



ARDEX FEATHER FINISH®

Self-Drying, Cement-Based Finish Underlayment

Self-drying, finishing underlayment

**Provides a smooth surface prior to the installation of floor covering
over a variety of substrates**

A blend of Portland cement and other hydraulic cements

Exceptional bond strength

Easy to mix and apply

Mixes with water only

True featheredge

Superior coverage - up to 300 sq. ft. per bag*

Mold and mildew resistant

Install floor coverings in as little as 15 minutes

Interior use only



SystemOne™

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ARDEX FEATHER FINISH®

Self-Drying, Cement-Based Finish Underlayment

Description and Usage

ARDEX FEATHER FINISH® is an underlayment formulated from a blend of Portland cement and other hydraulic cements that provides a smooth, permanent finish for a variety of substrates prior to the installation of today's demanding floor coverings, including sheet vinyl and VCT (vinyl composition tile). ARDEX FEATHER FINISH allows the installation of most types of floor covering in as little as 15 minutes over all types of interior concrete, masonry, wood, terrazzo, and ceramic and quarry tile - as well as properly prepared residues of cutback and other non-water-soluble adhesives on concrete - all without the need for priming or the use of a latex additive.

ARDEX FEATHER FINISH mixes with water only to a creamy, smooth consistency, for easy application. Engineered around a self-drying matrix, all of the mix water is chemically combined within the product itself. Using this unique technology, flooring installation problems associated with disbonding, crumbling, mold, mildew and staining are eliminated, thus preserving the floor manufacturer's full product warranty.

ARDEX FEATHER FINISH also may be used as an embossing filler when mixed with ARDEX P 82™ ULTRA PRIME. Please read the instructions under "Embossing Filler."

Substrate Preparation

For all of the substrates listed below, acid etching, adhesive removers, solvents and sweeping compounds are not acceptable means for cleaning the substrate. Substrate and ambient temperatures must be a minimum of 50°F (10°C) for the installation of ARDEX products. For more detailed information on substrate preparation, please refer to the ARDEX Substrate Preparation Brochure at www.ardexamericas.com.

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, grinding 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 equipment is not an effective method to remove curing and sealing compounds.

****NOTES ON CURING COMPOUNDS:** Test areas of ARDEX FEATHER FINISH 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 removed completely prior to patching or leveling. Dissipating compounds must also be removed completely 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 FEATHER FINISH also can 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. Water-soluble adhesives must be removed mechanically down to clean concrete. The existing adhesive also must be tested to verify that it does not interact with the new flooring adhesive, and the new flooring must be tested to ensure it is not susceptible to bleed through of the existing adhesive. If adhesive interaction and/or migration are a concern, install an ARDEX self-leveling material such as ARDEX K 15® Premium Self-Leveling Underlayment.

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 removed completely.

OTHER NON-POROUS SUBSTRATES: ARDEX FEATHER FINISH also can be applied over other clean, sound and solidly bonded 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. Substrate preparation must be by mechanical means, such as shot blasting.

GYPSUM: ARDEX FEATHER FINISH can be installed over gypsum underlayments that are sound, solid, well bonded and properly primed. For instructions on priming gypsum underlayments, please refer to the Priming section below. The gypsum must be thoroughly clean and free of dirt, debris, sealers and any contaminant that might act as a bond breaker. If necessary, mechanically clean the floor down to sound, solid gypsum by shot blasting, grinding or similar.

Please be advised, however, that the fact remains that the substrate is gypsum, and therefore has inherent weakness. ARDEX FEATHER FINISH will provide a solid surface to which new flooring can bond, but cannot change the fact that a weak substrate lies below.

The wood subfloor must be constructed according to prevailing building codes and must be solid and securely fixed to provide a rigid base free of undue flex. Any boards exhibiting movement must be re-nailed. The surface of the wood must be clean and free of oil, grease, wax, dirt, varnish, shellac and any contaminant that might act as a bond breaker. If necessary, sand down to bare wood. A commercial drum sander can be used to sand large areas. Do not use solvents, strippers or cleaners. Vacuum all dust and debris. It is the responsibility of the installation contractor to ensure that the wood subfloor is thoroughly clean and properly anchored prior to the installation of any ARDEX material.

Some flooring manufacturers recommend a finish-grade wood underlayment be installed over the existing wood subfloor. If necessary, ARDEX FEATHER FINISH can be used to smooth fasteners and/or joints in the wood underlayment. Please note that the wood underlayment must be suitable for the installation of the specific floor covering and must be installed in accordance with the wood underlayment manufacturer's recommendations.

METAL: Metal substrates must be rigid, well supported, properly anchored, and free of undue flex and vibration. They must also be clean, including the complete mechanical removal of rust, corrosion and any contaminant that may act as a bond breaker. It is the responsibility of the installation contractor to ensure that this is so. To prevent rust from recurring, steel surfaces must be coated with an anticorrosive epoxy coating and allowed to dry thoroughly. The coating must be installed in strict accordance with the coating manufacturer's written recommendations and allowed to cure fully. Lead, copper and aluminum do not need to be coated with an anticorrosive coating.

NOTE ON ASBESTOS-CONTAINING MATERIALS: Please note that when removing existing flooring, any asbestos-containing materials should be handled and disposed of in accordance with applicable federal, state and local regulations.

For all of the above cases, acid etching, adhesive removers, solvents and sweeping compounds are not acceptable means for cleaning the substrate. Substrate and ambient temperatures must be a minimum of 50°F (10°C) for the installation of ARDEX products. For more detailed information on substrate preparation, please refer to the ARDEX Substrate Preparation Brochure at www.ardexamericas.com.

Recommended Tools

ARDEX T-2 Ring Mixing Paddle, mixing bucket, margin trowel, steel trowel, razor scraper, and a 1/2" (12 mm) heavy-duty drill (min. 650 rpm).

Priming

NOTE: ARDEX primers may require longer drying time with low surface temperatures and/or high ambient humidity. Do not install ARDEX FEATHER FINISH before the primer has dried thoroughly.

GYPSUM: If the substrate is a gypsum underlayment that will not be removed, double priming of the gypsum is necessary to consolidate what may be a dusty surface prior to installing ARDEX FEATHER FINISH. Make an initial application of ARDEX P 51™ PRIMER mixed with 3 parts water, and apply using a soft push broom. Do not leave any bare spots. Remove all puddles and excess primer. Allow thorough drying such that the film of primer does not re-emulsify in water (approximately 1 to 3 hours) before proceeding with the second application of ARDEX P 51 diluted 1:1 with water. Allow thorough drying to a clear, thin film (min. 3 hours, max. 24 hours).

NON-POROUS SUBSTRATES: ARDEX FEATHER FINISH will bond to some non-porous substrates, such as burnished concrete, terrazzo, and ceramic and quarry tile, without the use of a primer. Other non-porous substrates, such as epoxy coating systems and concrete treated with silicate compounds, must be primed with ARDEX P 82 ULTRA PRIME. Follow the mixing instructions on the 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, no primer is needed. If it is non-porous, prime with ARDEX P 82.

METAL: Prime the prepared metal with ARDEX P 82 ULTRA PRIME. Follow the mixing instructions on the 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).

Joins and Cracks

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

Please be advised that while dormant control joints and dormant cracks in the slab may be filled with a trowel-grade material such as ARDEX FEATHER FINISH prior to installing finish flooring, this filling is not intended to act as a repair method that will eliminate the possibility of joints and cracks telegraphing. ARDEX FEATHER FINISH is a non-structural material and is, therefore, unable to restrain movement within a concrete slab. This means that while some dormant joints and dormant cracks may not telegraph up into the finish flooring, cracks will telegraph in any area that exhibits movement, such as an active crack, an expansion or isolation joint, or an area where dissimilar substrates meet. We know of no method to prevent this telegraphing from occurring.

Mixing and Application

For one 10 lb. (4.5 kg) bag of ARDEX FEATHER FINISH, use 2 1/2 quarts (2.4 L) of clean water. Pour the water in the mixing container first, and then add the ARDEX FEATHER FINISH. For best results, mix with an ARDEX T-2 Ring Mixing Paddle and a 1/2" (12 mm) heavy-duty drill (min. 650 rpm). Mechanical mixing will produce a creamier, smoother consistency without the need for additional water. **DO NOT OVERWATER!** Additional water will weaken the compound and lower its strength. To mix smaller quantities by hand, use 2 parts of powder to 1 part of water by volume. Use a margin trowel and mix vigorously for 2 to 3 minutes. Just prior to application on the substrate, the mixture should be stirred again to ensure a creamy, smooth, lump-free consistency. The pot life of ARDEX FEATHER FINISH is approximately 15-20 minutes at 70°F (21°C). If stiffening or surface skinning occurs within this time, remix before using. **Do not add more water.**

After mixing, apply the ARDEX FEATHER FINISH to the substrate with the flat side of a steel trowel to obtain a solid mechanical bond before applying the desired thickness. Apply sufficient pressure to fill all defects and to feather the product onto the subfloor surface.

EMBOSSING FILLER: Existing felt-backed embossed residential sheet vinyl must be clean and free of any waxes or other dressings. The flooring must be solidly bonded, must be installed over a suitable substrate, and must not show any signs of moisture, mold, mildew or alkaline salts. Do not use embossing filler over cushioned-backed flooring that is thicker than 0.080", or over perimeter-bonded flooring.

To use ARDEX FEATHER FINISH as an embossing filler, mix one part of ARDEX P 82 Part A with one part of ARDEX P 82 Part B by volume and blend to a uniform consistency. Add two parts of ARDEX FEATHER FINISH by volume and mix as above.

For example, mix 1 cup (8 oz.) of ARDEX P 82 Part A with 1 cup of ARDEX P 82 Part B. Blend this to a uniform color and consistency, and then add 2 cups (16 oz.) of ARDEX FEATHER FINISH. For best results, mix the embossing filler with an ARDEX T-2 Ring Mixing Paddle and 1/2" heavy-duty drill to a creamy consistency, or use a margin trowel and mix vigorously for 2 to 3 minutes. Apply the filler to the prepared residential sheet vinyl with the flat side of a trowel in the thinnest possible layer to fill in the existing pattern. (Coverage of above mix is approx. 50 sq. ft., depending upon the depth of the embossing pattern.) If additional filling or smoothing is required after the pattern is filled, use ARDEX FEATHER FINISH mixed with water only.

The embossing filler blend will typically require 90 minutes of drying time prior to the installation of the new residential sheet vinyl. The surface is ready when a twist of a shoe does not affect the bond of the embossing filler. When dried, the surface of the filled vinyl is considered a non-porous substrate, and the adhesive should be selected accordingly.

Thickness of Application

ARDEX FEATHER FINISH can be installed from a true featheredge up to 1/2 in. (12.7 mm) over large areas. It can also be installed up to any thickness in small, well-defined areas, such as thresholds and birdbaths, as well as for height transitions. There is no minimum thickness requirement for this product. Use the least amount possible to attain the desired smoothness. The thickness of the application should be calculated based on the surface profile of the substrate and the specified tolerances of the floor covering.

Wear Surface

ARDEX FEATHER FINISH is not to be used as a permanent wear surface, even if coated or sealed. ARDEX FEATHER FINISH must be covered by a suitable floor covering material such as carpet, vinyl flooring, ceramic tile, etc. For resurfacing and leveling indoor concrete floors in warehouses, storage areas, hallways or other areas where a wear surface is required, use ARDEX SD-M™ DESIGNER FLOOR FINISH™.

Installation of Flooring

As soon as the ARDEX FEATHER FINISH can be worked on without damaging the surface (15-20 minutes), standard floor coverings such as ceramic tile, VCT, sheet vinyl and carpeting can be installed. If installing wood flooring, or, if high-performance adhesives will be used, such as epoxies or urethanes, please note that the ARDEX FEATHER FINISH must first be allowed to cure for 16 hours. All flooring adhesives that are compatible with concrete are compatible with ARDEX FEATHER FINISH.

Drying time is a function of jobsite temperature and humidity conditions, as well as the installation thickness. Low substrate temperatures and/or high ambient humidity will extend the drying time. Adequate ventilation and heat will aid drying.

It is important to note that many different types of adhesives are used to install floor coverings, and their absorbency into cementitious substrates can vary significantly. If it is found that the adhesive being used is drying more quickly over the ARDEX FEATHER FINISH than over adjacent concrete, we recommend that the surface of the underlayment be primed with ARDEX P 51 PRIMER diluted 1:3 with water. Allow the primer to dry thoroughly (1 to 3 hours), and proceed with the installation of the adhesive. The use of the primer will even out the open time of the adhesive without affecting the bond or the long-term performance.

Notes

FOR PROFESSIONAL USE ONLY.

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 the 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 FEATHER FINISH.** 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.

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 and air temperatures. Install quickly if the substrate is warm, and follow warm weather instructions available from the ARDEX Technical Service Department.

To preserve its freshness, ARDEX FEATHER FINISH must be protected from air while not in use. Protect unused material by removing the air from the bag and sealing tightly. Open and reseal as necessary.

Precautions

Carefully read and follow all precautions and warnings on the product label. For complete safety information, please refer to the Material Safety Data Sheet (MSDS) available at www.ardexamericas.com.

Technical Data According to ARDEX Quality Standards

All data based on a mixing ratio of 2 parts powder to 1 part water by volume at 70°F (21°C). Physical properties are typical values and not specifications.

Mixing Ratio:	2 1/2 quarts (2.4 L) of water per 10 lb. (4.5 kg) bag For smaller batches, use 2 parts powder to 1 part water by volume
*Coverage:	16.7 sq. ft. per bag at 1/4" (1.5 sq. m at 6 mm) 33.3 sq. ft. per bag at 1/8" (3.09 sq. m at 3 mm) 100-300 sq. ft. (9.2-27.8 sq. m) per bag at a skim coat Coverage will vary depending on the texture of the surface being smoothed.
Install Flooring:	15-20 minutes at 70°F (21°C)
VOC:	0
Packaging:	10 lb. (4.5 kg) net weight bag
Storage:	Store in a cool, dry area. Do not leave bags exposed to sun. Protect unused material by removing air from bag and sealing tightly.
Shelf Life:	9 months, if unopened
Warranty:	ARDEX Engineered Cements Standard Limited Warranty applies. Also eligible for the ARDEX/HENRY SystemOne™ Warranty when used in conjunction with select HENRY® Flooring Adhesives.