material.

It is imperative to be able to determine the type of curing compound that was used before proceeding. Any curing compound that cannot be identified should be completely, mechanically removed.

Adhesive Residues on Concrete: ARDEX V 1200 can

also be installed over non-water-soluble adhesive residue on concrete only. The adhesive must first be tested to make certain it is not water-soluble. Any water-soluble adhesives must be mechanically removed down to clean concrete. Non-water-soluble adhesives should be prepared to a thin, well-bonded residue using the wet-scraping technique as recommended by the Resilient Floor Covering Institute (www.rfci.com) to remove thick areas and adhesive build-up, as well as any areas that are weak or not well bonded to the concrete. Any existing patches below the adhesive must be completely removed.

Other Non-Porous Substrates: ARDEX V 1200 can also be applied over other non-porous substrates, including terrazzo, burnished concrete, epoxy coating systems, and ceramic and quarry tile. The substrate must be clean, including the complete removal of existing waxes and sealers, dust, dirt, debris and any other contaminant that may act as a bond breaker. If necessary, mechanically clean the floor down to a sound, solid substrate by shot blasting or similar. Do not use acid etching, sweeping compounds, solvents or adhesive removers.

For more detailed information on substrate preparation, please refer to the ARDEX Substrate Preparation Brochure.

Recommended Tools

ARDEX T-1 Mixing Paddle, ARDEX T-10 Mixing Drum, ARDEX T-4 Spreader, ARDEX T-5 Smoother, ARDEX MB-5.0 Measuring Bucket (5 quarts/4.75 L per 50 lb/22.7 kg bag), and a 1/2" heavy-duty drill (12 mm, min, 650 rpm).

Priming

Standard absorbent concrete must be primed with ARDEX P 51[™] PRIMER diluted 1:1 with water. Apply evenly with a soft push broom. Do not use paint rollers, mops or spray equipment. Do not leave any bare spots. Brush off puddles and excess primer. Allow primer to dry to a clear, thin film (min. 3 hours, max. 24 hours).

Extremely absorbent concrete may require two applications of ARDEX P 51 to avoid the formation of bubbles and pinholes in the ARDEX V 1200. In such cases, make an initial application of ARDEX P 51 diluted with 3 parts of water by volume. Let dry thoroughly (1 to 3 hours) and install a second application of ARDEX P 51 mixed 1:1 with water as stated above.

Non-porous substrates, burnished concrete, terrazzo, ceramic and quarry tile, non-water soluble adhesive residue on concrete and concrete treated with silicate compounds must be primed with ARDEX P 82TM ULTRA PRIME. Follow

mixing instructions on container and apply with a short-nap or sponge paint roller, leaving a thin coat of primer. Do not leave any bare spots. Brush off puddles and excess primer. ARDEX P 82 should be applied within 1 hour of mixing. Allow primer to dry to a thin, slightly tacky film (min. 3 hours, max. 24 hours).

Note: If an approved acrylic curing compound is used, test the surface for porosity. If the concrete is porous, prime with ARDEX P 51. If it is non-porous, prime with ARDEX P 82.

ARDEX primers may require longer drying times with low surface temperatures and/or high ambient humidity. Do not install ARDEX V 1200 before the primer has dried thoroughly.

Moving Joints And Cracks

Under no circumstances should ARDEX V 1200 be installed over any moving joints or cracks. All existing expansion joints, isolation joints and construction joints, as well as any moving cracks, must be honored up through the underlayment and flooring.

Mixing And Application – Manually

ARDEX V 1200 is mixed two bags at a time. Mix each 50 lb (22.7 kg) bag with 5 quarts (4.75 liters) of water. Pour the water in the mixing drum first, then add each bag of ARDEX V 1200 while mixing with an ARDEX T-1 Paddle and a 1/2" heavy-duty drill (12 mm, min. 650 rpm). Mix thoroughly for approximately 2 to 3 minutes to obtain a lump-free mix. **Do not overwater!** Yellowish foam while mixing, or settling of the sand aggregate while placing, indicates overwatering.

ARDEX V 1200 has a flow time of 10 minutes at 70°F (21°C). Pour the mix onto the floor and spread with the ARDEX T-4 Spreader. Immediately smooth the material with the ARDEX T-5 Smoother. Wear baseball or soccer shoes with non-metallic cleats to avoid leaving marks in the liquid ARDEX V 1200.

Mixing And Application - Pumping

ARDEX V 1200 can be pumped using the ARDEX Levelcraft[™] Automatic Mixing Pump. The Levelcraft Pump provides for high productivity and a smooth, consistent installation. The pump may be rented from an authorized ARDEX Distributor, and is supported by the ARDEX Technical Service Department.

Start the pump at a water setting of 165 gallons per hour, and then adjust to the minimum water reading that allows self-leveling properties. **Do not overwater!** Check the

consistency of the product on the floor to ensure a uniform distribution of the sand aggregate at both the top surface and bottom of the pour. Conditions during the installation, such as variations in water, powder, and substrate and ambient temperature, require that the water setting be adjusted during installation to avoid overwatering.

ARDEX V 1200 has a flow time of 10 minutes at 70°F (21°C). Pump the liquid mix onto the floor and spread with the ARDEX T-4 Spreader. Immediately smooth the material with the ARDEX T-5 Smoother. Wear baseball or soccer shoes with non-metallic cleats to avoid leaving marks in the liquid ARDEX V 1200. Contact the ARDEX Technical Service Department for complete pump installation instructions.

Thickness Of Application

ARDEX V 1200 must be installed at a minimum thickness of 1/8" (3 mm) over the highest point in the floor, which typically results in an average thickness of 1/4" (6 mm) over the entire floor. ARDEX V 1200 can be installed to a maximum of $1\ 1/4$ " (32 mm), and can also be featheredged to match existing elevations.

Installation of Flooring

ARDEX V 1200 can be walked on 2 to 3 hours after installation. Moisture-insensitive tiles such as ceramic, quarry and porcelain can be installed after 24 hours. Other flooring structures can be installed after approximately 2 to 3 days at 70°F (21°C). Drying time will be a function of jobsite temperature and humidity conditions, as well as the installation thickness. While a 1/4" (6 mm) thick installation may be dry enough for some types of floor covering after only a day, additional drying time may be necessary for deeper installations. Adequate ventilation and heat will aid drying.

Wear Surface

AREX V 1200 is not to be used as a permanent wear surface, even if coated or sealed. ARDEX V 1200 must be covered by a suitable floor covering material such as carpet, vinyl flooring, ceramic tile, etc. For resurfacing and leveling indoor floors in warehouses, storage areas, hallways, or retail or office spaces where a wear surface is required, use ARDEX SD-T[®] SELF-DRYING, SELF-LEVELING CONCRETE TOPPING or ARDEX K 500[™] SELF-LEVELING CONCRETE TOPPING.

Notes

This product is intended for interior use over dry substrates only. Do not use in areas of constant water exposure or in areas exposed to permanent or intermittent substrate moisture, as this may jeopardize the performance of the underlayment and floor covering. This product is not a vapor barrier and will allow free passage of moisture. Follow the directives of the floor covering manufacturer regarding the maximum allowable substrate moisture content, and test the substrate prior to installing ARDEX V 1200. Where substrate moisture exceeds the maximum allowed, ARDEX recommends the use of ARDEX Moisture Control Systems. For further information, please refer to the ARDEX Technical Brochures.

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

Low substrate temperatures and/or high ambient humidity require longer drying times for ARDEX primers. Do not install ARDEX V 1200 before the primer has dried thoroughly.

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

Precautions

ARDEX V 1200 contains Portland cement and sand aggregate. 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 read the Material Safety Data Sheet or visit www.ardex.com.

Technical Data According To ARDEX Quality Standards

All data based on a mixing ratio of 4 parts powder to 1 part water by volume at 70°F (21°C)

Mixing Ratio: 5 quarts (4.75 L) of water per one 50 lb

(22.7 kg) bag

Coverage: 25 sq. ft. (2.3 m²) per bag at 1/4"

(6 mm)

Flow Time: 10 minutes

Initial Set: Approx. 30 minutes

(ASTM C191)

Final Set: Approx. 60 minutes

(ASTM C191)

Compressive: 4000 psi (281 kg/cm²) at 28 days

Strength

(ASTMC109/mod – Air cure only)

Flexural Strength: 1000 psi (70 kg/cm²) at 28 days

(ASTM C348)

Walkable: 2 to 3 hours Install Floor: 1 to 3 days

Covering

Packaging: 50 lb (22.7 kg) net weight bags

Storage: Store in a cool dry area. Do not leave

bags exposed to sun.

Shelf Life: One year if unopened

Warranty: ARDEX Engineered Cements Standard

Limited Warranty applies.

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