

## **ARDEX SKM™**

# **Skim Finish - Skimcoat Patch & Finishing Underlayment**

Use to patch and skim coat concrete, wood, moisture-insensitive tile and stone and non-water soluble adhesive residues on concrete

Non-sanded; install from a featheredge up to 1/2" (12 mm)

Walk on and install floor covering in as little as 30 minutes



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## **ARDEX SKM™**

### Skim Finish - Skimcoat Patch & Finishing Underlayment

#### **Description and Usage**

ARDEX SKM™ Skim Finish - Skim Coat Patch & Finishing Underlayment is a trowelable patch and skim coat for use over interior concrete, wood, moisture-insensitive tile and stone, cutback and other non-water soluble adhesive residues on concrete. ARDEX SKM will provide a permanent, smooth, durable finish prior to the installation of most floor coverings. ARDEX SKM hardens quickly, is easy to apply and dries fast without shrinking, cracking or spalling.

#### **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 Technical Data Sheet at www.ardexamericas.com.

#### Concrete

All concrete substrates must be solid, structurally sound, thoroughly clean and free of oil, wax, grease, asphalt, gypsum and latex 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 or similar. Over-watered, frozen or otherwise weak concrete surfaces must also be cleaned down to sound, solid concrete by mechanical methods. Sanding equipment is not an effective method to remove curing and sealing compounds.

\*Notes on Curing Compounds Test areas of ARDEX SKM 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 technical data sheet.

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 SKM 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. 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. If the adhesive is not well-bonded to the concrete or is brittle, powdery or otherwise weak, it must be completely, mechanically removed down to clean, sound, solid concrete. Any existing patching materials below the adhesive must be removed completely.

#### **Other Non-Porous Substrates**

ARDEX SKM can also be applied over other clean, sound and solidly bonded non-porous substrates, including ceramic, quarry and porcelain tiles and residential sheet vinyl flooring. 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.

#### Wood

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 properly fastened to create a sound surface. 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 SKM 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.

#### **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.

#### **Recommended Tools**

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

#### **Joints and Cracks**

Under no circumstances should ARDEX SKM 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 may be filled with a trowel-grade material such as ARDEX SKM 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 SKM is a non-structural material and is, therefore, unable to restrain movement within the substrate. 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 SKM, use 1.5 quarts (1.4 L) of clean water. Pour the water in the mixing container first, and then add the ARDEX SKM. 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 3 parts of powder to 1 part of water by volume. Use a margin trowel and mix vigorously for 2 - 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 SKM is approximately 15 minutes at 70°F (21°C).

After mixing, apply the ARDEX SKM 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**

For installations over embossed sheet flooring, use ARDEX E 25™ Resilient Emulsion. For detailed mixing instructions with ARDEX E 25, please contact the ARDEX Technical Service Department.

#### **Thickness of Application**

ARDEX SKM can be installed from a featheredge up to 1/2" (12 mm). 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 determined by the surface profile of the substrate and the specified tolerances of the floor covering.

#### **Wear Surface**

ARDEX SKM is not to be used as a permanent wear surface, even if coated or sealed. ARDEX SKM must be covered by a suitable floor covering material, such as carpet, vinyl flooring, ceramic tile, etc. For resurfacing 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

Most floor coverings, moisture-insensitive tile and Portland cement-based setting materials can be installed approximately 30 minutes after installing a skim coat application of ARDEX SKM (70°F / 21°C). For ARDEX SKM applications greater than 1/16", most floor coverings can be installed in 1 - 2 hours and most moisture-insensitive tile and Portland cement-based setting materials can be installed in 60 - 90 minutes. Make certain the patch is dry, and refer to the flooring manufacturer's specific recommendations for installing over cementitious underlayments.

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. Forced drying can dry the surface of the underlayment prematurely and is not recommended.

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 SKM than over adjacent concrete, we recommend that the surface of the underlayment be primed with ARDEX P 51™ diluted 1:3 with water. Allow the primer to dry thoroughly (1 - 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 it 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 SKM. Where substrate moisture exceeds the maximum allowed, ARDEX recommends the use of ARDEX MC™ Moisture Control Systems. For further information, please refer to the ARDEX technical data sheets.

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. 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.

Dispose of packaging and residue in accordance with federal, state and local waste disposal regulations. Do not flush material down drains.

#### **Precautions**

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

#### **Technical Data According To ARDEX Quality Standards**

All data based on a mixing ratio of 3 parts powder to 1 part water by volume at 70°F (21°C). Physical properties are typical values and not specifications.

**Mixing Ratio:** 1.5 quarts (1.4 L) of water per 10 lb.

(4.5 kg) bag. For smaller batches, use 3 parts powder to 1 part water

by volume

**Coverage:** 150 - 200 sq. ft. (14 - 18.5 sq. m) per

bag at a skim coat. Coverage will vary depending on the texture of the surface

being smoothed.

Walkable: 30 minutes

Install Flooring: For most floor

**coverings:** Approx. 30 minutes when installed

at a skim coat

Approx. 1 - 2 hours when installed at thicknesses greater than 1/16"

For moistureinsensitive tile and Portland cement-based

setting materials: Approx. 30 minutes when

installed at a skim coat

Approx. 60 - 90 minutes when installed at thicknesses greater than 1/16"

**VOC**: 0

**Packaging:** 10 lb. (4.5 kg) bag

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

bags exposed to sun.

**Shelf Life:** 1 year, 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.

Made in the USA.

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supersede the information herein.

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